NI 43-101 Technical Report

Selebi Mines, Central District, Republic of Botswana

Premium Nickel Resources Ltd.

Prepared by:

SLR Consulting (Canada) Ltd.

SLR Project No.: 233.065166.00001

Effective Date:

June 30, 2024

Signature Date:

September 20, 2024

Revision: 1

Qualified Persons:
Brenna J.Y. Scholey, P. Eng.
Valerie Wilson, M.Sc., P.Geo.

Making Sustainability Happen

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A (issued as Rev0)	August 30, 2024	Valerie Wilson Brenna J.Y. Scholey Chelsea Hamilton Yenlai Chee Kimantha Gokul Maria Campos	Luke Evans	Valerie Wilson
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1.0 Summary

1.1 Executive Summary

SLR Consulting (Canada) Ltd. (SLR) was retained by Premium Nickel Resources Ltd.. (PNRL) to prepare an independent Technical Report on the formerly producing Selebi and Selebi North nickel-copper (Ni-Cu) Mines (collectively, Selebi Mines or the Project), located in the Central District of the Republic of Botswana. The purpose of this Technical Report is to document PNRL's initial Mineral Resource estimates (MREs) for Selebi and Selebi North deposits, as well as the technical information available on the Project for public disclosure. This Technical Report conforms to NI 43-101 - *Standards of Disclosure for Mineral Projects*. SLR's Qualified Person (QP) visited the Project from May 13 to May 15, 2024.

PNRL is a Toronto based exploration and development company previously named North American Nickel Inc. (NAN), a Vancouver based junior mining company formed in 1983. PNRL's common shares trade on the TSX Venture Exchange (TSXV) in Canada under the symbol PNRL. Its exploration activities focus on nickel, with several exploration projects in Botswana, Greenland, and Canada.

The Project was acquired on January 31, 2022, by Premium Nickel Resources Corp. (PNRC), a private corporation formed under the laws of the Province of Ontario, through its wholly-owned indirect subsidiary, Premium Nickel Resources Proprietary Ltd. (PNRPL).

PNRC submitted an indicative offer to the BCL Limited (BCL) liquidation trustee (the Liquidator) in June 2020 for the purchase of selected assets owned by BCL. On March 24, 2021, PNRC signed an exclusivity Memorandum of Understanding (MOU) with the Liquidator that would govern a six month exclusivity period to complete additional due diligence and related purchase agreements on the Botswana Ni-Cu-Co assets formerly operated by BCL.

On September 28, 2021, PNRC announced that it had executed the definitive asset purchase agreement (the Selebi Purchase Agreement) with the Liquidator to acquire the Selebi Mines including the related infrastructure and equipment formerly operated by BCL. The acquisition closed on January 31, 2022, transferring the Selebi Mines and new Selebi mining lease to PNRPL.

PNRL was founded upon the closing of a reverse takeover transaction (the RTO) whereby PNRC and 1000178269 Ontario Inc. (NAN Subco), a wholly-owned subsidiary of NAN, amalgamated by way of a triangular amalgamation under the *Business Corporations Act* (Ontario) (OBCA) on August 3, 2022. In connection with the RTO, the Company was continued under the OBCA and changed its name from "North American Nickel Inc." to "Premium Nickel Resources Ltd."

BCL operated the combined Selebi-Phikwe mines from 1970 until their closure in 2016. Ore was mined from four distinct underground production areas namely Phikwe (1 Shaft, Phikwe Central and Phikwe South), Southeast Extension, Selebi North, and Selebi. PNRL's definitive asset purchase agreement pertains to the Selebi Mines only. In total, 26.6 million tonnes (Mt) grading 0.58% Ni and 1.03% Cu were mined from Selebi (1980 to 2016), and 13.9 Mt grading 0.74% Ni and 0.66% Cu were mined from Selebi North (1990 to 2016).

Exploration work completed by the project team to date has consisted of the sourcing and digitization of existing historical information, confirming collar and down hole location information of selected historical holes, completing electromagnetic (EM) surveys (borehole electro-magnetic (BHEM)) on selected high priority historical exploration holes and new holes, surface drilling to assess up-side potential of Selebi Main, drilling of three brownfields targets within the Selebi Mining Licence, advancing infrastructure and development of seven drill bays at Selebi North, and resource definition and exploration drilling from these drill bays.

1.1.1 Conclusions

The QPs offer the following conclusions by area:

1.1.1.1 Geology and Mineral Resources

- Indicated Mineral Resources at Selebi Mines is estimated to total 3.0 million tonnes (Mt) at grades of 0.98% Ni and 0.90% Cu, containing 29,500 tonnes (t) of nickel and 27,100 t of copper.
- Inferred Mineral Resources at Selebi Mines is estimated to total 24.7 Mt at grades of 0.92% Ni and 1.50% Cu, containing 227,000 t of nickel and 371,000 t of copper.
- There is good understanding of the geology and the nature of nickel and copper mineralization of the Project. The shape and continuity of mineralization at Selebi and Selebi North, especially within the Selebi Upper zone and the Selebi North N3 limb, is very consistent. At depth in the Selebi North South Limb, there appears to be additional structural control that is not yet fully understood.
- PNRL continues to test mineralization extents with targeted drilling supported by geophysics and structural measurements in core. As the project progresses, additional structural studies may give insights into the morphology and nature of the mineralization at depth at Selebi North, and potentially, the relationship between the Selebi North and Selebi deposits.
- Mineralization is open along strike in both directions and at depth at Selebi North. Mineralization is open down dip and along strike at Selebi. Mineral Resources at both deposits are constrained up dip by the historical mining depletion.
- The sample collection, preparation, and analytical procedures as designed and implemented by former operator BCL and current operator PNRL are appropriate for the style of mineralization.
- Verification of historical information through comparison of the digital database against selected original logs and assay certificates, and down hole survey confirmation have been undertaken. To date, very limited data or analysis related to quality assurance/quality control (QA/QC) programs supporting the historical drilling has been located. While validation of some historical information is ongoing, the results indicate that the drill hole database is adequate for use in Mineral Resource estimation.
- Results of the QA/QC programs supporting PNRL's surface and underground drilling activities at the Project show good precision and accuracy.
- Encouraging analytical results for cobalt by PNRL drilling indicate the potential for cobalt as a payable byproduct at the Project. Historical sampling largely excludes cobalt.

1.1.1.2 Mineral Processing

- Based on the results from preliminary studies and historical data analyses, PNRL has conceptualized a treatment process for Selebi and Selebi North material that includes ore sorting and flotation of a bulk sulphide nickel-copper (Ni-Cu) concentrate product. Future metallurgical studies will also look at producing separate nickel and copper concentrates.

- A preliminary ‘proof of concept’ metallurgical sampling and testing program over the Project area was completed in 2021 to support the production of market concentrates for both nickel and copper. Though the Project Team’s procedure of sample selection and collection of non-oxidized material is not considered best practice, its method of hand-picking samples was referenced to historical grades during production and is statistically representative of the Selebi mineralization. The test results based on composites prepared from these handpicked samples may not be indicative of the expected metallurgical performance (SLR, 2022).
- The QP confirms that proper sampling is yet to be evidenced as additional metallurgical test work was again carried out in 2023 by SGS Canada Inc. (SGS) under the direction of PNRL using the 2021 SGS Selebi composite samples.
- While preliminary flotation test results indicated that copper-nickel separation is achievable, further representative sampling and testing is required to demonstrate that the target grades of copper and nickel, both in bulk and separate concentrates, can be consistently met.
- The copper and nickel grades of bulk concentrate were simulated by DRA Projects (PTY) Ltd. (DRA) based on the manipulation of PNRL data representing separately produced copper and nickel concentrates and thus, may not be indicative of the expected metallurgical performance for bulk concentrates.
- To the best of the QP’s knowledge, pre-concentration techniques have not been used to prepare any Selebi materials for flotation testing to date.
- The metallurgical and analytical data have been collected in a manner that is suitable to be used conceptually for Mineral Resources estimation, however, further testing is recommended to confirm the characteristics of the Selebi final bulk or separate concentrate product.
- The QP has been informed that collection of a bulk sample through drilling and blasting has been completed at Selebi North and is in progress Selebi Main. Samples will be used for metallurgical test work and pre-concentration studies.

1.1.2 Recommendations

The QPs offer the following recommendations by area:

1.1.2.1 Geology and Mineral Resources

1 The QPs have reviewed and agree with PNRPL’s proposed exploration budget (Table 1-1).

   a) Phase I of the recommended work program will include the continuation of the Selebi North underground drill program, digitization and verification work, BHEM, televiewer surveys and an updated estimation of Mineral Resources at the Project. Additional budget will be used to advance existing development at Selebi North to promote accessibility for deep target drilling.

   b) Concurrent with continued drilling at Selebi North, Selebi will be advanced through an underground drill program with BHEM, televiewer surveys, structural and geochemical studies. In particular, continue to infill the Selebi Upper Domain in the southeast of the deposit to understand the thickness variability of mineralization within the vicinity of historical drill hole sd119.

c) Contingent upon and guided by the results of Phase I, engineering and additional metallurgical studies to be completed with the goal of advancing the Project toward a Pre-Feasibility Study.

2 Manage historical and current drill hole databases within a single database entity. Note original source and ensure data is verified before and upon migration. Hire a database manager to confirm the integrity of select historical data and to maintain the integrity of PNRL data.

3 Continue to explore the viability of cobalt as a payable byproduct. Estimate cobalt within areas supported by sufficient analytical results.

4 Refine variogram results in the Main domain at Selebi North to reflect the different thickness and grade traits in the N3, N2, South Limb, and deep areas of the deposit. Explore custom interpolation strategies for these areas individually.

5 Conduct a comprehensive analysis of grade and volume variability using conditional simulation to gain insights for Mineral Resource upgrading and conversion and for future production de-risking.

6 Complete additional structural studies focused on the South Limb hinge and limbs at depth to gain insights into the morphology and nature of the mineralization, and potentially, the relationship between the Selebi North and Selebi deposits.

1.1.2.2 Mineral Processing

1 Complete additional metallurgical testing using samples from underground workings that are spatially representative of the deposits to confirm the metallurgical recoveries projected following pre-concentration and concentrate flotation.

2 These additional tests should be designed to evaluate recoveries to produce a single bulk concentrate and for separate Ni and Cu concentrates to be used in future trade off studies.

Table 1-1: Proposed Budget – Phase I

Item	Cost (C$000)
Geology and drilling • Ongoing Selebi North underground drilling (50,000 m in 90 holes) • Underground drilling at Selebi Main (37,000 m in 178 holes) • Geological support, assays	16,740
Mineral Resource estimate	120
Metallurgical testing • Flotation and pre-concentration studies	700
Engineering studies	800
Mine Development • Development to support underground drill program	9,000

Item	Cost (C$000)
• Maintain mine infrastructure, power, water, equipment repair and maintenance	
General site and administration costs	3,000
Subtotal	**30,360**
Contingency (5%)	1,518
Total Phase I	**31,878**

1.2 Technical Summary

1.2.1 Property Description

The Project is located in Botswana approximately 150 km southeast of the city of Francistown, and 410 km northeast of the national capital Gaborone.

The Selebi Mines are readily accessed via paved and gravel roads from the town of Selebi-Phikwe, located just north of the mining licence. With a population of approximately 52,000, the town is accessed via a well maintained paved road that branches due east from the major A1 highway at the town of Serule, 57 km from the Project.

Project infrastructure includes two mines, Selebi and Selebi North, both currently on care and maintenance, each with an operational shaft, and associated surface infrastructure such as office buildings, rail, power, and roads.

1.2.2 Land Tenure

The Project consists of a single mining licence (2022/1L) covering an area of 11,504 ha. The mining licence is centred approximately at 22°03’00”S and 27°47’00”E.

Mining licence 2022/1L was granted to PNRPL on January 31, 2022. The original licence (4/72) which had been granted to BCL on March 7, 1972, included both the Selebi and Phikwe project areas, and hosts mine infrastructure, including the concentrator and smelter plants located near the Phikwe mine that was used to process ore from both Selebi and Phikwe. Mining licence 4/72 was amended several times and renewed once and was set to expire on March 6, 2022. The new mining licence is limited to the Selebi and Selebi North deposits and their surrounding areas and expires January 30, 2032.

1.2.3 History

Exploration in the historical Project area was initiated in 1959 by Bamangwato Concessions Limited (Bamangwato) and included soil geochemistry, geological mapping, trenching, and diamond drilling over the then combined Selebi-Phikwe area. The Selebi and Phikwe discoveries were made in 1963 and 1967, respectively, and a single mining lease was granted to Bamangwato in 1972 covering both areas.

Bamangwato changed its name to BCL in 1977 and operated the combined Selebi-Phikwe project from 1970 until its closure in 2016. Nickel and copper ore was mined from an open pit at Phikwe (1972 to 1980), as well as four distinct underground production areas, namely Phikwe (1981 to 2016), Southeast Extension (at Phikwe, 1997 to 2016), Selebi North (1990 to 2016) and Selebi (1980 to 2016). Head grades declined from 2010 to 2015 and in October 2016 BCL was placed into provisional liquidation and all of its operations put under care and maintenance.

PNRC submitted an indicative offer to the Liquidator in June 2020 for the purchase of select assets owned by BCL. On March 24, 2021, PNRC signed an exclusivity MOU with the Liquidator that would govern a six month exclusivity period to complete additional due diligence and related purchase agreements on the Botswana Ni-Cu-Co assets formerly operated by BCL.

The Project was acquired by PNRC, a private corporation formed under the laws of the Province of Ontario, on January 31, 2022 through its wholly-owned indirect subsidiary, PNRPL.

On September 28, 2021, PNRC announced that it had executed the definitive asset purchase agreement (the Selebi Purchase Agreement) with the Liquidator to acquire the Selebi Mines, including the related infrastructure and equipment formerly operated by BCL. The acquisition closed on January 31, 2022, transferring the Selebi Mines and new Selebi mining lease to PNRC.

PNRL was founded upon the closing of the RTO whereby PNRC and NAN Subco, a wholly-owned subsidiary of NAN, amalgamated by way of a triangular amalgamation under the OBCA on August 3, 2022. In connection with the RTO, the Company was continued under the OBCA and changed its name from "North American Nickel Inc." to "Premium Nickel Resources Ltd."

1.2.4 Geological Setting, Mineralization, and Deposit

The eastern portion of Botswana forms part of the Limpopo Mobile Belt (LMB) which represents a deep crustal section through an orogenic province between the Kaapvaal and Zimbabwe Cratons.

The Project occurs in highly deformed and metamorphosed Archean gneisses near the north margin of the central zone (CZ) of the LMB. The CZ region is characterized by complex structural fold patterns accompanied by regional and cataclastic metamorphism with grades ranging from amphibolite to granulite facies and cataclastic tectonites.

The deposits in the Project area are categorized as ortho-magmatic Ni-Cu sulphide-type deposits. They are hosted within amphibolite and understood as a tectono-metamorphically modified tholeiitic magma parents with an immiscible sulphide melt which has undergone all the phases of deformation that have affected the enclosing gneisses. They form part of the Selebi-Phikwe belt of intrusions that also contain the Phikwe, Dikoloti, Lentswe, and Phokoje deposits.

All mineralization horizons pinch and swell, are conformable to the gneissic foliation, and are hosted within or at the hanging wall contact of amphibolite with the gneissic country rocks. Mineralization horizons range in thickness from very thin to over 20 m thick and are commonly one metre to three metres thick (deposit dependent). Orientation follows country rock foliation, and the zones can dip moderately to steeply, and can extend from 150 m to over 2,000 m.

The principal sulphide minerals are pyrrhotite, chalcopyrite, and pentlandite which occur in massive, semi-massive, and disseminated form. Pyrite occurs as localized overgrowth. Magnetite occurs as rounded inclusions in massive sulphides and as later overgrowths.

1.2.5 Exploration

Exploration work completed by the Project Team from 2021 to June 30, 2024 consisted of the sourcing and digitization of existing historical information, confirming collar and down hole location information of selected historical holes, and drilling. PNRL also completed gyro, BHEM, televiewer, and downhole physical property surveys on selected high priority historical and recent exploration holes. A focused structural model over a portion of the Selebi deposit was developed by SRK Consulting Ltd. (SRK), and a three dimensional (3D) model of mineralization for use in targeting was created at Selebi North by SLR.

The purpose of these programs was to:

(a) Validate information and interpretations collected and completed by historical operators.

(b) Demonstrate that the known mine horizons could host economic mineralization beyond the legacy infrastructure.

(c) Understand the size potential of the Selebi mines mineralizing systems.

(d) Collect sufficient data to support disclosure of MREs at each deposit.

1.2.6 Mineral Processing and Metallurgical Testing

The historical BCL operations consisted of an integrated mining, concentrating, and smelting complex which operated for over 40 years over the Selebi Phikwe project area. The smelter processed Selebi and Phikwe concentrates and toll treated nickel concentrates received from the Nkomati Nickel Mine (a joint venture (JV) between Norilsk Nickel Africa Pty. Ltd. and African Rainbow Minerals) and the Phoenix Mine (Tati Nickel Mining Company, later a subsidiary of BCL). The concentrator plant and smelter were placed on care and maintenance in 2016 and are located adjacent to the Project at the historical Phikwe Mine.

PNRL intends to use pre-concentration methods to separate the minerals from waste materials to produce a mill feed and flotation for the production of a bulk or separate nickel and copper concentrates for commercial sale and does not plan to restart the existing concentrator or smelter. In 2021, the Project Team carried out due diligence work that included metallurgical sampling and testing. Metallurgical study programs were carried out by SGS in Lakefield, Ontario in 2021 and 2023 for separate copper and nickel concentrate production at a conceptual level. The conceptual process flowsheet developed by SGS includes the key unit operations of crushing, grinding, and flotation.

PNRL and DRA collaborated in the analyses of historical data collected on key flotation parameters observed in the production of separate nickel and copper concentrates, such as metal upgrade ratios and % mass pull, to simulate estimated metal grades and recoveries for bulk concentrate.

1.2.7 Mineral Resource Estimates

Mineral Resources for the Selebi Mines are presented in Table 1-2.

Table 1-2: Selebi Mines Mineral Resource Estimate, June 30, 2024

Classification	Deposit	Tonnage	Grade		Contained Metal	
		(Mt)	(% Cu)	(% Ni)	(000 t Cu)	(000 t Ni)
Indicated	Selebi North	3.00	0.90	0.98	27.1	29.5
	Total Indicated	3.00	0.90	0.98	27.1	29.5
Inferred	Selebi Main	18.89	1.69	0.88	319.2	165.5
	Selebi North	5.83	0.90	1.07	52.5	62.4

Classification	Deposit	Tonnage	Grade		Contained Metal	
		(Mt)	(% Cu)	(% Ni)	(000 t Cu)	(000 t Ni)
	Total Inferred	24.72	1.50	0.92	371.7	227.9

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at a net smelter return (NSR) value of US$70/t.
3. Mineral Resources are estimated using a long-term prices of US$10.50/lb Ni and US$4.75/lb Cu, and a US$BWP exchange rate of 1.00:13.23.
4. Mineral Resources are estimated using nickel and copper recoveries of 72.0% and 92.4%, respectively, derived from metallurgical studies, which consider a conceptual bulk concentrate scenario.
5. Bulk density has been estimated.
6. Mineral Resources are reported within conceptual underground reporting shapes considering a minimum thickness of 1.5 m.
7. There are no Mineral Reserves.
8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
9. Totals may not add or multiply accurately due to rounding.

All Mineral Resource domains at Selebi Main were defined within Seequent's Leapfrog Geo software, and sub-block model estimates were completed within Leapfrog Edge software using drilling and assays results as of June 30, 2024. All Mineral Resource domains at Selebi North were defined within Leapfrog Geo software and sub-block model estimates were completed within Resource Modelling Solutions Platform (RMSP) and Leapfrog Edge software. Underground constraining shapes (resource panels) were optimized using Deswik stope optimizer (DSO) software.

At Selebi Main, uncomposited density measurements and one metre composites of uncapped nickel and capped copper sample grades from underground and surface drillholes were estimated into an oriented sub-blocked model using a multi-pass inverse distance squared (ID2) interpolation approach and mined out areas were depleted where needed to represent in situ material.

At Selebi North, one metre composites of capped nickel, copper, and density sample grades from channels and underground and surface drill holes were estimated into a sub-blocked model using a multi-pass ordinary kriging (OK) interpolation approach in unfolded space in the main domain and using a multi-pass ID2 interpolation approach and dynamic anisotropy (no unfolding) in the footwall domains.

The Selebi North Mineral Resources were estimated using a sub-block model defining one principal domain and three small footwall domains representing mineralization extension below 150 metre elevation (approximately 750 metres below surface), where adjacent and below (mostly below) existing historical mine workings. The estimate uses all information available as of June 30, 2024.

Domain orientation and morphology have been informed by underground mapping, channel sampling, and surface and underground drilling completed by historical operators as well as by PNRL. The structures mimic the mined-out areas with respect to orientation and form and have been confirmed to continue down plunge through drill core observations and downhole geophysics.

In addition to standard database validation techniques, wireframe and block model validation procedures including wireframe to block volume confirmation, statistical comparisons with composite and nearest neighbour (NN) estimates, swath plots, visual reviews in 3D, longitudinal, cross section and plan views, as well as cross software reporting confirmation, were completed. In addition to SLR's internal peer and senior review processes, PNRL's technical team have reviewed the MRE.

Blocks were classified following CIM Definitions (2014) as Indicated and Inferred using drill hole spacing based criterion. Inferred mineral resources at Selebi Main were defined where drill hole spacings of up to approximately 200 metres was achieved. Indicated and Inferred Mineral Resources at Selebi North were defined where drill hole spacings of up to approximately 50 m and 150 m were achieved, respectively, modified in some areas to reflect geological and grade uncertainty. At both deposits, Mineral Resources are reported within conceptual underground reporting shapes (resource panels) defined using a minimum thickness of 1.5 m and a NSR cut-off value of US$70/t. All blocks within the resource panels have been included within the MRE. Mined-out areas were depleted where needed to represent in-situ material, and resource panels in the crown pillar area at Selebi North were excluded from the estimate.

2.0 Introduction

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The mines are currently on care and maintenance, and access to both Selebi and Selebi North via shaft and decline ramp is possible. Exploration activities including the sourcing, verification, and digitization of existing historical information; downhole geophysical surveys to support targeting; and drilling of several targets at Selebi (from surface) and Selebi North (from underground) to support resource definition and expansion is ongoing. This work has culminated in along strike and depth extension of mineralization at Selebi North, and down dip expansion of mineralization at Selebi. These results are reflected in PNRL's initial Mineral Resource estimates (MRE) contained herein.

2.1 Site Visits

A Qualified Person (QP) from SLR, Valerie Wilson, M.Sc., P.Geo., visited the site on May 13 and May 15, 2024. During the visit, the QP toured the Project infrastructure on surface and underground at Selebi North and confirmed the presence and style of mineralization in underground openings. The QP visited the active core logging facility where they reviewed core processing, logging, and sampling procedures and confirmed the geology and mineralization in pre-selected drill holes with respect to the corresponding drill log descriptions.

2.2 Sources of Information

During the preparation of this Technical Report, discussions were held online and onsite with personnel from PNRL:

- Sharon Taylor, P.Geo., Vice President, Exploration, PNRL
- Gerry Katchen, P.Geo., Exploration Manager, PNRL
- Mpho Mosarwe, Selebi North Project Geologist, Premium Nickel Resources Proprietary Ltd. (PNRPL)

- Wazha Mbaiwa, P.Eng., Mine Captain, PNRPL
- Jefferson Mohlaping, Mine Planner, PNRPL

This Technical Report was prepared by Valerie Wilson, M.Sc., P. Geo., Brenna J.Y. Scholey, P.Eng., Chelsea Hamilton, P.Eng., Yenlai Chee, M.Sc., Kimantha Gokul, Pr.Sci.Nat., and Maria Campos, G.I.T., The QP responsibilities are indicated in Table 2-1.

Table 2-1: Qualified Persons and Responsibilities

QP, Designation	Responsible for
Brenna J.Y. Scholey, P.Eng.	Section 13 and subsections 1.1.1.2, 1.1.2.2, 1.2.6, 25.2, and 26.2
Valerie Wilson, M.Sc., P.Geo.	Overall preparation and all sections except Section 13 and sub-sections related to mineral processing including 1.1.1.2, 1.1.2.2, 1.2.6, 25.2, and 26.2

The documentation reviewed, and other sources of information, are listed at the end of this Technical Report in Section 27 References.

2.3 List of Abbreviations

Units of measurement used in this Technical Report conform to the metric system. All currency in this Technical Report is US dollars (US$) unless otherwise noted.

μ	micron
μg	microgram
a	annum
A	ampere
bbl	barrels
Btu	British thermal units
°C	degree Celsius
C$	Canadian dollars
cal	calorie
cfm	cubic feet per minute
cm	centimetre
cm^2	square centimetre
d	day
dia	diameter
dmt	dry metric tonne
dwt	dead-weight ton
°F	degree Fahrenheit
ft	foot
ft^2	square foot
ft^3	cubic foot
ft/s	foot per second
g	gram
G	giga (billion)
Gal	Imperial gallon
g/L	gram per litre
Gpm	Imperial gallons per minute
g/t	gram per tonne
gr/ft^3	grain per cubic foot
gr/m^3	grain per cubic metre
ha	hectare
kVA	kilovolt-amperes
kW	kilowatt
kWh	kilowatt-hour
L	litre
lb	pound
L/s	litres per second
m	metre
M	mega (million); molar
m^2	square metre
m^3	cubic metre
MASL	metres above sea level
m^3/h	cubic metres per hour
mi	mile
min	minute
μm	micrometre
mm	millimetre
mph	miles per hour
MVA	megavolt-amperes
MW	megawatt
MWh	megawatt-hour
oz	Troy ounce (31.1035g)
oz/st, opt	ounce per short ton
ppb	part per billion
ppm	part per million
psia	pound per square inch absolute
psig	pound per square inch gauge
RL	relative elevation
s	second
st	short ton
stpa	short ton per year

hp	horsepower	stpd	short ton per day
hr	hour	t	metric tonne
Hz	hertz	tpa	metric tonne per year
in.	inch	tpd	metric tonne per day
in^2	square inch	US$	United States dollar
J	joule	USg	United States gallon
k	kilo (thousand)	USgpm	US gallon per minute
kcal	kilocalorie	V	volt
kg	kilogram	W	watt
km	kilometre	wmt	wet metric tonne
km^2	square kilometre	wt%	weight percent
km/h	kilometre per hour	yd^3	cubic yard
kPa	kilopascal	yr	year

3.0 Reliance on Other Experts

This Technical Report has been prepared by SLR for PNRL. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to SLR at the time of preparation of this Technical Report.
- Assumptions, conditions, and qualifications as set forth in this Technical Report.

For the purpose of this Technical Report, SLR has relied on ownership information provided by PNRL in a legal opinion by Bookbinder Business Law (BBL) dated May 30, 2024, entitled "Title Opinion: Premium Nickel Resources Proprietary Limited". SLR has not researched property title or mineral rights for the Project as we consider it reasonable to rely on PNRL's legal counsel who is responsible for maintaining this information.

The QPs have taken all appropriate steps, in their professional opinion, to ensure that the above information from PNRL is sound.

Except for the purposes legislated under provincial securities laws, any use of this Technical Report by any third party is at that party's sole risk.

4.0 Property Description and Location

4.1 Location

The Project consists of a single mining licence (2022/1L) covering an area of 11,504 ha located near the town of Selebi Phikwe, approximately 150 km southeast of the city of Francistown, and 410 km northeast of the national capital of Gaborone. The mining licence is centred at approximately 22°03'00" S and 27°47'00" E and is presented in Figure 4-1.

4.2 Land Tenure

Mining licence 2022/1L was granted to PNRPL on January 31, 2022 and includes the Selebi Mines deposits. The original licence (4/72) had been granted to BCL on March 7, 1972 and included both the Selebi and Phikwe project areas, as well as associated infrastructure, including the concentrator and smelter plants used to process ore from both Selebi and Phikwe. Mining licence 4/72 was amended several times and renewed once, and was set to expire on March 6, 2022. The current mining licence is limited to the Selebi and Selebi North deposits and their surrounding areas and expires January 30, 2032.

The terms and conditions for the renewal of the mining licence is framed by the relevant sub-sections of Section 42 of the *Mines Act* (the Act) and indicate that:

3 The Minister shall grant an application for renewal if satisfied that:

   a) the applicant is not in default.

   b) development of the mining area has proceeded with reasonable diligence.

   c) the proposed program of mining operations will ensure the most efficient and beneficial use of the mineral resources in the mining area.

4 The Minister shall not reject an application on the ground referred to in:

   a) subsection (4)(a), unless the applicant has been given details of the default and has failed to remedy the same within three months of such notification.

   b) subsection (4)(b), unless the applicant has been given reasonable opportunity to make written representations thereon to the Minister.

   c) subsection (4)(c), unless the applicant has been so notified and has failed to propose amendments to his proposed programme of mining operations satisfactory to the Minister within three months of such notification.

5 Subject to the provisions of this Act, the period of renewal of a mining licence shall be such period, not exceeding 25 years, as is reasonably required to carry out the mining programme.

6 On the renewal of a mining licence the Minister shall append thereto the program of mining operations to be carried out in the period of renewal.

4.2.1 Mineral Rights

In Botswana, mining activities are regulated under the Act, which is administered by the Ministry of Mineral Resources, Green Technology and Energy Security (MMGE). The Act regulates the issuance of exploration and mining licences as well as harmonizing mining activities and environmental impacts. The Act entails:

- Introduction of the retention licence which allows exploration companies that have confirmed the discovery of a mineral deposit to retain rights over a period of three years, renewable once for a period of no more than three years.
- Issuing of a prospecting licence for up to 1,000 km^2 for an initial period of three years and renewed for two periods of two years each.
- The abolition of the Government of Botswana's right to free equity participation. The legislation allows for the Government of Botswana to acquire up to 15% in new mining ventures on commercial terms.
- Royalty schedules have been revised, with rates reduced from 5% to 3% for all minerals except precious stones and precious metals, which remain at 10% and 5%, respectively.
- The granting, renewal, and automatic transfer of licences has been made more automatic and predictable.
- Introduction of new mining taxation, which includes:
  - A generalized tax regime that applies to all minerals except diamonds, with corporate income tax of 25%.
  - Immediate 100% capital write off in the year that the investment is made, with unlimited carry forward of losses.
  - Introduction of a variable rate income tax formula.

The Act further stipulates that the holder of the mineral concession shall:

- Conduct operations in a manner that will preserve the natural environment.
- Where unavoidable, promptly treat pollution and contamination of the environment. In the event of an emergency or extraordinary circumstances requiring immediate action, the holder of a mineral concession shall forthwith notify the Director of Mines and shall take all immediate action in accordance with the reasonable directions of the Director of Mines.
- Prepare and submit an Environmental Impact Assessment (EIA) report as part of the mining licence application or renewal.
- Restore the land substantially to the condition in which it was prior to the commencement of operations during and at the end of operations.
- Make adequate ongoing financial provision for compliance with environmental obligations as stipulated by the Act.

Any abstraction of water in Botswana is regulated through the *Water Act of 1967*.

PNRPL was granted a mining licence to permit the ongoing care and maintenance activities at the Selebi Mines and to conduct exploration work from both surface and underground.

4.2.2 Surface Rights

The Project is subject to two land tenure systems namely, State Land within the Township boundary and Tribal Land for the remaining portions. The two land tenure systems are administered by the Department of Lands and governed by the Ngwato Land Board, respectively. PNRPL holds a mining lease agreement granting exclusive surface rights (Grant of Lease) for 1,800 ha within the mining licence area that includes the Selebi Mines. The mining lease agreement is deemed effective January 31, 2022 and is valid for a period of 10 years, equivalent to the duration of mining licence 2022/1L. If the mining licence is renewed, then the Grant of Lease shall automatically be renewed for the period equivalent to the renewed mining licence, subject to the conditions prevailing during the period of renewal. The rental amount for the first term of the Grant of Lease is Botswana Pula (BWP) 90,020.47 per annum (approximately US$7,700 based on a BWP 1 = US$0.08544 exchange rate), and if renewed, the Land Board and PNRPL shall negotiate the appropriate fee for the renewed period. PNRPL also holds the surface rights to a 181 ha strip of land for rail and power service. The rental amount on the rail and power servitude is BWP 105,521.10 per annum (approximately US$9,015 per annum) for the first term of the Grant of Lease, and the Land Board and PNRPL shall negotiate the appropriate rental for any renewed period. Figure 4-2 illustrates the disposition of the surface rights.

4.3 Encumbrances

PNRPL has signed a royalty agreement and contingent compensation agreement with the Liquidator.

A 2% net smelter return (NSR) exists on the sale of concentrates (or any other economic mineral resource material produced and sold) subject to specific rights of purchase by the purchaser and the Government of Botswana:

- A reduction to a 1% NSR for a payment of US$20 million on or before the two year anniversary date of the first shipment.
- A general first right of purchase shared between the purchaser and the Government of Botswana.

There is also a contingent compensation agreement whereby PNRPL would pay additional compensation to the Government of Botswana if and when it discovers additional resources over and above the base case scenario of 15.9 Mt:

- New resource discovery until the end of the seven year mine life of the base case resource of 15.9 Mt (minimum grade of 2.5% Ni eq at Decision to Mine):
    - 25 Mt < new deposit > 50 Mt US$0.50 per ton.
    - 50 Mt < new deposit> 75 Mt US$0.20 additional per incremental ton.
    - 75 Mt < new deposit> 100 Mt US$0.30 additional per incremental ton.
    - New deposit >100 Mt US$0.40 additional per incremental ton.
- The payment of contingent compensation shall be made from operating cash flow of the mine(s) once in operation and subject to adequate liquidity.

4.4 Royalties

In order to maintain the mining licence in good order, the holder must make annual payments on its anniversary date in accordance with Section 71 of the Act and monthly royalty payments according to Section 66 of the Act, if appropriate, in each case to the Government of Botswana. The royalties payable are percentages of the gross market value of mineral or mineral products as follows: precious stones (10%), precious metals (5%), and other minerals or mineral products (3%). The term gross market value is defined in the Act as the sale value receivable at the mine gate in an arms-length transaction without discounts, commissions, or deductions for the mineral or mineral product on disposal. No annual payments are required until the mine is in production.

4.5 Other Significant Factors and Risks

The QP is not aware of any environmental liabilities on the Selebi Mines property which was assumed by PNRPL pursuant to the Selebi Purchase Agreement. The QP is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the property.

Figure 4-1: Location Map

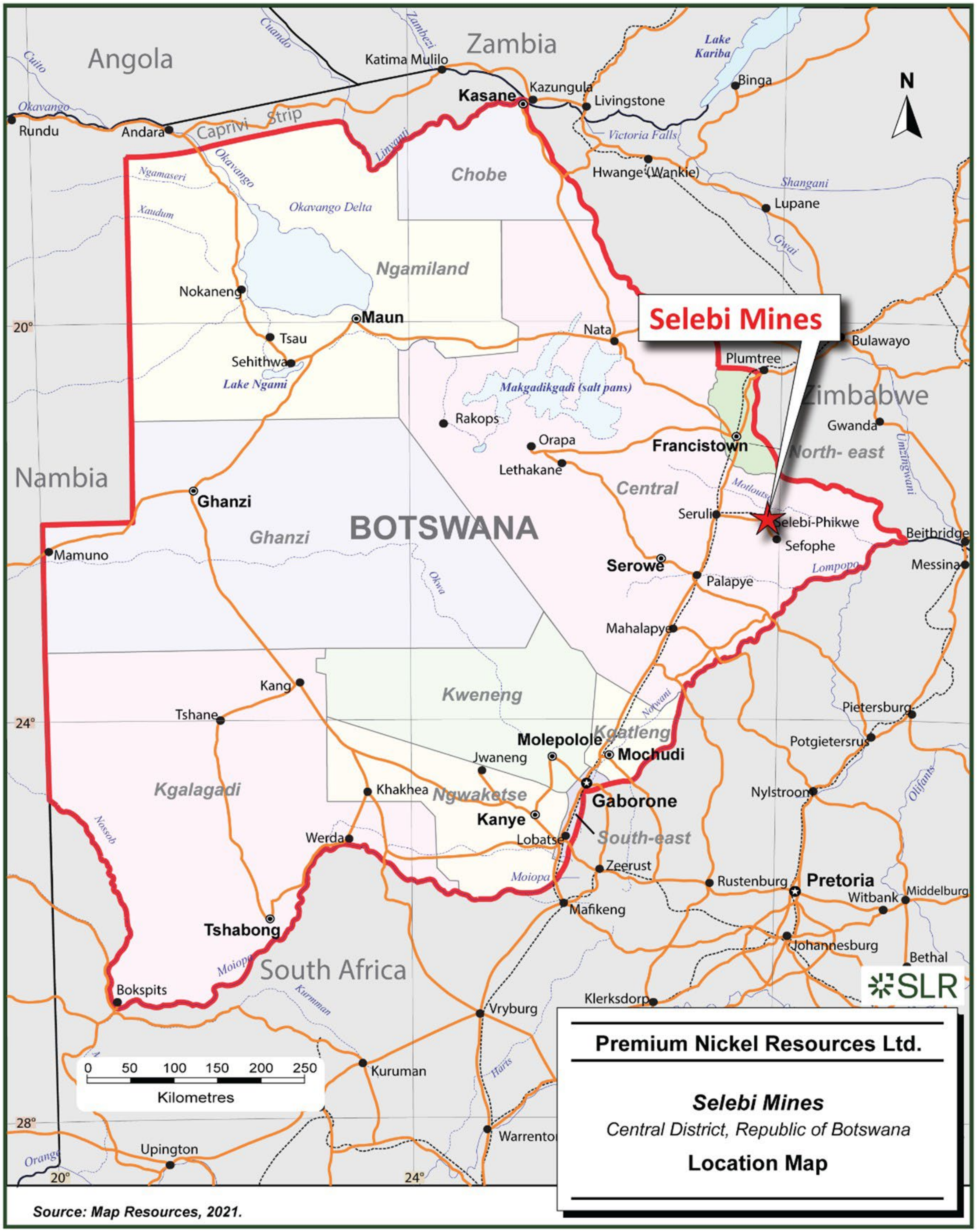
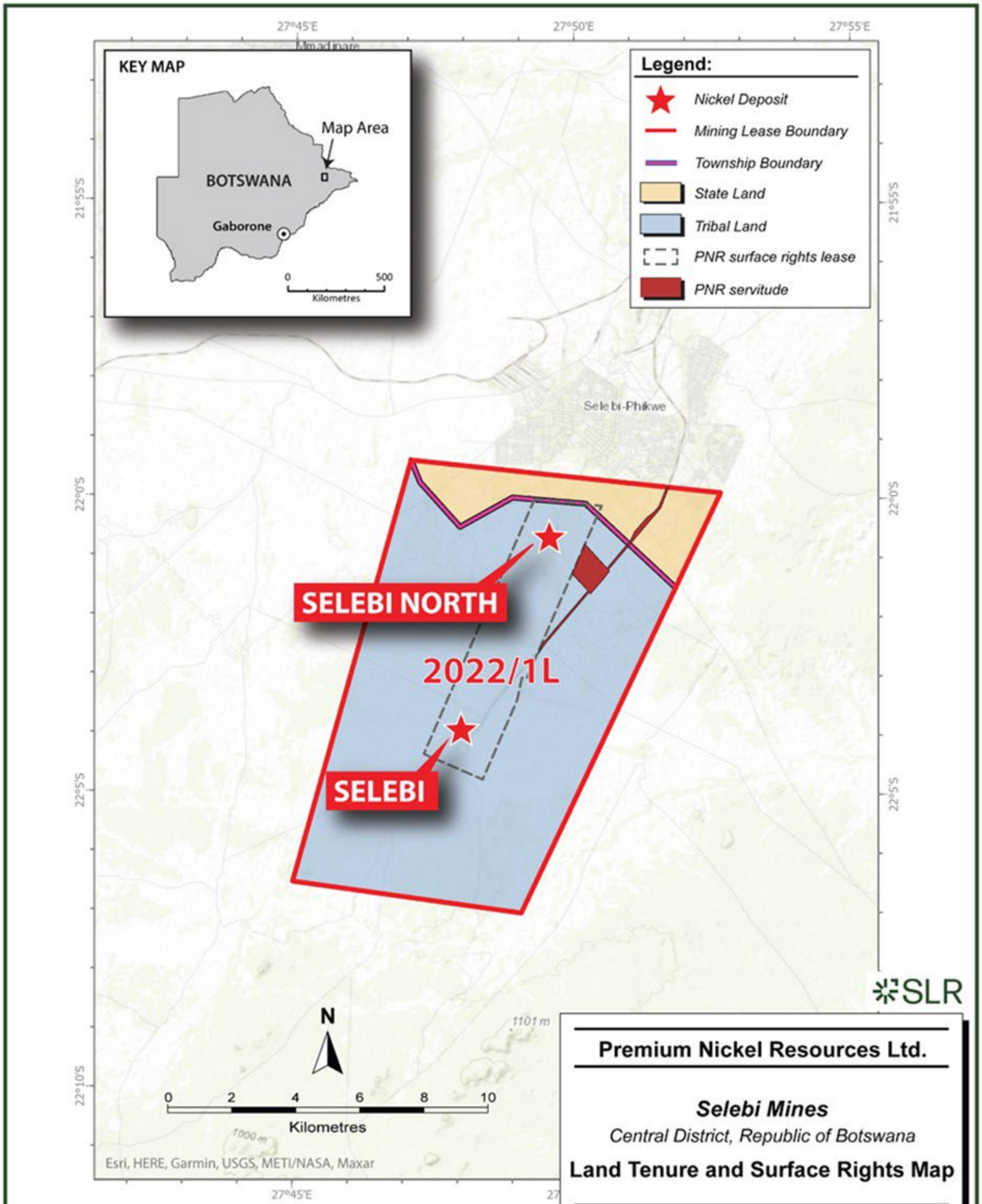


Figure 4-2: Land Tenure and Surface Rights Map



Source: Ngwato Land Board, Republic of Botswana, 2022.

5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Selebi Mines are readily accessed via paved and gravel roads from the town of Selebi-Phikwe, located just north of the mining licence. With a population of approximately 52,000, the town is accessed via a well maintained paved road that branches due east from the major A1 highway at the town of Serule, 57 km from the Project.

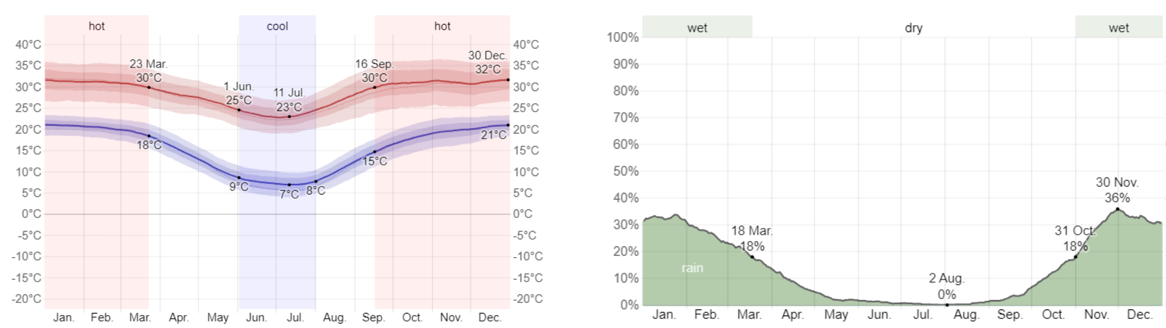
5.2 Climate

The Project has a semi-arid climate with temperatures that typically vary from 7°C to 37°C. The warm season lasts from September to November with an average daily temperature above 30°C, while the colder season lasts from June to the end of July with an average low temperature of 7°C and average high temperature of 24°C. The wet season occurs from November to mid March. The wettest month is typically January, with an average of 10 days with at least one millimetre of precipitation (Weatherspark.com, 2022).

No climatic risks exist that would affect the year round exploitation of the resources delineated in the future.

Figure 5-1 illustrates the average annual temperature for the Project area.

Figure 5-1: Average Annual Temperature and Rainfall Profiles



Source: WeatherSpark.com, 2024.

Notes:

1. The daily average high (red line) and low (blue line) temperature, with 25th to 75th and 10th to 90th percentile bands. The thin dotted lines are the corresponding average perceived temperatures.

5.3 Local Resources

The town of Selebi Phikwe is serviced by a paved road and a railway line runs from Selebi Phikwe to Serule where it joins the main line from Gaborone to Francistown. The railway line is predominately used for the freighting of materials and goods to and from Selebi Phikwe.

Selebi Phikwe is serviced by a government run airport situated near the Project on the outskirts of town. The airport is open daily, however, it has no fueling facility onsite and no commercial flights.

Reliable landline telephone communication, using the Botswana Telecommunications Corporation (BTC) network, is available throughout most of the country. BTC, as well as other private cellular network providers, also provide reliable cellphone coverage over most of the country.

Although, Botswana is situated in a semi-arid terrain, the town of Selebi Phikwe is adequately serviced by the Water Utilities Corporation which supplies treated water to the community as well as to the Project. The Letsibogo Dam, located near Mmadinare, approximately 17 km from Selebi Phikwe, is the primary source of water for Selebi Phikwe and surrounding areas. The new Dikgatlhong Dam is approximately 40 km to the north and is also a major source of water, supplying the southern regions of Botswana, including Gaborone.

The source of water for BCL's historical mining operation was an underground aquifer at #3 Shaft. PNRPL is currently dewatering #2 Shaft and pumping 1.0 megalitre per day to surface. This volume is sufficient to support mining operations at the Selebi Mines.

All electricity and power supply in Botswana is transmitted and managed by the Botswana Power Corporation (BPC). The Project is supplied through the National Grid, via a 220/66/11KV substation. The 220 KV substation is fed by two 220 KV overhead lines that run 7.6 km from the Phokoje substation.

5.4 Infrastructure

The purchased infrastructure at the Selebi Mines includes two mines currently on care and maintenance, namely Selebi (#2 Shaft) and Selebi North (#4 Shaft), and associated surface infrastructure.

The Selebi Mine has a vertical rock/service shaft down to the 300 m level, and a cable belt conveyor decline from the 300 m level to the 850 level. The shaft is 375 m deep, 6.1 m in diameter, concrete lined, and equipped with steel buntons at six metre intervals. The shaft contains five main compartments comprising a 70 person, single deck cage running in balance with a counterweight; two 6 tonne bottom discharge skips running in balance; and a ladderway. Stations are at 50 m vertical intervals, commencing on the 100 m level. A 1,070 mm x 760 mm jaw crusher located on the 300 m level, loading boxes are located on the 340 m level, and a spillage box is located on the 367 m level. The -18° decline currently runs from the 250 m level to the 850 m level providing access to deposits between the 300 m level and 800 m level horizons. A single drum winder at the top of the decline enables transport of personnel and material and is also used for waste rock handling from decline development. Stations are cut at 50 m vertical intervals, with a crusher station on the 850 m level and a cable belt loading facility on the 875 m level. A tertiary sub inclined shaft equipped with twin rails extends from the 850 m level to the 1,050 m level. This shaft provides access to the levels below the 850 m level. A 4.8 m diameter, concrete lined, ventilation shaft is located approximately 1,000 m north of the rock/service shaft.

The Selebi North Mine is serviced by a 3.5 m diameter shaft down to the 745 m level and a twin 7° decline trucking ramp that is currently down to the 900 m level. The shaft is equipped with a Koepe hoist with a two cage/six tonne skip. The cage has a four person capacity. The shaft limitation suggests that it was primarily used for ore skipping, and that material and personnel were mainly transported via the ramp.

The Selebi Mines are powered by two overhead lines. The first power line originates from the 11 kilovolt (KV) station at the Phikwe processing plant and follows the railway track. The second power line is supplied by the BPC at 66 KV. Both power sources go through a booster station to regulate the voltage before supplying the Selebi Mines. The booster station works with two 11 kV transformers.

5.5 Physiography

The topography of the Project area is generally flat and typical of the basement system of Botswana. The Project lies at an altitude between 780 MASL and 980 MASL with a gentle gradient from southwest to northeast. A number of hills, ridges, kopjes, and inselbergs of granitoid rocks are found within the mining licence and surrounding areas with the most prominent hill being Selebi Hill located at the southwest corner of the township boundary.

6.0 History

6.1 Prior Ownership

Discussions between the Roan Selection Trust and the Bamangwato tribal chiefs, initiated in 1956, culminated in the signing of an agreement in 1959 that formed Bamangwato Concessions Limited (Bamangwato), allowing for the exploration and exploitation of the nickel and copper deposits in the Project area (Lungu, 2016).

In 1972, the Government of Botswana issued to Bamangwato mining lease 13-NQ (State Grant 4/72), covering an area of 27,310.43 ha. This mining lease was granted in regard to copper and nickel ores and associated minerals contained in these mined ores for a renewable period of 25 years.

In 1977, Bamangwato changed its name to BCL. BCL and predecessor Bamangwato operated the combined Selebi-Phikwe Mines from 1972 until its closure in 2016. Ore was mined from an open pit at Phikwe, as well as four distinct underground production areas, namely Phikwe (1 Shaft, Phikwe Central, and Phikwe South), Southeast Extension, Selebi North, and Selebi. In October 2016, BCL was placed into provisional liquidation and all of its operations were placed on care and maintenance.

PNRC submitted an indicative offer to the Liquidator in June 2020 for the purchase of select assets owned by BCL. On March 24, 2021, PNRC signed an exclusivity Memorandum of Understanding (MOU) with the Liquidator that would govern a six month exclusivity period to complete additional due diligence and related purchase agreements on the Botswana Ni-Cu-Co assets formerly operated by BCL.

The Project was acquired by Premium Nickel Resources Corp. (PNRC), a private corporation formed under the laws of the Province of Ontario, on January 31, 2022 through its wholly-owned indirect subsidiary, PNRPL.

On September 28, 2021, PNRC announced that it had executed the Selebi Purchase Agreement with the Liquidator to acquire the Selebi Mines including the related infrastructure and equipment formerly operated by BCL. The acquisition closed on January 31, 2022, transferring the Selebi Mines and the new Selebi mining licence 2022/1L to PNRPL.

On April 26, 2022, PNRC and NAN announced that they had executed the Amalgamation Agreement which provided the terms and conditions upon which PNRL would complete a “go-public” transaction by way of a reverse take-over of NAN under the policies of the TSXV. The Amalgamation Agreement provides for, among other things, a three-cornered amalgamation pursuant to which (i) Subco will amalgamate with PNR under Section 174 of the *Business Corporation Act* (Ontario) to form one corporation, (ii) the securityholders of PNRL will receive securities of the Resulting Issuer in exchange for their securities of PNRL at an exchange ratio of 5.27 Resulting Issuer common shares for each outstanding share of PNRL (subject to adjustments in accordance with the Amalgamation Agreement), and (iii) the transactions will result in a RTO of NAN in accordance with the policies of the Exchange, all in the manner contemplated by, and pursuant to, the terms and conditions of the Amalgamation Agreement.

The current mining licence 2022/1L is smaller than the previous licence 4/72 and includes the Selebi Mines and their surrounding areas only. The Selebi Mines were originally covered under mining licence 4/72 which also included the Phikwe mines and associated infrastructure, including the concentrator and smelter plants used to process ore from both Selebi and Phikwe mines.

6.2 Exploration and Development History

Information in this section describes work completed over the Selebi-Phikwe project and is mostly summarized from Lungu (2016). Information relevant to Phikwe has been retained as it is sometimes difficult to summarize regional exploration work completed concurrently for the Selebi and Phikwe prospects to represent results for Selebi only. Where possible, SLR has noted for which area work is relevant.

6.2.1 Early Exploration (1959 to 1990)

Exploration in the Project area was initiated in 1959 by Bamangwato.

The anomalous copper and nickel occurrences in the Selebi Phikwe area were all discovered through geochemical soil surveys (Gordon, 1973). This geochemical soil sampling was conducted in stages from reconnaissance to close interval sampling on identified targets. The 1.6 km long Ni-Cu geochemical anomaly at Selebi was defined in March/April 1963 and Selebi became a mineral occurrence in May/June 1963. Mineralization outcropped as gossans at the three main target areas of Selebi, Selebi North, and Phikwe. Trenching and mapping were undertaken to determine the lateral extent and geology of the mineralization and associated lithologies. To test for sulphide mineralization at depth, wagon and diamond drilling was conducted on the most favourable targets. Magnetic surveying to define sub-cropping mineralization was also undertaken.

This early stage of exploration is not well documented.

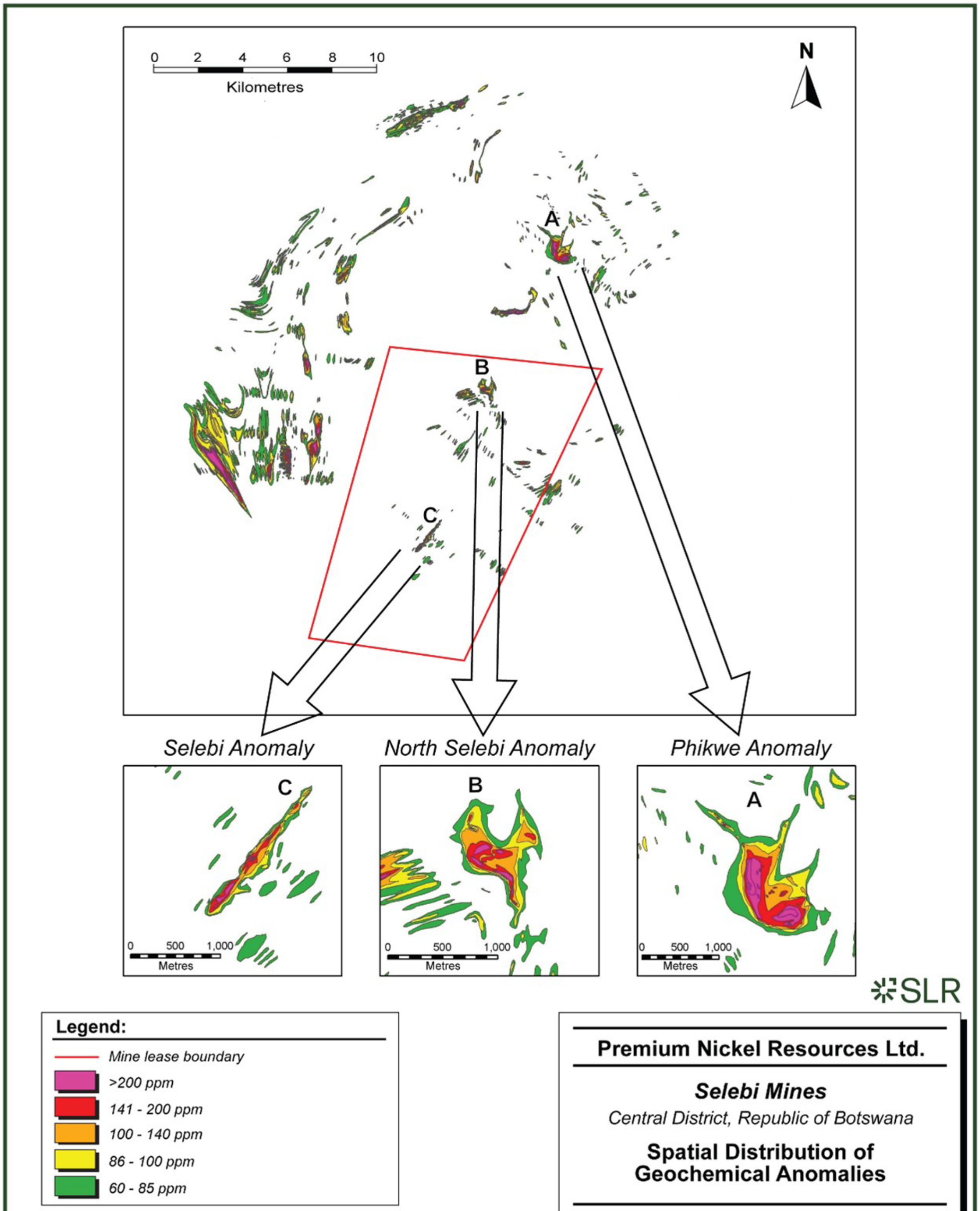
6.2.1.1 Soil Geochemistry

Reconnaissance geochemical traverses were planned from aerial photography. These traverses were planned such that they intersected major fold closures. At the reconnaissance stage, soil samples were collected at 61 m intervals along traverses that had a maximum separation of 16 km (Gordon, 1973). The reconnaissance sampling identified a number of geochemical anomalies. Regular closer spaced follow-up sampling was then conducted with samples collected at 30.4 m intervals on traverses 914 m apart. The distance between traverses was further narrowed down to 304 m in geochemically, geologically, and structurally anomalous areas. The samples were analyzed using standard rapid colorimetric methods. The geochemistry was very successful in delineating significant mineralization within the Project area. Figure 6-1 illustrates the spatial distribution of the geochemical anomalies in the vicinity of the Project. Enlarged inserts of the three principal anomalies of Phikwe, Selebi North, and Selebi are also presented.

6.2.1.2 Geological Mapping

The discovery of the Selebi and Phikwe deposits in 1963 and 1967, respectively, triggered scientific research work undertaken by groups and individuals in the vicinity of Selebi Phikwe, encompassing the Project area. From 1964 to 1975, the Botswana Geological Survey conducted geological mapping and produced geological maps of the rock units and regional structures at a scale of 1:1,000,000 and 1:125,000. This mapping was completed concurrently with scholarly work by Gordon in 1973, Wakefield in 1974, and Gallon in 1986. These scholars were focused on deciphering the structural occurrence and tectonic sequences of the amphibolites hosting the Selebi and Phikwe deposits.

Figure 6-1: Spatial Distribution of Geochemical Anomalies



Source: Lungu, 2016.

6.2.1.3 Diamond Drilling

Drilling was first conducted in 1964 prior to close-spaced geochemical sampling. After completion of eight shallow wagon drill holes, drilling was suspended due to poor results (Gordon, 1973), however, three of the holes indicated possible enrichment with depth. In 1965, drilling resumed and confirmed the improvement of sulphide mineralization grades with depth.

Close spaced geochemical surveys conducted as follow-up work produced copper and nickel anomalies at Phikwe and Selebi and drilling was shifted to these areas. Drilling at these targets continued until 1971 with the subsequent opening of the Phikwe open pit. At the end of this drilling campaign, 124 holes totalling 34,206 m and 73 holes totalling 19,294 m were completed at Phikwe and Selebi, respectively (Gordon, 1973).

Further surface exploration drilling continued at Selebi between 1980 and 1994 to confirm the down-dip and northerly continuation of the mineralization.

6.2.2 Late Exploration (2004 to 2012)

Since 2004, several exploration methods have been employed to generate targets for further examination.

A desktop study employing satellite image interpretation coupled with field mapping was completed by Peter Williams of SRK Consulting Ltd. (SRK) (Williams, 2005) over the Selebi Phikwe project area. The study generated 23 independent prospects, ten of which were located on the current Project claim area, and Williams recommended specific follow up work including mapping, geochemical surveys, and ground electromagnetic (EM) surveys. Follow up work was commissioned and completed by several contractors from 2005 to 2008 and the most prospective areas following this work were drill tested. Surface drilling was also completed to test for down-dip extensions of the existing known deposits (described in Section 10.0).

6.2.2.1 Ground Electromagnetic Surveying

In June 2005, Lamontagne Geophysics Limited of Canada was commissioned to complete a UTEM survey within the Project area, centred on Universal Transverse Mercator (UTM) coordinate location 580500 E / 7558000 N. The survey was carried out to locate conductors in the immediate grid areas with the intention of outlining targets for future work. A total of 21 km of UTEM data was collected using one transmitter loop with the receiver operating in 10 channel mode at a transmitter frequency of 3.251Hz. All lines were surveyed measuring the vertical component. Readings were initially taken at 25 m intervals along 100 m spaced lines, however, the station spacing was later increased to 50 m.

In 2011, Spectral Geophysics of Botswana was contracted by MSA on behalf of BCL to complete a surface EM survey over an untested versatile time domain electromagnetic (VTEM) anomaly located 1.5 km west of Selebi Mine, centred on UTM coordinate location 581058 E / 7559488 N. The survey utilized the Zonge GGT10 transmitter and GDP32II receiver with an EMIT three component fluxgate senor. A total of five kilometres of three component data was collected at a frequency of four hertz at a station spacing of 25 m on lines spaced at 150 m intervals.

6.2.2.2 Airborne Magnetic and VTEM Survey

From November to December 2006, Geotech Airborne Limited (Geotech) of South Africa completed a low level, high resolution magnetic and electromagnetic survey over the Project area (Figure 6-2). The survey was flown over two main grids: the North Sector Block was flown over the Phikwe Mines and the South Sector Block was flown over the Selebi Mines.

The survey was flown in a N98°E direction at nominal traverse line spacing of 100 m for the main grids and 500 m over the additional central block over the town of Selebi Phikwe. Tie lines were flown perpendicular to traverse lines at a nominal tie line spacing of 1,000 m. The helicopter maintained a mean terrain clearance of 95 m which translated into an average height of 45 m above ground for the bird-mounted VTEM system and 82.5 m above ground for the magnetic sensor. The QP notes that this is higher than the nominal clearances due to many man-made structures in the area.

Data compilation and processing were carried out by Geotech personnel using Geosoft OASIS Montaj software and programs proprietary to Geotech. Digital databases, grids, and maps were presented to BCL.

6.2.2.3 Direct Current Induced Polarization (DCIP)/Magnetotellurics (MT) Survey

In 2008, Quantec Geosciences Limited of Canada (Quantec) completed a Titan-24 ground geophysical survey over the Project area. The system is designed to collect two separate geophysical parameters, DCIP (resistivity and chargeability) and MT.

This survey was undertaken with the objective of defining conductive and chargeable geophysical features within the Project area. These features are indicative of possible Ni-Cu mineralization and hence provide a guide to focused drilling. The survey lines were spaced 250 m apart and were two kilometres to four kilometres long.

The data acquired was modelled and interpreted by Quantec, resulting in 208 targets identified for possible follow-up exploration.

Several two metre deep trenches, 600 m long and spaced 250 m apart, were dug over some of the targets. These were profiled and sampled, however, did not yield any significant host rock intersections or mineralization. Several drillholes that targeted deep MT anomalies also had poor results.

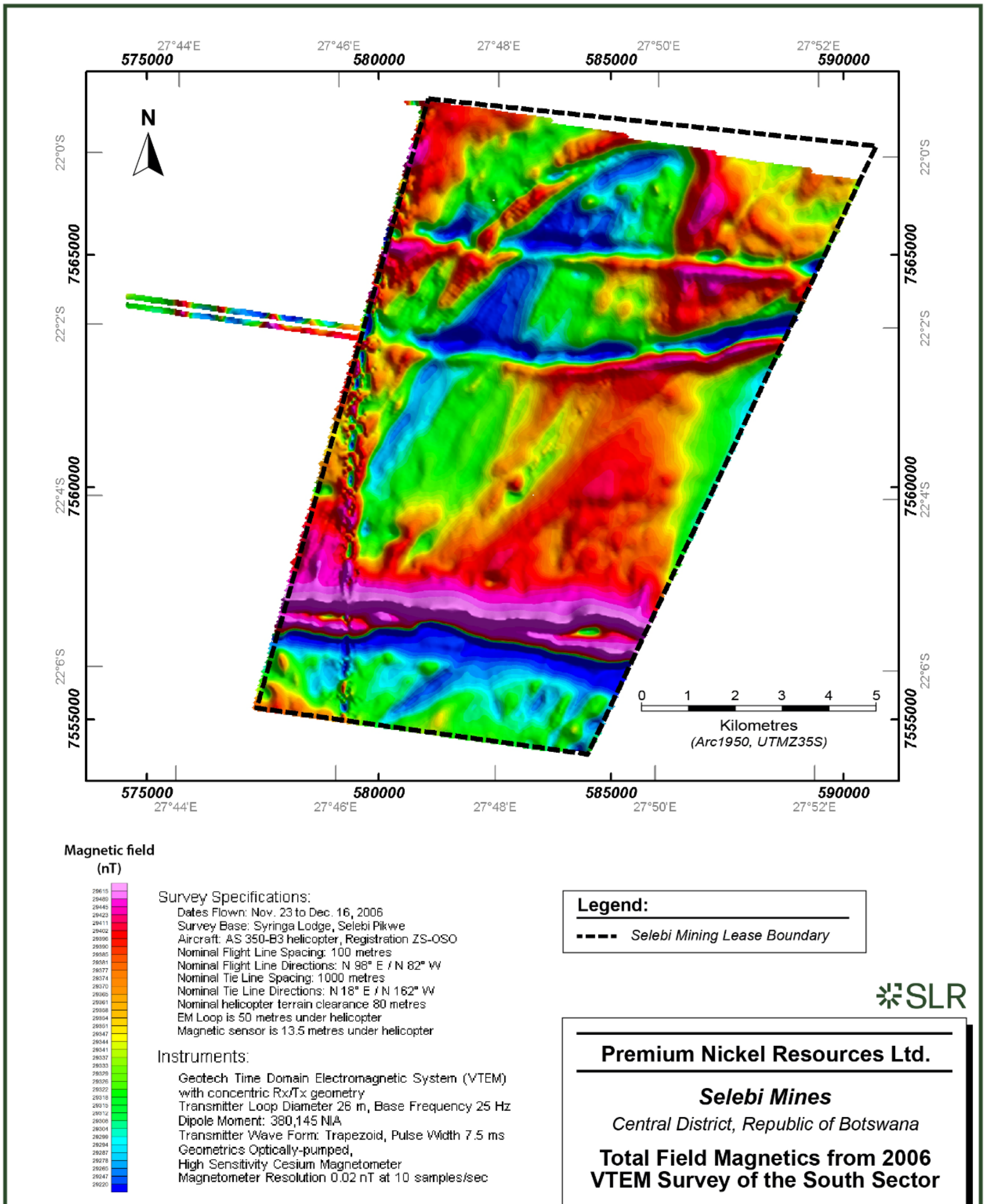
Figure 6-3 illustrates the plan of resistivity at a depth of 700 m.

6.2.2.4 Borehole Electromagnetic Surveys

Borehole electromagnetic (BHEM) surveys were completed by AEGIS Instruments (Pty) Limited (AEGIS) between April 2009 and March 2010. These surveys were designed to characterize the size and orientation of conductive mineralization intersected in drill core and search for off-hole conductors that could represent Ni-Cu mineralization. A total of 21 drill holes were surveyed in the Selebi Project area utilizing the Geonics PROTEM digital receiver, TEM67 transmitter and MAG43-3D fluxgate probe. Surveys operated at a frequency of 6.25 Hz.

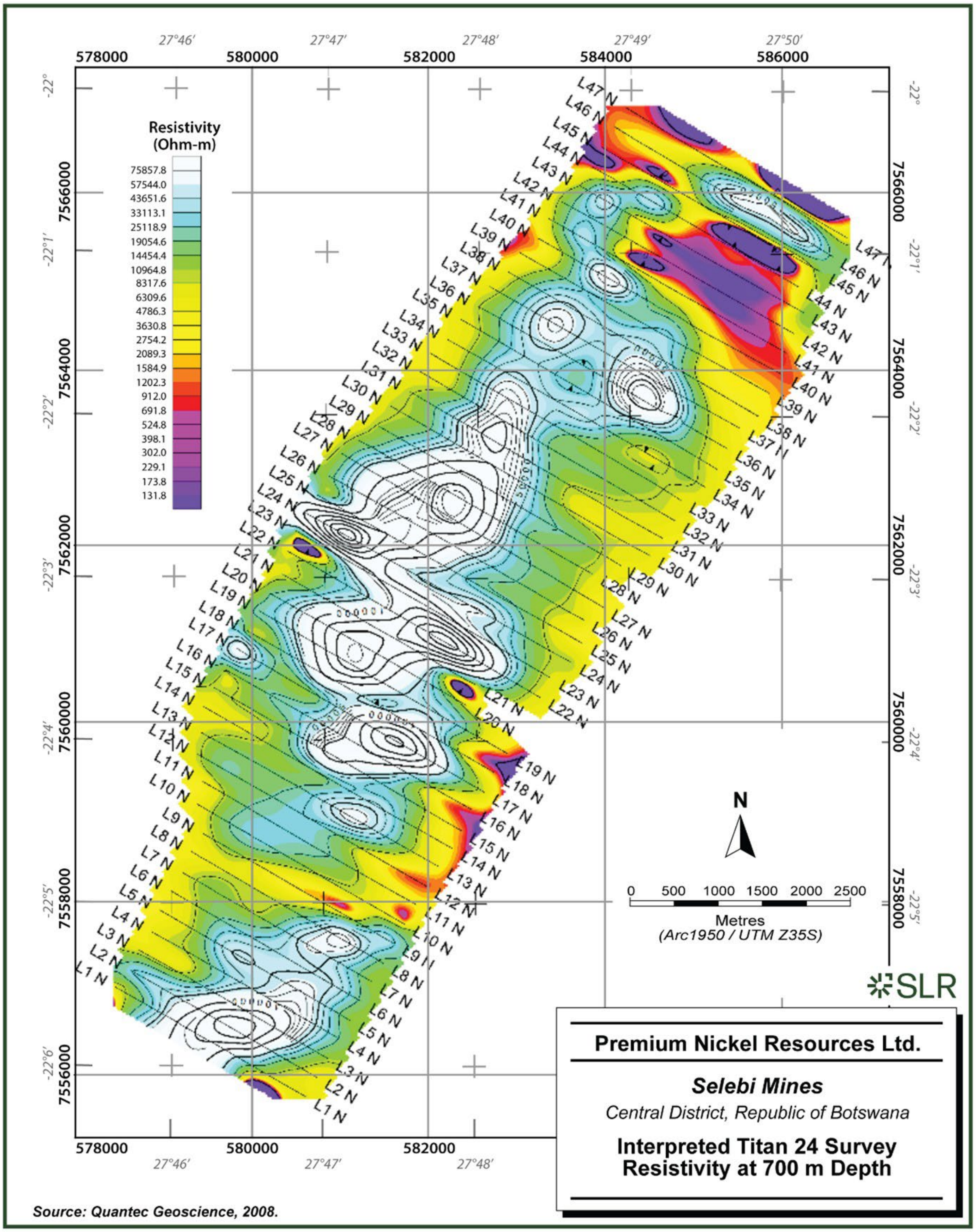
A review of the data completed by the Project Team in 2019 identified high quality off-hole anomalies in drill hole sd140, located down plunge of the Selebi Mine, and in drill hole sdn137, located near the eastern edge of Selebi North Mine. There is no indication that these targets were drill tested by the previous operator.

Figure 6-2: Total Field Magnetics from 2006 VTEM Survey of the South Sector



Source: Geotech, 2006.

Figure 6-3: Interpreted Titan 24 Survey Resistivity at 700 m Depth



6.2.2.5 Surface Diamond Drilling

Diamond drilling was undertaken within the Project area from 2007 to 2012. A two tier approach was adopted targeting on-mine/brownfields and exploration targets. On-mine drilling was undertaken with the objective of defining down dip and strike extensions of existing operations while exploration work targeted areas outside the mining infrastructure to test geochemical, geophysical, and geological targets in order to delineate stand-alone deposits.

A more detailed description of the diamond drilling on the Project can be found in 10.0 of this Technical Report. As of the effective date of this Technical Report, PNRPL had not sourced a complete database of regional exploration drilling over the Selebi Mines property.

6.3 Historical Resource Estimates

At the time of liquidation, Mineral Resources prepared in accordance with the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC Code) within the Selebi Mines property boundary were reported as in-situ and depleted for mining as of September 30, 2016 (Lungu, 2017). Table 6-1 replicates the portion of those historical Mineral Resources relevant for the Project. This estimate is considered to be historical in nature and should not be relied upon. The QP has not completed sufficient work to classify the historical estimate as a current Mineral Resource and PNRL is not treating the historical estimates as current Mineral Resources.

Table 6-1: Historical Mineral Resources as of September 30, 2016

Class/Deposit	Tonnes (Mt)	Grade		Contained Metal	
		% Ni	% Cu	(000 t Ni)	(000 t Cu)
Measured					
Selebi	0.37	1.01	2.19	3.69	8.01
Selebi North	0.71	1.24	1.03	8.83	7.34
Total Measured	1.08	1.16	1.42	12.53	15.34
Indicated					
Selebi	6.82	1.05	2.29	71.65	156.27
Selebi Central	8.79	0.64	0.78	56.28	68.59
Selebi North	1.14	1.27	1.13	14.46	12.86
Total Indicated	16.76	0.85	1.42	142.39	237.73
Measured and Indicated					
Selebi	7.19	1.05	2.28	75.35	164.28
Selebi Central	8.79	0.64	0.78	56.28	68.59
Selebi North	1.85	1.26	1.09	23.29	20.20
Total M&I	17.83	0.87	1.42	154.92	253.07
Inferred					
Selebi	4.09	0.86	1.21	35.18	49.49
Selebi Central	8.46	0.57	0.74	48.21	62.59

Class/Deposit	Tonnes (Mt)	Grade		Contained Metal	
		% Ni	% Cu	(000 t Ni)	(000 t Cu)
Selebi North	2.79	0.93	0.87	25.97	24.30
Total Inferred	15.34	0.71	0.89	109.36	136.38

Notes:

1. Mineral Resources are in-situ and depleted for mining as at September 30, 2016.
2. Mineral Resources are exclusive of pillars left in mined out areas and are corrected for geological losses.
3. Mineral Resources are inclusive of Mineral Reserves.
4. Estimated grades and tonnages have been verified both visually and statistically and are considered reasonably representative of the data informing the estimation.
5. Mineral Resource models were estimated at a cut-off grade of 0.4% NiEq within a lithology constrained model.
6. NiEq is calculated using the equation NiEq = %Ni + (Cu price/Ni price)*%Cu.
7. Nickel and copper prices used are US$8.00/lb Ni and US$3.00/lb Cu, respectively.
8. Selebi Mineral Resources are exclusive of the Lower Ore Body (LOB) due to uncertainty in interpretation resulting from very low exposure of the zone.
9. Geological losses are based on estimated losses due to pinch outs, and geotechnical and structural features.
10. Numbers may not add due to rounding.

6.4 Past Production

Construction of the Phikwe processing plant began in 1970 concurrently with the sinking of the Phikwe No. 1, Phikwe No.2, and Selebi shafts. In 1972, development work at Selebi was suspended in favour of open pit mining at Phikwe. The concentrator began operations in 1973 at a rate of 6,000 tpd, and the capacity was increased to 10,000 tpd over time. In 1980, the Phikwe open pit was exhausted and the underground operations at Selebi were phased in. Production at all operations ceased in October 2016 when BCL was placed in liquidation.

Table 6-2 summarizes the historical mineral production from the Selebi Mines from 1981 to 2016 based on information supplied by BCL and includes production figures for 1980 from the US Department of the Interior (Morgan, 1982).

Table 6-2: Historical Production

Year	Selebi			Selebi North		
	Tonnes (t)	Grade (% Ni)	Grade (% Cu)	Tonnes (t)	Grade (% Ni)	Grade (% Cu)
2016[1]	351,746	0.48	1.01	320,793	0.76	0.73
2015	500,403	0.49	0.99	512,442	0.81	0.68
2014	507,993	0.47	0.87	560,504	0.74	0.67
2013	483,314	0.48	0.74	588,247	0.71	0.64
2012	471,744	0.50	0.74	530,687	0.70	0.57
2011	531,848	0.51	0.78	562,518	0.79	0.69
2010	572,033	0.45	0.77	414,427	0.72	0.57
2009	581,517	0.46	0.75	400,334	0.70	0.68
2008	564,911	0.50	0.93	422,131	0.83	0.75

Year	Selebi			Selebi North		
	Tonnes (t)	Grade		Tonnes (t)	Grade	
		(% Ni)	(% Cu)		(% Ni)	(% Cu)
2007	585,495	0.55	0.97	500,109	0.88	0.80
2006	594,319	0.55	0.94	514,881	0.84	0.78
2005	648,124	0.60	0.99	632,671	0.83	0.73
2004	568,088	0.58	1.03	556,944	0.91	0.71
2003	610,808	0.65	1.20	625,382	0.90	0.76
2002	685,309	0.59	0.96	664,058	0.80	0.70
2001	757,580	0.61	1.01	638,712	0.69	0.62
2000	782,006	0.66	1.07	627,179	0.64	0.59
1999	830,430	0.62	1.11	616,476	0.66	0.62
1998	857,342	0.60	1.16	659,002	0.65	0.64
1997	887,383	0.58	0.97	587,470	0.67	0.62
1996	900,977	0.64	1.16	570,171	0.67	0.58
1995	814,195	0.68	1.00	482,027	0.72	0.65
1994	909,123	0.64	1.10	503,769	0.70	0.65
1993	914,560	0.66	0.96	543,484	0.68	0.63
1992	899,231	0.67	0.93	466,987	0.63	0.54
1991	825,389	0.61	0.96	325,986	0.61	0.53
1990	834,823	0.68	1.01	108,085	0.67	0.79
1989	806,936	0.64	1.06	-	-	-
1988	815,561	0.63	1.16	-	-	-
1987	827,068	0.64	1.30	-	-	-
1986	743,540	0.61	1.29	-	-	-
1985	758,949	0.59	1.28	-	-	-
1984	922,067	0.51	1.19	-	-	-
1983	940,302	0.49	1.14	-	-	-
1982	899,585	0.56	1.05	-	-	-
1981	826,683	0.52	0.91	-	-	-
1980	590,000	0.46	0.94	-	-	-
Total	26,601,382	0.58	1.03	13,935,474	0.74	0.66

Notes:

1. January 1, 2016 to September 30, 2016

7.0 Geological Setting and Mineralization

7.1 Regional Geology

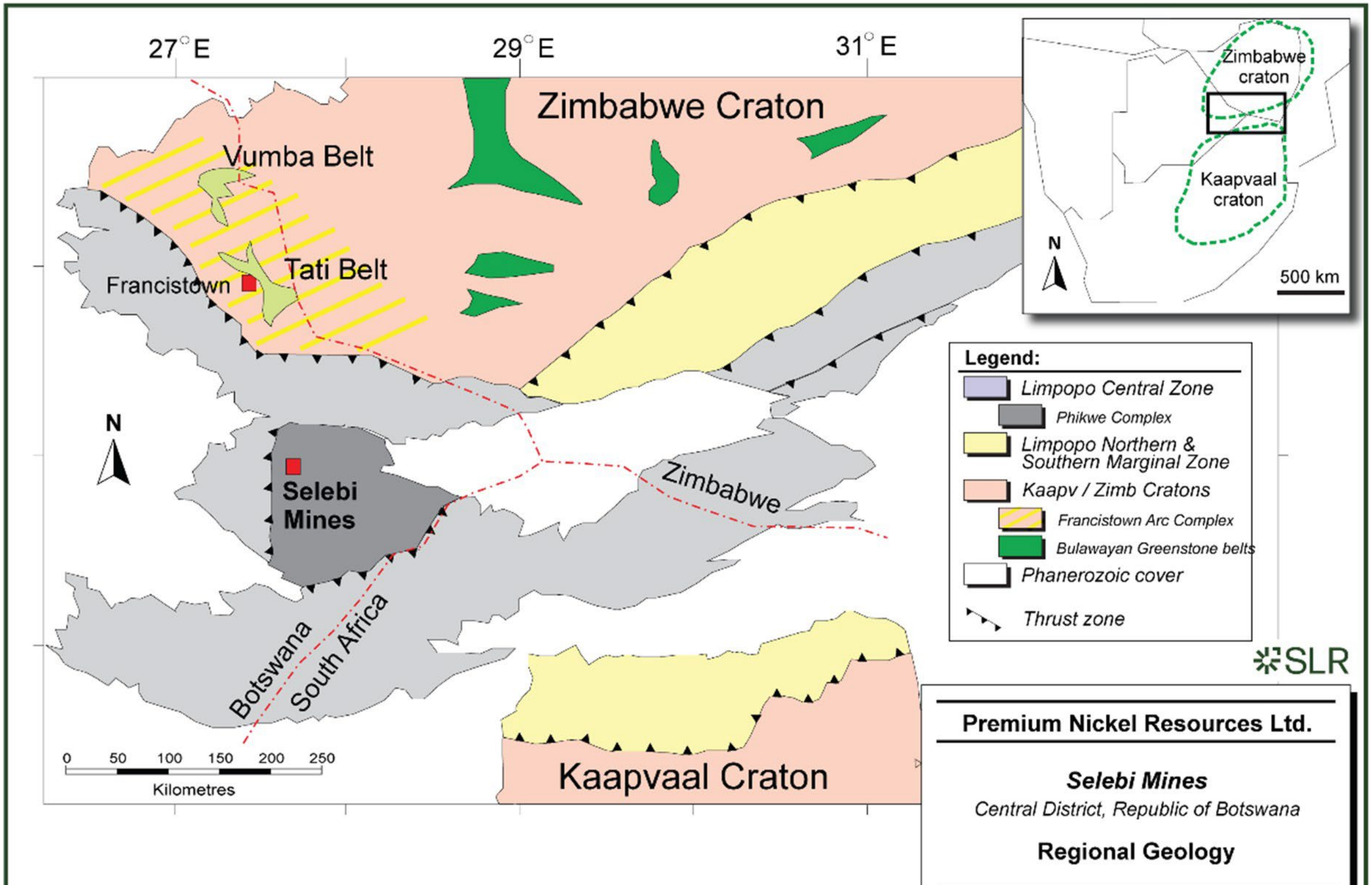
The eastern portion of Botswana forms part of the Limpopo Mobile Belt (LMB) which represents a deep crustal section through an orogenic province between the Kaapvaal and Zimbabwe cratons (Carney et al., 1994). Each of these terranes is comprised of granitoids and supra-crustal rocks. The LMB consists of volcano-sedimentary sequences and granitoid rocks which have undergone strong deformation and granulite facies metamorphism and cratonic rocks which have undergone low grade metamorphism (Carney et al., 1994). The LMB extends as a broad zone of tectonically deformed and metamorphosed rocks for approximately 900 km, between the stable Zimbabwe and Kaapvaal cratons. Recent geochronological studies indicate the age of major periods of folding and metamorphism are between 2.0 Ga to 2.69 Ga (Kampunzu et al., 2000).

The LMB is divided into three structural zones: two linear zones trending parallel to the belt, the northern and southern marginal zones, and the complex folded central zone (CZ) (Carney et al., 1994). The Project area described in this Technical Report lies in the northern portion of the CZ, just south of an east-northeast trending shear zone marked by the Letlhakane fault, at the boundary between the north marginal and central zones. The CZ region is characterized by complex structural fold patterns accompanied by regional and cataclastic metamorphism, with grades ranging from amphibolite to granulite facies and cataclastic tectonites (Carney et al., 1994).

The marginal zones are characterized by predominately metamorphosed igneous rocks whereas the CZ contains a significant amount of metasedimentary rocks (paragneisses, metapelites, quartzites, and marbles) coexisting with a variety of deformed and metamorphosed igneous rocks (Kampunzu et al., 2000). Treloar et al. (1992) suggested that the CZ is an exotic block inserted between the marginal zones during Himalayan type tectonics (Kampunzu et al., 2000). De Wit et al. (1992) considered the CZ to represent a pop-up structure formed during the Neoarchaean convergence between the Kaapvaal and Zimbabwe cratons. Roering et al. (1992), modelled the pop-up geometry as post-collisional (Kampunzu et al., 2000). Uranium-lead (U-Pb) zircon ages of gneiss granitoids from the CZ predominately range from 2,734 Ma ± 4 Ma to 2,637 Ma ±3 Ma (Kampunzu et al., 2000). Brandl (1983) suggested that the supracrustal metasedimentary rocks exposed in the CZ represent a continental platform sequence, whereas Fripp (1983) considered it to be an arc-related sedimentary package (Kampunzu et al., 2000). Geochemical studies of granitoid gneiss and metamorphosed mafic igneous rocks from the CZ led Boryta and Condie, (1990) to suggest their emplacement in an arc setting.

Figure 7-1 illustrates the regional geological context.

Figure 7-1: Regional Geology



Source: Maier, 2008.

7.2 Local Geology

The Project occurs in highly deformed and metamorphosed Archean gneisses near the north margin of the CZ of the LMB. The ores and host rocks have experienced all the phases of deformation that have affected the enclosing gneisses (Brown, 1987). According to Brown (1987), a distinction has been made between extensive tracts of photogeologically homogeneous granitic gneisses and varied well-banded supracrustal assemblages of hornblende gneisses and amphibolites, quartzo-feldspathic grey gneisses, anorthositic and gabbroic gneisses, and minor metasediments (quartzites, marbles, and banded iron formations), characterized by abundant photogeological trend-lines. The supracrustal assemblage contains Ni-Cu sulphide deposits. According to Hoffmann (2002), the deposits occur as conformable stratabound ore bodies associated with an amphibolite host within a sequence of gneisses at a similar stratigraphic position.

The Phikwe Complex is located within the CZ of the LMB, consisting predominately of Archean hornblende bearing tonalitic and trondhjemitic gneisses. The Phikwe Complex also contains the Selebi-Phikwe belt of mafic–ultramafic intrusions hosted by medium to coarse grained, massive to weakly foliated, granoblastic to porphyroblastic granite gneiss and a variety of banded supracrustal gneisses comprising hornblende-gneiss, quartzo-feldspathic gneiss, and anorthositic gneiss. The protoliths to the hornblende gneisses are believed to be volcanics and shallow intrusions of tholeiitic basaltic and titanium rich ferrobasaltic composition, whereas the protoliths to the quartzo-feldspathic gneisses may have been calcalkaline volcano-sedimentary rocks (Brown, 1987). Subordinate amounts of pelitic schists, marbles, impure quartzites, and ironstones are also observed. Most of the aforementioned rocks are very sulphide poor (<200 ppm sulphur (S)) (Maier et al., 2008). A map of the local geology is presented in Figure 7-2.

A few age determinations constrain relationships in the Selebi-Phikwe area. Samples of the granite gneisses have been dated at 2.6 Ga to 2.65 Ga (U-Pb SHRIMP method; McCourt et al. 2004). According to Wright (1977) and Brown (1987), the granite gneisses have intrusive relationships with the supracrustal rocks, implying that the latter are older than 2.6 Ga. The absolute and relative ages of the mafic–ultramafic intrusions remain unclear, as lithological contacts are mostly tectonic, however, it is clear that that they are older than 2.0 Ga.

Figure 7-3 illustrates the generalized stratigraphic column of the Phikwe Complex.

Figure 7-2: Local Geology

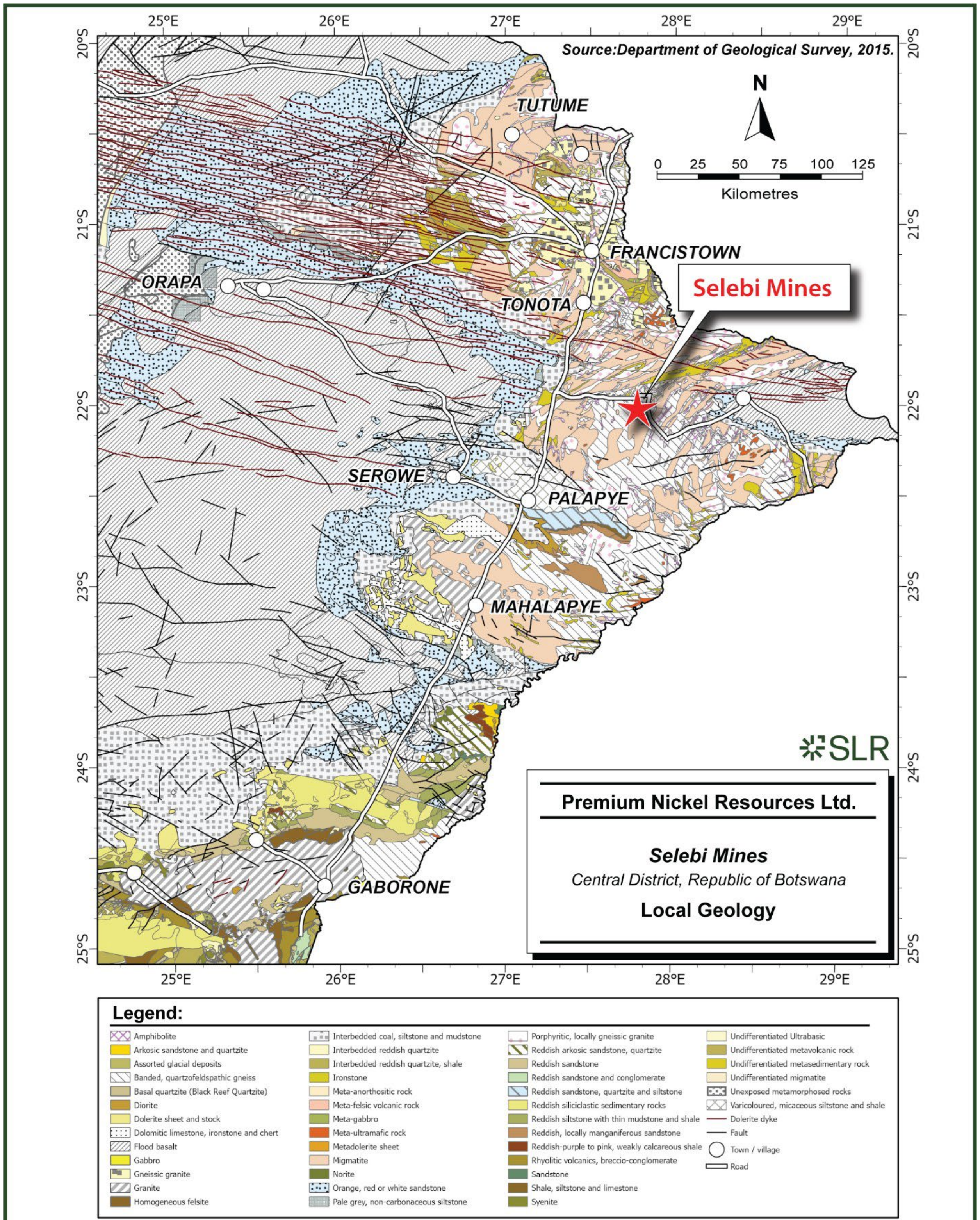
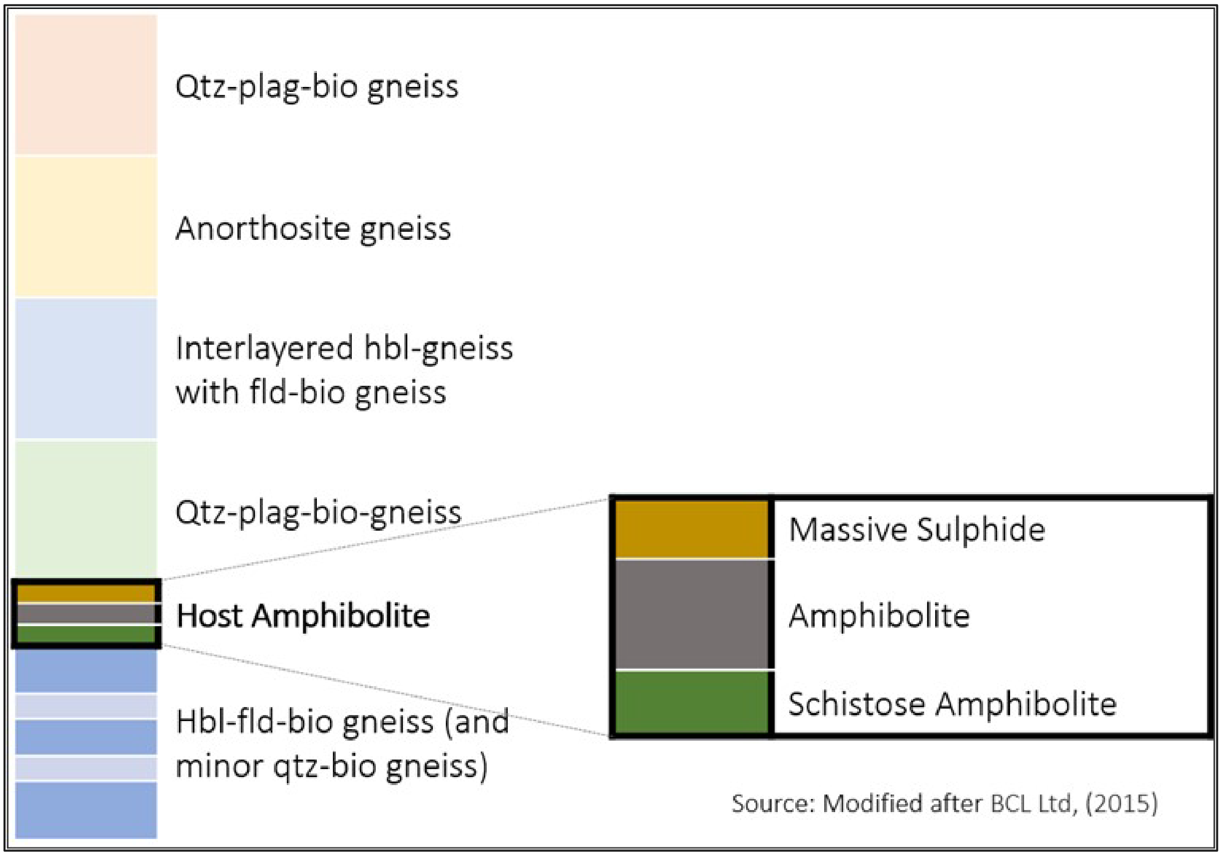


Figure 7-3: Generalized Stratigraphic Column



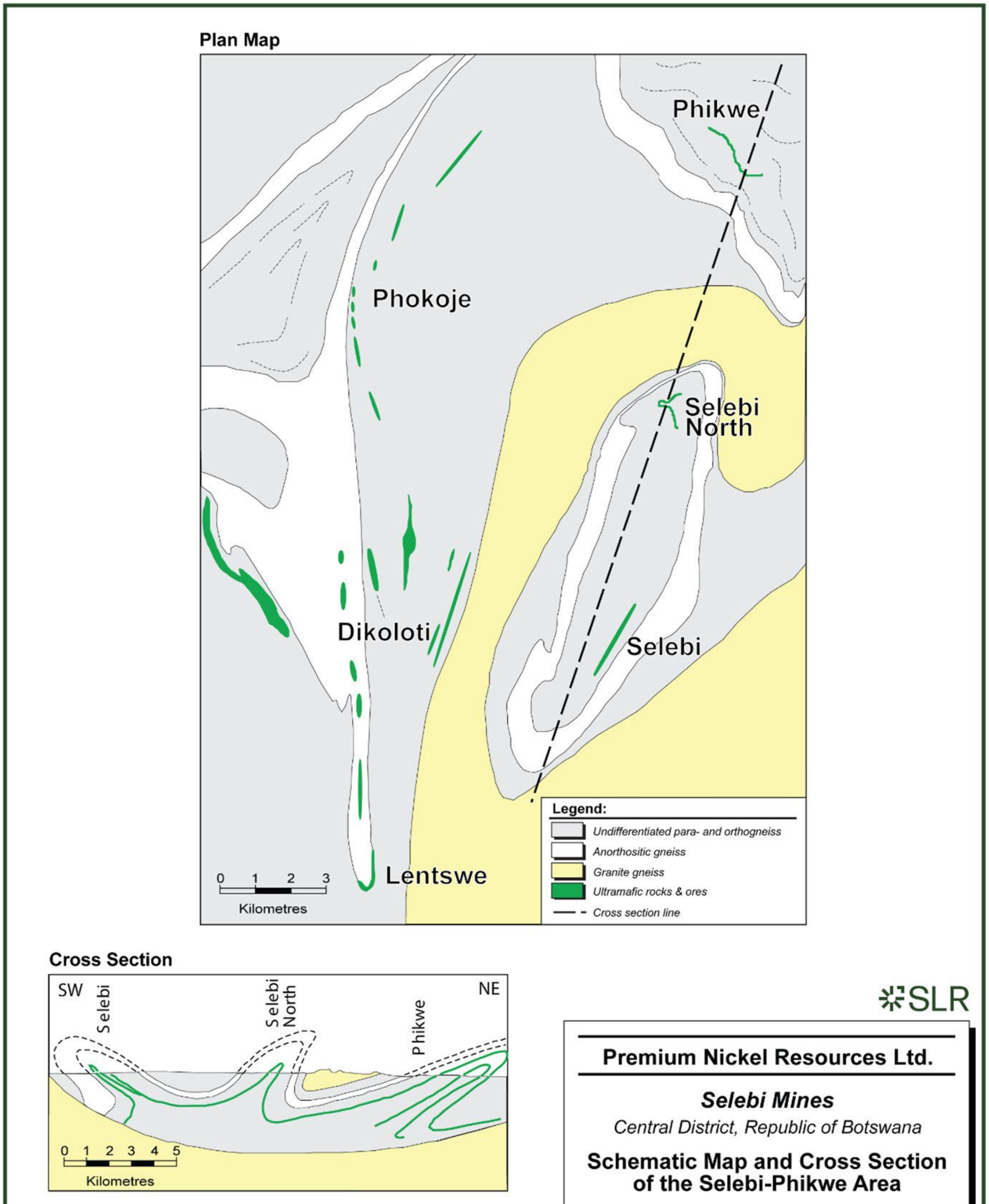
7.3 Property Geology

A schematic geological map of the Selebi-Phikwe area and a north-south section across the Selebi Phikwe nickel belt (along dense stippled line) is presented in Figure 7-4.

A structural and geological map was developed by Williams (2005) and is the most recent geological and structural map of the Project area (Figure 7-5). The map was developed using a combination of detailed mapping, GIS interpretation of remotely sensed images, integration of existing stratigraphic drill core, and geochemical datasets (Dirks, 2005). Within the Project area, all mineralized zones lie within the Selebi Synformal Basin.

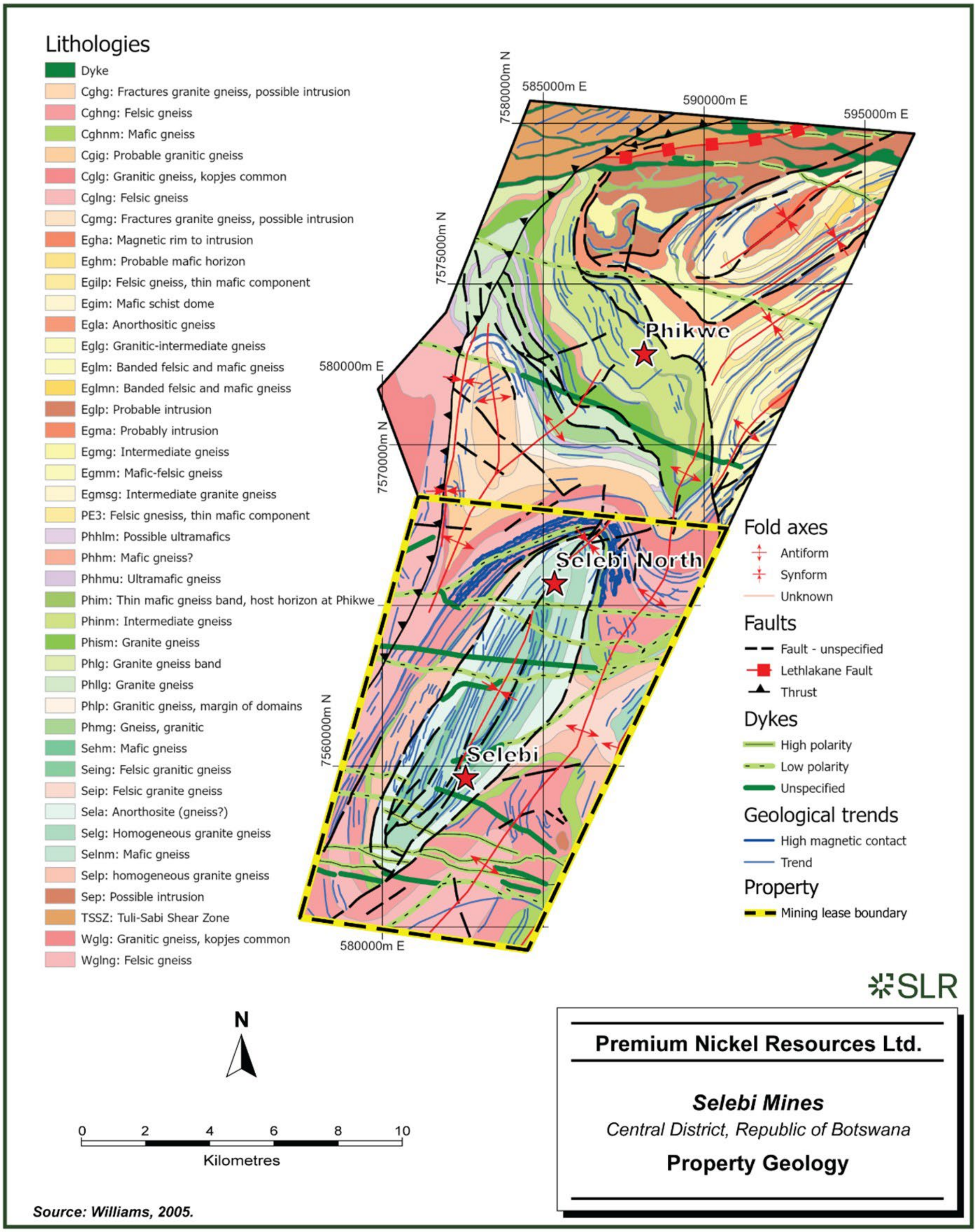
The Selebi and Selebi North deposits form part of the Selebi-Phikwe belt of intrusions that also contain the Phikwe, Dikoloti, Lentswe, and Phokoje deposits. In all of these deposits, the sulphide mineralization is predominately associated with boudinaged lenses and layers of fine to medium grained amphibolite interlayered with various types of gneisses (Gordon (1973), Wakefield (1976), Key (1976), Gallon (1986) and Brown (1987)). The ore bearing intrusions are generally relatively thin (e.g., on average 11 m in the Phikwe area), however, this may largely be the result of intense folding and shearing (Lear, 1979). The amphibolites predominately consist of hornblende, feldspar, gedrite, and mica. Minor metamorphic orthopyroxene and olivine also occur. Based on whole rock compositional data and Cross, Iddings, Pirsson, and Washington (CIPW) norms of a large number of samples, Brown (1987) estimated that the parental magmas to the intrusions were tholeiitic basalts (with approximately 8 wt% MgO) that crystallized variable proportions of olivine, pyroxene, and plagioclase (Maier et al., 2008).

Figure 7-4: Schematic Map and Cross Section of the Selebi-Phikwe Area



Source: Maier et al, 2008.

Figure 7-5: Property Geology



Source: Williams, 2005.

7.4 Mineralization

The following is modified from Lungu (2016).

The Ni-Cu mineralization in the Selebi North and Selebi deposits is hosted by hornblende rich amphibolites with varying amounts of plagioclase (labradorite to bytownite), gedrite, phlogopite, biotite, garnet, and sulphides (Gordon (1973) and Brown (1987)). Spinel, olivine, and orthopyroxene have been reported (Brown, 1987). The principal sulphide minerals are pyrrhotite, chalcopyrite, and pentlandite which occur in massive, semi-massive, and disseminated form. Pyrite occurs as localized overgrowth. Magnetite occurs as rounded inclusions in massive sulphides and as later overgrowths.

The mafic, hornblende rich mineralogy of the Selebi-Phikwe host rocks, their association with Ni-Cu mineralization, and their geochemistry has been used to infer an igneous protolith of troctolitic-noritic gabbros locally associated with ortho-pyroxenite (Brown, 1987). Trace element geochemistry suggests a tholeiitic protolith, and the wide ranging and locally high chromium content is indicative of a cumulate intrusive rather than extrusive origin. Geochemical modelling suggests that the parent intrusive body of the Selebi-Phikwe deposits was a mixture of cumulus phases (plagioclase, olivine, pyroxene, and chromite), intercumulus liquid, and an immiscible sulphide liquid (Brown, 1987).

All of the mined ore bodies over the Project area are observed within, or at the hanging wall contact of the hosting amphibolite with gneisses. The gneisses forming the country rock of the Selebi-Phikwe deposits can be divided into two main groups. The first group is a suite of well-banded hornblende gneiss, grey quartzo-feldspathic gneiss, with anorthosite, minor magnetite quartzite, and marble, and the second group is composed of granitic gneisses.

7.4.1 Selebi

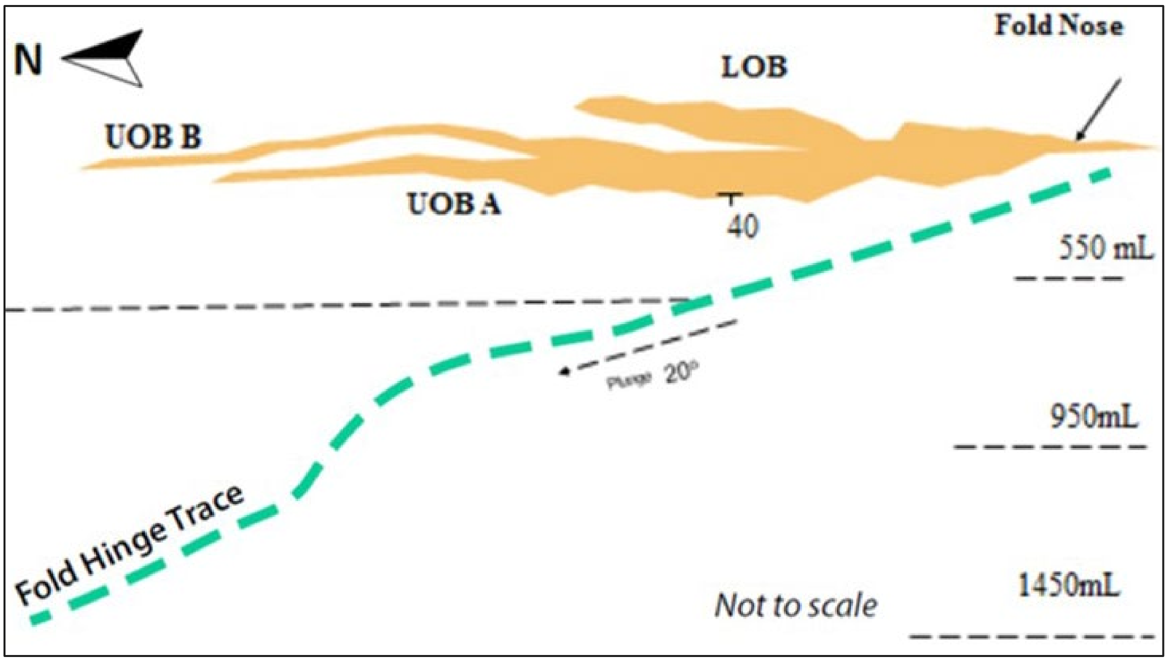
The Selebi deposit is an amphibolite-massive sulphide sill one metre to 25 m thick and 2,000 m long. Within the deposit three distinct interconnected, mineralized horizons were mined: the LOB, the Upper B (UB) ore body, and the Upper A (UA) ore body. The LOB is the eastern limb of an F1 age isoclinal fold, whereas the UB ore body forms the larger western fold limb. Four hundred and fifty metres up dip from the fold hinge, the UB ore body splits creating the UA ore body, which continues 150 m before pinching out. From the UA-UB split, the UB sulphide horizon continues, much thinner, for an additional 450 m, eventually changing into a barren amphibolitic schist two metres to three metres thick. All ore horizons, massive sulphide, or amphibolite are conformable to the gneissic foliation. The contacts of the host amphibolite with the surrounding grey gneiss are conformable but typically sheared, with the development of abundant mica locally in the host amphibolite and coarse cataclastic textures in the grey gneiss (Brown, 1987).

The Selebi deposit can be divided into two distinct areas. The southern half of the Selebi deposit is characterized by thick amphibolite while the north fringe area is composed of multiple sulphide horizons rarely thicker than three metres. The major structural features in the north fringe area are drag folds and a pinch and swell habit within the sulphide horizon. Hanging wall drag folding has formed the UA ore body ore as well as several minor splits north of the UA body (Figure 7-6).

The major structural feature in the Selebi deposit is the F1 isoclinal fold which marks the southern limit of mineralization and links the UB to the LOB. With a hinge line plunging 20° on a N10°E bearing, the Selebi fold is synformal, however, due to the anorthosite horizon, it lies on the footwall of the Selebi mineralization. Gordon (1973) considered the fold to be an overturned anticline. Gordon went on to illustrate the deposit as a drag fold on the flank of the Selebi structural basin. Isoclinal folding at Selebi strongly influenced the deposition of remobilized sulphides, since the thickest concentration of massive sulphide and the highest metal grades are both encountered along the nose of this major fold.

The host rock consists largely of hornblende rich amphibolites with varying amounts of plagioclase, gedrite, phlogopite mica, biotite mica, garnet, and sulphides. Magnetite is commonly associated with the sulphides. Also present in the amphibolite, though rarer, are green spinel, olivine, and orthopyroxene. The sulphide minerals occur as massive sulphides (70% to 100% sulphides), through semi-massive sulphides with increasing volumes of silicate minerals, to disseminated/stringer sulphides (0% to 30% sulphides).

Figure 7-6: Longitudinal Sketch of the Selebi Deposit Showing the Fold Plunge



Source: Lungu, 2016

The upper amphibolite is generally thicker, up to 27 m, while the lower amphibolite is almost always less than 10 m, lenticular, and locally absent. Thick amphibolite intersections have been observed from surface drilling for deep seated sulphides at Selebi.

Pinch and swell features, common in the Selebi deposit, are predominately due to D1 boudinage and not a result of D2 folding (Brown, 1987).

Within the UB deposit, the host amphibolites exhibit clear sulphide zonation. Massive sulphides occur at the hanging wall contact. Along the actual contact centimetre scale cummingtonite crystals form an alteration fringe growing into the hanging wall quartzo-feldspathic gneisses. The massive sulphides are underlain by a massive amphibolite consisting of gedrite-hornblende-phlogopite with very little to no plagioclase and stringers of sulphide as well as disseminated sulphide. The gedrite crystals are coarse grained and orientated in the regional mineral lineation, which plunges shallowly to the north. This unit likely represents a highly altered and recrystallized metapyroxinite (Brown, 1987). Progressing into the footwall, the rocks contain increasingly less phlogopite, gedrite, and disseminated sulphide and increasing amounts of hornblende and plagioclase, thus, gradually transitioning into a hornblende-plagioclase amphibolite, i.e., the type of amphibolite that is characteristic within the banded gneiss suite (Dicks, 2005).

7.4.2 Selebi Central

Distribution of mineralization is complex in the Selebi Central area and has similarities to the ore zones encountered at Selebi, although it was not possible to map folding as described by Gallon (1986). Nickel and copper mineralization occur at a number of stratigraphic levels within the host amphibolite, and occasionally within the hanging wall gneiss. There are, however, three reasonably consistent mineralized horizons within the host amphibolite as follows:

1 Zone A: Developed at the contact between the hanging wall gneiss and the host amphibolite.

2 Zone B: Developed generally within the middle of the host amphibolite.

3 Zone C: Developed at or near the base of the host amphibolite.

Of the three mineralized zones, Zone C is the most consistent, covering most of the areal extent of the Selebi Central deposit. Mineralization occurs generally as sulphide stringers or disseminations with grades averaging 0.6 % Ni and 0.7 %Cu.

Similar to the Selebi deposit, the Selebi Central deposit dips approximately 40° to the west. The Selebi Central deposit is characterized by the three separate thin mineralized zones within a host amphibolite package which ranges in thickness from zero metres to 40 m.

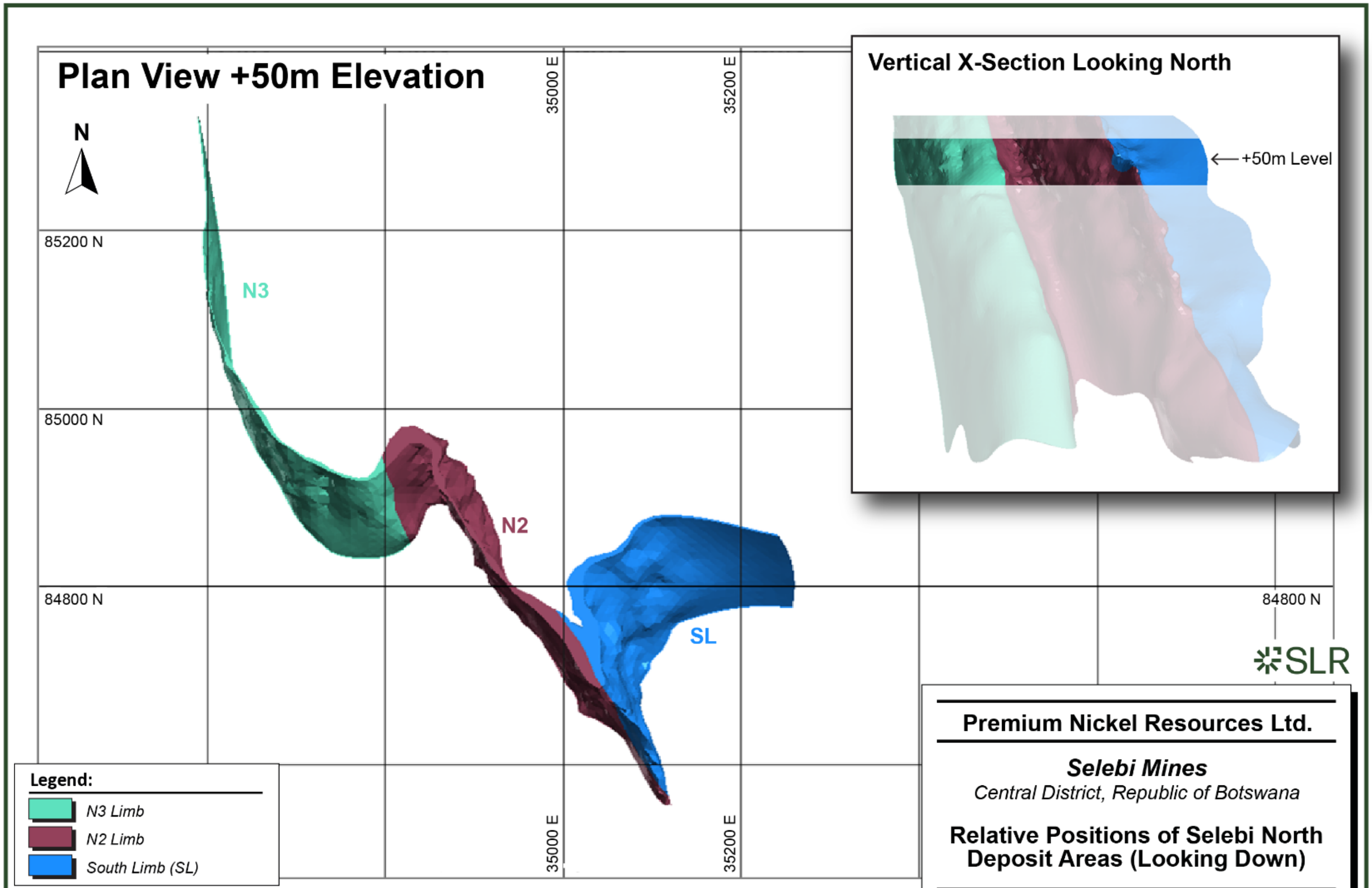
7.4.3 Selebi North

The Selebi North structure consists of a South Limb that is connected to the North 2 (N2) Limb through the fold nose, which is in turn connected to the North 3 (N3) Limb by a second fold nose (Figure 7-7). Underground exploration drilling indicates shortening of the South Limb strike length and tightening of the fold nose.

The host amphibolite is conformable with the surrounding grey gneiss. Massive sulphide thickness in the N3 Limb, vary from zero metres to 20 m, averaging three metres.

Folding within the footwall gneiss is evident, however, does not affect the structure and dip on the deposit. The Ni-Cu mineralization at the Selebi-Phikwe deposits is confined to what evidence suggests is a single layer of amphibolite occurring within a sequence of grey quartzo-feldspathic and hornblende gneisses. The host rocks consist predominately of hornblende rich amphibolites (tschermakite to ferroan pargasite) with varying amounts of plagioclase (labradorite to bytownite), gedrite, phlogopite mica, biotite mica, garnet (almandine), and sulphides (Brown, 1987).

Figure 7-7: Relative Positions of Selebi North Deposit Areas



Source: SLR, 2024.

7.4.3.1 South Limb

The South Limb dips 35° to 80° south and the amphibolite thickness ranges from 0.10 m on the fringes to 40 m in the central portion. The South Limb deposit is shallow dipping on the eastern extremity and steep towards the fold nose. Two segments can be defined and are separated by an open fold. The western portion of the fold is predominately thick massive sulphides with relatively high nickel grades while the eastern side of the open fold is predominantly disseminated sulphides and low grade massive sulphides. The strike length of the South Limb is 200 m. The South Limb is a mineralized amphibolite layer consisting of massive sulphide mineralization against the hanging wall. The massive sulphide zone is thick and rich towards the middle of the deposit and narrows at the fold nose and on the southern extremity. The South Limb has an average thickness of 40 m of lower grade disseminated amphibolite against the footwall. The disseminated zone often contains pods and lenses of massive sulphides ore. The footwall of the deposit is taken as the contact between crystalline amphibolite and biotite schistose amphibolite that grades into hornblende-phlogopite-plagioclase schist. This schist contains minor disseminated sulphides mineralization and rare lenses of massive sulphides, however, is uneconomic. To the east, the immediate hanging wall is barren schist grading into altered hornblende gneiss. The gneiss is invariably barren with occasional injections of massive sulphides.

7.4.3.2 North 2 Limb

The N2 Limb dips from 60° to 90° west with ore thicknesses ranging from 0.20 m to 3.5 m wide below the 828 m level and a plunge of 45° to the southwest. Structurally, the N2 Limb is aligned along a shear zone that has resulted in the separation of the N3 Limb and South Limb ore bodies, however, remains connected to the South Limb through the fold nose. The N2 Limb and South Limb were previously mined and modelled separately, split along the fold nose (Figure 7-7).

Economic mineralization in the N2 Limb is patchy although the total strike length is up to 300 m on the upper levels. Thicker mineralization occurs at the extreme limits of the N2 Limb while the middle portions are generally pinched out or with poor to barren amphibolite grading 0.22% Ni on average. The mineralization is predominantly confined to the hanging wall contact with the quartzo-feldspathic gneisses. The footwall is predominately altered micaceous schist with thicknesses of up to 40 m in places.

7.4.3.3 North 3 Limb

The N3 Limb at Selebi North is a sub vertical narrow massive sulphide deposit with dips of 70° in the deeper levels to 90° in the upper levels and a strike length of approximately 300 m on the 828 m level. The strike length narrows with depth to 50 m on the 1,100 m level. The N3 Limb is characterized by pinch and swell structures where the average mineralization thickness ranges between 0.10 m to 10 m. Although the N3 Limb is narrow, the massive sulphides percent in-situ nickel grade (approximately 2.50% Ni) is relatively high compared to the other limbs with a lower overall gangue mineral percentage. There is a marked decrease in grade towards the eastern extremity of the N3 Limb with the mineralization occurring as poorly mineralized to barren amphibolite. The western extremity is characterized by an open fold with mineralization thinning out to sub-economic thicknesses.

Shear structures observed at the western limit of the N3 Limb and northern limit of the N2 Limb is evidence of the connection of the two limbs prior to deformation.

8.0 Deposit Types

The following section is modified from Lungu (2016).

The deposits in the Project area are categorized as ortho-magmatic Ni-Cu sulphide-type deposits. They are hosted within amphibolite and understood as a tectono-metamorphically modified tholeiitic magma parents with an immiscible sulphide melt (Brown, 1987) which has undergone all the phases of deformation that have affected the enclosing gneisses.

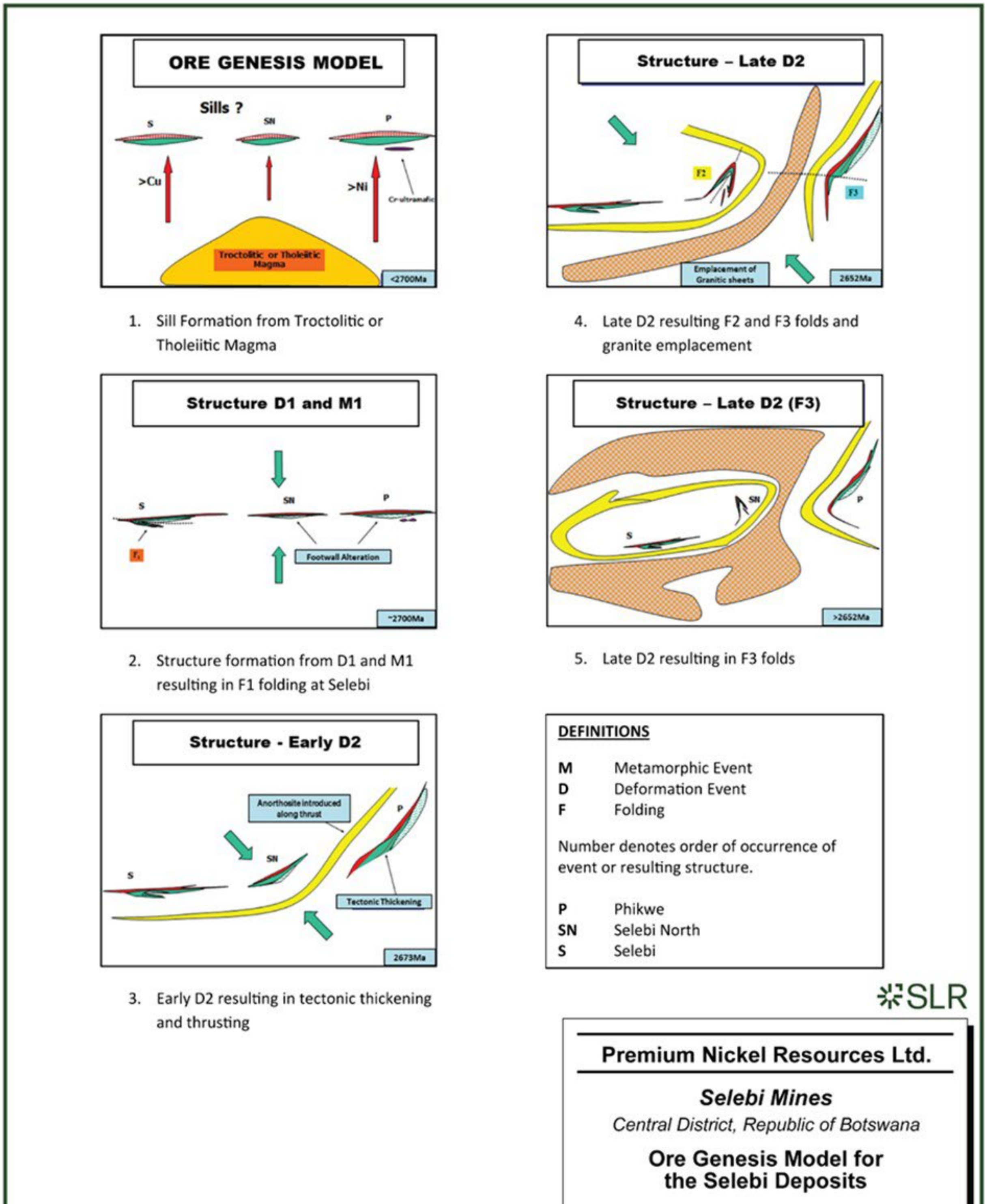
The mineralogical composition of the host rock bodies, the suggested geochemistry of the basaltic intercumulus liquid, and the Ni-Cu content of the sulphide ores are consistent with the formation of the host rocks and sulphide ore bodies from a fractionating tholeiitic basaltic magma that intruded as a liquid mush (Gordon (1973), Wakefield (1983), and Brown (1987)) likely between 2,700 Ma to 2,650 Ma ago.

Intrusion of the host magma was followed by several phases of deformation and metamorphism which resulted in the ductile dismemberment and folding of the original intrusive complex as well as the massive sulphide lenses. The postulated genesis model (Figure 8-1) was originally suggested by Gordon, and later supported by Brown (Gordon (1973), Wakefield (1976), and Brown (1987)). The ages of syn-tectonic granitic gneiss units in the area vary between 2,650 Ma to 2,600 Ma indicating that deformation was concomitant with that recorded in the Zimbabwe Craton to the North (McCourt and Armstrong (1998), and Jelsma and Dirks (2002)).

Both the Selebi North and Selebi Ni-Cu sulphide deposits are associated with an amphibolite layer which occurs within grey gneiss and lesser hornblende gneiss of Unit E of the Selebi Sequence (Brown, 1987). The sulphides mainly occur as massive sulphide, usually containing >70% sulphides with small amounts of silicate inclusions or as disseminated sulphides, usually <30% sulphides, with higher amounts of inclusions. Stringer sulphides are generally thin, <10 cm veins typically crosscutting the foliation in the amphibolite (Brown, 1987).

The Selebi-Phikwe sulphides have been interpreted as having formed as an immiscible sulphide fluid in a deeper lying, crystallising, mafic magma body, from which sills were injected to higher crustal levels, transporting the sulphide fluids. The host sill is now metamorphosed to amphibolite. Quartz-feldspar gneisses form the hanging wall and footwall.

Figure 8-1: Ore Genesis Model for the Selebi Deposits



Source: Lungu, 2016.

9.0 Exploration

Exploration work completed by PNRPL from 2021 to May 2024 has consisted of surface and underground drilling supported by the development of an exploration drift, the sourcing and digitization of existing historical information, the confirmation of collar and down hole location information of selected holes, and the completion of downhole location (gyro) surveys, televiewer surveys, and surface and BHEM surveys on high priority historical exploration holes. A small, focused structural modelling study at Selebi was also prepared at the request of PNRL by SRK (Lebrun and Tuitz, 2022), and a 3D model of mineralization at Selebi and a 3D model of mine workings from 2D level plans and survey information was also progressed. A summary is presented in Table 9-1.

Table 9-1: Summary of Exploration Activities

Activity	Description	Dates	Contractor
Diamond Drilling Underground at Selebi North	107 holes, 42,653 m resource drilling	Aug 2023 to June 30,2024 and ongoing	PNRPL employees assisted by Fusion Drilling
Diamond Drilling Regional Targets	10 holes, 1,852.89 m three VTEM anomalies tested	Sep 2023 to Nov 2023	Discovery Drilling
Diamond and RAB Drilling	15,074 m, 9 holes intersected the target horizon	Mar 2022 to Jan 2023	Mitchell Drilling
Diamond Drilling and Reaming	60 holes, 2 holes extended to test amphibolite horizons	Oct 2021 to October 2023	Discovery Drilling
Gyro Surveys	60 historical holes plus all new drill holes	Nov 2021 and ongoing	Genway/Reflex and PNRPL employees
BHEM Surveys	58 historical holes 18 PNRL surface holes (8 at Selebi Main and 10 regional) 30 PNRL underground holes	Apr 2022 to June 2024	PNRPL employees using equipment rented from Crone Geophysics
Surface EM Surveys	4 grids covering VTEM anomalies	Jul 2023 to Nov 2023	PNRPL employees using equipment rented from Crone Geophysics
Televiewer/ Physical Properties Survey	5 holes: 3 historical holes, and two 2022 holes	Jun 2022 to Aug 2022	Wireline Workshop
Selebi North Mineralization Model	Wireframe of folded Selebi North mineralization	Aug 2022 to Nov 2022. Updated April 2024	SLR Canada
Structural Modelling	Focused structural study at Selebi	Oct 2022 to Nov 2022	SRK Canada and SRK South Africa
Structural Modelling	Focused structural study at Selebi North	April 2024	SRK Canada

Activity	Description	Dates	Contractor
Database Management	Data entry of assays, lithologies, structural data and verification	Apr 2021 (ongoing)	PNRL employees
Digitization of Mine Workings and Underground Geology	Selebi and Selebi North underground infrastructure and stopes at Selebi North. Digitization of geology is ongoing.	2021 (ongoing)	PNRL employees

For historical exploration work (pre-2016) completed at the Project, refer to Section 6.2 of this Technical Report.

9.1 Digitization of Existing Information

Collection, sorting, and digitization of hard copy reports, maps, and drill logs found within the Geology offices at the BCL administration building is ongoing and to date has included:

- Digitization of original drill logbooks including descriptive lithology logging, some structural information, and analytical results of secondary elements (iron, cobalt, sulphur).
- Digitization of underground development drilling and channel samples.
- Digitization of detailed level plans with mapped mineralization, lithology, and structure.
- Georeferencing of surficial maps and surveys.
- Georeferencing of level plans at Selebi and Selebi North.
- 3D digitization of mine development, ventilation raises, conveyors, production stopes, and ramps has been completed at Selebi and Selebi North. Scanning of geological level plans and digitization of geological and structural data is currently in progress.
- Digital survey capture of the Selebi North ramp and lowest underground development levels has also been completed by PNRPL. These areas were not previously surveyed because of the sudden closure of operations in 2016.

9.2 Collar, Downhole, BHEM, Televiewer, and Physical Property Surveys

9.2.1 Collar Location (DGPS)

Location and re-entry of selected existing drill holes with the purpose of confirming collar and downhole survey information commenced in May 2021 and was paused in October 2023. Holes were initially located using handheld GPS units and later confirmed using either Leica GS12 and Leica GS10 GPS units, or Trimble R8 DGPS equipment. A total of 291 collars, including 268 historical holes, have been accurately positioned. In general, only a small deviation from the original historical hole location was observed, with more significant differences noted at Selebi Central. Coordinates were provided in WGS84, UTM zone 35 South, with geoidal heights. Evidence of drilling was observed at a further 108 locations, however, the original collar location was not found.

9.2.2 Downhole Reaming and Surveying (Gyro)

Discovery Drilling, contractors hired by the Project Team, began work in October 2021 to re-open high priority holes. GEN WAY T/A/Mining Surveying Systems was contracted to provide gyro surveys and AEGIS was contracted to carry out the initial BHEM surveys.

The drill arrived on site on October 17, 2021 and hole cleaning continued through October 2023. As of the effective date of this Technical Report, 60 holes have been re-opened.

Gyro surveys utilized the Reflex EZ-Gyro/Sprint Gyro, and due to the vertical nature of the holes, data was collected every 30 m in ‘Multi-Shot Mode’. Readings within each survey are individual and independent of the other readings above and below. Surveys were completed both entering and exiting the hole. As of the effective date of this Technical Report, downhole survey information has been collected in 60 re-opened holes, and all new drill holes.

9.2.3 BHEM Surveys

The BHEM survey work resumed on April 1, 2022, and is ongoing (Figure 9-1). As of June 30, 2024, BHEM surveys have been completed in 107 holes (58 historical surface holes, 19 new surface holes (nine at Selebi and 10 regional) and 30 underground holes).

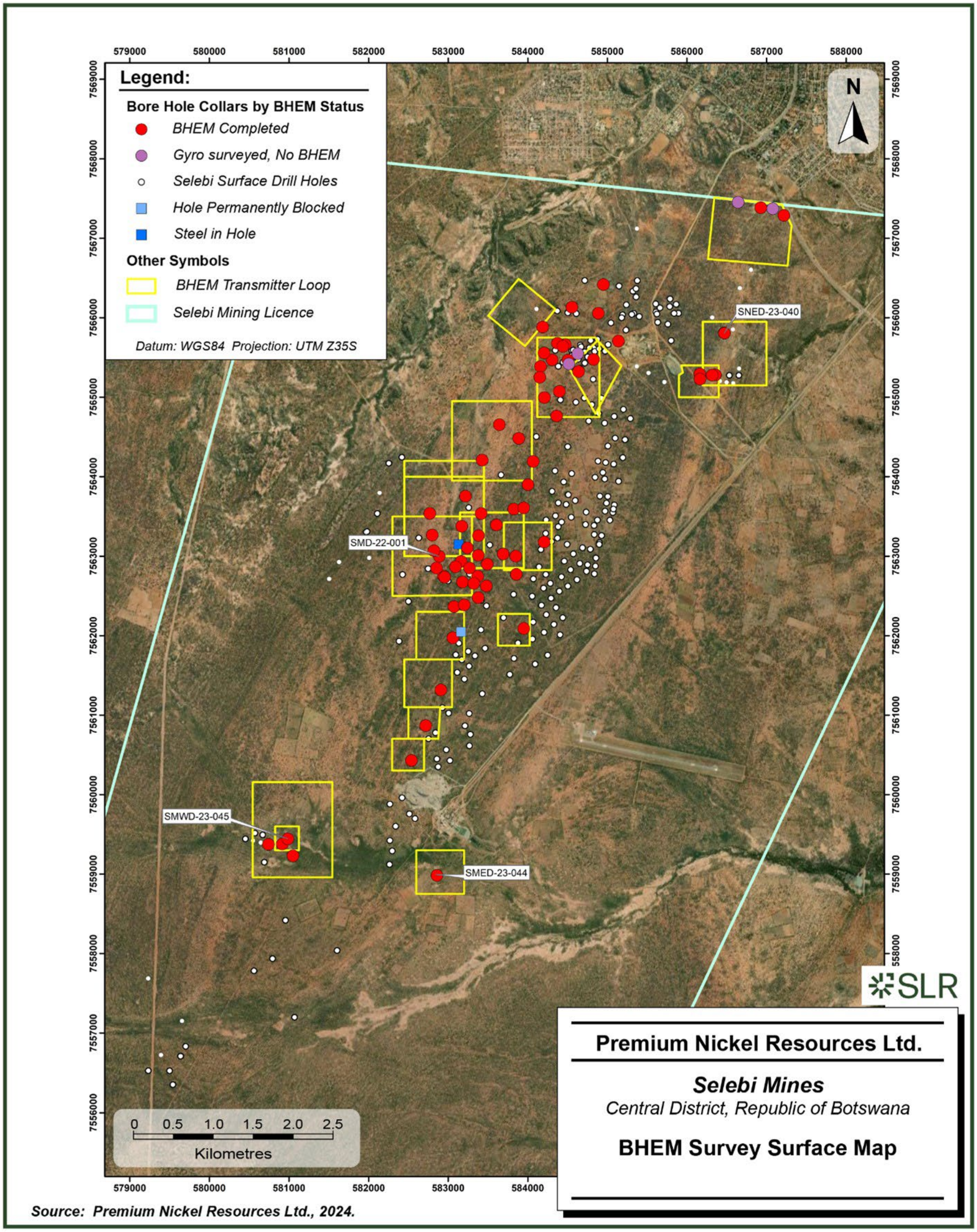
The BHEM surveys utilized the Crone PEM system, rented from Crone Geophysics & Exploration Ltd., in Mississauga, Ontario, Canada, and operated by local Botswana staff trained by Canadian operators. The system consisted of a transmitter powered by a 10 kW generator, a receiver capable of collecting full waveform data, and a three component fluxgate magnetometer probe.

The transmitter loop consisted of a single turn 10-gauge wire placed on the ground; loop size varied from 400 m x 400 m to 1,000 m x 1,000 m and current varied from 10 A to 12 A. Surveys have been carried out using timebases between 50 and 1,000 ms (0.25 Hz to 5Hz). The receiver recorded full waveform data which was delivered in specified time gates. The data has been processed to a calculated residual step response to better quantify the conductive sources. This added processing has been beneficial due to the size of the highly conductive mineralized system.

In the current surveys, positional information for the loop and drill hole collars were collected by Drysdale and Associates Ltd or PNRL employees using differential global positioning system (DGPS) equipment with post-processing using a local base station. Positional information was provided in the UTM projection Zone 35 South utilizing the WGS 1984 datum and the WGS84 geoidal elevation. Data were collected at survey intervals between five metres and 50 m.

Interpretation of the results was carried out using Maxwell, a commercially available modelling software package available from Electromagnetic Technologies (EMIT) of Australia. This software uses thin and thick plates to approximate conductive sources.

Figure 9-1: BHEM Survey Surface Map



Source: Premium Nickel Resources Ltd., 2024.

The results of the BHEM surveys at Selebi indicate that the highest conductivity sits at the lower edge of the historical resource outlined by BCL in 2016, down-plunge of the previous mine workings. The survey results also suggest that: (i) Selebi and Selebi North may be part of one continuous mineralized system, (ii) there are multiple stacked conductors, and (iii) a lower conductor that has not been drill-tested may be present. The location and orientation of modelled BHEM plates are presented in Figure 9-2.

9.2.4 Surface EM Surveys

Surface EM surveys were carried out over four clusters of VTEM anomalies between July and November 2023. The EM surveys utilized the Crone PEM system, rented from Crone Geophysics & Exploration Ltd. in Mississauga, Ontario, Canada, and operated by local Botswana staff trained by Canadian operators. The system consisted of a transmitter powered by a 10 kW generator, a receiver capable of collecting full waveform data, and an inductive coil mounted on a tripod.

Surveys were carried out using a timebase of 50 ms (5Hz). The receiver recorded full waveform data which was delivered in specified time gates. The data has been processed to a calculated residual step response to better quantify the conductive sources. This added processing has been beneficial due to the size of the highly conductive mineralized system.

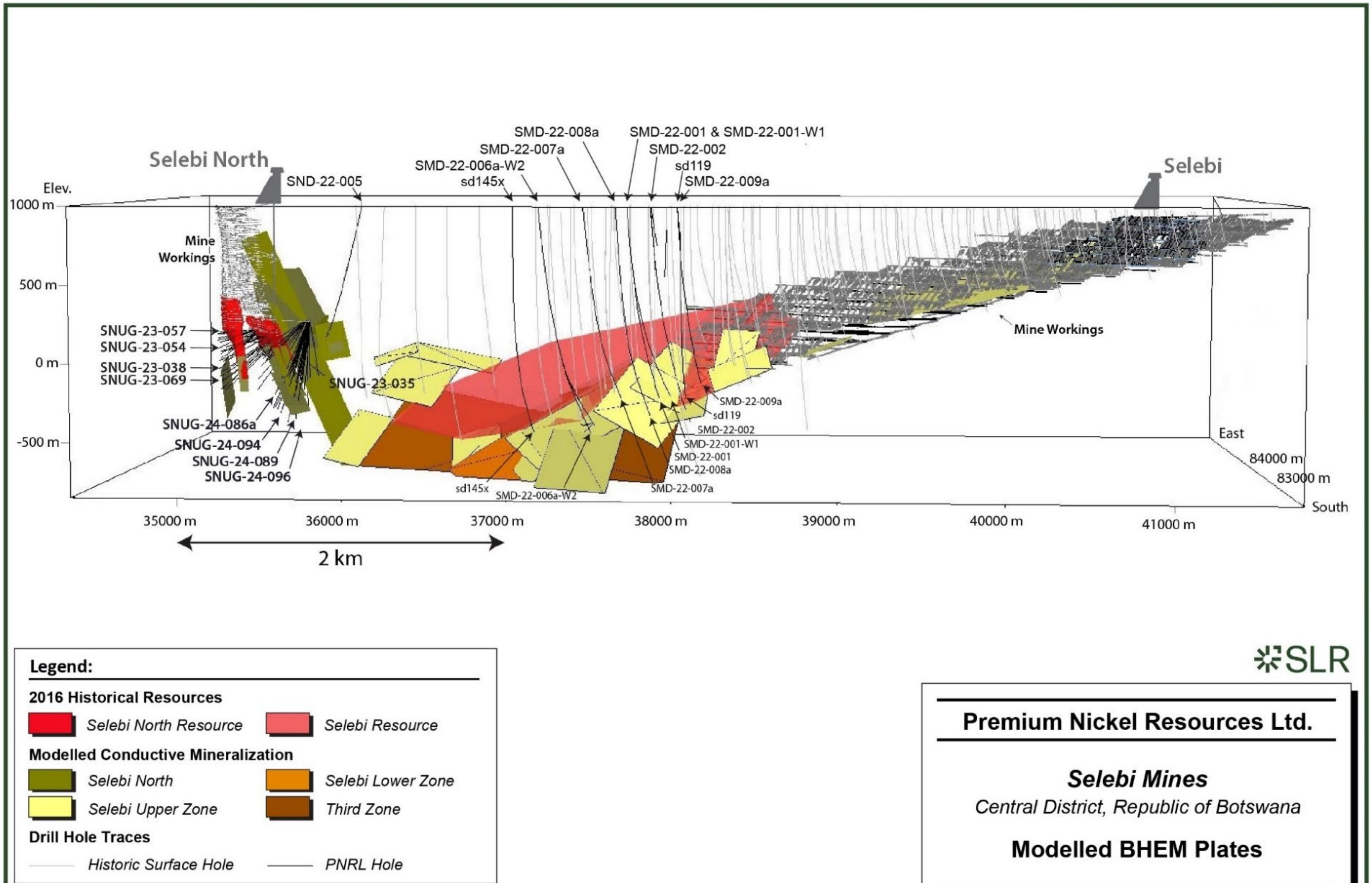
Positional information for the loop and drill hole collars were collected by PNRL employees using DGPS equipment with post-processing using a local base station. Positional information was provided in the UTM projection Zone 35 South utilizing the WGS 1984 datum and the WGS84 geoidal elevation. Data were collected at survey intervals of 25 m on 100 m spaced lines.

9.2.5 Televiewer and Physical Property Surveys

Televiewer and physical property logging data were collected by contractor Wireline Workshop of South Africa between June 25 and August 4, 2022. Data were collected in three historical holes (sd141, sd119, and sd129b) and two 2022 drill holes (SMD-22-001-W1 and SMD-22-002). A shallow drill hole within Selebi Central was used as a test hole to determine which physical properties were useful to optimize data collection in deeper holes.

Logging tools included the optical televiewer (OTV), ultraviolet optical televiewer, acoustic televiewer (ATV), full waveform sonic (FWS), natural gamma (NGAM), magnetic susceptibility (MSUS), density (SSDD), thermal neutron, conductivity, induced Polarization (IP), and resistivity (RLLS and RLLD). Other tools included a caliper to measure variations in hole diameter and a differential temperature probe.

Figure 9-2: Modelled BHEM Plates



Source: Premium Nickel Resources Ltd., 2024.

9.3 Technical Studies

9.3.1 Selebi Structural Study

Televiewer data from five holes and a drill hole database was provided to SRK (Canada) to identify possible controls on mineralization down-plunge of the historical Selebi Mine, and to determine the relationship between the upper and lower mineralized amphibolite horizons, historically interpreted as two limbs of a tight isoclinal fold.

This work was supported by SRK (South Africa) through a review of drill core and underground exposures on site.

Through this work, no evidence was found for folding that could duplicate mineralization by tightened limbs or thicken mineralization within hinge zones, however, the following principal observations were made:

- Most mineralized zones are either bound or spatially associated with shear zones or fault breccias.
- Visible folding is rare and found outside mineralized zones.
- The distribution of alpha angles related to foliation/layering highlights structural domains and can be used to identify fold hinges.
- The upper portions of the holes are in a low alpha angle domain.
- The lower portions of the holes are a moderate to high alpha angle domain.
- The transition between the two domains is sharp, suggesting southwest dipping shears subparallel to mineralization (approximately 40/210, mine grid).

Televiewer data identified two main orientations of foliation/layering dipping at approximately 76° from one another in opposite directions. The main set is sub-parallel to foliation and oriented 55/204 (mine grid) and a minor set is oriented around 22/000 (mine grid). Field work is required to understand the characteristics of the minor set.

Televiewer data showed that the intersection of the high and low alpha angle domains produced a shallowly northwest plunging lineation of 15/286, which is coaxial with the plunge of mineralization in the historical Selebi Mine (15/292), suggesting the plunge of the mineralization is controlled by structure bounding the low and high alpha domains and/or their splays.

Folding was mostly observed in the leucocratic neosome layers; folded layers were likely less competent than the surrounding rock and were preferentially buckled forming drag or possible sheath folds.

The plunge of mineralization in longitudinal section is approximately 15/292. Two moderate southwest dipping shear zones are interpreted to control the distribution of anomalous copper grades; mineralization thickens at their intersection (approximately 15/280), which is subparallel to the mineralization plunge at the historical Selebi Mine.

9.3.2 Data Management and Drill Hole Re-logging

The original drill hole database provided by BCL was limited to broad lithological units and nickel and copper assay results for Selebi and Selebi North. Handwritten detailed lithology logs and analytical results for cobalt, iron, and sulphur, in addition to nickel and copper were located and are being scanned and digitized. Core from these historical holes is currently being relogged where possible and to date, 27 holes are completed. In total, there are 296 Selebi and Selebi North surface holes, 152 Selebi Central holes, and 4,164 underground holes. Underground holes are not available for re-logging. As part of this work, errors related to collar elevations and from and to readings were identified and corrected.

9.4 Exploration Potential

The exploration potential of the Selebi Mine is based on the hypothesis that the mineralizing systems which supported the Selebi North and Selebi mines are connected at depth. Exploration efforts by PNRL to date (drilling and modelled conductors from BHEM survey data) support this assumption and early results indicate that mineralization may be thicker and have greater depth extent than defined by the historical Mineral Resources (See Section14.1).The 2021 and 2024 drilling and exploration programs completed by PNRL continue to demonstrate significant expansion potential and mineralization continuity along strike, down dip and down plunge of the historical mine workings.

Interpretation of the geophysical (BHEM) anomalies, televiewer surveys, structural modelling and surface drilling supports the hypothesis that the Selebi and Selebi North deposits are connected at depth and may represent a continuous system of mineralization.

The conductivity defined to date through BHEM surveys correlates well with known Ni-Cu mineralization intersected in drill holes. Figure 9-3 shows that the mineralization has the potential of thicknesses and depth greater in extent than indicated by the historically defined Mineral Resources at the Project.

Selebi North mineralization is also open at depth, and additional potential to establish Mineral Resources occurs here. Given the basin structure, it is possible that the Selebi North mineralization extends at depth and flattens to the south, while also potentially extending southward. This potentially mineralized corridor is presented in Figure 9-3

The borehole geophysics has been very successful in imaging highly conductive metallic mineralization along the down-dip structure and early tests support the possibility that the two deposits connect over a length greater than 3,000 m within a single mineralized system and that mineralization may be present in at least two mineralized amphibolite hosted horizons identified as the Upper Interval and Lower Interval.

The 2022-2023 drill program at Selebi resulted in 10 new intercepts of mineralized amphibolite over a down-plunge distance of 1,150 m. Four of these intercepts lie down-dip of the 2016 historical estimate and have successfully shown that there is potential to increase the size of the remaining resource. The results returned from SMD-22-001, SMD-22-006a-W2, and SMD-22-009a are more significant in thickness than the results reported from equivalent intercepts and grades from the historical drilling, thus showing up-side potential. This thickening at the down dip extent is one of the reasons that the increase in tonnage between the current MRE and the 2016 BCL historic resource (see Section 14.1).

Additionally, building BHEM responses in multiple holes indicate an additional conductor beyond the end of the holes. To date, all of the identified BHEM anomalies correlate to mineralized amphibolite, making this lower zone a significant target. The interpretation of its size, orientation, and depth is complicated by the large EM responses from intersected mineralization, however, it is estimated to be 200 m beneath intersected mineralization.

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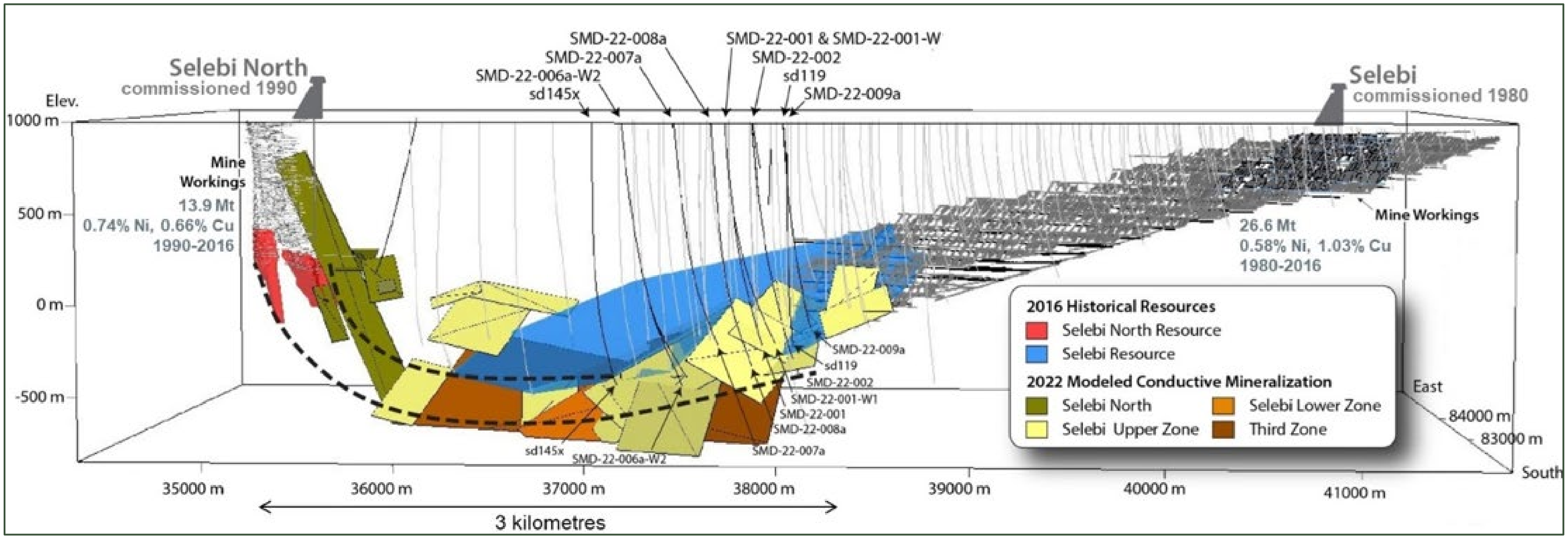
Figure 9-3: Prospective Mineralized Corridor Linking the Selebi North and Selebi Deposits



Source: PNRL, 2023

10.0 Drilling

10.1 Summary

In addition to reaming described in Section 9.2.2. PNRPL has completed 133 drill holes, including wedges, on the Project as of the effective date of this Technical Report. Drilling completed by the historical and current operators is summarized in Table 10-1, shown in Figure 10-1, and described below. The historical summary is not considered to be complete, and, at minimum, is missing some regional exploration target drilling completed by BCL.

In addition, PNRL has digitized from historical records 1,789 channels totalling 2884.65 m at Selebi, and 3,035 channels totalling 12,503.52 m at Selebi North.

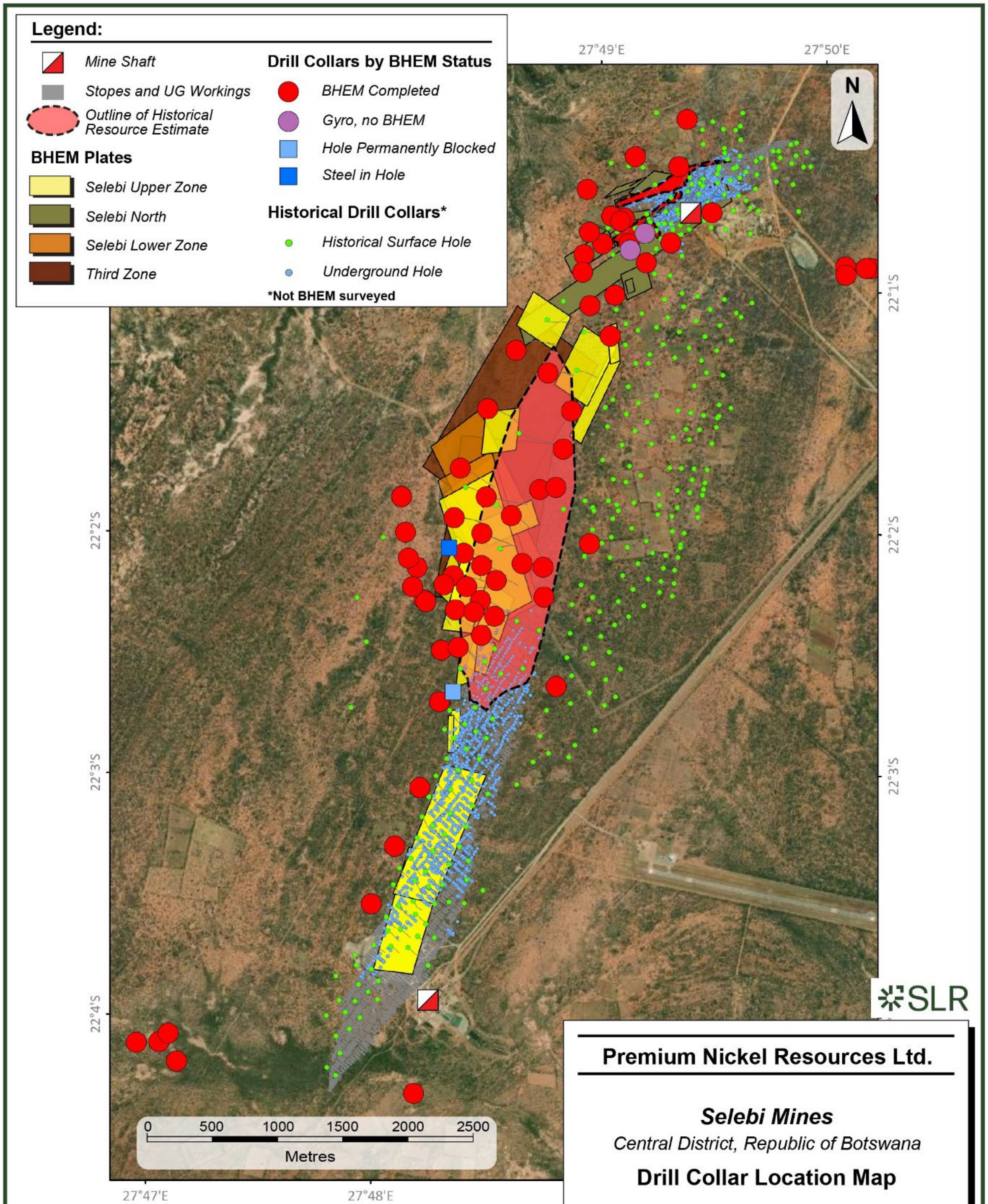
Table 10-1: Summary of Drilling

Deposit	Surface RAB[4] Drill Holes		Surface DDH[5] Drill Holes		Underground Drill Holes	
Operator	**Count**	**Length**	**Count**	**Length (m)**	**Count**	**Length (m)**
Selebi						
Historical			134	104,156	2,619	86,696
PNRL	2	707	22[1]	14,395		
Total	**2**	**707**	**156**	**118,551**	**2,619**	**86,696**
Selebi North						
Historical			151	86,607	1,642	55,221
PNRL					101	39,594
Total			**151**	**86,607**	**1,743**	**94,815**
Selebi Central						
Historical			152	65,018		
Total			**152**	**65,018**		
Regional						
Historical[3]			43	21,863		
PNRL			10	1,853		
Total			**57**	**5,220**		

Notes:

1. Of these 22 drill holes, seven, totaling 2,835 m, are wedged from a pilot hole. Due to drilling challenges including excessive deviation and challenges during the wedging process, some PNRL holes did not reach the target.
2. This table is not considered to be complete, and, at minimum, is missing some historical regional exploration target drilling.
3. Lungu, 2016; may include some drilling completed over the neighbouring Phikwe area.
4. RAB = Rotary Air Blast
5. DDH = Diamond Drill Holes

Figure 10-1: Drill Hole Collar Location Map



Source: Premium Nickel Resources Ltd., 2024.

10.1.1 Historical Drilling

Early Drilling (1964 to 1994)

The earliest diamond drilling on the Project area is reported to have been completed in 1964 (Lungu, 2016). Gordon (1973) reports that by the end of 1971, drilling on the Selebi targets totalled 73 holes for 19,294 m. Drilling is reported to have continued between 1980 and 1994 to confirm the down-dip and northerly continuation of the mineralization at Selebi (Lungu, 2016).

Documentation related to this early diamond drilling was not available for review. The QP is not aware of the sample preparation, analyses, and security procedures followed for the drilling completed prior to 2007.

Recent Drilling (2007 to 2010)

Diamond drilling was undertaken within the Project area from 2007 to 2010. A two-tier approach was adopted targeting on-mine/brownfield and greenfield targets. On-mine drilling was undertaken with the objective of defining down dip and strike extensions of existing deposits while greenfield work targeted areas away from the mining infrastructure.

Greenfield drilling was conducted on areas a considerable distance from the mining operations but within the Project area. The sole purpose of this drilling was to delineate new standalone ore bodies. Drilling was undertaken at nine sites as follow-up to combinations of geophysical, geochemical, and geological anomalies.

On-mine or brownfield drilling within the current Selebi Mining Licence was focused at Selebi Central. A total of 65,018 m was drilled in 152 holes, testing the area along strike from Selebi and Selebi North at depths ranging from 49 to 1358 m.

A summary of significant historical intercepts beyond the existing Selebi and Selebi North mine workings are included in Table 10-2.

Table 10-2: Summary of Significant Historical Intercepts at the Project

Hole ID	From (m)	To (m)	Intercept Length (m)	Estimated True Thickness (m)	Grade	
					(% Cu)	(% Ni)
Selebi[1]						
sd102a	1,176.5	1,178.9	2.4	2.2	1.45	2.65
sd114	1,066.6	1,071.1	4.5	4.1	0.84	1.76
sd117	1,099.9	1,102.4	2.5	2.3	1.20	1.87
sd119	1,231.1	1,257.2	26.1	20.3	3.39	2.38
sd121	1,270.4	1,272.2	1.8	1.8	2.05	1.54
sd121b	1,262.0	1,265.2	3.2	2.8	1.88	1.59
sd123	1,443.4	1,444.9	1.4	1.4	1.48	1.32
sd128	1,159.8	1,161.9	2.1	1.9	0.90	1.31
sd129b	1,410.6	1,414.0	3.4	3.1	1.53	1.59
sd131	1,371.0	1,373.0	2.0	2.0	5.96	2.05

Hole ID	From (m)	To (m)	Intercept Length (m)	Estimated True Thickness (m)	Grade	
					(% Cu)	(% Ni)
sd131b	1,370.3	1,372.3	2.0	1.9	3.75	1.59
Selebi North[2]						
sn29006	263.60	274.10	10.50	8.4	1.46	2.05
sn29053	324.90	329.00	4.10	3.3	0.85	2.22
sn29005	236.90	257.10	20.20	16.2	1.33	1.91
sn29050	193.20	199.40	6.20	5.0	1.26	2.34
sn29050	206.30	211.70	5.40	4.3	1.45	1.66
sn29050	211.70	224.90	13.20	10.6	2.04	1.61
sn29001	185.40	193.20	7.80	6.2	2.18	2.17
sn29001	200.40	211.80	11.40	9.1	2.24	1.92
sdn102b	919.30	937.20	17.90	14.3	0.59	1.04
sdn103b	840.50	860.00	19.50	15.6	1.62	2.18
sdn106	1108.40	1114.30	5.90	4.7	0.50	1.44
sdn106b	1098.20	1111.40	13.20	10.6	1.33	2.34
sdn108	1025.90	1029.80	3.00	2.4	0.33	1.36
sdn109	1242.70	1244.20	1.30	1.0	0.50	1.51
sdn109	1252.40	1255.80	3.40	2.7	3.20	2.05
sdn112	1111.50	1120.20	8.70	7.0	1.31	1.84
sdn112	1144.80	1152.40	7.60	6.1	0.52	1.64
sdn125	877.90	880.50	2.60	2.1	1.89	1.88
sdn132	1001.00	1002.80	1.80	1.4	1.83	3.00
sdn132a	1001.70	1002.77	1.06	0.8	0.81	2.34
sdn136a	1029.30	1032.50	3.20	2.6	0.58	1.14

Notes:

1. Estimated true thickness is based on a thickness evaluation in Leapfrog Geo.
2. Estimated true thickness is based on 80% of intersected thickness based on visual review against modelled mineralization and mine workings.

10.1.1.1 Selebi Central

Drilling at Selebi Central commenced as follow-up to a VTEM anomaly. A total of 152 holes totalling approximately 65,018 m were drilled over an area of approximately 4,500 ha. Selebi Central mineralization ranges from massive to disseminations hosted by amphibolite with an average thickness of one metre. Selebi Central forms the link between Selebi and Selebi North with the Selebi Central deposit joining the Selebi deposit at depth and Selebi North on strike to the north.

10.1.2 Current Drilling

Drilling by PNRL has to date consisted of testing from surface the down dip extension at Selebi Main, from underground, testing extension and infilling at Selebi North, and a limited number of regional exploration drill holes.

10.1.2.1 Surface Drilling

Selebi Project (March 2022 to January 2023)

Surface drilling at the Project was completed by contractors to PNRPL from March 14, 2022 to January 23, 2023. The primary purpose of the program was to test the down plunge extension of mineralization at Selebi Main. In total, PNRPL completed 24 diamond and rotary air blast (RAB) surface drill holes (including wedges) totaling 15,074 m. A summary of the completed drilling is presented in Table 10-1 and a summary of significant intercepts at Selebi is presented in Table 10-3 and selected results are shown in section in Figure 10-2. The Program was successful in extending known mineralization 100 m down dip.

Table 10-3: Summary of PNRPL Intercepted Mineralization at Selebi

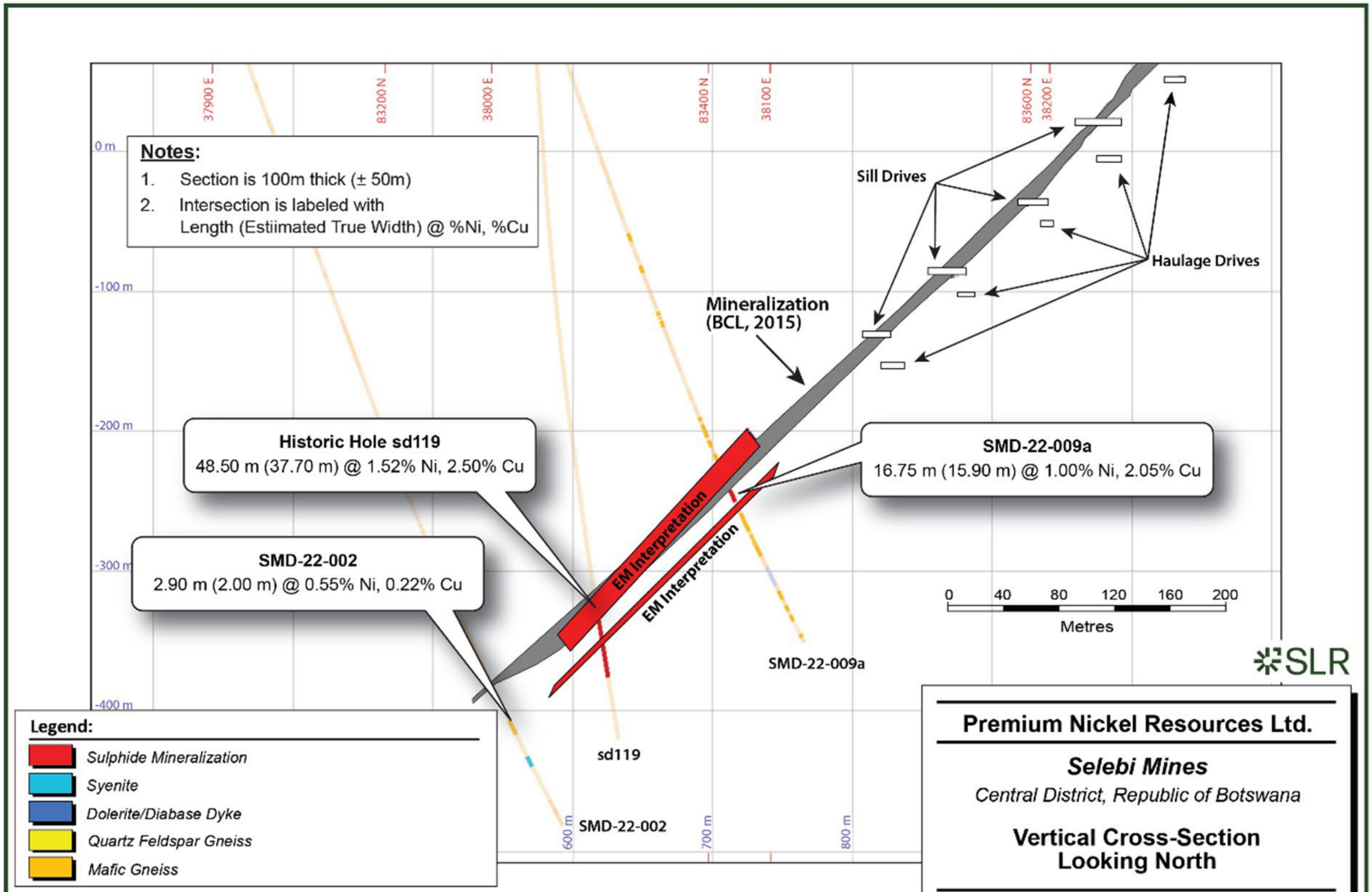
Hole-ID	From (m)	To (m)	Length (m)	ETT[1] (m)	Ni (%)	Cu (%)
SMD-22-001	1,355.35	1,362.50	7.15	6.8	0.33	0.82
SMD-22-001	1,374.50	1,400.20	25.65	24.4	0.95	2.03
including	1,378.00	1,384.90	6.90	6.6	2.22	3.76
and	1,390.75	1,394.00	3.25	3.1	0.87	2.00
and	1,398.25	1,400.20	1.90	1.8	1.40	0.76
SMD-22-001-W1	1,344.05	1,351.00	6.95	7.0	0.37	0.58
SMD-22-001-W1	1,363.00	1,367.35	4.35	4.4	0.98	1.61
SMD-22-001-W1	1,385.65	1,398.20	12.55	12.6	0.39	1.99
including	1,391.00	1,397.40	6.40	6.4	0.52	2.63
SMD-22-002	1,374.80	1,377.70	2.90	2.9	0.55	0.22
SMD-22-006a	1,575.20	1,580.90	5.70	6.4	0.24	1.12
including	1,575.20	1,579.45	4.25	4.8	0.29	1.39
and	1,627.00	1,634.55	7.55	8.5	0.25	0.94
including	1,631.00	1,634.55	3.55	4.0	0.24	1.33
SMD-22-006a-W2	1,581.50	1,591.30	9.80	9.2	0.97	1.74
including	1,581.50	1,588.30	6.80	6.4	1.28	2.35
and	1,627.00	1,631.00	4.00	3.8	0.66	0.40
and	1,639.80	1,644.45	4.65	4.4	1.10	1.24
SMD-22-007a	1,451.40	1,457.85	6.45	6.3	0.66	0.67
including	1,451.40	1,457.45	6.05	5.9	0.70	0.64

Hole-ID	From (m)	To (m)	Length (m)	ETT[1] (m)	Ni (%)	Cu (%)
and	1,460.5	1,462.2	1.70	1.7	0.75	0.71
and	1,467.40	1,469.30	1.90	1.9	0.32	1.79
and	1,509.95	1,510.70	0.75	0.7	1.82	1.07
SMD-22-008a	1,465.10	1,475.00	9.90	9.9	0.35	1.13
including	1,469.00	1,475.00	6.00	6.0	0.26	1.58
SMD-22-009a	1,185.75	1,187.80	2.05	2.0	0.81	0.44
including	1,185.75	1,186.80	1.05	1.0	1.14	0.83
	1,202.65	1,219.40	16.75	15.9	1.00	2.05
including	1,202.65	1,212.00	9.35	8.9	1.34	3.01
and	1,216.0	1,218.2	2.20	2.1	1.33	1.11
sd145x	1,519.30	1,520.05	0.75	0.8	1.40	0.42
and	1,573.00	1,580.75	7.75	7.8	0.21	1.09
SMD-22-012	1,204.90	1,206.8	1.90	1.9	0.54	2.90

Notes:

1. ETT = Estimated True Thickness

Figure 10-2: Vertical Cross-Section Looking North



Source: Premium Nickel Resources Ltd., 2023.

Regional Exploration (2023)

Concurrent with the underground drill program at Selebi North, the regional potential of the Selebi Mining Licence was evaluated through drilling of three, previously untested EM anomalies. A total of 10 drill holes were completed using a Boyles 56 drill retrieving NQ (47.6 mm) diameter core, totalling 1,852.89 m.

Mineralization was encountered in eight of the 10 holes, and with BHEM, demonstrated that the conductive sulphides were the source of the EM anomalies. Although no economically significant grades and widths of Ni-Cu mineralization were intersected, these results have established the presence of additional sulphidic horizons that warrant further exploration for down-dip and down-plunge potential. Stratigraphy similar to the Selebi deposit was intersected in SMWD-23-045 at VTEM Anomaly 5, located 1.5 km west of Selebi, where a narrow sulphide interval returned an assay of 0.77% Ni and 0.80% Cu. This hole targeted the near surface southern extent of a weak conductor with a 400 m down plunge extent that remains untested at depth.

10.1.2.2 Underground Drilling (July 2023 to June 2024)

The 2023-2024 Selebi North Underground (SNUG) drilling program was initiated in August 2023 by Forage Fusion Drilling Ltd. of Hawkesbury, Ontario, Canada, who provided three Zinex U-5 drills and training of local operators. The purpose of this ongoing underground drilling campaign is to extend and infill existing mineralization in support of a MRE at Selebi North. To date, drilling has been conducted on levels 935 mL, 925 mL, 895 mL, 880 mL, and 810 mL, and 37,953 m of drilling has been completed in 101 holes, recovering BQTK (40.7 mm) diameter diamond drill core. A summary of significant intersections at Selebi North is provided in Table 10-4.

Table 10-4: Summary of PNRPL Intercepted Mineralization at Selebi North

Hole-ID	From (m)	To (m)	Length (m)	ETT	Ni (%)	Cu (%)	Co (%)	Limb
SNUG-23-026	325.10	329.20	4.10	2.00	1.52	3.65	0.07	N3 FH
SNUG-23-053	74.95	81.00	6.05	4.50	1.95	1.23	0.11	South
SNUG-23-054	182.25	189.10	6.85	3.8	2.72	1.97	0.15	N3 Main
SNUG-23-055	91.70	107.00	15.30	10.00	1.84	1.85	0.10	South
Including	91.70	100.15	8.45	5.52	2.15	1.40	0.11	South
and	104.00	107.00	3.00	1.96	2.13	1.28	0.12	South
SNUG-23-057	190.40	199.95	9.55	6.90	2.72	1.81	0.16	N3 Main
SNUG-23-058	43.55	56.50	12.95	6.10	0.74	3.23	0.04	N2
including	46.10	56.50	10.40	4.90	0.69	3.94	0.04	N2
SNUG-23-069	264.75	270.60	5.85	5.20	1.17	0.70	0.06	N2 / N3
including	266.55	267.00	0.45	0.40	4.53	2.10	0.16	N2/N3
SNUG-23-069	510.50	513.30	2.80	2.30	2.20	1.42	0.10	N3
SNUG-23-071	276.60	279.90	3.30	2.80	1.60	0.58	0.08	N3

Hole-ID	From (m)	To (m)	Length (m)	ETT	Ni (%)	Cu (%)	Co (%)	Limb
SNUG-23-072	188.05	190.85	2.80	2.40	1.40	1.39	0.06	N2
SNUG-23-073	305.40	308.24	2.84	2.40	1.34	1.87	0.07	N3 Main
SNUG-24-076	379.20	383.20	4.00	3.60	1.17	2.03	0.06	South
SNUG-24-077	350.60	357.30	6.70	4.20	2.43	2.19	0.12	South
SNUG-24-082	418.00	435.65	17.65	11.50	1.08	1.22	0.06	South
including	427.65	435.65	8.00	5.20	1.26	1.67	0.07	South
SNUG-24-087	10.60	14.80	4.20	3.00	1.71	2.18	0.09	South FW
SNUG-24-089	591.95	609.50	17.55	7.50	2.07	1.98	0.11	South
SNUG-24-095	94.80	98.00	3.20	2.75	1.93	1.46	0.10	N2
SNUG-24-097	133.15	144.25	11.10	3.90	1.61	0.91	0.09	N2
including	133.15	139.50	6.35	2.23	2.24	1.06	0.12	N2
SNUG-24-098	120.80	128.25	7.45	4.80	1.16	0.55	0.06	N2
SNUG-24-100	451.75	464.40	12.65	8.20	0.96	1.65	0.05	South
including	461.95	464.40	2.45	1.60	2.17	2.59	0.11	South
SNUG-24-101	419.70	424.25	4.55	3.70	1.96	1.19	0.10	NE
SNUG-24-102	305.95	307.65	1.70	1.65	2.21	0.61	0.11	South
SNUG-24-102	315.90	318.55	2.65	2.57	2.13	1.74	0.11	South
SNUG-24-102	329.55	335.10	5.55	5.10	0.91	1.19	0.05	South FW
SNUG-24-104	377.30	384.30	7.00	5.60	2.19	1.64	0.12	South
SNUG-24-105	286.05	321.65	35.60	26.90	1.54	1.38	0.08	South / N2
including	286.05	302.20	16.15	12.20	1.86	1.80	0.10	South
and	305.90	311.20	5.30	4.00	1.61	1.15	0.09	South
and	315.85	321.65	5.80	4.40	2.23	1.72	0.12	N2

Notes:

1. Estimated True Thickness

10.2 Historical Drilling and Handling Protocols

The following section describes work undertaken by former operator BCL from 2007 to 2016.

10.2.1 Surface Drilling

The following is taken from Lungu (2016).

Underground and surface diamond drilling core samples are the primary source of information for interpretation and modelling of the historical Mineral Resources. Routine procedures were completed to acceptable industry standards for the data to be acceptable for use in the interpretation of the geology and modelling of the ore bodies.

All data acquisition protocols, outlined below, were completed, or supervised by non-registered but adequately qualified BCL geologists and surveyors.

10.2.1.1 Collar and Down Hole Surveying

Collar positions were surveyed using a Trimble Differential GPS, models XT and XP, with ± 10 cm and ± 50 cm precision, respectively by qualified BCL geologists. Some collar positions were surveyed using Leica Total Station by qualified BCL surveyors.

Except for a few holes, down hole surveys were carried out immediately upon completion of a drill hole, by an external contractor using either the Reflex EZ-Shot or Gyro survey tool. Historical holes were surveyed using a Sperry Sun downhole camera.

In some cases, a time lag between drill hole completion and down hole survey opportunities rendered the survey impossible as holes collapsed in the interim period. These holes were flagged in the database and excluded from historical Mineral Resource estimation work.

Where core orientation was measured, it was completed using a spear core marking tool.

10.2.1.2 Core Logging

All core logging was completed by degree qualified BCL geologists. Core was logged on paper log sheets and later uploaded in Century System’s Fusion database (now owned by Datamine). Core logging included identification of lithology, structure, alteration, mineralization, core recoveries, and other notable characteristics. Geotechnical logging was completed on selected holes.

Core was initially cleaned and metreage marked before delineating lithological contacts and marking sample intervals. Sample intervals were drawn based on different petrological and physical characteristics of each sample length.

All core was photographed with the start, end, and intermediate intervals clearly marked on each box. Core was photographed after sampling and marked clearly before storage.

The QP considers the lithological logging procedures for surface exploration holes to be consistent with standard industry practice.

10.2.1.3 Core Recovery

Qualified, non-registered BCL exploration geologists regularly monitored core recoveries by daily visits to the drill rigs. Core recovered was reconciled at the drill rig and then entered into formatted Microsoft (MS) Excel spreadsheets.

The drilling contract stipulated 100% core recovery with ±5% deviation. Where anomalies were observed, immediate corrections were sought from the drillers. The recoveries for mineralized zones were good, ranging from 90% to 100%. Most of the lithologies in the Project area were competent gneisses which yielded good recoveries. There were only a few scenarios where core was lost due to collapsing formations or bad ground. In the weathered zone, to approximately the first 50 m below surface, core recoveries were generally poor and holes were commonly steel cased to avoid collapse.

Core recovery is generally high (above 95%) in the host lithology and core losses are therefore considered to have minimal effect on the quality of the Project drill hole database.

10.2.1.4 Core Sampling

The BCL standard operating procedures required sampling of the entire amphibolite host plus a minimum length of one metre in the hanging wall and footwall lithologies. The minimum sample length for exploration samples was set at 0.3 m, although approximately 7% of samples in the database are shorter than this threshold. Approximately 95% of all samples at Selebi are sampled at or below 1.5 m length. Chosen sample length was at the discretion of the logging geologist and selected based on the style of mineralization and whether the sample was within or adjacent to visible mineralization.

Samples were marked directly on the core, which was cut and split longitudinally using a diamond saw. Sample bags and ticket books were prepared prior to sample cutting. Core was cut from bottom to top (down hole to up hole) with the orientation line facing vertically upwards. One core half was submitted for analysis in most cases, however, where a resubmission was requested, the remaining half core was quartered and a quarter was sent for duplicate or re-analysis.

10.2.1.5 Core Photography

Two photographs of core were taken, one wet and one dry prior to core cutting. After cutting the procedure was repeated.

10.2.1.6 Sample Shipping

Following the review of the SG results by the geologist, a BCL technician completed the following steps prior to sample shipment to the laboratory:

- Secured the individual sample bags with cable tie to avoid sample loss.
- Packaged smaller secured bags into 430 mm x 760 mm x 250 mm plastic bags.
- Secured large bags with cable ties for added protection.
- Prepared sample dispatch documents (analytical services request sheet) in duplicate that listed sample numbers, elements to be analyzed, and any other instructions.
- Transferred samples to a BCL driver for transportation to the onsite laboratory.

10.2.1.7 Core and Sample Storage

It was a statutory requirement that all core obtained from exploration drilling be kept in storage for future reference. All BCL core was thus stored at the BCL core shed at the Phikwe Mine site.

All production pulp and coarse rejects from the BCL laboratory were kept in storage at the laboratory for three weeks before they were discarded. Coarse rejects from surface exploration campaigns were returned to the geology department and kept in secured storage at the core shed for one year after the campaign prior to being discarded.

10.2.2 Underground Drilling

The following is taken from Lungu (2016).

Underground drilling was used for either ore body profiling, grade control, hazard identification, and/or service holes. Drilling information was collected by BCL diamond drill crews consisting of a Foreman, Miner-in-Charge, Operator, and Workman.

Underground borehole spacing along strike was generally 25 m apart along the primary developments although this was not strictly followed due to mining constraints resulting in the unavailability of drilling sites and erratic drill spacing. Drilling was also carried out from secondary developments such as stope-raises and drill-drives where the deposit was not fully exposed from footwall contact to hanging wall contact.

BCL underground exploration used an AXT bit size (48 mm diameter) for core sampling. Diamond drilling was carried out with slow rotation and gentle pressure with water used to lubricate and cool the bit.

The drilled core was extracted and placed in core boxes, which could hold up to six metres of core. The core boxes were then transported from the drilling sites to the Geology core yard on surface where core logging was undertaken.

Drillers were trained to take extra care when drilling through structurally weak ground caused by faulting and shearing.

Core was logged in appropriate detail including identification of lithology, structure, alteration, mineralization, and other notable characteristics. A geologist logged the drill hole and identified and marked the section of the core to be sampled. The entire host rock amphibolite was sampled together with part of the country rocks (footwall and hanging wall gneisses). A drill hole was sampled one metre into the hanging wall gneiss in contact with the host, and similarly on the footwall gneiss.

Channel sampling was performed underground predominately from stope raises mined on dip, along the hanging wall contact or extraction drives mined along string, within the ore body. These were predominately used for grade estimation for the mining stope.

The U2 and U3 Pneumatic Kempe Diamond Drilling machines were used at the BCL underground mines to drill AXT size holes. The smaller sized U2 machine was predominantly used in stope raises for pre-stoping evaluation drilling (footwall delineation) while the larger U3 machine was used for all other exploration drilling including haulage exploration drilling, cover drilling for water and other service holes.

For ore body profiling in haulages, multiple array holes were drilled with inclinations varying from -20° to +90°. The disadvantage of the wide spectrum drilling is that most of the holes intersected the ore body at oblique angles thereby giving an apparent thickness of the ore body. Holes drilled perpendicular to strike gave the true thickness of the ore body. Wide spectrum drilling was suitable for the Selebi deposit where the ore body was known to pinch and swell over short distances. Haulage drilling sites were normally spaced at 25 m to 50 m intervals.

Underground exploration drilling at Selebi North employed a U8 Diamec drill rig for drilling BQ holes (56 mm diameter) up to 300 m long. Drilling was performed from the 810 m level hanging wall exploration drive to confirm the down dip extension of the South Limb and N2 beyond the 850 m level resource model limit to the 1,100 m level.

At the drill site, drilled core was placed in secure core boxes capable of storing up to six metres of drilled core. The core boxes were then transported by the BCL drilling crew from the underground drilling site to the Geology surface core yard where core logging was undertaken by qualified BCL geologists.

Geologists planned and designed diamond drilling layouts, providing the drill site information, site name, location, measurements with reference to the nearest pegs, planned metres, borehole inclinations, and identities. It was the responsibility of the driller to track the progress of the drill hole and report the progress to the shift boss. The section geologist also checked this progress daily to verify the expected target. A copy of the drill layout was provided to the surveyor for collar survey to be completed. The daily drilling progress was captured on the drill ledger and any problems highlighted for prompt resolution.

10.2.2.1 Collar and Down Hole Surveying

Underground drill holes were only surveyed for the collar position and orientation using a Total Station Theodolite instrument, with a ±20 mm accuracy. The survey was carried out by trained BCL surveyors.

Longer underground exploration holes drilled using the U8 Diamec drill at Selebi North were also down hole surveyed by an external contractor, using the AUSLOG Model A698 nonmagnetic gyroscope with survey readings every 20 mm. The output survey log was then composited to provide readings over specified intervals, e.g., every 10 m, depending on any observed deviations.

Shorter holes drilled for ore body delineation were not routinely down hole surveyed. These holes were generally less than 50 m long, and it was assumed that no deviation occurred that warranted down hole surveying.

10.2.2.2 Core Logging

Qualified BCL geologists recorded lithology, structure, alteration, mineralization, and other notable characteristics on BCL geology log sheets for each drill hole. Core photographs were taken on some drill holes. Below are the logging stages completed by the geologist:

- Core laid out on logging table.
- Metreage marking for core recovery.
- Detailed logging for lithology and mineralization.
- Core marking for sampling.

After the manual logging was completed as detailed above, the BCL geologist digitally captured the logging details in the Fusion Database using the DHLogger interface. Apart from being used for resource modelling, ore delineation drilling was used to inform the ore production department on ore body position and size to allow them to plan for eventual extraction. The logging detail thus captured was limited to defining the ore body and was sufficient for resource modelling and estimation, however, was of insufficient detail to permit detailed lithological or mineralogical studies.

10.2.2.3 Core Recovery

Core recovery reconciliation was completed during the logging process to check the discrepancy between the drilled metres and the recovered metres. Intersections used in BCL resource estimation should have a core recovery of at least 95%. Geotechnically, the Selebi Mines rock quality designation was generally high given the competent lithologies drilled through, e.g., gneissic footwall and hanging wall and amphibolite host. The core recovery within the mineralized zone was generally above 90%. Drill holes with low core recovery, mostly encountered when drilling through weak fracture zones, were not captured for resource estimation.

Drillers were always advised to drill slowly when experiencing blockages encountered when drilling through fractured or weak zones. In rare occurrences, where excessive core recovery was experienced, attempts were made to determine the reason during onsite core inspection by the geologist.

Core losses were generally very low and therefore not likely to affect the outcome of the MRE.

10.2.2.4 Core Sampling

Underground ore delineation drill core was subjected to whole core sampling over a variety of lengths as dictated by lithological contacts within the host rock. The main purpose of core sampling was to collect a sufficient number of representative samples to support resource evaluation and estimation.

Sections of the core to be sampled were marked in red/white during logging. The entire host rock (amphibolite) was sampled together with at least one metre into the hanging wall gneiss in contact with the host, and similarly on the footwall gneiss. The minimum and maximum lengths of samples are 0.15 m and one metre, respectively. Where one lithological unit was greater than the maximum length (one metre), more samples were taken with the longest sample being one metre. For instance, a 2.5 m length of semi-massive sulphides unit would produce three samples, two 1.0 m in length and one 0.5 m in length.

Except for Selebi North underground exploration drilling, all drill core arising from underground ore delineation drilling at other shafts was split prior to sampling for density determination and grade analysis.

Underground exploration core, drilled using the U8 Diamec drill rig at Selebi North, was first marked for sampling and then cut in half using a diamond saw. One half was sampled for density determination and grade analysis. The other half was kept in storage for future reference and re-submission, if required.

10.2.2.5 Core Photography

Drill core was not routinely photographed unless the responsible geologist required a photo of the core for discussion or reference.

10.2.2.6 Sample Shipping

Underground samples were transported to the laboratory using the identical procedures as the surface samples.

10.3 PNRPL Drilling by Handling Protocols

10.3.1 Surface Drilling

The drill rigs were positioned on prepared drill pads over a surveyed and pegged collar location and oriented by alignment by positioned front sights. The drill head was then fine-tuned and set to the desired azimuth and inclination utilizing a Reflex TN-14 gyrocompass instrument ±0.2 azimuth latitude dependent and ±0.05° dip latitude dependent). Inclination was double checked using an inclinometer.

Holes were cased with HW casing through overburden or cored with PQ (85.0 mm). Once the core barrel was through the overburden, a reduction to recover HQ sized core (63.5 mm) was completed through the weathered zone until seated in competent rock and beyond. Depth of weathering typically ranged from 15 m to 30 m. Once depth reached approximately 700 m, the rod string was reduced to pass through the HQ rods and drilled to target depth recovering NQ core (47.6 mm).

Upon completion of the hole, the NQ rods were fully extracted, and HQ rods were extracted to a depth of nine metres to 12 m beyond the base of weathering in order to keep the hole open for possible borehole surveys or re-entry. The HQ rod strings were capped (welded) with a steel base to prevent sinkage during rainy seasons.

The drilled core was extracted and placed in metal core boxes, which, depending on core diameter, could hold up to five metres of core (NQ). The core boxes were then transported from the drilling sites to the geology core yard where core processing and logging was carried out by qualified PNRL geologists.

10.3.1.1 Collar and Down Hole Survey

Collar positions were surveyed by external contractor Drysdale and Associates Limited (Drysdale) of Francistown, Botswana, using a Leica Differential GPS system with current Leica Blue Certificates and provided to PNRL in WGS84 coordinate system, UTM zone 35 South format.

Down hole surveys were carried out by Mitchell personnel using a Reflex EZ-Gyro and a Reflex Sprint IQ Gyro (±1.0° Az and ±0.3° dip, which are latitude dependent). Systematic readings, taken approximately every 30 m, tracked the hole trace so directional wedges could be used to redirect the hole if needed. Immediately upon completion of a drill hole, a PNRL employee surveyed the hole using an alternate Reflex Sprint IQ instrument in continuous “sprint” mode, set to take readings every five metres.

Readings were taken when the survey tool was lowered, and a new hole survey was completed on the way up. The “in” and “out” surveys were compared to ensure the instrument was functioning properly and as an additional validation step. Reflex software automatically compares the two surveys, and the survey is considered successfully ‘closed’ if the difference is <1% between the two surveys.

Oriented core measurements were made at the drill by Mitchell personnel using a Reflex ACTIII tool.

Some historical collar positions have been surveyed by trained PNR operators using a PNR owned Trimble R8 Differential GPS with ±0.08 cm horizonal precision and ±0.15 cm vertical precision.

10.3.2 Underground Drilling

The underground drill rigs are positioned in drill bays and the drill head is set to the desired azimuth and inclination utilizing a Reflex TN-14 gyrocompass instrument (±0.2° azimuth latitude dependent and ±0.05° dip latitude dependent), and double checked using an inclinometre.

All holes are cased with NW casing (88.9 mm) into the wall or floor of drill bay and drilled using BQTK sized core (40.7 mm). Upon completion of the hole the casing is capped with aluminum cap with the drill hole name punched into it.

The drilled core is recovered and placed in metal core boxes, which are transported each shift to the geology core yard.

10.3.2.1 Collar and Down Hole Survey

Down hole surveys are carried out by Fusion Drilling personnel using an Axis-Champ-Gyro (±0.75° Az and ±0.15° dip). An initial shallow reading (less than 17 m) is taken to allow redirection if needed. After the first reading, systematic readings are taken approximately every five metres and upon completion the driller surveys the hole in continuous mode. Similar to the surface drilling protocol, “in” and “out” surveys are compared.

Axis-Camp-Gyro are brought to surface once every week to be checked by PNR survey personnel. When the instrument fails checks, it is returned to the supplier for replacement.

Oriented core measurements are made at the drill by Fusion drilling personnel using a Reflex ACTIII tool.

10.3.3 Core Processing Routines (Surface and Underground)

10.3.3.1 Core Recovery

Qualified unregistered PNR exploration geologists regularly monitor core recoveries by daily visits to the drill rigs. Drillers are instructed to drill at a slower rate when experiencing blockages encountered at fractured or weak zones. Core recovery is reconciled at the core shed, recorded in formatted MS Excel spreadsheets, and then imported into DHLogger.

Geotechnical logging, including rock quality designation (RQD), magnetic susceptibility, and conductivity, using a TerraPlus KT-10 is completed on all holes.

The rock quality designation at the Project is generally high due to the competent lithologies drilled through, e.g., gneissic footwall and hanging wall, and amphibolite host. Core recovery in the weathered zone near surface (up to 50 m depth) is poor and holes are steel cased to avoid hole collapse. The recoveries in the mineralized zones are good, ranging from 90% to 100%. Core loss is very low.

10.3.3.2 Core Logging

Core is initially cleaned and metreage marked before delineating lithological contacts and marking sample intervals. All core logging and sample selection is completed by degree qualified PNR geologists. Core is logged digitally into the Fusion database using the DHLogger interface. Core logging includes identification of lithology, structure, alteration, mineralization, core recoveries, and other notable characteristics. Logging is completed in sufficient detail to permit detailed lithological and mineralogical studies. Sample intervals are drawn based on different petrological and physical characteristics of each sample length.

10.3.3.3 Core Photography

All core is photographed with the start, end, and intermediate intervals clearly marked on each box. Core is photographed both wet and dry, and before and after sampling, and marked clearly before storage.

10.3.3.4 Core Sampling

The PNRL standard operating procedures require sampling of the entire amphibolite host plus a minimum length of one metre in the hanging wall and footwall lithologies. Sample intervals range from a minimum of 0.25 m to a maximum 1.5 m in length, with the majority of sampling kept at one metre intervals. Samples below 0.5 m are taken to reflect mineralization and geological contacts, at the discretion of the site geologists. Approximately 10% of samples in the PNR 2023-2024 underground drill hole database are less than 0.50 m, and greater than 99% of all 2023-2024 underground core samples at Selebi North are sampled at or below 1.5 m length.

Prior to cutting, the core is aligned in the box and photographed. Samples are marked directly on the core, which is cut longitudinally using a diamond saw. Core is cut from bottom to top (up hole) with the orientation line facing vertically upwards. After cutting, one half of the sawn core sample is placed in an individual plastic sample bag along with its sample number and sent for analysis in sample batches. The remaining half core is placed back in the core box and retained for reference purposes, i.e., quartered for duplicates or re-analysis.

Sample tag books recording the drill hole number, estimated sulphides, lithology, and the sample interval are maintained at the core shed at the Selebi North Mine site.

10.3.3.5 Sample Shipping

Following the review of the density results by the geologist, a BCL technician completed the following steps prior to sample shipment to the laboratory:

- Secured the individual sample bags with cable tie to avoid sample loss.
- Packaged smaller secured bags into 430 mm x 760 mm x 250 mm polyweave bags.
- Secured large bags with cable ties for added protection.
- Prepared sample dispatch documents (analytical services request sheet) in duplicate listing sample numbers, elements to be analyzed, and any other instructions.
- Transferred samples to a BCL driver for transport to the laboratory.

10.3.3.6 Core and Sample Storage

It is a statutory requirement that all core obtained from exploration drilling be kept in storage for future reference. All drill core was thus stored at the PNR core shed at the Selebi North Mine site. Mineralized intervals are stored in a sea container for protection from the weather and non-mineralized core is stored outside on concrete slabs.

For the analyzed sample material, all coarse rejects were placed in storage at the ALS laboratory in Johannesburg for a period of 45 days and were then disposed of. The 'Master Pulps' were stored at the laboratory for 90 days in case re-analysis was required, and then periodically shipped from the ALS laboratory to Selebi Phikwe, Botswana for long term storage by PNR. Pulps are kept in secured storage in sea containers at the Selebi North Mine site.

The QP considers the core processing routines and lithological logging procedures for exploration holes to be consistent with standard industry practice.

10.4 Hydrogeology Data

GCS Botswana (Pty) Ltd (GCS) was appointed by BCL in Liquidation to conduct a specialist hydrogeological study to complement a mine closure process for the BCL Complex (BCL and TNMC Mines) and the following information is summarized from their 2020 report entitled "BCL Complex Hydrogeological Study; Selebi Phikwe and Tati).

GCS conducted a series of data driven and field investigations, including groundwater and surface water sampling, geophysical investigations, borehole drilling, and aquifer testing. The data collected were used to create a conceptual hydrogeological model over the area and to explore closure management plans and risks for the Project.

Selebi and Selebi North mines are actively dewatered, with water pumped to the Million Gallon Dam (MGD) within Phikwe. In 2020, a cumulative volume of approximately 1000 m^3/day was pumped from Selebi North and Selebi. With the cessation of mine dewatering, flooding periods for Selebi and Selebi North are estimated to be between 12 and 13 years, and 33 and 53 years, respectively. The potential exists for the mine workings to flood to a level that may encroach the upper shallow aquifer and surface water rivers and streams. It is GCS' opinion that after cessation of mine dewatering the workings will flood, but that the water table will stabilize below the upper geological strata and that none of this water will decant from any of the shafts (Labuschagne and Stapelberg, 2020).

10.5 Geotechnical Data

The QP understands that geotechnical data has been acquired over several years and has been used to support the mine development at Selebi. As of the date of this Technical Report, these reports were not available for review.

11.0 Sample Preparation, Analyses, and Security

This section summarizes the sample preparation and analysis procedures as applied to historical and current drill hole samples. As of the date of this Technical Report, SLR had not been able to source documentation describing the sample preparation, analyses, and security procedures followed prior to 2007.

11.1 Historical Work

11.1.1 Sample Preparation, Analysis, and Security

The following sections describe work undertaken by former operator BCL from 2007 to 2016.

Sample Preparation

Core samples from both surface and underground drilling were delivered by BCL personnel to the onsite BCL laboratory, which served as the primary laboratory, for analysis. The BCL laboratory received accreditation from the Southern African Development Community Accreditation Service in accordance with the ISO/IEC 17025:2005 international standard for technical competence of nickel and copper analysis in March 2016. While most samples in the historical database were analyzed prior to this accreditation, in the years prior to accreditation the laboratory had been actively working with the Botswana Bureau of Standards to achieve this goal. As part of this work, a selection of samples was sent to ALS Chemex (ALS) Tati-Phoenix and Nkomati laboratories for quality assurance and quality control (QA/QC) purposes. The ALS laboratories are independent and were accredited according to the South African National Accreditation System.

At the BCL laboratory, samples were crushed in a two step process to ±5 mm, then a ±300 g sample was riffle split and pulverized to <325 mesh.

Sample Analysis

Both the BCL laboratory and the ALS laboratories used a four acid (HNO_3-$HClO_4$-HF-HCl) digestion to treat the samples.

At the BCL laboratory, surface samples were assayed for copper, nickel, iron, sulphur, and cobalt using flame atomic absorption spectroscopy (FAAS). ALS analyzed the samples by inductively coupled plasma (ICP)–atomic emission spectroscopy (AES) for a suite of 33 elements (including platinum group elements) according to its analytical code ME-ICP61. ALS analyzed samples with copper and nickel values > 1% (>10,000 ppm) by ICP-atomic absorption spectroscopy (AAS) according to its analytical codes Cu-OG62 and Ni-OG62, respectively.

Underground samples were routinely analyzed by FAAS for nickel and copper, however, provisions were available for analysis of other elements including cobalt, iron, and sulphur, as required.

Density Determination

Bulk density (density) determination was completed using the water immersion method (Archimedes method) by a trained BCL geological technician. The method entails the weighing of a dry sample in air and in water. Density determinations of all samples were carried out in a closed environment at the core shed to avoid external disturbances that may affect the scale reading. Dry samples were weighed using an electronic scale sensitive to 0.1 g and capable of measuring weights up to 3,100 g.

Density of a particular sample lithology was reviewed for correspondence with the sample description of the lithology on the log sheet and if there were any marked discrepancies, the process was repeated and the density recalculated.

The recorded bulk density was validated by a geologist to confirm if it corresponded to the lithology as logged. If correct, the geologist approved the batch for dispatch to the laboratory and the density measurements were recorded on a log sheet, otherwise the whole process was repeated.

The QP considers the historical density determination procedure to be adequate and consistent with standard practices.

11.1.1.1 Sample Security

Sample Shipping

Following the review of the density results by the geologist, a BCL technician completed the following steps prior to sample shipment to the laboratory:

- Secured the individual sample bags with cable tie to avoid sample loss.
- Packaged smaller secured bags into 430 mm x 760 mm x 250 mm plastic bags.
- Secured large bags with cable ties for added protection.
- Prepared sample dispatch documents (analytical services request sheet) in duplicate listing sample numbers, elements to be analyzed plus any other instructions.
- Transferred samples to a BCL driver for transportation to the onsite laboratory.

Core and Sample Storage

It was a statutory requirement that all core obtained from exploration drilling be kept in storage for future reference. All BCL core was thus stored at the BCL core shed at the Phikwe Mine site.

All production pulp and coarse rejects from the BCL laboratory were kept in storage at the laboratory for three weeks before they were discarded. Coarse rejects from surface exploration campaigns were returned to the Geology department and kept in secured storage at the core shed for one year after the campaign before being discarded.

11.1.2 Quality Assurance and Quality Control

Quality assurance consists of evidence that the assay data has been prepared to a degree of precision and accuracy within generally accepted limits for the sampling and analytical method(s) to support its use in an MRE. Quality control consists of procedures used to ensure that an adequate level of quality is maintained in the process of collecting, preparing, and assaying the exploration drilling samples. In general, QA/QC programs are designed to prevent or detect contamination and allow assaying (analytical), precision (repeatability), and accuracy to be quantified. In addition, a QA/QC program can disclose the overall sampling-assaying variability of the sampling method itself.

There is no evidence that QA/QC samples were submitted as part of analytical programs prior to 2007. QA/QC protocols including insertion rates as presented in Table 11-1 were implemented by BCL in 2007 and are summarized from Lungu (2016).

Table 11-1: Historical QA/QC Sample Insertion Rates

QA/QC Sample Type	Frequency	Placement
Field Duplicate	1 in 20[1]	Random, Preference for Within Mineralized Zone
Check Assay (Pulp Return)	0 to 5 in 20	Random
Coarse Rejects (Coarse Return)	0 to 5 in 20	Random
Blank	1 in 20	Random, Preference for Within Mineralized Zone
Certified Reference Material (CRM)	1 in 20	Random

Source: modified from Lungu, 2016

Notes:

1. Field duplicate submission was limited to surface and Selebi North underground exploration holes only. Small diameter underground drill holes were submitted whole to the laboratory for analytical testing.

In addition to blind sample submissions to the laboratory by the BCL geological department, the BCL laboratory included certified reference material (CRM) samples for internal monitoring at a rate of 1 in 10, as well as duplicate samples (rate unknown).

SLR received and reviewed a partial database of QA/QC results representing analytical results from 2010 to 2014 (Table 11-2). As of the effective date of this Technical Report, it was unknown whether a complete database of the historical QA/QC samples and results exists. In addition to this data, SLR received several partial datasets and analytical result compilations and summaries including the following:

- A comparison of 64 primary nickel and copper analytical results from the BCL laboratory analyzed in 2010 with ALS Tati and Nkomati laboratories check assay results.
- A graphical comparison of 184 paired primary (BCL laboratory) copper and nickel analytical results against ALS analytical results (no date).
- A tabular and graphical comparison of 18 paired primary (BCL laboratory) copper and nickel analytical results against ALS check assays and internal pulp duplicates (no date).
- A dataset comparing 158 internal re-assays of nickel and copper pulp duplicate samples from six batches, alongside 17 CRMs (no date).
- A data and control plot of 58 blank reference material samples (no date).

Table 11-2: Summary of Available Historical QA/QC Database Entries

Year	Assay Count	Reference Sample Count		
		AMIS0060	AMIS0061	Blank
2010	20	2	2	-
2011	30	-	-	4
2012	252	6	6	6
2013	102,458	298	318	176
2014	18,325	33	65	160
Total	121,165	339	391	346

Notes:

1. Counts represent single variable results. A single CRM assayed for both nickel and copper may be represented twice.

Lungu (2016) concluded that BCL's QA/QC protocols were inconsistently followed both temporally and in different parts of Selebi-Phikwe, however, reviewed available results and observed them to be sufficient to support the estimation of Mineral Resources. Lungu (2016) recommended that QA/QC protocols be standardized across the site and for all sample types and that sample support from drill holes be delineated spatially and used to support classification criteria.

The QP reviewed the available information and noted some deficiencies in the QA/QC sample results, including evident sample mix-ups in CRM material results, as well as observed biases in some CRM and check assay results. The QP is of the opinion that the results are inconclusive and lack temporal and spatial context. The sample type and location being supported by the QA/QC samples is not known, nor is the purpose, original conclusions drawn, or actions taken based on the results of the analysis. SLR was not able to source comprehensive QA/QC data or reports representing or summarizing QA/QC sample collection at the Project from 2007 to 2016. As a result, the QP is of the opinion that further QA/QC compilation, data verification, and statistical comparisons with recent data are required to support the inclusion of the historical drill hole information in an MRE.

11.2 Current Work

11.2.1 Sample Preparation and Analysis

Samples collected at the Project are submitted to ALS Chemex South Africa in Johannesburg, (ALS Johannesburg) for preparation and analysis. ALS Johannesburg is independent of PNRPL, and its facilities are accredited to the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) 9001:2008 standards, for all quality management and to ISO/IEC 17025:2005 for all relevant procedures.

A check assay program by a secondary laboratory was completed at SGS South Africa (PTY) Ltd. (SGS) of Johannesburg, South Africa. This facility is also an accredited facility to SANAS ISO 17025 by SANAS.

The following analysis is undertaken at the ALS Johannesburg facilities:

- **Sample Preparation: PREP-31 and PREP-32H.** Samples are crushed to 70% less than 2 mm, riffle split to 250 g, pulverized split to greater than 85% passing 75 µm. PREP-32H provides a larger pulverized sample for pulp duplicates.

- **Analysis: ME-ICP81.** Samples are decomposed using a peroxide fusion with an ICP-AES finish to measure Ni, Cu, Co, As, Pb, Zn, S, Fe, Al_2O_3, CaO, Cr_2O_3, Fe_2O_3, K_2O, MgO, MnO, SiO_2, TiO_2.
- **Analysis PGM-ICP23.** Analyses for Pt, Pd, and Au are by fire assay with an ICP-AES finish.
- **Analysis ME-ICP61.** Samples are analyzed using four acid digestion with ICP-EAS finish are completed to measure Ag
- **Analysis S-IR08.** If sulphur over-runs occur, total S is determined by LECO furnace and infrared spectroscopy

In the QP's opinion, the sample preparation and analytical procedures are acceptable for the purposes of Mineral Resource estimation.

11.2.2 Density Determination

Bulk density (density) determination was completed using the water immersion method (Archimedes method) by a trained PNR geological technician. All determinations were carried out in a closed environment at the core shed to avoid external disturbances that may affect the scale reading. Dry samples were weighed using an electronic scale sensitive to 0.1 g and capable of measuring weights up to 3,100 g.

Density of a particular sample lithology was reviewed for correspondence with the sample description of the lithology on the log sheet and if there were any marked discrepancies, the process was repeated and recalculated.

The recorded densities were validated by a geologist to confirm if they correspond to the lithology as logged. If correct, the geologist approved the batch for dispatch to the laboratory and the density measurements were recorded on a log sheet, otherwise the whole process was repeated.

The QP considers the density determination procedure to be adequate and consistent with standard practices. Density measurements were recorded on all core samples in 2022, 2023, and 2024 to build a database to support the interpolation of density during resource estimation.

11.2.3 Sample Security and Database Management

Samples are handled and transported by PNRPL personnel or contractors. Drill core is stored at the onsite core storage facility, the grounds of which are locked. The storage facilities are open with 2022 mineralized intervals stored in a locked sea container. A core storage map is maintained by PNRPL. Sample rejects are stored at the ALS site and then are disposed.

Residual coarse rejects are placed in air proof plastic bags and stored on pallets at the ALS prep lab in South Africa. The coarse rejects are stored for a period of 90 days and then they are disposed. The 'Master Pulps' in ALS Johannesburg are periodically shipped to Selebi Phikwe, Botswana for long term storage by PNRL.

PNRL drill hole logging data are maintained in DHlogger software, with regular back ups. Analytical data is currently maintained in spreadsheets outside of DHLogger. Historical databases are maintained separately in a series of MS Access, mining software (Datamine), or MS Excel file types. The QPs recommend that a comprehensive and validated database representing historical drill holes be prepared and merged with the current database, and that analytical results be imported directly into and maintained within a data management software.

In the QP's opinion, the sample security procedures are adequate for the purposes of Mineral Resource estimation when considered alongside additional verification tests completed by the QP, however, improvements are warranted, specifically with reference to the historical data.

11.2.4 Quality Assurance and Quality Control

11.2.4.1 QA/QC Protocols

Blank samples and CRM samples are inserted regularly at a rate of one per 20 samples within a batch not exceeding 200 samples. CRM samples are chosen based on anticipated nickel content of the proximal mineralized core sample. All QA/QC sample insertions maintain consecutive numerical order. A pulp silica blank was also inserted every 20 samples. All CRMs are certified for nickel and copper and are matrix matched.

QA/QC sample results are reviewed upon receipt by the corporate geology team.

A summary of annual QA/QC submittals is presented in Table 11-3.

Table 11-3: Summary of QA/QC Database Submissions

Sample	Assay Count	Submission Rate % Total
Core Samples	5,052	
Blanks (Gran.Gn. & Silica Pulp Blank)	285	5.3
Standards (CRMs)	300	5.6
Coarse Duplicates	611	11.4
Check Assays on Pulps	72	1.4

11.2.4.2 Blank and Certified Reference Material

Both coarse and fine blank samples are employed as control samples within the sample sequence at Selebi.

1. A barren quartz-feldspar gneiss obtained locally at the project site had been used to monitor potential sample contamination at the sample preparation stage. Early results indicated erratic copper values and was replaced with a quartzite material sourced from Madinare. The Mmadinare quartzite performs very well as a potential indicator of sample contamination.
2. Two analytical silica pulp blanks, one prepared by AMIS (AMIS0577) and one prepared by CF Reference (CFRM-900) are in use to monitor sample mix-ups, contamination, and instrumentation drift at the analytical stage.

A total of six matrix matched reference material samples are in use at the site, ranging in nickel grades from 0.2985% to 2.452%, and copper grades from 0.210% to 2.741%. Failures for CRM data are defined by PNRL as when values report further than three standard deviations from the expected value. When this occurs, the failed CRM alongside 10 samples on either side of the CRM in consecutive order are repeated by ALS Johannesburg at the request of PNRL.

A summary of in use blank and CRM samples are presented in Table 11-4 and Table 11-5 alongside their failure rates.

Table 11-4: Summary of Blanks Used in the 2022 to 2024 QA/QC Programs

Control Sample	% Ni (Failure rate%)	% Cu (Failure rate%)	Submissions To Date
Blank (Field Gneiss) *	0.0	0.0	44
AMIS0577 (silica)**	0.0	0.0	9
CFRM-900 (silica)*	0.0	0.8	252

Notes:

1. * - Failure rates calculated from a coarse blank threshold limit of 0.05% for base metals.
2. **- Failure rates calculated from a fine blank threshold limit of 0.03% for base metals.

Table 11-5: Summary of CRM Samples used in the 2022 to 2024 QA/QC Programs

CRM	Element	Unit	Period Range	No Samples	SD	Mean	EV	No. Outliers	Bias (%)	No.Outliers (%)
AMIS0316	Cu	ppm	(2022, 2022)	6	0.006	0.21	0.21	0	0.4	0.0
	Ni	ppm	(2022, 2022)	6	0.024	0.60	0.595	0	0.0	0.0
AMIS0385	Cu	pct	(2022, 2022)	3	0.019	0.98	0.96	0	2.2	0.0
	Ni	pct	(2022, 2022)	3	0.036	1.81	1.77	0	2.1	0.0
AMIS0283	Cu	pct	(2022, 2022)	1	0.091	2.77	2.741	0	1.1	0.0
	Ni	pct	(2022, 2022)	1	0.099	2.20	2.257	0	-2.5	0.0
CFRM-100	Cu	pct	(2022, 2024)	156	0.014	0.35	0.349	1	-0.4	0.6
	Ni	pct	(2022, 2024)	156	0.015	0.31	0.299	1	3.5	0.6
CFRM-101	Cu	pct	(2022, 2024)	60	0.031	0.89	0.881	0	0.5	0.0
	Ni	pct	(2022, 2024)	60	0.035	1.17	1.191	3	-2.0	5.0
CFRM-102	Cu	pct	(2023, 2024)	74	0.071	1.72	1.695	0	1.7	0.0
	Ni	pct	(2023, 2024)	74	0.049	2.48	2.452	3	1.3	4.1

Notes:

1. SD = Standard Deviation
2. EV = Expected Value

SLR reviewed the analytical work completed by PNRL and prepared control charts for selected CRMs for copper and nickel.

Precision of cobalt results was found to be quite low, which is often the case with low values proximal to the detection limit of the analytical method.

The CRMs AMIS0316, AMIS0385 and AMIS0283 were inserted into the sampling stream from February to August 2022, however, due to the limited number of samples (10 in total), these results are not sufficient to draw any definitive conclusions.

Figure 11-1 and Figure 11-2 illustrate the performance of the low-grade CRM CFRM-100 as analyzed by ALS between 2022 and 2024. During this period, a total of 156 samples were inserted. The analysis shows low biases for both copper and nickel with very few or no samples exceeding the three standard deviation threshold.

Figure 11-3 and Figure 11-4 present the performance of the high-grade CRM CFRM-102, with 74 samples inserted from November 2023 onwards. The results indicate good performance by the primary laboratory for both copper and nickel.

Figure 11-1: Selebi Cu Control Chart for CRM CFRM-100 at ALS: 2022-2024

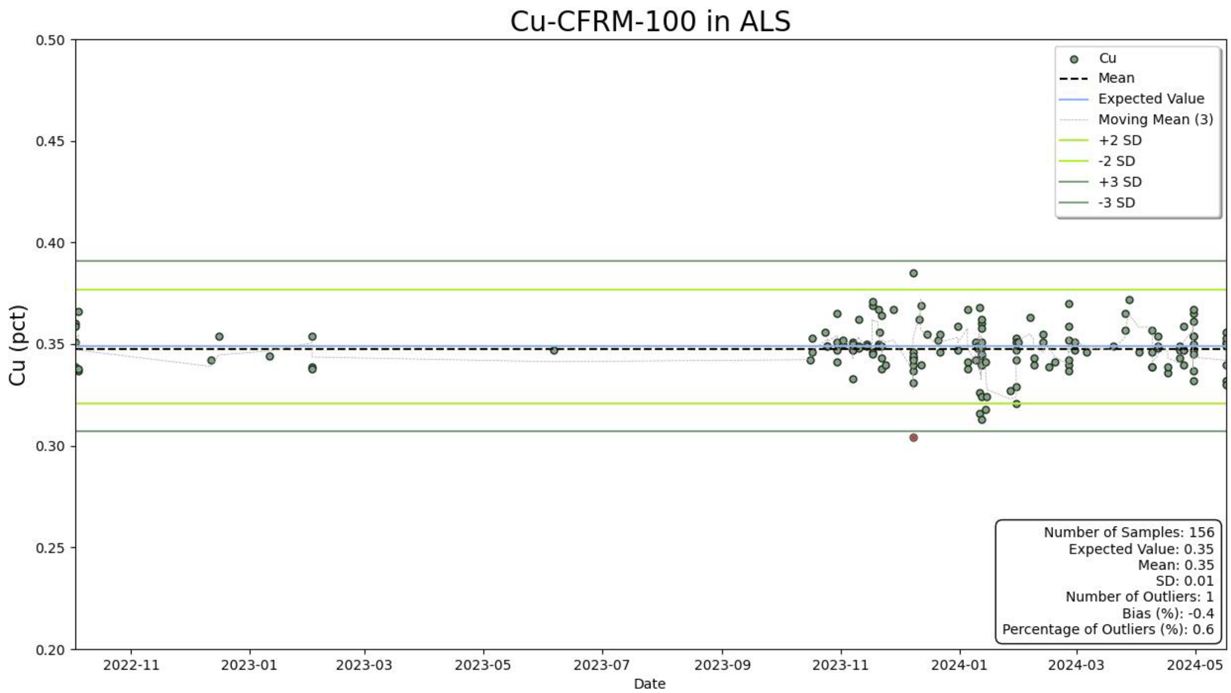


Figure 11-2: Selebi Ni Control Chart for CRM CFRM-100 at ALS: 2022-2024

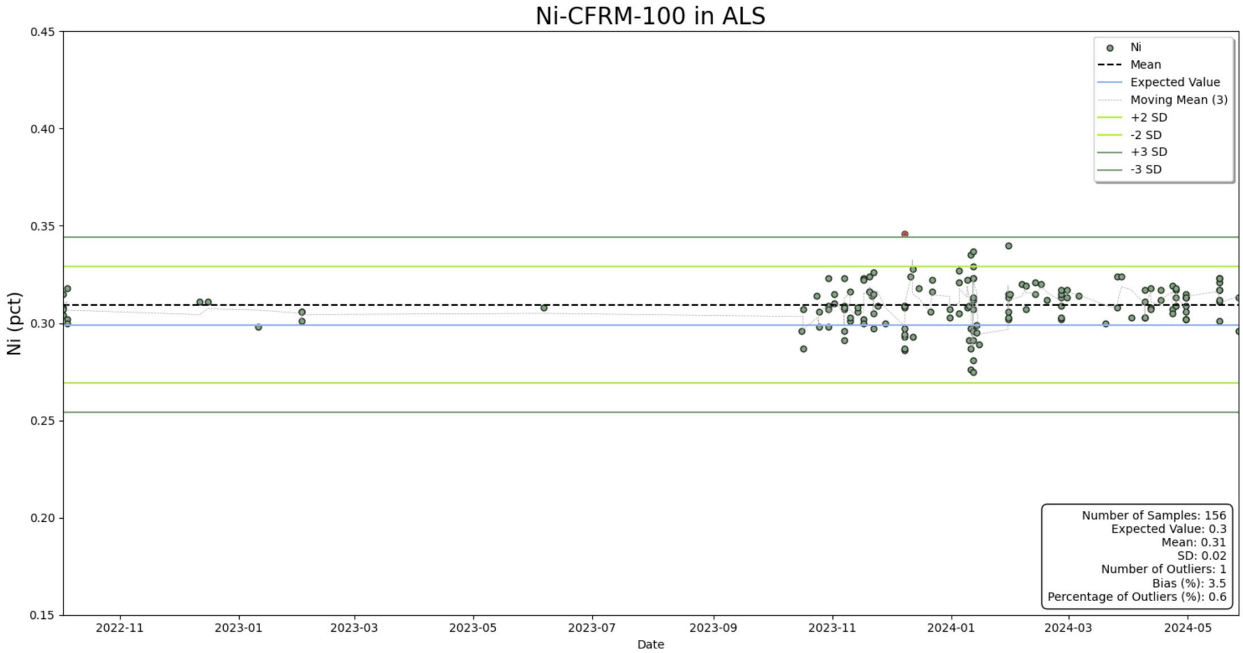


Figure 11-3: Selebi Cu Control Chart for CRM CFRM-102 at ALS: 2023-2024

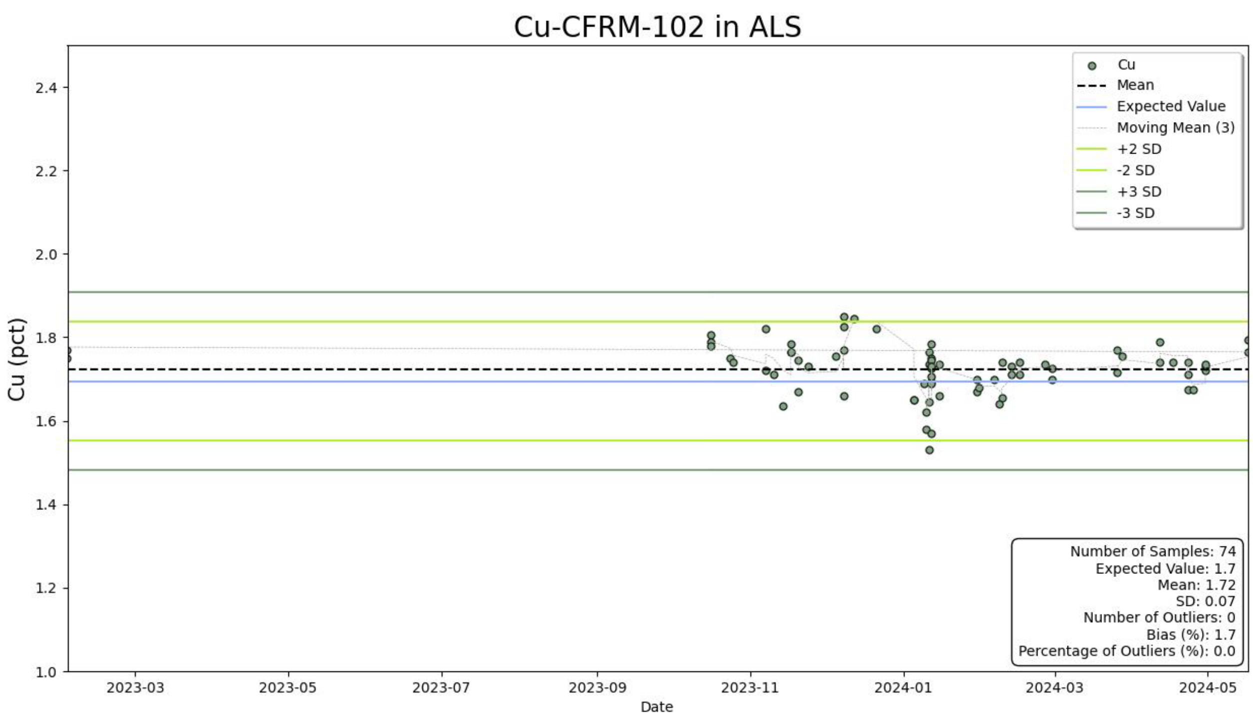
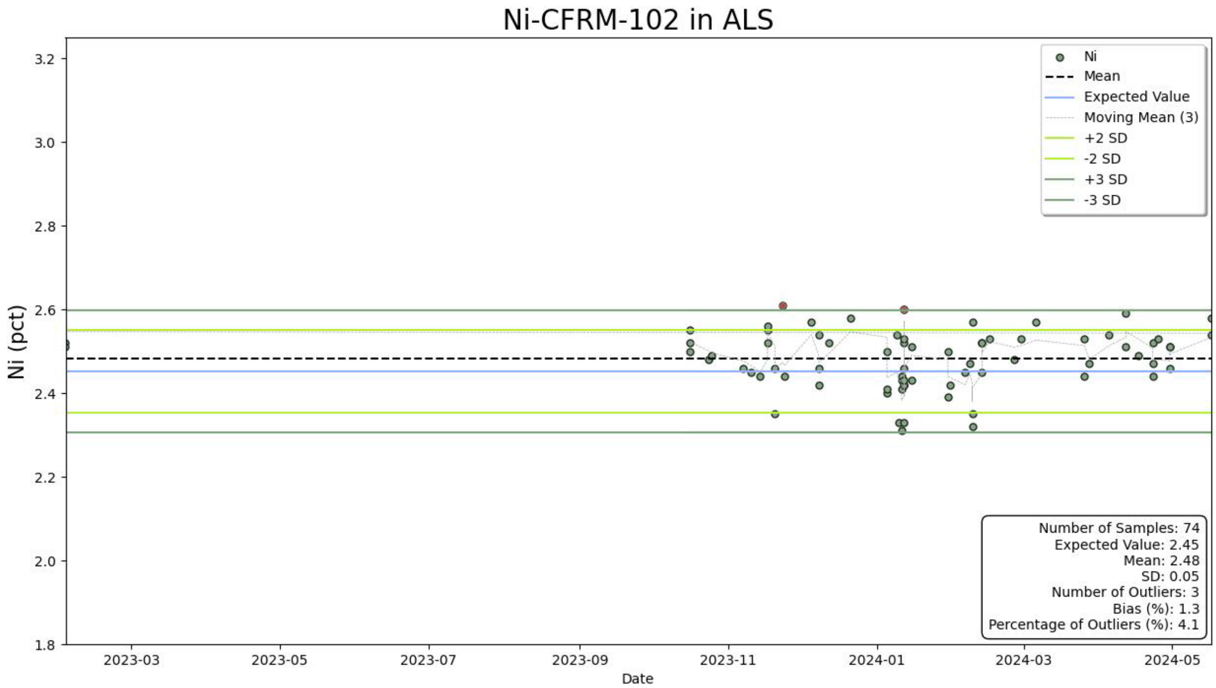


Figure 11-4: Selebi Ni Control Chart for CRM CFRM-102 at ALS: 2023-2024



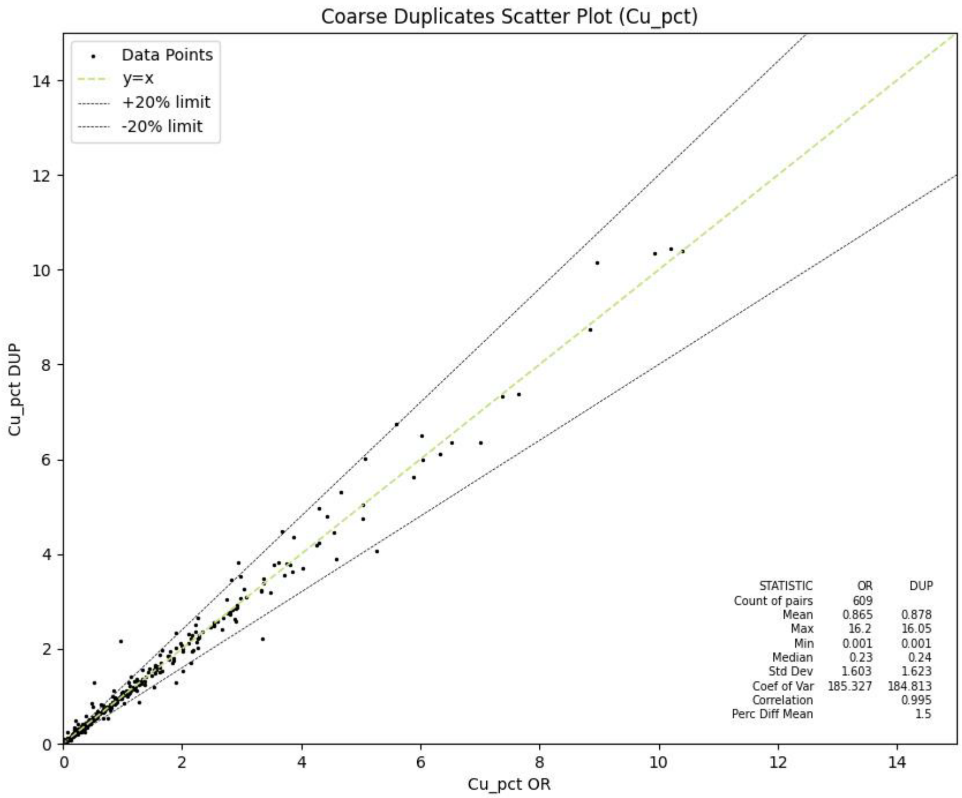
11.2.4.3 Field, Coarse Reject, and Pulp Duplicates

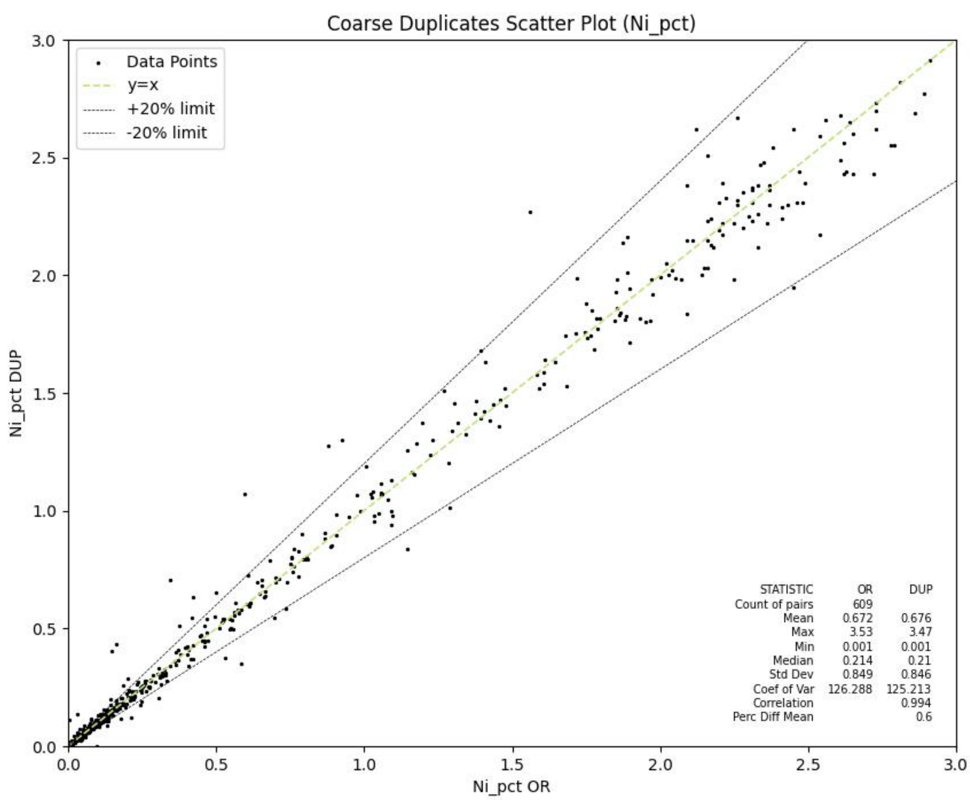
Coarse reject (preparation) duplicate samples are submitted for re-analysis to evaluate sample homogeneity at the coarse crush stage during sample preparation. Samples represent a second 250 g sample portion from a riffle splitter.

Figure 11-5 presents the coarse duplicate results, demonstrating good grade coverage and strong correlation for copper and nickel (0.995 and 0.994, respectively). Additionally, the original and duplicate pairs exhibit statistical similarity, indicating good repeatability by ALS.

No field or pulp duplicates are part of the Selebi QA/QC program currently.

Figure 11-5: Selebi Scatter Plots of Coarse Duplicates at ALS: 2022 to 2024





11.2.4.4 Check Assays

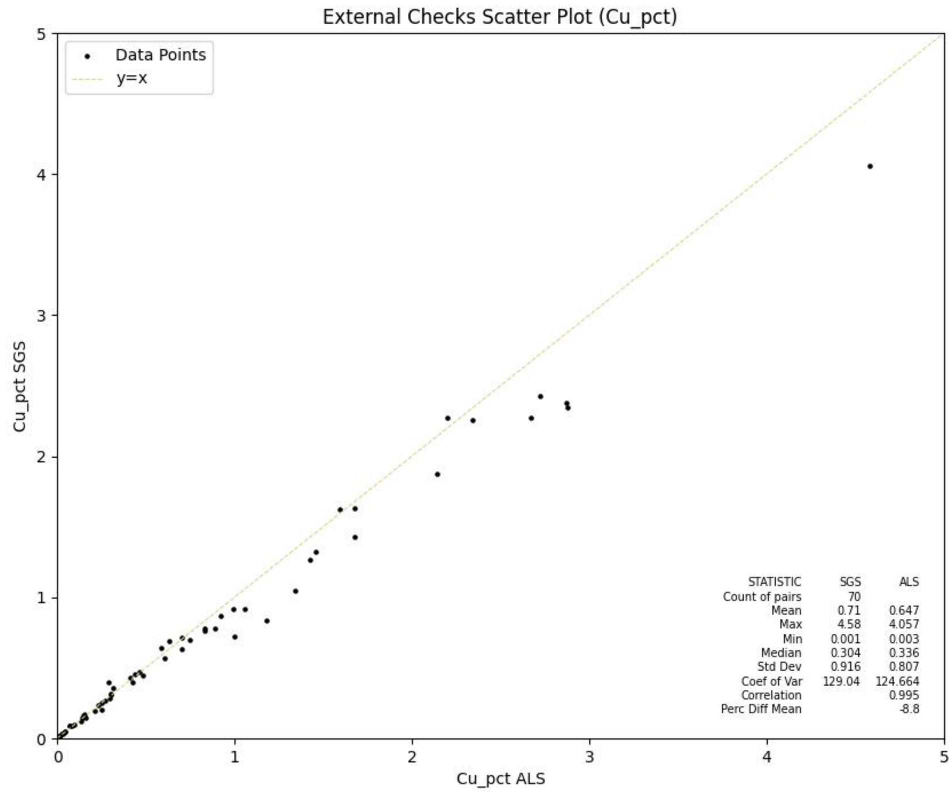
To facilitate assay checks at a secondary lab, PNRL selected a total of 72 pulp samples for submission to a second laboratory. The check sample was a 'Scoop Split Replicate' and was split from the original 250 g master pulp, then sent directly to SGS for assay. Results for copper and nickel are presented in Figure 11-6. CRM samples were not submitted as part of this program.

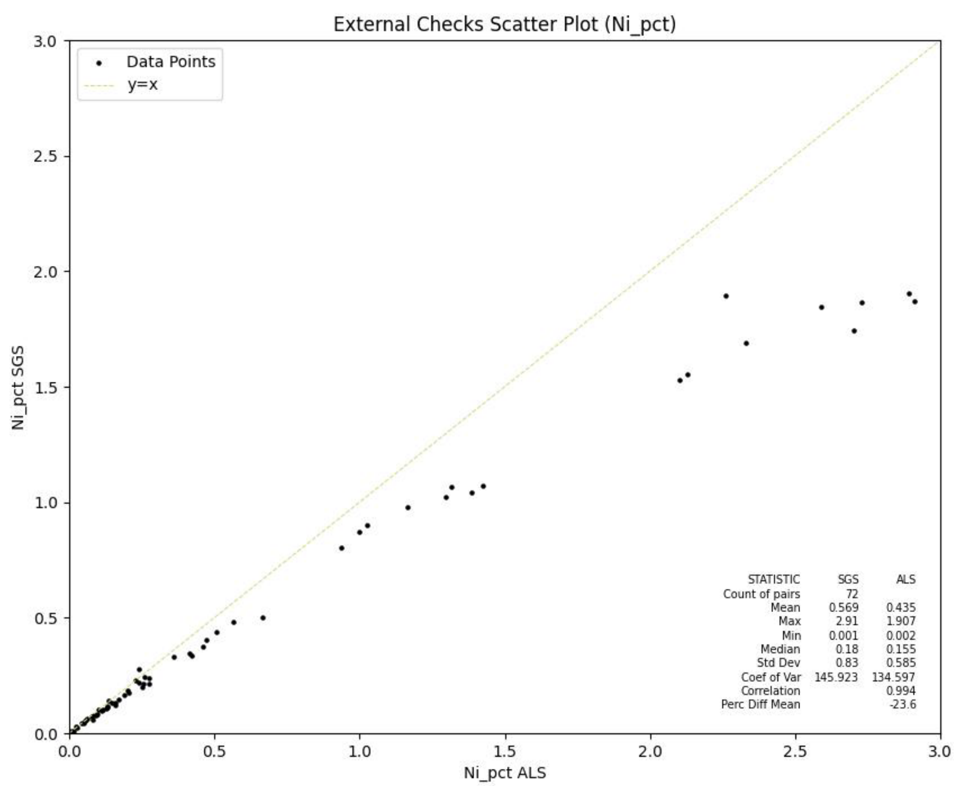
These 72 pulp samples were sourced from the Selebi Main surface drill program. The check assay results from the 2023-2024 Selebi North underground drill program were not yet available at the effective date of this report.

The QP reviewed the results and found that the primary laboratory (ALS) reported consistently higher values for both copper and nickel than the secondary laboratory (SGS) at all grades of mineralization. These results indicate a potentially significant positive bias, however, this conclusion is not backed by CRM results at ALS.

In reviewing results, PNRL technical staff proposed that the results could be caused by a resettling of the pulp sample over the extended time between preparation and submission to SGS, and that the bias could be resolved through remixing of the pulp prior to resampling. The QP agrees that this is possible and recommends this check assay program be redone with re-homogenization of the pulps prior to sampling, and inclusion of at least 10 CRMs from two different economic value ranges.

Figure 11-6: Scatter Plot of ALS Original Versus External Check at SGS





11.2.4.5 Conclusions

- The QA/QC protocols in place are sufficient to monitor sample quality assurance and control at the Project. Some protocol improvements are possible and include a review of the number of reference material samples in place at site, the grade range of reference material samples, and the insertion of field and pulp duplicates.
- The results of the fine blank sample program indicate low likelihood of sample mix-ups within the program. The coarse blank used early in the QA/QC program returned a small number of anomalous copper values. The coarse blank was replaced with a quartzite material sourced from Madinare. The Mmadinare quartzite performs very well as a potential indicator of sample contamination.
- The results from the reference material sample program, which includes CRMs AMIS0316, AMIS0385, and AMIS0283, are insufficient to draw conclusive results due to the limited number of samples. However, the newer CRM series CFRM-100 to CFRM-102 shows overall good performance by the primary laboratory, with only a few outliers exceeding the threshold.
- The results of the coarse duplicate program indicate good repeatability for copper and nickel analytical results by the primary laboratory.
- The results of the check assay program point to inadequate homogenization of the pulps prior to sampling. The QP is of the view that the check assay results are inconclusive and lack CRM results.

11.2.4.6 Recommendations

1. Re-do the check assay program, ensuring CRMs are submitted to the secondary laboratory, and sample homogenization is performed before resampling.
2. Continue to monitor accuracy issues at the primary laboratory.
3. Maintain a balanced number of submissions for low-grade, moderate-grade, and high-grade CRMs to avoid low-grade standards being over-represented. Ensure all grades of interest are monitored by inserting a sufficient number of samples, ideally more than 30 samples for each individual CRM in a drilling campaign, to allow for statistically meaningful conclusions to be drawn.
4. Initiate a program of field duplicate samples at a rate of approximately 1 in 50. Submit two half core samples and include samples expected to be economically mineralized.
5. Initiate a program of pulp duplicate samples at a rate of approximately 1 in 50. Submit samples expected to be economically mineralized.
6. Reduce insertion rate of coarse duplicates to approximately 1 in 50.

12.0 Data Verification

12.1 SLR Site Verification Procedures

A site visit to the Project was conducted by an SLR Principal Geologist and an SLR Associate Resource Geologist on May 13 and May 15, 2024. An earlier visit was also undertaken by an SLR Associate Environmental Consultant from May 2 to May 6, 2021.

While onsite, the SLR Principal Geologist and QP visited the core shack and library, reviewing previously requested core for Selebi Main and North as well as core processing, logging and sampling procedures, and carried out a site infrastructure tour, visiting Shafts 2 and 4 above ground and observing the general layout of the property. The QP also completed an underground visit to Selebi North, accessed from Shaft #4 and connecting ramps to levels 733, 810, 850, 856, 880, and 925, observing both N3 and South Limb deposit areas, a recent blast supporting metallurgical testing, evidence of historical channel sampling, active drilling, evidence of other recent drilling, and several opportunities to view mineralization in the backs and walls of the underground development.

The QP also reviewed historical data collection and processing with the site team.

12.1.1 Confirmation of Mineralized Intercepts

While on site in May 2024, the QP visited the core shack and library, reviewing requested core for Selebi Main and North, as well as unprocessed drill core from the previous day's drilling activities (SNUG-24-114).

Drill core from mineralized intercepts and its immediately adjacent core from the following drill holes were reviewed against the digital database:

- Selebi: sd119, SMD-22-006A-W2, SMD-22-009A
- Selebi North: SNUG-23-028, SNUG-23-32, SNUG-23-060

What is assumed to have originally been mineralized core within drill hole sd119 was observed to be completely oxidized, including deep rusting of the containing core box. No mineralization in the drill hole was observed, however, the deep oxidation corresponds to a logged massive sulphide intersection and to elevated copper and nickel analytical results.

But for sd119, all other drill holes were observed to align with the recorded logging, and nickel and copper analytical results were observed correlate with presence of chalcopyrite (Cu) and pyrrhotite and pentlandite (Ni).

12.1.2 Confirmation of Drill Hole Location and Survey information

A total of 39 drill hole collars were located at the site, 33 of which were clearly labelled. Collar casings were observed in a variety of conditions, ranging from capped casings extending approximately one metre above the ground, to uncapped flush casings, to holes in the ground with no casings.

Locations were measured using a handheld GPS and approximate measurements of the hole dips and azimuths were taken using a Brunton Compass. All labelled holes were observed to closely approximate the digital database.

12.2 SLR Audit of the Drill Hole Database

Drill hole paper logs from sd108, sd117, and sd55 were reviewed against digital positioning, logging, and analytical results. The paper logs included lithology coding, detailed descriptions of the lithology, drill hole attribute data including collar location and core diameter, mineralogical information including sulphide mineral percentages and mineralogical descriptions, and analytical results for nickel, copper, cobalt, iron, sulphur, and SG.

Original certificates from ALS for the years 2022 to 2024 were compared against assay databases, including drill holes Selebi North Underground series (SNUG), Selebi Main series (SMD), snd132, and snd143. In total, 5,831 samples underwent cross-checks for nickel and copper analysis, revealing only one discrepancy.

Analytical values were compared between the logs and the digital database by PNRPL and were observed to compare well. Of the samples reviewed, only two typographic errors in the elemental analysis results were noted. The QP notes, however, that the BCL digital database had only upheld lithology designation and results for nickel and copper.

The original data handoff included historical BCL data that had significant figures of the lithology interval lengths rounded from the nearest decimetre, and detailed descriptions of the lithologies, mineralogy, and alteration were absent from the digital database. The rounding issue was the result of the export out of Studio RM. This was resolved by reviewing the original data and making corrections. The QP understands that PNRL is undertaking a larger digitization and validation exercise to confirm a larger selection of historical logging from underground channel samples and delineation holes and to incorporate missing qualitative and analytical values into the master database.

The QP reviewed the drill hole databases representing surface and underground drilling at Selebi Main and Selebi North in Leapfrog software and conducted a standard review of import errors and visual checks. In addition to the missing analytical data previously mentioned, a number of overlapping, zero length, very long (>10 m), and anomalous intervals were identified in the historical BCL database, again, resulting from the export of the BCL database from Studio RM. Varying significant figures in the From and To columns in some areas have created the appearance of a high number of small overlapping segments. As mentioned above, these errors resulted from the Studio RM export and have been largely resolved.

While visually, survey deviations appear as expected, the QP understands that the re-surveying exercise undertaken on several historical holes has identified large differences in the location of mineralized intercepts. Elevation discrepancies between collar locations and topography appear to be small. The QP compared collar locations against georeferenced collar location maps and level plans. The QP observed very good agreement between surface collar locations in the digital database and the location maps for near mine drill holes, however, noted several regional drill holes indicated on the location map to be missing from the digital database.

12.3 SLR Data Verification Conclusions and Recommendations

The Project Team continues to collect, compile, review, and validate technical data relevant for the Project. The field and computer-based validation exercises conducted by the QP and the Project Team indicate the potential for an extensive historical drill hole database to support Mineral Resource estimation work in the QP's opinion. The QP recommends PNRL continue its validation program and complete validation and digitization of missing information from handwritten logs as part of that work.

13.0 Mineral Processing and Metallurgical Testing

The BCL concentrator and smelter plants located on the adjacent Phikwe property operated for over 40 years, processing ore from both Selebi and Phikwe until the operations were placed on care and maintenance in October 2016.

The concentrator operated at capacities ranging from 6,000 tpd up to a maximum of 10,000 tpd. The preferred technology adopted for the concentrator was designed to produce a low-grade bulk sulphide Ni-Cu concentrate. Presently, the metallurgical recoveries are based primarily on the historical operating performance achieved.

The Outokumpu flash smelting furnace was commissioned in 1973 and processed Selebi and Phikwe concentrates. The smelting equipment was upgraded over the years to facilitate the incorporation of Ni-Cu concentrates received from the Nkomati Nickel Mine (a joint venture (JV) between Norilsk Nickel Africa Pty. Ltd. and African Rainbow Minerals) and the Phoenix Mine (Tati Nickel Mining Company, later a subsidiary of BCL). The smelter produced a high-grade sulphide matte containing nickel, copper, and cobalt, which was shipped off-site to refineries for further processing.

PNRL's metallurgical current objectives are significantly different than those of the historical BCL operations. PNRL considers the present smelter on the adjacent Phikwe property to be outdated, in poor condition, and not consistent with current environmental standards. PNRL's current plan is to produce readily marketable copper and nickel concentrates without recommencing operation of the BCL concentrator or smelter. A preliminary metallurgical study program for separate copper and nickel concentrate production at a conceptual level was completed by SGS Canada (SGS, 2021). The results from the 2021 SGS testing were previously reported (SLR 2022).

The historical mineralogical data supports Ni-Cu separation in flotation as pentlandite and chalcopyrite, however, these are not commonly associated, and the primary challenge is pentlandite liberation from pyrrhotite. Liberation data suggests that 70% of the pentlandite is finer than 40 µm and that non-liberated pentlandite is associated primarily with pyrrhotite. All copper occurs as chalcopyrite, which tends to liberate slightly coarser than pentlandite.

In 2023, study programs were undertaken by different agencies to investigate various conceptual process options for the Project:

- Ore Sorting Test Work- Stark Resources (Stark), in Aachen, Germany, studied pre-concentration methods to upgrade the Selebi material (Stark 2024).
- Flotation Test Work - SGS Canada Inc. (SGS) in Lakefield, Ontario, Canada tested samples from the Selebi and Selkirk deposits with the following objective (SGS, 2024):
  - Explore options to improve nickel recovery and to generate concentrates for downstream hydrometallurgical testing. The remaining composite samples from the 2021 SGS test program were used for testing, including Selebi Main (S Comp) and Selebi North (SN Comp) composite samples.
- DRA Projects (PTY) Ltd. (DRA) was engaged by PNRL to prepare a Front End Solutions (FES) conceptual study for the Selebi Project, including various process options for concentrate production and processing (DRA, 2023).

Based on the results from these preliminary studies and historical data analyses, PNRL conceptualized a treatment process that included ore sorting and flotation of a bulk concentrate product for sale and estimated the copper and nickel recoveries.

The report sections below briefly describe the work undertaken for the Project in support of the current conceptual treatment process to produce a bulk concentrate.

13.1 Pre-concentration Test Work

Stark conducted some preliminary amenability test work for PNRL on pre-concentration methods (Stark, 2024). X-ray Transmission (XRT) sorting technology was evaluated to determine the effectiveness on Selebi feed samples and to identify whether different lithologies could be detected. Test work focused on separating the minerals from waste materials. The following information is modified from a report prepared by Stark.

Samples of Project material were sent to Stark's facilities in South Africa by PNRL. Stark did not provide any information describing how the Project samples were originally collected by PNRL or the sample locations. After breaking the larger rock samples with a hammer and chisel, a Stark geologist hand selected rock samples based on the lithologies represented in terms of mineralogy and size. Different rocks were glued onto a test sheet, packaged, and sent to the test facility at RWTH Aachen University in Germany. At the test facility, static scans were taken of the different lithology samples to determine whether the sorting algorithm could distinguish the different lithologies based on PNRL data. Figure 13-1 shows the test sheets and the scanning unit.

Figure 13-1: Scanning Unit and Test Sheets Mounted with Selebi Materials

The lab scale sensor showed that the average densities of all lithologies were distinct, except for some particles in the disseminated material and amphibolite waste which had similar densities.

Testing with an industrial scale sensor confirmed the results obtained with the lab scale sensor, and the results are shown in Table 13-1. Among the five lithologies tested, only disseminated material and amphibolite waste had overlapping densities. The industrial sensor identified high-density disseminated sulphide inclusions and classified 83% of the disseminated material as product and 94% of amphibolite particles as waste. The other three lithologies, massive sulphide, pegmatite, and gneiss, were correctly classified as product or waste based on atomic density with 100% accuracy.

Table 13-1: Summary of the XRT Scan Results

Column Number	Lithology Description	Lithology Classification (Product/Waste)	Product	Waste	Indicated Separation Efficiency (%)
1	Disseminated	Product	15	3	83
2	Massive Sulphide	Product	18	0	100
3	Pegmatite	Waste	0	18	100
4	Amphibolite	Waste	1	17	94
5	Gneiss	Waste	0	18	100
Total					**95.6**

Overall, the XRT scanning results demonstrated the efficacy of the technology in classifying the Project samples as product or waste based on the atomic density profiles of the rocks scanned. Based on the preliminary test work results, Stark recommended additional work on comminution analysis and modelling, bulk sorting test campaign with larger samples, and economic modelling of the flowsheet options.

13.2 2023 SGS Test Work Program

The main objective of the 2023 SGS test work program for the Project samples was to produce copper and nickel concentrates for hydrometallurgical testing through 10 kg locked cycle tests (LCT).

The metallurgical test work program included feed characterization (assays and mineralogy of historical cleaner tailings samples) and flotation testing to generate two concentrates for downstream test work.

The information in this section is largely extracted from the 2024 SGS report, which also references information from the 2021 SGS Report, as the same composite samples were used in 2023 SGS testing.

13.2.1 Sample Selection and Preparation

In 2022, the QP described the Project sampling program in detail and provided commentary (SLR 2022). The QP notes that the approach to sample selection and preparation has not changed since 2022. The same composite samples prepared in 2021 were used again in SGS test work conducted in 2023, therefore, the QP expresses the same concerns with respect to the continued use of these samples in metallurgical testing and the reliance on data from any test results generated:

> In the QP's opinion, PNRPL's procedure of sample selection and collection of non-oxidized material is not considered best practice. However, PNRPL's method of hand-picking samples was referenced to historical grades during production and is statistically representative of the Selebi mineralization. The test results based on composites prepared from these hand-picked samples may not be indicative of the expected metallurgical performance. Although considered adequate for a 'proof of concept' test, the QP recommends that proper sampling of drill core, that is spatially representative of the deposits, be undertaken prior to conducting any further metallurgical testing (SLR 2022).

13.2.2 Feed Characterization

Table 13-2 provides a summary of the feed characteristics of the two Project test samples. Copper feed grade varied from 1.07% Cu to 1.90% Cu, while nickel feed grade varied from 0.88% Ni to 1.17% Ni. Nickel sulphide (Ni(s)) assays suggested that most of the nickel was in sulphide form.

Table 13-2: Head Assays of Test Samples

Analysis	Unit	SN Comp	S Comp
Cu	%	1.07	1.90
Ni	%	1.17	0.88
Ni(s)	%	1.12	0.85
Fe	%	32.3	20.6
S	%	16.5	11.9

A subsample from each of the test samples was submitted for mineralogical analysis using Quantitative Evaluation of Materials by Scanning Electron Microscopy (QEMSCAN) at a grind size of 80% passing (P_{80}) 84 µm, 115 µm, and 122 µm, respectively. The major sulphide minerals were identified as chalcopyrite, pentlandite, and pyrrhotite, with lesser amounts of pyrite. Pyrrhotite content was very high in these samples, ranging from 22% to 37%. Approximately 80% of the nickel was contained in pentlandite and approximately 15% of the remaining nickel was mostly hosted by pyrrhotite in solid solution. Minor amounts of nickel (approximately 5%) were hosted by non-sulphide gangue minerals.

While chalcopyrite and pyrrhotite were well liberated at the grind size submitted for mineralogy, pentlandite was poorly liberated. Results indicate that the use of regrinding will be critical to fully liberate pentlandite in order to maximize nickel recovery and grade.

13.2.3 Mineralogy

In 2023, the LCT-2 Po first cleaner tails sample of the SN Comp (80% passing size, p_{80} of 15 µm) from the 2021 SGS test work was submitted for mineralogical analysis in an attempt to understand the reasons for the nickel losses. From an analysis of the deportment of sulphide nickel, it was determined that pentlandite hosted most of the nickel losses (70.2%) and the remainder of the losses was nickel in pyrrhotite (29.8%) in the tails sample. The pentlandite was well liberated (approximately 80%) and the non-liberated pentlandite was mainly associated with pyrrhotite (19%). The mineralogy suggested that pentlandite liberation was not the main cause for nickel losses to the sample, however, overgrinding the sample could cause challenges to the recovery of the fines by flotation.

The QP notes that mineralogical analysis was performed on a single, historical LCT sample of the first cleaner tails representing the composite sample, SN Comp, and that more testing and analysis is recommended for material representing Selebi and Selebi North.

13.2.4 Flotation

Selebi flotation testing to produce separate copper and nickel concentrates was conducted in 2021 by SGS and was previously reviewed (SLR 2022). In 2023, four LCT (LCT-7 to LCT-10) were completed on 2021 Selebi composite samples using approximately10 kg test charges and these are shown in Table 13-3. The information in this section was largely taken from the recent SGS report (SGS, 2024).

Table 13-3: Summary of LCT Tests

Test ID	Sample ID	Test Description	Sample Charges
LCT-7	SN Comp	Bulk Cu/Ni LCT	5 x 9.4 kg
LCT-8	S Comp	Bulk Cu/Ni LCT	10 x 9.2 kg
LCT-9	SN Comp	Cu-Ni Sep LCT	7 x 860 g
LCT-10	S. Comp	Cu-Ni Sep LCT	9 x 1,027 g

The flowsheet for LCT-7 and LCT-8 is shown in Figure 13-2. The flowsheet for LCT-9 and LCT-10 is shown in Figure 13-3.

Figure 13-2: Flowsheet of LCT-7 and LCT-8

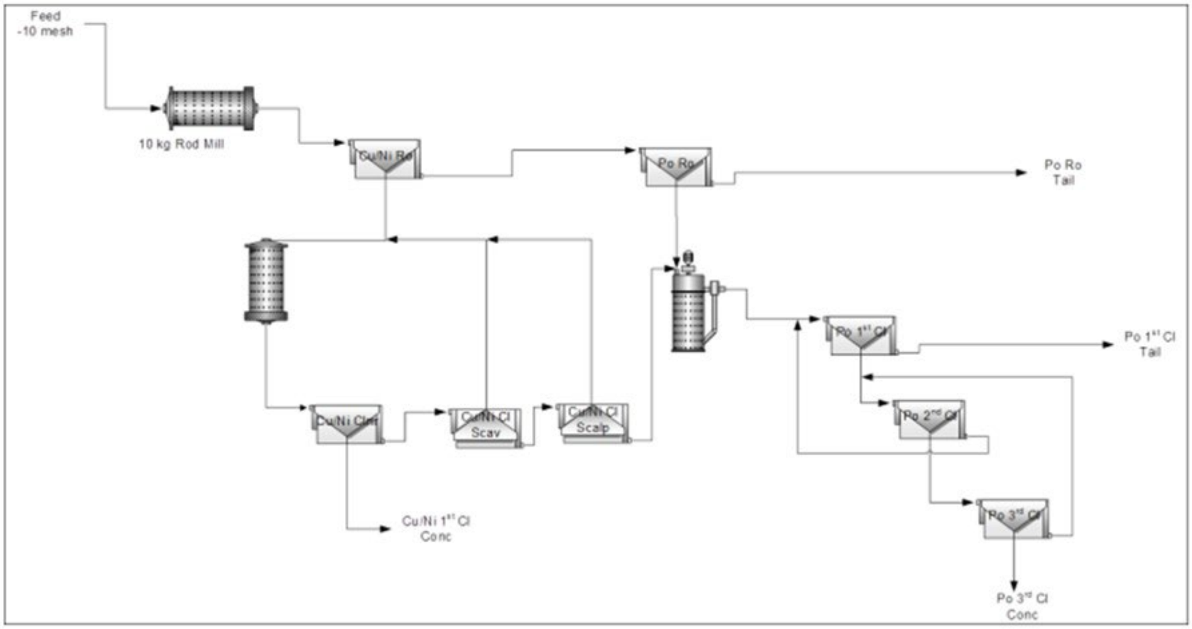
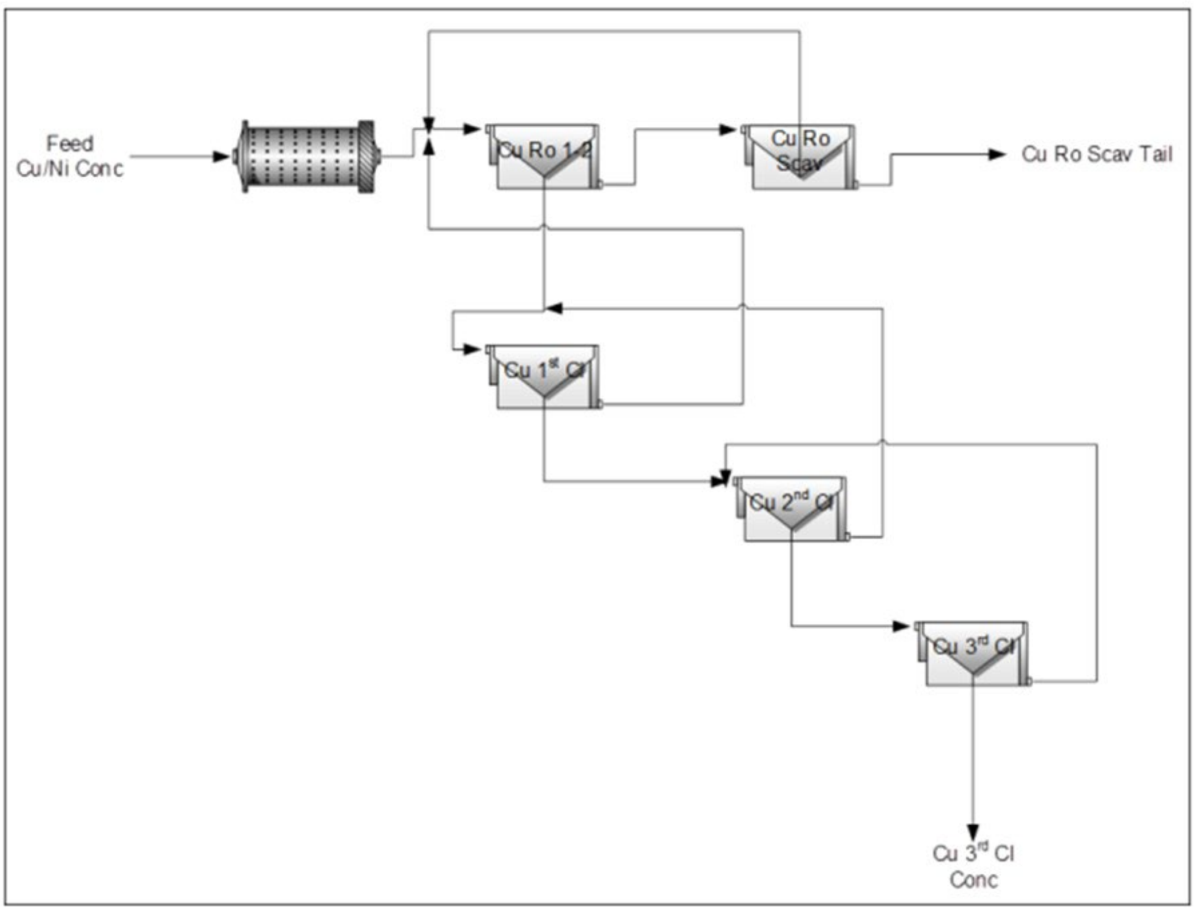


Figure 13-3: Flowsheet of LCT-9 and LCT-10



The main objective of tests LCT-7 and LCT-8 was to generate Cu/Ni cleaner concentrates. The Cu/Ni cleaner concentrates were filtered and the total wet weight was recorded. A subsample was taken for moisture measurement and assay. The remaining sample was repulped and stored until a Cu-Ni separation test could be performed.

The Cu/Ni cleaner concentrates were generated from the same sample in each cycle of the three LCT (LCT-7 and LCT-8) were combined, filtered, homogenized, and split into equal weight charges for use in the Cu-Ni separation LCT (LCT-9 and LCT-10). The Cu-Ni separation tests were conducted based on the previously established flowsheet in which separation was achieved by depressing nickel at high pH (12.0) using lime together with a polishing grind.

13.2.4.1 LCT on Selebi SN Comp (LCT-7 and LCT-9)

Test LCT-7 was completed in seven cycles using 9.4 kg SN Comp test charges per cycle to produce bulk Cu/Ni cleaner concentrate. The stability check showed that cycles C to E were stable and suitable for projected mass balance calculations.

The projected mass balance results are presented in Table 13-4. The combined Cu/Ni 1st Cleaner Concentrate and Po 3rd Cleaner Concentrate graded approximately 12% Cu+Ni at 97% Cu recovery and 80% Ni recovery.

The Cu-Ni separation test was conducted in test LCT-9. Following statistical analyses, cycles F to J were deemed suitable for projected mass balance calculations. The projected metallurgical results are presented in Table 13-5 and showed the stage recovery of copper to the copper concentrate was 75% at a grade of 34% Cu and 0.6% Ni. The nickel stage recovery to the nickel concentrate (Cu Ro Scav Tails) was 98.6% at a grade of 7.5% Ni and 1.9% Cu.

The combined results of LCT-7 and LCT-9 are presented in Table 13-6. The overall copper recovery to the Cu 3rd Cleaner Concentrate was 71% at a grade of 33.5% Cu and 0.6% Ni. The overall nickel recovery to the combined nickel concentrate (Cu Ro Scav Tails and Po 3rd Cl Conc.) was 80% at a grade of 7.3% Ni and 2.0% Cu.

Table 13-4: LCT-7 (SN Comp) Metallurgical Projections (C-E)

Product	Wt (%)	Assays (%)							% Distribution					
		Cu	Ni	S	Cp	Pn	Po	Cu+Ni	Cu	Ni	S	Cp	Pn	Po
Cu/Ni 1st Cl Conc.	14.9	6.51	5.96	35.7	18.9	15.7	62.1	12.5	95.9	77.4	35.9	95.9	87.4	27.8
Po 3rd Cl Conc.	0.7	2.26	4.32	35.6	6.54	10.9	77.2	6.57	1.5	2.5	1.6	1.5	2.7	1.5
Comb. Cu/Ni Conc.	15.6	6.33	5.89	35.7	18.4	15.5	62.8	12.2	97.4	79.9	37.5	97.4	90.1	29.2
Po 1st Cl Tails	16.0	0.08	0.75	33.8	0.23	0.88	86.8	0.83	1.3	10.5	36.5	1.3	5.2	41.5
Po Ro Tail	68.4	0.02	0.16	5.63	0.06	0.18	14.4	0.18	1.4	9.5	26.0	1.4	4.7	29.4
Head (Calculated)	100.0	1.01	1.15	14.8	2.94	2.68	33.5	2.16	100	100	100	100	100	100
Head (Direct)		1.07	1.17	16.5	3.10	2.69	37.7	2.24						

Note:

1. Pyrrhotite (Po), Chalcopyrite (Cp), Pentlandite (Pn).

Table 13-5: LCT-9 (SN Comp) Metallurgical Projections (F-J) – Stage Performance

Product	Wt (%)	Assays (%)							% Distribution					
		Cu	Ni	S	Cp	Pn	Po	Cu+Ni	Cu	Ni	S	Cp	Pn	Po
Cu 3rd Cl Conc.	14.4	33.5	0.62	34.7	98.3	1.68	2.33	34.1	74.5	1.4	14.4	74.5	1.4	0.5
Cu Ro Scav Tail	85.6	1.93	7.46	34.6	5.66	19.5	71.4	9.38	25.5	98.6	85.6	25.5	98.6	99.5
Head (Calculated)	100.0	6.48	6.47	34.6	19.0	16.9	61.5	13.0	100	100	100	100	100	100
Head (Direct)		6.75	6.13	35.9	19.8	16.0	65.1	12.9						

Note:

1. Pyrrhotite (Po), Chalcopyrite (Cp), Pentlandite (Pn).

Table 13-6: Combined LCT-7 and LCT-9 Results for SN Comp

Product	Wt (%)	Assays (%)							% Distribution					
		Cu	Ni	S	Cp	Pn	Po	Cu+Ni	Cu	Ni	S	Cp	Pn	Po
Cu 3rd Cl Conc.	2.1	33.5	0.62	34.7	98.3	1.68	2.33	34.1	71.4	1.1	5.1	71.5	1.3	0.2
Cu Ro Scav Tail	12.8	1.93	7.46	34.6	5.66	19.5	71.4	9.38	24.4	77.8	30.1	24.4	86.9	27.3
Po 3rd Cl conc.	0.7	2.26	4.32	35.6	6.54	10.9	77.2	6.57	1.5	2.3	1.6	1.5	2.5	1.5
Po 1st Cl tails	16.0	0.08	0.75	33.8	0.23	0.88	86.8	0.83	1.3	9.9	36.9	1.3	4.9	41.6
Po Ro Tails	68.4	0.02	0.16	5.63	0.06	0.18	14.4	0.18	1.4	9.0	26.2	1.4	4.4	29.5
Com. Ni Conc. (Cu Ro Scav Tail + Po 3rd Cl Conc.)	13.4	1.95	7.30	34.7	5.70	19.1	71.7	9.25	25.9	80.1	31.8	25.9	89.5	28.8
Head (Calculated)	100.0	1.01	1.22	14.67	2.96	2.86	33.4	2.23	100	100	100	100	100	100
Head (Direct)		1.07	1.17	16.50	3.10	2.69	37.7	2.24						

Note:

1. Pyrrhotite (Po), Chalcopyrite (Cp), Pentlandite (Pn).

13.2.4.2 LCT on Selebi S Comp (LCT-8 and LCT-10)

Test LCT-8 was completed in ten cycles using 9.2 kg S Comp test charges per cycle to produce bulk Cu/Ni cleaner concentrate. The stability check showed that cycles F to J were stable and suitable for projected mass balance calculations.

The projected mass balance results are presented in Table 13-7. Test LCT-8 produced a combined concentrate of Cu/Ni 1st Cleaner Concentrate and Po 3rd Cleaner Concentrate grading approximately 21% Cu+Ni at 98% copper recovery and 70% nickel recovery.

Before proceeding with the Cu-Ni separation LCT test (LCT-10), a batch flotation test (BF-2) was performed on a test charge of LCT-8 Cu/Ni Cleaner Concentrate weighing approximately 1.027 kg to establish baseline conditions for test LCT-10. Test results are summarized in Table 13-8. Two stages of copper cleaning were found to be adequate and PAX dosages could be increased in the copper rougher and scavenger stages to improve copper recovery.

The Cu-Ni separation test was performed in test LCT-10. Following statistical analyses, cycles H to I were deemed suitable for projected mass balance calculations. The projected metallurgical results are presented in Table 13-9 and showed the stage recovery of copper to the copper concentrate was 86% at a grade of 27.1% Cu and 0.6% Ni, with the remaining 14% reporting to the nickel concentrate. The nickel stage recovery to the nickel concentrate (Cu Ro Scav Tails) was 94% at a grade of 9.3% Ni and 4.5% Cu.

The combined results of LCT-8 and LCT-10 are presented in Table 13-10. The overall copper recovery to the Cu 3rd Cleaner Concentrate was 83% at a grade of 27.1% Cu and 0.6% Ni. The overall nickel recovery to the combined nickel concentrate (Cu Ro Scav Tails and Po 3rd Cl Conc.) was 65% at a grade of 9.1% Ni and 4.5% Cu.

Table 13-7: LCT-8 (S Comp) Metallurgical Projections (F-J)

Product	Wt (%)	Assays (%)							% Distribution					
		Cu	Ni	S	Cp	Pn	Po	Cu+Ni	Cu	Ni	S	Cp	Pn	Po
Cu/Ni 1st Cl Conc.	11.3	16.2	5.32	36.4	46.9	14.2	39.6	21.5	97.0	67.8	36.4	97.0	76.7	19.8
Po 3rd Cl Conc.	0.4	3.67	5.58	37.0	10.7	14.5	74.1	9.26	0.8	2.5	1.3	0.8	2.8	1.3
Combined Cu/Ni Conc.	11.7	15.8	5.33	36.4	45.7	14.2	40.8	21.1	97.8	70.4	37.7	97.8	79.4	21.1
Po 1st Cl Tails	17.7	0.14	1.13	33.2	0.42	1.97	84.2	1.28	1.4	22.7	52.2	1.4	16.6	66.2
Po Ro Tail	70.5	0.02	0.09	1.62	0.07	0.12	4.1	0.11	0.9	6.9	10.1	0.9	3.9	12.7
Head (Calculated)	100.0	1.89	0.89	11.3	5.47	2.10	22.6	2.77	100	100	100	100	100	100
Head (Direct)		1.90	0.88	11.9	5.51	2.06	24.1	2.78						

Note:

1. Pyrrhotite (Po), Chalcopyrite (Cp), Pentlandite (Pn).

Table 13-8: BF-2 (S Comp) Flotation Test Results

Product	Wt (%)	Assays (%)							% Distribution					
		Cu	Ni	S	Cp	Pn	Po	Cu+Ni	Cu	Ni	S	Cp	Pn	Po
Cu 3rd Cl Conc.	27.2	31.3	0.41	33.9	90.7	1.07	4.66	91.8	53.6	2.2	27.2	20.8	53.6	2.1
Cu 2nd Cl Conc.	31.0	30.8	0.54	33.9	89.4	1.41	5.67	90.8	60.0	3.2	30.9	23.9	60.0	3.1
Cu Ro Scav Tail	35.2	6.37	5.72	33.7	18.5	15.1	57.8	33.5	14.1	39.0	34.9	42.5	14.1	38.3

Note:

1. Pyrrhotite (Po), Chalcopyrite (Cp), Pentlandite (Pn).

Table 13-9: LCT-10 (S Comp) Metallurgical Projections (H-I) – Stage Performance

Product	Wt (%)	Assays (%)							% Distribution					
		Cu	Ni	S	Cp	Pn	Po	Cu+Ni	Cu	Ni	S	Cp	Pn	Po
Cu 2nd Cl Conc.	49.7	27.1	0.57	35.6	78.6	1.30	20.1	27.7	85.5	5.7	50.5	85.5	4.9	26.1
Cu Ro Scav Tail	50.3	4.56	9.31	34.5	13.2	25.1	56.2	13.9	14.5	94.3	49.5	14.5	95.1	73.9
Head (Calculated)	100.0	15.8	4.96	35.1	45.7	13.3	38.3	20.7	100	100	100	100	100	100

Note:

1. Pyrrhotite (Po), Chalcopyrite (Cp), Pentlandite (Pn).

Table 13-10: Combined LCT-8 and LCT-10 Results for S Comp

Product	Wt (%)	Assays (%)							% Distribution					
		Cu	Ni	S	Cp	Pn	Po	Cu+Ni	Cu	Ni	S	Cp	Pn	Po
Cu 3rd Cl Conc.	5.6	27.1	0.57	35.6	78.6	1.30	20.1	27.7	82.9	3.8	18.0	82.9	3.7	5.0
Cu Ro Scav Tail	5.7	4.56	9.31	34.5	13.2	25.10	56.2	13.9	14.1	62.5	17.6	14.1	71.7	14.2
Po 3rd Cl conc.	0.4	3.67	5.58	37.0	10.7	14.5	74.1	9.26	0.8	2.6	1.3	0.8	2.9	1.3
Po 1st Cl tails	17.7	0.14	1.13	33.2	0.42	1.97	84.2	1028	1.4	23.8	52.9	1.4	17.6	66.6
Po Ro Tails	70.5	0.02	0.09	1.62	0.07	0.12	4.06	0.11	0.9	7.3	10.3	0.9	4.1	12.8
Com. Ni Conc. (Cu Ro Scav Tail + Po 3rd Cl Conc.)	6.1	4.50	9.06	34.7	13.0	24.4	57.4	13.6	14.9	65.2	18.9	14.9	74.6	15.6
Head (Calculated)	100.0	1.84	0.85	11.2	5.33	1.99	22.4	2.68	100	100	100	100	100	100
Head (Direct)		1.90	0.88	11.9	5.51	2.06	24.1	2.78						

Note:

1. Pyrrhotite (Po), Chalcopyrite (Cp), Pentlandite (Pn).

13.3 Metal Upgrade Ratios and Mass Pull Analyses

PNRL summarized select historical data reported for the production of separate copper and nickel concentrates and collaborated with DRA in the data analyses. This historical data provided by PNRL has been reproduced by SLR in Table 13-11 (PNRL, 2024a), however, the QP has not been able to verify all of the data presented from the sources listed. The production of separate copper and nickel concentrates from select tests and other sources was subsequently analyzed by DRA to determine the relationships between metal upgrade ratios and % mass pull in flotation for copper and nickel in bulk concentrate. Figure 13-4 and Figure 13-5 show the nickel upgrade ratio (UGR) vs. % mass pull (MP) and the copper UGR vs. MP, respectively (PNRL, 2024b). The following formulas were derived from these figures:

- Ni UGR = -3.155 x ln(MP) + 13.731
- Cu UGR = 80.371 x $(MP)^{-0.945}$

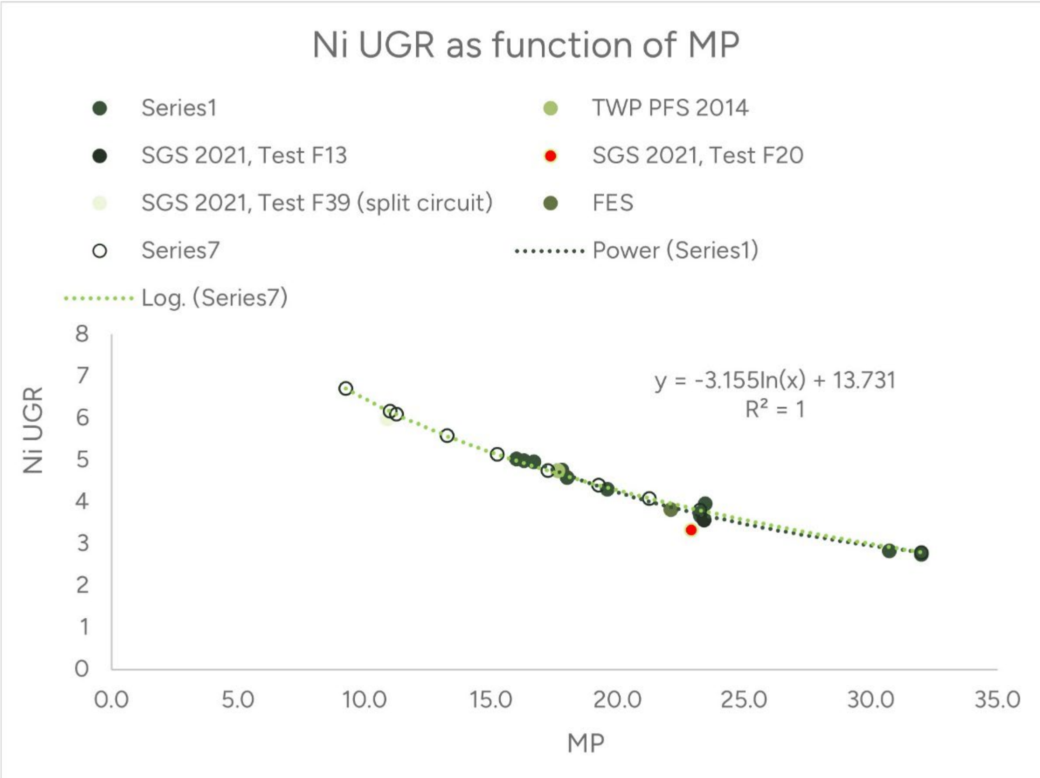
The metal upgrade ratios were then used to estimate metal recoveries, as follows:

- %Ni Recovery to Bulk Concentrate = MP x Ni grade of Bulk Concentrate (%) / ROM Ni grade (%).
- % Cu Recovery to Bulk Concentrate = Cu grade of Bulk Concentrate (%) x (MP / ROM Cu grade (%).

where the Cu grade of Bulk Concentrate (%) = Cu UGR / ROM Cu grade (%).

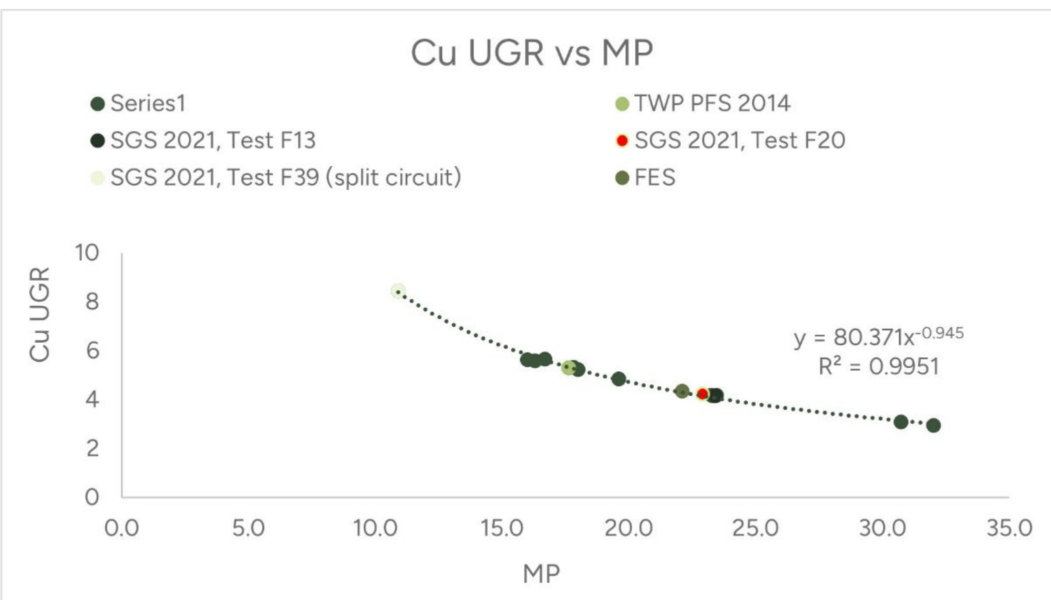
In the QP’s opinion, the copper and nickel grades of bulk concentrate were simulated by DRA based on the manipulation of PNRL data representing separately produced copper and nickel concentrates and thus, may not be indicative of the expected metallurgical performance for bulk concentrates.

Figure 13-4: Nickel UGR vs. MP



Source: PNRL

Figure 13-5: Copper UGR vs. MP



Source: PNRL

Table 13-11: Historical PNRL Selebi Data on the Production of Separate Copper and Nickel Concentrates

Source	Nickel					Copper					Cu+Ni Head Grade (%)	Cu+Ni Conc Grade (%)	Cu+Ni UGR
	Head Grade (%)	Conc Grade (%)	UGR	%Mass Pull (MP)	Recovery (%)	Head Grade (%)	Conc Grade (%)	UGR	%Mass Pull (MP)	Recovery (%)			
1980	0.96	2.72	2.83	30.73	87.07	0.85	2.64	3.11	30.73	95.44	1.81	5.36	2.96
BCL Tech Asses - GT 2010 - 2011	0.57	2.83	4.96	16.69	82.84	0.57	3.24	5.68	16.69	94.85	1.14	6.07	5.32
TWP PFS 2014	0.60	2.85	4.75	17.63	83.74	0.60	3.19	5.32	17.63	93.73	1.20	6.04	5.03
MPP Report	0.65	2.80	4.31	19.60	84.43	0.64	3.11	4.86	19.60	95.24	1.29	5.91	4.58
MPP Report	0.60	2.86	4.77	17.80	84.85	0.60	3.21	5.35	17.80	95.23	1.20	6.07	5.06
MPP Report	0.62	2.84	4.58	18.00	82.45	0.62	3.26	5.26	18.00	94.65	1.24	6.10	4.92
MPP Report	0.57	2.84	4.98	16.30	81.21	0.59	3.30	5.59	16.30	91.17	1.16	6.14	5.29
MPP Report	0.56	2.82	5.04	16.00	80.57	0.57	3.22	5.65	16.00	90.39	1.13	6.04	5.35
1980 (incl. mag sep)	0.92	2.53	2.75	32.00	88.00	1.00	2.97	2.97	32.00	95.04	1.92	5.50	2.86
Frother testing TFB	0.67	2.50	3.73	23.25	86.75	0.71	2.99	4.21	23.25	97.91	1.38	5.49	3.98
Frother testing TFB	0.66	2.42	3.67	23.28	85.36	0.71	2.97	4.18	23.28	97.38	1.37	5.39	3.93
Collector DTP 123	0.54	2.14	3.96	23.45	92.93	0.63	2.64	4.20	23.45	98.38	1.17	4.78	4.09
SGS 2021, Test F13	1.14	4.06	3.57	23.40	83.57	1.04	4.32	4.17	23.40	97.68	2.17	8.39	3.86
SGS 2021, Test F20	1.16	3.86	3.33	22.90	76.24	1.01	4.32	4.26	22.90	97.44	2.17	8.17	3.76
SGS 2021, Test F39 (split circuit)	1.18	7.07	5.99	10.90	65.26	0.98	8.28	8.45	10.90	92.15	2.16	15.34	7.11
HG Bulk FES	0.72	4.59	6.37	10.00	63.69	0.65	6.00	9.23	10.00	92.31	1.37	10.59	7.73
LG Bulk FES	0.72	2.45	3.40	23.00	78.17	0.65	2.75	4.22	23.00	97.13	1.37	5.19	3.79

Note:

1. Upgrade ratio (UGR).

13.4 Conceptual Mineral Processing

The conceptual mineral processing that PNRL is currently considering involves pre-concentration of Project feed materials via XRT particle sorting technology followed by flotation to produce a bulk or separate nickel and copper concentrates. The QP notes that an overall process flowsheet combining these individual steps has not been developed or tested by PNRL or by any parties (Stark, SGS, or DRA) to date and thus, the metallurgical recoveries for copper and nickel have been estimated for the purposes of Mineral Resource estimation.

PNRL assumed that by particle sorting of Selebi and Selebi North material that approximately 80% of the mined material could be sorted by XRT (20% of the material would be screened), the quantity of gangue material rejected would be 25%, and the quantity of nickel and copper lost in processing would be 5.00%. This data was not confirmed through recent Stark test work.

Based on a target of 6.00% Ni in bulk concentrate and a mass pull in flotation of 12.50%, metallurgical recoveries of 92.3% Cu and 72.0% Ni have been estimated by DRA for bulk concentrate. These metal recoveries reflect PNRL's historical test data and relationships obtained to produce separate copper and nickel concentrates, with an additional deduction for refining, smelting, transportation costs, and smelter penalties. Currently, iron and MgO are the only deleterious elements that have been identified by PNRL for the application of smelter penalties and this requires further confirmation via metallurgical testing in the production of a bulk concentrate.

13.5 Conclusions and Summary

Though the Project Team's procedure of sample selection and collection of non-oxidized material is not considered best practice, its method of hand-picking samples was referenced to historical grades during production and is statistically representative of the Selebi mineralization. The test results based on composites prepared from these handpicked samples may not be indicative of the expected metallurgical performance. Although considered adequate for a 'proof of concept' test, the QP recommended that proper sampling of drill core, that is spatially representative of the deposits, be undertaken prior to conducting any further metallurgical testing (SLR, 2022). The QP confirms that proper sampling is yet to be evidenced as additional metallurgical test work was again carried out in 2023 by SGS under the direction of PNRL using the 2021 SGS Selebi composite samples. The QP is aware of the future test work using fresh samples, collected through drilling and blasting from several underground sites from both Selebi North and Selebi Main.

While preliminary flotation test results indicated that Cu-Ni separation is achievable, further representative sampling and testing is required to demonstrate that the target grades of copper and nickel in bulk or separate nickel and copper concentrates can be consistently met. The copper and nickel grades of bulk concentrate were simulated by DRA based on the manipulation of PNRL data representing separately produced copper and nickel concentrates and thus, may not be indicative of the expected metallurgical performance for bulk concentrates. To the best of the QP's knowledge, pre-concentration techniques have not been used to prepare any Selebi materials for flotation testing to date.

The QP is of the opinion that the metallurgical data verification of key parameters from separate copper and nickel concentrate production by PNRL personnel indicated that the data are adequate to support the metallurgical interpretations by DRA. The QP concludes that the metallurgical and analytical data were collected in a manner that is suitable to be used conceptually for Mineral Resources estimation, however, further testing is recommended to confirm the characteristics of the Selebi final concentrate product.

14.0 Mineral Resource Estimates

Mineral Resources for the Selebi Mines are presented in Table 14-1 and a comparison to the previous historical MRE is presented in Table 14-2.

Table 14-1: Selebi Mines Mineral Resource Estimate as at June 30, 2024

Classification	Deposit	Tonnage	Grade		Contained Metal	
		(Mt)	(% Cu)	(% Ni)	(000 t Cu)	(000 t Ni)
Indicated	Selebi North	3.00	0.90	0.98	27.1	29.5
	Total Indicated	**3.00**	**0.90**	**0.98**	**27.1**	**29.5**
Inferred	Selebi Main	18.89	1.69	0.88	319.2	165.5
	Selebi North	5.83	0.90	1.07	52.5	62.4
	Total Inferred	**24.72**	**1.50**	**0.92**	**371.5**	**227.4**

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at a net smelter return (NSR) value of US$70/t.
3. Mineral Resources are estimated using a long-term prices of US$10.50/lb Ni and US$4.75/lb Cu, and a US$:BWP exchange rate of 1.00:13.23.
4. Mineral Resources are estimated using nickel and copper recoveries of 72.0% and 92.4%, respectively, derived from metallurgical studies, which consider a conceptual bulk concentrate scenario.
5. Bulk density has been estimated.
6. Mineral Resources are reported within conceptual underground reporting shapes considering a minimum thickness of 1.5 m.
7. There are no Mineral Reserves.
8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
9. Totals may not add or multiply accurately due to rounding.

Changes (growth) in Mineral Resources are attributed to (in general order of importance):

1 Drilling success, inclusion of a separate lower domain at Selebi, and changes to the thickness attribution of the upper domain in the southeast of the Selebi deposit.

2 Drilling success extending mineralization below the N3 and South Limb developed areas at Selebi North, increasing tonnage, and slightly decreasing grade.

3 Changes to the classification approach.

4 Migration from a NiEq based on a price ratio to NSR cut-off value.

5 Inclusion of underground reporting shapes (resource panels) that consider a minimum thickness.

Table 14-2: Selebi Mines Comparison of the Current and Historical Mineral Resource Estimate

Deposit	Tonnage (Mt)			Grade (%Ni)			Grade (%Cu)			Contained Metal (000 t Ni)			Contained Metal (000 t Cu)		
Class	**2016 BCL[1]**	**2024 SLR**	**Δ[2]**	**2016 BCL**	**2024 SLR**	**Δ**	**2016 BCL**	**2024 SLR**	**Δ**	**2016 BCL**	**2024 SLR**	**Δ**	**2016 BCL**	**2024 SLR**	**Δ**
Selebi Main															
Measured	0.37			1.01			2.19			4			8		
Indicated	6.82			1.05			2.29			72			156		
Total Measured and Indicated	**7.19**			**1.05**			**2.28**			**75**			**164**		
Inferred	4.09	18.89	362%	0.86	0.88	2%	1.21	1.69	40%	35	165	369%	49	319	545%
Total Selebi Main	**11.28**	**18.89**	**67%**	**0.98**	**0.88**	**-10%**	**1.90**	**1.69**	**-11%**	**111**	**165**	**49%**	**214**	**319**	**49%**
Selebi North															
Measured	0.71			1.24			1.03			9			7		
Indicated	1.14	3.00	163%	1.27	0.98	-23%	1.13	0.90	-20%	14	29	101%	13	27	110%
Total Measured and Indicated	**1.85**	**3.00**	**62%**	**1.26**	**0.98**	**-22%**	**1.09**	**0.90**	**-18%**	**23**	**29**	**25%**	**20**	**27**	**34%**
Inferred	2.79	5.80	108%	0.93	1.07	15%	0.87	0.90	3%	26	62	139%	24	52	114%
Total Selebi North	**4.64**	**8.80**	**90%**	**1.06**	**1.04**	**-2%**	**0.96**	**0.90**	**-6%**	**49**	**91**	**85%**	**45**	**79**	**78%**
Total Mineral Resources	**15.92**	**27.69**	**74%**	**1.00**	**0.93**	**-7%**	**1.62**	**1.44**	**-11%**	**160**	**256**	**60%**	**258**	**398**	**54%**

Notes:

1. BCL (2016) Effective September 30, 2016
2. Δ = (SLR-BCL)/BCL

14.1 Selebi

14.1.1 Summary

An updated MRE for the Selebi deposit was prepared by SLR using available drill hole data as of June 30, 2024. Mineral Resource domains and block modelling work was performed using Leapfrog Geo and Edge Software.

The MRE is defined by two mineralized domains, Upper and Lower, modelled as tabular veins and using a minimum thickness of 1.5 m and a NSR of US$60/t as a guide for mineralized selections. The estimated true thickness averages 5.6 m for the Upper domain and 4.6 m for the Lower domain.

Uncapped nickel and capped copper assays within the domains were composited to 1 m. Composite values were estimated into an oriented sub-blocked model using a three-pass inverse distance squared (ID2) approach. In addition to standard historical data and database validation techniques, wireframe and block model validation procedures including wireframe to block volume confirmation, statistical comparisons of composites with the estimate, and visual reviews in both 3D and section view were also completed.

Inferred Mineral Resources represent areas with approximate drill hole spacings of up to 200 m and are limited to areas of continuous mineralization. Mineral Resources are reported depleted and within conceptual underground reporting shapes considering a minimum thickness of 1.5 m and a NSR cut-off of US$70/t.

Inferred Mineral Resources at Selebi are estimated to total 18.89 Mt at average grades of 1.69% Cu and 0.88% Ni and to contain 319,000 t Cu and 165,000 t Ni (Table 14-3).

Table 14-3: Mineral Resource Estimate as at June 30, 2024 - Selebi

Classification	Zone	Tonnage	Grade		Contained Metal	
		(Mt)	(% Cu)	(% Ni)	(000 t Cu)	(000 t Ni)
Inferred	Upper	15.04	1.81	0.93	272.7	140.0
	Lower	3.85	1.21	0.66	46.5	25.4
	Total	**18.89**	**1.69**	**0.88**	**319.2**	**165.5**

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at a net smelter return (NSR) value of US$70/t.
3. Mineral Resources are estimated using long-term prices of US$10.50/lb Ni and US$4.75/lb Cu, and a US$:BWP exchange rate of 1.00:13.23.
4. Mineral Resources are estimated using nickel and copper recoveries of 72.0% and 92.4% respectively, derived from metallurgical studies which consider a conceptual bulk concentrate scenario.
5. Bulk density has been estimated and averages 3.39 t/m^3.
6. Mineral Resources are reported depleted and within conceptual underground reporting shapes considering a minimum thickness of 1.5 m.
7. There are no Mineral Reserves.
8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
9. Totals may not add or multiply accurately due to rounding.

The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the MRE.

14.1.2 Comparison to Previous

Table 14-4 presents a comparison of the current MRE above a NSR cut-off of US$70/t with the September 30, 2016, historical MRE (BCL 2016), estimated above a NiEq (nickel equivalent, price ratio only) cut-off value of 0.4%.

The changes, representing a 67% increase in total tonnage, a slight reduction in average copper and nickel grades, and a 49% increase in both contained nickel and copper, can be attributed to the following:

- Inclusion of a separate domain (Lower), which was estimated but unclassified in the historical BCL 2016 estimate.
- Thickness increase in the southeast area of the Upper domain. PNRL drill holes intercepting the upper domain have tempered the modelled thickness attributed by historical drill hole sd119 (estimated true thickness: 20.3 m). In the BCL 2016 model, this thick intersection was artificially reduced to 3 m, resulting in an understated tonnage.
- Incorporation of a minimum thickness condition with underground reporting shapes has diluted the grade in some areas.
- A change in classification, limiting all blocks to a classification of Inferred.

Table 14-4: Comparison of the Current and Historical Mineral Resource Estimate - Selebi

Item	Class	Measured	Indicated	Total Measured and Indicated	Inferred	Total Selebi
Mt	2016BCL[1]	0.37	6.82	**7.19**	4.09	**11.28**
	2024 SLR				18.89	**18.89**
	Δ[2]				362%	**67%**
%Ni	2016 BCL	1.01	1.05	**1.05**	0.86	**0.98**
	2024 SLR				0.88	**0.88**
	Δ				2%	**-10%**
%Cu	2016 BCL	2.19	2.29	**2.28**	1.21	**1.90**
	2024 SLR				1.69	**1.69**
	Δ				40%	**-11%**
000 t Ni	2016 BCL	4	72	**75**	35	**111**
	2024 SLR				165	**165**
	Δ				369%	**49%**
000 t Cu	2016 BCL	8	156	**164**	49	**214**
	2024 SLR				319	**319**
	Δ				545%	**49%**

Notes:

1. Historical MRE prepared by BCL and effective September 30, 2016.
2. Δ = (SLR2024 – BCL2016)/BCL2016

14.1.3 Mineral Resource Cut-off Grades

A cut-off NSR of US$70/t was developed for the Selebi deposit and reflects assumed mining costs of conventional open stoping in addition to nickel-copper bulk concentrate processing costs and nickel and copper prices. The full operating cost, including mining, processing, and general and administration (G&A) costs, has been used in the calculations. Capital costs, including sustaining capital, have been excluded. Table 14-5 lists the parameters used to calculate the NSR cut-off.

Table 14-5: Parameters Used to Calculate the NSR Cut-off - Selebi

Item	Unit	Selebi 2024 Bulk Concentrate
Mining Rate	dry tpd	1,857
Processing Rate	dry tpd	1,486
Metallurgical Recovery:		
Cu	%	92.4
Ni	%	72.0
Metal Prices:		
Cu	US$/lb	4.75
Ni	US$/lb	10.5
Exchange Rate (USD to BWP)	US$:BWP	13.23
Cu Concentrate Charges		
Payability	%	80
Transport	US$/wet metric tonne	150
Treatment	US$/dry metric tonne	220
Refining	US$/lb	0.45
Ni Concentrate Charges		
Payability	%	90
Transport	US$/wet metric tonne	150
Treatment	US$/dry metric tonne	220
Refining	US$/lb	0.96
Mining cost	US$/t mined	48
Processing Cost	US$/t milled	20
G&A	US$/t milled	4.92
Total	US$/t mined	67.94
Break-Even NSR Cut-Off	**US$/t**	**70**

14.1.4 Resource Database

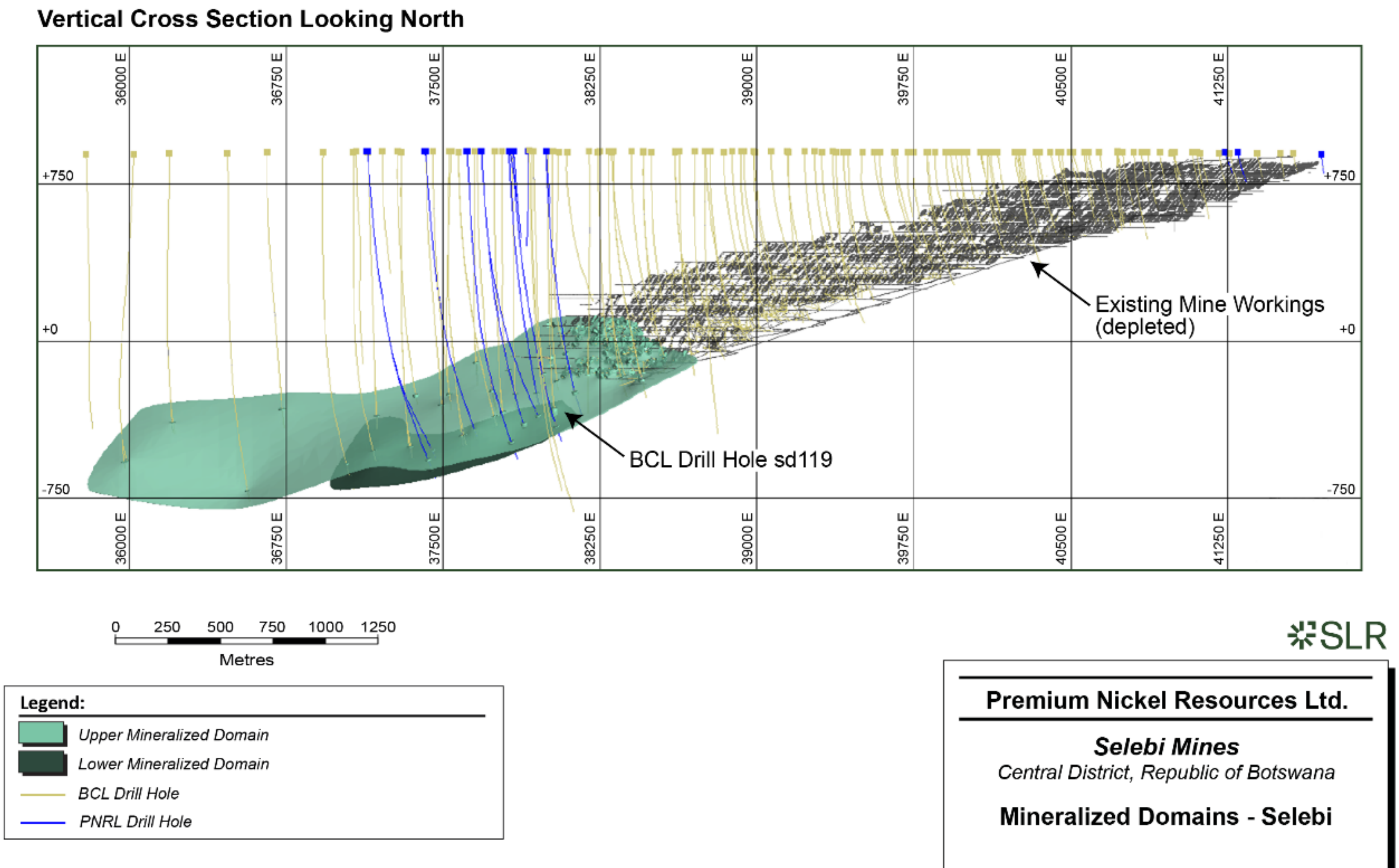
The drill hole database is maintained separately in a series of Microsoft Access, mining software (Datamine, dhlogger), and Microsoft Excel file types. The database for Selebi was handed over to SLR in Microsoft Excel files and consists of surface and underground diamond drilling, as well as underground channel samples. Surface and underground drilling is spaced from 20 m to 600 m apart and includes 2,362 domain intersecting nickel and copper assays, from 505 drill holes, with a total assay length of 1,980 m. No channel samples were used in the estimation. The data was collated using python scripts and imported into Seequent's Leapfrog Geo version 2023.2.3 for wireframe building, statistical analysis, block modelling, and resource estimation. Four underground drill holes were ignored (s18070c, s18071c, s18072C, and s18178) due to poor confidence in the locations or orientation of these holes.

14.1.5 Geological Interpretation

The MRE is defined by two mineralized domains, the Upper domain and the Lower domain. Domains were modelled as tabular shapes guided by mine workings, geology, and a general targeted NSR cut-off of US$60/t. Samples below the cut-off were included in some areas to maintain the continuity and thickness of the domains. Domain extensions were defined at a limit of the closer of 50% of the local drill hole spacing or 50% of the distance to an excluded drill hole.

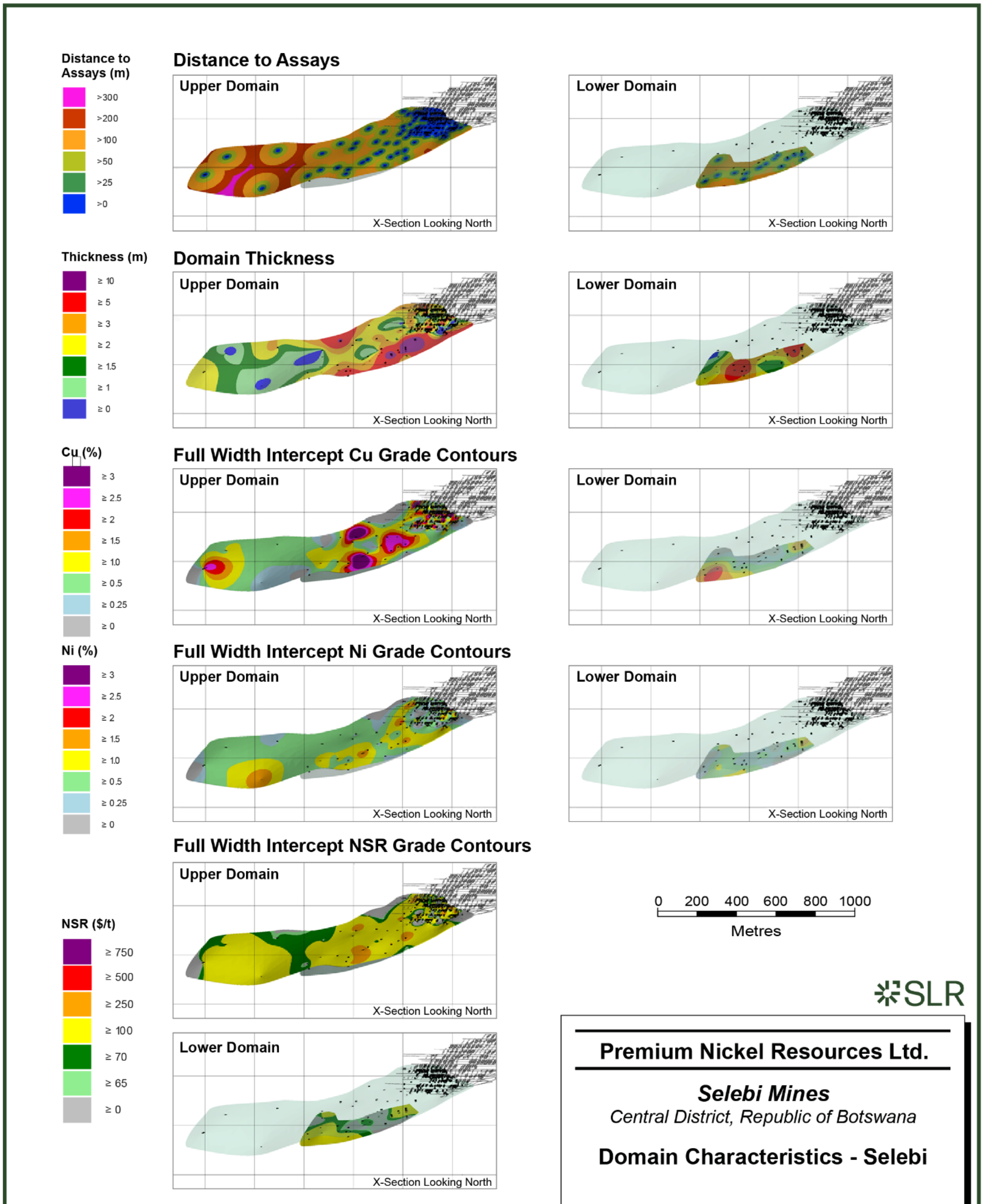
Both domains dip shallowly, extending beyond existing mine workings at approximately 40°/205° (dip/dip azimuth) and from approximately 725 m to 1,700 m vertical distance below the surface. The domains range in width from less than one metre to 25 m, and domain dimensions along strike and down dip are approximately 2,500 m x 650 m for the Upper domain and 1,100 m x 330 m for the Lower domain. Final mineralized domains are presented alongside intercepting drill holes in Figure 14-1, and a series of supplemental domain information, including full width grade contours of copper, nickel, and NSR, domain thickness, and distance to drill hole intercept contours are shown in Figure 14-2.

Figure 14-1: Mineralized Domains – Selebi



Source: PNRL, 2024.

Figure 14-2: Domain Characteristics – Selebi



Source: SLR, 2024.

14.1.6 Resource Assays

14.1.6.1 Capping

Table 14-6 summarizes the capped copper and uncapped nickel assay statistics at Selebi. A capping strategy was developed by SLR by reviewing raw assays using basic statistics, histograms, log probability plots, and decile analysis to determine a copper and nickel cap, if necessary, for each domain independently. Nickel showed to be insensitive to capping, with low coefficient of variation and low metal at risk. Copper caps of 20% and 6% were applied to the Upper and Lower domain, respectively. Capping analysis for copper within the Upper domain is presented in Figure 14-3.

Table 14-6: Copper and Nickel Assay Statistics (Original and Capped) - Selebi

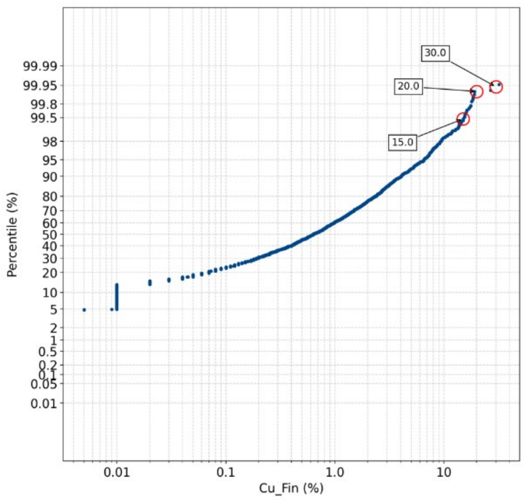
Domain	Count	Count Capped	% Capped	Original Mean (%)	Capped Mean (%)	Original Min. (%)	Original Max. (%)	Capped Value (%)	Original CV[1]	Capped CV
Copper										
Upper	2,250	2	0.09	1.53	1.53	0	32	20	1.61	1.58
Lower	84	2	2.38	0.92	0.84	0	15.49	6	1.82	1.39
Nickel										
Upper	2,250	0	-	0.74	-	0	8.18	-	1.32	-
Lower	84	0	-	0.51	-	0	3.42	-	1.39	-

Note:

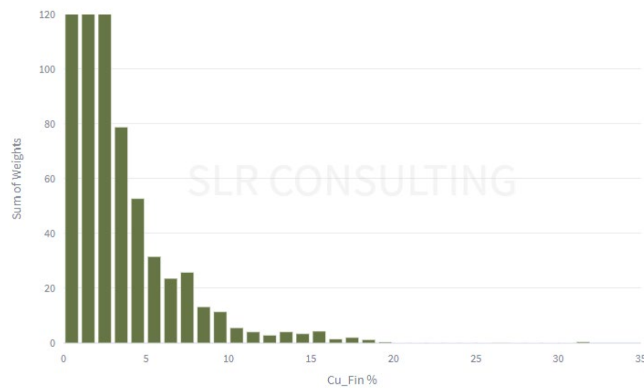
1. Coefficient of Variation (CV)

Figure 14-3: Probability Plot (A) and Histogram (B) of Length Weighted Copper Assays within the Upper Domain - Selebi

A: Probability Plot



B: Histogram



Note: Y-axis zoomed in

14.1.6.2 High-grade Restriction

High-grade restrictions were not applied to the copper and nickel estimation.

14.1.6.3 Compositing

A histogram of assays lengths within both mineralized domains is presented in Figure 14-4, showing that most samples are one metre or less. Capped copper and uncapped nickel assay values were composited to one metre intercepts within each domain. The QP notes that the longer full length composites (>5.0 m) are from drill holes where missing (unsampled) intervals were assigned zero values, prior to compositing. Copper and nickel assay statistics by domain, before and after compositing, are summarized in Table 14-7.

Figure 14-4: Histogram of Interval Lengths within the Mineralized Domains - Selebi

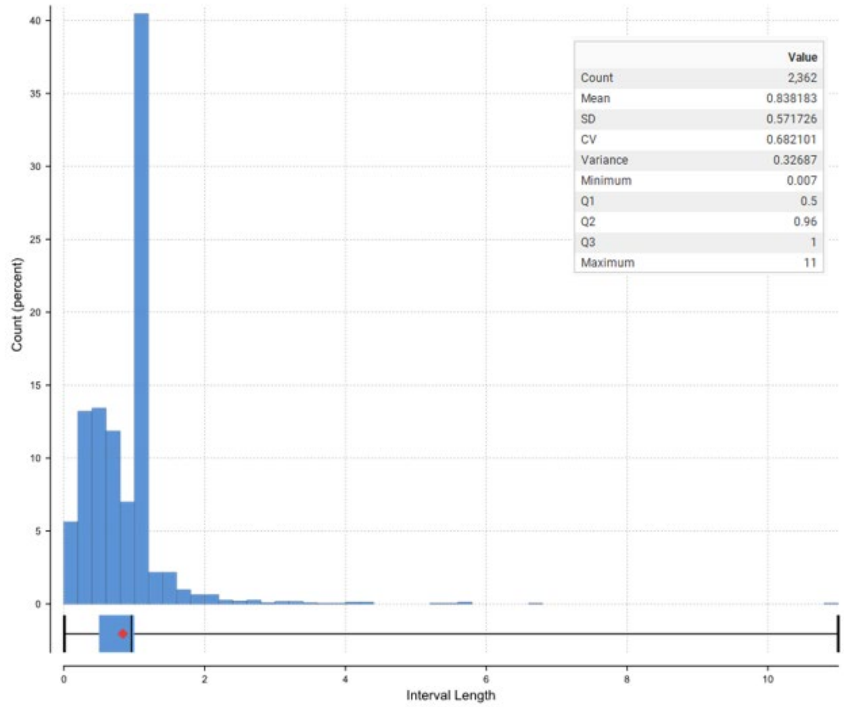


Table 14-7: Copper and Nickel Assay Statistics, Before and After Composting - Selebi

Domain	Capped Assays						Composites					
	Count	Length (m)	Mean (%)	CV	Min (%)	Max (%)	Count	Length (m)	Mean (%)	CV	Min (%)	Max (%)
Copper												
Upper	2,250	1,847.2	**1.53**	1.61	0	20.0	2,083	1,852.8	**1.52**	1.35	0	19.15
Lower	84	74.4	**0.92**	1.82	0	6.0	84	74.4	**0.84**	1.25	0	6.0
Nickel												
Upper	2,250	1,847.2	**0.74**	1.32	0	8.18	2,083	1,852.8	**0.74**	1.15	0	7.72
Lower	84	74.4	**0.51**	1.39	0	3.42	84	74.4	**0.51**	1.19	0	2.59

Notes:

1. Length Weighted.
2. Unsampled intervals assigned a null value.

14.1.7 Variography

Experimental variograms were computed and plotted for the Upper domain to assess the spatial continuity of the copper and nickel grades inside the mineralized envelope and confirm observed trends, based on the domain's one-metre composites. Variograms were computed on untransformed grade values producing variograms with a normalized sill value of 1.0.

Both copper and nickel variograms for the Upper domain indicate that the continuity is highest towards the southeast, however, there remains uncertainty with the trends being not fully understood at this stage, and short local trends deviating from this, particularly for copper, are observable within the channel data and underground development drilling. Scatterplot evaluation between nickel and copper also indicates a low correlation. The relative nugget effect is interpreted at a level of approximately 20% for copper and 15% for nickel. The QP notes that most of the variance in the dataset (90% of the sill) is captured within the first 60 m, with maximum ranges of approximately 100 m reached in the primary direction for both variables. Although the variograms were not used for estimation, the results were useful in supporting the range of expected grade continuity. A variogram map, and experimental and model results are presented in Figure 14-5 and Figure 14-6 and point to mineralization continuity of approximately 100 m x 60 m for both copper and nickel, in the primary (major) and secondary (semi-major) directions.

Figure 14-5: Copper Variogram Map and Model Results for the Upper Domain - Selebi

	Variogram Model	Dip	Dip Azimuth	Pitch	Major (m)	Semi-major (m)	Minor (m)	Normalize dNugget	Normalized Variance
Structure 1	Spherical	43	212	24	20	10	4	0.2	0.35
Structure 2	Spherical	-	-	-	100	60	4	-	0.45

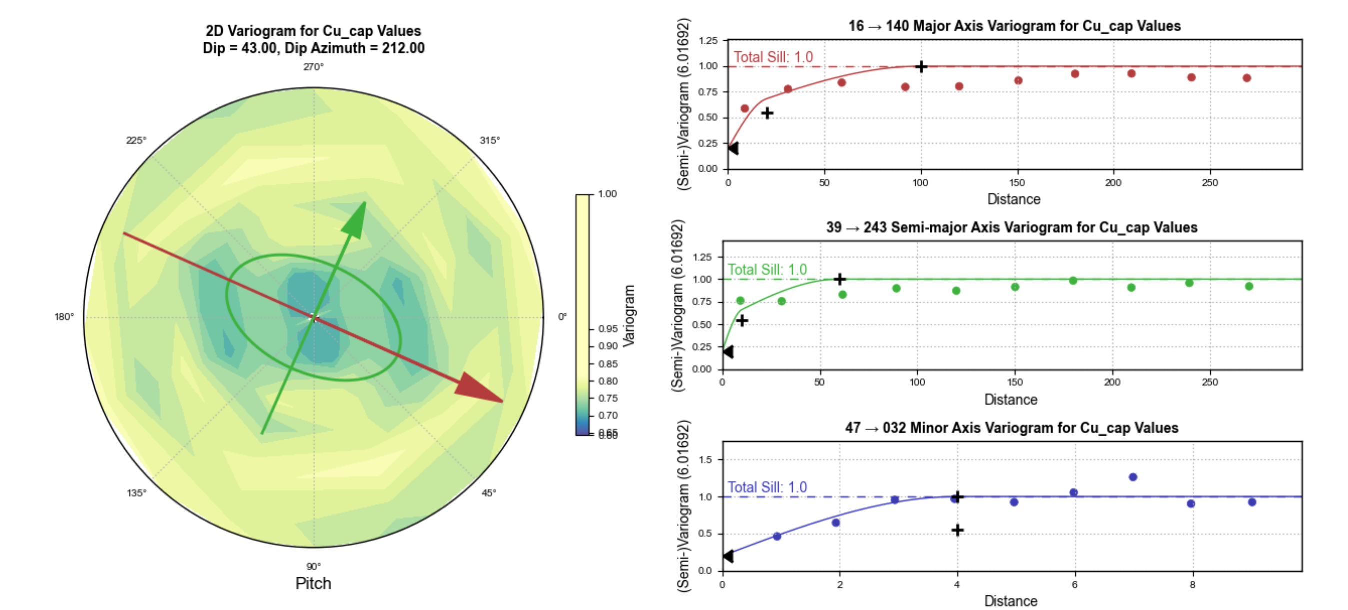
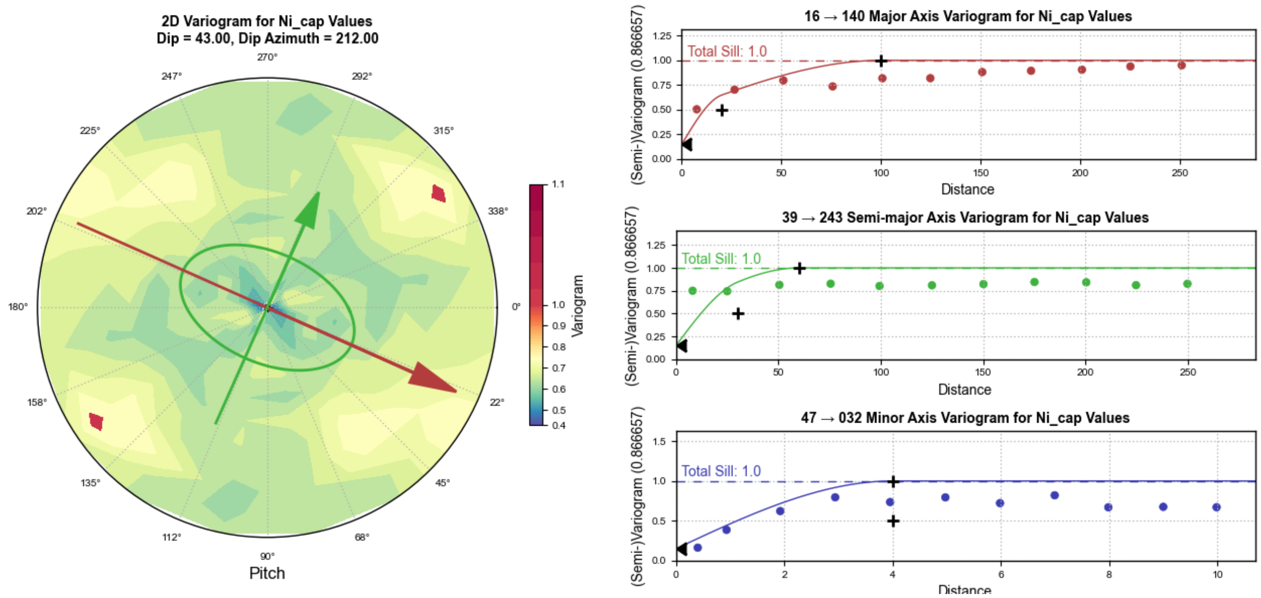


Figure 14-6: Nickel Variogram Map and Model Results for the Upper Domain - Selebi

	Variogram Model	Dip	Dip Azimuth	Pitch	Major (m)	Semi-major (m)	Minor (m)	Normalized Nugget	Normalized Variance
Structure 1	Spherical	43	212	24	20	30	4	0.15	0.35
Structure 2	Spherical	-	-	-	100	60	4	-	0.50



14.1.8 Bulk Density

A total of 2,199 density measurements intersect the Upper and Lower domains. Densities range from 2.17 g/cm^3 to 5.07 g/cm^3 within mineralized domains and from 2.11 g/cm^3 to 5.14 g/cm^3 in the waste.

Density was bottom capped at 2.5 t/m^3. The capped statistics, per domain, are presented in Table 14-8.

Table 14-8: Density Statistics per Domain - Selebi

Domain	Count	Mean (t/m^3)	CV	Min. (t/m^3)	Max. (t/m^3)
Upper	1,961	**3.30**	0.12	2.5	4.96
Lower	70	**3.25**	0.11	2.6	4.28
Waste	3,577	**2.95**	0.06	2.5	4.74

Note: Coefficient of Variation (CV)

In the QP's opinion, these are reasonable densities for this type of mineralization.

14.1.9 Search Strategy and Estimation Parameters

Grade and density estimations were performed on parent blocks using hard boundaries and a four-pass ID2 estimation approach, with progressively larger interpolation passes. Search ellipses for grade estimation, designed to preserve the across-strike variability in the domains, were anisotropic in this dimension for all domains and oriented using dynamic anisotropy. Search ellipse dimensions are detailed in Table 14-9 and the sample selection plan is outlined in Table 14-10.

Table 14-9: Search Ellipse Dimensions Per Domain - Selebi

Domain	1st Pass			2nd Pass			3rd Pass			4th Pass		
	X-axis (m)	Y-axis (m)	Z-axis (m)	X-axis (m)	Y-axis (m)	Z-axis (m)	X-axis (m)	Y-axis (m)	Z-axis (m)	X-axis (m)	Y-axis (m)	Z-axis (m)
Upper	50	50	10	200	200	20	250	250	20	800	800	200
Lower	50	50	10	200	200	20	250	250	20	400	400	200
Waste[1]	50	50	10	200	200	20	250	250	20	800	800	200

Note:

1. For density estimation only.

Table 14-10: Sample Selection Plan - Selebi

Domain	1st Pass		DH[2] Limit	2nd Pass			3rd Pass			4th Pass		
	Min No.	Max No.		Min No.	Max No.	DH Limit	Min No.	Max No.	DH Limit	Min No.	Max No.	DH Limit
Upper and Lower	12	20	2	6	10	2	6	10	2	4	10	2
Waste[1]	12	20	2	6	10	2	6	10	2	4	8	2

Notes:

1. For density estimation only.
2. Drill hole limit.

14.1.10 Block Model

Block model construction and estimation was completed in Seequent's Leapfrog Edge software using a rotated block model (both azimuth and dip rotation) to better honour the sometimes thin, shallowly dipping mineralization. The block model extents and dimensions for Selebi are presented in Table 14-11. The QP considers the block sizes appropriate for the deposit geometry and proposed mining methods.

Table 14-11: Block Model Extents and Dimensions - Selebi

Extents	X	Y	Z
Base Point (m)	38,900	83,500	200
Boundary Size (m)	3,100	1,410	201
Rotation			
Azimuth (degrees)	205		
Dip (degrees)	40		
Blocks	**X**	**Y**	**Z**
Parent Block Size (m)	10	10	1.5
Min. Sub-block Size (m)	10	10	0.375

14.1.11 Block Model Validation

Blocks were validated using industry standard techniques including:

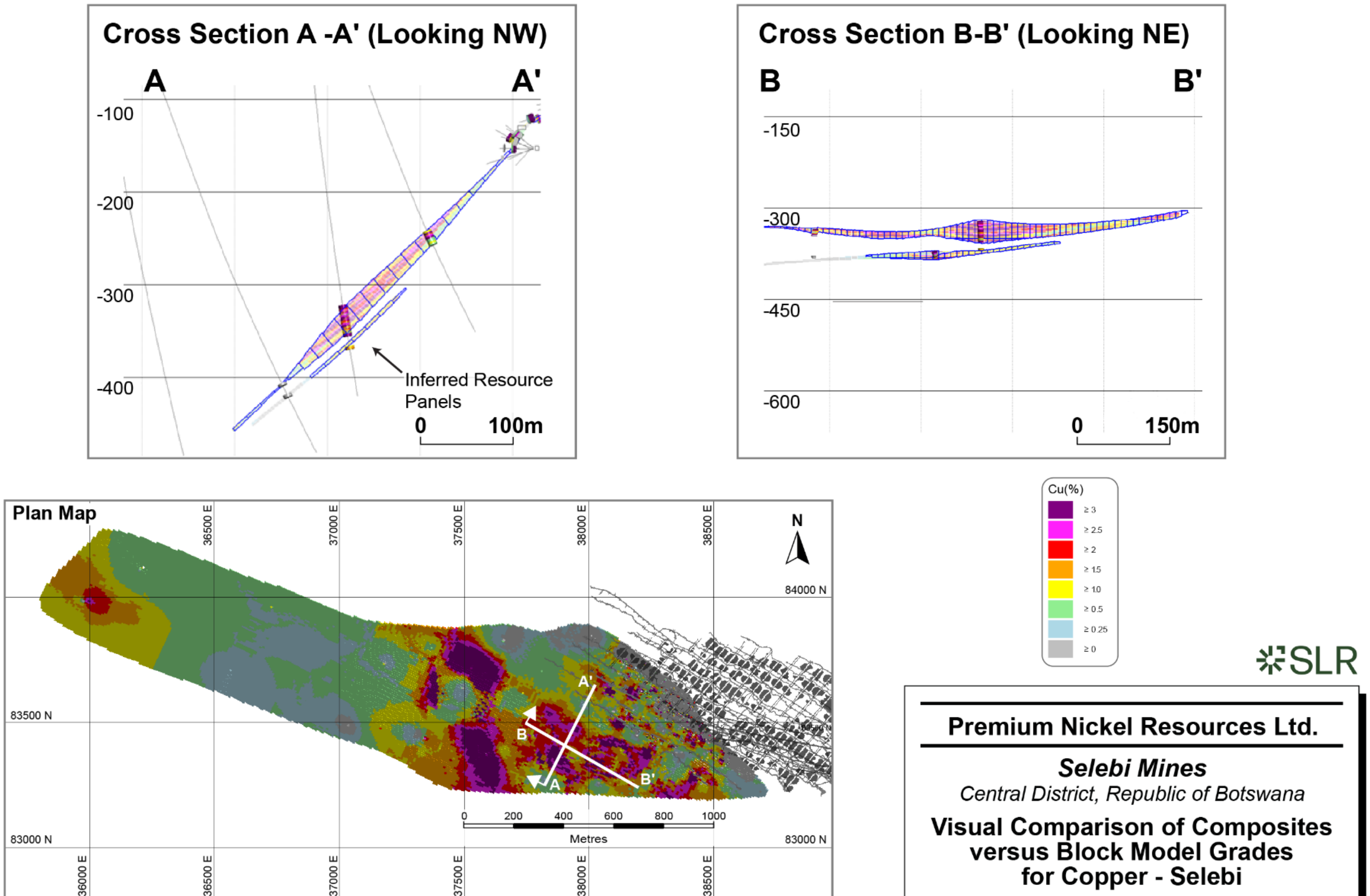
- Wireframe to block model volume confirmation (Table 14-12)
- Visual inspection of composites versus block model grades (Figure 14-7 and Figure 14-8)
- Statistical comparison between composites and block model grades (Table 14-13)
- Comparison between ID2 and nearest neighbour (NN)mean swath plots (Figure 14-9)

SLR viewed grades and proportions relative to the blocks, drilled grades, composites, and modelled solids. SLR observed that the block grades exhibited general accord with drilling and sampling and did not appear to smear significantly across sampled grades. Swath plots generally demonstrated good correlation, with block grades being somewhat smoothed relative to composite grades, as expected.

Table 14-12: Wireframe to Block Volume Confirmation - Selebi

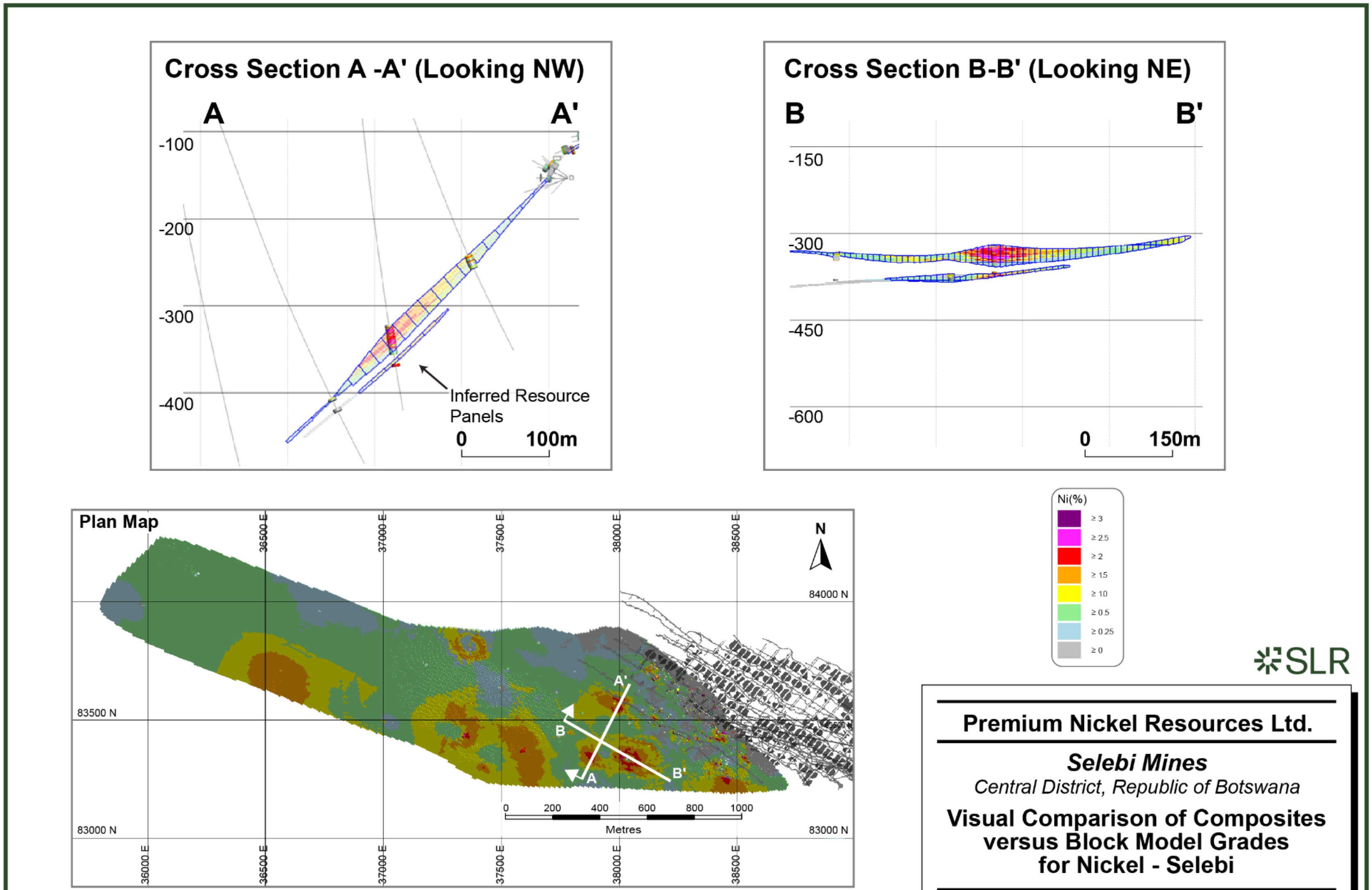
Domain	Wireframe Volume (m^3)	Block Model Volume (m^3)	Confirmation (%)
Upper	6,343,900	6,342,787	99.98
Lower	1,672,200	1,671,187	99.94

Figure 14-7: Visual Comparison of Composites versus Block Model Grades for Copper – Selebi



Source: SLR, 2024.

Figure 14-8: Visual Comparison of Composites versus Block Model Grades for Nickel – Selebi



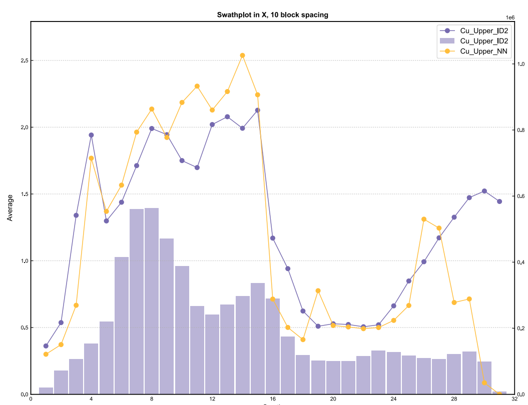
Source: SLR, 2024.

Table 14-13: Statistical Comparison Between Composites and Block Model Grades - Selebi

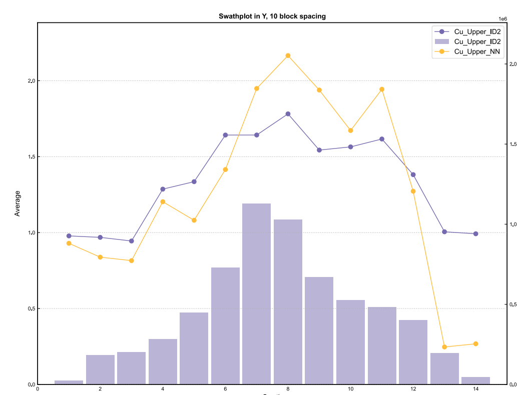
Domain	Composites				Block Model				Difference in Mean (%)
	Mean (%)	CV	Min.	Max.	Mean (%)	CV	Min.	Max.	
Copper									
Upper	**1.52**	1.35	0.0	19.15	**1.52**	0.65	0.0	16.25	0.0
Lower	**0.84**	1.25	0.0	6.00	**0.95**	0.76	0.0	4.35	13.8
Nickel									
Upper	**0.74**	1.15	0.0	7.72	**0.84**	0.52	0.0	4.35	13.8
Lower	**0.51**	1.19	0.0	2.59	**0.56**	0.55	0.0	2.51	10.4

Figure 14-9: Comparison between ID2 and NN Mean Swath Plots for Copper in the Upper Domain - Selebi

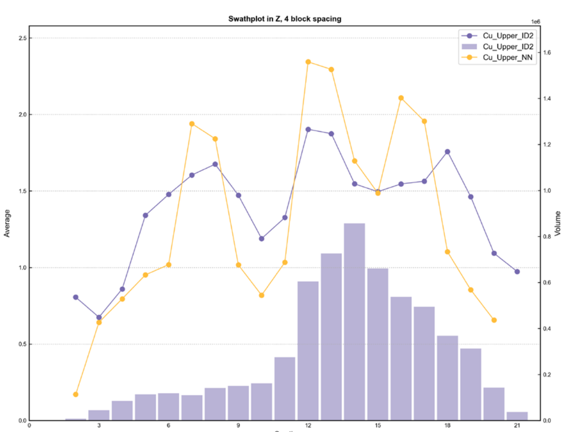
X-axis (Along Strike)



Y-Axis (Down Dip)



Z-axis



14.1.12 Classification

Definitions for resource categories used in this Technical Report are consistent with those defined by CIM (2014) and adopted by NI 43-101. In the CIM classification, a Mineral Resource is defined as “a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction” (RPEEE).

Mineral Resources are classified into Measured, Indicated, and Inferred categories. A Mineral Reserve is defined as the “economically mineable part of a Measured and/or Indicated Mineral Resource” demonstrated by studies at Pre-Feasibility or Feasibility level as appropriate. Mineral Reserves are classified into Proven and Probable categories.

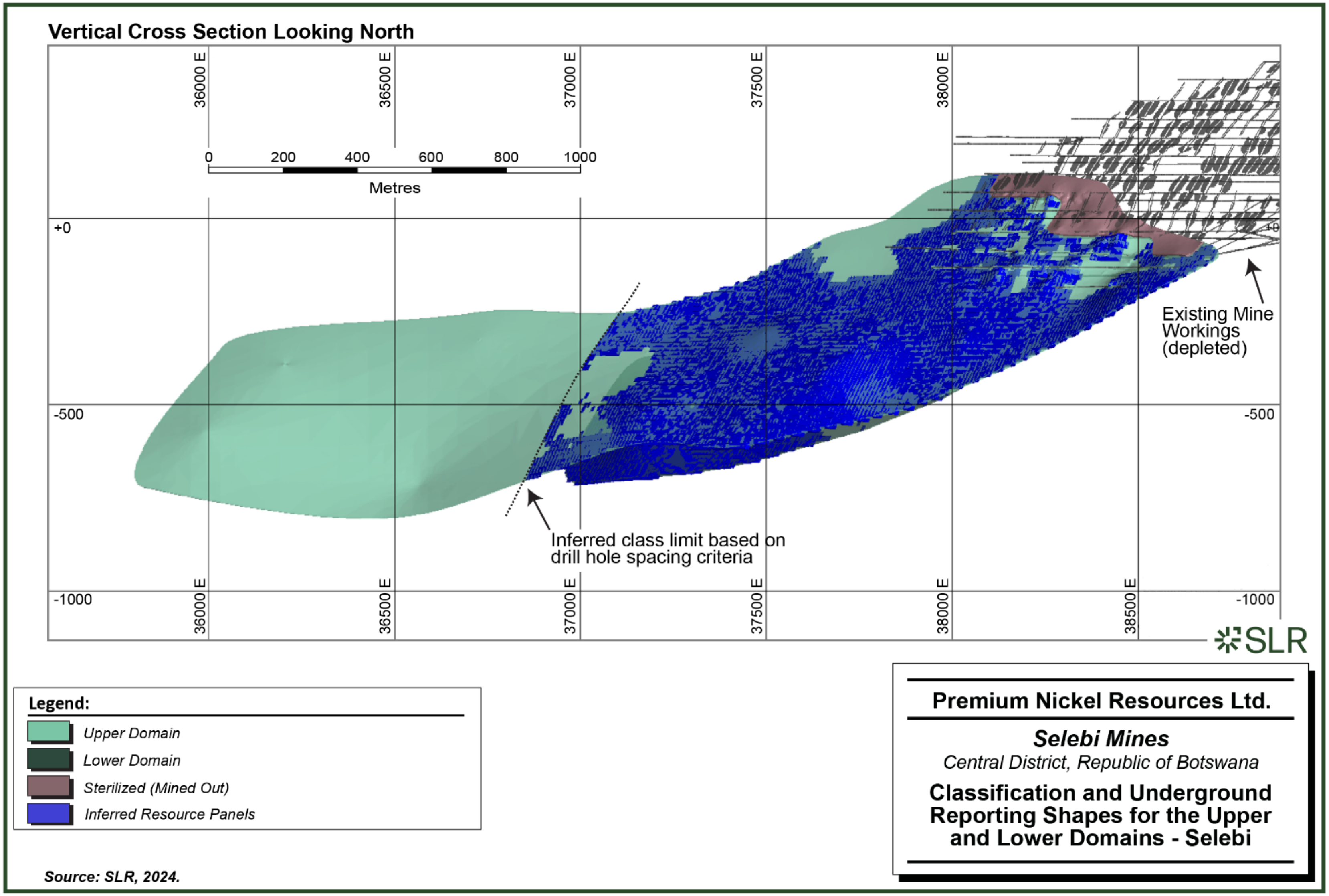
At Selebi, a classification of Inferred has been assigned to the Upper and Lower domains where defined by drill holes spaced approximately 200 m x 200 m apart and closer, modified to consider geological understanding and grade continuity. Additionally, technical and economic considerations for the purposes of demonstrating RPEEE were accomplished through the creation of underground reporting shapes, or resource panels, using Deswick Stope Optimizer software. Resource panels were defined considering an economic cut-off of US$70/t and a minimum thickness threshold of 1.5 m.

Final classified blocks met both criteria: drill hole spacing supportive of an Inferred class designation, and constrained within resource panels built with consideration to both technical and economic factors(Figure 14-10).

Two additional areas potentially met the drill hole spacing threshold for a class of Indicated, however, were maintained as Inferred for this update:

- Volumes proximal to existing workings and historical underground definition drill holes are defined at a spacing of less than 75 m. Due to some uncertainty in the assay and collar location information of these drill holes, a classification of Inferred has been maintained. It is expected that with some twin hole drilling to confirm analytical results and some ground truthing of collar locations, this area will meet the conditions for an Indicated Mineral Resource.
- The south edge of the Upper domain, where defined using both PNRL and historical drilling, a spacing of approximately 100 m is achieved. This area was maintained as Inferred due to the large tonnage attributed to historical drill hole sd119, which has an intercept thickness significantly wider than neighbouring holes. The geological reason for this is not yet understood, however, it is expected that with further drilling and geological investigation, this area will meet the conditions for an Indicated Mineral Resource.

Figure 14-10: Classification and Underground Reporting Shapes for the Upper and Lower Domains- Selebi



Source: SLR, 2024.

14.1.13 Mineral Resource Reporting

Mineral Resources at Selebi are reported as per the Mineral Resource estimation methodologies and classification criteria detailed in this Technical Report. They are estimated at a NSR of $70/t and reported depleted and within conceptual underground reporting shapes considering a minimum thickness of 1.5 m. Mineral Resources for Selebi are summarized by domain in Table 14-14.

Table 14-14: Mineral Resources, June 30, 2024 - Selebi

Classification	Zone	Tonnage	Grade		Contained Metal	
		(Mt)	(% Cu)	(% Ni)	(000 t Cu)	(000 t Ni)
Inferred	Upper	15.04	1.81	0.93	273	140
	Lower	3.85	1.21	0.66	46	25
	Total	**18.89**	**1.69**	**0.88**	**319**	**165**

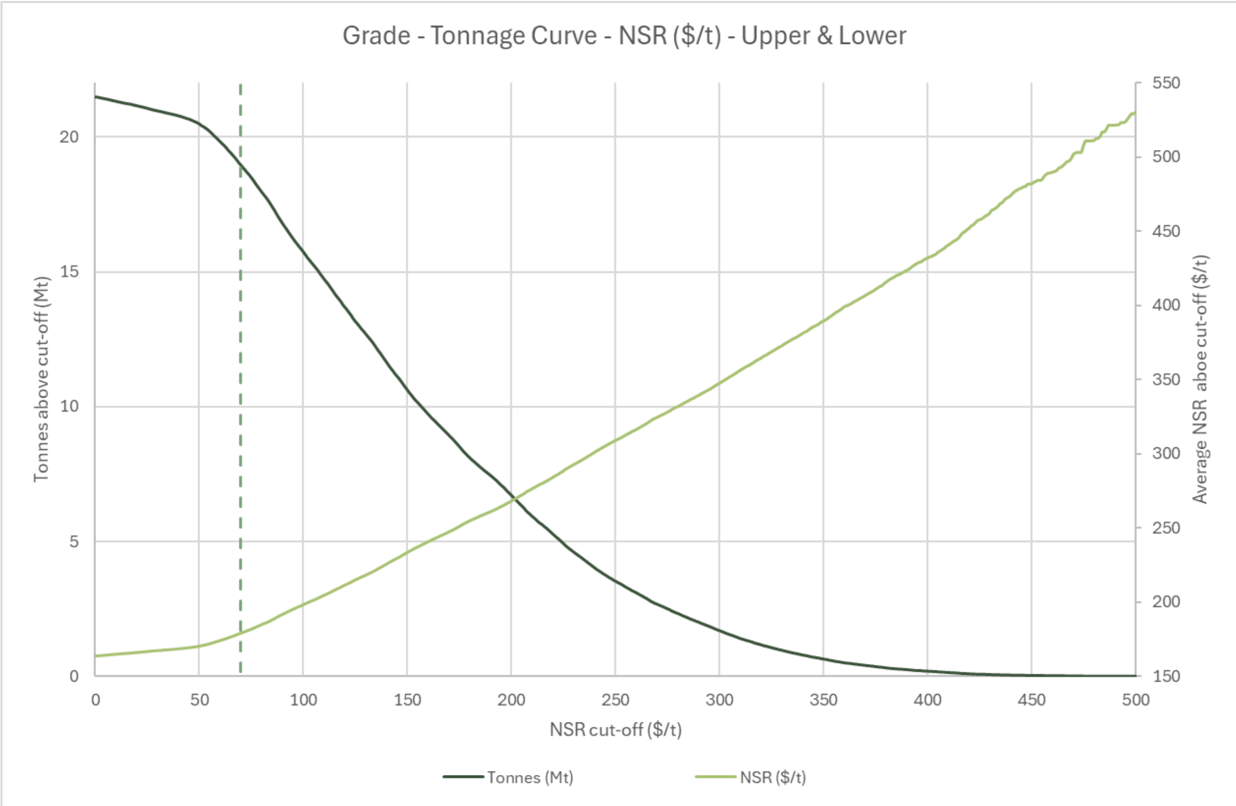
Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at a net smelter return (NSR) value of $70/t.
3. Mineral Resources are estimated using a long-term prices of US$10.50/lb Ni and US$4.75/lb Cu, and a US$:BWP exchange rate of 1.00:13.23.
4. Mineral Resources are estimated using nickel and copper recoveries of 72.0% and 92.4% respectively, derived from metallurgical studies which consider a conceptual bulk concentrate scenario.
5. Bulk density has been estimated and averages 3.39 t/m^3.
6. Mineral Resources are reported depleted within conceptual underground reporting shapes considering a minimum thickness of 1.5 m.

14.1.13.1 Sensitivity to Cut-off Grade

SLR has estimated the Mineral Resources at a NSR cut-off of $70/t. To assess the sensitivity of the Mineral Resources to potential variations in economic parameters, the resources were reported at NSR cut-off grades ranging from $0/t to $500/t. Figure 14-11 summarizes the results, showing the tonnage and average NSR above cut-off.

Figure 14-11: NSR Grade-Tonnage Curve - Selebi



Note:

1. Inferred material reported for Upper and Lower domains, unconstrained by the stopes.

14.2 Selebi North

14.2.1 Summary

An updated MRE for the Selebi North deposit was prepared by SLR using available drill hole data as of June 30, 2024. Mineral Resource domains were defined within Leapfrog Geo software and sub-block model estimates were completed within Resource Modelling Solutions Platform (RMSP) and Leapfrog Edge software. Underground constraining shapes (resource panels) were optimized using Deswik stope optimizer (DSO) software.

The MREs were defined by one principal domain and three small footwall domains representing mineralization extension below 150 m elevation (approximately 750 m below surface), where adjacent and below (mostly below) existing historical mine workings.

Domain orientation and morphology have been informed by underground mapping and channel sampling, historical underground development drilling, and surface and underground drilling completed by historical operators as well as by PNRL. Both structures mimic the mined-out areas with respect to orientation and form; confirmed to continue down plunge through drill core observations and down hole geophysics.

For the principal domain, one metre composites of capped nickel, copper, and density sample grades from channels and underground and surface drill holes were estimated into a sub-blocked model using a multi-pass ordinary kriging (OK) interpolation approach in unfolded space. Small footwall domains were also composited at one metre and estimated into a sub-blocked model using a three-pass ID2 approach. In addition to standard database validation techniques, wireframe, and block model validation procedures, including wireframe to block volume confirmation, statistical comparisons with composite and NN estimates, swath plots, visual reviews in 3D, longitudinal, cross-section, and plan views, as well as cross software reporting confirmation were completed. In addition to SLR's internal peer and senior review processes, PNRL's technical team has reviewed the MRE.

Indicated Mineral Resources were defined where drill hole spacings of up to approximately 50 m were achieved. Inferred Mineral Resources were defined where drill hole spacing up to approximately 150 m were achieved, modified in some areas to reflect geological and grade uncertainty. Mineral Resources are reported within underground reporting shapes defined using a minimum thickness of 1.5 m and a NSR cut-off value of $70/t. All blocks within the underground constraining shapes have been included within the MRE. Mined-out areas were depleted where needed to represent in-situ material, as well as resource panels in the crown pillar area.

Indicated Mineral Resources at Selebi North are estimated to total 3.02 Mt at average grades of 0.90% Cu and 0.98% Ni and to contain 32,000 t Cu and 34,670 t Ni (Table 14-15).

Inferred Mineral Resources at Selebi are estimated to total 5.83 Mt at average grades of 0.90% Cu and 1.07% Ni and to contain 52,500 t Cu and 62,400 t Ni (Table 14-15).

Table 14-15: Mineral Resource Estimate as at June 30, 2024 - Selebi North

Classification	Zone	Tonnage	Grade		Contained Metal	
		(Mt)	(% Cu)	(% Ni)	(000 t Cu)	(000 t Ni)
Indicated	Main	3.00	0.90	0.98	27.1	29.5
	Total	3.00	0.90	0.98	27.1	29.5
Inferred	Main	5.22	0.92	1.11	48.0	58.0
	Vein A	0.08	0.63	0.57	0.5	0.4
	Vein B	0.48	0.75	0.69	3.6	3.3
	Vein C	0.06	0.72	1.00	0.4	0.6
	Total	5.83	0.90	1.07	52.5	62.4

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at a net smelter return (NSR) value of $70/t.
3. Mineral Resources are estimated using a long-term prices of US$10.50/lb Ni and US$4.75/lb Cu, and a US$:BWP exchange rate of 1.00:13.23.
4. Mineral Resources are estimated using nickel and copper recoveries of 72.0% and 92.4% respectively, derived from metallurgical studies which consider a conceptual bulk concentrate scenario.
5. Bulk density has been estimated and averages 3.60 t/m^3.
6. Mineral Resources are reported depleted and within conceptual underground reporting shapes considering a minimum thickness of 1.5 m.
7. There are no Mineral Reserves.
8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
9. Totals may not add or multiply accurately due to rounding.

The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the MRE.

14.2.2 Comparison to Previous

Table 14-16 presents a comparison of the current Mineral Resource estimate above a NSR cut-off value of US$70/t with the September 30, 2016, historical MRE (BCL 2016), estimated above a NiEq (nickel equivalent, price ratio only) cut-off grade of 0.4%.

The changes, representing a 90% increase in total tonnage, a slight reduction in average copper and nickel grades, and an 80% and 86% increase in both contained copper and nickel, respectively, can be attributed to the following:

- Drilling success extending mineralization below the N3 and South Limb developed areas, increasing tonnage and slightly decreasing grade. Changes to the main vein wireframe are shown in Figure 14-12.
- Inclusion of three small footwall domains proximal to the South Limb hinge area.
- Incorporation of a minimum thickness condition with underground reporting shapes has diluted the grade in some areas. Extension along the strike of N3 has also lowered the grade. Historical Mineral Resources were previously concentrated on a smaller, slightly higher-grade plunge below existing workings.
- A change in classification, limiting all blocks to a classification of Indicated.

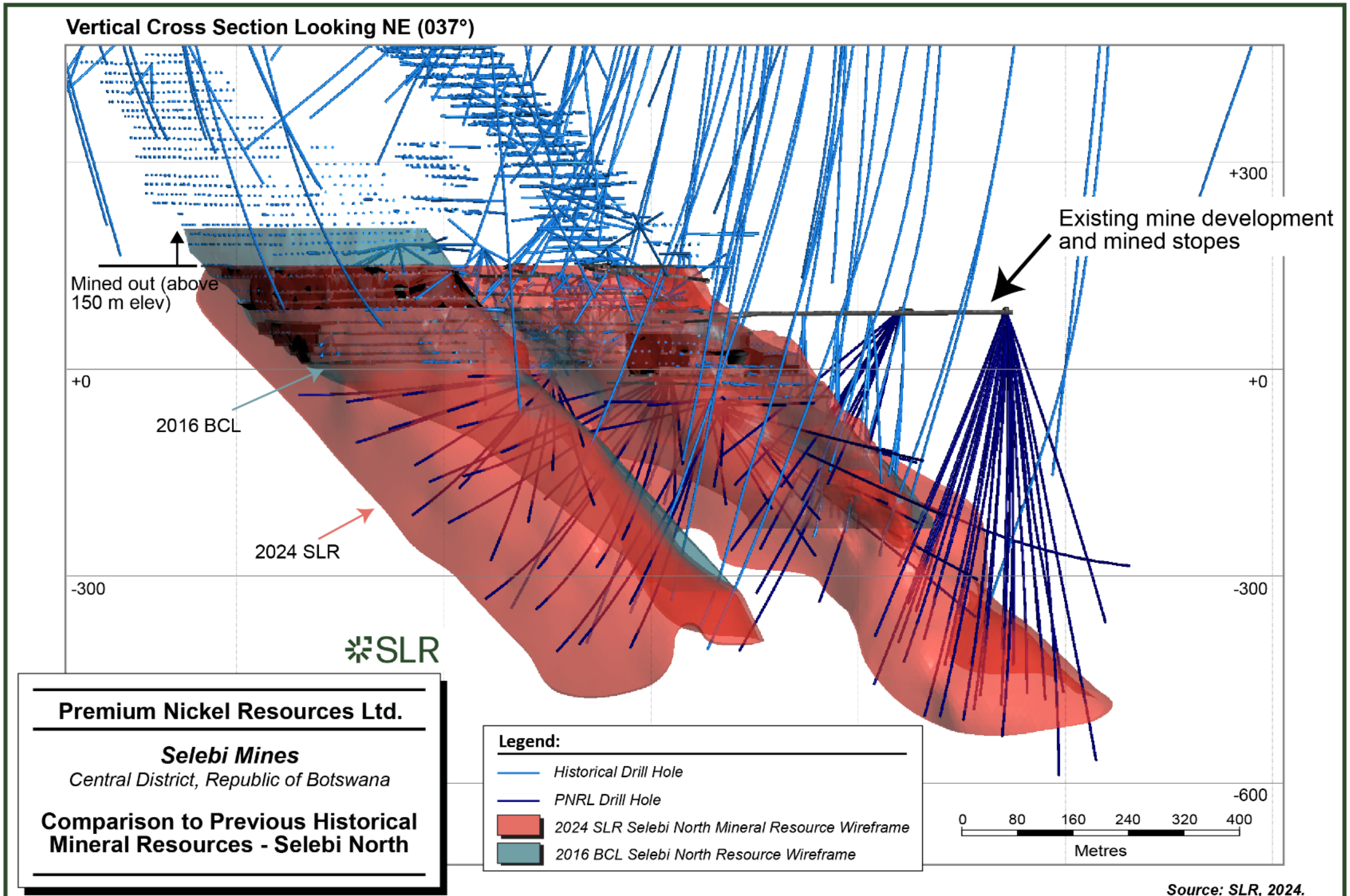
Table 14-16: Comparison of the Current and Historical Mineral Resource Estimate – Selebi North

Class	Model	Tonnage	Grade		Contained Metal	
		(Mt)	(% Cu)	(% Ni)	(000 t Cu)	(000 t Ni)
Measured and Indicated	2024 SLR	3.0	0.90	0.98	27	29
	2016 BCL[1]	1.85	1.09	1.26	20	23
	Δ	**62%**	**-17%**	**-22%**	**35%**	**26%**
Inferred	2024 SLR	5.8	0.9	1.07	52	62
	2016 BCL	2.79	0.87	0.93	24	26
	Δ	**108%**	**3%**	**15%**	**117%**	**138%**
Combined Total	2024 SLR	8.8	0.9	1.04	79	91
	2016 BCL	4.64	0.96	1.06	44	49
	Δ	**90%**	**-6%**	**-2%**	**80%**	**86%**

Notes:

1. Historical MRE prepared by BCL and effective September 30, 2016.
2. Δ = (SLR2024 – BCL2016)/BCL2016

Figure 14-12: Comparison to Previous Historical Mineral Resources – Selebi North



Source: SLR, 2024.

14.2.3 Mineral Resource Cut-off Grades

A cut-off NSR of US$70/t was developed for the Selebi North deposit and reflects assumed mining costs of conventional open stoping in addition to nickel-copper bulk concentrate processing costs and nickel and copper prices. The full operating cost, including mining, processing, and G&A costs, has been used in the calculations. Capital costs, including sustaining capital, have been excluded. Table 14-17 lists the parameters used to calculate the NSR cut-off. These values are the same as was used for Selebi and described in Section 14.1.3.

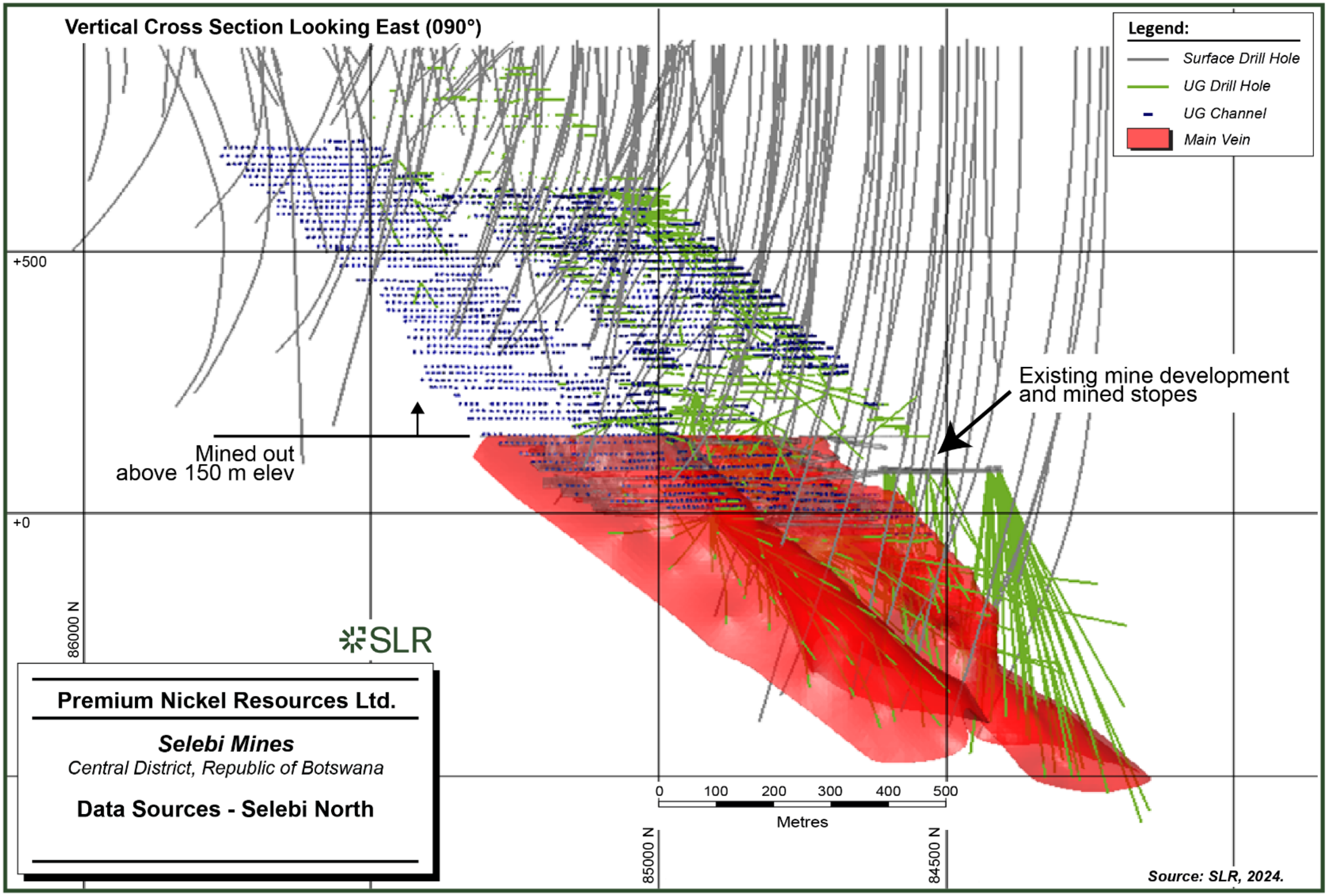
Table 14-17: Parameters Used to Calculate the NSR Cut-off – Selebi North

Item	Unit	Selebi 2024 Bulk Concentrate
Mining Rate	dry tpd	1,857
Processing Rate	dry tpd	1,486
Metallurgical Recovery:		
Cu	%	92.4
Ni	%	72.0
Metal Prices:		
Cu	US$/lb	4.75
Ni	US$/lb	10.5
Exchange Rate (USD to BWP)	US$:BWP	13.23
Cu Concentrate Charges		
Payability	%	80
Transport	US$/wet metric tonne	150
Treatment	US$/dry metric tonne	220
Refining	US$/lb	0.45
Ni Concentrate Charges		
Payability	%	90
Transport	US$/wet metric tonne	150
Treatment	US$/dry metric tonne	220
Refining	US$/lb	0.96
Mining cost	US$/t mined	48
Processing Cost	US$/t milled	20
G&A	US$/t milled	4.92
Total	US$/t mined	67.94
Break-Even NSR Cut-Off	US$/t	70

14.2.4 Resource Database

The drill hole database is maintained separately in a series of MS Access, mining software (Datamine, dhlogger), or MS Excel file types. The database for Selebi North, shown visually in Figure 14-13, was handed over to SLR in MS Excel files and consists of surface and underground diamond drilling by BCL and PNRL, as well as historical underground channel samples. Surface and underground drilling is spaced from less than one metre to 200 m apart and includes 7,375 domain intersecting nickel and copper assays from 414 drill holes, with a total drill hole assay length of 7,366 m. Additionally, 639 channel samples spaced from 2.4 m to 22 m apart, containing 2,123 assays with a total channel sample length of 2,106 m, support the MRE. The data was collated using python scripts and imported into Seequent's Leapfrog Geo version 2023.2.3 for wireframe building, statistical analysis, block modelling, and resource estimation of the footwall domains.

Figure 14-13: Data Sources – Selebi North



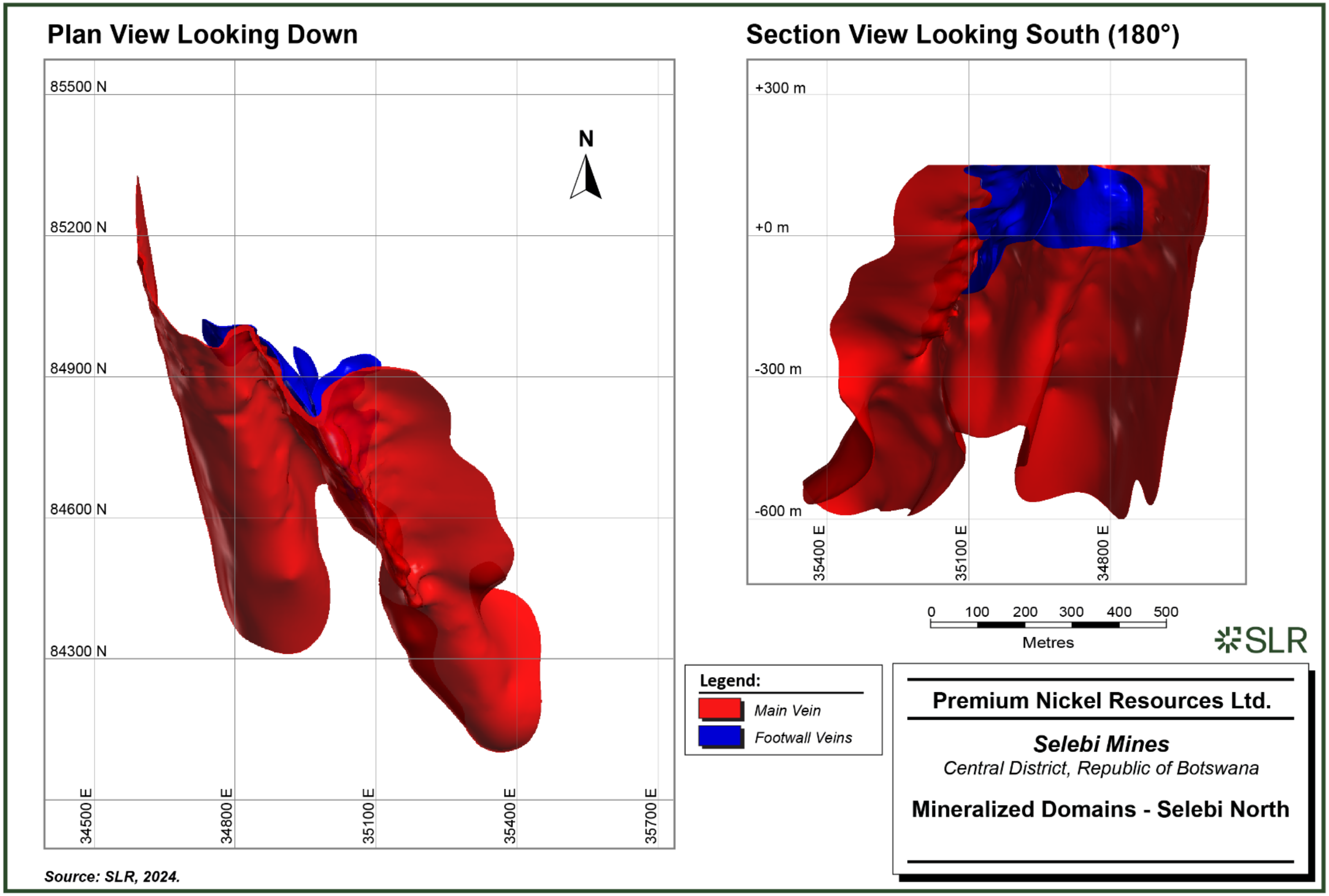
14.2.5 Geological Interpretation

The MRE is defined by four mineralized domains consisting of a Main domain and three footwall domains. Wireframe domains were constructed considering historical mine workings and underground mapping, geological logging, a targeted NSR cut-off of US$60/t, and a minimum width of 1.5 m, with samples below the cut-off included in some areas to maintain the continuity of the domains. Domain extensions were defined at a limit of the closer of 50% of the local drill hole spacing, or 50% of the distance to an excluded drill hole.

The Main domain is a folded structure consisting of three limbs, N2, N3 and South Limb, extending from 750 m to approximately 1,500 m below surface for a total vertical extent of 750 m, and approximate along strike and down dip extents of 1,250 m and 1,000 m, respectively. Mineralization is adjacent, but mostly directly below, historical mine workings. The Main domain ranges in thickness from less than one metre, reaching up to 25 m in the hinge of the South Limb. Three smaller footwall domains range in width from 1.5 m to 13 m. Final mineralized domains are presented in Figure 14-14.

The shape and continuity of mineralization at Selebi North, especially within the N3 limb, is very consistent. At depth in the South Limb, there appears to be additional structural control that is not yet fully understood. PNRL continues to test mineralization extents with targets supported by geophysics and structural measurements in core. As the project progresses, additional structural studies may give insights into the morphology and nature of the mineralization at depth, and potentially, the relationship between the Selebi North and Selebi deposit.

Figure 14-14: Mineralized Domains – Selebi North



Source: SLR, 2024.

14.2.6 Resource Assays

14.2.6.1 Capping

A capping strategy was developed by SLR by reviewing raw assays using basic statistics, histograms, log probability plots, and decile analysis to determine a copper and nickel cap for the Main Vein and footwall veins independently. Although SLR identified outliers, the metal loss is less than 1%, suggesting that if capping was not applied it would have minimal impact on the estimation. A cap of 18% Cu was applied to the Main Vein domain and 6% Cu to the footwall domains. Nickel was capped at 8% in the Main domain; footwall domains were not capped.

Probability plots for copper and nickel within the Main domain are presented in Figure 14-15. Table 14-18 summarizes the capped copper and capped nickel assay statistics at Selebi North.

Table 14-18: Copper and Nickel Assay Statistics (Original and Capped) – Selebi North

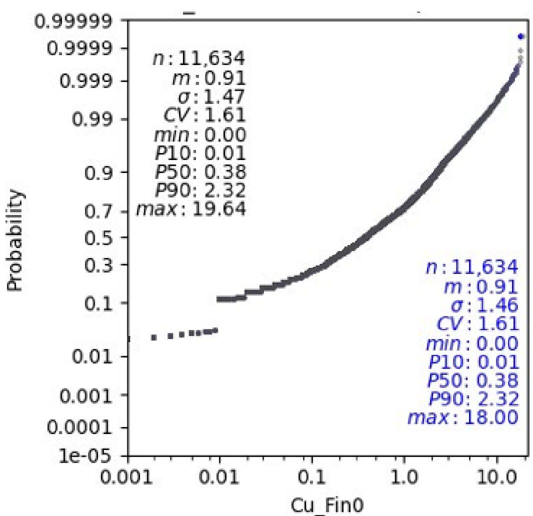
Domain	Count	Count Capped	% Capped	Original Mean (%)	Capped Mean (%)	Original Min. (%)	Original Max. (%)	Capped Value (%)	Original CV[1]	Capped CV
Copper										
Main	9498	1	0.1	0.75	0.75	0	18.16	18	1.46	1.46
Vein A	393	1	0.27	0.36	0.36	0	6.24	6	2.06	2.05
Vein B	791	2	0.28	0.65	0.62	0	14.65	6	1.74	1.53
Vein C	484	5	1.15	0.56	0.52	0	21.00	6	2.16	1.66
Nickel										
Main	9498	1	0.1	0.78	0.78	0	8.38	8	1.47	1.47
Vein A	408	0	0	0.32	0.32	0	2.92	2.92	1.71	1.71
Vein B	793	0	0	0.59	0.59	0	3.20	3.20	1.26	1.26
Vein C	484	0	0	0.55	0.55	0	3.83	3.83	1.37	1.37

Note:

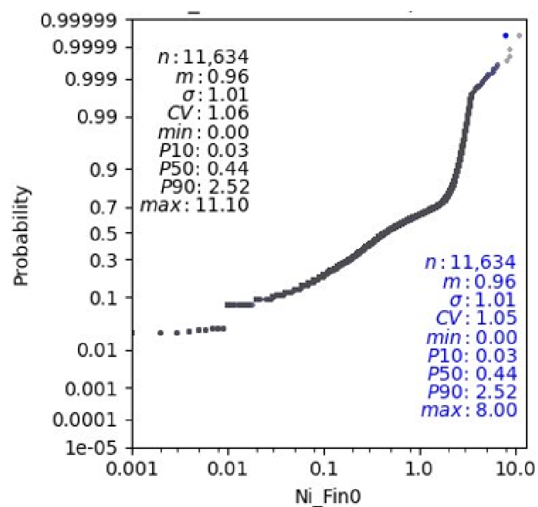
1. Coefficient of Variation (CV)

Figure 14-15: Probability Plot Copper and Nickel Assays within the Main Domain – Selebi North

Copper



Nickel



14.2.6.2 High-grade Restriction

High-grade restrictions were not applied to the copper and nickel estimation.

14.2.6.3 Compositing

A histogram of assay lengths within the Main and footwall domains is presented Figure 14-16, showing that most of the samples are one metre or shorter. Capped copper and nickel assays in the Main Vein domain and capped copper assays and uncapped nickel assays on the footwall domains were composited to one metre intercepts. The QP notes that the longer full length composites (>5.0 m) are from drill holes that contained unsampled intervals, such intercepts were assigned zero values prior to compositing. Copper and nickel assay statistics by domain, before and after compositing, are summarized in Table 14-19. Several drill holes in the South Limb at depth, which had been completed but for which analytical results were still pending, were excluded from the composite database.

Figure 14-16: Histogram of Interval Lengths within the Mineralized Domains – Selebi North

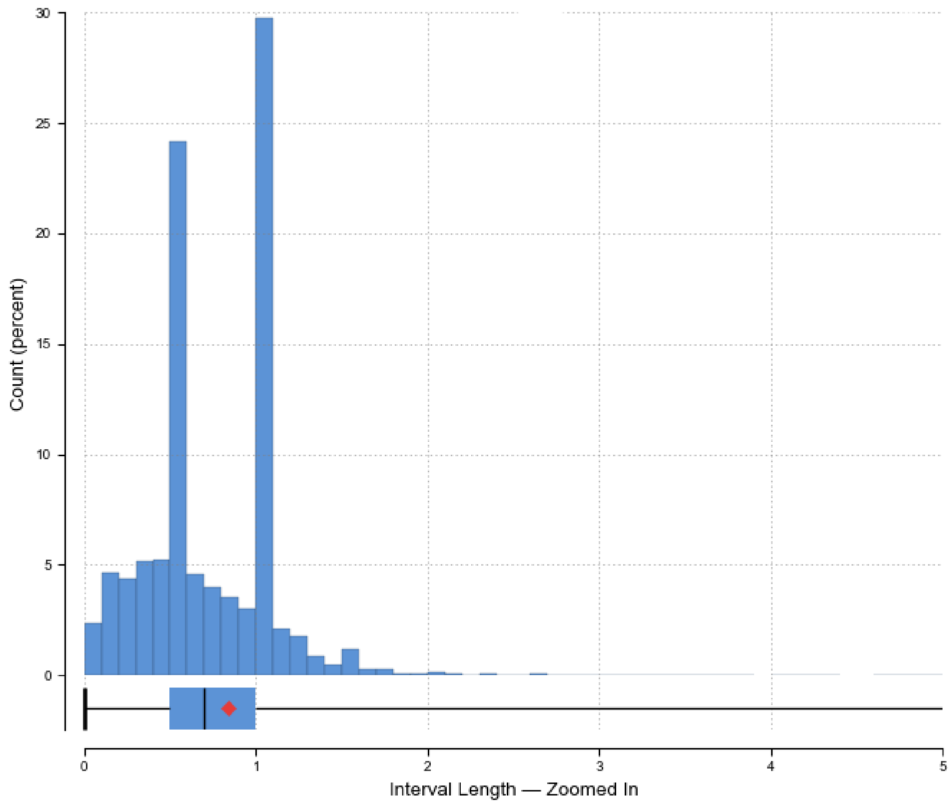


Table 14-19: Copper and Nickel Assay and Composite Statistics – Selebi North

Domain	Capped Assays						Composites					
	Count	Length (m)	Mean[1] (%)	CV	Min (%)	Max (%)	Count	Length (m)	Mean[1] (%)	CV	Min (%)	Max (%)
Copper												
Main	11,364	9472	0.75	1.74	0	18	9,498	9,472	0.75	1.47	0.00	18.16
Vein A	393	362.31	0.36	2.05	0.00	6.00	365	363.52	0.35	1.85	0.00	5.11
Vein B	791	713.99	0.62	1.53	0.00	6.00	717	714.83	0.62	1.35	0.01	5.66
Vein C	484	431.95	0.52	1.66	0.00	6.00	436	431.95	0.52	1.46	0.00	5.99
Nickel												
Main	11,634	9,472	0.78	1.23	0	8.00	9,498	9,472	0.78	1.12	0.00	8.38
Vein A	408	423.83	0.32	1.71	0	2.92	425	423.83	0.32	1.57	0.00	2.56
Vein B	793	716.41	0.59	1.26	0	3.20	719	716.33	0.59	1.15	0.00	2.68
Vein C	484	431.95	0.55	1.37	0	3.83	436	431.95	0.55	1.23	0.00	3.83

Notes:

1. Length Weighted.
2. Unsampled intervals assigned a null value; pending assays ignored.

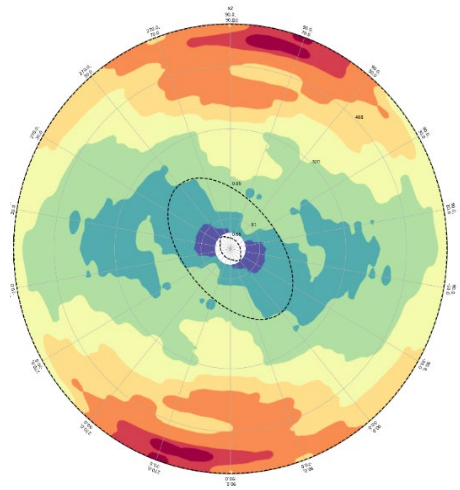
14.2.7 Variography

Experimental variograms were calculated and plotted for the Main domain to assess the spatial continuity of the copper and nickel grades inside the mineralized envelope and confirm observed trends. The variograms were based on the domain's one metre composites. Variograms were calculated on a transformed unfolded space in RMSP software and transformed data to a normal distribution. Resultant trends were confirmed against contoured values.

The copper and nickel variograms for the Main domain indicates that the continuity is highest towards the 270° in the unfolded space, The nugget effect is interpreted at a level of approximately 5% for copper and 9% for nickel, considering the sill of the variogram. The QP notes that most of the variance in the dataset (75% of the sill) is captured within the first 40 m and 100 m for copper and nickel, respectively, with a slow rise to sill and maximum ranges of approximately 500 m and 600 m reached in the primary direction for copper and nickel. Variogram maps and experimental and model variogram results are presented in Figure 14-17 and Figure 14-18.

Figure 14-17: Copper Variogram Map and Model Results for the Main Domain – Selebi North

	Nugget	Structure 1	Structure 2	Structure 3
Contribution	0.048	0.667	0.048	0.238
Model Shape		spherical	spherical	spherical
Angle 1		270.0	270.0	270.0
Angle 2		50.0	50.0	50.0
Angle 3		90.0	90.0	90.0
Range 1		28.4	80.0	500.0
Range 2		25.5	110.0	400.0
Range 3		2.3	6.7	9.1



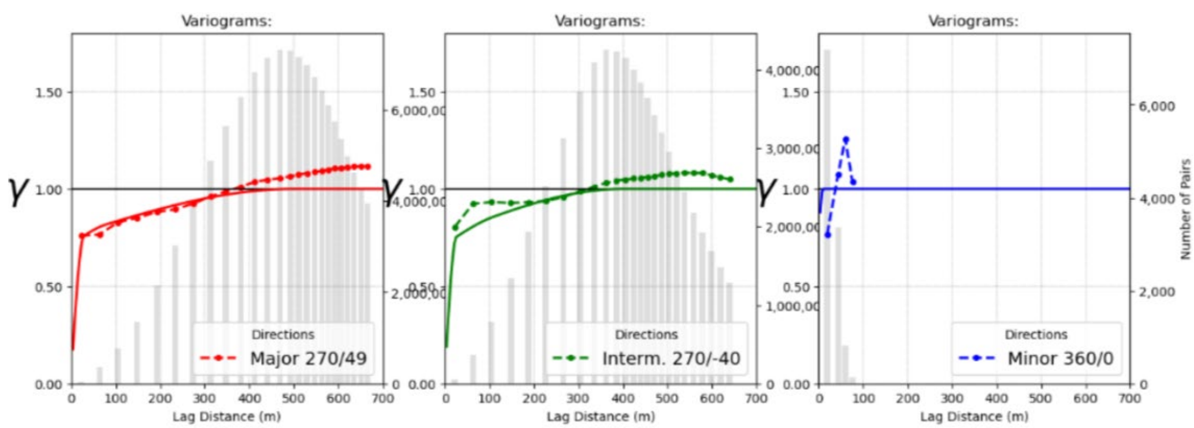
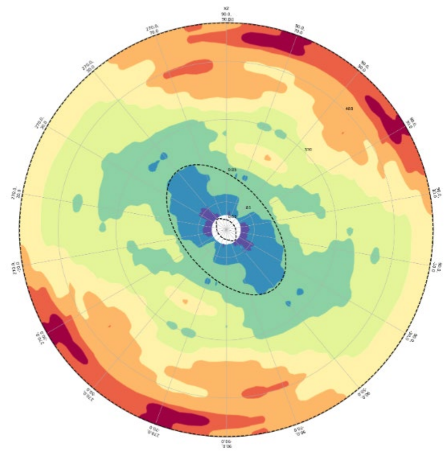
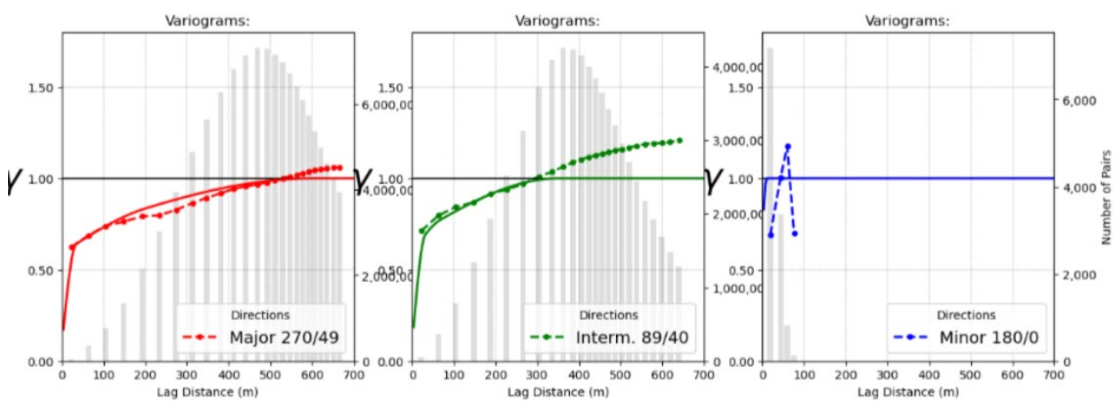


Figure 14-18: Nickel Variogram Map and Model Results for the Main Domain -Selebi North

	Nugget	Structure 1	Structure 2	Structure 3
Contribution	0.091	0.500	0.091	0.318
Model Shape		spherical	spherical	spherical
Angle 1		270.0	270.0	270.0
Angle 2		50.0	50.0	50.0
Angle 3		-90.0	-90.0	-90.0
Range 1		34.2	200.0	600.0
Range 2		31.6	67.9	350.0
Range 3		2.4	5.7	9.7





14.2.8 Bulk Density

A total of 8,918 density measurements intersect the Main domain and a total of 777 density measurements intercept the three footwall domains. Density values range from 2.36 t/m^3 to 7.69 t/m^3 within mineralized domains and from 1.51 t/m^3 to 4.80 t/m^3 in the host rock.

The composited statistics per domain are presented in Table 14-20.

Table 14-20: Density statistics per Domain – Selebi North

Domain	Count	Mean (t/m^3)	CV	Min. (t/m^3)	Max. (t/m^3)
Main	8,918	**3.58**	0.16	2.36	7.69
Vein A	125	**3.41**	0.1	2.81	4.60
Vein B	366	**3.56**	0.15	2.50	4.69
Vein C	286	**3.45**	0.14	2.69	4.67

In the QP’s opinion, these are reasonable densities for this type of mineralization.

14.2.9 Search Strategy and Estimation Parameters

Estimation for the Main domain was completed within RMSP software. Sub-block model estimates of grade and density were performed using progressively larger search ellipses and fewer composite restrictions in a three-pass OK approach in unfolded space. An ID2 approach using three successively larger search ellipses was performed for the footwall domains in Leapfrog Edge software. Search ellipses for grade estimation were anisotropic for all domains and oriented using dynamic anisotropy. Search ellipse dimensions are detailed in Table 14-21 and the sample selection plan is outlined in Table 14-22.

Table 14-21: Search Ellipse Dimensions Per Domain – Selebi North

Domain	Commodity	1st Pass			2nd Pass			3rd Pass		
		X-axis (m)	Y-axis (m)	Z-axis (m)	X-axis (m)	Y-axis (m)	Z-axis (m)	X-axis (m)	Y-axis (m)	Z-axis (m)
Main	Cu	30	15	10	200	150	15	500	400	45
Main	Ni	30	17	10	240	140	15	600	350	45
Footwall (A, B, & C)	Cu	20	20	5	40	40	5	200	160	15
Footwall (A, B, & C)	Ni	20	20	5	40	40	5	240	140	15
Main, Footwall and Waste Halo	Density	30	15	10	200	160	15	500	400	45

Table 14-22: Sample Selection Plan – Selebi North

Domain	1st Pass			2nd Pass			3rd Pass		
	Min No.	Max No.	DH[1] Limit	Min No.	Max No.	DH[1] Limit	Min No.	Max No.	DH[1] Limit
Main	8	15	7	8	12	7	4	12	7
Footwall (A, B, & C)	8	15	7	8	12	7	4	12	7
Density	8	15	7	8	12	7	4	12	7

Note:

1. DH Limit = Drill hole limit.

14.2.10 Block Model

Block model construction was completed in Seequent's Leapfrog Edge software. SLR opted for a rotated block model in the azimuth with no dip rotation to best represent the mineralized domains. The block model extents and dimensions for Selebi North are presented in Table 14-23. SLR considers the block sizes appropriate for the deposit geometry and proposed mining methods.

Table 14-23: Block Model Extents and Dimensions – Selebi North

Extents	X	Y	Z
Base Point (m)	34346.559	85225.73	182.932
Boundary Size (m)	1480	760	800
Rotation			
Azimuth (degrees)	65		
Dip (degrees)	0		
Blocks	**X**	**Y**	**Z**
Parent Block Size (m)	5	5	5
Min. Sub-block Size (m)	4	4	4

14.2.11 Block Model Validation

Blocks were validated using industry standard techniques including:

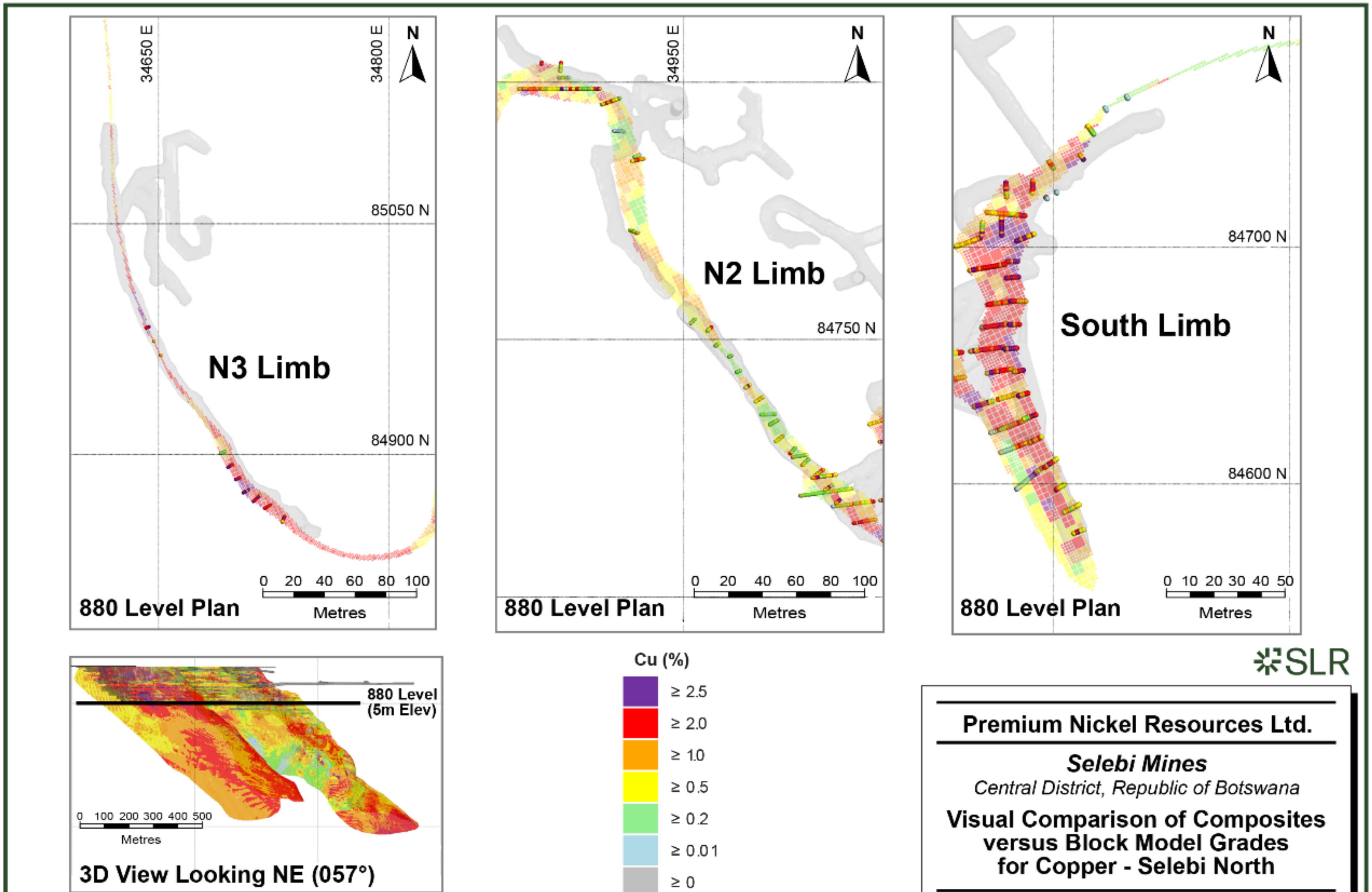
- Wireframe to block model volume confirmation (Table 14-24)
- Visual inspection of composites versus block model grades (Figure 14-19 and Figure 14-20)
- Statistical comparison between composites and block model grades (Table 14-25)
- Comparison between OK, ID2 and NN mean swath plots (Figure 14-21)

SLR viewed grades and proportions relative to the blocks, drilled grades, composites, and modelled solids. SLR observed that the block grades exhibited general accord with drilling and sampling and did not appear to smear significantly across sampled grades. Swath plots generally demonstrated good correlation, with block grades being somewhat smoothed relative to composite grades, as expected.

Table 14-24: Wireframe to Block Volume Confirmation – Selebi North

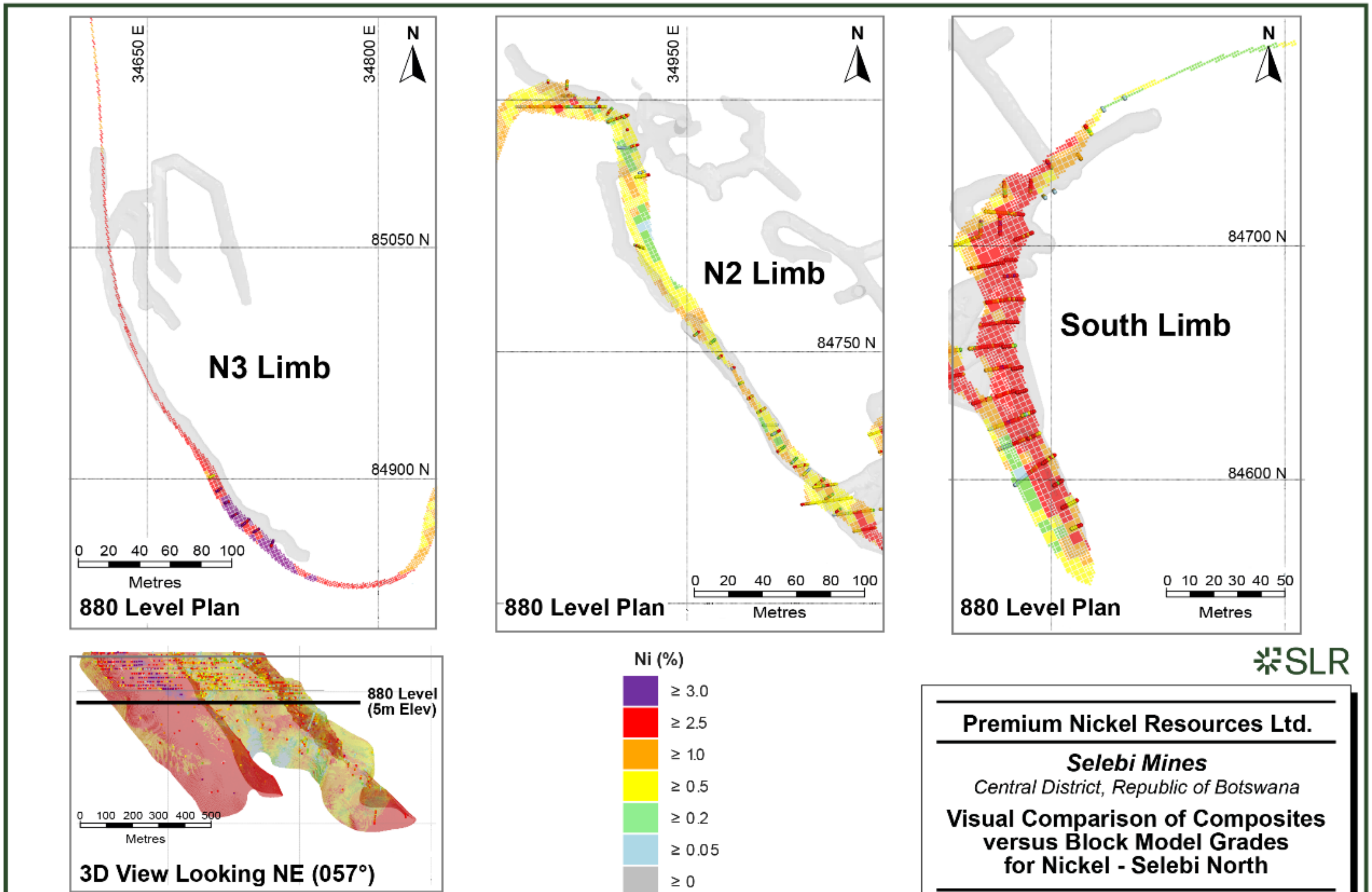
Domain	Wireframe Volume (m^3)	Block Model Volume (m^3)	Confirmation (%)
Main Vein	5,123,500	5,127,105	99.99
Vein A	196,360	196,143	100
Vein B	280,120	279,980	99.92
Vein C	89,986	89,845	100
Total	**5,689,966**	**5,693,073**	**99.94**

Figure 14-19: Visual Comparison of Composites versus Block Model Grades for Copper – Selebi North



Source: SLR, 2024.

Figure 14-20: Visual Comparison of Composites versus Block Model Grades for Nickel – Selebi North

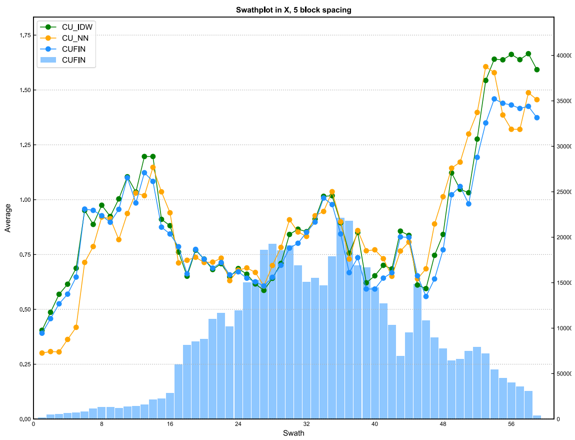
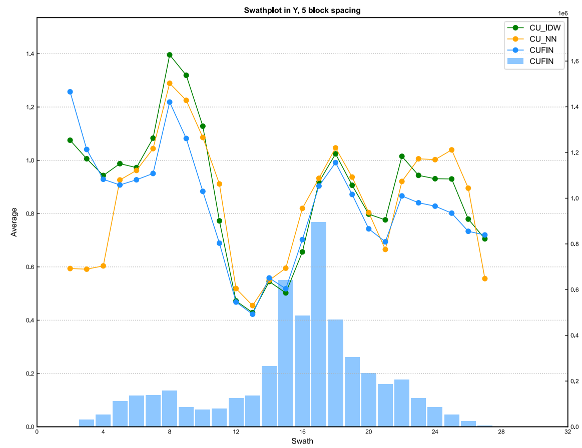


Source: SLR, 2024.

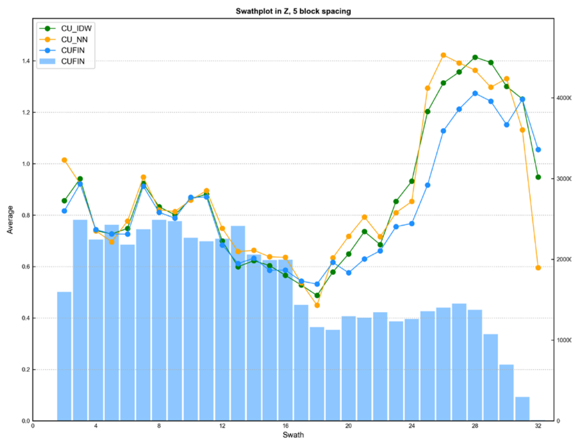
Table 14-25: Statistical Comparison of Composites and Block Model Grades – Selebi North

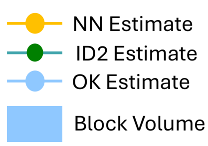
Domain	Composites				Block Model				Difference in Mean (%)
	Mean (%)	CV	Min.	Max.	Mean (%)	CV	Min.	Max.	
Copper									
Main	**0.75**	1.47	0.0	18	**0.83**	0.57	0.0	7.11	5
Vein A	**0.35**	1.85	0.0	5.11	**0.47**	0.96	0.0	4.6	13
Vein B	**0.62**	1.34	0.0	5.65	**0.63**	0.62	0.0	2.74	-10
Vein C	**0.52**	1.45	0.0	5.98	**0.51**	0.74	0.0	2.3	-1
Nickel									
Main	**0.78**	1.12	0.0	8.0	**0.95**	0.69	0.0	3.75	-2.
Vein A	**0.32**	1.57	0	2.55	**0.34**	0.55	0.0	2.51	-1.
Vein B	**0.59**	1.15	0	2.68	**0.60**	0.61	0	2.30	-1
Vein C	**0.55**	1.22	0	3.83	**0.61**	0.77	0	2.53	5

Figure 14-21: Comparison between OK, ID, and NN Mean Swath Plots for Copper in the Main Domain – Selebi North

X-AXIS (ALONG STRIKE)	Y-AXIS (DOWN DIP)
	

Z-axis





14.2.12 Classification

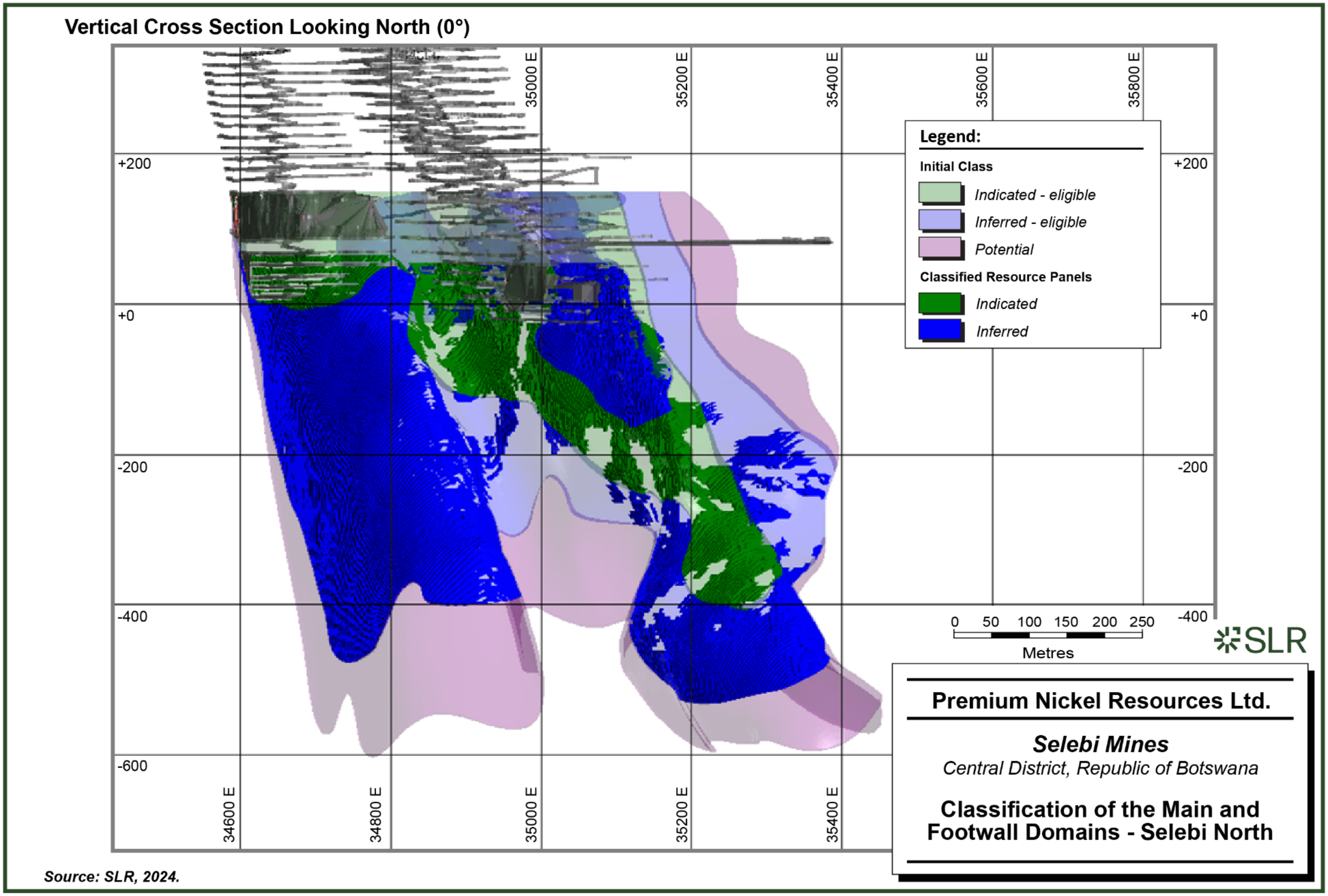
Definitions for Mineral Resource categories used in this Technical Report are consistent with those defined by CIM (2014) and adopted by NI 43-101. In the CIM classification, a Mineral Resource is defined as "a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction".

Mineral Resources are classified into Measured, Indicated, and Inferred categories. A Mineral Reserve is defined as the "economically mineable part of a Measured and/or Indicated Mineral Resource" demonstrated by studies at Pre-Feasibility or Feasibility level as appropriate. Mineral Reserves are classified into Proven and Probable categories.

An initial classification over the Main domain representing confidence in the geological interpretation and grade estimate, areas with reasonable grade continuity (which in turn reference modelled variogram ranges and observable trends) defined Indicated and Inferred -eligible blocks. Class shapes were then created manually with reference to drill hole spacings of 150 m for Inferred, and 50 m for Indicated across the domains and a two metre buffer surrounding the domains. The hinge area of the South Limb within the Main domain was restricted to an initial class of Inferred due to some uncertainty in the geometry of the shape and the footwall domains were restricted to an initial class of Inferred due to uncertainty in both geometry and grade continuity.

Final classified blocks were limited to within resource panels created in Deswick software. Resource panels referenced a minimum thickness of 1.5 m and an NSR cut-off value of US$70/t and were restricted to areas beyond a two-metre distance buffer surrounding existing development and excluded a crown pillar area below existing mining. Panels were also post-processed to remove isolated panels. Initial class-eligible shapes and final classified resource panels are shown in Figure 14-22.

Figure 14-22: Classification of the Main and Footwall Domains – Selebi North



Source: SLR, 2024.

14.2.13 Mineral Resource Reporting

Mineral Resources at Selebi North (Table 14-26) are reported as per the Mineral Resource estimation methodologies and classification criteria detailed in this Technical Report. They are estimated at an NSR of US$70/t and reported depleted within conceptual underground reporting shapes considering a minimum thickness of 1.5 m.

Table 14-26: Mineral Resources Estimate, June 30, 2024 – Selebi North

Classification	Zone	Tonnage	Grade		Contained Metal	
		(Mt)	(% Cu)	(% Ni)	(000 t Cu)	(000 t Ni)
Indicated	Main	3.00	0.90	0.98	27.1	29.5
	Total	3.00	0.90	0.98	27.1	29.5
Inferred	Main	5.22	0.92	1.11	48.0	58.0
	Vein A	0.08	0.63	0.57	0.5	0.4
	Vein B	0.48	0.75	0.69	3.6	3.3
	Vein C	0.06	0.72	1.00	0.4	0.6
	Total	5.83	0.90	1.07	52.5	62.4

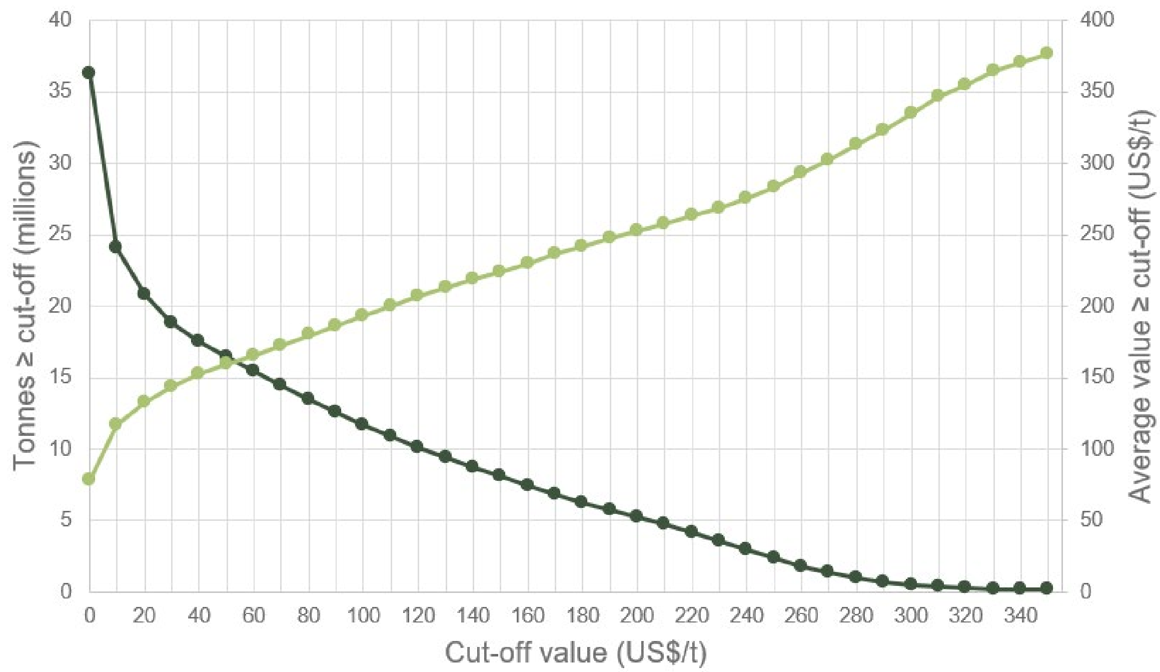
Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated at a net smelter return (NSR) value of US$70/t.
3. Mineral Resources are estimated using a long-term prices of US$10.50/lb Ni and US$4.75/lb Cu, and a US$:BWP exchange rate of 1.00:13.23.
4. Mineral Resources are estimated using nickel and copper recoveries of 72.0% and 92.4% respectively, derived from metallurgical studies which consider a conceptual bulk concentrate scenario.
5. Bulk density has been estimated and averages 3.39 t/m^3.
6. Mineral Resources are reported depleted and within conceptual underground reporting shapes considering a minimum thickness of 1.5 m.
7. There are no Mineral Reserves.
8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
9. Totals may not add or multiply accurately due to rounding.

14.2.13.1 Sensitivity to Cut-off Grade

SLR has estimated the Mineral Resources at a NSR cut-off of US$70/t. To assess the sensitivity of the Mineral Resources to potential variations in economic parameters, Indicated and Inferred eligible blocks were reported at NSR cut-off grades ranging from US$0/t to US$250/t, shown graphically in Figure 14-23.

Figure 14-23: NSR Grade-Tonnage Curve – Selebi North



Note:

1. Indicated and Inferred material reported within domains, unconstrained by resource panels.

15.0 Mineral Reserve Estimates

This section is not applicable.

16.0 Mining Methods

This section is not applicable.

17.0 Recovery Methods

This section is not applicable.

18.0 Project Infrastructure

This section is not applicable.

19.0 Market Studies and Contracts

This section is not applicable.

20.0 Environmental Studies, Permitting, and Social or Community Impact

This section is not applicable.

21.0 Capital and Operating Costs

This section is not applicable.

22.0 Economic Analysis

This section is not applicable.

23.0 Adjacent Properties

Mining licence 2022/1L was granted to PNRPL on January 31, 2022, and includes the Selebi Mines deposits. The original licence (4/72) had been granted to BCL on March 7, 1972, and included both the Selebi and Phikwe project areas as well as associated infrastructure, including the concentrator and smelter plants used to process ore from both Selebi and Phikwe. The new mining licence expires on January 30, 2032, however, BCL operated the combined Selebi-Phikwe Project from 1970 until its closure in 2016. Ore was mined from four distinct underground production areas namely the Phikwe (1 Shaft, Phikwe Central, and Phikwe South), and Southeast Extension mines located on the Phikwe project area, and the Selebi North and Selebi mines located on the Selebi Mines project area. Ore from both the Phikwe project area and the Selebi Project area was processed at the concentrator and smelter plants located at Phikwe. Annual production from the Phikwe property from 1981 to 2016 averaged 1.723 Mt at average nickel and copper grades of 0.72% and 0.63, respectively (BCL, 2016).

The QP has not relied on information from adjacent properties in the writing of this Technical Report and has not verified the information relevant to the Phikwe Project. The information presented for the Phikwe Project is not necessarily indicative of the mineralization on the property that is the subject of this Technical Report.

24.0 Other Relevant Data and Information

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

25.0 Interpretation and Conclusions

The QPs offer the following conclusions by area:

25.1 Geology and Mineral Resources

- Indicated Mineral Resources at Selebi Mines is estimated to total 3.0 million tonnes (Mt) at grades of 0.98% Ni and 0.90% Cu, containing 29,500 tonnes (t) of nickel and 27,100 t of copper.
- Inferred Mineral Resources at Selebi Mines is estimated to total 24.7 Mt at grades of 0.92% Ni and 1.50% Cu, containing 227,000 t of nickel and 371,000 t of copper.
- There is good understanding of the geology and the nature of nickel and copper mineralization of the Project. The shape and continuity of mineralization at Selebi and Selebi North, especially within the Selebi Upper zone and the Selebi North N3 limb, is very consistent. At depth in the Selebi North South Limb, there appears to be additional structural control that is not yet fully understood.
- PNRL continues to test mineralization extents with targeted drilling supported by geophysics and structural measurements in core. As the project progresses, additional structural studies may give insights into the morphology and nature of the mineralization at depth at Selebi North, and potentially, the relationship between the Selebi North and Selebi deposits.
- Mineralization is open along strike in both directions and at depth at Selebi North. Mineralization is open down dip and along strike at Selebi. Mineral Resources at both deposits are constrained up dip by the historical mining depletion.
- The sample collection, preparation, and analytical procedures as designed and implemented by former operator BCL and current operator PNRL are appropriate for the style of mineralization.
- Verification of historical information through comparison of the digital database against selected original logs and assay certificates, and down hole survey confirmation have been undertaken. To date, very limited data or analysis related to quality assurance/quality control (QA/QC) programs supporting the historical drilling has been located. While validation of some historical information is ongoing, the results indicate that the drill hole database is adequate for use in Mineral Resource estimation.
- Results of the QA/QC programs supporting PNRL’s surface and underground drilling activities at the Project show good precision and accuracy.
- Encouraging analytical results for cobalt by PNRL drilling indicate the potential for cobalt as a payable byproduct at the Project. Historical sampling largely excludes cobalt.

25.2 Mineral Processing

- Based on the results from preliminary studies and historical data analyses, PNRL has conceptualized a treatment process for Selebi and Selebi North material that includes ore sorting and flotation of a bulk sulphide nickel-copper (Ni-Cu) concentrate product. Future metallurgical studies will also look at producing separate nickel and copper concentrates.

- A preliminary ‘proof of concept’ metallurgical sampling and testing program over the Project area was completed in 2021 to support the production of market concentrates for both nickel and copper. Though the Project Team’s procedure of sample selection and collection of non-oxidized material is not considered best practice, its method of hand-picking samples was referenced to historical grades during production and is statistically representative of the Selebi mineralization. The test results based on composites prepared from these handpicked samples may not be indicative of the expected metallurgical performance (SLR, 2022).
- The QP confirms that proper sampling is yet to be evidenced as additional metallurgical test work was again carried out in 2023 by SGS Canada Inc. (SGS) under the direction of PNRL using the 2021 SGS Selebi composite samples.
- While preliminary flotation test results indicated that copper-nickel separation is achievable, further representative sampling and testing is required to demonstrate that the target grades of copper and nickel, both in bulk and separate concentrates, can be consistently met.
- The copper and nickel grades of bulk concentrate were simulated by DRA Projects (PTY) Ltd. (DRA) based on the manipulation of PNRL data representing separately produced copper and nickel concentrates and thus, may not be indicative of the expected metallurgical performance for bulk concentrates.
- To the best of the QP’s knowledge, pre-concentration techniques have not been used to prepare any Selebi materials for flotation testing to date.
- The metallurgical and analytical data have been collected in a manner that is suitable to be used conceptually for Mineral Resources estimation, however, further testing is recommended to confirm the characteristics of the Selebi final bulk or separate concentrate product.
- The QP has been informed that collection of a bulk sample through drilling and blasting has been completed at Selebi North and is in progress Selebi Main. Samples will be used for metallurgical test work and pre-concentration studies.

26.0 Recommendations

The QPs offer the following recommendations by area:

26.1 Geology and Mineral Resources

1 The QPs have reviewed and agree with PNRPL's proposed exploration budget (Table 26-1).

   a) Phase I of the recommended work program will include the continuation of the Selebi North underground drill program, digitization and verification work, BHEM, televiewer surveys and an updated estimation of Mineral Resources at the Project. Additional budget will be used to advance existing development at Selebi North to promote accessibility for deep target drilling.

   b) Concurrent with continued drilling at Selebi North, Selebi will be advanced through an underground drill program with BHEM, televiewer surveys, structural and geochemical studies. In particular, continue to infill the Selebi Upper Domain in the southeast of the deposit to understand the thickness variability of mineralization within the vicinity of historical drill hole sd119.

   c) Contingent upon and guided by the results of Phase I, engineering and additional metallurgical studies to be completed with the goal of advancing the Project toward a Pre-Feasibility Study.

2 Manage historical and current drill hole databases within a single database entity. Note original source and ensure data is verified before and upon migration. Hire a database manager to confirm the integrity of select historical data and to maintain the integrity of PNRL data.

3 Continue to explore the viability of cobalt as a payable byproduct. Estimate cobalt within areas supported by sufficient analytical results.

4 Refine variogram results in the Main domain at Selebi North to reflect the different thickness and grade traits in the N3, N2, South Limb, and deep areas of the deposit. Explore custom interpolation strategies for these areas individually.

5 Conduct a comprehensive analysis of grade and volume variability using conditional simulation to gain insights for Mineral Resource upgrading and conversion and for future production de-risking.

6 Complete additional structural studies focused on the South Limb hinge and limbs at depth to gain insights into the morphology and nature of the mineralization, and potentially, the relationship between the Selebi North and Selebi deposits.

26.2 Mineral Processing

1 Complete additional metallurgical testing using samples from underground workings that are spatially representative of the deposits to confirm the metallurgical recoveries projected following pre-concentration and concentrate flotation.

2 These additional tests should be designed to evaluate recoveries to produce a single bulk concentrate and for separate Ni and Cu concentrates to be used in future trade off studies.

Table 26-1: Proposed Budget – Phase I

Item	Cost (C$000)
Geology and drilling: • Ongoing Selebi North underground drilling (50,000 m in 90 holes) • Underground drilling at Selebi Main (37,000 m in 178 holes) • Geological support, assays	16,740
Mineral Resource estimate	120
Metallurgical testing: • Flotation and pre-concentration studies	700
Engineering studies	800
Mine Development: • Development to support underground drill program • Maintain mine infrastructure, power, water, equipment repair and maintenance	9,000
General site and administration costs	3,000
Subtotal	**30,360**
Contingency (5%)	1,518
Total Phase I	**31,878**

27.0 References

BCL Limited, 2012. A Brief History of BCL (Handout), Internal BCL document. Author unknown, 114 p.

BCL., 2009. Environmental Management Plan for BCL.

Bookbinder Business Law, 2022. Title Opinion: Premium Nickel Resources Proprietary Limited, [DRAFT Legal Opinion], April 29, 2022.

Boryta, M.D. and Condie, K.C., 1990. Geochemistry and origin of the Archaean Beit Bridge complex, Limpopo Belt, South Africa. J. geol. Soc. London 147, pp. 229-239.

Brandl, G., 1983. Geology and geochemistry of various supracrustal rocks of the Beit Bridge Complex east of Messina. Spec. Publ. Geol. Soc. S. Afr., 8: pp. 103-112.

Brown, P. J., 1987. Petrogenesis of Nickel/Copper orebodies, their host rocks and country rocks at Selebi Phikwe, eastern Botswana. Unpublished Ph.D. Thesis, Univ. of Southampton, UK, 333 p.

Canadian Institute of Mining, Metallurgy and Petroleum (CIM), 2014. CIM Definition Standards for Mineral Resources and Mineral Reserves, adopted by the CIM Council on May 10, 2014.

Carney, J.N., Aldiss, D.T., and Lock, N.P., 1994. The Geology of Botswana. Geological Surveys Department, Bulletin 37, pp. 1-113.

De Wit, J.M., Roering, C., Hart, R.J., Armstrong, R.A., De Ronde, C.E.J., Green, R.W.E., Tredoux, M., Peberdy, E., and Hart, R.A.,1992. Formation of an Archean continent. Nature, Vol. 357, pp. 553-562.

Dirks, P.H.G.M., 2005. A Preliminary Assessment of the Structural Setting of the Ni-Sulphide Mineralization Near Selebi-Phikwe, Botswana with Reference to Future Exploration Efforts and Training of Geological Staff at the Mine. An unpublished report prepared for BCL Limited, 30 p.

DRA Projects (PTY) Ltd., 2023, Selebi Front End Solutions Study for Premium Nickel Resources Botswana, Selebi, Botswana, DRA Project Number HBWAYR7865, DRA-HBWAYR7865-GEN-REP-001, Revision 1, December 21, 2023.

Fripp, R.E.P., 1983. The Precambrian geology of the area around the Sand River near Messina, Central Zone, Limpopo Mobile Belt. Geol. Soc. S. Afr. Spec. Publ., 8, pp. 89-102.

Gallon, M.L., 1986. Structural re-interpretation of the Selebi-Phikwe nickel–copper sulphide deposits, eastern Botswana. *In* Anhaeusser, C.R., Maske, S. (eds) Mineral deposits of Southern Africa. Geological Society of South Africa, pp. 1663–1669.

GCS Consulting, 2020. BCL Complex Hydrological Study Selebi Phikwe and Tati. Johannesburg.

Gordon, P.S.L., 1973. The Selebi-Phikwe nickel–copper deposits, Botswana. *In* Lister L.A., (ed) Symposium on granites, gneisses and related rocks. Special Publication, Geological Society of South Africa 3, pp. 167–187.

Guest, R., Witley, J., Jacobs, W., Roode, C., and Bolton, R., 2014. Technical Review of the BCL Operations, Botswana. An unpublished report prepared by the MSA Group on behalf of BCL Limited, 72 p.

Hoffmann, D., 2002. Structural control and metal zonation in the Selebi Phikwe Ni-Cu sulphide deposits, Botswana. Extend. Abr. Geoconference 2002.

Horan, S, Degan, C., 2022. Selebi North DDH Planning. Selebi North Technical Assistance. 5 p.

Kampunzu, A.B., Tembo, F., Matheis, G., Kapenda, D., and Huntsman-Mapila, P., 2000. Geochemistry and Tectonic setting of mafic igneous units in the Neoproterozoic Katangan basin Central Africa; Implications for Rhodinia break-up. Gondwana Research 3, pp. 125-153.

Key, R.M., 1976. The geology of the area around Francistown and Phikwe, northeast and central districts, Botswana. Distr Mem Geol Surv Botswana 3, pp. 5–25

KPMG, 2014. Botswana Country Mining Guide. Prepared by KPMG Global Mining Institute, 34 p.

Labuschagne, P., and J. Stapelberg. 2020. BCL Complex Hydrogeological Study: Selebi Phikwe and Tati. GCS Water and Environmental Consultants. Prepared for BCL in Liquidation. 323 p.

Lear PA, 1979. The ore mineralogy of the Phikwe and Selebi nickel– copper deposits, Botswana. Geological Society of South Africa, Special Publication 5, pp. 117–132.

Lebrun E. and C.Tuitz, 2022. Structural Review of the Exploration Program at Selebi Mine, Botswana. 39 p.

Lungu, S., 2016. Competent Person's Report on BCL Mineral Resources BCL Mine, Selebi Phikwe, Botswana. A report prepared on behalf of BCL Limited, 161 p.

Lungu, S., 2017. Addendum to the Competent Person's Report on BCL Mineral Resources. A report prepared on behalf of BCL Limited, 22 p.

Maier, W., Barnes, S-J., Chinyepi, G., Barton, Jr., M.J., Eglinton, E, and Sheshedi, I., 2008. The Composition of the Magmatic Ni-Cu-(PGE) Sulfide Deposits in the Tati and Selebi Phikwe Belts of Eastern Botswana. Mineralium Deposita Vol., 43, pp. 37-60.

Malema, M.T. and Legg, A.C., 2006. Recent Improvements at the BCL Smelter. Southern African Pyrometallurgy 2006, edited by Jones, R.T.: Johannesburg, The Southern African Institute of Mining and Metallurgy, March 5-8, 2006, pp. 215-231.

McCourt, S., and Armstrong, R. A., 1998. SHRIMP U Pb zircon chronology of granites from the Central Zone, Limpopo Belt, southern Africa: implications for the age of the Limpopo Orogeny. South African Journal of Geology 1998, Vol. 101, pp. 329-337.

Meyer, S, 2021. Site Visit Report to Selebi Phikwe Copper and Nickel Mine. An unpublished report prepared by SLR Consulting Ltd. on behalf of North American Nickel Inc., 19 p.

Mineral Corporation Consultancy (Pty) Ltd., 2018a. Site Visit Report Back and Review: BCL Processing Plant: Q1 2018, prepared for the Liquidator of BCL Limited (February 7, 2018).

Mineral Corporation Consultancy (Pty) Ltd., 2018b. BCL General Engineering Recommendations, presentation dated August 29, 2018.

Morgan, G.A., 1982. The Mineral Industry of Botswana. In Mineral Yearbook 1980: Volume III Area Reports: International, prepared for the US Department of the Interior by staff of the Bureau of Mines, pp. 159-191.

MSA, 2014, Technical Review of the BCL Operations, Botswana, prepared for BCL Limited (July 21, 2014).

Mulaba-Bafubiandi, A.F. and Medupe, O., 2007. Run of Mine Ore from BCL Mine (Botswana) and its Impact on the Flotation Yield in Proceedings of the Fourth Southern African Conference on Base Metals 2007 – 'Africa's base metals resurgence', The Southern African Institute of Mining and Metallurgy, pp. 57-76.

North American Nickel Inc., 2021. Advancing Three Camp Scale Ni-Cu-Co Assets, company presentation, dated January 2021.

PNRL, 2024a, PNR Recoveries Consolidated Data – ex DRA.xlsx.

PNRL, 2024b, Rough estimate to Cost per tonne Conc for Selebi Combined - SLR Prices - Met calc corrected_2024-06-12.xlsx.

Roering, C., van Reenen, D.D., Smit, C.A., Barton, J.M., Jr., de Beer, J.H., de Wit, M.J., Stettler, E.H., van Schalkwyk, J.F., Stevens, G., and Pretorius, S., 1992. Tectonic model for the evolution of the Limpopo Belt, Precambrian Research, v. 55, pp. 539–552.

SGS, 2021, An Investigation into the Recovery of Copper and Nickel from Composite Samples from the Phikwe-Selebi Deposit, prepared for North American Nickel, (December 13, 2021).

SGS, 2024, An Investigation into the Metallurgical Testwork on Samples from the Selebi and Selkirk Deposits, prepared for Premium Nickel Resources (January 3, 2024).

SLR Consulting (Canada) Ltd., 2022, Technical Report on the Selebi Mines, Central District, Republic of Botswana, Report for NI 43-101, prepared for North American Nickel Inc., Premium Nickel Resources Corporation, and Premium Nickel Resources Ltd. (June 16, 2022).

Stark Resources, 2024, Selebi Intrinsic Ore Sorting Test Report, Project D241353 – Selebi, May 28, 2024.

The Mineral Corporation, 2015. Final Report on BCL Mine Optimisation Process. Unpublished Report No. C-BCL-TEC-1581-973 prepared on behalf of BCL Ltd.

Treloar, P.J., Coward, M.P. and Harris, N.B.W., 1992. Himalayan-Tibetan analogies for the evolution of the Zimbabwe Craton and Limpopo Belt, Precambrian Research, v. 55, pp. 571–587.

Venter, M., Clarke, B. and Lotter, C., 2011. BCL Data Compilation and Interpretation prepared by The MSA Group on behalf of BCL Limited. Report J1764, 68 p.

Wakefield, J. 1976. The structural and metamorphic evolution of the Phikwe Ni–Cu sulfide deposit, Selebi-Phikwe, eastern Botswana. Econ. Geol., 71, pp 988–1005.

Williams, P., 2005. Selebi-Phikwe Aeromagnetic Interpretation. An unpublished report prepared by SRK Consulting on behalf of BCL Limited, 22 p.

Wright, L., 1977. A Structural Cross Section Across the North Margin of the Limpopo Belt. Ph.D. thesis, University of Leeds, UK.

28.0 Date and Signature Date

This report titled "NI 43-101 Technical Report for the Selebi Mines, Central District, Republic of Botswana" with an effective date of June 30, 2024 was prepared and signed by the following authors:

(Signed & Sealed) ***Brenna J.Y. Scholey***

Dated at Toronto, ON
September 20, 2024

Brenna J.Y. Scholey, P.Eng.

(Signed & Sealed) ***Valerie Wilson***

Dated at Perth, Australia
September 20, 2024 20, 2024

Valerie Wilson, M.Sc., P.Geo.

29.0 Certificate of Qualified Person

29.1 Brenna J.Y. Scholey

I, Brenna J.Y. Scholey, P.Eng., as an author of this report entitled NI 43-101 Technical Report for the Selebi Mines, Central District, Republic of Botswana with an effective date of June 30, 2024 prepared for Premium Nickel Resources Ltd., do hereby certify that:

1. I am Principal Metallurgist with SLR Consulting (Canada) Ltd., of Suite 501, 55 University Ave., Toronto, ON M5J 2H7.
2. I am a graduate of The University of British Columbia in 1988 with a Bachelor of Science (Applied) degree in Metals and Materials Engineering.
3. I am registered as a Professional Engineer in the Provinces of Ontario (Reg.# 90503137) and British Columbia (Reg.# 122080). I have worked as a metallurgist for a total of 36 years since my graduation. My relevant experience for the purpose of the Technical Report is:
    - Review and report as a metallurgical consultant on numerous mining operations and projects for due diligence and regulatory requirements.
    - Senior Metallurgist/Project Manager on numerous base metals and precious metals studies for an international mining company.
    - Management and operational experience at several Canadian and U.S. milling, smelting and refining operations treating various metals including copper, nickel, and precious metals.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (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 fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I did not visit the Selebi Mines.
6. I am responsible for Section 13 and subsections 1.1.1.2, 1.1.2.2, 1.2.6, 25.2, and 26.2of the Technical Report.
7. I am independent of the Issuer, the Vendor, and the Selebi Mines Project applying the test set out in Section 1.5 of NI 43-101.
8. I have had prior involvement with the property that is the subject of the Technical Report, including preparing previous technical reports in 2024 (SK-1300) and in 2022 (NI 43-101), I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
9. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report Section 13 and subsections 1.1.1.2, 1.1.2.2, 1.2.6, 25.2, and 26.2 contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 20th day of September, 2024.

(Signed & Sealed) ***Brenna J.Y. Scholey***

Brenna J.Y. Scholey, P.Eng.

29.2 Valerie Wilson

I, Valerie Wilson, M.Sc., P.Geo., as an author of this report entitled “NI 43-101 Technical Report for the Selebi Mines, Central District, Republic of Botswana” with an effective date of June 30, 2024 prepared for Premium Nickel Resources Ltd., do hereby certify that:

1. I am a Principal Geologist with SLR Consulting Australia Pty Ltd., of Level 1, 500 Hay Street, Subiaco, WA, Australia, 6008
2. I am a graduate of the Camborne School of Mines, University of Exeter, UK in 2010 with a Master of Science degree in Mining Geology and a graduate of the University of Victoria, BC in 2006 with a Bachelor of Science degree in Geoscience.
3. I am registered as a Professional Geologist in the Province of Ontario (Reg. #2113). I have worked as a geologist for a total of 16 years since graduation from my bachelor’s degree. My relevant experience for the purpose of the Technical Report is:
    - Exploration geologist on sulphide nickel projects in Canada, Norway, and Sweden.
    - Mineral Resource estimation work and reporting on numerous copper and nickel mining and exploration projects around the world
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (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 fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I visited the Selebi Mines May 13 to May 15, 2024.
6. I am responsible for overall preparation of the Technical Report as well as all sections except Section 13 and sub-sections related to mineral processing including 1.1.1.2, 1.1.2.2, 1.2.6, 25.2, and 26.2.
7. I am independent of the Issuer, the Vendor, and the Selebi Mines Project applying the test set out in Section 1.5 of NI 43-101.
8. I have had prior involvement with the property that is the subject of the Technical Report, including preparing previous technical reports in 2024 (SK-1300) and 2022 (NI 43-101), as well as providing sporadic technical support related to exploration and Mineral Resource estimation.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At 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.

Dated this 20th day of September, 2024.

(Signed & Sealed) ***Valerie Wilson***

Valerie Wilson, M.Sc., P.Geo.

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