



Earthlab

Volspruit North MRE Technical Report

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Volspruit North Body

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COMPETENT PERSON'S CONSENT FORM

Under Clause 9 of the JORC Code 2012 Edition (Written Consent Statement)

Report Name:

EARTH-PPD-PO_976-1-Technical_Report_1

The company releasing the Report:

Sylvania Platinum Limited

This deposit to which this Report refers:

Volspruit North Body

Date of the Report

30 January 2024

STATEMENT

I, Gideon Petrus (Deon) du Plessis,

Confirm that I am the Competent Person for the Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code 2012 Edition, having more than five years of experience that is relevant to the style of mineralisation and the type of deposit described in the Report, and to the activity for which I am accepting responsibility.
- I am a Member in good standing of the South African Council for Natural Scientific Professions (SACNASP) (Reg No. 400050/05) and the Geological Society of South Africa (GSSA) (Reg No. 963338), both being Recognised Professional Organisations (RPO) included in the list promulgated by JORC.
- I have partially compiled and fully reviewed the Report to which this Consent Statement applies.

I am the founder, executive CEO, and a full-time employee of

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and have been engaged by

Volspruit Mining Company (Pty) Ltd (hereafter “VMC”), a subsidiary of Sylvania Platinum Ltd (hereafter “Sylvania”), incorporated in South Africa, with its main country of operation currently being South Africa.

to prepare the documentation for

the Volspruit North deposit on the farm Volspruit 326 KR

on which the Report is based, for the period ended

30 January 2024

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest.

I verify that the Report is based on and fairly and accurately reflects the form and context in which it appears, the information in my supporting documentation relating to the Geology, Mineral Exploration and Mineral Resources.

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Sylvania Platinum Limited



Signature of Competent Person

30 January 2024

Date

SACNASP

Professional Membership (a)

Pr.Sci.Nat. 400050/05

Membership Number (a)

FGSSA

Professional Membership (b)

963338

Membership Number (b)



Signature of Witness

Marius Swart
Olifantsfontein

Witness Name and Residence (suburb, town)

EXECUTIVE SUMMARY

Overview of the project and geology

Earthlab created a new geological model and Mineral Resource Estimate with platinum, palladium, gold, copper, and nickel estimated in the Mineral Resource of Volspruit North (VN). During the first part of 2023 Earthlab relogged all the available VN drill core stored at the Volspruit core shed. The new lithological, mineralogical, and stratigraphic logging aided Earthlab in this MRE's creation.

The Volspruit Project (hereinafter "the Project," referring to both VN and VS combined, whereas VS refers to Volspruit South) is located on the farm Volspruit 326 KR as well as portion two of Zoetveld 294KR within the Mogalakwena district municipality, Limpopo Province, in the Republic of South Africa (RSA). The farm is situated approximately 15 km to the south of the town of Mokopane and 60 km south of the capital of Limpopo, Polokwane.

The Project is currently owned by the Volspruit Mining Company (Pty) Ltd ("VMC"). Iolite Trading 16 (Pty Ltd, which is a 100% Broad-based Black Economic Empowerment (BBBEE) company owns 26% of Volspruit Mining Company, while PPD owns 74%. PPD is owned 100% by Sylvania (Mauritius) Ltd which falls fully under the parent company, Sylvania Platinum Ltd ("Sylvania").

The following exploration techniques have been applied:

- Exploration geophysics (aeromagnetic and radiometric surveys)
- Soil geochemical sampling
- Surface exploration drilling (diamond and percussion drilling)

The historical surface drilling and sampling database was provided to Earthlab by VMC in a Microsoft Access Database format, which has undergone a migration to a secure SABLE® database where each project is given a project definition with tailored validations and mandatory cleaning by Earthlab. This has been done to maintain data integrity as per the Joint Ore Reserves Committee (JORC) 2012 requirements.

As part of this report's MRE, Earthlab completely remodelled the stratigraphy and weathering zones based off the relogging work of the historic holes and created a completely new mineralised domain for the new estimation.

Stratigraphically the Volspruit Project area falls within the Lower Zone of the RLS below the Critical Zone, which is host to the Platreef deposit, making this particular PGM occurrence rather unique. The Lower Zone within the Northern Limb can be sub-divided into three main groups which include from the base upwards: the Volspruit Pyroxenite, the Drummondlea Harzburgite Chromitite, and the Moordrift Harzburgite Pyroxenite. The Lower Zone contains approximately 37 cyclic units which are numbered from the base upwards. These cyclic units' grade in composition and morphology upwards forming the basis of the sub-division stated above.

Cyclic units 1 through 10 in the Volspruit subzone display incomplete cycles where olivine and chrome-bearing pyroxenites at the base of these units gradually change into pyroxenite at the top. The upper portion of the cyclic unit 11 contains significant PGE-Cu-Ni concentrations and is host to the Volspruit Reef. Cyclic unit 11 consists predominantly of orthopyroxenite with varying proportions of olivine, chrome, and minor plagioclase.

The re-logging campaign of 2023 was conducted based on a new stratigraphic understanding generated by Earthlab from the work of Hulbert (1983) and Tanner et al. (2019), to better define the Volspruit Reef. In this model it was established that the Volspruit Reef is only confined within Cyclic Unit 11 Upper hosted by pyroxenites. The Volspruit Reef is a PGE grade-based domain, which displays moderate to sharp elevated PGE concentrations. The re-logging in 2023 could not establish a physical geological marker from the

historical diamond drilled core related to the grade-based domain, despite the detailed mineral identification logging.

Cyclic Unit 12 Upper comprises homogeneous ortho-pyroxenites with minor chromite and no sulphides observed.

Cyclic Unit 12 Lower comprises a relatively small unit of harzburgites containing olivine which vary from poikilitic to inequigranular in texture. This unit does occasionally have sulphides but there are no significant PGMs concentrated here. This unit marks the hanging wall of the Cyclic Unit 11 Upper.

The Volspruit Reef (VR) is confined within Cyclic Unit 11 Upper. Sulphide mineralisation observed in the cyclic units surrounding Cyclic Unit 11 Upper did not show any significant Pt, Pd, and Au grades according to historic downhole assay grade profiles of 2E and Au. The unit comprises homogeneous ortho-pyroxenites with minor chromite. It can be sub-divided into several mineralised units, most prominently three units i.e., VR1, VR2 and VR3 along with internal waste zones defined as VR middling units (VRMID) which can be barren or have insignificant scattered mineralisation. These mineralised units are characterised by their base metal sulphide content.

Cyclic Unit 11 Lower forms the basal layer of Cyclic Unit 11 Upper and can be compared to Cyclic Unit 12 Lower as it consists of the olivine-bearing harzburgites which vary from poikilitic to inequigranular in texture and are sometimes strongly serpentinised at certain intervals. Serpentinisation increases with depth and poikilitic harzburgites to equigranular fine-grained dunites form the dominant lithologies. The sulphides in this cyclic unit do not have significant PGM mineralisation according to historic downhole assay grade profiles of 2E and Au.

The Volspruit Reef mineralisation is predominantly interstitial disseminated to net-textured sulphide assemblages hosted within olivine and chrome-bearing pyroxenites. The sulphide mineralisation within this horizon, in decreasing abundance, consists of pyrrhotite, pentlandite, chalcopyrite and cubanite (Hulbert, 1983). Sulphide assemblages reach their peak modal abundance at approximately 3 wt.% of the whole rock composition. Mineralisation is predominantly hosted by fine-grained equigranular ortho-pyroxenites with minor olivine and chrome occurrences.

The Volspruit Reef has provisionally been classified as a disseminated, PGE-Cu-Ni, syngenetic, ortho-magmatic deposit within the Lower Zone of the RLS by Hulbert (1983).

Summary of the Mineral Resource

At the time of creating this MRE, the geological exploration dataset consisted of 150 diamond drill holes. 125 holes were used in the model and MRE, while the rest were located outside of the resource model perimeter. The drill hole spacing, however, is not constant across the project area, with more than one hole twinned, a grid in Domain SW with an average spacing of approximately 70 m, and more than one portion with spacings of less than 30 m, other areas with spacings ranging around 50 m, as well as larger open areas with no drill holes at 70 m spacing. Considering only the drill holes within the main stratigraphic model perimeter, the vast majority of assay samples had a length of 1 m.

The following stratigraphic units were modelled in 3D namely:

- Soil and scree,
- CUI2 as hanging wall waste,
- CUIIU being the main stratigraphic unit of interest, given that over 97% of the mineralisation considered for the grade domain (discussed in chapter 1) occurred with this unit, and

- CUIIL which was modelled from the bottom contact of the CUIIU down to an elevation of 850 mamsl in order to provide material beneath the potential ore unit for future mining studies, even though the CUIIL was logged at depths greater than that.

A cut-off grade was applied to CIIU to distinguish between material with economical concentrations and material below the cut-off being the lower grade portion. A 2E+Au cut-off grade of 1.2 g/t with lenient settings in the COMPSE function in Datamine StudioRM was used, requiring a minimum mineralised interval of 2.5 m and allowing for up to 2.5 m of internal waste, was chosen as the final parameters to define the potentially economic domain within CUIIU. This domain is referred to as the “Mineralised Domain.” The remainder of CUIIU which consisted of the samples coded as “waste” will be referred to as the “Waste Domain” in which grade estimation was also done but should not be confused with the other stratigraphic units also classified as waste but in which grade estimation was not done.

Composites were coded with indicators of 1 and 0, i.e., 1 if they represented the Mineralised Domain and 0 if they represented the Waste Domain in CUIIU. The indicators were analysed to determine indicator variograms for preparing for the probability estimation.

Since the existence and locations of the Mineralised Domain were too difficult to model with a wireframe in StudioRM, a technique called Probability Estimation was performed (also commonly referred to as Categorical Indicator Kriging).

Probability Estimation was done into the blocks using the indicator samples to estimate where a block has sufficient probability of being part of the Mineralised Domain, and where the probability of being part of the Waste Domain is larger.

Directional variograms were created in Snowden Supervisor v8.14 (hereafter “Supervisor”) for Pt, Pd, Au, Cu, and Ni in the two respective grade estimation domains.

Kriging Neighbourhood Analysis (KNA) was first done in Supervisor to determine the starting point for the grade estimation parameters. KNA was done for Pt, Pd, Au, Cu, and Ni, in both the estimation domains. The parent block dimensions used for grade and density estimation were 50 mX by 50 mY by 2.5 mZ, rotated 45° clockwise around the Z-axis.

The search ellipsoids’ dimensions were set to the ranges of the variograms. The rotation of the search ellipsoids’ major direction was to match that of the variograms in each estimation domain, Dynamic Anisotropy (DA) was used to slightly rotate the ellipsoids locally depending on the dip and plunge of the Mineralised Domain when estimating grade.

Ordinary Kriging was used for the grade estimations of Pt, Pd, Au, Cu, and Ni, as well as some of the density estimations. Where less data was available but a variogram was still possible, Simple Kriging was used, e.g., during density estimation in Fresh material type of CUI2 and in the Transitional Zone. The sample data was too limited in the Oxidised Zone to model a reliable variogram, and it was decided to use Inverse Power of Distance (also referred to as Inverse Distance Weighting) to the power of 2 to estimate the density.

Rh and Ru were estimated in the block model by employing Linear Regression and RANSAC Regression respectively using the Pt, Pd, and Au values. The machine learning model that executed the regression was trained with the 2023 drilled metallurgical holes which had assay results for Pt, Pd, Rh, Ru, Ir, and Au. Ir was excluded from the regression and Mineral Resources given its mostly below detection limit concentration.

The total geoloss applied in the 2022 MRE was 10%. Known geological losses include intrusions, which have an estimated 6.07% whereas faults have been modelled with 2.5 m brackets on either side of interpreted fault planes (1.24%). The balance of 2.69% geological losses is making up the unknown component of the Geological Loss estimation.

The geostatistical parameters used to aid in the Mineral Resource Classification include Domain Probability, Kriging Efficiency (KE) and Slope of Regression (SR). The consideration of the final Resource Classification is based on the confidence in the upstream processed, the results of the KE and SR classification scores, and the mineralisation understanding. The interpretation led to manually created zones of higher and lower confidence, which coincide well with the drill hole spacing. Certain fault blocks were automatically downgraded to Inferred given their geological uncertainty. In cases where mineralisation was continuous for several drill holes in one direction but suddenly completely absent in a next drill hole, the surrounding areas were also manually classified as Inferred due to uncertainty. Some portions on the outskirts or where the Probability Estimation showed deterioration were ensured to be classified as Inferred.

Grades were calculated on total tonnes. Geoloss was applied across the total tonnes of the MRE. To adhere to the current Mining Rights in place, the metal content for PGEs were calculated for the entire MRE (inside the flood barrier), the metal content reported for Cu and Ni was only that which was situated within the Volspruit Mining Right, since the adjacent Mining Right on Zoetveld 294 KR RE, also held by Sylvania, did not include Cu and Ni.

The table below contains the MRE grade per classification category.

Total Mineral Resource (inside flood barrier)						
Category	Tonnage before geoloss (t)	Tonnage after 10% geoloss (t)	2E+Au (g/t)	4E+Au (g/t)	Cu (%)	Ni (%)
Indicated	18,243,306	16,418,975	2.37	2.58	0.067	0.18
Inferred	1,361,373	1,225,236	2.30	2.50	0.071	0.18
Total	19,604,679	17,644,211	2.36	2.57	0.067	0.18

The table below contains the MRE metal content per classification category.

Total Mineral Resource (inside flood barrier)						
Category	Tonnage before geoloss (t)	Tonnage after 10% geoloss (t)	2E+Au (oz)	4E+Au (oz)	Cu (t)	Ni (t)
Indicated	18,243,306	16,418,975	1,251,058	1,361,233	9,956	27,897
Inferred	1,361,373	1,225,236	90,493	98,349	866	2,138
Total	19,604,679	17,644,211	1,341,551	1,459,583	10,822	30,035

Key conclusions and recommendations

This VN MRE offers more tonnes at a higher grade compared to the 2022 MRE. This increase in tonnage was due to multiple mineralised intercepts per drill hole that could be included in this MRE's Mineralised Domain instead of just a single, or in limited cases two or three of the mineralised intercepts that were included in the 2022 MRE based on the wireframing technique. Geological confidence gained from the recently completed re-logging exercise confirmed mineralisation is confined within a single stratigraphic unit. The increase in grade was due to the Mineralised Domain being strictly based on a grade cut-off, whereas the 2022 MRE included lower grade intercepts where it showed higher grade than the barren zones and continuity with the adjacent mineralisation.

The Mineralised Domain was created with a cut-off grade applied on a sample level, coding the samples with binary indicators, and estimating the probability of the above-cut-off-grade domain (Mineralised Domain) existing in an estimated location. The method offered a way of estimating the potential metal content that could be expected in estimated locations, however, it should be emphasized that while this MRE offered a useful estimate, this deposit will require a rigorous and densely-spaced grade control programme should this project be taken into operation, given its short-scale variability.

Following an extensive re-logging campaign and focussed mineral identification logging, a physical geological marker demarcating the Volspruit Reef could not be identified in the drill core. Due to the absence of a physical marker, no Measured Mineral Resources have been declared for this new MRE.

Apart from additional infill drilling to upgrade areas of lower confidence that could always be advantageous, a geophysical survey of very high resolution could be of great benefit to identify and delineate fault structures with more confidence.

Earthlab also recommends that an SG-measurement verification campaign should be executed.

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LIST OF ABBREVIATIONS AND GENEREIC TERMS

2E + Au	Platinum, palladium, and gold
AED	African Environmental Development (Pty) Ltd
Au	Gold
BC	Bushveld Complex
BMS	Base metal sulphides
CP	Competent Person
Cr	Chromium
CRM	Certified Reference Material
Cu	Copper
CU11L	Cyclic Unit 11 Lower
CU11U	Cyclic Unit 11 Upper
CU12L	Cyclic Unit 12 Lower
CU12U	Cyclic Unit 12 Upper
CV	Coefficient of variation
DA	Dynamic Anisotropy
DHID	Drill hole identity
DMRE	South African Department of Mineral Resources and Energy
E	East
Earthlab	Earthlab Technical Division (Pty) Ltd
EcoE	Eco Elementum
g/t	Grams per tonne
GVN	Grasvally Volspruit North (historic name)
GVS	Grasvally Volspruit South (historic name)
ha	Hectare
IGS	Integrated Geological Solutions (Pty) Ltd
IPD	Inverse Power of Distance
JORC	Joint Ore Reserves Committee
K	Potassium
KE	Kriging Efficiency
km	kilometre
km/h	Kilometres per hour
KNA	Kriging Neighbourhood Analysis
m	Metre
Ma	Million years ago
MAE	Mean Absolute Error
mm	Millimetre
mX	Metres in the X-axis
mY	Metres in the Y-axis
mZ	Metres in the Z-axis
mamsl	Metres above mean sea level
MPRDA	Minerals and Petroleum Resources Development Act of the Republic of South Africa (Act 28 of 2002)
MRE	Mineral Resource Estimate
N	North
NE	North-east
NW	North-west
Ni	Nickel



NQ	A letter name specifying dimensions of bits, core barrels, and drill rods in the N-size and Q-group wireline diamond drilling system having a core diameter of 47.6 mm and a hole diameter of 75.7 mm
OK	Ordinary Kriging
Oz	Troy ounce
PGE	Platinum Group Elements
PGM	Platinum Group Metals
PPD	Pan Palladium South Africa (Pty) Ltd
Pt	Platinum
Pd	Palladium
QAQC	Quality Assurance and Quality Control
RANSAC	Random Sample Consensus
Rh	Rhodium
RLS	Rustenburg Layered Suite
RPEEE	Reasonable Prospects for Eventual Economic Extraction
RSA	Republic of South Africa
Ru	Ruthenium
S	South
SE	South-east
SG	Specific gravity (equivalent to density)
SHERQ	Safety Health Environment Risk & Quality
SK	Simple Kriging
SR	Slope of Regression
SW	South-west
t	metric tonnes
Th	Thorium
t/m ³	Tonne per cubic metre
TML	Thabazimbi-Murchison Lineament
U	Uranium
VMC	Volspruit Mining Company (Pty) Ltd
VN	Volspruit North (current name)
VR	Volspruit Reef
VS	Volspruit South (current name)
W	West
WGS	World Geodetic System
XRF	X-Ray Fluorescence





MEASUREMENT SYSTEM

The datum used for this project is the Hartebeesthoek94 Lo29 projected coordinate system with WGS84 as the reference ellipsoid.

The metric system was used for all measurements. A conversion table for metric units to imperial units can be viewed below.

British English was applied with dates reported in dd/mm/yyyy format.

Metric amount	Metric unit		Conversion factor	Imperial unit
1	Millimetre	=	0.0394	Inches
	Centimetre		0.3937	Inches
	Metre		3.2808	Feet
	Kilometre		0.6214	Miles
	Square metres		10.7639	Square feet
	Square kilometre		0.3861	Square miles
	Hectare		2.4711	Acres
	Cubic metre		35.3147	Cubic feet
	Gram		0.0353	Troy ounces
	Kilogram		2.2046	Pounds
	Metric tonne		2204.62	Pounds
	Metric tonne		1.1023	Short tons
	Grams per cubic centimetre		0.0361	Pounds per cubic inch
n	Degrees Celsius	=	$(n * 9/5) + 32$	Degrees Fahrenheit

1 INTRODUCTION

This Mineral Resource Estimate (MRE) was done in fulfilment of purchase order number 976 placed on Earthlab Technical Division (Pty) Ltd (“Earthlab”) by Pan Palladium South Africa (Pty) Ltd (“PPD”).

Earthlab created a new geological model and Mineral Resource Estimate with platinum, palladium, gold, copper, and nickel estimated in the Mineral Resource.

Due to the overlapping of certain geological aspects and project particulars between Volspruit North (VN) and Volspruit South, some of the chapters in this report will be identical or near identical to chapters in the technical report of the Volspruit South (VS) 2023 MRE. There may also be content copied directly from the 2022 VN MRE (PO_798-07-Technical_Report_v1) where the information or data remain unchanged and applicable.

1.1 Sources of information

1.1.1 Previous work

Earthlab received the Volspruit Project database in 2021 including a drill hole database, geophysical survey maps and report, a topographic scan, various historic reports including the 2012's MRE technical report.

Earthlab also had the 2022 MRE files available in-house.

1.1.2 New work

During the first part of 2023 Earthlab relogged all the available VN and VS drill core stored at the Volspruit core shed. The new lithological, mineralogical, and stratigraphic logging aided Earthlab in this MRE's creation.

1.1.3 Academic Literature

To aid Earthlab's regional and local geological understanding, various published academic papers were used. Cited content is referenced in the Bibliography section.



2 PROJECT LOCATION AND DESCRIPTION

2.1 Location

The Volspruit Project (hereinafter “the Project,” referring to both VN and VS combined) is located on the farm Volspruit 326 KR as well as portion two of Zoetveld 294KR within the Mogalakwena district municipality, Limpopo Province, in the Republic of South (RSA). The farm is situated approximately 15 km to the south of the town of Mokopane and 60 km south of the capital of Limpopo, Polokwane.



Figure 1. Locality map of the Volspruit Project with respect to South Africa.

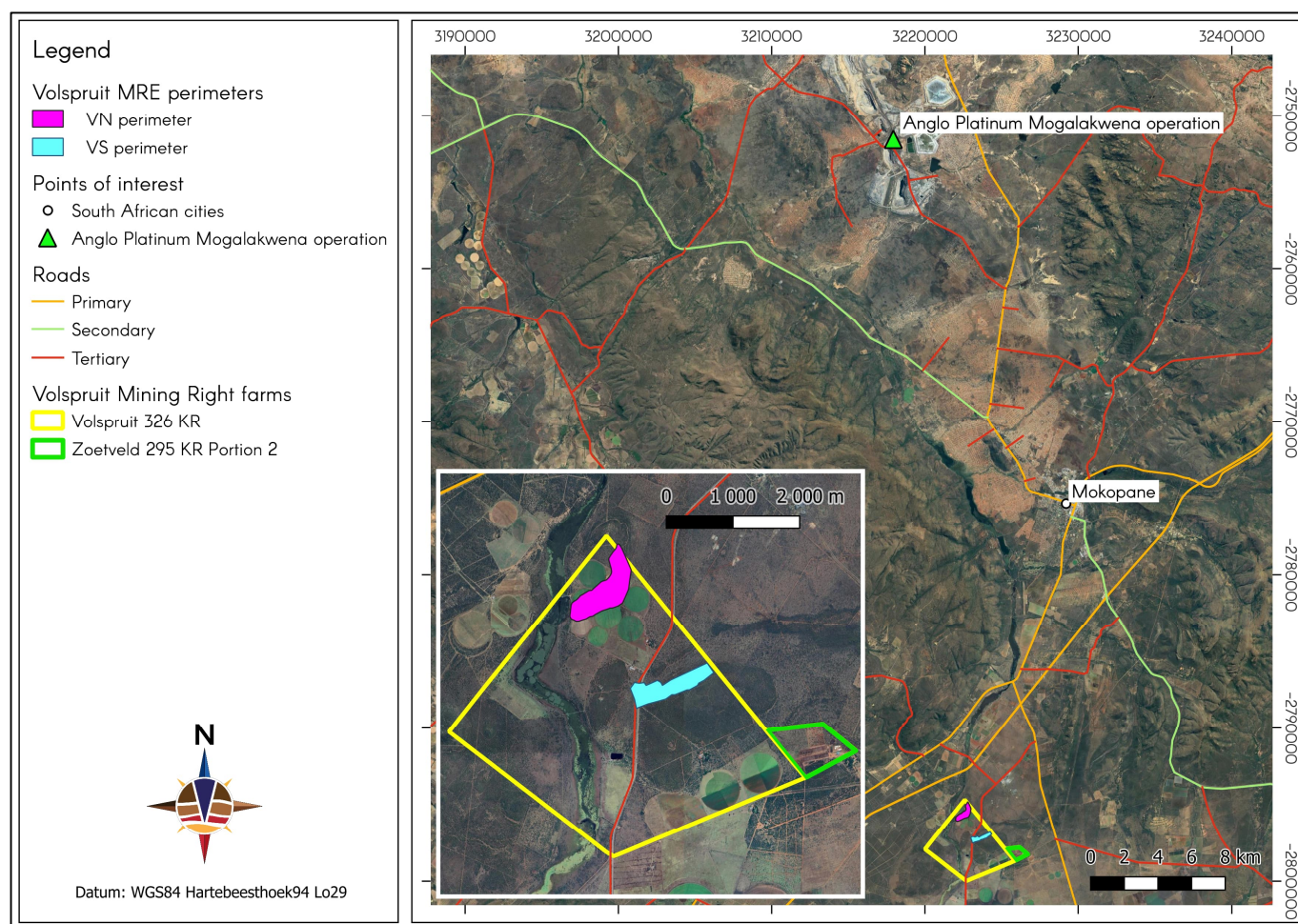


Figure 2. Location of the Volspruit Project relative to the nearest city and large-scale mining operation.

2.2 Topography

Apart from a small hill just north of VN and one south of VS, the project is situated in a relatively flat-lying area next to the Nyl River, at an elevation of approximately 1,050 to 1,100 metres above mean seal level (mamsl). The majority of the VN domain lies between 1,060 and 1,070 mamsl, while VS lies mostly between 1,070 and 1,090 mamsl, as illustrated in Figure 3.

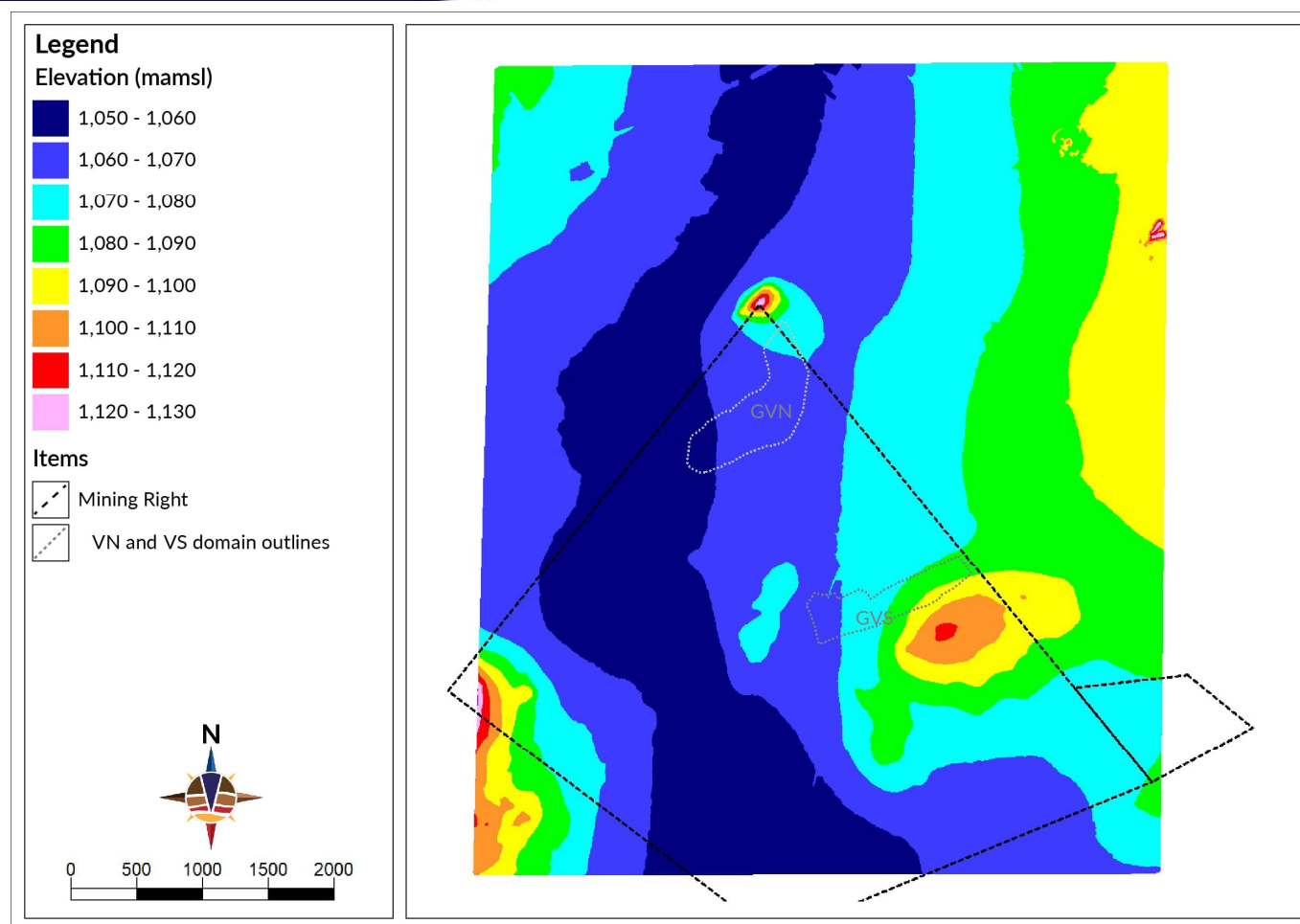


Figure 3. The topography of the project area.

2.3 Environment and climate

The Project is situated alongside the Nyl River, which crosscuts the farm along the western boundary fence. The Nyl River forms a large flat-lying valley, which is filled with semi-marsh-like areas and shallow running outlets. The vegetation across the region is classified as Waterberg Savannah hosting a myriad of open tree plains on shallow rolling hills.

The climate is semi-arid with moderate winter temperatures, ranging from 3°C to 25°C, and warm to hot summer temperatures, ranging from 16°C to 36°C. The average annual rainfall in the area has been recorded as 350 to 400 mm, which is mostly confined to the summer months.

2.4 Land occupation

The land is partially used for farming, and apart from a few farmhouses and other infrastructure, the land does not host any communities or densely populated residential dwellings.

2.5 Infrastructure and accessibility

The Volspruit Project is situated close to major infrastructure, including national roads, railway, and overhead power lines. The R101 national road from Mokgophong (previously Naboomspruit) to Polokwane and the north-south railway line are located on the northern side of the project area. The N11 national highway runs south-easterly to the eastern side of the project area, whereas the N1 national toll highway passes the western boundary fence of the project area.

On-site infrastructure includes water and power to the extent described in the historical Pre-feasibility Report dated December 2004.

Two small farmsteads and farming land are located on the project location, which is confined to the northern and south-eastern boundaries.

The project location can be accessed from the N11 national highway, via the Singlewood turnoff travelling toward the south. The Singlewood road is paved up to and within 5 km from the site, where access is over an all-weather gravelled section of the road. The gravel road is maintained by graders on a semi-quarterly basis but is subject to municipal delays and governance.

3 LAND TENURE AND MINERAL TENEMENT

3.1 Project ownership

The Project is currently owned by the Volspruit Mining Company (Pty) Ltd. Iolite Trading 16 (Pty) Ltd, which is a 100% Broad-based Black Economic Empowerment (BBBEE) company, owns 26% of Volspruit Mining Company, while PPD owns 74%. PPD is owned 100% by Sylvania (Mauritius) Ltd which falls fully under the parent company, Sylvania Platinum Ltd ("Sylvania").

3.2 Land tenure and surface rights

The surface rights of the area covered by the mining right in respect to portions 5 and 7 of the farm Volspruit 326 KR are held by Volspruit Mining Company, while the surface rights to portions 1, 2, and 8 are held by private individuals. The Surface Rights for Zoetveld are held by Zoetveld Properties (Pty) Ltd (Zoetveld). Zoetveld is a wholly owned subsidiary company of Sylvania. Grasvally Chrome Mine the holder of the Mining Right in respect of the remaining extent and Portion 1 of the Zoetveld 294 KR.

The Surface Rights ownership over the Volspruit and Zoetveld are summarised in Table 1 below.

Table 1. Surface rights ownership breakdown.

Farm name	Portion	Owner	Contact person
Volspruit 326 KR	1	Faer Glen Properties No 55 (Pty) Ltd.	Phillipie de Klerk
Volspruit 326 KR	2	Elizabeth De Beer	Dewald De Beer
Volspruit 326 KR	5 and 7	Sylvania Properties	Lisa Watermeyer
Volspruit 326 KR	8	L P Steenkamp	Lukie / Kariena Steenkamp
Zoetveld 294 KR	RE	Zoetveld Properties (Pty) Ltd.	Lisa Watermeyer

3.3 Mining Rights

3.3.1 Volspruit 326 KR (MPT No. 11/2018)

This Mining Right was granted to Volspruit Mining Company (Pty) Ltd for Platinum Group Metals (PGMs), gold (Au), nickel (Ni), and chrome (Cr) in respect of the farms Volspruit 326 KR and Zoetveld 294 KR Portion 2, located in the Magisterial District of Mogalakwena, Limpopo Province. The Mining Right is valid for 30 years with the commencement date of 04 October 2017, expiring on 03 October 2047.

A Section 102 application was lodged with the DMRE to include the mineral copper (Cu) in terms of MPRDA. Section 102 was granted by the Department of Minerals and Energy on 12 January 2021 and notarially executed with the Mineral and Petroleum Titles Registration Office (MPTRO) in Pretoria.

3.3.2 Zoetveld 294 KR (MPT No. 16/2019)

This Mining Right was granted to Grasvally Chrome (Pty) Ltd. (Grasvally) for the mineral chrome (Cr) in respect of the remaining extent and Portions 4, 5 and 18 of the Grasvally 293 KR and the remaining extent and Portion 1 of the farm Zoetveld 294 KR, located in the Magisterial District of Mogalakwena, Limpopo Province. The Mining Right was granted in 2018 for a period of 30 years expiring on 04 September 2048.

A Section 102 application was lodged with the DMRE on 13 December 2019 to include the mineral rock aggregate and PGMs in terms of MPRDA. Section 102 was granted by the Department of Minerals and Energy

and notarially executed with the MPTRO in Pretoria on 07 February 2020. The amendment excludes Cu and Ni.

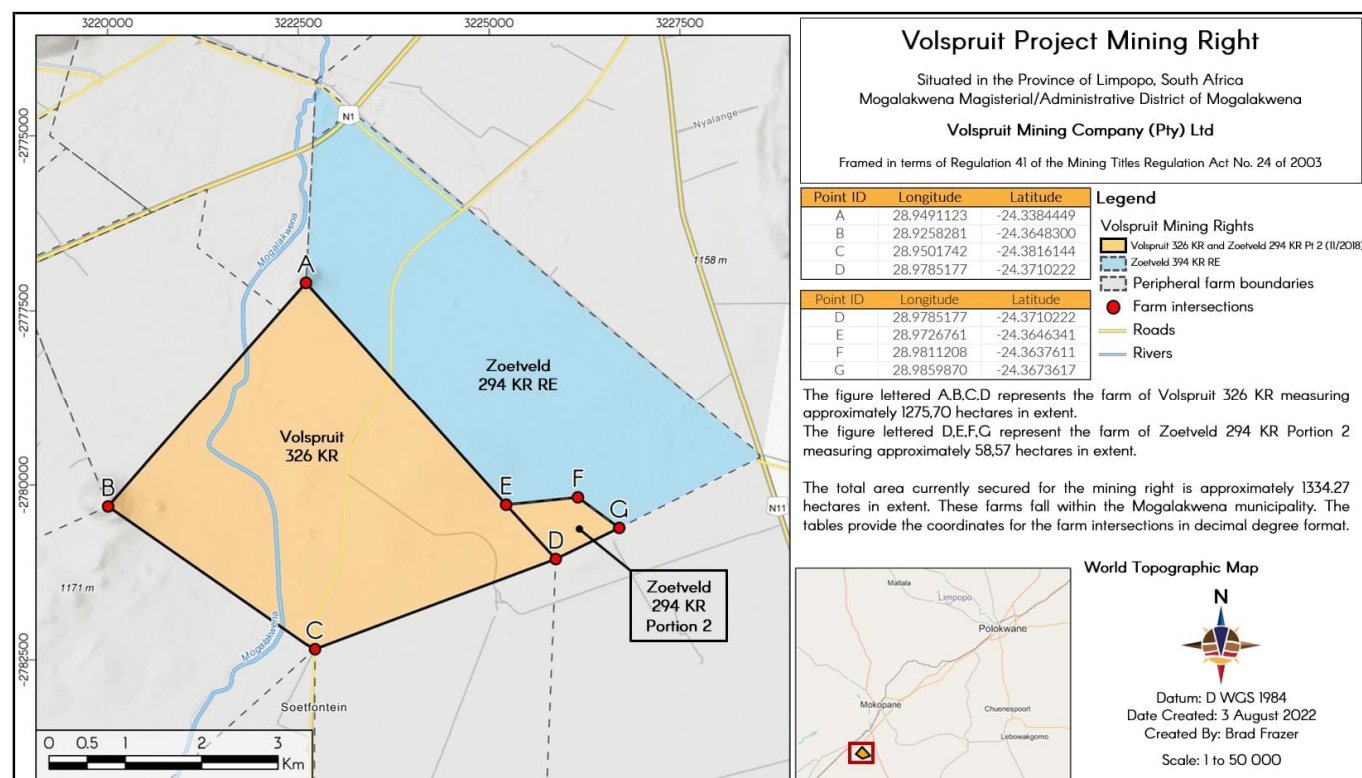


Figure 4. Map showing the location of the Volspruit Mining Right.

3.4 Royalties and agreements

A Sale of Shares and Claims Agreement (Agreement) in respect of the Grasvally Project has been entered into between Sylvania Resources Proprietary Limited (Sylvania Resources), Sylvania Metals Proprietary Limited (Sylvania Metals) and Forward Africa Mining Proprietary Limited (Forward Africa) on 03 November 2021. In this agreement Sylvania Resources and Sylvania Metals agreed to sell their shares and claim in Grasvally, respectively to Forward Africa. The agreement further stipulates that VMC remains the Mineral Rights holder for PGMs in respect of the Grasvally Mining Right. VMC intends to lodge a Section 102 application with the DMRE in terms of MPRDA to amend Volspruit Mining Right to include the Properties in the mining area to which the Volspruit Mining Right relates and to include the right to mine PGMs from the Grasvally Mining Right area.

According to the agreement, until such time that Section 102 has been granted and amendments to the Volspruit Mining Right have been notarially executed Grasvally and VMC shall enter into a contract mining agreement under which Grasvally will appoint VMC as contract miner, following the provisions of Section 101 of the MPRDA. Under this agreement, VMC will mine and process PGMs included in the Grasvally Mining Right and pursuant to which Grasvally will sell the PGMs so mined and processed to VMC until such time that Section 102 has been notarially executed.



4 PROJECT HISTORY

4.1 Ownership

Prospecting Licences over the properties comprising the Volspruit project were held at various stages by various mineral exploration companies. Previously, African Metals Corporation (Amcor), Anglo American Corporation (AA) and Shell held Prospecting Rights over Volspruit and conducted exploration work during the 1950s and 1960s. Rio Tinto Zinc (RTZ) was the holder of Mining Rights during the 1970s and 1980. Genmin held the Mineral Rights at some time period and drilled three metallurgical drill holes in addition to the 39 diamond drill holes over the Northern and Southern Bodies. Limited verifiable information is available from these periods (SRK , 2011).

In 2001 the rights to the property were taken over by PPD who drilled an additional 151 diamond drill holes in 2002 and 2003 over the project area that confirmed the mineralisation in the North and South Bodies and extended the North Body to the west (SRK , 2011). The Prospecting Right license was granted on 27 February 2006 for five years to the holding company of PPD.

4.2 Historic exploration

The following section contains information regarding the historic exploration campaigns conducted on the Volspruit Project. The information has been synthesised from previous Technical Reports completed for PPD over the years i.e., D1221P Venmyn Report, and Integrated Geological Solutions (Pty) Ltd (IGS) Vol Res&Res Report May 2012 Final. Earthlab was not involved in the physical sampling and assaying of the Volspruit Project drill core.

The Volspruit Project has been explored over several decades spanning back to as far as the 1920s when Hans Merensky first started his exploration for Pt across the BC. Various mining companies have since prospected the area for several resources conducting a multitude of exploration techniques spanning from the 1950s to the present day. A generalised history of the project development on Volspruit is summarised below in Table 2.

Table 2. Project development history summary.

Year	Summary of events
1950 - 1960	27 Diamond drill holes were drilled by Amcor totalling 739 m and 13 drill holes were drilled by Anglo American totalling 950 m. No geological and or sampling data has been recovered for this period.
1970 - 1980	Rio Tinto Zinc produced a large soil geochemistry report which was followed by 66 diamond drill holes. 24 drill holes were used to define a resource for the North Deposit at 7 Mt with 1.99 g/t 2E, 0.15% Ni and 0.06% Cu. The remaining drill holes were used to define the South Deposit at 39Mt with 1.15 g/t 2E, 0.17% Ni and 0.05% Cu
1988	Genmin conducted more soil geochemistry studies followed by updating the resource from Rio Tinto Zinc by adding 39 diamond drill holes for the North Deposit and 10 holes to the South Deposit. Genmin's Mineral Resource update indicated 12.7 Mt at 2.25 g/t 2E + Au and 0.19% Ni for the North Deposit while indicating 24 Mt at 1.33 g/t 2E + Au for the South Deposit.
1992	Genmin continued working on the Volspruit project producing an in-depth Ground Water study and most importantly a Pit Optimisation Design for the North Deposit using Whittle 4D software.



Year	Summary of events
2001	PPD drilled 151 drill holes and confirmed the mineralisation on Volspruit.
2003 – 2004	PPD conducted two Pre-feasibility Studies with consultants including RSG Global and The Mineral Corporation.
2004	Knight Piesold conducted a Pre-feasibility geotechnical study for Pan Palladium.
2010	PPD continued studies during a pre-feasibility stage. These included Biodiversity, Hydrogeological and Flood Modelling reports on Volspruit. Mintek was approached to undertake Flotation Characterisation and Bulk Concentrate Production for the Volspruit Project.
2010	IGS commenced producing an in-depth Technical Report of the Resource Estimation of the Volspruit North and South Deposit. The Knight Piesold geotechnical report was reviewed by SRK Consultants and found to be lacking.
2011	Short-Form Techno-Economic Statement was completed by Venmyn dated 31 July 2011.
2012	IGS submitted the final geological and Resource Estimation report on the Volspruit Project at a cut-off grade of 0.34 g/t 2E + Au. Knight Hall Hendry was conducted another geotechnical report to make up for the previous gaps identified.
2012	MDM Engineering conducted a Pre-feasibility Study on a concentrator and infrastructure for the Volspruit Project. EPS Engineering Services conducted a Smelter Pre-feasibility Study.
2012	Venmyn updated their Short-Form Techno-Economic Statement of 2011 dated 22 June 2012, which was in addition to other technical reports based on the IGS Mineral Resource report dated May 2012.
2020 – 2021	DRA was commissioned by VMC to produce a Whittle Pit optimisation of the North and South bodies. Results thereof have not been viewed by Earthlab. DRA conducted metallurgical optimisation for the recoveries of the Volspruit Project. DRA reported on 16 November 2020 that PGE recovery was between 65-70% at a feed grade of 1.5-2 g/t. The first draft of the report is dated 14 December 2020.
2021	Earthlab was commissioned by VMC to conduct a Scoping Study into the method statement produced on 25 November 2020. Cross-sections through the exploration drill hole sample data show the possibility of a 2E + Au grade above 1.25 g/t correlating laterally between drill holes (i.e., North body). Earthlab's recommendation was to re-create the resource models at a higher minimum 2E + Au grade. This would have resulted in a smaller resource volume at a higher average grade (material above the mineralised zone will be effectively waste stripping, with a new stripping ratio to be determined based on the higher minimum grade).



Year	Summary of events
2022	Earthlab created a new VN MRE without any additional drilling, logging, or sampling. The modelling approach was to flag mineralised intervals in the drill holes and modelling those with the clearest continuity into a continuous wireframe in which the block modelling was done. Where mineralised intercepts could not easily be related to adjacent mineralised intercepts, they were excluded from the model and MRE and essentially formed part of the waste. The exclusion was based on the lack of geological understanding at the time. Earthlab reported a new MRE for VN and a subsequent mining study was performed on the new model.
2023	Earthlab oversaw the drilling of 10 new metallurgical drill holes in VN to collect material for metallurgical testing as well as analysing for Rh, Ru, and Ir, apart from Pt, Pd, and Au, in order to perform regression of the additional metals on the models' existing Pt, Pd, and Au values.
2023	After relogging the existing VS and VN core, Earthlab could establish a better geological understanding with a refined stratigraphic interpretation. New MREs for VN and VS are reported.

4.2.1 Geophysics

The following section comprises a summary of the exploration geophysics completed for the Volspruit Project and references all the information below in the report titled, "Interpretation of High-Resolution Aeromagnetic and Spectrometer Survey Data over the project area which, at the time, was referred to as the Grasvally Project area, Potgietersrus, Northern Province, on behalf of Pan Palladium South Africa (Pty) Ltd", by Geoff Campbell, GAP Geophysics (Campbell, 2002).

During August 2002, a high resolution aeromagnetic and radiometric survey was flown by FUGRO over the Grasvally Project area on behalf of PPD. Data acquisition, processing, and interpretations were managed by GAP Geophysics, who subsequently delivered their preliminary results to PPD in October 2002. Interpretations were aimed at mapping the stratigraphy and structure of the Bushveld mafic and Basement rocks underlying the area, with a particular focus on the PGM-bearing pyroxenites occurring within the Lower Zone units.

FUGROs' survey was flown over a roughly rectangular-shaped block with dimensions of 10.5 km (NE) by 7.2 km (NW) approximately 13 km south of the town of Mokopane. The area flown falls on the eastern banks of the Nyl River and is bounded by quartzite ridges of the Pretoria Group in the NE.

Interpretation objects were outlined at generating pseudo-geological and structural maps which can better locate the following features:

- Floor contact and distribution of overlying Bushveld Marginal, Lower, and Critical Zones for possible PGM mineralisation.
- Lateral displacements and/or strike discontinuities along marker horizons, which reflect dip and strike.
- Linear or curvilinear features reflecting shearing or faulting.
- Positions of intrusive dykes or veins which reflect significant mining loss-of-ground areas.

The mapping was considered qualitative in nature, although exhaustive, utilizing a conventional image processing approach incorporating multiple overlayed datasets. FUGRO flew the operations using a Bell 206 IIIB Jet Ranger at airspeeds of 120 to 160 km/h along a 130°T flight line direction at 100 m spacing, and a

220°T tie line direction at 1,000 m spacing. Navigation was managed through real-time differential GPS. The following methods, software and instrumentation were implemented for the geophysical survey.

4.2.1.1 Aeromagnetic survey

The magnetometer system used during the survey included a Two Scintrex CS3 caesium vapour system with a horizontal gradiometer sensor configuration. The sample rate was 0.1 seconds (4 m ground equivalence) at 0.01nT sensitivity.

Data was compiled by FUGRO using GEOSOFT OASIS and ECS software packages to produce a dataset following the line procedures listed below:

- Recovery of digital magnetic and GPS flight path data
- Inspection of velocity reports for speed error
- Importing of fiducials and sensor data to secure database
- Removal of magnetic spikes using fourth difference operators
- The normalisation of line magnetic data to a common datum

4.2.1.2 Radiometric survey

The radiometric system used included an Exploranium GR-280 spectrometer with a crystal volume of 1,000 cu in. The sampling rates were 1.0 seconds (40 m ground equivalence). Full ECS software spectrometer processing packages were used involving the following corrections and processes:

- Livetime/deadtime normalisation
- Energy calibration
- Cosmic correction
- Radon correction
- Noise adjusted singular value decomposition (NASVD)
- Windowing of 256 channel spectrum into K, Th, U, and Total Count
- Compton stripping of K, Th, and U channels
- Height attenuation correction
- Conversion to ground concentrations (%)
- Normalising ground concentrations to a common datum

4.2.1.3 Conclusions by GAP Geophysics

The major geological findings from the interpretations of the aeromagnetic-radiometric surveys concluded the following points (Campbell, 2002):

- PGM-bearing pyroxenites at the base of the Lower Zone do not display a unique geophysical signature which would allow for a direct airborne mapping campaign. However, the strong positive and unique magnetic signatures of the heavily serpentinised hanging wall Drummondlea Harzburgites allow for the indirect mapping of the lower PGM-bearing pyroxenites.
- The uplifted Lower Zone block to the west described by Hulbert and Von Gruenewaldt (1986) is confidently mapped through a series of N-S fault blocks along the 13 km NE to N-S striking arc of the Bushveld mafic rocks. The unit is fault-bounded and terminates to the east within the boundary of the Grasvally farm.
- The North Body Mineral Resource within the northern sectors of the Volspruit farm falls downdip from the mapped Drummondlea Harzburgites, inferring a bounding fault that throws up to the north.
- From an aerial point of view, the extensive Lower Zone outcrop is also mapped over complex dome-and-basin interference fold structures on Volspruit and southern Zoetveld, where they extend

eastwards from the arc towards the basement contact. Aeromagnetic data alone cannot confidently classify these structures as domal or basinal.

- The apparent uplifting of the Pretoria Group quartzites in the southern parts of the survey may reflect late-stage faulting.
- Hulbert's (1986) four-phase structural interpretation appears to hold true and has been fully recognised. The various stages of faulting are attributed to the strike-slip movement associated with the Thabazimbi-Murchison Lineament (Zebediela Fault locally) immediately to the south of the area.
- The basement contact with the BC has been confidently mapped over most of the area via a combination of all the survey data above as shales and quartzites which display significant and strongly unique geophysical signatures.

Figure 5 shows the interpreted geological map of the area by GAP Geophysics at the end of the project. Additional maps containing the separate geophysical survey data are contained within the original reports completed for the exploration geophysics.

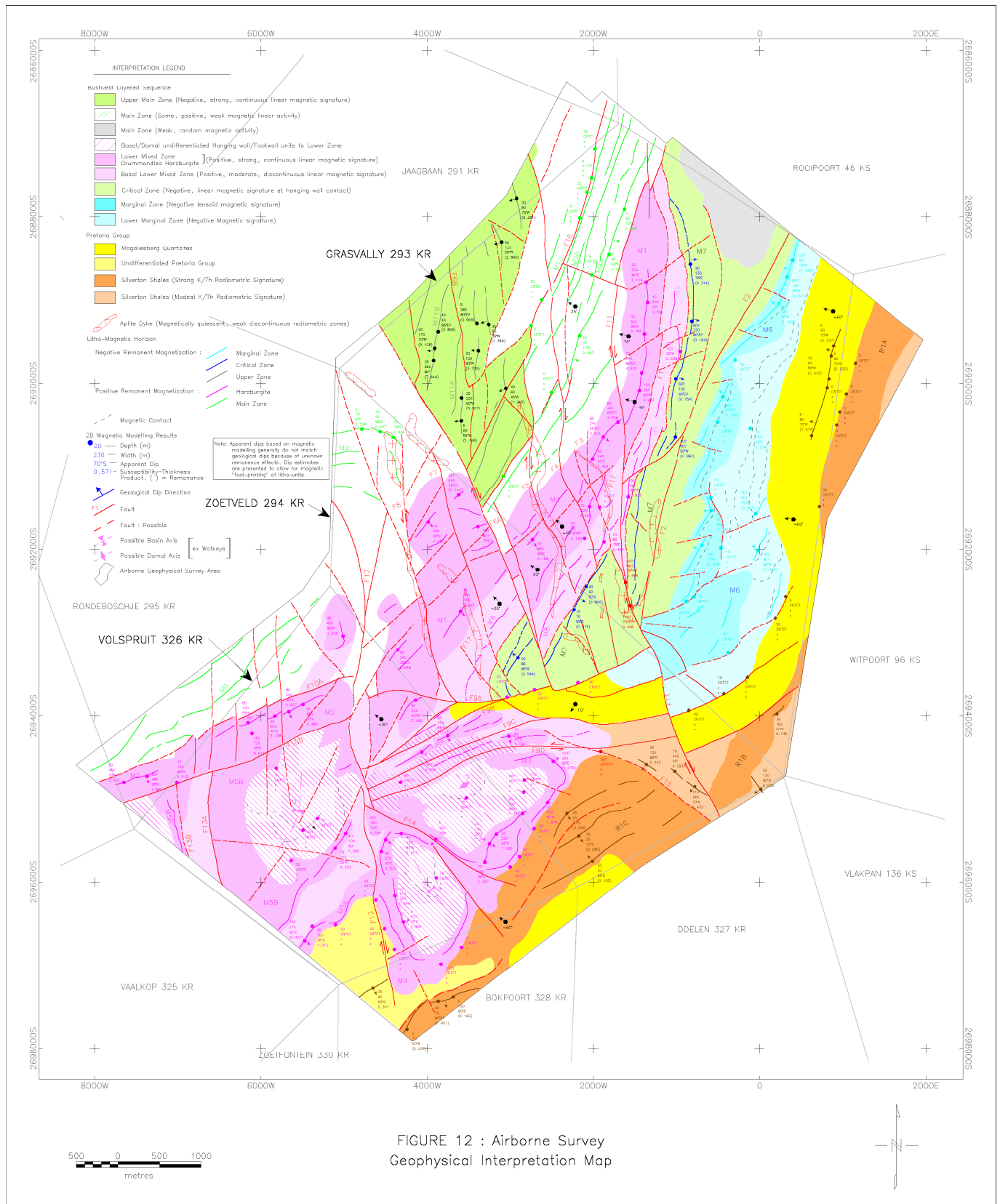


Figure 5. Interpreted geological map of the area by GAP Geophysics (Campbell, 2002).

4.2.2 Mapping

Given the sub-cropping nature of the deposit, field mapping has not yet been performed.

4.2.3 Soil sampling

Rio Tinto conducted a large soil sampling programme to source possible targets for PGM mineralisation. It is presumed that a detailed report on this no longer exists.

Genmin continued the soil sampling programme from Rio Tinto producing a combined dataset containing a total of 3,193 samples. The samples were submitted for analysis by way of atomic absorption spectrometry for Cu, Ni and Cr. Only 45 samples and 104 analyte results are available from the database. Additionally, there is a single hand-drawn map showing the distribution of Cu (ppm) on Volspruit, which highlights the location of the North Body deposit relatively well (Figure 6). The source of the map is unknown and has not been verified by Earthlab.

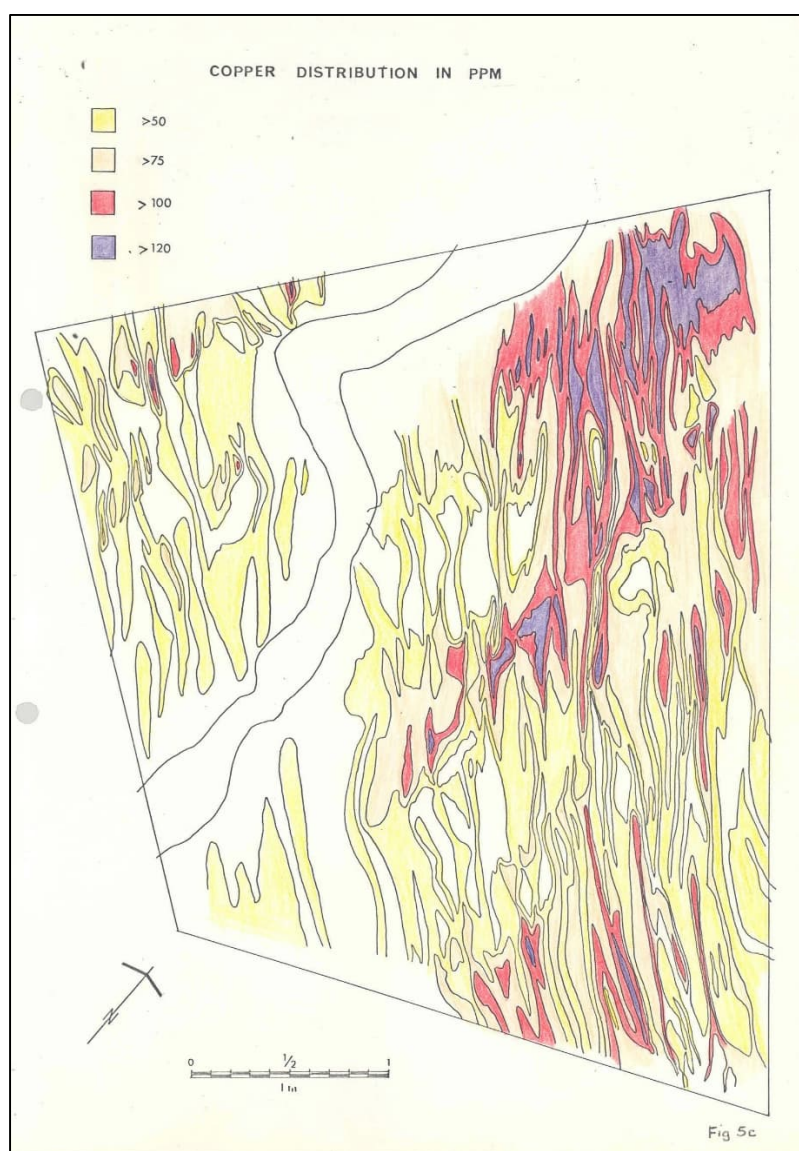


Figure 6. Relatively high Cu values identified by Genmin and Rio Tinto during their respective soil geochemistry sampling projects which coincide with the North Body location.

4.2.4 Surface drilling

The Volspruit Project contains both diamond and reverse circulation drill hole data on two separately identified ore bodies, the North Body, and the South Body. Numerous drilling campaigns have been executed on VN and VS, however, not all the historic drill core were available for verification and relogging. While Earthlab could source some information on historic drilling from previous reports, Earthlab did not do any verification on work related to core that are no longer available in the Volspruit Core Yard. The following is taken from the SRK report in 2011:

- Amcor drilled twenty-seven boreholes, totalling 739 m, whilst prospecting for chrome in the area. No results are available. Thirteen boreholes totalling 950 m were drilled by AA but again no further details are available. It is known that Shell was active in the area and whilst no details of their exploration are available, it is thought that the work involved regional stream sediment or soil sampling.
- The first significant work performed on the property was by RTZ who focused on PGE and base metal (BM) exploration. RTZ exploration involved a grid-based soil geochemistry programme that identified broad target areas for follow up percussion drilling (200 to 300 holes). No details of either the soil sampling or percussion drilling programmes are currently available. This was followed up by a core drilling programme, with twenty-four holes drilled into the northern ore body, and twenty-seven into the southern ore body.
- Genmin drilled three metallurgical drill holes, and an additional thirty-nine core holes into the northern ore body and ten into the southern ore body.
- In 2001 the rights to the property were taken over by Pan Palladium who drilled an additional 151 diamond holes in 2002 and 2003 over the project area that confirmed the mineralisation in the northern and southern bodies and extended the northern body to the west.
- In 2004 a Pre-Feasibility study was done for Pan Palladium, and the Resource used in this study was an estimate done by RSG Global in 2004. The Mineral Resources were estimated for both the northern and southern bodies.
- In early 2010 Pan Palladium undertook additional exploration on the northern body, totalling forty-two holes. Following this was a revised Resource estimate on the Northern ore body by IGS in 2010. The IGS estimate used results from 193 drill holes, all drilled by Pan Palladium, and all previous data were excluded by IGS based on the inability to verify analytical data (no drill core or assay certificates) and the lack of electronic geological logs.

Earthlab oversaw the drilling of 10 new metallurgical drill holes in VN to collect material for metallurgical testing as well as analysing for Rh, Ru, and Ir, apart from Pt, Pd, and Au, to perform regression of the additional metals on the models' existing Pt, Pd, and Au values.

4.3 Mineral Resources and Ore Reserves

4.3.1 Mineral Resource by IGS, 2012

Based on a cut-off grade of 0.34 g/t 2E+Au, Integrated Geological Solutions (Pty) Ltd (IGS) reported an MRE in 201. The northern body's MRE is summarised in Table 3.

The numbers in Table 3 were not verified by Earthlab and were taken as is from the IGS report of 2012.

Table 3. The VN MRE reported by IGS in 2012.

Sulphide / Oxide	Resource Class	Tonnes	Tonnes after 10% geoloss	SG	2E+Au (g/t)	Cu (%)	Ni (%)
Fresh	Measured	26,587,544	23,928,790	3.05	1.30	398	1.424
	Indicated	14,551,442	13,096,298	3.04	1.14	381	1,488
	Inferred	984,223	885,801	2.93	1.14	458	1,320
Sub-total		42,123,210	37,910,889	3.05	1.24	393	1,444
Transitional	Measured	2,415,509	2,173,958	2.85	1.14	461	1,226
	Indicated	1,431,167	1,288,050	3.00	1.05	294	1,729
	Inferred	725,876	653,288	2.99	0.96	329	1,741
Sub-total		4,572,552	4,115,297	2.92	1.08	388	1,465
Oxide	Measured	2,133,613	1,920,252	2.20	1.25	541	1,371
	Indicated	879,355	791,420	2.20	1.08	355	1,546
	Inferred	76,538	68,884	2.20	0.80	312	1,571
Sub-total		3,089,507	2,780,556	2.20	1.19	482	1,426
Grand total		49,785,268	44,806,741	2.98	1.22	398	1,444

4.3.2 MRE by Earthlab, 2022

Earthlab reported an MRE in 2022 after remodelling a domain based on a manual approach which comprised of flagging samples with a grade above 1.0 g/t 2E+Au but allowing for manual flagging of intercepts below this grade if the intercept showed clear continuity with adjacent drill holes' intercepts in 3D.



Table 4. The VN MRE reported by Earthlab in 2022.

Classification	Total tonnage (t)	Tonnage @ 10% Geoloss (t)	Density (g/cm ³)	Pt grade (g/t)	Pd grade (g/t)	Au grade (g/t)	2E + Au grade (g/t)	Cu grade (%)	Ni grade (%)
Measured	3,508,449	3,157,604	3.02	1.01	1.23	0.0513	2.30	0.0656	0.170
Indicated	13,011,849	11,710,665	2.99	1.01	1.19	0.0512	2.26	0.0597	0.176
M+I	16,520,299	14,868,269	2.99	1.01	1.20	0.0513	2.27	0.0610	0.175
Inferred	620,021	558,019	2.69	1.17	1.09	0.0614	2.33	0.0672	0.173
Total	17,140,320	15,426,288	2.98	1.02	1.20	0.0516	2.27	0.0612	0.175





5 EXPLORATION AND SAMPLING

5.1 Safety

The following relates to the relogging campaign Earthlab undertook at the Volspruit Core Yard during 2022 and 2023.

5.1.1 Legal appointments

Chief Safety Officer: Johann Esterhuyse

Safety Officer: Theunis Cornelius Botha

Subordinate Manager: Walter Pretorius

5.1.2 Risk management, SHERQ compliance, and safety record

The team executed their work in line with Earthlab's Standard Operating Procedure (SOP), ensuring a safe work environment by adhering to Earthlab's Baseline Risk Assessment and completing Earthlab's Hazard Identification and Risk Assessment (HIRA) checklist on a daily basis. The team achieved a perfect safety record with zero incidents.

5.2 Geophysics / Remote sensing

No new geophysics or remote sensing has been done.

5.3 Mapping

No new mapping has been performed.

5.4 Drilling programme

No new drilling related directly to this MRE's purchase order has been conducted. Earthlab oversaw the drilling of 10 new metallurgical drill holes on VN in early 2023, however, the particulars of this campaign is reported in a separate report (EARTH-PPD_939-1-Report_1). The sampling and assaying work was still in progress at the time of producing this MRE and was therefore excluded from the MRE. A future MRE may include the assay results of the latest drilling campaign.

5.5 Logging and photography

Refer to section 5.4 and the report named EARTH-PPD_939-1-Report_1.

5.6 Sampling methods and protocols

Refer to section 5.4 and the report named EARTH-PPD_939-1-Report_1.

5.7 Assay / Analytical methods

Refer to section 5.4 and the report named EARTH-PPD_939-1-Report_1.

5.8 Rehabilitation

Refer to section 5.4 and the report named EARTH-PPD_939-1-Report_1.

6 DATA INTEGRITY AND VERIFICATION

6.1 Database storage and management

The historical database was provided to Earthlab by VMC in a Microsoft Access Database format, which has subsequently undergone a migration to a secure SABLE® database where each project is given a project definition with tailored validations and mandatory cleaning by Earthlab. This has been done to maintain data integrity as per the Joint Ore Reserves Committee (JORC) 2012 requirements.

6.2 Quality assurance

None of the re-logged drill holes of 2023 were re-sampled. The re-logging of the Grasvally North drill holes was completed in accordance with the standardised method for classifying the stratigraphy, lithology and mineralisation as described in Section 9.3.

Earthlab performed a sampling programme on nine (9) Grasvally North metallurgical drill holes. The sampling was conducted on 1 m intervals, respecting lithological and weathering intervals. The sampling intervals were marked out on the core before cutting after which sampling occurred. Quarter core was sampled and the remaining quarter was left behind as reference samples. The remaining half core sample was left behind for bulk sampling for further metallurgical test work. The sample bags were sealed directly after packing with one sample name ticket inside the bag and one stapled to the top of the bag. The samples were divided into batches of 53 samples (of which forty were primary samples and thirteen were quality control samples). The samples were transported to SGS laboratories in Rustenburg by an Earthlab Geologist and the chain of custody was handed over to SGS for the analysis of the samples for 5E and Au.

A total of 383 samples were collected including quality control samples of which 288 were primary samples. The quality control samples consisted of blanks, standards, and duplicates (Table 5).

Table 5: Quality control samples used during the sampling of Grasvally North Metallurgical sampling programme.

Sample Type	Name	Number
Blank	AMIS0577	37
Certified Reference Material	AMIS0502	4
Certified Reference Material	AMIS0499	8
Certified Reference Material	AMIS0498	10
Certified Reference Material	AMIS0486	8
Duplicates	-	28

All the data was captured into SABLE® upon completion of the logging and sampling of the metallurgical drill holes and the re-logging. The data was then validated and signed off by the Database Manager if all was in order.

6.3 Verification of drilling data

Earthlab did not verify collar positions or drill hole orientations or depths, and accepted the database contents on this as is.

The relogging campaign that Earthlab undertook (covered in a separate report) verified the existence of historic core of 150 diamond drill holes which was subsequently used for the modelling and estimation covered in this report.

54 out of the 150 available drill holes had intervals of missing core, i.e., no core available for relogging or assay verification. Presumably, many of these intervals were sent in full for metallurgical test work without leaving reference material behind. Of the ~21,950 m of drilling length subjected to relogging, ~1,150 m was missing. Of the ~1,150 m missing core, ~214 m was part of the Mineralised Domain (refer to chapter 11 for more information on the Mineralised Domain).

Earthlab also did a test on checking the collar surveys against the topography wireframe received from VMC. The absolute difference between the Z-coordinate of each collar and the Z-coordinates of the topography in that location is summarised in the chart seen in Figure 7. It was uncertain whether it was the collar survey or the topography causing the discrepancy, but nevertheless the difference was relatively small. Only GVN020 and GVN021 showed significant differences (>2 m). The holes were not altered and was used as is. GVN020 did not contain sufficient mineralisation to be included in the Mineralised Domain, and GVN021 was a fault block that was downgraded to Inferred.

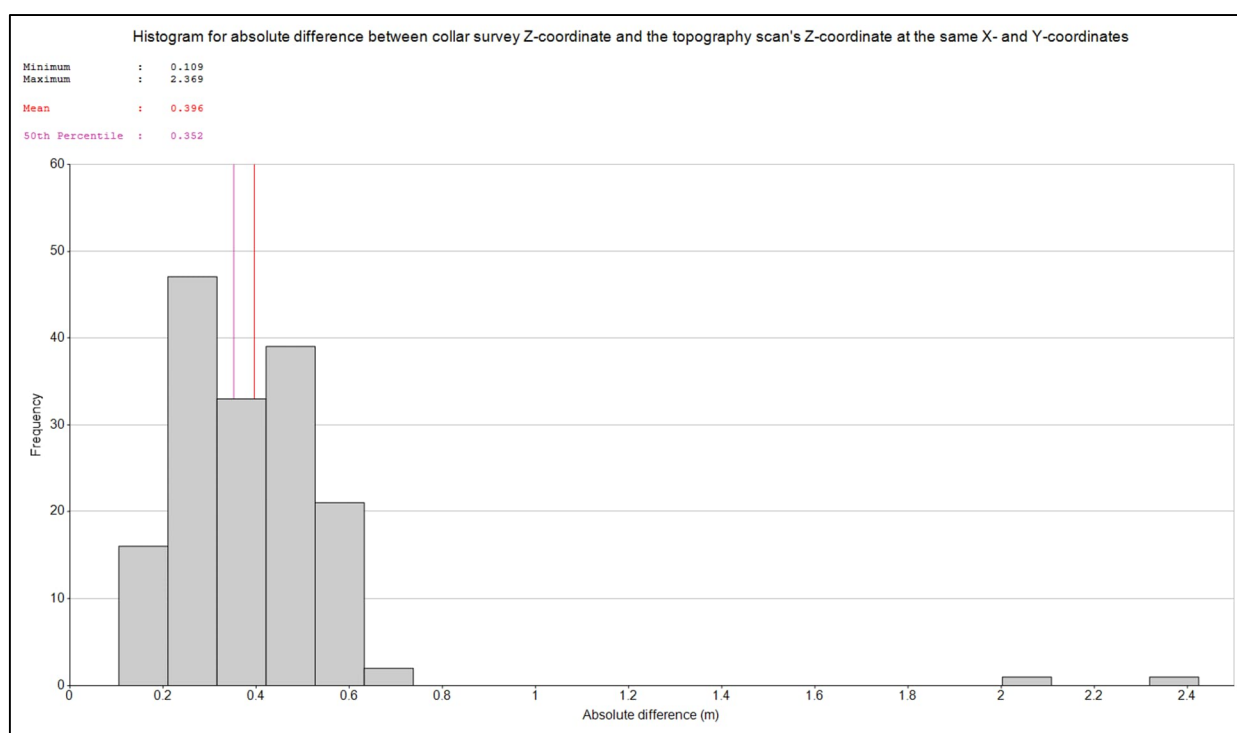


Figure 7. Verification of collar Z-coordinates vs the topography scan.

6.4 Verification of sampling and assay data

No re-sampling or re-assaying was performed by Earthlab. Earthlab accepted the assay data as is and only performed assay quality verification on it in the same way that assay quality control would typically be done.

Earthlab did not perform any verification of specific gravity (SG) measurement by redoing any measurements, as it was not part of the scope of the relogging campaign. However, based on the density values obtained from the newly drilled metallurgical holes, Earthlab suspected that the historic density measurements might have been overestimated in the Oxidised and perhaps even in the Transitional weathering zones. Granted, the suspicion was based on only 10 samples, however, it is recommended that a verification campaign of SG values should be performed in the future.

The database also contained multiple SG values that were considered to be unrealistic, and adjustments are discussed in section 10.1.2.2.

6.5 Verification of geological and Mineral Resource models

As part of this report's MRE, Earthlab completely remodelled the stratigraphy and weathering zones based on the relogging work of the historic holes and created a completely new mineralised domain for new estimation. Therefore, no verification was done on previous models.

In terms of verification of the new model and MRE, Earthlab performed various checks between the model and the data and is discussed in later chapters.



7 ASSAY QUALITY CONTROL

Since the MRE in this report only used the historic drilling, the assay quality control of the holes drilled in 2023 is discussed in its separate report.

As part of this MRE, assay quality verification was performed in a similar manner as typical assay quality control is usually performed and discussed in this chapter. The detailed procedures used in each analyte determination by these laboratories are contained in the official assay QAQC report dated 15 October 2021 (PO_771-06-QAQC_Report_v2). The following sections present a brief summary of the findings in that report.

7.1 Quality control and acceptance methodology

Assay control data was migrated from the Access Database (Grasvally Project Borehole Database) to a secure and validated SABLE® 7.0 SQL Database. Unfortunately, due to the structure and design of the historic database, especially regarding the sampling, submitted control and assay results, large portions of standardised and required data for these tables could not be stored in the SABLE® 7.0 SQL Database. Therefore, these data have been manually cleaned and formatted to be used in this assessment.

Python programming, with the aid of several data analytical and statistical modules (NumPy, Pandas, SciPy, Matplotlib) has been used, where custom scripts were written by Earthlab's Database Manager, for this evaluation.

7.2 Accuracy analysis

Two control samples SARM7 and QC93 were identified within the historic exploration programmes as the majority of the reference material used for quality control purposes. SARM7 is a CRM that was made in 1975 and was reported without the sophistication of today's modern analytical techniques. Approximately 10% of the accepted value can be considered a representative of the second standard deviation, whereas 15% of the accepted value can be considered a representative of the third standard deviation. SARM7 has been analysed according to this approach. Additionally various AMIS made standards were also incorporated into the assay dataset in subsequent drilling phases, however contained a fairly limited number of samples to analyse.

Accuracy testing for these standards has been split into two sets of analyses. The first incorporates monitoring each samples concentration per analyte relative to the corresponding standard certificate accepted value and standard deviations. Samples which fall outside the third standard deviation are flagged as out of statistical control and are labelled as failures. In terms of the platinum group elements, platinum and palladium in this case, it is generally accepted that 90% of samples passing this criterion is considered a great indication of good accuracy.

The results of this initial accuracy analysis are summarised in Table 6.

Table 6 Summary of accuracy analysis and verification for the Volspruit North Body.

Project ¹	No. of Samples	Au Samples		Cu Samples		Ni Samples		Pt Samples		Pd Samples	
		n	Failed (%)	n	Failed (%)	n	Failed (%)	n	Failed (%)	n	Failed (%)
Grasvally GVN	1389.00	1063.00	15.80	1286.00	13.30	1372.00	20.04	1065.00	5.35	1065.00	3.10
Grasvally Bulk Sample	176.00	175.00	1.14	166.00	1.20	166.00	15.66	175.00	2.86	175.00	1.71
North Definition	21.00	17.00	0.00	16.00	12.50	16.00	18.75	17.00	0.00	17.00	0.00
Sterilisation	40.00	31.00	3.23	31.00	0.00	31.00	3.23	31.00	3.23	31.00	3.23
Total North Body	1626.00	1286.00	13.30	1499.00	11.68	1585.00	19.24	1288.00	4.89	1288.00	2.87

The second analysis for testing accuracy incorporates comparing population statistics between the submitted standards concentration and the population statistics of the certified reference materials. This is done by comparing the means for each CRM provided by the lab and the means obtained for the CRMs for each project per analyte. The overall performance of a particular CRM reported by a laboratory, within the parameters of this analysis, may be deemed accurate if the mean of the population falls within $\pm 5\%$ difference of the certified value of the CRM and/or within 1 std of the certified value.

The Table 7 below summarises the statistics of the two populations per project and analyte.

Table 7. Population statistics for CRMs vs certified values and tolerance limits.

Project	CRM	Analyte	Mean	2x Std of Assays	Count of Assays	Certified Value	Upper Threshold	Lower Threshold	Difference	% Difference
Grasvally GVN	SARM7	Au	0.299	0.110	403	0.310	0.326	0.295	-0.011	-3.504
Sterilisation	AMIS0099	Au	0.082	0.01	8	0.089	0.097	0.081	-0.007	-7.865
Sterilisation	AMIS0170	Au	0.104	0.046	4	0.09	0.095	0.085	0.014	15
North Definition	AMIS0170	Au	0.095	0.004	3	0.09	0.095	0.085	0.005	5.185
North Definition	AMIS0067	Au	0.147	0.002	3	0.15	0.16	0.14	-0.003	-2.222
Grasvally Bulk Sample	AMIS0099	Au	0.093	0.03	25	0.089	0.097	0.081	0.004	4.719
Grasvally Bulk Sample	AMIS0002	Au	0.16	0.007	10	0.155	0.163	0.147	0.005	3.226
Grasvally Bulk Sample	AMIS0124	Au	0.161	0.019	52	0.160	0.170	0.150	0.001	0.433
Grasvally GVN	SARM7	Cu	876.1	148.4	421	1000.0	1050.0	950.0	-123.891	-12.389
Sterilisation	AMIS0099	Cu	260.9	20.8	8	256	265	247	4.875	1.904
Sterilisation	AMIS0170	Cu	739.8	28.2	4	709	731.5	686.5	30.75	4.337
North Definition	AMIS0170	Cu	749.3	28.7	3	709	731.5	686.5	40.333	5.689

¹ As categorised in the database



Project	CRM	Analyte	Mean	2x Std of Assays	Count of Assays	Certified Value	Upper Threshold	Lower Threshold	Difference	% Difference
North Definition	AMIS0067	Cu	958.7	115.5	3	895	917	873	63.667	7.114
Grasvally Bulk Sample	AMIS0099	Cu	247.5	19.0	24	256	265	247	-8.458	-3.304
Grasvally Bulk Sample	AMIS0002	Cu	1399.0	267.3	10	1310	1375	1245	89	6.794
Grasvally Bulk Sample	AMIS0124	Cu	1369.4	94.5	48	1343.0	1396.0	1290.0	26.375	1.964
Grasvally GVN	SARM7	Ni	1974.8	594.0	421	2000.0	2100.0	1900.0	-25.178	-1.259
Sterilisation	AMIS0099	Ni	440.3	30.6	8	443.0	467.0	419.0	-2.8	-0.621
Sterilisation	AMIS0170	Ni	1116.3	37.7	4	1071.0	1114.5	1027.5	45.3	4.225
North Definition	AMIS0170	Ni	1091.7	87.4	3	1071.0	1114.5	1027.5	20.7	1.93
North Definition	AMIS0067	Ni	1781.7	271.4	3	1728.0	1819.0	1637.0	53.7	3.106
Grasvally Bulk Sample	AMIS0099	Ni	429.9	29.6	24	443.0	467.0	419.0	-13.1	-2.953
Grasvally Bulk Sample	AMIS0002	Ni	1929.5	272.9	10	1970.0	2045.0	1895.0	-40.5	-2.056
Grasvally Bulk Sample	AMIS0124	Ni	1878.5	134.7	48	1917.0	1985.0	1849.0	-38.5	-2.006
Grasvally GVN	SARM7	Pd	1.561	0.545	405	1.530	1.607	1.454	0.031	2.048
Sterilisation	AMIS0099	Pd	0.21	0.023	8	0.225	0.242	0.208	-0.015	-6.611
Sterilisation	AMIS0170	Pd	0.924	0.309	4	0.81	0.83	0.79	0.114	14.074
North Definition	AMIS0170	Pd	0.841	0.017	3	0.81	0.83	0.79	0.031	3.868
North Definition	AMIS0067	Pd	0.976	0.027	3	0.98	1.02	0.94	-0.004	-0.374
Grasvally Bulk Sample	AMIS0099	Pd	0.228	0.011	25	0.225	0.242	0.208	0.003	1.529
Grasvally Bulk Sample	AMIS0002	Pd	0.919	0.045	10	0.89	0.923	0.857	0.029	3.236
Grasvally Bulk Sample	AMIS0124	Pd	0.904	0.074	52	0.870	0.900	0.840	0.034	3.899
Grasvally GVN	SARM7	Pt	3.750	0.776	405	3.740	3.927	3.553	0.010	0.271
Sterilisation	AMIS0099	Pt	0.56	0.056	8	0.59	0.625	0.555	-0.03	-5.106
Sterilisation	AMIS0170	Pt	0.793	0.285	4	0.72	0.75	0.69	0.073	10.139
North Definition	AMIS0170	Pt	0.744	0.024	3	0.72	0.75	0.69	0.024	3.38
North Definition	AMIS0067	Pt	1.952	0.115	3	1.95	2.03	1.87	0.002	0.085
Grasvally Bulk Sample	AMIS0099	Pt	0.592	0.082	25	0.59	0.625	0.555	0.002	0.285
Grasvally Bulk Sample	AMIS0002	Pt	0.839	0.053	10	0.82	0.876	0.764	0.019	2.354
Grasvally Bulk Sample	AMIS0124	Pt	0.856	0.088	52	0.840	0.875	0.805	0.016	1.953



From the results above it is clear that there is a great level of accuracy in terms of the PGEs, with all the results above 10 analyses falling within the tolerance of 5% difference. The results demonstrate a robust and reliable analytical process, with mean differences and biases well within the specified tolerances.

It should be noted that Cu did not perform as well as the rest of the analytes and clearly shows a negative bias, especially looking at the SARM7 results for this analyte. The results depict more outliers than expected, however these may be attributed to SARM7 not being certified for Cu as well as possible capturing errors during the inception of the historical Access Database. Considering this, these results are less likely attributable to laboratory inaccuracy, and provided the context of the project gives more confidence in these Cu results.

A fair number of CRMs analysed in throughout the project have less than 30 analyses, which may cause erratic statistical behaviour, and as such are treated with much less statistical meaning to the overall project accuracy.

QC93 is not certified reference material and was made by Setpoint Laboratories using left over Volspruit drill core material after logging and sampling as the use of SARM7 was deemed too costly for the project at the time. With this being the case, it is not possible to perform the above set of analyses, however Figure 8 and Figure 9 below illustrate the population central tendencies of each analyte.

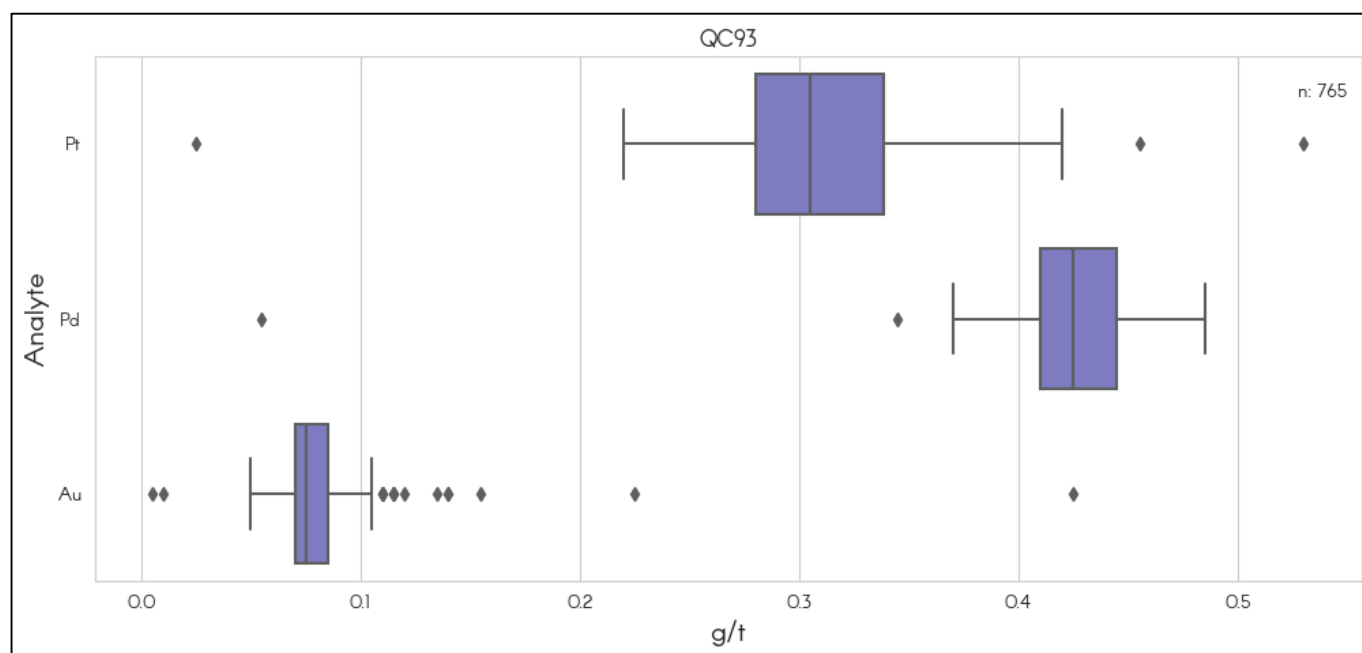


Figure 8. Box plot showing the distribution of Pt, Pd, and Au for QC93.

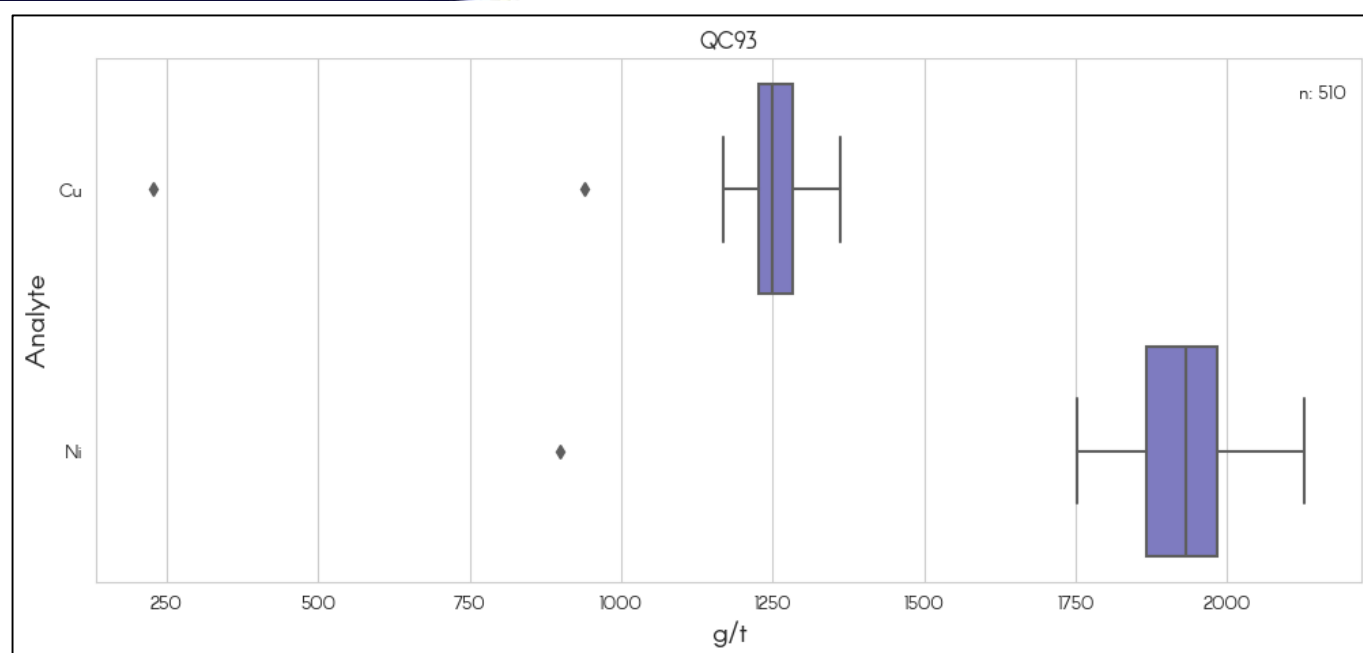


Figure 9. Box plot showing the distribution of Cu and Ni for QC93.

The results above demonstrate relatively good control over accuracy by the laboratory, with majority of the Q1, Mean, and Q3 values falling closely together, along with short tails either end.

7.3 Precision analysis

The historic database for which the precision analysis has been conducted only included duplicate sample data provided by the laboratory's internal QAQC protocols. This data was also not recorded in the database in the standard sampling tables. Additionally, these duplicate samples were also recorded with identical sample IDs to the original reported result.

Twinstream results have been analysed using the Half Absolute Relative Difference method. Analyses have been separated into their respective elements including Au, Cu, Ni, Pt, and Pd. Duplicate result analysis has only been concluded for the Grasvally GVN and Bulk Sample Projects, as no results have been recorded for North Definition and there are less than 10 results for Sterilisation. The results have summarised in Table 8 below.

Table 8. Summary of the precision analysis for the historic sampling campaigns for the north body.

Project	Element	No. of Samples	Mean Original	Mean Duplicate	Mean Difference	Within 10% HARD	No. of Outliers	Outliers (%)
Grasvally GVN	Au	353.00	0.03	0.02	0.01	72.66	96.00	27.20
	Cu	310.00	243.79	243.13	11.22	97.74	7.00	2.26
	Ni	312.00	1191.37	1188.44	25.80	97.76	7.00	2.24
	Pd	351.00	0.28	0.28	0.02	82.05	62.00	17.66
	Pt	353.00	0.28	0.27	0.03	69.69	107.00	30.31



Project	Element	No. of Samples	Mean Original	Mean Duplicate	Mean Difference	Within 10% HARD	No. of Outliers	Outliers (%)
Grasvally Bulk Sample	Au	98.00	0.04	0.04	0.00	84.09	14.00	14.29
	Cu	78.00	421.96	418.15	11.29	100.00	0.00	0.00
	Ni	78.00	1381.59	1364.87	34.97	100.00	0.00	0.00
	Pd	98.00	0.75	0.73	0.03	91.58	8.00	8.16
	Pt	98.00	0.58	0.57	0.04	90.63	9.00	9.18

It was decided to not exclude samples during grade estimation based on the outcome of the accuracy and precision analyses. The theory was that given the short-range variability in the deposit, excluding samples from grade estimation and forcing the estimation to use samples further away than necessary would result in a higher error variance than using a closer sample which has an inherent error smaller than the difference between the true grade and the grade of a sample which is further away which would be used if the closer sample were to be excluded. The quality analysis results were still thoroughly reported for the convenience of the reader, should the reader apply his/her own adjustment to the estimate based on the quality analysis outcome.

The results of the accuracy and precision analyses are in line with the Indicated and Inferred Mineral Resources being reported for the new MRE.

8 SAMPLE SECURITY

8.1 Storage security

To Earthlab's knowledge the historic pulp samples are stored in metal shipping containers at the Volspruit core yard facility. This has not been confirmed.

8.2 Chain of custody

No verification was done on historic exploration campaigns' chain of custody.



9 GEOLOGICAL INTERPRETATION

9.1 Regional geology

9.1.1 Bushveld Igneous Complex

The Bushveld Complex (BC) is the largest layered intrusion on Earth and hosts the world's largest magmatic ore deposits (Lee, 1996). The BC was emplaced 2055.91 ± 0.26 Ma (Zeh, et al., 2015), and comprises several limbs; the Eastern, Western, and Northern Limbs, that cover an approximate areal extent of 90,000 km² (Finn, et al., 2015). The Northern Limb of the BC is separated from the Eastern and Western Limbs by the approximately east-west striking Thabazimbi–Murchison Lineament (TML) (Figure 10). The connection between the latter limbs of the BC remains under much debate amongst the geological community across the globe.

The BC is sub-divided into several igneous bodies which include the Rustenburg Layered Suite (RLS), the Lebowa Granite Suite, the Roshoop Granophyre Suite, and the Rooiberg Group Volcanics (Cawthorn, et al., 2006). The following sections describe the occurrences of these sub-divisions, where the Lebowa Granite Suite, Roshoop Granophyre Suite, and Rooiberg Group Volcanics have been left out in this report as they are not directly relevant.

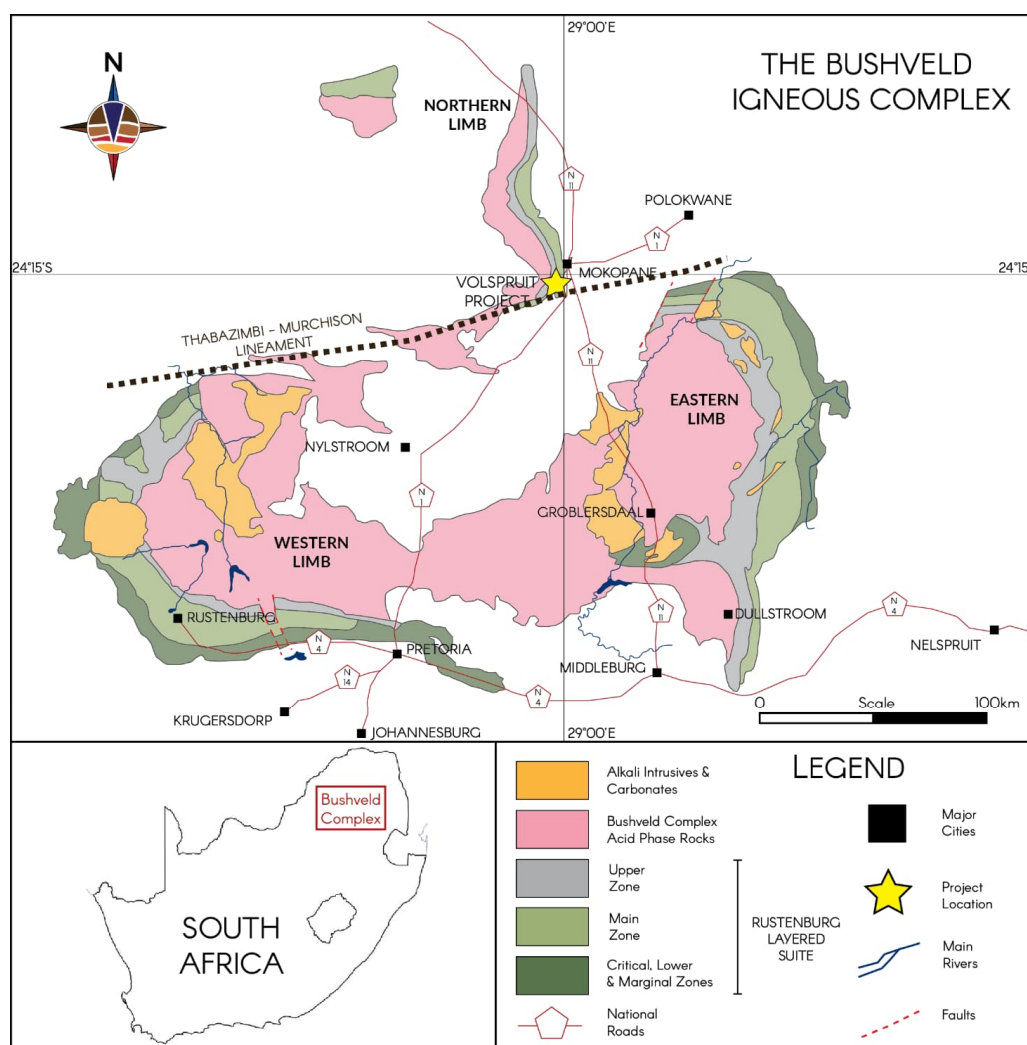


Figure 10. The Bushveld Igneous Complex and its respective limbs.

9.1.1.1 Rustenburg Layered Suite

The RLS is the world's largest layered mafic intrusion, covering approximately 65,000 km² reaching thicknesses between 7 – 9 km (Eales and Cawthorn, 1996). The RLS is a lopolith-like intrusive body and is host to the largest PGM reserves in the world (Naldrett, et al., 2009).

The RLS was emplaced at shallow crustal levels beneath the Rooiberg Group Volcanics and the Transvaal Supergroup. The RLS comprises several main layers showing spectacular layering, which have been grouped according to spatial distribution, variation in lithology, and morphology. These layers include, from the base to top, the Marginal, Lower, Critical, Main, and Upper Zones:

- The Marginal Zone is not always present and ranges in thickness from zero to hundreds of metres situated at the very base of the intrusion and is best described as a contact facies of the RLS during its earliest intrusive phases into the Transvaal Supergroup.
- The Lower Zone is limited in its distribution across the BC and is usually confined to areas of basement lows. The best preservation of this zone is found in the northern sectors of the Eastern and Western Limbs, as well as the southern sector of the Northern Limb. The Lower Zone reaches a maximum thickness of approximately 1,300 m (Cawthorn, et al., 2002), and comprises four main lithological units which include a norite-pyroxenite at the base, a lower pyroxenite, harzburgite, and upper pyroxenite. The harzburgites contain cyclic layers containing dunite, harzburgite and pyroxenite.
- The Critical Zone is host to world-class chromite and PGM deposits. These deposits are found within several layers termed "reefs," and the most well-known are the Merensky Reef and the UG2 Reef. This zone is approximately 1,500 m in thickness and is further sub-divided into the lower sub-zone, comprising an ultra-mafic succession of pyroxenites, as well as the upper sub-zone which comprises a series of chromitite, harzburgite, pyroxenite, norite, and anorthosite. Ultimately there have been approximately nine magmatic cycles identified within the lower sub-zone and eight in the upper sub-zone. Interestingly the Critical Zone marks the first appearance of cumulate plagioclase throughout the RLS, and its base is determined by the lowest anorthositic layer between two chromitites.
- The Main Zone forms the largest body of magma by volume within the RLS, reaching thicknesses of over 3,000 m. It comprises a succession of layered gabbro-norites with infrequent pyroxenite and anorthosite, where olivine and chromite are rare occurrences. The layers within the Main Zone are associated with multiple influxes of magma, however, this layering has been attributed to the mechanical distribution of crystals throughout the Main Zone, as their compositions are not within cotectic proportions.
- The Upper Zone can be characterized as a sequence of intensely banded gabbro with layers of anorthosites and magnetite. Magnetite layers within this zone are numerous, with some twenty-five layers being identified along with the Eastern Limb of BC (Molyneux, 1974). The Main Magnetite Layer, near the base of the Upper Zone sequence, has been recorded at 2 m thick and is mined for its highly economical vanadium content.

9.1.2 Northern Limb

The Northern Limb is separated from the Eastern and Western Limbs by the Thabazimbi Murchison Lineament and has been rather neglected in the past for its economic potential. Only in recent decades have there been major efforts to reignite exploration along the Northern Limb. The stratigraphy of the Northern Limb has been split into the traditional units established for the Eastern and Western Limbs, i.e., the Lower, Critical, Main and Upper Zone (Figure 11). The Lower Zone is predominantly harzburgites and pyroxenites. The Critical Zone contains layered ortho-pyroxene, clinopyroxene, chromite, and plagioclase cumulates. The Main Zone is

dominated by gabbro-norite with infrequent anorthosite and pyroxenite, with rare olivine bearing units. The Upper Zone is mainly ferro-gabbro with variable magnetite.

The mineral deposits within the Northern Limb can be separated into four major commodities: tin (Sn), chromium (Cr), vanadium (V), and PGMs. The first PGMs mined in this region come from the Platreef deposit, which is considered the Critical Zone equivalent of the Northern Limb and for the most part rest on top of the basement contact of the RLS. The Platreef has had a major impact on PGM mining in South Africa, as in its shallow occurrence it can be mined using less costly open cast mining methods such as the Anglo Platinum Mogalakwena mine. However, Ivanplats Ltd is developing an underground mine at its Platreef Project roughly halfway between Mokopane and the Mogalakwena mine. Other PGM deposits not interpreted as Platreef have been identified in the Northern Limb. Some of these deposits include the Waterberg and Aurora Projects, located in the far northern sectors of the Northern Limb, as well as the Volspruit Project, which is located to the far south of the Northern Limb (Figure 11).

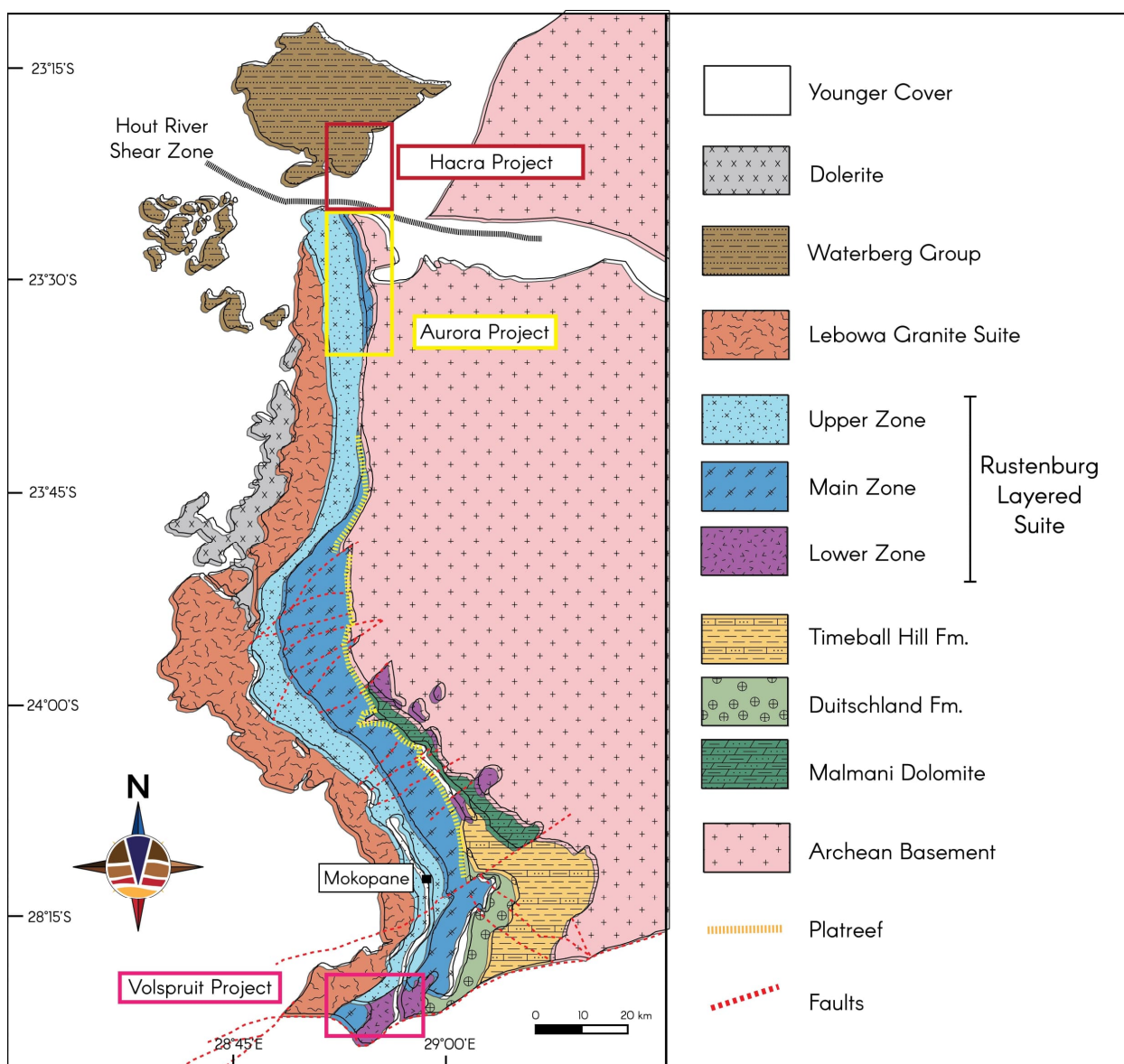


Figure 11. Simplified geological map of the Northern Limb showing the approximate locations of the Hacra, Aurora, and Volspruit Projects. Image modified after McCreesh et al. (2018).

9.2 Local geology

The local geology for the Volspruit Project is described based on historic interpretations and descriptions by VMC as well as information ascertained from literature by Hulbert (Hulbert, 1983). No attempt was made by Earthlab to reinterpret the current understanding of geological information. The following paragraphs summarise the local geological setting for the project.

No surface geological mapping within the project area has been undertaken as the outcrop is extremely poor. Hulbert (1983) managed to construct the only geological map of the area using the drill core that was available at the time (Figure 12).

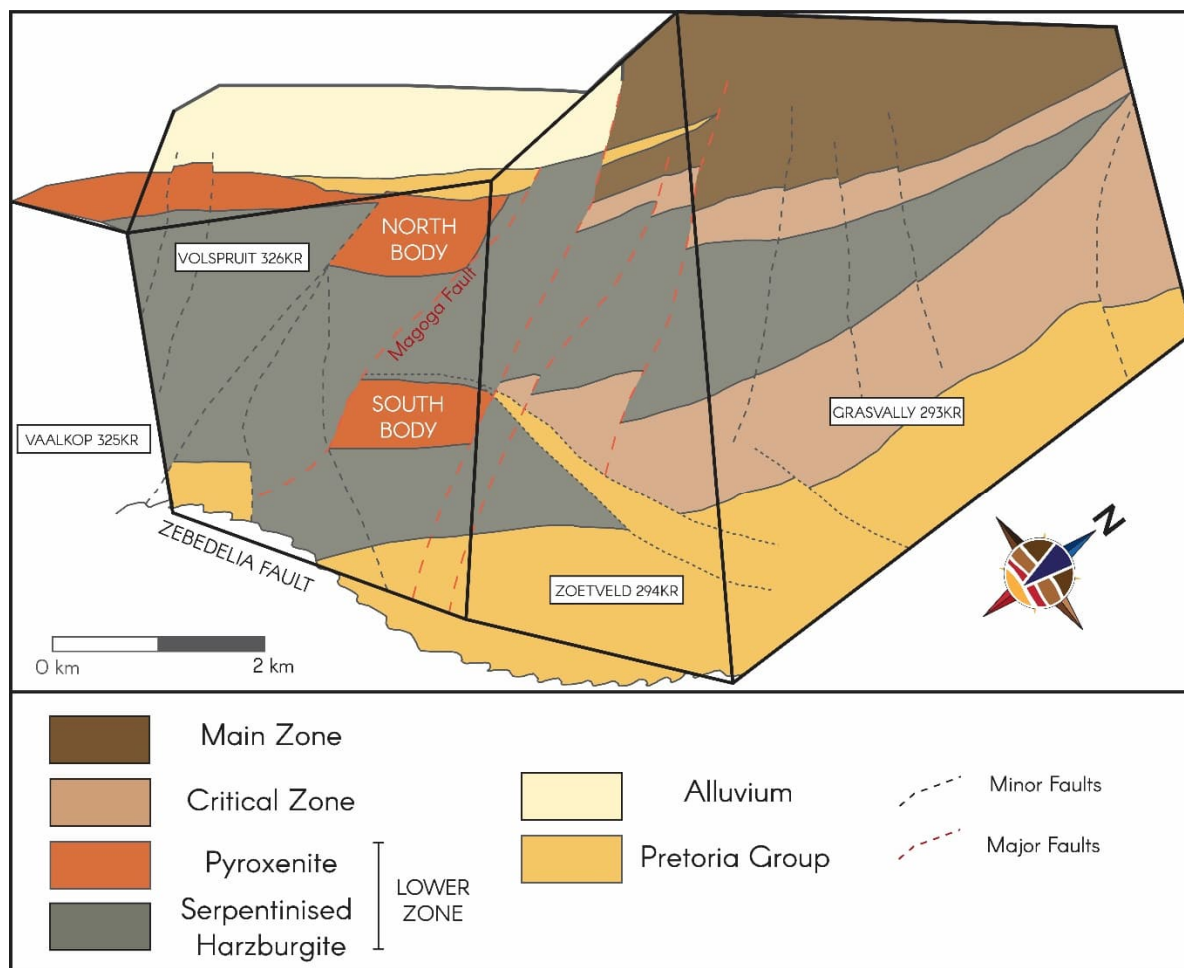


Figure 12. Local geology map of the Volspruit Project. Image modified after Hulbert (1983).

The schematic cross-section in Figure 13 has been largely confirmed by airborne geophysical data collected by PPD from 2001 to 2002. Hulbert's (1983) map reveals a structurally complex region, which is dominated by a series of horst blocks and graben structures with several generations of deformation. Neither the current academic literature, nor the geophysics report of 2002 offer specific ages of these deformation events, apart from the fourth episode related to Karoo Supergroup basalt intrusion, circa 182 Ma. The deformation events consist of:

- The first is described by (Hulbert, 1983) as an episode of north-south trending reverse faulting, which resulted in the horst block of the Lower Zone being vertically displaced by almost 800 m into the Critical Zone. This north-south trending fault system was later intruded by a granitic dyke swarm which likely represents the formation of the Lebowa Granite Suite which directly overlies the RLS.

- Second-generation faulting is a WNW to ESE reverse block faulting, which has resulted in a step-like displacement of the RLS towards the west (Hulbert, 1983). This faulting event has exposed parts of the Lower Zone from deeper stratigraphic horizons in the Volspruit, Zoetveld, and Vaalkop farms.
- The third generational faults strike NE-SW and caused upfaulting slices of Pretoria Group quartzites into the RLS. It is assumed to be post-Waterberg Group of which the age is estimated to be 1,900 – 1,700 Ma old (Callaghan, et al., 1991).
- The final generation of faults occurred post-Karoo Supergroup when basalts from the Karoo Supergroup came into contact the Lower Zone lithologies along the Zebediela fault (Hulbert, 1983).

Stratigraphically the Volspruit Project area falls within the Lower Zone of the RLS below the Critical Zone, which is host to the Platreef deposit, making this particular PGM occurrence rather unique. The Lower Zone within the Northern Limb can be sub-divided into three main groups which include from the base upwards: the Volspruit Pyroxenite, the Drummondlea Harzburgite Chromitite, and the Moordrift Harzburgite Pyroxenite (Figure 14). The Lower Zone contains approximately 37 cyclic units which are numbered from the base upwards. These cyclic units' grade in composition and morphology upwards forming the basis of the sub-division stated above.

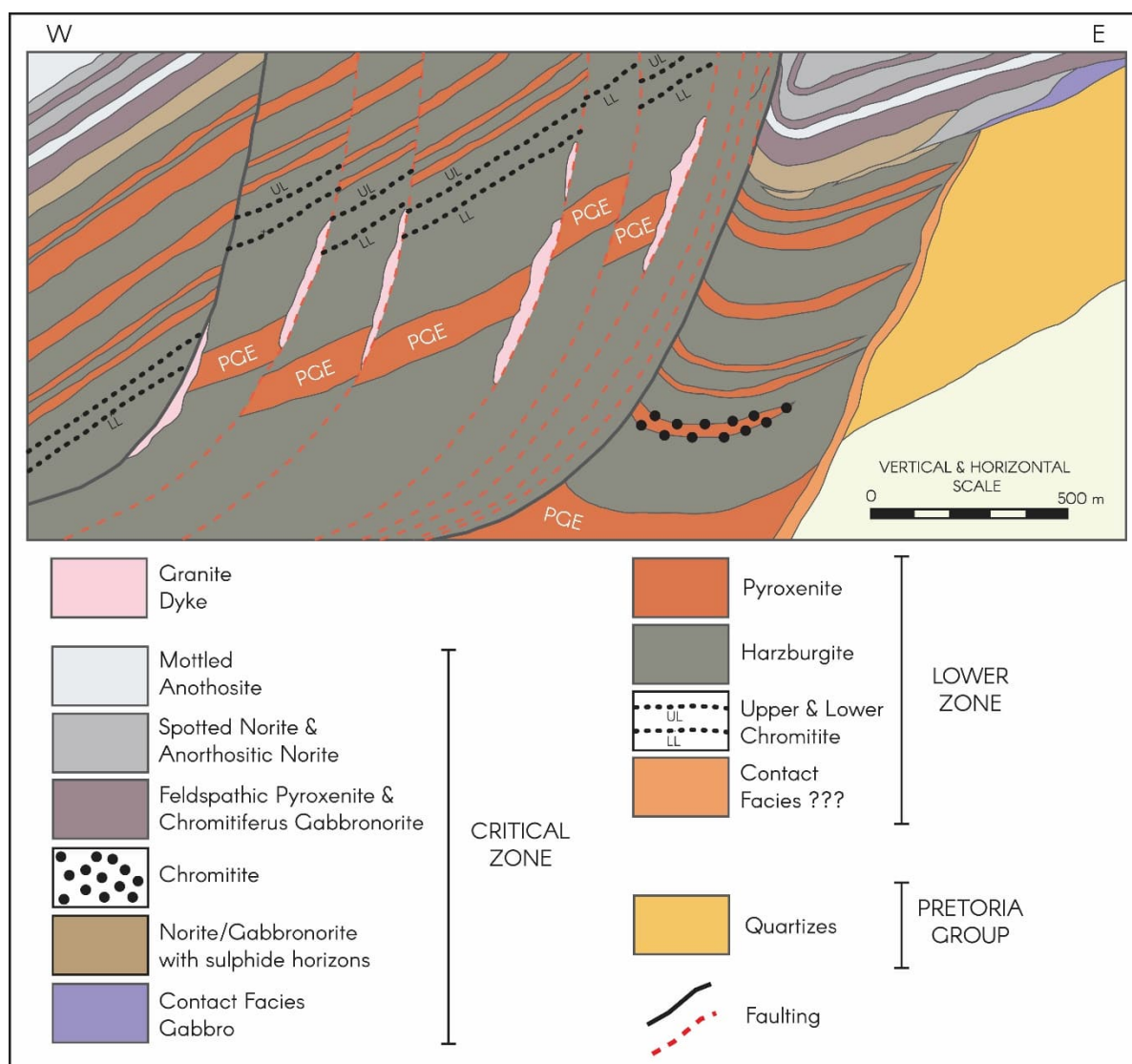


Figure 13. Schematic vertical cross-section of the local geology of the Volspruit Project. Image modified after Hulbert (1983).

Cyclic units 1 through 10 in the Volspruit subzone display incomplete cycles where olivine and chrome-bearing pyroxenites at the base of these units gradually change into pyroxenite at the top. The upper portion of the cyclic unit 11 contains significant PGE-Cu-Ni concentrations and is host to the Volspruit Reef. Cyclic unit 11 consists predominantly of orthopyroxenite with varying proportions of olivine, chrome, and minor plagioclase. The textures of the unit vary from massive equigranular, streaky to poikilitic pyroxenites (Figure 15).

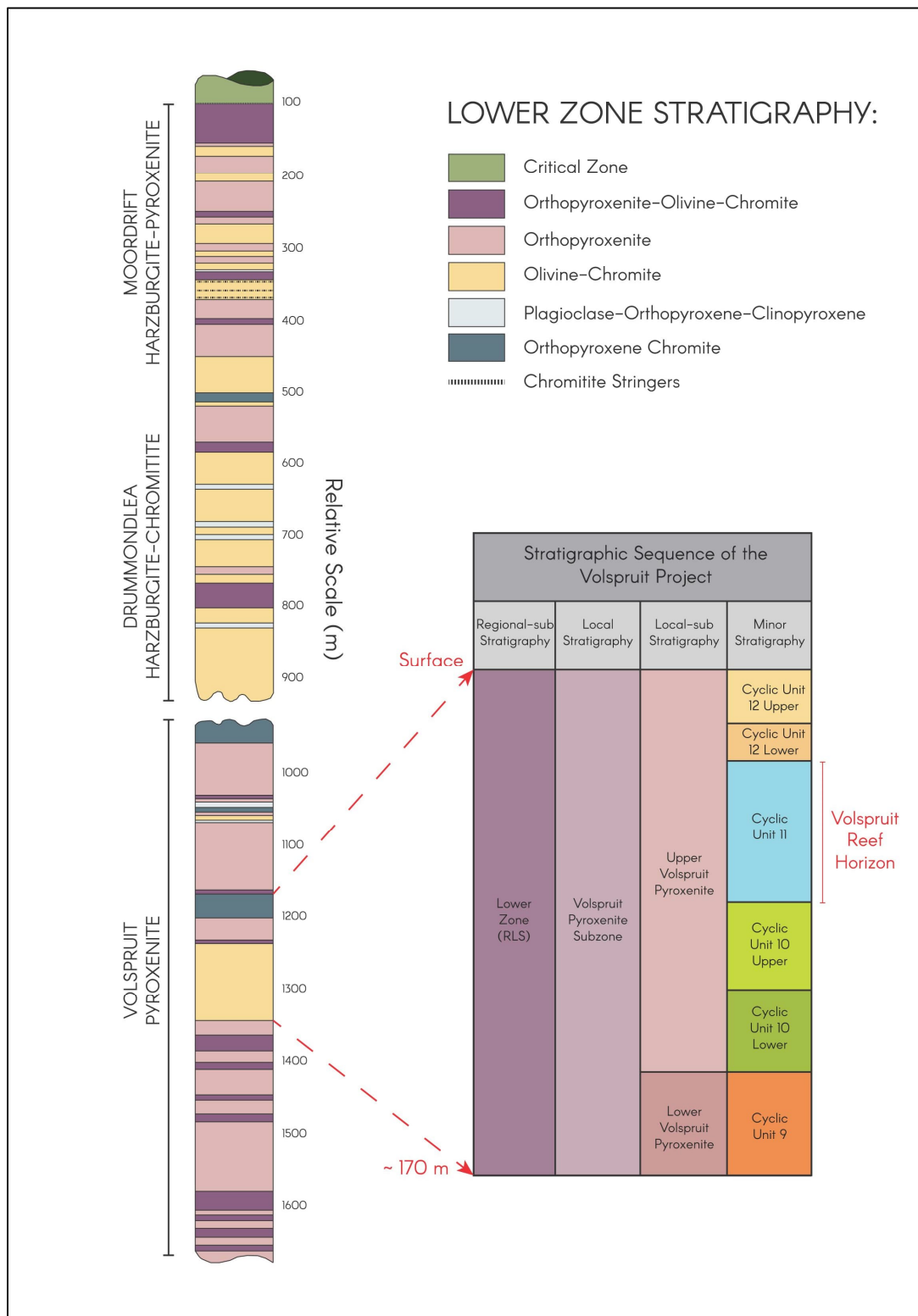


Figure 14. Lower Zone stratigraphy representing the Volspruit Project Area. Image modified after Hulbert (1983).

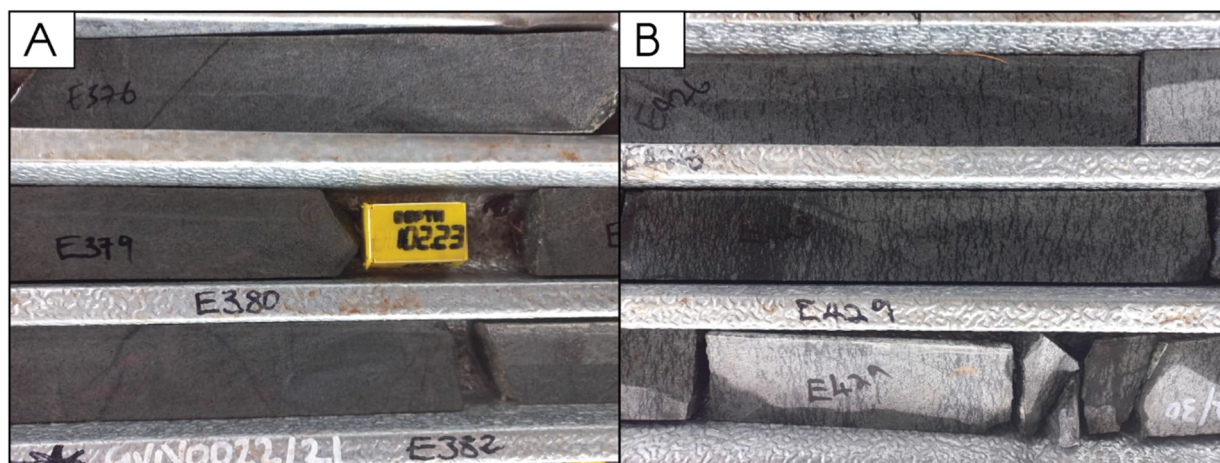


Figure 15. Drill core photographs illustrating variable-textured Volspruit Reef lithologies..

The lithological boundaries defining cyclic unit 11 were not always consistent between drill holes, however, loosely bounding approaches have been used. The upper boundary between cyclic units 11 and 12 was the most consistent throughout the drill holes and was defined as wispy stringers of chromitite locally termed the “Liam Layer”. This layer was discontinuous, but recognisable, often marking the top of the mineralised interval. The bottom contact of cyclic unit 11 was not as readily identified within the drill core and often varied between a change from equigranular pyroxenites to streaky or poikilitic olivine-bearing pyroxenites, to even a basal unit of harzburgite. In some instances, the Volspruit Reef horizon has been cross-cut by a series of anastomosing alkali-granite dykes along previously mentioned generational fault systems (Figure 16).



Figure 16. Photograph showing alkali-granite dyke intrusion into the Volspruit Reef.

9.3 Re-logging results – VN

The re-logging entailed detailed lithological logging, mineralogical logging, and stratigraphic logging in line with the newly defined stratigraphic units (Figure 17). The re-logging started in January 2023 and was completed in June 2023. A total of 21,949.38 m of core was re-logged.

This was performed due to the historical stratigraphic logging that has been done using multiple naming conventions as well as being based on the larger-scaled cyclic units 10, 11, and 12 within the Volspruit pyroxenite stratigraphic unit. However, this method produces a much thicker unit which does not capture the resolution of the deposit within these cyclic units. Earthlab proposed a modified stratigraphic naming convention with new minor-sub and horizon-level stratigraphy fields in which the resolution of the deposit was

captured. Figure 17 shows the proposed stratigraphic interpretation that was used to re-log the Volspruit North deposit. The stratigraphic convention was supported by literature published by Hulbert (1983) and Tanner et al. (2019).

Cyclic Unit 12 Upper comprises homogeneous ortho-pyroxenites with minor chromite and no sulphides observed.

Cyclic Unit 12 Lower comprises a relatively small unit of harzburgites containing olivine which vary from poikilitic to inequigranular in texture. This unit does occasionally have sulphides but there are no significant PGMs concentrated here. This unit marks the top contact of the hanging wall in the Volspruit Reef which is confined in the Cyclic Unit 11 Upper.

The Volspruit Reef (VR) is confined to the Cyclic Unit 11 Upper. Sulphide mineralisation observed in the cyclic units surrounding Cyclic Unit 11 Upper did not show any significant Pt, Pd, and Au grades according to historic downhole assay grade profiles of 2E and Au. The unit comprises homogeneous ortho-pyroxenites with minor chromite. It can be sub-divided into several mineralised units, most prominently three units i.e., VR1, VR2 and VR3 along with internal waste zones defined as VR middling units (VRMID) which can be barren or have insignificant scattered mineralisation. These mineralised units are characterised by their base metal sulphide content.

Cyclic Unit 11 Lower forms the basal layer of Cyclic Unit 11 Upper and can be compared to Cyclic Unit 12 Lower as it consists of the olivine-bearing harzburgites which vary from poikilitic to inequigranular in texture and are sometimes strongly serpentinised at certain intervals. Serpentinisation increases with depth and poikilitic harzburgites to equigranular fine-grained dunites form the dominant lithologies. The sulphides in this cyclic unit do not have significant PGM mineralisation according to historic downhole assay grade profiles of 2E and Au.



Stratigraphic Sequence of the Volspruit Project				
Regional-sub Stratigraphy	Local Stratigraphy	Local-sub Stratigraphy	Minor Stratigraphy	Minor-sub Stratigraphy
Lower Zone (RLS)	Volspruit Pyroxenite Subzone	Upper Volspruit Pyroxenite	Cyclic Unit 12 upper	
			Cyclic Unit 12 lower	
			Cyclic Unit 11 upper	VRHW
				VR1
				VRMID1
				VR2
				VRMID2
				VR3
			Cyclic Unit 11 lower	VRFW
			Cyclic Unit 10 upper	
		Lower Volspruit Pyroxenite	Cyclic Unit 10 lower	
			Cyclic Unit 9	

Figure 17. Redefined stratigraphy used by Earthlab for the re-logging of VN drill holes in 2023.



9.4 Mineralisation

The Volspruit Reef mineralisation is predominantly interstitial disseminated to net-textured sulphide assemblages hosted within olivine and chrome-bearing pyroxenites. The sulphide mineralisation within this horizon, in decreasing abundance, consists of pyrrhotite, pentlandite, chalcopyrite and cubanite (Hulbert, 1983). Sulphide assemblages reach their peak modal abundance at approximately 3 wt.% of the whole rock composition. Mineralisation is predominantly hosted by fine-grained equigranular ortho-pyroxenites with minor olivine and chrome occurrences.

According to Tanner, et al. (2019) the PGMs were directly observed within chromite-hosted sulphide inclusions. Their studies show it was unlikely that the late-magmatic fluids which migrated through the crystal pile played any significant role in enriching the PGMs of the Volspruit Sulphide Zone. Instead, the texture and high tenor of base metal sulphides in the Volspruit Sulphide Zone indicate that PGMs were partitioned into an immiscible sulphide liquid, which scavenged PGMs from a larger body of silicate magma.

The Volspruit Reef has provisionally been classified as a disseminated, PGE-Cu-Ni, syngenetic, ortho-magmatic deposit within the Lower Zone of the RLS by Hulbert (1983). Tanner et al. (2019) suggested that the parental magma of the Lower Zone had a separate ultramafic source. The B1 magma is modelled as a mixture of 22% solids equivalent to Lower Critical Zone pyroxenite with 78% liquid while the B1-UM magma represents chills of a basal ultramafic sequence with distinct high siderophile element chemistry from magmas in the eastern limb of the BC corresponding with results obtained by Tanner et al. (2019). Tanner et al. (2019), views the deposit as primitive, ultramafic magmas which intruded along sedimentary contacts beneath the main Grasvally magma chamber. Their research indicates that the Malmani Dolomites may be the location of the sub-Grasvally staging chamber. Carbonates with a minor contribution from surrounding sediments locally increased the oxygen fugacity (fO_2) of the ultramafic magmas leading to chromite saturation and crystallisation evident from exotic chromite inclusions. The chromite crystallisation leading to a decrease iron along with an external influx of sulphur from sedimentary contamination led to lowered levels required to achieve the sulphur saturation and crystallisation of the sulphide minerals. Turbulent pulses or sudden faults moved the magma slurries with crystals to the main Grasvally magma chamber. As the cumulates cooled, interstitial sulphide droplets fractionated, exsolving a copper rich liquid which crystallised Fe-Ni rich base metal sulphides and precious metal mineral assemblages of the Volspruit Reef Zone.

The metamorphic aureole surrounding the northern limb of the BC records two stages of metamorphism. The first the emplacement of the Lower Zone (Grasvally chamber) and the second the emplacement of the overlying layered rocks. The second phase altered and serpentinised the Lower Zone rocks with low-grade regional metamorphism and associated gentle folding and four episodes of faulting (Tanner, et al., 2019). The North Body deposit is displaced by a north-south trending fault termed the Magoga Fault, which has thrust the ore body downwards towards the east. The north body deposit is subdivided into two main structural domains (not to be confused with grade estimation domains): a northern domain referred to as North 1 and North 2 which lies south-west relative to North 1. North 1 represents a flat-lying and sub-cropping body that is overlain by subsequent cyclic units or regolith. North 2 is the largest, deepest domain and appears as a graben structure bounded by inward stepping faults along its peripherals.

Earthlab has not yet found unambiguous evidence of structurally controlled epigenetic mineralisation and has for this MRE accepted the assumption that the mineralisation was syngenetic as explained above.

9.5 Structural geology

Relogging of structural elements was not part of the recent relogging campaign of Earthlab as the lithological, mineralogical, and stratigraphic relogging was of first priority.

Historic structural logging captured in the historic Microsoft Access database was limited to 43 drill holes and did not prove to be of significant use. The structures mostly logged included faults, fractures, breccia, and

shearing, however, making use of this data in the modelling proved to be very difficult. Apart from GVN153 and GVN154 in which a fault was also predicted by the geophysics, the faults logged did not necessarily correspond with clear displacement of stratigraphic units. The areas in which faults were interpreted in the new model were based on stratigraphic elevation and thickness differences and is discussed in more detail in the relevant chapters.

The logging contained comments of both brittle and ductile deformation. For this MRE's model, the assumption was made that while ductile deformation was possible, the slight undulatory shape of the main stratigraphic unit of interest (CU11U) could have just as easily been explained by the emplacement environment and subsequent emplacements and fractionation of magma, as well as brittle deformation as proposed by Hulbert (1983) as well as Cambell (2002). The brittle faults interpreted in the model were based on stratigraphic elevation differences, and while unable to prove the exact orientation, it was inserted as vertical structures for the time being with 2.5 m brackets on either side in an aim to quantify the potential geoloss.

In a further attempt to ascertain the deposit-scale structural nature and whether a correlation could be made between PGE-Cu-Ni grade and deformation, the assay data was viewed in 3D with Maximum Intensity Projection (MIP). The method is commonly used in the medical industry and entails projecting datapoints located in 3D space in such a way that the viewer always sees datapoints with higher values "in front of" points with lower values, regardless of their actual positions relative to each other along the line of sight in 3D space. Admittedly, this method is more effective when used on densely spaced data such as grade-control data as opposed to exploration data. In this case, the application of MIP did not indicate any unambiguous evidence of deposit-scale structurally controlled mineralisation.

9.6 Alteration

During historic logging as well as during Earthlab's relogging, three weathering zones were distinguished, namely Fresh, Transitional, and Oxidised. The zone boundaries are generally in a horizontal orientation, as one would expect of zones of alteration caused by surface water. Since the PGEs and base metals are associated with the sulphides, it was assumed that the oxidation of the sulphides would impact recoveries in a processing plant. It was therefore deemed necessary to log and delineate these weathering zones to include them in the Mineral Resource Estimation process. The Transitional and Oxidised zones typically also have lower densities than the Fresh zone, which further necessitated their delineation.

The sulphides leave behind iron oxides slight when they oxidise. They also have slight depressions in the surface, suggesting that they sulphide material are preferentially weathered compared to the surrounding host rock. These alteration products of the sulphides are fine to medium-grained, brick-red in colour, and easily break apart when force is applied.

Minerals such as chlorite, serpentine, tremolite, and magnesite are typically found in and surrounding structures such as shears, fractures, and large networks of anastomosing veins. Figure 18 shows how hydrothermal alteration increases towards a structure such as a fault zone, causing total replacement of primary mineralisation of the immediately surrounding rock. Alteration intensity decreases away from structurally dense areas where there is only partial replacement alteration of the primary minerals taking place due to the decrease of structures and thus the lower supply of hydrothermal fluids. These alteration minerals identified are presumed to be alteration products of the mafic minerals such as olivine and pyroxene.

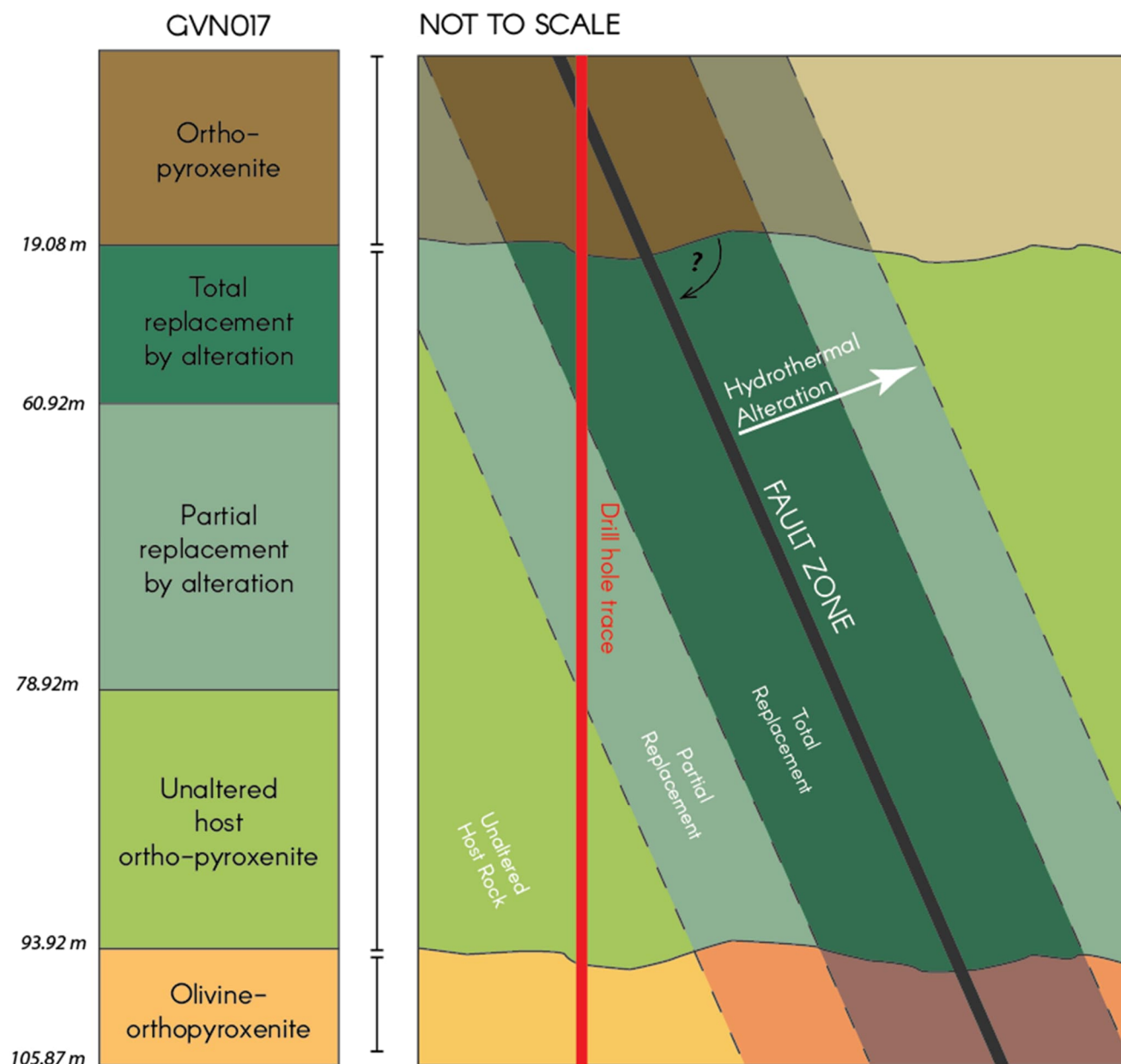


Figure 18 Diagram showing the intensity of alteration with proximity to a Fault Zone.

10 GEOLOGICAL MODEL

10.1 Data description

10.1.1 Data used

VMC provided Earthlab with the geophysics of 2002 (as discussed in section 4.2.1) as image files which Earthlab then georeferenced into Datamine. Earthlab also received a topographic scan file which was used in this MRE.

While the historic drill hole database did contain other older drill holes as well, Earthlab only officially used the drill holes that could be relogged as part of the relogging campaign in 2023. Some of the other drill holes (e.g. with a prefix “GM”) were merely viewed in 3D to see if it could assist in establishing the perimeter within which the model was to be limited, but since the logging did not match Earthlab’s (more detailed) convention, and the holes were no longer available for relogging, the GM-holes were neither used in the model, nor in the MRE.

The dataset consisted of 150 diamond drill holes, 125 holes were used in the model and MRE, while the rest were located outside of the model perimeter (Figure 19).

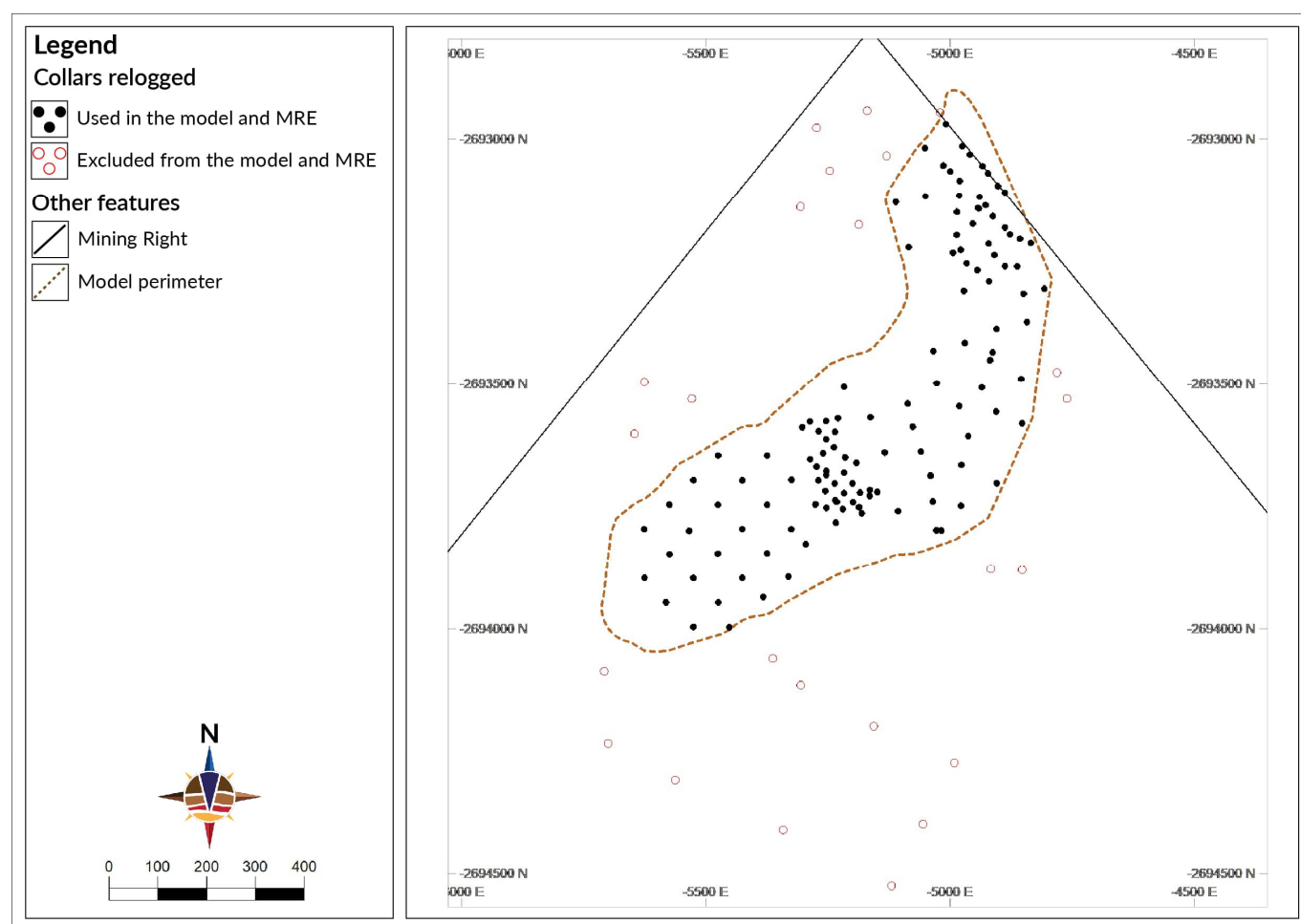


Figure 19. Collars of drill holes relogged for this MRE.

10.1.2 Aggregation and adjustments to data

10.1.2.1 Downhole surveys

Of the 125 drill holes used in the model, only 46 holes had actual downhole survey measurements in the database. 79 out of the 125 drill holes only had a single reading indicating that they were vertical holes, and therefore a dip of -90° and azimuth of 0° were assigned to those 79 holes.

10.1.2.2 Top-capping

Apart from 10 negative SG values that were readily identified as erroneous, another 10 SG values between 0 and 1.491 were removed from the dataset based on the assumption that they might be unrealistically low.

Four SG values above 8.0 were also removed, while 14 samples between 3.5 and 8.0 were simply adjusted to a value of 3.5, since Earthlab believed them to be unrealistically high.

In terms of grade, top-capping was applied to most elements, and is tabulated in Table 9.

Table 9. Top-capping of elements in the respective domains.

Domain	Sub-domain	Element	Top-cap (g/t)	Reduction in maximum	Reduction in mean
Mineralised Domain	NE	Au	0.3	49.2%	0.7%
		Pt	5.5	45.1%	0.3%
		Pd	4.5	31.1%	0.3%
		Cu	3,000	50.1%	1.1%
		Ni	6,500	35.0%	0.5%
	SW	Au	0.3	70.5%	2.1%
		Pt	3.0	29.0%	0.7%
		Pd	3.5	30.8%	0.2%
		Cu	2,000	38.3%	0.2%
		Ni	4,500	14.1%	0.1%
Waste Domain	Single Domain	Au	0.15	92.0%	1.7%
		Pt	1.0	51.4%	0.9%
		Pd	1.1	37.5%	0.5%
		Cu	No top-cap	-	-
		Ni	3,500	34.5%	0.0%

10.1.3 Data spacing and appropriateness

10.1.3.1 Drill hole spacing

Using the formula $\sqrt{\frac{\text{Area (m}^2\text{)}}{\text{Number of drill holes}}}$ to calculate an average spacing of drill holes in the domain:

$$\sqrt{\frac{447,919 \text{ m}^2}{125}}$$

$$\text{Average spacing} = 59.9 \text{ m}$$



The drill hole spacing, however, is not constant across the project area, with more than one hole twinned, a grid in North 2 with an average spacing of approximately 70 m, and more than one portion with spacings below 30 m, other areas with spacings ranging around 50 m, as well as larger open areas with no drill holes at 70 m spacing. Figure 20 illustrates some of the distances between collars for the reader to gain a feel for the drill hole spacing of the project.

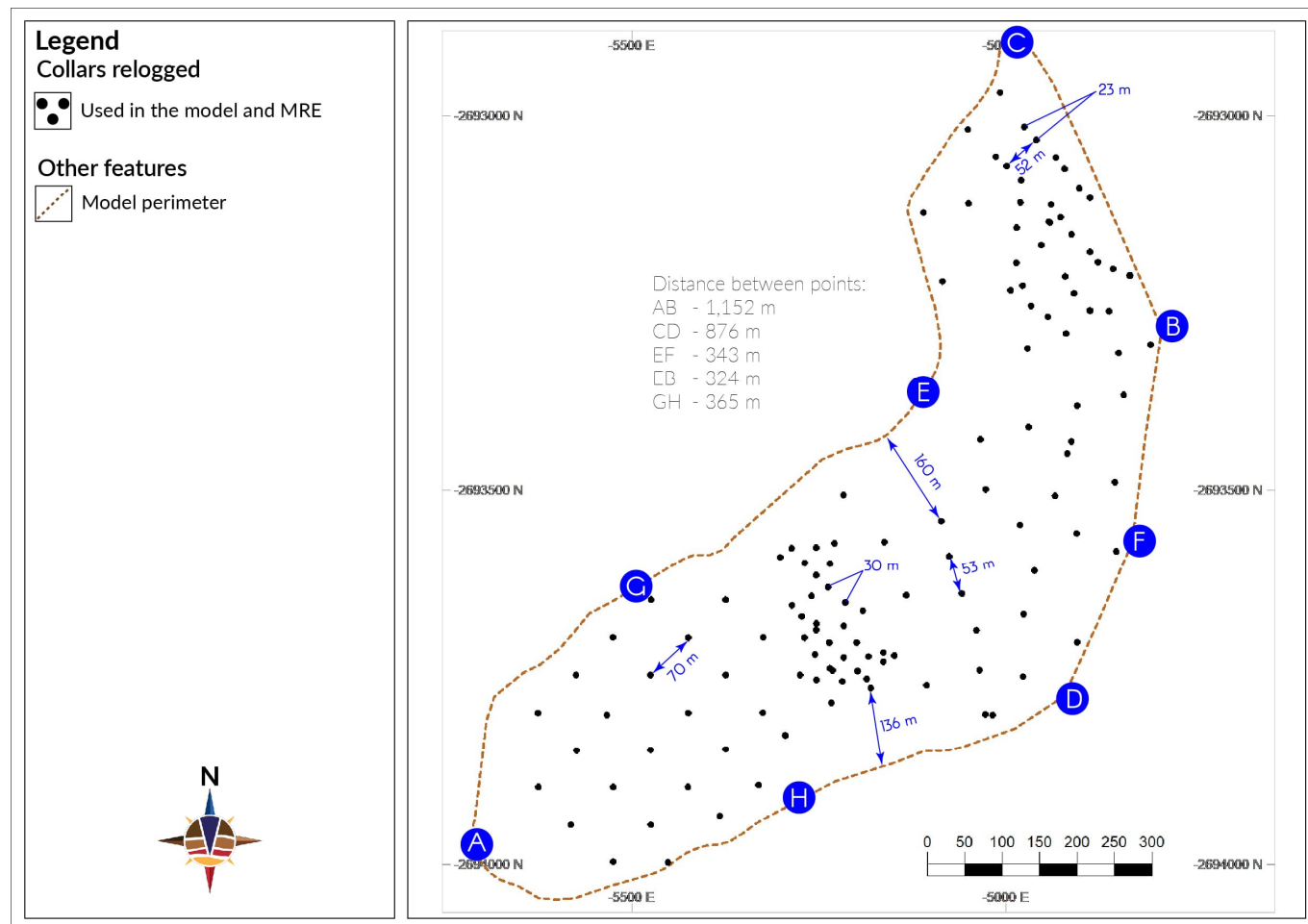


Figure 20. Plan view of collars, illustrating some of the distances between drill holes.

10.1.3.2 Sample spacing

Considering only the drill holes within the main stratigraphic model perimeter, the vast majority of assay samples had a length of 1 m. Figure 21 shows the assay sample length distribution across all the stratigraphy, and Figure 22 shows the sample length distribution of only the samples within the CUIIU domain.

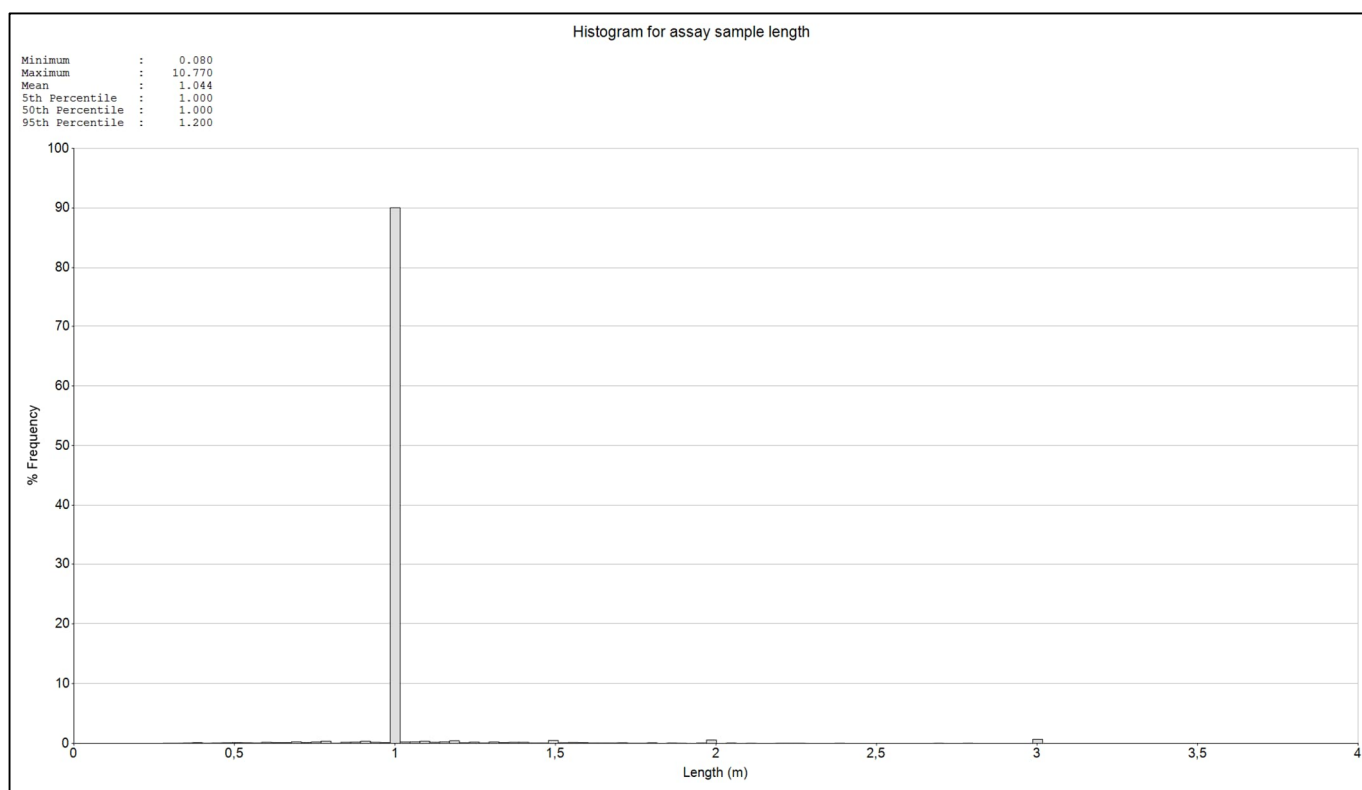


Figure 21. Assay sample length distribution across all the stratigraphy.

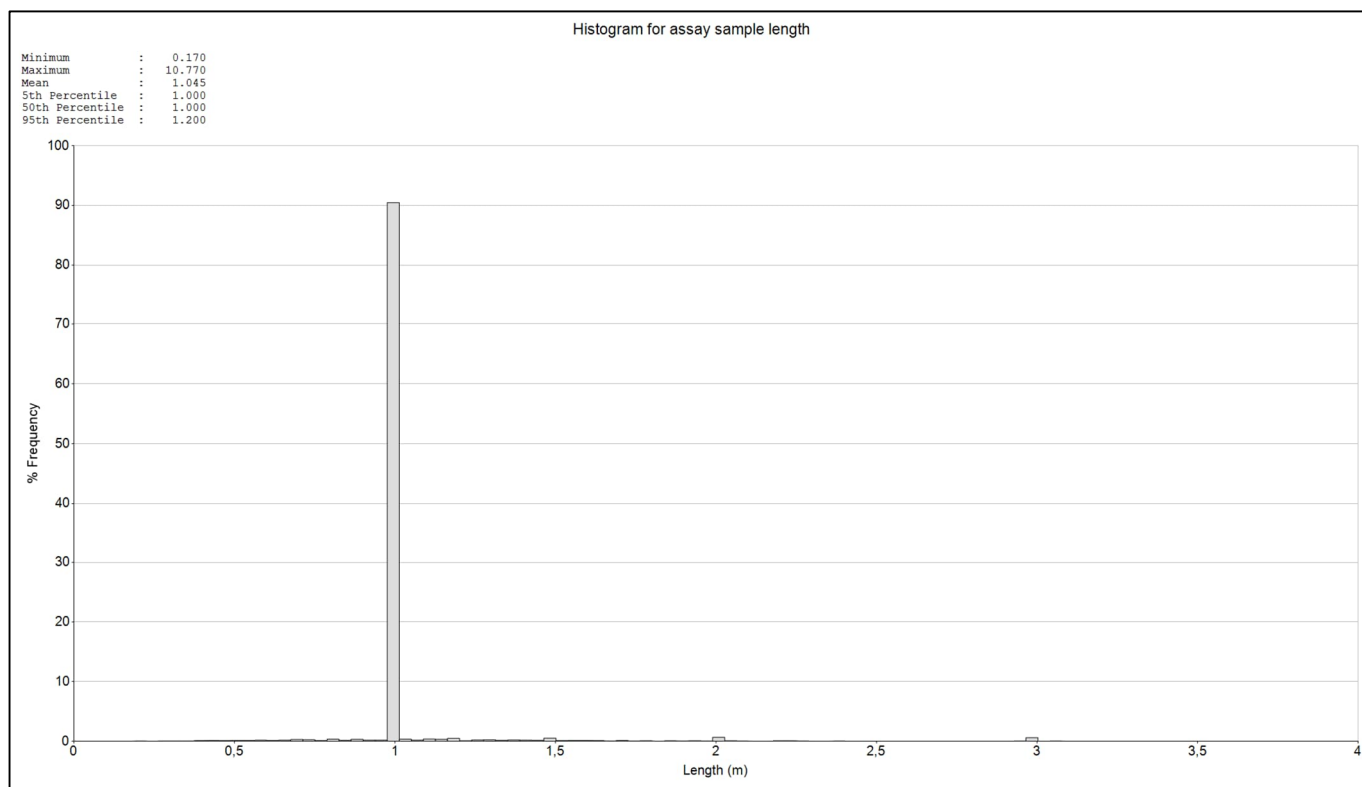


Figure 22. Assay sample length distribution of samples within the CUIIU domain.



10.2 Structural interpretation

As mentioned earlier in the report, based on literature and the geophysical report, it was accepted that the deformation in this project was mainly brittle, horst and graben type fault blocks. While the geophysics was of some assistance, and the historic structural logging consulted, the faults modelled in this MRE were based mostly on significant stratigraphic elevation differences between adjacent drill holes in both the hanging wall and foot wall contacts of the CUIIU. Since the fault plane orientation could not be established with the data available, the fault planes were modelled as vertical planes to allow for the software to truncate the implicit models on either side of the digital fault planes.

It was assumed that the mineralisation took place pre-faulting and therefore in order to consider the drill holes on either side of faults as part of the same estimation domain without negatively affecting the geostatistics, the fault blocks were “unfaulted” to restore to approximate positions relative to one another as they would have been during emplacement and mineralisation.

10.3 Modelling procedure

After some data processing in Microsoft Excel to sort and rename some of the contents of the database extracts, the drill holes were imported into Datamine StudioRM v13.202.0.

The drill holes were interrogated by viewing the Minor Stratigraphy (see Figure 17), as well as attributes such as Pt, Pd, Cu, and Ni grades, lithological logs, and weathering zones.

StudioRM's *Vein* and *Contact Surface* tools were used for the implicit modelling of the wireframes.

The perimeter within which the main stratigraphic units and eventual domain were limited laterally, was created based on a number of factors depending on the location:

- Geophysical results suggesting large faults
- Sharp changes in the aeromagnetic results which suggested there could be changes in the geology that might be relevant to the model.
- Little to no changes in the aeromagnetic results suggesting that the geology might be relatively continuous
- A loosely-fit maximum distance from the outer drill hole(s) of either ~70 m or ~100 m depending on the location and other factors such as geophysics and expected geological continuity
- The absence of PGE-Cu-Ni mineralisation in multiple holes' CUIIU units.

10.3.1 Weathering Zones

The weathering zones (Fresh, Transitional, and Oxidised) were modelled as more or less horizontally orientated planes (Figure 23). The contact surfaces that honoured the contacts between these zones in the drill holes perfectly did not resemble a realistic, regular surface (too many “spikes”). It was assumed that it was due to multiple possible factors such as the core being logged by a team of different geologists, each interpreting the weathering slightly differently given its subjectiveness, the core possibly undergoing further oxidation in some places over the years, and lastly the intervals with missing core could not be logged and therefore in some cases those intervals would have been important for weathering zone transitions.

The contact surface between Oxidised and Transitional as well as between Transitional and Fresh were modelled to honour the contacts as logged, and thereafter smoothed with StudioRM's *Smooth* function with two passes each to create more regular surfaces. Dummy samples were also inserted where necessary to ensure surface trends on the outskirts of the data continued realistically.

Since the smoothed surfaces ended up not honouring each and every drill hole's weathering log, a calculation was done to determine the total lengths of samples logged for each zone, accounting and excluding the

missing core intervals. Then stamping the modelled surfaces onto the drill holes, coding the drill holes with the modelled weathering surfaces, and then performing the same length calculations, once again excluding the missing core intervals.

Based on the comparison between the length ratios in the logs and length ratios of the smoothed modelled surfaces, the surfaces were translated slightly in order for them to honour the length ratios of the logs of the total dataset, even if they did not honour the logs perfectly in each respective drill hole necessarily. The difference at the end was less than 1% difference.

While it could be asked that if the actual contacts could not be trusted enough to model the contact surfaces without smoothing them, why should the length ratios of these supposedly incorrect contacts be trusted enough to correct the surfaces according to that, the answer to that is simply that in the case of having such an imperfect dataset, one needs to make alterations to produce a useful model, and certain alterations to the data need to be based on at least something instead of nothing. In the end, the model was considered to be useful.

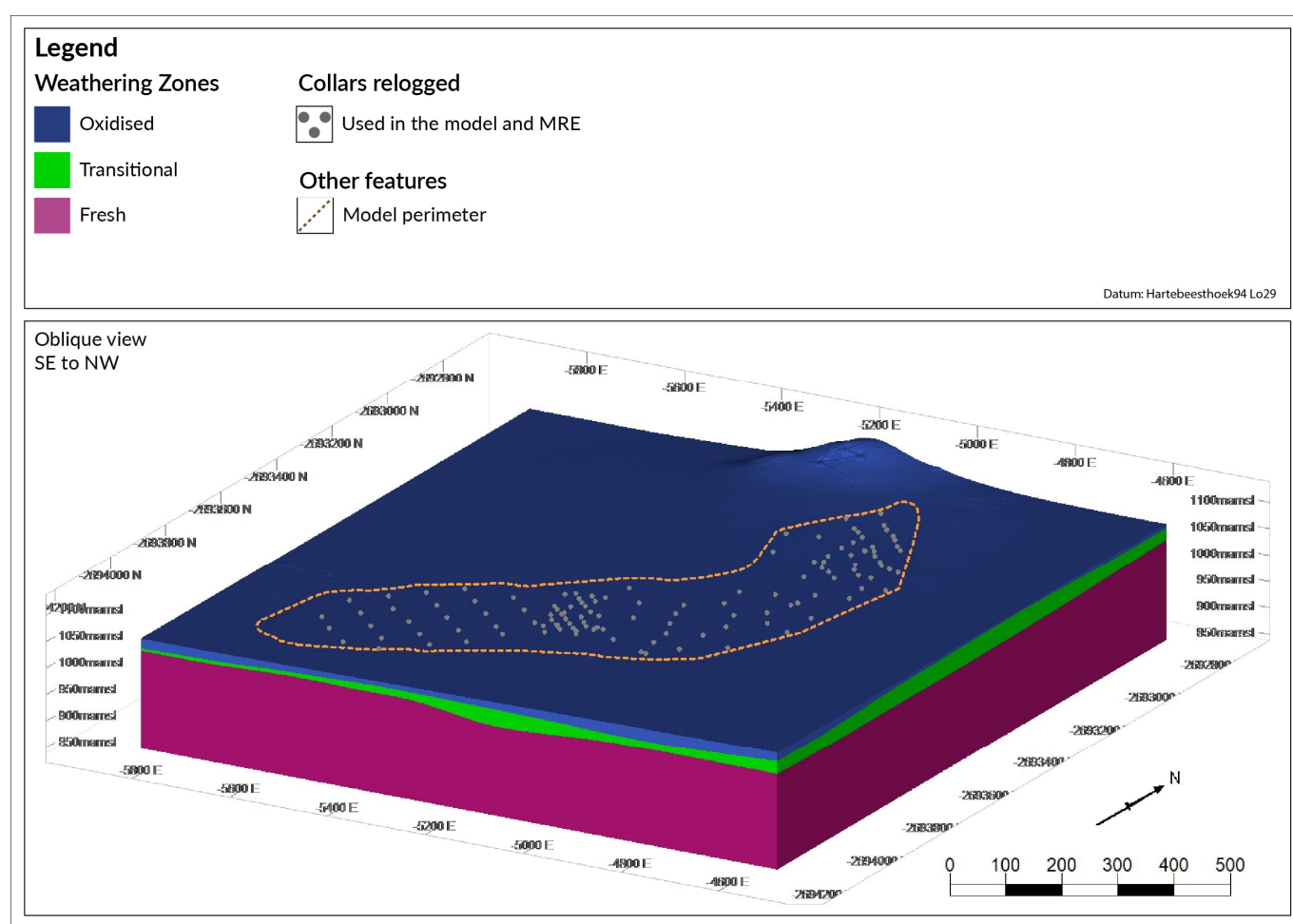


Figure 23. Oblique view of the weathering zones wireframes.

10.3.2 Stratigraphic units

10.3.2.1 Soil & Scree

The solid & scree (hereafter “Soil”) unit logged by the geologists was modelled for the use in potential future mining studies for calculating the amount of material that could possibly be load and hauled without the need for drilling and blasting.

The contact surface was modelled and directed with dummy samples on the outskirts to prevent it from cross-cutting the topography.

The unit however did not have density measurements available and should a mining contractor quote on mining costs based on tonnes instead of volume, the density should be determined and assigned to the model.

The Soil unit ranges from zero to 15.7 m in thickness with an arithmetic mean thickness of 2.6 m.

10.3.3 CUI2

The Minor Stratigraphy distinguished between the CUI2U and CUI2L, however, given the fact that these two units were both considered as waste, and being similar enough for the purpose of the model, they were modelled as one unit on top of CUI1U and below the Soil unit.

10.3.4 CUI1U

The CUI1U unit was the main stratigraphic unit of interest, given that practically all the mineralisation considered for the grade domain (discussed in chapter 1) occurred with this unit.

The unit was modelled with StudioRM's implicit *Vein* tool, considering the vertically modelled fault planes.

In a number of the drill holes, the contact was either slightly changed by the Resource Geologist or it had to be "switched off" in the software in order for the software to ignore it during modelling. This was due to one or more of the following reasons:

- Since it was possible that the various logging geologists could've subjectively interpreted the stratigraphic contact in different places given the variable amounts of minerals such as olivine's and the cyclical and repetitive intervals of olivine-rich and olivine-poor lithological units at the transitions between the Minor Stratigraphic cyclic units, the Resource Geologist applied some slight adjustments at his discretion based on relative contact depth correlations between adjacent drill holes. Where adjustments were made, the lithology, grade, and both the hanging wall and footwall contacts were considered in order to have comfort that the adjustment was fair, and that it should not have perhaps been a fault in the vicinity. 19 drill holes were adjusted in this way.
- In cases where core was missing, there was no way to be certain where the contact would have been located, in which case the hanging wall and/or footwall contact(s) were ignored during modelling in order for the software to interpret the contact from surrounding drill holes. 13 drill holes were affected in this way.
- Where the drill hole ended within CUI1U before intersecting CUI1L, the footwall contact was naturally switched off. Four drill holes' footwall contacts were "switched off" because of their end-of-hole position.
- Where later-stage intrusions affected where the CUI1U could have been. Two drill holes were affected by this.

The number of drill holes manipulated in this way and the extent to which it was, was considered to be acceptable in order to produce a useful model in a practical time limit. Given the difficulty in pinpointing the exact position of the contacts given the cyclical or gradual nature of the fractionation contacts, the possibility of thermal erosion, magma mixing, emplacement chamber footwall and hanging wall undulation, and later-stage faulting and intrusion, it could very well be that the contacts as modelled could be considered to lie slightly higher or lower, however, in the aim of producing a realistic and, most importantly, a useful model in the limited timeframe, the model was deemed acceptable.

After attempting numerous fault positions and orientations to produce a realistic model of the regions of Fault Block 3 and Fault Block 5 (hereafter "FB#") (see Figure 25), it was deemed unworthy to spend further time on the task given the strict timeframe. CUI1U was interpreted to be present in those areas, however the thickness

of the unit made the interpretation and modelling challenging. For the sake of progress, vertical fault surfaces were modelled to separate those drill holes from the areas with more continuous thickness and the contacts were modelled as logged. The significant thickness discrepancy between FB3 and FB1 as well as between FB5 and FB2 was noted and discussed with VMC, and since it would be difficult to explain such thickness discrepancies geologically, FB3 and FB5 would simply be classified as Inferred regardless of whether they could have otherwise been classified at a higher confidence category. The geological uncertainty was too high to allow for Indicated or Measured.

The desurveyed drill hole traces that are coloured by the Minor Strat code is illustrated in Figure 24.

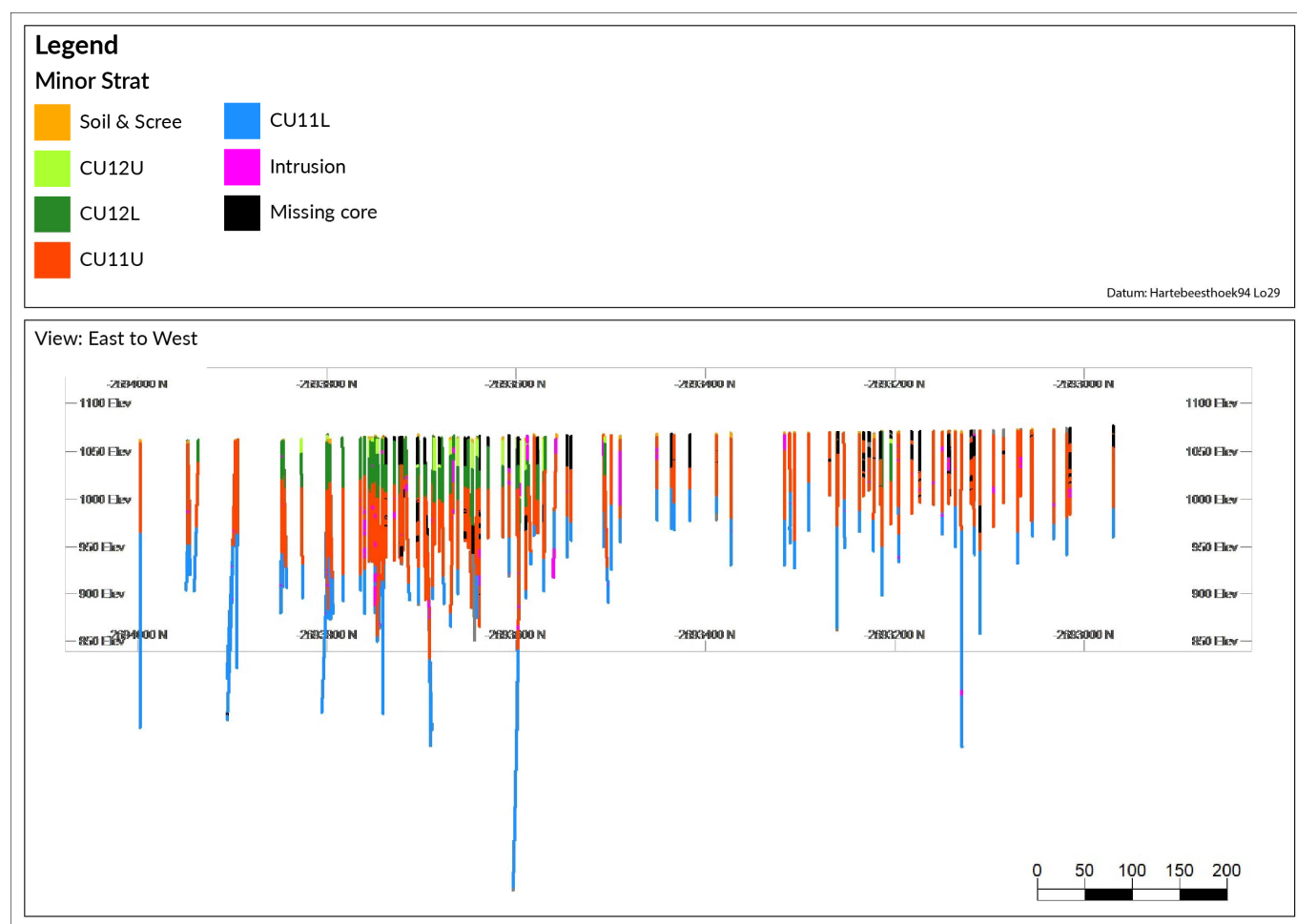


Figure 24. Drill holes viewed from east to west, coloured by the Minor Strat.

The main stratigraphic wireframes (excluding the Soil unit) along with the drill hole collars and the vertical fault surfaces can be seen in Figure 25. The black dots represent the collar positions on surface.

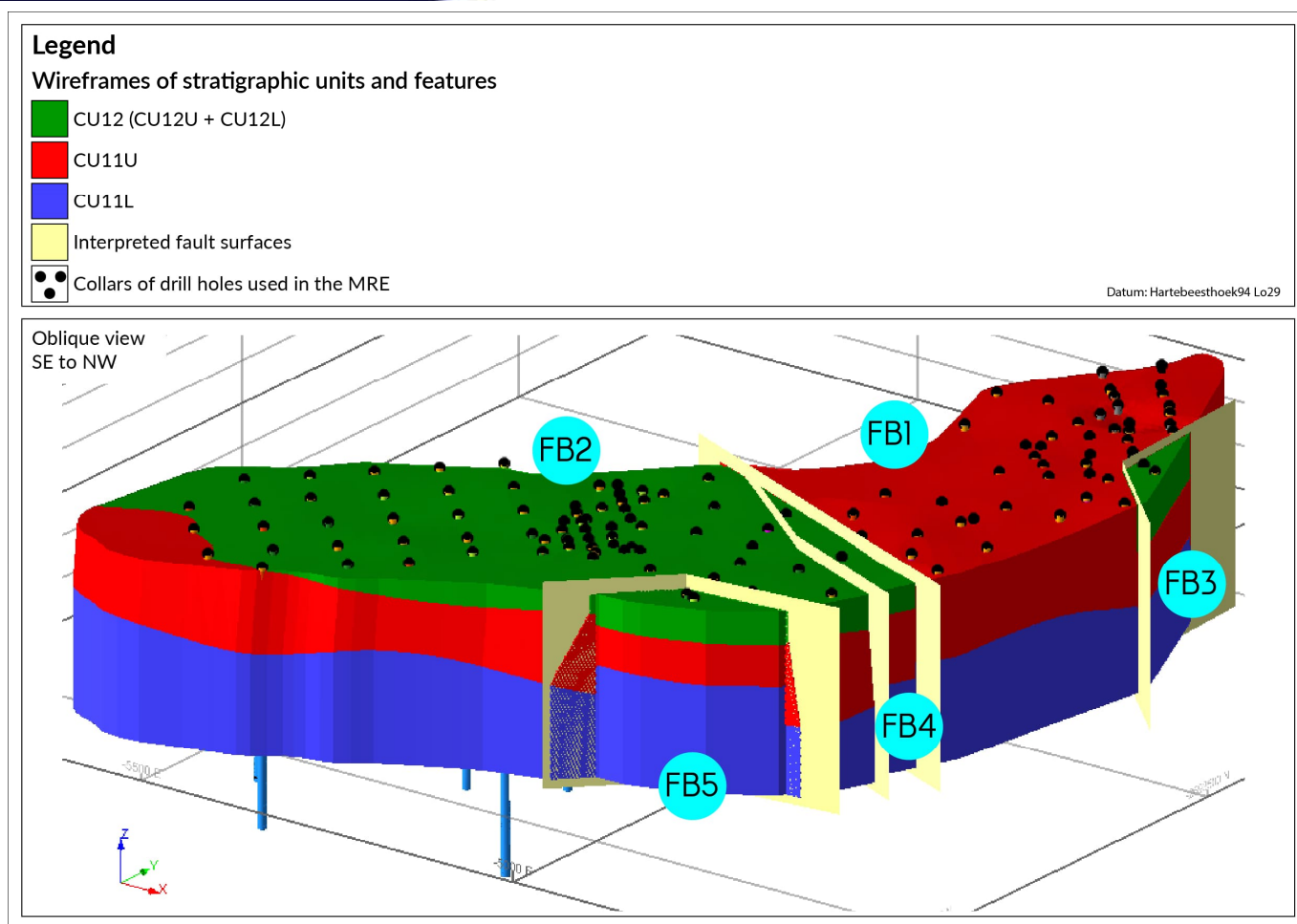


Figure 25. Oblique view from approximately south-east to north-west of the main stratigraphic wireframes (excluding the Soil unit), and the drill holes.

CU11U's wireframe thickness ranges from 0.5 m to 131.1 m with an average vertical thickness of 81.4 m. The wireframe has a mostly horizontal orientation.

10.3.5 CU11L

The CU11L was simply modelled from the bottom contact of the CU11U down to an elevation of 850 mamsl in order to provide material beneath the potential ore unit for future mining studies.

10.3.6 Intrusions

After several attempts it was proven too difficult at this stage to effectively model the later-stage granitic intrusions.

The granitic intrusion intercepts in the entire dataset (including the drill holes excluded from the MRE) range from 0.04 m to 146.74 m. GVNI52 and GVNI55 were both angled holes at approximately 60° and intersected an intrusion unit at 146.74 m and 31.75 m continuously, respectively. Apart from those two cases, 11 intercepts of more than 10 m have been logged, 25 intercepts between 5 m and 10 m, 78 intercepts between 1 m and 5 m and 59 intercepts between 0 m and 1 m have been logged.

In the drill holes used in the MRE, inside the CU11U wireframe which is the stratigraphic unit of interest within which the mineralisation occurs, a total of 283.74 m of intrusion intercepts have been logged.

10.3.7 VR1, VR2, VR3, VRMID1, and VRMID2

As mentioned in section 9.3 the geologists logged a minor-substratigraphy level, namely the VR1, VR2, VR3, VRMID1, and VRMID2 units based on the visual sulphide mineral content. The purpose of this was to delineate the economic zones based on visual identification which would give comfort that in-pit grade control during mining could potentially be possible with the naked eye. The VR1 – VR3 units had a higher mean PGE grade than the encompassing CUIIU unit, indicating progress in being able to visually identify the mineralised zone. However, the VR1 – VR3's mean PGE grade remained sub-economical and would have still required a grade-based subdomain within them. In this deposit's case, given the need for and methodology of creating a grade-based subdomain, it was decided to model the minor stratigraphic units and proceed directly to creating the grade-based subdomain instead of modelling wireframes for the minor substratigraphic units as well.

10.4 Model confidence and alternative interpretations

The confidence in the current stratigraphic model is acceptable for this MRE. Alternative interpretations will always be possible, but Earthlab does not foresee that a viable alternative stratigraphic interpretation will produce a completely and materially different model. While different resource geologists may interpret the perimeter at different extents, or interpret the fault planes at various positions, it is unlikely that it will result in a completely different type of model, but just alter the tonnage between fault blocks by altering the positions of faults.

11 DOMAINING

11.1 Cut-off grade

During the relogging by Earthlab in 2023, a minor-sub stratigraphic zone (Figure 17) was added to the level of detail logged. It was hoped that logging the minor-sub stratigraphy based on visual observation of base metal sulphide mineralisation would offer a domain that would have economic PGE mineralisation without having to apply a cut-off grade. The Resource Geologist could then just model these zones as is. Unfortunately, the minor-sub stratigraphic logging did not offer an immediately economic average grade, nor was the PGE mineralisation always strictly limited to those zones. It was therefore not possible to use the minor-sub stratigraphy as is for the optimal mineralised domain. It was decided to use the minor stratigraphy for the geological model and create a grade-based domain, as explained in the text below.

The theoretical economic mineralisation is limited to the CUIIU unit; however, it would not be economic to mine the unit as a whole due to the large portions with low to trace levels of mineralisation of the PGEs and base metals bringing down the average grades to sub-economic levels.

It was therefore necessary to apply a cut-off grade on a sample-level to define a sub-domain within CUIIU which could potentially pass RPEEE requirements.

It should be noted that JORC Appendix 1 suggests generalised meaning to terms such a “cut-off grade” and “ore” which should not be confused with the context in which it is used here temporarily.

The ‘cut-off grade’ applied on the sample-level was not based on a minimum grade which in itself would be economic to mine and process, but rather a grade which (when applied as a cut-off grade in Datamine StudioRM’s COMPSE function) would produce a set of samples that would meet the following criteria:

- Have an average grade which could potentially be economic to mine
- Consist as far as possible of a single grade population, or at least have minimal samples that would appear to be part of a separate statistical population when viewed on a probability plot
- Display a relatively realistic log-normal histogram without significant gaps in grade intervals.

The COMPSE function in Datamine StudioRM is a complex procedure to classify samples as “ore” or “waste” depending on their grade, length, and position relative to other samples, which is a more preferable method of applying a cut-off grade as opposed to a simple flagging of samples above and below a specified grade. Apart from the minimum grade and minimum mineable thickness, the parameters also allow for tweaking the level of conservatism versus lenience in the way in which samples below the cut-off grade could be included in intervals classified as “ore” which effectively reduces the average grade, but allows for longer, more continuous intervals. (Note the usage of “ore” and “waste” here are not in line with JORC’s intended use, but simply the terms used by the software to distinguish between the two respective domains.)

A set of iterations were run to evaluate different cut-off grades, using 2E+Au as the variable to be applied. 2E+Au cut-off grades ranging from 1.0 g/t to 1.5 g/t were evaluated, with both conservative and lenient settings.

A 2E+Au cut-off grade of 1.2 g/t with lenient settings, requiring a minimum mineralised interval of 2.5 m and allowing for up to 2.5 m of internal waste, was chosen as the final parameters to define the potentially economic domain within CUIIU. This domain will henceforth be referred to as the “Mineralised Domain.” The remainder of CUIIU which consisted of the samples coded as “waste” will be referred to as the “Waste Domain” but should not be confused with other portions of waste material situated within other stratigraphic units.

The probability plot seemed to suggest two statistical populations. However, the lower grade population consists of only approximately 10% of the samples, which was deemed acceptable.

The grade statistics displayed in Figure 26 and Figure 27 are length-weighted and calculated before any top-capping was applied later.

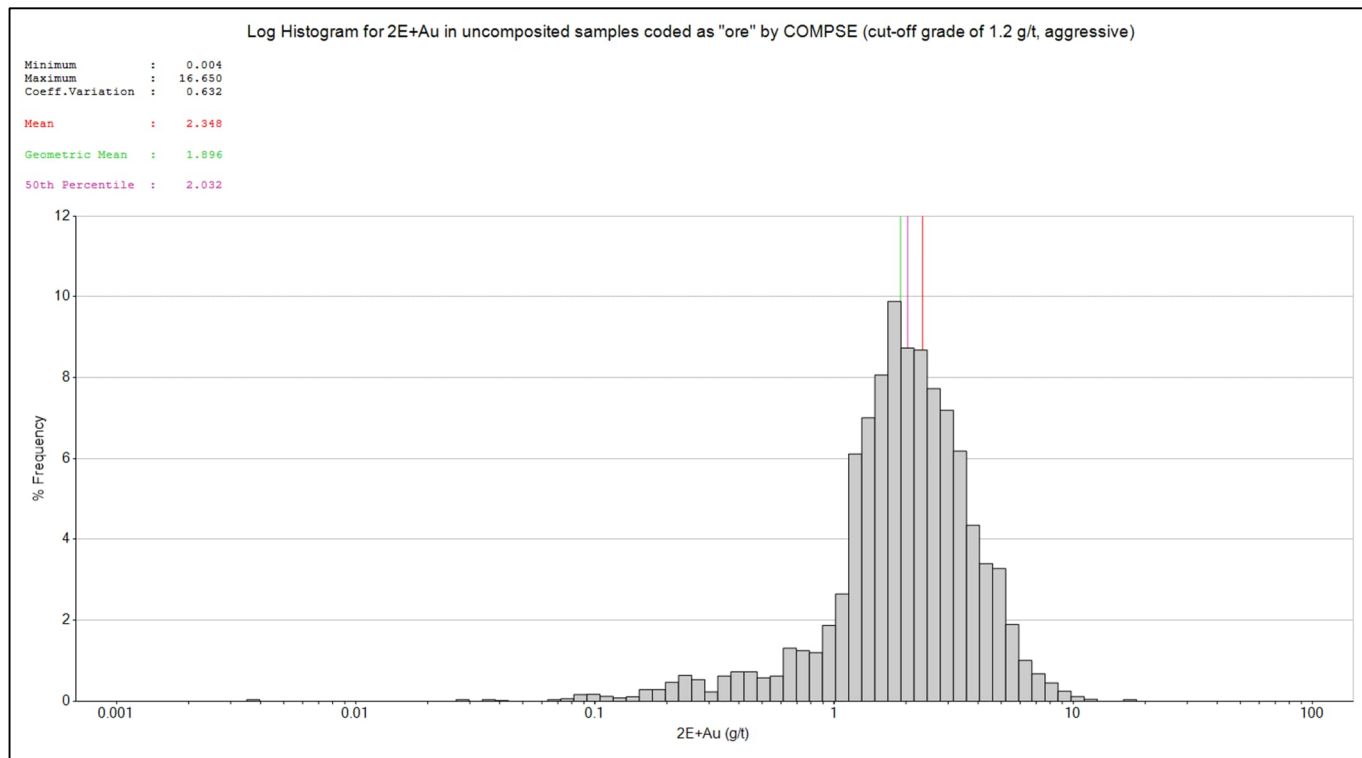


Figure 26. Log histogram of 2E+Au in uncomposited samples coded as "ore" by the COMPSE process, representing the samples in Mineralised Domain.

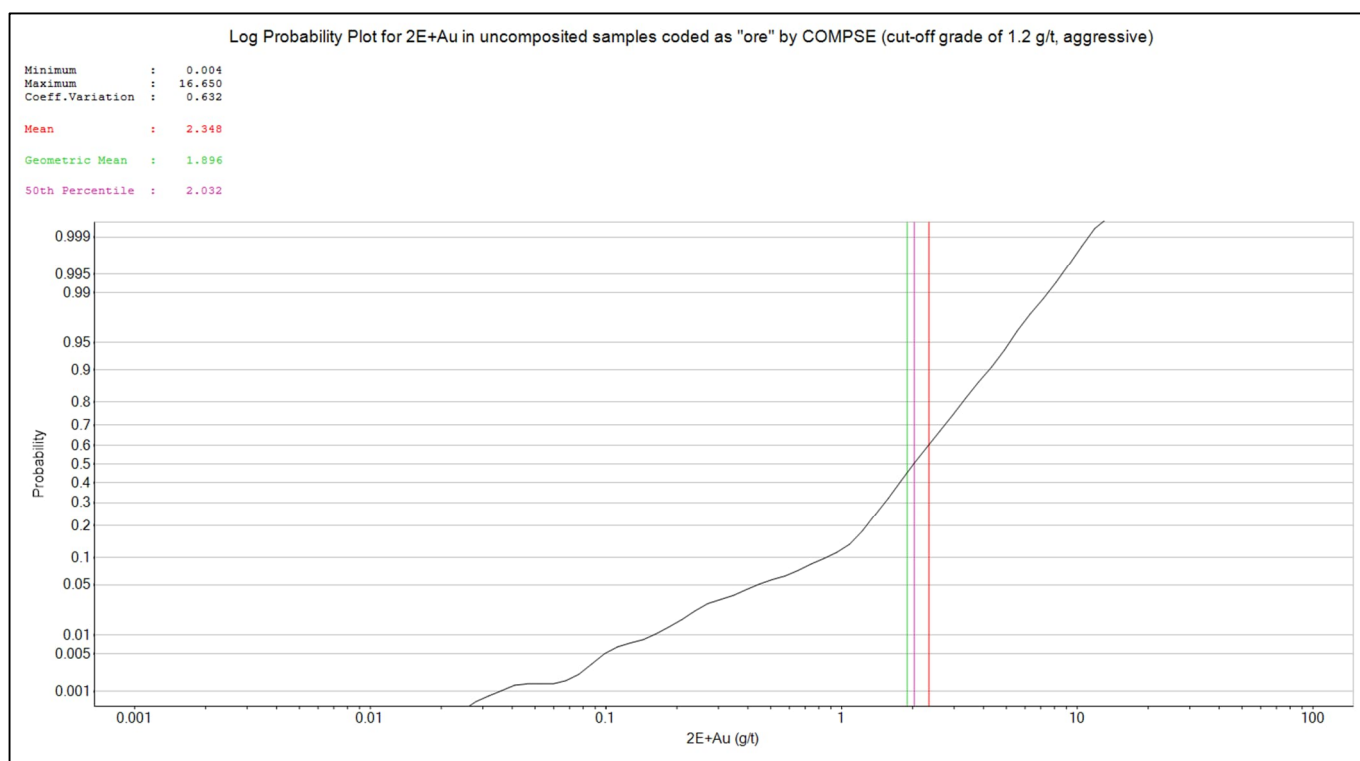


Figure 27. Log probability plot of 2E+Au in uncomposited samples coded as "ore" by the COMPSE process, representing the samples in Mineralised Domain.

11.2 Compositing

Although Figure 22 indicated that the samples were already mostly of equal length, it was still important to go through the typical step of compositing since it was expected that variography and kriging would be incorporated. The choice of length for the composites was obvious based on Figure 22, i.e., 1 m, and composites were terminated at stratigraphic unit and boundaries. The compositing method aimed to minimize residuals and therefore allowed for slight deviation from the intended composite length.

The statistics reported hereafter are based on the composited samples.

The composite length distribution is illustrated in Figure 28. The setting to prevent residuals can cause a slight deviation from the preferred composite length, but as the histogram illustrates, the vast majority of composites were located within remarkably close proximity to 1.0 m.



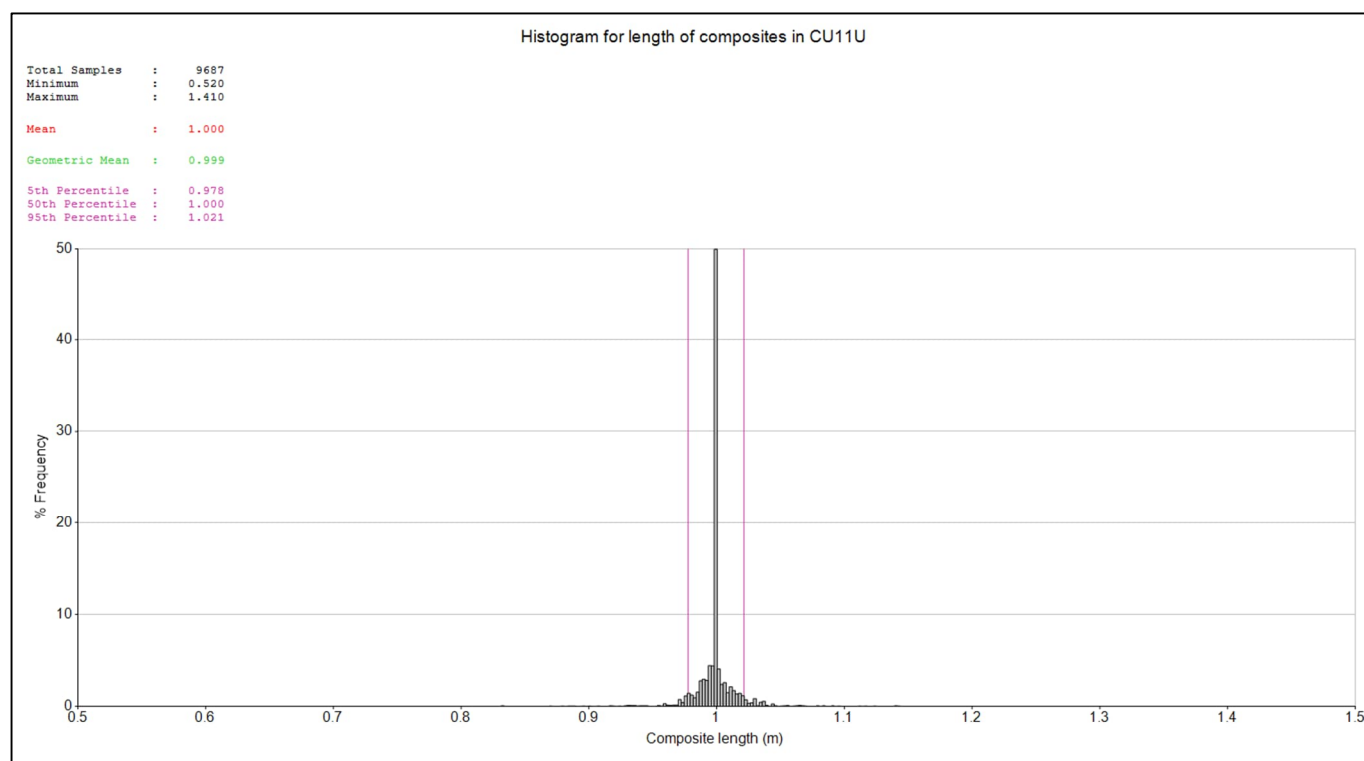


Figure 28. CU11U composite length.

11.3 Unfaulting

Based on the assumption that the mineralisation occurred pre-faulting and not significantly affected by the faulting, the fault blocks were “unfaulted” to restore them to their pre-faulting positions relative to one another. The drill holes were unfaulted in the same way depending on the fault block in which they were situated.

11.4 Indicator variograms

The composites were coded with indicators of 1 and 0, i.e., 1 if they represented the Mineralised Domain and 0 if they represented the Waste Domain in CU11U.

The indicators were analysed to determine indicator variograms for preparing for the probability estimation.

While using ordinary semi-variograms for the indicators proved to be impractical, correlograms were used to establish some sort of a directional continuity, which was around ~200 m in the horizontal. An omnidirectional variogram could not be used since the vertical component would have caused the experimental variogram to reach the sill too early. The indicator correlograms are illustrated in Figure 29.

It should be noted that while indicator variograms’ nugget component could be misleading, it was easy to see the short-scale variability between closely spaced drill holes, however, if sufficient continuous intervals of the same indicator exist in each drill hole, the average semi-variance could create a nugget close to 0 suggesting low short-scale variability (at least in the case of ‘indicator’ presence), which could be seen to be untrue at least at the distance between the closer spaced drill holes.



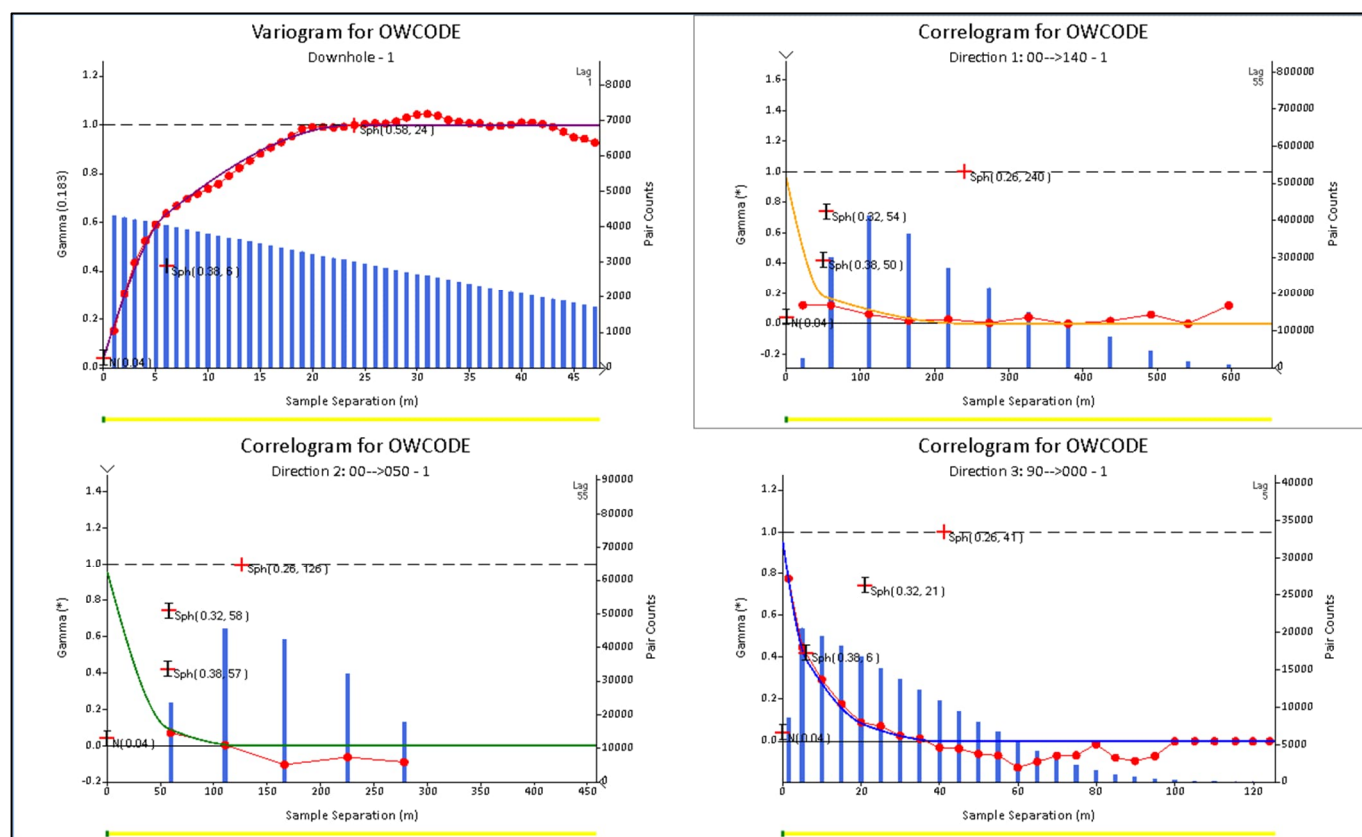


Figure 29. Indicator correlograms.

11.5 Probability Estimation

Since the existence and locations of the Mineralised Domain were too difficult to model with a wireframe in StudioRM, a technique called Probability Estimation was performed (also commonly referred to as Categorical Indicator Kriging).

The CUIIU wireframe was filled with blocks with parent block dimensions of 2.5 mX by 2.5 mY by 2.5 mZ, as well as allowing for sub-celling to honour the wireframe.

Probability Estimation was done into the blocks using the indicator samples to estimate where a block has sufficient probability of being part of the Mineralised Domain, and where the probability of being part of the Waste Domain is larger.

Using Kriging with the indicator variograms caused too much smoothing, not honouring the drill holes with nearby blocks effectively enough, and therefore Inverse Power of Distance (IPD) to the power of 4 was used to estimate the probabilities. When using IPD for grade estimation, a higher power would typically be used when short-scale variability is low and a lower power would be used if the nugget is high to allow for more smoothing, however, in the case of working with the indicators to determine the location of the Mineralised and Waste Domains, a higher power was used to ensure drill hole honouring, even though it was known that the location of the domains could vary at a short scale between drill holes.

Dynamic Anisotropy (DA) was used to rotate the search ellipsoid in the aim of following the general Mineralisation trend in the vicinity. The surfaces to control the DA were created through explicit modelling of a hanging wall surface and a footwall surface encapsulating the mineralisation in a single zone. The surfaces were smoothed with StudioRM's Smooth function to remove highly angular areas that resulted from irregular mineralisation. The hanging wall and the footwall surfaces used for DA are shown in Figure 30.

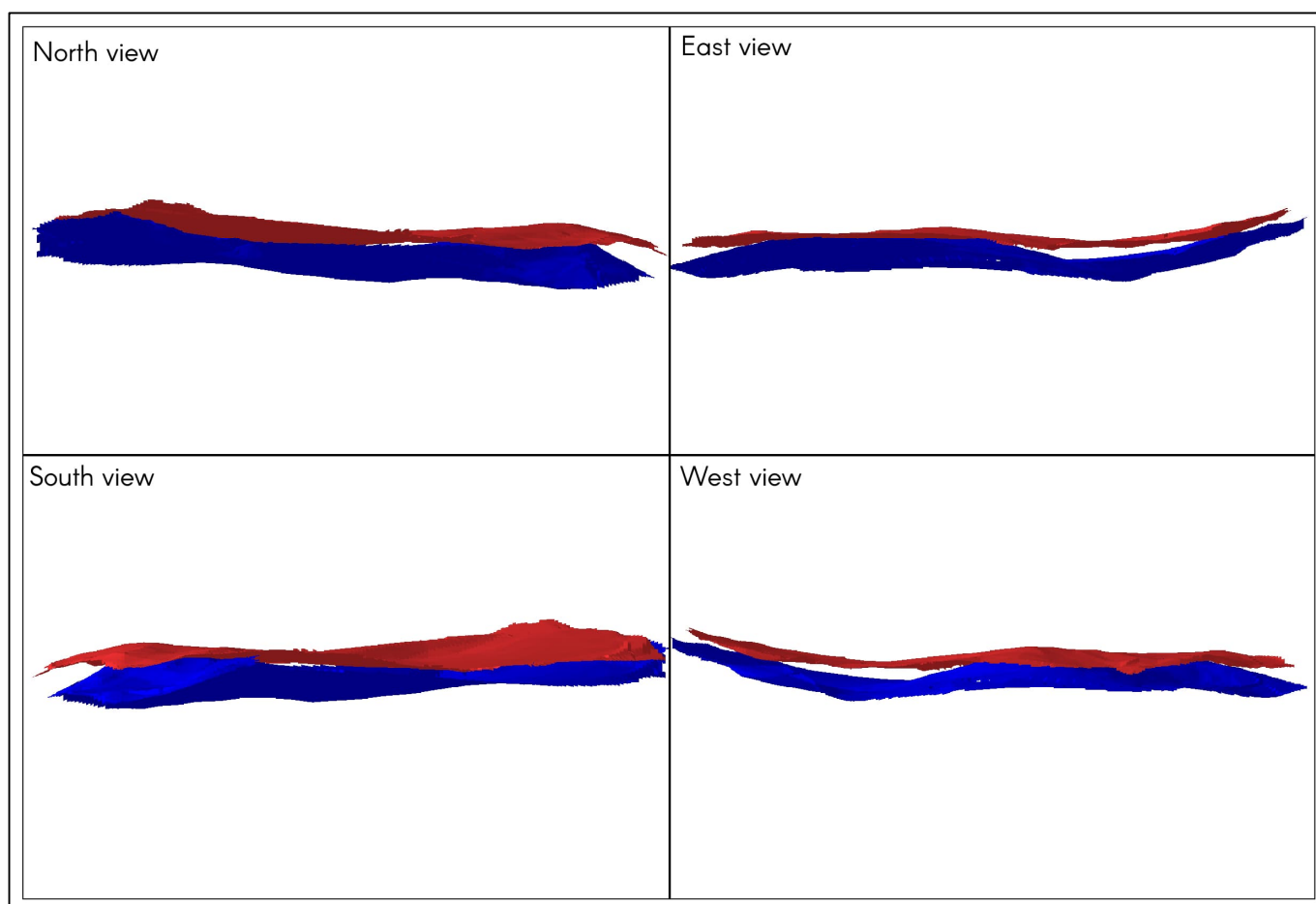


Figure 30. Surfaces used to guide the Dynamic Anisotropy. Red: Hanging wall. Blue: Footwall.

The search and estimation parameters of the Probability Estimation are tabulated in Table 10.

Table 10. Search and estimation parameters used for the Probability Estimation of the Minerals and Waste Domains in CUIIU.

Parameter	Setting
Interpolation method	IPD ⁴
Search volume dimensions	200 mX by 200 mY by 40 mZ
Minimum samples	3
Maximum samples	10
Maximum samples per drill hole	3
Use of octants	No

After estimating the probability, a series of thresholds were investigated to determine the best threshold to apply. Probability thresholds from 0.3 to 0.55 with a step of 0.05 were looked at to determine the best threshold to apply in this project's case. Based on the differences between the outcomes of the various thresholds, it was decided to use a commonly used one of 0.4; coding all the blocks with a probability above 0.4 as part of the Mineralised Domain and all the blocks below 0.4 as part of the Waste Domain.

Further manual cleaning was done on the block model, specifically the Mineralised Domain to remove artifact blocks, areas where over-estimation could have been possible, and areas where certainty was lower, and the probabilities clearly deteriorated but still reported just above 0.4.

Of the drill holes used in the MRE, a total of 9,682.5 m of logged samples were located within the CUIIU wireframe, consisting of 2,337 m of Mineralised Domain samples and 7,345.5 m of Waste Domain samples, giving a proportion of approximately 24.1% Mineralised Domain samples. It should be noted though that not all drill holes intersected CUIIU fully, and therefore this ratio could be slightly off.

Comparing the block volume ratio (Figure 32) with the sample ratio (Figure 31) of Mineralised Domain vs Waste Domain, one can see that the Mineralised Domain's volume is more conservative than what the samples indicate.

The Mineralised Domain is illustrated in an oblique view in Figure 33 and on sections from Figure 34 to Figure 37. The 2022 MRE's Reef is also illustrated in the section views for comparison.

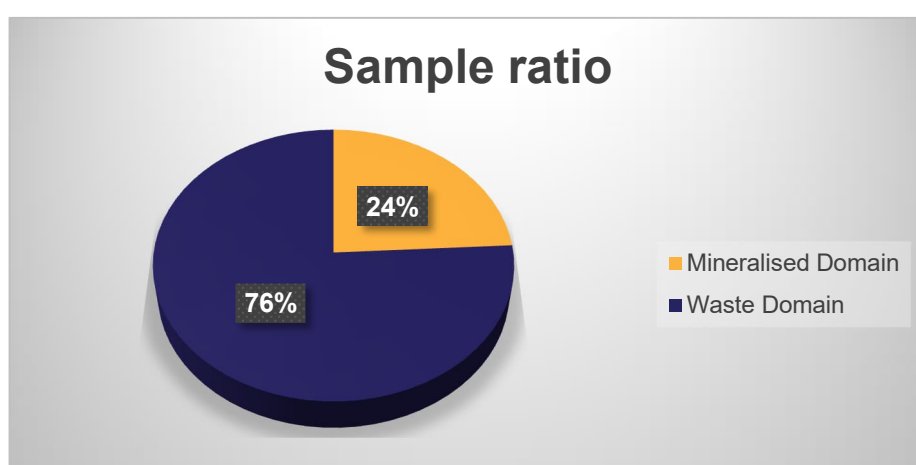


Figure 31. Sample ratio of Mineralised Domain vs Waste Domain.

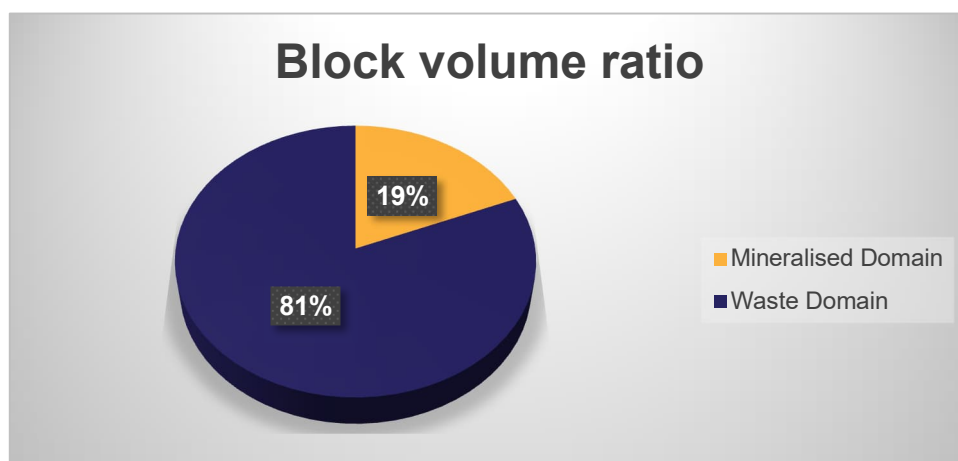


Figure 32. Block volume ratio of Mineralised Domain vs Waste Domain.

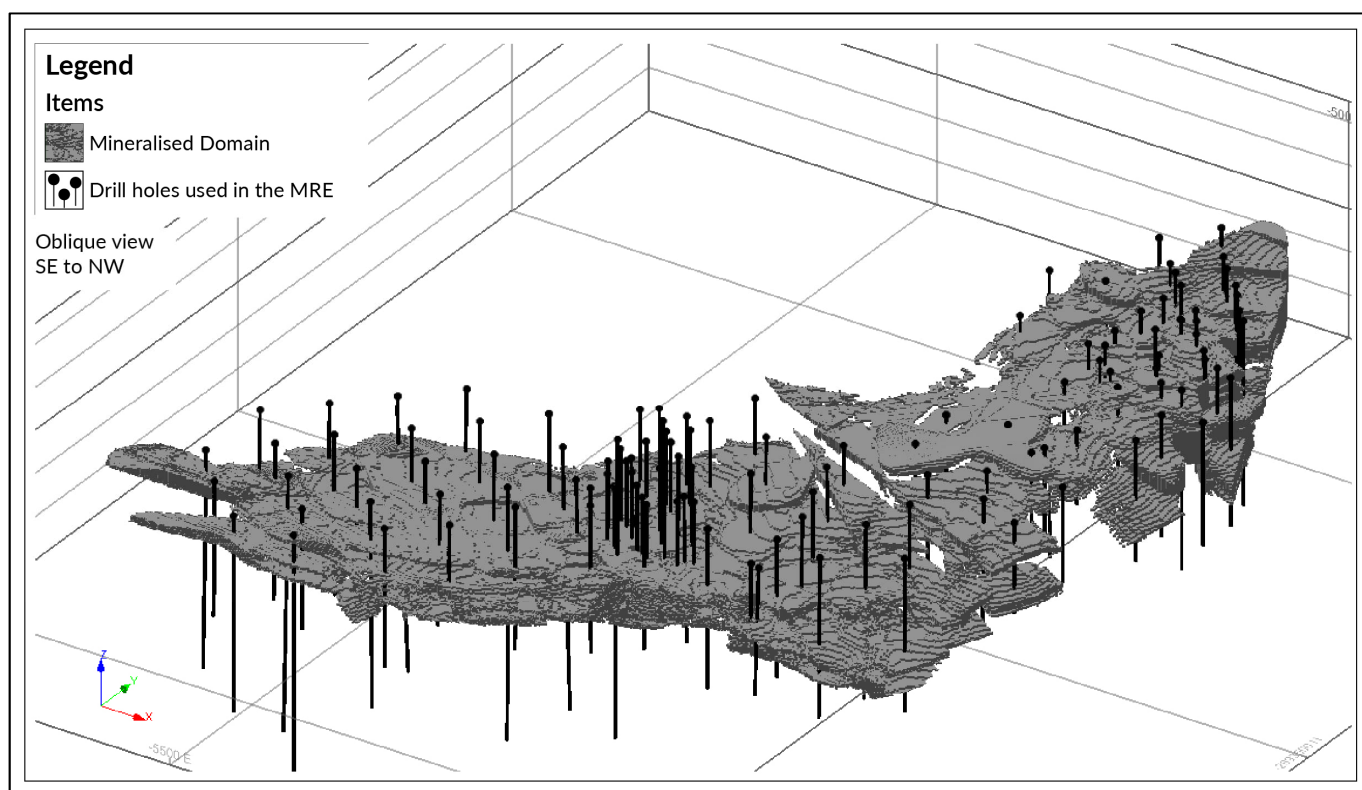


Figure 33. The Mineralised Domain produced by the Probability Estimation and a threshold of 0.4 and manual cleaning of uncertain blocks.

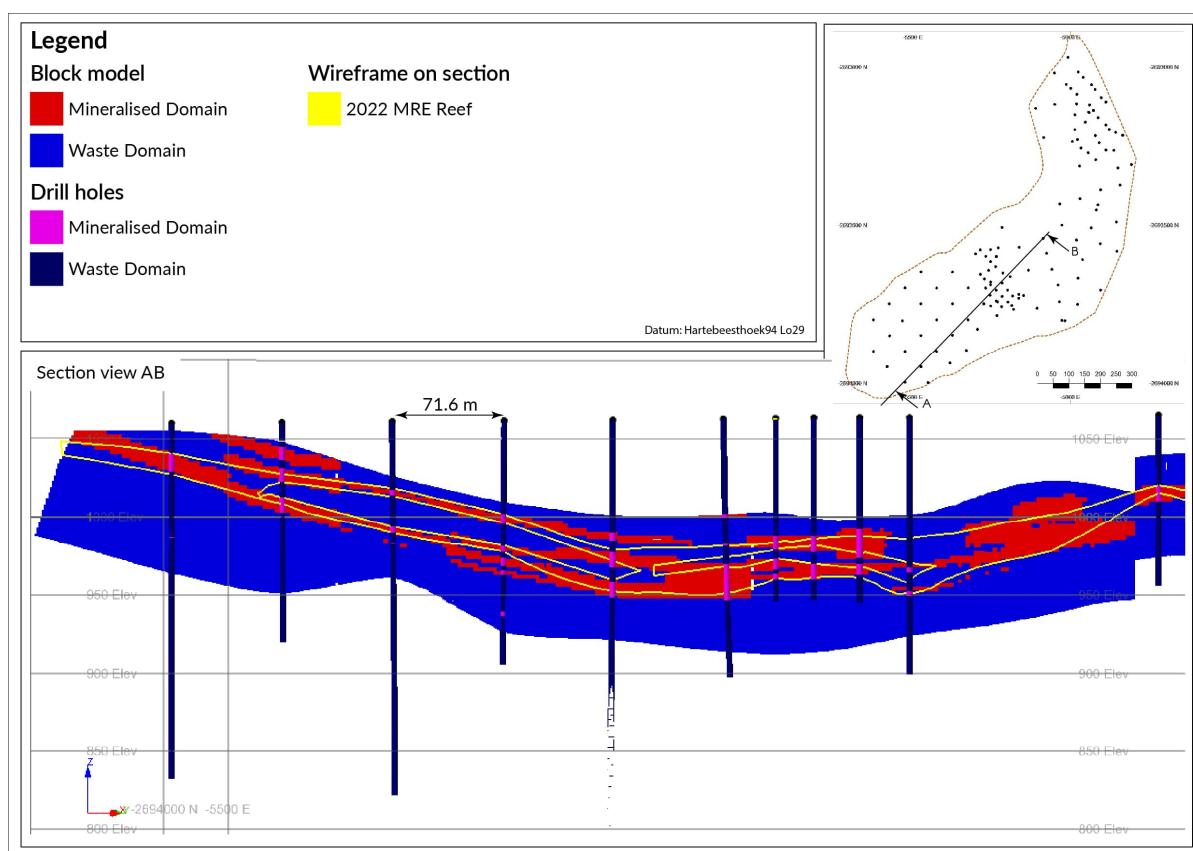


Figure 34. The Mineralised Domain (red) and Waste Domain (blue) inside CUIIU on section AB. Drill holes not illustrated to scale.

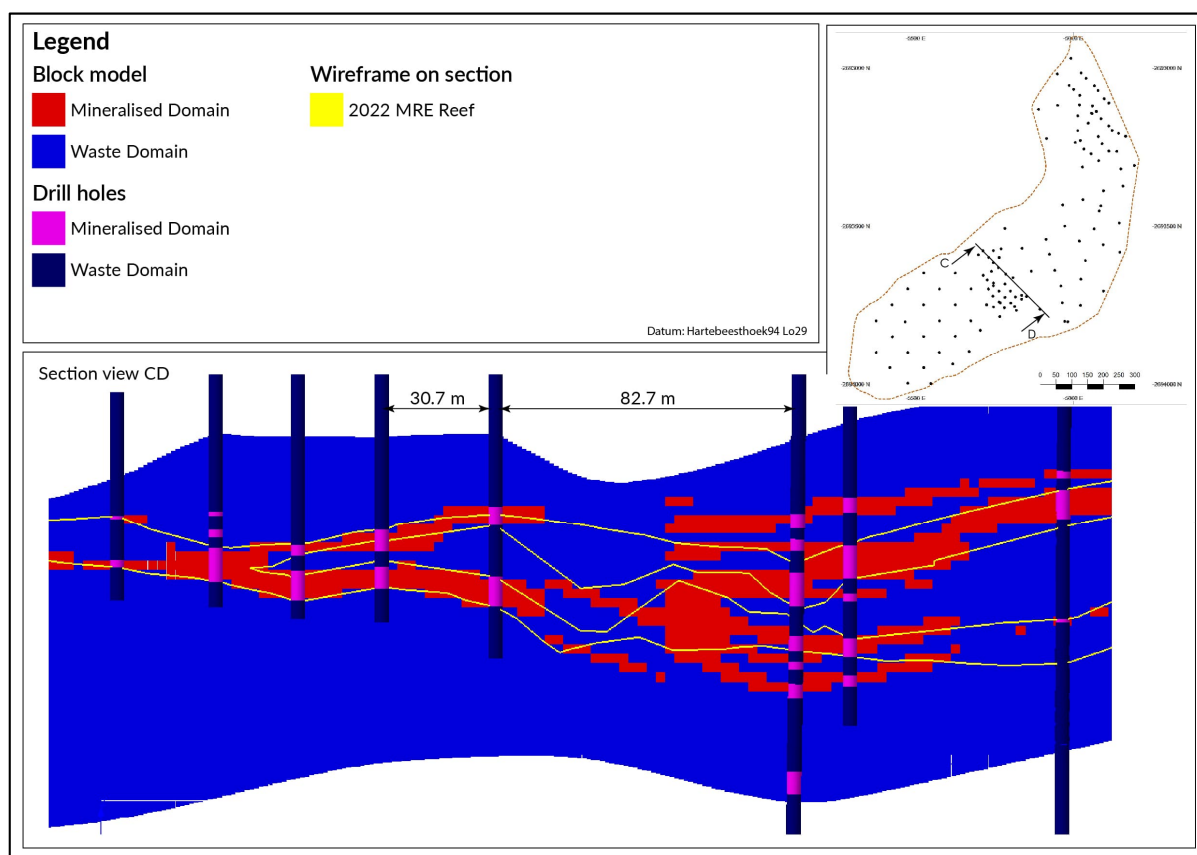


Figure 35. The Mineralised Domain (red) and Waste Domain (blue) inside CUIIU on section CD. Drill holes not illustrated to scale.

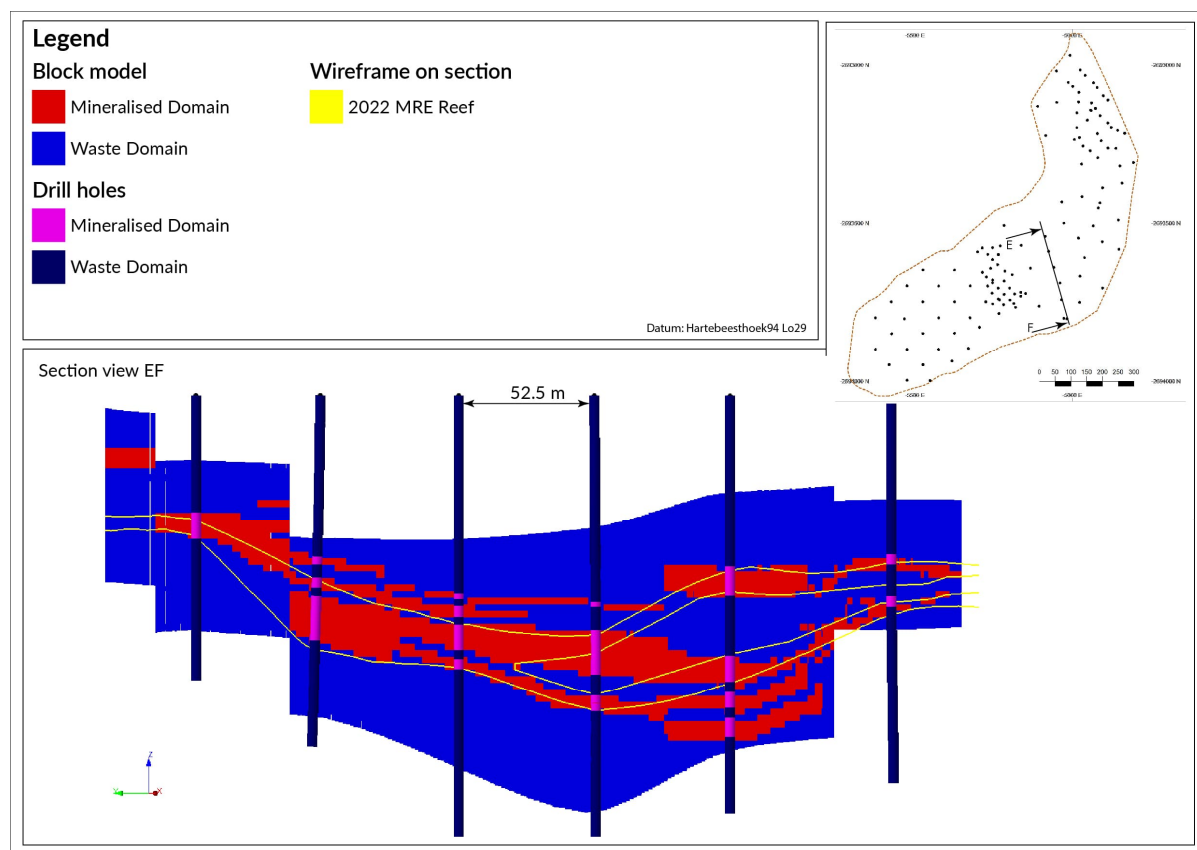


Figure 36. The Mineralised Domain (red) and Waste Domain (blue) inside CUIIU on section EF. Drill holes not illustrated to scale.

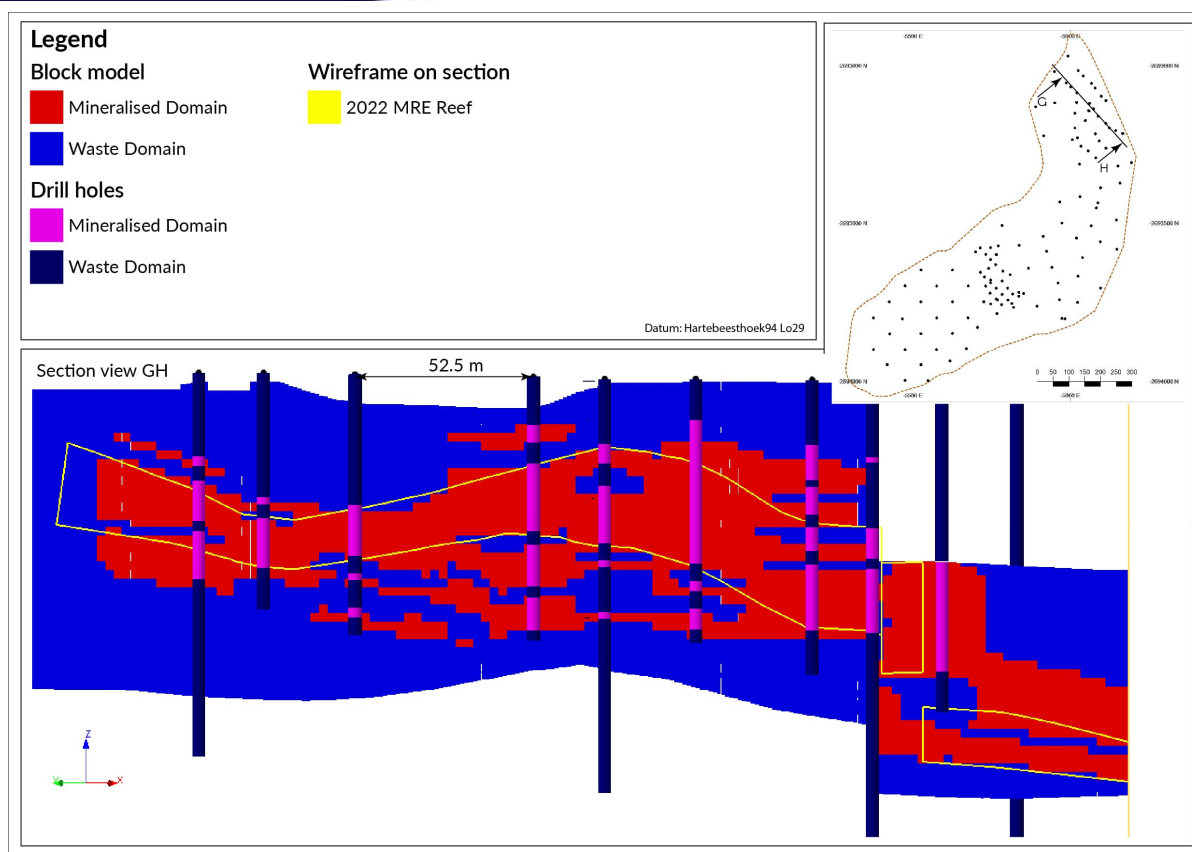


Figure 37. The Mineralised Domain (red) and Waste Domain (blue) inside CUIIU on section GH. Drill holes not illustrated to scale.

The Mineralised Domain along with the Waste Domain were not modelled with wireframes, but directly as a block model with Probability Estimation and applying a threshold probability to distinguish between the two. Therefore, its shape resembles that of the block model and not that of a smooth wireframe. Nevertheless, the model remains useful. When modelled as a wireframe, calculating true thickness in areas where the material is dipping is still possible, however, in the block model format, only vertical thickness can be calculated.

The vertical thickness distribution of the Mineralised Domain's block model is illustrated in Figure 38. Given the positively skewed distribution, one can consider the geometric mean of 5.8 m to be a safer average than the arithmetic mean of 7.8 m. Note that the 50th percentile lies at 5.0 and the 75th percentile at 10.0 m meaning that 25% of the domain has a vertical thickness of more than 10.0 m.

The distribution of continuous sample lengths in the drill holes coded as the Mineralised Domain is shown in Figure 39. The positively skewed distribution's geometric mean equals 4.8 m while the arithmetic mean is 6.5 m, both lower than that of the block model. The maximums also differ. The discrepancy can be explained simply by the merging of two or more intervals in the drill holes to a single zone in the blocks when considering the adjacent drill holes in 3D and estimating the probability block belonging to the Mineralised Domain. The samples only tell their stories in one dimension, while the Probability Estimation considers three dimensions. Nevertheless, the volume ratio between the Mineralised Domain and the Waste Domain was still more conservative than the ratio in the samples (Figure 31 and Figure 32).

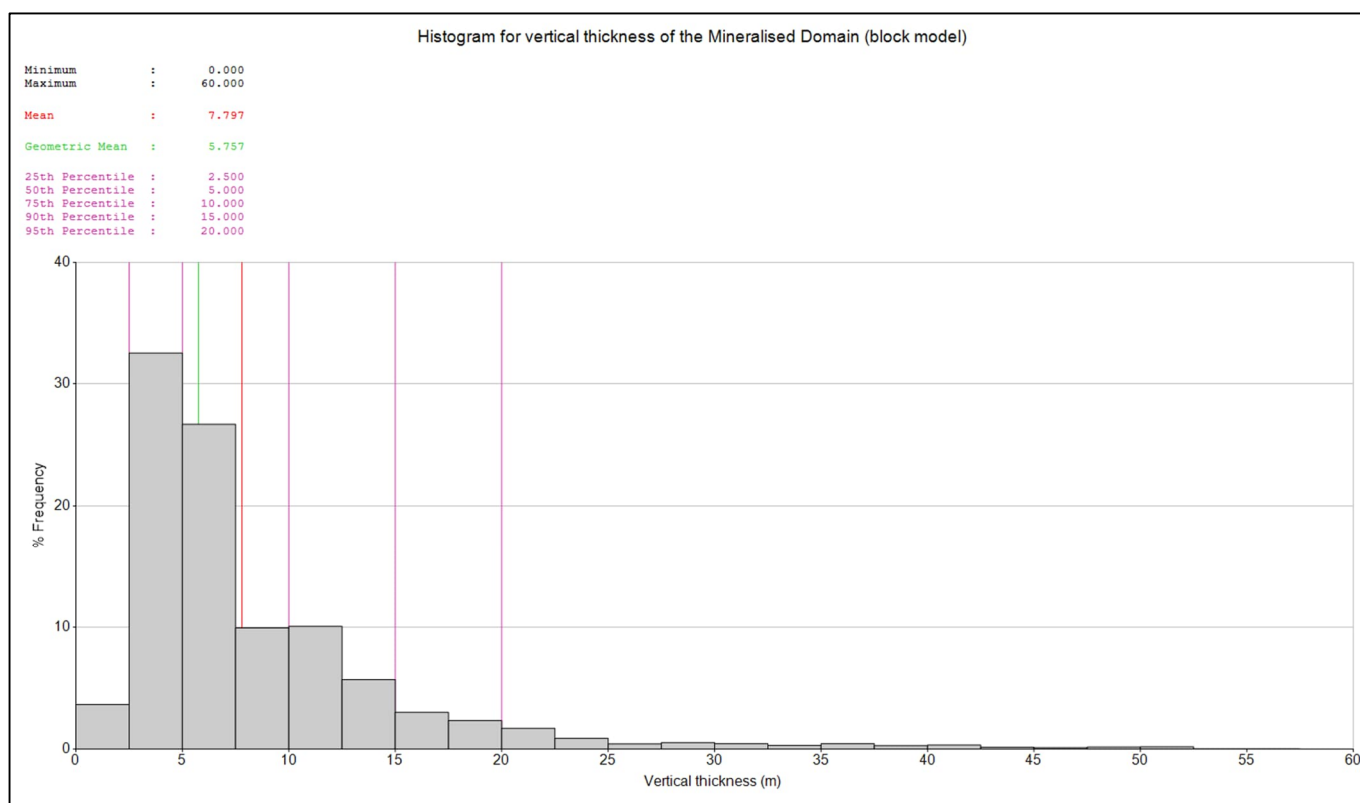


Figure 38. Vertical thickness distribution of the Mineralised Domain's block model.

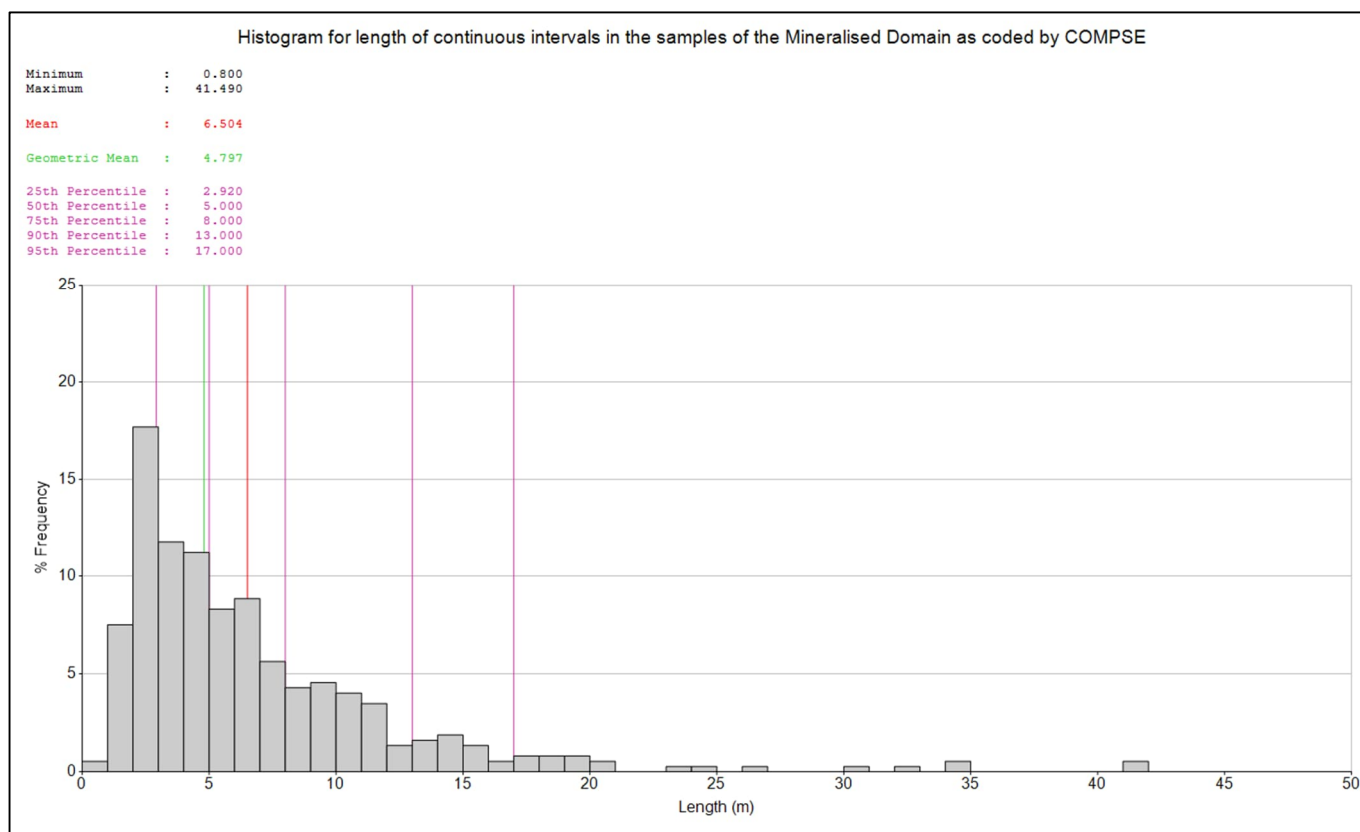


Figure 39. Distribution of continuous sample intervals coded as the Mineralised Domain.



11.6 2022 domain vs 2023 domain comparison

Since no relogging was done by Earthlab at the time of creating the 2022 MRE, Earthlab had to rely on historic logging, however, the stratigraphic logging lacked certainty in several cases. While some drill holes contained only one mineralised intercept, many contained more than one if applying a cut-off grade to separate certain mineralised intercepts with barren intervals in between. Given the short-scale variability in the existence and position of the mineralisation between drill holes, it was not certain yet whether all of the mineralised intercepts could be considered to be part of a single domain, given the lithological uncertainty. Earthlab then proceeded to look for cases where there was relatively clear continuity in one, two, or (in a very small area) three of the mineralised intercepts between drill holes. A combination of implicit and explicit modelling was done to create a “reef” of mineralisation which showed acceptable continuity. Where an interval of mineralisation above the applied “cut-off grade” could not be connected with a corresponding interval of mineralisation in adjacent drill holes, that intercept was excluded from the domain and considered to be part of the hanging wall or footwall waste. Where an interval’s grade was clearly higher than the baseline grade of the barren parts, but not coded initially during cut-off grade application, that interval was manually coded as part of the domain given its (albeit lower) grade spike compared to the waste and its position relative to the surrounding mineralised intercepts.

In 2023, after relogging the core, Earthlab established a better geological understanding and found that practically all of the mineralisation occurred within the same stratigraphic unit which was based on lithology. Earthlab then had the necessary comfort to include all of the mineralised intercepts into the domain. As long as the cut-off grade application procedure (StudioRM’s *COMPSE*) coded the interval as qualifying, regardless of position relative to other drill holes’ mineralisation, it was included in the grade-based domain. During the 2022 MRE there remained a larger possibility that some of the mineralisation was completely unrelated to the main body of mineralisation given the lack in geological certainty at the time, and therefore only the most continuous was included. The 2023 MRE relies on the relogging to give the comfort that all of the mineralisation in the same stratigraphic unit could be considered to be related and therefore included in the domain.

Including all the mineralised intercepts obviously made the modelling of the domain much more difficult given the short scale variability, however, the Probability Estimation technique with additional conservatism added, allows for estimating the amount of mineralisation (metal) that could potentially be expected in the ground. The reader is reminded of the famous quote by George Box which also applies to Mineral Resource models: “*All models are wrong, but some are useful.*” It is a known fact that no geological model can be 100% correct. It is therefore the responsibility of the Resource Geologist to create a model that will be useful to estimate metal content, allow for mine planning, and approximate risk, to a level of accuracy that is useful in estimating the value of the project. Just as the 2023 MRE differs from the 2022 MRE, so will the next MRE differ if done by a different person or if other information or data is included. The model will always be wrong and subject to change, but it is up to the Competent Person to establish the reliability and risk of the model in order for it to be useful or not.

12 COMPOSITE STATISTICS

The Mineralised Domain's composites' statistics are reported in this chapter. While declustering was not applied for variography analysis, the samples were declustered for classical statistics reporting, given the variety of drill hole spacing. The histograms and scatter plots in Figure 40 to Figure 55 are shown before top-capping was applied.

The grade distributions in the Mineralised Domain displayed roughly log-normal distributions. Useful statistics are displayed in each figure, and the reader could consider both the arithmetic mean as well as the geometric mean. The coefficient of variation (CV) for each element was below 1.

The density distribution histograms do not display perfect normal distributions, but could be in part due to more limited datasets compared to the assay dataset. Some histograms could even hint at more than one statistical population, but it is difficult to confirm. The density CV values of the Fresh categories were all below 0.1, while the Transitional and Oxidised had CV values between 0.1 and 0.2 which are still very low and would result in low error variances in the estimations.

The correlation scatter plots indicated positive correlations between all the elements, albeit not equally as strong. Pt and Pd indicated the best correlation, while Ni showed the overall worst correlation with the respective elements. It should be noted that correlation statistics involving Au could have been affected by the number of values below LOD in the dataset.

12.1 Mineralised Domain composites (declustered @ 150 mX by 150 mY by 5 mZ)

12.1.1 Au

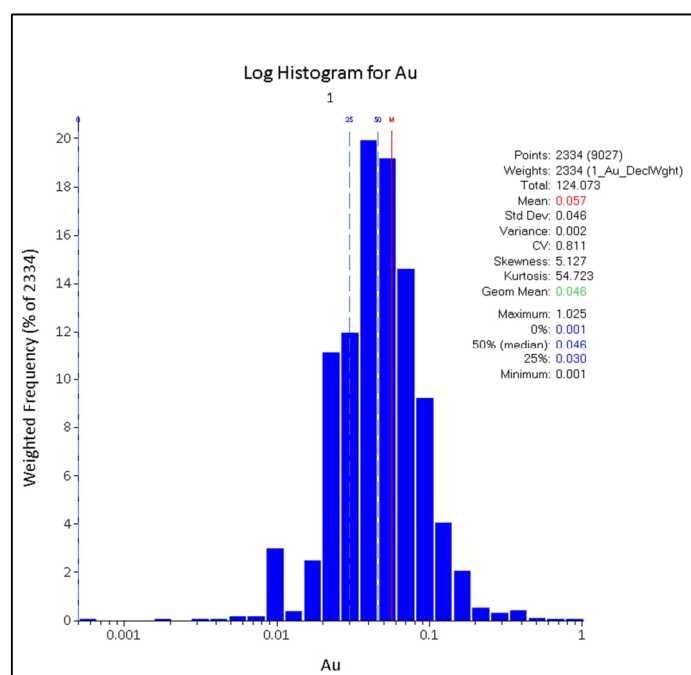


Figure 40. Mineralised Domain composites Au distribution (declustered).

12.1.2 Pt

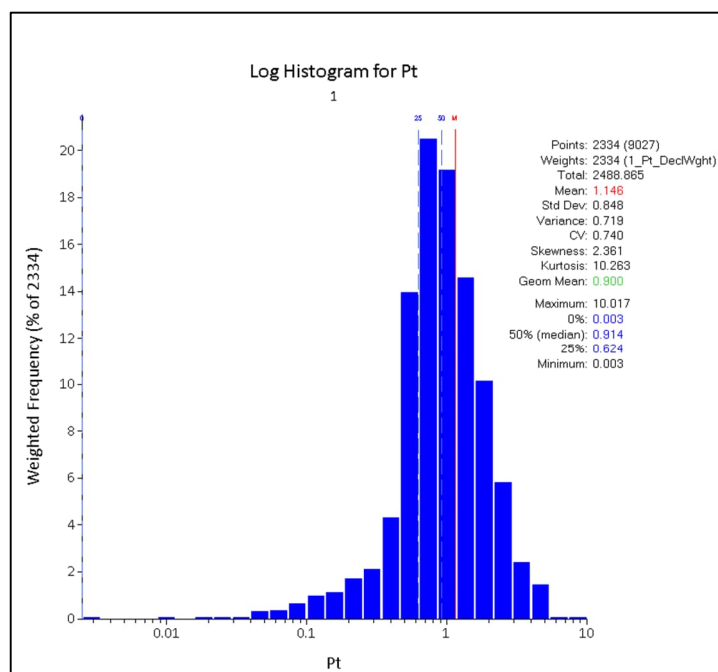


Figure 41. Mineralised Domain composites Pt distribution (declustered).

12.1.3 Pd

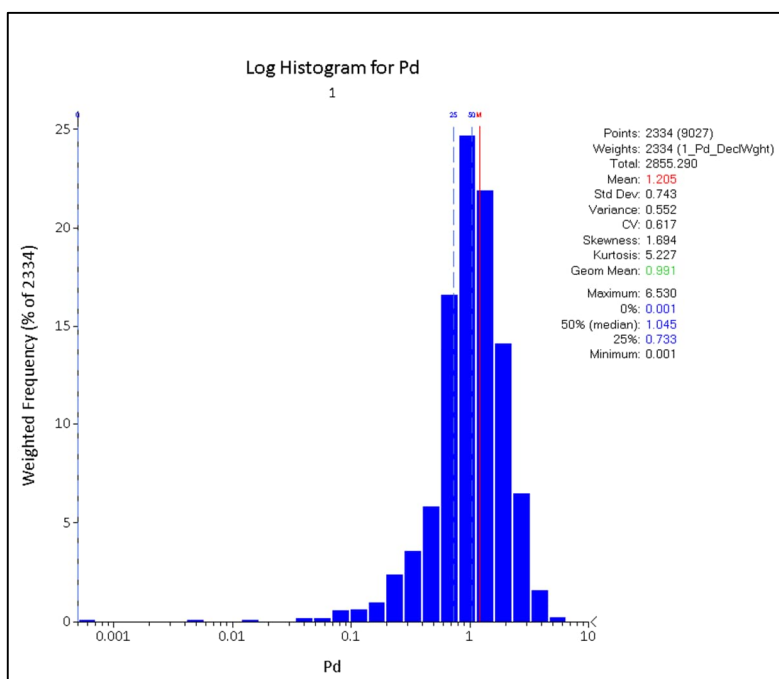


Figure 42. Mineralised Domain composites Pd distribution (declustered).

12.1.4 Cu

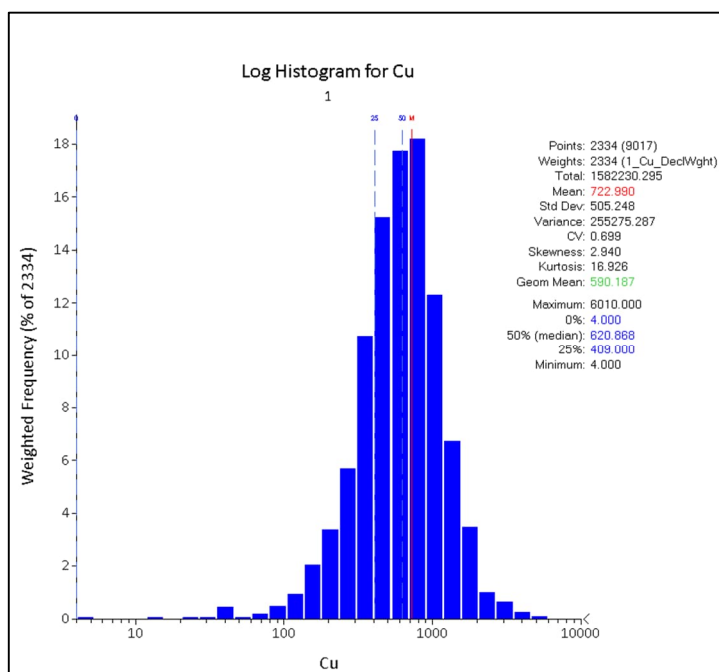


Figure 43. Mineralised Domain composites Cu distribution (declustered).

12.1.5 Ni

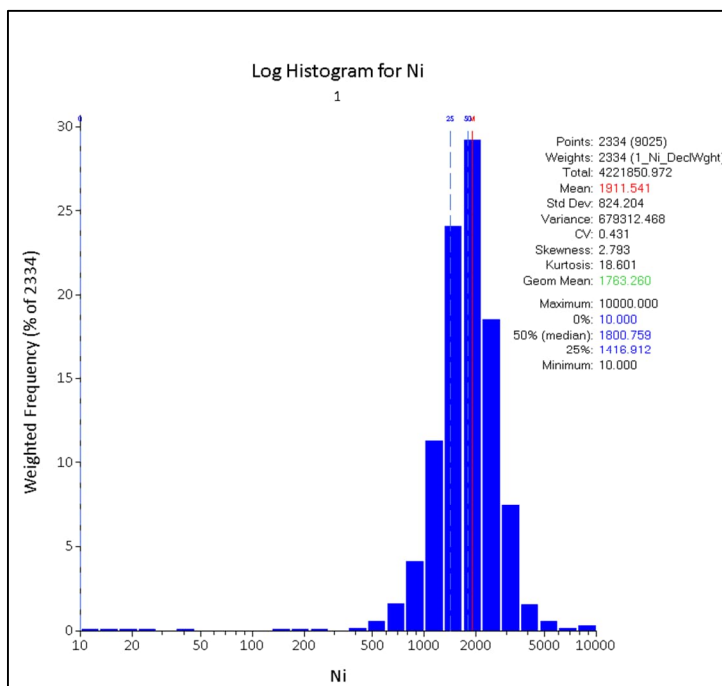


Figure 44. Mineralised Domain composites Ni distribution (declustered).

12.2 Density statistics

12.2.1 CUI2 (CUI2U + CUI2L) in the Fresh Zone

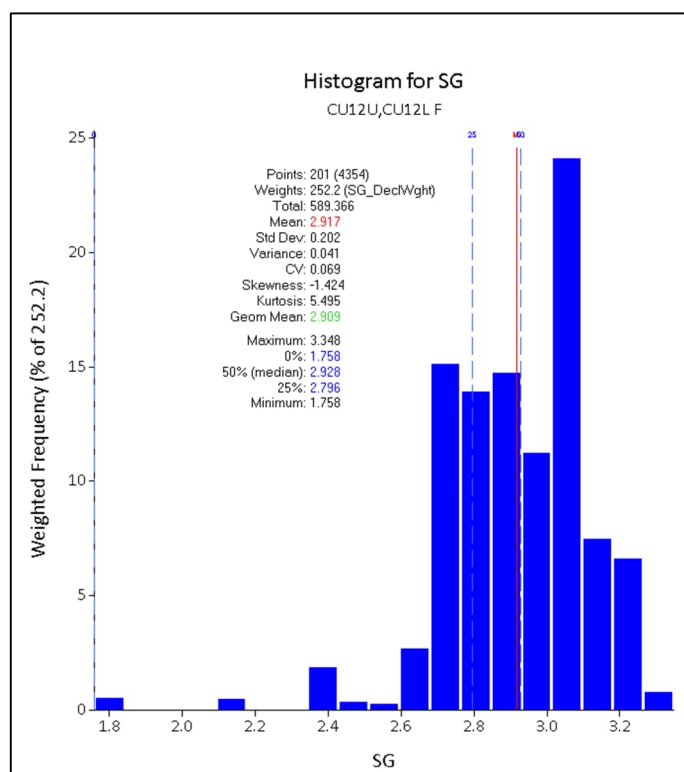


Figure 45. Density distribution of CUI2 samples in the Fresh Zone (declustered).

12.2.2 CUI1U in the Fresh Zone

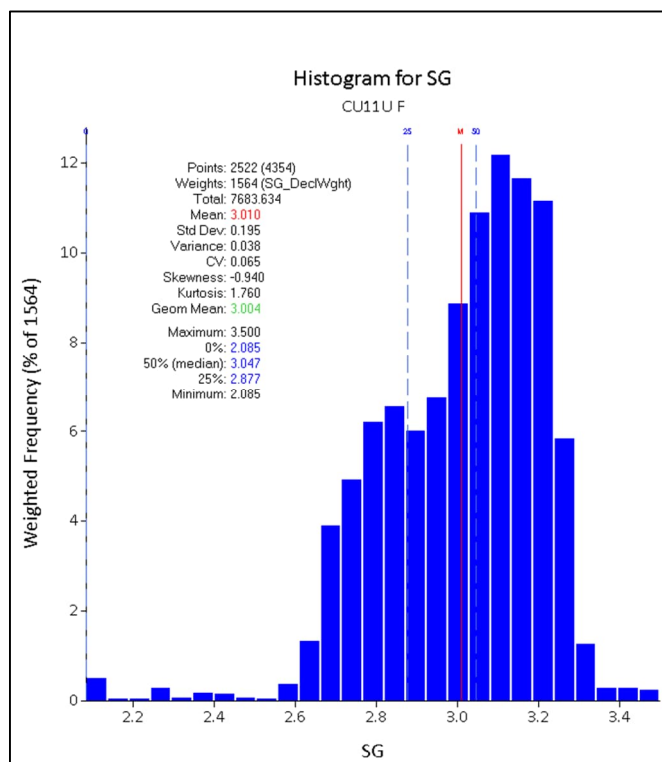


Figure 46. Density distribution of CUI1U samples in the Fresh Zone (declustered).

12.2.3 CUIIL in the Fresh Zone

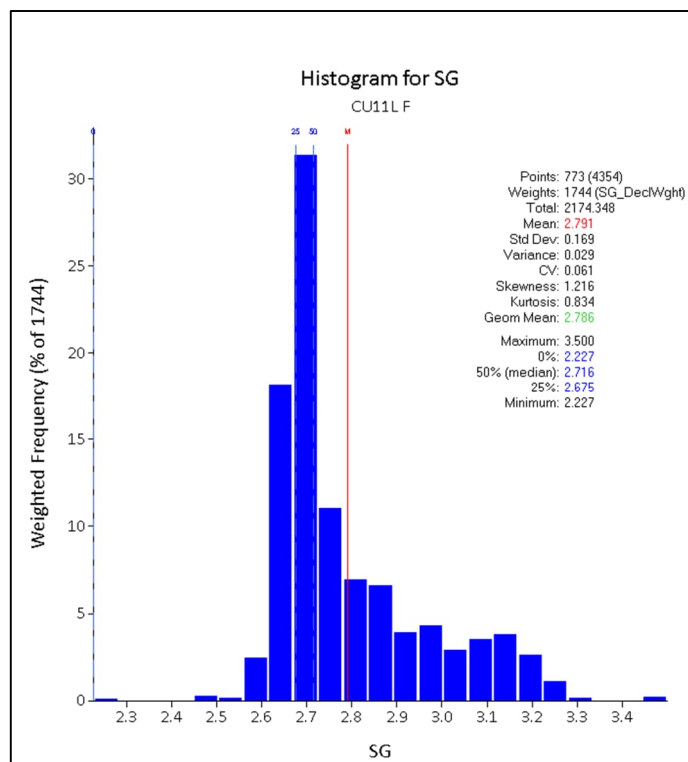


Figure 47. Density distribution of CUIIL samples in the Fresh Zone (declustered).

12.2.4 Entire Fresh Zone

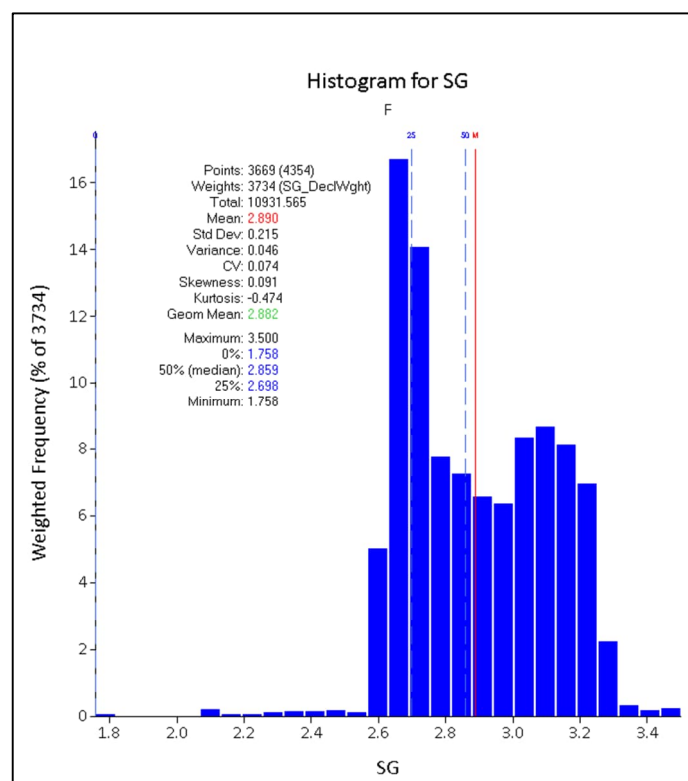


Figure 48. Density distribution of the entire Fresh Zone (declustered).

12.2.5 Entire Transitional Zone

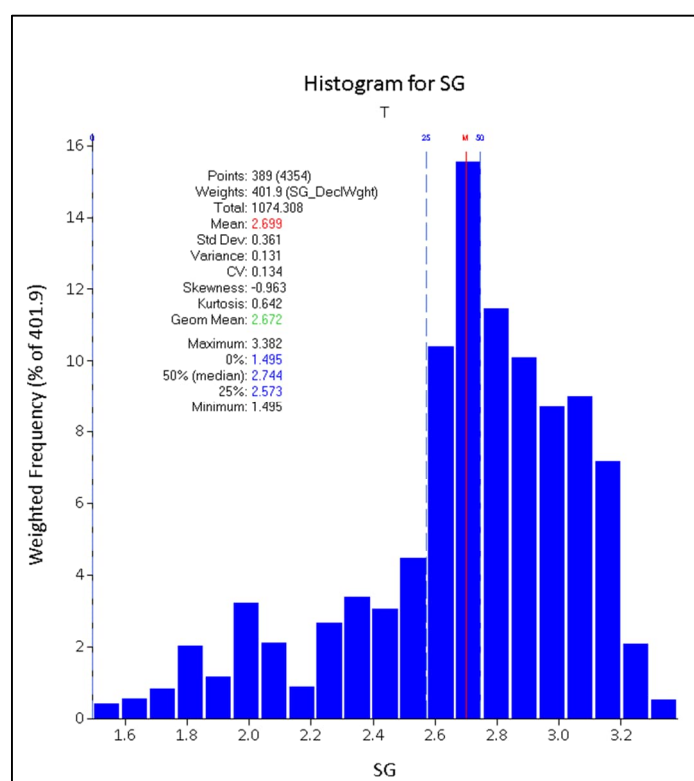


Figure 49. Density distribution of the entire Transitional Zone (declustered).

12.2.6 Entire Oxidised Zone

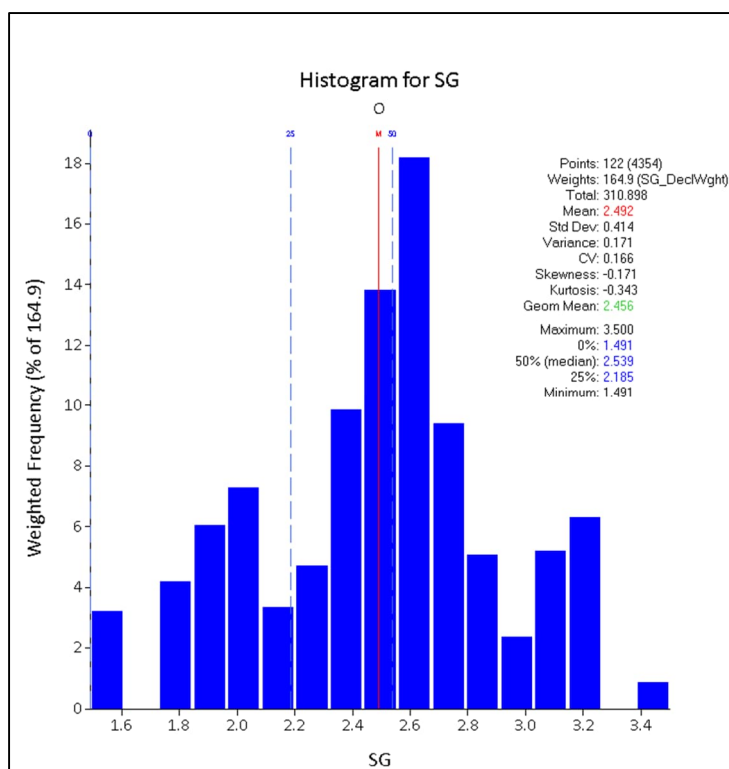


Figure 50. Density distribution of the entire Oxidised Zone (declustered).

12.3 Correlations

Scatter plots for all the elements have been log-transformed given their positively skewed distributions. A Least Squares regression is also illustrated with a green line.

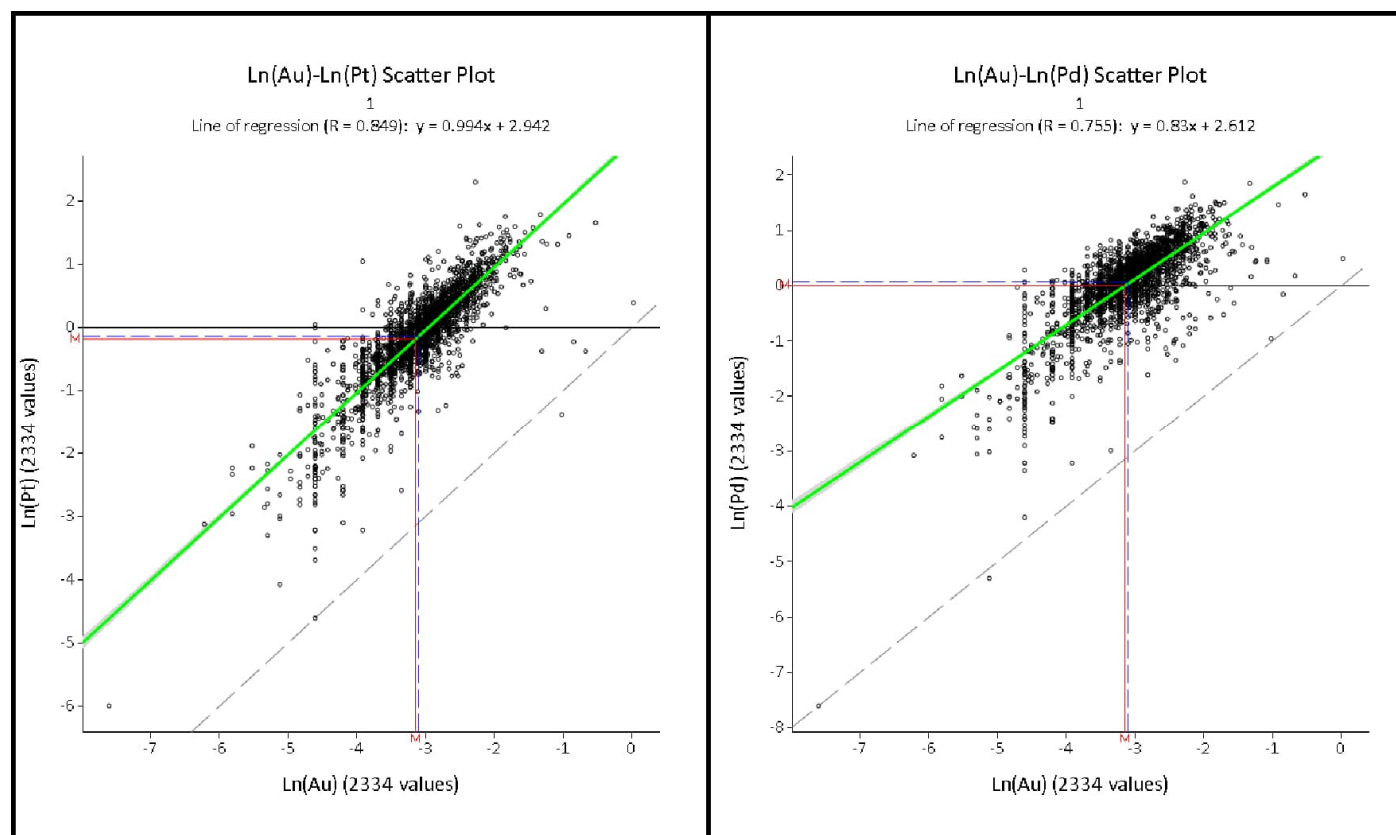


Figure 51. Mineralised Domain composites' scatter plots (log-transformed). Au-Pt ; Au-Pd.

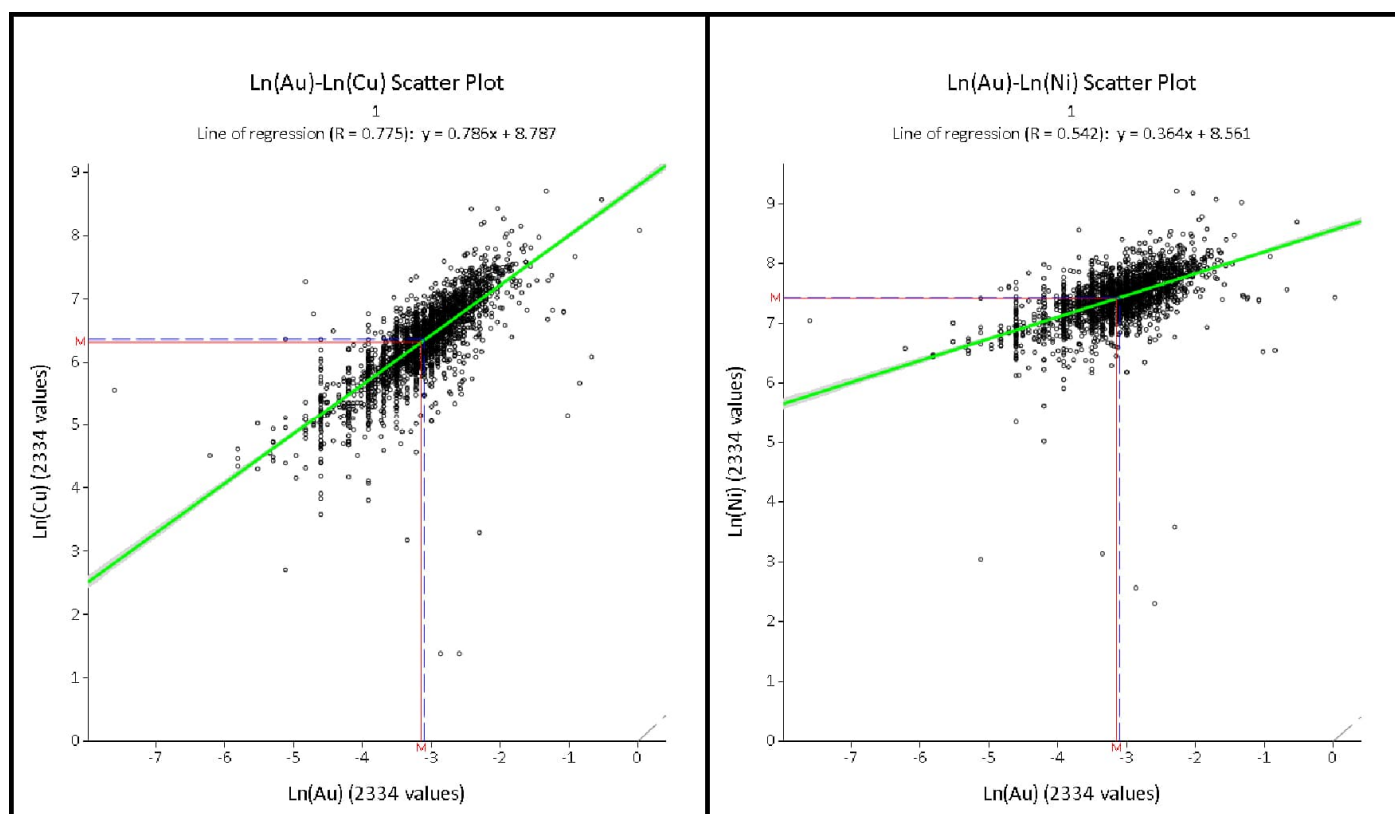


Figure 52. Mineralised Domain composites scatter plots (log transformed). Au-Cu ; Au-Ni.

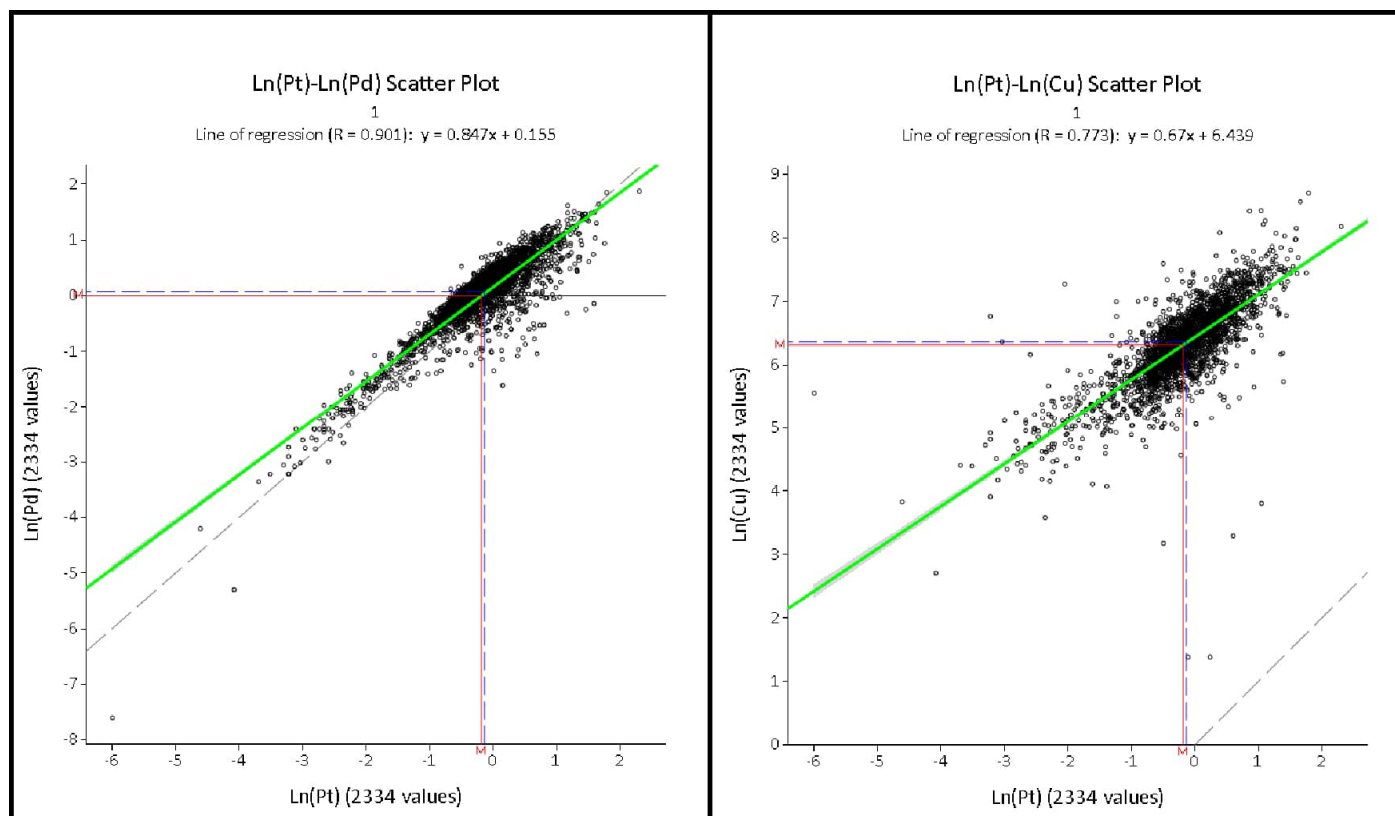


Figure 53. Mineralised Domain composites scatter plots (log transformed). Pt-Pd; Pt-Cu.

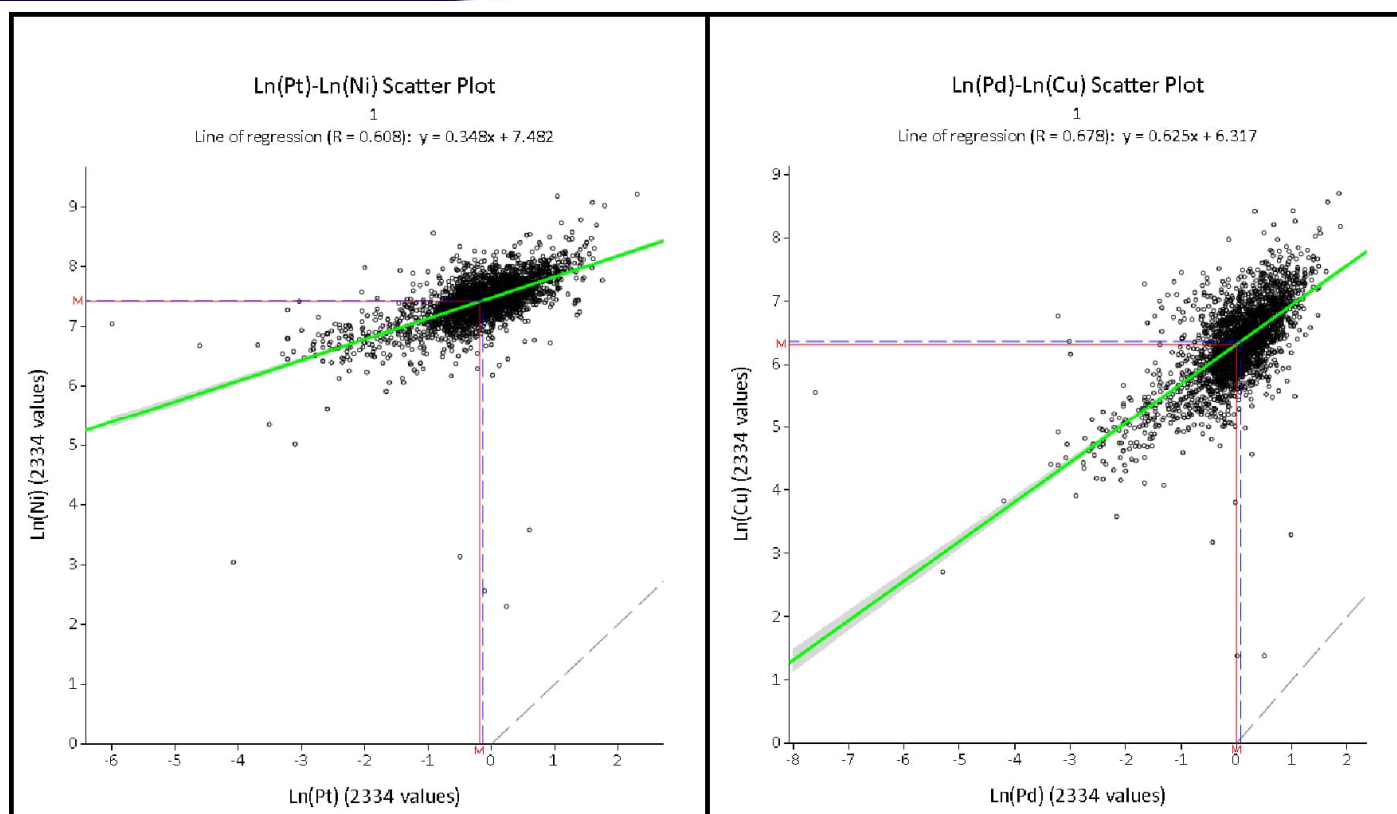


Figure 54. Mineralised Domain composites scatter plots (log transformed). Pt-Ni; Pd-Cu.

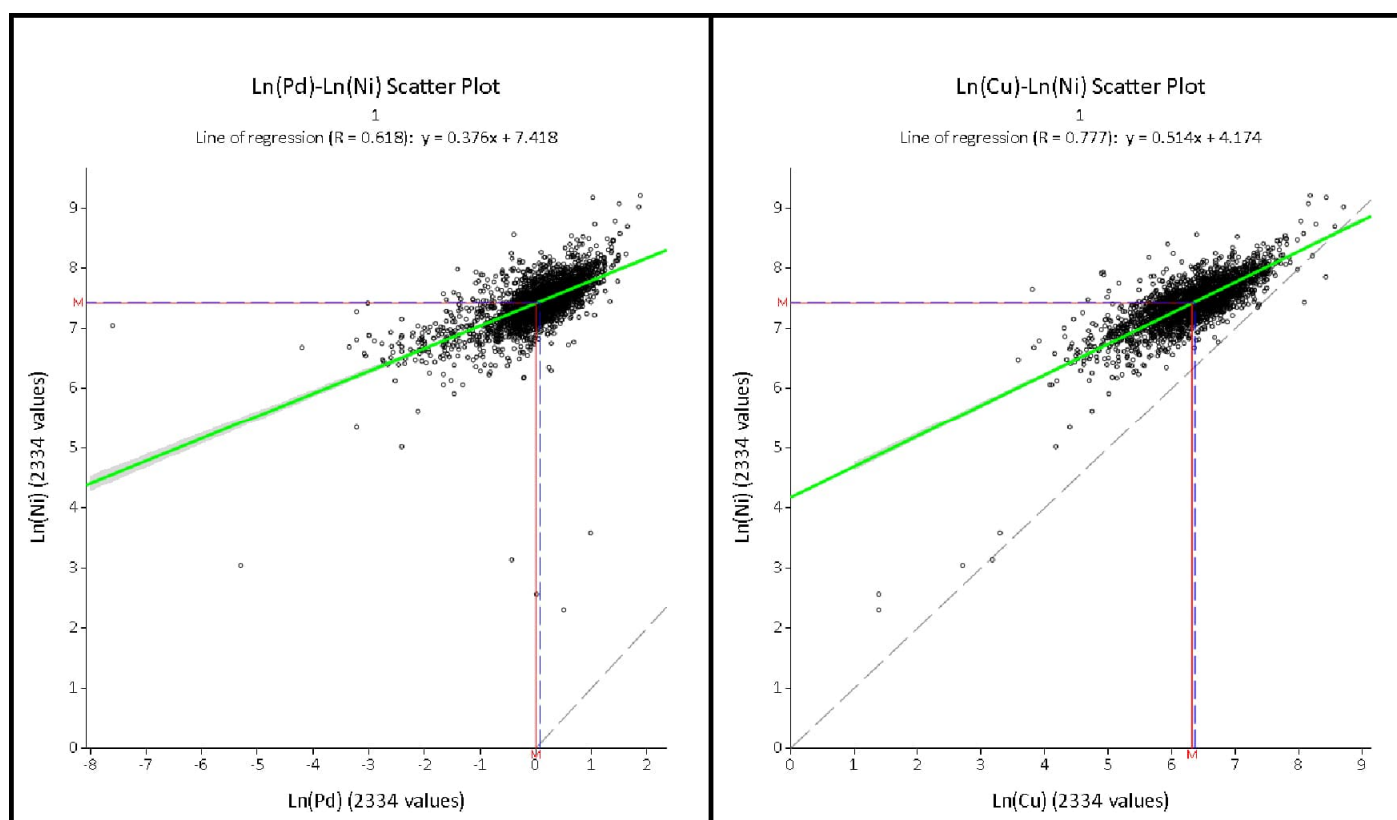


Figure 55. Mineralised Domain composites scatter plots (log transformed). Pd-Ni; Cu-Ni.

13 GEOSTATISTICS

13.1 Domains

For stationarity testing of the Mineralised Domain, the domain was divided into five roughly equal areas (Figure 56) of which the samples in each were inspected and compared in terms of means and variance or standard deviation. The boundary between Area 3 and Area 4 was evaluated in multiple positions, including along the NW-SE-striking faults, however the results were the most stable in the position as illustrated in Figure 56.

The results are summarised in Table 11.

Based on the results, it was decided to divide the Mineralised Domain into two separate estimation domains. Area 4 and 5 were grouped together to make up Domain SW while Area 1, 2, and 3 were grouped together to make up Domain NE. The reason for this phenomenon was not apparent to Earthlab, however, it could not be ignored during grade estimation, and therefore the two estimation domains were created. These two domains are grade estimation domains, and should not be confused with North 1 and North 2 representing general structural domains. The phenomenon could form part of future investigation work to determine whether it could have been related to structural deformation and remobilisation of minerals which could affect the general understanding of the mineralisation of the deposit.

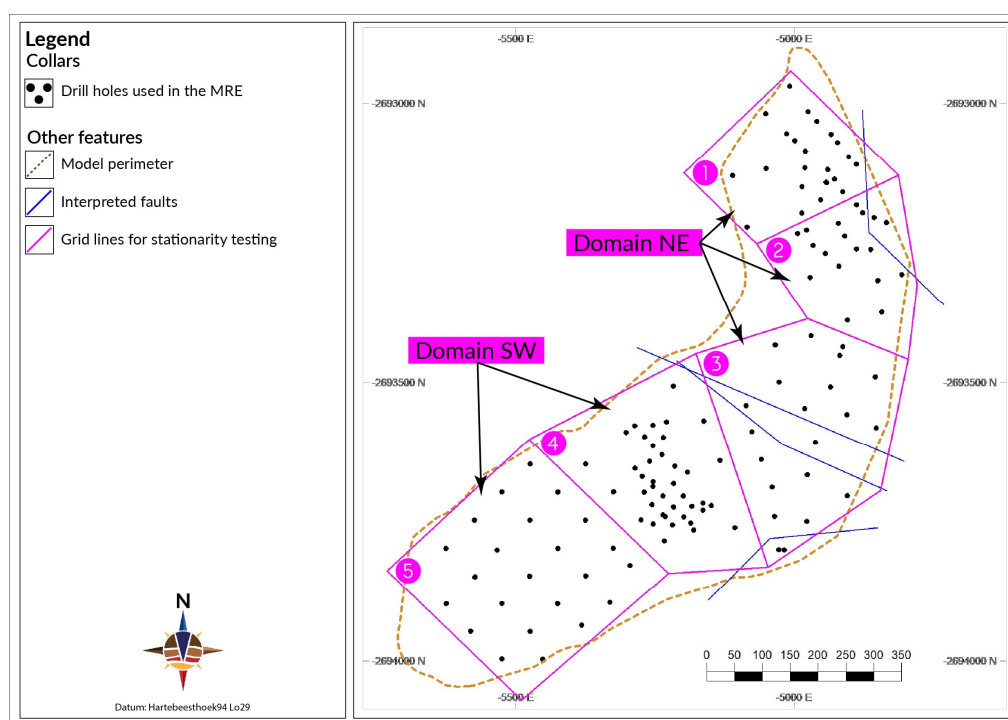


Table II. Stationarity testing results. Variance is reported for Au, Pt, and Pd. Standard deviation is reported for Cu and Ni.

Element	Area number	Arithmetic mean	Geometric Mean	Variance / Standard deviation
Au	1	0.060	0.05	0.002
	2	0.066	0.056	0.002
	3	0.065	0.054	0.002
	4	0.043	0.034	0.002
	5	0.041	0.034	0.001
Pt	1	1.248	1.028	0.751
	2	1.264	1.023	0.73
	3	1.342	1.020	0.867
	4	0.845	0.679	0.266
	5	0.860	0.667	0.388
Pd	1	1.363	1.143	0.689
	2	1.314	1.107	0.593
	3	1.204	0.952	0.597
	4	1.130	0.932	0.347
	5	1.143	0.908	0.509
Cu	1	904.3	760.32	641.14
	2	818.9	677.3	454.0
	3	807.3	668.77	468.7
	4	503.68	432.33	284.93
	5	484.23	420.73	244.83
Ni	1	2018.5	1827.6	1052.78
	2	1704.5	1518.3	698.45
	3	1902.3	1767.6	682.78
	4	1687.3	1588.9	588.2
	5	1829.7	1718.7	648.3

13.2 Data processing

Top-capping is discussed in section 10.1.2.2.

13.3 Variography

Directional variograms were created in Snowden Supervisor v8.14 (hereafter “Supervisor”) for Pt, Pd, Au, Cu, and Ni in the two respective grade estimation domains. All experimental variograms were created by applying a normalscore transformation and the models back-transformed again.

Although clustered drill holes exist in this project, declustering was not applied to experimental variogram calculation, as the sill should be based on the naïve equally weighted variance (Rossi & Deutsch, 2014).

To account for the clustered drill holes’ samples, it helped in some cases to have the first couple of lags shorter than the rest, for example in Domain NE it often helped to have four 25 m lags up to 100 m followed by 50 m lags. In Domain SW 30 m lags up to 120 m followed by 70 m lags seemed to produce satisfactory results. This was adjusted depending on the amount of noise in the experimental variograms, which varied from element-to-element, domain-to-domain.

The nuggets were determined from the downhole experimental variograms.



Although one should avoid relying on experimental variogram results beyond half the dimensions of the domain in each direction, the ranges in some of the variograms do extend beyond those limits. In those cases, the slope of the variogram model was based on the more reliable experimental variogram points within the limits.

Whenever the experimental variogram indicated that the sill was never reached, i.e., zonal anisotropy, the variogram was modelled to the first reliable points with the last structure placed at 1,000 m.

Typically, one should expect near-identical variograms for elements that have high correlation coefficients, e.g., above 0.9. The main directions for continuity seemed to be approximately similar for the elements within each respective domain, however the ranges and variance components of the individual structures were not necessarily as identical. Nevertheless, it was decided to model the variograms to the actual experimental variogram results, instead of aiming to model them identically.

Strangely enough, the Ni experimental variograms in Domain NE showed the best continuity ranges in a direction practically 90° relative to the rest of the major directions of the other elements in that domain.

Grade estimation was also done in the Waste Domain of CUIIU, but as one estimation domain.

The experimental variograms along with the variogram models are shown in Figure 57 to Figure 75.

All variograms were standardized to have a sill of 1.

It can be seen in Figure 57 to Figure 75 that the Waste Domain generally had the lowest nugget, followed by Mineralised Domain's Domain NE, and with Domain SW having the highest nugget, which consequently resulted in a more smoothed grade estimate in Domain SW compared to Domain NE.

13.3.1 Au variograms

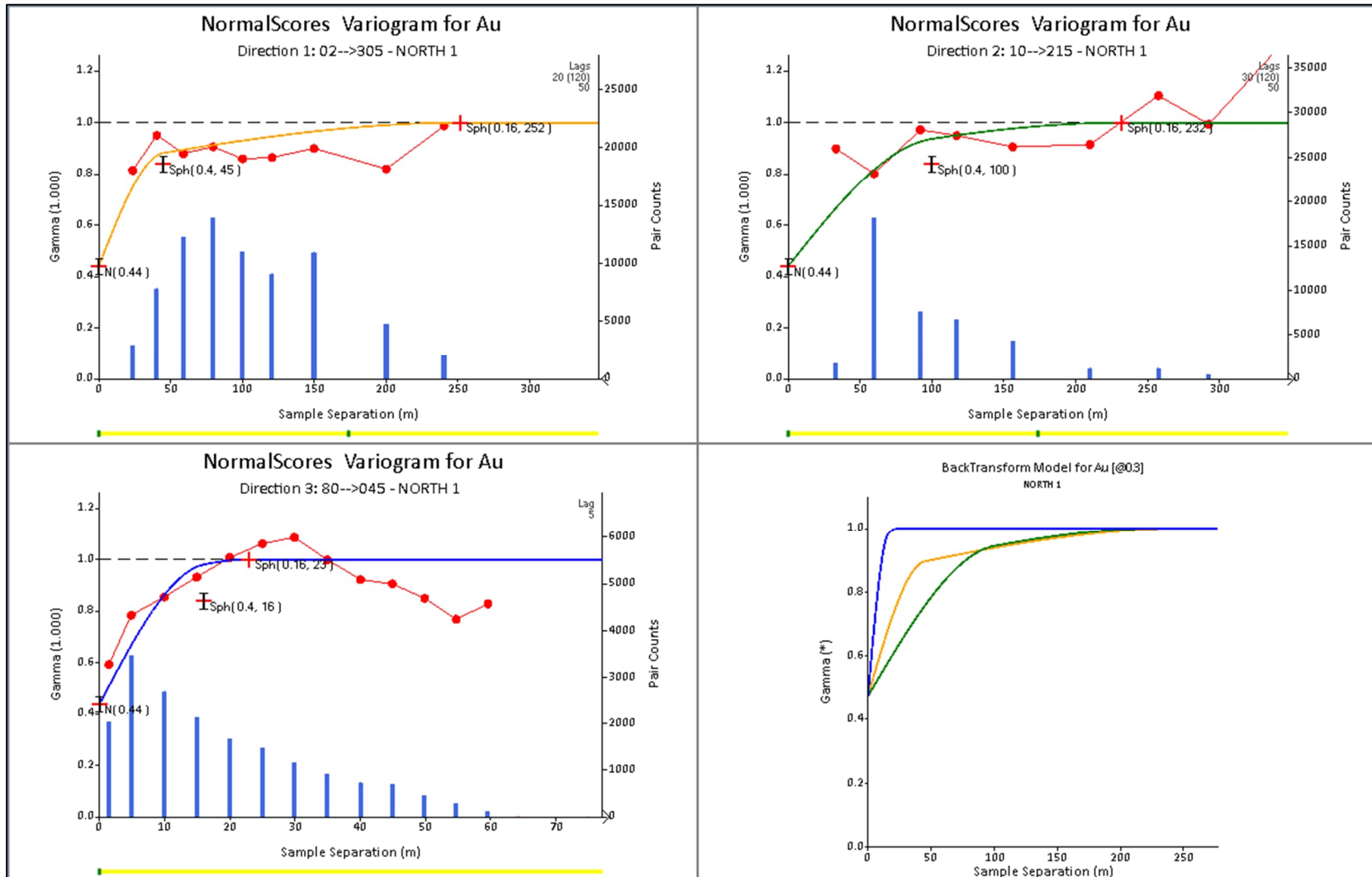


Figure 57. Au variograms in Domain NE.



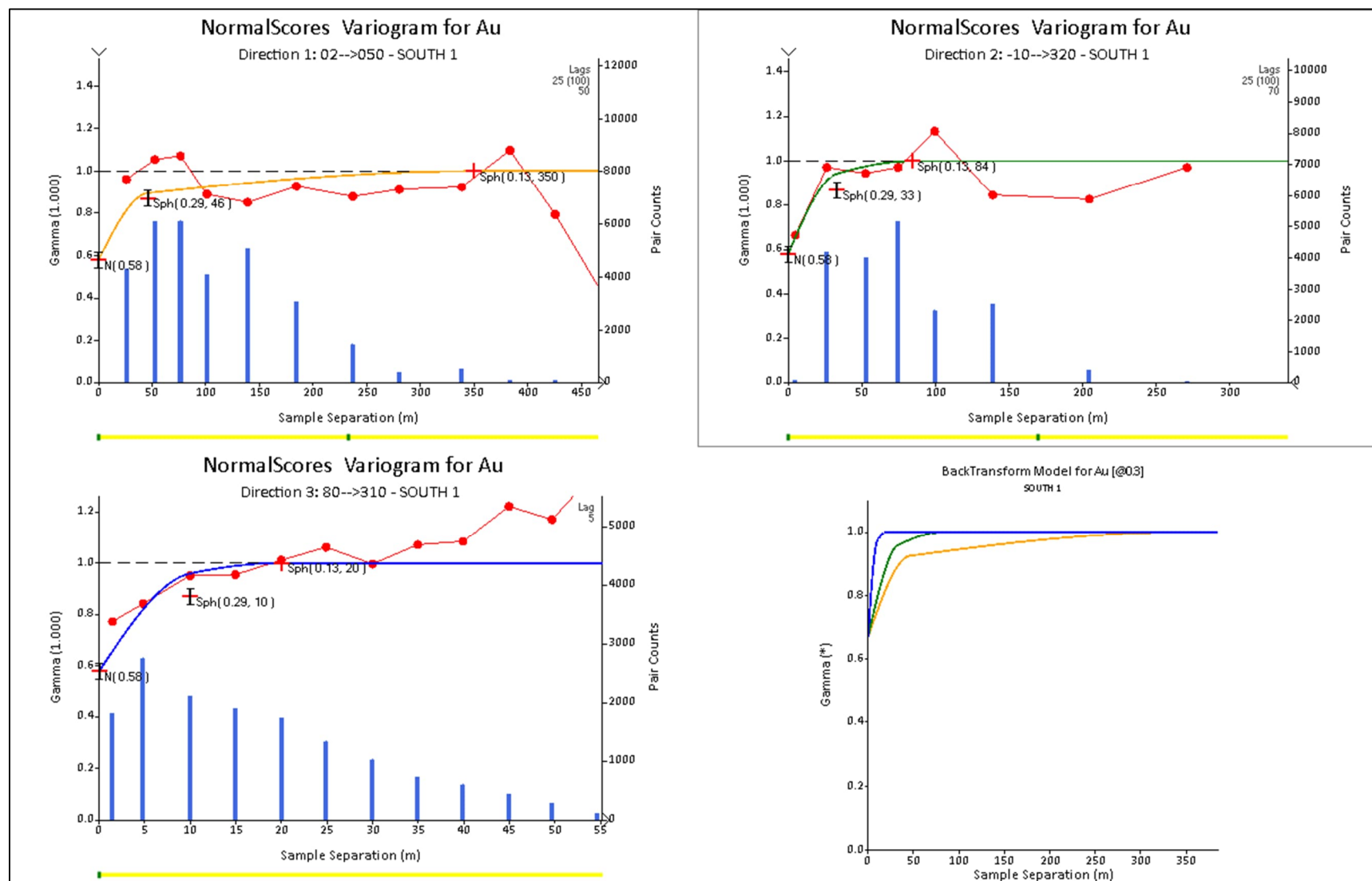


Figure 58. Au variograms in Domain SW.

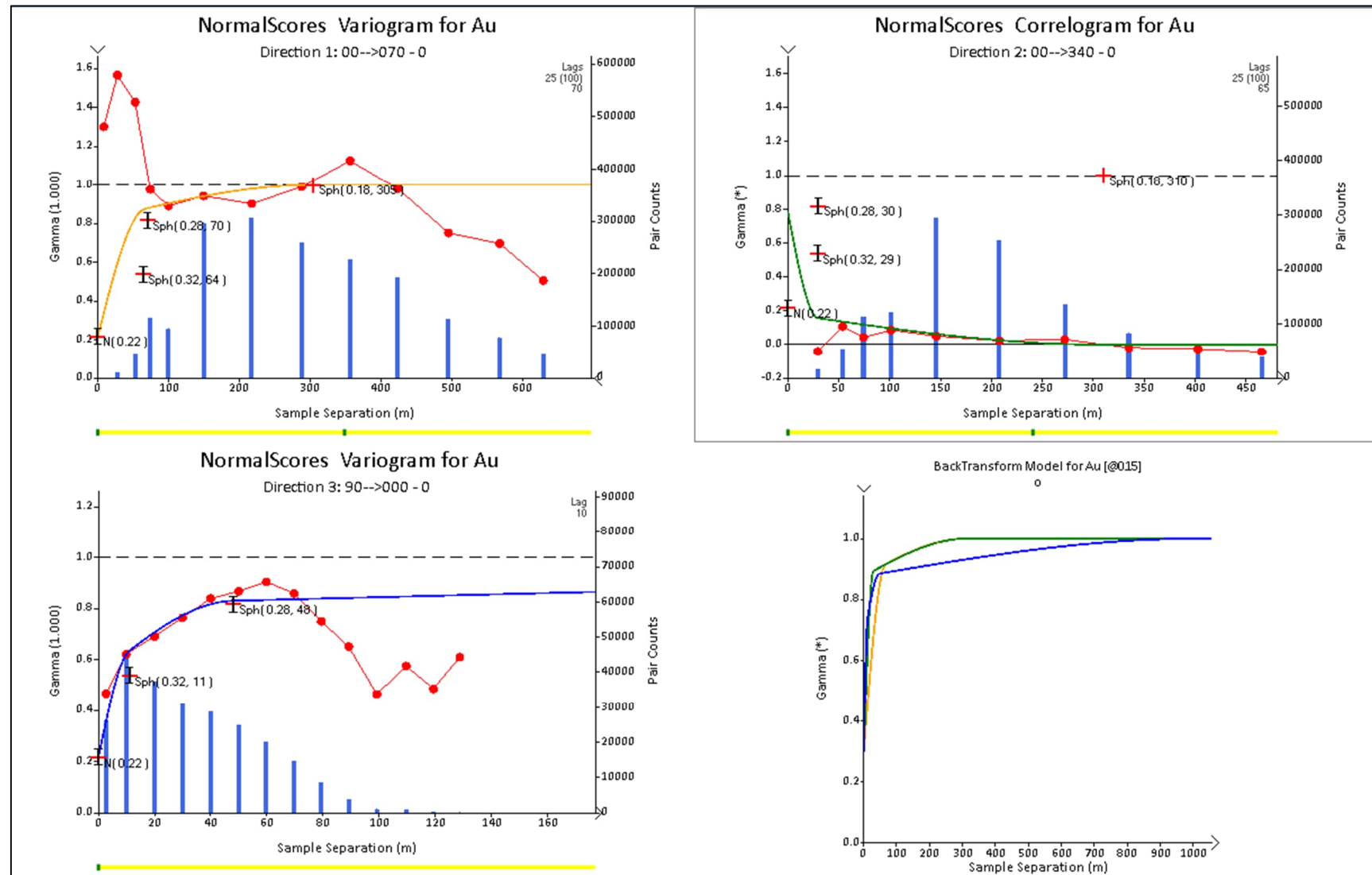


Figure 59. Au variograms in the Waste Domain.

13.3.2 Pt variograms

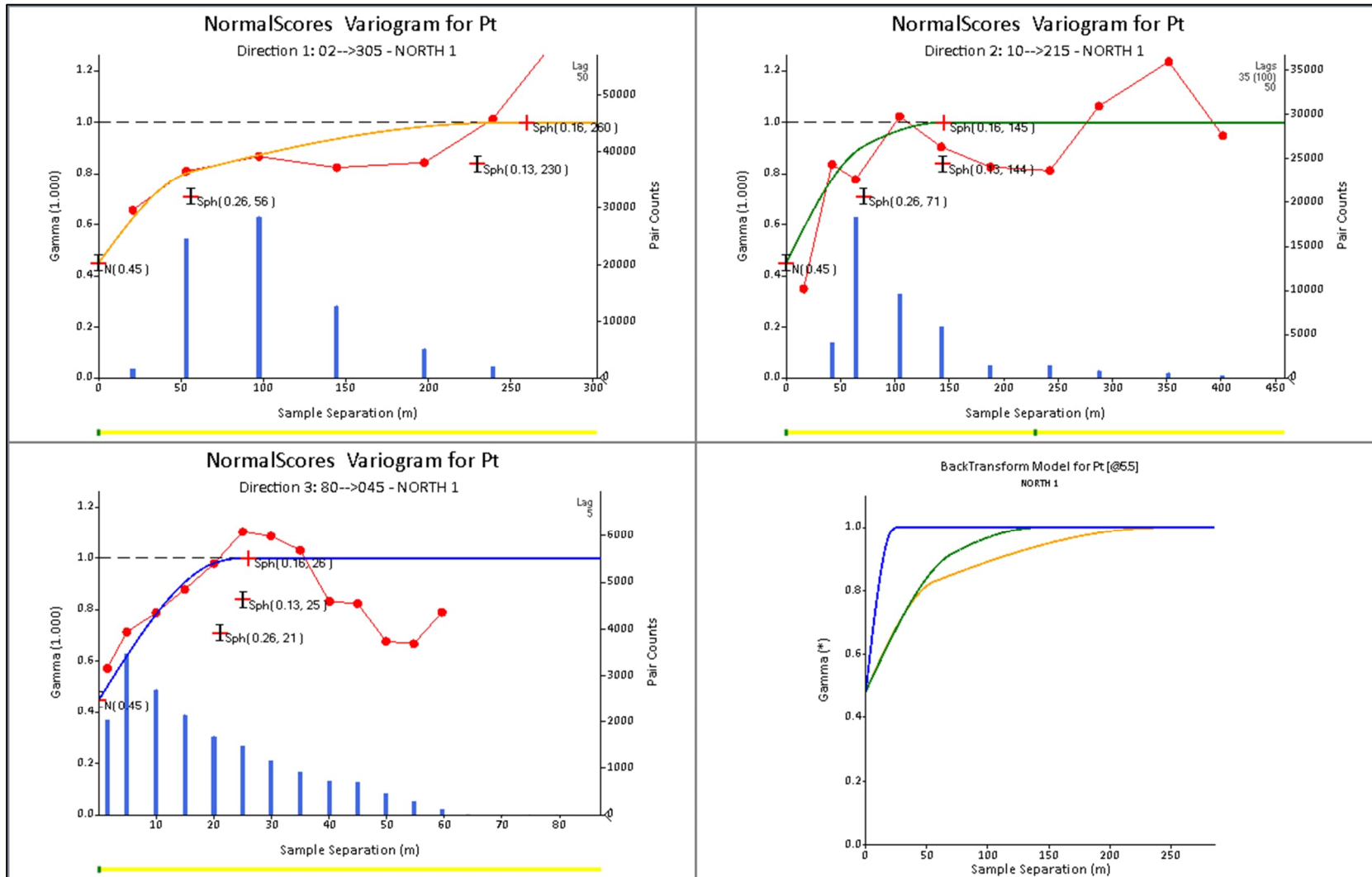


Figure 60. Pt variograms in Domain NE.

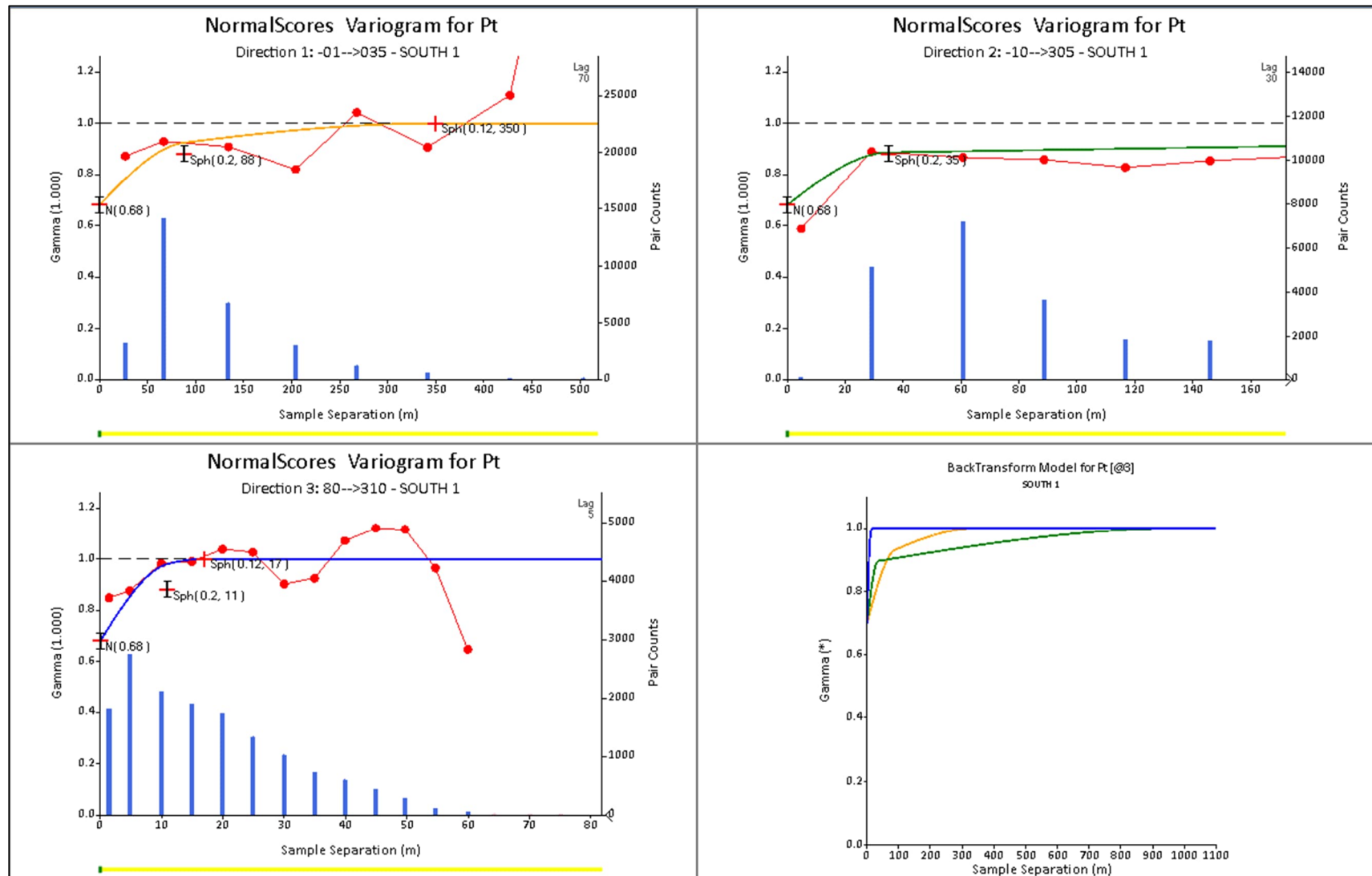


Figure 61. Pt variograms in Domain SW.

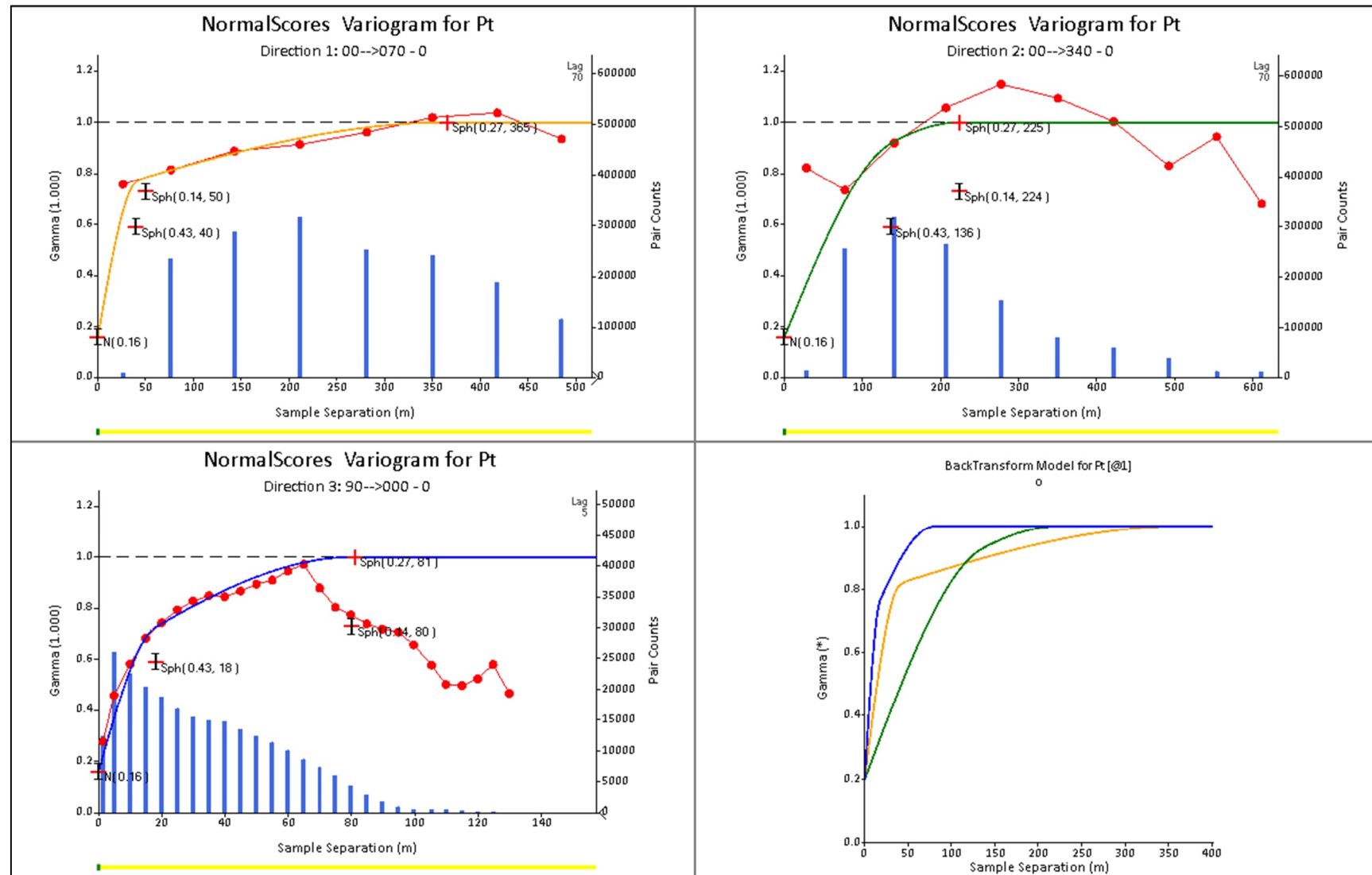


Figure 62. Pt variograms in the Waste Domain.

13.3.3 Pd variograms

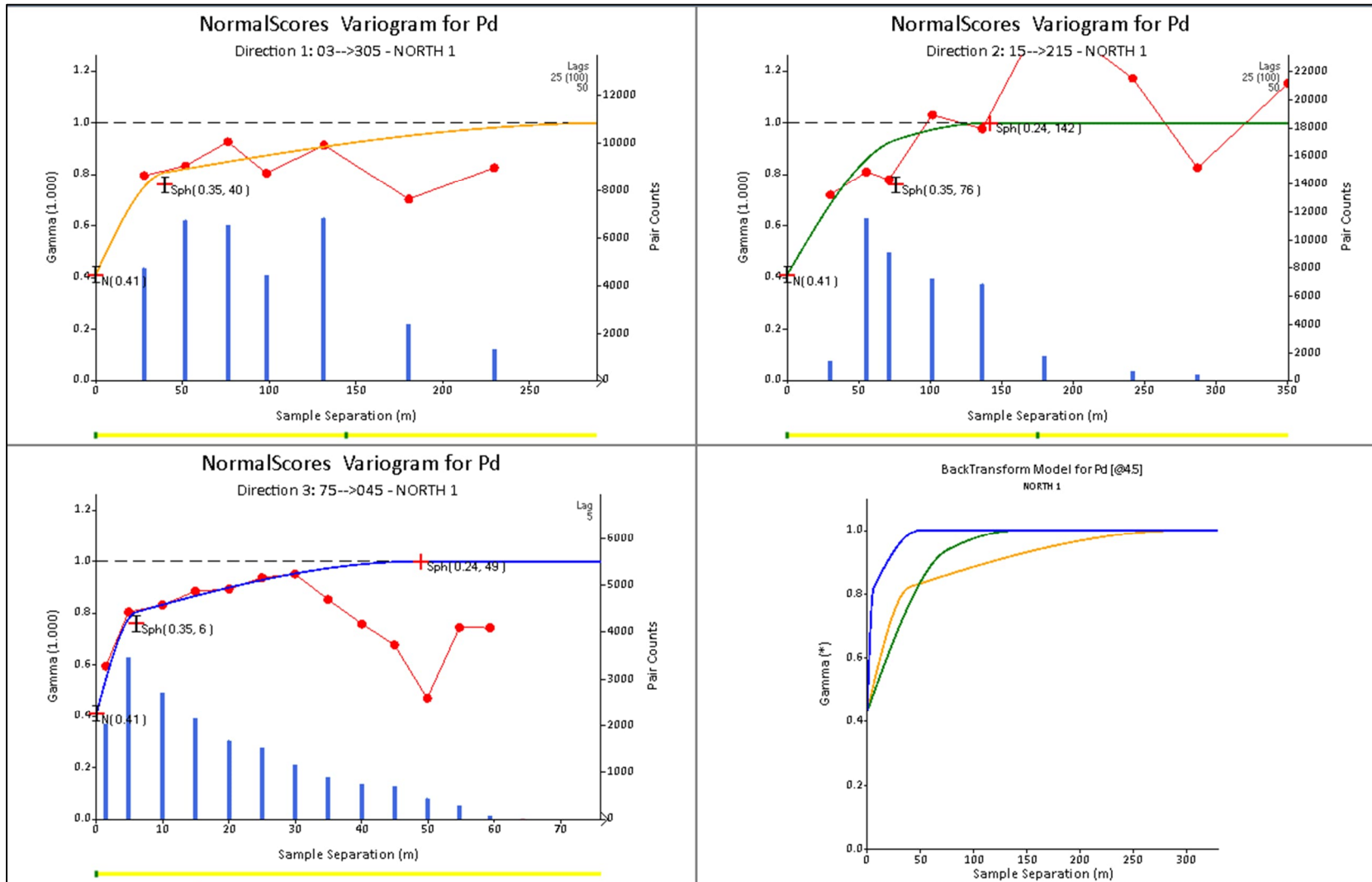


Figure 63. Pd variograms in Domain NE.

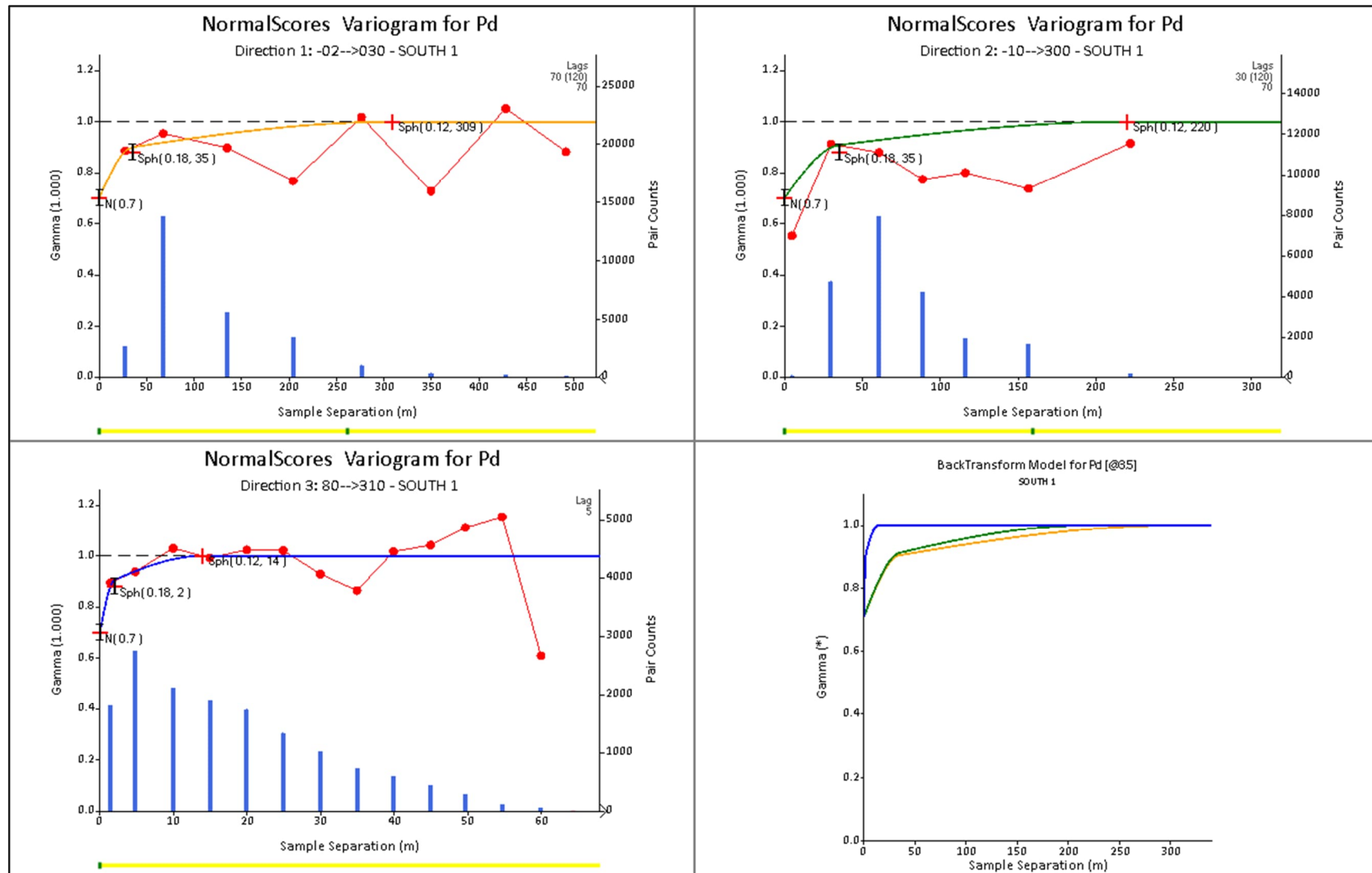


Figure 64. Pd variograms in Domain SW.

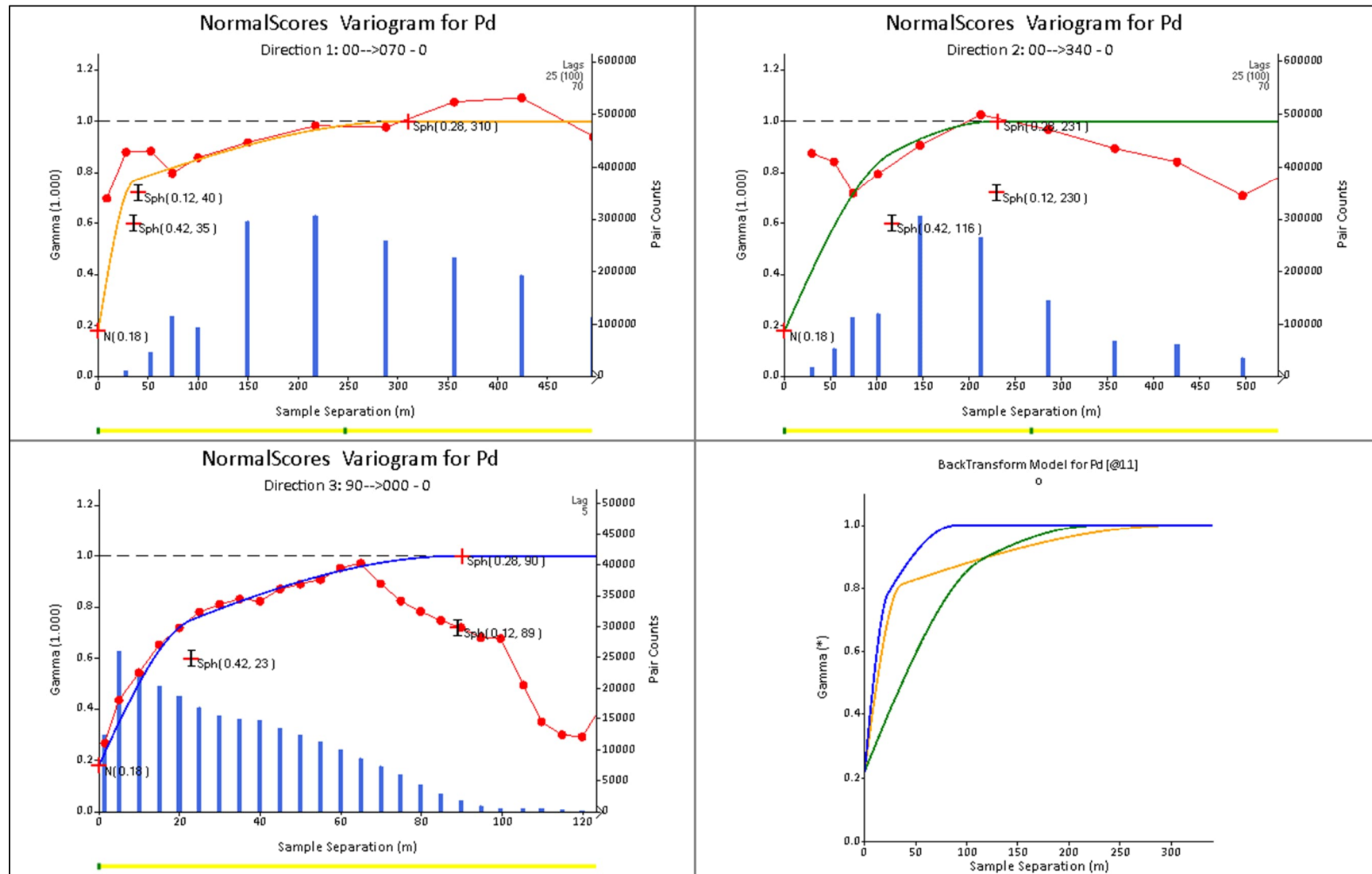


Figure 65. Pd variograms in the Waste Domain.

13.3.4 Cu variograms

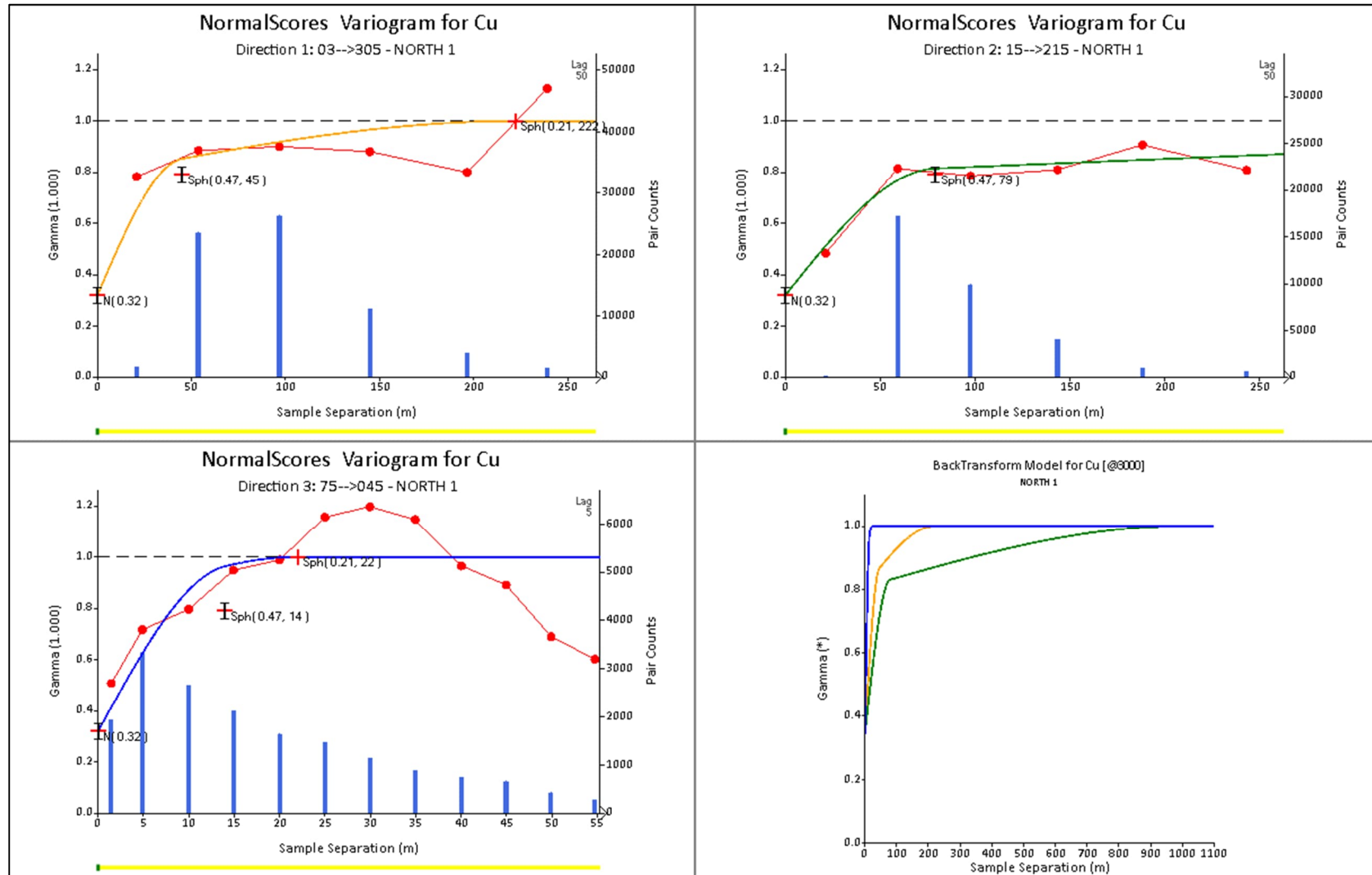


Figure 66. Cu variograms in Domain NE.

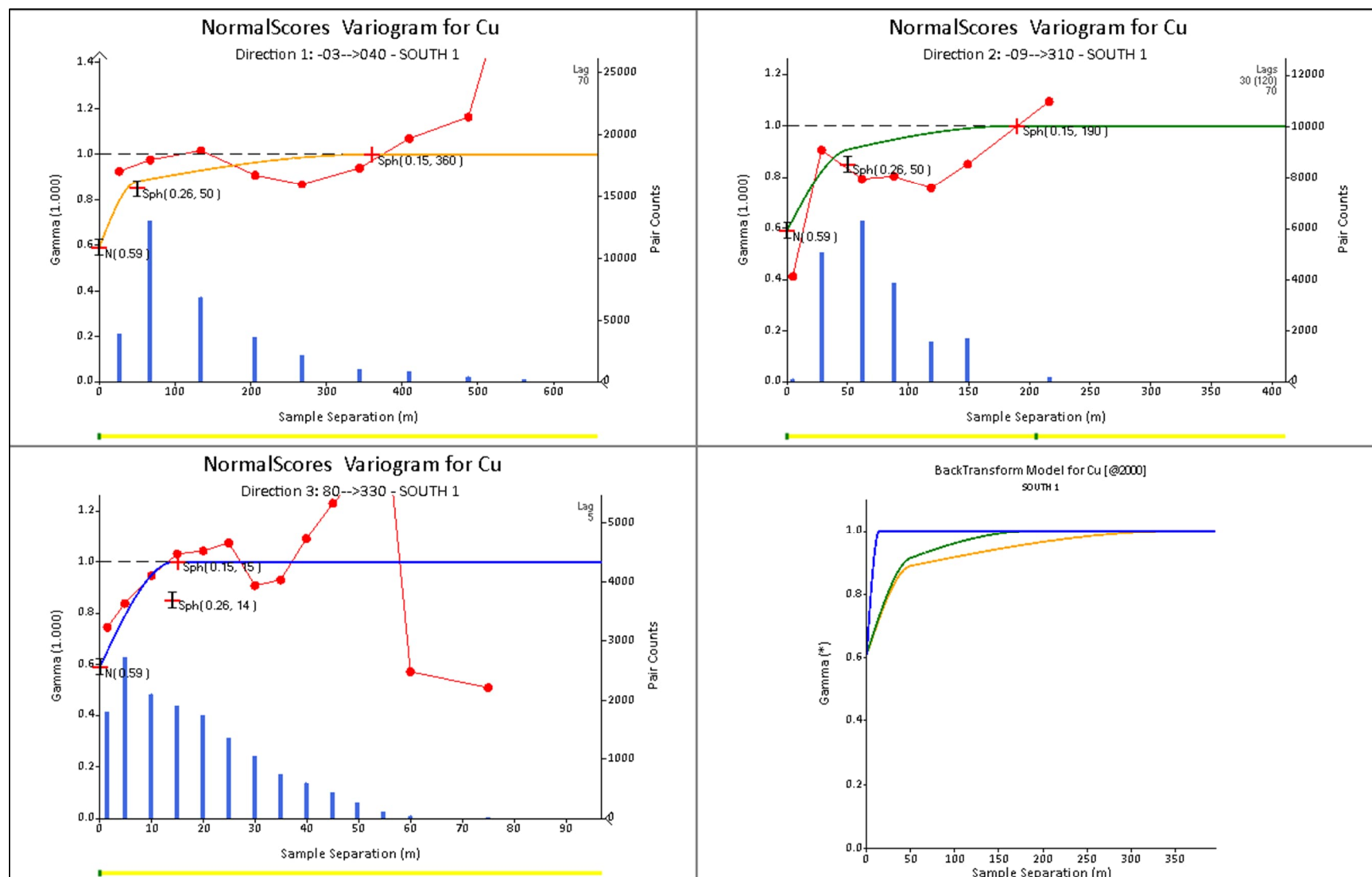


Figure 67. Cu variograms in Domain SW.

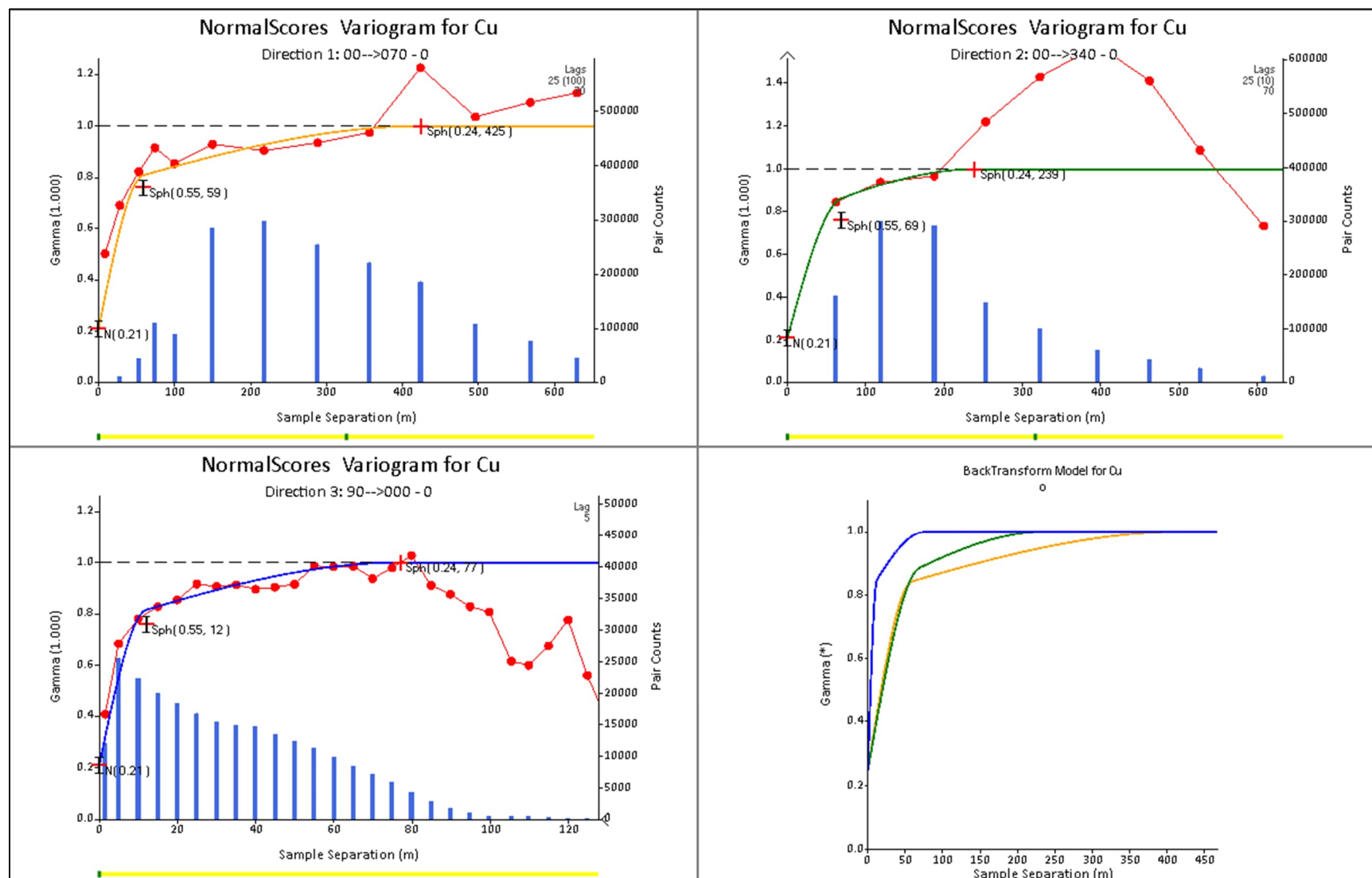


Figure 68. Cu variograms in the Waste Domain.

13.3.5 Ni variograms

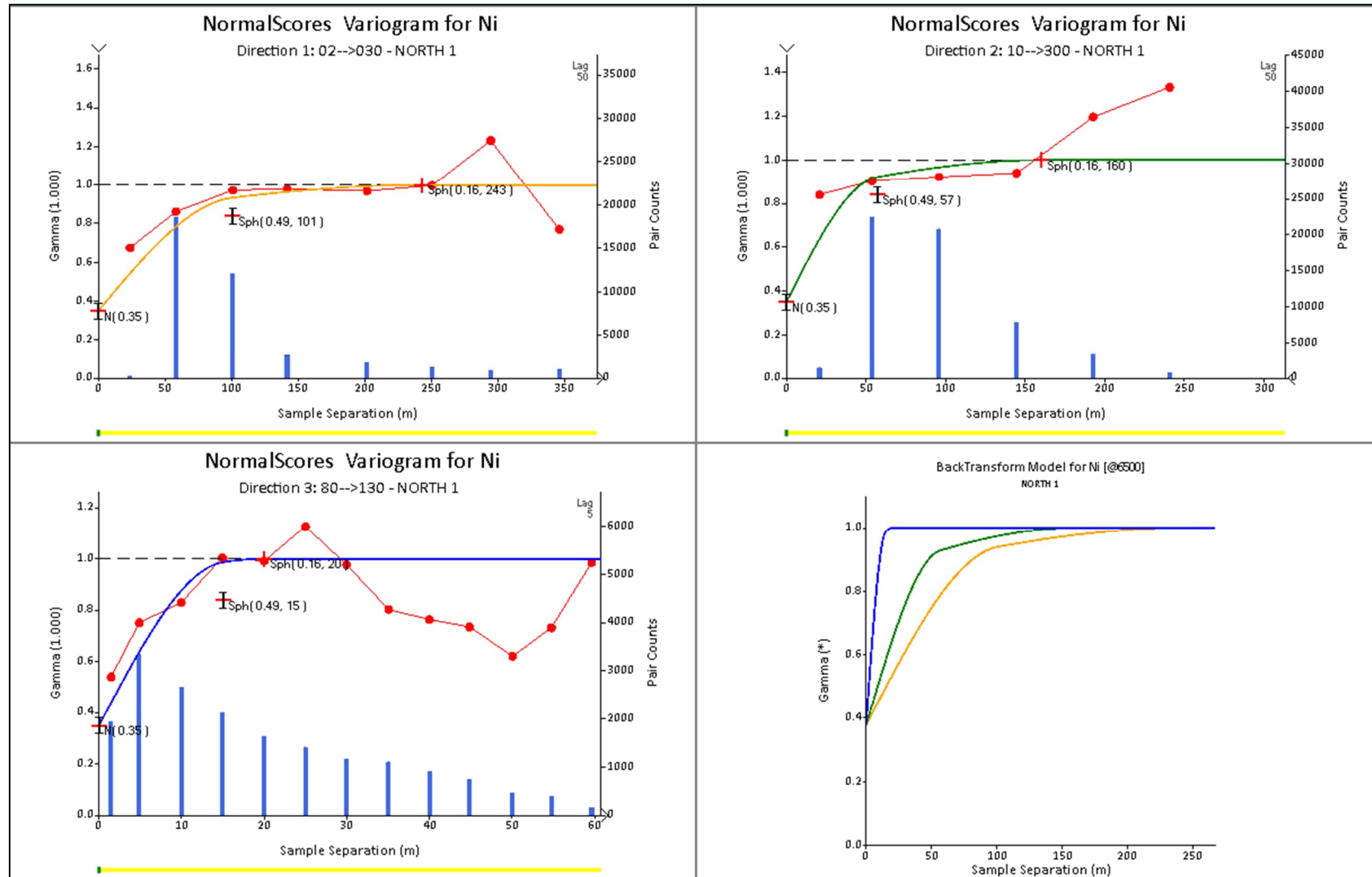


Figure 69. Ni variograms in Domain NE.

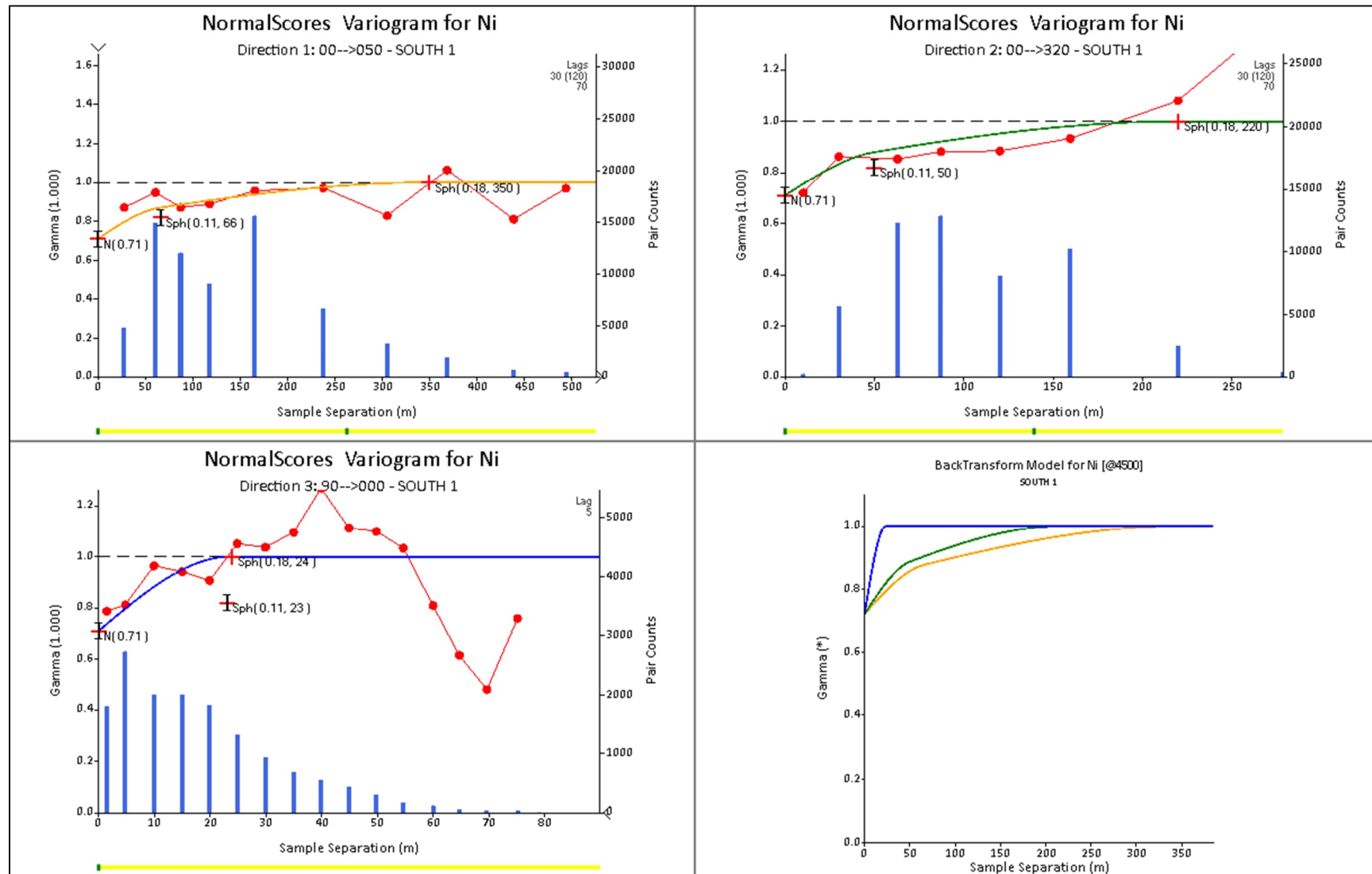


Figure 70. Ni variograms in Domain SW.

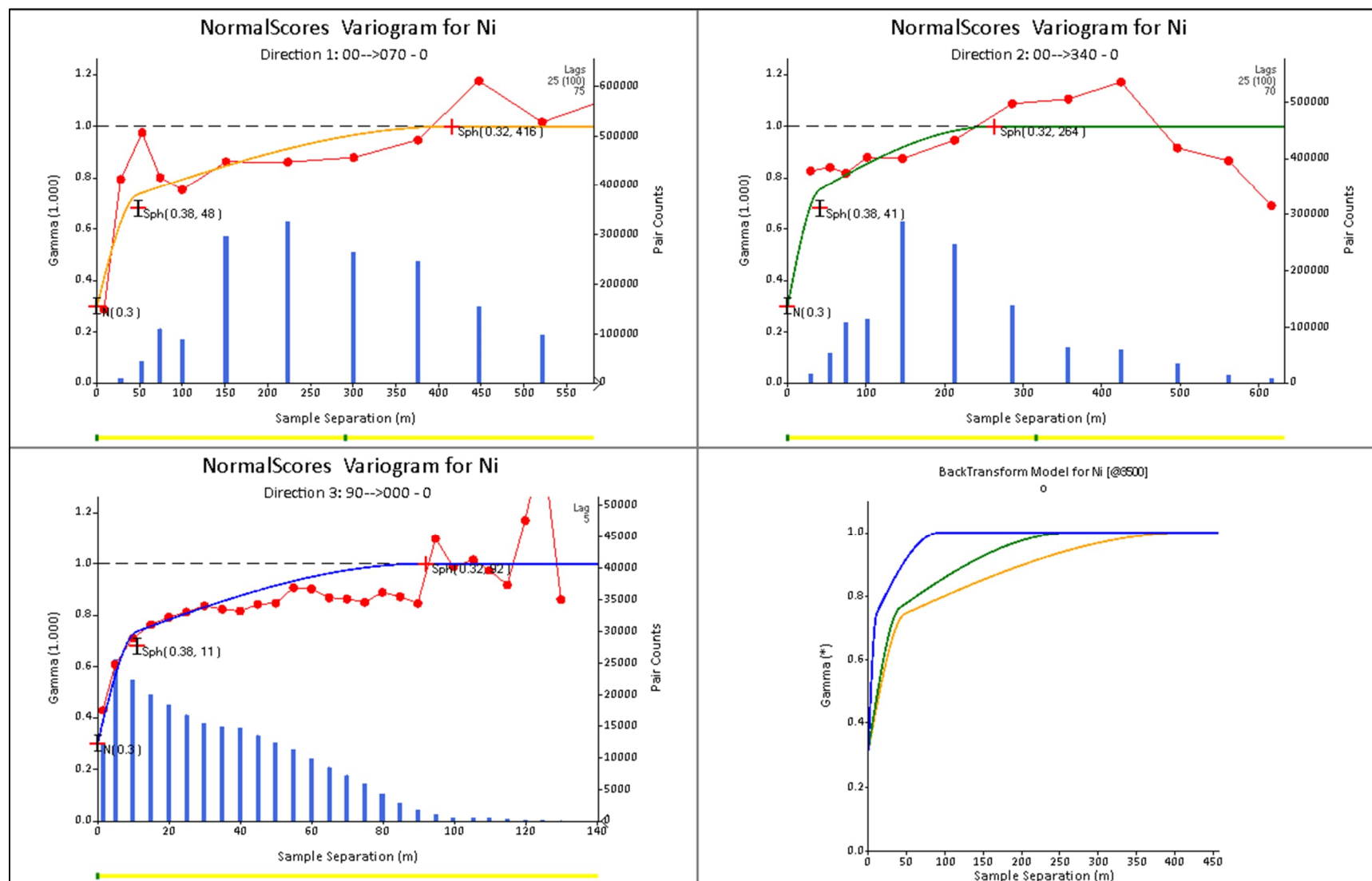


Figure 71. Ni variograms in the Waste Domain.

13.3.6 Density variograms

13.3.7 CUIIU in the Fresh Zone

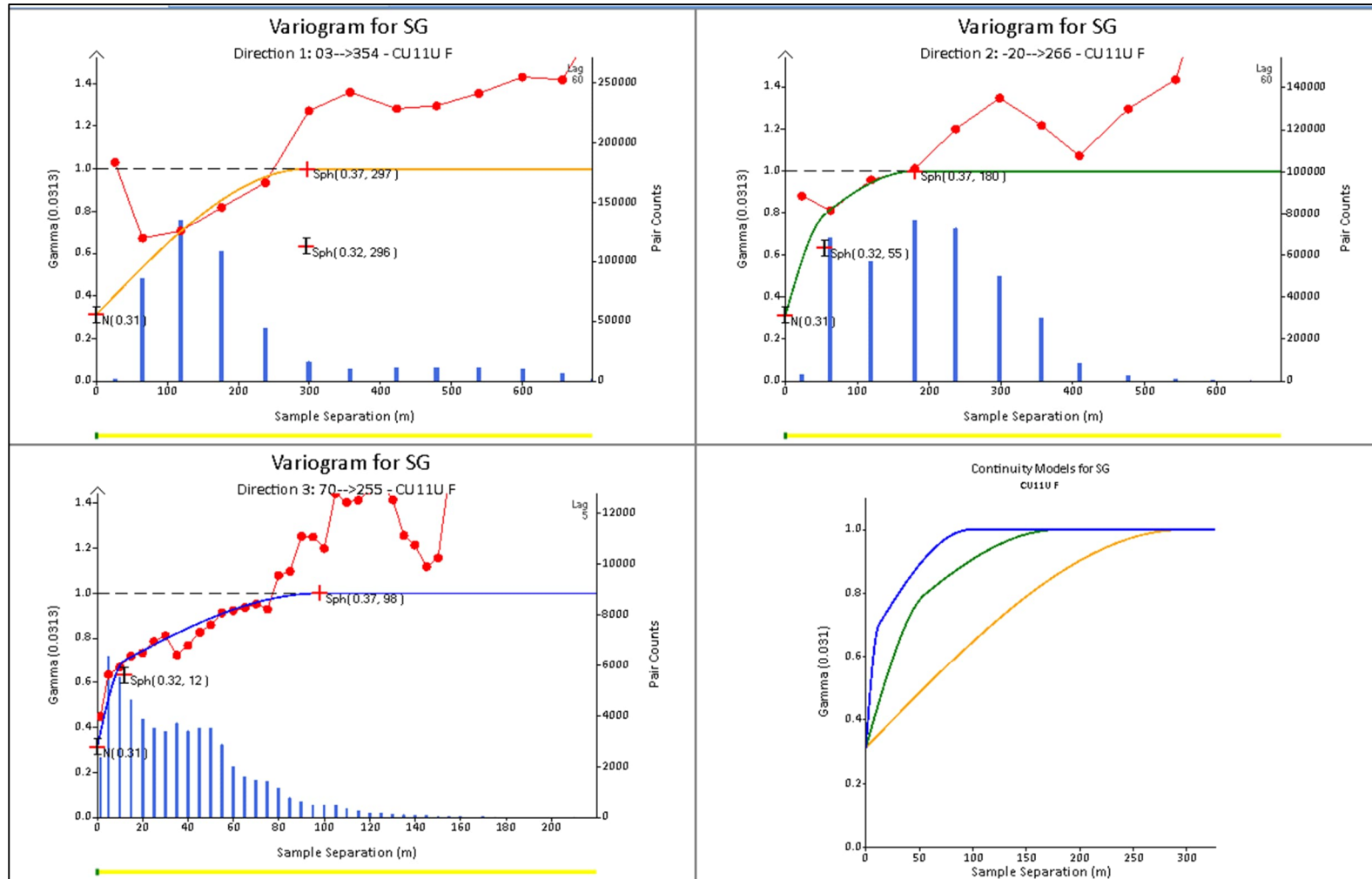


Figure 72. Density variograms of CUIIU in the Fresh Zone.

13.3.8 CUI1L and CUI2 in the Fresh Zone (Omnidirectional variograms)

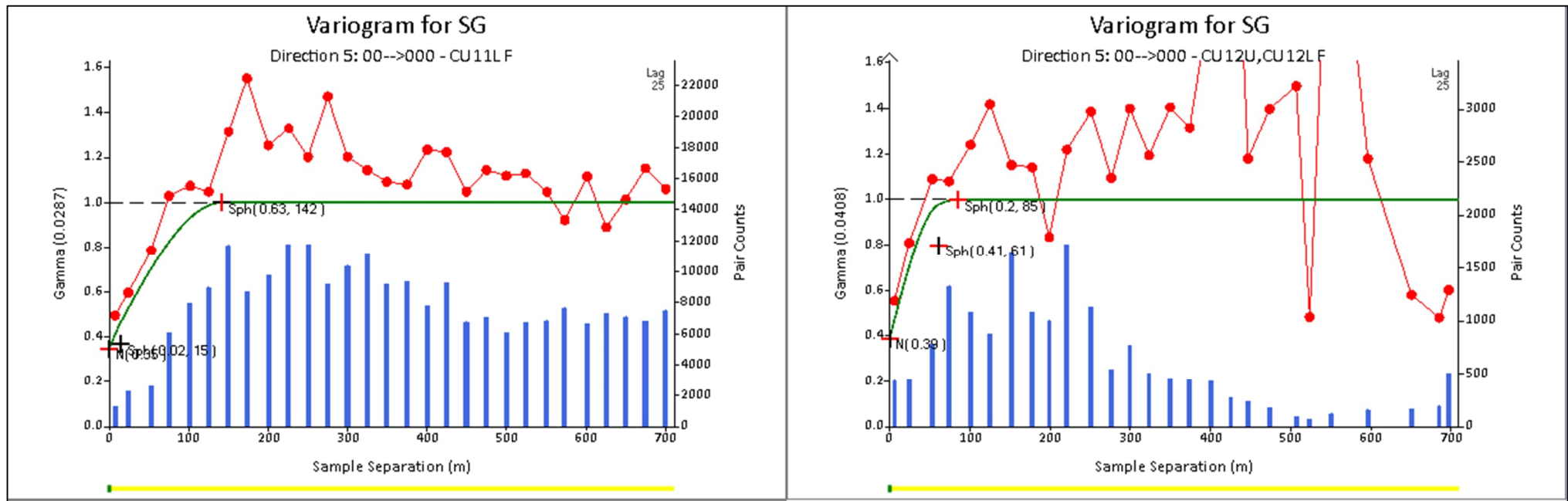


Figure 73. Density omnidirectional variograms for CUI1L and CUI2 in the Fresh Zone.

13.3.9 Entire Fresh Zone

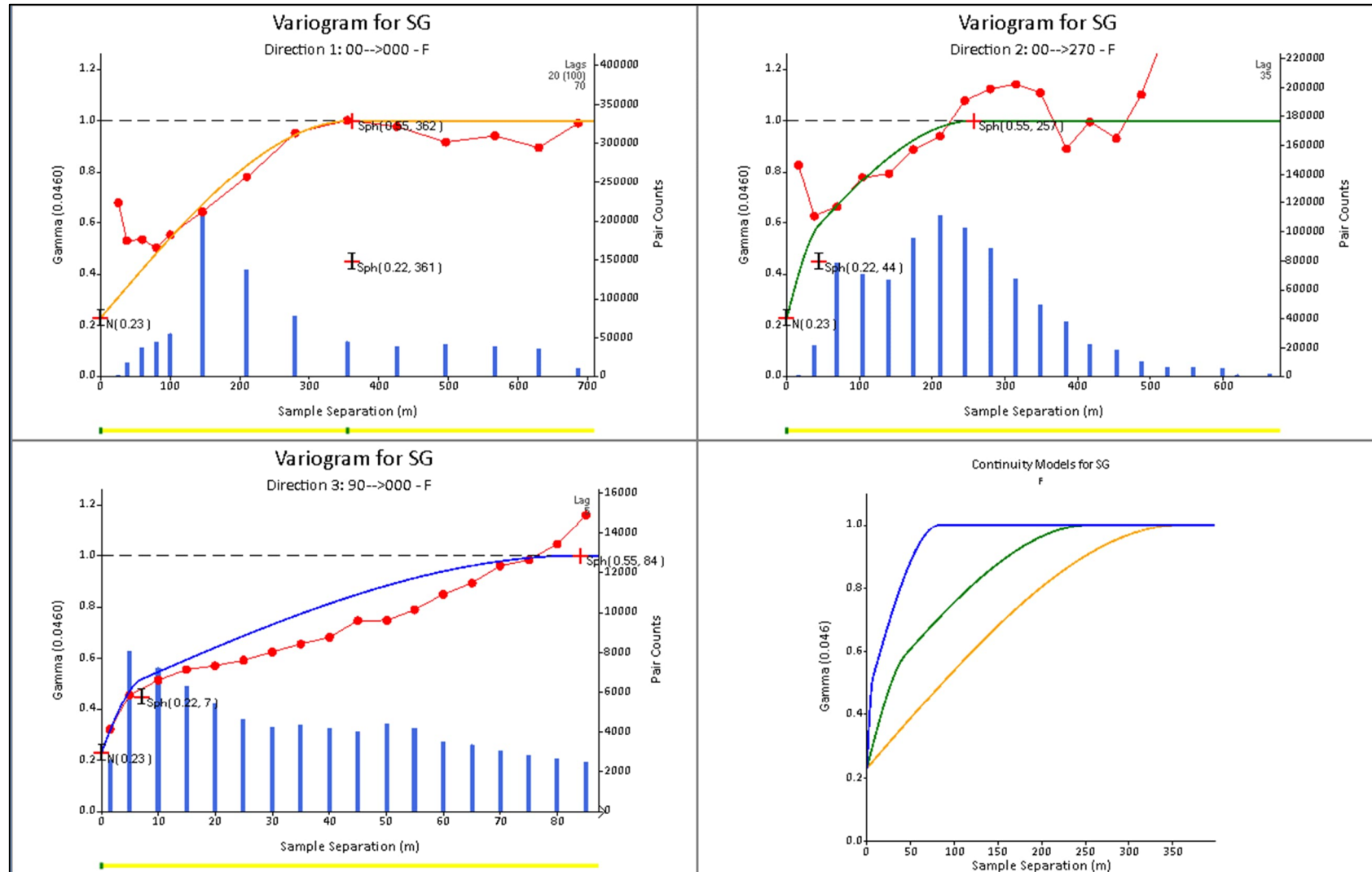


Figure 74. Density variograms for the entire Fresh Zone.

13.3.10 Entire Transitional Zone

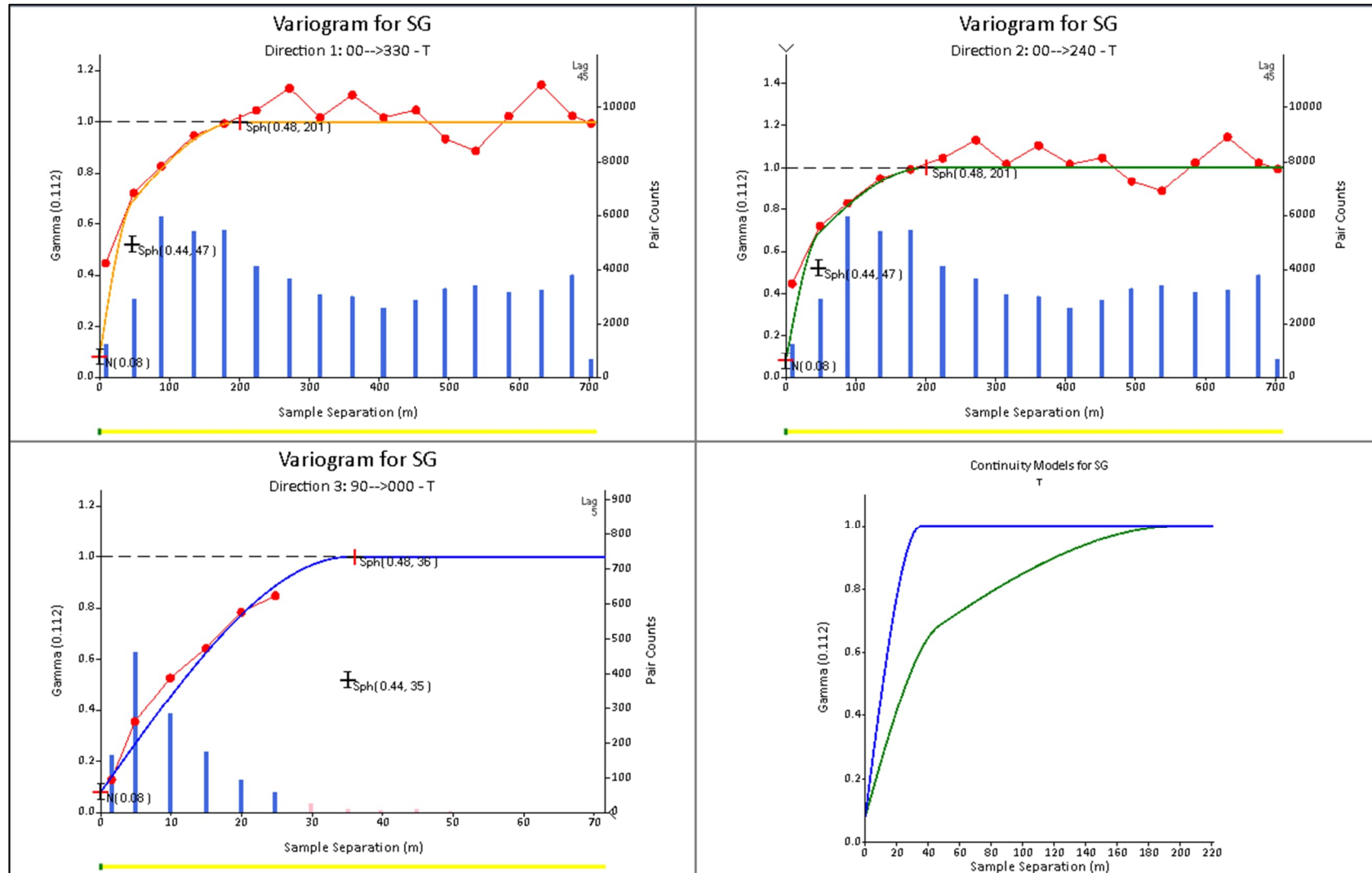


Figure 75. Density variograms for the entire Transitional Zone.

14 MINERAL RESOURCE ESTIMATION

14.1 KNA iterations

Kriging Neighbourhood Analysis (KNA) was first done in Supervisor to determine the starting point for the grade estimation parameters. KNA was done for Pt, Pd, Au, Cu, and Ni, in both the estimation domains. To remain pragmatic given the time limit, a single set of parent block dimensions were chosen for all the elements to be estimated in both Domain NE and Domain SW. Based on the KNA results in Supervisor, the best performing parent block dimensions differed between elements and domains, but in general the 50 mX by 50 mY (by 2.5 mZ) performed on average the best between the elements and domains.

Several estimation iterations were run in StudioRM while comparing the Kriging Efficiency and Slope of Regression results for Pt, Pd, and Ni of each iteration to optimise the conditional bias statistics.

The conditional bias statistics of the iterations seemed to support the findings of Deutsch, et al. (2014) in that the more samples that are used in the estimation, the better the conditional bias statistics.

14.2 Block model dimensions

The parent block dimensions used for grade and density estimation were 50 mX by 50 mY by 2.5 mZ, rotated 45° clockwise around the Z-axis.

14.3 Estimation parameters

14.3.1 Search volumes

The search ellipsoids' dimensions were set to the ranges of the variograms. The rotation of the search ellipsoids' major direction was to match that of the variograms in each estimation domain, DA was used to slightly rotate the ellipsoids locally depending on the dip and plunge of the Mineralised Domain when estimating grade. During density estimation DA was not applied.

A second and third pass at double and triple the original search ellipsoid's dimensions were allowed to ensure most blocks have estimations. While it is not advisable to estimate beyond the range of the variogram, the software also calculated the Transformed Distance of the search ellipsoid which is calculated on the average percentage of the original search ellipsoid's dimensions that was needed to fulfil the estimation. The average percentage is calculated by determining the percentage for each axis of the ellipsoid and taking the average. In some cases, only a slight expansion beyond 100% in only one or perhaps two directions were required to fulfil the estimation requirements, while the average of the axes actually used still remained below 100% of the original search ellipsoid.

Blocks with a Transformed Distance of larger than 1 (100%) meant that all three of their search ellipsoid's axes were larger than the original, first pass' dimensions (also equal to the variogram ranges) and were identified to classify as Inferred in the end given the uncertainty in their actual estimates. A total of 69,089 t of blocks in the Mineralised Domain required a Transformed Distance of more than 1 to estimate. This equated to 0.35% of the Mineral Resource before a 10% geoloss was applied.

Some blocks still did not estimate even with a third pass, not because of an abnormally large distance away from data, but rather because of their positions relative to data and the usage of DA. A total of 2,564 t of blocks were assigned a grade based on the average grade of the blocks in an approximately 50 m radius. This equated to 0.013% of the Mineral Resource before a 10% geoloss was applied.

Table 12. Search ellipsoid dimensions.

Domain	Variable	Major axis	Semi-major axis	Minor axis
Domain NE	Au	252	232	23
	Pt	260	145	26
	Pd	300	142	49
	Cu	222	79	22
	Ni	160	243	20
Domain SW	Au	350	84	20
	Pt	350	70	17
	Pd	220	309	14
	Cu	360	190	15
	Ni	350	220	24
Waste Domain	Au	310	305	48
	Pt	365	225	81
	Pd	310	231	90
	Cu	425	239	77
	Ni	416	264	92
CU12 Fresh Zone	SG	85	85	85
CU11U Fresh Zone	SG	297	180	98
CU11L Fresh Zone	SG	142	142	142
Rest of the Fresh Zone	SG	362	201	36
Entire Transitional Zone	SG	201	201	36
Entire Oxidised Zone	SG	201	201	36



Table 13. Search parameters used in estimations.

Domain	Variable	Minimum samples	Maximum samples	Use of octants	Minimum octants required	Minimum samples per octant	Maximum samples per octant	Maximum samples per drill holes
Domain NE	Grade	10	100	yes	4	2	20	3
Domain SW	Grade	10	100	yes	4	2	20	3
Waste Domain	Grade	10	100	yes	4	2	20	3
CU12 Fresh Zone	SG	10	100	no	-	-	-	3
CU11U Fresh Zone	SG	10	100	no	-	-	-	3
CU11L Fresh Zone	SG	10	100	no	-	-	-	3
Rest of the Fresh Zone	SG	10	100	no	-	-	-	3
Entire Transitional Zone	SG	10	100	no	-	-	-	3
Entire Oxidised Zone	SG	10	100	no	-	-	-	3

14.3.2 Interpolation method

Kriging is considered to be the Best Linear Unbiased Estimator (BLUE) and minimizes the variance of estimation errors (Deutsch, et al., 2014). While Simple Kriging (SK) with a global mean tends to be the most statistically efficient unbiased linear estimator, it relies on a strong global stationarity assumption, which is often unrealistic. SK is however useful when data is limited. When sufficient data is available Ordinary Kriging (OK) is a better choice of estimator as it does not rely that much on a global stationarity.

Ordinary Kriging was used for the grade estimations of Pt, Pd, Au, Cu, and Ni, as well as some of the density estimations. Where less data was available but a variogram was still possible, SK was used, e.g., during density estimation in Fresh CUI2 and in the Transitional Zone. The sample data was too limited in the Oxidised Zone to model a reliable variogram, and it was decided to use IPD to the power of 2 to estimate the density. The estimation methods are summarized in Table 14. Summary of the interpolation methods used in the estimation.

Table 14. Summary of the interpolation methods used in the estimation.

Domain	Variable	Interpolation method	Type of variogram used	Calculation of mean	Cell discretisation
Domain NE	Grade	OK	Directional	-	10X by 10Y by 2Z
Domain SW	Grade	OK	Directional	-	10X by 10Y by 2Z
Waste Domain	Grade	OK	Directional	-	10X by 10Y by 2Z
CU12 Fresh Zone	SG	SK	Omnidirectional	Inside search volume	10X by 10Y by 2Z
CU11U Fresh Zone	SG	OK	Directional	-	10X by 10Y by 2Z
CU11L Fresh Zone	SG	OK	Omnidirectional	-	10X by 10Y by 2Z
Rest of the Fresh Zone	SG	OK	Directional	-	10X by 10Y by 2Z
Entire Transitional Zone	SG	SK	Semi-directional	Inside search volume	10X by 10Y by 2Z
Entire Oxidised Zone	SG	IPD ²	-	-	10X by 10Y by 2Z



14.4 Post-processing

No change of support methods was done on the block model.

As mentioned in section 6.4, Earthlab noted a potential over-measurement of SG (density) values in the Oxidised Zone. While thorough verification would first be required to adjust the entire dataset, Earthlab felt that it would be appropriate to introduce some conservatism in the density estimation of the Oxidised Zone and applied a 10% reduction in the Oxidised Zone's estimated densities. Earthlab did want to be overly conservative by applying a larger than 10% reduction before being able to substantiate it, but also did not want to just leave it unaddressed. A 10% reduction was chosen as a moderate choice, but recommends that a thorough density verification campaign is performed to have confidence in the dry in-situ bulk density estimated. The 10% reduction in the Oxidised Zone's estimated densities reduced the total tonnes by approximately 70,000 t, which is less than half a percent of the entire Mineral Resource.

14.5 Rh and Ru regression

Rh and Ru were estimated in the block model by employing Linear Regression and Random Sample Consensus (RANSAC) Regression respectively using the Pt, Pd, and Au values. The machine learning model that executed the regression was trained with the 2023 drilled metallurgical holes which had assay results for Pt, Pd, Rh, Ru, Ir, and Au. Ir was excluded from the regression and Mineral Resources given its mostly below detection limit concentration.

The regression application conducted on Rh and Ru utilising Pt, Pd, and Au as input variables have yielded highly successful results. Both regression models for Rh and Ru demonstrated exceptional performance, with Mean Absolute Errors (MAE) well below the laboratory's detection limit of 0.02 ppm. Specifically, the Rhodium model achieved a remarkable MAE of 0.0092 ppm, while the Ruthenium model exhibited an even lower MAE of 0.0065 ppm. The regression methodology and application thereof has been described in great detail within a separate report named "EARTH-PPD_939-1_Metallurgical Drilling and Relogging Draft".

14.6 RPEEE test

Since neither the lateral perimeter nor the maximum depth of the domain changed significantly from the 2022 MRE, the Reasonable Prospects for Eventual Economic Extraction (RPEEE) test was based on the strip ratio of the 2022 pit shell created during the Mining Study. A comprehensive RPEEE test could not be undertaken as preferred by Earthlab due to the limited scope and budget approved by VMC. Only a basic test was performed, for which a new pit shell to check for a strip ratio was therefore not created and the RPEEE test was assumed to be passed for this MRE.

The Mineral Resource was however limited to only the material protected by the flood barrier designed by Eco Elementum (Pty) Ltd ("EcoE") in 2023.

14.7 Geoloss

The total geoloss applied in the 2022 MRE was 10%. As mentioned in section 10.3.6, it was not possible to create a 3D wireframe model of the later-stage granitic intrusions. In the attempt to quantify the potential geoloss that would have to be attributed to intrusions, Earthlab calculated the total length of samples inside the CUIIU wireframe logged as intrusions and compared that to the total length of samples coded as part of the Mineralised Domain. The sum of intrusion sample lengths (inside CUIIU) was 283.7 m. The sum of Mineralised Domain sample lengths was 2,337.0 m. If considering the former as a percentage of the latter, it gave 12.14%. However, applying that as a geoloss would be overly conservative, as the Mineralised Domain barely made up a quarter of the CUIIU samples. Applying the ratio of Mineralised Domain to CUIIU to the 12.14% would on the other hand have given a potential underestimation of the intrusion-related geoloss, although

it could not be known at this point. To balance conservatism, it was decided to take half of 12.14% as the geoloss attributed to intrusions, equating to 6.07%.

Since it was not certain yet to what extent the faults in the deposit would cause potential geoloss, it was decided to create 2.5 m brackets on either sides of the faults and use that for the geoloss attributed to faults calculation. The 2.5 m brackets were based on a common practice in PGE mining operations in the Western Limb of the Bushveld Complex, although acknowledged that this deposit and those of the Western Limb are geologically different.

Earthlab aimed to quantify the known geoloss components, but since no significant new information came to light, it was decided to keep the geoloss to 10% in line with the 2022 MRE.

14.8 Mineral Resource Classification

14.8.1 Classification criteria

Assuming equal levels of recovery of the metals estimated, an approximation of revenue contribution between the five metals was done using the August 2023 Afriforesight Rolling Commodities Forecast's predicted prices for refined metals in the fourth quarter of 2024. The following metal prices were used:

Table 15. Forecasted metal prices used during potential revenue contribution calculation.

Metal	Price
Au	\$ 1,976 per oz
Pt	\$ 1,011 per oz
Pd	\$ 1,130 per oz
Cu	\$ 9,058 per tonne
Ni	\$ 22,382 per tonne

Based on the average grades in the Mineralised Domain and the forecasted metal prices, the potential revenue contribution was calculated as illustrated in Figure 76. It is obviously acknowledged that this will not be the exact eventual revenue contribution should this project ever evolve into a mining operation, however, for the task of Mineral Resource Classification Earthlab had to establish a weight assigned to each metal that its confidence would be considered.

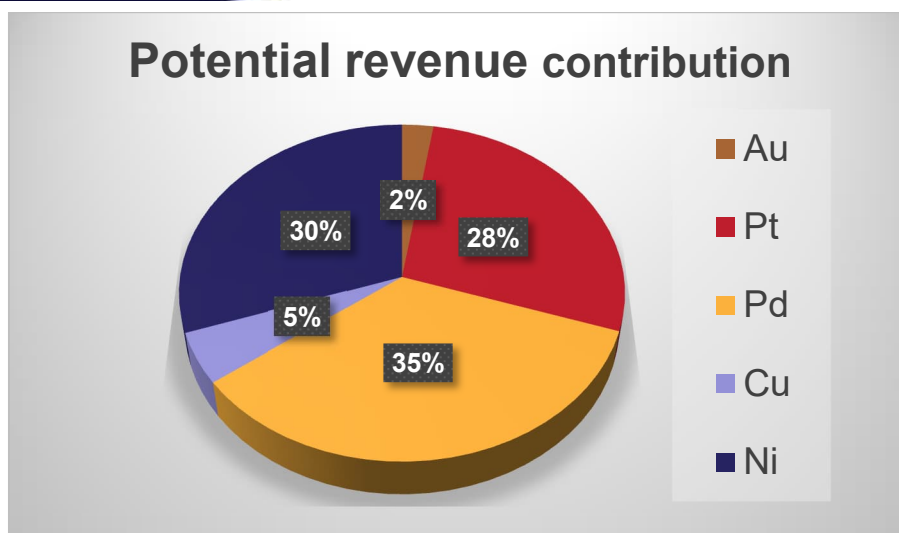


Figure 76. Potential revenue contribution breakdown.

The weighted average of the Kriging Efficiency (KE) and Slope of Regression (SR) were calculated using the revenue contribution percentages to weight each metal's KE and SR in the calculation.

After using the scorecard in Table 16 to classify each block based on the three parameters, the results were each viewed respectively by the Competent Person (CP) in order to identify areas of lower and higher confidence.

Table 16. Mineral Resource Classification Scorecard

Parameter	Score range	Classification
Domain Probability	0.8 – 1.0	Measured
	0.6 – 0.8	Indicated
	0.4 – 0.6	Inferred
Kriging Efficiency	> 0.8	Measured
	0.4 – 0.8	Indicated
	< 0.4	Inferred
Slope of Regression	> 0.8	Measured
	0.5 – 0.8	Indicated
	< 0.5	Inferred

The classification based on Probability Estimation of the Mineralised Domain is shown in Figure 77. The classification based on KE is shown in Figure 78 and based on SR in Figure 80.

The distribution of the weighted average KE and SR in the Mineralised Domain are shown in Figure 79 and Figure 81, respectively.

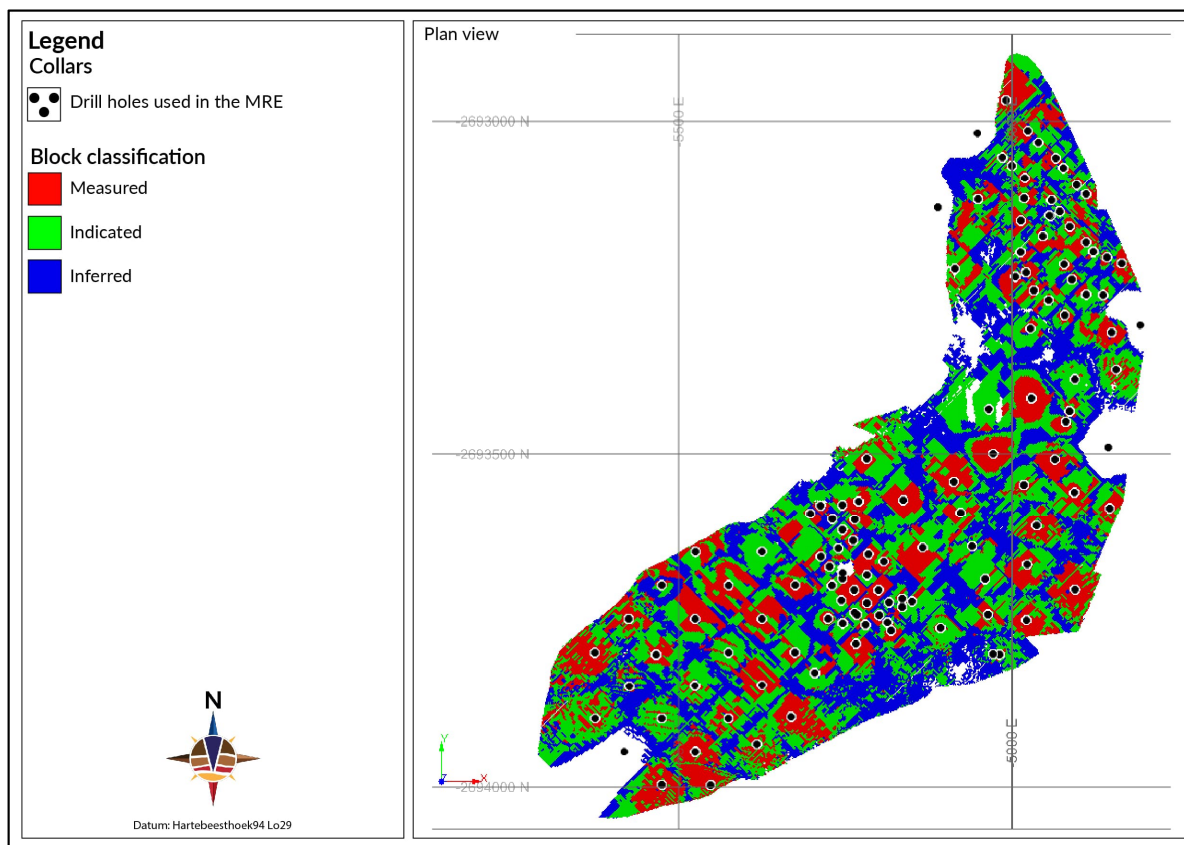


Figure 77. Classification based solely on the Probability Estimation.

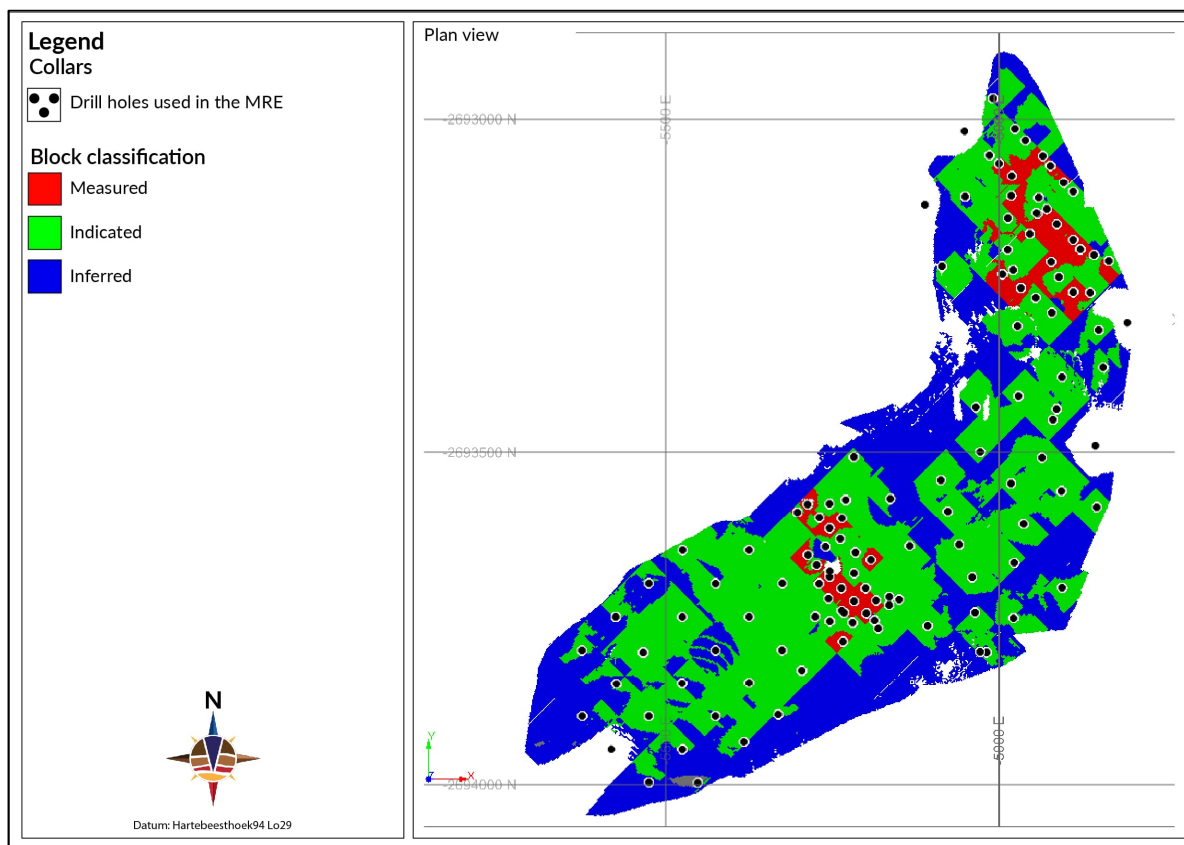


Figure 78. Classification based solely on the weighted average of the KE.

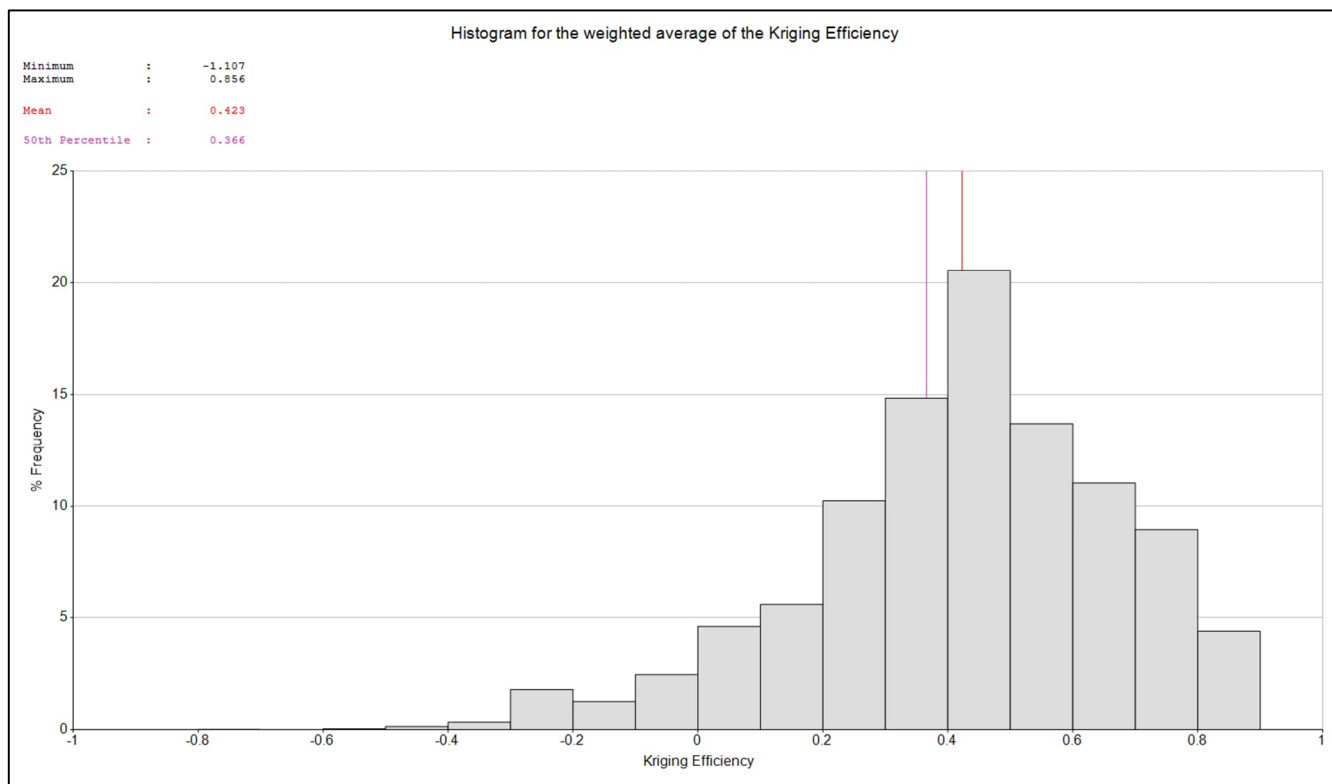


Figure 79. Kriging Efficiency distribution in the Mineralised Domain viewed as a weighted average of the metals' KE. Frequency is weighted by the volume of the blocks.

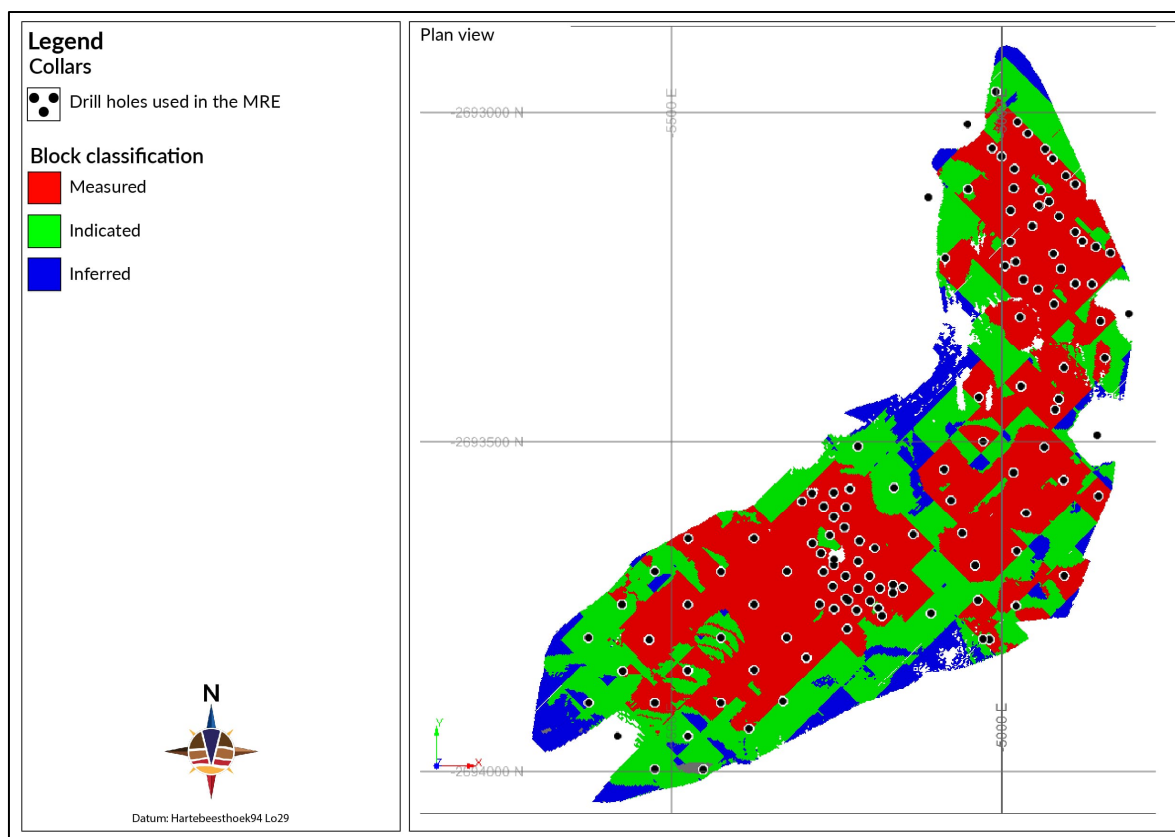


Figure 80. Classification based solely on the weighted average of the SR.

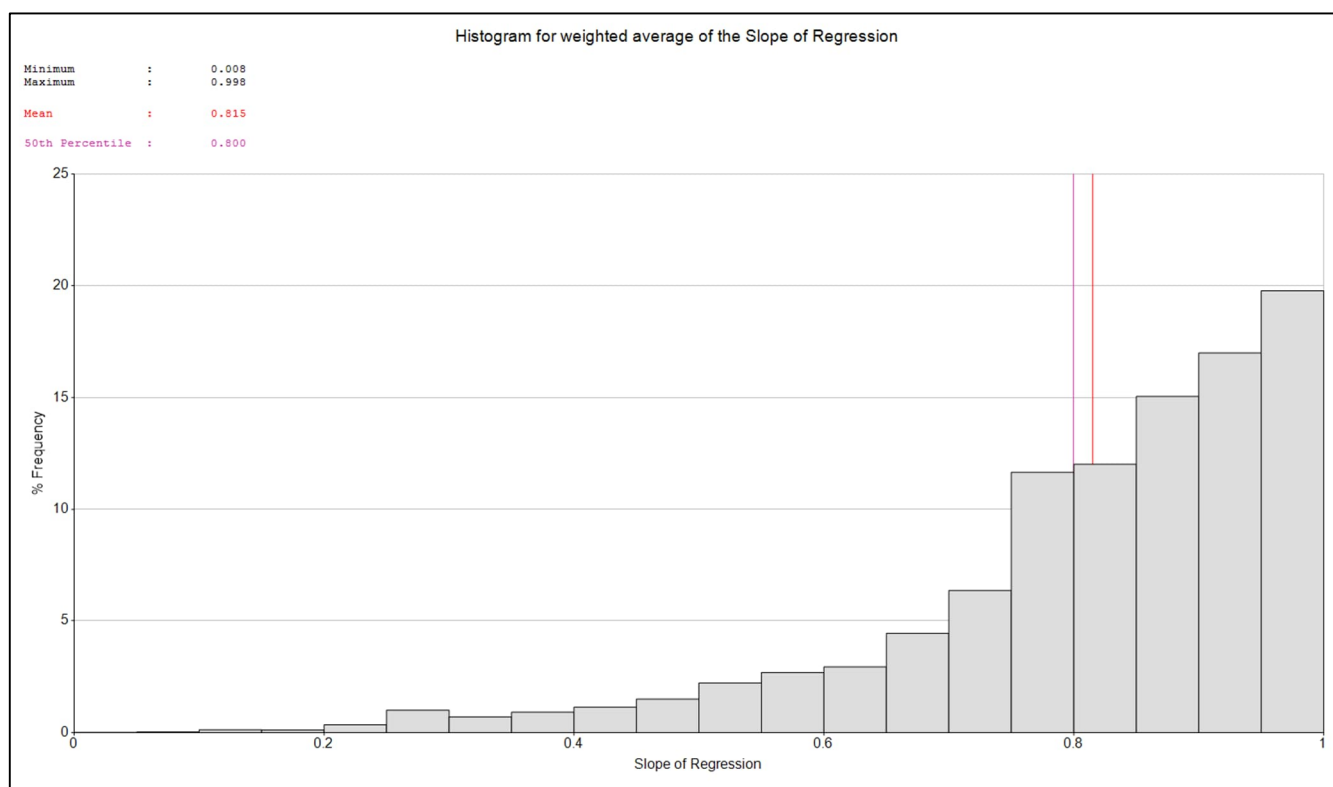


Figure 81. Slope of Regression distribution in the Mineralised Domain viewed as a weighted average of the metals' SR. Frequency is weighted by the volume of the blocks.

14.8.2 Manual classification

As seen in Figure 77 the Probability Estimation's probabilities did not prove to be a useful parameter to base classification on. The difficulty resulted from the multiple "layers" in the vertical of the Mineralised Domain did not perform equally well in the Probability Estimation given the short-scale variability in the existence and location of the mineralisation. Since there was not sufficient clear scoring in the vertical dimension, it was initially decided to put aside the Probability Estimation's score and assume the obvious that the confidence will be higher in the areas of closer drill hole spacing.

The CP then considered and interpreted the KE and SR classification scores, and manually created zones of higher and lower confidence, which to no surprise correlated well with the drill hole spacing.

FB 3 and FB 5 were automatically downgraded to Inferred given their geological uncertainty. In cases where mineralisation was continuous for several drill holes in one direction but suddenly completely absent in a next drill hole, the surrounding areas were also manually classified as Inferred due to uncertainty. Some portions on the outskirts or where the Probability Estimation showed deterioration were ensured to be classified as Inferred.

The higher confidence areas have KE and SR that qualify as Measured according to the scorecard in Table 16, however, it was decided to keep the classification as Indicated based on the irregular mineralisation pattern. The Mineral Resource therefore consists only of Indicated and Inferred classifications.

The final Mineral Resource Classification, as done by the CP, is illustrated in Figure 82.

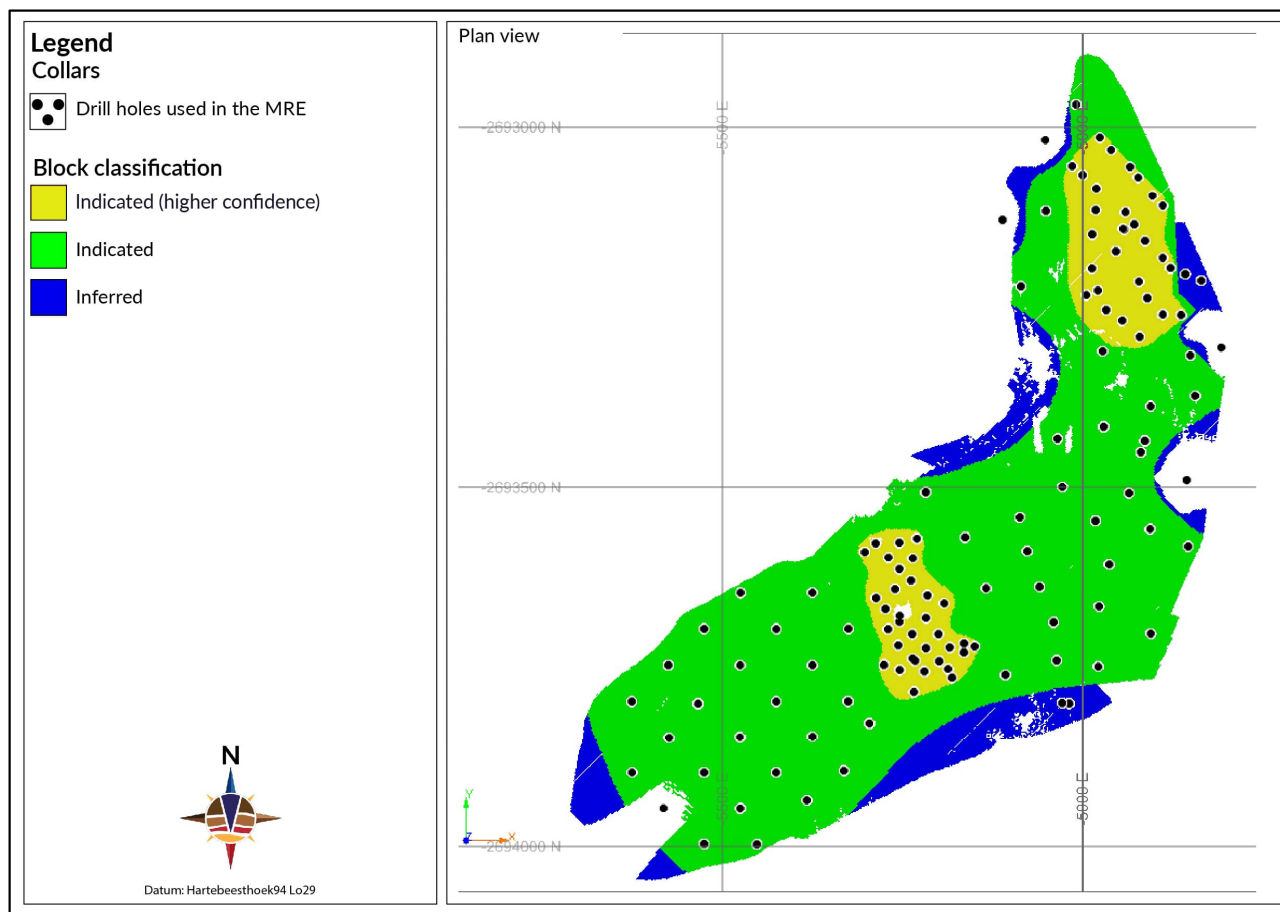


Figure 82. Final Mineral Resource Classification as done by the Competent Person.

14.9 Mineral Resource Estimate

14.9.1 Cut-off parameters

A cut-off grade of 1.2 g/t 2E+Au was applied on a sample level to create a grade-based domain, which is discussed in detail in Chapter 1.

No cut-off grade was applied on a block model level at the time of reporting.

14.9.2 Mineral Resource cross sections

A selection of cross sections of the block model (limited to only CUIIU) and drill holes coloured to the same 2E+Au colour legend is displayed in Figure 83 to Figure 88. Displaying the block model according to 4E+Au would not be comparable with the samples that do not contain Rh and Ru, however, the grade trends of 4E+Au would be similar enough to 2E+Au for the reader to consider the cross sections displaying 2E+Au as representative. The drill holes are not illustrated to scale. On the left side of each drill hole is a two-colour bar, displaying black where samples were coded as part of the Waste Domain, and cerise-pink where samples were coded as part of the Mineralised Domain. The Waste Domain can clearly be seen as the blue (very low grade) blocks. As expected with large Mineral Resource blocks, the smoothing in the blocks can be seen vertically and laterally compared to the 1 m long composites. Domain SW in general had higher nugget effects than Domain NE and therefore was smoothed to a higher degree than Domain NE.

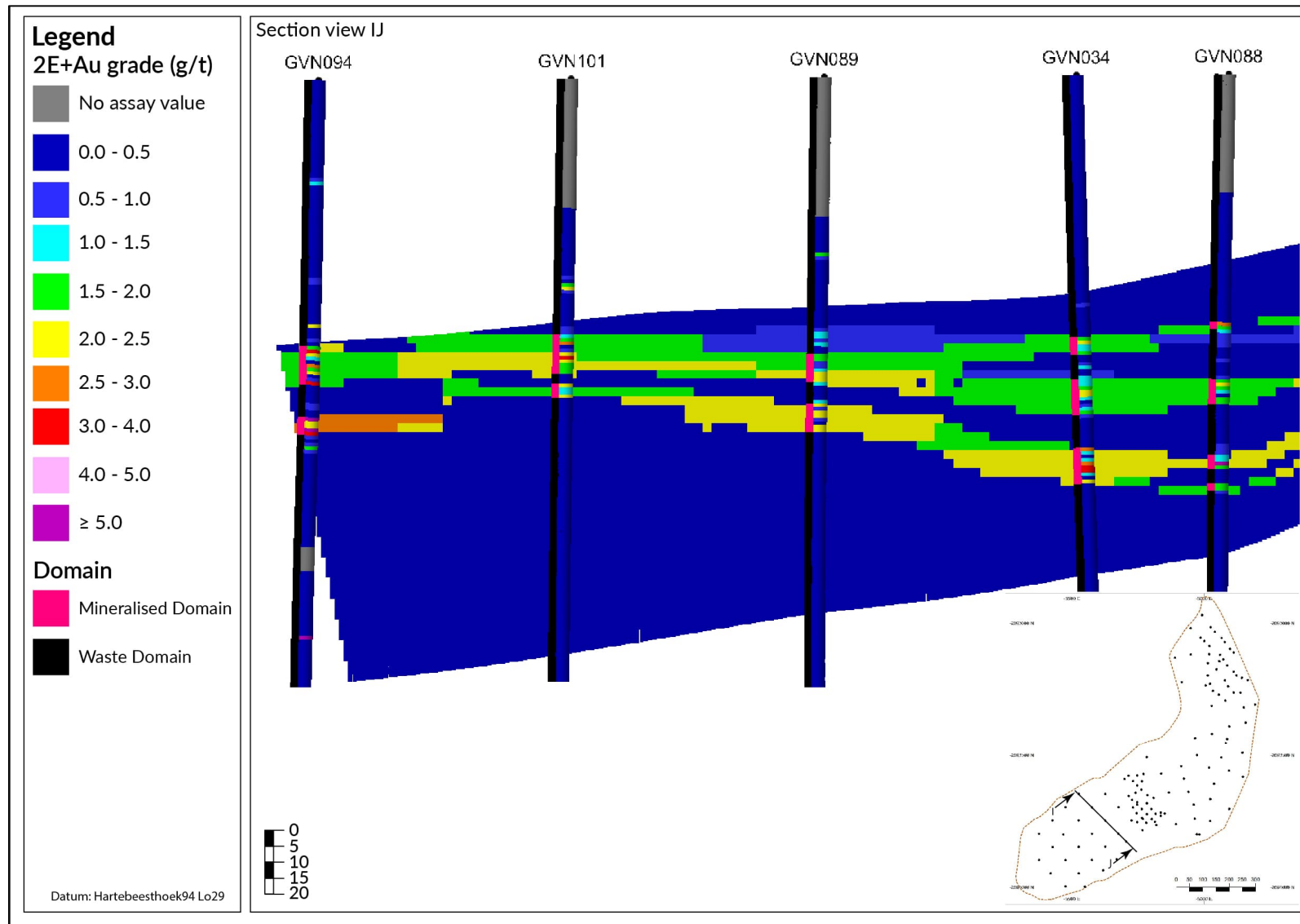


Figure 83. MRE block model and drill holes on section IJ, coloured by 2E+Au grade.



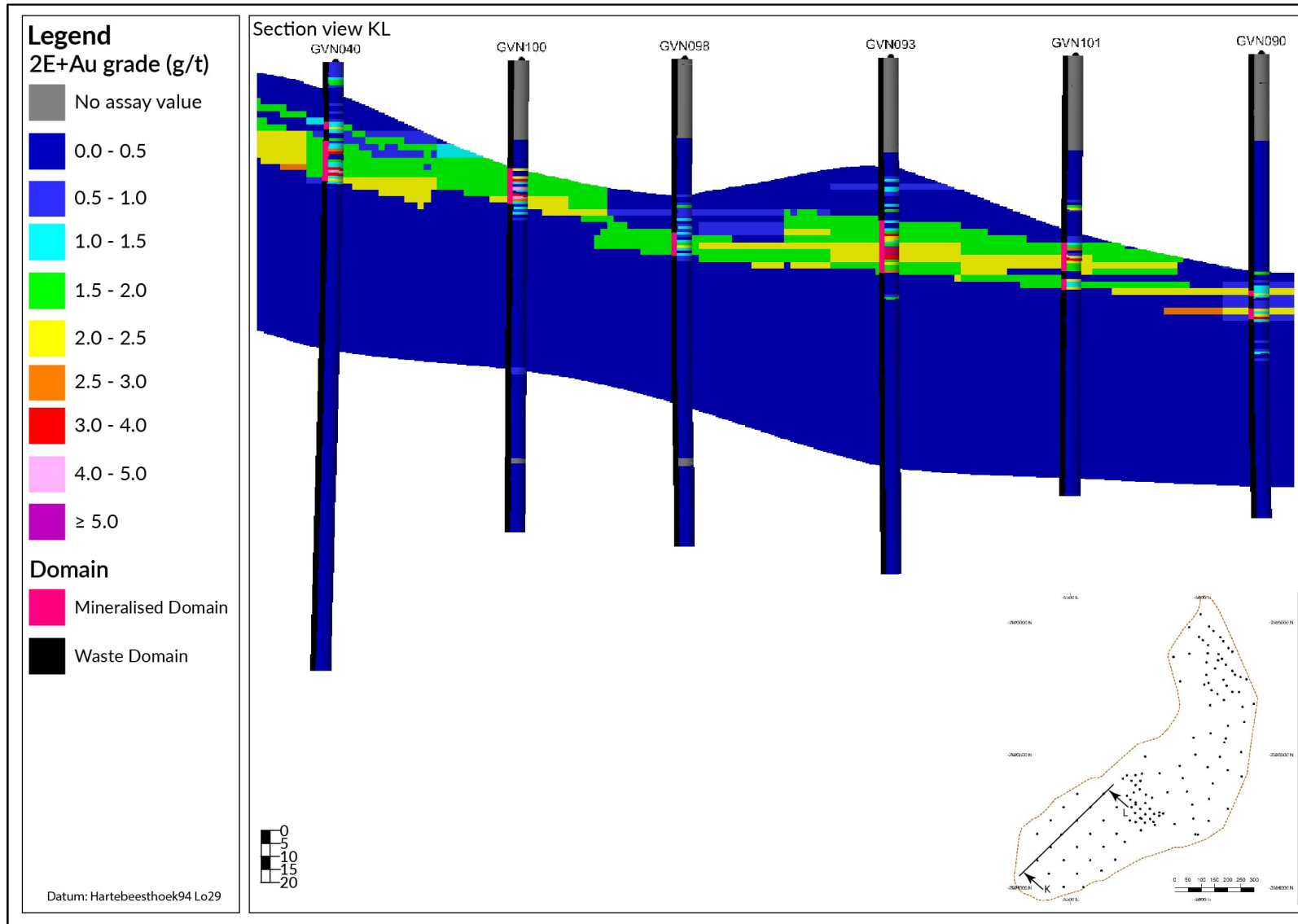


Figure 84. MRE block model and drill holes on section KL, coloured by 2E+Au grade.



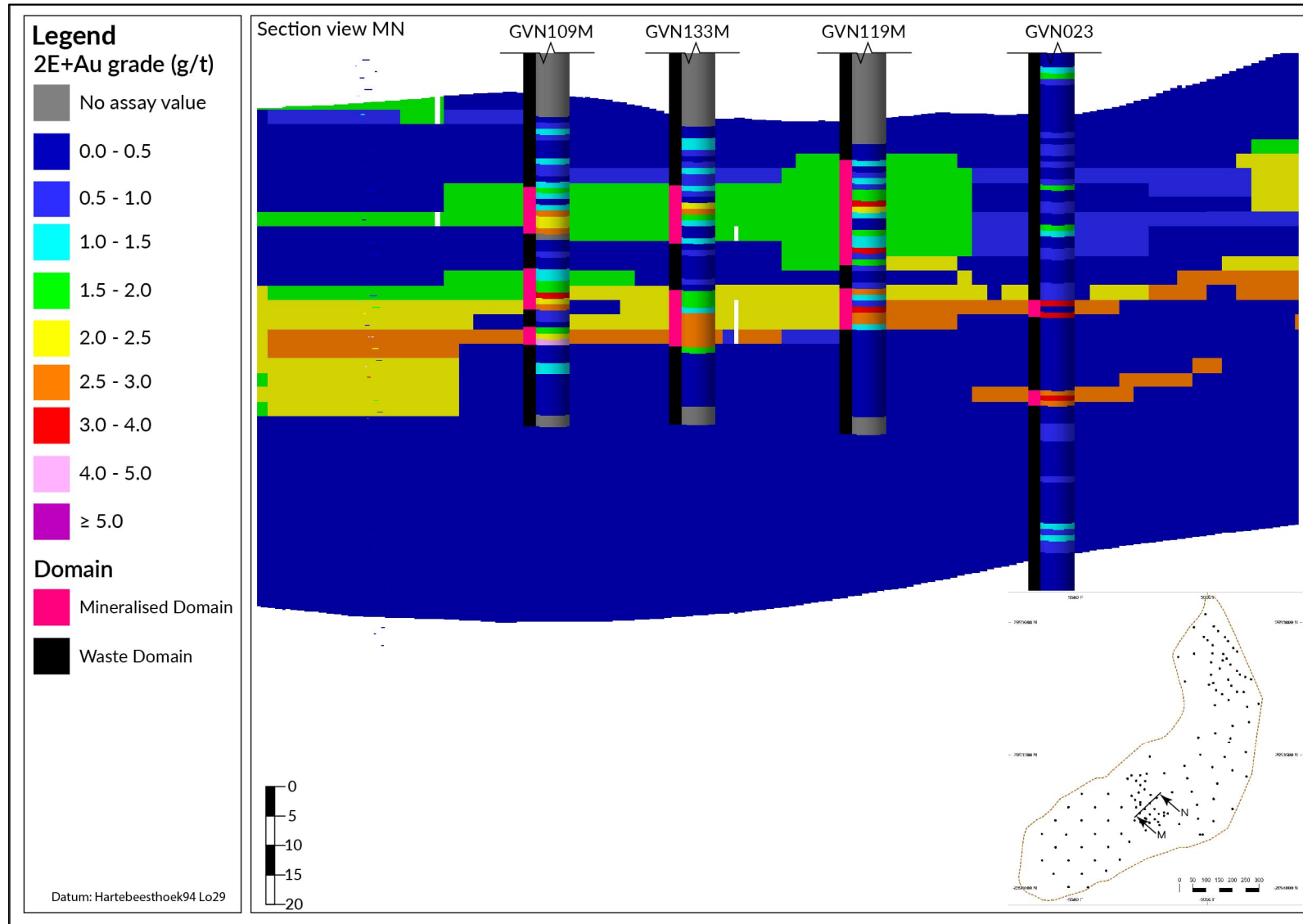


Figure 85. MRE block model and drill holes on section MN, coloured by 2E+Au grade.



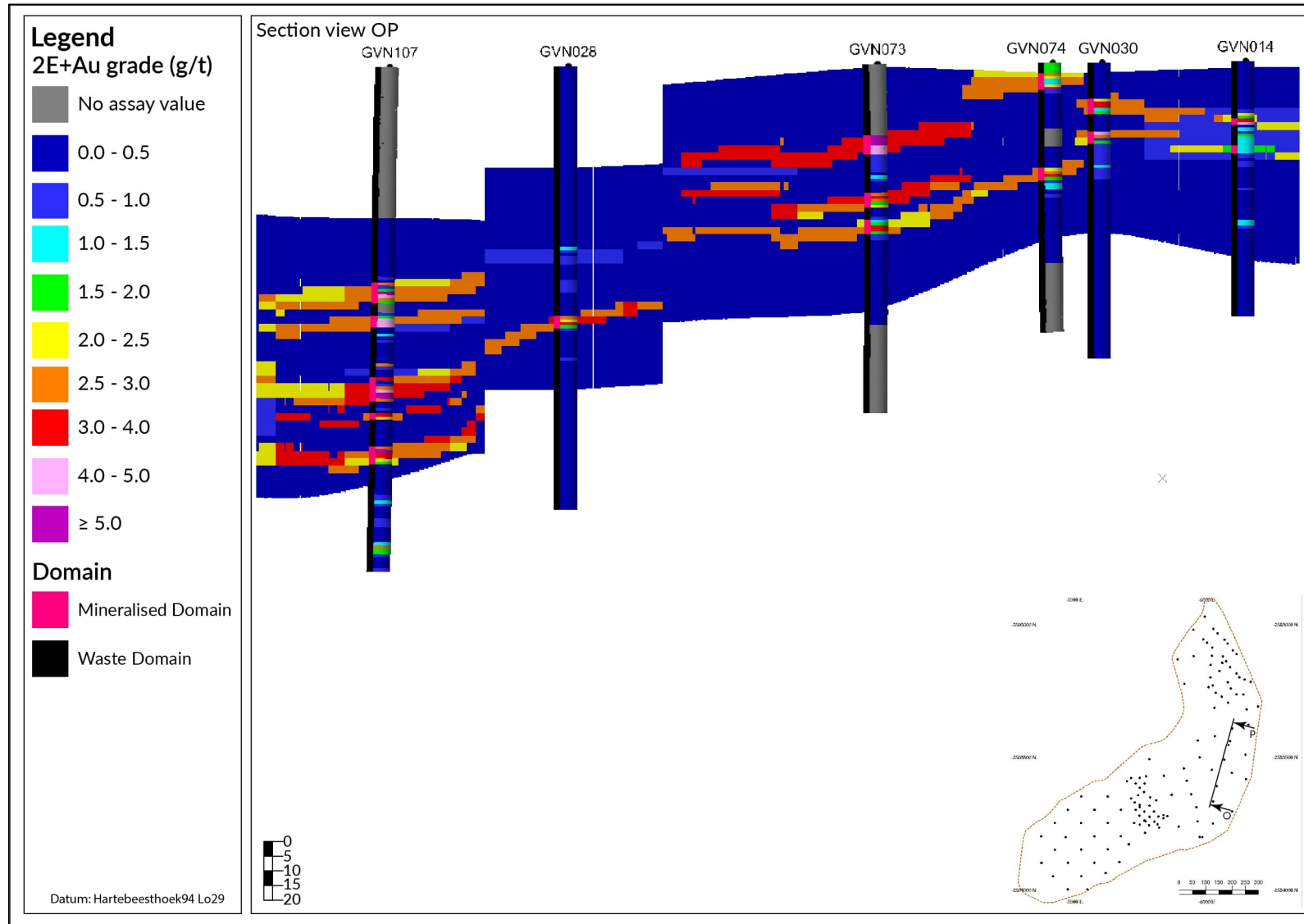


Figure 86. MRE block model and drill holes on section OP coloured by 2E+Au grade.

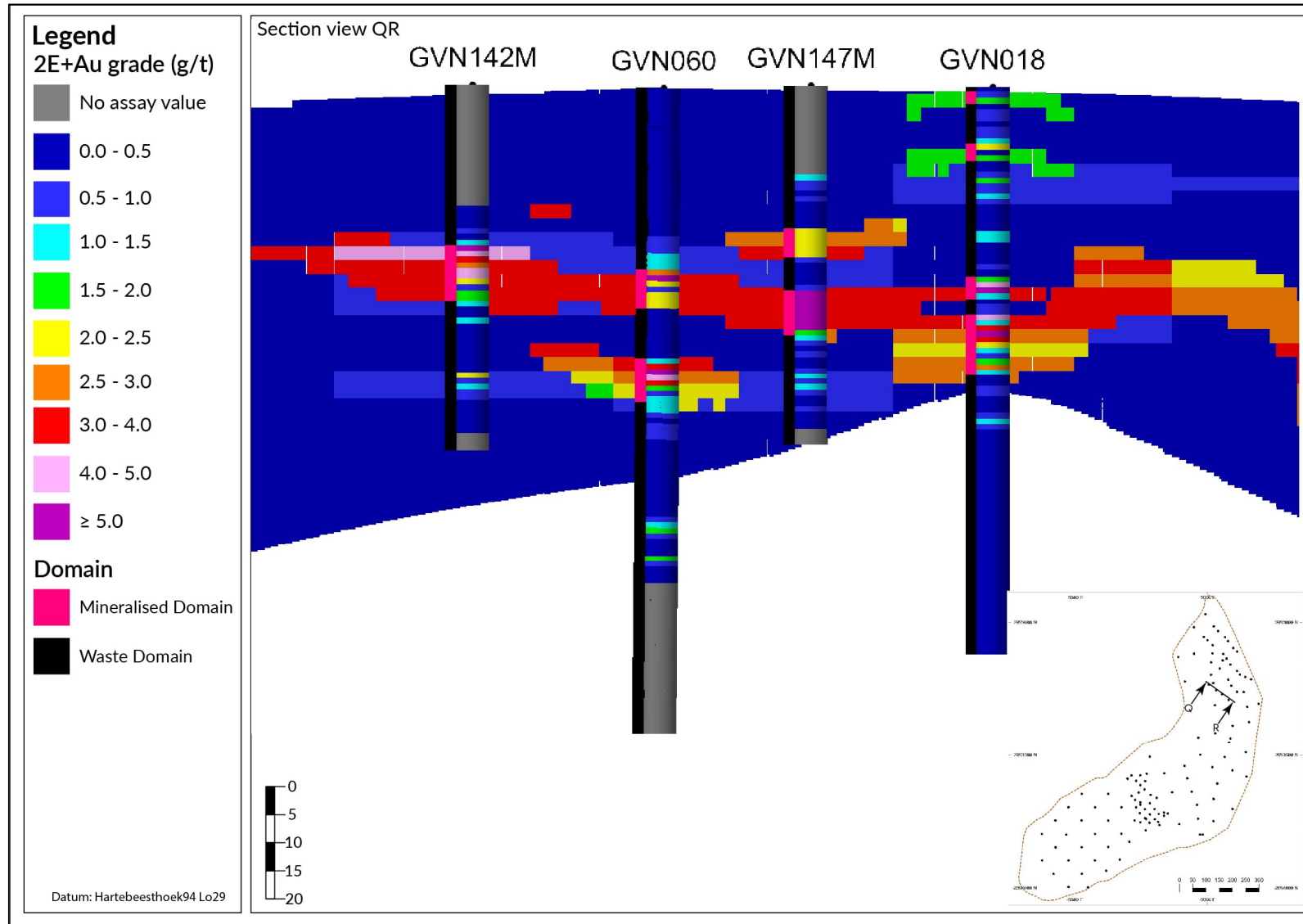


Figure 87. MRE block model and drill holes on section QR coloured by 2E+Au grade.



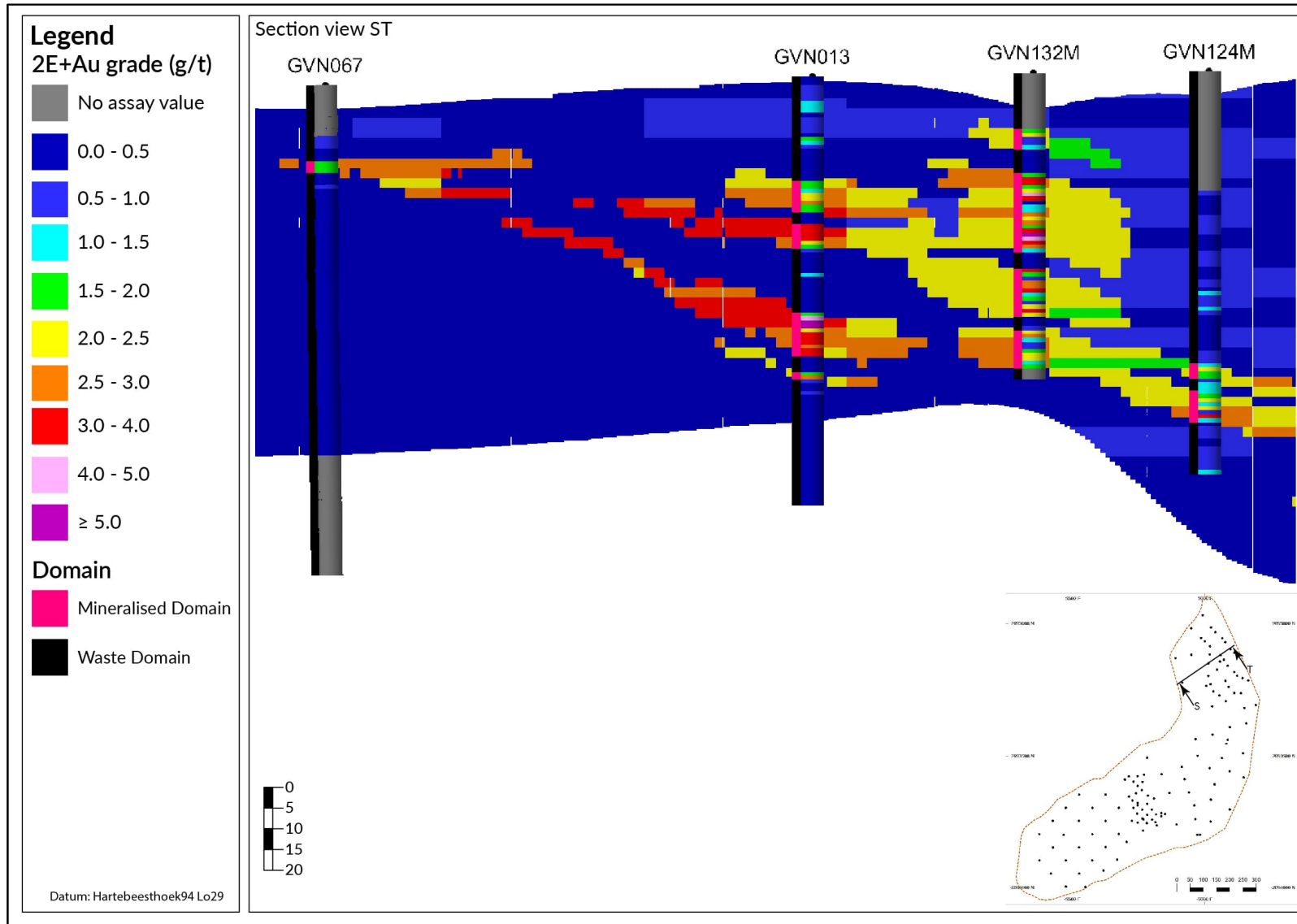


Figure 88. MRE block model and drill holes on section ST coloured by 2E+Au grade.



14.9.3 Grade distributions in the block model

The grade distribution histograms displayed in Figure 89 to Figure 94 are that of the entire Mineralised Domain, regardless of estimation domain, classification, or weathering zone. The frequency of the distribution as well as other statistics such as the means were weighted by tonnes.

It should be noted that the final Mineral Resource Estimate average grades reported in section 14.9.5 were not calculated directly the same as the tonnes-weighted arithmetic means shown in the histogram, although the calculation could be considered as performing the same task. The final Mineral Resource Estimate's average grades were produced by calculating the amount of metal in each cell in the block model (grade * tonnes) and dividing the category's sum of metal by the category's sum of tonnes, giving an average grade across the entire category (e.g., Mineral Resource Class, Weathering Zone, etc.).

The histograms mostly display roughly log-normal distributions, however due to the smoothing effect, they are less positively skewed than the distributions of the composites. As an example, the 2E + Au maximum in the composites after top-capping was 10.3 g/t in Domain NE and 6.8 g/t in Domain SW, however in the grade estimate the maximum 2E + Au was 5.06 g/t.

14.9.3.1 2E + Au distribution

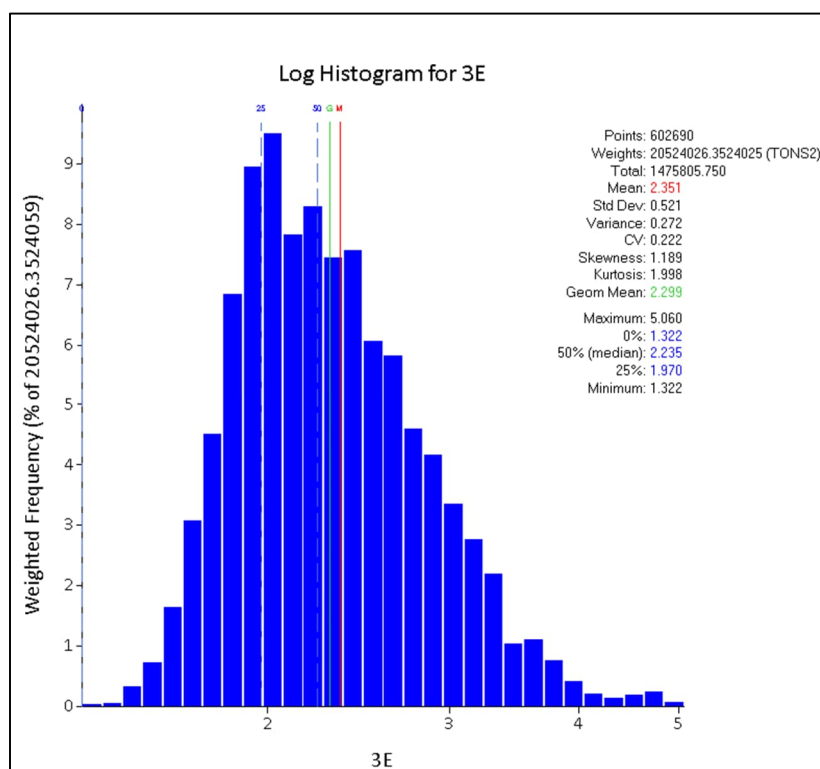


Figure 89. Log histogram for 2E + Au distribution in the Mineralised Domain block model (weighted by tonnes).

14.9.3.2 Au distribution

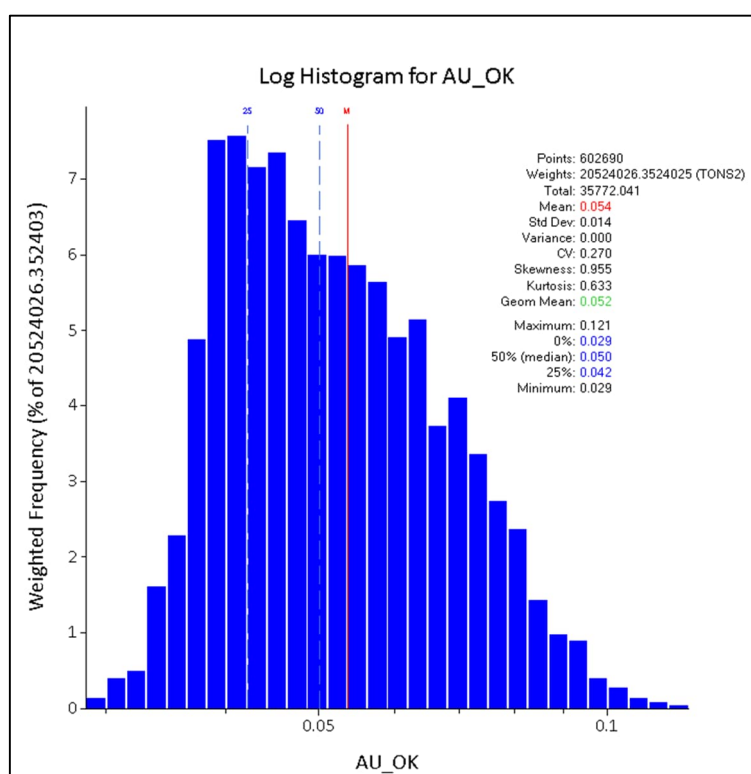


Figure 90. Log histogram for Au distribution in the Mineralised Domain block model (weighted by tonnes).

14.9.3.3 Pt distribution

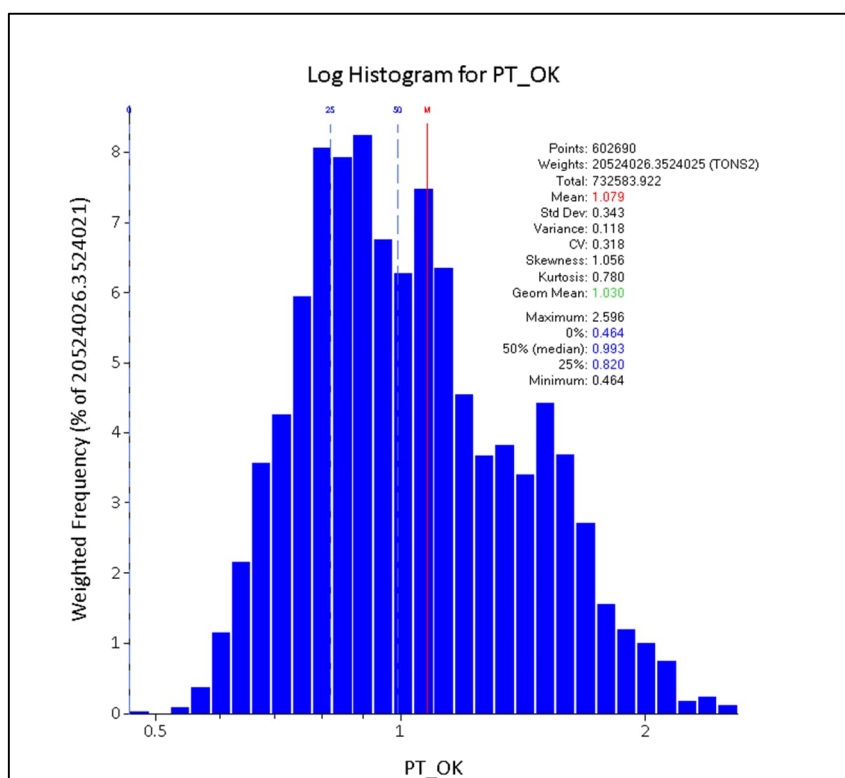


Figure 91. Log histogram for Pt distribution in the Mineralised Domain block model (weighted by tonnes).

14.9.3.4 Pd distribution

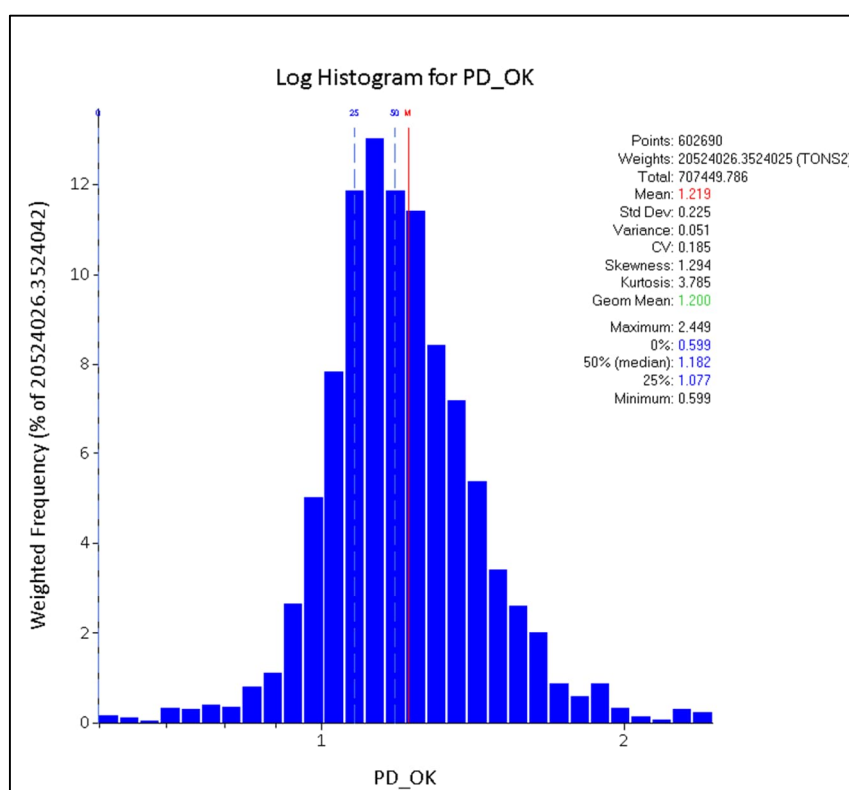


Figure 92. Log histogram for Pd distribution in the Mineralised Domain block model (weighted by tonnes).

14.9.3.5 Cu distribution

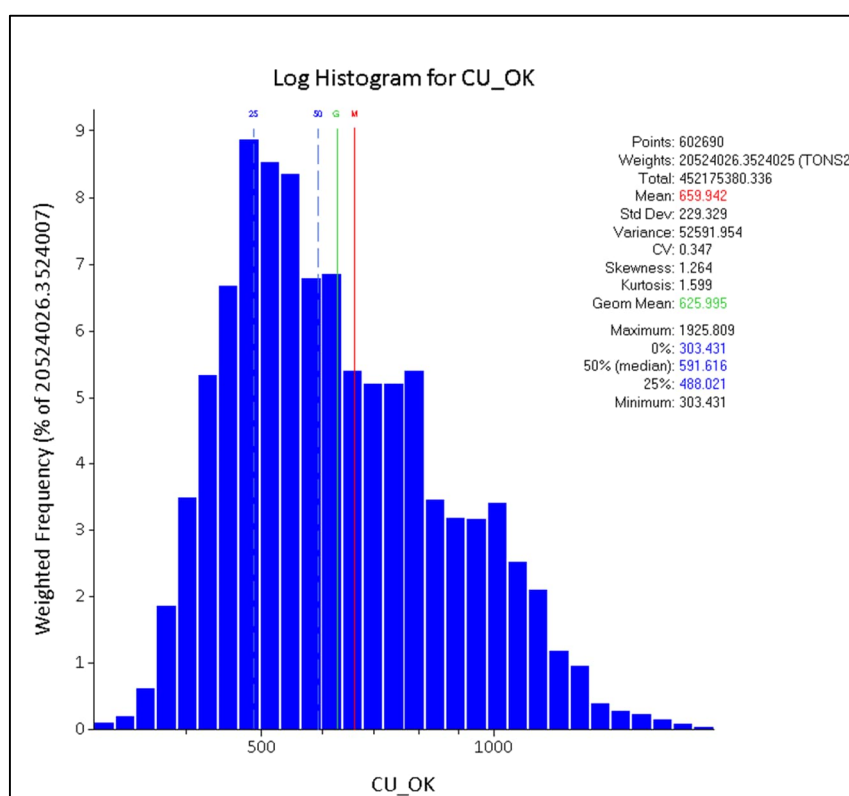


Figure 93. Log histogram for Cu distribution in the Mineralised Domain block model (weighted by tonnes).

14.9.3.6 Ni distribution

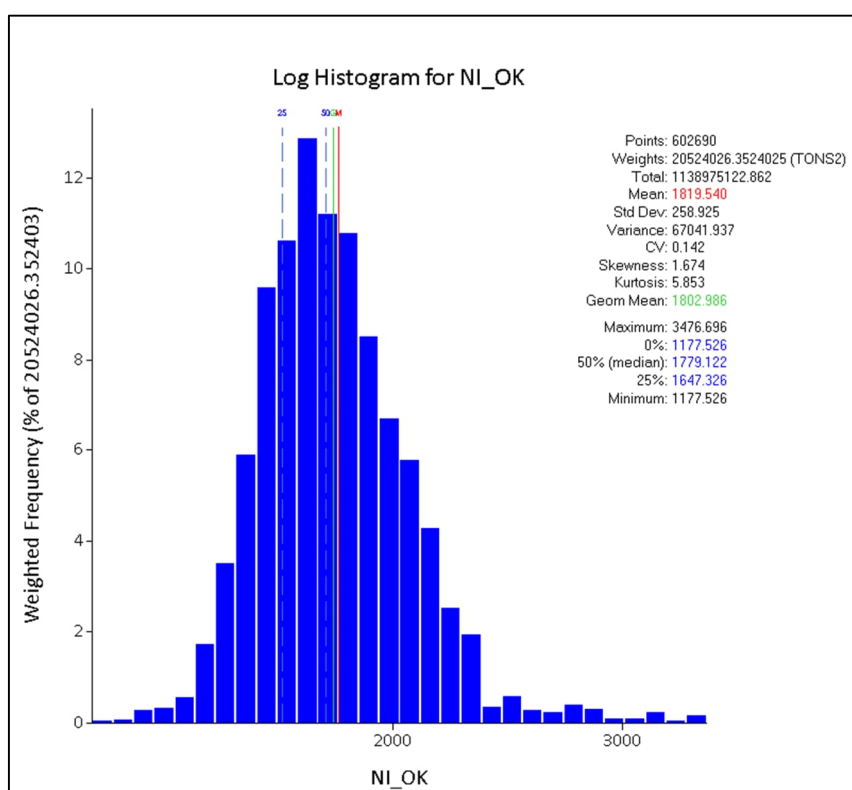


Figure 94. Log histogram for Ni distribution in the Mineralised Domain block model (weighted by tonnes).

14.9.3.7 Rh distribution

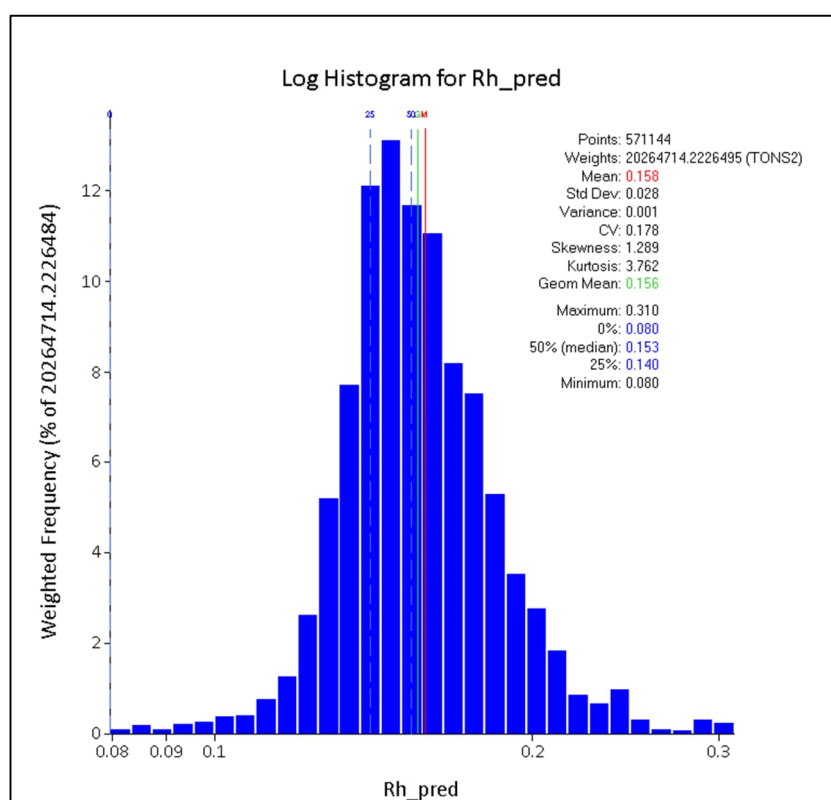


Figure 95. Log histogram for Rh distribution in the Mineralised Domain block model (weighted by tonnes).

14.9.3.8 Ru distribution

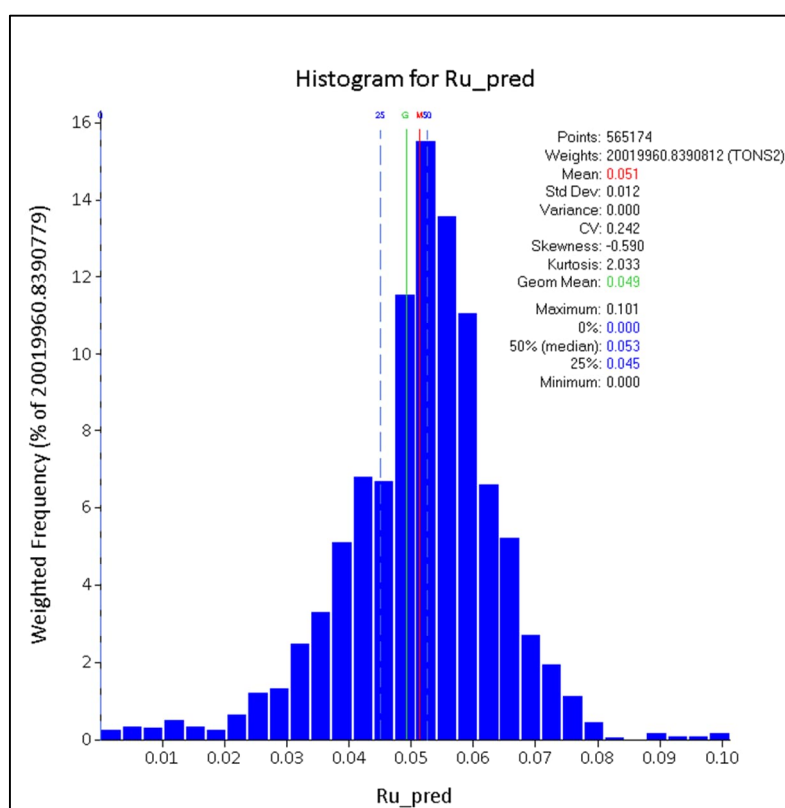


Figure 96. Histogram for Rh distribution in the Mineralised Domain block model (weighted by tonnes).

14.9.4 Swath plots

The swath plots in Figure 97 to Figure 101 were created with 100 m wide sections in the rotated (45° around the Z-axis) space, with the X-direction shown on the left side and the Y-direction on the right side. Model grades were tonnes-weighted.

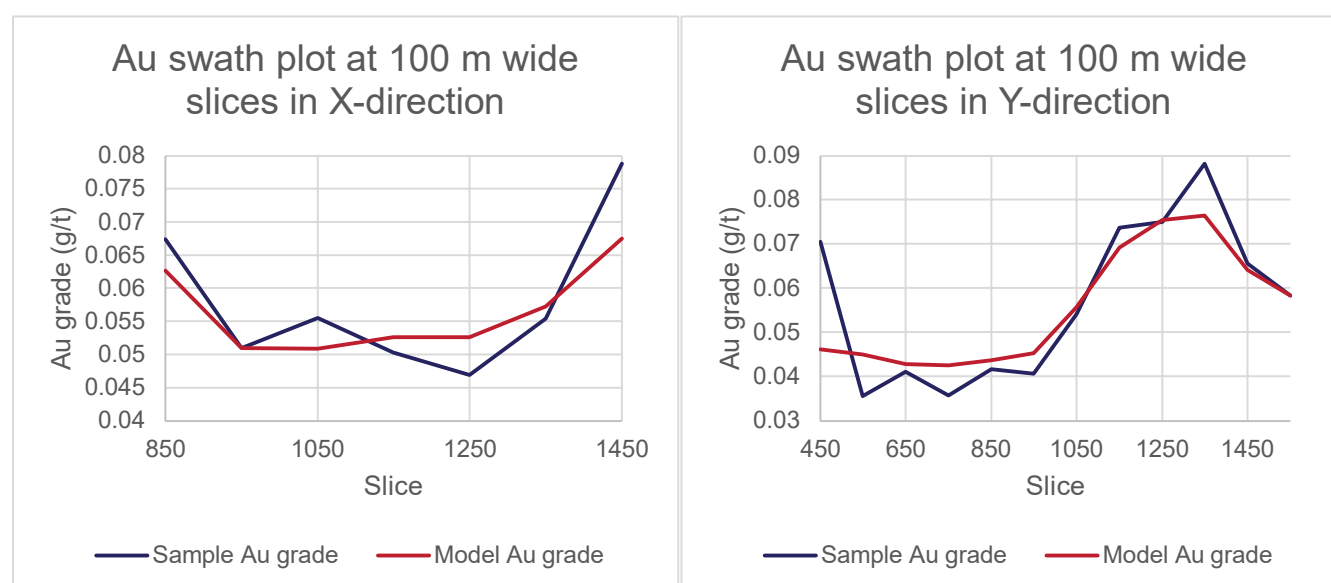


Figure 97. Au swath plots.

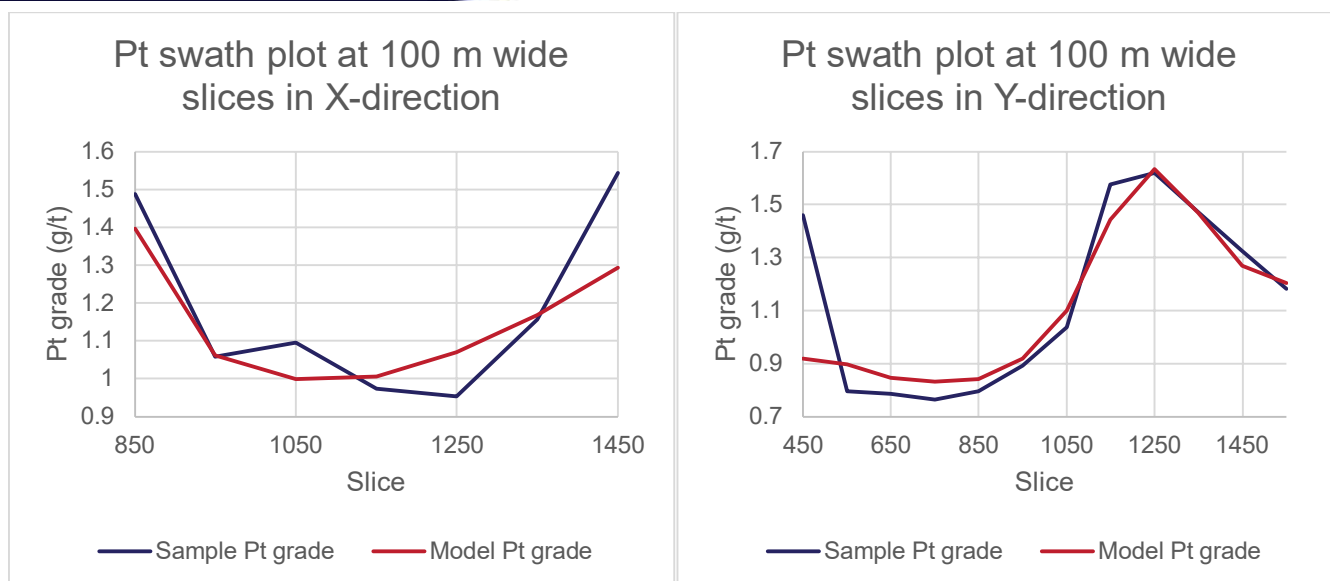


Figure 98. Pt swath plots.



Figure 99. Pd swath plots.



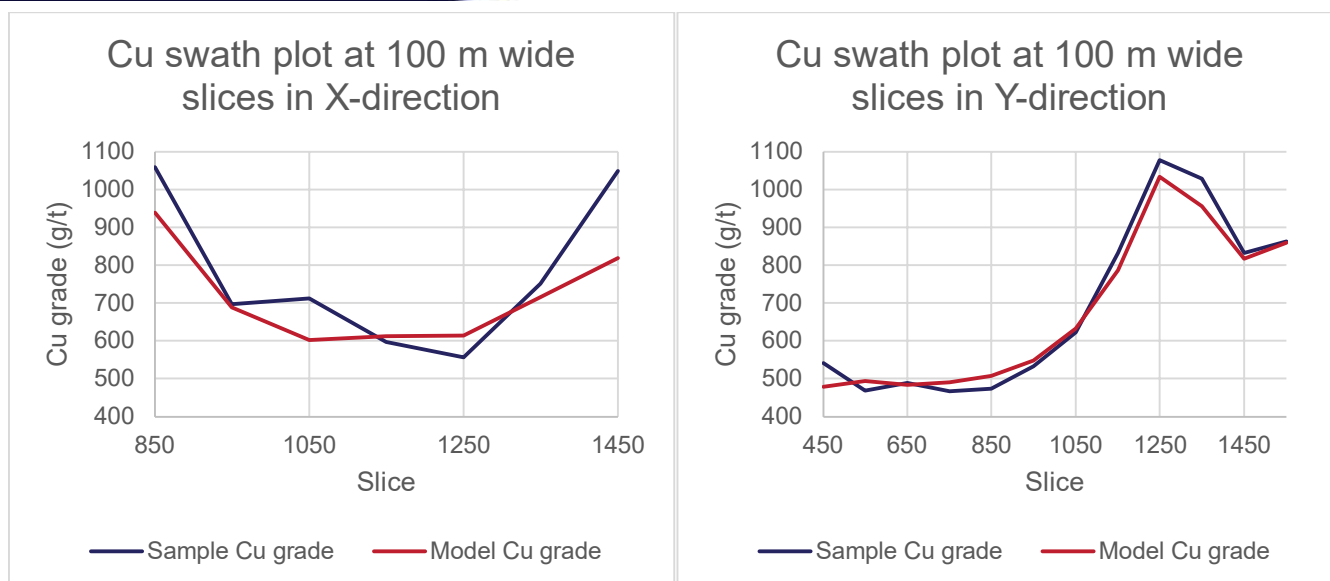


Figure 100. Cu swath plots.

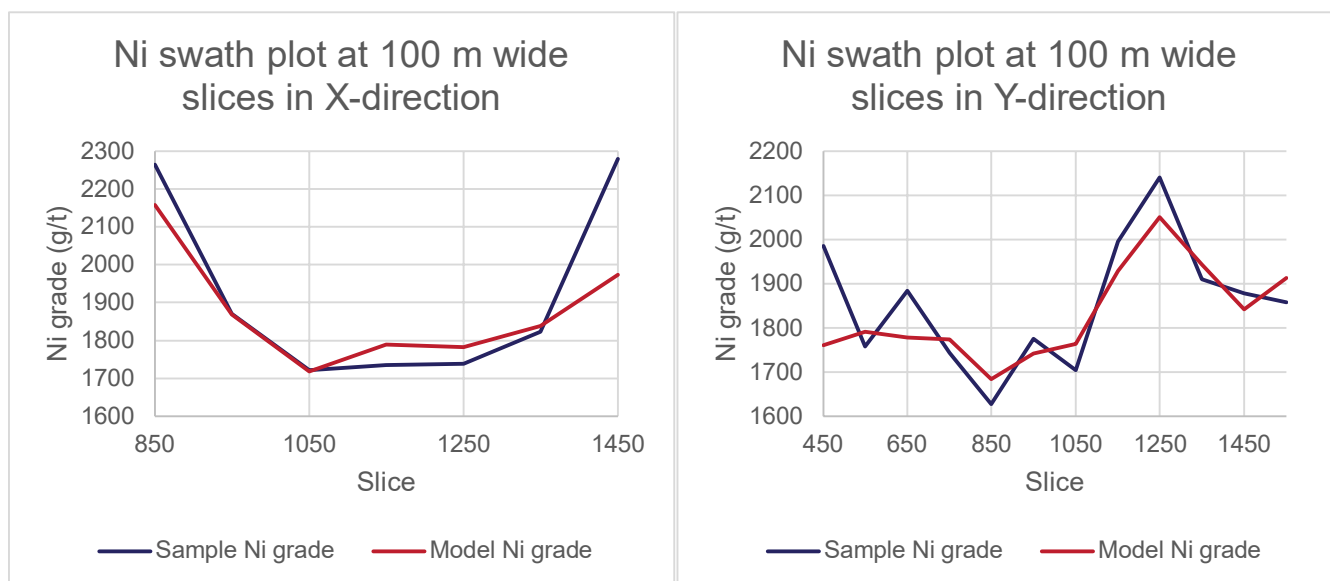


Figure 101. Ni swath plots.



14.9.5 Tabulated MRE numbers

The average grades of the MRE reported in Table 17 and Table 19 were obtained by calculating the metal content of each block or cell (grade * tonnes), taking the sum of the metal content per category (e.g. classification or weathering zone) and dividing it by the sum of the tonnes of the corresponding category, resulting in an average grade across the entire category.

Only the blocks inside the flood barrier were included in this MRE, based on the mining study of 2022.

Grades were calculated on total tonnes. Geoloss, although somewhat quantified, was applied across the total tonnes of the MRE, instead excluding specifically the blocks within the fault brackets and applying the rest of the geoloss percentage blindly. This was because of the remaining uncertainty of the faults and wanting to keep the geoloss calculation more “open.”

To adhere to the current Mining Rights in place, the metal content for PGEs were calculated for the entire MRE (inside the flood barrier), the metal content reported for Cu and Ni were only that which was situated within the Volspruit Mining Right, since the adjacent Mining Right on Zoetveld 294 KR RE, also held by Sylvania, did not include Cu and Ni (see Table 21).

Metal content was calculated with 1 oz equal to 31.1034768 g.

Due to the rounding of decimals, some numbers in the tables might not add up precisely.

14.9.5.1 MRE per classification category

Table 17. MRE grade per classification category.

Total Mineral Resource (inside flood barrier)												
Category	Tonnage before geoloss (t)	Tonnage after 10% geoloss (t)	Density (t/m ³)	Pt (g/t)	Pd (g/t)	Rh (g/t)	Ru (g/t)	Au (g/t)	2E+Au (g/t)	4E+Au (g/t)	Cu (%)	Ni (%)
Indicated	18,243,306	16,418,975	2.99	1.09	1.22	0.16	0.050	0.054	2.37	2.58	0.067	0.18
Inferred	1,361,373	1,225,236	2.89	1.07	1.17	0.15	0.048	0.057	2.30	2.50	0.071	0.18
Total	19,604,679	17,644,211	2.98	1.09	1.22	0.16	0.050	0.054	2.36	2.57	0.067	0.18

Table 18. MRE metal content per classification category.

Total Mineral Resource (inside flood barrier)												
Category	Tonnage before geoloss (t)	Tonnage after 10% geoloss (t)	Density (t/m ³)	Pt (oz)	Pd (oz)	Rh (oz)	Ru (oz)	Au (oz)	2E+Au (oz)	4E+Au (oz)	Cu (t)	Ni (t)
Indicated	18,243,306	16,418,975	2.99	576,117	646,494	83,842	26,333	28,447	1,251,058	1,361,233	9,956	27,897
Inferred	1,361,373	1,225,236	2.89	42,249	46,015	5,949	1,907	2,229	90,493	98,349	866	2,138
Total	19,604,679	17,644,211	2.98	618,366	692,509	89,791	28,240	30,676	1,341,551	1,459,583	10,822	30,035



14.9.5.2 MRE per weathering zone

Table 19. MRE grade per weathering zone.

Total Mineral Resource (inside flood barrier)												
Category	Tonnage before geoloss (t)	Tonnage after 10% geoloss (t)	Density (t/m ³)	Pt (g/t)	Pd (g/t)	Rh (g/t)	Ru (g/t)	Au (g/t)	2E+Au (g/t)	4E+Au (g/t)	Cu (%)	Ni (%)
Fresh	17,163,258	15,446,932	3.03	1.07	1.23	0.16	0.050	0.053	2.35	2.56	0.065	0.18
Transitional	1,802,516	1,622,265	2.81	1.25	1.21	0.16	0.050	0.062	2.52	2.73	0.078	0.19
Oxidised	638,904	575,013	2.38	1.30	1.00	0.13	0.045	0.067	2.37	2.55	0.085	0.20
Total	19,604,679	17,644,211	2.98	1.09	1.22	0.16	0.050	0.054	2.36	2.57	0.067	0.18

Table 20. MRE metal content per weathering zone.

Total Mineral Resource (inside flood barrier)												
Category	Tonnage before geoloss (t)	Tonnage after 10% geoloss (t)	Density (t/m ³)	Pt (oz)	Pd (oz)	Rh (oz)	Ru (oz)	Au (oz)	2E+Au (oz)	4E+Au (oz)	Cu (t)	Ni (t)
Fresh	17,163,258	15,446,932	3.03	529,258	610,600	79,132	24,799	26,213	1,166,071	1,270,002	9,116	25,897
Transitional	1,802,516	1,622,265	2.81	65,034	63,335	8,219	2,607	3,227	131,596	142,422	1,235	3,040
Oxidised	638,904	575,013	2.38	24,075	18,574	2,440	834	1,236	43,885	47,158	471	1,097
Total	19,604,679	17,644,211	2.98	618,366	692,509	89,791	28,240	30,676	1,341,551	1,459,583	10,822	30,035



14.9.5.3 Geoloss and metal loss breakdown

Table 21. Metal content (at 10% geoloss) per Mineral Resource Classification category situated outside of the current Volspruit Mining Right (within Zoetveld 294 KR RE).

Material outside of Volspruit Mining Right				
Category	Tonnage before geoloss (t)	Tonnage after 10% geoloss (t)	Cu metal content (t)	Ni metal content (t)
Indicated	1,102,014	991,812	975	2,166
Inferred	13,213	11,892	9	19
Total	1,115,227	1,003,704	984	2,185

Table 22. Metal content (at 10% geoloss) per Mineral Resource Classification category situated outside of the protection of the EcoE-designed flood barrier.

Material outside of flood barrier											
Category	Tonnage before geoloss (t)	Tonnage after 10% geoloss (t)	Pt metal content (oz)	Pd metal content (oz)	Rh metal content (oz)	Ru metal content (oz)	Au metal content (oz)	2E+Au metal content (oz)	4E+Au metal content (oz)	Cu metal content (t)	Ni metal content (t)
Indicated	650,484	585,436	15,933	22,266	2,885	909	815	39,013	42,808	278	988
Inferred	268,863	241,977	6,236	8,888	1,151	367	332	15,455	16,974	106	402
Total	919,348	827,413	22,168	31,154	4,036	1,276	1,147	54,469	59,781	384	1,390



Table 23. 10% geoloss tonnage breakdown.

Geoloss breakdown		
Category	Percentage	Tonnage (t)
Total Mineral Resource before geoloss	(100%)	20,264,714
Estimated geoloss attributed to intrusions	6.07%	1,190,004
Estimated geoloss attributed to faults	1.28%	250,408
Estimated unknown geoloss component	2.65%	520,056
Total geoloss applied	10.0%	1,960,468





14.9.6 Grade-tonnage curves

Since smoothing is inevitable in a block model when aiming to minimize the conditional bias, it should be kept in mind that a smoothed Mineral Resource model with blocks much larger than potential eventual mining blocks presents its own inaccuracies when considering its grade-tonnage curve. Nevertheless, a grade-tonnage curve of 2E+Au at 10% geoloss is illustrated in Figure 102 and 4E+Au at 10% geoloss in Figure 103. Given the smoothing in the model due to relatively high nugget values in the variograms (especially in Domain SW), the grade-tonnage curve in Figure 102 shows no drop in tonnage up to a cut-off grade of 1.3 g/t 2E+Au since the block model's minimum 2E+Au value is 1.322 g/t (Figure 89). A similar effect is seen in Figure 103. In an attempt to reduce the smoothing effect in the grade-tonnage curve, a pseudo-grade-tonnage curve was created using declustered drill hole samples, therefore it was only done for 2E+Au. To account for the volume-variance effect, the samples were composited to 2.5 m (smallest mineable thickness in the vertical, as per the input from Earthlab's Mining Engineer), instead of 1 m composites as was used for the estimation. While the pseudo-grade-tonnage curve should not be treated as a perfectly accurate alternative to the block model's curve, it could be used to get a feeling for the possible ranges of actual tonnes and grade that would remain after applying a cut-off grade on the Mineral Resource, especially at grades lower than the block model's minimum.

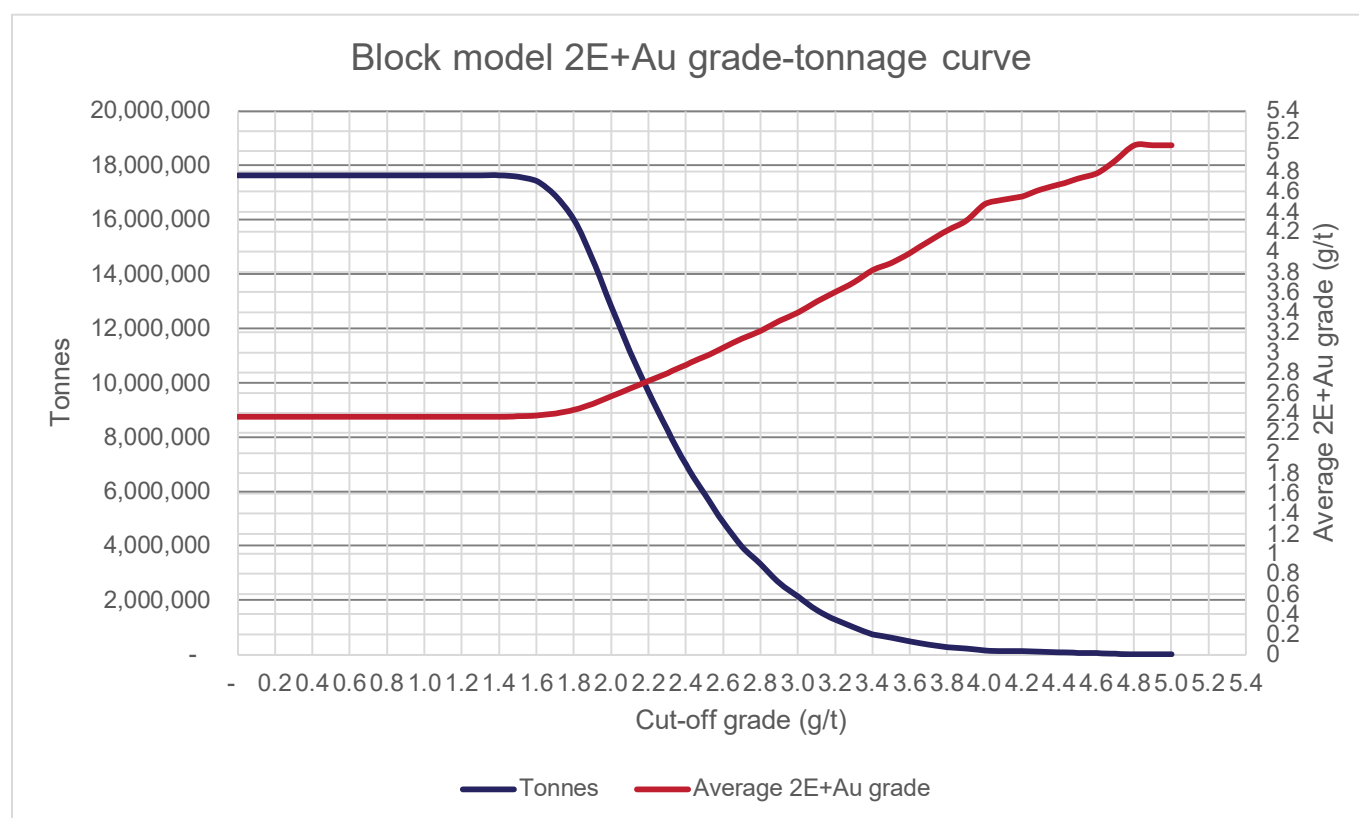


Figure 102. Block model 2E+Au grade-tonnage curve.



Block model 4E+Au grade-tonnage curve

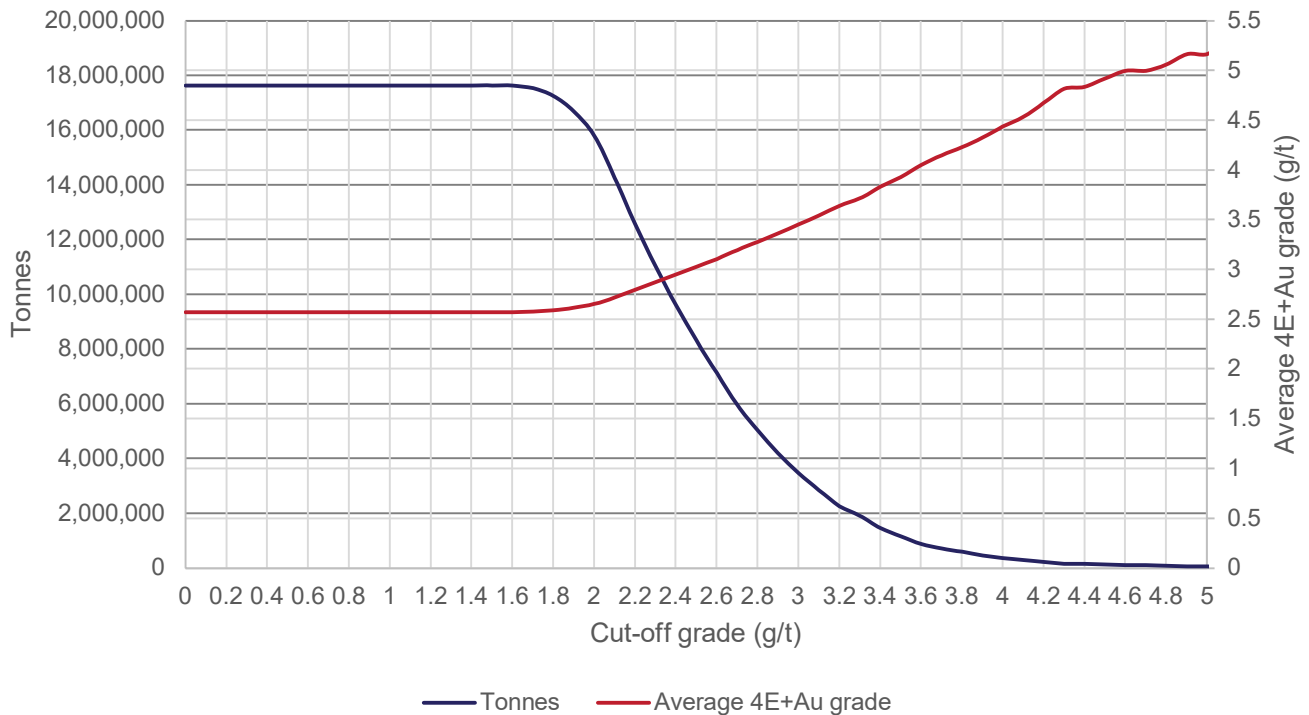


Figure 103. Block model 4E+Au grade-tonnage curve.

Block model 2E+Au grade-tonnage curve + 2.5m composites 2E+Au pseudo-grade-tonnage curve

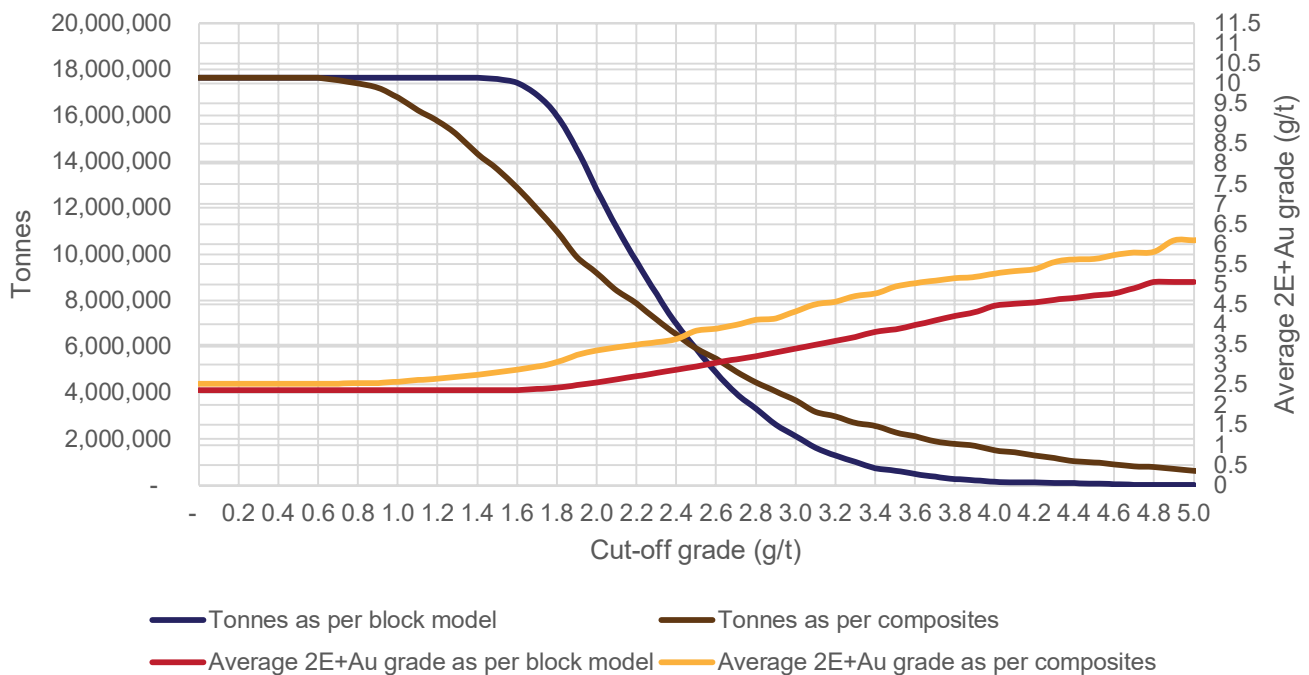


Figure 104. Block model 2E+Au grade-tonnage curve along with a pseudo-grade-tonnage curve created from 2.5m composites.

14.9.7 Tonnage at depths

The chart in illustrates the number of tonnes at 10% geoloss included and excluded in the respective depth categories.

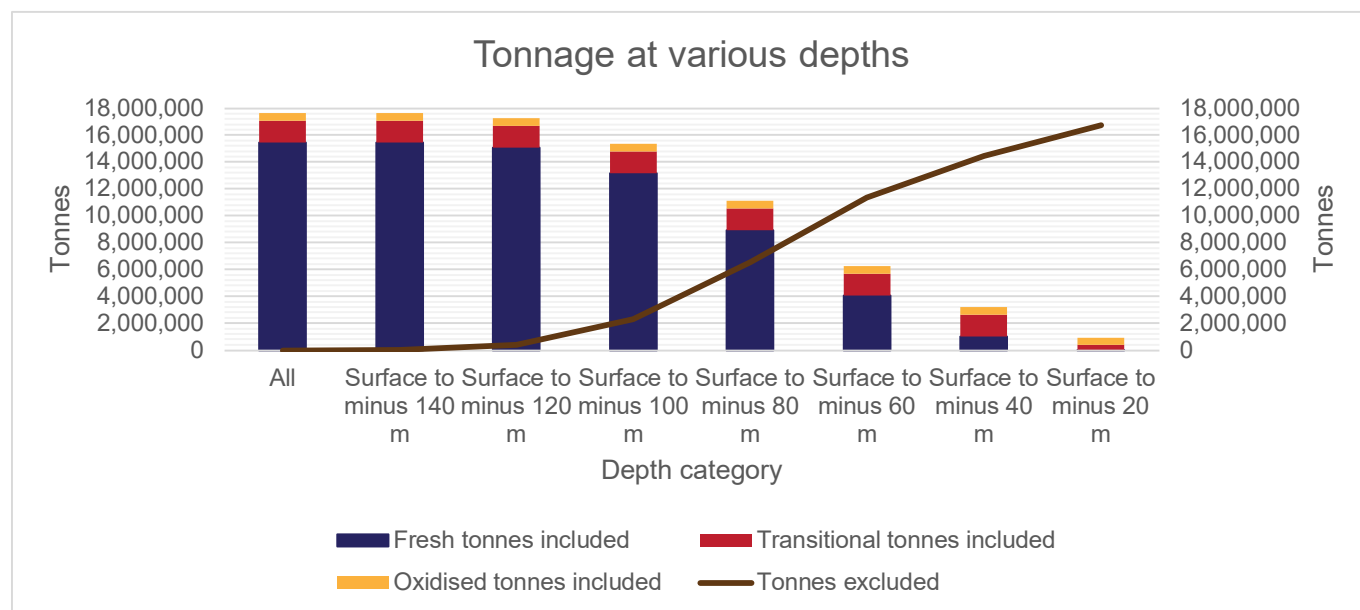


Figure 105. Tonnes included and excluded at respective depths.

15 CONCLUSION

15.1 Summary of findings

This VN MRE offers more tonnes at a higher grade compared to the 2022 MRE. This increase in tonnage was due to multiple mineralised intercepts per drill hole that could be included in this MRE's Mineralised Domain instead of just a single, or in limited cases two or three of the mineralised intercepts that were included in the 2022 MRE. This was the result of increased geological confidence from the re-logging campaign completed confirming that the mineralisation was confined in a single stratigraphic unit. The increase in grade was due to the Mineralised Domain being strictly based on a grade cut-off, whereas the 2022 MRE included lower grade intercepts where it showed higher grade than the barren zones and continuity with the adjacent mineralisation.

The Mineralised Domain was created with a cut-off grade applied on a sample level, coding the samples with binary indicators, and estimating the probability of the above-cut-off-grade domain (Mineralised Domain) existing in a location or not. The method offered a way of approximating the potential metal content that could be expected in approximated locations, however, it should be emphasized that while this MRE offered a useful approximation, this deposit will require a rigorous and densely-spaced grade control programme should this project be taken into operation, given its short-scale variability.

15.2 Future work recommendations

Apart from additional infill drilling to upgrade areas of lower confidence that could always be advantageous, a geophysical survey with a closer line spacing and higher resolution than the previous survey could be of great benefit to identify and delineate fault structures with more confidence.

Infill drilling in the higher confidence Indicated areas is suspected to upgrade them to Measured. A drilling campaign mimicking a grade control programme could be implemented in those areas to test the model and predictability of the position of the mineralisation.

The project owner could also consider executing a trenching campaign, stripping the overburden and opening a face in the Mineralised Domain where it exists near-surface to gain a better understanding of the mineralisation patterns.

Earthlab also recommends that a density measurement verification campaign should be executed to determine the dry bulk in-situ density with confidence.



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17 APPENDIX A: DRILL HOLE SUMMARY

Table 24. Drill hole summary

DHID	X-coordinate	Y-coordinate	Z-coordinate	Hole length	Dip	Used domaining	Mineralised Domain total intercept length
GVN001	-4,887.94	-2,693,109.77	1,071.11	214.00	90.00	Yes	15.00
GVN002	-4,862.46	-2,693,260.98	1,069.45	208.09	90.00	Yes	51.49
GVN003	-4,849.76	-2,693,316.64	1,069.20	140.00	90.00	Yes	26.44
GVN004	-4,834.55	-2,693,213.54	1,070.11	172.10	90.00	Yes	27.56
GVN005	-4,843.02	-2,693,373.58	1,068.47	139.20	90.00	Yes	3.00
GVN006	-4,806.78	-2,693,305.70	1,068.97	142.20	90.00	Yes	0.00
GVN007	-5,020.21	-2,692,946.06	1,077.00	150.32	90.00	No	-
GVN008	-4,877.23	-2,693,196.06	1,070.03	136.18	90.00	Yes	29.09
GVN009	-4,927.49	-2,693,135.91	1,070.68	120.90	90.00	Yes	26.62
GVN010	-4,922.09	-2,693,070.07	1,071.93	140.36	90.00	Yes	22.19
GVN011	-5,013.80	-2,693,054.29	1,072.36	112.15	90.00	Yes	28.60
GVN012	-4,959.72	-2,693,032.00	1,072.84	115.14	90.00	Yes	48.57
GVN013	-4,986.02	-2,693,149.59	1,070.34	107.50	90.00	Yes	27.22
GVN014	-4,904.91	-2,693,388.18	1,067.82	90.00	90.00	Yes	4.55
GVN015	-4,904.66	-2,693,703.04	1,066.23	178.62	90.00	Yes	14.90
GVN016	-4,986.36	-2,693,196.63	1,069.43	84.95	90.00	Yes	12.50
GVN017	-4,852.65	-2,693,581.42	1,067.03	105.87	90.00	Yes	18.92
GVN018	-4,920.06	-2,693,290.93	1,068.66	102.50	90.00	Yes	20.23
GVN019	-4,909.34	-2,693,237.49	1,069.37	104.00	90.00	Yes	43.51
GVN020	-4,854.66	-2,693,489.84	1,065.00	110.00	90.00	Yes	0.00
GVN021	-5,027.66	-2,693,798.83	1,067.00	82.63	90.00	Yes	3.00
GVN022	-5,180.66	-2,693,763.83	1,063.00	160.00	90.00	Yes	36.92
GVN023	-5,191.55	-2,693,661.27	1,063.62	164.40	90.00	Yes	5.55
GVN024	-5,229.40	-2,693,570.75	1,063.44	160.16	90.00	Yes	10.61
GVN025	-5,035.27	-2,693,740.01	1,065.01	160.38	90.00	Yes	34.29
GVN026	-5,059.19	-2,693,638.51	1,065.10	200.00	90.00	Yes	20.32
GVN027	-5,086.57	-2,693,541.33	1,065.19	109.20	90.00	Yes	10.20
GVN028	-4,962.27	-2,693,607.53	1,066.09	148.40	90.00	Yes	4.00
GVN029	-4,981.33	-2,693,546.23	1,066.21	127.10	90.00	Yes	13.12
GVN030	-4,912.86	-2,693,435.77	1,067.36	98.80	90.00	Yes	9.00
GVN031	-4,970.04	-2,693,416.36	1,067.05	90.00	90.00	Yes	11.00
GVN032	-5,425.07	-2,693,596.23	1,061.16	475.00	90.00	No	-
GVN033	-5,324.54	-2,693,696.37	1,061.99	306.78	89.59	Yes	34.00
GVN034	-5,324.97	-2,693,796.52	1,061.90	287.93	88.91	Yes	24.81
GVN035	-5,524.97	-2,693,696.52	1,059.80	320.93	89.56	Yes	24.90
GVN037	-5,424.97	-2,693,896.52	1,060.90	239.73	89.22	Yes	8.42
GVN038	-5,524.97	-2,693,896.52	1,059.70	293.03	88.96	Yes	15.95
GVN040	-5,624.97	-2,693,896.52	1,058.60	248.88	89.42	Yes	18.31
GVN042	-5,231.82	-2,693,740.36	1,063.00	289.88	90.00	Yes	49.00
GVN043	-5,301.81	-2,693,589.53	1,062.80	167.88	90.00	Yes	12.02
GVN045	-5,524.97	-2,693,996.52	1,059.86	227.78	90.00	Yes	12.95



DHID	X-coordinate	Y-coordinate	Z-coordinate	Hole length	Dip	Used domaining	Mineralised Domain total intercept length
GVN046	-5,451.65	-2,693,997.17	1,060.78	302.83	90.00	Yes	12.15
GVN048	-5,110.57	-2,693,129.54	1,069.70	332.68	89.30	Yes	0.00
GVN049	-5,273.17	-2,692,976.68	1,071.16	398.83	89.30	No	-
GVN050	-5,698.79	-2,694,233.99	1,058.51	137.88	89.30	No	-
GVN051	-5,561.98	-2,694,310.32	1,059.86	116.88	89.78	No	-
GVN052	-5,340.91	-2,694,412.16	1,062.66	92.88	89.29	No	-
GVN053	-5,706.89	-2,694,086.77	1,057.70	76.98	87.90	No	-
GVN054	-5,119.09	-2,694,526.65	1,065.38	77.78	88.70	No	-
GVN055	-5,055.00	-2,694,400.68	1,065.87	323.88	89.00	No	-
GVN056	-5,305.00	-2,694,115.31	1,062.44	128.88	88.61	No	-
GVN057	-5,156.03	-2,694,198.68	1,064.19	104.83	88.58	No	-
GVN058	-4,991.19	-2,694,274.95	1,066.52	56.88	88.50	No	-
GVN059	-4,971.50	-2,693,310.81	1,068.12	114.01	89.29	Yes	2.48
GVN060	-4,966.50	-2,693,253.97	1,068.73	120.00	88.92	Yes	15.00
GVN061	-5,169.22	-2,692,942.20	1,077.41	175.01	89.42	No	-
GVN062	-5,245.75	-2,693,065.34	1,068.89	186.01	87.27	No	-
GVN063	-5,306.04	-2,693,139.50	1,066.14	195.01	89.57	No	-
GVN064	-5,625.16	-2,693,496.51	1,059.11	48.10	89.08	No	-
GVN065	-5,645.46	-2,693,603.19	1,058.62	60.01	89.24	No	-
GVN066	-5,186.77	-2,693,175.92	1,067.49	165.01	89.43	No	-
GVN067	-5,084.94	-2,693,221.52	1,068.17	123.01	88.59	Yes	2.95
GVN068	-5,129.30	-2,693,034.17	1,072.42	180.01	88.91	No	-
GVN069	-5,051.15	-2,693,018.27	1,073.70	132.01	88.60	Yes	0.00
GVN070	-5,050.28	-2,693,117.36	1,070.57	129.01	89.28	Yes	29.25
GVN071	-5,039.57	-2,693,687.24	1,065.10	171.01	89.31	Yes	25.00
GVN072	-5,076.10	-2,693,588.01	1,065.23	135.01	88.62	Yes	24.00
GVN073	-4,934.78	-2,693,507.77	1,066.88	117.01	89.02	Yes	16.20
GVN074	-4,918.34	-2,693,451.39	1,067.29	90.01	89.50	Yes	9.60
GVN075	-5,034.10	-2,693,432.90	1,066.51	99.01	89.39	Yes	2.99
GVN076	-5,133.32	-2,693,640.54	1,064.30	174.01	88.72	Yes	26.00
GVN077	-5,217.09	-2,693,506.63	1,064.06	174.01	88.91	Yes	3.00
GVN078	-5,162.37	-2,693,568.97	1,064.35	162.01	89.24	Yes	24.00
GVN079	-5,259.76	-2,693,641.62	1,063.05	189.01	89.44	Yes	15.00
GVN080	-4,977.58	-2,693,748.51	1,065.64	186.01	89.44	Yes	16.66
GVN081	-5,163.95	-2,693,716.50	1,063.85	171.01	88.49	Yes	32.00
GVN082	-5,233.45	-2,693,783.43	1,063.08	171.01	88.80	Yes	27.00
GVN083	-5,017.86	-2,693,799.52	1,065.15	149.01	89.59	Yes	8.00
GVN084	-5,330.72	-2,693,894.10	1,061.90	111.01	89.79	Yes	16.00
GVN085	-4,905.62	-2,693,557.49	1,066.81	150.01	88.76	Yes	14.00
GVN086	-5,106.43	-2,693,759.86	1,064.42	186.01	89.42	Yes	11.00
GVN087	-5,275.20	-2,693,746.34	1,062.55	165.01	89.10	Yes	26.22
GVN088	-5,295.26	-2,693,826.93	1,062.24	167.35	88.81	Yes	15.00
GVN089	-5,374.56	-2,693,746.56	1,061.46	177.08	89.60	Yes	16.00



DHID	X-coordinate	Y-coordinate	Z-coordinate	Hole length	Dip	Used domaining	Mineralised Domain total intercept length
GVN090	-5,374.58	-2,693,646.51	1,061.64	177.01	89.49	Yes	6.00
GVN091	-5,382.21	-2,693,935.46	1,061.29	159.01	88.60	Yes	7.00
GVN092	-5,374.46	-2,693,845.71	1,061.43	156.01	89.16	Yes	21.00
GVN093	-5,474.83	-2,693,746.59	1,060.36	197.31	89.76	Yes	20.00
GVN094	-5,474.24	-2,693,646.69	1,060.54	210.00	89.11	Yes	16.00
GVN095	-5,474.60	-2,693,946.78	1,060.44	141.01	88.75	Yes	27.00
GVN096	-5,475.04	-2,693,846.38	1,060.43	153.80	90.00	Yes	6.00
GVN097	-5,574.57	-2,693,746.52	1,059.28	210.01	89.52	Yes	9.00
GVN098	-5,533.38	-2,693,799.77	1,059.73	186.01	89.54	Yes	9.00
GVN099	-5,581.26	-2,693,946.58	1,059.31	156.01	89.73	Yes	2.00
GVN100	-5,573.57	-2,693,847.30	1,059.28	180.01	89.46	Yes	14.00
GVN101	-5,424.68	-2,693,696.78	1,060.91	168.01	88.89	Yes	15.00
GVN102	-5,625.34	-2,693,796.76	1,058.65	186.01	88.30	Yes	8.00
GVN103	-5,424.73	-2,693,796.78	1,061.05	183.01	88.86	Yes	23.00
GVN104	-5,527.95	-2,693,531.49	1,060.43	159.01	88.72	No	-
GVN105	-5,253.29	-2,693,678.17	1,062.96	174.01	89.14	Yes	1.00
GVN106	-5,027.41	-2,693,499.28	1,066.07	141.01	90.00	Yes	7.11
GVN107	-4,976.51	-2,693,665.62	1,065.79	201.01	88.40	Yes	27.00
GVN108M	-5,219.09	-2,693,755.17	1,063.30	128.44	90.00	Yes	40.00
GVN109M	-5,255.35	-2,693,719.09	1,062.99	117.00	90.00	Yes	18.00
GVN110M	-5,253.26	-2,693,753.18	1,062.96	120.00	90.00	Yes	39.00
GVN111M	-5,253.70	-2,693,686.50	1,063.15	111.26	90.00	Yes	17.00
GVN112M	-5,214.70	-2,693,650.28	1,063.70	115.00	90.00	Yes	13.00
GVN113M	-5,186.24	-2,693,751.83	1,063.66	129.00	90.00	Yes	28.00
GVN114M	-5,253.80	-2,693,576.38	1,063.54	99.00	90.00	Yes	13.00
GVN115M	-5,235.13	-2,693,598.30	1,063.56	103.00	90.00	Yes	7.00
GVN116M	-5,198.47	-2,693,741.11	1,063.55	128.00	90.00	Yes	24.00
GVN117M	-5,273.10	-2,693,668.83	1,062.96	107.00	90.00	Yes	7.00
GVN118M	-5,183.88	-2,693,722.00	1,063.68	125.00	90.00	Yes	31.00
GVN119M	-5,216.83	-2,693,681.35	1,063.52	119.00	90.00	Yes	25.00
GVN120M	-5,253.68	-2,693,613.79	1,063.38	104.00	90.00	Yes	11.00
GVN121M	-5,164.12	-2,693,728.88	1,064.02	129.00	90.00	Yes	28.00
GVN122M	-5,199.48	-2,693,703.61	1,063.56	126.00	90.00	Yes	36.00
GVN123M	-4,933.48	-2,693,055.40	1,072.51	96.00	90.00	Yes	14.00
GVN124M	-4,902.18	-2,693,095.86	1,071.64	101.00	90.00	Yes	12.00
GVN125M	-4,912.63	-2,693,158.52	1,070.62	77.00	90.00	Yes	51.00
GVN126M	-4,856.67	-2,693,204.56	1,070.25	97.00	90.00	Yes	32.00
GVN127M	-5,235.36	-2,693,737.40	1,063.00	124.00	90.00	Yes	29.96
GVN128M	-5,216.90	-2,693,723.00	1,063.43	125.43	90.00	Yes	28.48
GVN129M	-5,269.39	-2,693,696.89	1,062.91	107.00	90.00	Yes	15.00
GVN130M	-4,888.01	-2,693,182.06	1,070.34	86.10	90.00	Yes	44.00
GVN131M	-5,237.64	-2,693,629.78	1,063.51	105.00	90.00	Yes	12.00
GVN132M	-4,939.81	-2,693,118.86	1,071.29	77.00	90.00	Yes	46.63



DHID	X-coordinate	Y-coordinate	Z-coordinate	Hole length	Dip	Used domaining	Mineralised Domain total intercept length
GVN133M	-5,236.00	-2,693,703.61	1,063.40	117.00	90.00	Yes	19.60
GVN134M	-5,286.55	-2,693,577.37	1,063.28	99.00	90.00	Yes	3.00
GVN135M	-5,149.22	-2,693,720.64	1,064.19	134.00	90.00	Yes	23.00
GVN136M	-4,887.90	-2,693,260.21	1,069.47	77.00	90.00	Yes	35.75
GVN137M	-4,980.15	-2,693,085.33	1,071.96	76.22	90.00	Yes	20.00
GVN138M	-5,286.08	-2,693,653.99	1,062.92	107.00	90.00	Yes	8.40
GVN139M	-5,268.88	-2,693,597.38	1,063.40	100.87	90.00	Yes	12.00
GVN140M	-5,008.16	-2,692,969.27	1,075.90	116.00	90.00	Yes	50.00
GVN141M	-4,975.43	-2,693,014.76	1,073.71	90.00	90.00	Yes	14.48
GVN142M	-4,994.11	-2,693,233.24	1,069.09	66.00	90.00	Yes	10.00
GVN143M	-4,981.01	-2,693,116.10	1,071.18	73.00	90.00	Yes	20.94
GVN144M	-4,999.29	-2,693,066.62	1,072.37	69.13	90.00	Yes	17.00
GVN145M	-4,953.00	-2,693,173.08	1,070.32	74.00	90.00	Yes	17.00
GVN146M	-4,920.98	-2,693,214.82	1,069.83	76.00	90.00	Yes	24.00
GVN147M	-4,944.18	-2,693,268.52	1,068.96	65.00	90.00	Yes	13.17
GVN148M	-4,978.10	-2,693,226.94	1,069.34	60.00	90.00	Yes	15.24
GVN149M	-4,943.01	-2,693,142.01	1,070.83	67.00	90.00	Yes	8.00
GVN149MR	-4,941.54	-2,693,142.77	1,070.84	76.00	90.00	Yes	17.00
GVN151	-5,361.86	-2,694,060.79	1,061.91	185.73	60.44	No	-
GVN152	-4,851.82	-2,693,880.92	1,067.07	285.54	62.18	No	-
GVN153	-4,760.84	-2,693,531.16	1,068.09	78.36	50.00	No	-
GVN154	-4,780.92	-2,693,476.68	1,068.19	159.68	59.39	No	-
GVN155	-4,916.44	-2,693,878.35	1,066.41	149.72	59.81	No	-



18 APPENDIX B: JORC TABLE 1

Criteria: JORC Table 1 - Section 1: Sampling techniques and data	
Explanation	Answer
Sampling Techniques	
- Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tool appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurements or systems used. - Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.	Historical Work Completed - A total of 150 un-orientated sampled drill holes were analysed for the North Body resource remodelling on the Volspruit Project. Samples were taken at 1 m intervals throughout the entire length of the drill holes, where only cross-cutting granite and dolerite dykes were left unsampled. - Measures were put in place to prevent sampling errors. - Hand-held portable XRF device was used at 1 m intervals for aiding in the stratigraphic position of the mineralised intersections. - Double check metre marks and sample numbers - Mark in standard, duplicates & blanks - Any errors would be picked up further down the line with SG measurements as a set number of primary samples needed to be present for a representative SG.
Drilling Techniques	
Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Historical Work Completed - Both diamond core and reverse circulation drilling methods were used to recover in-situ material for the Volspruit Project. - Diamond core drilling was done at NQ size core (47.6 mm diameter) using a standard tube. - Diamond drill core was not orientated.



Drill Sample Recovery	
- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure representative nature of the samples. - Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Historical Work Completed Drill core was transported from the drilling site to the core yard on a daily basis. Core received was measured for core recoveries to consider any losses and gains and recorded onto a recovery log. RQD measurements were also conducted. Any discrepancies noted were taken up with the drill rig supervisors to be rectified and resolved.
Logging	
- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. - The total length and percentage of the relevant intersections logged.	Historical Work Completed - Geological logging of the drill holes was done qualitatively by PPD. - Logging included lithological, structural, alteration and weathering. These were logged by zones showing the same characteristics rather than in extreme detail. The historical dataset includes a combination of cumulus and whole rock terminology. Stratigraphic logs were not consistent throughout the drill holes. Post-processing operations were required to delineate geological horizons with acceptable continuity. - Geological logging was done over the entire length of the drill holes. Relogging 150 Historical diamond drill holes of NQ-size core were relogged amounting to 21,949.38 m. The core was a mixture of full core, half core, and quarter core. The drill holes were logged in terms of their stratigraphy, lithology, BMS mineralisation and weathering intervals. the relogging started in January 2023 and was completed in June 2023. - It was established that the Volspruit Reef was only confined to the Cyclic Unit 11 Upper associated with the BMS concentrates hosted in the pyroxenites. The units above and below can be considered as hanging wall and footwall,



	respectively. In some instances, the core was very structurally dense and highly serpentinised.
Sub-Sampling Techniques and Sample Preparation	
• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality, and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	Historical Work Completed • Two core cutters were allocated to split the core to produce 1 m half-core samples for laboratory analysis. The remaining half-core samples were left in the original core trays for future analysis and verification, or resampling. Every sample was duplicated into quarter core samples with the same sample number. One sample went for assay analysis and the other for bulk sampling. • Sample preparation techniques were conducted by two commercial laboratories over the life of the exploration campaigns for the Volspruit Project. These were SetPoint Laboratories and ALS Chemex Laboratories. ALS supplied PPD with their certificates of accreditation and descriptions of each method conducted on the samples, while SetPoint only provided a description of the methods used at their laboratories. • The exploration geologist on-site provided the sampling team with a control sheet that specified the type, sample number, and depth intervals of all control samples inserted into the consignment. The control samples include both standards and blanks. • From the historical data, it is not clear whether field duplicates were created for the purpose of verifying the representativeness of the in-situ material collected. It is clear that a substantial portion of pulp duplicates was created by the laboratories at the time of analysis which has been analysed by Earthlab for QAQC purposes of the assay data. • The sample sizes for the drill core were physically composited at 1 m intervals, which is considered standard practice and suitable for drill core material.
Quality of Assay Data and Laboratory Tests	
• The nature, quality and appropriateness of the assaying and laboratory procedures used and	• All quality control sample assays were analysed by Earthlab Technical Division (Pty) Ltd to assess



whether the technique is considered partial or total. - For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. - Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	the usability and quality of the assay data for Mineral Resource Estimation. - All samples were analysed for Pt, Pd, Au using Fire Assay technique. Cu and Ni were analysed using ICP-AES techniques. - Verification of depth intervals allocated for sampling, a hand-held XRF device was used at 1 m intervals on the half core. No information regarding calibration of this instrument at the time has been retained. - Quality control procedures adopted for the historic exploration included several certified reference materials and blanks. Duplicates were created as lab duplicates for selected samples throughout the sampling campaigns. - Acceptable levels of accuracy and precision were established for the Volspruit Project.
Verification of Sampling and Assaying	
- The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. - Discuss any adjustment to assay data.	- Independent verification of the significant intersections has not been completed to date. - Although holes have previously been twinned, no twinned holes were drilled as part of this MRE. - Historical data has been migrated from an Access Database to a secure and validated SABLE®7.0 Database. - No numerical adjustments were made to the assay data in the database. Topcapping was done within the project files.
Location of Data Points	
- Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. - Specification of the grid system used. - Quality and adequacy of topographic control.	- All VN drill hole collars for the North Body deposit were surveyed by a certified land surveyor, L. Nel. - Collar surveys were measured in the WGS84 as well as the Clarke 1880 grid system. - Collar position coordinates were converted from the WGS84 to Hartebeesthoek 94 Lo29 for geological modelling and Mineral Resource Estimation by Earthlab. - No information regarding downhole surveys has been retained by the historical database, the method, and instrument used is currently unknown.



	Topographic control was completed through collar survey data and geophysics provided by GAP Geophysics (LiDAR).
Data Spacing and Distribution	
- Data spacing for reporting of Exploration Results. - Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. - Whether sample compositing has been applied.	- The average drill hole spacing (of those used in the estimation) was 59.9 m, however the spacing varies from area to area. - The data spacing and distribution is sufficient to produce geological and grade continuity appropriate for a Mineral Resource, with a combination of Indicated, and Inferred classifications. 1 m composites were created, bounded by the CU11U, interpreted Mineralised Domain and Waste Domain, as well as weathering zones.
Orientation of Data in Relation to Geological Structure	
- Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. - If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The orientation of the mineralised horizon is horizontal to sub-horizontal, while all of the drill holes used in the MRE were vertical to sub-vertical, resulting in approximately perpendicular intersection of the reef mineralisation. The Mineralised Domain does have various dips, but sampling bias was not expected for the general intersection.
Sample Security	
The measures taken to ensure sample security.	Samples were transported from the Volspruit core yard to the laboratories by a senior geologist or responsible assistant. All samples were checked into the various facilities and signed for by a facility representative. The signed sample submission control documents and laboratory work orders are filed at the Volspruit office. All laboratory pulps and reject returns are stored at the Volspruit core yard facility.



Audits or Reviews	
The results of any audits or reviews of sampling techniques and data.	- No external audits have been completed on the sampling techniques and data. - Data reviews and validations have been completed internally. Quality control data has been reviewed internally by Earthlab Technical Division (Pty) Ltd. No significant “deal-breaking” issues were identified regarding the data quality.
Mineral Tenement and land Tenure Status	
- Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. - The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	- A mining right MPT No. 11/2018 in respect of the farm Volspruit 326 KR and portion 2 of Zoetveld 294 KR was granted to Volspruit Mining Company (Pty) Ltd. (Volspruit) for thirty years commencing on 4 October 2017. - The Mining Right was granted for PGMs, Au, Ni, and Cr. - Section 102 application was lodged with DMRE to add the mineral copper and subsequently granted and notarially executed on 12 January 2021. - The Volspruit Project is 100% owned by Volspruit Mining Company (Pty) Ltd. - Iolite Trading 16 (Pty) Ltd, a Broad-based Black Economic Empowerment company owns 26% of Volspruit Mining Company. - Pan Palladium South Africa (Pty) Ltd owns 74% of Volspruit Mining Company. - Sylvania (Mauritius) Ltd owns 100% of Pan Palladium South Africa (Pty) Ltd - Sylvania Platinum Ltd owns 100% of Sylvania (Mauritius) Ltd.





Criteria: JORC Table 1 - Section 2: Reporting of Exploration Results

Explanation	Answer
Exploration Done by Other Parties	
Acknowledgment and appraisal of exploration by other parties.	- Exploration work over the Volspruit Project has been conducted by various mineral exploration companies as far back as the 1950s by Anglo American. - Between 1970 and 1992 Rio Tinto Zinc and Genmin conducted exploration activities that led to the definition of Mineral Resources for two deposits, namely North Deposit and South Deposit. The initial Mineral Resources were defined by Rio Tinto for North Deposit (7 Mt with 1.99 g/t Pt & Pd, 0.15% Ni and 0.06% Cu) and South Deposit (39 Mt with 1.15 g/t Pt & Pd, 0.17% Ni and 0.05% Cu). - Genmin updated the Mineral Resources of Volspruit in 1988 with additional drilling to: Indicated Mineral Resource at 12.7 Mt 2.25 3E + Au g/t and 0.19% Ni for the North Deposit and 24 Mt at 1.33 3E + Au g/t for the South Deposit. - Additional drilling of 151 drill holes by PPD as part of the Pre-feasibility Study on the Volspruit Project was commissioned between 2001 and 2003, followed by several specialised studies by various consultants to support the Pre-feasibility Study covering the period 2004 to 2012. - DRA was commissioned in 2020 –2021 to, among other things, produce a Whittle Pit optimisation for the North and South bodies. They further conducted optimised metallurgical test work to understand the PGM recoveries. DRA reported on 16 November 2020 that PGM recovery was between 65-70% at a feed grade of 1.5-2 g/t. - Earthlab oversaw on behalf of VMC drilling of 10 drill holes on Volspruit North in 2023 for metallurgical sampling, however these drill holes were excluded from this MRE as sample analysis was incomplete at the time of Mineral Resource Estimation. - The exploration activities conducted on the Volspruit Project over the years have been of a



	professional level and have met industry standards at the time.
Geology	
• Deposit type, geological setting, and style of mineralisation.	• The North Body is provisionally classified as a syngenetic, ortho-magmatic, PGE-Cu-Ni disseminated deposit hosted within the Lower Zone, of the RLS in the Northern Limb of the Bushveld Complex. • The Lower Zone magmas can be split into three units within the Northern Limb, from the base upwards; the Volspruit Pyroxenite, Drummondlea Harzburgite-Chromitite, and the Moordrift Harzburgite-Pyroxenite. The North Body is hosted within the middle portions of the Volspruit Pyroxenite sub-group. • The North Body is primarily hosted within fine-grained ortho-pyroxenites with varying proportions of olivine, chromite, and minor plagioclase. The overall textures of the host rocks vary from massive equigranular to streaky or even poikilitic. • The genesis of the deposit is linked to a series of partially developed ultramafic magmas progressively increasing in incompatible elements, i.e., PGMs, within the upper portion of cyclic unit 11. Together with this increase in incompatible elements, along with mixing from a pulse of more evolved magma, the precipitation of PGE minerals and base-metal sulphides could occur through sulphur saturation. • The sulphide mineralisation within this horizon, in decreasing abundance, consists of pyrrhotite, pentlandite, chalcopyrite and cubanite, where the only noted platinum group mineral within this zone is sperrylite. Mineralisation is predominantly interstitially disseminated to net-textured sulphide assemblages hosted within olivine and chrome bearing pyroxenites. Sulphide assemblages reach their peak modal abundance at approximately 3 wt.% of the whole rock composition.



Drill Hole Information

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| <ul style="list-style-type: none"> • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> ◦ easting and northing of the drill hole collar ◦ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ◦ dip and azimuth of the hole ◦ down hole length and interception depth ◦ hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. | <ul style="list-style-type: none"> • Provided in Appendix A attached to the end of the Volspruit Project JORC Report (CPR) for the North Body, produced by Earthlab. |
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Data Aggregation Methods

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| <ul style="list-style-type: none"> • In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated. | <ul style="list-style-type: none"> • The following top-capping was applied to the elements in the Mineralised Domain unit during variography and estimation. <ul style="list-style-type: none"> ◦ Domain NE: <ul style="list-style-type: none"> ▪ Pt: 5.5 g/t ▪ Pd: 4.5 g/t ▪ Au: 0.30 g/t ▪ Cu: 0.30 % ▪ Ni: 0.65 % ◦ Domain SW: <ul style="list-style-type: none"> ▪ Pt: 3.0 g/t ▪ Pd: 3.5 g/t ▪ Au: 0.30 g/t ▪ Cu: 0.20 % ▪ Ni: 0.45 % ◦ Waste Domain: <ul style="list-style-type: none"> ▪ Pt: 1.0 g/t ▪ Pd: 1.1 g/t ▪ Au: 0.15 g/t ▪ Cu: not top-capped ▪ Ni: 0.35 % • Density samples were bottom-cut at 1.5 g/cm³ and top-capped at 3.5 g/cm³. |
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	No metal equivalent values are reported.
Relationship Between Mineralisation Widths and Intercept Lengths	
- These relationships are particularly important in the reporting of Exploration Results. - If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. - If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').	The mostly near-perpendicular intersection of the drill holes relative to the mineralised horizon offers a good representation of the mineralisation width.
Diagrams	
Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Provided in the Earthlab Technical Division (Pty) Ltd Volspruit Project CPR for the North Body.
Other Substantive Exploration Data	
Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples—size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Geophysical surveys, bulk sampling and metallurgical testing conducted.
Further Work	
- The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling). - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling	No official future work has been planned to Earthlab's knowledge at the time of reporting, however future work recommendations were included in the technical report.



areas, provided this information is not commercially sensitive.

Criteria: JORC Table 1 - Section 3: Estimation and Reporting of Mineral Resources

Explanation

Answer

Database Integrity

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| <ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. | <ul style="list-style-type: none"> Data was migrated from a historical Microsoft Access database into a secure SABLE®7.0 Database. |
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Site Visits

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| <ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. | <ul style="list-style-type: none"> Earthlab has been conducting work on behalf of VMC and other subsidiaries of Sylvania since 2020, with a team on the Volspruit farm for more than two years and is familiar with the project site. The CP has also been on-site several times. |
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Geological Interpretation

- | | |
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| <ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource Estimation. | <ul style="list-style-type: none"> Earthlab re-logged the available 150 drill holes' core and defined a more detailed breakdown of the cyclic units. After modelling the stratigraphic units (CU12U, CU12L, CU11U, and CU11L, it was clear that practically all of the mineralisation was situated within a single stratigraphic unit namely CU11U. |
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The use of geology in guiding and controlling Mineral Resource Estimation. The factors affecting continuity both of grade and geology.	- After evaluating several sample-level cut-off grades, a cut-off grade of 1.2 g/t 2E+Au was applied with the parameters such as requiring a minimum length of 2.5 m, allowing up to 2.5 m of internal waste. The cut-off grade and accompanying parameters were used to code samples with indicators: 1 for the Mineralised Domain and 0 for the Waste Domain. - Probability estimation with IPD⁴ was used in 2.5 mX by 2.5 mY by 2.5 mZ blocks and by applying a probability threshold 0.4 and manual cleaning of artifact blocks, the (grade-based) Mineralised Domain was created in a block model. - The data showed significant short-range variability of the position of the mineralisation. The current model were therefore useful in estimating the approximate metal content and approximate locations, however a thorough grade-control programme will still be necessary during the mining of the deposit like this. - If more geophysics and/or drilling is done and/or a different resource geologist creates a new geological model, domain and MRE, the numbers will undoubtedly change, however they should not change materially. The locations (and orientation) of faults and the perimeter will change, and it is most likely the domain will also change; however, it is unlikely that a completely new structural interpretation e.g., a deposit-scale folded structure is interpreted, altering the model, grade, and metal content completely. The likelihood of alternative geological interpretation is suspected to be very low, however any alternative domain modelling technique would definitely alter the numbers.
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Dimensions

The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The Mineral Resource was confined by interpreted faults, geological features suggested by the geophysics, the absence of mineralisation, and the EcoE-designed flood barrier. The model roughly has an L-shape with ~1,150 m at its longest, covering an area of approximately ~450,000 m² (~45 ha). The Mineralised domain ranges from subcropping at the surface to roughly 140 m below surface. The Mineralised Domain's block model's vertical thickness has an arithmetic mean of 7.8 m and geometric mean of 5.8 m with the median at 5.0 m.
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Estimation and Modelling Techniques

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| <ul style="list-style-type: none"> • The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. | <ul style="list-style-type: none"> • Domaining was done on a cut-off grade basis, with certain additional parameters set in the software. Probability estimation with a threshold of 0.4 was applied to create the Mineralised Domain in a block model. • Drill hole plotting, wireframe modelling, and estimation were performed in Datamine Studio RM v1.13.202. Sample statistical evaluation, directional variography, and preliminary Kriging Neighbourhood Analysis were done in Snowden Supervisor v8.14. • Grade estimation of Pt, Pd, Au, Cu, and Ni was done by means of Ordinary Kriging, with a search distance allowed to a maximum of three times the variogram range of the respective elements, however, during estimation, the transformed distance of the search ellipsoid remained mostly below 1. • A minimum of three octants had to be filled during grade estimation. The number of samples used was limited to between 10 and 100 samples, with a maximum of three samples per drill hole allowed. • Density estimation was done by Ordinary Kriging, Simple Kriging and Inverse Power of Distance depending on the stratigraphical unit and/or weathering zone, using between 10 and 100 samples. • Rh and Ru estimation was done by means of machine learning regression, using Pt, Pd, and Au in the block model. The machine learning model was trained with the 2023 metallurgical drilling's samples that were analysed for 5E+Au. Ir was excluded from regression due to being mostly below the detection limit. • Parent block dimensions for grade and density estimation was 50 mX by 50 mY by 2.5 mZ, allowing subcells. Parent cell estimation with 10x10x2 cell discretisation was used. • Block estimates were compared to drill hole samples on section as part of validation. • Cu and Ni were included in the Mineral Resource with the assumption that it can be recovered. • No other deleterious elements were estimated. • No mine production data exists to use in estimation or validation. |
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Moisture	
Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages were estimated with SG measurements that could have included natural moisture. Earthlab noted the Oxidised Zone could have had over-measured SG values and therefore applied a 10% reduction on the estimated densities in the Oxidised Zone. Grades reported by the lab were based on dried weights. Reported metal content could therefore potentially still be over-stated, hence the verification of SG measurements suggested by Earthlab.
Cut-Off Parameters	
The basis of the adopted cut-off grade(s) or quality parameters applied.	- A sample-level cut-off grade of 1.2 g/t 2E+Au was used to create the grade-based domain within the CU11U. - No cut-off grade was applied on a block model level post grade estimation.
Mining Factors or Assumptions	
Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Based on the mining study Earthlab conducted on the 2022 MRE: - The planned mining method implemented at the Volspruit North Project is conventional open pit mining, using trucks (i.e., combination of rigid and articulated dump trucks) and backhoe (excavators) combinations. Blast hole drilling (i.e., pit vipers and crawler rigs) will take cognisance of geological contacts for grade control purposes as well as appropriate fragmentation. The blast holes will be charged with emulsion explosives. These explosives will be detonated remotely from a safe distance. After blasting, the broken rock will be removed by excavators and loaded onto trucks, which will be transported to designated areas. - Mining could be conducted on 10 m benches (minimum flitch size will be 2.5 m, in line with the original z-height of the parent cell which equates to the smallest mining unit). Flitches of the waste material may vary between 2.5 m and



	10 m for both blasting and loading activities. 120 Tonne (t) excavators with 5.2 m³ bucket size configurations will load 60t dump trucks. The average hauling distance over the life of the project is 2,760 m from the point of loading to the RoM pad and 1,618m for waste to the Waste Rock Dump (WRD) and In-Pit backfilling. The pit slopes are guided by the geotechnical recommendations of 45 degrees (°) for the weathered zone of approximately 30 m and 55° pit wall angles for the pyroxenites underlying the weathered zone.
Metallurgical Factors or Assumptions	
The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Based on the mining study Earthlab conducted on the 2022 MRE: - The Processing plant (Concentrator) throughput is assumed as 150,000 t per month - Metallurgical test work has been conducted during the initial scoping study in 2010 by Mintek on freshly taken drill core samples which were representative of the mine shell at the time. This test work has been repeated in 2020 and 2022 on the same core samples with comparable results being achieved. As expected, the PGM concentrate grade is dependent on the grade of PGM ore being mined. - Low, medium, and high recovery scenarios have been developed as the test work was conducted in an open circuit and certain assumptions are required to account for the effect of close circuit recycles. The use of a low, medium, and high recovery is valuable in estimating the impact of variable recoveries on the project economics. - Potential exists for improved recoveries and PGM grades in the final concentrate through a programme of detailed metallurgical investigation. The initial test work conducted has indicated that the project is viable at the low recoveries recorded. With the redesigned pit shell which optimizes the orebody into three distinct weathering domains, the milling, flotation, and chemical reagent suite can be optimised for each ore type.



Environmental Factors or Assumptions	
Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	VMC invested in the permitting requirements of the existing Mining Right. This work continues with specialist technical teams currently working on the authorisations. These authorisations include the Water Use License for the mining and on-site processing of the ore, updating of the Environmental Impact Assessment and the finalisation of the amended Social and Labour Plan (SLP), which will update the Local Economic Development (LED) project that is included in the Mining Right held by the Company.
Bulk Density	
- Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size, and representativeness of the samples. - The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. - Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	No bulk density campaigns have been performed.
Audits or Reviews	
The results of any audits or reviews of Mineral Resource Estimates.	No audits have been performed on this MRE.
Classification	



• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity, and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit.	• Earthlab performed a quality verification exercise on the assay data. • The Mineral Resource classification was manually done by the Competent Person and based on the Kriging Efficiency and Slope of Regression which coincided with areas of denser drill hole spacing. • The Competent Person considered reliability of input data, data coverage, continuity, and statistical performance in the manual classification.
Discussion of Relative Accuracy / Confidence	
• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• No production data exists yet, and the statement relates to global estimates without any current confidence limits stated. The relative accuracy has not yet been calculated.

