Independent Technical Report for the Luanga PGE+Au+Ni Project, Pará State, Brazil

Developed by GE21 Consultoria Mineral on behalf of:

Bravo Mining Corp.

Effective Date: 12th April 2022

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This report, titled "**Independent Technical Report for the Luanga PGE+Au+Ni Project, Pará State, Brazil**", having an effective date of 12th April 2022, was prepared on behalf of Bravo Mining Corp. By Ednie Rafael Fernandes and Marlon Sarges Ferreira and signed.

Dated at Belo Horizonte, Brazil, this 27th June 2022

/s/ Ednie Rafael M. De C. Fernandes

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UNITS, SYMBOLS AND ABBREVIATIONS

Unless otherwise stated, the units of measurement in this Report are all metric in the International System of Units ("SI"). All monetary units are expressed in United States Dollars ("USD"), unless otherwise indicated.

Bravo used the Universal Transverse Mercator coordinate system ("UTM") Zone 22 Southern Hemisphere with a SAD69 Datum.

Ac/Ab	Definition/Term
A	
Ag	Silver
AIG	Australian Institute of Geoscientists
ANM	Mining National Agency
As	Arsenic
Au	Gold
B	
BAIP	Brazil Americas Investments and Participation Mineração Ltda
Be	Beryllium
Bi	Bismuth
BNDES	Banco Nacional de Desenvolvimento Econômico e Social
Bravo	Bravo Mining Corp.
BSc	Bachelor of Science
C	
Ce	Cerium
CEF	Caixa Econômica Federal
CEP	Código de Endereçamento Postal (Postal Code)
CFEM	Compensação Financeira pela Exploração de Recursos Minerais
Chr	Chromatite
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CPRM	Companhia de Pesquisa de Recursos Minerais
C	
cm	centimetre(s)
CMM	Companhia Meridional de Mineração
Co	Cobalt
Cr	Chromium
CTSZ	Cinzento Transcurrent Shear Zone
Cu	Copper
CVRD	Companhia Vale do Rio Doce (now Vale S.A.)
D	
DD	Diamond Drilling
DNPM	Departamento Nacional de Produção Mineral (now ANM)
DOCEGEO	Rio Doce Geologia e Mineração S.A. (subsidiary of CVRD) (Now VALE SA)
E	
E	East
e.g.	for example
E-W	East-West

Ac/Ab	Definition/Term
F	
FA/AAS	Fire Assay/Atomic Absorption Spectrometry
FFA	FFA Legal
FFAH	FFA Holding e Mineração Ltda
G	
g	gram(s)
g/t	grams per ton
H	
HQ	96.4 mm diameter drill core
I	
IBGE	Instituto Brasileiro de Geografia e Estatística
ICP/MS	Inductively Coupled Plasma/Mass Spectrometry
ID	Identification
K	
kg	kilogram(s)
km	kilometre(s)
km^2	square kilometre(s)
kV	kilovolt
L	
La	Lanthanum
LI	Installation License
LMIs	Layered Mafic Intrusions
LIP	Large Igneous Province(s)
LO	Operation License
LP	Preliminary License
M	
m	metre(s)
M	Million(s)
Ma	Million years
MAIG	Member of Australian Institute of Geoscientists
mm	milimetre(s)
MME	Ministry of Minerals and Energy
Moz	million ounces
Mt	Million tons
MW	Megawatt
N	
N	North

Ac/Ab	Definition/Term
N	
NE	Northeast
Ni	Nickel
NQ	76.2mm diameter core drilling
N-S	North-South
NSR	Net Smelter Royalty
NW	Northwest
O	
Ol	Olivine
Opx	Orthopyroxene
P	
Pb	Lead
Pd	Palladium
PGC	Projeto Grande Carajás
PGE	Platinum Group Elements (Pd + Pt)
PGM	Platinum Group Metals (Pd + Pt)
Pl	intercumulus plagioclase
ppb	parts per billion
ppm	parts per million
Pt	Platinum
PVC	Polyvinyl chloride
R	
Rh	Rhodium
RQD	Rock Quality Designation
S	
SAD69	South American Datum
Sb	Antinony

Ac/Ab	Definition/Term
S	
SE	Southeast
SIRGAS	Sistema de Referência Geocêntrico para as Americas
Sn	Tin
SPDS	Serra Pelada Divergent Splay
Sr	Strontium
T	
Te	Tellurium
TEM	Transient Electromagnetic
Ti	Titanium
U	
U-Pb	Uranium-Lead
US$	United States dollar
USD	United States dollar
UTM	Universal Transverse Mercator (coordinate system)
V	
V	Vanadium
VALE	Vale S.A. (ex-Companhia Vale do Rio Doce - CVRD)
vol%	volume percent
vs.	versus
W	
W	West
W	Tungsten
Z	
Zn	Zinc
#	mesh
%	percentage

1 SUMMARY

GE21 Consultoria Mineral Ltda ("GE21") was contracted by Bravo Mining Corp. ("Bravo") to review historic data for the Luanga PGE+Au+Ni Project (the "Project") located in the Carajás Mineral Province, Pará State, Brazil, identify its merits and propose an appropriate exploration program, including a budget for PGE+Au+Ni exploration on the Project. GE21 was subsequently retained for and on behalf of Bravo, to prepare this Technical Report ("Report") on the Project in compliance with Canadian Securities Administrators' National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101").

Mr. Ednie Rafael Fernandes is one of the Qualified Person/s ("QP") responsible for this Report. Mr. Fernandes is a geologist member of the Australian Institute of Geoscientists ("MAIG") and has sufficient experience that is relevant to the styles of mineralization and types of deposit under consideration to be considered as a QP, as defined by the NI 43-101. Mr. Fernandes has almost 10 years' experience working with exploration and mining projects.

Mr. Marlon Sarges Ferreira is one of the QPs responsible for this Report. Mr. Ferreira is a geologist and MAIG and has sufficient experience that is relevant to the styles of mineralization and types of deposit under consideration to be considered as a QP, as defined by NI 43-101. Mr. Ferreira has almost 15 years' experience working with exploration and mining projects and visited the Luanga Project as a QP between 13th and 14th of January 2022.

1.1 Project Description

Luanga is an intermediate-staged exploration project located in Pará State, Brazil which contains PGE plus Au, plus Ni mineral deposit known as the Luanga deposit (Figure 1-1). The assay database also indicates the presence of Rh, Co and Cu. It is held under the Exploration Licence Nº.1961 and designated ANM.851.966/1992, comprising an area of 7,810.02 hectares in extent.

Figure 1-1: Luanga Project Location Plan.

1.2 Mineral Tenements and Status

On September 5th, 1995, the Ministério de Minas e Energia (Ministry of Minerals and Energy – “MME”) issued to Vale SA (“VALE”) Exploration Licence No.1961 under the process designated ANM.851.966/1992. Exploration Licences are administrated by the Agência Nacional de Mineração (“ANM”), the Brazilian National Mining Agency. This Exploration License is located 40 km north-east of the town of Parauapebas in Para State, Brazil.

The license, which covers the Luanga PGE+Au+Ni Project, comprises an area of 7,810.02 hectares, currently in the name of BPGM Mineração Ltda, as summarized on Table 1-1 and illustrated on Figure 1-2. Exploration License 851.966/1992 remains valid while the Mining License application is pending.

Table 1-1: Mineral Tenement Summary
Source: ANM – May 2020

ANM Process	Municipality	Stage	Mineral	Title Owner	Size (hectares)	License No.	Expiry Date
851.966/1992	Curionópolis	Application for Mining License	Gold	BPGM Mineração Ltda	7,810.02	1961	
Comments: Mining License pending				**TOTAL**	**7,810.02**	*ANM = Mining National Agency*	

The Luanga mineral property is centred approximately at coordinates -05º57'24.34" S/-49º32'51.00" W. Bounding coordinates of Exploration License No.1961 from ANM title documents are presented on Table 1-2.

Table 1-2: Vertexes of Luanga mineral property (Exploration License No.1961)

Vertex	Latitude	Longitude	Vertex	Latitude	Longitude
v1	-05°54'40"284	-49°30'09"580	v10	-06°00'05"795	-49°35'30"045
v2	-05°57'27"643	-49°30'09"580	v11	-05°56'28"677	-49°35'30"072
v3	-05°57'27"638	-49°32'36"608	v12	-05°56'28"677	-49°35'34"710
v4	-05°58'41"177	-49°32'36"614	v13	-05°54'40"336	-49°35'34"693
v5	-05°58'41"177	-49°32'36"617	v14	-05°54'40"300	-49°31'50"304
v6	-05°59'26"752	-49°32'36"617	v15	-05°55'51"911	-49°31'50"304
v7	-05°59'26"758	-49°32'36"617	v16	-05°55'51"911	-49°30'45"503
v8	-05°59'26"758	-49°30'09"580	v17	-05°54'40"289	-49°30'45"503
v9	-06°00'05"822	-49°30'09"580	v18	-05°54'40"284	-49°30'14"770

Exploration License Nº 1961, ANM.851.966/1992 - Datum SIRGAS2000

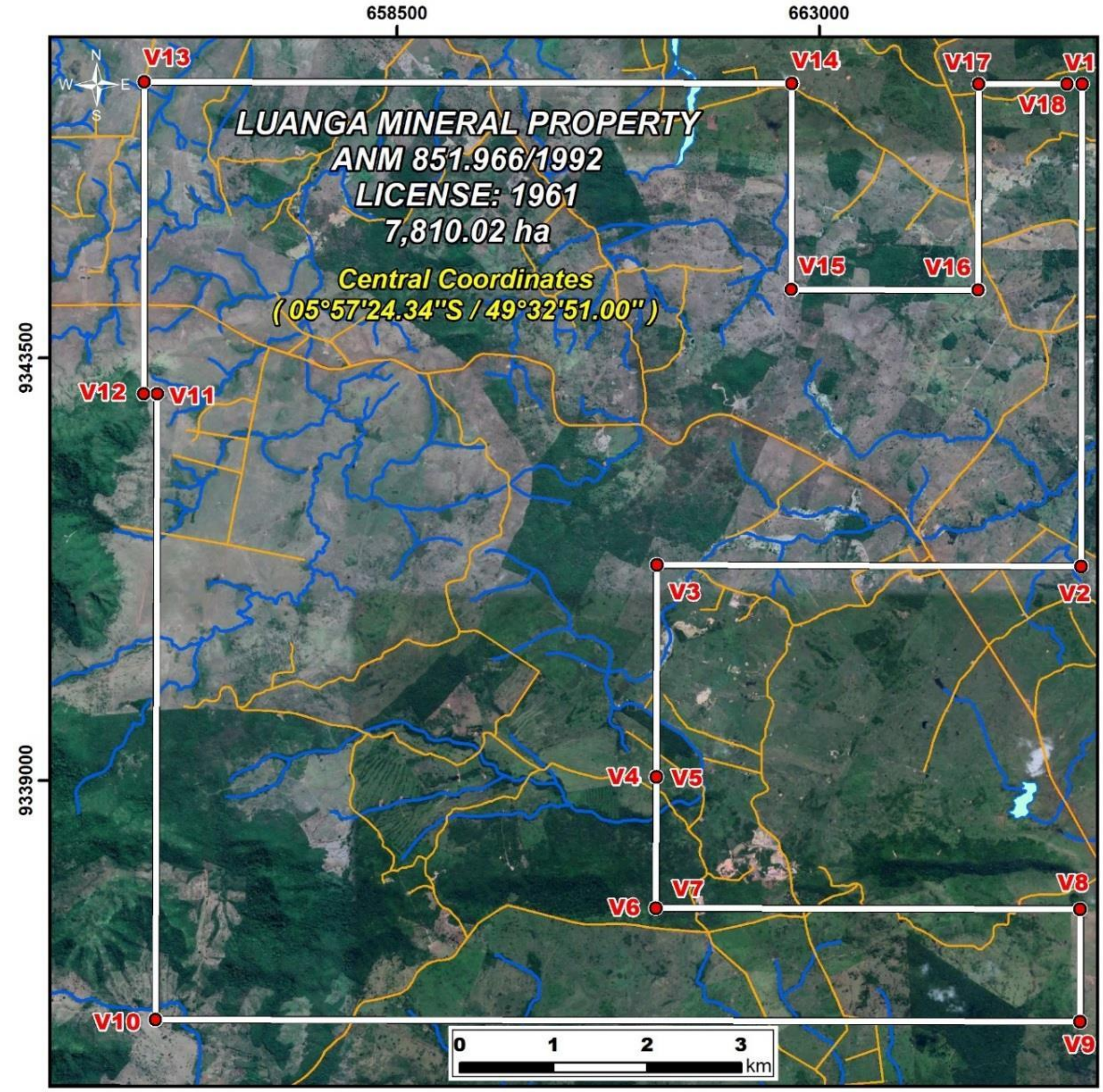

Figure 1-2: Luanga Project Tenement Map.

1.3 Historic Exploration

<u>The Carajas Mineral Province:</u>

The first successful mineral exploration in the Carajás was carried out by Companhia de Desenvolvimento de Indústrias Minerais ("CODIM"), a subsidiary of Union Carbide which, in 1966, discovered the manganese deposit of Serra do Sereno. This discovery motivated US Steel, through its subsidiary Companhia Meridional de Mineração ("CMM"), to commence regional-scale exploration in the Carajás. In July 1967, a Brazilian team discovered high-grade iron ore with an average ore grade of 66% Fe. US Steel wanted to develop the Carajás iron deposit, but the Brazilian Government was unwilling to give a foreign company control over such an important national asset. Instead, in

April 1970, the Brazilian Government created a joint venture company, Amazônias Mineração SA ("AMSA"), where 51% was owned by Companhia Vale do Rio Doce ("CVRD", which now is "VALE") the Brazilian Government state enterprise, and 49% was owned by CMM. By presidential decree, on 6 September 1974, AMSA was granted the rights to all iron ore in the Carajás Mineral Province.

Iron ore exploration continued until 1977 when CMM, concerned over the high capital cost and poor outlook for iron ore, withdrew from the project. CVRD purchased CMM's 49% for US$55 million. AMSA, now wholly owned by CVRD, was granted the rights for mineral exploration and development of the entire Carajás Mineral Province.

In June 1978, the construction of the Carajás railroad, linking Ponta da Madeira on the Maranhão coastline to the Carajás, launched the development of the Carajás Iron Ore Project. This is reported to have cost CVRD US$3 billion in direct investments.

With the establishment of the Carajás Iron Ore Project and its associated infrastructure, the Carajás Mineral Province was established and recognised. Decades on it is the largest mineral province in the world, and the largest mining region in Brazil.

The Luanga Project:

Mafic-ultramafic rocks of the Luanga Complex were identified in 1993 during regional exploration developed by DOCEGEO in the Serra Leste region. Following the discovery of up to 2m thick chromatites, DOCEGEO carried out geological mapping, soil geochemistry survey (400mx40m grid) and ground magnetic survey in the Luanga Complex. Four diamond bore holes were drilled to test the thickness and lateral continuity of outcropping chromatites. The drilling was not positive for chromatite mineralization, but intersected anomalous concentrations of Pt and Pd, including 9 metres at 2.57 ppm of Pt+Pd (drillhole PPT-LUAN-FD0004).

In 1997, a joint-venture DOCEGEO-Barrick Gold carried out a stream sediment campaign over the Luanga Complex area that identified Au anomalism.

In 2000, Vale carried out a new soil geochemistry survey to test the Au anomalies indicated by Barrick Gold. The sampling grid, covering the southern portion of Luanga Complex, indicated a 1 km long trend of Pt and Pd anomalies. Due to this anomalous trend, VALE carried out additional soil geochemistry survey in the northern portion of the Luanga Complex (next to chromatite layers), which identified another 1 km long Pd and Pt anomalous trend. The geochemical survey was extended to the central portion of the layered complex, adding a further 2km extension, now joining up to form a continuous Pt-Pd anomalous trend along the entire length of the layered intrusion.

1.4 Geology and Mineralisation

Luanga's principal geological unit is the Luanga Layered Mafic-Ultramafic Complex ("The Luanga Complex"). The Luanga Complex comprises a 6km long and up to 3.5km wide (~18km²) sequence of mafic-ultramafic layered rocks. There is an abundance of unweathered rocks, in comparison to adjacent areas of the Carajás Mineral province, comprising predominantly massive blocks and boulders. The most prominent geomorphologic feature consists of an elongated arc-shaped hill of mainly ultramafic units interlayered with mafic units. This hill is up to 60m higher than the surrounding flat areas of predominantly gabbroic rocks. Country rocks include highly foliated gneiss and migmatite of the Xingu Complex in the south/southeast and mafic volcanics and iron formations of the Grão Pará Group in the north/west (Figure 1-3).

Several thin chromatite layers occur in the Luanga Complex, mainly in the upper and lower stratigraphic portions of the Transition Zone (Figure 1-3), where they are hosted by ultramafic cumulates, and through the immediate contact with the overlying Mafic Zone (Figure 1-3), where they are hosted by plagioclase-bearing norite cumulates. This stratigraphic interval consists of several cyclic units interpreted as the result of successive influxes of primitive magma.

While some PGE mineralization is hosted in chromatites, two other distinct styles of PGE mineralization occur in the Luanga Complex; (i) sulphide-related PGE mineralization and (ii) silicate-related PGE mineralization. PGE mineralization associated with sulphides hosts the bulk of PGE historical mineral resources of the Luanga Complex.

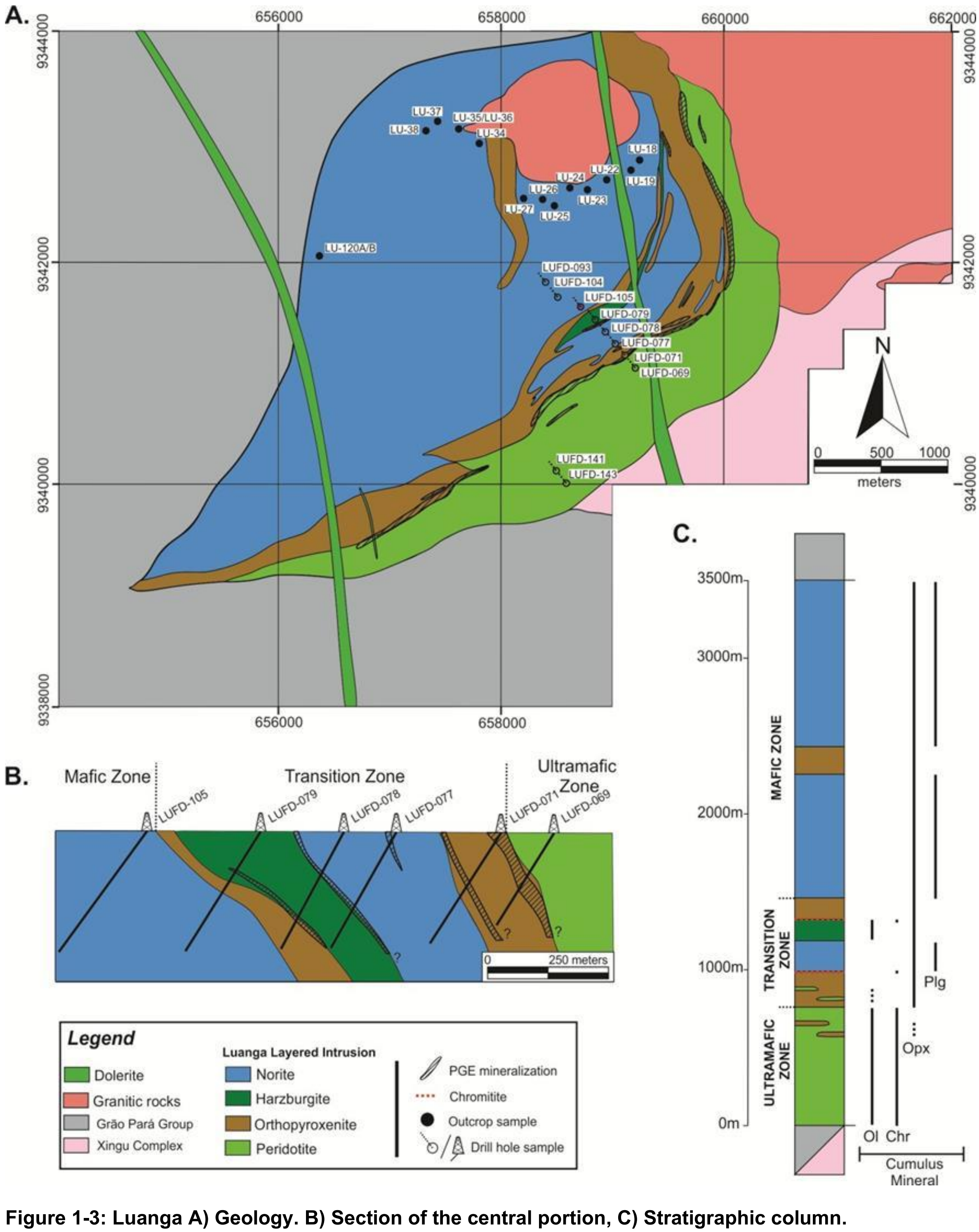

Figure 1-3: Luanga A) Geology. B) Section of the central portion, C) Stratigraphic column. (Mansur, 2017). The area illustrated lies entirely within the property boundary.

1.5 Bravo Exploration

Exploration completed by Bravo in the prior 3 years totals **CAD$ 211,264**, and included but was not limited to:

- Re-location of Historic Drill Core (to 23 March 2022)
- Orthophotography, Digital Elevation Model
- Commencement of resampling programme: clean core, re-logging, core photography, cutting and sampling
- Geophysics
- Re-logging of Historic Core
- Drilling

1.6 Data Verification and QA/QC

Data verification activities carried out by the Authors included a site visit by Marlon Sarges Ferreira on the 13th and 14th of January 2022, accompanied by the Bravo team. This site visit included downloading and reviewing previous reports that described the historic exploration on the property and confirming that the described methods of work were completed to industry standards. The information obtained data from the various technical reports were verified on the site visit where possible.

The site visit had the following itinerary:

Field Visit – 13th to 14th January 2022

During the site visit, four VALE drill collars located in the northern portion of the deposit in a section line. Drillholes LUFD-112, LUFD-0118, LUFD-0152 and LUFD-0195 were correlated with data in the historic VALE drill database.

Drill Core Samples

The ranges of metapyroxenites, the principal lithology of interest that is reported to host the Pt+Pd+Au+Ni mineralization, were observed in the core boxes of holes LUFD-0018, LUFD-0059, LUFD-0131, LUFD-0132 and LUFD-0220. The drill core is preserved in wooden boxes with original past identification and organized on shelves inside an enclosed area. The facility also includes core logging facilities.

Confirmatory Sampling by Bravo

On 21st to the 23rd of September 2020 Bravo had visited VALE´s core facilities where they collected five verification core samples from four historical drill holes. The verification samples were ¼ core from mineralized intervals previously sampled by VALE. Those samples were cut and bagged in VALE's facilities by Bravo personnel, who were responsible for the identification (the same ID as the original sample) and shipping of the sample bags.

All samples were analysed for Pt, Pd, and Au by fire assay with ICP-AES finish, and for Rh by fire assay with ICP-MS finish. The samples also were analysed for 48 elements by four acid and ICP-MS finish.

Although a small number of samples, the correlation (r2=0.74 to Pd and r2=0.99 to Pt) between original assays and verification assays is considered acceptable.

QP Opinion

The QPs reviewed the historical documents, made available by Bravo, including work on geochemistry, geophysics and geology completed by VALE and its consultants and laboratories.

Based on their review, the QPs believe these data are suitable for use in planning an expanded mineral exploration program that would include:

- Surface mapping and soil/rock chip sampling of the Luanga property.
- Re-logging and re-assaying historical VALE core.
- Confirmatory twin hole drill program to validate the historical VALE drilling.
- Drill program aimed at confirming and infilling the zones of historically defined mineralization.

1.7 Metallurgical testing

The Project is an intermediate stage exploration project and, as a result, historical metallurgical testwork has been limited to first pass (or fatal flaw) metallurgical testwork.

This testwork is early stage, however it indicates that a “saleable” Pd-Pt-Au-Ni +/- Rh concentrate could potentially be produced.

The focus of historical metallurgical testwork has been on samples from the Sulphide Zone, since this represents the bulk of the historic PGE mineralization identified at Luanga. Work was performed at a number of facilities between 2002 to 2007 and can be summarised as follows:

- Mintek, 2002
- CDM (internal VALE lab), 2002-2004
- SGS Lakefield, 2003-2004

Initial work by Mintek and CDM used a higher-grade sample (5.0g/t Pt+Pd+Au) from the Sulphide Zone. Metallurgical testwork by both companies demonstrated that recoveries of approximately 70% could be achieved using conventional milling, griding and froth flotation, similar to other sulphide PGE deposits.

Testwork subsequently carried out SGS Lakefield (Canada) on a lower grade 200kg sample from the Sulphide Zone, also indicated that recoveries of approximately 70%, with a concentrate from 0.78% of the fed mass grading 132 g/t PGE+Au. Internal work by CDM using the same sample also supported these results.

1.8 Mineral Resources

There are no current mineral resources on the Project. However, prior owner VALE is reported to have completed a Historical Estimate, that was reported as 142Mt @ 1.24 g/t 3E (Pd + Pt + Au) + 0.11% Ni using a cut-off grade of 0.5 g/t PGE + Au (Mansur, E.T., Ferreira Filho, C.F., &

Oliveira, D.P. (2020b). No breakdown of the individual metals contributing to this Historical Estimate has been published and no technical report related to this Historical Estimate is available to the authors. As a result, aside from the information quoted above, nothing is known of the key assumptions, parameters, and methods used to prepare the Historical Estimate. Further, this Historical Estimate was not classified in accordance with the categories for a mineral resource that are required by NI 43-101. Since Bravo has just acquired the Project directly from VALE and has not conducted any work in estimating mineral resources, there are no more recent estimates or data available to the authors. Despite these limitations, the authors believe that this Historical Estimate is relevant to the reader's understanding of the status of the Project and its future potential. Further, given that this estimate was prepared by VALE, a major mining company with global operations, it is likely to have been prepared to standards a reasonable person would use and is therefore considered reliable for the purposes of defining recommendations for future work. See Section 26 of this Report for the authors' recommendations as to the work that needs to be done to upgrade or verify the Historical Estimate as current mineral resources or mineral reserves.

Bravo cautions that the Luanga Historical Estimate is not NI 43-101 compliant, and a qualified person has not done sufficient work to classify the Historical Estimate as current mineral resources or mineral reserves under NI 43-101, and Bravo is not treating the Historical Estimate as current mineral resources or mineral reserves. There can be no certainty, following further evaluation and/or exploration work, that the Historical Estimate can be upgraded or verified as mineral resources or mineral reserves in accordance with NI 43-101. Further, the assays values used to calculate the Nickel content in the Historical Estimate are total Nickel, and thus contain both sulphide Nickel (recoverable) and silicate Nickel (unrecoverable). It is unknown to Bravo whether the nickel content in the Historic Estimate has been modified to account for this or not.

1.9 Interpretation and Conclusion

The Luanga deposit is interpreted as a Neo-Archean age PGE+Au+Ni+/-Rh+/-Co+/-Cu deposit hosted in mafic and ultramafic complex, approximately 7km by 3.5km. It is broadly similar in age and geological setting to some of the world's major PGE deposits and producing mines.

Luanga is characterized as a "suspended operation", with extensive previous drilling, historical mineral resources and preliminary metallurgical test work.

The Authors are of the opinion that additional exploration and development work is warranted, including a drill program aimed at twinning a statistically representative number of historical drill holes to confirm historical assay results, re-logging and re-assaying VALE's available core and infill drilling at a spacing sufficient to produce a NI 43-101 compliant mineral resource estimate. A systematic geo-metallurgical program is also warranted to increase confidence in the metallurgical characteristics of the Project. In addition, the prospectivity of the entire Project warrants additional work in the form of surface mapping and sampling to evaluate the potential for discovery of additional deposits.

1.10 Recommendations

Based on their evaluation of the Project as outlined in this Report, the authors recommend additional work to (a) define a mineral resource estimate in accordance with NI 43-101, and (b) assess the metallurgical characteristics of the mineralization, in order to determine the potential economic viability of the deposit and define reasonable prospects for economic extraction.

The recommended work program comprises:

PHASE 1

Validation

Sub-total – Validation	***US$2.10M***

Mineral Resources

Sub-total – Mineral Resources	***US$5.35M***

Exploration

Sub-total – Exploration	***US$6.9M***

Metallurgical Studies

Sub-total – Metallurgical Studies	***US$1.70M***

Updated Technical Report

Sub-total – Technical Report	***US$0.1M***
TOTAL PHASE 1	**US$16.15M**

PHASE 2

The Phase 2 programme is dependent on the results received in the Phase 1 programme.

Mineral Resources

Sub-total – Mineral Resources	***US$5.3M***

Exploration

Sub-total – Exploration	***US$6.9M***

Metallurgical Studies

Sub-total – Metallurgical Studies	***US$1.70M***

Updated Technical Report

Sub-total – Technical Report	***US$0.1M***

TOTAL PHASE 2	**US$14.0M**

GRAND TOTAL	**US$30.15M**

These work programs and cost estimates are preliminary in nature and will be refined, adjusted and modified as additional information is compiled, contracts for the various aspects of the work program entered into, and results from new work are received. This could result in some movement in funds between different categories.

2 INTRODUCTION

GE21 Consultoria Mineral Ltda ("GE21") was contracted by Bravo to review historic data for the Luanga PGE+Au+Ni Project (the "Project"), determine its merits and propose an appropriate exploration programme, including a budget for PGE+Au+Ni exploration, on the Project. GE21 was subsequently retained for and on behalf of Bravo to prepare this Technical Report ("Report") on the Project in compliance with National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101").

Mr. Ferreira, QP, visited the property on the 13th and 14th of January 2022. On the site visit, a preserved diamond drill collar was located, its recorded coordinates validated with a handheld GPS, and the preserved core was inspected in the onsite core storage facility.

Bravo indirectly owns 100% of the Luanga Project. The organizational structure of Bravo and ownership of the Luanga Project is shown in Figure 2-1.

(BVI = British Virgin Islands)
Figure 2-1: Bravo Organizational Chart.

2.1 Qualifications, Experience, and Independence

GE21 is a specialized, independent mineral consulting company. The geological reconnaissance and due diligence evaluation have been conducted by GE21 staff members, who are members of the Australian Institute of Geoscientists (AIG) and are Qualified Persons as defined by NI43-101

2.2 Qualified Persons

The QP's responsible for this Independent Technical report are Mr. Ednie Rafael Fernandes and Mr. Marlon Sarges Ferreira.

Mr. Fernandes is a geologist and member of the Australian Institute of Geoscientists ("MAIG") and has sufficient experience that is relevant to the styles of mineralization and types of deposit under consideration to be considered as a QP, as defined by the Canadian Securities Administrators' NI

43-101. Mr. Fernandes has almost 10 years' experience working with exploration and mining projects, Mr. Fernandes is responsible for all sections in this Independent Technical Report, except Section 12 where he is co-responsible with Mr Ferreira.

Mr. Ferreira is a geologist and member of MAIG and has sufficient experience that is relevant to the styles of mineralization and types of deposit under consideration to be considered as a QP, as defined by the Canadian Securities Administrators' NI 43-101. Mr. Ferreira has almost 15 years' experience working with exploration and mining projects and visited the Project as a QP between 13th and 14th of January 2022. Mr Ferreira is co-responsible for section 12 in this Independent Technical Report.

Neither GE21, nor the Authors of this Report, have, or have had, any material interest invested in BPGM or any of its related entities. GE21's and the Authors relationship with BPGM is strictly professional, consistent with that held between a client and an independent consultant. This report was prepared in exchange for payment based on fees that were stipulated in a commercial agreement. Payment of these fees is not dependent on the results of this report. Table 2-1 below, relates each QP with their report items responsibility.

Table 2-1: Qualified Person and Report Items Responsibility Relations

Company	Qualified Person	Section Responsibility	Site Visit	Responsibility
GE21	Ednie Rafael Fernandes, MAIG	All sections, with co-responsibility for Section 12	-	Author
GE21	Marlon Sarges Ferreira, MAIG	All sections	13 & 14 January 2022	Author

The effective date of this report is 12th April 2022. The Authors have relied on information provided by BPGM which was provided in a database with full access given to the QPs.

3 RELIANCE ON OTHER EXPERTS

The Independent Technical Report for the Luanga PGE+Au+Ni Project (Technical Report) relies on reports and statements from legal and technical experts who are not qualified persons as defined by NI 43-101. The Qualified Persons responsible for the preparation of this Technical Report have reviewed the information and conclusions provided, determined that they conform to industry standards and are professionally sound, and are acceptable for use in this report.

Specifically, the QP relied upon the following information in the following sections in this report:

- Section 4.3 - Mining legislation, supplied by FFA Legal
- Section 4.4 – Luanga ANM title opinion supplied by Linneu de Albuquerque Mello, 11th February 2022
- Section 4.7 – SUDAM tax relief, supplied by FFA Legal

4 PROPERTY DESCRIPTION AND LOCATION

4.1 Project Description & Ownership

Luanga is an intermediate-staged exploration project located in Pará State, Brazil which contains PGE plus Au, plus Ni mineral deposit known as the Luanga deposit (Figure 4-1). The assay database also indicates the presence of Rh, Co and Cu. It is held under the Exploration Licence Nº.1961 and designated ANM.851.966/1992, comprising an area of 7,810.02 hectares in extent.

Figure 4-1: Luanga Project Location Map.

4.2 Land Access

The Luanga Project resides on private farmland generally used for cattle farming. There are no indigenous claims or protected forests in this area. In order to carry out exploration/feasibility works, such as drilling, an access agreement is required with the owner of the surface rights (landowner).

Land access agreements are currently in place with 4 out 5 key landowners. Negotiations with the final landowner is in progress and expected to be concluded shortly. See Section 4.3 for discussion on BPGM's rights in respect of non-owned surface rights. The current land access status can be seen in the Figure 4-2.

Under Brazilian mining law, exploration and study work (including all works in the recommendations of this report) do not require any permitting, as the land is privately owned, and permission to conduct work is resolved under the land access agreements with various owners.

As far as the authors are aware, there are no other significant factors or risks that may impede access or the ability to perform the proposed work on the property, the information contained in this report is current and complete as of the report's Effective Date and complies with Section 4.2(8) of NI 43-101.

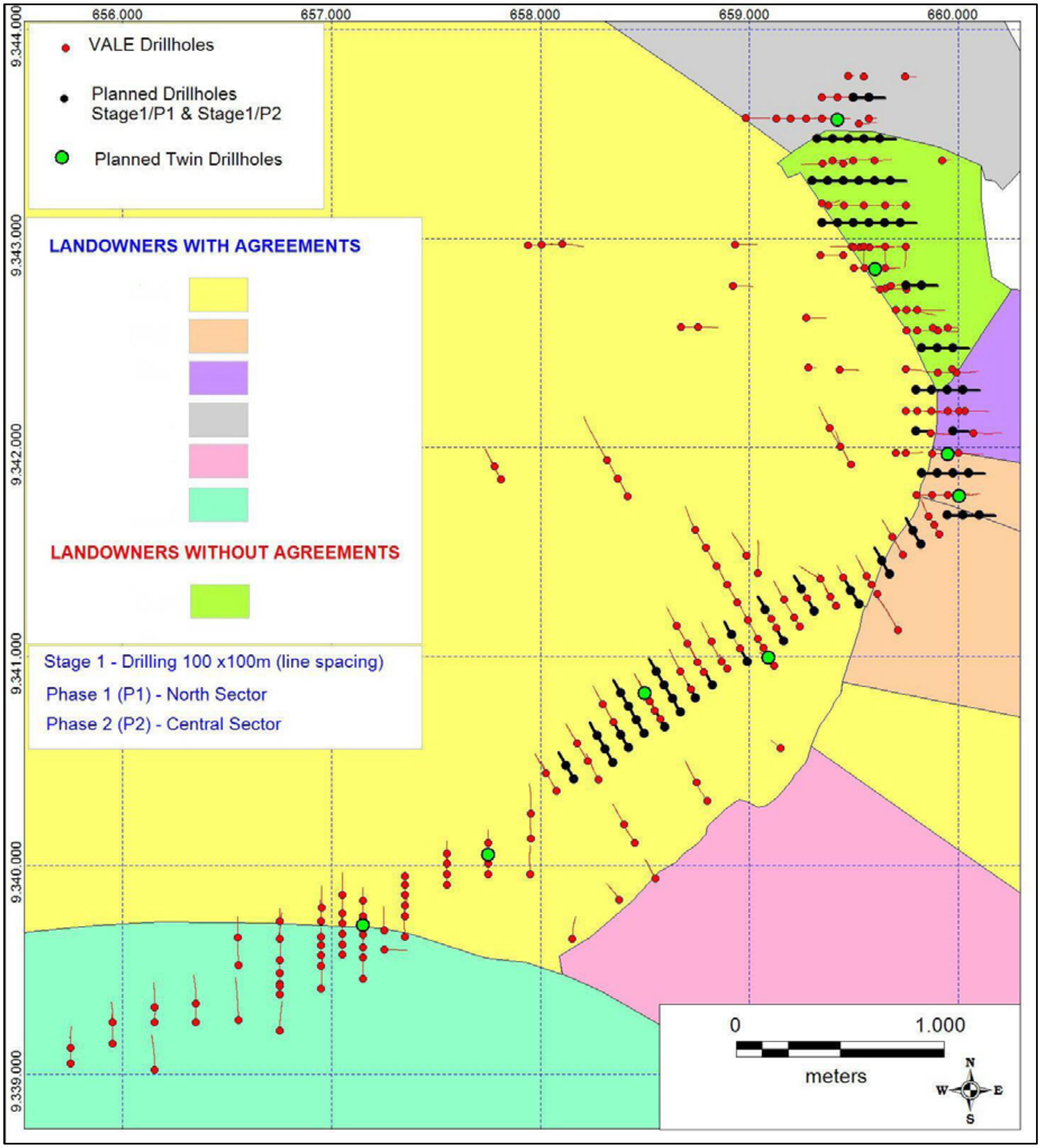

Figure 4-2: Land Access Summary.

4.3 Mining Legislation, Administration and Rights

Brazilian Mining Legislation, Administration and Rights are governed by the Brazil Mining Code (Federal Law Decree No. 227/1967), which regulates exploration and development of mineral resources and mining projects in Brazil.

Mineral tenements in Brazil generally comprise Prospecting Licenses, Exploration Licenses and Mining Licenses. These are granted subject to various conditions including an annual fee per hectare payment and reporting requirements. Each tenement is granted subject to standard conditions that regulate the holder's activities and regulations that are designed to protect the environment.

The holder of a granted Prospecting License, Exploration License or Mining License is not required to spend a set annual amount per hectare in each tenement on exploration or mining activities. There is no statutory or other minimum expenditure requirement in Brazil. However, annual rental payments are made to the Brazilian National Department of Mineral Production (Mining National Agency, ANM) and the holder of an Exploration License must pay rates and taxes ranging, based on current exchange rate, from US$0.69 to US$1.03 per hectare to the Government.

If a mineral tenement is located on private land, then the holder must arrange or agree with the landowners to access the property, however in the absence of an agreement the company can request access in court and by depositing a compensation value that is established and estimated by a court expert.

4.3.1 Prospecting Licenses

A Prospecting License entitles the holder, to the exclusion of all others, to explore for minerals in the area of the License, but not to conduct commercial mining. A Prospecting License may cover a maximum area of 50 hectares and remains in force for up to 5 years. The holder may apply for a renewal of the Prospecting License, which is subject to approval by ANM. The period of renewal may be up to a further 5 years.

4.3.2 Exploration Licenses

The federal department responsible for issuing Exploration Licences is ANM. Exploration licenses are typically granted for 3 years and can be extended for an additional 3 years maximum, subject to ANM approval. An exploration license allows the holder to explore for minerals in the granted concession, but not to conduct commercial mining.

License applications must include applicant details, the elements or metals to be explored for, the application license area, and be accompanied by stipulated technical documents that have been prepared under the responsibility of a qualified geologist or mining engineer. Such documents typically include budget forecasts for the planned exploration program, maps of the intended area, payment of governmental fees and taxes, and proof of sufficient funds or financing for the investment forecast set forth in the proposed exploration plan. Licenses are deemed granted when they are published in the National Official Gazette.

In order to renew the exploration license, the ANM shall take into consideration the development of the work performed. The request for renewal of the exploration license must be presented 60 days prior to the expiration date of the original license. As to the renewal request, a report must be presented of the work already carried out, indicating the results achieved, as well as reasons justifying the work continuation. The renewal of the exploration license does not depend on the publication of a new license, but only on the publication of the decision to renew it.

A final exploration report summarizing the economic viability and technical feasibility of the claim must be supplied to the ANM prior to the expiration of the granted time period. Such report must be prepared under technical responsibility of a legally qualified professional and must also contain:

- (i) information on the area, means of access and communication;
- (ii) plan of the geological survey;
- (iii) description of the main aspects of the deposit;
- (iv) quality of the mineral substance and definition of the deposit;
- (v) genesis of the deposit, as well as its qualification and comparison to similar deposits;
- (vi) report on the assay results of samples collected;
- (vii) demonstration of the economic feasibility of the deposit, and;
- (viii) the necessary information for the calculation of the reserve, such as the density, area, volume and grade.

The final exploration report must be presented independently from the results of the work and shall indicate the feasibility or non-feasibility of the development and exploitation of the mineralization, or the non-existence of the deposit. The holder of an exploration license who does not present a final exploration report, within the date established by the regulations, will be fined. Nevertheless, the exemption from presentation of the report is permitted in certain cases where the license is relinquished by the titleholder. The ANM must confirm the relinquishment, provided it happened in one of the two following instances:

- (i) at any time, if the titleholder has not been successful at entering the area, despite all the efforts made, including judicial means, or;
- (ii) before one-third (1/3) of the term of duration of the exploration license has passed.

If the final exploration report concludes that mineral exploitation or development is temporarily non-feasible (due to economic conditions, logistics, commodities prices, among others) then the license holder may request the postponement of the decision related to the report ("Sobrestamento") which shall be reviewed by the ANM.

A concession holder has one year from approval of the report to apply for a mining concession or to transfer this right to a third party. The application period may be extended for longer than a year at the discretion of the ANM, if requested by the holder prior to the expiration date, with necessary motivations and justifications (for example more time to obtain environmental approvals or conduct further studies on economic viability and technical feasibility).

Development of mining projects are governed by three phases: Preliminary Licence (LP), Installation Licence (LI) and Operating Licence (LO). Issuance of these licences is governed by the Brazilian Institute of Environment and Renewable Natural Resources ("IBAMA"), the State Environmental Agencies, which would be the Pará State Environmental Agency ("SEMA") for the Luanga Project or the Municipality Authorities.

Stage 1 Licencing: Preliminary Licence (LP)

Receipt of the LP requires the licencing agency to evaluate the location and overall design of the project, environmental impact, social/community impact and establish terms of reference for future development. The Luanga Project occurs on predominantly privately owned, cleared land and there are no indigenous communities within the property boundary or within a 10km radius, so there is no consultation requirement under the National Foundation of the Indian Fundação Nacional do Índio ("FUNAI"), the federal agency that that establishes and manages policies relating to indigenous communities.

Stage 2 Licencing: Installation Licence (LI)

Receipt of the LI allows earthworks and mine construction to start. Application for the LI must include layout of the mine, processing plant, tailings dam and all associated infrastructure. It also includes detail on mining methods, recovery methods, tailings dam design (and dam break study). The LI also expands and updates the environmental and social/community studies that were included in the LP terms of reference and conditions.

Stage 3 Licencing: Operating Licence (LO)

Receipt of the LO allows operating activities to start and is essentially a review of the operation to ensure it was constructed according to the detail provided in the LI.

4.4 Mineral Tenure

On September 5th, 1995, the Ministério de Minas e Energia (Ministry of Minerals and Energy – "MME") issued to Vale SA ("VALE") Exploration Licence No.1961 under the process designated ANM.851.966/1992. Exploration Licences are administrated by the Agência Nacional de Mineração ("ANM"), the Brazilian National Mining Agency. This Exploration License is located 40 km north-east of the town of Parauapebas in Para State, Brazil.

The license, which covers the Luanga PGE+Au+Ni Project, comprises an area of 7,810.02 hectares., currently in the name of BPGM Mineração Ltda, as summarized on

Table 4-1 and illustrated on Figure 4-3. Exploration License 851.966/1992 remains valid while the Mining License application is pending.

Table 4-1: Mineral Tenement Summary
(source ANM – May 2020).

ANM Process	Municipality	Stage	Mineral	Title Owner	Size (hectares)	License No.	Expiry Date
851.966/1992	Curionópolis	Application for Mining License	Gold	BPGM Mineração Ltda	7,810.02	1961	
Comments: Mining License pending				**TOTAL**	**7,810.02**	*ANM = Mining National Agency*	

The Luanga mineral property is centred approximately at coordinates -05º57'24.34" S/-49º32'51.00" W. Bounding coordinates of Exploration License No.1961 from ANM title documents are presented on Table 4-2.

Table 4-2: Vertexes of Luanga mineral property
(Exploration License No.1961)

Vertex	Latitude	Longitude	Vertex	Latitude	Longitude
v1	-05°54'40"284	-49°30'09"580	v10	-06°00'05''795	-49°35'30''045
v2	-05°57'27"643	-49°30'09"580	v11	-05°56'28''677	-49°35'30''072
v3	-05°57'27"638	-49°32'36"608	v12	-05°56'28''677	-49°35'34''710
v4	-05°58'41''177	-49°32'36''614	v13	-05°54'40''336	-49°35'34''693
v5	-05°58'41''177	-49°32'36''617	v14	-05°54'40''300	-49°31'50''304
v6	-05°59'26''752	-49°32'36''617	v15	-05°55'51''911	-49°31'50''304
v7	-05°59'26''758	-49°32'36''617	v16	-05°55'51''911	-49°30'45''503
v8	-05°59'26''758	-49°30'09''580	v17	-05°54'40''289	-49°30'45''503
v9	-06°00'05''822	-49°30'09''580	v18	-05°54'40''284	-49°30'14''770

Exploration License Nº 1961, ANM.851.966/1992 – Datum SIRGAS2000

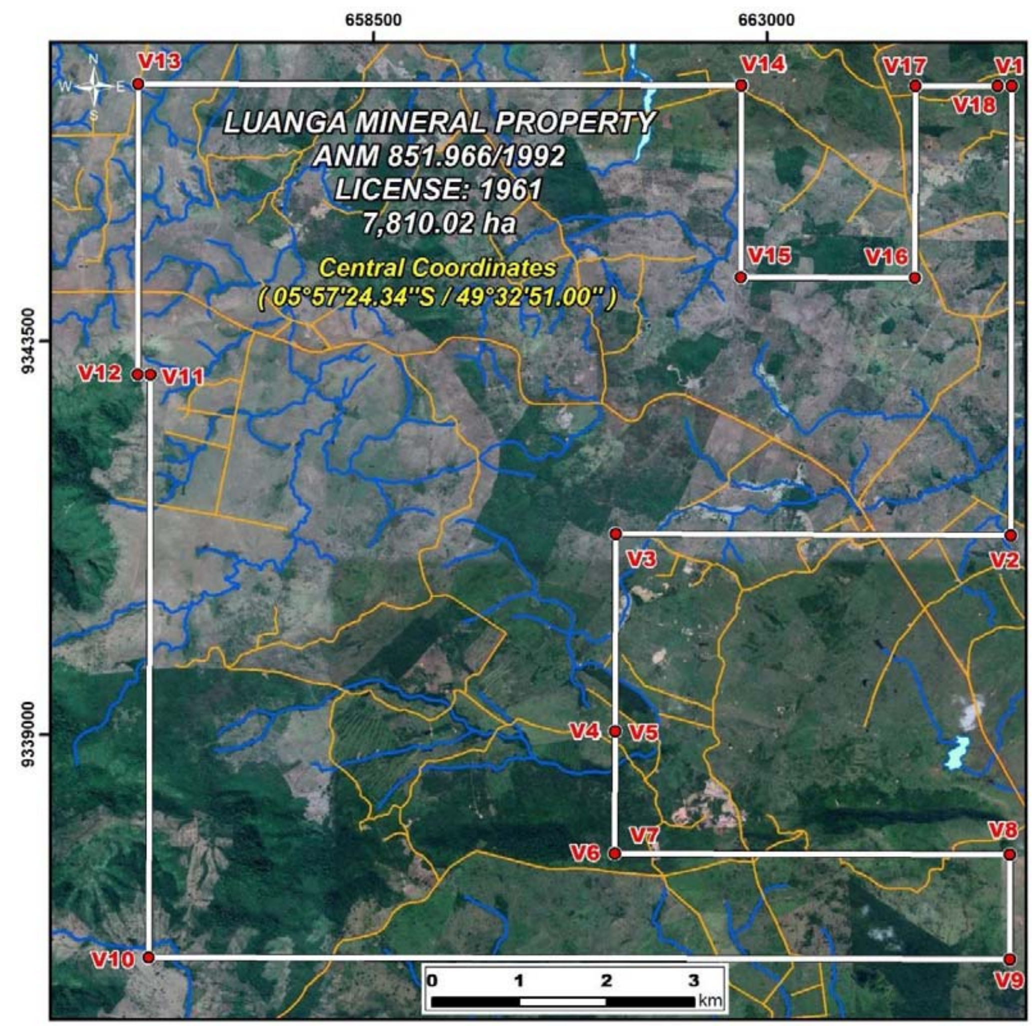

Figure 4-3: Luanga Project Tenement Map.

The first three years of exploration permit expired on September 5th, 1998, but the ANM only provided renewal of Exploration License on April 12th, 2005, due to its internal bureaucracy, renewing for additional three years until April 12th, 2008 (Figure 4-4). On April 11th, 2008, VALE presented a Final Exploration Report to the ANM, and, on April 19th, 2013, the company applied for a Mining License.

The ANM continues to postpone the decision on the Project's Final Exploration Report and BPGM expects this status to continue until such time that the Company submits a new study that demonstrates the technical and economic feasibility of the Project.

BPGM retained Linneu de Albuquerque Mello whose lawyers are qualified to carry out the practice of law in the Federative Republic of Brazil. According to a title opinion by Linneu de Albuquerque Mello dated February 11th, 2022, the Luanga Mineral Rights were valid and in good standing at that time.

Eventos:

Descrição	Data
1044 - REQ LAV/TRANSF DIREITOS -CESSÃO TOTAL REQ LAV EFETIVADA	14/12/2021
1043 - REQ LAV/TRANSF DIREITOS -CESSÃO TOTAL REQ LAV APROVADA	29/11/2021
1042 - REQ LAV/TRANSF DIREITOS -CESSÃO TOTAL REQ LAV PROTOCOL	10/11/2021
336 - REQ LAV/DOCUMENTO DIVERSO PROTOCOLIZADO	05/09/2019
336 - REQ LAV/DOCUMENTO DIVERSO PROTOCOLIZADO	28/08/2019
2350 - REQ LAV/SIGILO INFORMAÇÃO MINERÁRIA- REQUERIDA	04/04/2019
336 - REQ LAV/DOCUMENTO DIVERSO PROTOCOLIZADO	07/11/2018
1812 - ÁREA DESBLOQUEADA JUDICIALMENTE	19/09/2018
1811 - ÁREA BLOQUEADA JUDICIALMENTE	17/09/2018
365 - REQ LAV/CUMPRIMENTO EXIGÊNCIA PROTOCOLIZ	14/09/2018
361 - REQ LAV/EXIGÊNCIA PUBLICADA	16/07/2018
336 - REQ LAV/DOCUMENTO DIVERSO PROTOCOLIZADO	12/06/2018
336 - REQ LAV/DOCUMENTO DIVERSO PROTOCOLIZADO	13/04/2018
336 - REQ LAV/DOCUMENTO DIVERSO PROTOCOLIZADO	21/09/2017
336 - REQ LAV/DOCUMENTO DIVERSO PROTOCOLIZADO	24/07/2017
336 - REQ LAV/DOCUMENTO DIVERSO PROTOCOLIZADO	14/01/2015
356 - REQ LAV/DESPACHO PUBLICADO	31/12/2014
336 - REQ LAV/DOCUMENTO DIVERSO PROTOCOLIZADO	03/11/2014
336 - REQ LAV/DOCUMENTO DIVERSO PROTOCOLIZADO	29/08/2014
336 - REQ LAV/DOCUMENTO DIVERSO PROTOCOLIZADO	19/08/2014
336 - REQ LAV/DOCUMENTO DIVERSO PROTOCOLIZADO	20/06/2014
350 - REQ LAV/REQUERIMENTO LAVRA PROTOCOLIZADO	20/06/2014
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	08/05/2014
1951 - TRANSF DIREITOS - INCORPORAÇÃO AVERBADA	06/08/2013
1950 - TRANSF DIREITOS - INCORPORAÇÃO APROVADA	02/08/2013
349 - AUT PESQ/PRORROGAÇÃO PRAZO REQ LAVRA- 01 ANO PUB	20/06/2013
1882 - REQ LAV/CORREÇÃO DE FASE- ÁREA AUTORIZAÇÃO PESQUISA	23/05/2013
350 - REQ LAV/REQUERIMENTO LAVRA PROTOCOLIZADO	19/04/2013
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	22/01/2013
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	21/12/2012
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	14/11/2012
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	03/07/2012
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	14/05/2012
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	12/12/2011
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	17/11/2011
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	18/11/2010
1782 - AUT PESQ/RETIFICAÇÃO DA APROVAÇÃO DO RELATÓRIO FINAL	20/07/2010
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	07/04/2010
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	24/02/2010
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	24/02/2010
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	18/11/2009
291 - DIR REQ LAVRA/RELATORIO PESQ APROV C/REDUC ÁREA PUB	18/11/2008
1273 - AUT PESQ/REDUÇÃO DE ÁREA PROTOCOLIZADO	18/09/2008
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	10/09/2008
255 - AUT PESQ/CUMPRIMENTO EXIGÊNCIA PROTOCOLI	03/09/2008
694 - PAGAMENTO VISTORIA FISCALIZAÇÃO EFETUADO	27/08/2008
2 - DOCUMENTO DIVERSO PROTOCOLIZADO	24/04/2008
794 - AUT PESQ/RELATORIO PESQ POSITIVO APRESENTADO	11/04/2008
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	18/09/2007
2 - DOCUMENTO DIVERSO PROTOCOLIZADO	14/09/2007
264 - AUT PESQ/PAGAMENTO TAH EFETUADO	30/07/2007
264 - AUT PESQ/PAGAMENTO TAH EFETUADO	27/07/2006
264 - AUT PESQ/PAGAMENTO TAH EFETUADO	27/07/2005
209 - AUT PESQ/INICIO DE PESQUISA COMUNICADO	13/06/2005
236 - AUT PESQ/DOCUMENTO DIVERSO PROTOCOLIZADO	10/05/2005
326 - AUT PESQ/PRORROGAÇÃO PRAZO 03 ANOS PUB	12/04/2005
215 - AUT PESQ/VISTORIA REALIZADA -REEMBOLSO PROTOCOLIZADO	25/05/1999
268 - AUT PESQ/ALVARÁ DE RETIFICAÇÃO SOLICITADO	15/12/1998
265 - AUT PESQ/PRORROGAÇÃO PRAZO ALVARÁ SOLICITADO	06/07/1998
293 - AUT PESQ/RELATORIO PESQ PARCIAL APRESENTADO	06/07/1998

Figure 4-4: ANM events.

4.4.1 Acquisition or Transaction Terms

On June 3rd, 2020, VALE, FFA Holding e Mineração Ltda ("FFAH") and Brazil Americas Investments and Participation Mineração Ltda ("BAIP"), where BPGM is the beneficiary party, appointed FFAH and BAIP to acquire the Luanga Project.

On 24th January 2022, BPGM´s wholly owned subsidiary acquired 100% of the shares of AIPL (Americas Investments & Participation Ltd., giving it a 100%, undivided interest in the Luanga Project.

4.5 Royalties

The following royalties are applicable to the Luanga Project:

- 1% NSR royalty to VALE
- 2% NSR royalty to BNDES
- CFEM Government Royalties:
  - 1.5% NSR royalty Au
  - 2% NSR royalty on precious metals (Pd, Pt, Rh)
  - 2% NSR royalty on base metals (Ni, Cu)
- The Private Landowner Royalty is equal to 50% of CFEM royalties.

4.6 Environmental and Social Liabilities

No environmental liabilities have been identified within the Luanga Exploration License. The current land use at the Luanga Project is solely agricultural cattle grazing. There are no significant rivers running through the property. There are also no existing forests on the property, thus no deforestation is required. However, it is the intention of BPGM to plant 10 trees for every drill hole completed.

The most significant activity to be completed by the company in the next few years is relatively low impact drilling. BPGM will concurrently reclaim drill sites.

It is expected that social or community impact will also be negligible since the nearest community is the village of Serra Pelada, which is approximately 8km away. There are no indigenous communities within 25km of Luanga.

The unpaved road to Serra Pelada crosses the Luanga Project in the northern half of the property. A low voltage power line parallels this road. BPGM does not expect to encounter major difficulties in moving the road and associated power line if the Project advances to a construction decision. The location of the road and power line will not impact planed exploration activities.

4.7 SUDAM

The Brazilian subsidiary of BPGM is subject to corporate income tax rate of 25% which is applied to pre-tax profit. The company can apply to the Government Grant (tax incentive) granted by SUDAM (Superintendência do Desenvolvimento da Amazônia) based on Federal Law Nº 13,799 of January 3rd, 2019, in order to be able to reduce 75% of the income tax rate as tax incentive in a 10-year period from the year in which the Appraisal Certificate from SUDAM is issued.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE & PHYSIOGRAPHY

5.1 Accessibility & Physiography

The Luanga Project is located in the municipality of Curionópolis in the central-eastern region of Pará State, approximately 500km south of Belém (a sizeable coastal port city, Figure 5-1). Luanga is accessible via paved and unpaved roads from two regional centres, Parauapebas and Marabá Figure 5-2). Both cities have commercial airports with multiple flights a day to Brasilia and Belém from Parauapebas and to Brasilia, São Paulo, Rio de Janeiro, Salvador and others from Marabá (Figure 5-3). Access to the Project is via a high-quality unpaved road that turns off paved Highway PA-257 (Table 5-1).

The closest population centres to the Project are the small town of Curionópolis, with a population of approximately 17,846, approximately 17km south-southwest of Luanga and the mining community of Serra Pelada approximately 12km to the west of Luanga. There are no communities within the property boundary. BPGM's centre of operations are in the municipality of Currionopolis.

Parauapebas, located approximately 40km to west-southwest of Luanga is the key service provider and labour source in the region. Parauapebas is the largest mining town in the state, with a significant labour force resident in the town supporting multiple World class sized iron ore and copper-gold mines in the Carajás. Parauapebas is also home to all of the mining-related services and mining infrastructure in the region. Parauapebas was recorded as having a population of 213,576 in 2020. It is expected that any future operation will be able to source all labour from the local region.

The nearest rail services are those privately owned by VALE located in Parauapebas, which connect to Marabá. The nearest commercial scale port facilities are Vila da Conde located adjacent to state capital Belém, approximately 660km to the north. The port facilities can also be accessed via barge on the Tocantins River, the nearest access to which is also in Marabá.

Figure 5-1: Regional location of Luanga Project in Pará State, Brazil

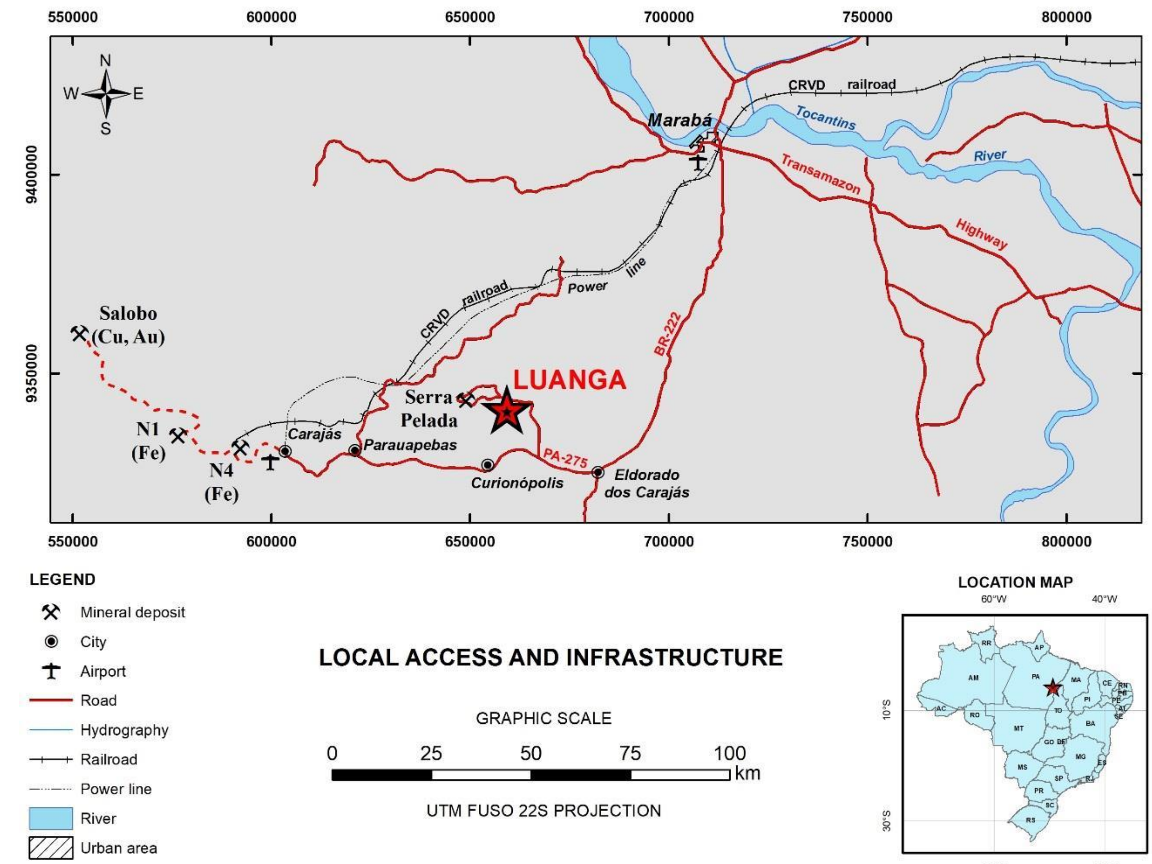

Figure 5-2: Access map for Luanga Project

Figure 5-3: Carajás airport 17km WSW of Parauapebas (top), Marabá airport (bottom).

Table 5-1: Distances for ground access to Luanga Project.

Departing (from)	Destination (to)	Road distance (km)	Estimated time (hours)
Marabá town	Eldorado dos Carajás town	102 (on BR-222)	01:15
Eldorado dos Carajás town	Unpaved road access	16 (on PA-275)	00:20
Unpaved road access	Luanga property	20	00:25
TOTAL		**138**	**02:00**
Departing (from)	**Destination (to)**	**Road distance (km)**	**Estimated time (hours)**
Parauapebas town	Curionópolis town	36 (on PA-275)	00:40
Curionópolis town	Unpaved road access	16 (on PA-275)	00:20
Unpaved road access	Luanga property	20	00:25
TOTAL		**72**	**01:25**
Departing (from)	**Destination (to)**	**Road distance (km)**	**Estimated time (hours)**
Curionópolis town	Unpaved road access	16 (on PA-275)	00:20
Unpaved road access	Luanga property	20	00:25
TOTAL		**36**	**00:45**

The Luanga Project is located in Carajás Mineral Province which lies within the South Pará Plateau, where the altitudes vary from 500m to 700m above sea level. A series of NNE-SSW trending ranges project above the plateau, remnants of an older surface that was eroded to a peneplain and uplifted during the Paleozoic. Luanga lies on the south-east flank of one of these, the Serra Sereno range, with peaks up to 600m above sea level. The stream banks are terraced and capped with iron-aluminous laterite, which are currently being actively eroded (Figure 5-4).

The drainage of the area flows into the Sereno Gorge, part of the Rio Parauapebas system. A tributary of the Sereno Gorge flows north-east from Serra Pelada.

Inside the Luanga Project area, vegetation has been cleared for pasture and subsistence cultivation, which is indicated in Figure 5-4 by the pink areas, versus dark green which is forested areas. The Luanga project covers 7,810 Ha, which is more than sufficient for any contemplated future mining related activities, including waste rock and tailings disposal, process plant and related infrastructure. Similarly, the other surface rights agreements discussed in Section 4 and shown in Figure 4-2, will also provide sufficient space within the 7,810 Ha for proposed work programs and any contemplated future mining-related activities.

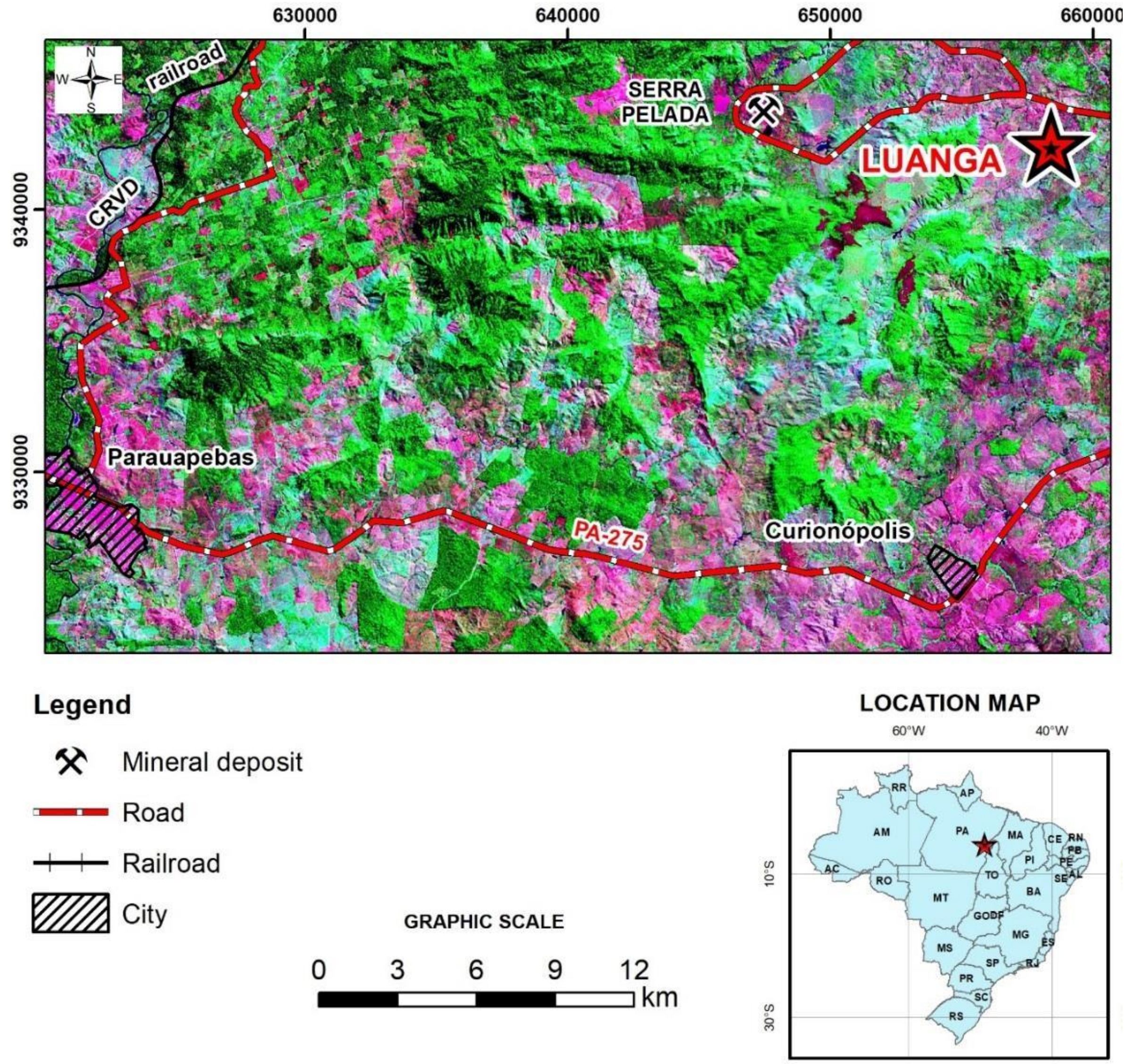

Figure 5-4: Physiography of Carajás region

5.2 Climate and Length of Operating Season

Situated approximately 6º south of the equator, the climate at Luanga Project is typically equatorial with little variation in mean monthly temperatures throughout the year. The average maximum temperature 32ºC while the average minimum is 22ºC. There are two distinct seasons; the winter is warm and dry while the summer is wet and humid. Three-quarters of the annual precipitation falls from December through April. In August, average rainfall for the month is 10mm, while in January, February and March the monthly rainfall exceeds 150mm. Rainfall intensity can be high. For these reasons, water availability for any contemplated future mining related activity in the region is plentiful, and readily accessible.

Figure 5-5: shows the climate data for Parauapebas. Annual rainfall average is 2,082mm.

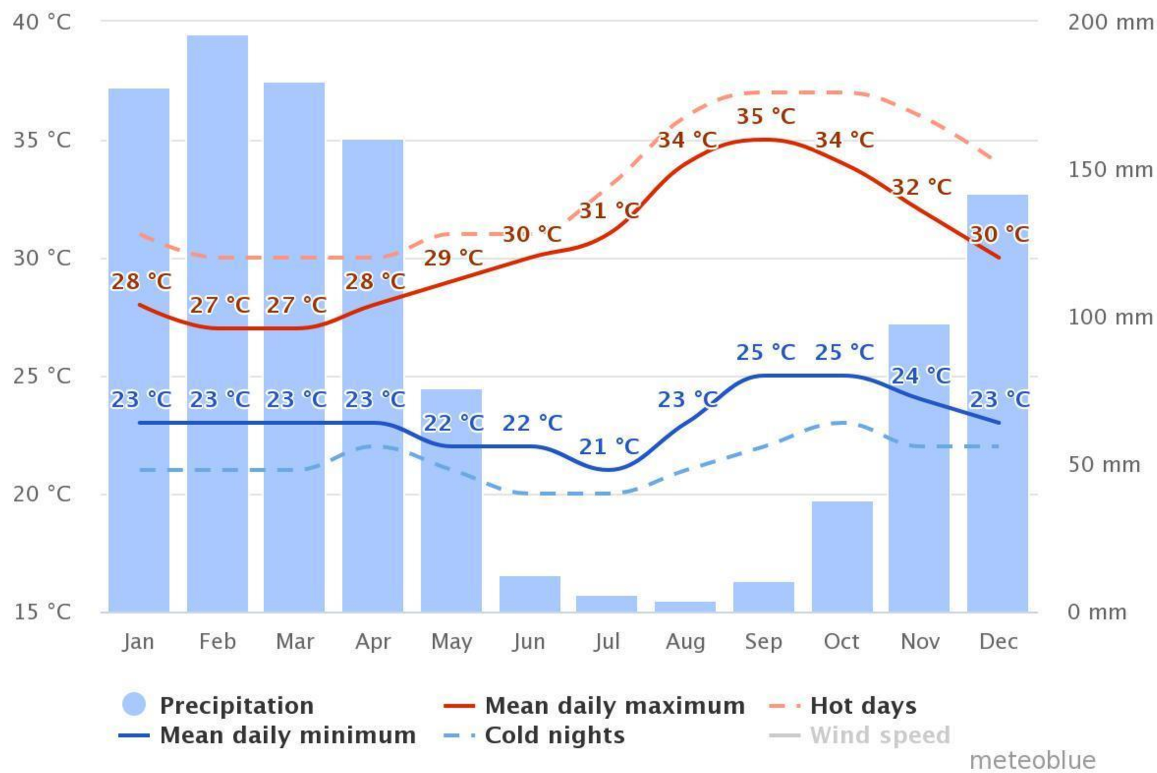

Figure 5-5: Average monthly temperature and rainfall at Parauapebas.
Source: Meteoblue.com, 2022

5.3 Local Resources and Infrastructure

The Luanga Project area is in a region of moderately fertile red/yellow podsols. Agricultural production includes rice, corn, beans, palm oil, banana, tomato, watermelon, coffee, avocado, guava and cashew nuts. Throughout the region, there is extensive cattle-ranching, producing both milk and meat; using natural pastures that are annually burnt to stimulate young growth of grasses. Total stock numbers include up to 400,000 head of cattle and 50,000 pigs in the region. The remaining forest areas have been intensively exploited for fuel wood for domestic use and especially for the production of charcoal. This is an important material for the production of pig iron for small plants in Marabá.

The burgeoning mining industry in the Carajás Mineral Province required a massive investment in infrastructure to create transport routes for industrial and agricultural exports. One of the biggest mining projects in Brazil is based on the iron ore deposits in the Serra dos Carajás near Parauapebas. With a reported 18 billion tonnes of ore, this is one of the biggest iron ore deposits in the world. The Luanga Project lies within the Projeto Grande Carajás Mining and Industrial Zone ("PGC") that is reported to be gazetted over an area of 400,000 km^2 and to involve a total investment of US$62 billion. The town of Carajás has been completely rebuilt and is closed to all but VALE's workers. VALE constructed a heavy-duty rail line, over 892 km from the iron mines to the Atlantic port of São Luís. The nearest railhead to Luanga Project is at Carajás, a distance of 55 km by road from Luanga.

Besides iron ore, other minerals such as gold, copper, nickel, manganese and bauxite have been discovered in significant quantities in the Carajás Mineral Province with additional discoveries a regular occurrence. Much of the metal mined in the region is exported in its raw form but there has been some attempt at metal refining. These include the aluminium smelter in Belém (the largest industrial plant in Latin America) and a steel mill in São Luís. Mining developments have led to increased energy demands, spurring the construction of dams for the generation of hydroelectric power.

The economy of the region is heavily dependent on mining, principally from the iron ore mines of Carajás. VALE is reported to be developing five projects in Southern Pará located within a radius of 90km from Carajás, three of them to the southeast and two to the northeast.

The city of Parauapebas is equipped with all the local amenities such as banks, hospitals, hotels, and supermarkets. In addition, the long history of mining in the town has provided the area with a skilled workforce experienced in disciplines that support mining such as machinery mechanics and general maintenance.

Marabá is the market centre for the region and a hub for road, rail and river transport. Together with the mining industry, the city economy relies also on agriculture, cattle raising, handcraft production and commerce. There are many experienced miners in the vicinity and the university in Marabá is focused on training professionals for the mineral industry.

The Tocantins River and its tributaries are of vital economic importance to the region, both as a source of fresh water for the population and industry, and as a source of hydro-electric power.

Downstream from Marabá, the Tucuruí hydro-electric dam had its capacity expanded in 2005, to lift output to 8,370 MW. Three other hydro-electric plants on the Tocantins River have a combined capacity of 2,630 MW and an additional plant is near completion. Seven more hydro-electric plants are planned on the Tocantins River (Figure 5-7).

A branch of the main 230 kV hydro-electric power transmission line from Tucuruí to Carajás has the available capacity to supply the necessary power to the Luanga PGE Project area for any contemplated future mining-related activity. This power transmission line is approximately 25 km to NW of the Luanga property.

However, it is worth noting that BPGM has existing office facilities close to the Project, within a local farm close to Currionopolis and Parauapebas. Further, since completing the acquisition of Luanga, BPGM has purchased a small parcel of land very close to the Project site, on an adjacent farm. BPGM has also recently purchased mobile offices with all ancillaries and is in the process of relocating these to this recently acquired parcel of land (Figure 5.6).

Figure 5-6: New Offices to be re-located to site.

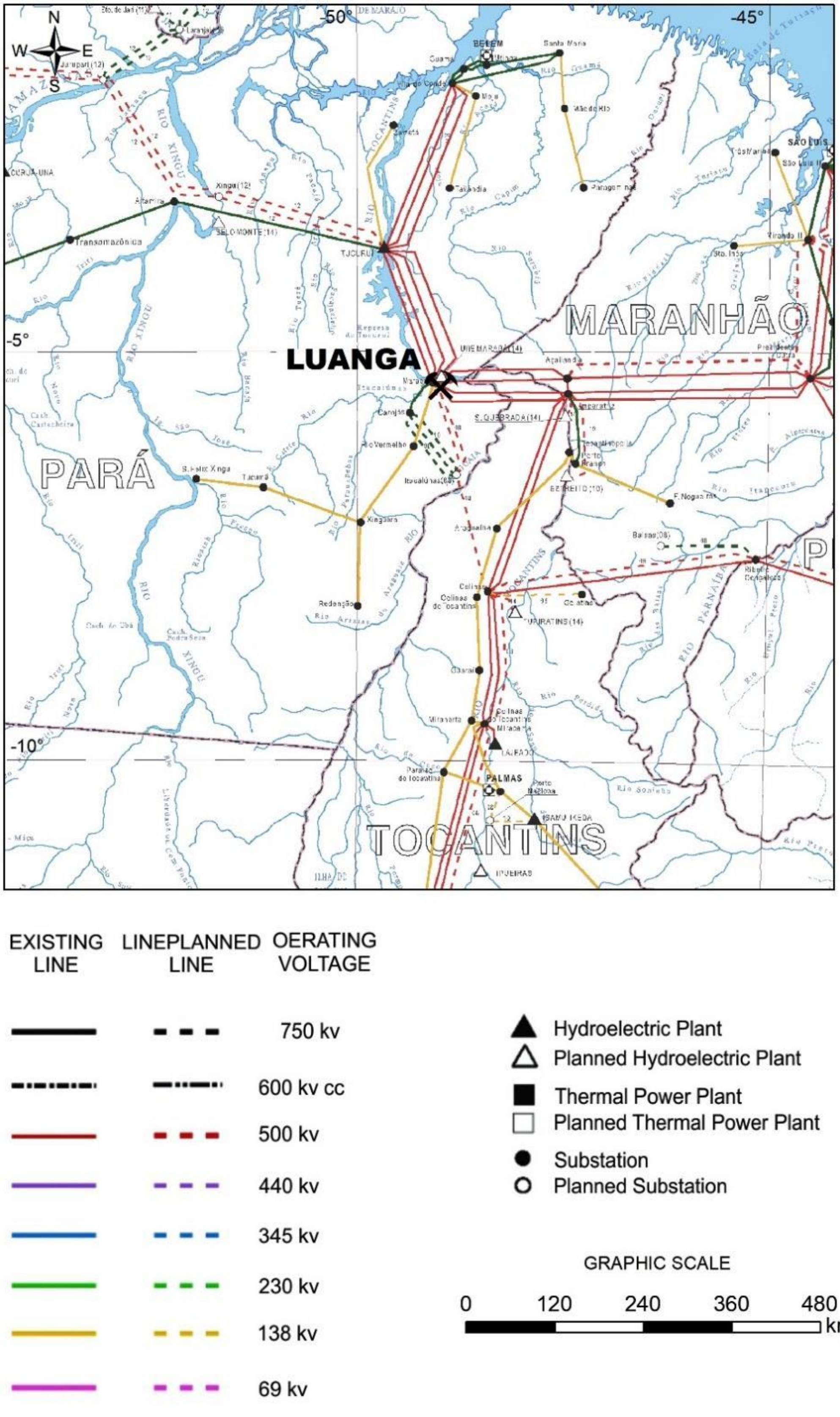

Figure 5-7: Power transmission lines in the region of Luanga Project

6 HISTORY

The Carajas Mineral Province:

The history of the Carajás region is important to contextualize the discovery and subsequent evaluation of the Luanga deposit. Until the 1960s, geological work carried out in the Carajás region has been restricted, by lack of access, to the vicinity of the major rivers. In 1966, DNPM/PROSPEC published the results of Project Araguaia. This involved the acquisition of aerial photo coverage and photointerpretation of the Carajás region. No mineral discoveries were reported as the field work was restricted to the major drainages. The bare patches in the rain forest that later turned out to be high-grade iron ore were interpreted at the time to be calcareous sandstone.

The first mineral exploration in the Carajás region was carried out by Companhia de Desenvolvimento de Indústrias Minerais ("CODIM"), a subsidiary of Union Carbide which, in 1966 discovered the manganese deposit of Serra do Sereno. This discovery motivated US Steel, through its subsidiary Companhia Meridional de Minerações ("CMM"), to commence broad-scale exploration in the region. In July 1967, a Brazilian team discovered high-grade iron ore with an average ore grade of 66% Fe. US Steel wanted to develop the Carajás iron deposit, but the Brazilian Government was unwilling to give a foreign company control over such an important national asset. Instead, the Brazilian Government created in April 1970 a joint venture company, Amazônias Mineração SA ("AMSA"), of which 51 percent was owned by the Companhia Vale do Rio Doce ("CVRD", which now is "VALE"), the Brazilian Government state enterprise, and 49 percent was owned by CMM. By presidential decree on 6 September 1974, AMSA was granted the rights to all iron ore in the Carajás Mineral Province.

Exploration continued until 1977, when CMM, concerned over the high capital cost and poor outlook of the international market for iron ore at the time, withdrew from the project. VALE purchased CMM's 49% for US$55 million. AMSA, now wholly owned by VALE, was granted the rights for mineral exploration and development of the entire Carajás Mineral Province.

In June 1978, at the commencement of laying the Carajás railroad, linking Ponta da Madeira on the Maranhão coastline to the Carajás reserves, effectively launched the implementation of the Carajás Iron Ore Project, which was to cost CVRD US$3 billion in direct investments: 56% for the railroad, 20% for the mine and beneficiation plant, 14% for the marine terminal, and 10% for infrastructure. With the establishment of the Carajás Iron Ore Project and its associated infrastructure, the the Carajás Mineral Province was established and recognised. Decades on, it is one of the largest mineral provinces in the world, and the largest mining region in Brazil. As a result of the recognition of the global importance of the Carajás Mineral Province, significant exploration was undertaken over the following decades by VALE as well as other domestic and foreign mining companies. This work resulted in the discovery of a number of deposits in the province and the development of several mines

The Luanga Project:

Mafic-ultramafic rocks of the Luanga Complex were identified in 1993 during regional exploration developed by DOCEGEO in the Serra Leste region. Following the discovery of up to 2m thick chromatites, DOCEGEO carried out geological mapping, soil geochemistry survey (400mx40m grid) and ground magnetic survey in the Luanga Complex. Four diamond bore holes were drilled to test the thickness and lateral continuity of outcropping chromatites. The drilling was not positive for chromatite mineralization, but intersected anomalous concentrations of Pt and Pd, including 9 metres at 2.57 ppm of Pt+Pd (drillhole PPT-LUAN-FD0004).

In 1997, a joint-venture DOCEGEO-Barrick Gold carried out a stream sediment campaign over the Luanga Complex area that identified Au anomalism.

In 2000, Vale carried out a new soil geochemistry survey to test the Au anomalies indicated by Barrick Gold. The sampling grid, covering the southern portion of Luanga Complex, indicated a 1 km long trend of Pt and Pd anomalies. Due to this anomalous trend, VALE carried out additional soil geochemistry survey in the northern portion of the Luanga Complex (next to chromatite layers), which identified another 1 km long Pd and Pt anomalous trend. The geochemical survey was extended to the central portion of the layered complex, adding a further 2 km extension, now joining up to form a continuous Pt-Pd anomalous trend along the entire layered intrusion.

In 2001, VALE started an exploration program for PGE in the Serra Leste region. Systematic geological and structural mapping using RADARSAT and Landsat-TM5 integrated data, along with airborne geophysical survey, led to the discovery of several other layered mafic intrusions.

6.1 Historic Drilling

VALE drilled 252 diamond drill holes (50,352.89 linear metres) on the Luanga Project between 1993 to 2003 (Table *6-1*). The majority of the diamond drilling occurred between 2001 and 2003 over two main targets, Luanga and Luanga South. At Luanga, 228 diamond drill holes (45,165.74 linear metres) were completed, representing approximately 90% of the entire drilling program. At Luanga South, 24 drill holes (5,187.15 linear metres) were completed.

The majority of diamond drilling was carried out by two Brazilian diamond drilling companies Geologia e Sondagem S.A. (“Geosol”) and Engenharia e Sondagem Ltda (Rede). DOCEGEO was responsible for the first four drill holes at the Project.

Table 6-1: **VALE Drilling Summary**

Year	Drill Type	Drill Holes	Total Metres	Contractor
1993	DD	4	643.69	DOCEGEO
2001	DD	89	15,392.10	Geosol
2002	DD	68	14,603.40	Geosol
2003	DD	91	19,713.70	Geosol Rede
TOTAL		**252**	**50,352.89**	

Most of the diamond drill holes (248 holes) were drilled with inclinations varying from -55.0º to -70.0º, with the predominant inclination at -60.0 (Figure 6-1). Only four diamond drill holes were drilled vertically or close to vertical (-90.0º to -80.0º).

Figure 6-1: Historic drilling at Luanga Project, angled drill hole.
Source: VALE

Maximum hole length was 497.60m and the average hole length was 199.8 metres. The DD drill holes were drilled with a HQ (96.40mm) diameter in the weathered zone, changing to NQ (76.20 mm) diameter in the fresh rock. There is no information about the drilling recovery in the historical database. However, from visual inspection of available core from these programs, recoveries appear to have been excellent.

The upper portions of the Luanga deposit have been oxidized to depths of a few meters to a few tens of metres and are underlain by a thin transition zone before fresh sulphide mineralization is encountered. PGMs and Au are potentially recoverable from both oxide and sulphide mineralization, based on comparable deposits, whereas Ni would typically only be recovered from sulphide mineralization, where present in sulphide minerals as opposed to silicates.

The location of the drill holes at Luanga and Luanga South targets are illustrated on Figure 6-2 and Figure 6-3, respectively. A tabulation of collar coordinates, and final depths are presented as Appendix B.

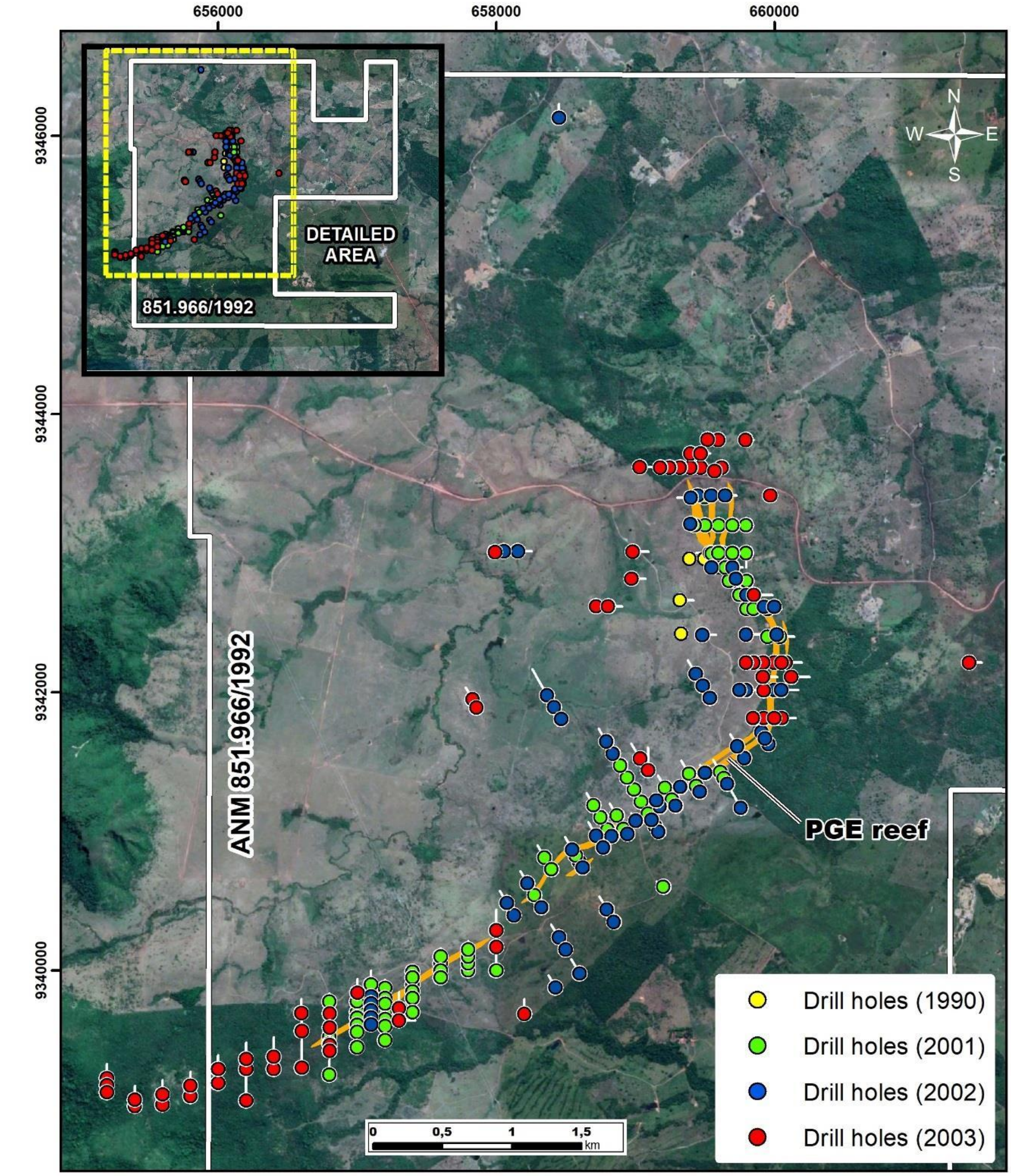

Figure 6-2: Drill hole location map for Luanga target, Luanga Project

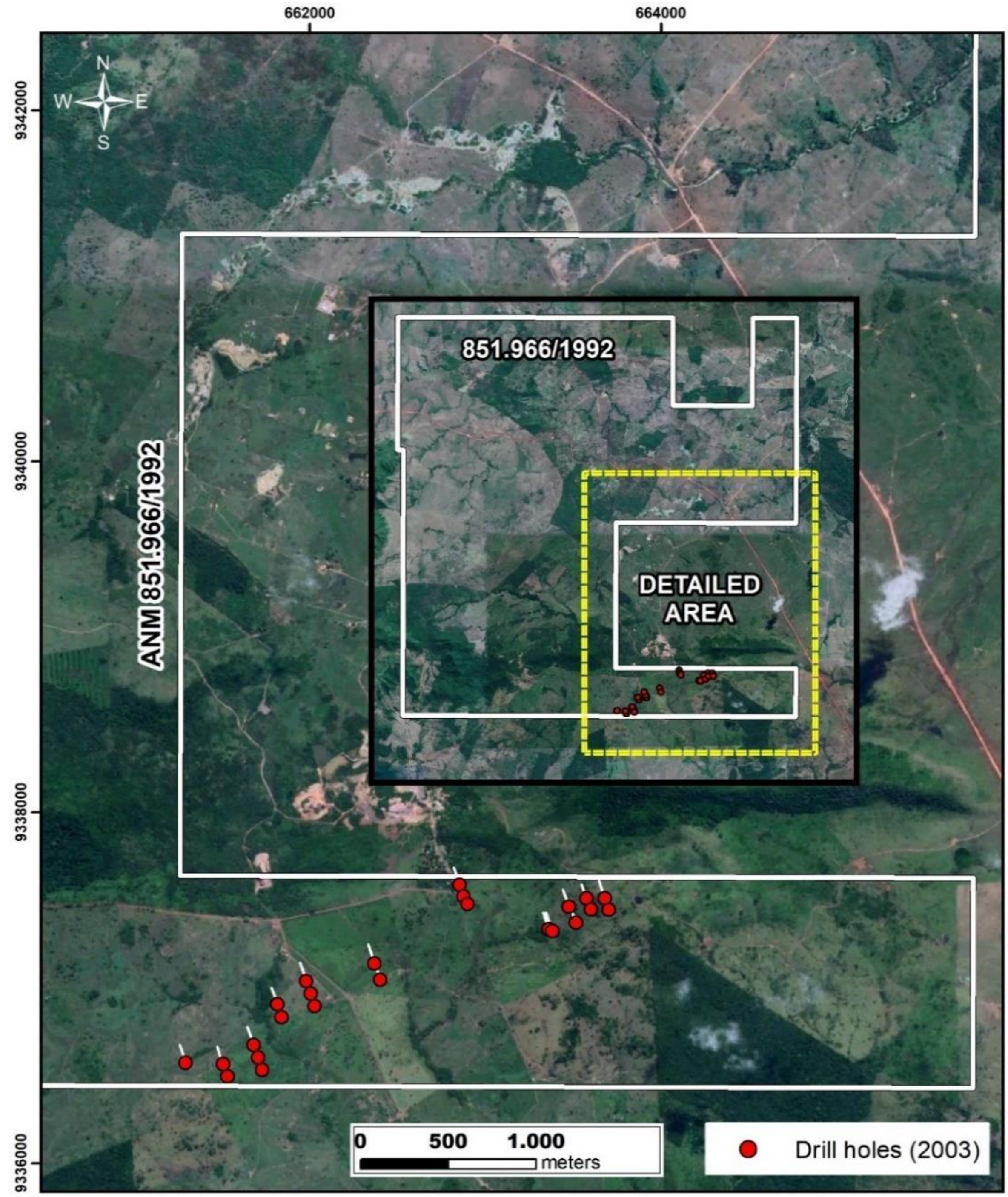

Figure 6-3: Drill hole location map for Luanga South target, Luanga Project

6.2 Historic Drill Hole Collar Survey

The drill holes collars were sited based on the Instituto Brasileiro de Geografia e Estatística (IBGE) base datum. All the drill holes collars were surveyed at the end of each drilling campaign, using Total Station TOPCOM GTS 229 equipment with the final location entered into the drilling database. The survey Datum used for the Luanga Project was SAD69.

All the drillholes collars were capped with cement blocks, including a PVC tube and aluminium plates, including drillhole number. Information related to hole ID, coordinates, elevation, dip, azimuth and final depth data are included on the collar plugs on the aluminium plates.

Downhole deviation surveys were carried out along the length of 240 diamond drillholes with readings collected at 3 metres intervals. The downhole survey covered approximately 95% of the total drillhole population.

A selection of the main mineralized intervals from Luanga's historic drilling is summarized in Table 6-2. It is important to note that many other mineralized intersections exist within the deposit. The original grade units (ppb and ppm) have been restated as g/t and %, respectively.

Table 6-2: **Highlights of mineralized intervals from the Luanga Project**

HOLE-ID	From (m)	To (m)	Thickness (m)	Pd g/t	Pt g/t	Rh g/t	Au g/t	Ore Type
FD0136	0	17	17	17.36	18.36	2.94	0.06	Ox
FD0036	0	71	71	2.22	1.10	0.10	0.28	Ox+Su
FD0124	0	12	12	9.97	6.12	1.02	0.07	Ox
FD0018#	0	47	47	1.98	1.36	0.13	0.25	Ox+Su
FD0035	3	18	15	6.18	2.49	0.00	0.64	Ox
FD0095	28	59	31	2.55	1.61	0.21	0.03	Su
And	*71*	*93*	*22*	*2.63*	*1.59*	*0.09*	*0.02*	Su
FD0145	0	40	40	1.88	0.69	0.08	0.27	Ox+Su
FD0132	0	65	65	0.80	0.91	0.04	0.00	Ox+Su
FD0068	75	89	14	4.04	3.16	0.00	0.18	Su
FD0220	108	157	49	1.09	0.62	0.25	0.12	Su
FD0069	99	124	25	2.10	1.39	0.24	0.15	Su
FD0019	79	109	30	1.76	0.97	0.12	0.06	Su
FD0014	11	21	10	5.65	2.61	0.41	0.05	Ox
FD0059	55	98	43	0.78	0.93	0.01	0.00	Su
FD0173	0	35	35	0.26	1.16	0.58	0.00	Ox
And	*44*	*77*	*33*	*0.23*	*0.78*	*0.56*	*0.00*	Su
FD0026	6	20	14	2.00	1.79	0.26	0.08	Ox
FD0218	41	53	12	1.98	1.51	0.98	0.16	Su
FD0137	76	93	17	2.05	0.76	0.12	0.03	Su

- *All drill holes ID have a prefix "PPT-LUAN-"*
- *All From To depths, and Intervals are downhole*
- *Given the orientation of the holes and the mineralization, the intercepts are estimated to range from ~70 to 100% of true thickness. Holes marked with # were drilled sub-parallel to mineralization and therefore do not represent true thicknesses.*
- *Ox = Oxide. Su = Sulphide. Recovery methods and results will differ based on the type of mineralization*

6.3 Historic Mineral Resource

The “Historical Estimate” of mineral resources for Luanga was prepared internally in 2017 by VALE and reported in Mansur et al., 2020 as:

142Mt @ 1.24 g/t 3E (Pd + Pt + Au) + 0.11% Ni using a cut-off grade of 0.5 g/t PGE + Au.

<u>This disclosure is made as per *Section 2.4 of NI 43-101, parts 1 to 7 inclusive*:</u>

1. The “Historical Estimate” was prepared internally in 2017 by VALE and reported publicly by Mansur et al., 2020, who obtained this information internally from VALE and subsequently report it himselve.
2. Bravo has just acquired the Project directly from VALE and has not conducted any work. Despite these limitations, the authors believe that this “Historical Estimate” is relevant to the reader’s understanding of the status of the Project and its future potential. Further, given that this estimate was prepared by VALE, a major mining company with global operations, the Authors believe it is likely to have been prepared to standards a reasonable person would use and is therefore considered reliable for the purposes of defining recommendations for future work.
3. No breakdown of the individual metals contributing to this Historical Estimate has been published and no technical report related to this Historical Estimate is available to the authors. As a result, aside from the information quoted above, nothing is known of the key assumptions, parameters, and methods used to prepare the Historical Estimate.
4. The “Historical Estimate” used no categories to define it.
5. There are no more recent estimates or data available to the authors.
6. The work needed to be done to verify the "Historical Estimate” as a current mineral resource is defined in Section 26 of this report.
7. (i) A qualified person has not done sufficient work to classify the "Historical Estimate” as a current mineral resource; and

   (ii) Bravo is not treating the “Historical Estimate” as a current mineral resource.

Bravo also cautions that there can be no certainty, following further evaluation and/or exploration work, that the “Historical Estimate” can be upgraded or verified as a current mineral resource in accordance with NI 43-101. Further, the assays values used to calculate the Nickel content in the “Historical Estimate” are total Nickel, and thus contain both sulphide Nickel (recoverable) and silicate Nickel (unrecoverable). It is unknown to Bravo whether the nickel content in the “Historic Estimate” has been modified to account for this or not.

6.4 Historic Metallurgical Testwork

The Project is an intermediate stage exploration project and, as a result, historical metallurgical testwork has been limited to first pass (or fatal flaw) metallurgical testwork.

This testwork is early stage, however it indicates that a “saleable” Pd-Pt- Au-Ni concentrate could potentially be produced.

The Luanga deposit is the largest PGE deposit in South America (Mansur et al., 2020) and has two distinct styles of PGE mineralization. The first type, termed as the “Sulphide Zone”, consists of 10-50m thick intervals with disseminated base metal sulphides (pentlandite, pyrrhotite and minor chalcopyrite) located along the upper contact of the intrusion’s Ultramafic Zone. The Sulphide Zone extends along the entire length of the intrusion and hosts the bulk of the historic PGE mineralization at Luanga. There is a positive correlation between the PGE and S content. The second type of PGE mineralization, termed “Low S", consists of several zones of 2-10m thick stratabound PGE mineralization within a sequence of interlayered ultramafic and mafic cumulates located above the Sulphide Zone.

The focus of historical metallurgical testwork has been on samples from the Sulphide Zone, since this represents the bulk of the historic PGE mineralization identified a Luanga. Work was performed at a number of facilities between 2002 to 2007 and can be summarised as follows:

- Mintek, 2002
- CDM (internal VALE lab), 2002-2004
- SGS Lakefield, 2003-2004

Initial work by Mintek and CDM used a higher-grade sample (5.0g/t Pt+Pd+Au) from the Sulphide Zone. Metallurgical testwork by both companies demonstrated that recoveries to concentrates of approximately 70% could be achieved using conventional milling, griding and froth flotation, similar to other sulphide PGE deposits globally.

Testwork subsequently carried out SGS Lakefield (Canada) on a lower grade 200kg sample from the Sulphide Zone, also indicated that recoveries of approximately 70%, with a concentrate from 0.78% of the fed mass of 132 g/t PGE+Au. Internal work by CDM using the same sample also supported these results.

Results of historical metallurgical work are summarised in Table 6-3.

Table 6-3: Results of historical metallurgical work

Sample	Lab	Test	Average Grade	Mass	Concentrate Grade	Recovery
M1	Mintek	Lock Cycle Test	5,00	2.2%	137 g/t 3E*	66.2
M2	CDM	Open Circuit	5,00	3.4%	104 g/t 3E	72.1
S1A3	CDM	Lock Cycle Test 1	1.70	1.2%	95 g/t 3E	73.0
S1A3	CDM	Lock Cycle Test 2	1.70	0.89%	137 g/t 3E	69.3
S1A3	Lakefield	Lock Cycle Test	1.49	0.78%	132 g/t 3E	69.4

**3E = Pt+Pd+Au. No data is available for Rh or Ni.*

6.5 Historic Bulk Density

Bulk density measurements (weight in water-weight in air) were completed on 2,962 pieces of fresh and weathered core from 14 individual drill holes, including mineralized and non-mineralized rocks. Weathered pieces were infused and sealed with paraffin. The weight was obtained using an electronic scale (Urano manufacturer, model 10000/1) with a nominal capacity of 10 kg and precision of 0.5 g.

The bulk density measurements for the main lithotypes from Luanga deposit are presented on Table *6-4*.

Table 6-4: Density measurements by lithotype

Lithotype	Nb. Samples	Mean	Median	Minimum	Maximum	Standard Deviation
CATAX	347	2.92	2.93	2.66	3.11	0.05
CBX	12	2.98	2.97	2.93	3.05	0.03
CR	3	2.89	2.88	2.85	2.93	0.04
MDI	271	2.96	2.98	2.63	3.56	0.14
MGB	13	2.83	2.84	2.72	2.97	0.07
MLGB	16	2.84	2.84	2.81	2.87	0.02
MNO	129	2.85	2.84	2.72	2.96	0.05
MNRT	38	2.88	2.87	2.70	3.05	0.07
MPD	8	2.81	2.84	2.71	2.89	0.06
MPDT	58	2.90	2.90	2.68	3.15	0.14
MPX	785	2.99	2.99	2.66	3.32	0.09
MPXF	331	3.06	3.08	2.8	3.31	0.09
MPXT	85	2.92	2.92	2.62	3.07	0.08
MTST	674	2.94	2.94	2.67	3.34	0.06
SPTM	23	2.72	2.70	2.64	2.92	0.06
SPTN	169	2.94	2.94	2.78	3.07	0.05
TOTAL	**2962**	**2.90**	**2.90**	**2.72**	**3.10**	**0.07**

7 GEOLOGICAL SETTING AND MINERALIZATION

The following is summarized from published academic works describing the regional geological framework of the Amazon Craton.

7.1 Regional Geology

The Brazilian Shield extends over much of South America east of the Andes Mountains. The major tectonic units of the Shield are the Mesoproterozoic Amazon, São Francisco and the Rio de la Plata Cratons, surrounded by Neoproterozoic orogenic belts (Figure 7-1). There are many smaller cratonic fragments, such as the São Luís Craton. Paleoarchean rocks occur as small cratonic nuclei in north-eastern Brazil. The cratons contain voluminous 2,600-3,000Ma granitic and greenstone belts and a large volume of Paleoproterozoic rocks. The Neoproterozoic orogenic belts are dominantly derived from re-working of older Archean crust but also include Mesoproterozoic sediments and volcanogenic sediments. Major orogenic activity ceased in the Cambrian. Deformation of the Shield in the Phanerozoic is limited to re-activation of older sub-vertical shear zones.

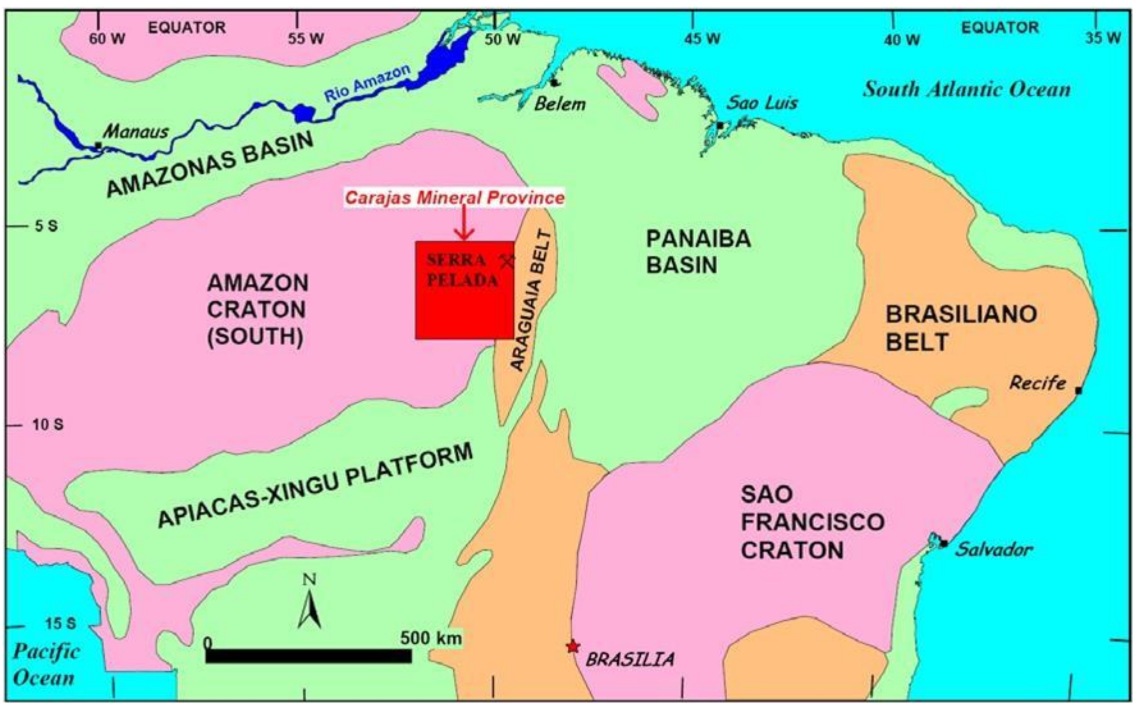

Figure 7-1: Simplified regional geology of the north/northeast portion of Brazil

The Amazon Craton is the largest preserved block in the Brazilian Shield. Deformation is concentrated along the Neoproterozoic Araguaia orogenic belt on the eastern flank of the south Amazon craton.

Like similar PGE deposits (such as Chalice's Gonneville deposit (Julimar Project)), Luanga is intruded close to the edge of the Amazon craton edge, within a dilation splay at the end of the Cinzento Shear.

Gold deposits are concentrated in the Archean and Paleoproterozoic terranes, including the Archean Carajás Mineral Province of the Amazon Craton. The Carajás Mineral Province is composed mostly of granites and greenstone belts and hosts the largest gold deposits in the Amazon Craton, including Serra Pelada and the Salobo and Igarapé Bahia Cu-Au deposits.

7.1.1 The Carajás Mineral Province

The Carajás Mineral Province is one of the most important mineral provinces of the South American continent, hosting several world-class Fe, Cu-Au and Ni deposits. It is in the south-eastern portion of the Amazonian Craton, bounded by the Neoproterozoic Araguaia Belt in the east and south, and overlain by Paleoproterozoic sequences generically assigned to the Uatumã Supergroup in the west (Araújo and Maia, 1991; Docegeo, 1988). To the north, where Paleoproterozoic gneiss-migmatite-granulite terrains predominate (Vasquez et al., 2008), geological limits are not precisely defined. The Carajás Mineral Province is subdivided into two Archean tectonic domains: the older Mesoarchean Rio Maria Domain to the south and the younger Neoarchean Carajás Domain to the north (Araújo and Maia, 1991; Araújo et al., 1988; Dall'Agnol et al., 2006; Docegeo, 1988; Feio et al., 2013). A regional E–W shear zone, known as the Transition Subdomain (Feio et al., 2013), separates the Rio Maria and Carajás domains (Figure 7-2).

The Rio Maria Domain is a typical granite–greenstone terrain (Vasquez et al., 2008). The Andorinhas Supergroup comprises several individual Mesoarchean greenstone belts (2904 ± 29 Ma) and metasedimentary rocks (Huhn et al., 1986; Souza and Dall'Agnol, 1996; Souza et al., 2001). The recent characterization of spinifex-textured komatiites in a greenstone belt sequence within the Transition Subdomain (Siepierski and Ferreira Filho, 2016) suggests that granite–greenstone terrains extend further north than indicated in previous regional maps.

The basement of the Carajás Domain consists mainly of gneiss-migmatite-granulite terrains of the Xingu Complex (Machado et al., 1991; Pidgeon et al., 2000). The evolution of the Carajás Domain is widely discussed. Different models have been proposed to explain the evolution of the Archean volcano-sedimentary sequences, which includes the large sequence of metabasalts of the Grão Pará Group (ca. 2.75 Ga). While several studies have proposed an intraplate rift model (Gibbs et al., 1986; Villas and Santos, 2001), others have suggested subduction-related environments (Dardenne et al., 1988; Teixeira and Eggler, 1994). These volcano-sedimentary sequences are covered by low-grade metamorphic sequences of clastic sedimentary rocks of the Águas Claras Formation.

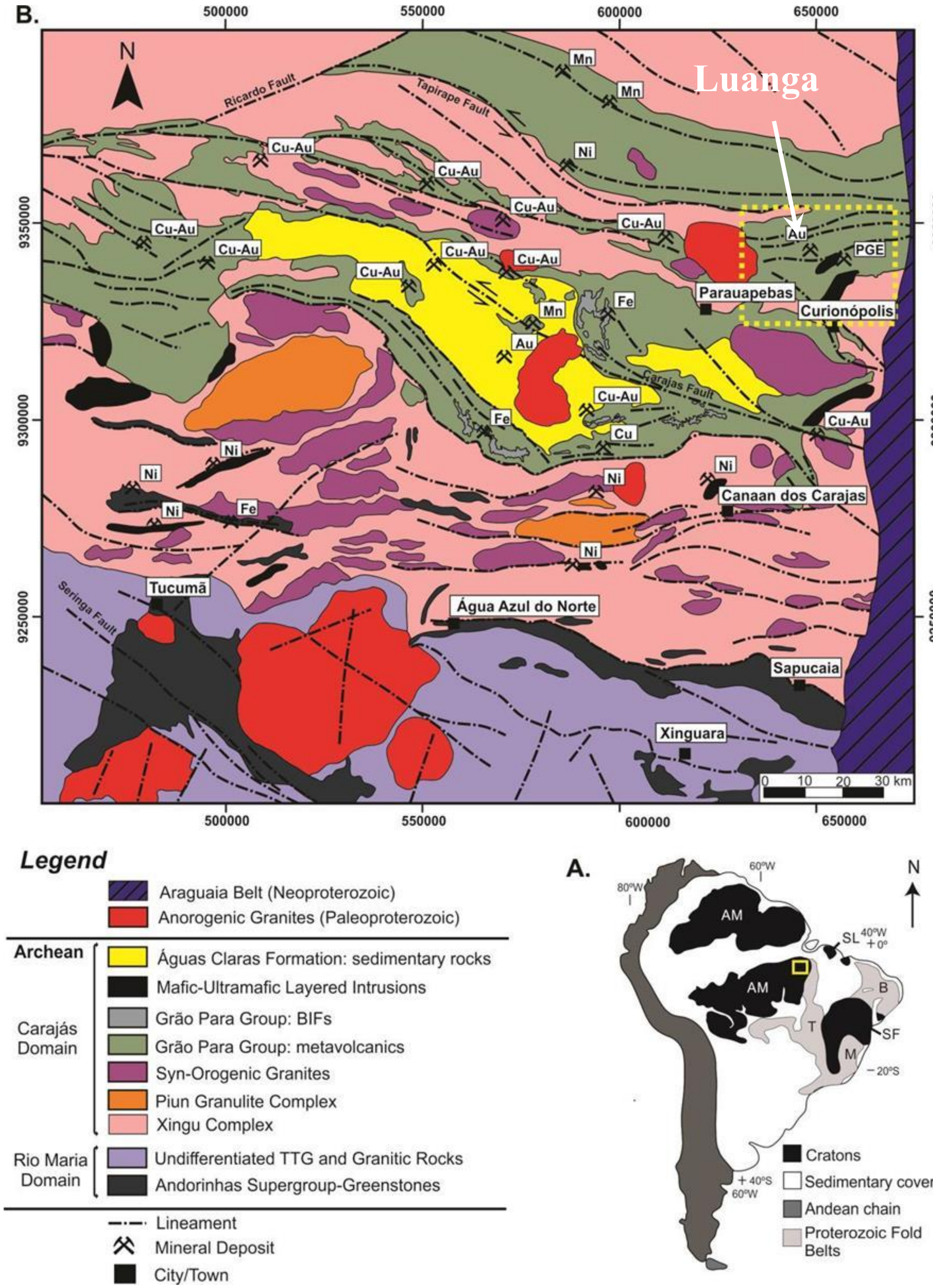

Figure 7-2: Geology and mineral deposits of the Carajás Mineral Province.
(Mansur, 2017)

Several mafic–ultramafic complexes intrude into both the Xingu Complex and the Archean volcano-sedimentary sequences (Docegeo, 1988; Ferreira Filho et al., 2007). These intrusions host large Ni laterite deposits (e.g., Onça-Puma, Vermelho and Jacaré) as well as PGE deposits (e.g., Luanga, Lago Grande) and were ascribed as part of the Cateté Suite in regional studies. Significant differences in the magmatic structure and evolution of the layered intrusions suggest, however, that they belong to different Neoarchean magmatic suites (Ferreira Filho et al., 2007; Rosa, 2014; Teixeira et al., 2015).

7.1.2 The Serra Leste Magmatic Suite

The Serra Leste Magmatic Suite (Ferreira Filho et al., 2007) consists of a cluster of small- to medium-size layered mafic-ultramafic intrusions located in the north-eastern portion of the Carajás Mineral Province (Figure 7-3). Mafic-ultramafic complexes are intrusive into gneissic rocks of the Xingu Complex and/or volcanic-sedimentary rocks of the Grão Pará Group. This suite was originally grouped based on the abundant PGE anomalies in the layered intrusions, disregarding any geological, stratigraphic or petrological consideration (Ferreira Filho et al., 2007). Magmatic ages of the layered intrusions overlap with the age of the bimodal volcanism of the Grão Pará Group (2,759 ± 2 Ma, U-Pb in zircon and 2,760 ± 11 Ma, U-Pb in zircon), supporting the interpretation that they are part of a major Neoarchean magmatic event (Machado et al., 1991; Ferreira Filho et al., 2007).

The architecture of the intrusion and the crystallization sequence described in the Luanga and Lago Grande complexes indicate an overturned layered sequence (Ferreira Filho et al., 2007; Teixeira et al., 2015). Even though the tectonic processes leading to the overturned sequence of layered rocks in the Lago Grande and Luanga complexes have so far not been studied in detail, regional structural studies in the Serra Leste region indicate significant tectonic transport that may lead to major overturned blocks (Holdsworth and Pinheiro, 2000; Tavares, 2015).

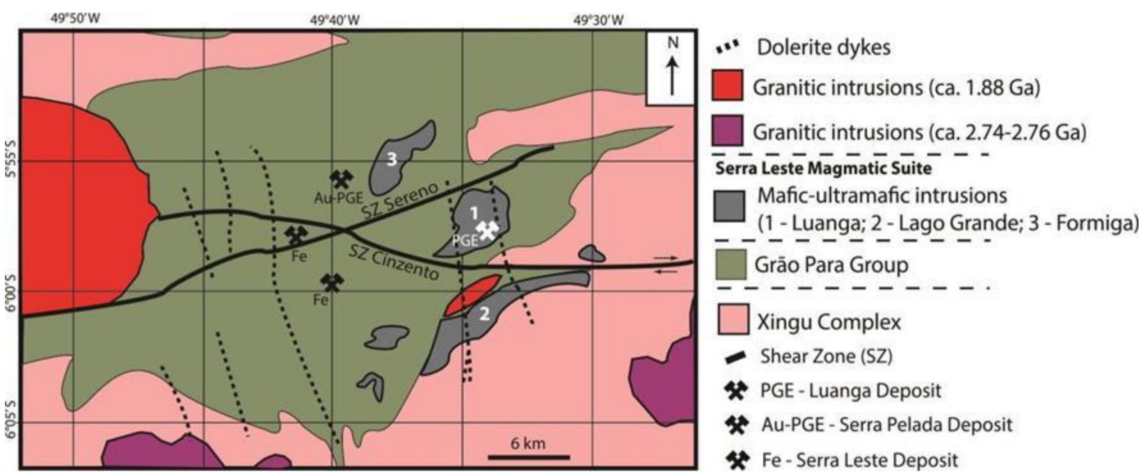

Figure 7-3: Geology of the Serra Leste region.
(Mansur, 2017)

7.2 Regional Geophysics

The Luanga Project area is covered by airborne geophysical surveys carried out on behalf of the Brazilian Government and currently available in the public domain. These surveys include magnetic, radiometric and electromagnetic data obtained by Geoterrex-Dighem in 1999, using flight lines oriented along an E-W direct with lines spaced 250m apart. Control flight lines were N-S oriented and spaced 5km apart. Flying height was 120m above the ground.

Magnetic field anomalies highlight the structural framework and main geological features in the area. High signal values are associated with meta-ultramafic rocks of the mafic-ultramafic complexes and magnetite-rich shear zones related to the Serra Pelada Divergent Splay (SPDS). The meta-ultramafic rocks include dunite, meta-peridotite, serpentinite, sulphide-rich zones with pyrrhotite, and shear zones with magnetite. Formation of magnetite in meta-peridotite occurs simultaneously with talc and serpentine as a product of olivine alteration.

The axes of the anomalies appear as anastomosed features that are ductile shear zones. Magnetite-rich, sub-parallel splays related to the Cinzento Transcurrent Shear Zone (“CTSZ”) crosscut the Luanga mafic-ultramafic complex (Figure 7-4). Magnetic highs are associated with magnetite-enriched meta-ultramafic rocks, such as dunite, peridotite, serpentinite, and talc-schist, as well as shear zones that truncate these complexes and remobilized the magnetite from the meta-ultramafic units. PGE mineralization in the mafic–ultramafic Luanga Complex is associated with pyrrhotite-rich meta-pyroxenite and chromatite layers close to the contact between meta-pyroxenite and peridotite/serpentinite.

Discrete circular high magnetic anomalies can be seen in the central part of the area. These anomalies are associated with shallow depth magnetic banded iron formation sources such as the Serra Leste iron deposit.

Discontinuities in the high values of the N-S or NNW anomaly patterns likely represent magnetite-enriched gabbroic dikes, which are widespread in the Itacaiúnas Supergroup.

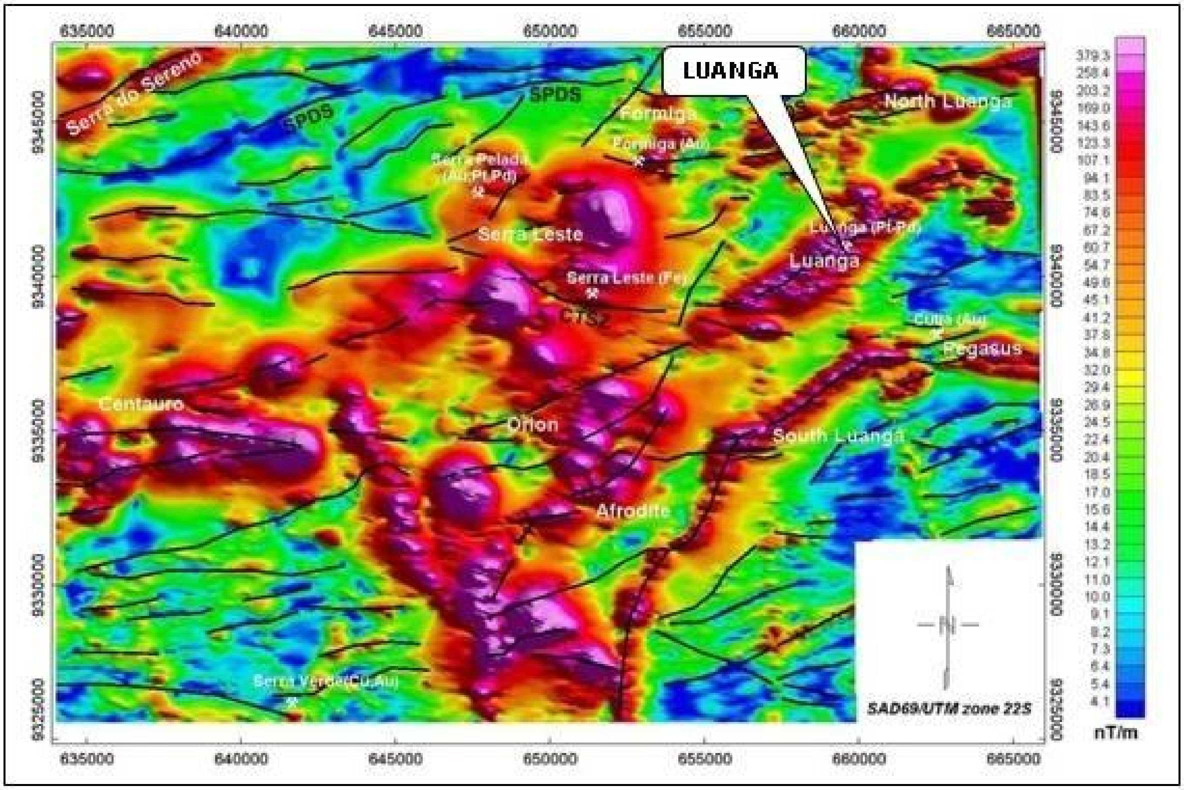

Figure 7-4: Regional Aeromagnetic image.
(CPRM data, 1999)

The transient electromagnetic ("TEM") data shows conductive zones in: (a) the NE portion of the map, where there are NE-trending aligned features (part of the Serra Sereno), which may represent carbonate and manganese-rich phyllite of the Rio Fresco Group; (b) the surroundings of the Formiga deposit, highlighting the thick alteration mantle, the meta-ultramafic rocks of the Formiga complex as well as banded magnetite-rich formations; (c) the mafic-ultramafic Luanga complex, where sulphide-related PGE mineralization occurs; and (d) the Serra Pelada Au-Pd-Pt deposit, where highly conductive zones occur due to the presence of carbonaceous meta-siltstone (Figure 7-5).

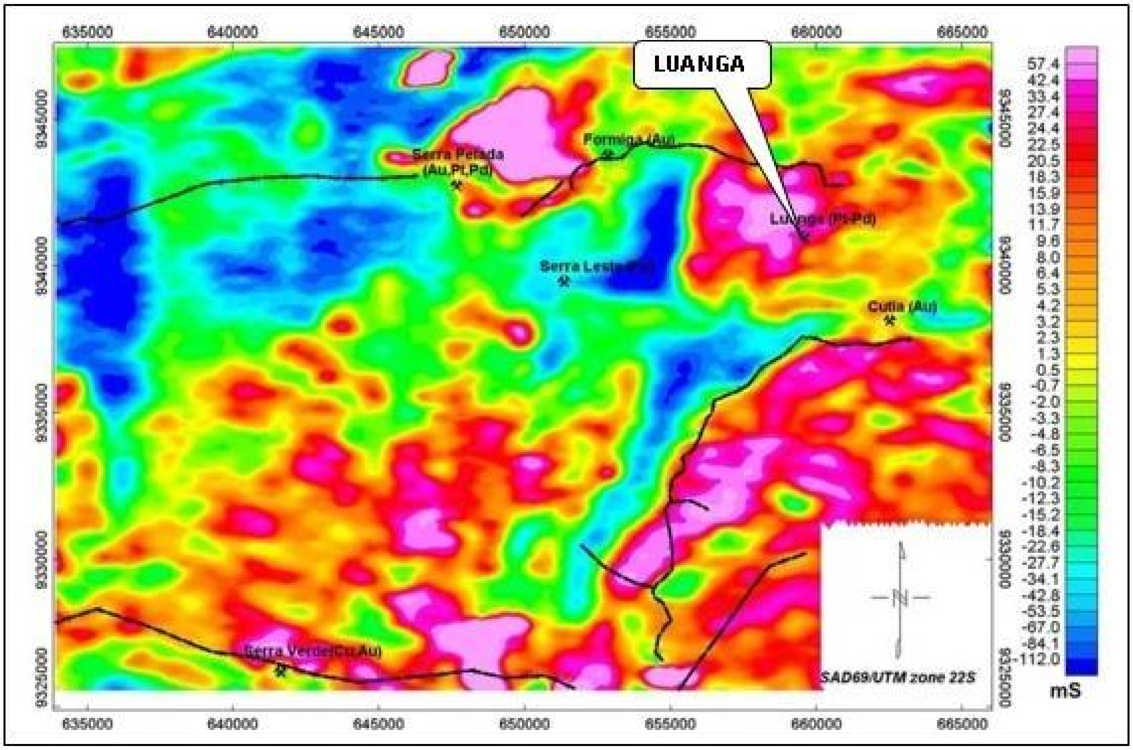

Figure 7-5: Regional Airborne TEM Image.
(CPRM data, 1999)

High values of total radiation count can be related to the presence of Archean granitic rocks of the Estrela Granite Complex, the Xingu Complex and Paleoproterozoic Cigano-type granites. Intermediate to high total radiation count values in the central area reflects the sericite-rich metasiltstones of the Rio Fresco Group.

Low values of total gamma radiation count are associated with outcrops of the mafic–ultramafic complexes (a = Luanga, b = Luanga South) and appear as dark colours (Figure 7-6). It is interesting to note that immediately east of the Serra Pelada Au-Pt-Pd deposit there is a small area of low values that is compatible with the radiometric signature of meta-mafic to ultramafic units. The possible presence of buried meta-mafic and meta-ultramafic rocks near this mineralization could provide a source for the Pt and Pd associated with Au in the Serra Pelada deposit.

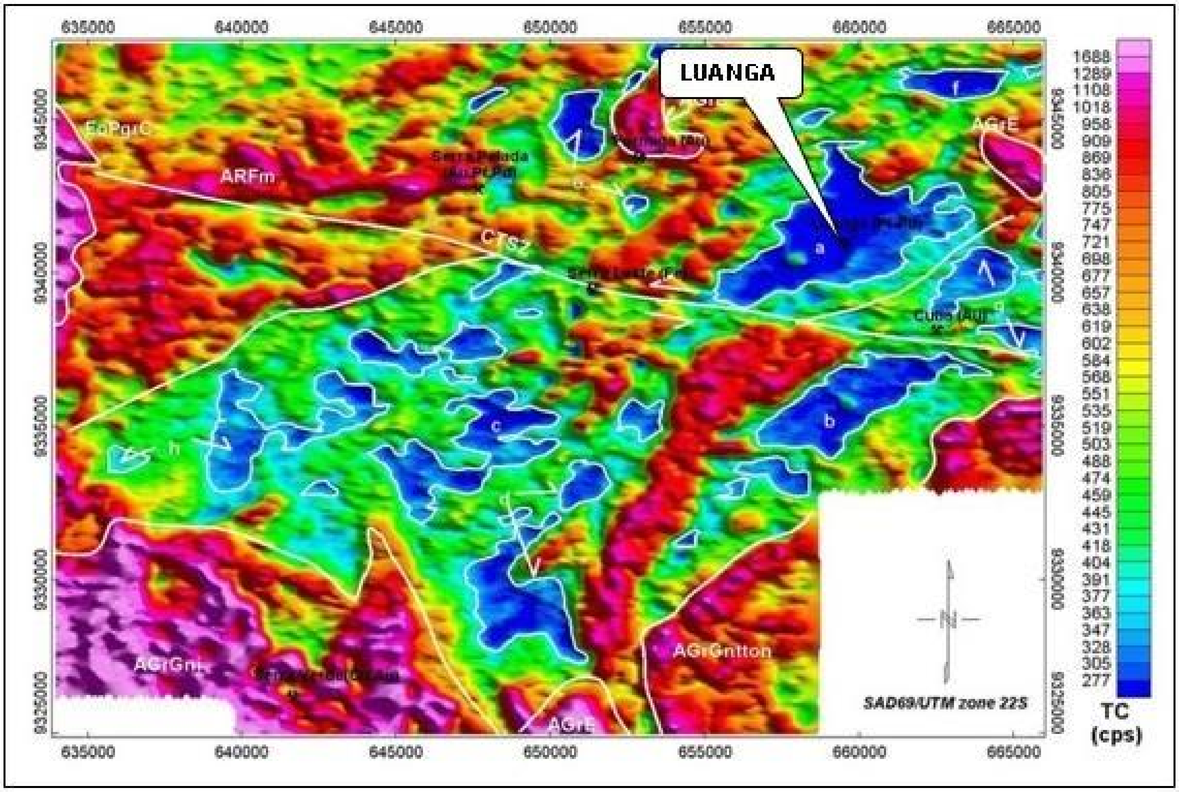

Figure 7-6: Regional air-radiometric image (Total Count Channel)
(CPRM data, 1999)

7.3 Local Geology

The principal geological unit on the mineral property is the Luanga Layered Mafic-Ultramafic Complex (The "Luanga Complex"). The Luanga Complex consists of a 6km long and up to 3.5km wide (~18 km²) sequence of mafic-ultramafic layered rocks. There is an abundance of unweathered rocks, in comparison to adjacent areas of the Carajás Mineral province, that consist mainly of massive blocks and boulders. The most prominent geomorphologic feature consists of an elongated arc-shaped smooth hill sustained mainly by ultramafic rocks, up to 60m higher than flat areas where gabbroic rocks prevail. The layering forms an arc-shaped structure that matches the morphology. Pre-existing host rocks of the Luanga Complex consist of highly foliated gneiss and migmatite of the Xingu Complex in the south/southeast and mafic volcanics and iron formations of the Grão Pará Group in the north/west (Figure 7-7).

The central portion of the Luanga Complex has the thickest sequence of layered rocks. To the north and northeast, the layered sequence is truncated by granitic intrusions, and to the south it becomes progressively thinner. The Luanga Complex and host rocks are crosscut by NNW-SSE diabase dykes. These vertical dykes are up to several metres wide and consist of fine- to medium-grained intergranular to ophitic textured rocks with thin aphanitic chilled margins. Diabase dykes consist mainly of clinopyroxene, olivine and plagioclase, with accessory Ti-magnetite. They belong to a Proterozoic swarm of magnetic mafic dykes that occurs in the Serra Leste region (Teixeira, 2013; Teixeira et al., 2015).

Geological sections (Figure 7-7) defined by historical drilling indicate that igneous layers have steep dips to the SE. These sections indicate that the Ultramafic Zone overlies the Transition Zone, which overlies the Mafic Zone, suggesting that the layered sequence is tectonically overturned. An overturned layered sequence was previously described for the Luanga Complex (Ferreira Filho et al., 2007) and for the Lago Grande Complex (Teixeira, et al., 2015). These studies suggest the existence of regional scale structures leading to large, overturned blocks in the Serra Leste region.

The subdivision of the Luanga Complex into three zones, ‘Ultramafic’, ‘Transition’ and ‘Mafic’, is based on the different type and/or proportion of cumulus minerals. The estimated thickness of the layered sequence is some 3,500m thick, as indicated in both the stratigraphic column (Figure 7-7) and schematic block diagram (Figure 7-8) and supported by the extensive drilling in the central portion of the complex, which is likely to represent the axial portion of the original magma chamber.

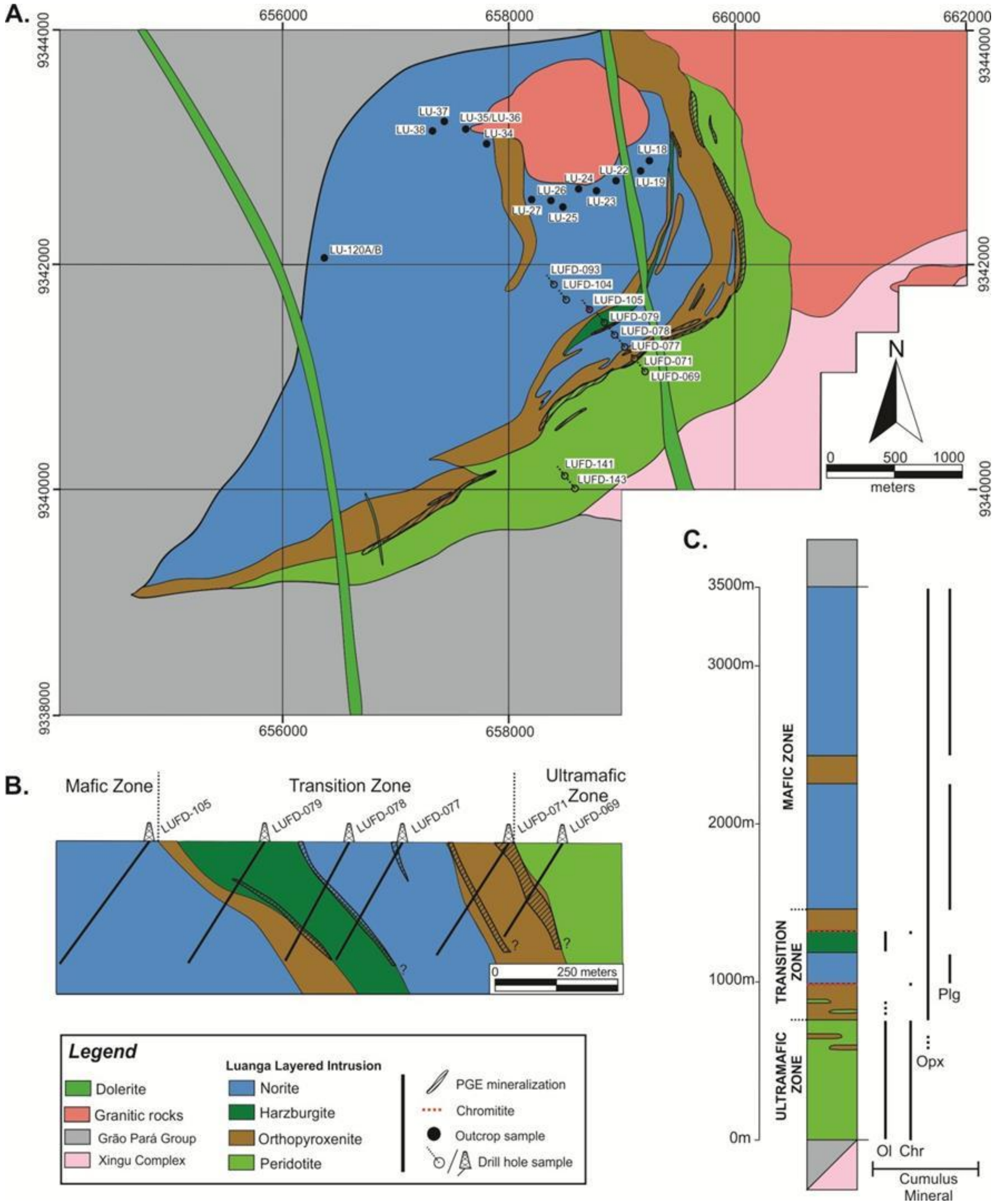

Figure 7-7: Luanga A) Geology. B) Section of the central portion, C) Stratigraphic column.
(Mansur, 2017) . The area illustrated lies entirely within the property boundary.

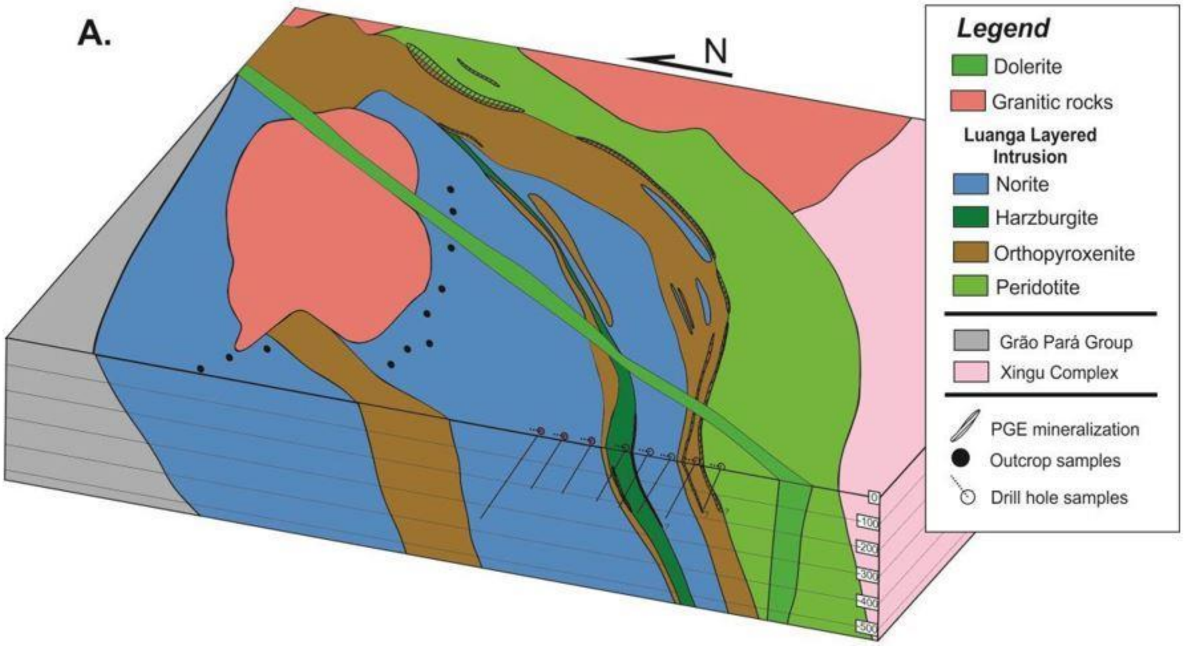

Figure 7-8: Simplified 3D Luanga model showing overturned structure.
(Mansur, 2017). The area illustrated lies entirely within the property boundary.

7.3.1 Ultramafic Zone

The Ultramafic Zone, about 5km long and up to 1km wide, is up to 800m thick and consists of serpentinites (i.e. metamorphosed peridotite) with a few metres thick orthopyroxenite lenses at the upper portions (facing criteria, considering the overturned sequence). The lower contacts of the Ultramafic Zone with the Xingu Complex and Grão Pará Group are poorly exposed and was mapped mainly by soil sample assays of the geochemistry surveys. The contact with the stratigraphically overlying Transition Zone is gradational and characterized by a 5-10m thick sequence of interlayered orthopyroxenite and serpentinite. Serpentinite is a massive fine-grained rock (Figure 7-9), with discrete cross-cutting domains of foliated magnetite-serpentine schist.

These foliated domains are up to several metres thick and probably result of discrete high strain zones. Magmatic textures are usually preserved in massive serpentinites, but primary igneous minerals are commonly partially to extensively replaced by metamorphic minerals. Based upon the domains with best preserved textures and minerals, serpentinites are olivine (Ol) cumulates with abundant intercumulus minerals. Chromatite (Chr) is a common accessory mineral (~2 vol%) suggesting its occurrence as a liquidus (or cumulus) mineral throughout the Ultramafic Zone. Chromatite occurs in relict cores of fine-grained euhedral crystals variably replaced by magnetite (or ferrichromatite) in the outer rim or along fractures.

Serpentinites have variable modal proportions of serpentine, chlorite, talc, amphibole (tremolite/actinolite) and magnetite, as the result of extensive replacement of olivine and intercumulus minerals. Textural and mineralogical features indicate that the Ultramafic Zone consists mainly of olivine+chromatite cumulates with ortho-to- mesocumulate textures, the later consisting of abundant intercumulus plagioclase (Pl) and orthopyroxene (Opx).

7.3.2 Transition Zone

The Transition Zone is about 5km long and up to 1km wide, comprises a pile of interlayered ultramafic and mafic cumulate rocks, which is up to 800m thick. Interlayering of different rocks types in different scales (from a few centimetres up to dozens of metres), is a distinctive feature of the Transition Zone. Cumulate rocks have variable textures, from adcumulate to orthocumulate, and variable assemblages of cumulus and intercumulus minerals. The most common rock types are orthopyroxenite, harzburgite, norite and chromatite, but minor dunite, troctolite, olivine orthopyroxenite and melanorite occur in the Transition Zone.

Orthopyroxenite is a medium- to coarse-grained orthopyroxene cumulate. The texture varies from adcumulate (Figure 7-9) to meso- and orthocumulate with plagioclase as the predominant intercumulus mineral. The transition from an adcumulate orthopyroxenite to orthocumulate rocks (i.e., plagioclase orthopyroxenite or melanorite) is commonly gradational and result from continuous upward increase in plagioclase content.

Harzburgite is a medium- to coarse-grained olivine and chromatite cumulate with meso- to orthocumulate texture. Most rocks consist of abundant oikocrysts of orthopyroxene (harzburgite) or orthopyroxene and plagioclase (plagioclase harzburgite) enclosing several olivine and chromatite crystals (Figure 7-9). Olivine crystals included in orthopyroxene oikocrysts show corrosion features (Figure 7-9) indicating a peritetic reaction of cumulus olivine and intercumulus liquid (i.e, Ol + liquid = Opx).

Norite is a medium-grained orthopyroxene and plagioclase adcumulate rock (Figure 7-9). It occurs as discontinuous layers commonly following a gradational upward fractionation from orthopyroxenite to plagioclase-orthopyroxenite and norite.

Chromatite layers with variable thickness and textures occur mainly in the upper portions of the Transition Zone and the lowermost portion of the Mafic Zone. The thickest chromatite is an up to 60 cm chromatite-rich layer located at the contact between the upper harzburgite and orthopyroxenite layers from the Transition Zone. Several thin chromatites (< 10 cm-thick) occur in the Transition Zone and in the lowermost portion of the Mafic Zone. Thin chromatites hosted by noritic rocks are commonly preceded by a thin layer of harzburgite, These chromatites are fine- to medium-grained chromatite cumulates with intercumulus plagioclase and orthopyroxene The upward transition from massive chromatite, to chain textured chromatite and disseminated chromatite is common and provides a facing criterion for the igneous stratigraphy of the Luanga Complex (Figure 7-9).

7.3.3 Mafic Zone

The Mafic Zone, about 5 km long and up to 3km wide, comprises an up to 2,000m-thick sequence of monotonous noritic rocks (i.e., orthopyroxene and plagioclase cumulates). Minor interlayered ultramafic rocks in the Mafic Zone consist mainly of orthopyroxenite. These rocks are similar to those described in the Transition Zone. Medium-grained norite consisting of tabular plagioclase and anhedral orthopyroxene is the characteristic rock type of the Mafic Zone (Figure 7-9). These rocks are adcumulates except for rare domains with interstitial quartz and/or clinopyroxene.

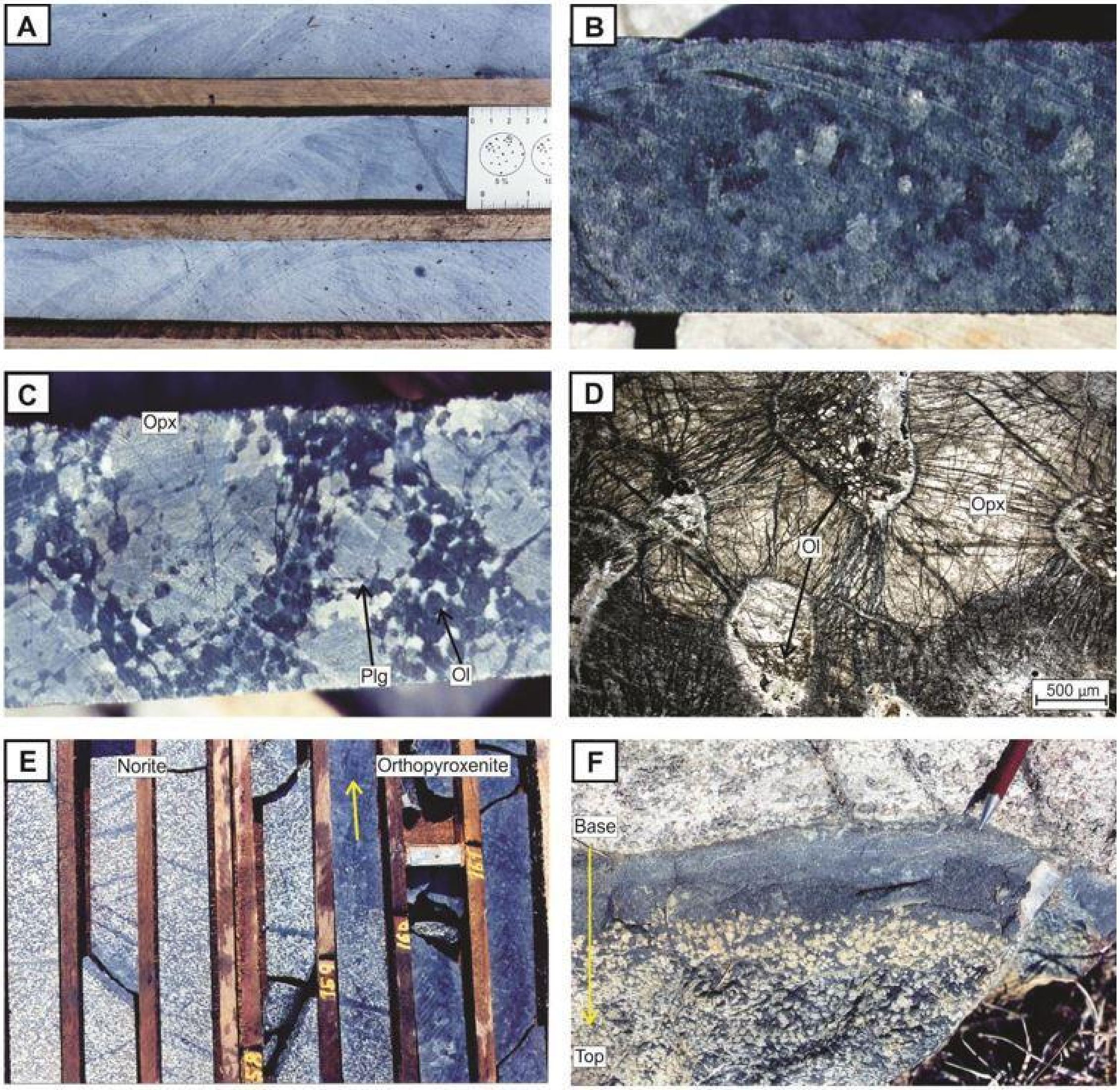

Figure 7-9: Luanga rock types
A) Serpentinite B) Adcumalte orthopyroxenite C) Harzburgite D) Harzburgite E) Orthopyronenite norite contact F) Chromatite layer.

7.3.4 Metamorphism

Metamorphic assemblages commonly replace primary igneous minerals of the Luanga Complex. This metamorphic alteration is heterogeneous and characterized by an extensive hydration that largely preserves primary textures, bulk rock compositions and the compositional domains of igneous minerals. The penetrative fabric is restricted to narrow domains of up to a few metres across, and igneous textures are identified in adjacent non-deformed domains. These assemblages include serpentine + talc + magnetite ± cummingtonite in replaced olivine-bearing ultramafic rocks, talc + serpentine + magnetite ± cummingtonite in replaced orthopyroxenites, and hornblende + chlorite + epidote in replaced mafic rocks.

Metamorphic assemblages indicate temperatures of the greenschist facies and up to the amphibolite facies of metamorphism in the Luanga Complex (Ferreira Filho et al., 2007) and Lago

Grande Complexes (Teixeira et al., 2015). The age and type of metamorphism affecting the layered intrusions and their host metavolcanic and metasedimentary rocks in the Serra Leste region is a debated issue. However, the effect of metamorphism on sulphides is relevant for discussions regarding PGE mineralization hosted by sulphide-bearing and sulphide-poor cumulate rocks in the Luanga Complex.

The metamorphic alteration is heterogeneous as indicated by rocks with magmatic minerals and texture closely associated (i.e., a few metres, to tens of metres apart in drill core) with rocks where primary textures are preserved but magmatic minerals are extensively replaced. Apart from highly variable hydration, the compositions of variably altered samples are very similar when recalculated on anhydrous basis, thus supporting that metamorphic alteration does not promote a significant change in composition.

7.3.5 Mineralization

The following description of the mineralization at Luanga has been compiled based on published peer reviewed academic papers in international journals (especially Mansur, E.T. – 2017).

Several thin chromatites layers occur in the Luanga Complex mainly in the upper and lower stratigraphic portions of the Transition Zone, where they are hosted by ultramafic cumulates, and through the immediate contact with the overlying Mafic Zone, where they are hosted by plagioclase-bearing norite cumulates (Figure 7-10).Figure 7-10: Drill core showing a thin chromatite layer hosted by noritic rocks of the Mafic Zone.

This stratigraphic interval consists of several cyclic units interpreted as the result of successive influxes of primitive magma.

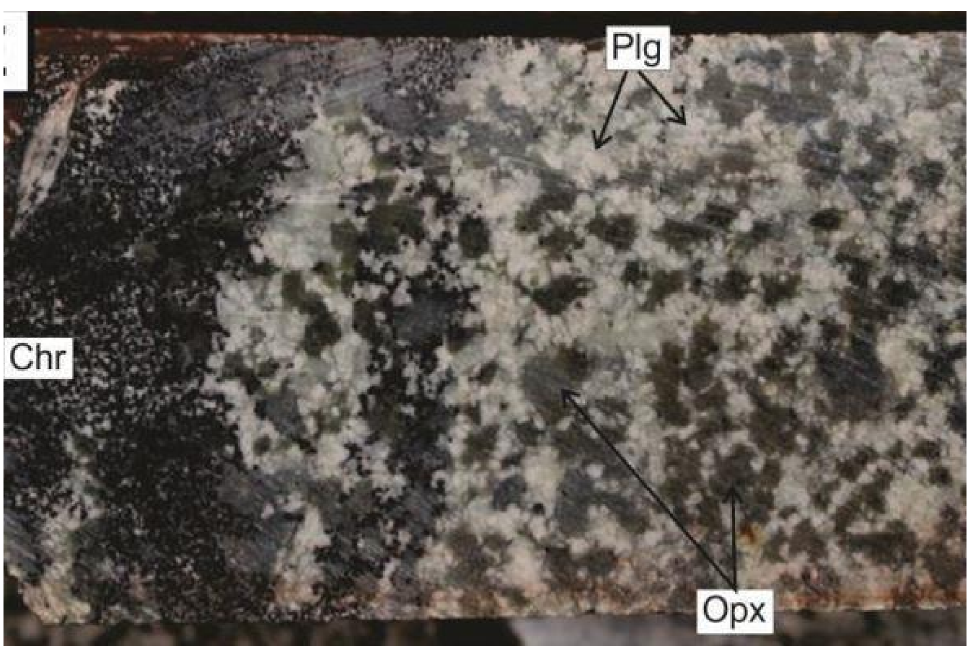

Figure 7-10: Drill core showing a thin chromatite layer hosted by noritic rocks of the Mafic Zone.

The Figure 7-11 and Figure 7-12 show sections with drill holes with significant intersections of mineralization.

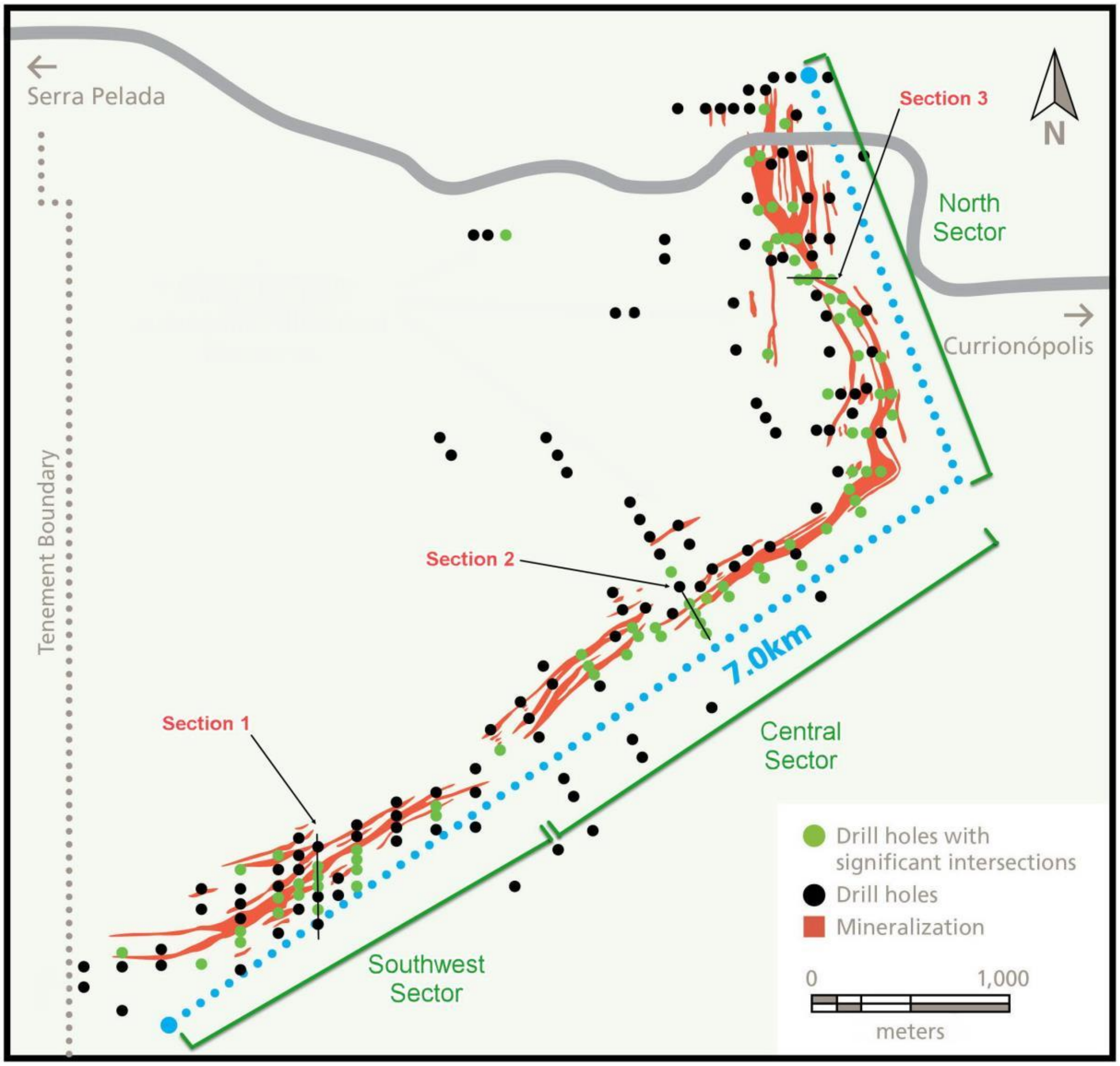

Figure 7-11: Location of historical VALE drill holes.

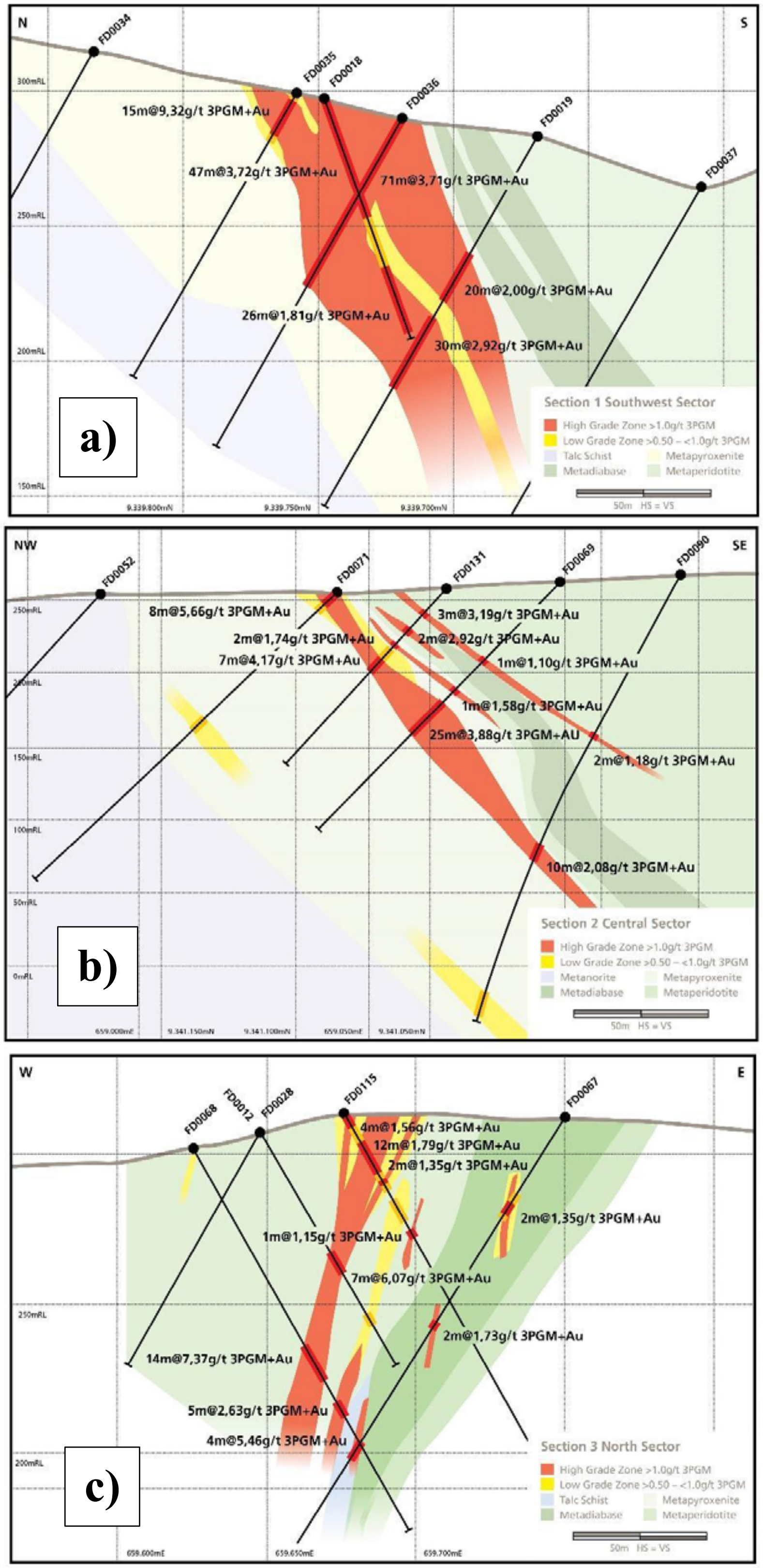

Figure 7-12: Drill sections shown in the Figure 7-11: (a) Section 1; (b) Section 2; (c) Section 3. These sections lie entirely within the property boundary. 3PGM = Pd + Pt+ Rh.

While some PGE mineralization is hosted in the chromatites, two main styles of PGE mineralization occur in the Luanga Complex are: (i) sulphide-related PGE mineralization (bulk of tonnage) and (ii) silicate-related PGE mineralization.

7.3.5.1 Sulphide-related PGE

PGE mineralization associated with disseminated sulphides hosts the bulk of PGE historical mineral resources of the Luanga Complex. The stratigraphic section hosting the PGE deposit, referred to as the “Sulphide Zone”, consists of a 10–50 m thick interval with disseminated sulphides located along the contact of the Ultramafic and Transition Zones (Figure 7-13).

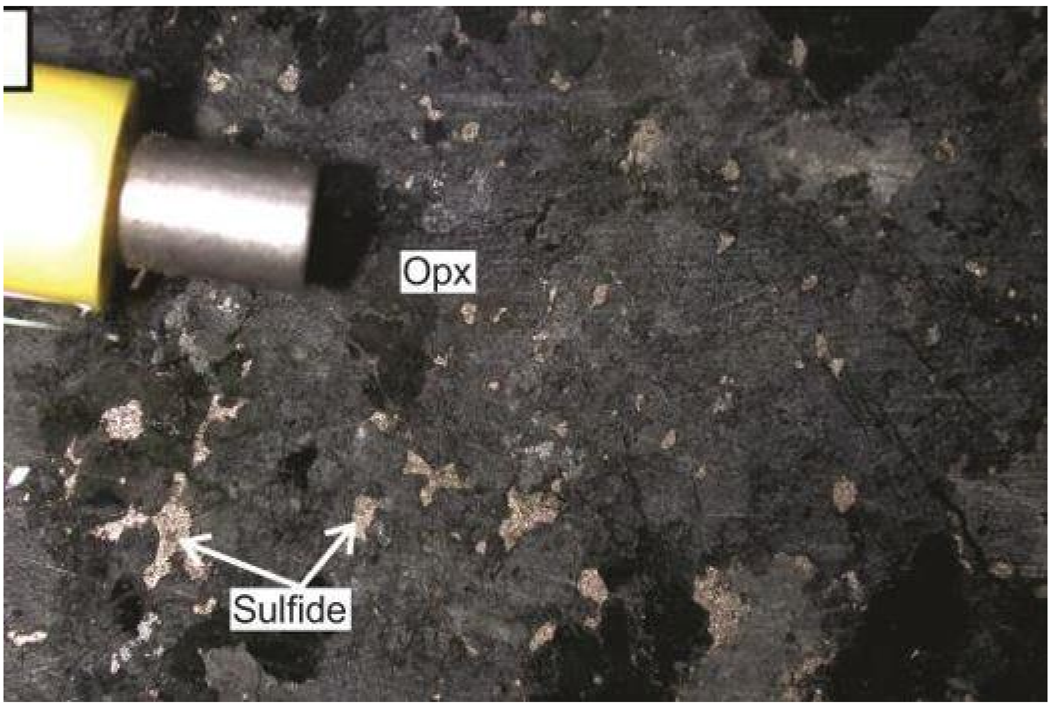

Figure 7-13: Drill core showing disseminated sulphides in PGE mineralized rock of the Sulphide Zone.

The Sulphide Zone is a zone of stratabound PGE mineralization consisting of interstitial sulphides (~ 1-3 vol. %) hosted by variably metamorphically altered orthopyroxenite and peridotite. The location of the Sulphide Zone along the contact zone is variable, such that sulphides may be hosted just by the lowermost orthopyroxenite of the Transition Zone or encompass both the orthopyroxenite and the underlying peridotite of the Ultramafic Zone. The mineralogy of the Sulphide Zone does not show major variation through the deposit and consists of base metal sulphides with pentlandite>pyrrhotite, >>chalcopyrite. Magnetite is commonly developed at the outer border or along fractures in sulphide blebs. Both magnetite and rare pyrite crystals occur in partially altered sulphide aggregates. Chalcopyrite is not abundant (< 10 vol% of the sulphides) and commonly occurs as fine-grained crystals at the borders of larger pentlandite and/or pyrrhotite crystals. Additionally, thin lamellar chalcopyrite occurs enclosed within pentlandite crystals. The metamorphic transformation of primary igneous silicates of the hosting rocks does not seem to significantly modify the sulphide mineralogy.

The occurrence of sulphide minerals is not restricted to the Sulphide Zone. Minor sulphide veinlets occur in thin (up to 8m thick) discontinuous shear zones located along the Luanga Complex. Sulphides in these zones have distinct texture and mineralogy described for the Sulphide Zone, showing typically intergrowth with amphibole and predominantly composed by chalcopyrite. These occurrences are described as hydrothermal sulphides.

PGE mineralization associated with sulphides, hosts the bulk of PGE historical mineral resources of the Luanga Complex.

7.3.5.1 Silicate-related PGE

This style of mineralization comprises PGE-mineralized rocks devoid of base metal sulphides and/or chromatite. The silicate-related PGE mineralization of the Luanga Complex consists of 2-10 m thick stratabound zones across the Transition Zone. These zones occur above the Sulphide Zone and do not show extensive lateral continuity. The silicate-related PGE zones commonly occur at the contact between layers of distinct cumulate rocks in the Transition Zone, but its occurrence within one rock type is also observed. The hosting rocks, mainly harzburgite and orthopyroxenite, do not show any distinctive texture or change in modal composition that characterize the PGE enrichment. As a result, the PGE enriched intervals were not identified during core logging or routine petrographic studies. These PGE-anomalous intervals were only indicated by their anomalous Pt-Pd assay values. A remarkable feature is the occurrence of anomalously Ni-rich olivines in harzburgites closely associated with silicate-related PGE mineralization.

All the different styles of mineralization at Luanga can be classified into two sub-classes based on based on the weathering processes:

- The fresh rock mineralization where sulphides and other minerals are completely unweathered.
- The oxide mineralization where the weathering and oxidization transformed the original mineralogy. The oxide mineralization includes the completely weathered material (saprolite) and the transition zone (saprock) between saprolite and fresh rock.

8 DEPOSIT TYPES

The alternating magmatic layers and the stratabound nature of magmatic sulphide mineralization encountered at Luanga Complex fit with the “reef” model of mineralization for layered mafic-ultramafic complexes such as Bushveld, Stillwater, Great Dyke, Penikat and the Skaergaard.

Layered mafic intrusions (“LMIs”) are significant sources of PGEs, base metal sulphides, chromatite, magnetite and ilmenite. These types of deposits (magmatic ore deposits) are derived from accumulations of crystal of metallic oxides, or immiscible sulphide, or oxide liquids that formed during the cooling and crystallization of magma, typically with mafic to ultramafic compositions, according Zientek, M.L., 2012.

"PGE reefs" are stratabound PGE-enriched lode mineralization in mafic to ultramafic layered intrusions. The term "reef" is derived from Australian and South African literature for this style of mineralization and used to refer to (1) the rock layer that is mineralized and has distinctive texture or mineralogy or (2) the PGE-enriched sulphide mineralization that occurs within a rock layer.

The dominance of the Bushveld Complex in world-wide production of minerals related to mafic layered intrusions (Figure 8-1) gives this intrusion an archetypal status in exploration and resource models for mafic intrusions.

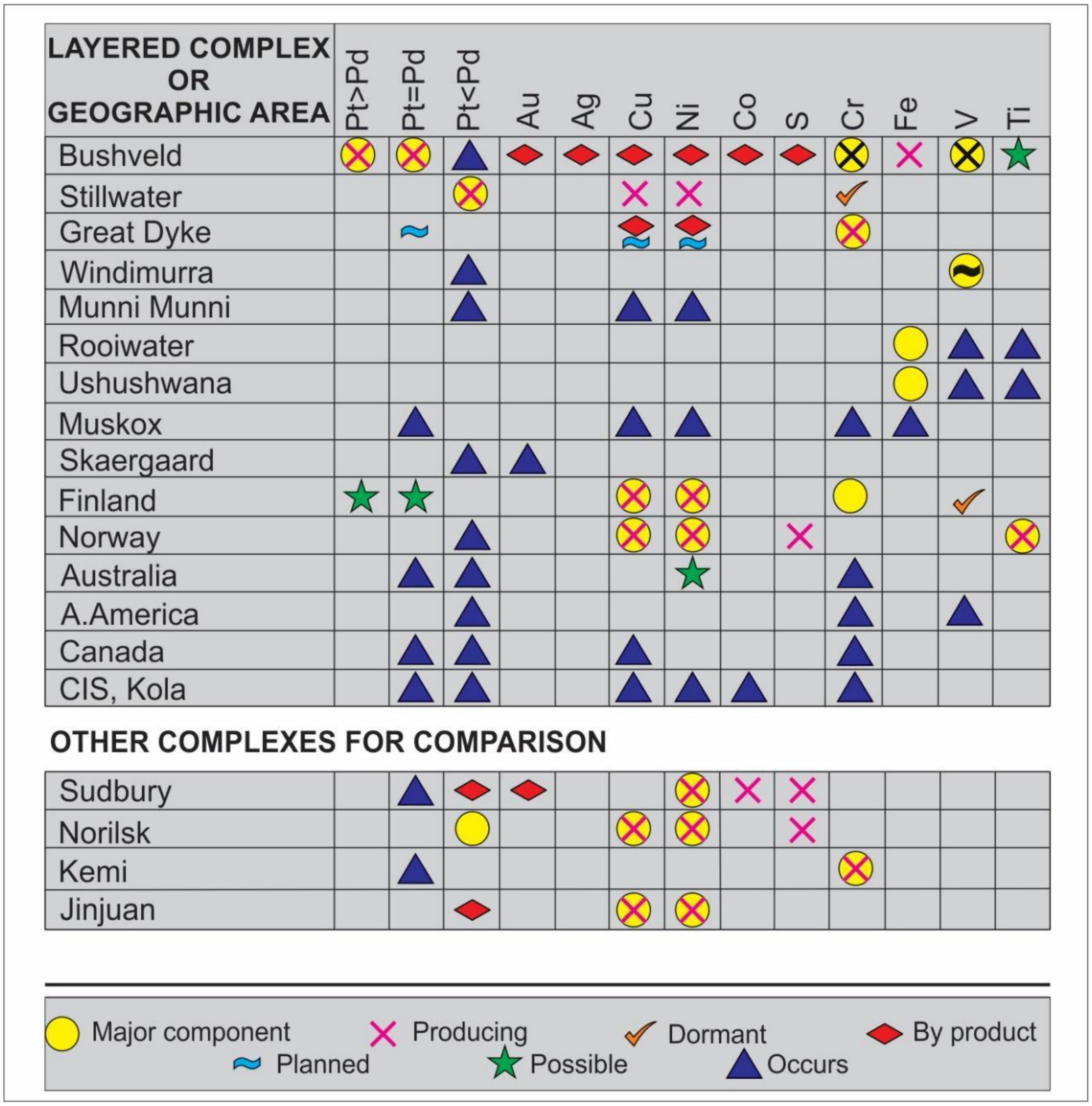

Figure 8-1: Chart summarizing mineralization in a variety of layered mafic intrusions.

A schematic model of an LIP-related layered intrusion is presented on Figure 8-2, showing the relative position and petrological affinities (e.g., chromatite vs. sulphide dominated; ultramafic vs. mafic; reef vs. contact styles of mineralization) of the differing types of LIP-related PGE-dominated magmatic sulphide deposits. A single layered intrusion is unlikely to host all of these styles of mineralization, and that PGE deposits with differing magmatic affinities can occur in similar positions within an intrusive system.

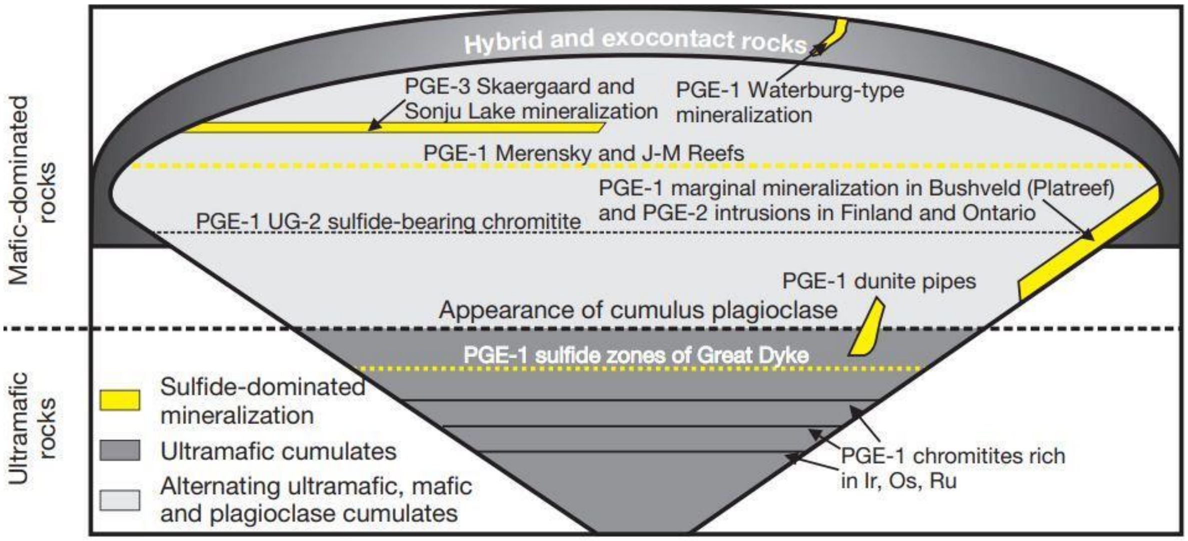

Figure 8-2: LIP layered intrusion schematic.
Adapted from Hoatson et al. (2006) and Naldrett (2010a)

9 EXPLORATION

Exploration completed by Bravo in the prior 3 years includes the following:

- September 2020 Field Programme and resampling

Salaries (geology and technical)	US$ 5,000
Field Costs	US$ 1,400
Vehicle Rental	US$ 819
Assaying	US$ 908
Sub-total	***US$ 8,127***

- Re-location of Historic Drill Core (to 23 March 2022) US$ 19,159

Sub-total	***US$ 19,159***

- Re-logging of Historic Drill Core

Salaries	US$ 10,400
Consumables	US$ 1,826
Sub-total	***US$ 12,226***

- Commencement of resampling programme: clean core, core photography, cutting and sampling

Salaries	US$ 2,549
Assay – Certified Reference Material (OREAS Australia)	US$ 2,696
PPE	US$ 719
Field Costs	US$ 3,603
Sub-total	***US$ 9,567***

• Orthophotography, Digital Elevation Model	US$ 8,287
• Re-survey of drill collars for every historic drill hole	US$ 6,451
Sub-total	***US$ 14,738***

- Geophysics

Reprocess Magnetic data (SGC Australia)	US$ 2,500
Reprocess IP data (Southernrock Geophysics Chile)	US$ 2,500
Sub-total	***US$4,500***

- Drilling

Preparation of drill pads – Bulldozer	US$ 12,000
Drill rig mobilization (3 drill rigs)	US$ 8,600
Assay – Certified Reference Material (AIMS Sth. Africa)	US$ 11,372
Diamond Drilling (352.25m)	US$ 67,381
Sub-total	***US$ 99,353***

TOTAL	***US$ 167,670***
FOREX USD/CAD = 1.26	***CAD$ 211,264***

The earliest exploration completed by Bravo was from the 21st to the 23rd of September 2020. Bravo staff visited VALE´s core facilities where they collected five verification core samples from four historical drill holes (Table 9-1). Samples were ¼ core from mineralized intervals previously sampled by VALE (Figure 9-2). Those samples were cut and bagged in VALE's facilities by Bravo personnel, who were responsible for the identification (the same ID as the original sample) and shipping of the sample bags.

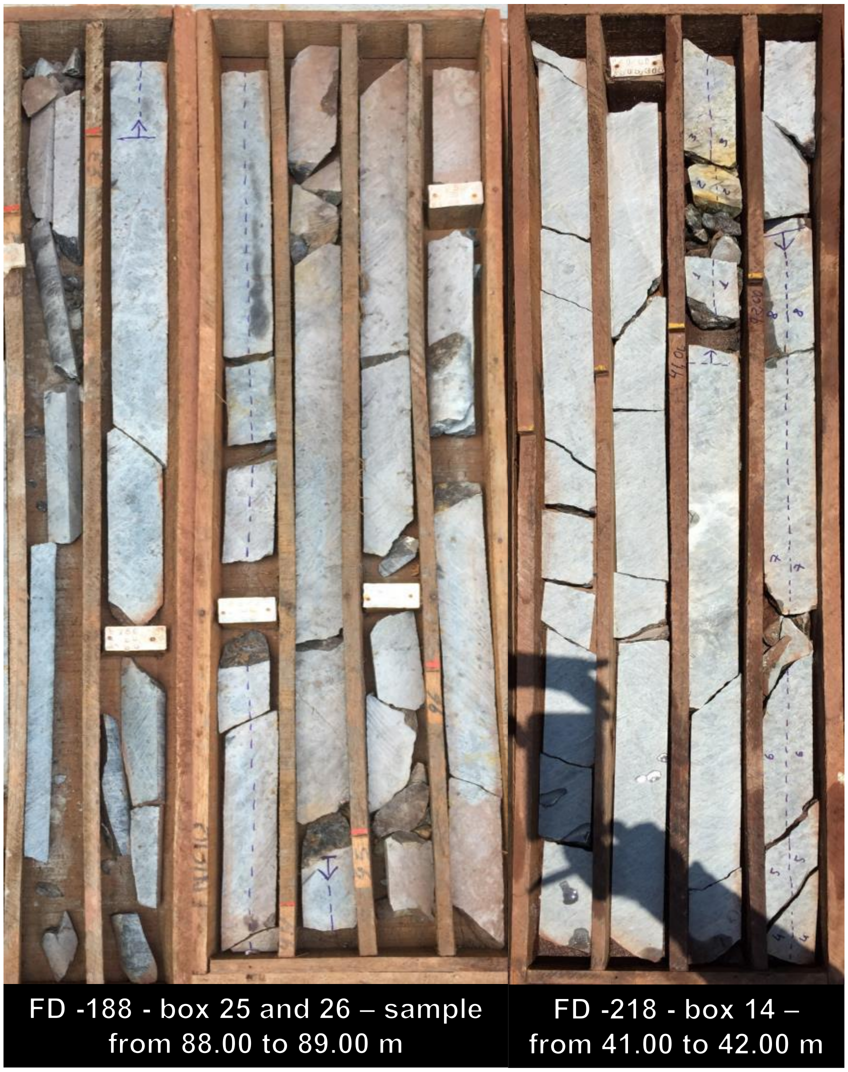

Figure 9-1: Examples of drill holes selected for independent re-sampling.

Samples chosen for assay analysis by Bravo were shipped directly to the analytical laboratory of ALS Brasil Ltda in Belo Horizonte, Minas Gerais state. ALS Brasil Ltda. Is a part of ALS Global, an international laboratory company with certified labs all over the world. ALS are ISO/IEC 17025:2017 and ISO 9001:2015 certified/accredited. At ALS, all samples were weighed, dried, crushed, split, and pulverized up to 85% <75µm.

All samples were analysed for Pt, Pd, and Au by fire assay with ICP-AES finish, and for Rh by fire assay with ICP-MS finish. The samples also were analysed for 48 elements by four acid and ICP-MS finish.

The results for the PGE and Au check assays from samples collected by Bravo staff are shown in the table below.

Table 9-1: Sampling PGE and Gold Check Results

DRILL HOLE	SAMPLE ID	From (m)	To (m)	Pt (ppm)		Relative Diff %	Pd (ppm)		Relative Diff %
				Bravo	VALE		Bravo	VALE	
PPT-LUAN-FD0036	LUFD-036	63.00	64.00	2.10	1.86	+13	4.03	3.23	+25
PPT-LUAN-FD0069	LUFD-069	121.00	122.00	1.37	1.58	-13	3.19	2.75	+16
PPT-LUAN-FD0188	PPT-LUAN-FD188-094	88.00	89.00	1.44	1.56	-8	2.36	2.96	-20
PPT-LUAN-FD0188	PPT-LUAN-FD188-193	183.00	184.00	>10.0*	10.00	0	9.05	5.80	+56
PPT-LUAN-FD0218	PPT-LUAN-FD218-044	41.00	42.00	5.73	6.39	-10	6.93	7.07	-2
DRILL HOLE	**SAMPLE ID**	**From (m)**	**To (m)**	**Au (ppm)**		**Relative Diff %**	**Rh (ppm)**		**Relative Diff %**
				Bravo	**VALE**		**Bravo**	**VALE**	
PPT-LUAN-FD0036	LUFD-036	63.00	64.00	0.14	0.16	-12	0.35	0.22	+59
PPT-LUAN-FD0069	LUFD-069	121.00	122.00	0.08	0.09	-8	0.24	0.24	+1
PPT-LUAN-FD0188	PPT-LUAN-FD188-094	88.00	89.00	0.07	0.06	+17	0.26	0.29	-9
PPT-LUAN-FD0188	PPT-LUAN-FD188-193	183.00	184.00	0.10	0.06	0	>1.00*	3.03	N/A
PPT-LUAN-FD0218	PPT-LUAN-FD218-044	41.00	42.00	0.55	0.64	-14	>1.00*	4.78	N/A

** Results above the detection limit of analytical method*

Although a small number of samples, the correlation (r2=0.74 to Pd and r2=0.99 to Pt – Figure 9 2) between original assays and verification assays is considered acceptable

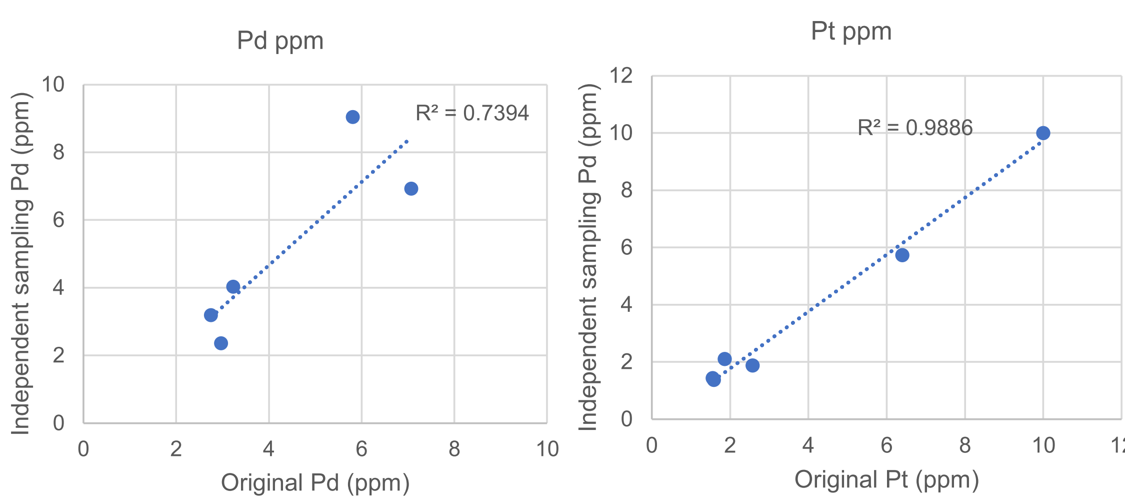

Figure 9-2: Correlation of Pt and Pd from VALE database versus Bravo results from check sampling.

Historic drill core is being relocated from the Vale core yard to the Bravo core yard. To date 16 complete diamond drill holes have been received at the Bravo core yard, representing a good cross section of the geology intersected by Drilling.

The next priority for drill core relocation has been placed on approximately 600 core boxes containing all of the remainder of known mineralised zones and their wall rock contacts from historic Luanga diamond drilling by Vale.

Following the receipt of historic drill core, Bravo technical staff restored the condition of the boxes, their markings and labels prior to re-logging the core geologically. Following this, re-logging, the historic core was cleaned and photographed before the commencement of resampling.

Figure 9-3: Historic Core now at the Bravo Offices.

For the re-sampling programme, half core was cut by a standard industry core saw and, in cases where only quarter remains, it was sampled in its entirety. All 16 holes received to date have been resampled, for a total of 727 samples collected. Certified Reference Materials (blanks and standards) were inserted through the sample sequence at a ratio of one in every twenty samples for each, resulting in a quality control sample after every ten primary samples. Standards were purchased from both OREAS in Australia and AIMS in South Africa. These standards cover a variety of grades, while also being the best matrix match for the type of mineralization at Luanga. Samples were submitted to ALS Brasil at their facility located in Parauapebas. The QP believes the samples to be representative and mimic the sample intervals chosen by Vale for each hole. ALS Brasil Ltda. Is a part of ALS Global, an international laboratory company with certified labs all over the world. ALS are ISO/IEC 17025:2017 and ISO 9001:2015 certified/accredited. Assay results are pending. The Authors believe the information contained in this report is current and complete as of the report's Effective Date and complies with Section 4.2(8) of NI 43-101.

Following the receipt of the remaining core boxes containing all the rest of the Luanga historic mineralized zones, the resampling will continue. The aim is to re-assay all of the historic ore zones, creating a complete new set of assays, assayed by a modern ISO certified laboratory and with an expanded assay suite.

Figure 9-4: Resampling programme.

RR Topografia & Engenharia of Brazil completed the Orthophotography and new Digital Elevation Model. Commercial drone surveying equipment was used to complete the aerial work, while ground surveying was used for control of accuracy, positioning and georeferencing. A mosaic of the orthoimagery overlain on the 3D digital terrain model created from the DEM, is shown below in Figure 9.3.

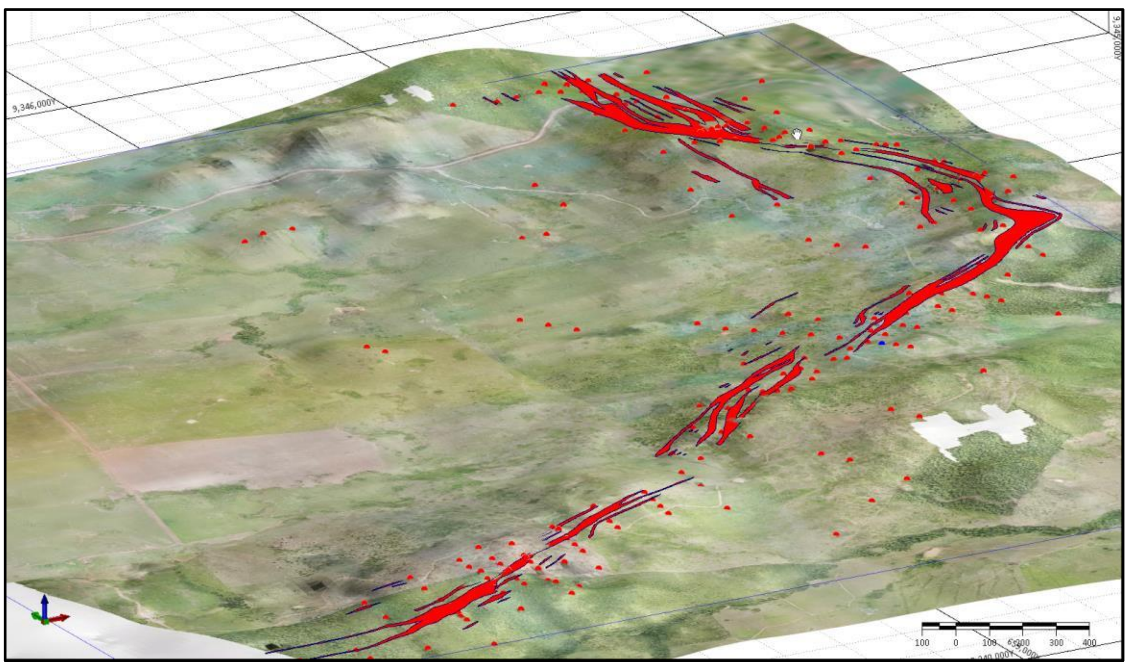

Figure 9-5: Luanga Project: Digital Elevation Model, Orthoimage, Drill Collars and Ore Zones.

Geophysical work for Luanga was performed by both Southern Geoscience Consultants of Australia (SGC) and Southernrock Geophysics of Chile (Southernrock) in 2021. Southernrock reprocessed the historic IP data, while SGC reprocessed the historic magnetic data. The images below show the IP one of the images form the Southernrock work (Figure 9.4) and IP overlaid on reprocessed magnetic image produced by SGC (Figure 9.4).

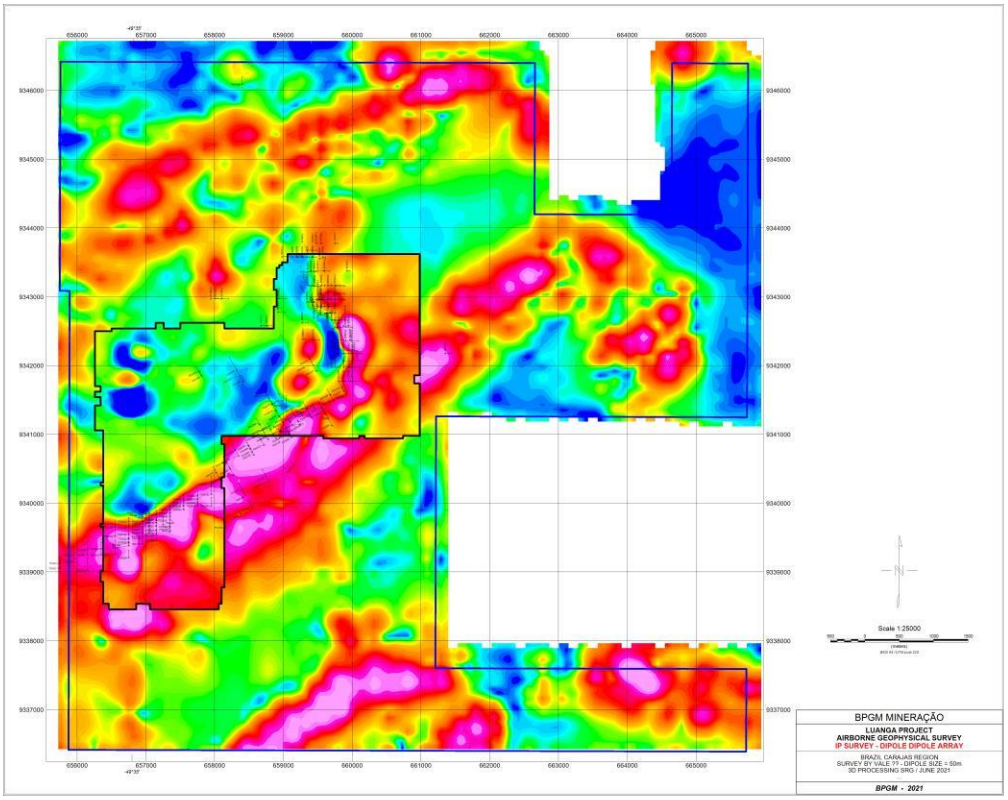

Figure 9-6: Luanga Project: IP over Reprocessed Magnetic Imagery.

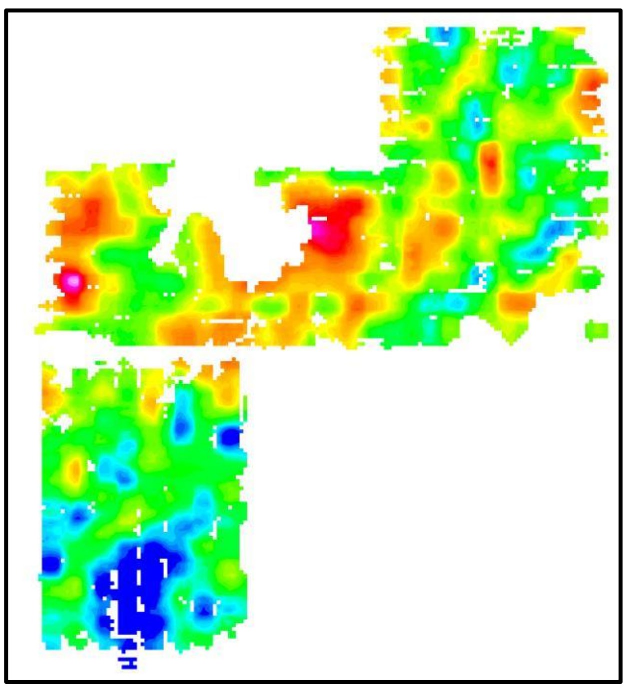

Figure 9 7: Luanga Project: 3D Inversion of IP Resistivity, Depth -125m.

Location of this work is entirely within the property boundary, and shown in Figure 9.6 above

10 DRILLING

Historical drilling information presented in this Report is included in Section 6.

Bravo commenced drilling at Luanga Project on March 25, 2022. Work to date includes preparation of drill pads, surveying of drill hole locations, mobilization of the first drill rigs, and the commencement of drilling in line with the recommended work program.

Three drill rigs are already on site and operating. To date 3 drill holes have been completed and 3 are in progress for a total 352m (Table 10.1).

The drilling undertaken by Bravo so far in 2022 is part of the recommended program set out in this Report and no changes to the recommended program is warranted based on observations of the core received to the Effective Date of this Report. To the Effective Date, 3 drill holes have been completed and 3 are in progress for a total 352m showing the same lithologies (orthopyroxenites and harzburgites) and style of mineralization anticipated based on prior drilling by VALE. Drilling is by HQ sized diamond core from surface, until reaching competent fresh rock from where drilling is by NQ sized diamond core. Core recoveries are generally excellent, >95% in the fresh rock, 75% to 95% for oxidized rocks. Mineralization is finely and evenly disseminated, thus it is believed that there will be no nugget effects or issues affecting accuracy and reliability, as was the case in the historical core. Drill holes are drilled at the same dip and azimuth as historical drilling, with mineralization intersected at the same angle, and with mineralized widths repeating that seen in historical drilling. Given the orientation of the holes and the mineralization, the intercepts are estimated to range from ~70 to 100% of true thickness Core is diamond sawed to ensure representativeness of samples, where sawing of the core leaves two identical halves. For all of these reasons, there have been no material changes to the geologic model, depth, thickness, sulphide abundance and style of mineralization or the proposed drill program. The Authors believe the information contained in this report is current and complete as of the report's Effective Date and complies with Section 4.2(8) of NI 43-101.

Drill hole locations (including depth, *azimuth and dip*) are listed in Table 10-1 and are shown in Figure10.2, and summary drill logs in Table 10.2. Holes were sampled in their entirety. Assay Results are pending.

Table 10-1: Bravo 2022 Drill Progress to 12th April 2022

Hole ID	UTM East SIRGAS2000	UTM North SIRGAS2000	Elevation	Depth (M)	Azimuth	Dip	Company	Year	Status
DDH22LU001	657149.00	9339724.00	272.080	100.35	360.00	-60.00	Bravo	2022	concluded
DDH22LU002	657100.00	9339715.00	284.366	152.35	360.00	-60.00	Bravo	2022	concluded
DDH22LU003	657200.00	9339710.00	256.000	3.75	360.00	-60.00	Bravo	2022	in progress
DDH22LU006	658495.00	9340828.00	243.210	76.55	330.00	-60.00	Bravo	2022	concluded
DDH22LU007	659093.00	9341002.00	241.300	2.80	330.00	-60.00	Bravo	2022	in progress
DDH22LU008	659827.00	9341624.00	252.000	16.55	330.00	-60.00	Bravo	2022	in progress
TOTAL				**352.25**					

Figure 10-1: Luanga Project: Staff and Visitors in front of a diamond drill rig ready to start.

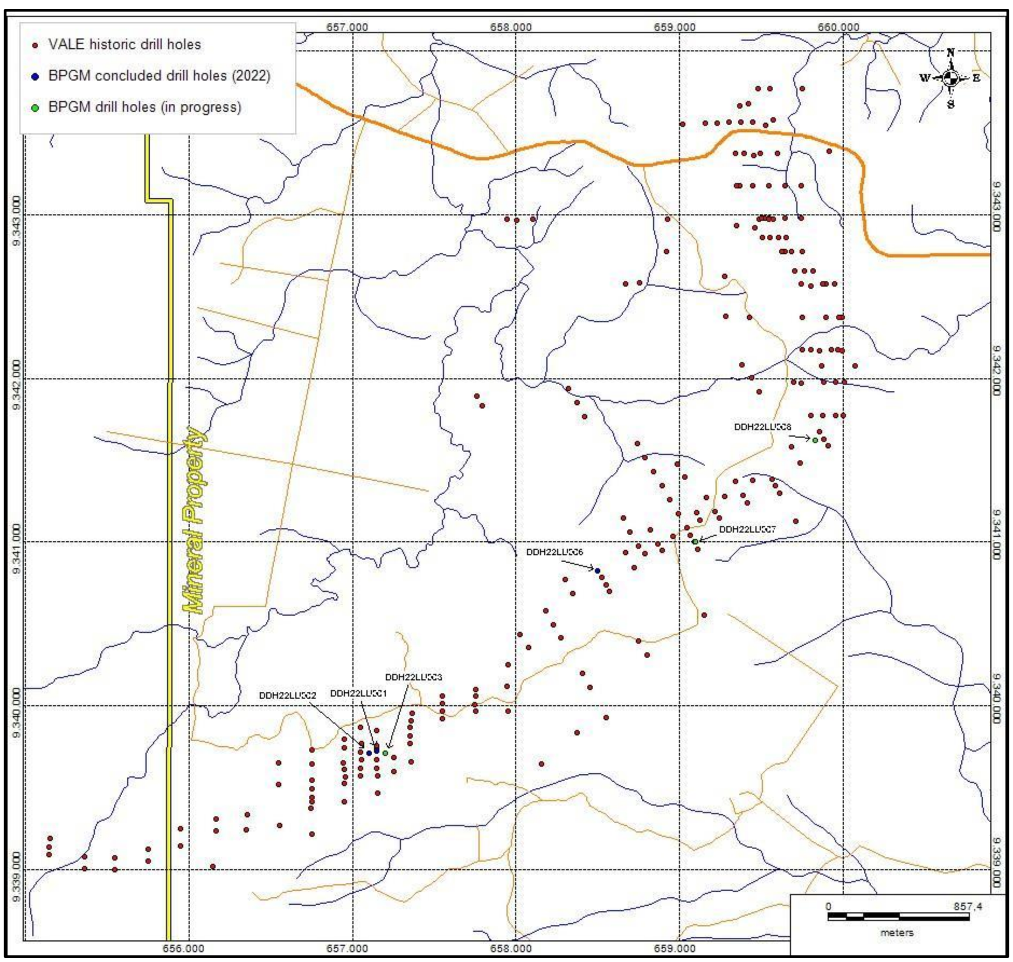

Figure 10-2: Bravo Drilling 2022 – Drill Hole Locations

Table 10-2: Bravo 2022 Drilling – Summary Drill Logs

Summary log for DDH22LU001								
FROM	TO	LENGTH	WEATHERING	LITHO CODE	GRAIN SIZE	TEXTURE	LITHOLOGY	SULPHIDE
0.00	5.54	*5.54*	**SOIL**	**SOI**			Soil	
5.54	17.30	*11.76*	**SAPROLITE**	***pOPYf***	Medium to coarse	Foliated	plagioclase metaorthopyroxenite	traces
17.30	25.96	*8.66*	**SAPROLITE**	***pOPYf***	Medium to coarse	Foliated	plagioclase metaorthopyroxenite	traces
25.96	26.45	*0.49*		***pOPY***	Medium to coarse	Mesocumulatic	plagioclase metaorthopyroxenite	1-2%
26.45	51.48	*25.03*	**FRESH ROCK**	**OPY**	Fine to medium	Mesocumulatic	metaorthopyroxenite	1%
51.48	60.11	*8.63*		**DYK**	Fine to coarse	Massive Nematoblastic	dolerite dyke	1-2%
60.11	100.35 End of Hole	*40.24*		**OPY**	Fine to coarse	Mesocumulatic, Foliated	metaorthopyroxenite	1%

Summary log for DDH22LU002								
FROM	TO	LENG HT	WEATHERING	LITHO CODE	GRAIN SIZE	TEXTURE	LITHOLOGY	SULPHIDE
0.00	2.70	*2.70*	**SOIL**	**SOI**			red soil	
2.70	5.16	*2.46*	**SAPROLITE**	**OPY**	Fine to coarse	Mesocumulatic	metaorthopyroxenite	
5.16	17.35	*12.19*	**SAPROCK**	***mOPY***	Fine to coarse	Mesocumulatic, Foliated	metaorthopyroxenite (with strong metamorphism)	traces
17.35	60.40	*43.05*	**FRESH ROCK**	***mOPYf***	Fine to medium	Granolepidoblastic, mesocumulatic	metaorthopyroxenite (with strong metamorphism)	traces
60.40	98.03	*37.63*		***mOPY***	Fine to coarse	Granolepidoblastic, mesocumulatic	metaorthopyroxenite (with strong metamorphism)	traces
98.03	98.63	*0.60*		**DYK**	Fine to coarse	Massive, lepidoblastic	dolerite dyke	1-2%
98.63	152.35	*53.72*		***mOPY***	Fine to coarse	Granolepidoblastic, mesocumulatic	metaorthopyroxenite (with strong metamorphism)	traces

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Summary log for DDH22LU003								
FROM	TO	LENGHT	WEATHERING	LITHO CODE	GRAIN SIZE	TEXTURE	LITHOLOGY	SULPHIDE
0.00	2.45	*2.45*	**SOIL**	**SOI**			red soil	
2.45	3.75	*1.30*	**SAPROLITE**	***m*OPY**	Medium to coarse		metaorthopyroxenite (with strong metamorphism)	

Summary Log for DDH22LU006								
FROM	TO	LENGHT	WEATHERING	LITHO CODE	GRAIN SIZE	TEXTURE	LITHOLOGY	SULPHIDE
0.00	3.12	*3.12*	**SOIL**	**SOI**			red soil	
3.12	16.30	*13.18*	**SAPROLITE**	**OPY**	coarse	Mesocumulatic	metaorthopyroxenite	
16.30	35.10	*18.80*	**SAPROCK**	**OPY**	coarse	Mesocumulatic	metaorthopyroxenite	traces
35.10	76.55	*41.45*	**FRESH ROCK**	***p*OPY**	coarse	Ad-Mesocumulatic	plagioclase metaorthopyroxenite	1%

Summary Log for DDH22LU007								
FROM	TO	LENGHT	WEATHERING	LITHO CODE	GRAIN SIZE	TEXTURE	LITHOLOGY	SULPHIDE
0.00	0.70	*0.70*	**SOIL**	**SOI**			red soil	
0.70	2.80	*2.10*	**SAPROLITE**	***m*HAR*f***	Medium to coarse		metaharzburgite (with strong metamorphism)	

Summary Log for DDH22LU008								
FROM	TO	LENGHT	WEATHERING	LITHO CODE	GRAIN SIZE	TEXTURE		SULPHIDE
0.00	3.54	*3.54*	**SOIL**	**SOI**			red soil	
3.54	16.55	*13.01*	**SAPROLITE**	***p*OPY**	coarse	Adcumulatic	plagioclase metaorthopyroxenite	

SOI = Soil
DYK = Dolerite dyke
OPY = Orthopyroxenite
HAR = Harzburgite

f = foliated
m = metamorphosed
p = plagioclase

11 SAMPLE PREPARATION, ANALYSIS AND SECURITY

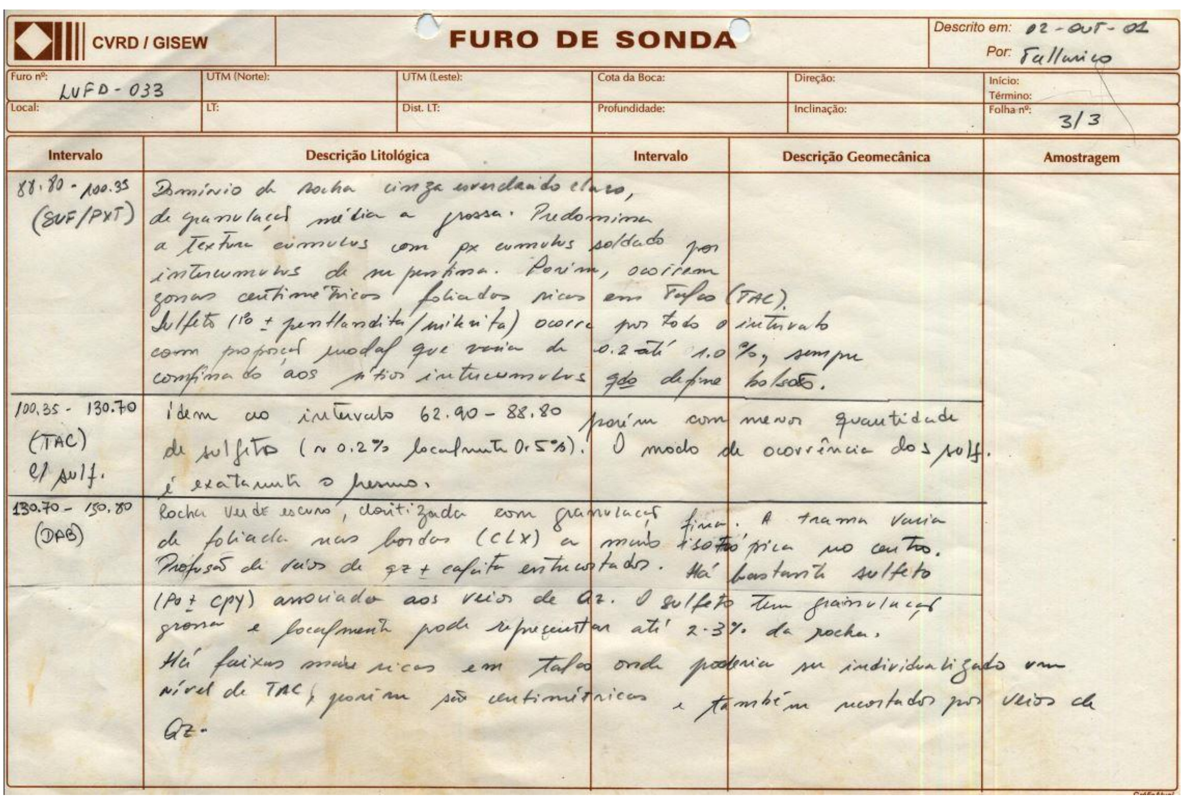
11.1 Prior Owners Methods

The sample preparation, analysis and security procedures employed followed those normally used in the mineral exploration industry as detailed below.

11.1.1 Historic Drill Core Logging and Sampling

Diamond drill core were stored in wooden boxes and transported to the Carajás/N5 camp facility, where they were logged. The logs described several features, including weathering, rock types, lithological contacts, structures, textures, granulometry, mineralogy and magnetism. Concomitant with logging, magnetic susceptibility readings and Rock Quality Designation (“RQD”) measurements were carried out along the core.

Logging was initially recorded by hand on appropriate log sheets (see an example in Figure 11-1) before being transferred to electronic format and the Project database. Both records remain available for validation.


CVRD / GISEW

FURO DE SONDA

Descrito em: 02-OUT-01
Por: Fallarico

Furo nº: LUFD-033 | UTM (Norte): | UTM (Leste): | Cota da Boca: | Direção: | Início: | Término:
Local: | LT: | Dist. LT: | Profundidade: | Inclinação: | Folha nº: 3/3

Intervalo	Descrição Litológica	Intervalo	Descrição Geomecânica	Amostragem
88.80 - 100.35 (SUF/PXT)	Domínio de rocha cinza esverdeado claro, de granulação média a grossa. Predomina a textura cumulus com px cumulus soldado por intercumulus de ... Porém, ocorrem zonas centimétricos foliados ricos em talco (TAC). Sulfeto (Po ± pentlandita/milerita) ocorre por todo o intervalo com proporção modal que varia de 0.2 até 1.0 %, sempre confinado aos sítios intercumulus qdo define bolsões.			
100.35 - 130.70 (TAC) c/ sulf.	idem ao intervalo 62.90 - 88.80 porém com menor quantidade de sulfeto (~0.2% localmente 0.5%). O modo de ocorrência dos sulf. é exatamente o mesmo.			
130.70 - 150.80 (DAB)	Rocha verde escuro, cloritizada com granulação fina. A trama varia de foliada nas bordas (CLX) a mais isotrópica no centro. Profusão de veios de qz + calcita entrecortados. Há bastante sulfeto (Po ± cpy) associado aos veios de Qz. O sulfeto tem granulação grossa e localmente pode representar até 2-3% da rocha. Há faixas mais ricas em talco onde poderia ser individualizado um nível de TAC, porém são centimétricas e também recortados por veios de Qz.			

Figure 11-1: Log sheet used on Luanga drilling program.

The different lithologies described in the drill logs were combined by the project geologists resulting in a group of 30 different lithologies. These litho-types were coded as illustrated on Table 11-1.

***Table 11-1*: Lithological units and codes used at Luanga Project**

Ref	Lithology	Litho-Code
1	Anorthosite	ANO
2	Banded Iron Formation	BIF
3	Chlorite-Actinolite-Talc Schist	CATAX or CATX
4	Chlorite-Biotite Schist	CBX
5	Chromatite	CR
6	Diabase	DB
7	Magnetite Gabbro	GBM
8	Granite	GR
9	Hydrothermalite	HIDRO
10	Manganese	MAN
11	Meta Anorthosite	MANT
12	Meta Diabase	MDB
13	Monzodiorite	MDI
14	Meta Diorite	MDRT
15	Meta Gabbro	MGB
16	Meta Leuco Gabbro	MLGB
17	Meta Norite	MNO or MNRT
18	Meta Peridotite	MPD or MPDT
19	Meta Piroxenite	MPX or MPXT
20	Meta Feldspatic Piroxenite	MPXF
21	Meta Quartz Diorite	MQDI or MQDT
22	Meta Troctolite	MTCT
23	Magnetite Serpentinite	MTST
24	Quartz Diorite	QDI
25	Saprock	RSI
26	Saprolite	SAP
27	Soil	SOLO
28	Magnetic Serpentinite	SPTM
29	Serpentinite	SPTN
30	Quartz Vein	VQTZ

After logging, the core was sampled as half-core samples, in some cases with a machete (in the weathered zones) and in other with a diamond saw (Figure 11-2). Sample intervals were marked in nominal 1-metre intervals. Geological contacts were not used to define sampling intervals. Only a small group of samples (469 samples), representing approximately 1% of the total population (48,237 samples), used different intervals, including a maximum and minimum sample lengths reaching 3.00 metres and 0.10 metres, respectively. In general, these samples represent the last intervals at the end of holes.

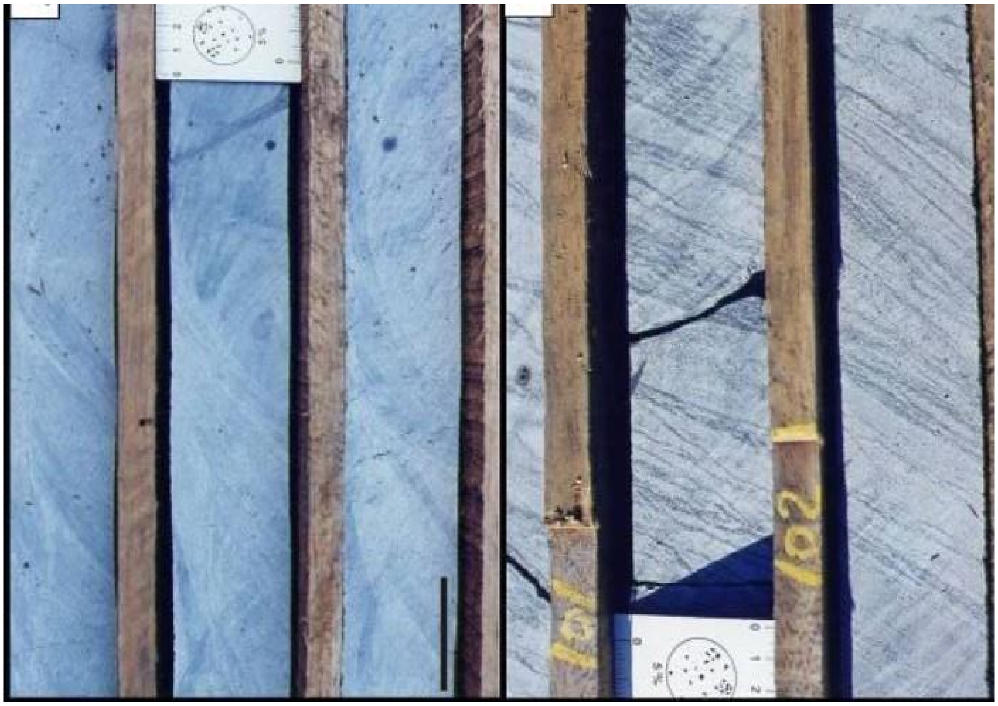


Figure 11-2: Cut core, half-core (right side) sampled.

As of the date of this report, the historic drilling database includes a total of 48,237 core samples.

Chemical analysis was performed for Au, Pd, Pt, Rh, Cu, Ni, Cr and Co for all samples. A portion of the samples were also analysed for Bi, Ag, As, Te, Ti, V, S, Sb and Zn. During the drill program, different commercial and independent laboratories, including Nomos, SGS Lakefield (Ontario, Canada) and SGS Brasil were used. All of them were independent of Vale. SGS Lakefield and SGS Brazil are ISO 9001:2015, ISO 14001:2015 and ISO/IEC 17025:2005 accredited today. The author is not aware of the status of their accreditation in 2001 to 2003, which pre-dates current ISO standards.

11.2 Sample Preparation

11.2.1 Core Drill Samples

Prior to 2005, drill samples were prepared at the Nomos or Lakefield laboratories. From mid-2005, core sample preparation was exclusively done at the SGS Laboratory. All three laboratories involved are considered independent.

Details on the preparation of core samples applied by Nomos and Lakefield prior 2005 are described in the historical database. The aliquot for analyses prepared by Nomos used a -200 mesh ("#") fraction while Lakefield used -150# and -200# fractions.

The preparation route used by SGS for the core samples included drying, two crushing stages, splitting and pulverization to reach a final aliquot of 200 g at -150# granulometry, as illustrated on Figure 11-3.

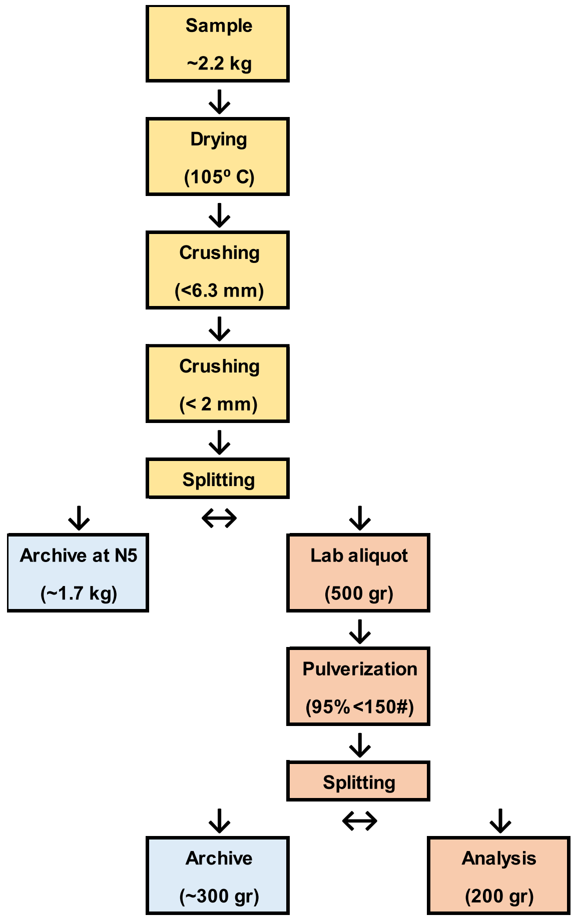


Figure 11-3: Core preparation route used by SGS Laboratory.

11.2.2 Soil Samples

Soil samples were prepared following the route below;

- Drying at 60ºC;
- Crushing at <2mm;
- Splitting to generate a 500g aliquot;
- Pulverization with 95% <150 mesh ("#");
- Splitting to generate a 200g aliquot for chemical analyses;

11.3 Chemical Analyses

11.3.1 Core Drill Samples

Core samples were analysed by three different laboratories (Nomos, Lakefield and SGS). The suite of elements and the analytical methods used by each laboratory are summarized on Table 11-2.

Table 11-2: Chemical elements and methods used for core drilling analyses

Lab	Element	Analytical Method	Fraction	Unit	Lower Limit	Upper Limit
NOMOS	Au	FIRE ASSAYATOMIC ABSORPTION	-200#	PPM	<0.01	*
	Pd				<0.01	*
	Pt				<0.05	*
	Rh				<0.001	*
	Cu	ATOMIC ABSOPTION			<10	*
	Ni				<10	*
	Cr				<10	*
	Co				<10	*
	Ag				<0.1	*
	V				<10	*
	Zn				<10	*
LAKEFIELD	Au	FIRE ASSAY/ATOMIC ABSORPTION	-150#/200#	PPM	<0.005	*
	Pd				<0.01	*
	Pt				<0.01	*
	Rh				<0.001	*
	Cu	AQUA REGIA/ATOMIC ABSORPTION			<1	>5000
	Ni				<1	>5000
	Cr				<1	>5000
	Co				<1	*
	Ti				<10	*
	V				<10	*
	As	ATOMIC ABSOPTION			<1	*
	As	AQUA REGIA/ICP			<5	*
	Cu				<1	>5000
	Ni				<1	>5000

Lab	Element	Analytical Method	Fraction	Unit	Lower Limit	Upper Limit
	Cr				<1	>5000
	Co				<1	*
	Te				<3	*
	Ti				<10	*
	V				<10	*
	S	X-RAY			<50	*
SGS	Au	FIRE ASSAY/ICP	-150#	PPB	<20	*
	Pd				<20	*
	Pt				<75	*
	Rh				<15	*
	Cu	AQUA REGIA/ICP		PPM	<1	>5000
	Ni				<1	>5000
	Cr				<1	>5000
	Co				<1	*
	Bi				<10	*
	Te				<3	*
	S	LECO/INFRA-RED			<40	*
	Sb	AQUA REGIA/ATOMIC ABSORPTION			<0.1	*

Regarding Nickel assaying specifically, historic assay methods used by Vale were for total Nickel and thus contain both sulphide Nickel (present in fresh rock and recoverable by froth flotation) and silicate Nickel (unrecoverable by froth flotation). As a result, reported nickel values in fresh rock (oxide Nickel is not relevant to the Project) are not reflective of recoverable Nickel by froth flotation, which is the likely extraction method for fresh rock at the Project, and has been the focus of historical metallurgical testwork to date. Bravo intends to resolve Nickel sulphide contents by re-assaying the historical core prior to any future Mineral Resource Estimate reported in NI 43-101.

11.3.2 Soil Samples

All soil samples were submitted to chemical analyses for a suite of 16 elements (in ppb), including: Ag, As, Be, Bi, Ce, Co, Cr, Cu, La, Ni, Pb, Sb, Sn, Te, W and Zn. This suite of elements was analysed by inductively coupled plasma/mass spectrometry ("ICP/MS") by the three different laboratories (Nomos, Lakefield and SGS).

Soil samples were also analysed for Au, Pt and Pd (in ppb) by fire assay/atomic absorption spectrometry ("FA/AAS"). Information about the laboratory responsible for the FA/AAS analyses is not included in the database.

11.4 Bulk Density

Bulk density measurements (weight in water-weight in air) were completed on 2,962 pieces of fresh and weathered core from 14 individual drill holes, including mineralized and non-mineralized rocks. Weathered pieces were infused and sealed with paraffin. The weight was obtained using an electronic scale (Urano manufacturer, model 10000/1) with a nominal capacity of 10 kg and precision of 0.5 g.

The bulk density measurements for the main lithotypes from Luanga deposit are presented on Table *11-3*.

Table 11-3: Density measurements by lithotype

Lithotype	Nb. Samples	Mean	Median	Minimum	Maximum	Standard Deviation
CATAX	347	2.92	2.93	2.66	3.11	0.05
CBX	12	2.98	2.97	2.93	3.05	0.03
CR	3	2.89	2.88	2.85	2.93	0.04
MDI	271	2.96	2.98	2.63	3.56	0.14
MGB	13	2.83	2.84	2.72	2.97	0.07
MLGB	16	2.84	2.84	2.81	2.87	0.02
MNO	129	2.85	2.84	2.72	2.96	0.05
MNRT	38	2.88	2.87	2.70	3.05	0.07
MPD	8	2.81	2.84	2.71	2.89	0.06
MPDT	58	2.90	2.90	2.68	3.15	0.14
MPX	785	2.99	2.99	2.66	3.32	0.09
MPXF	331	3.06	3.08	2.8	3.31	0.09
MPXT	85	2.92	2.92	2.62	3.07	0.08
MTST	674	2.94	2.94	2.67	3.34	0.06
SPTM	23	2.72	2.70	2.64	2.92	0.06
SPTN	169	2.94	2.94	2.78	3.07	0.05
TOTAL	**2962**	**2.90**	**2.90**	**2.72**	**3.10**	**0.07**

11.5 Historic Quality Assurance and Quality Control (QA/QC)

All the information related to quality assurance or quality control (QA/QC) procedures were provided by VALE with the historical drill database. These data include an excel spreadsheet with 2,836 duplicates and 720 blank samples.

11.5.1 Blanks

Blank samples were inserted randomly during the sampling of drill core, with one in every 20 samples, starting with drilling in 2002. The information on the source of the blank material are not available at the date of this report.

The blank assays for the elements of interest (Pd, Pt, Au and Ni) were compiled from the historical database, with a total of 799 blank samples. All the blanks in the database were analysed by SGS Laboratory during the years of 2002 and 2003. Blank sample assay control charts are presented in Figure 11-4 to Figure 11-7 for Pd, Pt, Au and Ni respectively. All the control charts show analytical results with an adjustment of samples below of detection limit changed by the respective detection limit divided by 2.

The vast majority of the blank samples report results that are at, or close to, the analytical detection limit for each element. There is no evidence for systematic contamination of samples during sample preparation and/or assaying.

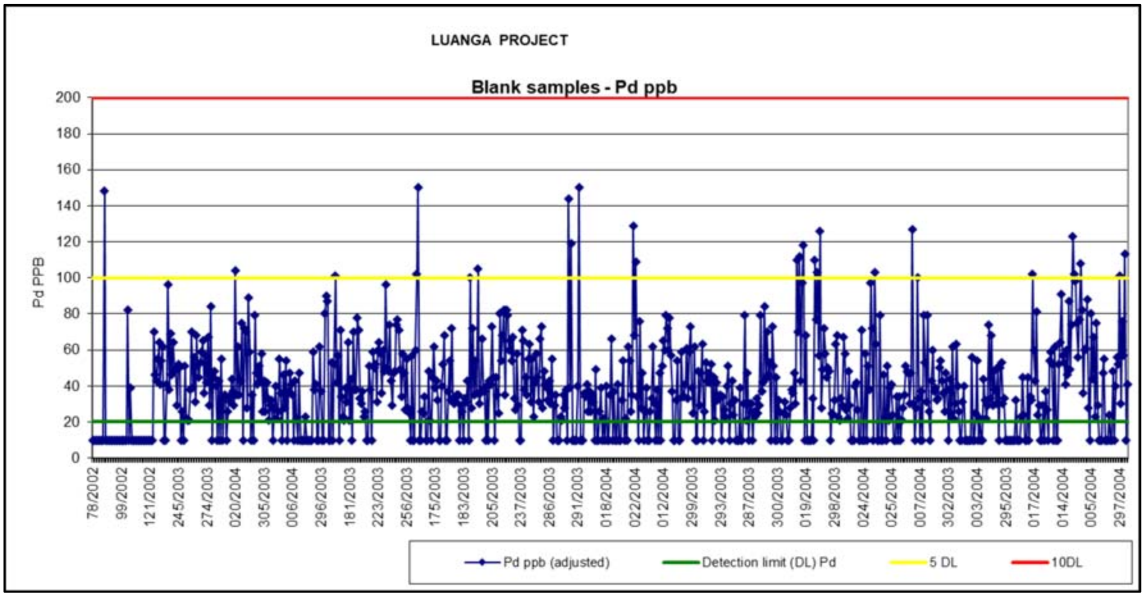


Figure 11-4: Blank sample control chart – Pd (ppb)
Yellow lines=5 times detection limit; red lines= 10 times detection limit.

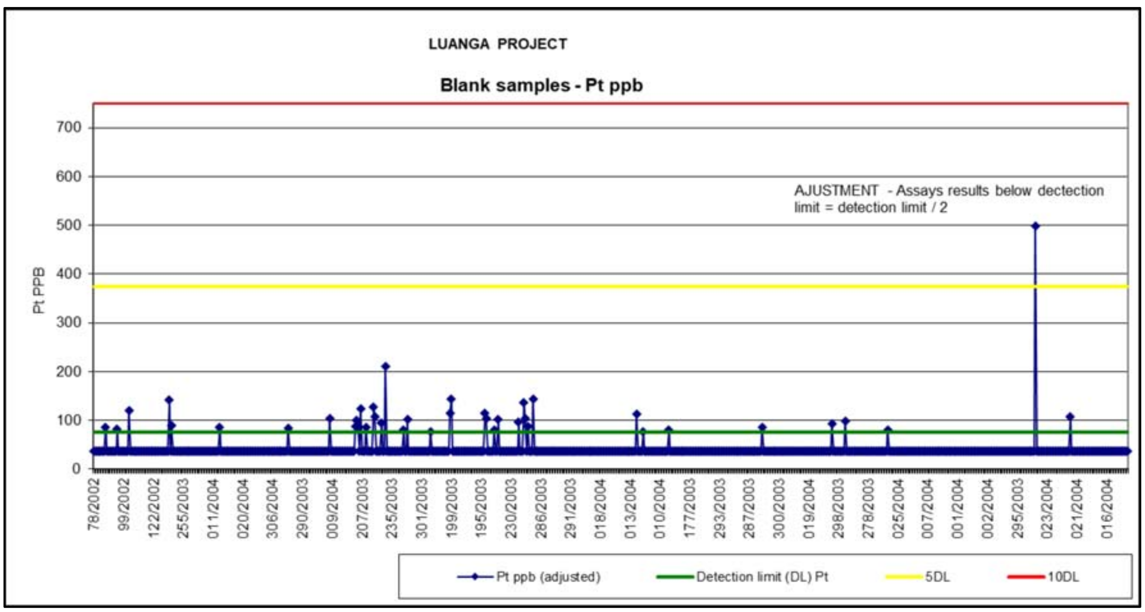


Figure 11-5: Blank sample control chart – Pt (ppb)
Yellow lines=5 times detection limit; red lines= 10 times detection limit.

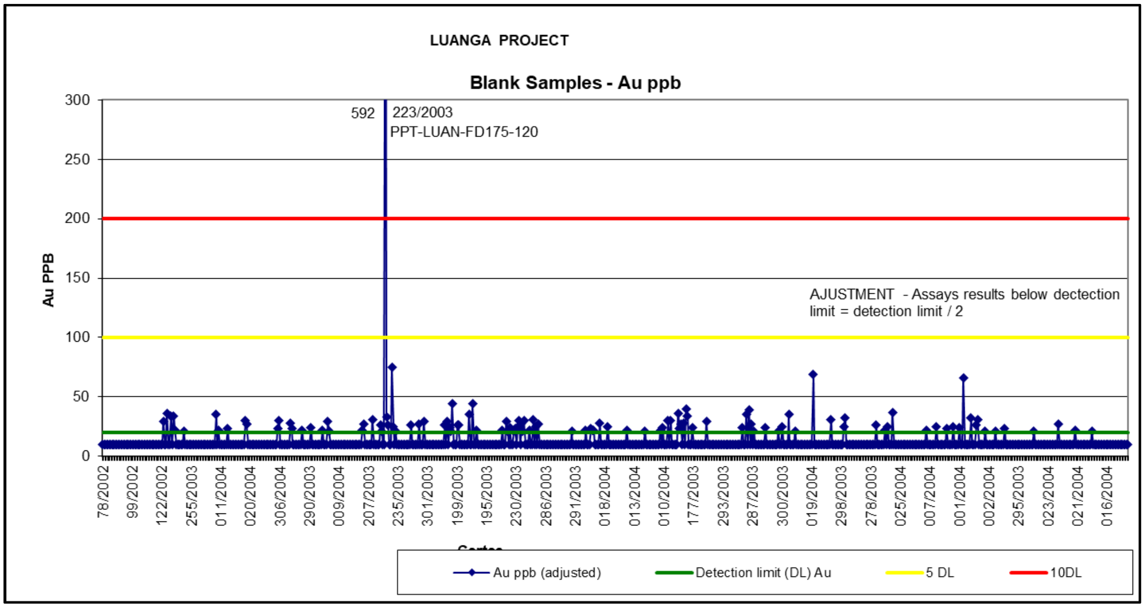


Figure 11-6: Blank sample control chart – Au (ppb)
Yellow lines=5 times detection limit; red lines= 10 times detection limit.

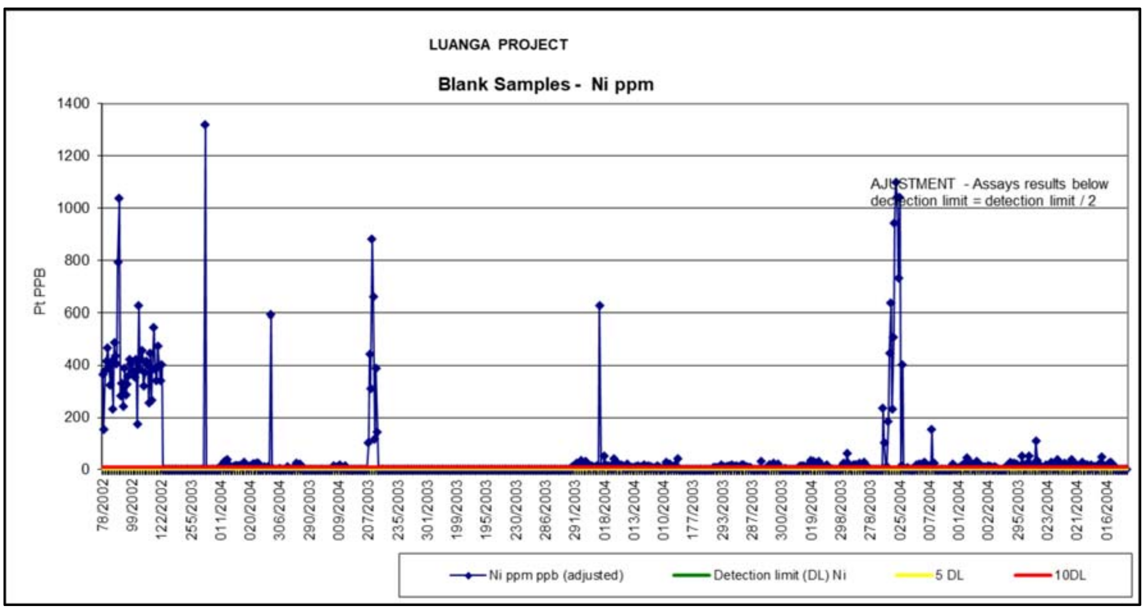


Figure 11-7: Blank sample control chart – Ni (ppm)
Yellow lines=5 times detection limit; red lines= 10 times detection limit.

11.5.2 Duplicates

The historic database contains 2,836 duplicates analysed by three different laboratories (Nomos, Lakefield and SGS) during the years of 2002 and 2003. Duplicates are sampled by quarter cutting the core and submitting two identical quarter core samples.

The samples duplicate performance is presented as scatterplots for Pd (ppb), Pt (ppb) and Au (ppb) by three different laboratories in Figure 11-8 to Figure 11-10, respectively. The original assay is plotted on the X-axis with the duplicate assay plotted on the Y-axis.

The duplicates evidence no systematic bias in the analyses.

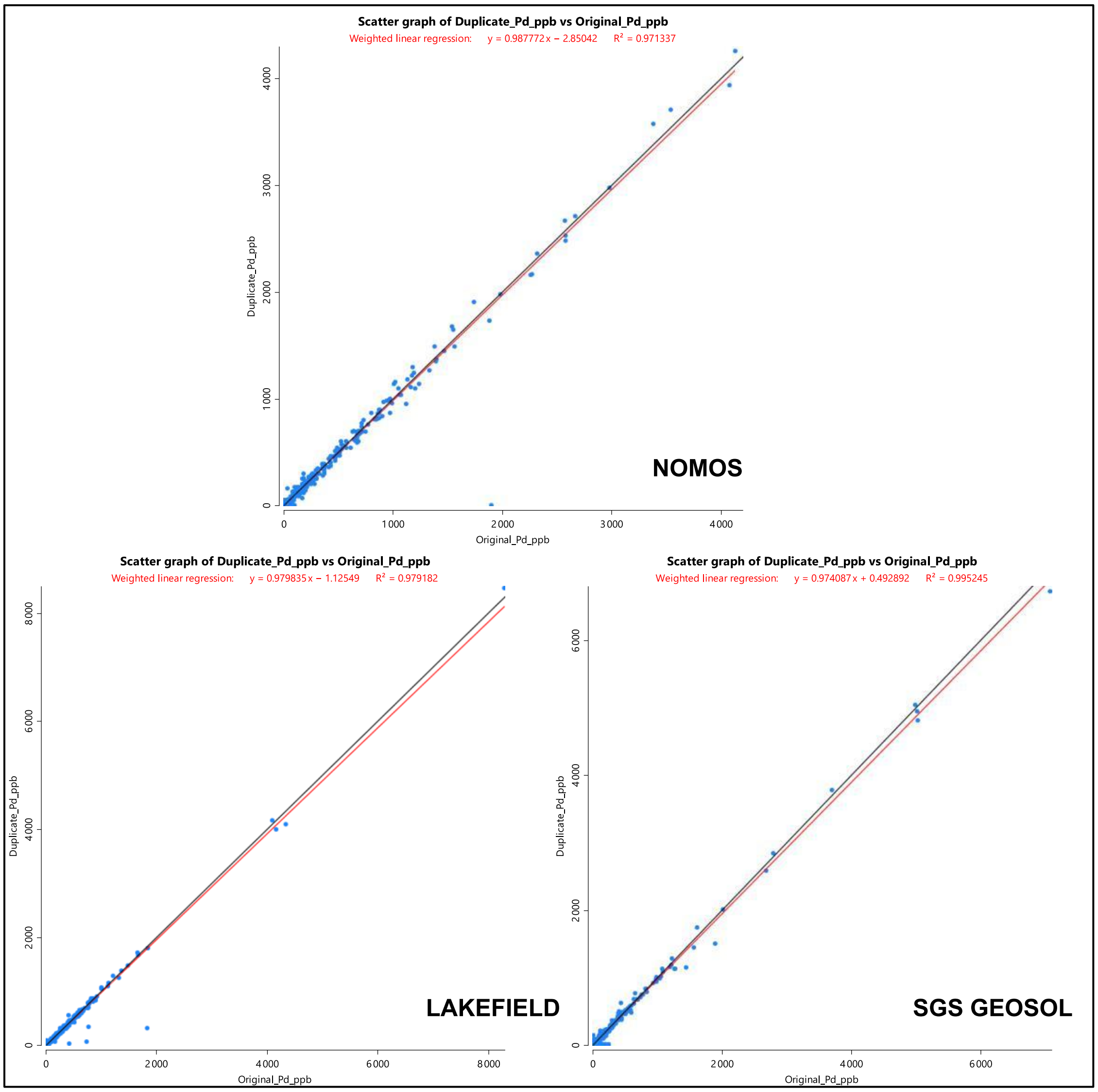


Figure 11-8: Scatterplot of Pd (ppb) sample duplicates.

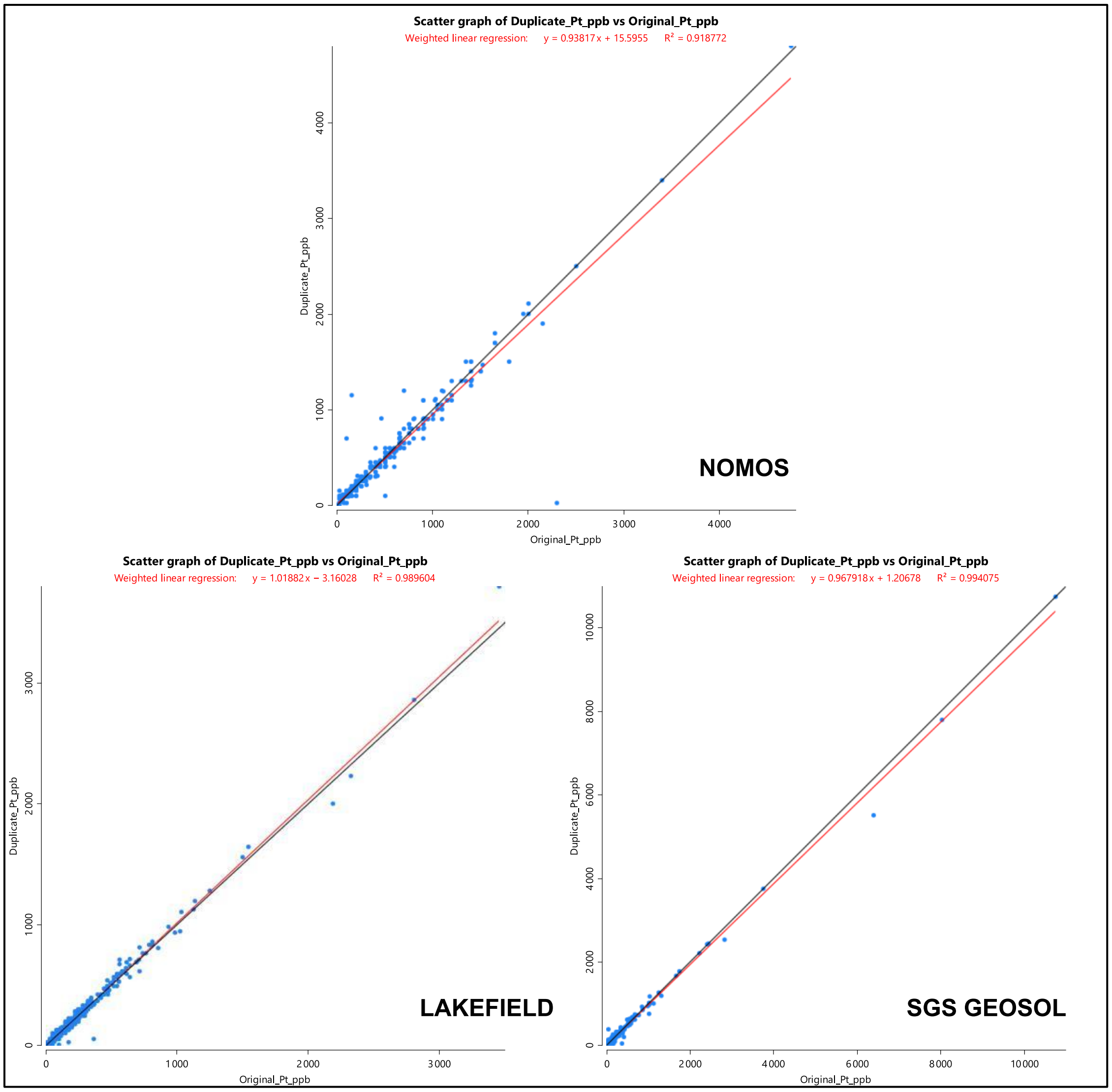


Figure 11-9: Scatterplot of Pt (ppb) sample duplicates.

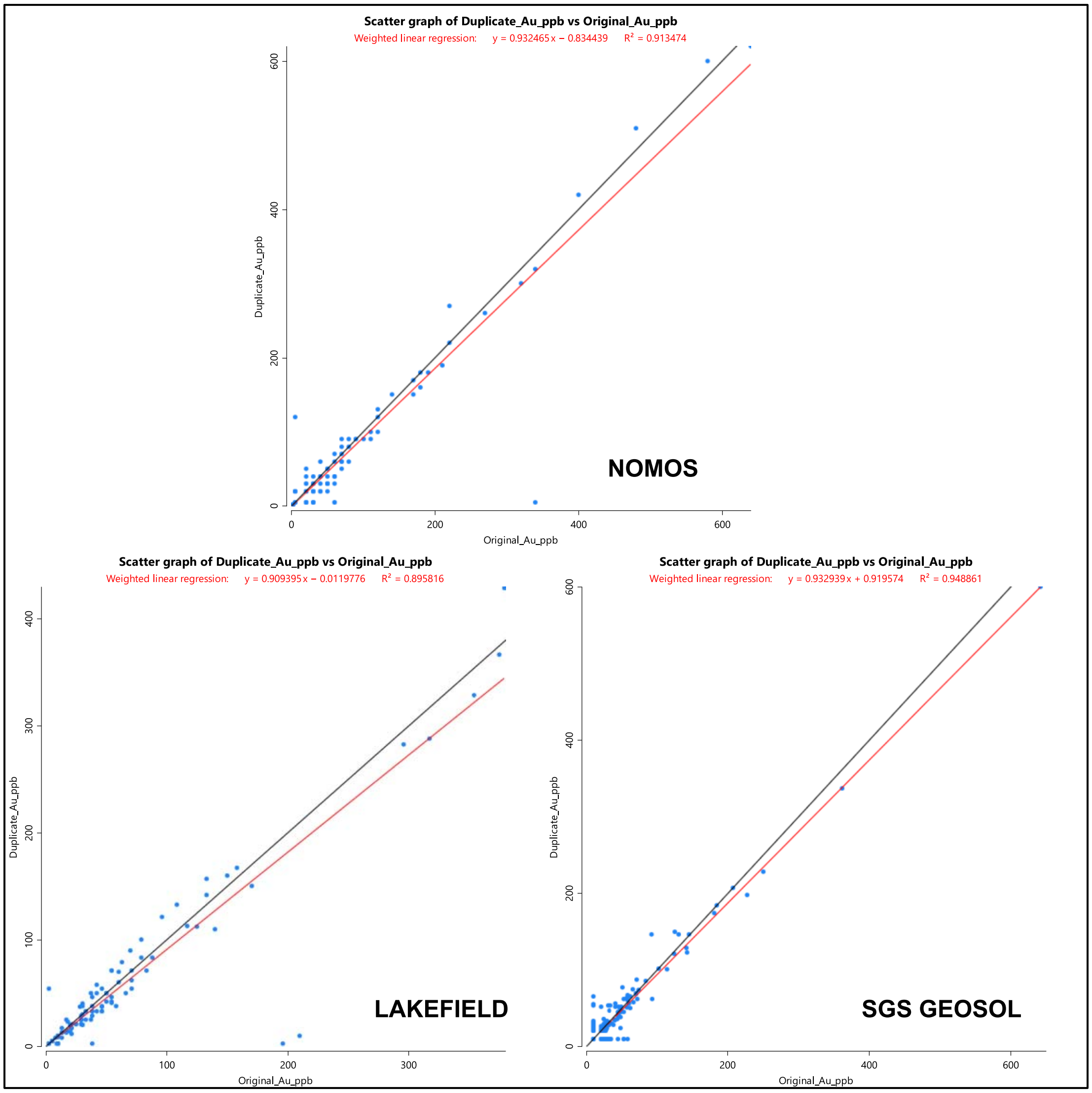


Figure 11-10: Scatterplot of Au (ppb) sample duplicates.

It should be noted that Bravo has not conducted any sample preparation, analyses or security undertakings at Luanga, other than data verification disclosed below. All sample preparation and analyses presented in this report are historical, other than data verification disclosed below. However, in the opinion of the qualified persons, personnel have used care in the collection and management of the field and assaying exploration data. Based on reports and data available, the qualified persons have no reason to doubt the reliability of exploration information provided by Vale. The reports and analytical results suggest that analytical results delivered by the laboratories used by Vale are free of apparent bias.

Bravo will implement a rigorous industry best practice QA/QC program going forward.

Bravo is currently in the process of appointing primary and secondary laboratories, which will be independent of Bravo, and ISO accredited.

Furthermore, Bravo will use industry best practices in sample control and security, and data control, security and back-up.

12 DATA VERIFICATION

Data verification activities carried out by GE21 included a site visit by Marlon Sarges Ferreira on the 13th and 14th of January 2022, accompanied by the Bravo team. This site visit included downloading and reviewing previous reports that described the historic exploration on the property and confirming that the described methods of work were completed to industry standards. The information obtained from the various technical reports were verified on the site visit where possible.

The site visit had the following itinerary: Field Visit – 13th to 14th January, 2022

During the site visit, four VALE drill collars were re-located in the northern portion of the deposit in a section line. Drillholes LUFD-112, LUFD-0118, LUFD-0152 and LUFD-0195 were correlated with data in the historic VALE drill database (Figure 12-1).

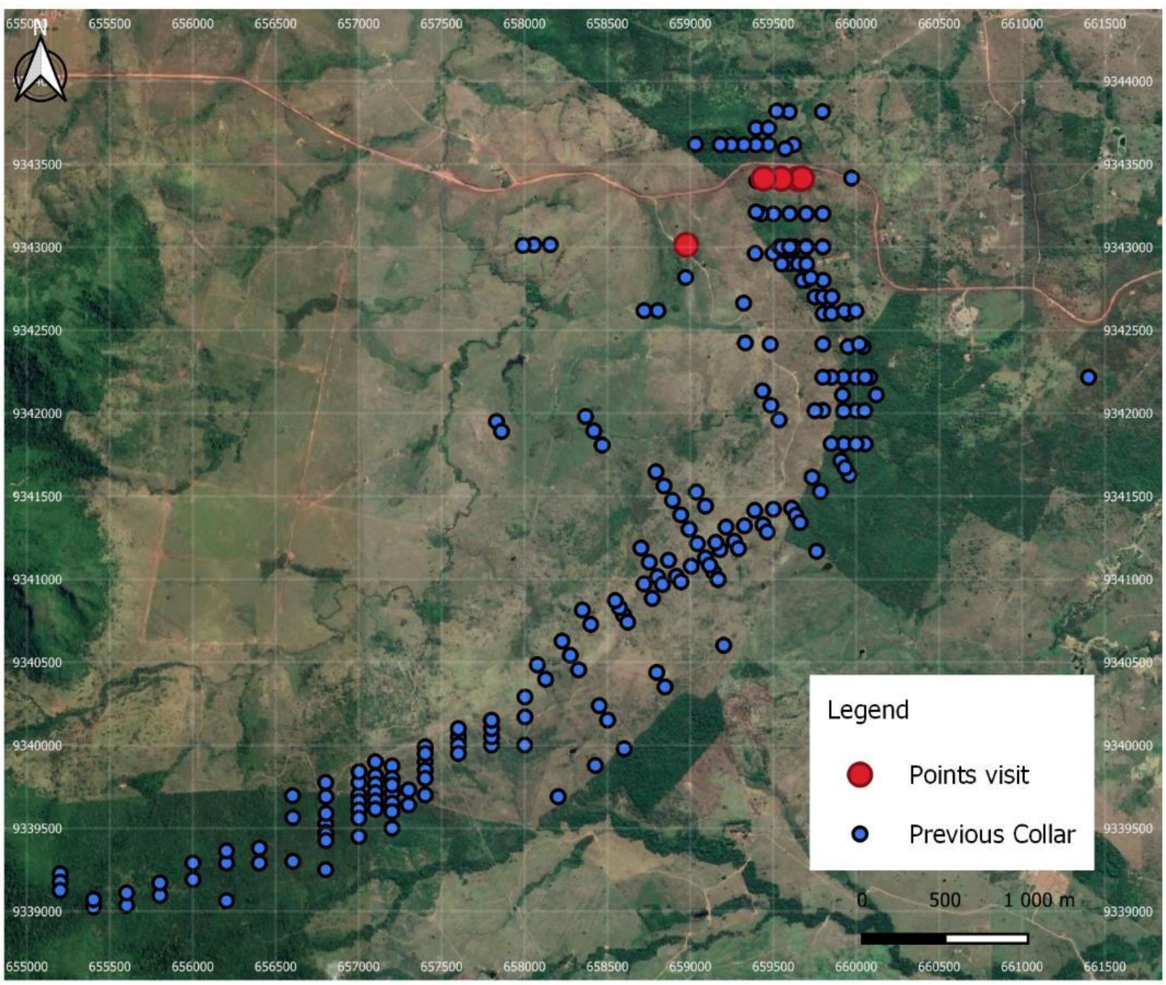


Figure 12-1: Map showing points visited in the Luanga Project.

Figure 12-2 to Figure 12-4 show the conditions of the identification landmarks found in the field visit.

Figure 12-2: Hole identification plate LUFD-0112.

Figure 12-3: Identification plate damaged by the weather without identification.

Figure 12-4: Hole identification plate LUFD-0195.

Core Drill Samples

The ranges of metapyroxenites, lithology of interest (hosting reported Pt+Pd+Rh+Au+Ni mineralization), were observed in the core boxes of holes LUFD-0018, LUFD-0059, LUFD-0131, LUFD-0132 and LUFD-0220. The drill core is preserved in wooden boxes with original past identification and organized on shelves inside an enclosed area. The facility also includes core logging facilities (Figure 12-5).

Figure 12-5: (a) Core yard, (b) Core storage facilities (c) Hole LUFD-0220; (d) Adcumulate orthopyroxenite

QP Opinion

The QPs reviewed the locations drill holes in the field, drill core in the core yard, assay certificates, historical drill logs, and other historical documents made available by Bravo. This included but was not limited to work on geochemistry, geophysics and geology completed by VALE and its consultants and laboratories. The historical data reported in this Technical Report aligns with the source data.

In *the opinion of the QP's, VALE personnel have used care in the collection and management of the field and assaying exploration data. Based on reports and data available, the QP's have no* *reason to doubt the reliability of exploration information provided by Vale. The reports and analytical results suggest that analytical results delivered by the laboratories used by Vale are free of apparent bias*

The QP's believe the data suitable for use in planning an expanded mineral exploration program, including:

- Surface mapping and soil/rock chip sampling of the Luanga property.
- Re-logging and re-assaying historical VALE core.
- Confirmatory twin hole drill program to validate the historical VALE drilling.
- Drill program aimed at confirming and infilling the zones of historically defined mineralization.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

Bravo has not completed any mineral processing or metallurgical testing on the Luanga Project. The mineral processing and metallurgical testing completed is historical in nature and included in Section 6.

14 MINERAL RESOURCE ESTIMATES

There are no current mineral resources on the Luanga Project that comply with the CIM Standards on Mineral Resources and Reserves Definitions and Guidelines adopted by the CIM Council. However, the prior owner VALE is reported to have completed a Historical Estimate, which is included in Section 6. Historic Mineral Resource.

15 ADJACENT PROPERTIES

Within 10 km of the Project, there are two main mineral deposits: the Serra Pelada Au+PGE deposit and the Serra Leste iron ore deposit (Figure 15-1). In addition, there are several minor gold occurrences, mostly operated by artisanal miners, in the area. These projects are located to the west of the Luanga Project.

The Serra Pelada Au+PGE deposit occurs 8km west of Luanga in a tenement with a Mining License held by Serra Pelada Companhia de Desenvolvimento Mineral. During the 1980s there were tens of thousands of illegal miners active in the Serra Pelada open pit, the largest gold mine in Brazil in its day. The pit reached 400m in length by 300m wide, to a depth over 120m below surface, all dug by hand. History records that 1.04Moz was extracted (Source: Meireles & Silva, 1988).

The Serra Leste high-grade hematite open pit iron ore mine occurs approximately 8.5km southwest of the Luanga Project, in a tenement held by VALE. Serra Leste includes active open pit mining and a beneficiation process comprising screening, hydrocycloning, crushing and filtration (Source: VALE public records)

There is no open ground for new exploration claims surrounding the Luanga License, and Vale S.A. is the major holder of exploration claims in the region.

The qualified person has not been able to verify the information on the adjacent properties and observes that the information in section 15 is not indicative of the mineralization on the property that is the subject of this technical report.

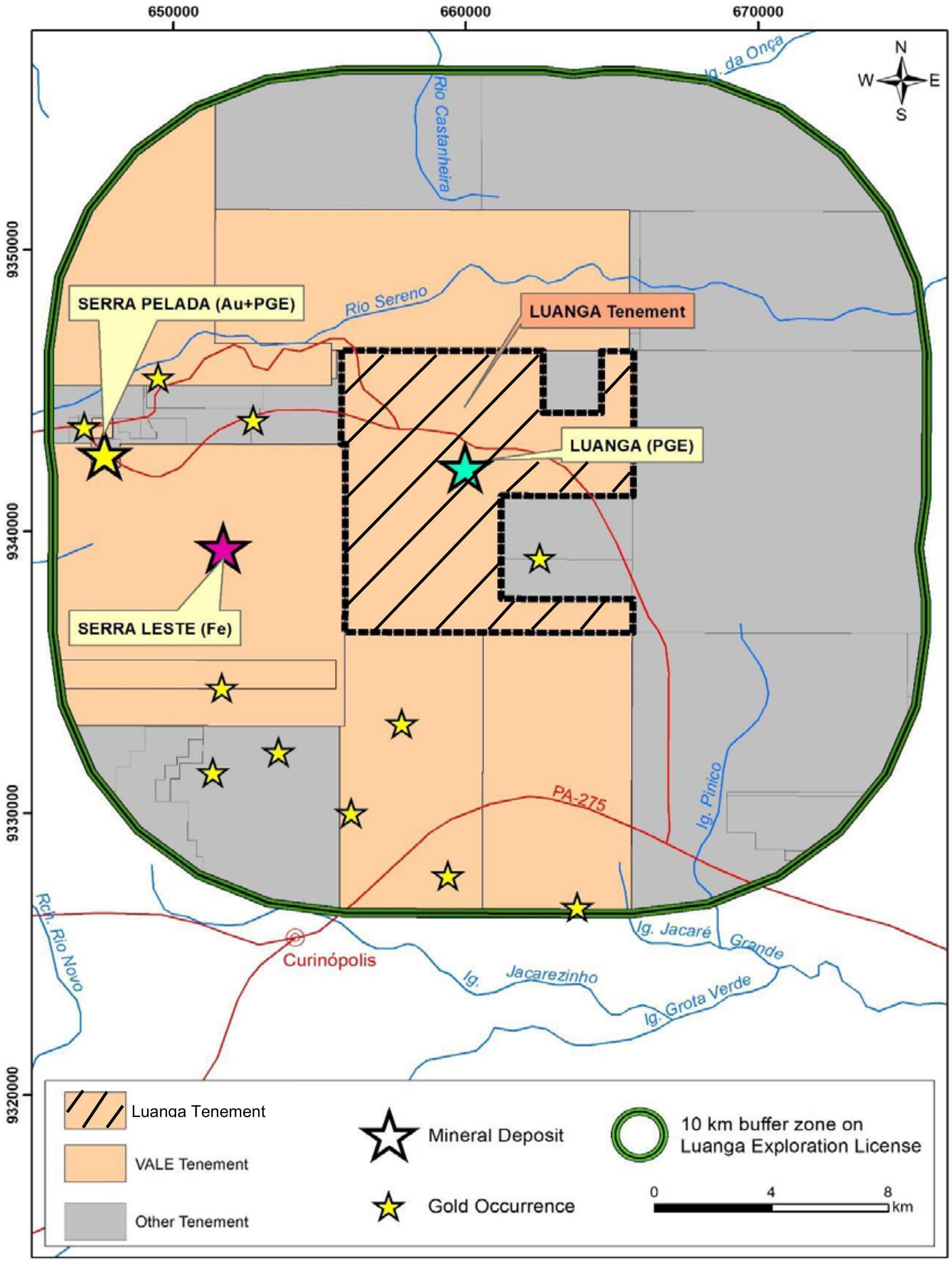


Figure 15-1: Mineral deposits adjacent to Luanga Project.

16 OTHER RELEVANT DATA AND INFORMATION

To the best of the author's' knowledge, there is no other relevant information or data that would add material benefit to the interpretation and conclusions outlined in this Report.

17 INTERPRETATION AND CONCLUSIONS

The Luanga deposit is interpreted as a Neo-Archean age PGE+Au+Ni +/- Rh, +/- Co, +/- Cu deposit hosted in a mafic and ultramafic complex that has an aerial extent of approximately 7km by 3.5km. It is broadly similar in age and geological setting to some of the world's major PGE deposits and producing mines.

Luanga is characterized as a "suspended operation", with extensive previous drilling, historical mineral resources and preliminary metallurgical test work.

The Authors are of the opinion that additional exploration and development work is warranted, including a drill program aimed at twinning a statistically representative number of historical drill holes to confirm historical assay results, re-logging and re-assaying VALE's available core, and infill drilling at a spacing sufficient to produce a NI 43-101 compliant mineral resource estimate. A systematic geo-metallurgical program is also warranted to increase confidence in the metallurgical characteristics of the Project. In addition, the prospectivity of the entire Project area warrants additional work in the form of surface mapping and sampling to evaluate the potential for discovery of additional deposits.

Some risks for the Project are:

- Permitting (delays and bureaucracy)
- Resource definition success
- Concentrate grade and marketability (limited purchasers)
- Metals payability and potential for penalty elements
- Reduced historic Nickel assay grades after determination of the sulphide (recoverable) Nickel values and thus removal (discounting) of the silicate (unrecoverable) Nickel portion.
- Surface access/community opposition given the one road to site could be blocked were opposition to develop

Opportunities also exist on the Project, such as:

- Higher grade zones within overall mineralized envelopes
- Minimal drilling in South Luanga that may indicate the presence of another deposit
- Potential for recovery of other metals besides Pd, Pt and Au (such as Ni, Cu, Co, Rh) and payment for same
- Potential expansion at depth
- Potential for the discovery of additional deposits.

18 RECOMMENDATIONS

Based on their evaluation of the Project as outlined in this Report, the authors recommend additional work to (a) define a mineral resource estimate in accordance with NI 43-101, and (b) assess the metallurgical characteristics of the mineralization, in order to determine the potential economic viability of the deposit and define reasonable prospects for economic extraction.

While there is a lot of drilling data over a well-characterized mineralized trend whose litho-structural controls and geological context are well known, this data is historical in nature and was completed by VALE. It is therefore recommended that Bravo:

1. Undertake a reassessment of the data collected in previous research campaigns, including drilling of twin holes and other geostatistically supported approaches that would confirm the grades and thicknesses of mineralization and the assay results obtained in the previous campaigns.
2. Classify or reclassify mineralization and lithologies to support evaluation of both potential bulk tonnage mining and processing, or more selective extraction of higher-grade mineralization by either open pit and/or underground methods, if warranted.
3. Conduct infill drilling to define a mineral resource estimate for the Project in accordance with NI 43-101, including demonstrating reasonable prospects for economic extraction, with sufficient flexibility to support the evaluation of both bulk-tonnage and more selective mining methods.
4. Undertake mineralogical and metallurgical studies to demonstrate the potential recoveries and subsequent economic extraction of payable metals, such as in support of the production of concentrates for export or in support of secondary processing.
5. Conduct exploration, including drilling, to evaluate the potential for mineralization to be expanded to depth and along strike, and to potentially discover additional mineralized zones.
6. Preparation of an updated Technical Report, including a mineral resource estimate.

The Authors recommend a work program as follows:

PHASE 1

A. Validation

- Execution of confirmation drill holes and laboratory analyses with QA/QC program control on key cross-sections of the mineralized sequence, along the entire length of the trend, to obtain confirmation in terms of thickness, distribution, and grade of mineralized zones and results obtained in the historical work:
  - Estimate 20 holes, ~200m long for 4,000m @ US$500/m[1] = US$2M
- Reanalysis of mineralized zones by several laboratories using available materials (core and sample material) to obtain a correlation between laboratories and chemical

[1] Includes drilling, geology, assaying, surveying and support costs

analyses carried out in previous campaigns and those carried out in future complementary campaigns, consolidating and validating the results of the analyses obtained and thus the data base:

- Estimate 1000 samples @ US$100/sample[2] = US$100k

All drilling steps should be performed with a best practice QA/QC program, including reanalysis, and analysis performed in an umpire laboratory.

Sub-total – Validation	***US$2.10M***

B. Mineral Resources

- Validation of methodologies and integrated database:
  - Estimate US$50,000
- Infill drilling program of the whole of Luanga, particularly areas where previous drilling campaigns are not considered sufficient to classify mineral resources, in two phases: (a) to an inferred mineral resource and (b) to an indicated mineral resource standard:
  - Phase 1 50 holes @ ~200m = 10,000m @ US$500/m = US$5M
- Prepare geological, geo-metallurgical, environmental and grade models:
  - Estimate US$0.15M
- Estimation of mineral resources in accordance with NI 43-101:
  - Estimate US$0.15M

Sub-total – Mineral Resources	***US$5.35M***

C. Exploration

- Geological, geophysical and drilling programs to evaluate the potential for the at-depth and lateral continuation of the known mineralization, where it is still open:
  - Geological and geophysical studies US$0.2m
  - Drilling of lateral extensions 10 holes @ ~200m = 2,000m @ US$500/m = US$1.0M
  - Drilling of depth extensions ~50 holes extended from 200m to ~350m depth, for 7,500m of drilling @ US$600/m[3] = US$4.5M
- Geological, geophysical and drilling programs to evaluate the potential for the discovery of additional zones of mineralization:
  - Geology & geophysical studies US$0.2M
  - Drilling 10 holes @ ~200m for 2,000m @ US$500/m = US$1.0M

• ***Sub-total – Exploration***	***US$6.9M***

D. Metallurgical Studies

- Study and classification of mineralogical and metallurgical characteristics of the mineralization:
  - Estimate US$0.2M
- Metallurgical test work to evaluate potential metallurgical recoveries in a variety of scenarios:
  - Phase 1 estimate US$0.5M

[2] Includes material recovery, collection, and assaying at multiple labs

[3] *Includes additional US$100/m for deeper portions of holes*

- Study of alternative processing routes, especially for lower grade mineralization.
  - Phase 1 estimate US$1.0M

Sub-total – Metallurgical Studies	***US$1.70M***

E. Updated Technical Report

- Preparation of an updated technical report
  - Estimate US$0.1M

Sub-total – Technical Report	***US$0.1M***
TOTAL PHASE 1	**US$16.15M**

Between the time the Authors defined the Phase 1 program the effective date of this Report, 352m of drilling has been completed (See Section 10 Drilling) in accordance with the Phase 1 recommended program. Since the completed drill meterage represents just 1.5% of the recommended drilling in the Phase 1 Program, it is immaterial to the scope of the recommendation, and therefore the Phase 1 recommendations remain unchanged.

PHASE 2

The Phase 2 programme is dependent on the results received in the Phase 1 programme.

A. Mineral Resources

- Infill drilling program of the whole of Luanga, particularly areas where previous drilling campaigns are not considered sufficient to classify mineral resources, in two phases: (a) to an inferred mineral resource and (b) to an indicated mineral resource standard:
  - 50 holes @ ~200m = 10,000m @ US$500/m = US$5M
- Prepare geological, geo-metallurgical, environmental and grade models:
  - Estimate US$0.15M
- Estimation of mineral resources in accordance with NI 43-101:
  - Estimate US$0.15M

Sub-total – Mineral Resources	***US$5.3M***

B. Exploration

- Geological, geophysical and drilling programs to evaluate the potential for the at-depth and lateral continuation of the known mineralization, where it is still open:
  - Geological and geophysical studies US$0.2m
  - Drilling of lateral extensions 10 holes @ ~200m = 2,000m @ US$500/m = US$1.0M
  - Drilling of depth extensions ~50 holes extended from 200m to ~350m depth, for 7,500m of drilling @ US$600/m[4] = US$4.5M
- Geological, geophysical and drilling programs to evaluate the potential for the discovery of additional zones of mineralization:
  - Geology & geophysical studies US$0.2M

[4] *Includes additional US$100/m for deeper portions of holes*

  - Drilling 10 holes @ ~200m for 2,000m @ US$500/m = US$1.0M

• ***Sub-total – Exploration***	***US$6.9M***

C. Metallurgical Studies

- Study and classification of mineralogical and metallurgical characteristics of the mineralization:
  - Estimate US$0.2M
- Metallurgical test work to evaluate potential metallurgical recoveries in a variety of scenarios:
  - Phase 2 estimate US$0.5M
- Study of alternative processing routes, especially for lower grade mineralization.
  - Phase 2 estimate US$1.0M

Sub-total – Metallurgical Studies	***US$1.70M***

D. Updated Technical Report

- Preparation of an updated technical report
  - Estimate US$0.1M

Sub-total – Technical Report	***US$0.1M***
TOTAL PHASE 2	**US$14.0M**

GRAND TOTAL	**US$30.15M**

These work programs and cost estimates are preliminary in nature and will be refined, adjusted and modified as additional information is compiled, contracts for the various aspects of the work program entered into, and results from new work are received. This could result in some movement in funds between different categories.

19 REFERENCES

Araújo, O.J.B., Maia, R.G.N., João, X.S.J., Costa, J.B.S., 1988. A megaestruturação arqueana da Folha Serra dos Carajás. Congresso Latino Americano de Geologia, BelémBrazil, Anais, pp. 324-338.

Araújo, O.J.B., Maia, R.G.N., 1991. Projeto especial mapas de recursos minerais, de solos e de vegetação para a área do Programa Grande Carajás; Subprojeto Recursos Minerais; Folha SB.22-Z-A Serra dos Carajás - Estado do Pará: DNPM/CPRM.

Cabri, L.J. (2003). A Mineralogical Study of Samples from the Luanga Layered PGE Deposit, Carajás, Brazil. Parte 5: Samples from the Luanga Orebody. Confidential Report 2003-07. 74p.

Dall'Agnol, R., Oliveira, M.A., Almeida, J.A.C., Althoff, F.J., Leite, A.A.S., Oliveira, D.C., Barros, C.E.M., 2006. Archean and Paleoproterozoic granitoids of the Carajás metallogenetic province, eastern Amazonian craton. Symposium on Magmatism, Crustal Evolution, and Metallogenesis of the Amazonian Craton, Abstracts Volume and Field Trips Guide, 150 pp.

Dardenne, M.A., Ferreira Filho, C.F., Meirelles, M.R., 1988. The role of shoshonitic and calc-alkaline suites in the tectonic evolution of the Carajás District, Brazil. Journal of South American Earth Sciences 1, 363–372.

Diella, V., Ferrario, A., Girardi V.A.V. (1995). PGE and PGM in the Luanga Mafic-Ultramafic Intrusion in Serra dos Carajás (Pará State, Brazil). 9p.

Docegeo - Rio Doce Geologia e Mineração, 1988, Revisão Litoestratigráfica da Província Mineral de Carajás, in, SBG-NNO, ed., 35º Congresso Brasileiro Geologia, Belém, Anais: p. 11-59.

Feio, G.R.L., Dall'Agnol, R., Dantas, E.L., Macambira, M.J.B., Santos, J.O.S., Althoff, F.J., Soares, J.E.B., 2013. Archean granitoid magmatism in the Canaã dos Carajás area: Implications for crustal evolution of the Carajás province, Amazonian craton, Brazil. Precambrian Research 227, 157-185.

Ferreira Filho, C.F., Cançado, F., Correa, C., Macambira, E.M.B., Siepierski, L., Brod, T.C.J., 2007. Mineralizações estratiformes de EGP-Ni associadas a complexos 91 acamadados em Carajás: os exemplos de Luanga e Serra da Onça. In: Publitec Gráfica & Editora, Contribuições à Geologia da Amazônia, vol. 5, pp. 01-14.

Gibbs, A.K., Wirth, K.R., Hirata, W.K., Olszewski Jr, W.J., 1986. Age and composition of the Grão Pará Group volcanics, Serra dos Carajás. Revista Brasileira de Geociências 16, 201-211.

HDK Engenharia. (2003). Caracterização de Amostras e Dimensionamento Preliminar de Circuito de Moagem – Depósito Luanga. 28p.

Hoatson, D.M., Jaireth, S., and Jaques, A.L., 2006, Nickel sulfide deposits in Australia: Characteristics, resources, and potential: Ore Geology Reviews, v. 29, p. 177–241.

Holdsworth, R.E., Pinheiro, R.V.L., 2000. The anatomy of shallow-crustal transpressional structures: insights from the Archean Carajás fault zone, Amazon, Brazil. Journal of Structural Geology 61, 1105-1123.

Huhn, S.R.B., Santos, A.B.S., Amaral, A.F., Ledsham, E.J., Gouveia, J.L., Martins, L.P.B., Montalvão, R.M.G., Costa, V.C., 1986. O terreno granito-greenstone da região de Rio Maria-Sul do Pará. 35º Congresso Brasileiro de Geologia, Belém, Brasil, Anais, Sociedade Brasileira de Geologia, pp. 1438-1452.

Machado, N., Lindenmayer, Z.G., Krogh, T.E., Lindenmayer, D., 1991. U-Pb geochronology of Archean magmatism and basement reactivation in the Carajás area, Amazon shield, Brazil. Precambrian Research 49, 329-354.

Mansur, E.T. (2017). Caracterização e Metalogênese do Depósito de Elementos do Grupo da Platina do Complexo Luanga, Província Mineral do Carajás. 158p.

Mansur E.T., Ferreira Filho C.F., Oliveira D.P.L. (2020). The Luanga deposit, Carajás Mineral Province, Brazil: Different styles of PGE mineralization hosted in a medium-size layered intrusion. Ore Geology Reviews. 18p.

Meireles, E.M., and Silva, A.R.B., 1988, Depósito de ouro de Serra Pelada, Marabá, Pará, in Schobbenhaus, C., and Coelho, C.E.S., eds., Principais depósitos minerais do Brasil – volume III: Brasília, Departamento Nacional da Produção Mineral, Companhia Vale do Rio Doce, p. 547–557.

Muller, P.H. (2020) Technical Report on Luanga PGE+Au Project, State of Para, Brazil

Naldrett, A.J., 2010a, Secular variation of magmatic sulfide deposits and their source magmas: Economic Geology, v. 105, p. 669–688.

Pidgeon, R.T., Macambira, M.J.B., Lafon, J.M., 2000. Th-U-Pb isotopic systems and internal structures of complex zircons from enderbite from the Pium Complex, Carajás Province, Brazil: evidence for the ages of granulite facies metamorphism and the protolith of the enderbite. Chemical Geology 166, 159-171.

Prinsloo, C.F. (2002). Investigation into the Recovery of PGM Values from a Brazilian Ore Type for Companhia Vale do Rio Doce (CVRD). Mintek. 98p

Ribeiro, V.E. (2020). Gênese e Controle das Mineralizações de Pt-Pd nos Alvos Luanga e Fênix – Complexo Máfico-Ultramáfico Luanga, Província Mineral de Carajás, Pará. 210p.

Rosa, W.D., 2014. Complexos acamadados da Serra da Onça e Serra do Puma: Geologia e petrologia de duas intrusões Máfico-Ultramáficas com sequência de 94 cristalização distinta na Província Arqueana de Carajás, Brasil. Unpublished M.Sc. Thesis, Universidade de Brasília, Brazil, 65 pp.

SGS Lakefield Research Limited (2004). Locked Cycle Flotation Products, Luanga Deposit, Brazil. 131p.

SGS Lakefield Research Limited (2005). Applicability of the PLATSOL® Process to Five Samples from the Luanga Deposit. 64p.

Siepierski, L., Ferreira Filho, C.F., 2016. Spinifex-textured komatiites in the south border of the Carajas ridge, Selva Greenstone belt, Carajás Province, Brazil. Journal of South American Earth Sciences 66, 41-55.

Souza, Z.S., Dall'Agnol, R., 1996. Caracterização geoquímica e tectônica de rochas meta vulcânicas de "greenstone belts" arqueanos da região de Rio Maria, SE do Pará. Boletim. IG-USP, special publication, online, vol.18, pp. 97-101. ISSN 0102-6275.

Souza, Z.S., Potrel, A., Lafon, J.M., Althoff, F.J., Pimentel, M.M., Dall'Agnol, R., Oliveira, C.G., 2001. Nd, Pb and Sr isotopes in the Identidade Belt, an Archean greenstone belt of Rio Maria region (Carajás Province, Brazil): implications for the geodynamic evolution of the Amazonian Craton. Precambrian Research 109, 293-315.

Tallarico, J.B.C. (2002). Caracterização de Amostras de Cromitito. Projeto Platina – Luanga. 14p.

Tallarico, J.B.C. (2003). Projeto Platina, Carajás: Petrografia de Amostras Testadas para WI do Minério. 13p.

Tallarico, J.B.C. (2003). Projeto Planita, Carajás – Caracterização Mineralógica de Amostra de Minério tipo "Sulfeto Oxidado" (SO-1). 32p.

Tallarico, J.B.C. (2003). Projeto Planita, Carajás – Caracterização Mineralógica de Quatro Amostras Iniciais (S1 a S4) de Minério Sulfetado de Luanga. 46p.

Tallarico, J.B.C., Sá, L.R.B.M. (2004). Projeto Platina, Carajás – Caracterização Mineralógica de Amostra Inicial (SB) de Minério Sulfetado. 43p.

Tavares, F.M., 2015. Evolução geotectônica do nordeste da Província Carajás. Unpublish, Ph.D. Thesis, Universidade Federal do Rio de Janeiro, p. 115 pp.

Teixeira, A.S. (2013). Geologia, Petrologia e Geocronologia do Complexo Acamadado Lago Grandee: Evidência para uma Suíte Magmática Mineralizada a EGP na Província Mineral de Carajás, Brasil. 216p.

Teixeira, J.B.G., Eggler, D.H., 1994. Petrology, Geochemistry, and Tectonic Setting of Archaean Basaltic and Dioritic Rocks from the N4 Iron Deposit, Serra dos Carajás, Pará, Brazil. Acta Geologica Leopoldensia 17, 71-114.

Teixeira, A.S., Ferreira Filho, C.F., Giustina, M.E.S.D., Araujo, S.M., Silva, H.H.A.B., 2015. Geology, petrology and geochronology of the Lago Grande layered complex: Evidence for a PGE-mineralized magmatic suite in the Carajás Mineral Province, Brazil. J. South Am. Earth Sci. 64, 116-138.

VALE. (unknown date). Report Luanga. 159p.

Vasquez, M.L., Carvalho, J.M.A., Sousa, C.S., Ricci, P.S.F., Macambira, E.M.B., and Costa, L.T.R., 2008. Geological map of the Pará state in GIS, Geological Survey of Brazil-CPRM.

Villas, R.N., Santos, M.D., 2001. Gold deposits of the Carajás Mineral Province: deposit types and metallogenesis. Mineralium Deposita 36, 300–331.

Zacharias, O., Tallarico, J.B.C. (2002). Caracterização de Amostras de Cromititos de Luanga – Estudo em Escala de Bancada. Relatório Final. 33p.

Zacharias, O. (2007). Estudos de Flotação com Amostras de PGM Luanga – Relatório de Progresso 1. 24p.

Appendix A

Technical Report QP Signature Page & Certificates

QP CERTIFICATE OF EDNIE RAFAEL M. DE C. FERNANDES

I, Ednie Rafael M. de C. Fernandes, MAIG, (#7974), as an author of the technical report titled "National Instrument 43-101 Independent Technical Report for the Luanga PGE+Au+Ni Project, Pará State, Brazil", dated June 27th, 2022, with an effective date of April 12th, 2022 (the "Technical Report"), prepared for Bravo Mining Corp. ("Bravo") do hereby certify that:

1) I am a Geologist and Associate Consultant for GE21 Consultoria Mineral, which is located on Avenida Afonso Pena, 3130, 12th floor, Savassi, Belo Horizonte, MG, Brazil - CEP 30130-910.
2) I am a graduate of the Federal University of Bahia, located in Salvador, Brazil, and hold a Bachelor of Science Degree in Geology (2010). I have practised my profession continuously since 2011.
3) I am a Professional enrolled with the Australasian Institute of Geoscientists ("AIG") - ("MAIG") #7974.
4) I am a professional geologist, with more than 10 years' relevant experience in exploration geology. My relevant experience for the purpose of this report is:
    i. Co-authored reports including gold projects in Brazil
    ii. A senior position within a consulting company
    iii. Performing as an exploration geologist for several Brazilian mining companies working in geological systems of the same type as Luanga.
5) I have read the definition of "qualified person" set out in National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association as defined in NI 43-101, and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of NI 43-101.
6) I have no prior involvement with the property that is the subject of this Technical Report, other than as an author of the independent technical report 'National Instrument 43-101 Independent Technical Report for the Luanga PGE+Au+Ni Project", dated June 27th, 2022, with an effective date of April 12th, 2022, prepared for Bravo. The relationship with Bravo was solely for professional works in exchange for fees based on rates set by commercial agreement. Payment of these fees is in no way dependent on the results of the Technical Report.
7) I am independent of Bravo and the Property and have no material interest invested in the Property, Bravo or any of their related entities. My relationship with Bravo is strictly professional, consistent with that held between a client and an independent consultant.
8) I am responsible for co-authoring all sections of this Technical Report except Section 12.
9) I have not personally inspected the property.
10) As of the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections of the Technical Report that I have authored, and I am responsible for all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
11) I have no personal knowledge, as of the date of this certificate, of any material fact or material change which is not reflected in this Technical Report.
12) I am independent of Bravo, applying all the tests in section 1.5 of NI 43-101.
13) I have read NI 43-101 and Form 43-101F1 – Technical Report, and the Technical Report has been prepared in compliance with that instrument and form.
14) I do hereby consent to the public filing (including electronic) of the Technical Report by Bravo, with any stock exchange and other regulatory authority, and any publication by them for regulatory purposes, in the public company files on their websites accessible by the public, of the Technical Report.

Belo Horizonte, Brazil, June 27th, 2022.

/s/ Ednie Rafael M. de C. Fernandes

Ednie Rafael M. de C. Fernandes, MAIG

QP CERTIFICATE OF MARLON SARGES FERREIRA

I, Marlon Sarges Ferreira, MAIG, (#6914), as an author of the technical report titled "National Instrument 43-101 Independent Technical Report for the Luanga PGE+Au+Ni Project, Pará State, Brazil", dated June 27th, 2022, with an effective date of April 12th, 2022 (the "Technical Report"), prepared for Bravo Mining Corp. ("Bravo"), do hereby certify that:

1) I am a Geologist and Associate Consultant for GE21 Consultoria Mineral, which is located on Avenida Afonso Pena, 3130, 12th floor, Savassi, Belo Horizonte, MG, Brazil - CEP 30130-910.
2) I am a graduate of the Federal University of Pará, located in Belém, Brazil, and hold a Bachelor of Science Degree in Geology and a master's degree in Mineral Engineering from Federal University of Ouro Preto, Brazil. I have practised my profession continuously since 2006.
3) I am a Professional enrolled with the Australasian Institute of Geoscientists ("AIG") - ("MAIG") #6914.
4) I am a professional geologist, with more than 15 years' relevant experience in exploration geology. My relevant experience for the purpose of this Technical Report includes:
   - 2006 to 2011 – Geologist at various consulting companies, developing technical studies of exploration, open pit design, projects and validation of mineral resources for mining negotiations;
   - 2011 and 2015 – Geologist at a mining company responsible by long- term mineral resource supporting company strategies decisions and development of new business;
   - 2015 to present – Geologist which provides advice, assistance, and audits for the entire mining cycle, from defining strategies, generating and selecting mineral targets, mineral exploration, geological assessments, resource reserve estimation for JORC and NI 43-101 reports in level of conceptual technical and economic studies, and economic feasibility.
5) I have read the definition of "qualified person" set out in National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association as defined in NI 43-101, and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of NI 43-101.
6) I have no prior involvement with the property that is the subject of this Technical Report, other than as an author of the independent technical report 'National Instrument 43-101 Independent Technical Report for the Luanga PGE+Au+Ni Project", dated June 27th, 2022, with an effective date of April 12th, 2022, prepared for Bravo. The relationship with Bravo was solely for professional works in exchange for fees based on rates set by commercial agreement. Payment of these fees is in no way dependent on the results of the Technical Report.
7) I am independent of both Bravo and the Property and have no material interest invested in the Property, Bravo or any of their related entities. My relationship with Bravo is strictly professional, consistent with that held between a client and an independent consultant.
8) I am responsible co-authoring all Sections of this report and completing the Field Visit in Section 12 of this Technical Report.
9) I did personally inspect the property for 2 days, between the 13th and 14th of January 2022.
10) As of the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections of the Technical Report that I have authored, and I

am responsible for all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

11) I have no personal knowledge, as of the date of this certificate, of any material fact or material change which is not reflected in this Technical Report.
12) I am independent of Bravo, applying all the tests in section 1.5 of NI 43-101.
13) I have read NI 43-101 and Form 43-101F1 – Technical Report, and the Technical Report has been prepared in compliance with that instrument and form.
14) I do hereby consent to the public filing (including electronic) of the Technical Report by Bravo, with any stock exchange and other regulatory authority, and any publication by them for regulatory purposes, in the public company files on their websites accessible by the public, of the Technical Report.

Belo Horizonte, Brazil, June 27th, 2022.

/s/ Marlon Sarges Ferreira

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Marlon Sarges Ferreira, MAIG

Appendix B

Luanga Drill Hole Collars
(Source: VALE SA)

HOLE-ID	UTM_E	UTM_N	Elevation (m)	Azimuth (º)	Dip (º)	Depth (m)	Target Area	Year	Contractor
PPT-LUAN-FD0001	659320.00	9342663.00	249.00	090	-60.00	194.08	Luanga	1990	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0002	659390.00	9342963.00	269.00	090	-60.00	199.91	Luanga	1990	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0003	659330.00	9342423.00	234.21	090	-60.00	76.13	Luanga	1990	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0004	659497.00	9342963.00	281.00	270	-60.00	173.57	Luanga	1990	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0005	659497.28	9343401.35	273.21	090	-60.00	90.30	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0006	656800.00	9339250.00	249.58	000	-70.00	315.70	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0007	659597.41	9343201.44	296.11	090	-60.00	95.10	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0008	659697.36	9343201.52	273.88	090	-60.00	91.70	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0009	659537.65	9343001.38	296.80	270	-60.00	200.05	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0010	659597.55	9343001.44	301.86	090	-60.00	90.35	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0011	659697.52	9343001.52	296.80	090	-60.00	90.30	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0012	659697.68	9342801.52	310.01	090	-60.00	90.35	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0013	659199.57	9340601.13	299.20	310	-60.00	120.65	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0014	658801.00	9341015.00	255.00	330	-60.00	200.65	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0015	657600.00	9340050.00	287.63	000	-60.00	121.10	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0016	657400.06	9339990.08	298.53	180	-55.00	200.05	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0017	657400.00	9339900.00	288.52	000	-60.00	123.20	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0018	657200.01	9339790.09	297.33	180	-70.00	100.30	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0019	657200.01	9339710.10	285.00	000	-60.00	200.15	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0020	657000.02	9339700.04	314.99	000	-60.00	90.05	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0021	657000.02	9339660.05	302.23	000	-60.00	90.35	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0022	656800.00	9339525.00	289.20	000	-60.00	158.90	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0023	659797.31	9343201.61	296.73	270	-60.00	90.50	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD023A	659797.31	9343201.61	296.73	090	-60.00	45.30	Luanga	2001	Geosol - Geologia e Sondagem SA

HOLE-ID	UTM_E	UTM_N	Elevation (m)	Azimuth (º)	Dip (º)	Depth (m)	Target Area	Year	Contractor
PPT-LUAN-FD0024	659797.53	9343001.60	311.97	270	-60.00	90.35	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD024A	659797.53	9343001.60	311.97	180	-60.00	207.75	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0025	659697.36	9343201.52	273.88	270	-60.00	90.20	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0026	659597.55	9343001.44	301.86	270	-60.00	110.00	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0027	659697.52	9343001.52	296.80	270	-60.00	90.40	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0028	659697.68	9342801.52	310.01	270	-60.00	90.70	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0029	656800.00	9339475.00	284.00	000	-60.00	120.80	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0030	656800.00	9339775.00	307.00	000	-60.00	120.15	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0031	657000.00	9339775.00	305.00	000	-60.00	202.10	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0032	657000.00	9339610.00	288.91	000	-60.00	126.65	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0033	657000.00	9339560.00	286.25	000	-60.00	150.80	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0034	657200.00	9339875.00	314.99	000	-60.00	120.10	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0035	657200.00	9339800.00	299.81	000	-60.00	121.35	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0036	657200.00	9339760.00	290.00	000	-60.00	140.25	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0037	657200.00	9339650.00	264.08	000	-60.00	211.00	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0038	657200.00	9339600.00	274.50	000	-60.00	251.70	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0039	657400.00	9339950.00	304.30	000	-60.00	120.15	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0040	657400.00	9339850.00	283.64	000	-60.00	150.10	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0041	657400.00	9339800.00	277.88	000	-60.00	201.55	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0042	657600.00	9340100.00	297.38	000	-60.00	122.05	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0043	657600.00	9340000.00	278.58	000	-60.00	150.55	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0044	657600.00	9339950.00	273.46	000	-60.00	260.05	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0045	657800.00	9340000.00	268.60	000	-60.00	122.30	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0046	657800.00	9340050.00	276.63	000	-60.00	121.60	Luanga	2001	Geosol - Geologia e Sondagem SA

HOLE-ID	UTM_E	UTM_N	Elevation (m)	Azimuth (º)	Dip (º)	Depth (m)	Target Area	Year	Contractor
PPT-LUAN-FD0047	657800.00	9340100.00	283.40	000	-60.00	121.70	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0048	657800.00	9340150.00	291.85	000	-60.00	120.35	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0049	659750.00	9342700.00	301.00	090	-60.00	121.45	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0050	658348.00	9340814.00	274.72	330	-60.00	200.80	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0051	659800.00	9342600.00	298.86	090	-60.00	137.10	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0052	659041.00	9341214.00	252.83	330	-60.00	202.35	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0053	659387.00	9341414.00	274.10	330	-60.00	221.65	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0054	659400.00	9343400.00	261.39	270	-60.00	194.25	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0055	658751.00	9341102.00	241.68	330	-60.00	200.90	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0056	658701.00	9341188.00	237.38	330	-60.00	203.25	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0057	659214.00	9341314.00	254.24	330	-60.00	201.75	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0058	659500.00	9343200.00	291.54	090	-60.00	156.10	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0059	659425.00	9343200.00	270.00	090	-60.00	152.55	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0060	660040.00	9342400.00	288.48	090	-55.00	181.25	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0061	658867.00	9341114.00	247.90	330	-60.00	200.40	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0062	659625.00	9343000.00	299.61	090	-60.00	226.25	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0063	659850.00	9342600.00	301.80	090	-60.00	125.60	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0064	659575.00	9343000.00	299.61	090	-60.00	190.80	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0065	659550.00	9343000.00	297.36	090	-60.00	269.75	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0066	658915.00	9341017.00	264.46	330	-60.00	208.30	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0067	659800.00	9342800.00	314.44	270	-60.00	311.20	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0068	659675.00	9342800.00	304.36	090	-60.00	150.25	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0069	659140.00	9341041.00	264.28	330	-60.00	202.75	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0070	659950.00	9342600.00	300.00	090	-60.00	206.35	Luanga	2001	Geosol - Geologia e Sondagem SA

HOLE-ID	UTM_E	UTM_N	Elevation (m)	Azimuth (º)	Dip (º)	Depth (m)	Target Area	Year	Contractor
PPT-LUAN-FD0071	659090.00	9341128.00	256.01	330	-60.00	234.65	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0072	659437.00	9341327.00	249.61	330	-60.00	231.00	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0073	659264.00	9341228.00	248.99	330	-60.00	229.10	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0074	659610.00	9341427.00	229.53	330	-60.00	204.75	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0075	658126.00	9340397.00	269.00	330	-60.00	294.70	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0076	659950.00	9342400.00	279.82	090	-55.00	170.05	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0077	658991.00	9341301.00	245.97	330	-60.00	224.50	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0078	658941.00	9341387.00	234.07	330	-60.00	210.85	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0079	658891.00	9341474.00	226.92	330	-60.00	214.75	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0080	658596.00	9340784.00	289.00	330	-60.00	230.55	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0081	658830.00	9340968.00	254.00	330	-60.00	241.95	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0082	659783.00	9341528.00	230.00	330	-60.00	213.20	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0083	659957.00	9341628.00	233.00	330	-60.00	216.65	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0084	659733.00	9341614.00	248.08	330	-60.00	193.80	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0085	658571.00	9340828.00	277.02	330	-60.00	209.40	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0086	658398.00	9340728.00	283.37	330	-60.00	201.45	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0087	658275.00	9340541.00	284.97	330	-60.00	202.90	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0088	659635.00	9341384.00	229.00	330	-60.00	243.20	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0089	659760.00	9341168.00	215.30	330	-60.00	450.80	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0090	659166.00	9340998.00	265.00	330	-70.00	318.00	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0091	659166.00	9340998.00	265.00	000	-90.00	478.70	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0092	657100.00	9339900.00	313.43	000	-60.00	200.05	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0093	658367.00	9341980.00	204.62	330	-60.00	432.20	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0094	659600.00	9342900.00	290.00	090	-60.00	284.10	Luanga	2001	Geosol - Geologia e Sondagem SA

HOLE-ID	UTM_E	UTM_N	Elevation (m)	Azimuth (º)	Dip (º)	Depth (m)	Target Area	Year	Contractor
PPT-LUAN-FD0095	659650.00	9342900.00	290.00	090	-60.00	121.35	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0096	659660.00	9341341.00	224.00	000	-90.00	320.40	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0097	658000.00	9340000.00	250.28	000	-65.00	300.00	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0098	657400.00	9339700.00	253.77	000	-65.00	300.55	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0099	657200.00	9339500.00	267.20	000	-60.00	302.20	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0100	657000.00	9339450.00	268.11	000	-60.00	302.05	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0101	658840.00	9341561.00	215.03	330	-60.00	201.60	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0102	658417.00	9341893.00	204.90	330	-60.00	208.85	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0103	659434.00	9342134.00	225.39	330	-60.00	225.75	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0104	658467.00	9341807.00	206.23	330	-60.00	202.90	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0105	658791.00	9341647.00	215.42	330	-60.00	212.20	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0106	659484.00	9342047.00	225.00	330	-60.00	210.55	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0107	659534.00	9341960.00	236.53	330	-60.00	303.20	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0108	660017.00	9342416.00	289.65	090	-80.00	141.20	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0109	659927.00	9342615.00	300.28	090	-80.00	302.30	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD010A	659597.55	9343001.44	301.86	180	-60.00	200.30	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0110	658076.00	9340484.00	269.00	330	-60.00	205.90	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0111	659700.00	9342899.00	310.00	090	-60.00	141.70	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0112	659446.00	9343415.00	268.10	090	-60.00	160.90	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0113	659289.00	9341184.00	251.00	330	-70.00	210.65	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0114	659395.00	9343212.00	263.80	090	-70.00	264.40	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0115	659725.00	9342816.00	315.76	090	-60.00	157.85	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0116	659462.00	9341284.00	245.00	330	-70.00	237.35	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0117	659549.00	9342899.00	295.00	060	-60.00	288.35	Luanga	2002	Geosol - Geologia e Sondagem SA

HOLE-ID	UTM_E	UTM_N	Elevation (m)	Azimuth (º)	Dip (º)	Depth (m)	Target Area	Year	Contractor
PPT-LUAN-FD0118	659546.00	9343416.00	270.61	090	-60.00	200.00	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0119	658719.00	9340971.00	266.14	330	-60.00	221.20	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD011A	659697.52	9343001.52	296.80	180	-60.00	200.10	Luanga	2001	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0120	659800.00	9342700.00	307.00	090	-60.00	279.05	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0121	658769.00	9340884.00	265.88	330	-60.00	216.10	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0122	659798.00	9342416.00	273.20	090	-60.00	259.65	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0123	658325.00	9340454.00	287.40	330	-60.00	261.55	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0124	659907.00	9341714.00	258.76	330	-60.00	202.30	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0125	658154.00	9343015.00	228.70	090	-60.00	201.45	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0126	658450.00	9346130.00	300.00	000	-60.00	202.60	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0127	659798.00	9342016.00	250.40	090	-60.00	150.35	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0128	659750.00	9342015.00	245.10	090	-60.00	150.45	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0129	659480.00	9342415.00	246.80	090	-60.00	201.30	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0130	657100.00	9339814.00	303.02	000	-60.00	134.55	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0131	659115.00	9341084.00	260.20	330	-60.00	139.95	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0132	659400.00	9343400.00	263.00	090	-60.00	201.05	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0133	657100.00	9339764.00	300.00	000	-60.00	123.10	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0134	657100.00	9339714.00	296.46	000	-60.00	150.85	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0135	658621.00	9340741.00	302.93	330	-70.00	345.65	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0136	659998.00	9342015.00	291.30	090	-60.00	172.25	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0137	657100.00	9339664.00	282.50	000	-60.00	155.40	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0138	657100.00	9339614.00	280.70	000	-60.00	201.70	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0139	658796.00	9340438.00	295.30	330	-60.00	218.85	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0140	658426.00	9339878.00	234.91	330	-60.00	200.30	Luanga	2002	Geosol - Geologia e Sondagem SA

HOLE-ID	UTM_E	UTM_N	Elevation (m)	Azimuth (º)	Dip (º)	Depth (m)	Target Area	Year	Contractor
PPT-LUAN-FD0141	658450.00	9340238.00	273.94	330	-60.00	217.30	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0142	658500.00	9340151.00	271.19	330	-60.00	203.30	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0143	658600.00	9339978.00	244.67	330	-60.00	239.75	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0144	658846.00	9340351.00	289.65	330	-60.00	205.20	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0145	658546.00	9340871.00	274.16	330	-60.00	204.45	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0146	658225.00	9340627.00	283.01	330	-60.00	203.75	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0147	660050.00	9342015.00	305.80	090	-60.00	245.65	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0148	658054.00	9343014.00	232.60	090	-60.00	202.50	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0149	658942.00	9340984.00	272.39	330	-60.00	157.25	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0150	659997.00	9342616.00	287.94	090	-60.00	104.30	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0151	659932.00	9341671.00	250.91	330	-60.00	181.55	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0152	659646.00	9343416.00	266.60	090	-60.00	160.05	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0153	659325.00	9341321.00	249.24	330	-60.00	103.65	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0154	659499.00	9341421.00	251.39	330	-60.00	130.30	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0155	659177.00	9341178.00	249.89	330	-60.00	151.00	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0156	659152.00	9341221.00	252.60	330	-60.00	110.90	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0157	659004.00	9341078.00	264.10	330	-60.00	126.25	Luanga	2002	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0158	655199.00	9339225.00	365.26	000	-60.00	205.70	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0159	655199.00	9339175.00	358.52	000	-60.00	202.55	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0160	655199.00	9339125.00	351.48	000	-60.00	203.00	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0161	656202.00	9339290.00	266.60	000	-60.00	200.75	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0162	658002.00	9340170.00	269.22	000	-60.00	270.40	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0163	658202.00	9339689.00	222.55	000	-60.00	213.85	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0164	656802.00	9339690.00	295.85	000	-60.00	252.65	Luanga	2003	Geosol - Geologia e Sondagem SA

HOLE-ID	UTM_E	UTM_N	Elevation (m)	Azimuth (º)	Dip (º)	Depth (m)	Target Area	Year	Contractor
PPT-LUAN-FD0165	656802.00	9339589.00	289.35	000	-60.00	260.00	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0166	656802.00	9339464.00	275.00	000	-60.00	7.20	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD166A	656802.00	9339425.00	275.00	000	-60.00	207.65	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0167	657002.00	9339840.00	307.05	000	-60.00	200.65	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0168	657830.00	9341950.00	222.83	330	-60.00	200.50	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0169	657860.00	9341890.00	219.42	330	-60.00	200.65	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0170	659035.00	9341525.00	238.27	330	-60.00	250.20	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0171	659795.00	9343816.00	202.10	090	-60.00	109.40	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0172	659621.00	9343617.00	233.46	090	-60.00	73.65	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0173	659470.00	9343617.00	257.73	090	-60.00	129.35	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0174	659395.00	9343617.00	268.35	090	-60.00	169.35	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0175	659321.00	9343617.00	280.06	090	-60.00	199.40	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0176	659245.00	9343617.00	276.88	090	-60.00	200.55	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0177	659178.00	9343617.00	274.75	090	-60.00	167.90	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0178	657990.00	9343010.00	218.65	090	-60.00	235.10	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0179	659395.00	9343717.00	265.22	090	-60.00	149.00	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0180	658970.00	9342817.00	220.38	090	-60.00	202.80	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0181	658720.00	9342617.00	215.40	090	-60.00	200.65	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0182	658803.00	9342617.00	213.70	090	-60.00	203.30	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0183	660080.00	9342216.00	300.38	090	-60.00	232.50	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0184	659998.00	9342216.00	293.40	090	-60.00	221.10	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0185	659920.00	9342216.00	278.63	090	-60.00	250.90	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0186	659850.00	9342216.00	260.70	090	-60.00	224.70	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0187	659798.00	9342216.00	252.60	090	-60.00	497.60	Luanga	2003	Rede - Engenharia e Sondagem Ltda

HOLE-ID	UTM_E	UTM_N	Elevation (m)	Azimuth (º)	Dip (º)	Depth (m)	Target Area	Year	Contractor
PPT-LUAN-FD0188	660052.00	9342216.00	297.01	090	-60.00	200.70	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0189	659923.00	9342013.00	272.50	090	-60.00	220.45	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0190	657300.00	9339730.00	282.44	000	-60.00	231.30	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0191	660120.00	9342110.00	312.06	090	-60.00	267.55	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0192	655400.00	9339025.00	348.64	000	-60.00	250.10	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0193	659924.00	9341815.00	277.50	090	-60.00	200.45	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0194	659848.00	9341816.00	276.60	090	-60.00	205.55	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0195	658979.00	9343013.00	222.75	090	-60.00	227.20	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0196	659971.00	9343416.00	259.90	090	-60.00	83.75	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0197	659595.00	9343815.00	211.80	090	-60.00	40.95	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0198	659520.00	9343820.00	234.22	090	-60.00	56.30	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0199	661400.00	9342216.00	225.20	090	-60.00	180.25	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0200	659030.00	9343620.00	289.47	090	-60.00	250.35	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0201	658002.00	9340290.00	277.80	000	-60.00	295.90	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0202	656600.00	9339695.00	285.02	000	-60.00	200.90	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0203	656400.00	9339290.00	262.25	000	-60.00	340.80	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0204	656602.00	9339564.00	277.30	000	-60.00	300.05	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0205	656602.00	9339300.00	257.48	000	-60.00	400.80	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0206	659571.00	9343592.00	237.00	090	-60.00	181.35	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0207	656202.00	9339063.00	256.26	000	-60.00	350.00	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0208	656202.00	9339363.00	270.01	000	-60.00	240.50	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0209	656000.00	9339190.00	273.40	000	-60.00	283.05	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0210	656000.00	9339290.00	282.04	000	-60.00	201.35	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0211	655800.00	9339095.00	292.83	000	-60.00	250.25	Luanga	2003	Geosol - Geologia e Sondagem SA

HOLE-ID	UTM_E	UTM_N	Elevation (m)	Azimuth (º)	Dip (º)	Depth (m)	Target Area	Year	Contractor
PPT-LUAN-FD0212	655800.00	9339170.00	293.78	000	-60.00	205.40	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0213	655600.00	9339035.00	326.81	000	-60.00	252.00	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0214	655400.00	9339070.00	316.87	000	-60.00	200.85	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0215	656400.00	9339380.00	262.12	000	-60.00	281.40	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0216	659470.00	9343717.00	250.00	090	-60.00	138.25	Luanga	2003	Rede - Engenharia e Sondagem Ltda
PPT-LUAN-FD0217	655600.00	9339110.00	315.47	000	-60.00	206.70	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0218	659852.00	9342700.00	300.65	090	-60.00	266.80	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0219	659090.00	9341440.00	235.43	000	-60.00	330.20	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0220	660053.00	9341815.00	278.20	090	-60.00	200.50	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0221	659998.00	9341815.00	272.30	090	-60.00	200.50	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0222	659916.00	9342110.00	272.09	090	-60.00	207.60	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUAN-FD0223	657300.00	9339640.00	230.42	090	-60.00	233.50	Luanga	2003	Geosol - Geologia e Sondagem SA
PPT-LUSL-FD0002	661529.00	9336493.00	171.45	341	-60.00	218.30	Luanga South	2003	not reported
PPT-LUSL-FD0003	661504.00	9336563.00	167.29	341	-60.00	211.10	Luanga South	2003	not reported
PPT-LUSL-FD0004	661703.00	9336603.00	168.37	341	-60.00	200.80	Luanga South	2003	not reported
PPT-LUSL-FD0005	661678.00	9336673.00	163.81	341	-60.00	213.05	Luanga South	2003	not reported
PPT-LUSL-FD0006	661837.00	9336832.00	166.24	341	-60.00	200.00	Luanga South	2003	not reported
PPT-LUSL-FD0007	661814.00	9336904.00	164.54	341	-60.00	201.25	Luanga South	2003	not reported
PPT-LUSL-FD0008	662027.00	9336894.00	170.96	341	-60.00	225.40	Luanga South	2003	not reported
PPT-LUSL-FD0009	662004.00	9336966.00	175.01	341	-60.00	229.15	Luanga South	2003	not reported
PPT-LUSL-FD0010	661979.00	9337036.00	172.29	341	-60.00	226.45	Luanga South	2003	not reported
PPT-LUSL-FD0011	662853.00	9337585.00	186.48	341	-60.00	210.55	Luanga South	2003	not reported
PPT-LUSL-FD0012	662368.00	9337139.00	169.33	341	-60.00	230.60	Luanga South	2003	not reported
PPT-LUSL-FD0013	662400.00	9337044.00	170.46	341	-60.00	233.00	Luanga South	2003	not reported

HOLE-ID	UTM_E	UTM_N	Elevation (m)	Azimuth (º)	Dip (º)	Depth (m)	Target Area	Year	Contractor
PPT-LUSL-FD0014	662874.00	9337519.00	181.01	341	-60.00	209.10	Luanga South	2003	not reported
PPT-LUSL-FD0015	662898.00	9337477.00	176.27	341	-60.00	222.30	Luanga South	2003	not reported
PPT-LUSL-FD0016	663361.00	9337333.00	180.60	341	-60.00	199.75	Luanga South	2003	not reported
PPT-LUSL-FD0017	663380.00	9337324.00	182.28	341	-60.00	216.80	Luanga South	2003	not reported
PPT-LUSL-FD0022	661291.00	9336572.00	174.53	341	-60.00	212.20	Luanga South	2003	not reported
PPT-LUSL-FD0026	661726.00	9336532.00	163.23	341	-60.00	260.10	Luanga South	2003	not reported
PPT-PEGS-FD0001	663575.00	9337509.00	244.07	341	-60.00	166.00	Luanga South	2003	not reported
PPT-PEGS-FD0002	663475.00	9337460.00	223.53	341	-60.00	206.15	Luanga South	2003	not reported
PPT-PEGS-FD0003	663515.00	9337370.00	198.50	341	-60.00	246.85	Luanga South	2003	not reported
PPT-PEGS-FD0004	663600.00	9337445.00	211.16	341	-60.00	219.25	Luanga South	2003	not reported
PPT-PEGS-FD0005	663681.00	9337508.00	223.08	341	-60.00	217.20	Luanga South	2003	not reported
PPT-PEGS-FD0006	663702.00	9337444.00	210.79	341	-60.00	211.80	Luanga South	2003	not reported