

NI43-101 TECHNICAL REPORT

On The

NIŇOBAMBA AU-AG PROJECT

Districts of Vinchos, Chuschi and Paras, Provinces of Humanga and Cangallo,
Department of Ayacucho, Peru

Centered at Approximately

Latitude 13° 22’ South by Longitude 74° 34’ West
Peruvian (NTS) Map Area Huachocolpa 27-n

- Report Prepared For -

AFRICAN ENERGY METALS INC.

- Report Prepared By -

JAMES A. McCREA. P. Geo.
10743 139 Street, 306
Surrey, BC V3T 4L8

Effective Date:

January 21, 2025

IMPORTANT NOTICE

This report was prepared as a National Instrument 43-101 Technical Report for African Energy Metals Inc. by James A. McCrea, P.Geo. The quality of information and conclusions contained herein are consistent with the level of effort involved in Mr. McCrea's services, based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions and qualifications set forth in this report. This report is intended to be used by African Energy Metals Inc., subject to the terms and conditions of its contract with Mr. McCrea. This contract permits African Energy Metals Inc. to file this report as a Technical Report to satisfy TSX Venture Policy requirements pursuant to National Instrument 43-101, Standards of Disclosure for Mineral Projects. Except for the purposes legislated under provincial securities law, any other use of this report by any third party is at that party's sole risk.

DATE and SIGNATURE PAGE

CERTIFICATE OF QUALIFIED PERSON

I, James Albert McCrea, am a professional geologist residing at 306 - 10743 139 Street, Surrey, British Columbia, Canada, do hereby certify that:

- I am the author of the 'NI43-101 Technical Report on the Niñobamba Au-Ag Project, Districts of Vinchos, Chuschi and Paras, Provinces of Humanga and Cangallo, Department of Ayacucho, Peru', dated, January 21, 2025;
- I am a Registered Professional Geoscientist (P. Geo.), Practising, with the Engineers and Geoscientists of British Columbia, (Licence # 21450). I graduated from the University of Alberta, Canada, with a B. Sc. in Geology in 1988.
- I have worked as a geoscientist in the minerals industry for over 30 years and I have been directly involved in the mining, exploration and evaluation of mineral properties mainly in Canada, the United States, Mexico, Peru, Argentina, Bolivia and Colombia for gold, silver, copper, molybdenum and base metals;
- I visited the Niñobamba Au-Ag Project and area on April 14th, 2013, August 19th and 20th, 2021 and again on May 5th to 7th of 2023.
- I had no prior involvement with the property before I visited it in April of 2013, later involvement was the additional site visits and authoring the previous report on the property filed on Sidar (McCrea, 2022).
- I am responsible for all sections of the 'NI43-101 Technical Report on the Niñobamba Au-Ag Project, Districts of Vinchos, Chuschi and Paras, Provinces of Humanga and Cangallo, Department of Ayacucho, Peru', dated January 21, 2025.
- I am independent of African Energy Metals Inc. and Rio Silver Inc. as independence is described in Section 1.5 of NI43-101. I have not received, nor do I expect to receive, any interest, directly or indirectly, in African Energy Metals Inc or Rio Silver Inc.
- I was retained by African Energy Metals Inc. to prepare an exploration summary on the Niñobamba Au-Ag Project, Districts of Vinchos, Chuschi and Paras, Provinces of Humanga and Cangallo, Department of Ayacucho, Peru in accordance with National Instrument 43-101. The report is based on my review of project files and information provided by Rio Silver Inc.;
- I have read National Instrument 43-101 and Form 43-101F1 and, by reason of education and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI43-101. This technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- As of the date of this certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
- I, the undersigned prepared this report titled 'NI43-101 Technical Report on the Niñobamba Au-Ag Project, Districts of Vinchos, Chuschi and Paras, Provinces of Humanga and Cangallo, Department of Ayacucho, Peru', dated January 21, 2025 in support of the public disclosure of technical aspects for the Niñobamba Ag-Pb-Zn Project by African Energy Metals Inc.

Effective Date: January 21, 2025
Signed By James A. McCrea

_____
James A. McCrea, B. Sc., P. Geo.
(signed and sealed original copy on file)

Dated this 21st day of January, 2025

Table of Contents

Page No.
DATE and SIGNATURE PAGE……..i
1.0 SUMMARY 1
1.1 Introduction 1
1.2 Property Description and Ownership 1
1.3 Accessibility, Physiography, Climate, Local Resources and Infrastructure 1
1.4 History 2
1.5 Geological Setting and Mineralization 3
1.6 Exploration and Drilling 4
1.7 Mineral Processing and Metallurgical Testing 4
1.8 Mineral Resources 4
1.9 Interpretations and Conclusions 4
1.10 Recommendations and Proposed Exploration Budget 5
2.0 INTRODUCTION 6
2.1 Introduction and Terms of Reference 6
2.2 Sources of Information 6
2.3 Site Visit 6
2.4 Abbreviations and Units of Measure 7
2.5 Acknowledgements 8
3.0 RELIANCE ON OTHER EXPERTS 8
4.0 PROPERTY DESCRIPTION and LOCATION 9
4.1 Property Location 9
4.2 Property Description 10
4.3 Underlying Agreements 11
4.4 Surface Rights 12
4.5 Mineral Rights in Peru 12
4.6 Royalties and Obligations 13
4.7 Environmental Regulations & Exploration Permits 13
4.8 Environmental Considerations 14
5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY 15
5.1 Physiography 15
5.2 Accessibility 15
5.3 Climate 15
5.4 Local Resources and Infrastructure 15
6.0 HISTORY 16
6.1 Property Exploration History 16
6.1.1 Exploration by AngloGold 16
6.1.2 Exploration by Bear Creek 17
6.1.3 Exploration by Newmont/Southern Copper (Peru) 18
6.1.4 Acquisition by Rio Silver 31
6.1.5 Exploration by Rio Silver (Peru) 31
7.1.2 South Zone 38
7.0 GEOLOGICAL SETTING and MINERALIZATION 46
7.1 Regional Geology 46
7.2 Regional Structure 47
7.3 Regional Mineral Occurrences and Mines 47
7.4 Property Geology 48

8.0 DEPOSIT TYPES....53
9.0 EXPLORATION....56
10.0 DRILLING....57
11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY....58
11.1 Exploration by AngloGold....58
11.2 Exploration by Bear Creek....58
11.3 Exploration by Newmont/Southern Copper (Peru)....58
11.4 MineGate Sampling Preparation (Rio Silver)....58
11.5 Verification Sampling....59
12.0 DATA VERIFICATION....60
12.1 Verification Sampling Results....60
13.0 MINERAL PROCESSING and METALLURGICAL TESTING....66
13.1 Introduction:....66
13.2 Head Samples....66
13.3 Metallurgical Test Evaluation....68
13.4 Conclusions....72
14.0 MINERAL RESOURCE ESTIMATES....73
15.0 MINERAL RESERVE ESTIMATES....74
23.0 ADJACENT PROPERTIES....75
24.0 OTHER RELEVANT DATA and INFORMATION....76
25.0 INTERPRETATION and CONCLUSIONS....77
RECOMMENDATIONS....78
26.0 REFERENCES....79

List of Tables

Table 1.1: Niñobamba Project Mining Concession Titles....1
Table 4.1: Niñobamba Project Mining Concession Locations....9
Table 4.2: Niñobamba Project Mining Concession Titles....10
Table 5.1: Road Distances to Access the Niñobamba Ag-Pb-Zn Project....15
Table 6.1: AngloGold Drill Results....17
Table 6.2: Bear Creek Drill Results....17
Table 6.3: Bear Creek Trench Results....17
Table 6.4: Newmont Main Zone (East) Drill Hole Intercepts....24
Table 6.5: Newmont Jorimina Silver Drill Hole Intercepts....24
Table 6.6: Newmont Jorimina Gold Drill Hole Intercepts....26
Table 6.7: North Zone Drill Hole Intercepts....32
Table 6.8: North Zone Trenching Results Summary (2012)....32
Table 6.9: Trench 01 Results....33
Table 6.10: Trench 04 Results....34
Table 6.11: Trench 05 Results....36
Table 6.12: Historic Drill Results in the South Zone versus Trenching Results 2012....39
Table 6.13: South Zone Trenching Results Summary (2012)....39
Table 6.14: Trench 02 Results....40
Table 6.15: Trench 03 Results....41
Table 12.1: Verification Samples from Niñobamba Main zone....60

List of Figures

Figure 4.1: Location Map of the Niñobamba Project....9
Figure 4.2: Mineral Concession Map of Niñobamba Au-Ag Project....10
Figure 6.1: AngloGold and Bear Creek Drill Hole and Trench Locations....18
Figure 6.2: Newmont Sample Results for Main Zone East – Gold....19
Figure 6.3: Newmont Sample Results for Main Zone East – Silver....20
Figure 6.4: Newmont Sample Results for Jorimina Zone - Gold....21
Figure 6.5: Newmont Sample Results for Jorimina Zone – Silver....21
Figure 6.6: Newmont - Ground Magnetometer - Total Magnetic Field Map (nT)....22
Figure 6.7: Newmont – Induced Polarization - Chargeability....23
Figure 6.8: Newmont - Induced Polarization - Resistivity....23
Figure 6.9: Newmont, Main Zone (East), DrillHole Locations....29
Figure 6.10: Newmont, Jorimina Zone, Drill Hole Locations....30
Figure 6.11: North Zone: Location of Historic Drill Holes and Trenches....38
Figure 6.12: South Zone: Location of Historic Drill Holes and Trenches....40
Figure 6.13: Drill Hole AN-4....43
Figure 6.14: Drill Hole AN-1....44
Figure 6.15: Drill Hole AN-2....45
Figure 7.1: Regional Geologic Map for the Niñobamba Property....47
Figure 7.2: Reconnaissance Geological Map of the Nevado Portugueza Volcanic Center*....48
Figure 7.3: Detailed Geology of the Main Zone....50
Figure 7.4: Main Niñobamba Zone – Drill Hole Location Map....51
Figure 8.1: Conceptual Regional Cross-Section....53
Figure 8.2: Schematic Reconstruction of a Telescoped High-Sulphidation System....55
Figure 12.1: Verification Sample Locations....62
Figure 12.2: Verification Sample Assay Certificate Page 1....63
Figure 12.2: Verification Sample Assay Certificate Page 2....64
Figure 12.2: Verification Sample Assay Certificate Page 3....65

List of Photographs

Photo 1: Jorimina Zone Gossan....49
Photo 2: Sample JR-02 showing vuggy silica type alteration....54
Photo 3: Sample JR-04 taken from TR-04....54
Photo 4: Sample 402262 – Hand Trench....61

1.0 SUMMARY

1.1 Introduction

The Niñobamba Au-Ag Project (the 'Project' or the 'Property') is an Au-Ag exploration project in Districts of Vinchos, Chuschi and Paras, Provinces of Humanga and Cangallo, Department of Ayacucho, Peru. The Project is held 100% by Rio Silver Inc. (Rio Silver) a public company that that holds the Project through its wholly owned Peruvian subsidiary, Minera Rio Plata S.A.C. (Rio Plata). African Energy Metals Inc. has an option to acquire a 100% in the Niñobamba project.

This Technical Report was prepared by James McCrea (P.Geo) at the request of African Energy Metals Inc. ("AEM") to provide a project compilation and an initial geological assessment of the Niñobamba Au-Ag High Sulphidation (HS) Project ("Niñobamba"). Mr. McCrea is an independent "qualified person" as defined by National Instrument 43-101. Niñobamba is located in the Andes in South Central Peru in the Department of Ayacucho. There are two areas of previous exploration activity. The 900 Ha (hectare) Dorita Primera concession, ("Main Zone"), was explored and drilled by AngloGold in 2003 and by Bear Creek Mining in 2005. The second zone is located on the Plata 600 concession ("Joramina"). The property was visited by the author in 2013, 2021 and again May 5th to 7th of 2023.

Information and data used in this report consists of field observations made by the author during the site visits on April 14th, 2013, August of 2021 and May of 2023; data collected by Newmont Mining Corporation (Newmont), AngloGold, Bear Creek Mining (Bear Creek) as reported by Newmont, trench data collected by Minegate Explorations S.A. (Minegate) and sampling completed during the site visits, which was supervised by the author.

1.2 Property Description and Ownership

The Niñobamba Au-Ag Project consists of seven contiguous mining concessions or mining rights totalling 4,099.98 ha. located on the western flank of the Cordillera Negra on map sheet 27N (Huachocolpa). With the exception of the governmental royalties, there are no underlying royalties. The Property comprises seven mining concessions. The concessions are known by the names of Dorita Primera, Plata 900, Plata 600, Plata 200 and Niño 1 to Niño 3. The mining rights are listed in Table 1.1 and are shown in Figure 4.2.

Table 1.1: Niñobamba Project Mining Concession Titles

Mining Registry No.	Name	Holder of Record	Status	Granted Area (ha)	Expiration Date
01-00433-07	Dorita Primera	Minera Rio Plata S.A.C.	Titled	899.98	30-June-2025
01-00380-18	Plata 900	Minera Rio Plata S.A.C.	Titled	900.00	30-June-2025
01-01114-17	Plata 600	Minera Rio Plata S.A.C.	Titled	600.00	30-June-2025
01-00682-20	Plata 200	Minera Rio Plata S.A.C.	Titled	200.00	30-June-2025
01-02350-20	Niño 1	Minera Rio Plata S.A.C.	Titled	800.00	30-June-2025
01-02351-20	Niño 2	Minera Rio Plata S.A.C.	Titled	500.00	30-June-2025
01-01428-21	Niño 3	Minera Rio Plata S.A.C.	Titled	200.00	30-June-2025

Note: Title information effective January 21, 2025

1.3 Accessibility, Physiography, Climate, Local Resources and Infrastructure

The Project is located, by road, 500 km south west of the city of Lima and road access is by the Pan American North highway, route 1S, following the coast for 238 km to the city of Pisco then

turn east on highway 28A for 262 km to the Property turnoff, 1.5 km east of the village of Niñobamba. The project main zone is located 7 kilometres from the turnoff on a dirt road. The total travel time from Lima to the Property is about 7.5 hours in a pickup truck. The closest commercial airport to the project is in the City of Ayacucho with a population of 180,766 (2015, Wikipedia), can be accessed via daily flights from Lima.

The Property lies in a plateau of the Cordillera Occidental in a region of moderate topographical relief where elevations range from 3,600 to 4,800 m.a.s.l. The terrain is mountainous and varies from gentle to steep slopes. Vegetation is also typical of the Peruvian altiplano with slopes mainly covered with brush and grasses. At higher elevations, the slopes are dominantly talus with sparse vegetation consisting of Ichu grass that grows in disperse clumps affording ample exposure of rock outcrop and rock float material on surface.

The climate in the area of the Project is described as typical for the Cordillera of the Andes with a sunny and cool dry season from April to December, with the coldest during June through August when night time temperatures can dip to below freezing. The rainy season runs from January to April when unmaintained roads and trails can become nearly impassable due to muddy and foggy conditions. Flash flooding during the rainy season may impede access along coastal highways and roads that climb to high elevations on the flank of the Cordillera Occidental.

Local manual labor is available from both the communities of Paras and Chuschi while skilled labour is also available in the area or from Lima. The City of Ayacucho is the nearest commercial center where food, accommodation, contractors, and fuel are available. Water for an exploration camp and drill programs is available from the drainages on the Property. The Property has sufficient surface area for future mining operations. However, the surface rights are controlled by the local communities and agreements for further exploration or future exploitation will need to be negotiated.

1.4 History

On the Niñobamba property, both in the Jorimina zone and in the Niñobamba main zone (Figure 7.2), there is evidence of mining works from colonial times. Due to some of the evidence (small manual stone grinding mills) found in Jorimina, it is presumed that the work was related to the exploitation of gold. According to Mckee and Noble (1982), the mineralization in this area was recognized by the Spanish in 1562 and since then exploited.

In Jorimina, early field work was carried out during in 1995 and 1996, geological field work and drilling, which included four diamond drills. This work was carried out by a “Joint Venture” between Buenaventura-BRGM and CEDIMIN S.A. According to unofficial information thin structures were found with very restricted gold values. During 2006 ASC (Andean Silver Corporation) drilled 8 holes in Jorimina area. This drilling is believed to have been focused on the silver mineralization as reported in a 2008 Newmont Technical report (Pinto, *et al.*, 2008). No data, results or reports are available for this work.

Previous owners and operators of the Property performed work and collected data. This historical work was performed by AngloGold, Bear Creek and Newmont starting in 2002 and continued until Rio Silver acquired the main property beginning in 2007. Rio Silver agreed in 2016 to purchase, from Newmont, three concessions including all exploration data. Rio Silver eventually allowed these three concessions to lapse but successfully reacquired them by application in 2021.

Both areas, Main Niñobamba and Joramina Zones has had significant exploration conducted by well respected companies. A total of 44 diamond holes totaling 9,743 metres were drilled by Anglogold Exploración Perú, Newmont/Southern Copper Peru and Bear Creek Mining, Anglogold conducted the earliest known exploration on Niñobamba Main in 2001 and 2002 and drilled 5 holes. Surface mapping and sampling defined two parallel zones (500 metres apart) located in the Main zone: North Zone and South Zone.

Anglogold drilled 5 holes at the Main Zone. Best results showed 129.5 metres of 94.6 g/t Ag in hole AN-2 and 96 metres of 53 g/t Ag in hole AN-4. Detailed assays and drill logs were provided to Rio Silver Inc. Anglogold optioned the property to Bear Creek Mining in mid-2003. Bear Creek drilled a total of 8 holes for 1001 metres in the fall of 2003. Best result was in hole BC-2 of 26 metres of 79 g/t Ag. Detailed data from the Bear Creek drill program was not available. The property was later returned to Anglogold and the concessions were allowed to elapse due to non-payment of the annual tenure fees.

Widespread exploration was conducted by Newmont on concessions and adjacent and east of the Main zone. From 2006 to 2009, Newmont drilled 31 drill holes spaced through a large area. Newmont also completed a ground magnetometer and an induced polarization on the Property. The exploration highlighted the Joramina Zone located 7.5 kilometres west of the Main Zone. A total of 4,377 metres of diamond drilling was conducted on this zone. Newmont's data package and concessions were later purchased by Rio Silver in 2016.

Rio Silver Exploration Ltd now Rio Silver Inc. applied for the open area in 2007 comprising the Main Zone. Co-applicants were Newmont and a Peruvian individual. Rio Silver's subsidiary was successful in acquiring the area in a "closed bid" government auction in 2008.

1.5 Geological Setting and Mineralization

The Niñobamba Property is underlain by a thick sequence of volcanic rocks that host both high and low sulfidation epithermal precious metal deposits in the region. These volcanic units disconformably overlie upper Mesozoic continental shelf clastic and carbonate sedimentary rocks and intrusive rocks of the Coastal Batholith.

The volcanic stratigraphy on the Property consists of volcanic rocks of the Huachocopla Group (Late Miocene). Niñobamba lies in the outer part of a compound stratovolcano, which is assigned to the Late Miocene Apacheta Formation. The complex volcanic edifice is built up by andesitic lava flows with some minor pyroclastic, scoriaceous intercalations, which have been intruded and are overlain by younger andesitic stocks and lavas and by dacitic dikes.

The mineralization at Niñobamba is of high sulphidation type. Typical Peruvian examples of this type of mineralization include the world class Yanacocha, Piernia, and Alto Chicama deposits. Pierina had significant silver credits and showed an approximate 8:1 silver/gold ratio. Previous operators did not recognize the gold potential at Niñobamba. Exploration in 2012 by Rio Silver revealed that there are potentially economic gold values on the property.

The alteration and mineralization styles at Niñobamba are identical to the Pierina mine but at Niñobamba there is a clear distinction between the silver rich and silver-gold rich zones. Zoning is expected in high sulphidation systems due to the varying geochemistry and pressure changes within the hydrothermal system. Niñobamba appears to be significantly enriched with silver compared to other high Sulphidation-type systems in the Andes.

1.6 Exploration and Drilling

Rio Silver conducted an extensive trenching program in 2012 consisting of 17 trenches. The rock was channel sampled and surveyed. A significant gold zone was revealed that was not recognized by previous operators. The best results in the Au-Ag zones show 54 metres of 1.05 g/t Au and 101 g/t Ag in trench TR-1, 15.1 metres of 1.4 g/t Au and 112.47 g/t Ag in trench TR-4 which ended in mineralization. Best pure silver results show broad disseminated mineralization of 62.40 metres of g/t Ag in trench TR-5 and 42.62 metres of 130.98 g/t Ag in trench TR-2. Both these intervals had no gold zone showing a typical metal zonation commonly associated with Andean epithermal systems. No work has been conducted on the property since 2012.

1.7 Mineral Processing and Metallurgical Testing

In March of 2011, Newmont sent 6 drill core samples from the Ninobamba deposit in central Peru to Plenge Laboratories in Lima. The primary objective of the test work was to determine if the samples were gold/silver or copper/molybdenum dominant based on their response to:

- Gravity concentration,
- Conventional cyanidation,
- Concentration by froth flotation.

Results of the testing are shown in Section 13.

1.8 Mineral Resources

There are no mineral resource estimates for this property.

1.9 Interpretations and Conclusions

African Energy Metals Inc. through a 100% option with Rio Silver has a significant land position in the Niñobamba project totaling 4100 hectares. The concessions cover potentially both a significant Au-Ag high sulphidation system and a large bulk minable low sulphidation silver target as well. These HS systems are normally the main exploration focus for gold mining companies in Peru. Significant deposits mined in Peru, such as Yanacocha, Lagunas Norte and Piernia, are these types of HS systems.

Due to the extensive surface trenching program along with the previous drilling, the main Niñobamba area is considered “drill ready” in both the North and South Zones. Proposed exploration targets should initially use the new conceptual model generated by Rio Silver’s technical staff. Understanding that the precious metal vertical and lateral zonation patterns typically present in these epithermal systems is a must to properly interpret the drill data.

The first exploration phases should consider the two types of targets: 1) Large Lower Grade Bulk Tonnage Silver Deposit and 2) Near Surface Oxide Au-Ag Deposit. This order of priorities is dictated by community agreements and permitting.

The first drill target would be to duplicate results from Newmomt drill hole JOR-01 in the Jorimina Zone. If the initial holes are successful, a second phase program would start with a geophysical survey to be conducted across the area which would consist of both Induced Polarization (“IP”) and a CSAMT (“CSAMT”) resistivity survey. Drilling would follow and be focused on the low sulphidation potential. If coincident IP and CSAMT anomalies are identified, these targets would be a priority for drilling.

The Niñobamba Project is a Property of Merit that justifies the continuation of exploration programs designed to test the deposit models outlined in this report.

1.10 Recommendations and Proposed Exploration Budget

The recommended exploration and work programs for the Niñobamba Project are as follows:

The Phase I program includes geologic mapping, channel sampling, road work and community programs

Phase I USD $141,000

- Geophysics: Alpha IP survey $60,000
  Induced polarization survey to identify possible polymetallic vein targets and vuggy silica precious metal targets
- Geological Mapping (20 days @ US$ 800/day) $16,000
- Channel Sampling Assay costs (200 samples @ US$50/sample) $10,000
- Channel Sampling program: geologists, logistics, supplies (20 days @ $1600/day) $32,000
- 50 assay samples (50 rock samples) at $50 per sample - $2,500
- Road Work - $2,500
- Community Costs Travel/Projects - $3,500
- QP and Final Report - $1,500
- Budget = $128,000
- ~10% Contingency = $13,000

The Phase II program is not contingent on positive results from the Phase I program and following a thorough compilation and review by a qualified person the following Phase II program is recommended.

Phase II USD $450,000

- 1500 metres of diamond drilling at $210 per metre, all in = $315,000
  Drilling to confirm previous results and test IP targets for mineralization.
- 1000 core assay samples at $50 per sample - $50,000
- Senior Geologist - $9,000
- Junior Geologists - $5,000
- Shipping costs - $4,000
- Community Costs Travel/Projects - $6,500
- Travel, crew changes, - $4,000
- Project Logistics - $3,000
- Depot - sampling area Ayacucho - $5,000 - one year rental
- QP and Final Report - $7,500
- Budget = $409,000
- ~10% Contingency = $41,000

Total Budget for Phase I and II is USD $591,000

- Note IGV, “value added tax” not included.

2.0 INTRODUCTION

2.1 Introduction and Terms of Reference

At the request of African Energy Metals Inc. a Canadian public company listed on the TSX Venture Exchange, James A. McCrea, P. Geo., carried out an independent review of the Niñobamba Au-Ag Project, Districts of Vinchos, Chuschi and Paras, Provinces of Humanga and Cangallo, Department of Ayacucho, Peru. The author reviewed available exploration results and prepared this independent technical report (the 'Report') in accordance with the formatting requirements of National Instrument 43-101 and Form 43-101F1 (Standards of Disclosure for Mineral Properties) to be a comprehensive review of the exploration activities on the property, and to provide recommendations for future work, if warranted. The Report is intended to be read in its entirety.

2.2 Sources of Information

The author was not involved in any previous exploration or development activities on the property. The information, conclusions, opinions and recommendations are based upon:

- information available to the author at the time of the preparation of this report;
- assumptions, conditions and qualifications as set forth in this report; and
- data, reports and other information provided by Rio Silver and other third-party sources.

During the site visit and while preparing this report, the author reviewed all of the readily available exploration information and reports pertaining to this property.

The sources of information for this technical report are field observations made by the author during the site visit, published government reports, and scientific papers such as papers published by Instituto Geologico, Minero y Metalurgico (INGEMMET), Peru's government geological library. Information concerning mining concessions comes from Peru's mining claim registry: Instituto Nacional de Concesiones y Catastro Minero (INACC). Population statistics, weather and local information on the Project has been obtained from Wikipedia (http://www.en.wikipedia.org/wiki/Department_of_Ayacucho). A detailed list of references and sources of information is provided in the References section of this report.

2.3 Scope of Site Inspection

The author, an independent qualified person according to NI43-101, visited the Niñobamba Au-Ag Project and area on April 14, 2013, on August 19 to 20, 2021 and again on May 5th to 7th, 2023. Work on the Project is contained within two areas: the Main zone and Jorimina. The first property examination and sampling was conducted on the Dorita Primera mineral concession during the 2013 site where the 2012 trenches were sampled. The sample from a hand trench taken during the 2021 site visit was on the Niño 1 concession. The 2023 site visit was to Jorimina Zone and the Plata 600 concession were the author removed boulders from the tot road to access the property and examined the gossan seen in Photo 1 and visited Newmont drill hole collars (Photo 5). The author examined trenches and outcrops on three concessions and collected 7 verification samples.

The author verified Rio Silver's news releases and financial statements to ensure that no material change has occurred since the time of the author's last property inspection. No reports were filed with the Peruvian Ministry of Mines as assessment reports are not required in Peru.

The Project is considered to be an exploration-stage property.

2.4 Abbreviations and Units of Measure

Metric units are used throughout in this report and currencies are in United States Dollars (US$) unless otherwise stated. Market gold or silver metal prices are reported in US$ per troy ounce. A list of abbreviations that may be used in this report is provided below.

Abbreviation	Description		Abbreviation	Description
%	percent		li	limonite
AA	atomic absorption		m	metre
Ag	silver		m^2	square metre
AMSL	above mean sea level		m^3	cubic metre
as	arsenic		Ma	million years ago
Au	gold		mg	magnetite
AuEq	gold equivalent grade		mm	millimetre
Az	azimuth		mm^2	square millimetre
b.y.	billion years		mm^3	cubic millimetre
CAD$	Canadian dollar		mn	pyrolusite
cl	chlorite		Mo	Molybdenum
cm	centimetre		Moz	million troy ounces
cm^2	square centimetre		ms	sericite
cm^3	cubic centimetre		Mt	million tonnes
cc	chalcocite		mu	muscovite
cp	chalcopyrite		m.y.	million years
Cu	copper		NI43-101	National Instrument 43-101
cy	clay		opt	ounces per short ton
°C	degree Celsius		oz	troy ounce (31.1035 grams)
°F	degree Fahrenheit		Pb	lead
DDH	diamond drill hole		pf	plagioclase
ep	epidote		ppb	parts per billion
ft	feet		ppm	parts per million
ft^2	square feet		py	pyrite
ft^3	cubic feet		QA	Quality Assurance
g	gram		QC	Quality Control
gl	galena		qz	quartz
go	goethite		RC	reverse circulation drilling
GPS	Global Positioning System		RQD	rock quality description
gpt, g/t	grams per tonne		Sb	antimony
ha	hectare		Sedar	System for Electronic Document Analysis and Retrieval
Hg	mercury		SG	specific gravity
hm	hematite		sp	sphalerite
ICP	induced coupled plasma		st	short ton (2,000 pounds)
kf	potassic feldspar		t	tonne (1,000 kg or 2,204.6 lbs)
kg	kilogram		to	tourmaline
km	kilometre		um	micron
km^2	square kilometre		US$	United States dollar
l	litre		Zn	zinc

2.5 Acknowledgements

The author wishes to thank the officers and personnel of African Energy Metals Inc. for providing the technical materials and the assistance required to prepare this report.

3.0 RELIANCE ON OTHER EXPERTS

The author has relied on information available through Instituto Geologico, Minero y Metalurgico (INGEMMET) the Peruvian government geological library and Peru's mining claim registry: *Instituto Nacional de Concesiones y Catastro Minero* (INACC) which is available on the INGEMMET website http://geocatmin.ingemmet.gob.pe/geocatmin/. The concession information relates to the property location and description in Sections 4.1 and 4.2 with concession titles listed in Table 4.2.

The author has relied on Rio Silver to provide full information concerning material environmental and permitting information that pertain to the property (Chris Verrico, CEO of Rio Silver, personal communication, 2024 and 2025). This relates to Section 4.7.

The author did not conduct any detailed investigations of the environmental or social-economic issues associated with the Project, and the author is not an expert with respect to these issues.

This report has been prepared for use by African Energy Metals Inc. The Report is intended to be read as a whole, and sections or parts thereof should therefore not be read or relied upon out of context.

4.0 PROPERTY DESCRIPTION and LOCATION

4.1 Property Location

The Niñobamba Au-Ag Project is located in the Cordillera Oriental on the western flank of the Cordillera Negra, 45 kilometres west southwest of the City of Ayacucho in the Districts of Vinchos, Chuschi and Paras, Provinces of Humanga and Cangallo in the Department of Ayacucho, Peru. The geographic coordinates near the centre of the Project are approximately 13° 22' South latitude by 74° 34' West longitude, or in the local UTM WGS 84 coordinate system at Zone 18 South, 8,521,543 m North by 546,223 m East (see Figure 4.1). The property is within Peruvian National Topographic System (NTS) 100,000 scale map area Huachocolpa 27-n.

Table 4.1: Niñobamba Project Mining Concession Locations

Concession Name	Department	Province(s)	District(s)
Dorita Primera	Ayacucho	Humanga	Vinchos
Plata 900	Ayacucho	Humanga	Vinchos
Plata 600	Ayacucho	Cangallo	Paras
Plata 200	Ayacucho	Cangallo	Paras
Niño 1	Ayacucho	Humanga, Cangallo	Vinchos, Chuschi, Paras
Niño 2	Ayacucho	Humanga, Cangallo	Vinchos, Chuschi
Niño 3	Ayacucho	Humanga, Cangallo	Chuschi, Paras

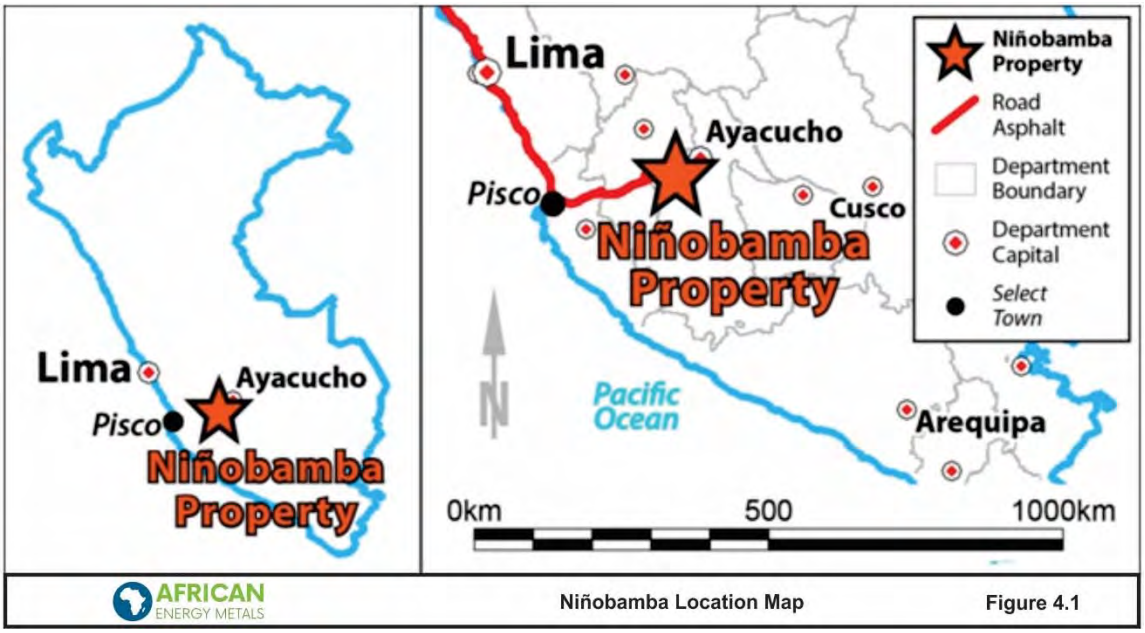


Figure 4.1: Location Map of the Niñobamba Project

4.2 Property Description

The Niñobamba Au-Ag Project consists of seven contiguous mining concessions or mining rights totalling 4,099.98 ha. The Property comprises seven mining concessions. The concessions are known by the names of Dorita Primera, Plata 900, Plata 600, Plata 200 and Niño 1 to Niño 3. The mining rights are listed in Table 4.1 and are shown in Figure 4.2.

Table 4.2: Niñobamba Project Mining Concession Titles

Mining Registry No.	Name	Holder of Record	Status	Granted Area (ha)	Expiration Date
01-00433-07	Dorita Primera	Minera Rio Plata S.A.C.	Titled	899.98	30-June-2025
01-00380-18	Plata 900	Minera Rio Plata S.A.C.	Titled	900.00	30-June-2025
01-01114-17	Plata 600	Minera Rio Plata S.A.C.	Titled	600.00	30-June-2025
01-00682-20	Plata 200	Minera Rio Plata S.A.C.	Titled	200.00	30-June-2025
01-02350-20	Niño 1	Minera Rio Plata S.A.C.	Titled	800.00	30-June-2025
01-02351-20	Niño 2	Minera Rio Plata S.A.C.	Titled	500.00	30-June-2025
01-01428-21	Niño 3	Minera Rio Plata S.A.C.	Titled	200.00	30-June-2025

Note: Title information effective January 21, 2025

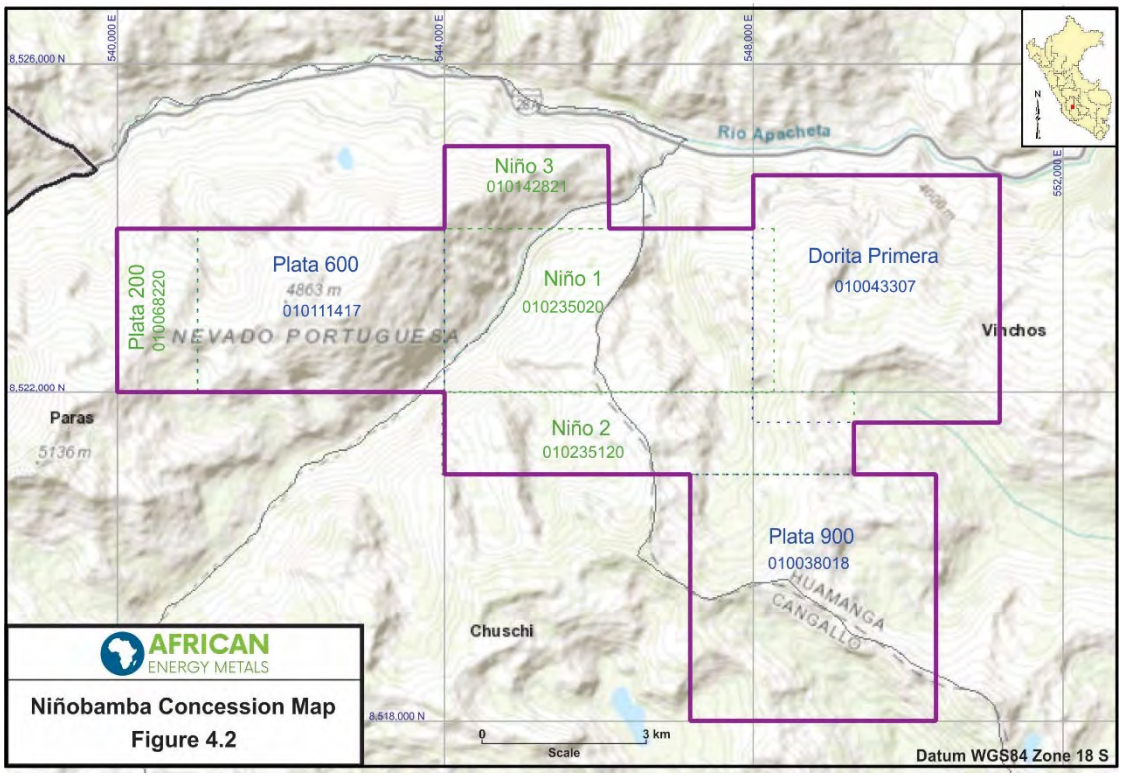


Figure 4.2: Mineral Concession Map of Niñobamba Au-Ag Project

The Dorita Primera, Plata 600 and Plata 900 are titled concessions registered to Minera Rio Plata S.A.C. (Rio Plata) (100%) in the Peruvian Public Registry (Superintendencia Nacional de Registros Publicos - 'SUNARP'). Minera Rio Plata S.A.C. is a private Peruvian company with offices in the Surco Municipality of Lima and is a wholly-owned subsidiary of Rio Silver Inc. Rio Plata is also the title holder of the Plata 200, Niño 1, Niño 2 and Niño 3 mining concessions.

The author has reviewed all documentation provided by the Peruvian Public Registries for the current status of mineral titles and application status of pending title grants.

4.3 Underlying Agreements

African Energy Metals has an agreement with Rio Silver Inc.:

> *"Under the terms of the Option Agreement dated January 19, 2025, African Energy Metals has the right to earn a 100% interest in the Project upon full exercise of the option under the Option Agreement. As set out in the table below, the Option Agreement requires payments of an aggregate CAD$260,000 during the first year of the Option Agreement and further payments of up to US$2,000,000, US$500,000 of this amount are advance payments on any royalties payable under the royalty agreement under the net smelter return royalty of 2% granted to Rio Silver. African Energy Metals retains the right to buy back 1% of the NSR for US$1,000,000 prior to commercial production on the Project. The Option Agreement requires the issuance to Rio Silver of a total of 2,500,000 common shares of African Energy Metals upon receipt of regulatory approval and a further 2,500,000 common shares on the earlier of the date that is one year from the receipt of Exchange approval or March 15, 2026. African Energy Metals has the right but not the obligation to issue African Energy Metals shares in lieu of 50% of any cash payment obligation save and except for the $260,000 payments in year one which must be made in cash. African Energy Metals paid $10,000 on a non-refundable basis to Rio Silver when the Option Agreement was executed. Rio Silver will provide operational support and use of Rio Silver facilities in Peru for a minimum of one year at Rio Silver's cost. Rio Silver is an arm's length party to African Energy Metals. The share issuances and payments under the Option Agreement are subject to the approval of the TSX Venture Exchange and the NEX Exchange." (African Energy Metals NR 2025)*

Time of Commitment	Cash or Advance Royalty Payment (ARP)	Consideration Shares
Upon execution of the Agreement	CAD$10,000	
Upon Exchange approval (the "Exchange Approval Date")	CAD$ 150,000	2,500,000 shares
On or before May 15, 2025	CAD$100,000	
Earlier of first anniversary of Exchange Approval Date or May 15, 2026		2,500,000 shares
On or before March 15, 2026	ARP US$100,000	
On or before March 15, 2027	ARP US$100,000	
On or before March 15, 2028	ARP US$100,000	
On or before March 15, 2029	ARP US$100,000	
On or before March 15, 2030	ARP US$100,000	
Within 90 days of receipt of results and assays upon completion of 10,000 meters of drilling	US$500,000	
Within 90 days of receipt of results and assays upon completion of a further 10,000 meters of drilling	US$500,000	
Within 90 days of receipt and issuance of a NI 43-101 resources estimate	US$500,000	

4.4 Surface Rights

The communities of Chuschi and Paras own the surface rights for the Property. Rio Silver had a one-year agreement with the community of Chuschi from May 2012 to April 2013. All conditions of the agreement were completed at that time.

Rio Plata has an agreement with the community Paras which covers the Jorimina Zone and was signed July 23, 2024 based on a News Release (Rio Silver, 2024). Exploration and drill permitting is nearing completion. The Chuschi community has been engaged but no access agreement is forthcoming. The recommended Phase 1 exploration and Phase 2 drill programs were planned for the Jorimina Zone covered by the existing community agreement.

4.5 Mineral Rights in Peru

The 'General Mining Law of Peru' defines and regulates different categories of mining activities, ranging from sampling and prospecting to development, mining, and processing. The General Mining Law of Peru was changed in the mid-1990s to foster the development of the country's mineral resources. The law defines and regulates different categories of mining activities according to stage of development (prospecting, exploitation, processing, and marketing). Titles over mineral claims are controlled by INGEMMET (Geological, Mineral and Metallurgical Survey of Peru). Mining titles (mining concessions) are granted using UTM coordinates (WGS84) to define areas in hectares. From 1992 to 2014, mining concessions were granted using PSAD56 UTM coordinate and this was replaced by the WGS84 UTM grid. The new mining concessions from 1992 to present must be at least 100 ha in size (1 km^2), and must be oriented in a north-south or east-west direction. Pre-existing concessions, based on the old system ("punto de partida" or starting point system), can be at any orientation.

The old framework, which has been in force since 1992, establishes that mining concessions are irrevocable if the concession titleholder complies with the annual payment of US$ 3.00 of validity-fee per hectare and reaches a minimum production of US$ 100.00 per hectare within six years following the year in which a mining concession is granted. Otherwise, the titleholder must pay a US$ 6.00 penalty per hectare per year as of the first semester of the seventh year until such production is reached (penalties increase to US$ 20 from the 12th year).

Current regulations establish that the holder of mining concessions shall achieve a minimum production of at least one Peruvian Tax Unit (approximately US$ 1,900) per hectare per year, within a 10-year term following the year in which the mining concession title is granted. If the minimum production is not reached in the referred term, the mining concession holder shall pay penalties equivalent to 10% of the Peruvian Tax Unit per hectare.

The concession Dorita Primera is in the penalty phase and in order to keep the concession in good standing, the Company will need to pay the USD $3 per hectare totaling USD $2700 and the penalty of 231,750 soles or USD $61,900 by June 30th of 2025

If minimum production within a 15-year term from the day in which the mining concession was granted is not achieved, the mining concession will be cancelled unless, a qualified force majeure event occurs and is approved by the Mining Authority. The titleholder may also maintain the title by paying the applicable penalties and providing evidence of a minimum investment of at least ten times the amount of the applicable penalties. In this last case, the mining concession will not be cancelled up to a maximum term of five additional years (total term 20 years). If minimum production is not reached in the 20-year term, the concession title will be inevitably cancelled.

While the holder of a mining concession is protected under the Peruvian Constitution and the Civil Code, it does not confer ownership of land and the owner of a mining concession must deal with the registered landowner to obtain the right of access to fulfill the production obligations inherent in the concession grant. It is important to recognize that all transactions and contracts pertaining to a mining concession must be duly registered with the Public Registry in the event of subsequent disputes at law.

4.6 Royalties and Obligations

With the exception of the governmental royalties, there are no underlying royalties on the Property. Peru established a sliding scale mining royalty late in 2004. Calculation of the royalty payable is made monthly and is based on the gross value of the concentrate sold (or its equivalent) using international metal prices as the base for establishing the value of metal. The sliding scale is applied as follows:

- First stage: up to US$60 million annual revenue; 1.0 percent of gross value;
- Second stage: in excess of US$60 million up to US$120 million annual revenue; 2.0 percent of gross value; and
- Third stage: in excess of US$120 million annual revenue; 3.0 percent of gross value.

4.7 Environmental Regulations & Exploration Permits

The General Mining Law, administered by the Ministry of Energy and Mines (MEM), may require a mining company to prepare an Environmental Evaluation (EA), an Environmental Impact Assessment (EIA), a Program for Environmental Management and Adjustment (PAMA), and a Closure Plan prior to mining construction and operation.

The Supreme Decree Nº 020-2004-EM classifies the environmental requirements for mining and exploration programs as follows:

Category I: this category includes mining projects involving small scale drilling programmes up to and including a maximum 20 drill pads, a disturbed area of less than 10 hectares considering drilling platforms, trenches, auxiliary facilities and access means or the construction of tunnels with a total maximum length of 50 metres. These projects require the preparation of an Environmental Impact Declaration ("Declaración de Impacto Ambiental –DIA-"). Category I permits require, prior to their submittal to the Ministry of Energy and Mines, water-use permits from the Ministry of Agriculture, if required, and land-use agreements with the surface rights owners in the form of a registered agreement resulting from a town-hall meetings in the local community(s).

Category II: this category includes mining projects involving more than 20 drill pads, a disturbed area of more than 10 hectares considering drilling platforms, trenches, auxiliary facilities and access, or the construction of tunnels over a total length of 50 metres, require an authorisation called an Environmental Impact Study-semi detailed ("Estudio de Impacto Ambiental-semi detallado", or EIA-sd) and is approved by the Ministry of Energy and Mines. Category II permits, which include mining projects involving more than just drilling, must include, prior to their submittal to the Ministry of Energy and Mines, water-use permits from the Ministry of Agriculture, land-use agreements with the surface rights owners and evidence of having held town-hall meetings in all nearby communities. Additionally, the EIA- must include a detailed reclamation program once the drilling phase ends.

Permits are usually granted within 3 to 6 months of submittal of an application. No permit is required for general exploration such as surface mapping, sampling or geophysics. Permission of the surface rights owner is required for access to the property and for any kind of surface disturbance such as trenching or the construction of trails.

Permissions for property access and to conduct surface explore are included in the Paras community agreement including access trails and drill platforms. Drill permitting is in the final stages with the Ministry of Mines, where all requirements have been completed including the environmental assessment and currently waiting for the drill permit to be granted by the Minisrty.

4.8 Environmental Considerations

To the best of the author's knowledge there are no known environmental liabilities on the property other significant factors or risks that may affect access, title, or the right or ability to perform work on the property.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY

5.1 Physiography

The Property lies in a plateau of the Cordillera Occidental in a region of moderate topographical relief where elevations range from 3,600 to 4,800 m.a.s.l. The terrain is mountainous and varies from gentle to steep slopes. Vegetation is also typical of the Peruvian altiplano with slopes mainly covered with brush and grasses. At higher elevations, the slopes are dominantly talus with sparse vegetation consisting of Ichu grass that grows in disperse clumps affording ample exposure of rock outcrop and rock float material on surface.

5.2 Accessibility

The Project is located, by road, 500 km south west of the city of Lima and road access is by the Pan American North highway, route 1S, following the coast for 238 km to the city of Pisco then turn east on highway 28A for 262 km to the Property turnoff, 1.5 km east of the village of Niñobamba. The project main zone is located 7 kilometres from the turnoff on a dirt road. The total travel time from Lima to the Property is about 7.5 hours in a pickup truck. The closest commercial airport to the project is in the City of Ayacucho with a population of 180,766 (2015, Wikipedia), can be accessed via daily flights from Lima. Road distances from Lima to the Project are listed in Table 5.1.

Table 5.1: Road Distances to Access the Niñobamba Ag-Pb-Zn Project

Segment	Kilometres	Hours	Road Surface
Lima to Pisco	238	3 hr 00 min	Paved
Pisco to Project Turnoff	262	4 hr 40 min	Paved
Project Turnoff to Main Zone	7	45 min	Dirt/Gravel

5.3 Climate

The climate in the area of the Project is described as typical for the Cordillera of the Andes with a sunny and cool dry season from April to December, with the coldest during June through August when night time temperatures can dip to below freezing. The rainy season runs from January to April when unmaintained roads and trails can become nearly impassable due to muddy and foggy conditions. Flash flooding during the rainy season may impede access along coastal highways and roads that climb to high elevations on the flank of the Cordillera Occidental.

5.4 Local Resources and Infrastructure

Local manual labor is available from both the communities of Paras and Chuschi while skilled labour is also available in the area or from Lima. The City of Ayacucho is the nearest commercial center where food, accommodation, contractors, and fuel are available. Water for an exploration camp and drill programs is available from the drainages on the Property. The Property has sufficient surface area for future mining operations. However, the surface rights are controlled by the local communities and agreements for further exploration or future exploitation will need to be negotiated.

Good road access to Property exists. The nearest high-tension power line is located in the valley north of the project. A regional airport exists in the City of Ayacucho where daily flights to Lima are available.

6.0 HISTORY

Mining activity in Peru goes back to before Inca times in the 14th century. Mining and exploration increased during the Spanish colonial period (1535 to 1821) and through the colonialist exploration of the Andes many silver and base metal (Pb-Zn) mines were discovered and in South Center of Peru, the area of Huachocolpa is considered one of the most important mining districts, located 45 kilometres north west of the concessions (Morche, W., *et al.*, 1996)

In Peru, production in the 1500's of silver alone is estimated to have been between 150 and 200 metric tonnes per year (Purser, 1971). Gold was produced mainly from placers and the most important discovery in 1563 was of mercury in Huancavelica, which enabled the processing of silver ores by the amalgamation process. During the 1570's silver mining became Peru's main economic activity. In 1790, the census of mines showed 784 silver and 69 gold mines in Peru (Gilbertson, 2008).

During the 1990's, Peru's new mining laws attracted several international mining companies to the area. Yanacocha, Latin America's largest gold mine, commenced commercial operation in the early 90's and produced 0.97 million ounces of gold in 2014 (Wikipedia). In 1998 Barrick reached commercial production at Pierina and operated the open pit heap-leach mine until 2014.

The author has been unable to verify the information on the Yanacocha and Pierina Projects and that the information on those properties may not be indicative of the mineralization on the Property.

6.1 Property Exploration History

On the Niñobamba property, both in the Jorimina zone and in the Niñobamba main zone (Figure 7.2), there is evidence of mining works from colonial times. Due to some of the evidence (small manual stone grinding mills) found in Jorimina, it is presumed that the work was related to the exploitation for gold. According to Mckee and Noble (1982), the mineralization in this area was recognized by the Spanish in 1562 and since then exploited.

In Jorimina, early field work was carried out during in 1995 and 1996, geological field work and drilling, which included four diamond drills. This work was carried out by a "Joint Venture" between Buenaventura-BRGM and CEDIMIN S.A. According to unofficial information thin structures were found with very restricted gold values. During 2006 ASC (Andean Silver Corporation) drilled 8 holes in Jorimina area. This drilling is believed to have been focused on the silver mineralization as reported in a 2008 Newmont Technical report (Pinto, *et al.*, 2008). No data, results or reports are available for this work.

Previous owners and operators of the Property performed work and collected data. This historical work was performed by AngloGold, Bear Creek and Newmont starting in 2002 and continued until Rio Silver acquired the main property beginning in 2007. Rio Silver agreed in 2016 to purchase, from Newmont, three concessions including all exploration data. Rio Silver eventually allowed these three concessions to lapse but successfully reacquired them by application in 2021. Historic Exploration is summarized by operator:

6.1.1 Exploration by AngloGold

AngloGold Peru S.A.C. (AngloGold) established a Peruvian exploration office in 1999 and started acquiring properties throughout Southern Peru by a massive application/staking campaign. The

Niñobamba main was identified and acquired in 2000. AngloGold conducted geological mapping and sampling and drilled 5 holes in 2001 for a total of 861 metres. Best results showed in NB DDH-02 (“AN-02”) of 96 g/t Ag over 129.49 metres and in NB DDH-04 (“AN-04”) of 57.59 g/t Ag over 68 metres. The Company has the complete database including drill logs, geological maps and both drill and surface assays (Reeder, 2022). Drill hole locations are shown in Figure 6.1 and composites are shown with the trenches in Figures 9.1 and 9.2. Sections for holes An-4, An-1 and AN-2 are shown in Figures 9.3, 9.4 and 9.5 respectively.

Table 6.1: AngloGold Drill Results

Hole-Id	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)
AN-1	90.00	97.10	7.10	0.731	60.08
AN-1	132.65	135.85	3.20	0.028	11.30
AN-2	9.16	138.65	129.49	0.044	94.60
AN-3	No significant intercepts				
AN-4	23.00	47.00	24.00	0.003	52.63
AN-4	63.00	131.00	68.00	0.003	57.59
AN-5	No significant intercepts				

6.1.2 Exploration by Bear Creek

Bear Creek entered an agreement with AngloGold to earn a 60 percent interest by completing 1,000 meters of drilling by March 2004. Bear Creek drilled 1,001 meters, in eight holes, in late 2003 to complete their first-year commitments. Bear Creek also did surface sampling in four “trenches” where results were taken from cross sections (Table 6.2) and shown on Figure 6.1. Best results from the drill program showed in NBBC-1 (“BC-1”) returning 20 metres of 70.6 g/t Ag and in NBBC-2 (“BC-2”) returning 26 metres of 79.6 g/t Ag. The property was later returned to AngloGold. Bear Creek offered to let Rio Silver purchase the data but Rio Silver declined after a review showed that Bear Creek did not assay for gold (Reeder, 2022). Drill hole locations are shown in Figure 6.1 and composites are shown with the trenches in Figures 9.1 and 9.2.

Table 6.2: Bear Creek Drill Results

Hole-ID	Total Depth	From	To (m)	Length	Ag (g/t)	Comments
BC-1	145.20	84.00	104.00	20.00	70.6	
BC-2	196.50	76.00	102.00	26.00	79.6	
BC-3	165.00	-	-	-	-	No significant intercepts
BC-4	101.75	18.00	32.00	14.00	42.6	
BC-5	113.00	-	-	-	-	No significant intercepts
BC-6	109.55	-	-	-	-	No significant intercepts
BC-7	83.20	6.00	24.00	18.00	20.6	
BC-8	86.70	81.90	86.70	4.80	42.3	TD in mineralization

Table 6.3: Bear Creek Trench Results

Trench	Section	Length (m)	Silver opt Ag	Silver ppm	Associated Drill Hole
BT-1	1	40	2.81	87.40	BC-1
BT-2	2	20	1.74	54.12	BC-8
BT-3	4	10	1.30	40.43	BC-2
BT-4	7	45	1.85	57.54	AN-2

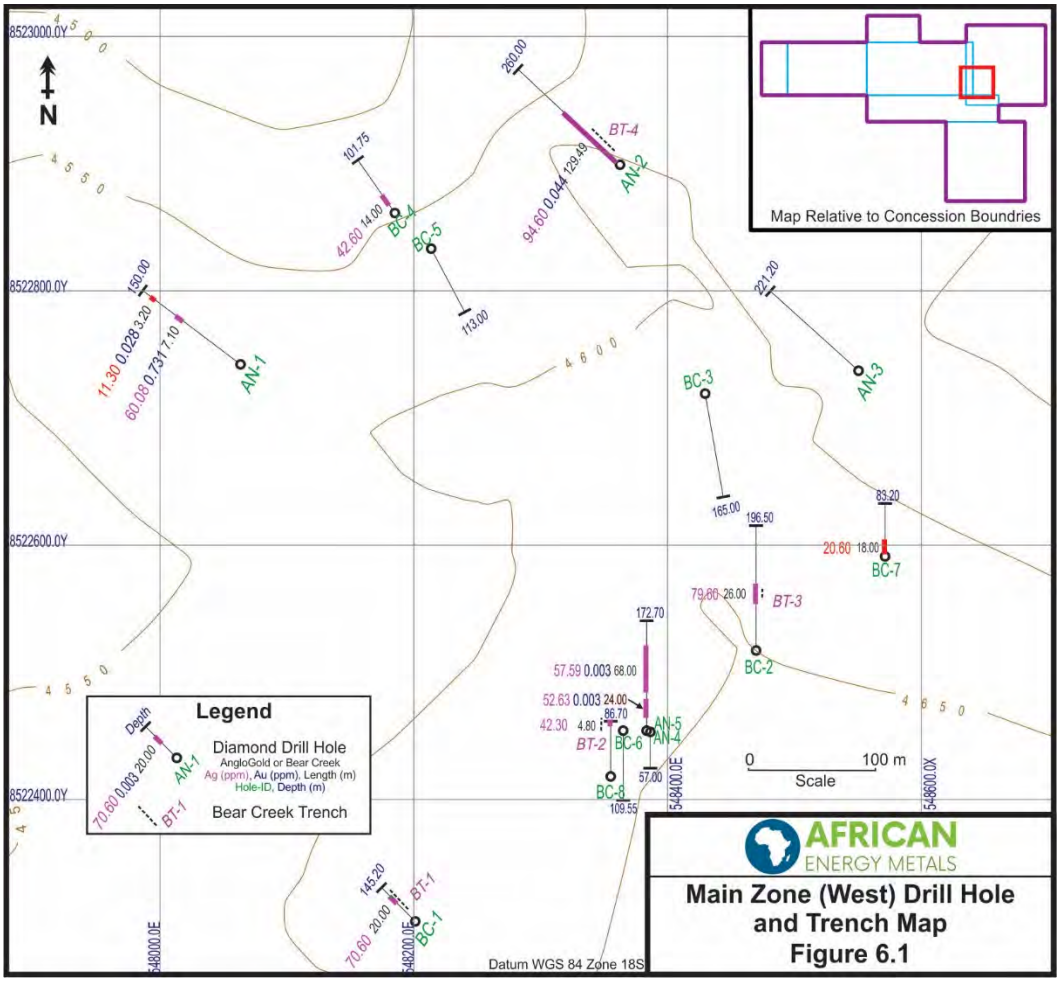


Figure 6.1: AngloGold and Bear Creek Drill Hole and Trench Locations

6.1.3 Exploration by Newmont/Southern Copper (Peru)

In 2006 Southern Copper (Peru) acquired the area west of the Niñobamba main zone, drilled by AngloGold and Bear Creek. This area included the Jorimina Zone and other isolated anomalous zones. The most easterly Au-Ag zone located on what were formerly the Southern Copper concessions is considered to be the extension of the Niñobamba main zone located on the former AngloGold concessions.

Newmont identified the area in 2007 after a regional BLEG-type sampling program (Pinto, *et al.*, 2008). An earn-in agreement with Southern Copper (Peru) was completed in mid 2007 and surface work started in June 2008. Newmont identified several zones of interest which included what they called the Niñobamba main zone which comprises four areas called the Sumi, Rupasca, Jatumpata and Patacocha Targets. The Jorimina zone was re-identified during this time and comprised the Jorimina Central, Jorimina NE, Rafaella and Red Cliff areas. These areas are located between four and six kilometres west of the Niñobamba main zone.

Newmont conducted a comprehensive surface exploration on the Property in 2008/2009 that included surface sampling, geophysics and mapping. Surface sampling was recorded as three main types: chips, channels and grab samples. Newmont crews collected 5067 samples where

2813 were channel samples, 1477 were selected samples, 719 were rock chips and the remainder were grab samples and sediments. Surface sample results are shown in Figures 6.2 to 6.5. During the surface program, Newmont crews collected some 6800 samples in total.

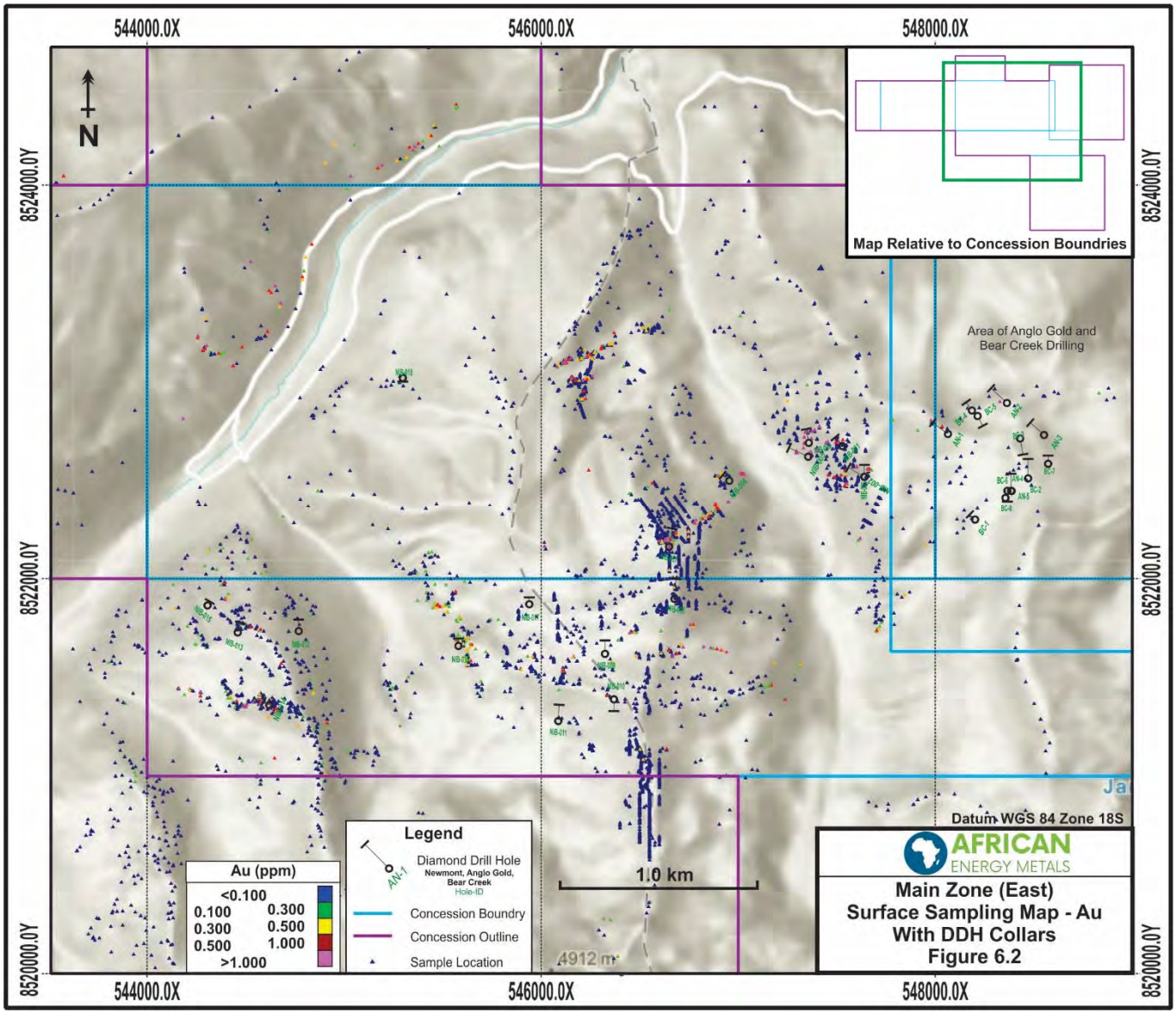


Figure 6.2: Newmont Sample Results for Main Zone East – Gold

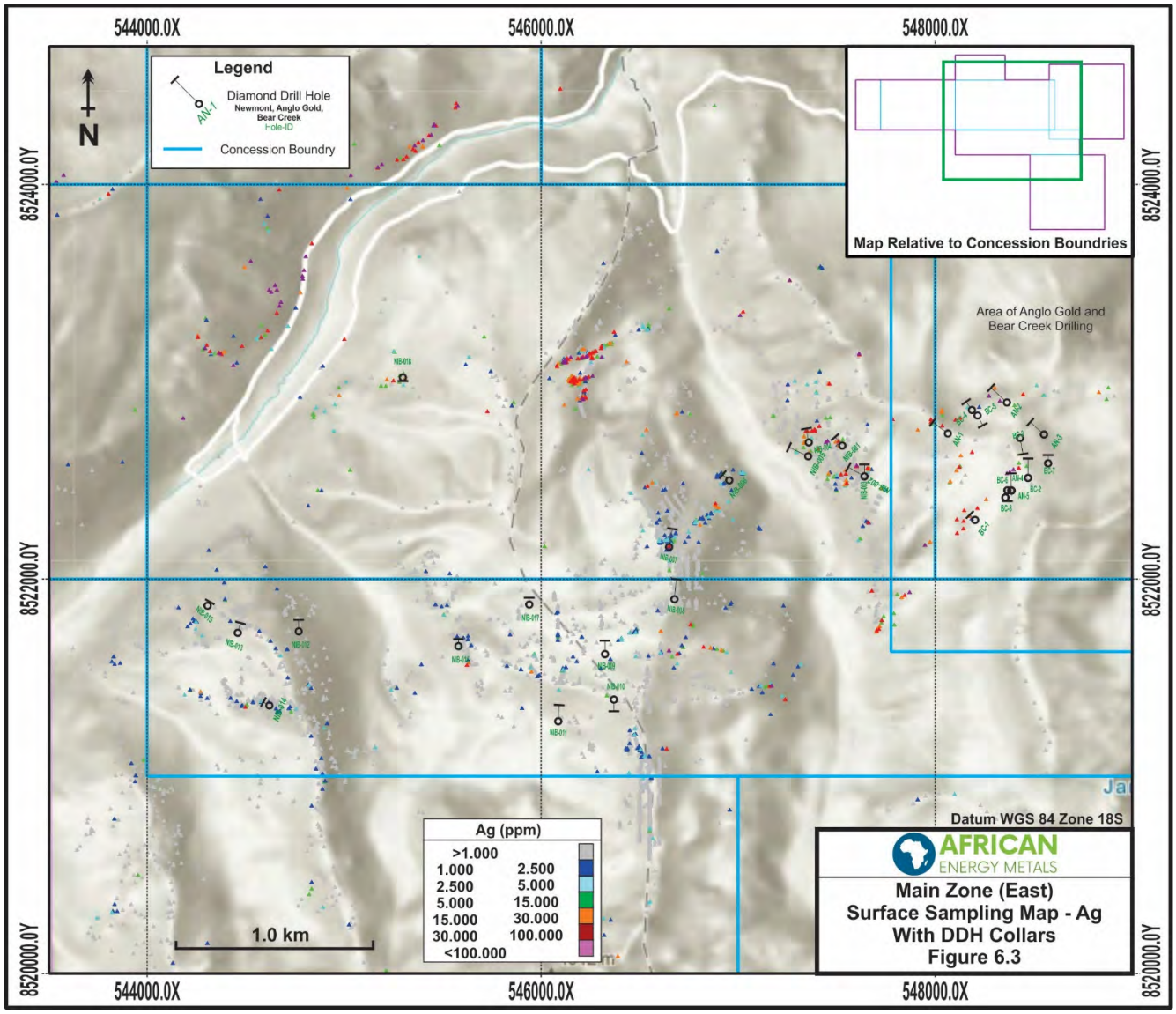


Figure 6.3: Newmont Sample Results for Main Zone East – Silver

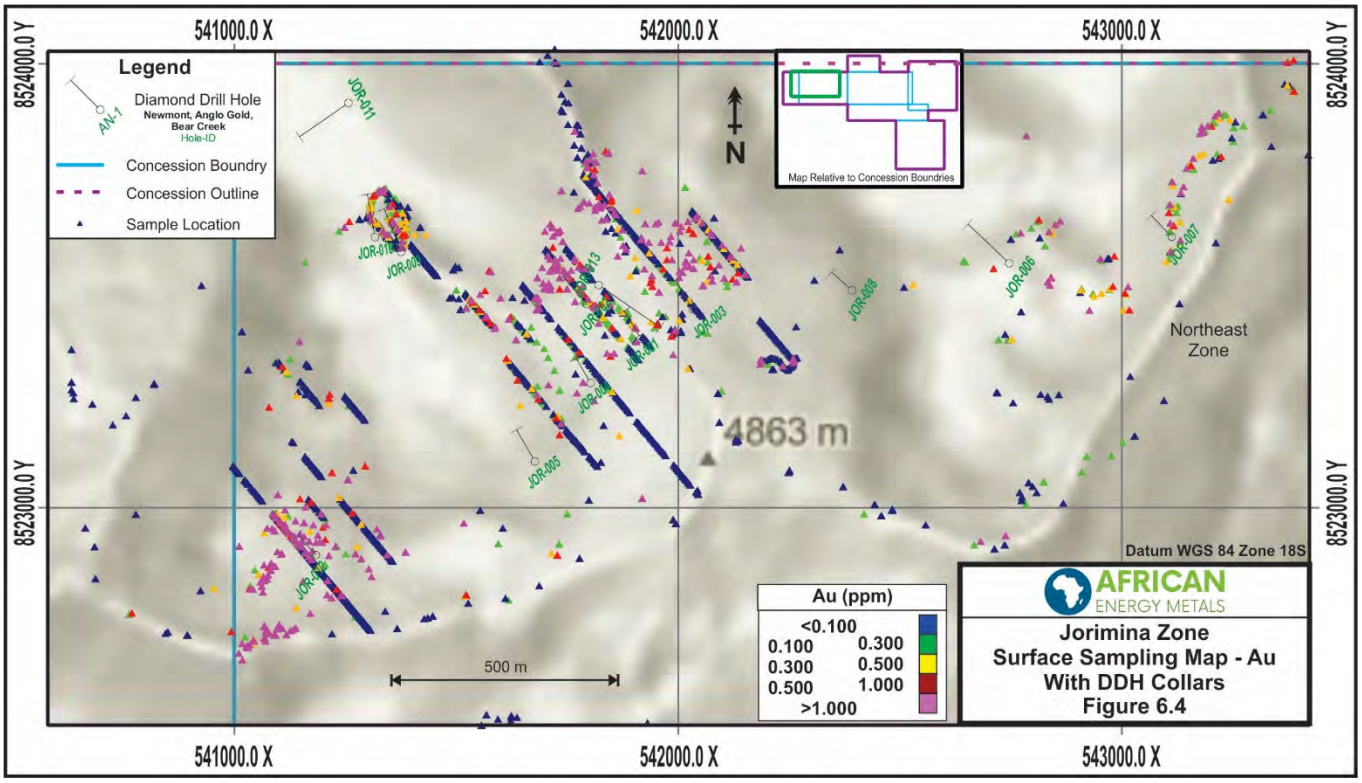


Figure 6.4: Newmont Sample Results for Jorimina Zone - Gold

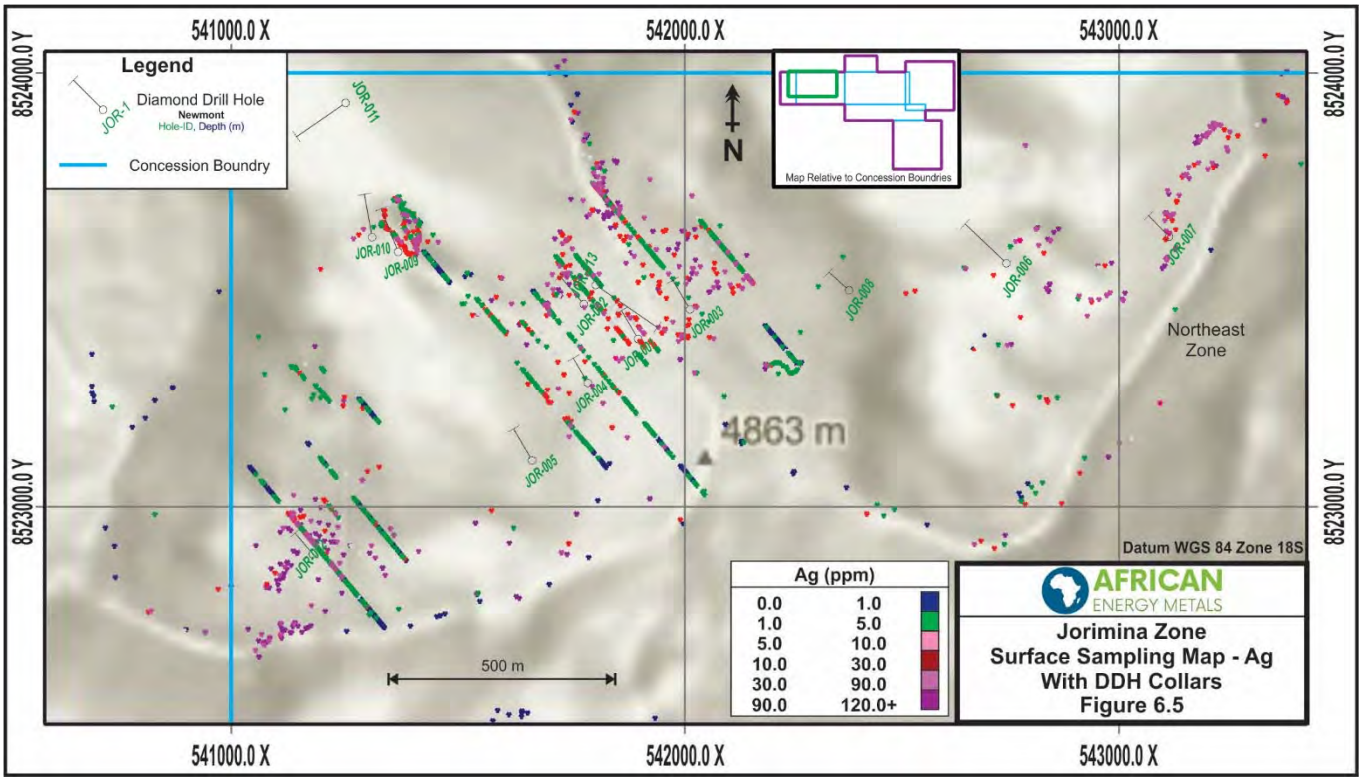


Figure 6.5: Newmont Sample Results for Jorimina Zone – Silver

Newmont conducted two geophysical surveys the first was, in 2008 on the Ninobamba area, a Ground magnetic Survey. The survey covered a total of 567 line km, of which 545 km correspond to NS lines and 22 km to EW lines. The line covered an area of approximately 5.2 km x 10.0 km. Total Magnetic Field is shown in Figure 6.6.

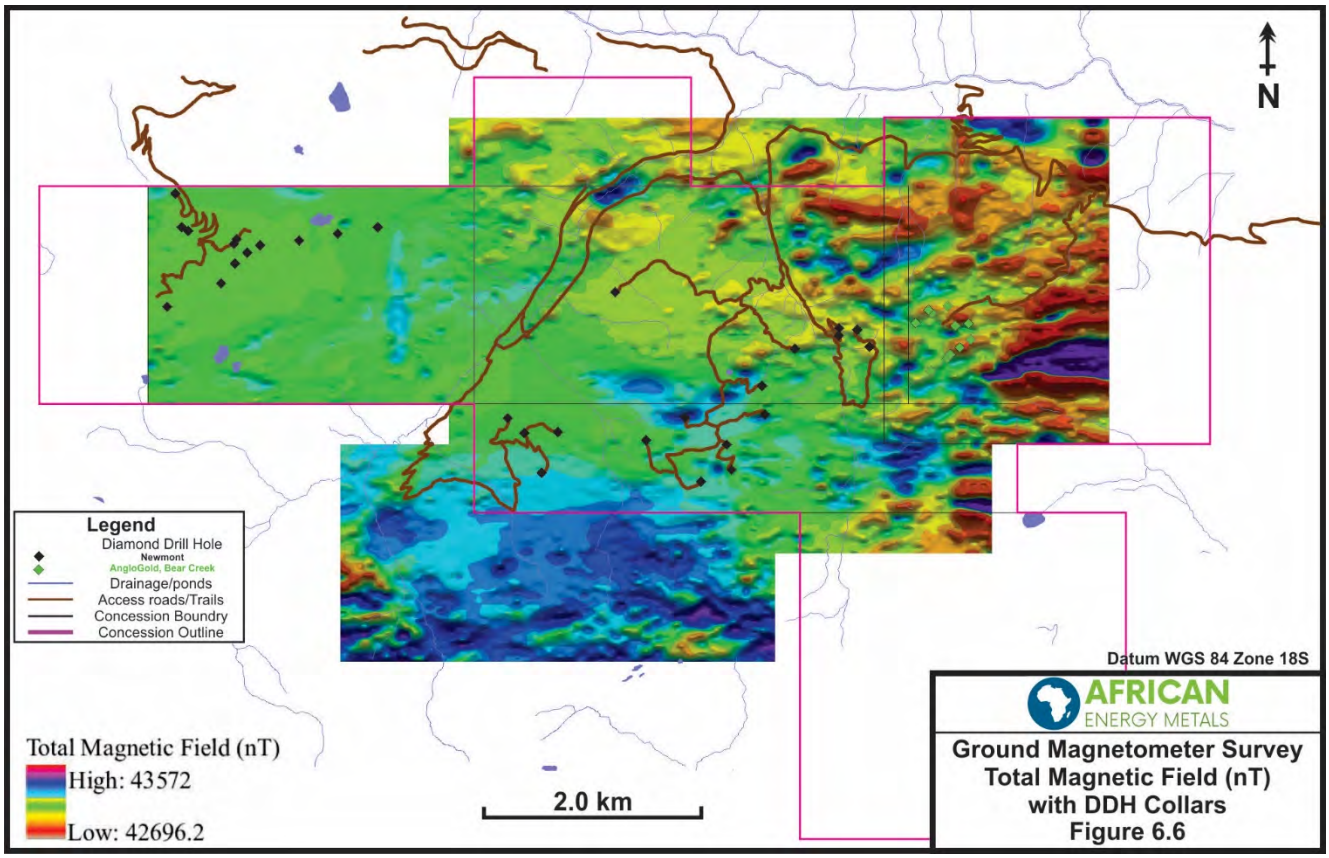


Figure 6.6: Newmont - Ground Magnetometer - Total Magnetic Field Map (nT)

The geophysical surveys carried out during the first quarter of 2009 were gradient-induced polarization over the Jorimina area that covers an area of 3.0 km. X1.5 km approximately. This survey consisted of 33 km of polarized-gradient induction with a line spacing every 100m. (Pinto, *et al.*, 2008)

In addition, pole-dipole induced polarization induction surveys were carried out on the area of Ninobamba main, covering an area of approximately 5.0 km x 3.3 km. This survey consisted of 13 lines (100m pole-dipoles), totaling 44.6 km of tests. The lines are spaced every 500m, only in the central part of the project there is a spacing of two lines every 250m. Results from the Induced polarization surveys, at 50 m below surface, are shown in Figures 6.7 and 6.8.

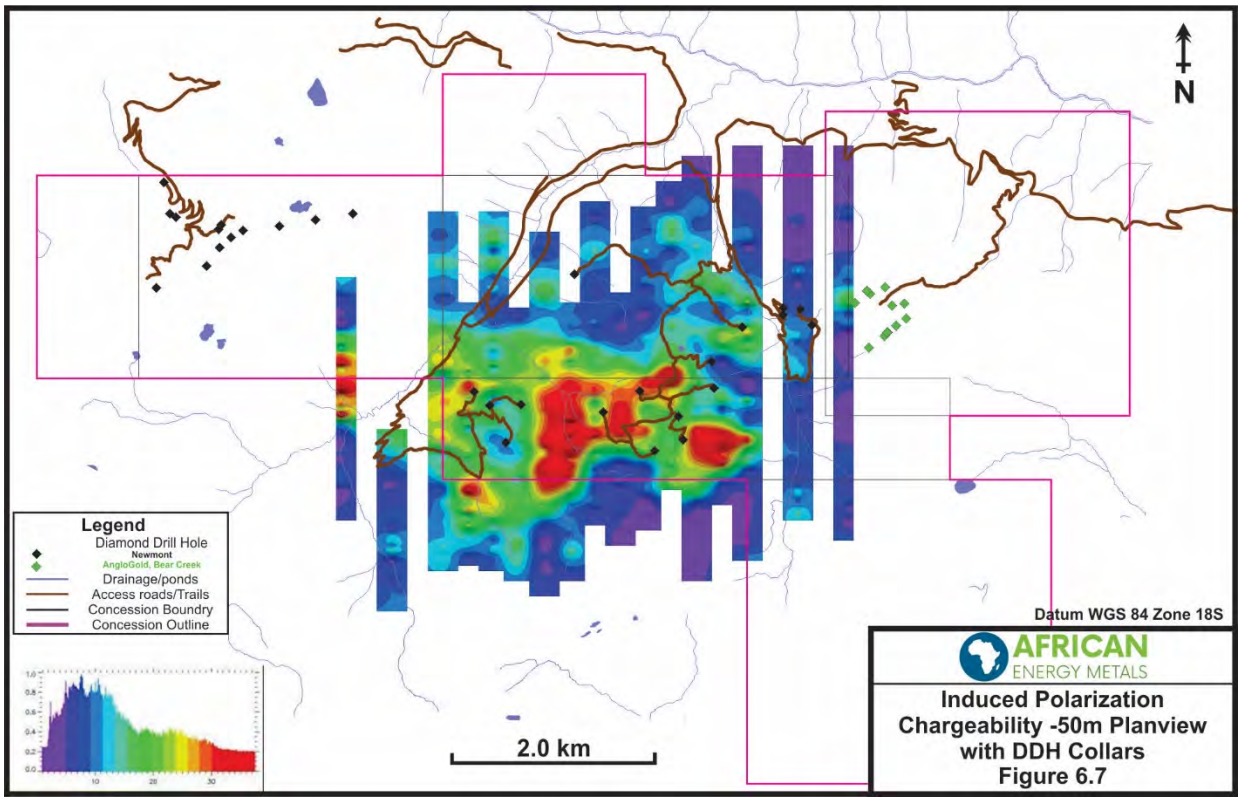


Figure 6.7: Newmont – Induced Polarization - Chargeability

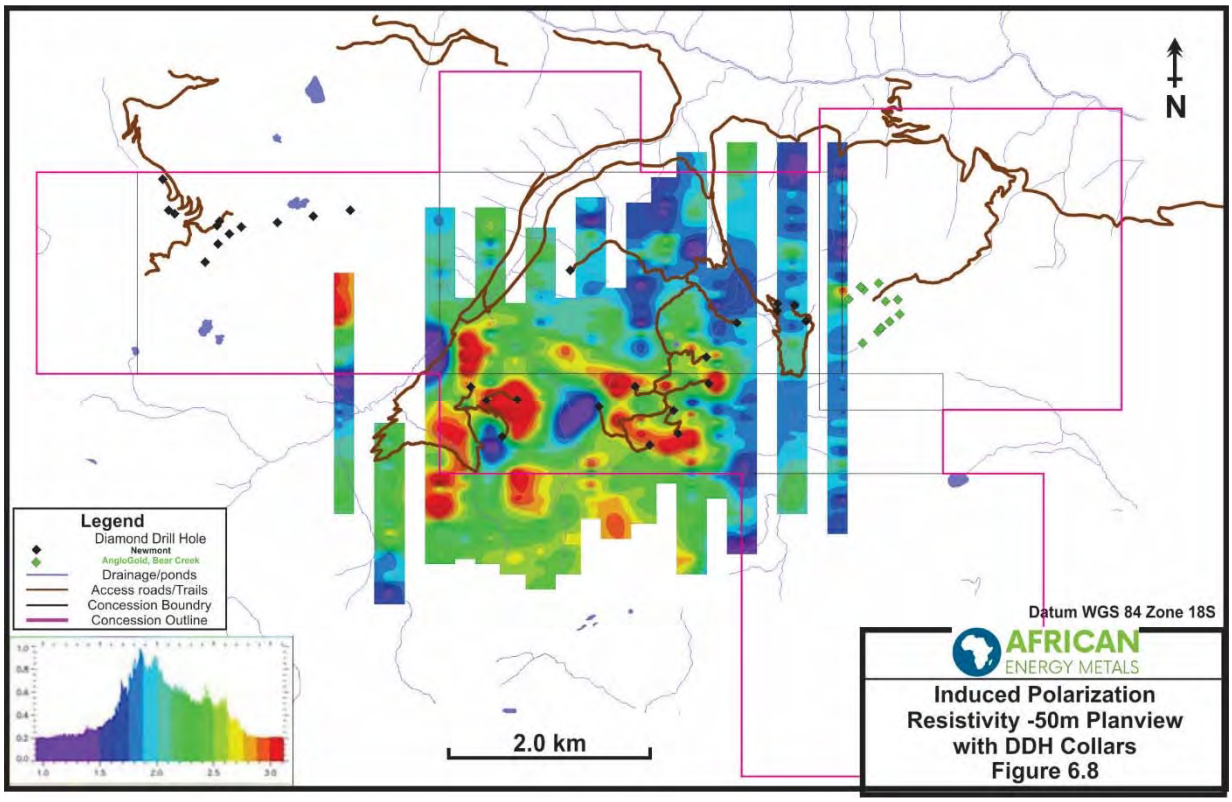


Figure 6.8: Newmont - Induced Polarization - Resistivity

Newmont conducted its drilling campaigns on all targets. Thirteen diamond drill holes totaling 4377 metres were drilled in the Jorimina Zone and eighteen diamond drill holes totaling 3504 metres in the Niñobamba main zone. One 320 metre hole was drilled in an isolated area. In all, Newmont drilled thirty-one holes totaling 7881 metres (Reeder, 2022). Summary results from the drilling are shown in Tables 6.4 to 6.6 and locations are shown in Figures 6.9 and 6.10. The Main zone intercepts in Table 6.4 were estimated from the assays using a gold cut-off. Jorimina results in Tables 6.5 and 6.6 were taken from drill summaries and descriptions in Newmont reports where the gold and silver values were reported separately

Table 6.4: Newmont Main Zone (East) Drill Hole Intercepts

Hole-ID	From	To	Length	Au (ppm)	Ag (ppm)
NIB-001	36.65	52.55	15.90	0.852	17.32
NIB-002	18.10	34.00	15.90	0.424	8.67
NIB-003	1.80	6.90	5.10	0.095	10.64
NIB-003	11.80	22.40	10.60	0.353	4.37
NIB-004	9.30	23.40	14.10	1.120	10.60
NIB-005	0.00	3.10	3.10	0.240	7.56
NIB-005	88.35	101.20	12.85	1.167	27.82
NIB-006	32.30	39.45	7.15	0.419	4.27
NIB-007	No significant intercepts				
NIB-008	10.60	14.50	3.90	0.103	0.52
NIB-009	78.40	82.30	3.90	0.295	3.32
NIB-010	No significant intercepts				
NIB-011	No significant intercepts				
NIB-012	244.00	256.20	12.20	0.174	0.15
NIB-013	No significant intercepts				
NIB-014	No significant intercepts				
NIB-015	25.20	33.20	8.00	0.116	0.47
NIB-015	46.10	65.10	19.00	0.188	0.79
NIB-016	16.50	21.20	4.70	0.270	0.95
NIB-016	35.60	55.60	20.00	0.185	0.66
NIB-017	No significant intercepts				
NIB-018	No significant intercepts				

Table 6.5: Newmont Jorimina Silver Drill Hole Intercepts

Hole-ID	From	To	Length	Ag (ppm)	Hole-ID	From	To	Length	Ag (ppm)
JOR-001	3.90	156.40	152.50	16.00	JOR-003	170.05	170.40	0.35	34.00
JOR-001	183.30	247.00	63.70	21.50	JOR-003	209.60	210.60	1.00	64.00
JOR-002	37.20	40.00	2.80	25.90	JOR-004	11.00	15.65	4.65	11.88
JOR-002	51.70	61.10	9.40	17.50	JOR-004	17.65	21.70	4.05	26.71
JOR-002	85.60	91.00	5.40	24.80	JOR-004	35.75	36.60	0.85	21.88
JOR-003	0.00	0.85	0.85	24.88	JOR-004	161.30	162.35	1.05	30.14
JOR-003	27.75	27.90	0.15	59.00	JOR-004	222.30	225.50	3.20	21.44
JOR-003	40.00	42.85	2.85	13.00	JOR-004	242.45	244.50	2.05	28.93

Hole-ID	From	To	Length	Ag (ppm)	Hole-ID	From	To	Length	Ag (ppm)
JOR-003	54.50	63.40	8.90	10.70	JOR-004	245.20	247.65	2.45	2.45
JOR-003	80.90	92.50	11.60	28.00	JOR-005	17.00	20.50	3.50	33.60
JOR-003	146.00	146.20	0.20	49.00	JOR-005	25.20	27.50	2.30	12.00
JOR-003	150.25	152.40	2.15	13.70	JOR-005	48.70	49.50	0.80	12.00
JOR-005	93.20	93.70	0.50	13.00	JOR-008	254.00	254.75	0.75	51.00
JOR-006	2.70	8.10	5.40	13.60	JOR-009	0.00	22.60	22.60	23.00
JOR-006	22.65	23.10	0.45	14.00	JOR-009	47.85	49.15	1.30	45.00
JOR-006	42.20	45.10	2.90	13.60	JOR-009	71.85	72.00	0.15	64.00
JOR-006	59.65	61.60	1.95	11.40	JOR-009	117.90	118.95	1.05	12.00
JOR-006	67.40	67.55	0.15	47.00	JOR-009	124.30	125.00	0.70	15.00
JOR-006	147.15	147.50	0.35	29.00	JOR-009	128.10	130.00	1.90	19.00
JOR-006	149.90	150.10	0.20	62.00	JOR-009	133.05	135.05	2.00	44.00
JOR-006	193.30	193.70	0.40	11.00	JOR-009	143.75	148.45	4.70	13.00
JOR-006	215.55	215.85	0.30	23.00	JOR-009	179.55	186.30	6.75	13.30
JOR-006	269.25	269.40	0.15	43.00	JOR-009	189.55	191.85	2.30	61.00
JOR-006	281.65	282.25	0.60	43.00	JOR-009	192.55	192.95	0.40	30.00
JOR-006	292.20	292.85	0.65	12.00	JOR-009	194.15	199.35	5.20	50.89
JOR-007	7.25	10.20	2.95	26.00	JOR-009	208.75	217.30	8.55	38.67
JOR-007	15.50	15.80	0.30	25.00	JOR-009	223.30	227.35	4.05	37.33
JOR-007	20.35	21.55	1.20	12.00	JOR-009	238.60	251.30	12.70	17.31
JOR-007	23.30	23.55	0.25	37.00	JOR-009	263.80	263.95	0.15	59.00
JOR-007	28.30	28.50	0.20	21.00	JOR-009	268.35	268.60	0.25	37.00
JOR-007	33.60	33.95	0.35	12.00	JOR-009	281.40	281.80	0.40	28.00
JOR-007	38.35	38.75	0.40	39.00	JOR-009	288.40	288.70	0.30	86.00
JOR-007	44.70	44.95	0.25	15.00	JOR-009	316.35	317.20	0.85	17.00
JOR-007	45.60	45.80	0.20	11.00	JOR-009	320.00	322.00	2.00	38.00
JOR-007	48.90	55.55	6.65	13.00	JOR-009	324.50	326.00	1.50	17.00
JOR-007	62.55	62.80	0.25	12.00	JOR-009	335.30	335.80	0.50	45.00
JOR-007	68.35	68.65	0.30	21.00	JOR-009	342.25	342.40	0.15	14.00
JOR-007	77.55	82.70	5.15	15.00	JOR-009	346.95	347.30	0.35	16.00
JOR-007	90.40	90.75	0.35	35.00	JOR-009	357.45	359.70	2.25	40.00
JOR-007	99.55	106.80	7.25	23.00	JOR-009	369.60	369.85	0.25	14.00
JOR-007	114.05	114.35	0.30	24.00	JOR-009	373.60	375.00	1.40	28.00
JOR-007	116.80	117.80	1.00	42.00	JOR-009	392.00	394.50	2.50	109.00
JOR-007	122.00	126.60	4.60	11.00	JOR-009	404.15	405.65	1.50	16.00
JOR-007	130.60	133.10	2.50	15.00	JOR-009	446.80	447.20	0.40	44.00
JOR-007	136.45	136.80	0.35	14.00	JOR-009	452.55	453.70	1.15	67.00
JOR-007	150.85	153.20	2.35	71.00	JOR-009	458.55	459.00	0.45	66.00
JOR-007	191.80	192.00	0.20	58.00	JOR-009	482.15	484.50	2.35	92.00
JOR-008	4.60	11.70	7.10	21.00	JOR-009	490.80	493.00	2.20	138.00
JOR-008	21.05	27.05	6.00	79.00	JOR-009	508.55	508.80	0.25	14.00
JOR-008	35.70	47.30	11.60	16.00	JOR-010	0.00	1.25	1.25	14.00

Hole-ID	From	To	Length	Ag (ppm)	Hole-ID	From	To	Length	Ag (ppm)
JOR-008	57.05	58.90	1.85	138.00	JOR-010	85.00	85.25	0.25	23.00
JOR-008	151.45	151.90	0.45	12.00	JOR-010	117.40	117.75	0.35	141.00
JOR-008	196.50	197.00	0.50	17.00	JOR-010	162.50	167.60	5.10	12.00
JOR-008	209.15	209.35	0.20	23.00	JOR-010	175.25	175.65	0.40	89.00
JOR-010	195.30	218.75	23.45	24.00	JOR-013	17.85	20.40	2.55	24.30
JOR-011	45.80	46.20	0.40	13.00	JOR-013	23.40	24.60	1.20	12.00
JOR-011	143.20	144.00	0.80	16.00	JOR-013	27.50	31.45	3.95	19.80
JOR-011	147.30	149.60	2.30	196.00	JOR-013	35.50	40.70	5.20	18.00
JOR-012	5.35	5.85	0.50	277.00	JOR-013	43.30	51.80	8.50	17.40
JOR-012	24.40	24.55	0.15	38.00	JOR-013	56.80	62.50	5.70	19.70
JOR-012	46.40	48.95	2.55	42.11	JOR-013	79.30	81.30	2.00	12.00
JOR-012	77.00	77.70	0.70	30.00	JOR-013	90.90	91.25	0.35	154.00
JOR-012	85.90	86.50	0.60	50.00	JOR-013	101.90	102.15	0.25	79.00
JOR-012	90.25	90.35	0.10	124.00	JOR-013	136.35	140.05	3.70	12.60
JOR-012	122.95	123.05	0.10	127.00	JOR-013	176.60	176.95	0.35	20.00
JOR-012	131.00	131.20	0.20	17.00	JOR-013	181.65	181.95	0.30	15.00
JOR-012	204.00	206.00	2.00	17.00	JOR-013	237.70	238.65	0.95	20.00
JOR-013	1.25	2.10	0.85	14.00	JOR-013	258.65	258.95	0.30	354.00
JOR-013	14.60	15.15	0.55	43.00	JOR-013	334.10	335.95	1.85	12.00

Table 6.6: Newmont Jorimina Gold Drill Hole Intercepts

Hole-ID	From	To	Length	Au (ppm)	Hole-ID	From	To	Length	Au (ppm)
JOR-001	6.00	156.40	150.40	0.690	JOR-004	2.00	5.00	3.00	0.140
JOR-001	162.70	260.30	97.60	0.420	JOR-004	6.60	22.00	15.40	0.300
JOR-002	37.20	47.40	10.20	0.610	JOR-004	32.00	37.20	5.20	0.160
JOR-002	48.00	50.10	2.10	0.160	JOR-004	48.30	52.00	3.70	0.110
JOR-002	52.00	67.20	15.20	0.160	JOR-004	54.00	56.90	2.90	0.220
JOR-002	123.00	125.50	2.50	0.430	JOR-004	69.90	71.25	1.35	2.140
JOR-002	138.00	166.05	28.05	0.130	JOR-004	110.35	114.40	4.05	0.120
JOR-002	169.00	176.10	7.10	0.330	JOR-004	129.00	131.55	2.55	0.200
JOR-002	197.00	217.70	20.70	0.450	JOR-004	135.50	138.90	3.40	0.290
JOR-003	0.00	0.85	0.85	0.160	JOR-004	156.05	156.20	0.15	2.020
JOR-003	12.00	23.25	11.25	0.140	JOR-004	233.20	233.35	0.15	4.800
JOR-003	27.75	29.65	1.90	0.140	JOR-004	246.55	247.65	1.10	12.620
JOR-003	33.50	45.60	12.10	0.140	JOR-005	17.00	20.50	3.50	0.140
JOR-003	52.00	57.95	5.95	0.290	JOR-005	43.60	44.35	0.75	0.461
JOR-003	79.50	84.80	5.30	0.680	JOR-005	48.70	49.50	0.80	0.800
JOR-003	87.00	92.50	5.50	0.230	JOR-005	66.00	66.50	0.50	0.277
JOR-003	139.00	146.20	7.20	0.150	JOR-005	265.85	266.65	0.80	0.441
JOR-003	150.25	154.00	3.75	0.160	JOR-005	297.55	298.40	0.85	0.119
JOR-003	158.00	162.45	4.45	0.110	JOR-005	300.25	301.00	0.75	0.165
JOR-003	164.00	168.00	4.00	0.120	JOR-005	304.40	305.00	0.60	0.127

Hole-ID	From	To	Length	Au (ppm)	Hole-ID	From	To	Length	Au (ppm)
JOR-003	176.00	224.65	48.65	0.520	JOR-006	2.70	3.25	0.55	0.250
JOR-003	233.60	242.00	8.40	0.410	JOR-006	6.55	7.40	0.85	0.790
JOR-003	280.00	284.90	4.90	0.130	JOR-006	44.85	45.10	0.25	0.100
JOR-006	67.40	67.55	0.15	0.170	JOR-008	58.65	58.90	0.25	4.310
JOR-006	131.25	135.60	4.35	0.350	JOR-008	116.85	117.55	0.70	0.140
JOR-006	149.90	150.10	0.20	0.300	JOR-008	130.40	130.65	0.25	0.120
JOR-006	161.85	162.30	0.45	0.300	JOR-008	151.45	151.90	0.45	2.050
JOR-006	178.05	179.70	1.65	0.300	JOR-008	175.00	177.10	2.10	1.650
JOR-006	191.00	191.45	0.45	0.270	JOR-008	196.50	197.00	0.50	0.400
JOR-006	193.30	193.70	0.40	0.100	JOR-008	203.20	203.45	0.25	0.300
JOR-006	215.55	215.85	0.30	0.120	JOR-008	209.15	210.25	1.10	2.400
JOR-006	251.20	251.45	0.25	0.100	JOR-008	218.35	218.85	0.50	0.160
JOR-006	269.25	273.05	3.80	0.180	JOR-008	222.50	224.80	2.30	0.600
JOR-006	278.60	282.25	3.65	2.240	JOR-008	253.15	254.75	1.60	0.570
JOR-006	292.20	292.85	0.65	0.160	JOR-008	287.50	287.70	0.20	0.110
JOR-006	305.30	307.65	2.35	0.240	JOR-009	0.60	19.60	19.00	0.290
JOR-006	310.60	312.50	1.90	0.120	JOR-009	47.85	49.15	1.30	0.200
JOR-006	317.50	318.70	1.20	0.880	JOR-009	63.70	65.70	2.00	0.290
JOR-006	326.60	327.85	1.25	0.450	JOR-009	71.85	72.70	0.85	47.900
JOR-007	7.25	8.05	0.80	2.000	JOR-009	106.70	106.85	0.15	0.180
JOR-007	15.50	15.80	0.30	0.140	JOR-009	120.95	131.05	10.10	0.330
JOR-007	19.60	20.35	0.75	0.260	JOR-009	140.15	157.40	17.25	0.150
JOR-007	23.30	23.55	0.25	0.220	JOR-009	176.20	186.30	10.10	1.140
JOR-007	29.25	29.90	0.65	1.650	JOR-009	189.10	191.85	2.75	0.270
JOR-007	33.60	33.95	0.35	0.130	JOR-009	489.55	493.00	3.45	0.880
JOR-007	38.35	38.75	0.40	0.330	JOR-009	194.15	199.35	5.20	0.150
JOR-007	47.65	49.50	1.85	0.440	JOR-009	210.60	225.10	14.50	0.130
JOR-007	52.30	52.50	0.20	0.240	JOR-009	230.40	240.50	10.10	0.130
JOR-007	55.40	55.55	0.15	0.120	JOR-009	245.05	248.90	3.85	0.210
JOR-007	68.35	68.65	0.30	0.280	JOR-009	268.35	268.60	0.25	0.660
JOR-007	75.40	75.55	0.15	0.120	JOR-009	275.75	275.90	0.15	0.670
JOR-007	77.55	78.70	1.15	0.150	JOR-009	288.40	288.70	0.30	0.880
JOR-007	82.30	82.70	0.40	0.180	JOR-009	320.00	322.00	2.00	0.170
JOR-007	88.35	90.75	2.40	0.120	JOR-009	335.30	335.80	0.50	0.320
JOR-007	97.15	97.35	0.20	0.200	JOR-009	342.25	342.40	0.15	0.220
JOR-007	104.20	106.80	2.60	0.230	JOR-009	404.15	416.60	12.45	0.180
JOR-007	116.80	117.80	1.00	0.280	JOR-009	418.80	422.50	3.70	0.170
JOR-007	122.00	122.20	0.20	0.900	JOR-009	428.50	433.85	5.35	0.180
JOR-007	130.60	132.00	1.40	0.170	JOR-009	437.00	447.20	10.20	0.510
JOR-007	136.45	136.80	0.35	0.170	JOR-009	451.20	455.70	4.50	0.580
JOR-007	150.85	154.70	3.85	0.570	JOR-009	461.90	479.15	17.25	0.120
JOR-007	191.80	192.00	0.20	1.230	JOR-009	482.15	486.50	4.35	0.160
JOR-008	21.05	21.30	0.25	2.440	JOR-009	508.55	508.80	0.25	0.370

Hole-ID	From	To	Length	Au (ppm)	Hole-ID	From	To	Length	Au (ppm)
JOR-008	35.40	42.05	6.65	0.250	JOR-010	0.00	6.00	6.00	0.130
JOR-008	45.30	47.30	2.00	0.130	JOR-010	35.05	41.60	6.55	0.190
JOR-008	52.20	52.40	0.20	0.170	JOR-010	47.50	47.90	0.40	0.470
JOR-010	55.30	59.50	4.20	1.360	JOR-013	14.60	17.85	3.25	0.740
JOR-010	67.60	67.95	0.35	0.100	JOR-013	23.40	31.45	8.05	0.380
JOR-010	85.00	85.25	0.25	0.220	JOR-013	41.65	60.45	18.80	0.250
JOR-010	105.50	106.20	0.70	0.130	JOR-013	79.30	91.25	11.95	0.800
JOR-010	117.40	117.75	0.35	0.310	JOR-013	99.00	116.50	17.50	0.240
JOR-010	144.70	145.10	0.40	0.120	JOR-013	122.40	124.00	1.60	0.200
JOR-010	166.85	175.65	8.80	0.210	JOR-013	130.00	166.45	36.45	0.180
JOR-010	195.30	197.45	2.15	1.080	JOR-013	176.60	183.85	7.25	0.110
JOR-010	204.40	218.75	14.35	0.150	JOR-013	191.60	192.30	0.70	1.100
JOR-011	38.00	40.20	2.20	0.200	JOR-013	198.00	200.00	2.00	0.110
JOR-011	45.80	46.20	0.40	0.340	JOR-013	202.00	204.00	2.00	0.110
JOR-011	66.70	67.10	0.40	0.160	JOR-013	210.00	212.35	2.35	0.110
JOR-011	147.30	149.60	2.30	0.180	JOR-013	229.15	231.00	1.85	0.240
JOR-012	5.35	5.85	0.50	0.320	JOR-013	236.00	241.55	5.55	0.260
JOR-012	11.60	11.70	0.10	0.160	JOR-013	255.30	258.95	3.65	4.840
JOR-012	23.05	24.55	1.50	0.140	JOR-013	260.85	262.90	2.05	0.120
JOR-012	46.40	46.70	0.30	1.600	JOR-013	281.00	283.05	2.05	0.130
JOR-012	47.75	48.95	1.20	0.550	JOR-013	286.50	289.85	3.35	0.130
JOR-012	51.80	51.90	0.10	0.320	JOR-013	295.45	299.00	3.55	0.110
JOR-012	77.00	77.70	0.70	0.300	JOR-013	303.15	309.75	6.60	0.200
JOR-012	85.35	90.75	5.40	0.630	JOR-013	316.45	321.30	4.85	0.110
JOR-012	98.20	98.35	0.15	0.190	JOR-013	325.95	327.35	1.40	0.140
JOR-012	101.45	101.80	0.35	0.170	JOR-013	334.10	335.95	1.85	0.150
JOR-012	122.95	123.05	0.10	0.440	JOR-013	354.35	356.25	1.90	0.120
JOR-012	131.00	131.20	0.20	0.150	JOR-013	357.45	359.65	2.20	0.120
JOR-012	144.80	146.55	1.75	0.120	JOR-013	363.00	364.15	1.15	1.010
JOR-012	150.30	151.55	1.25	0.110	JOR-013	368.15	376.35	8.20	0.150
JOR-012	200.00	206.00	6.00	0.180					

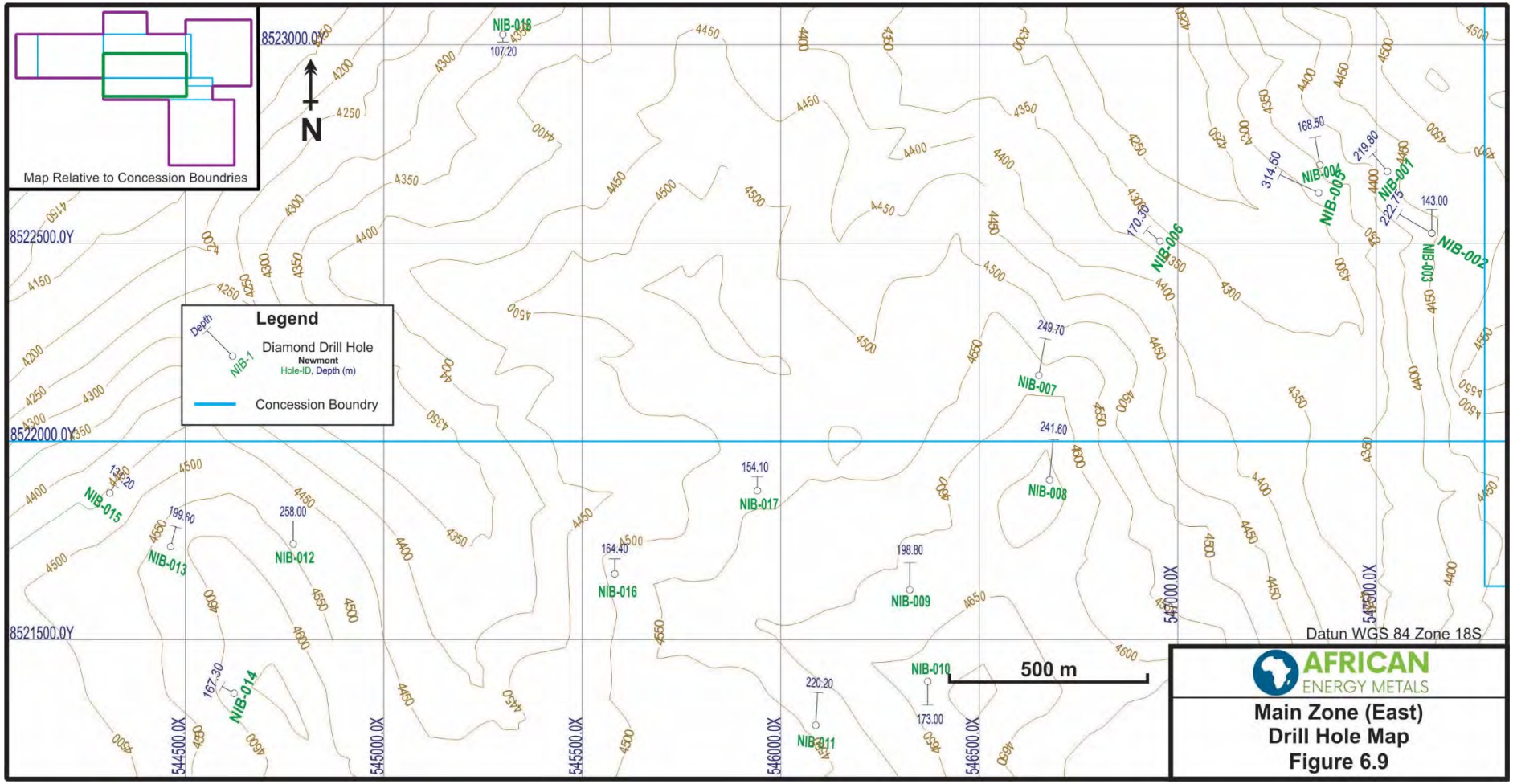


Figure 6.9: Newmont, Main Zone (East), DrillHole Locations

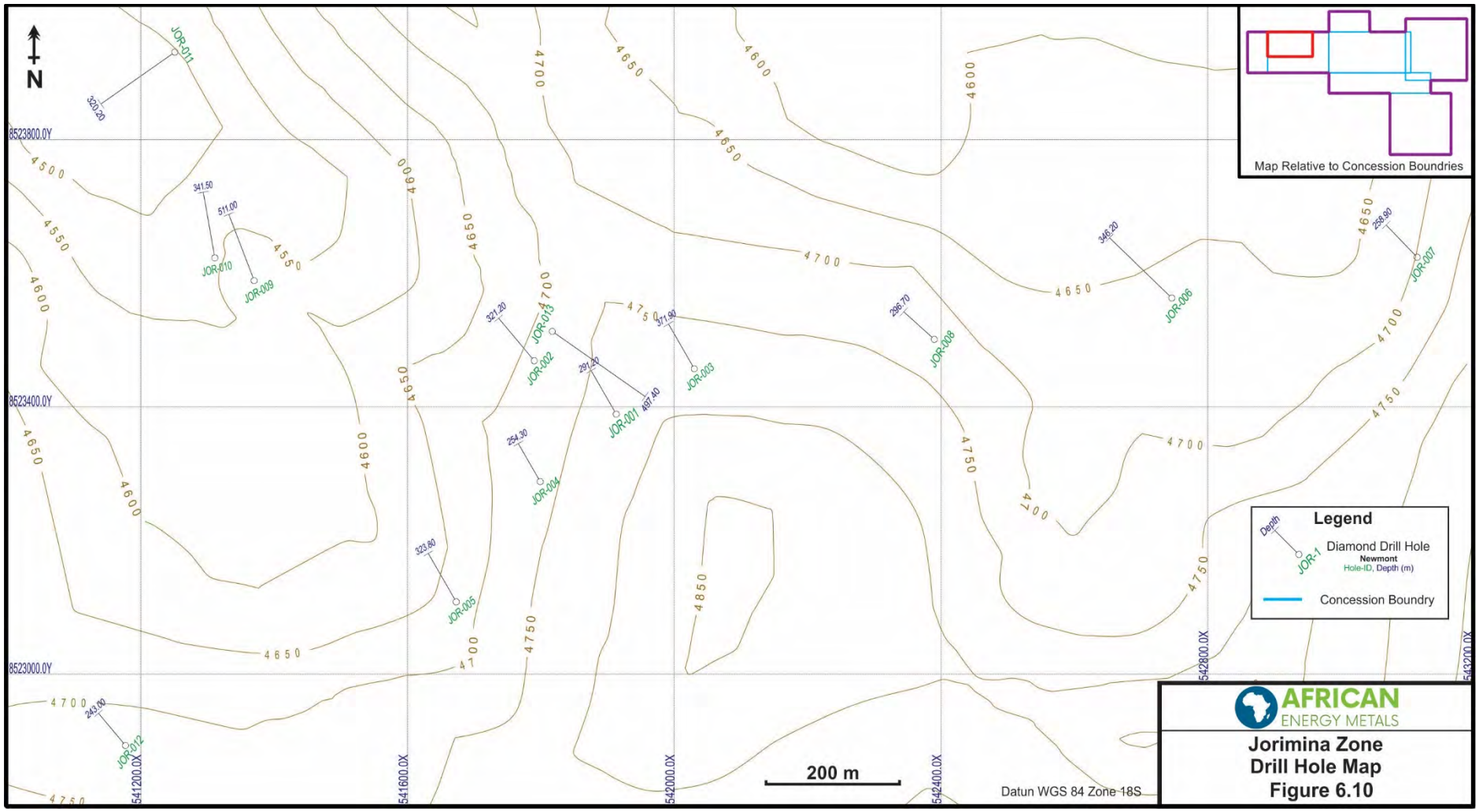


Figure 6.10: Newmont, Jorimina Zone, Drill Hole Locations

Newmont, in their 2011 report for Southern Copper, describes a study undertaken for the determination of the predominant mineral in the Prospects of Tunsulla (Jorimina) and Chuschi (Niñobamaba Main). The report states that based on the information obtained during more than two years of prospecting and exploration consisting of samplings of sediments, soils, rocks, trenches, detailed geological mappings, geophysical studies, diamond drilling, it has been possible to identify potential bodies associated with areas of structures with gold, silver, zinc and lead values. For thr Jorimina zone they are: Jorimina Central, Red Cliff, Jorimina NE and Rafaella and for the Niñobamba Main zone they are: Patacocha, Jatumpata and Sumi. The report then describes the Leapfrog models, cut-off grades, the number of drill holes used and the resource potential of each of these zones (bodies).

6.1.4 Acquisition by Rio Silver

AngloGold allowed their concessions to lapse for non-payment in 2006. Rio Plata S.A.C, Rio Silver's wholly owned Peruvian subsidiary, applied for the Niñobamba main zone (drilled by AngloGold and Bear Creek) by application in 2007 as well as Newmont and another individual. Rio Plata later acquired this area by outbidding Newmont in a "closed bid" auction in 2008.

Rio Silver agreed, in 2016, to purchase from Newmont, three concessions including all exploration data.

6.1.5 Exploration by Rio Silver (Peru)

Rio Silver conducted an extensive trenching program during the second half of 2012. The exploration program focused on two parallel mineralized zones: the North and South zones. In total, 17 trenches were excavated using manual labour from the local community. The rocks exposed in the trenches were channel sampled and surveyed. Significant gold mineralization was revealed that was either unappreciated or not recognized by previous operators. The best results in the Au-Ag zones show 43.5 metres of 0.69 g/t Au and 79.5 g/t Ag; also 24 metres of 1.24 g/t Au and 117.5 g/t Ag in trench 1 ("TR-01"); 10.4 metres of 0.17 g/t Au and 91.4 g/t Ag; also 15 metres of 1.4 g/t Au and 112.5 g/t Ag in trench 4 ("TR-04") which ended in mineralization. Pure silver results (no gold) show broad disseminated mineralization of 79.6 metres of 58.2 g/t Ag in trench 5 (TR-05") and 37 metres of 138.2 g/t Ag in trench 2 ("TR-02"). Both these intervals had no gold zone showing, a typical metal zonation commonly associated with Andean epithermal systems. No work has been conducted on the property since 2012.

i. North Zone

The horizontal separation between the South and North Zones is between 450 and 500 metres. Elevation difference from the top of hole AN-02 to the outcropping vuggy silica alteration in trench TR-04 is between 80 to 100 metres. Due to the relatively young age of the volcanics and the mineralizing event, the geochemical and geological differences in both the vertical and horizontal extent are significant and should be considered important to understand the epithermal system present at Niñobamba.

Locations of the trenches and drill holes in the North Zone are shown below in Figure 6.11. Assays from drill Hole AN-01 and the surface assays from trenches nearby AN-01 show distinct disseminated gold-silver mineralized zones. The top of drill hole AN-02 also shows weak gold mineralization associated with Ag in the first 34 metres whereas the majority of the mineralized interval in AN-02 contained only Ag mineralization. The detailed surface results from the trenches TR-01, TR-04 and TR-05 are shown below. It is important to note the continuous Au-Ag mineralization over their lengths. Sample intervals were from south to north.

Table 6.7: North Zone Drill Hole Intercepts

Hole-Id	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)
AngloGold 2002					
AN-1	90.00	97.10	7.10	0.731	60.08
AN-1	132.65	135.85	3.20	0.028	11.30
AN-2	0.00	34.50	34.50	0.185	47.65
AN-2	34.50	105.40	70.90	0.008	58.35
AN-2	105.40	133.95	28.55	0.008	222.68
Bear Creek 2003					
BC-4	18.00	32.00	14.00	Not assayed	42.60

ii. North Zone Trenching Results (2012)

Table 6.8: North Zone Trenching Results Summary (2012)

Trench -ID	From	To	Length	Au (ppm)	Ag (ppm)	Comment
TR-01	0.00	11.84	11.84	0.038	57.14	
TR-01	15.61	19.53	3.92	0.135	29.30	
TR-01	47.66	71.74	24.08	1.241	117.52	
TR-01	77.66	121.13	43.47	0.693	79.52	
TR-04	23.05	33.47	10.42	0.167	91.38	
TR-04	105.27	120.40	15.13	1.399	112.47	ends in mineralization
TR-05	0.00	16.49	16.49	0.013	64.96	
TR-05	19.54	79.58	60.04	0.107	59.19	starts and ends in mineralization
TR-08	17.01	31.27	14.26	0.106	71.55	
TR-08	103.37	113.75	10.38	0.023	57.49	
TR-09	10.50	17.38	6.88	0.003	27.29	
TR-09	34.06	54.34	20.28	0.024	40.52	
TR-09	84.33	90.22	5.89	0.016	47.57	
TR-12	4.24	12.52	8.28	0.529	153.48	starts and ends in mineralization
TR-13	16.09	19.57	3.48	0.018	67.66	
TR-13	28.73	48.74	20.01	0.003	179.12	ends in mineralization
TR-16	3.30	24.35	21.05	0.031	99.37	
TR-16	30.57	38.59	8.02	0.011	34.77	ends in mineralization
TR-17	9.78	51.63	41.85	0.015	37.60	

Trench TR-01 was excavated north – south over the area where AN-02 was drilled. Three distinct zones were identified in TR-01. The most southern portion of the trench uncovered an anomalous Ag zone with some gold. This zone has strong argillic alteration and is partly recessive. A second Au-Ag zone was sampled in the middle of the trench where strong, massive, granular silica alteration produced a prominent ridge. Below are the individual assay intervals with composite grades shown. Clearly, gold mineralization in TR-01 is associated with massive silica and/or vuggy silica.

Table 6.9: Trench 01 Results

Trench - ID	From	To	Length	Au (ppm)	Ag (ppm)	Comment
TR-01	0.00	1.98	1.98	0.003	26.2	From 0 to 19.53 m strong argillic alteration with recessive outcrops
TR-01	1.98	4.00	2.01	0.003	50.9	
TR-01	4.00	5.95	1.95	0.003	43.7	
TR-01	5.95	7.95	2.00	0.003	28.6	
TR-01	7.95	9.88	1.93	0.220	178.9	
TR-01	9.88	11.84	1.96	0.003	17.4	
TR-01	11.84	13.75	1.90	0.003	2.2	
TR-01	13.75	15.61	1.87	0.003	4.5	
TR-01	15.61	17.62	2.01	0.133	46.3	
TR-01	17.62	19.53	1.91	0.137	11.4	
Total			**19.53**	**0.051**	**41.16**	
TR-01	19.53	21.60	2.07	0.191	6.1	
TR-01	21.60	24.05	2.46	0.036	9.0	
TR-01	24.05	25.94	1.88	0.003	3.6	
TR-01	25.94	27.88	1.94	0.003	2.7	
TR-01	27.88	29.94	2.06	0.003	2.5	
TR-01	29.94	31.91	1.96	0.021	2.0	
TR-01	31.91	33.93	2.03	0.048	2.5	
TR-01	33.93	35.81	1.88	0.007	1.6	
TR-01	35.81	37.85	2.04	0.003	2.1	
TR-01	37.85	39.76	1.91	0.095	0.7	
TR-01	39.76	41.77	2.01	0.079	2.0	
TR-01	41.77	43.74	1.97	0.152	2.1	
TR-01	43.74	45.73	1.99	0.181	4.7	
TR-01	45.73	47.66	1.93	0.114	4.1	
TR-01	47.66	49.62	1.96	0.061	13.7	
TR-01	49.62	51.56	1.94	0.129	22.2	
TR-01	51.56	53.52	1.97	0.285	38.2	Strong silica alteration. Forms prominent ridge
TR-01	53.52	55.79	2.27	1.625	204.0	
TR-01	55.79	57.74	1.95	1.002	169.5	
TR-01	57.74	59.89	2.16	0.479	11.7	
TR-01	59.89	61.79	1.90	0.132	7.9	
TR-01	61.79	63.78	1.99	3.300	153.0	
TR-01	63.78	65.81	2.03	3.739	334.0	
TR-01	65.81	67.77	1.96	2.301	249.4	
TR-01	67.77	69.78	2.01	1.024	102.9	
TR-01	69.78	71.74	1.96	0.669	88.4	
TR-01	71.74	73.74	1.99	0.019	8.6	
TR-01	73.74	75.67	1.94	0.009	5.8	
TR-01	75.67	77.66	1.99	0.016	7.1	
TR-01	77.66	79.71	2.05	0.019	11.3	

Trench - ID	From	To	Length	Au (ppm)	Ag (ppm)	Comment
TR-01	79.71	81.72	2.02	1.141	136.1	
TR-01	81.72	83.66	1.94	1.060	149.8	
TR-01	83.66	85.65	1.98	3.806	326.0	
TR-01	85.65	87.67	2.02	1.032	88.7	
TR-01	87.67	89.61	1.94	0.978	77.6	
TR-01	89.61	91.66	2.05	0.640	57.8	
TR-01	91.66	93.69	2.03	0.833	79.3	
TR-01	93.69	95.64	1.96	0.431	72.5	
TR-01	95.64	97.63	1.99	0.821	93.6	
TR-01	97.63	99.24	1.61	1.086	94.4	
TR-01	99.24	100.49	1.25	0.305	32.6	
TR-01	100.49	102.09	1.61	0.344	54.7	
TR-01	102.09	103.53	1.44	1.363	71.4	
TR-01	103.53	105.50	1.97	0.478	43.7	
Total			**53.94**	**1.050**	**100.94**	
TR-01	105.50	107.48	1.98	0.096	23.0	Significant drop in Au mineralization. The rocks show argillic alteration and is more recessive compared to the previous Au-Ag interval
TR-01	107.48	109.44	1.95	0.182	33.0	
TR-01	109.44	111.41	1.97	0.136	17.6	
TR-01	111.41	113.41	2.00	0.065	33.0	
TR-01	113.41	115.36	1.95	0.028	25.5	
TR-01	115.36	117.28	1.93	0.058	11.3	
TR-01	117.28	119.25	1.97	0.996	255.8	
Total			**13.75**	**0.223**	**57.18**	
TR-01	119.25	121.13	1.89	0.015	15.1	
TR-01	126.85	128.78	1.93	0.003	3.3	
TR-01	132.68	134.69	2.01	0.003	4.9	
TR-01	134.69	136.63	1.94	0.003	0.3	
TR-01	136.63	138.58	1.95	0.003	0.2	
TR-01	138.58	140.55	1.97	0.027	0.3	

Table 6.10: Trench 04 Results

Trench -ID	From	To	Length	Au (ppm)	Ag (ppm)	
TR-04	0.00	1.99	1.99	0.044	0.50	
TR-04	1.99	4.00	2.00	0.013	0.40	
TR-04	4.00	5.99	2.00	0.010	0.10	
TR-04	5.99	7.98	1.99	0.003	0.10	
TR-04	7.98	9.98	2.00	0.007	0.10	
TR-04	9.98	12.22	2.24	0.003	0.40	
TR-04	12.22	13.61	1.39	0.006	0.10	
TR-04	13.61	15.35	1.74	0.003	0.10	
TR-04	15.35	17.36	2.02	0.003	0.10	
TR-04	17.36	19.10	1.74	0.003	0.10	

Trench -ID	From	To	Length	Au (ppm)	Ag (ppm)	
TR-04	19.10	21.09	1.99	0.003	0.10	
TR-04	21.09	23.05	1.95	0.003	5.00	
TR-04	23.05	25.18	2.13	0.034	54.60	
TR-04	25.18	27.25	2.07	0.250	192.40	
TR-04	27.25	29.13	1.89	0.318	108.40	
TR-04	29.13	31.05	1.92	0.162	51.50	
TR-04	31.05	32.34	1.29	0.117	84.40	
TR-04	32.34	33.47	1.13	0.078	23.10	
Total			**10.42**	**0.167**	**91.38**	
TR-04	34.31	35.02	0.71	0.003	0.60	
TR-04	35.02	36.72	1.71	0.003	0.10	
TR-04	36.72	37.92	1.20	0.003	0.10	
TR-04	37.92	39.18	1.26	0.003	1.40	
TR-04	39.18	41.12	1.94	0.003	0.10	
TR-04	41.12	43.12	2.00	0.003	0.10	
TR-04	43.12	45.15	2.03	0.003	0.10	
TR-04	45.15	47.14	2.00	0.003	0.10	
TR-04	47.14	49.11	1.96	0.003	0.10	
TR-04	49.11	51.12	2.02	0.003	0.10	
TR-04	51.12	52.96	1.84	0.003	0.10	
TR-04	52.96	54.93	1.97	0.003	0.10	
TR-04	54.93	56.89	1.97	0.003	0.10	
TR-04	56.89	58.91	2.02	0.003	0.10	
TR-04	58.91	60.70	1.79	0.003	0.10	
TR-04	60.70	62.67	1.98	0.003	0.10	
TR-04	62.67	64.65	1.98	0.003	0.10	
TR-04	64.65	66.60	1.95	0.003	0.10	
TR-04	66.60	68.64	2.03	0.003	0.10	
TR-04	68.64	70.48	1.84	0.003	0.10	
TR-04	70.48	72.54	2.06	0.003	0.10	
TR-04	72.54	74.48	1.94	0.003	0.10	
TR-04	74.48	76.42	1.94	0.003	0.10	
TR-04	76.42	78.62	2.20	0.003	0.10	
TR-04	78.62	80.41	1.79	0.003	0.60	
TR-04	80.41	82.22	1.81	0.003	0.40	
TR-04	82.22	84.34	2.13	0.003	0.30	
TR-04	84.34	85.72	1.38	0.003	0.30	
TR-04	85.72	86.74	1.02	0.010	0.30	
TR-04	86.74	88.30	1.55	0.003	0.40	
TR-04	88.30	90.17	1.87	0.003	0.10	
TR-04	90.17	92.40	2.23	0.003	0.10	
TR-04	92.40	94.22	1.82	0.007	0.10	

Trench -ID	From	To	Length	Au (ppm)	Ag (ppm)	
TR-04	94.22	96.18	1.96	0.003	0.20	
TR-04	96.18	98.23	2.06	0.003	0.60	
TR-04	98.23	100.10	1.87	0.003	0.30	
TR-04	100.10	102.11	2.00	0.003	0.50	
TR-04	102.11	103.34	1.23	0.003	0.10	
TR-04	103.34	105.27	1.93	0.003	1.50	
TR-04	105.27	107.16	1.89	0.430	24.20	Strong vuggy alteration – native sulphur
TR-04	107.16	109.17	2.01	1.062	74.50	
TR-04	109.17	111.42	2.25	0.579	30.10	
TR-04	111.42	112.74	1.32	0.399	61.30	
TR-04	112.74	114.16	1.43	2.490	233.80	
TR-04	114.16	116.18	2.02	2.595	239.90	
TR-04	116.18	117.21	1.04	2.494	77.20	
TR-04	117.21	118.99	1.78	2.417	194.40	
TR-04	118.99	120.40	1.40	0.529	81.90	
Total			**15.13**	**1.399**	**112.47**	

Table 6.11: Trench 05 Results

Trench -ID	From	To	Length	Au (ppm)	Ag (ppm)	Comments
TR-05	0.00	1.96	1.96	0.010	56.20	Starts in Mineralization
TR-05	1.96	3.42	1.46	0.010	58.10	
TR-05	3.42	5.07	1.66	0.008	63.30	
TR-05	5.07	6.68	1.61	0.003	56.20	
TR-05	6.68	8.47	1.79	0.003	49.50	
TR-05	8.47	10.67	2.20	0.011	93.10	
TR-05	10.67	12.63	1.96	0.025	61.10	
TR-05	12.63	14.61	1.98	0.018	97.70	
TR-05	14.61	16.49	1.88	0.027	39.70	
TR-05	16.49	18.20	1.71	0.003	1.00	
TR-05	18.20	19.54	1.34	0.006	1.60	
TR-05	19.54	20.47	0.93	0.035	22.10	
TR-05	20.47	22.21	1.74	0.003	20.30	
TR-05	22.21	23.75	1.54	0.003	36.60	
TR-05	23.75	24.98	1.23	0.003	11.40	
TR-05	24.98	26.37	1.38	0.003	7.80	
TR-05	26.37	28.22	1.85	0.024	14.30	
TR-05	28.22	29.95	1.73	0.003	32.90	
TR-05	29.95	31.82	1.87	0.018	21.40	
TR-05	31.82	33.34	1.52	0.037	12.70	
TR-05	33.34	34.50	1.17	0.600	34.40	
TR-05	34.50	35.94	1.43	0.081	38.80	
TR-05	35.94	37.70	1.76	0.100	38.90	

Trench -ID	From	To	Length	Au (ppm)	Ag (ppm)	Comments
TR-05	37.70	39.65	1.95	0.632	36.30	
TR-05	39.65	41.62	1.97	0.290	33.70	
TR-05	41.62	42.52	0.91	0.327	43.50	
TR-05	42.52	43.81	1.29	0.525	34.90	
TR-05	43.81	45.67	1.86	0.090	34.40	
TR-05	45.67	46.93	1.26	0.227	28.40	
TR-05	46.93	47.74	0.81	0.076	34.30	
TR-05	47.74	48.81	1.07	0.239	40.30	
TR-05	48.81	50.40	1.59	0.063	49.50	
TR-05	50.40	51.61	1.21	0.134	54.00	
TR-05	51.61	53.34	1.73	0.228	65.70	
TR-05	53.34	55.04	1.71	0.162	96.30	
TR-05	55.04	56.94	1.90	0.046	98.00	
TR-05	56.94	57.78	0.84	0.074	66.20	
TR-05	57.78	59.76	1.98	0.063	69.10	
TR-05	59.76	62.00	2.24	0.028	59.80	
TR-05	62.00	63.50	1.50	0.003	18.20	
TR-05	63.50	64.97	1.47	0.015	34.30	
TR-05	64.97	66.18	1.21	0.003	136.90	
TR-05	66.18	67.05	0.87	0.117	98.80	
TR-05	67.05	68.88	1.83	0.066	65.60	
TR-05	68.88	70.58	1.71	0.032	46.80	
TR-05	70.58	71.76	1.18	0.035	104.10	
TR-05	71.76	73.24	1.48	0.006	91.40	
TR-05	73.24	74.85	1.61	0.003	187.50	
TR-05	74.85	75.81	0.96	0.014	205.50	
TR-05	75.81	76.28	0.48	0.003	165.50	
TR-05	76.28	77.32	1.04	0.009	199.20	
TR-05	77.32	78.62	1.30	0.010	92.80	
TR-05	78.62	79.58	0.96	0.013	95.60	Ends in Mineralization
Total			**79.58**	**0.083**	**56.16**	

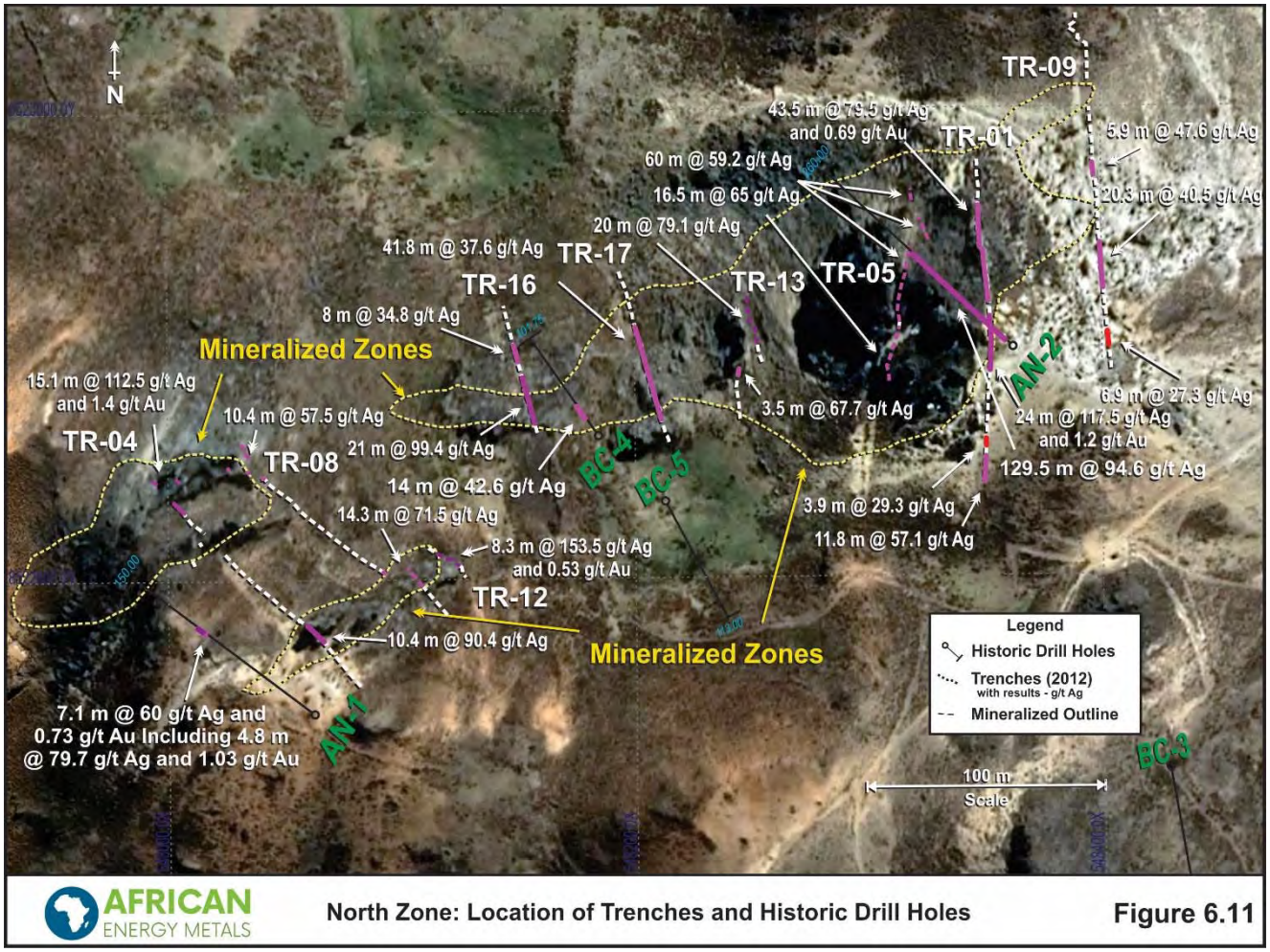


Figure 6.11: North Zone: Location of Historic Drill Holes and Trenches

7.1.2 South Zone

The best results in the Au-Ag zones in the South Zone are in trench 2 and trench 7 with 37 metres of 138.20 g/t Ag ("TR-02") and 23.8 metres of 80.2 g/t Au. Both these intervals had no gold zone showing in the trench.

A geochemical and alteration styles difference between the zones is clear. Mineralized outcrops show laminated silica introduction with fine grained pyrite. Much of this alteration follows the bedding in the volcaniclastic rocks. Locations of the trenches and drill holes in the South Zone are shown in Figure 6.12 below. Assays from the trenches and from drill hole AN-04 show distinct disseminated silver mineralization with little to no gold. Surface results from the trenches are listed below in Table 9.7 with detailed assay results and their intervals from Trenches TR-02 and TR-03 that highlight the continuous Ag mineralization over their lengths. Detailed drill logs and assay intervals from Bear Creek's drill program were not available but results reported by Bear Creek in (2003) are consistent.

Table 6.12: Historic Drill Results in the South Zone versus Trenching Results 2012

Drill Hole	Intercept (m)	Ag (ppm)	Trench	Intercept	Ag (ppm)
AN-4	67.5	57.6	TR-03	23.7	117.1
AN-4	24	52.6	TR-11	26.7	80.4
BC-1	20	70.6	TR-06	16.7	33.1
“	“	“	TR-02	37	138.2
BC-2	26	79.6	TR-07	23.8	83.2
BC-7	18	20.6	“	“	“

The drill log from drill hole AN-04 shows two distinct silver zones. (Figure 6.13) Both zones are associated with moderate to strong chalcedonic alteration (“flooding”) within the volcaniclastic sequence. Both silver zones in hole AN-04 returned 24 metres of 52.6 g/t Ag from 23 to 47 metres and 56 metres of 57.6 g/t Ag from 63 to 119 meters. Assays results show the disseminated style of the mineralization having consistent values throughout the mineralized intervals. Below the mineralized zones, descriptions indicate the presence of smectite/FeOx ± kaolinite and disseminated pyrite. Clearly the Ag mineralization is associated with the increased silica content.

iii. South Zone Trenching Results (2012)

Table 6.13: South Zone Trenching Results Summary (2012)

Trench-ID	From	To	Length	Au (ppm)	Ag (ppm)
TR-02	30.27	67.23	36.96	0.023	138.20
TR-03	77.41	101.13	23.72	0.003	117.10
TR-06	29.78	33.59	3.81	0.003	56.01
TR-06	48.50	51.73	3.23	0.003	20.85
TR-06	55.44	73.85	16.74	0.005	33.08
TR-07	100.23	124.03	23.80	0.014	83.22
TR-10	3.78	11.24	7.46	0.003	41.81
TR-10	27.24	39.48	12.24	0.004	41.66
TR-11	1.94	28.65	26.71	0.002	80.45
TR-14	8.07	15.58	7.51	0.002	33.38
TR-14	33.01	36.69	3.68	0.003	32.77

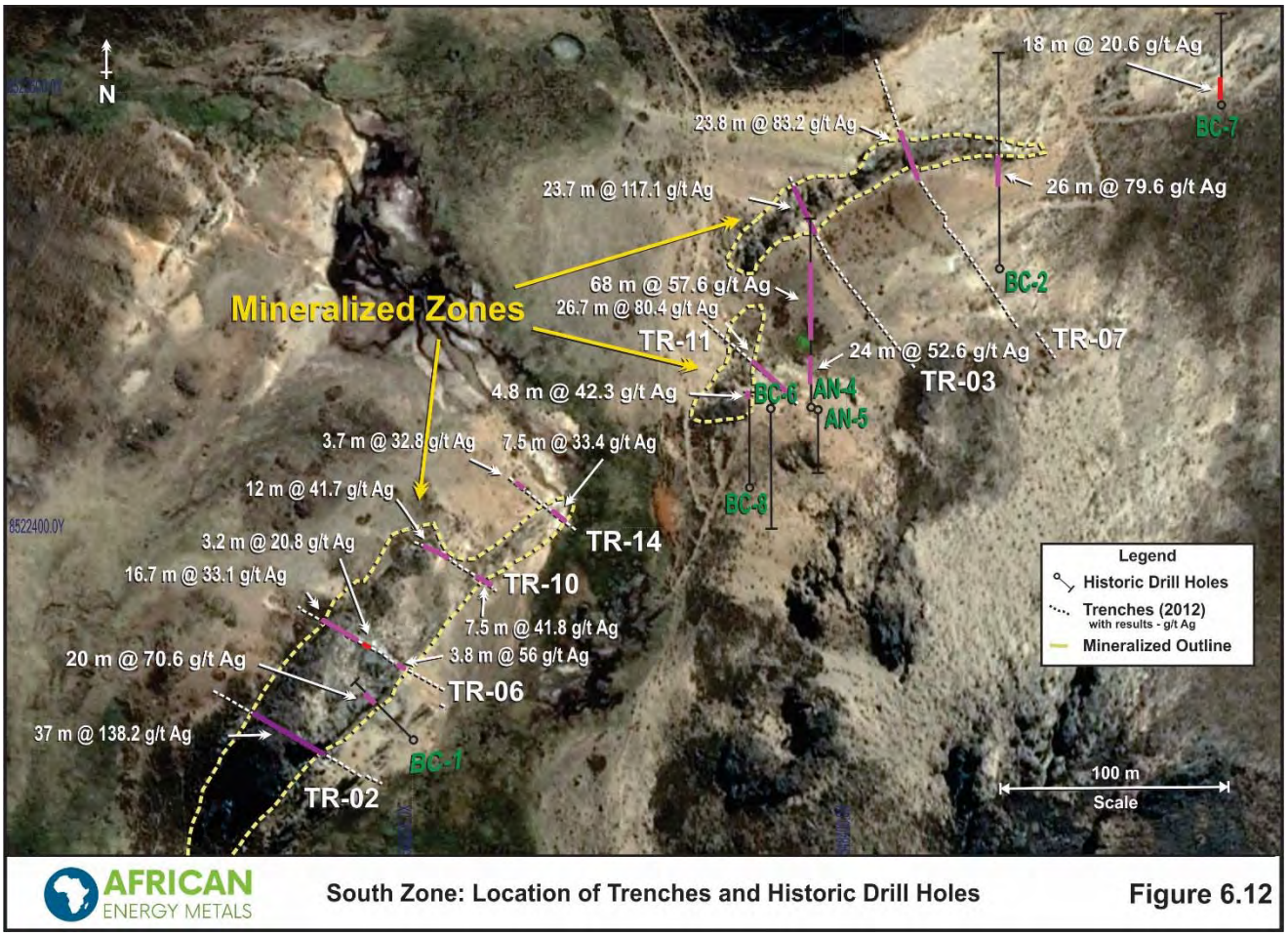


Figure 6.12: South Zone: Location of Historic Drill Holes and Trenches

Table 6.14: Trench 02 Results

Trench-ID	From	To	Length	Au (ppm)	Ag (ppm)
TR-02	0.00	1.98	1.98	0.021	0.10
TR-02	1.98	3.98	2.00	0.020	0.10
TR-02	3.98	6.07	2.10	0.003	0.10
TR-02	6.07	7.86	1.78	0.029	0.10
TR-02	7.86	10.28	2.42	0.003	0.10
TR-02	10.28	12.28	2.00	0.020	0.10
TR-02	12.28	14.30	2.02	0.012	0.10
TR-02	14.30	16.27	1.98	0.003	0.10
TR-02	16.27	18.29	2.02	0.003	0.10
TR-02	18.29	20.27	1.98	0.003	0.10
TR-02	20.27	22.26	1.99	0.003	0.10
TR-02	22.26	24.25	1.99	0.048	0.10
TR-02	24.25	26.29	2.04	0.023	0.80

Trench-ID	From	To	Length	Au (ppm)	Ag (ppm)
TR-02	26.29	28.27	1.98	0.007	0.60
TR-02	28.27	30.27	2.00	0.030	5.20
TR-02	30.27	33.34	3.07	0.003	63.80
TR-02	33.34	35.30	1.96	0.018	158.30
TR-02	35.30	37.25	1.95	0.023	89.30
TR-02	37.25	39.25	2.00	0.015	93.70
TR-02	39.25	41.25	1.99	0.003	30.70
TR-02	41.25	43.28	2.04	0.036	98.60
TR-02	43.28	45.34	2.06	0.026	56.20
TR-02	45.34	47.34	2.00	0.003	45.50
TR-02	47.34	49.29	1.95	0.003	42.10
TR-02	49.29	51.27	1.98	0.081	326.00
TR-02	51.27	53.21	1.95	0.087	355.00
TR-02	53.21	55.25	2.04	0.083	146.60
TR-02	55.25	57.36	2.11	0.003	429.00
TR-02	57.36	59.31	1.95	0.015	67.70
TR-02	59.31	61.37	2.06	0.003	269.10
TR-02	61.37	63.48	2.11	0.022	135.10
TR-02	63.48	65.36	1.88	0.003	61.00
TR-02	65.36	67.23	1.87	0.003	34.80
Total			**36.96**	**0.023**	**138.20**
TR-02	67.23	69.30	2.07	0.022	2.80
TR-02	69.30	71.31	2.01	0.027	1.00
TR-02	71.31	73.29	1.98	0.003	0.10
TR-02	73.29	75.02	1.73	0.003	0.10
TR-02	75.02	77.12	2.10	0.003	0.10
TR-02	77.12	78.93	1.80	0.003	0.10
TR-02	78.93	81.09	2.17	0.003	0.10
TR-02	81.09	83.14	2.04	0.003	0.10
TR-02	83.14	85.05	1.92	0.006	0.10
TR-02	85.05	87.00	1.95	0.010	0.10
TR-02	87.00	88.97	1.96	0.005	0.10
TR-02	88.97	91.00	2.04	0.003	0.10

Table 6.15: Trench 03 Results

Trench-ID	From	To	Length	Au (ppm)	Ag (ppm)
TR-03	0.00	1.88	1.88	0.003	0.10
TR-03	1.88	3.83	1.95	0.003	0.10
TR-03	3.83	5.83	2.00	0.003	0.10
TR-03	5.83	7.83	2.00	0.003	0.10
TR-03	7.83	9.80	1.97	0.003	0.10
TR-03	9.80	11.83	2.03	0.003	0.10

Trench-ID	From	To	Length	Au (ppm)	Ag (ppm)
TR-03	11.83	13.82	2.00	0.003	0.10
TR-03	13.82	15.80	1.98	0.003	0.10
TR-03	15.80	17.77	1.97	0.003	0.60
TR-03	17.77	19.79	2.02	0.003	0.10
TR-03	19.79	21.78	1.99	0.003	0.10
TR-03	21.78	23.79	2.01	0.003	9.80
TR-03	23.79	25.79	2.00	0.003	2.10
TR-03	25.79	27.74	1.94	0.003	6.80
TR-03	27.74	29.74	2.00	0.011	1.40
TR-03	29.74	31.73	1.99	0.008	0.10
TR-03	31.73	33.70	1.97	0.003	0.10
TR-03	33.70	35.72	2.02	0.003	0.10
TR-03	35.72	37.70	1.98	0.007	1.20
TR-03	37.70	39.72	2.02	0.003	0.50
TR-03	39.72	41.64	1.92	0.003	8.80
TR-03	41.64	43.64	2.00	0.003	8.20
TR-03	43.64	45.62	1.98	0.003	0.10
TR-03	45.62	47.61	2.00	0.003	0.10
TR-03	47.61	49.41	1.80	0.003	0.10
TR-03	49.41	51.53	2.12	0.003	0.10
TR-03	51.53	53.58	2.05	0.003	0.10
TR-03	57.59	59.60	2.01	0.003	0.10
TR-03	59.60	61.56	1.96	0.003	0.10
TR-03	61.56	63.56	1.99	0.003	0.10
TR-03	63.56	65.53	1.98	0.003	0.10
TR-03	65.53	67.53	2.00	0.003	0.10
TR-03	67.53	69.54	2.01	0.005	0.10
TR-03	69.54	71.54	2.00	0.003	0.10
TR-03	71.54	73.53	1.99	0.003	0.10
TR-03	73.53	75.41	1.88	0.003	0.10
TR-03	75.41	77.41	2.00	0.003	6.20
TR-03	77.41	79.36	1.94	0.003	14.00
TR-03	79.36	81.31	1.95	0.003	44.70
TR-03	81.31	83.02	1.72	0.003	64.40
TR-03	83.02	84.92	1.90	0.003	56.30
TR-03	84.92	86.69	1.77	0.006	247.00
TR-03	86.69	88.18	1.48	0.003	282.70
TR-03	88.18	89.30	1.12	0.003	140.90
TR-03	89.30	90.41	1.11	0.003	228.40
TR-03	90.41	92.12	1.71	0.003	207.20
TR-03	92.12	93.69	1.57	0.003	357.00
TR-03	93.69	95.60	1.91	0.003	51.60
TR-03	95.60	97.23	1.63	0.003	69.40

Trench-ID	From	To	Length	Au (ppm)	Ag (ppm)
TR-03	97.23	99.16	1.93	0.003	5.80
TR-03	99.16	101.13	1.97	0.006	19.60
Total			**23.72**	**0.003**	**117.1**
TR-03	101.13	103.00	1.86	0.003	7.40
TR-03	103.00	104.84	1.85	0.003	1.00
TR-03	104.84	106.77	1.93	0.003	0.90

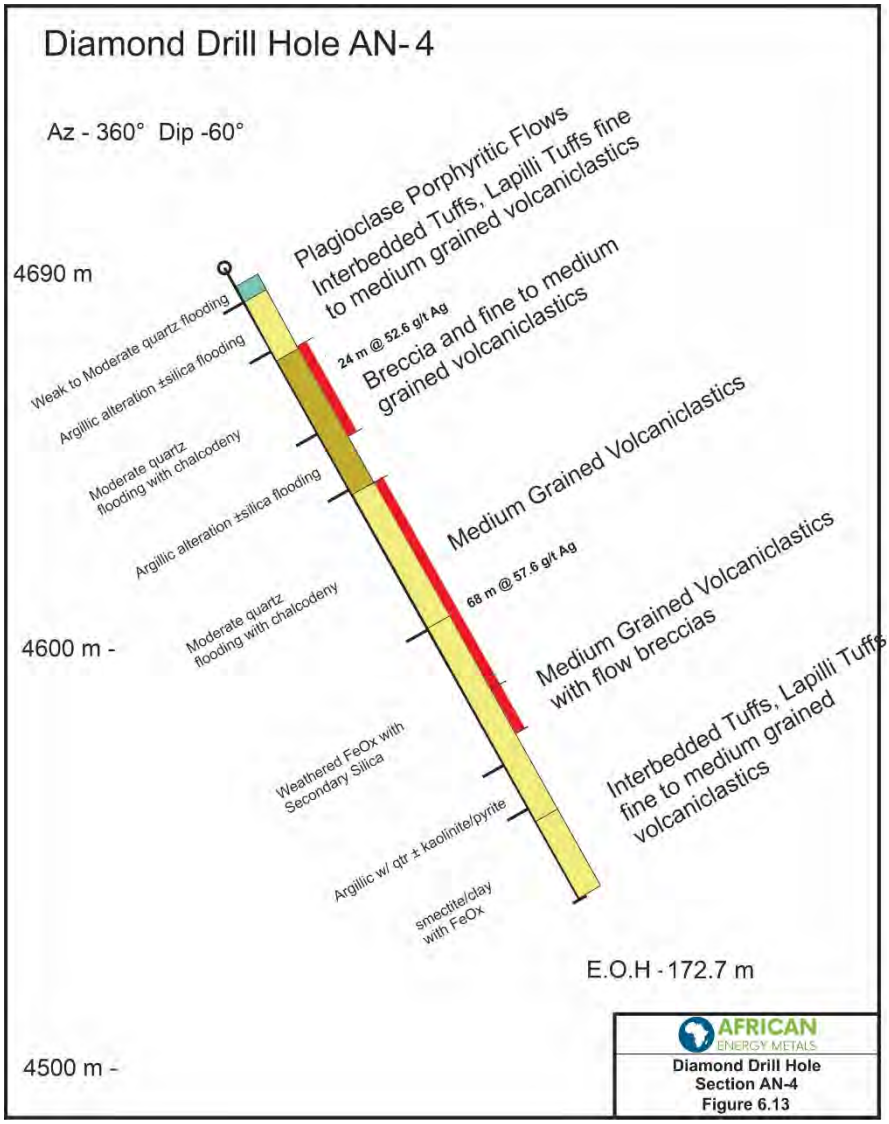


Figure 6.13: Drill Hole AN-4

The mineralization exposed in outcrop and trenches extend over a strike length of 400 metres. There appears to two styles of mineralization at the North Zone: Au depleted zone with high Ag values and Au-Ag associated with strong residual (vuggy) silica and massive silica flooding. Interesting the silver mineralization that contains no gold appears to be geochemically similar to the mineralization in the South Zone. Since there is no historic drill core to examine, caution should be taken to describe the similarities and comparisons between the North and South Zones. However, it is clear from the drill logs, Ag mineralization from drill hole AN-02 is associated with chalcedonic alteration.

There appears to be a distinct sharp zonation between the Au-Ag mineralization and Ag deleted Au mineralized zones. Interesting, the Au-Ag appears to be related to the extrusive porphyry intersected in drill hole AN-01 as shown below. No pure silver mineralization was intersected in AN-01.

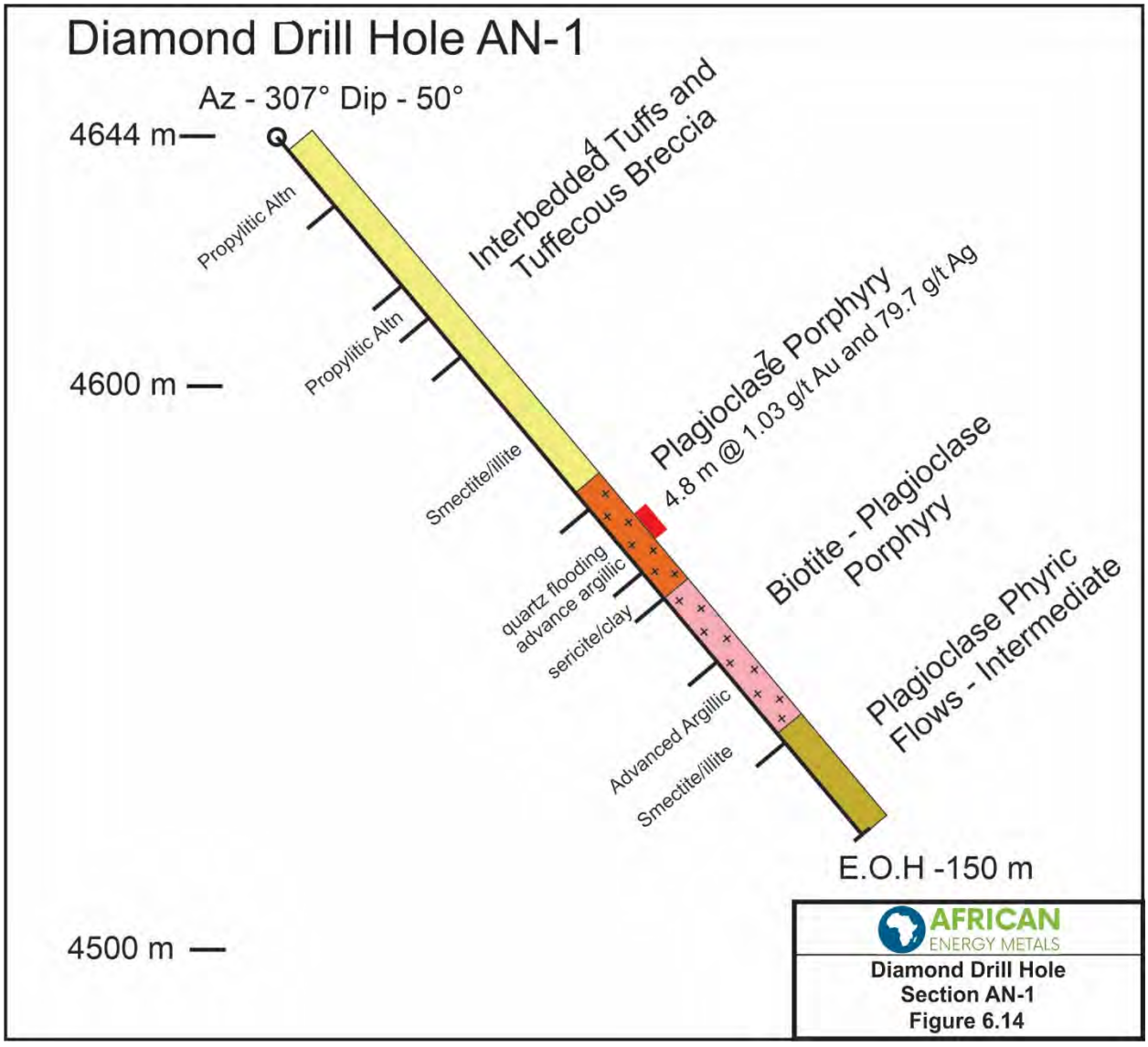


Figure 6.14: Drill Hole AN-1

Drill Hole AN-02 (Figure 6.15) intersected a thick sequence of interbedded tuffs and fine to medium grained volcaniclastic rocks. The top 34.5 metres intersected weak Au mineralization with moderate Ag grades averaging 47.6 g/t Ag. The remaining 100 metres assayed strong Ag values but with no gold. According to the drill logs, Ag mineralization appears to be associated with silica flooding which appears to be chalcedonic. The top 105 metres have Ag values similar to the south zone and trench TR-05 located immediately to the west of AN-02. The base of this volcaniclastic shows a three times increase in Ag grade. The evidence that the North Zone is probably central in the epithermal system is presence of Biotite-Plagioclase Porphyry dykes intersected in holes AN-01 and AN-02. Furthermore, mapping shows the surface extent of these porphyritic extrusive rocks is over 1600 metres in a SWW-NEE direction.

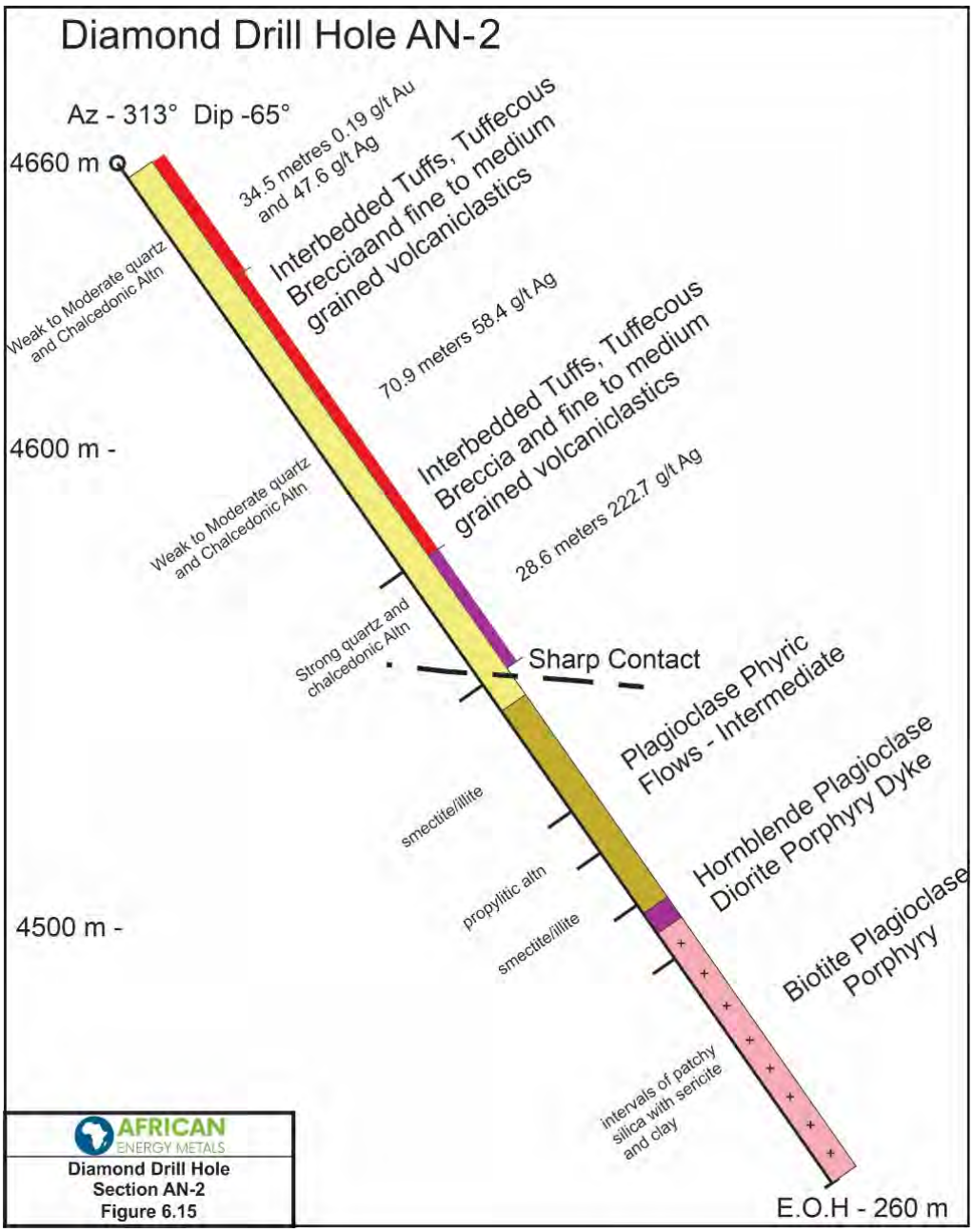


Figure 6.15: Drill Hole AN-2

7.0 GEOLOGICAL SETTING and MINERALIZATION

The Niñobamba Project is located in the Peruvian National Topographic system on map sheet 27-n Huachocolpa, in the Department of Ayacucho. INGEMMET completed regional geologic mapping on the 1:100,000 map sheet in 1980 and revised the digital mapping in 1995. The corresponding Bulletin, A 063, was completed in 1996. Geologic descriptions of Niñobamba are taken from an internal company report by Reeder (2022) titled “Geologic Summary of Niñobamba.

7.1 Regional Geology

The southwestern region of the Department of Ayacucho lies along the western flank of the Cordillera Occidental underlain by a thick section of volcanic units of Oligocene to Miocene age (34 – 6 Ma). These volcanic units disconformably overlie upper Mesozoic continental shelf clastic and carbonate sediments and intrusive rocks. The nearest exposures of these rocks to the Property are represented by quartz arenite and calcareous sandstone members of the Yura Group, and granodiorite to tonalite of the Coastal Batholith in deeply incised drainages 30 km west of the Property at elevations ±1,000m lower than the Project area. (Figure 7.1)

In the district around the Property, Morche (2002) noted that after a prolonged hiatus, subduction related magmatism started in this region during Late Miocene at around 8-10 Ma and lasted in its waning stage until Late Pliocene.

Volcanic rocks deposited and related to this magmatism belong to the Huachocolpa Group. It has four members (Apacheta, Chahuarma, Rumihuasi, and Portuguesa) which cover the three orogenic phases of the Quechua orogeny. It forms the principal outcropping geologic units within the Niñobamba area and the surrounding district. It is the principal host for mineralization in the region.

The Apacheta Formation is mid to upper Miocene in age. It is composed of interbedded basaltic-andesitic/andesitic/dacitic/rhyodacitic tuffs, lahars, lavas, pyroclastic and ignimbrite flows with rhyodacitic hypabyssal stocks. It is contemporaneous with the Quechua II orogeny phase. Due to the higher content of basaltic andesite lavas in this formation, it is considered to be the best host for mineralization in the region.

The Chahuarma Formation is upper Miocene in age. It is composed of interbedded basalt andesitic/andesitic/dacitic/rhyodacitic tuffs, lahars, lavas, pyroclastic and ignimbrite flows. Notables are trachyandesites from differentiated magmas. It is contemporaneous with the Quechua III orogeny phase. It is a host for mineralization and is contemporaneous with the main pulse of mineralization in the region.

The Rumihuasi Formation is upper Miocene in age. It is composed of interbedded andesitic/dacitic/rhyodacitic tuffs and pyroclastic flows. It is contemporaneous with the Quechua III orogeny phase. Due to the geo-mechanical characteristics of its units, it is a mediocre host for vein mineralization.

The uppermost part of the volcanic stratigraphy belongs to the Portuguesa Formation. Rocks belonging to this unit are Miocene to upper Pliocene in age. They are composed of interbedded basaltic andesitic/andesitic/dacitic/rhyodacitic tuffs, lahars, lavas, domes, calderas, pyroclastic and ignimbrite flows. It has intrusive granitic, granodioritic, dacitic and rhyodacitic hypabyssal stocks and it is contemporaneous with the Quechua III orogeny phase. It is a host for mineralization in the region. In its last stage large volumes were explosively erupted.

7.2 Regional Structure

Regional structures are oriented along the NW-oriented Andean trend originating from compressive and extensional tectonic cycles throughout Tertiary time. These cycles resulted in the folding of the Cretaceous basement sediments and, to a lesser extent the older Tertiary volcanic units along NW-trending axes and developed tensional fault systems trending northeast. Mineral occurrences on a district scale in this region align along trends that follow the NW Andean trend, conjugate NE, and northerly trends. The northwest trend is illustrated by the alignment of mines and prospects in the immediate area of the Property, especially with the Recuperada and Kolpa Mines located 60 km northwest of the Property.

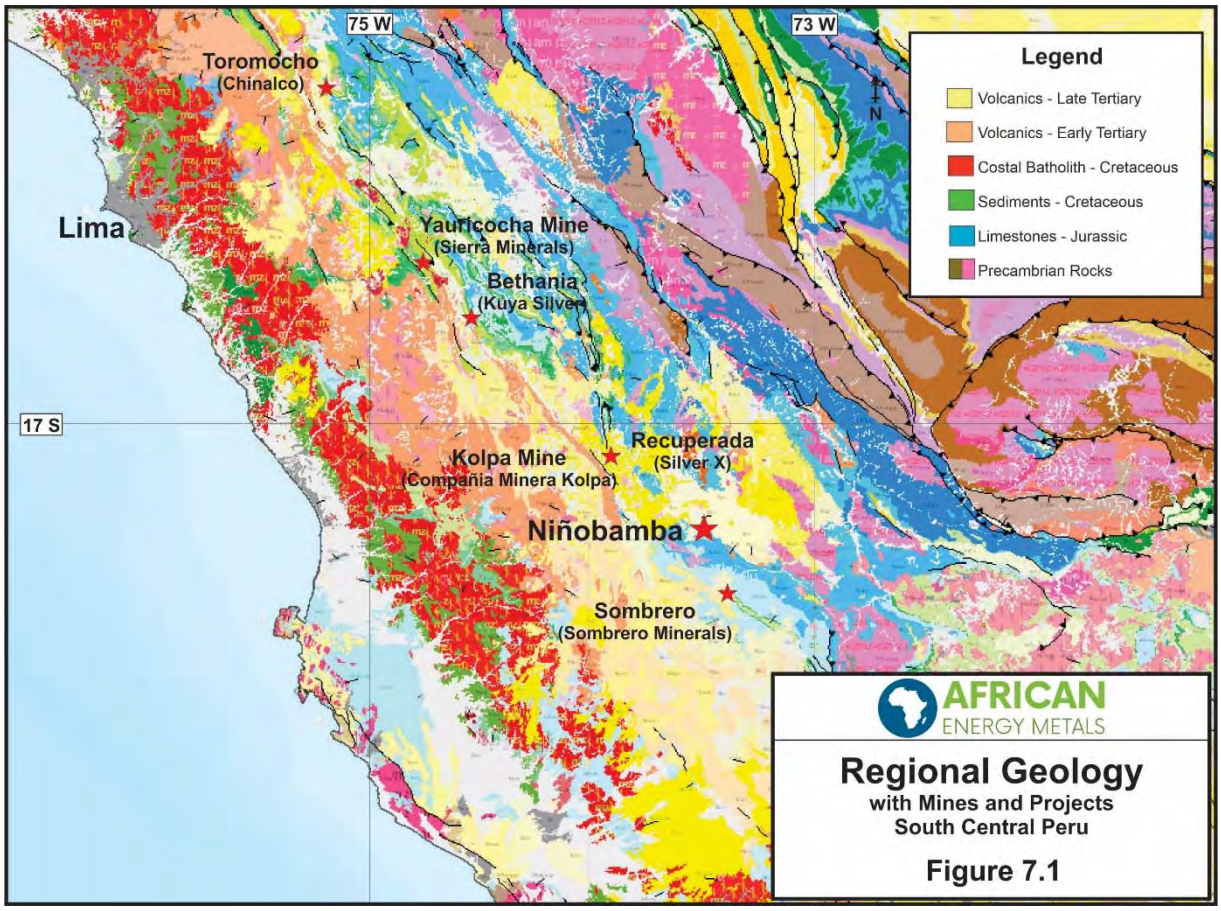


Figure 7.1: Regional Geologic Map for the Niñobamba Property

7.3 Regional Mineral Occurrences and Mines

The Property is located on a NW-trending structural corridor of epithermal Au-Ag-Pb-Zn and Cu-Au-Mo porphyry mineralization that hosts numerous active mines and mineral occurrences extending nearly through the entire country.

The Huachocolpa Mining District which hosts the Recuperada, and Kolpa Mines are located 60 km northwest of the Property. Daily production from these two mining areas averages around 1500 tonnes per day. Sierra Mineral's Yauricocha mine located 170 km northwest of the Property is currently processing 3600 tonnes per day. The mine produces Cu-Au-Ag, Pb-Ag and Zn concentrates. Both mining areas are hosted in Tertiary volcanic units.

The prospective Ag-Pb-Zn Bethania Mine located 130 kms to the northwest is owned by Kuya Silver Inc., a Canadian development company. The company recently announced a preliminary indicated resource of 5,858,521 ounces of silver equivalent and an inferred resource of 8,006,431 ounces of silver equivalent (see news release January 6, 2022, TSX-Venture Symbol : KUYA).

The author has been unable to verify this information about the Bethania Mine, the Recuperada, the Kola, or the Yauricocha mines and that the information may not be indicative of the mineralization on the Property.

7.4 Property Geology

Morche (2002) suggests that Niñobamba Property is located in a marginal position of an arc segment, characterized by deep seated NE and NW trending faults. The main volcanic force driving the volcanism is the area is shown at the Nevado Portugueza volcanic center located 9.6 kilometres from the Main Niñobamba zone. This calc-alkalic center is relatively young. Dating techniques by Noble and McKee (1982) on the Atunsulla Ash flow tuffs returned eruption dates between 2 to 4 m.y. ago.

The majority of the project area lies in the outer part of a compound stratovolcano, which is ascribed to the Late Miocene Apacheta Formation (Morche et al., 1996). The complex volcanic edifice is built up by andesitic lava flows with some minor pyroclastic flows and tuffs. Clearly the gentle dipping volcanic sequences are associated with recent volcanic activity within a collapse caldera environment.

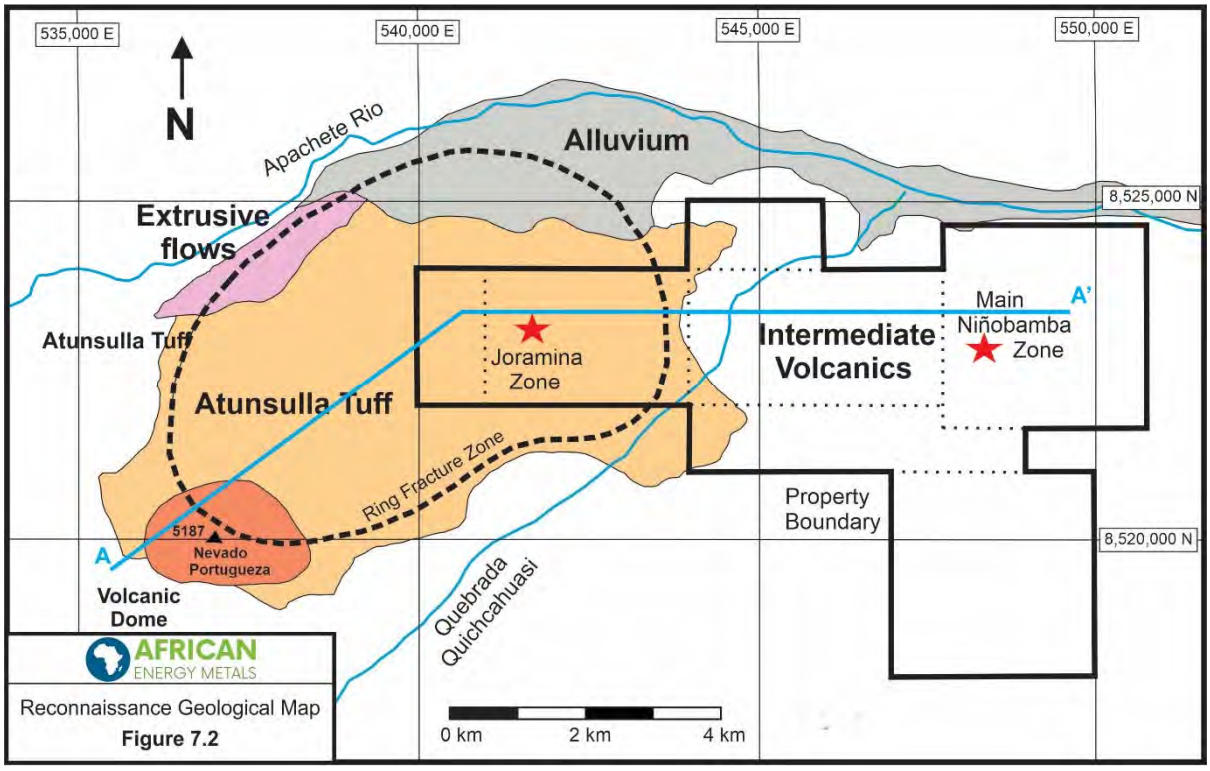


Figure 7.2: Reconnaissance Geological Map of the Nevado Portugueza Volcanic Center*

* After Noble and Mckee (1982)

Noble and McKee (1982) outline the topographic margin of the caldera shown in Figure 7.2. This margin is marked by steeply dipping volcanic flows and tuffs. If the geology is interpreted correctly, the Jorimina Zone is located within the collapsed caldera whereas the Main Niñobamba

Zone is located in the outer margins of the volcanic center. Ages of mineralization are dated by Noble and McKee (1982) at 1.9 m.y. Photo 1, below shows the Jorimina Zone, from the access road, with a large gossanous outcrop in the bottom of the valley.



Photo 1: Jorimina Zone Gossan

AngloGold in 2001 and 2002 and Rio Silver later in 2012 conducted extensive surface mapping and sampling programs at the Main Niñobamba Zone. The main zone is underlain by a shallow dipping volcanic sequences comprising of interbedded lapilli tuffs and ash flow tuffs to sequences of fine to medium grained volcanic clastic rocks. Theses rocks are overlain by an upper plagioclase phyric lava flow(s) and breccias of intermediate or andesite composition.

A definite NNE-SSW structure passes through the area where the mineralization and alteration exist. Movements and displacements are not extensive but enough to generate conduits for fluid flow allowing underlying magmatic and meteoric fluids to circulate. Extrusive porphyritic rocks appear to follow this trend and appear to be associated with the mineralization described below.

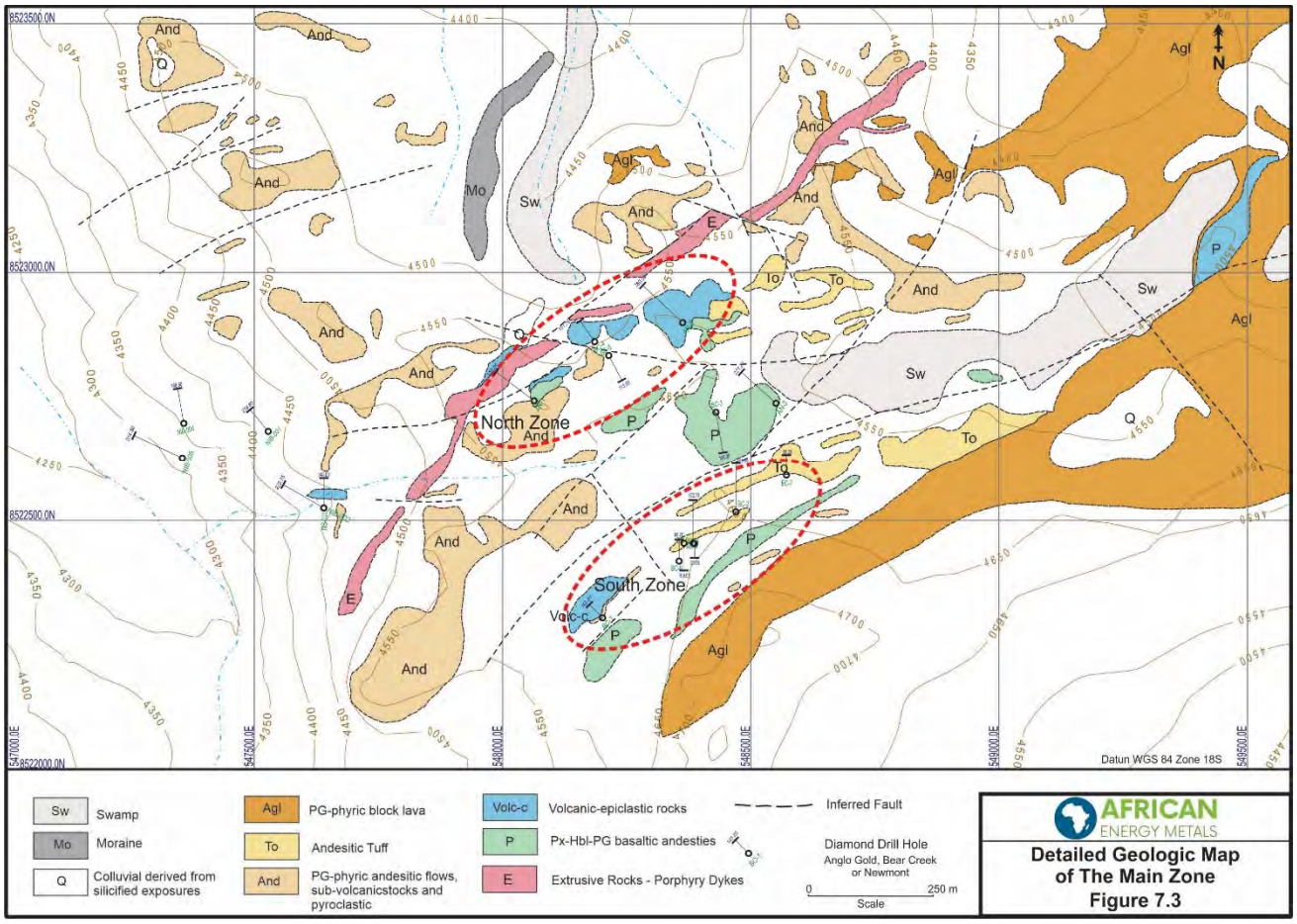


Figure 7.3: Detailed Geology of the Main Zone

Precious metals mineralization at Niñobamba can be considered both of the Low Sulphidation ('LS') and the High Sulphidation ('HS') type epithermal deposits. There exist two distinct parallel mineralized zones at Niñobamba. A review of the previous operator's data and the surface and geochemical review of outcrops show distinct differences between the North and South zones. Drill core from the previous operators is unavailable however detailed AngloGold drill logs from both zones suggest that the mineralization style at South Zone is Low Sulphidation whereas the mineralization on the North Zone is associated with both LS and HS. Mapping further suggests that acid leaching type HS alteration is possibly associated with the NEE-SWW trending extrusive rocks emplaced along the northern portion of the mineralized zones.

Surface mapping and sampling shows that the strike length of both zones is in excess of 500 metres and horizontally separated by 500 metres. A central zone was identified and sampled returning anomalous silver up to 20 g/t Ag. The area between the parallel north and south zone is recessive indicating a possible argillic altered zone.

7.1 Significant Mineralized Zones

7.1.1 Niñobamba Zone

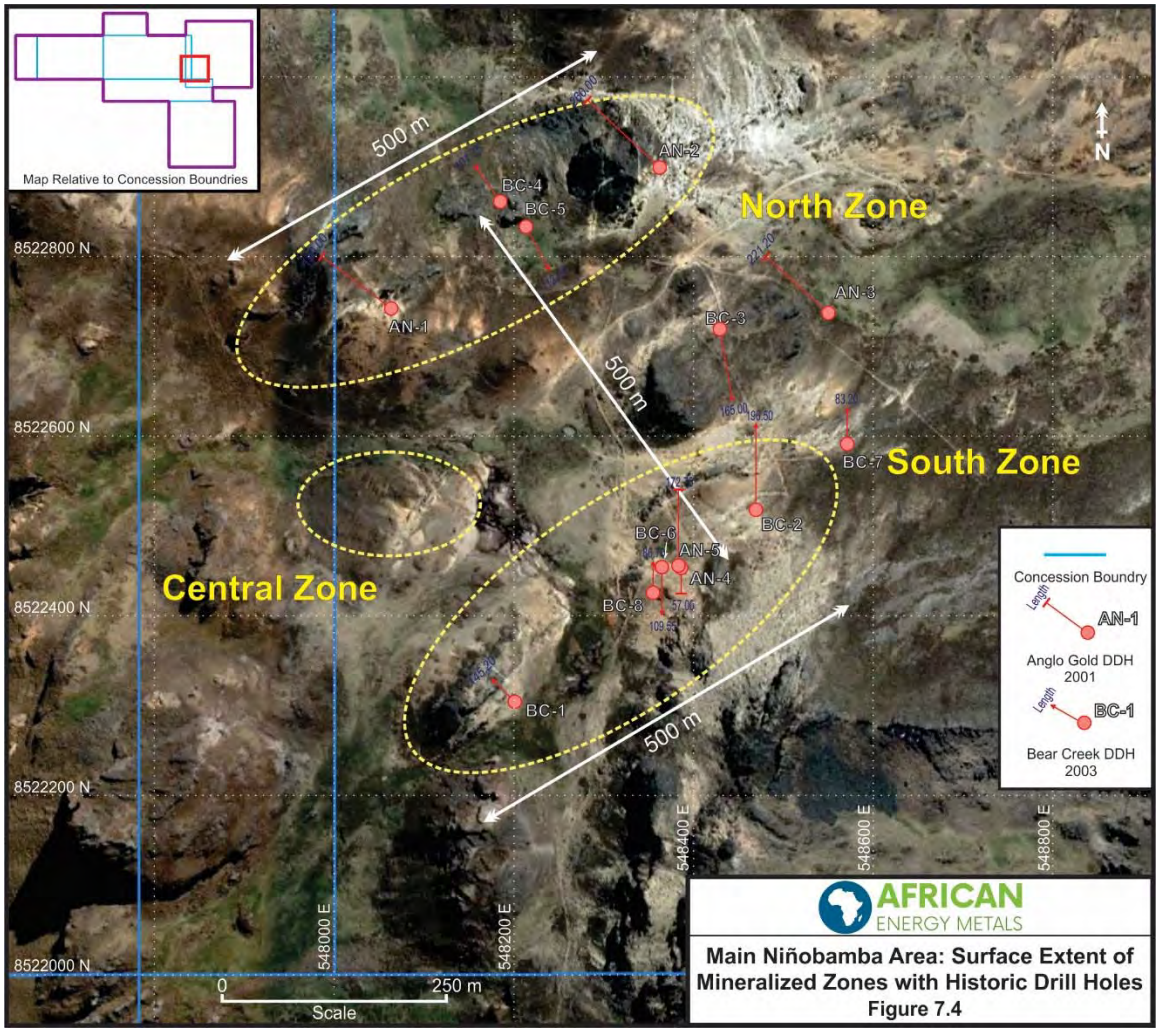


Figure 7.4: Main Niñobamba Zone – Drill Hole Location Map

Geochemical and alteration styles differences between the zones are clear. The horizontal separation between the South and North Zones is between 450 and 500 metres. Elevation difference from the top of hole AN-02 to the outcropping vuggy silica alteration in the southwest of the South Zone (TR-04) is between 80 to 100 metres. Mineralized outcrops show laminated silica with fine grained pyrite. Much of this alteration follows the bedding in the volcaniclastic rocks.

Due to the relatively young age of the volcanics and the mineralizing event, the geochemical and geological differences in both the vertical and horizontal extent are significant and should be considered important to understand the epithermal system present at Niñobamba. Results of the 2012 trenching program with interpretation are shown in Section 6, the history section.

7.1.2 Jorimina Zone

The Jorimina Zone has not seen the recent mapping and trenching program similar to the main Niñobamba Zone. Surface geochemical sampling (Fig. 6.5) shows two geochemical/colour anomalies (650mx550m and 440m x 600m). The first is located around drill holes JOR-01 to JOR-04 and JOR-13. The second is around drill hole JOR-12. The third colour anomaly is a gossan (150m x 150m) located around drill holes JOR-09 and JOR-10. Mineralization is related to the collapsed caldera and hosted mainly in tuffs as described in Section 7.4 and shown in Figure 7.2

8.0 DEPOSIT TYPES

The extent of the precious metal mineralization in the Niñobamba project area is clearly driven by a deep porphyry system. The regional geologic position of Niñobamba bolds well for the mineralizing system to be part of a collapsed caldera complex and associated with the underlying porphyry system. A conceptual regional cross-section is shown in Figure 8.1.

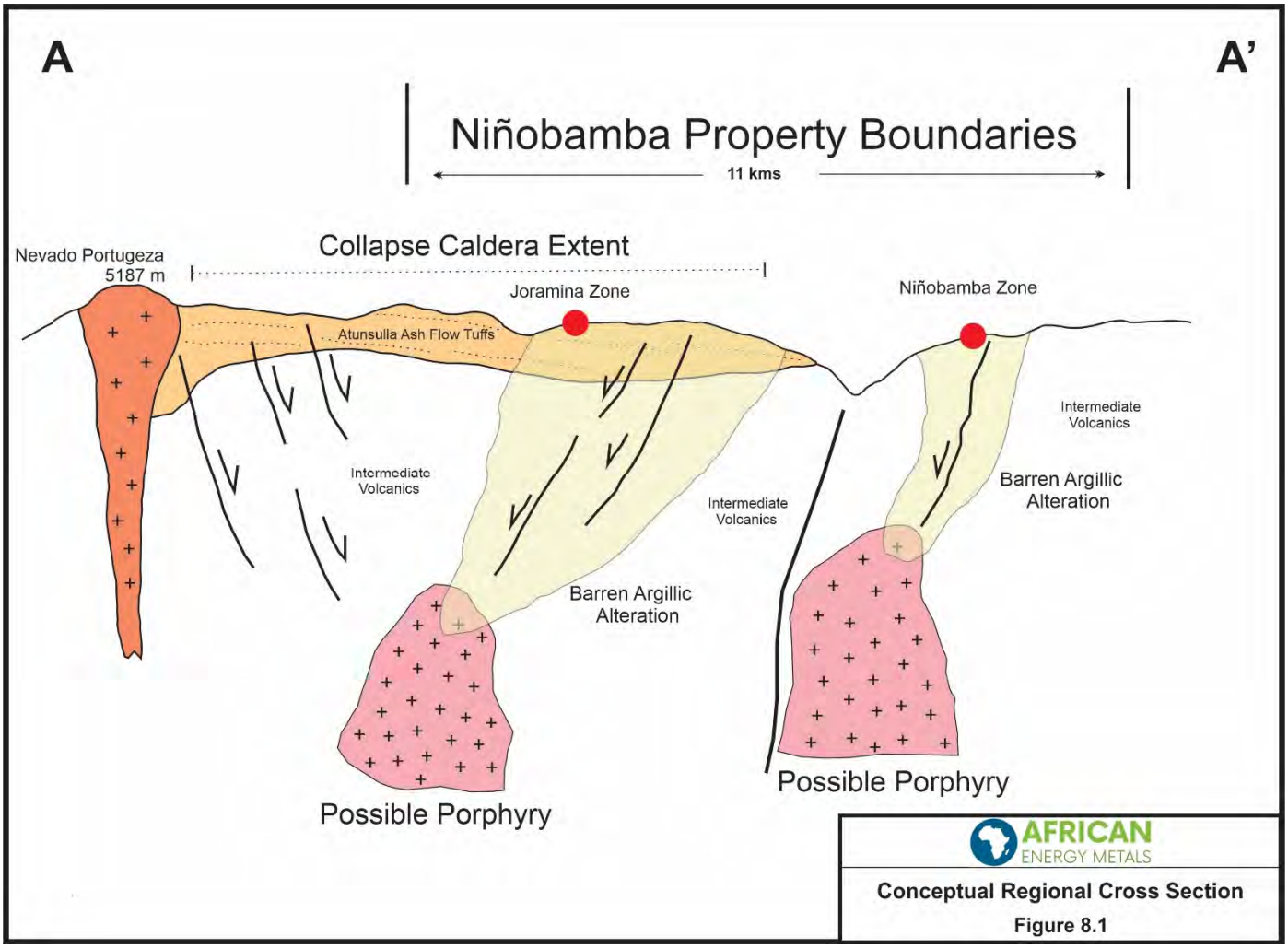


Figure 8.1: Conceptual Regional Cross-Section

Reeder (2013) took several samples in the North Zone near and in Trench 4 and recognized that there exists significant gold potential at Niñobamba. Previous operators did not follow up in these areas even though AngloGold had anomalous gold in their samples. Sampling and mapping recognized the presence of residual silica/vuggy silica type alteration on the northern contact of the porphyritic extrusive rocks trending NEE-SWW. Samples indicate strong Au/Ag mineralization associated with very typical HS type alteration. Adjacent is a photo of sample JR-02, which was taken west of TR-04 showing vuggy silica and weak Fe Oxide alteration. Assay results returned 0.68 g/t Au and 56.1 g/t Ag



Photo 2: Sample JR-02 showing vuggy silica type alteration



The photo of the sample JR-04 shows the typical vuggy silica near trench TR-4 which for the last 22 metres returned 1.3 g/t Au and 102 g/t Ag (ending in mineralization). Sample JR-04 returned 1.56 g/t Au and 56.2 g/t Ag with only 328 ppm As, 0.49% Fe and 0.19% sulphur. The trench sample also shows it should exhibit a good crush index and good leaching characteristics. Sample JR-04 is taken from a typical or classic high sulphidation vuggy silica type alteration.

Photo 3: Sample JR-04 taken from TR-04

Sillitoe (1999) proposes a schematic conceptual model on how a Low Sulphidation and porphyry system is related to High Sulphidation system. The epithermal system present at Niñobamba shows the possibility that the main Niñobamba area contains both a High Sulphidation in the North Zone and laterally a Low Sulphidation system exposed is the South Zone.

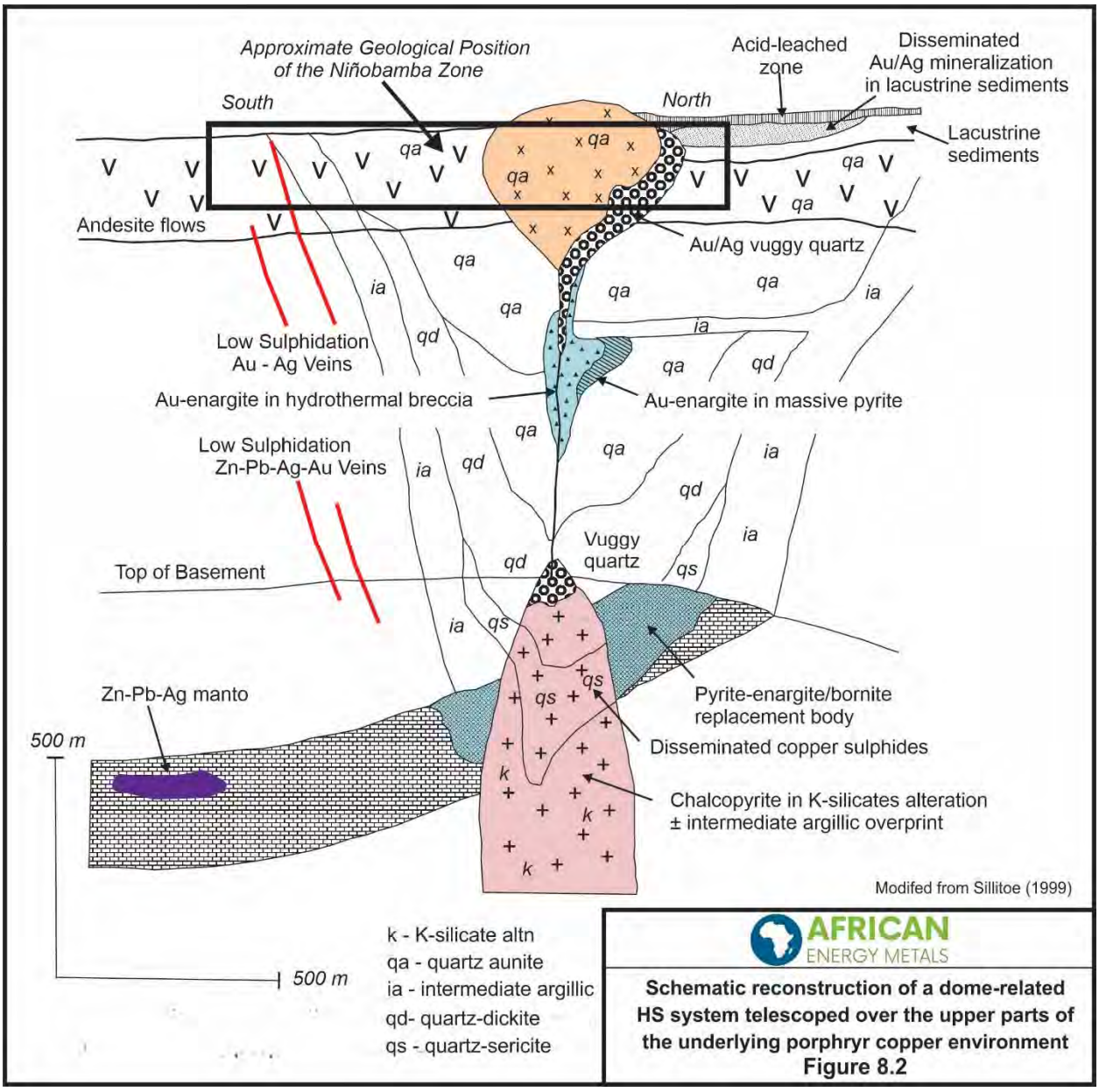


Figure 8.2: Schematic Reconstruction of a Telescoped High-Sulphidation System

9.0 EXPLORATION

There is no current exploration completed by African Energy Metals as of the effective date of this report.

10.0 DRILLING

There is no current drilling on the Niñobamba property.

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

Sample preparation, analyses and security are discussed by operator and summarizes the information available to the author at the time of the report.

11.1 Exploration by AngloGold

AngloGold drill hole data was included in the acquired data packages. The data consisted of the analyses for the 2002 drilling, sections for the holes and a summary report. From the drill hole data Anglo used a 41 element ICP with a gold analysis. Summary report did not discuss sampling or security. No other sample preparation information was available to the author.

11.2 Exploration by Bear Creek

The Bear Creek data was taken from maps and news releases. Samples in the news releases only reported silver grades as composites. No other sample preparation information was available to the author.

11.3 Exploration by Newmont/Southern Copper (Peru)

Newmont uses corporate policies to regulate field operations where these policies cover everything from community relations to camp compounds, security, assay protocol and quality control standards for sampling.

Drill core sampling was done in the secure compound, where the core was logged, photographed and sampled. Samples were bagged and tagged in the compound and quality control samples were inserted in the sample stream. From the secure compound, individual samples were placed is sacs, and later shipped to the primary Lab. No details of how samples were transported were provided in the reports.

Newmont policy maintains designating a primary and check laboratory for the program or portion thereof. From four semi annual reports the primary labs used were ALS Global Peru or SGS Peru and the check lab was CIMM Peru. All labs had current ISO certifications at the time of the programs. Newmont policy also designated the types of analyses used in all the programs and across all labs. Gold analyses were by fire assay with an Atomic Absorption spectroscopy (AA) finishes. Multi element analyses were by Inductively Coupled Plasma mass spectrometry (ICP-MS) with an Agua Regia digestion and ~50 elements reported. Over limits for the ICP-MS were run with Atomic Absorption for silver, copper and lead. Sample preparation packages used by Newmont were not included in the report and assay certificates for the samples were not provided.

The sample quality control programs used by Newmont required the insertion of certified standards (pulps), blanks and duplicates into the sample stream during the program. Newmont used mainly gold standards where 6 to 8 certified standards were listed in the reports as well as one or two poly metallic (Ag, Cu, Pb, Zn) standards. Results of the analyses for the standards were reported with charts of the performance of individual standards. The reports did not include the details of any remedial action taken related to standard failures.

The author believes the sample handling, preparation and analyses of samples by Newmont is adequate for this stage of exploration on the Niñobmaba Project.

11.4 MineGate Sampling Preparation (Rio Silver)

MineGate conducted the field work in 2012 and reported the following in their summary:

A total of 861 samples were taken, including 44 standard samples (5J-5H), 34 white samples and 33 duplicate samples, 2 coarse standards; were analyzed by 4 Acid Digestion with a detection limit of 1-1000 ppm at the Laboratory Inspectorate Services Peru S.A.C.

For the laboratory control, standard samples STD_5H and STD_5J were inserted at 19%, duplicate samples STD_DUP each 19% and STD_BLANK at 25%.

Samples were sent to BV-Inspectorate in Lima for preparation. BV-Inspectorate's Lima facility is an ISO 9001/2015 and ISO 14001/2015 registered laboratory. Sample preparation started with drying the samples at 100°C, crushing to 80% passing less than 2 mm then riffle split off 250 g and pulverize the split to 85% passing 0.075 mm. Samples were analyzed for gold by fire assay followed by atomic absorption spectroscopic (AAS) finish on a 30 g sample. Silver, lead, and zinc together with 30 other elements, were assayed by inductively coupled plasma-optical emission spectrometry (ICP-OES) following four-acid (near-total) dissolution of each pulp on a 0.5 g sample. Samples with silver, copper and lead assays above the upper limit for the ICP technique were re-assayed by atomic absorption (AA).

Rio Silver has no relationship with Bureau Veritas Inspectorate Services labs other than the procurement of analytical services.

11.5 Verification Sampling

The author's verification samples were sent to Bureau Veritas Inspectorate Services Laboratories (BV-Inspectorate). Samples were collected in the field by the author, as chip channel samples from trenches; the samples were bagged, labelled and sealed with one-use ties at the time they were taken. The samples were transported by Rio Silver geologists, accompanied by the author, from the Project to Lima and then continued in a pick-up truck to BV-Inspectorate in Lima for final preparation.

No quality control samples were included with the Rio Silver samples and were unwarranted based on the small number of samples collected at the Project. The author believes the sample handling, preparation and analyses of these samples is adequate for this stage of exploration on the Project.

12.0 DATA VERIFICATION

Data verifications for the Niñobamba NI43-101 report included: examination and sampling of the mineral showings on the property, review and compilation of internal company technical reports from previous operators, review of technical publications for the Project area and checking the Peruvian public registry to confirm title to the concessions. The author believes that these data verifications are sufficient for this exploration stage property.

12.1 Verification Sampling Results

The verification sampling was supervised by the author during the site visit in 2014. The author sampled trenches that were part of the 2012 trenching program carried out by Minegate. The author is of the opinion that the data from current and previous operators is adequate for the purposes used in this technical report. The author's verification sample results have been tabulated in Table 12.1. Sample locations are shown in Figure 12.1, an example of a surface, hand dug trench is shown in Photograph 3 and the assay certificate for the samples is shown in Figure 12.2.

The author is of the opinion that these data is adequate for the purposes used in this technical report.

Table 12.1: Verification Samples from Niñobamba Main zone

Sample	Sample Type	Width (m)	Au (g/t)	Ag (g/t)	Cu (ppm	Pb (ppm)	Zn (ppm)	Location
2305	Chip	1.5	2.169	215	16	1740	5	TR-1
2306	Chip	1.2	0.287	26.0	7	894	<5	TR-1
2307	Chip	1.5	1.269	54.1	12	316	6	TR-5
2308	Chip	2.0	0.014	68.6	35	293	10	TR-2
2309	Chip	1.0	0.770	46.3	9	595	13	Outcrop
2310	Chip	1.2	0.021	208	65	476	5	TR-4
402262	Chip	0.7	<0.005	<0.2	13	15	85	Hand trench



Photo 4: Sample 402262 – Hand Trench



Photo 5: Newmont Drill Collar JOR-2

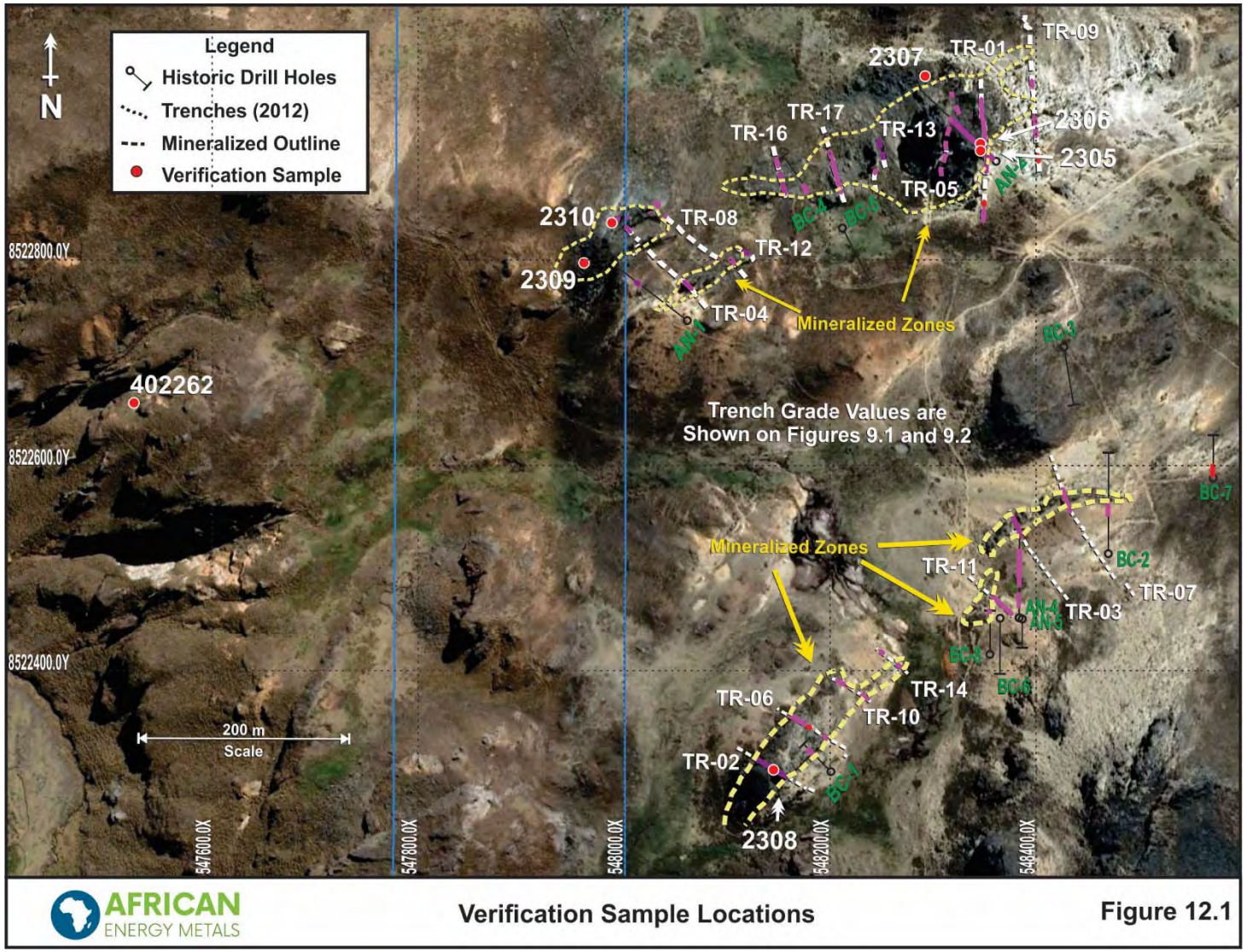
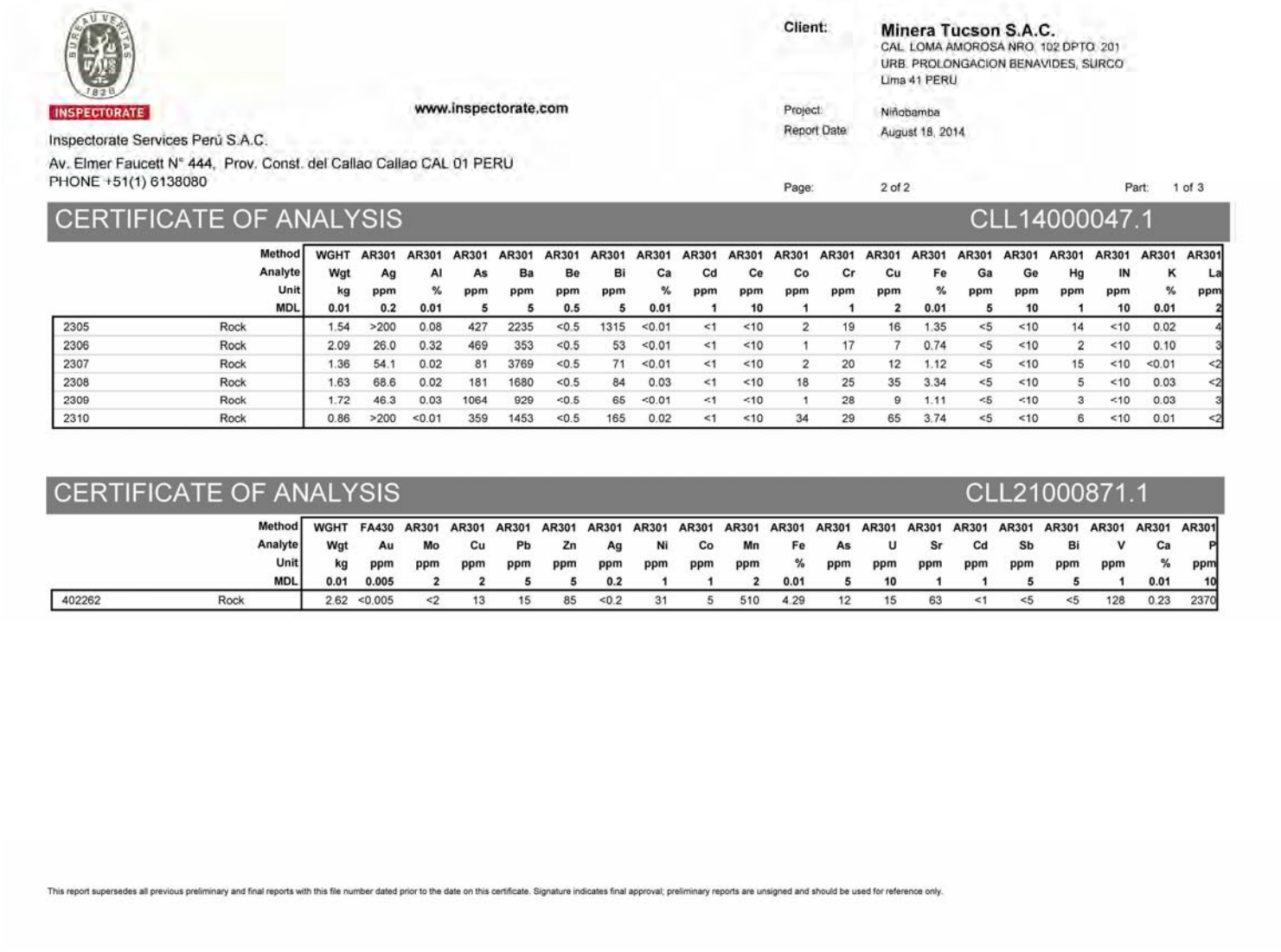


Figure 12.1: Verification Sample Locations



INSPECTORATE

www.inspectorate.com

Inspectorate Services Perú S.A.C.
Av. Elmer Faucett N° 444, Prov. Const. del Callao Callao CAL 01 PERU
PHONE +51(1) 6138080

Client: **Minera Tucson S.A.C.**
CAL. LOMA AMOROSA NRO. 102 DPTO. 201
URB. PROLONGACION BENAVIDES, SURCO
Lima 41 PERU

Project: Niñobamba
Report Date: August 18, 2014

Page: 2 of 2 Part: 1 of 3

CERTIFICATE OF ANALYSIS CLL14000047.1

	Method	WGHT	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301
	Analyte	Wgt	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	Ga	Ge	Hg	IN	K	La
	Unit	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
	MDL	0.01	0.2	0.01	5	5	0.5	5	0.01	1	10	1	1	2	0.01	5	10	1	10	0.01	2
2305	Rock	1.54	>200	0.08	427	2235	<0.5	1315	<0.01	<1	<10	2	19	16	1.35	<5	<10	14	<10	0.02	4
2306	Rock	2.09	26.0	0.32	469	353	<0.5	53	<0.01	<1	<10	1	17	7	0.74	<5	<10	2	<10	0.10	3
2307	Rock	1.36	54.1	0.02	81	3769	<0.5	71	<0.01	<1	<10	2	20	12	1.12	<5	<10	15	<10	<0.01	<2
2308	Rock	1.63	68.6	0.02	181	1680	<0.5	84	0.03	<1	<10	18	25	35	3.34	<5	<10	5	<10	0.03	<2
2309	Rock	1.72	46.3	0.03	1064	929	<0.5	65	<0.01	<1	<10	1	28	9	1.11	<5	<10	3	<10	0.03	3
2310	Rock	0.86	>200	<0.01	359	1453	<0.5	165	0.02	<1	<10	34	29	65	3.74	<5	<10	6	<10	0.01	<2

CERTIFICATE OF ANALYSIS CLL21000871.1

	Method	WGHT	FA430	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	MDL	0.01	0.005	2	2	5	5	0.2	1	1	2	0.01	5	10	1	1	5	5	1	0.01	10
402262	Rock	2.62	<0.005	<2	13	15	85	<0.2	31	5	510	4.29	12	15	63	<1	<5	<5	128	0.23	2370

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.

Figure 12.2: Verification Sample Assay Certificate Page 1

INSPECTORATE

www.inspectorate.com

Inspectorate Services Perú S.A.C.
Av. Elmer Faucett N° 444, Prov. Const. del Callao Callao CAL 01 PERU
PHONE +51(1) 6138080

Client: **Minera Tucson S.A.C.**
CAL. LOMA AMOROSA NRO. 102 DPTO. 201
URB. PROLONGACION BENAVIDES, SURCO
Lima 41 PERU

Project: Niñobamba
Report Date: August 18, 2014

Page: 2 of 2 Part: 2 of 3

CERTIFICATE OF ANALYSIS CLL14000047.1

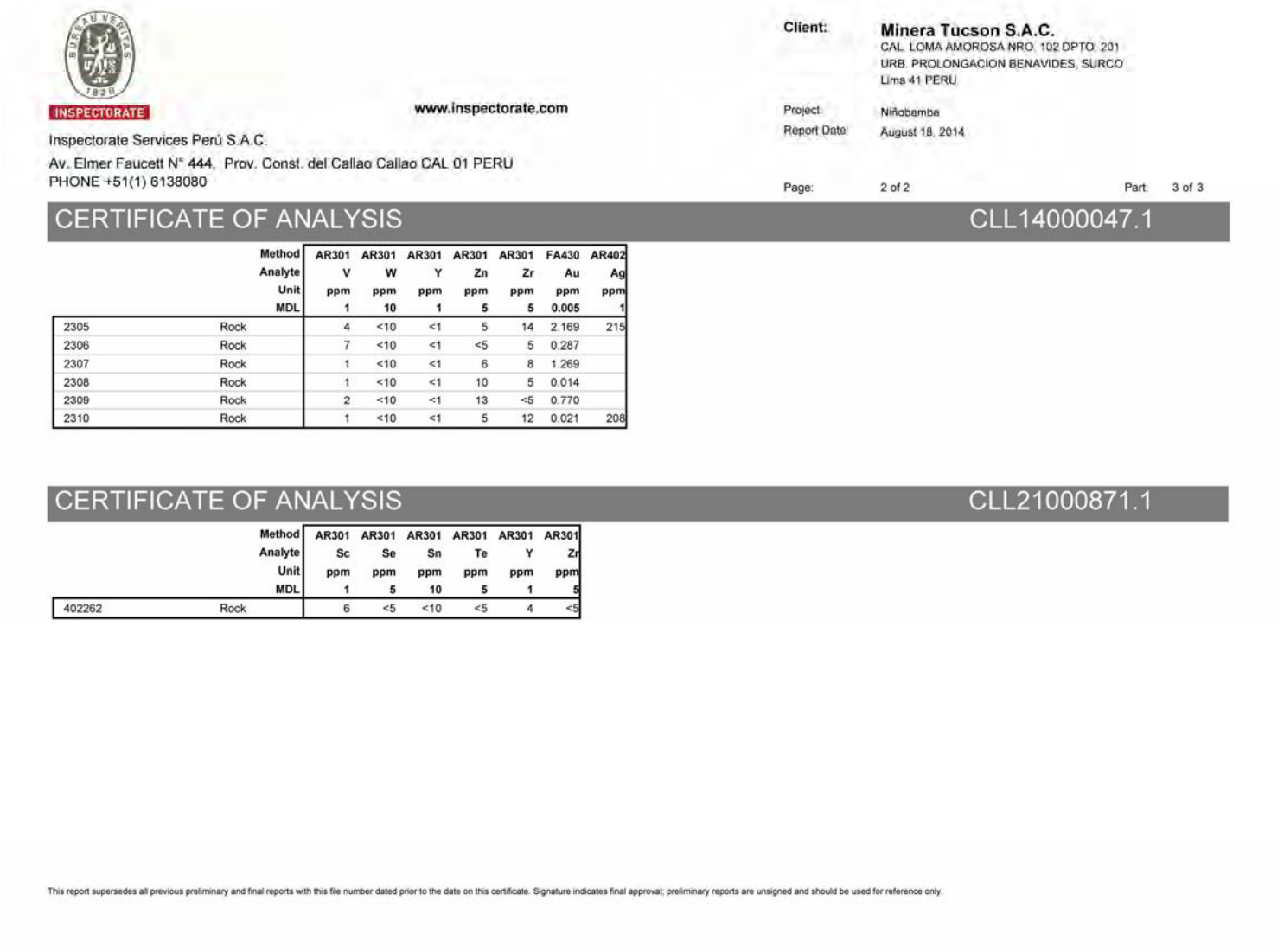
	Method	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301
	Analyte	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Re	S	Sb	Sc	Se	Sn	Sr	Te	Ti	Tl	U
	Unit	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	5	0.01	2	2	0.01	10	1	10	5	5	0.01	5	1	5	10	1	5	0.01	5	10
2305	Rock	<5	<0.01	46	3	<0.01	<10	4	140	1740	<5	0.49	1227	1	<5	17	120	6	0.03	5	<10
2306	Rock	<5	<0.01	32	<2	0.02	<10	1	196	894	<5	0.30	82	<1	<5	<10	167	<5	<0.01	<5	<10
2307	Rock	<5	<0.01	42	<2	<0.01	<10	3	24	316	<5	0.30	92	1	<5	<10	44	<5	0.01	<5	<10
2308	Rock	<5	<0.01	34	2	<0.01	<10	24	90	293	<5	1.98	81	<1	<5	<10	47	<5	0.01	7	<10
2309	Rock	<5	<0.01	42	<2	<0.01	<10	2	40	595	<5	0.13	80	<1	<5	<10	46	<5	<0.01	8	<10
2310	Rock	<5	<0.01	57	2	<0.01	<10	49	50	476	<5	2.86	163	<1	<5	<10	45	<5	0.03	7	<10

CERTIFICATE OF ANALYSIS CLL21000871.1

	Method	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301	AR301
	Analyte	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Tl	Hg	In	Re	Be	Ce	Ga	Ge	Li	Nb	S
	Unit	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	2	1	0.01	5	0.01	0.01	0.01	0.01	10	5	1	10	5	0.5	10	5	10	5	10	0.01
402262	Rock	52	144	3.72	214	<0.01	2.46	0.06	0.09	<10	<5	<1	<10	<5	<0.5	91	11	<10	16	<10	0.65

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.

Figure 12.2: Verification Sample Assay Certificate Page 2



INSPECTORATE

www.inspectorate.com

Inspectorate Services Perú S.A.C.
Av. Elmer Faucett N° 444, Prov. Const. del Callao Callao CAL 01 PERU
PHONE +51(1) 6138080

Client: **Minera Tucson S.A.C.**
CAL. LOMA AMOROSA NRO. 102 DPTO. 201
URB. PROLONGACION BENAVIDES, SURCO
Lima 41 PERU

Project: Niñobamba
Report Date: August 18, 2014

Page: 2 of 2 Part: 3 of 3

CERTIFICATE OF ANALYSIS CLL14000047.1

		Method	AR301	AR301	AR301	AR301	AR301	FA430	AR402
		Analyte	V	W	Y	Zn	Zr	Au	Ag
		Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		MDL	1	10	1	5	5	0.005	1
2305	Rock		4	<10	<1	5	14	2.169	215
2306	Rock		7	<10	<1	<5	5	0.287	
2307	Rock		1	<10	<1	6	8	1.269	
2308	Rock		1	<10	<1	10	5	0.014	
2309	Rock		2	<10	<1	13	<5	0.770	
2310	Rock		1	<10	<1	5	12	0.021	208

CERTIFICATE OF ANALYSIS CLL21000871.1

		Method	AR301	AR301	AR301	AR301	AR301	AR301
		Analyte	Sc	Se	Sn	Te	Y	Zr
		Unit	ppm	ppm	ppm	ppm	ppm	ppm
		MDL	1	5	10	5	1	5
402262	Rock		6	<5	<10	<5	4	<5

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.

Figure 12.2: Verification Sample Assay Certificate Page 3

13.0 MINERAL PROCESSING and METALLURGICAL TESTING

Newmont contracted Plenge Laboratories in Lima to provide metallurgical services for the Niñobamba project. The letter report is quoted below.

Servicios Metalurgicos

Yanacocha

To : Carl Schnell
CC : Ben Burger
From : Neil Ireland
Date : 30 Junio 2011
Subject : Ninobamba Samples DH575701-6: Recovered Metal Value based on Preliminary Metallurgical Testing at Plenge

13.1 Introduction:

On March 24, 2011, 6 drill core samples from the Ninobamba deposit in central Peru were sent to Plenge Laboratories in Lima. The primary objective of the test work was to determine if the samples were gold/silver or copper/molybdenum dominant based on their response to:

- Gravity concentration,
- Conventional cyanidation,
- Concentration by froth flotation.

The following documents should be read in conjunction with this report:

- "*Metallurgical Investigation No: 8253-58*" Laborotorio Plenge, report not dated but received June 23rd, 2011. This is reported in 3 parts: head sample MLA analysis, metallurgical testwork results and a summary report.

13.2 Head Samples

An ICP scan for each sample and detailed MLA data is provided in the Plenge report. Table 1 shows a summary of the head assays, Figures 2 show a breakdown of major elements (silica not included) and Figure 3 shows a breakdown of major minerals by size fraction.

Table 1: Head assays

Newmont Sample ID		DH57570	DH57570	DH57570	DH57570	DH57570	DH57570
Plenge Sample ID		8253	8254	8255	8256	8257	6 8258
Ag	g/t	15.6	13.2	21.3	10.8	22.2	31.2
Au	g/t	0.63	0.47	2.03	1.24	1.21	1.46
Au CN	g/t	0.52	0.27	1.79	1.16	0.85	0.37
Au CN : Au	%	82.5%	57.4%	88.2%	93.5%	70.2%	25.3%
Cu	%	0.021	0.02	0.029	0.022	0.019	0.867
Cu CN	%	0.008	0.008	0.008	0.008	0.01	0.75
CuCN : Cu	%	38.1%	40.0%	27.6%	36.4%	52.6%	86.5%
Pb	%	0.82	0.86	1.39	0.7	0.22	0.06
Zn	%	0.87	1.26	1.07	0.93	0.04	0.08
Fe	%	3.22	3.81	3.53	2.48	2.26	12.9
As	%	0.0609	0.054	0.0566	0.019	0.0494	0.3457
S	%	3.43	4.2	3.8	2.78	3.1	16.5
Sulfide S	%	3.02	3.7	3.3	2.13	1.5	15
C total	%	0.02	0	0.03	0.01	0.04	0.04
C organic	%	0.01	< 0.01	0.02	0.01	0.03	0.03

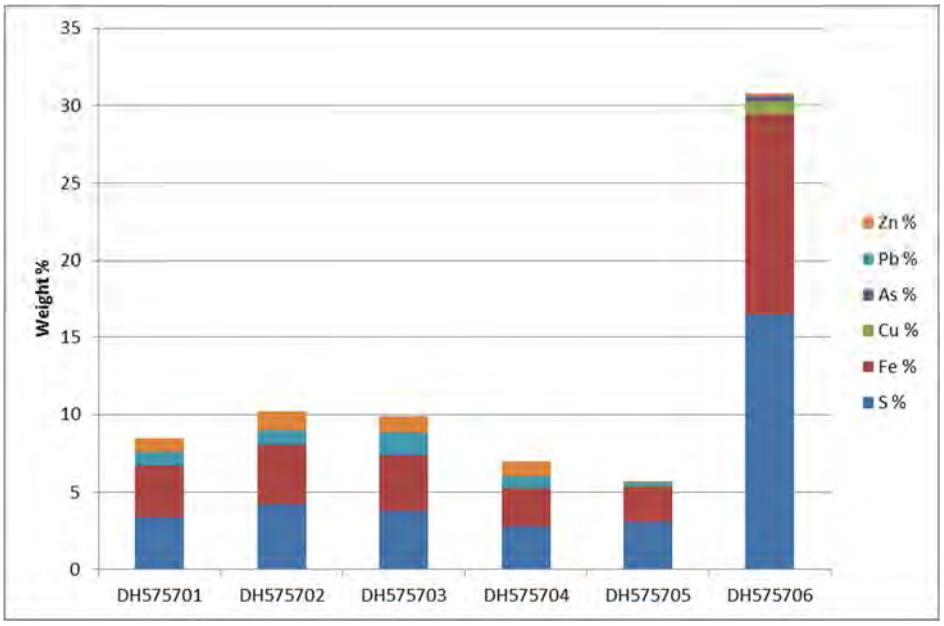


Figure 1: Major elements in Head Samples

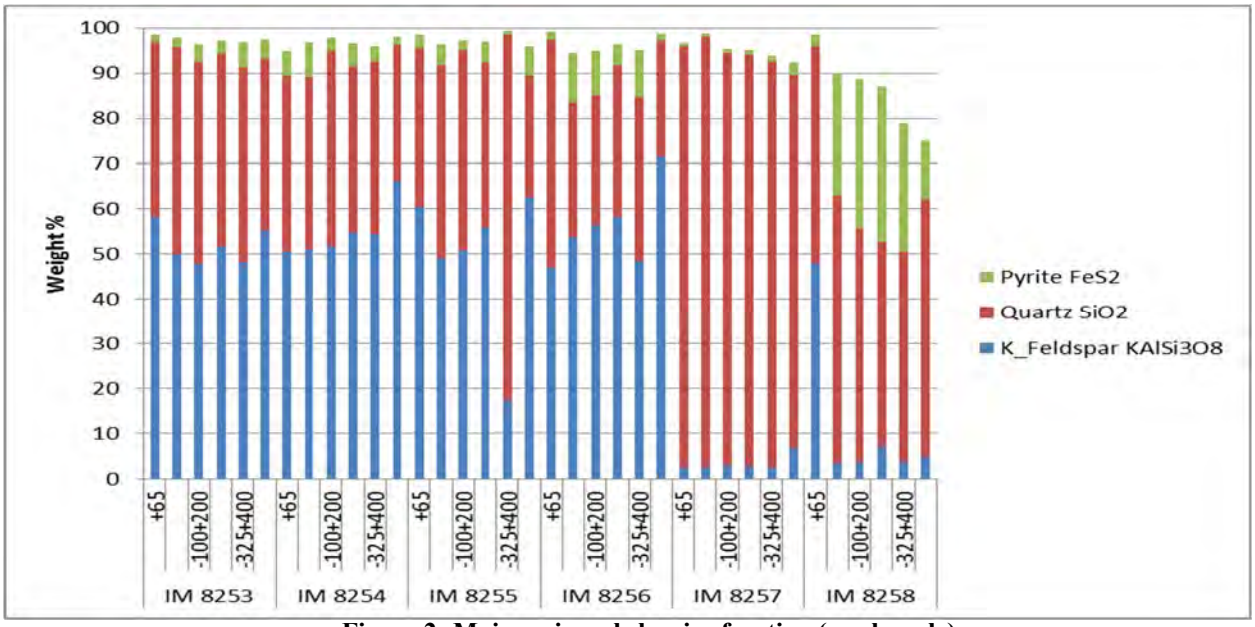


Figure 2: Major minerals by size fraction (mesh scale)

The major points of note are:

1. Samples DH575701-4 contain potentially economic values of gold and silver with negligible copper. They have significant quantities of lead and zinc which will need to be considered in flowsheet evaluation. The ore is potassium feldspar dominant, with major silica and significant pyrite.
2. Samples DH575705 contain potentially economic values of gold and silver with negligible copper. It silica dominant ore with minor feldspar and pyrite.
3. Sample DH575706 contains potentially economic quantities of gold, silver and copper along with elevated iron, sulfur and arsenic content. It is silica dominant with major pyrite and minor enargite.
4. Molybdenum assays were below detection limits for all samples (<5 ppm).

13.3 Metallurgical Test Evaluation

Three standard metallurgical flowsheets were examined; cyanidation and concentration by gravity and flotation. Cyanidation and gravity concentration processes are standard precious metal recovery flowsheets. In some cases, gravity concentration can be employed for copper recovery, such as for native copper and some copper mineralisations, however froth flotation is the industry stand for copper sulfide concentration for lower grade copper ores. Flotation can also be used for certain types of gold deposit, such as pyrite orebodies like the samples tested here.

Therefore, the cyanide leach results are viewed from a precious metals recovery standpoint only for comparison against copper recovery via froth flotation. Detailed results and summaries for these test programs are found in the Plenge Report.

The following evaluation to determine the dominant economic metal content is based on:

- The testwork conducted at Plenge but will consider improvements potential optimization via variable adjustment (grind size).
- Newmont reserve pricing: US$1200/oz for gold, US$22/oz for silver and US$3/lb for copper.
- Spot pricing (June 2011) for molybdenum of US$ 31/kg.
- Other metals have not been considered here from an economic standpoint (eg zinc, lead).

The values of gold, silver and copper in the head samples is shown in Table2. Molybdenum assays were below detection limits.

Table 2: Sample metal values

Sample I.D.	Head assay			Value,			
	Au g/t	Ag g/t	Cu %	Au	Ag	Au+Ag	Cu
DH575701	0.63	15.6	0.021	$24.31	$11.03	$35.34	$1.39
DH575702	0.47	13.2	0.020	$18.13	$9.34	$27.47	$1.32
DH575703	2.03	21.3	0.029	$78.32	$15.07	$93.39	$1.92
DH575704	1.24	10.8	0.022	$47.84	$7.64	$55.48	$1.45
DH575705	1.21	22.2	0.019	$46.68	$15.70	$62.39	$1.26
DH575706	1.46	31.2	0.867	$56.33	$22.07	$78.40	$57.33

Based on head assays, samples DH575701 – 5 are clearly precious metals dominant. Sample DH575706 is also precious metals dominant, however consideration must be given to metallurgical recoveries, saleability of product and sensitivity to metal price.

The recovered precious metal value from cyanidation testwork (P_{80} 75 micron, 1000ppm CN, 48 hrs) is shown in Table 3. An ICP scan of selected elements is shown in Tables 4.

Table 3: Cyanidation recovered value

Sample I.D.	Extraction, % Au		Value,US$/t Au	Ag	Au+Ag
DH57570	80.2	27.1	$19.50	$2.99	$22.49
DH57570	67.8	17.1	$12.29	$1.59	$13.89
DH57570	93.1	21.6	$72.89	$3.26	$76.15
DH57570	92.8	19.7	$44.39	$1.50	$45.89
DH57570	71.4	56.7	$33.32	$8.91	$42.23
DH57570	12.1	16.4	$6.82	$3.61	$10.43

Table 4: Selected cyanidation solution aasays

Elemen	DH57570	DH57570	DH57570	DH57570	DH57570	DH57570
Ag	1	1	1	1	2	3
Cd	<1	<1	<1	<1	<1	<1
Cu	30	20	20	28	28	690
Ni	1.3	0.9	1.1	1	1.3	1.1
Zn	41	53	48	59	5	31
Na	661	631	685	623	649	5520
S	155	143	206	149	230	687
K	12	13	10	17	6	19
Si	10	12	11	12	24	33
Fe	3.1	2.7	2.5	1.9	2.4	8.6
Mg	3	3	3	3	4	8
Mn	2	1	1	1	1	1
Co	1.3	0.6	0.8	0.9	2.3	1.1
As	<1	<1	<1	<1	3	64
Au	<1	<1	1	<1	<1	<1
Mo	<1	<1	<1	<1	<1	<1
Pb	<1	<1	<1	<1	<1	<1

For samples DH575701 – 5:

- Variable gold extractions were achieved, however many of the final gold leach recoveries (after 48 hours) are lower than those at the 24 hour mark (up to 10% points) so there is optimization potential for gold recovery.
- The recovered value for gold and silver is between 10 and 40 times the value of molybdenum and copper in the head for samples DH575701 – 5. Reagent consumptions were low (approximately 1 kg/t for cyanide and lime).
- WAD cyanide (copper, zinc, nickel) is slightly elevated but not excessive. Perhaps a flotation stage may be able to remove a large portion of this prior to cyanidation.

For sample DH575706:

- Gold extractions were very low, with the recovered value except for test DH575706 (3.2 kg/t cyanide, 0.8 kg/t lime).
- Copper concentrations are very high and would incur additional capital and operating cost to remove. However, the levels of copper in solution are within those experienced in some current commercial operations.

Table 5 shows a summary of flotation results and associated recovered metal value.

Table 5: Flotation Testwork Summary

Sample	Wt	Assays				Recovery, %				Value,US$/					
		Au	Ag	Cu	Mo	Au	Ag	Cu	Fe	Au	Ag	Au+Ag	Cu	Mo	Cu+Mo
	%	g/t	g/t	%	g/t										
DH575701	8.1	8.2	142.	0.19		91.5	81.9	65.4	75.2	$22.24	$9.04	$31.28	$0.91		$0.91
DH575702	8.1	6.8	119.	0.19		90.0	88.3	69.1	69.5	$16.32	$8.24	$24.56	$0.91		$0.91
DH575703	8.7	37.2	207.	0.25		96.3	89.0	68.7	73.6	$75.42	$13.41	$88.83	$1.32		$1.32
DH575704	6.2	18	159.	0.29		96.2	85.5	78.3	71.2	$46.02	$6.53	$52.55	$1.14		$1.14
DH575705	3.9	6.4	107.	0.25	132	22.6	20.0	24.0	51.1	$10.55	$3.14	$13.69	$0.30	$0.16	$0.46
DH575706-	2.5	3.2	521.	19.3	58	5.8	44.0	53.7	5.2	$3.27	$9.71	$12.98	$30.78	$0.04	$30.83
Average						67.1	68.1	59.9	57.6	$28.97		$37.32	$5.89		$5.93
DH575706-	16.2	2.15	41.8	1.27	38	25.7	23.3	23.3	22.2	$14.48	$5.14	$19.62	$13.36	$0.19	$13.55

It is important to note that flotation concentrates are intermediate products that do not realize full metal value. There will also be further metal recovery losses in subsequent processing through to metals.

Concentrate molybdenum assays were above detection limits for samples DH575705 – 6. Whilst recoveries could not be calculated, metal values could.

For samples DH575701 – 5:

- Combined metal values for gold and silver are lower than those for cyanidation with the exception of test DH575703, although the choice of flowsheet will also depend on costs and product payabilities.
- Combined copper and molybdenum values are significantly lower than both gold /silver cyanidation and flotation. Additionally, concentrate copper grades are well below industry minimums. Given the copper head grade, upgrading to make a saleable concentrate is not considered technically feasible even with extensive optimization testing.

For sample DH575706:

- The test procedure was modified to determine if a saleable copper concentrate could be produced. The concentrate is at the low end of grade range for copper smelters but optimization testing could improve this.
- The pyrite in the tails was then concentrated to produce a gold concentrate. This was ineffective, however more investigation would be warranted.

Gravity concentration results are shown in Table 6.

Table 6: Gravity Concentration Results

Sample	Weight %	Concassays Au g/t	Ag	Recovery, % Au	Ag	Assay Head Au g/t		Calc'd Head Au g/t		Value,US$/t Au	Ag	Au+Ag
DH575701	1	32.9	288.3	46.3	14.7	0.63	15.6	0.74	20.5	$11.25	$1.62	$12.88
DH575702	1	54.6	171.1	68.5	11.5	0.47	13.2	0.83	15.4	$12.42	$1.07	$13.49
DH575703	1.1	96.9	296.6	37.3	9.9	2.03	21.3	2.73	31.6	$29.21	$1.49	$30.70
DH575704	1	113	397.5	86.7	32.5	1.24	10.8	1.36	12.8	$41.48	$2.48	$43.96
DH575705	1	3.5	60.6	3.1	2.5	1.21	22.2	1.13	24.7	$1.45	$0.39	$1.84
DH575706	1.1	3.3	100.2	2.6	3.7	1.46	31.2	1.38	29	$1.46	$0.82	$2.28
Average				40.8	12.5					$16.21		$17.53

For samples DH575701 – 4, gravity concentration was shown to be technically viable although optimization work is required to define the grade recovery curve. For samples DH575705-6 gravity concentration was ineffective, with no potential for optimization.

13.4 Conclusions

Three standard metallurgical flowsheets were examined to determine if the there is greater economic value in the gold and silver content, or the copper and molybdenum content. The following conclusions can be made:

- All samples contained negligible molybdenum.
- Sample DH 575701-5 were clearly precious metals dominant with negligible copper. The testwork indicated that gold and silver recovery may be viable by cyanidation. For some samples, gravity concentration may be viable in combination with cyanidation or as a standalone process.
- Sample DH 575706 has a greater precious metal content than copper in the head sample. Based on the testwork at Plenge, there is greater recovered metal value in a copper flotation product than a gold concentrate or cyanide leach process.
- The six samples were, on average, precious metals dominant.
- Payabilities for metal products were not considered due to the clear cut nature of the results for the tests for each sample.

The author has been unable to verify the information related to metallurgical testing, grades or results.

There are no current metallurgical studies for this property.

14.0 MINERAL RESOURCE ESTIMATES

There are currently no mineral resource estimates for the subject property.

15.0 MINERAL RESERVE ESTIMATES

There are no Mineral Reserves on the subject property

23.0 ADJACENT PROPERTIES

There are no notable properties adjacent to the Niñobamba project with public information.

24.0 OTHER RELEVANT DATA and INFORMATION

To the author's best knowledge, all the relevant data and information has been provided in the preceding text.

25.0 INTERPRETATION and CONCLUSIONS

African Energy Metals Inc. through a 100% option with Rio Silver has a significant land position in the Niñobamba project totaling 4100 hectares. The concessions cover potentially both a significant Au-Ag high sulphidation system and a large bulk minable low sulphidation silver target as well. These HS systems are normally the main exploration focus for gold mining companies in Peru. Significant deposits mined in Peru, such as Yanacocha, Lagunas Norte and Piernia, are these types of HS systems.

Due to the extensive surface trenching program along with the previous drilling, the main Niñobamba area is considered “drill ready” in both the North and South Zones. Proposed exploration targets should initially use the new conceptual model generated by Rio Silver’s technical staff. Understanding that the precious metal vertical and lateral zonation patterns typically present in these epithermal systems is a must to properly interpret the drill data.

The first exploration phases should consider the two types of targets: 1) Large Lower Grade Bulk Tonnage Silver Deposit and 2) Near Surface Oxide Au-Ag Deposit. This order of priorities is dictated by community agreements and permitting.

The first drill target would be to duplicate results from Newmomt drill hole JOR-01 in the Jorimina Zone. If the initial holes are successful, a second phase program would start with a geophysical survey to be conducted across the area which would consist of both Induced Polarization (“IP”) and a CSAMT (“CSAMT”) resistivity survey. Drilling would follow and be focused on the low sulphidation potential. If coincident IP and CSAMT anomalies are identified, these targets would be a priority for drilling.

The Niñobamba is an exploration stage property with some drilling, the risks and uncertainties associated with this stage of exploration are the continuity of the vuggy silica or disseminated zones along strike and down dip, the discovery of new mineralization, and that the individual mineralized zones maintain their width and grade. Additional uncertainty is associated with the need to negotiate a new surface access agreement with the local community (Chuschi). The foreseeable impacts of these risks and uncertainties are delays to the exploration program while community agreements are negotiated and the failure to discover additional mineralization would limit the potential of the property.
The Niñobamba Project is a Property of Merit that justifies the continuation of exploration programs designed to test the deposit models outlined in this report.

RECOMMENDATIONS

The recommended exploration and work programs for the Niñobamba Project are as follows:

The Phase I program includes geologic mapping, channel sampling, road work and community programs

Phase I USD $141,000

- Geophysics: Alpha IP survey $60,000
  Induced polarization survey to identify possible polymetallic vein targets and vuggy silica precious metal targets
- Geological Mapping (20 days @ US$ 800/day) $16,000
- Channel Sampling Assay costs (200 samples @ US$50/sample) $10,000
- Channel Sampling program: geologists, logistics, supplies (20 days @ $1600/day) $32,000
- 50 assay samples (50 rock samples) at $50 per sample - $2,500
- Road Work - $2,500
- Community Costs Travel/Projects - $3,500
- QP and Final Report - $1,500
- Budget = $128,000
- ~10% Contingency = $13,000

The Phase II program is not contingent on positive results from the Phase I program and following a thorough compilation and review by a qualified person the following Phase II program is recommended.

Phase II USD $450,000

- 1500 metres of diamond drilling at $210 per metre, all in = $315,000
  Drilling to confirm previous results and test IP targets for mineralization.
- 1000 core assay samples at $50 per sample - $50,000
- Senior Geologist - $9,000
- Junior Geologists - $5,000
- Shipping costs - $4,000
- Community Costs Travel/Projects - $6,500
- Travel, crew changes, - $4,000
- Project Logistics - $3,000
- Depot - sampling area Ayacucho - $5,000 - one year rental
- QP and Final Report - $7,500
- Budget = $409,000
- ~10% Contingency = $41,000

Total Budget for Phase I and II is USD $591,000

- Note IGV, “value added tax” not included.

26.0 REFERENCES

African Energy Metals News Release announcing the option agreement with Rio Silver, January 21, 2025.

Bartos, P.J., 1989: Prograde and retrograde base metal lode deposits and their relationship to underlying porphyry copper deposits, Economic Geology, v. 84, p. 1671

Bear Creek Mining Corporation, 2003: BEAR CREEK ANNOUNCES NIÑOBAMBA SILVER PROJECT RESULTS, 15 Dec. 2003, 2 pp.

Benavides-Caceres, V., 1999: Orogenic Evolution of the Perúvian Andes; in Geology and ore Deposits of the Central Andes, Society of Economic Geologists Special Publication Number 7, Skinner, B.J. (ed), p. 61–107.

Clark, A.H., Farrar, E., Kontak, D.J., Langridge, R.J., Arenas F., M.J., France, L.J., McBride, S.L., Woodman, P.L., Wasteneys, H.A., Sandeman, H.A., and Archibald, D.A., 1990: Geologic and Geochronologic Constraints on the Metallogenic Evolution of the Andes of Southeastern Peru, Geology, v. 85, p. 1520-1583.
report.

Einaudi, M.T., Hedenquist, J.W.and Inan, E.E.: 200, Sulfidation state of hydrothermal fluids: The porphyry-epithermal transition and beyond, In Press: Giggenbach Volume, Society of Economic Geologists and Geochemical Society,Special Publication 10 (S.F. Simmons, ed.)

Hedenquist, J., 2012: Epithermal precious-metal deposits in Peru, and exploration potential in the porphyry “system”, Presentation at the PDAC Convention for the Peruvian Morning, Prospector and Development Association of Canada, p. 16.

INGEMMET website http://geocatmin.ingemmet.gob.pe/geocatmin/

Ireland, N., 2011: Ninobamba Samples DH575701-6: Recovered Metal Value based on Preliminary Metallurgical Testing at Plenge, Perpared by Yanacohca Metallurgical Services for Newmont Peru, 183 p.

McCrea, J.A., 2014: Technical Report on The Don Pancho Ploymetallic (Pb, Zn, Ag, Mn) Project, Peru, prepared for Duran Ventures Inc., 69 p., filed on Sedar.

McCrea, J.A., 2016: Technical Report on The Rey Solomon Gold Project, Peru, prepared for Montan Mining Corp., 59 p., filed on Sedar.

Morche, W.E., 2002: Niñobamba Epithermal Gold – Silver Prospect Ayacucho – central Peru. Revision of Geological Mapping and Volcanic Stratigraphy. Internal Reoprt for AngloGold Exploración Perú S.A.C.

Noble, D. C., and McKee, E.H., 1982: Nevado Portugueza Volcanic Center, Central Peru: A Pliocene Central Volcano-Collapse Caldera Complex with associated silver mineralization , ECON. GEOL., Vol.77 pp. 1893-1900.

Peterson, U., 1999: Magmatic and Metallogenic Evolution of the Central Andes, in Geology and Ore Deposits of the Central Andes, B. J.Skinner Editor, p 114 - 116.

Personal Communication Chris Verrico, 2024 and 2025

Personal Communication Jeffrey Reeder, 2022

Personal Communication Grywal, R., 2022

Pinto, R., Teal, L., Bernuy, O., Ampuero, D., Oropeza, J., Contreras, C. and Barba, J., 2009: Informe Tecnico y Geologico Proyecto Niñobamba 2008 a Abril 2009, 158 p.

Pinto, R., Teal, L., Bernuy, O., Ampuero, D., Oropeza, J., Contreras, C. and Barba, J., 2010: Informe Tecnico y Geologico Proyecto Niñobamba Mayo a Diciembre 2009, 162 p.

Pinto, R., Teal, L., Bernuy, O., Ampuero, D., Oropeza, J., Contreras, C. and Barba, J., 2010: Informe Tecnico y Geologico Proyecto Niñobamba Enero a Abril 2010, 99 p.

Pilco, J., Schnell, C., Teal, L., Bernuy, O., Ampuero, D., Oropeza, J., Contreras, C. and Barba, M., 2010: Informe Tecnico y Geologico Proyecto Niñobamba Octubre 2010, 153 p.

Teal, L., 2011: Determinacion Del Mineral Predominante en los Prospectos Tunsulla (Jorimina) y Chuschi (Niñobamba Main), Agusto 2011, 244 p.

Purser, M., 1971: Metal-Mining in Peru, Past and Present. Praeger Publishers, New York. 339p

Reeder, J.R., 2013: Internal Memo for Rio Silver Inc. Oxide Silver-Gold Mineralization Ag-Au Project South Central Peru.

Reeder, J.R., 2022: Geological Summary of Niñobamba, Internal report prepared for Rio Silver Inc., 25 p.

Rio Silver, 2024: News Release - Rio Silver Completes Agreement with Local Community at Jorimina Project, Peru, July 23, 2024.

Rio Silver Web Site: http://www.Riosilvercorp.com/s/news.asp

Sillitoe, R.H., 1999: Styles of High Sulphidation Gold, Silver and Copper Mineralisation in Porphyry and Epithermal Environments. PACRIM 99.

Wikipedia https://en.wikipedia.org/wiki/Ayacucho

Wikipedia https://en.wikipedia.org/wiki/Department_of_Ayacucho