

**TECHNICAL REPORT AND PRELIMINARY ECONOMIC ASSESSMENT
FOR THE**

**ZANCUDO
GOLD-SILVER MINERAL DEPOSIT**

**MUNICIPALITY OF TITIRIBI
DEPARTMENT OF ANTIOQUIA
REPUBLIC OF COLOMBIA
SOUTH AMERICA**

DATED MAY 14, 2026

EFFECTIVE DATE: MARCH 19, 2026

PREPARED FOR:

DENARIUS METALS CORP.

BY

**RESOURCE DEVELOPMENT ASSOCIATES
HIGHLANDS RANCH, COLORADO**

DATE AND SIGNATURE PAGE

Denarius Metals Corp.: Technical Report and Preliminary Economic Assessment for the Zancudo Gold-Silver Mineral Deposit, Municipality of Titiribi, Department of Antioquia, Republic of Colombia, South America.

Technical Report Effective Date: March 19, 2026

Dated May 14, 2026

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1. I am currently employed as President by Resource Development Associates, Inc., Highlands Ranch, Colorado USA 80126.
2. I graduated with a Bachelor of Arts degree in Geology from the California State University, Sacramento in 1989.
3. I am a Certified Professional Geologist and member of the American Institute of Professional Geologists (CPG #10965) and a Registered Member (#4025107) of the Society for Mining, Metallurgy and Exploration, Inc.
4. I have been employed as both a geologist and a mining engineer continuously for a total of 31 years. My experience includes resource estimation, mine planning, geological modeling, geostatistical evaluations, project development, and authorship of numerous technical reports and preliminary economic assessments of various projects throughout North America, South America and Europe. I have employed and mentored mining engineers and geologists continuously since 2003.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
6. I made a personal inspection of the Zancudo Project on March 4 and 5, 2026.
7. I am responsible for Sections 1 through 12, 14, 15, 19, 20 and 23 through 27 of the Technical Report.
8. I am independent of the Issuer as independence is described in Section 1.5 of NI 43-101.
9. Prior to being retained by the Issuer, I have not had prior involvement with the property that is the subject of the Technical Report.
10. I have read NI 43-101 and Form 43-101F1, and this Technical Report was prepared in compliance with NI 43-101.
11. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated: May 14, 2026

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Scott E. Wilson, CPG, SME-RM

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1. I am currently employed as a Principal by MineTech, LLC, 29 Denali Lane, Butte, Montana USA 59701.
2. I graduated with a Bachelor of Science degree in Mine Engineering from Montana College of Mineral Science and Technology, Butte, Montana 1994.
3. I am a Registered Member (#4029863) of the Society for Mining, Metallurgy and Exploration, Inc.
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5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
6. I made a personal inspection of the Zancudo Project on September 15 and 16, 2023.
7. I am responsible for Section 16 and co-authored Sections 18, 21, 22, 25, and 26 of the Technical Report.
8. I am independent of the Issuer as independence is described in Section 1.5 of NI 43-101.
9. Prior to being retained by the Issuer, I have not had prior involvement with the property that is the subject of the Technical Report.
10. I have read NI 43-101 and Form 43-101F1, and this Technical Report was prepared in compliance with NI 43-101.
11. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated: May 14, 2026

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1. I am currently employed as President by Woods Process Services LLC, 10585 Dillingham Dr, Reno, Nevada USA 89521.
2. I graduated with a Bachelor of Science degree in Metallurgical Engineering from the Mackay School of Mines, University of Nevada, Reno in 1988.
3. I am a Registered Member (#408591) of the Society for Mining, Metallurgy and Exploration, Inc. and a Registered Member (#01368QP) of the Mining & Metallurgical Society of America.
4. I have been employed as both a metallurgist and a process engineer continuously for a total of 35 years. My experience includes metallurgical test work, process flow sheet design, mine process operation, operating statistical analyses, capital cost and operating cost estimating, due diligence, operations performance optimization. project development, and authorship of numerous technical reports and preliminary economic assessments of various projects globally. I have employed and mentored metallurgical and chemical engineers and laboratory technicians continuously since 2006.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
6. I made a personal inspection of the Zancudo Project on September 15 and 16, 2023.
7. I am responsible for Sections 13, 17, parts of Sections 1 through 12, 14, 19, 20 and 23 through 27 of the Technical Report.
8. I am independent of the Issuer as independence is described in Section 1.5 of NI 43-101.
9. Prior to being retained by the Issuer, I have not had prior involvement with the property that is the subject of the Technical Report.
10. I have read NI 43-101 and Form 43-101F1, and this Technical Report was prepared in compliance with NI 43-101.
11. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated: May 14, 2026

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TABLE OF CONTENTS

1	SUMMARY	5
2	INTRODUCTION.....	11
3	RELIANCE ON OTHER EXPERTS	12
4	PROPERTY DESCRIPTION AND LOCATION	13
5	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY	19
6	HISTORY	21
7	GEOLOGICAL SETTING AND MINERALIZATION	26
8	DEPOSIT TYPES.....	36
9	EXPLORATION	38
10	DRILLING.....	41
11	SAMPLE PREPARATION, ANALYSIS AND SECURITY	47
12	DATA VERIFICATION	52
13	MINERAL PROCESSING AND METALLURGICAL TESTING	53
14	MINERAL RESOURCE ESTIMATES.....	67
15	MINERAL RESERVES	83
16	MINING METHODS.....	84
17	RECOVERY METHODS.....	98
18	PROJECT INFRASTRUCTURE.....	109
19	MARKET STUDIES AND CONTRACTS	111
20	ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT	112
21	CAPITAL AND OPERATING COSTS	114
22	ECONOMIC ANALYSIS	116
23	ADJACENT PROPERTIES.....	122
24	OTHER RELEVANT DATA AND INFORMATION	123
25	INTERPRETATIONS AND CONCLUSIONS	124
26	RECOMMENDATIONS	125
27	REFERENCES.....	130

TABLES

Table 1-1: Zancudo Indicated Mineral Resource Estimate (“MRE”) Effective date October 31, 2025. QP Scott Wilson C.P.G	5
Table 1-2: Zancudo Inferred Mineral Resource Estimate (“MRE”) Effective date October 31, 2025. QP Scott Wilson C.P.G	5
Table: 1-3: Key Economic Results of the PEA	7
Table: 1-4: Capital Cost Estimates for the Project	8
Table: 1-5 PEA Operating Costs	9
Table 1-6: Operating and Financial Metrics	9
Table 4-1: Summary of Zancudo Mining Titles	14
Table 4-2: Surface Land Ownership and Rental Contracts at the Zancudo Project	16
Table 6-1: Gold and Silver Production by Sociedad de Zancudo, 1912-1922	22
Table 6-2: Estimates of the Total Historical Production of Gold and Silver Expressed as Au Equivalent from the Zancudo District	22
Table 6-3: Gold and Silver Production from Scoria Dumps by Proyecto Sabaletas S.A.S., 2009-2011	24
Table 7-1: Summary of Key Lithological Units at Zancudo and the Associated Logging Codes in the Database	30
Table 9-1: Summary of Exploration Carried Out at the Zancudo Project	38
Table 10-1: Summary of Drilling Completed by Company	41
Table 10-2: Summary of Drilling Types and Drilling Contractors Used at the Zancudo Project	41
Table 10-3: Significant Intercepts	43
Table 11-1: Summary of Sample Preparation Methods and Primary Laboratory Used	47
Table 11-2: Summary of Sample Analysis Methods and Primary Laboratory Used	47
Table 13-1: Assay Results for Au and ag (g/t) for Samples	53
Table 13-2: Analysis of Au Distribution by Size Fraction	55
Table 13-3: Bulk Rougher Flotation Results	55
Table 13-4: Leaching Results on the Blended Concentrate	55
Table 13-5: Results of Direct Leaching Zancudo Ore	56
Table 13-6: Metallurgical Test Composites	56
Table 13-7: Gravity Recovery Results	62
Table 13-8: Metallurgical Rougher Flotation Test Composite Recovery Results	63
Table 13-9: Metallurgical Cleaner Flotation Test Composite Recovery Results	64
Table 13-10: Diagnostic Leach Test Results	64
Table 13-11: Metallurgical Test Composite, Gold Recovery Results	65
Table 13-12: Metallurgical Test Composite, Silver Recovery Results	65
Table 13-13: Gravity Results	65
Table 14-1: Zancudo Indicated Mineral Resource Estimate – Effective date: October 31, 2025	67
Table 14-2: Zancudo Inferred Mineral Resource Estimate – Effective date: October 31, 2025	68
Table 14-3: Gold Assay Statistics and Gold Composites subsequent to Compositing and Capping	77
Table 14-4: Grade Estimation Parameters for Gold and Silver	78
Table 14-5: Model Coordinates	78
Table 14-6: Average Density by Company and Estimation Domain from Mineralization Model	79
Table 14-7: Zancudo Indicated Mineral Resource Estimate – Cutoff 3.25 g/t Au – Effective date: October 31, 2025	80
Table 14-8: Zancudo Inferred Mineral Resource Estimate – Effective date: October 31, 2025	81
Table 14-9: Grades and Material Content at Various Equivalent Gold Cut-Off Grades	81
Table 16-1: Detailed Mine Layout	92
Table 16-2: Zancudo Development Schedule	93
Table 16-3: Site Operating Costs	97
Table 17-1: High Level Process Design Criteria	98
Table 17-2: Power Requirements	108
Table 21-1: Zancudo Total Capital Costs	114
Table 21-2: Zancudo Unit Operating Costs	115
Table 22-1: Key Parameters and Assumptions	116
Table 22-2: LOM Operating and Financial Data	117
Table 22-3: Zancudo Project Cash Flows	119
Table 22-4: Zancudo Project Sensitivity to Gold Price	120

Table 22-5: Zancudo Project Sensitivity to Capital Costs and Operating Costs and Royalties.....	120
Table 26-1: Recommended work program for Project Advancement over the Next 12 Months	125

FIGURES

Figure 4-1: Location Map of the Zancudo Project, Colombia.....	13
Figure 4-2: Map of the Mining Titles at the Zancudo Project	15
Figure 4-3: Location Map of La Candela Forest Reserve and the Falda de Cauca - Franá Biological Corridor Overlap with the Zancudo Concession Contracts (Source Denarius, 2023).....	18
Figure 5-1: Access from Medellin to the Zancudo Project.....	20
Figure 6-1: Historical Gold Roaster Chimneys at the Village of Sitio Viejo.....	22
Figure 6-2: Distribution of Historical Mine Workings at the Zancudo Project.....	23
Figure 7-1: Regional Geological Setting showing Lithotectonic and Morphostructural Map of Northwestern South America	27
Figure 7-2: Local Geology Map	28
Figure 7-3: Geological Map of the Zancudo Project	29
Figure 7-4: Core Photos of the Main Lithologies of the Zancudo Project.....	31
Figure 7-5: Schematic Three-Dimensional Block Model, Looking North, Showing Structural Control on Mineralization During Syn-Mineralization Deformation at Zancudo	32
Figure 7-6: The Geometry of the Vein Systems at Zancudo Showing Drillholes.....	33
Figure 7-7: The Geometry of the Veins in the Northern Zone at Zancudo (Albertos and Castaño targets) showing 3D Model with Drill Intersections (left) and Plan with Contoured AuEq Grades of Drillholes in the Manto Antigo Vein (right)	34
Figure 8-1: Porphyry System Model Showing the Zancudo Intermediate Sulfidation Epithermal Au-Ag Veins and the Titiribí Porphyry Au-Cu Deposits	37
Figure 9-1: Analysis of Soil Sampling Results for Gold at Zancudo	39
Figure 9-2: Rock Sampling Results for Gold at the Zancudo Project	40
Figure 10-1: Location Map of Drillhole Collars	42
Figure 11-1: Example of Certified Reference Samples Submitted During the 2024 Drilling Campaign.....	49
Figure 11-2: Analysis of Blank and Fine Blank Material for Au (g/t) at SGS During 2024 Program	50
Figure 11-3: Summary of Duplicate Submissions by Sample Type.....	51
Figure 13-1: Location of Composites Taken for Initial Metallurgical Testwork.....	54
Figure 13-2: Drillhole Locations for the Santa Catalina Metallurgical Composite	56
Figure 13-3: Drillhole Locations for the Manto Antigo Metallurgical Composite.....	57
Figure 13-4: Drillhole Locations for the La Miel Metallurgical Composite	58
Figure 13-5: TIMA-PMA Mineralogy	60
Figure 13-6: XRD Mineralogical Analysis.....	61
Figure 13-7: Gold Recovery vs. Time in Cleaner Flotation - Evaluation of P80, pH, and PAX	63
Figure 13-8: Gold Grade vs. Time in Cleaner Flotation - Evaluation of P80, pH, and PAX	64
Figure 14-1: Manto Antigo Gold Assay General Statistics	69
Figure 14-2: Manto Antigo Gold Assay log probability plot, showing a continuous population	70
Figure 14-3: Capped Au Composites Manto Antigo	71
Figure 14-4: Fit variogram for Manto Antigo	72
Figure 14-5: Modelled variogram for Manto Antigo	72
Figure 14-6: Manto Antigo showing the 93 drillholes that intercept the structure. Twenty-seven (27) holes from the 2024 program intercepted the structure. 2024 Collars identified in blue. Drill traces identified as red.....	73
Figure 14-7: Manto Antigo structure shows the capped composites used for the mineral estimate. The search ellipsoid is shown in green.....	74
Figure 14-8: Manto Antigo Kriged Au Estimate with Composites used for the Estimation	75
Figure 14-9: Manto Antigo Kriged Au Estimate with Composites used for the Estimation. Display limited to Indicated Mineralization.....	76
Figure 16-1: Zancudo General Area of Mineralization and Visual Topography.....	84
Figure 16-2: Modified Resue Vein Mining Sequence	85
Figure 16-3: Long Hole Open Stopping (LHOS)	86
Figure 16-4: Cut and Fill Mining	86

Figure 16-5: Room and Pillar Mining..... 87
Figure 16-6: RQD Data 88
Figure 16-7: Approximate Q Estimates 89
Figure 16-8: Manto Antiquo Zone 7 Room and Pillar Isometric View (NTS)..... 90
Figure 16-9: Generalized Mine Layout Santa Catalina, Manto Antiquo, La Miel Isometric View (NTS) 90
Figure 16-10: Santa Catalina Conceptual Ventilation System..... 95
Figure 17-1: Crushing Circuit..... 101
Figure 17-2: Grinding and Gravity Circuit 103
Figure 17-3: Flotation Circuit 105
Figure 17-4: Tailings Filtration 107
Figure 18-1: Titiribi Road Infrastructure..... 109
Figure 22-1 Zancudo Project After-Tax Sensitivity Analysis - IRR..... 121
Figure 22-2 Zancudo Project After-Tax Sensitivity Analysis – NPV @ 5%..... 121

1 SUMMARY

This technical report, prepared for Denarius Metals Corp. (“Denarius” or the “Company”) in accordance with National Instrument 43-101 standards by Scott E. Wilson, CPG, SME-RM of Resource Development Associates (“RDA”), evaluates the Zancudo gold-silver mineral deposit located in the Municipality of Titiribí, Department of Antioquia, Colombia (the “Zancudo Project” or “Project”). The deposit consists of intermediate sulfidation epithermal gold-silver veins and mantos hosted primarily in schists of the Late Jurassic to Early Cretaceous Arquia Complex.

An updated Mineral Resource Estimate effective October 31, 2025, reports 979,000 tonnes in the Indicated category grading 6.90 g/t Au and 84 g/t Ag (7.91 g/t AuEq) and 4.636 million tonnes in the Inferred category grading 5.58 g/t Au and 84 g/t Ag (6.59 g/t AuEq) at a 3.25 g/t AuEq cut-off. Mineral resources are not mineral reserves and do not have demonstrated economic viability. The estimate is based on over 35,000 meters of drilling and assumes underground mining with recoveries of approximately 85% for gold and 87% for silver.

1.1 MINERAL RESOURCE ESTIMATES

Geostatistical analyses and mineralization estimates have an effective date of October 31, 2025. Industry-standard grade estimation methods were employed to construct comprehensive block models representing global mineralization at the Zancudo deposit. The Mineral Resource estimate is based on the assumption of underground mining to support reasonable prospects for eventual economic extraction. Table 1-1 details the Indicated Mineral Resource estimate for the Project, reported at a cutoff grade of 3.25 grams per tonne gold equivalent (3.25 g/t AuEq). Table 1-2 details the Inferred Mineral Resource estimate for the Project, reported at a cutoff grade of 3.25 grams per tonne gold equivalent (3.25 g/t AuEq).

Table 1-1: Zancudo Indicated Mineral Resource Estimate (“MRE”) Effective date October 31, 2025. QP Scott Wilson C.P.G

Indicated Mineral Resources	Tonnes (x1,000)	Au g/t	Ag g/t	AuEq g/t	Au Ounces (x1,000)	Ag Ounces (x1,000)	AuEq Ounces (x1,000)
Au and Ag Indicated MRE Cutoff Grade 3.25 g/t AuEq	979	6.90	84	7.91	217	2,657	249

- Notes:
- Scott Wilson, CPG, President of RDA is responsible for this mineral resource estimate and is an independent Qualified Person (“QP”) as such term is defined by NI 43-101.
 - Reasonable prospects of eventual economic extraction were assessed by enclosing the mineralized material, in the block model estimate, in 3D wireframe shapes that were constructed based upon geological interpretations as well as adherence to a minimum mining unit with geometry appropriate for underground mining.
 - The cutoff grade of 3.25 g/t AuEq considered parameters of:
 - Metal selling prices: Au-US\$2,400/oz, Ag-US\$28/oz.
 - Recoveries of Au 85%, Ag 87%.
 - Operating costs of (US\$105/t mining, US\$42/t processing, US\$21/t G&A/off-site)
 - Royalty of 6.7%
 - Gold Equivalent Grade (“AuEq”) is estimated by the formula:
 - $AuEq = (Au \times 85\% \times US\$2,400 + Ag \times 87\% \times US\$28) / (85\% \times US\$2,400)$
 - Mineral resources are not mineral reserves and do not have demonstrated economic viability.
 - Figures may not add up due to rounding.
 - The QP knows of no other legal, political, environmental, or other risks that could materially affect the potential development of the mineral resources for the Project.

Table 1-2: Zancudo Inferred Mineral Resource Estimate (“MRE”) Effective date October 31, 2025. QP Scott Wilson C.P.G

Inferred Mineral Resources	Tonnes (x1,000)	Au g/t	Ag g/t	AuEq g/t	Au Ounces (x1,000)	Ag Ounces (x1,000)	AuEq Ounces (x1,000)
Au and Ag Inferred MRE Cutoff Grade 3.25 g/t AuEq	4,636	5.58	84	6.59	832	12,508	982

- Notes:
- Scott Wilson, CPG, President of RDA is responsible for this mineral resource estimate and is an independent Qualified Person (“QP”) as such term is defined by NI 43-101.
 - Reasonable prospects of eventual economic extraction were assessed by enclosing the mineralized material, in the block model estimate, in 3D wireframe shapes that were constructed based upon geological interpretations as well as adherence to a minimum mining unit with geometry appropriate for underground mining.

3. The cutoff grade of 3.25 g/t AuEq considered parameters of:
 - a. Metal selling prices: Au-US\$2,400/oz, Ag-US\$28/oz.
 - b. Recoveries of Au 85%, Ag 87%.
 - c. Operating costs of (US\$105/t mining, US\$42/t processing, US\$21/t G&A/off-site)
 - d. Royalty of 6.7%
4. Gold Equivalent Grade ("AuEq") is estimated by the formula:
 - a.
$$\text{AuEq} = (\text{Au} \times 85\% \times \text{US}\$2,400 + \text{Ag} \times 87\% \times \text{US}\$28) / (85\% \times \text{US}\$2,400)$$
5. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
6. Figures may not add up due to rounding.
7. The QP knows of no other legal, political, environmental, or other risks that could materially affect the potential development of the mineral resources for the Project.

1.2 PRELIMINARY ECONOMIC ASSESSMENT

The Zancudo Project PEA is based on the October 31, 2025, Mineral Resource Estimate. Over an approximately 11-year mine life, the plan contemplates mining and processing of 3.35 million tonnes of material using modified rescue and other suitable underground mining methods. The processing plant will treat material at an average rate of 925–1,000 tonnes per day using a conventional three-stage crushing, grinding, gravity and flotation circuit to produce a high-grade gold-silver concentrate.

Metallurgical recoveries are estimated at approximately 85% for gold and 87% for silver, with payable terms of 88.5% Au and 35% Ag in concentrate. The Project is expected to produce approximately 465,600 payable gold ounces and 2,188,100 payable silver ounces.

Initial capital costs, representing the remaining expenditures associated with reaching commercial production of gold-silver concentrates in 2026, are estimated at US\$11.04 million (including contingency). All-in sustaining costs (AISC) are forecast at US\$2,482 per payable gold ounce on a by-product credit basis.

At long-term prices of US\$4,000/oz gold and US\$50/oz silver, the Project generates strong economics with an after-tax undiscounted LOM free cash flow of US\$452.2 million, NPV5% of US\$323.8 million, IRR of 558.5%, and payback of less than 2 years.

Key economic results are summarized in Table 1-3.

Table: 1-3: Key Economic Results of the PEA

Assumption / Results	2026 PEA
Total tonnes processed over the LOM	3,348,000
Total waste mined over the LOM	715,000
Mine Life	11 Years
Average LOM process rate (tpd)	925 - 1000
Gold grade mined – LOM average (g/t)	5.75
Silver grade mined – LOM average (g/t)	66.71
Gold recovery – LOM average	85%
Silver recovery – LOM average	87%
Total gold production (payable ounces)	465,600
Total silver production (payable ounces)	2,188,100
Expected long-term gold price (US\$/oz)	\$4,000
Expected long-term silver price (US\$/oz)	\$50
LOM revenue (US\$ millions)	\$1,972
LOM operating costs and royalties (US\$ millions) (Table 1-5)	\$1,249
LOM cash cost per ounce of gold (US\$) (Table 1-5)	\$2,448
Initial capital costs (US\$ millions) (Table 1-4)	\$11.04
Sustaining capital costs (US\$ millions)	\$15.90
LOM AISC per ounce of gold (US\$) (Table 1-5)	\$2,482
After-tax undiscounted LOM Project Cash Flow (US\$ millions)	\$452.20
After-Tax NPV (5% discount) (US\$ millions)	\$323.80
After-Tax IRR	558.5%
Payback Period	<2 Years

This preliminary economic assessment is preliminary in nature, and there is no certainty that the reported results will be realized. The Mineral Resource estimate used for the PEA includes Inferred Mineral Resources which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the projected economic performance will be realized. The basis of the PEA is to demonstrate the economic viability of the Zancudo Mine, and the results are only intended as an initial, first-pass review of the Project economics based on preliminary information. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves.

1.3 CAPITAL COSTS AND OPERATING COSTS

Capital costs are summarized in Table 1-4 and operating costs/AISC are summarized in Table 1-5. The estimates were prepared from first-principles engineering and current local contractor quotations/agreements for an underground mining operation utilizing contract mining and a processing plant that will be installed under a “build and operate” arrangement with a local civil engineering and industrial construction services firm (the “Plant Contractor”). The local mine contractor is responsible for certain capital development and all operating development within the underground mine and will be compensated for such work through its mine operating contract with the Company. Treatment and refining charges for the gold-silver concentrate are factored into the payability rate for silver production pursuant to the commercial offtake contract.

Initial capital expenditures (including contingency), representing the remaining expenditures associated with reaching commercial production of gold-silver concentrates in 2026, is US\$11.04 million. Sustaining capital over the LOM totals US\$15.90 million, of which \$13.4 million is associated with capital development in the Brisas area beyond the initial construction period and \$2.5 million corresponds to the 15,000 meters exploration drilling program commencing in April 2026 and being carried out through 2026.

Table: 1-4: Capital Cost Estimates for the Project

Initial Capital Costs	Costs (US\$)
Capital development at the Brisas area during the plant construction period	2,290,000
Completion of access road	2,195,000
Crushing plant	108,000
Crushing plant electrical	49,000
Processing plant, net of expenditures financed by the plant contractor	362,000
Tailings storage facility	687,000
Environmental permitting related works and programs	3,333,000
Indirect costs	1,150,000
Owner's costs, including lab and other site infrastructure	450,000
Total initial capital costs before contingency	10,623,000
Contingency	417,000
Total initial capital costs	11,040,000
Sustaining Capital Costs LOM	
Exploration	2,520,000
Development	13,364,000
Other Sustaining	17,000
Total Sustaining	15,901,000
Total LOM Capital	26,941,000

Table: 1-5 PEA Operating Costs

Operating Costs	LOM (US\$M)	Per Oz Au (US\$)
Mining	782.7	1,681
Processing	163.3	351
Site Administration and Social Programs	26.5	57
Shipping & Port Handling	82.3	177
Selling and marketing	38.7	83
Royalties	155.6	334
Total operating costs and royalties	1,249.1	2,683
Less: silver by-product credits	(109.5)	(235)
Total cash costs	1,139.6	2,448
Sustaining capital and exploration	15.9	34
All-in sustaining costs (AISC)	1,155.5	2,482

1. All figures in constant 2026 US dollars.
2. Total Cash Costs and AISC is reported on a by-product credit basis (silver revenue is deducted).
3. Minor rounding differences may exist in the full model.

1.4 LOM OPERATING AND FINANCIAL DATA

A summary of the operating and financial metrics over the mine life of the Project is summarized in Table 1-6 below.

Table 1-6: Operating and Financial Metrics

Year	Production ⁽³⁾		Revenue ⁽⁴⁾	Operating Costs & Royalties ⁽⁵⁾	Operating Cash Flow ⁽⁶⁾	Sustaining Capex ⁽⁷⁾	Initial Capex ⁽⁷⁾	Project Cash Flow	AISC ⁽⁸⁾
	Gold	Silver							
	Kozs		US\$ Millions						
2026 ⁽²⁾	11	40	44.8	30.6	9.5	3.9	11.0	(5.4) ⁽⁸⁾	3,029
2027	37	128	154.3	99.2	36.5	8.3	-	28.2	2,733
2028	41	287	177.5	112.2	43.2	3.7	-	39.4	2,493
2029	41	275	177.2	112.3	43.0	-	-	43.0	2,413
2030	45	150	187.3	120.5	44.3	-	-	44.3	2,513
2031	44	175	185.0	118.7	44.0	-	-	44.0	2,495
2032	44	147	183.4	118.4	43.2	-	-	43.2	2,522
2033	48	177	201.2	127.7	48.8	-	-	48.8	2,471
2034	54	253	229.4	141.9	58.0	-	-	58.0	2,385
2035	53	266	226.2	139.8	57.2	-	-	57.2	2,377
2036	48	290	205.5	127.8	51.5	-	-	51.5	2,374
Total	466	2,188	1,971.8	1,249.1	479.2	15.9	11.0	452.2	2,482

- Notes:
1. All figures are rounded to reflect the relative accuracy of the estimate.
 2. Includes production and cash flow from early-stage mining operations and sale of run-of-mine ("ROM") material during the construction period. Processing plant operations and sale of gold-silver concentrates commencing August 2026.
 3. Production represents payable gold and silver from the sale of ROM material and concentrates.
 4. Revenue is based on spot gold and silver prices of US\$4,000 and US\$50 per ounce, respectively, and is based on the payability rates and other key terms in the Company's long-term offtake agreement.
 5. Refer to Table 1-5 for details.
 6. Operating cash flow is equal to revenue less operating costs & royalties and income taxes.
 7. Refer to Table 1-4 for details.
 8. AISC is a non-IFRS measure and is calculated on a by-product credit basis by deducting revenue from silver production from the sum of operating costs & royalties and sustaining capex, divided by the number of gold ounces produced.

9. Please see “*Cautionary Statement on PEA and Use of Inferred Resources*” below for the limitations, explanations and cautionary language on the use of the PEA.

1.5 PROPERTY DESCRIPTIONS AND OWNERSHIP

The Project is situated approximately 30 km southwest of Medellín in the Municipality of Titiribí, Department of Antioquia, Colombia. It comprises two mining concession contracts totaling approximately 1,061 hectares held by Zancudo Metals Sucursal Colombia, a branch of Denarius. Recent title integration and approval of the *Programa de Trabajos y Obras* (PTO) have advanced the Project to medium-scale mining status. Surface rights for key infrastructure areas are secured and an environmental license is in place.

1.6 GEOLOGY AND MINERALIZATION

Mineralization consists of structurally controlled epithermal gold-silver veins and flat-lying mantos hosted in schists of the Arquia Complex. The system has a known strike length of approximately 2.5 km and a vertical extent exceeding 650 m. Multiple high-grade vein systems remain open along strike and at depth.

1.7 CONCLUSIONS

The Qualified Persons conclude that the Project represents a high-grade underground gold-silver development opportunity with robust PEA economics, modest initial capital requirements, and significant exploration upside. The technical information reviewed is reliable, and no material risks have been identified that would preclude further advancement.

The Zancudo Project MRE has been evaluated using standard mining industry methods to demonstrate the reasonable prospects of eventual economic extraction. This study relied on scientific data such as drilling results, geological properties, and processing tests to set appropriate minimum grades for reporting mineral resources, ensuring only material within well-understood geological structures is included. The resources are categorized as indicated or inferred based on how closely spaced the drill holes are, the known geology of the veins, and lab studies of metallurgical recovery.

1.8 RECOMMENDATIONS

The Qualified Persons recommend a focused near-term work program over the next 12 months to increase Mineral Resource confidence, optimize the mine plan, and prepare an updated Preliminary Economic Assessment following the next mineral resource estimate. The program includes 12,000–15,000 meters of infill and targeted step-out drilling, additional mine design and planning, metallurgical variability testing, and continued environmental and community baseline work (detailed in Section 26).

2 INTRODUCTION

2.1 TERMS OF REFERENCE

Denarius retained Resource Development Associates Inc. (“RDA”) to prepare an independent Technical Report and Preliminary Economic Assessment (“PEA”) in accordance with National Instrument 43-101 (“NI 43-101”) for the Zancudo Gold-Silver Mineral Deposit, located in the Municipality of Titiribí, Department of Antioquia, Republic of Colombia.

The Qualified Persons responsible for this report are:

- **Scott E. Wilson, CPG, SME-RM**, President of Resource Development Associates Inc., Highlands Ranch, Colorado, who acted as the overall Qualified Person and is responsible for Sections 1 through 12, 14, 15, 19, 20 and 23 through 27 of the Technical Report. Mr. Wilson conducted a personal site visit of the Project on March 4 and 5, 2026.
- **Ray “Zeke” Blakeley, QP, SME-RM**, Principal of MineTech, LLC, Butte, Montana, who is responsible for Section 16 and co-authored Sections 18, 21, 22, 25 and 26 of the Technical Report. Mr. Blakeley conducted a personal site visit of the Project on September 15 and 16, 2023.
- **Jeffrey L. Woods, SME-RM, MMSA QP**, President of Woods Process Services LLC, Reno, Nevada, who is responsible for Sections 13 and 17 and contributed to portions of Sections 1 through 12, 14, 19, 20 and 23 through 27 of the Technical Report. Mr. Woods conducted a personal site visit of the Project on September 15 and 16, 2023.

The authors have worked closely with Denarius to ensure compliance with the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 29, 2019) and the CIM Mineral Exploration Best Practice Guidelines (November 23, 2018).

This report was prepared by Mr. Wilson at the request of Mr. Serafino Iacono, Executive Chairman of Denarius.

2.2 SOURCES OF INFORMATION

This Technical Report is based on technical reports, maps, published reports, company letters, memoranda, public disclosure, and other information provided by Denarius or otherwise in the public domain, as listed in Section 27 - References. Mineral resource estimates incorporated information from Denarius including geology maps, drilling databases, underground sampling databases, geology logging codes, QA/QC programs, underground development surveys, core photography, and results of metallurgical testing programs.

2.3 EFFECTIVE DATE

The effective date of this technical report is March 19, 2026.

2.4 UNITS OF MEASURE

The metric system has been used throughout this report. Tonnes are metric tonnes of 1,000 kilograms (2,204.6 lb). All monetary figures are expressed in United States dollars (US\$) unless otherwise noted.

3 RELIANCE ON OTHER EXPERTS

The authors of this Technical Report have relied upon the Title Opinion prepared by MIR Asesoría Minera, as well as written and verbal communications with Denarius, for information regarding land tenure, leases, and surface rights used in the preparation of Section 4 - Property Description. MIR Asesoría Minera is considered expert in matters of Colombian mining law and land title. MIR Asesoría Minera is not a Qualified Person as defined by NI 43-101.

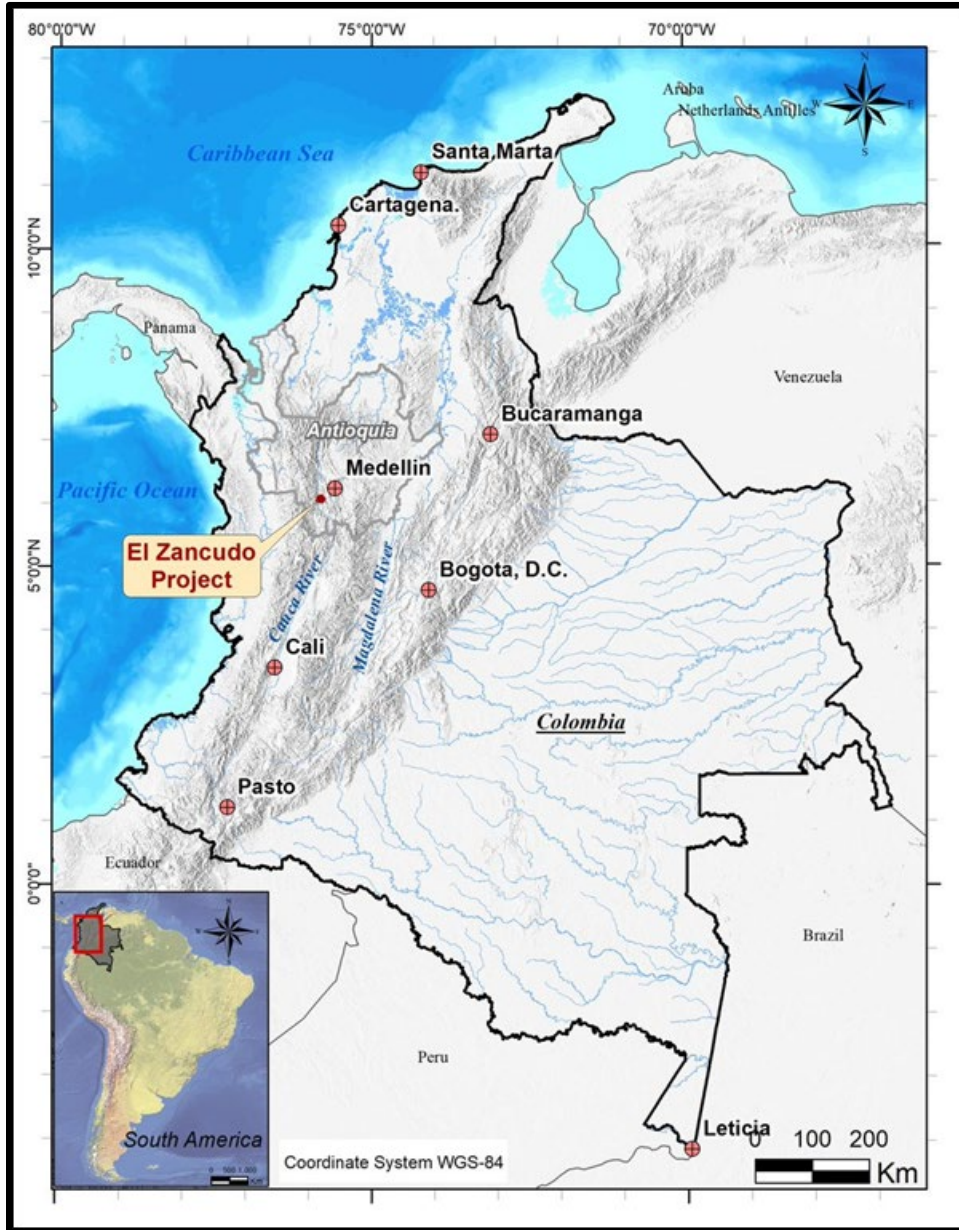
No other experts were relied upon in the preparation of this Technical Report.

4 PROPERTY DESCRIPTION AND LOCATION

4.1 PROPERTY LOCATION

The Zancudo - Titiribí district lies on the western flank of the Central Cordillera, immediately east of the Cauca River. The terrain is rugged, with approximately 1,750 m of local relief between the Cauca River (approximately 450 masl) and the peaks south of Titiribí (approximately 2,200 masl). The Zancudo mineralized structures outcrop along the north-trending ridge of Cerro Vetas between 900 masl and 1,350 masl.

The Zancudo Project is located in the Municipality of Titiribí, Department of Antioquia, Republic of Colombia (Figure 4-1). The Project is approximately 30 km southwest of Medellín, the departmental capital. The village of Sitio Viejo, within the Project area, is situated at 6°04'30" N, 75°47'26" W and an elevation of 1,302 masl.



Source RDA 2023

Figure 4-1: Location Map of the Zancudo Project, Colombia.

4.2 MINERAL TITLES

All mineral resources in Colombia belong to the state and can be explored and exploited by means of concession contracts granted by the state. The mining authority is the National Mining Agency (*Agencia Nacional de Minería* or ANM). As of January 1, 2024, the ANM resumed direct operations as the mining authority in Antioquia, assuming all functions previously delegated to the Government of Antioquia through its Secretariat of Mines. The Ministry of Mines and Energy is in charge of setting and overseeing the Government’s national mining policies. Mining is governed by the Mining Law 685 of 2001 and subsequent decrees and resolutions, except for mining titles granted before that law, which are subject to the law in place at the time of their granting, which is most commonly Decree 2655 of 1988. Under Mining Law 685 of 2001, there is a single type of concession contract covering exploration, construction and mining that is valid for 30 years and can be extended for another 30 years.

Denarius Metals owns two adjoining mining concession contracts with a total area of 1,060.9373 hectares (ha) as listed in Table 4-1 and Figure 4-2 (the “Zancudo Concessions”). The properties are held by Zancudo Metals Sucursal Colombia (“Zancudo Colombia”, formerly Gran Colombia Gold Titiribí Sucursal Colombia), a branch of Zancudo Metals Corp., Panamá (previously called Gran Colombia Gold Titiribí Corp., Panamá)

Table 4-1: Summary of Zancudo Mining Titles

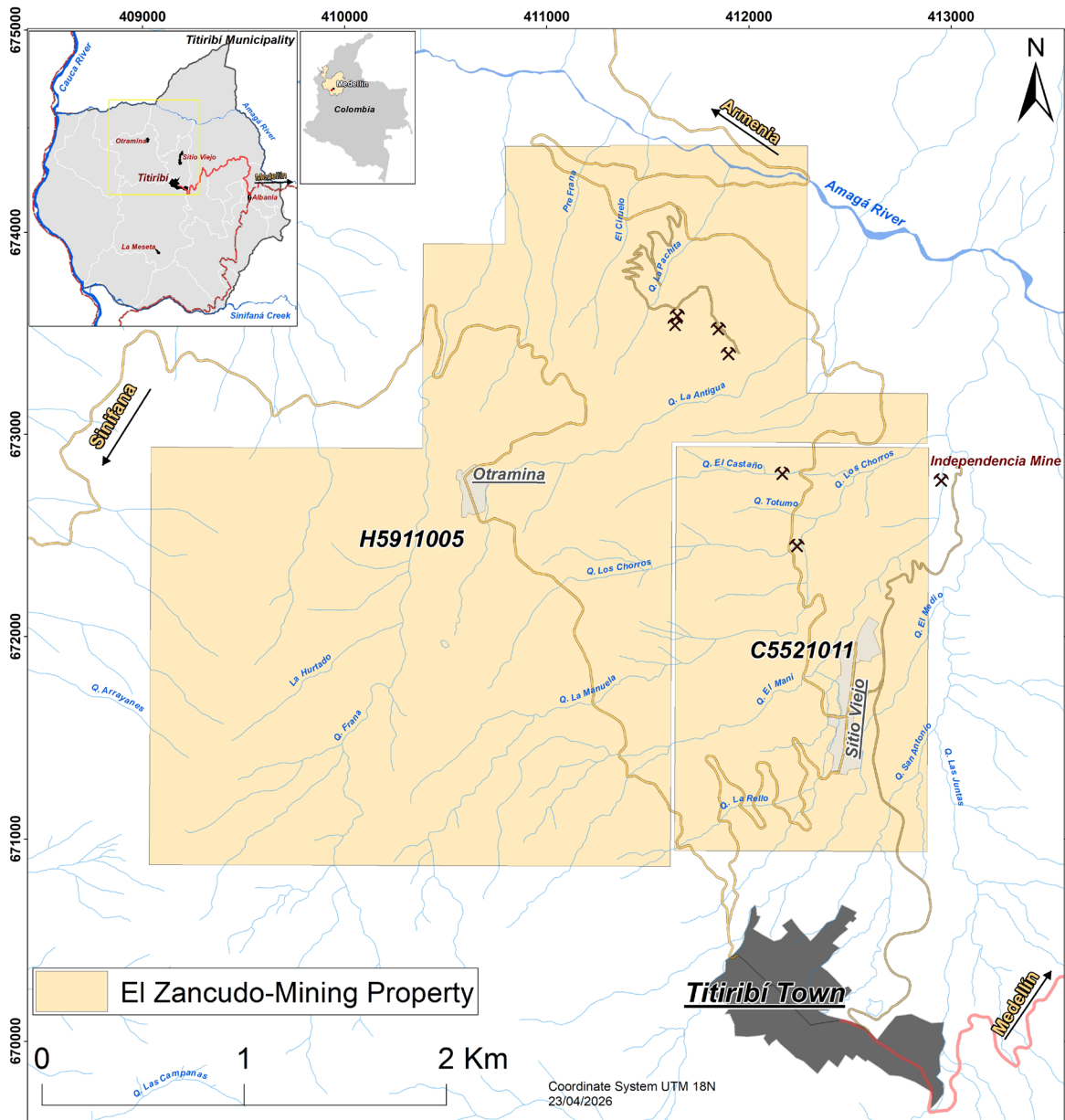
Title Number	National Mining Cadastre (RMN) No.	Old Contract No.	Type	Title Owner	Area (ha)	Date of Registration	Date of Expiration
H5911005	HGIE-07	5911	Concession contract (Law 685 of 2001)	Zancudo Metals Corp.	810.8709	March 12, 2026	May 8, 2036
C5521011	FDHK-01	5521	Concession contract (Decree 2655 of 1988)	Zancudo Metals Corp.	250.0664	January 7, 1998	January 6, 2028

* Zancudo Colombia filed a 30-year renewal application for C5521011 on September 2, 2025.

The Zancudo Concessions are located in the municipality of Titiribí, Department of Antioquia, Republic of Colombia. Zancudo Colombia is the registered title holder of the mining rights that conform the Zancudo Project. The Zancudo Concessions are valid, binding, and enforceable mining titles in accordance with their terms and under applicable Colombian laws.

Key recent developments (all confirmed by official resolutions):

- On February 9, 2026, the ANM executed the integrated mining concession contract H5911005, merging titles H5911005, HDWA-02, and HEOM-12 (approved via Resolution 2023060352975). The integrated title covers approximately 811 hectares in the Municipality of Titiribí, Antioquia. Term extends to May 8, 2036; registered in the National Mining Registry on March 12, 2026.
- On April 13, 2026, the ANM issued Resolution GNET-1289, formally approving the *Programa de Trabajos y Obras* (PTO) and its complement for the integrated H5911005 concession. The title is now classified as MEDIANA MINERÍA (medium-scale mining). The PTO includes updated resource/reserve estimates, underground mining methods (room and pillar, cut and fill), and production scheduling.
- Concession C5521011 remains separate. It has an approved operations and investment plan (PTI – Resolution 2023060353356) and a full environmental license (Resolution 040-RES2412-6009, CORANTIOQUIA, December 31, 2024). It is fully registered in the RUCOM system.
- Zancudo Colombia is the registered title holder of all mining rights. The concessions are valid, binding, and enforceable under Colombian law.



Source RDA 2023

Figure 4-2: Map of the Mining Titles at the Zancudo Project

4.2.1 NATURE AND EXTENT OF ISSUER’S INTEREST

4.2.1.1 SURFACE RIGHTS

The granting of a concession contract in Colombia does not include a legal right of surface access, for which permission must be obtained from the landowners or community.

Zancudo Colombia owns the surface rights over a land lot located in the District of Sitio Viejo, Municipality of Titiribí, with an approximate area of 22.1463 ha. In addition, its group company, Industrias Argentum S.A.S., owns a separate property with an approximate area of 12.2800 ha, where the processing plant will be located, as summarized in Table 4-2.

Table 4-2: Surface Land Ownership and Rental Contracts at the Zancudo Project

License Number	Name	Rights	Owner	Location	Area (ha)	Time (years)	Renewal
033- 19793	La Arabia	Owner	Zancudo Metals Corp.	Sitio Viejo, Titiribí	22.1463	Permanent	Permanent
033-21232	LA ARABIA SEGREGACION (Processing Plant)	Owner	INDUSTRIAS ARGENTUM S.A.S.	Sitio Viejo, Titiribí	12.2800	Permanent	Permanent

Zancudo Colombia has all necessary surface access rights for current exploration and planned development. No material disputes or encumbrances are known.

4.2.1.2 WATER RIGHTS

Water rights in Colombia are administered separately from mineral concession contracts by the regional environmental authority (CORANTIOQUIA for the Titiribí area). Zancudo Colombia previously submitted applications for water use and discharge permits in support of both exploration and future exploitation activities.

With the full environmental license issued under Resolution 040-RES2412-6009 (CORANTIOQUIA, December 31, 2024) for concession C5521011 and the recent approval of the Programa de Trabajos y Obras (PTO) for the integrated concession H5911005 via Resolución GNET-1289 dated April 13, 2026, water management, supply, recycling, and discharge requirements are now formally incorporated into the approved exploitation framework. Zancudo Colombia continues to coordinate with CORANTIOQUIA to finalize registration and any supplementary water concessions required for full-scale operations.

No material issues regarding water availability, quality, or permitting have been identified that would prevent the development of the Zancudo Project.

4.3 ROYALTIES, AGREEMENTS AND ENCUMBRANCES

Royalties are payable to the state at an effective rate of approximately 3.2% of the gross value at the mine mouth for gold and silver (Law 141 of 1994, modified by Law 756 of 2002). For royalties, the gold and silver price is set by the government and is typically 80% of the average of the London afternoon fix price for the previous month.

The Zancudo Project is subject to an aggregate of 3.5% NSR with third parties on future production, payable in cash.

4.4 ENVIRONMENTAL LIABILITIES AND PERMITTING

4.4.1 ENVIRONMENTAL LIABILITIES

No large-scale regional environmental liabilities have been identified. Local liabilities are possible at the site do exist due to prior mining activities. The regional environmental authority CORANTIOQUIA has not identified any environmental liabilities at the Project. However, the Project has potential environmental liabilities due to past mining activities including surface disturbance and degradation including deforestation; waste rock, scoria and tailings from past mining and smelting operations; and contamination of soil and water by mercury, cyanide, arsenic, acid drainage, heavy metals, and solids from past mining operations.

Under Colombian mining and environmental laws, companies are responsible for any environmental remediation and any other environmental liabilities based on actions or omissions occurring from and after the entry into force and effect of the relevant concession contract, exploration license or mining request, as applicable, even if such actions or omissions occurred at a time when a third party was the owner of the relevant mining title. On the other hand, companies are not responsible for any such remediation or

liabilities based on actions or omissions occurring before the entry into force and effect of the relevant concession contract, exploration license or mining request, as applicable, from historical mining by previous owners and operators, or based on the actions or omissions of third parties who carry out activities outside of the mining title such as illegal miners.

There is no known artisanal mining on the property.

4.5 OTHER SIGNIFICANT FACTORS AND RISKS

The La Candela Forest Reserve covers part of the land title HDWA-02 (5757) which is shown below in Figure 4 3. The Candela reserve was created as a result of Municipal Agreement 007 of the year 2000. This land is defined as a Forest Reserve Zone. It is considered a sensitive area given the environmental characteristics of the area and the repercussions for the inhabitants of Titiribí. There is no prohibition to mining, but further work will be required.

The Falda de Cauca and Franá Biological zones occur on the western side of the concessions and overlap parts of title HDWA-02 and HEOM-12 concessions. Current legislation does not restrict mining activities in these zones; however, they are socially and environmentally sensitive zones, and a local municipal agreement has declared these to be Forest Reserves. The area of overlap of the protected areas with the title is not known to be a significant target for exploration.

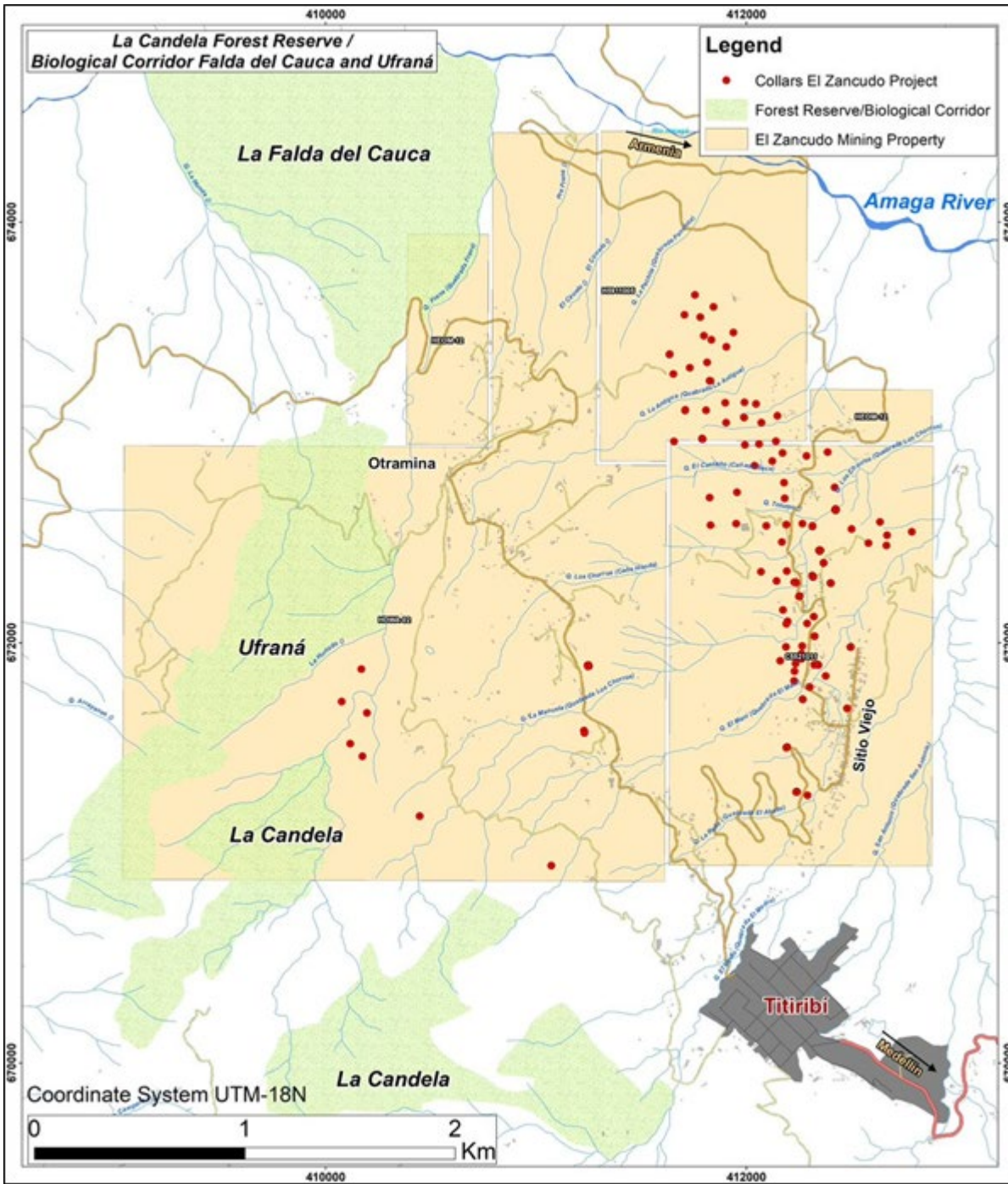


Figure 4-3: Location Map of La Candela Forest Reserve and the Falda de Cauca - Franá Biological Corridor Overlap with the Zancudo Concession Contracts (Source Denarius, 2023)

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 TOPOGRAPHY, ELEVATION AND VEGETATION

The Zancudo Project lies within the tropical moist forest ecological zone of the Holdridge Life Zone climatic classification system. The natural vegetation consists of tropical forest that has been partially cleared for pasture, with areas of secondary forest regrowth. Current land use includes cattle grazing, small-scale coal mining, and limited cultivation of coffee, sugar cane, citrus fruits, and bananas.

5.2 LOCAL RESOURCES AND INFRASTRUCTURE

Personnel for exploration programs and potential future mining operations are readily available from the towns of Sitio Viejo, Titiribí, and neighboring districts. The presence of existing coal mines in the district suggests that the local area can supply a basic workforce for mining activities.

The town of Titiribí is connected to the Colombian national power grid. The region experiences high rainfall and has abundant surface water resources. Water rights are held by the State and governed by Decree 1541 of 1978.

5.3 ACCESSIBILITY

The Zancudo Project is located approximately 30 km southwest of Medellín, the capital of the Department of Antioquia and Colombia's second-largest city (population approximately 2.5 million). The nearest international airport is Aeropuerto Internacional José María Córdova, which serves Medellín.

The current exploration office is located in the village of Sitio Viejo, near the town of Titiribí. Titiribí is approximately 56 km from Medellín and can be reached in about 1.5 hours by paved road via the Autopista Sur (Route 25) south to Caldas, then west on Route 60 through Amagá, followed by a secondary road into Titiribí (Figure 5-1).

Access within the Zancudo Project area is via unpaved roads. One road leads from Sitio Viejo to the Independencia Mine, and another higher-elevation road runs from Titiribí to the village of Otra Mina and beyond.

As part of the initial capital costs, Zancudo Colombia is constructing a 3.7 km access road that bypasses Titiribi and Sitio Viejo, connecting the Project mine and processing facilities with the main highway.

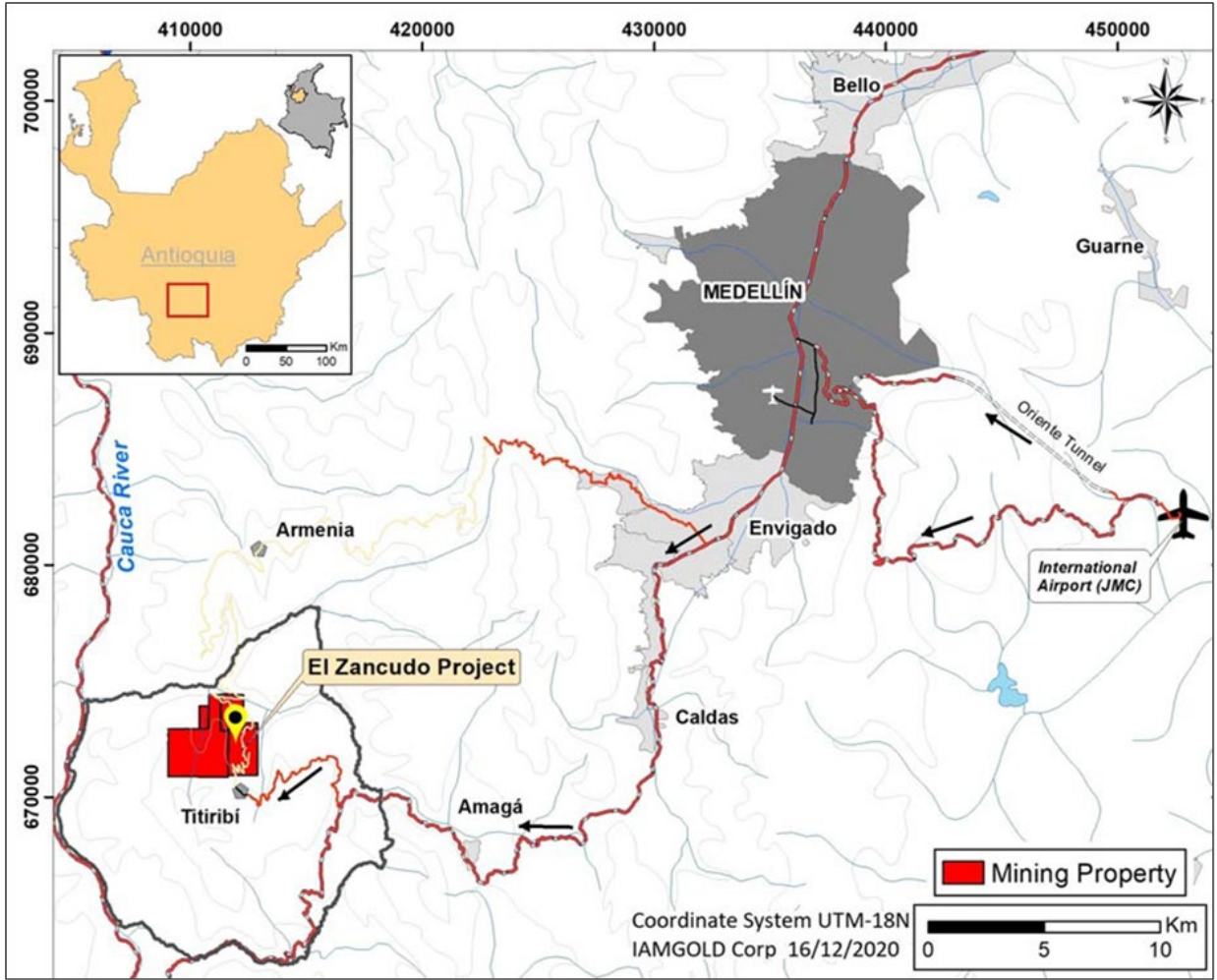


Figure 5-1: Access from Medelin to the Zancudo Project

6 HISTORY

The Zancudo Project has a long history of gold and silver mining dating back to Spanish colonial times. Modern exploration and small-scale production have been conducted by several companies since the 1980s.

6.1 EXPLORATION AND DEVELOPMENT RESULTS OF PREVIOUS OWNERS.

All exploration and drilling completed by previous owners is detailed in Sections 9 and 10 of this Technical Report.

6.2 HISTORIC MINERAL RESOURCES AND RESERVE ESTIMATES

Between 1985 and 1993, Compañía de Reciclaje Minero, S.A. (COREMINE) carried out studies to extract gold and silver from scoria dumps at Sitio Viejo. A historical proven and probable reserve estimate of 574,000 tonnes grading 4.40 g/t gold and 222.25 g/t silver was reported for the scoria dumps (Flores, 1991; James, 2006).

This is a historical estimate as defined in NI 43-101. The Qualified Person has not performed sufficient work to classify this historical estimate as current mineral resources or mineral reserves. The issuer is not treating the historical estimate as current mineral resources or mineral reserves.

6.3 HISTORIC PRODUCTION

6.3.1 MINING 1793 – 1945

Gold was first discovered in the Zancudo district in 1746. Mining has been carried out at Zancudo since 1793 in 58 mines. The nineteenth century mining companies were the Sociedad de Minas de Antioquia, formed in 1828, the Sociedad de Los Chorros and the Sociedad de Otra Mina. The most important company was the Sociedad de Zancudo that operated for a century from 1848-1948, with the most important mining period being from 1863-1927. From 1898 Sociedad de Zancudo was owned 57% by La Compañía Unida de Zancudo of Paris and Medellin, formed as a holding company to recapitalize it. The Zancudo mine was closed in 1945.

The first gold ore roaster was installed in 1851 at Sabaletas, 6 km southeast of Sitio Viejo, and others later at Sitio Viejo to treat refractory gold associated with arsenopyrite using locally- produced coal. The high-grade ore was hand cobbled and sent directly to the roasters. The lower grade ore was crushed in stamp mills, the sands were concentrated by gravity on Wilfley tables and “German” tables, and the fines by flotation. Free gold was panned from the concentrates of the Alto Chorros mines. The smelting process separated the ore by pooling into a primary matte, containing the precious metals, and slag. The primary matters were then refined through progressive oxidation of a mass of crude molten lead. Other metals such as arsenic and lead were also oxidized, leaving a bottom residue of molten precious metals. Hydrometallurgical processes were introduced in 1910 to treat the primary matter by sulfidization to recover silver, leaving a gold-bearing residue which was treated by cyanidation (Grosse, 1926; Flores, 1991; James, 2006). Three of the twelve brick chimneys still stand at Sitio Viejo (Figure 6 1).



Source RDA 2023

Figure 6-1: Historical Gold Roaster Chimneys at the Village of Sitio Viejo

Annual production data is generally lacking except for the period of 1912-1922 when the Sociedad de Zancudo reported production of 129,325 ounces (4.2 t) of gold and 958,570 ounces (30.8 t) of silver from 284,370 tonnes of ore (Table 6 2). The recovered grade was reported to be 14.62 g/t gold and 108.37 g/t silver. Free gold reportedly accounted for 53.5% of the total gold, and the balance was produced by smelting (Grosse, 1926). The head grade from 1864-1899 was 16.66 g/t Au and 256.61 g/t Ag (Botsford, 1926).

Table 6-1: Gold and Silver Production by Sociedad de Zancudo, 1912-1922

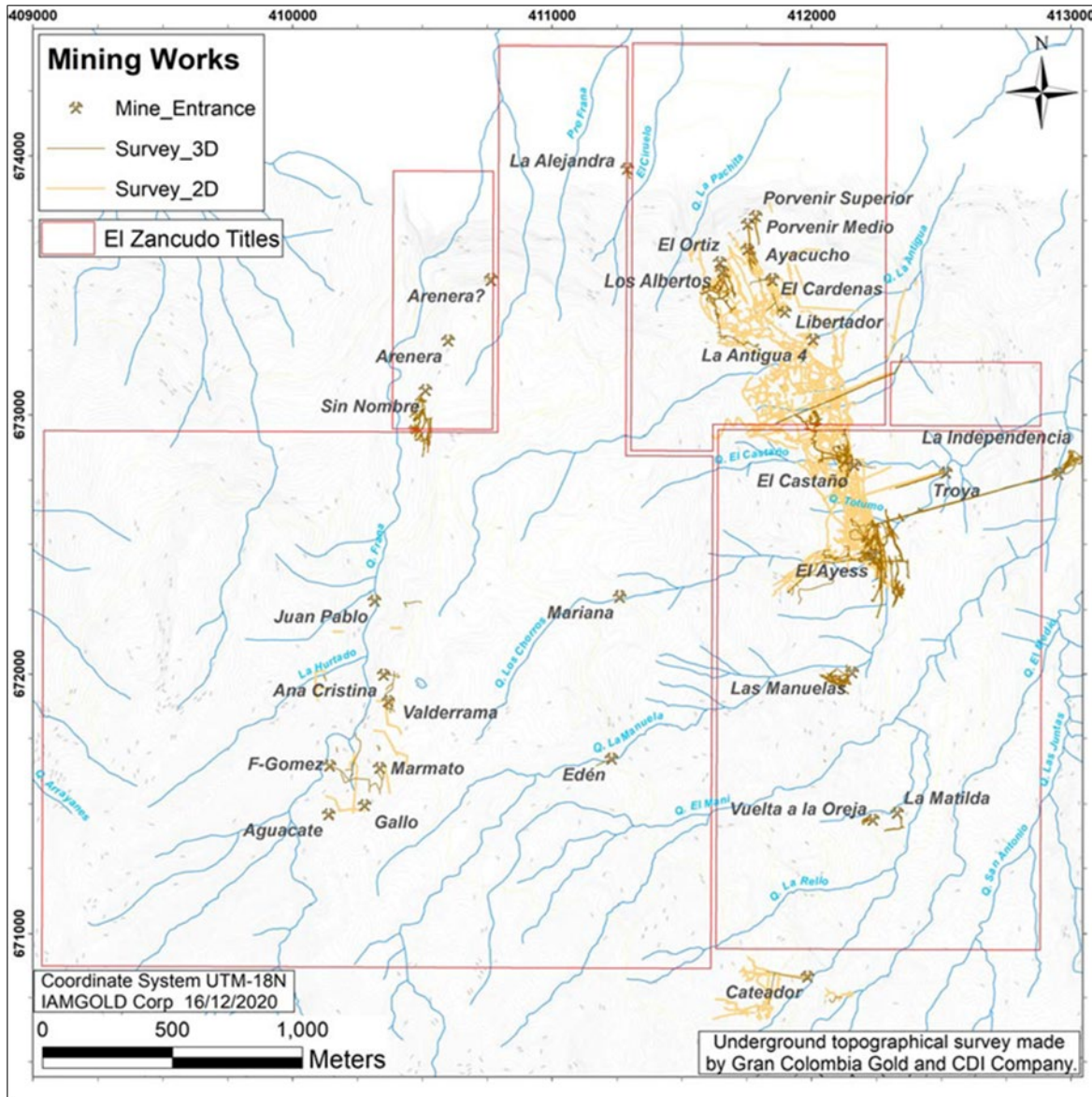
Years	Ore (t)	Au (oz)	Au (kg)	Ag (oz)	Ag (kg)
1912-1922	284,370	129,325	4,158	958,570	30,819

The 2021 Redwood technical report provided a summary of the estimated total production from the Zancudo District from 1793 to 2006 from various sources. The estimates ranged between 1.4 and 2 million ounces (Moz) AuEq (43.1 to 64.3 t) according to different estimates (Table 6 3).

Table 6-2: Estimates of the Total Historical Production of Gold and Silver Expressed as Au Equivalent from the Zancudo District

Years	AuEq (Moz)	AuEq (t)	Source
1793-1919	1.451	45.1	Miller & Singewald (1919), Emmons (1937)
1794-1922	1.386	43.1	Botsford (1926)
1793-2006	1.5 to 2.0	48.2 to 64.3	James (2006)

The historic mine workings are shown in Figure 6 2 and have been plotted from historical mine plans and underground surveys carried out by Gran Colombia and IAMGOLD Colombia.



Source RDA 2023

Figure 6-2: Distribution of Historical Mine Workings at the Zancudo Project

6.3.2 COREMINE, 1985-1993

COREMINE carried out studies to extract gold and silver from the scoria dumps at Sitio Viejo between 1985 and 1993. It is reported a historical proven and probable reserve estimate was made of the scoria dumps of 574,000 t grading 4.40 g/t gold and 222.25 g/t silver and was dated 1991 and was disclosed in a private disclosure document by Flores (1991) and quoted in a report by James (2006). The data and methodology used to calculate this estimate has not been verified. This MRE is a historical estimate as defined in NI 43-101, and the mineral reserve categories for this estimate predate the CIM standards and definitions for mineral reserve classification, and therefore do not conform with the current definitions of mineral reserves as stated in NI 43-101. The estimates are of unknown reliability but are included for purposes of depicting the history and development of the property. There is no plan to conduct any work to verify this historical estimate, and in any event, it is the QP's understanding that these reserves were subsequently mined by a prior operator. No QP has done sufficient work to classify the historical estimate as current mineral reserves. The issuer is not treating the historical estimate as current mineral resources or mineral reserves.

6.3.3 CDI, 1993-2010

Mining contract 5521 was returned to the owner Compañía Minera El Escorial S.O.M., which subsequently made an agreement with Consorcio de Inversionistas, C.D.I., S.A. (CDI) in 1993 to produce gold and silver from the scoria and from underground vein mining. CDI built a pilot plant at Sitio Viejo to treat the scoria in 1994.

CDI rehabilitated the Independencia, La Matilde and El Castaño mines, and built a 120 t/d mineral treatment plant at the Independencia Mine to concentrate ore by gravimetry and flotation. The concentrates were roasted and trucked to the pilot plant at Sitio Viejo for cyanidation. However, the plant was never fully operational. CDI carried out small scale exploitation of the mines from 2002 until about 2009; production in 2006, for example, was 112 oz (3.488 kg) of gold and 303 oz (9.438 kg) of silver (CDI, 2007).

6.3.4 PROYECTO SABALETAS S.A.S., 2000'S – 2013

Proyecto Sabaletas S.A.S. (Sabaletas), a subsidiary of Mineros S.A. (Mineros), a Colombian gold mining company, reprocessed scoria to recover gold and silver under a contract from CDI in the 2000's to 2013. Mineros re-processed about 70,000 t of scoria with a grade of 8 g/t Au at Sabaletas. The plant operated at Sitio Viejo from 2009 to 2013 and processed about 135,407 t of scoria grading 4 g/t Au. A summary breakdown of the reported production is shown in (Table 6 4).

The plant had a capacity to treat 6,000 t per month. It consisted of three stages of crushing and two stages of grinding in ball mills to 70% passing 325 mesh (-44 microns), followed by gold and silver dissolution in agitated cyanide tanks and Merrill Crowe precipitation using zinc powder. The zinc precipitate containing gold and silver was sold to a smelter in Medellin.

Table 6-3: Gold and Silver Production from Scoria Dumps by Proyecto Sabaletas S.A.S., 2009-2011

Year	Milled (t)	Au (g/t)	Au Recovery (%)	Au Production (kg)	Ag (g/t)	Ag Recovery (%)	Ag Production (kg)
2009	18,298	3.94	60.8	45.08	unknown	unknown	
2010	71,480	4.12	64.2	191.98	unknown	unknown	3,397.91
2011	45,629	3.94	59.0	100.46	unknown	unknown	2,234.53
Total	135,407	4.04	61.7	337.52			5,632.44

Source SRK 2023

6.3.5 GRAN COLOMBIA AND IAMGOLD 2010-2022

Gran Colombia Gold Corp. ("Gran Colombia") bought the Zancudo Project from CDI in 2010 for US\$15 million in cash. Gran Colombia carried out exploration, including a total of approximately 14,000 m of diamond drilling, in 2011 and 2012 that is described in a report by Gaviria et al. (2013). The exploration program was operated by its subsidiary Mineros Nacionales S.A. in 2013. Anglo American plc evaluated the porphyry potential of Zancudo in 2014. IAMGOLD Colombia, pursuant to an earn-in agreement that ultimately was not completed by IAMGOLD carried out an on-going program of exploration, including approximately 26,000 m of diamond drilling, from 2017 through 2022.

Other than as described in Section 6.4, no production has been completed at the Project since 2011.

6.3.6 ESV RESOURCES 2020-2021

In 2020, ESV entered into a share purchase agreement with Gran Colombia pursuant to which it would acquire the Zancudo Project in exchange for the issuance to Gran Colombia of 27,000,000 common shares of ESV. No production was completed during this period.

6.4 RECENT PRODUCTION (APRIL 2025 – PRESENT)

Denarius commenced mining operations at the Zancudo Project in April 2025. During the current "early production phase" (until the new 1,000 tpd processing plant reaches commercial operation in 2026), crushed ROM material is being mined and delivered to port for sale to Trafigura under the long-term offtake agreement described in Section 19.1.

Production to date during the early production phase is summarized as follows:

- The first shipment to Trafigura was completed in June 2025 and through the end of December 2025, the Zancudo Colombia delivered a total of 2,092 tonnes. With grades averaging 7.9 g/t gold and 222.7 g/t silver, these shipments contained approximately 532 ounces of gold and 14,977 ounces of silver resulting in the Company receiving payment for approximately 333 ounces of gold and 5,749 ounces of silver.

- During the first quarter of 2026, Zancudo Colombia delivered a total of 2,337 tonnes to a local port for sale to Trafigura. With grades averaging 11.5 g/t gold and 269.3 g/t silver, these shipments contained approximately 863 ounces of gold and 20,237 ounces of silver. Payable gold and silver amounted to 593 ounces and 7,839 ounces, respectively.

This early production phase will transition to full concentrate production and shipment once the processing plant is operational.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

The regional geology surrounding Titiribí (Figure 7-1; Cediel & Cáceres, 2000; Cediel et al., 2003) lies within the northern segment of the Central Cordillera, the highest and most tectonically active branch of the Colombian Andes. This area forms part of a complex Andean orogenic belt shaped by subduction, terrane accretion, and transpressional deformation along the northwestern margin of South America.

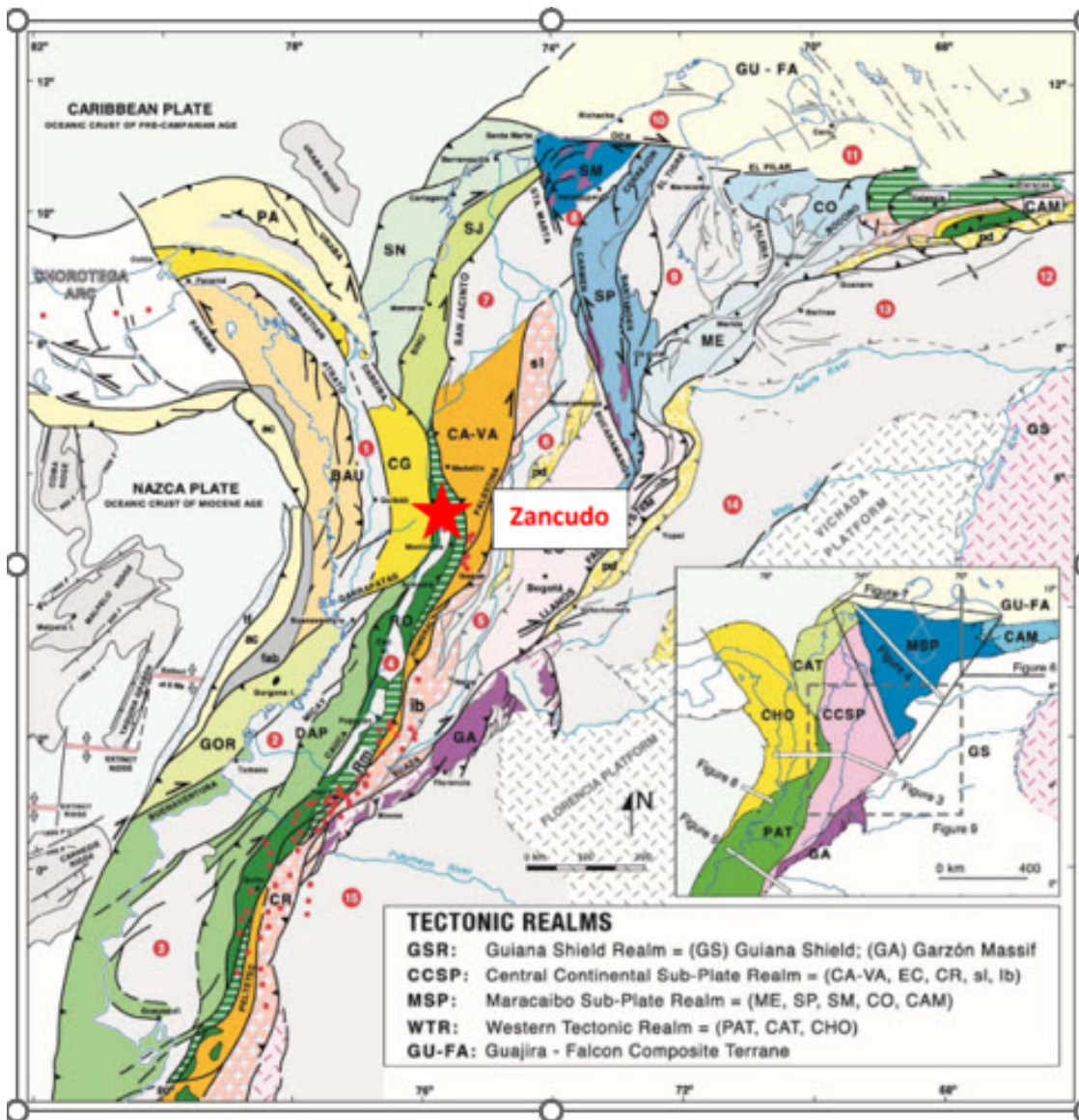
The western flank, near the Cauca River valley, is dominated by the Romeral fault system—a 1,600 km-long anastomosing shear zone that separates obducted oceanic crust to the west from continental basement to the east. Active since the Triassic, the system features strike-slip and thrust faults with ongoing left-lateral slip rates of 0.2–1.2 mm per year, contributing to the rugged topography and seismic activity in the region. The geology records a polyphase history of Paleozoic sedimentation in deep geosynclinal basins, Mesozoic subduction-related volcanism and flysch deposition, Late Cretaceous batholithic intrusions during orogeny, and Cenozoic uplift with intermontane basin filling.

Oldest exposed units are Precambrian to Early Paleozoic basement rocks, including micaceous paragneisses (quartz-feldspar-mica with garnet and graphite) that underwent amphibolite-facies metamorphism. Overlying these is the thick Paleozoic Valdivia Group (up to 13 km), a metasedimentary sequence of greenschist- to amphibolite-facies schists (quartz-sericite, chlorite-actinolite, and graphitic varieties) derived from clastic sediments and pyroclastics, regionally metamorphosed during the Permian-Triassic. In the western domain, Cretaceous ophiolitic assemblages of the Romeral terrane include metabasalts, metagabbros, serpentinite, radiolarian cherts, and graywackes of the Quebradagrande and Arquía complexes (127–119 Ma), representing accreted oceanic crust from Jurassic-Cretaceous subduction of the Farallones plate. Eastern continental domains contain Paleozoic to Mesozoic schistose metasediments of the Cajamarca and Sinifaná-Meta groups with Triassic mafic intrusives and Permian meta-volcano-sediments.

Sedimentary cover includes Early Cretaceous deep-water deposits of the San Pablo Formation (up to 1,000 m of rhythmic sandstones, argillites, phyllites, and conglomerates) and the La Soledad Formation (800–1,800 m of arenites, shales, and conglomerates with Albian fossils). These are unconformably overlain by Oligocene-Miocene continental clastics of the Amagá Formation (conglomerates, sandstones, shales, and coal seams) and Miocene-Pliocene volcanics of the Combia Formation (andesites and dacites) that filled intermontane basins during post-orogenic relaxation.

Igneous activity includes Permian syntectonic tonalites (e.g., Puquí Metatonalite), Lower Cretaceous ophiolitic gabbros, and Upper Cretaceous tonalitic batholiths such as the Antioquian Batholith (~90–65 Ma), which emplaced post-folding and produced contact-metamorphic hornfels aureoles. Tertiary plutons (e.g., Sabanalarga hornblende diorite-tonalite) and andesite porphyry dikes/sills reflect continued arc magmatism linked to Nazca plate subduction.

Structurally, the area displays north-trending folds, steep east-dipping foliations, and cataclastic shearing overprinted by greenschist-facies metamorphism during the Late Cretaceous orogeny. Major faults, including the northeast-striking Romeral wrench fault and north-striking Sabanalarga and Santa Rita faults, define block tectonics, grabens, and thrust slices. Quaternary alluvium, talus, and colluvium mantle the landscape, with ongoing epeirogenic uplift since the Pliocene driving deep incision and exposure of these units. This tectonic framework highlights the Central Cordillera's role as a dynamic plate-boundary zone influenced by the North Andes, Caribbean, and Nazca plates.



Source: Cediel et al., 2003

Notes: GS = Guiana Shield; GA = Garzón massif; SP = Santander massif; Serranía de Parí; ME = Sierra de Merida; SM = Sierra Nevada de Santa Marta; EC = Eastern Cordillera; CO = Carora basin; CR = Cordillera Real; CA-VA = Cajamarca-Valdivia terrane; sl = San Lucas block; lb = Ibagué block; RO = Romeral terrane; DAP = Dagua-Pijón terrane; GOR = Gorgona terrane; CG = Canas Cordas terrane; BAU = Baudó terrane; PA = Panamá terrane; SJ = San Jacinto terrane; SN = Sina terrane; GU-FA = Guajira-Falcon terrane; CAM = Caribbean Mountain terrane; Rm = Romeral melange; tab = fore arc basin; ac = accretionary prism; tf = trench fill; pd = piedmonts; 1 = Atrato (Choco) basin; 2 = Tumaco basin; 3 = Manabí basin; 4 = Cauca-Paipa basin; 5 = Upper Magdalena basin; 6 = Middle Magdalena basin; 7 = Lower Magdalena basin; 8 = Cesar-Rancheria basin; 9 = Maracaibo basin; 10 = Guajira basin; 11 = Falcon basin; 12 = Guaco basin; 13 = Barinas basin; 14 = Llanos basin; 15 = Putumayo-Napo basin; Additional Symbols: PALESTINA = fault/suture system; red dot = Pliocene-Pleistocene volcano; Bogota = town or city.

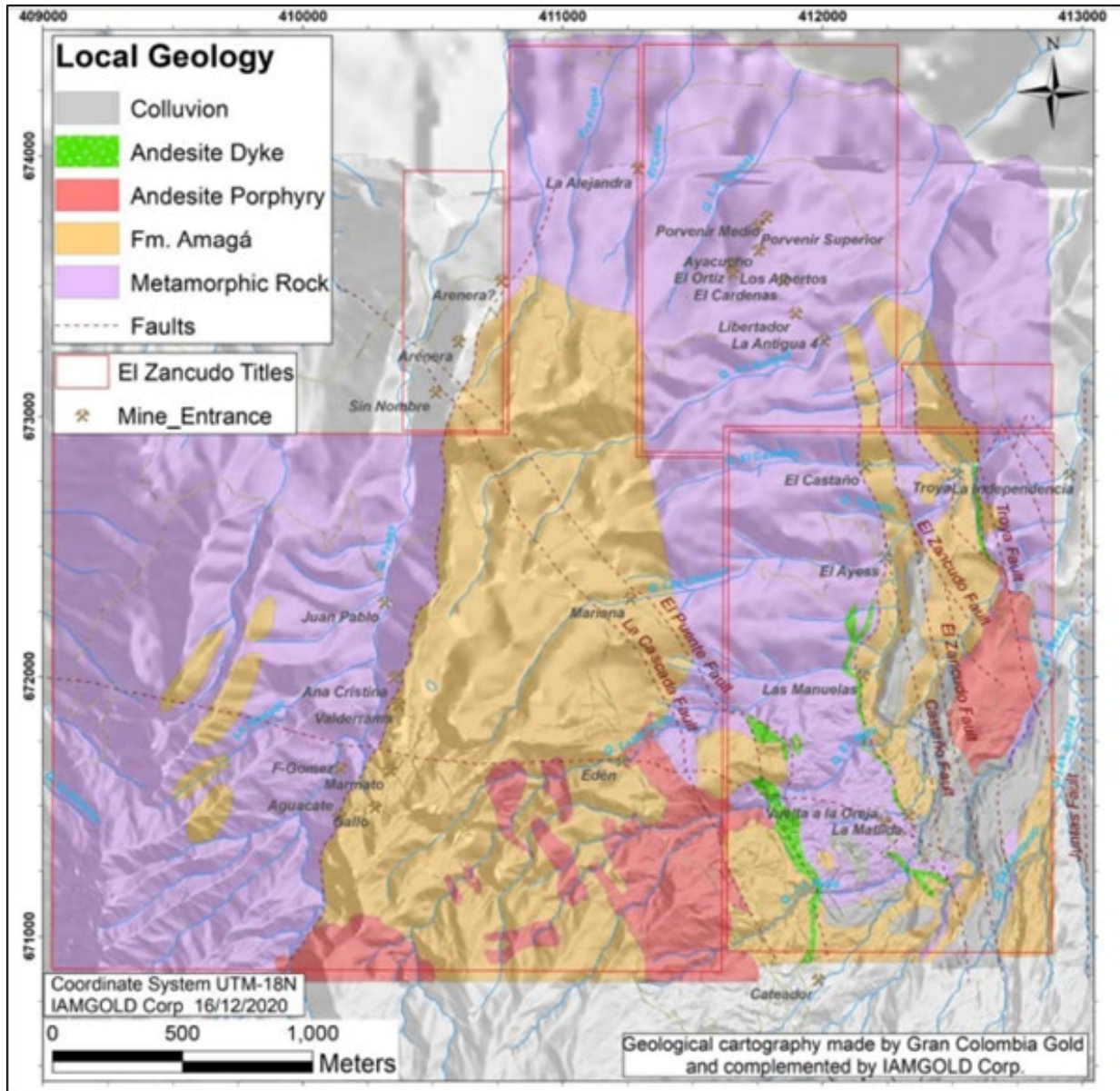
Figure 7-1: Regional Geological Setting showing Lithotectonic and Morphostructural Map of Northwestern South America

7.2 LOCAL GEOLOGY

The local geology of the Titiribí Mining District (Figure 7-2) lies on the western flank of the Central Cordillera atop the Romeral terrane. Basement rocks are overlain by Lower Paleozoic schists and gneisses that experienced intense folding and faulting along major shear zones, particularly the Romeral Fault. The landscape is further shaped by Oligocene to Miocene sedimentary layers of the Amagá Formation, comprising conglomerates, sandstones, and shales deposited in ancient river and lake basins during tectonic uplift.

7.3 PROPERTY GEOLOGY

The geology of the Zancudo deposit has been described by Botsford (1926), Grosse (1926), Emmons (1937), CDI (1994, 2007), PPM (2002, 2003), Carrillo (2003, 2004), and reports by Gran Colombia (Gaviria et al., 2013) and IAMGOLD Colombia (IAMGOLD, 2020). This section summarizes those descriptions. A property-scale geological map is shown in Figure 7-3.



Source RDA 2023

Figure 7-3: Geological Map of the Zancudo Project

7.3.1 LITHOLOGICAL UNITS

Host rocks in the local area comprise three main groups:

- Schists of the Late Jurassic to Early Cretaceous Arquía Complex — chlorite schists, quartz-sericite schists, and intervals of black graphitic schist. Schistosity trends north-south to northwest and dips steeply west.
- Continental sedimentary rocks of the Oligocene to Lower Miocene Amagá Formation — unconformable on the schists; the Lower Member consists of a basal coarse- to medium-grained polymictic conglomerate followed by sandstone with

carbonaceous beds, carbonaceous sandy mudstone, gray claystone, and upper violet claystone with thick sandstone lenses (preserved thickness up to 50 m).

- Late Miocene andesite and dacite porphyry intrusions — minor dikes and sills of andesite porphyry and dacite porphyry, plus fine-grained equigranular diorite intrusions located north of the Cerro Vetas porphyry center.

Additional logging codes were used for veins, hydrothermal breccias, fault breccias, and colluvium overlying the rocks near Titiribí and Sitio Viejo. The lithologies and associated database logging codes are summarized in Table 7-1 and illustrated in Figure 7-4.

Table 7-1: Summary of Key Lithological Units at Zancudo and the Associated Logging Codes in the Database

Code	Lithology	Description
BXF	Fault breccia	Matrix supported breccia. Clasts 0.3-10.0 cm, subangular, of schist, quartz. Matrix graphite, quartz, sulfides.
VEN	Vein	Vein textures may be massive sulfide, banded quartz-sulfide, massive quartz.
BXH	Hydrothermal breccia	Clast supported breccia with angular to subangular clasts of wall rock <4 cm cemented by sulfides.
ID	Diorite	Grey-green color, mottled texture. Fine grained (<1 mm) phaneritic texture. Quartz, plagioclase, hornblende, biotite. Veinlets of quartz-sulfides with epidote halo.
HD	Dacite porphyry	Pale grey-green color. Matrix 70%, very fine grained quartz-feldspathic. Phenocrysts 30%, size <4 mm, of quartz, plagioclase, hornblende, biotite.
HA	Andesite porphyry	Grey-green color. Matrix 80%, very fine grained. Phenocrysts 20%, size <2 mm, of hornblende, plagioclase, biotite and quartz, altered to chlorite and sericite. Moderate magnetic susceptibility.
SST	Sandstone	Light grey colored quartz arenite, grain size 1 mm, subrounded, quartz 90%, biotite 5%, clays 3%, muscovite 1%, pyrite <1%.
SCG	Conglomerate	Clast-supported conglomerate. Clasts 4-40 mm, rounded to subrounded, polymict, white quartz, black rock (graphite schist?). Matrix carbonate(?)
MSG	Graphite schist	Graphite schist with graphite, quartz, sericite(?)
MQS	Quartz-sericite schist	Schist with quartz, green sericite, biotite.
MSC	Chlorite schist	Chlorite schist with chlorite, dark minerals, carbonate.



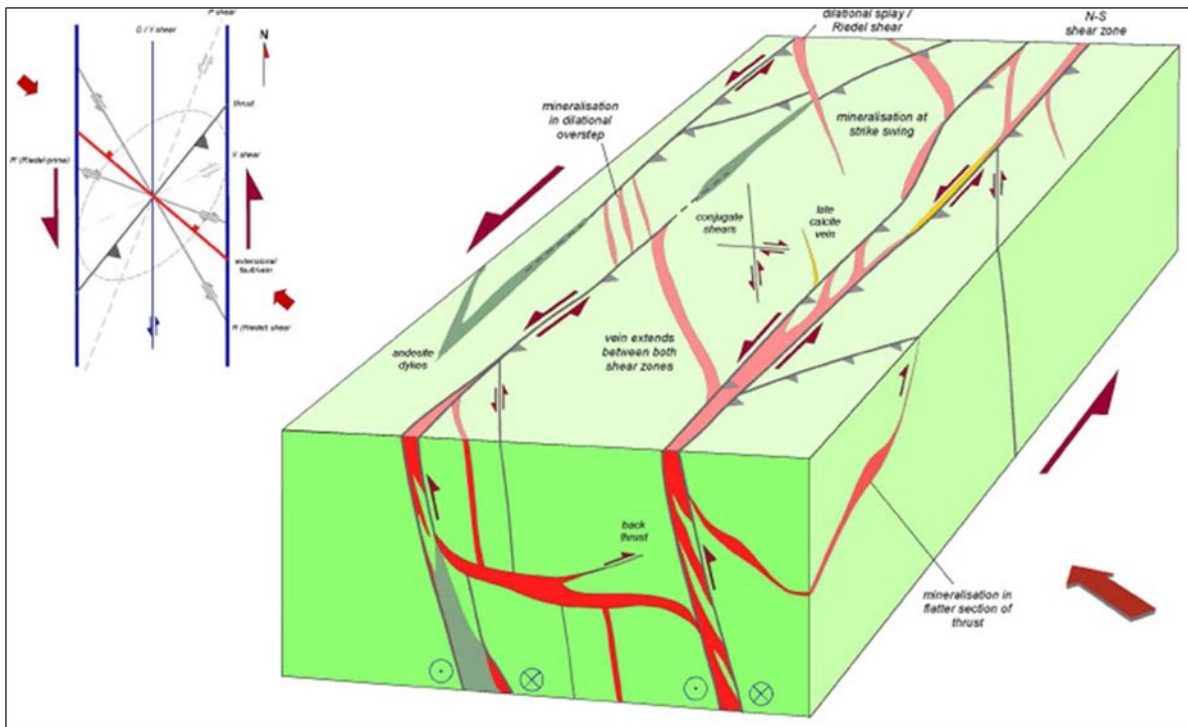
Notes: Top row: MSC, Chlorite schist; MQS, Quartz sericite schist; MSG Graphite schist. Middle row: SCG Conglomerate, SST Sandstone. Bottom row: HA, Andesite porphyry; HD, Dacite porphyry; ID, Diorite. Source: IAMGOLD, 2020 and photos by S. Redwood.

Figure 7-4: Core Photos of the Main Lithologies of the Zancudo Project

7.4 STRUCTURAL GEOLOGY

A structural study carried out by Telluris Consulting (2012, 2013) defined four phases of deformation:

- Pre-mineralization deformation of the Paleozoic and Jurassic-Cretaceous rocks to form schists (D1).
- NE-SW to E-W compression that resulted in the folding of the Oligocene Amagá Formation sedimentary rocks with the older schists prior to mineralization, and formation of probable thrust faults on the eastern limb with an east dipping imbricate structure (D2).
- WNW to NW-SE oriented compression during the late Miocene associated with emplacement of the Au-Cu porphyries, associated volcanic rocks and the formation of epithermal veins (D3), with reactivation of the D2 structures as sinistral transpressional shear zones, as shown in Figure 7.5. Steeply eastward dipping veins such as Platanal and Colmena formed by reactivation of probable thrust imbricate structures. The unconformable contact of the Amagá Formation sediments with the schists was reactivated as a shear zone to form the Santa Catalina vein. Low angle veins such as Manto Antiguo and Colmena II formed as reverse faults in the footwall of the Santa Catalina vein.
- Continued E-W to WNW-ESE oriented post-mineralization compression (D4) resulting in further folding and faulting such as the Zancudo Fault that defines the eastern margin of mineralization in the Independencia Mine.



Source; Telluris Consulting (2012)

Figure 7-5: Schematic Three-Dimensional Block Model, Looking North, Showing Structural Control on Mineralization During Syn-Mineralization Deformation at Zancudo

The Zancudo deposit occurs on the eastern limb of an upright N-S trending antiform with schists in the core and Amagá Formation sedimentary rocks on the eastern limb.

In the La Independencia Mine the kinematic indicators along the N-S veins indicate that they were activated as sinistral transpressional shears forming NNW to NW steep tensional splay veins with coeval, low-angle, contractional splay structures (thrusts) along NNE to NE trends. In places mineralization is associated with sheared andesite dikes that are silicified and host fine visible gold along sub-parallel structures indicating that the dikes were emplaced during or shortly before the main mineralization event.

The low-angle veins (mantos) that trend NNE to NE tend to show a SE dip due to NW vergence but in the confined space within the N-S-trending structural corridor, contraction was also accommodated by back-thrusting (i.e., SE vergent, NW-dipping thrusts/veins). Due

to the complex interaction of the frontal and back thrusts there are some low-angle to sub-horizontal zones of high-grade mineralization where they intersect but their dip and strike continuities are limited by other, steeper veins and faults. In this part of the deposit the mineralization is primarily hosted in banded and massive epithermal-style veins. Although there is some stockwork veining, especially on a small scale at strike-swings and marginal to the main veins, large-scale stockwork or breccia bodies appear to be scarce or absent.

The principal veins that have been drilled by Gran Colombia and IAMGOLD Colombia are the steep, N5- 20°W trending Santa Catalina Vein over 2,700 m strike length, divided from north to south into the Albertos, Castaño, Las Brisas and El Mani targets; the high angle Porvenir Vein in the footwall of Santa Catalina with a known strike length of 400 m; the low angle Manto Antiguo (Zancudo) and Manto Las Manueles veins mined over a strike length of 1,600 m and a width of 400 m; and the newly discovered low angle Manto Inferior and La Miel Vein. These veins are shown in Figure 7 6 and Figure 7 7.

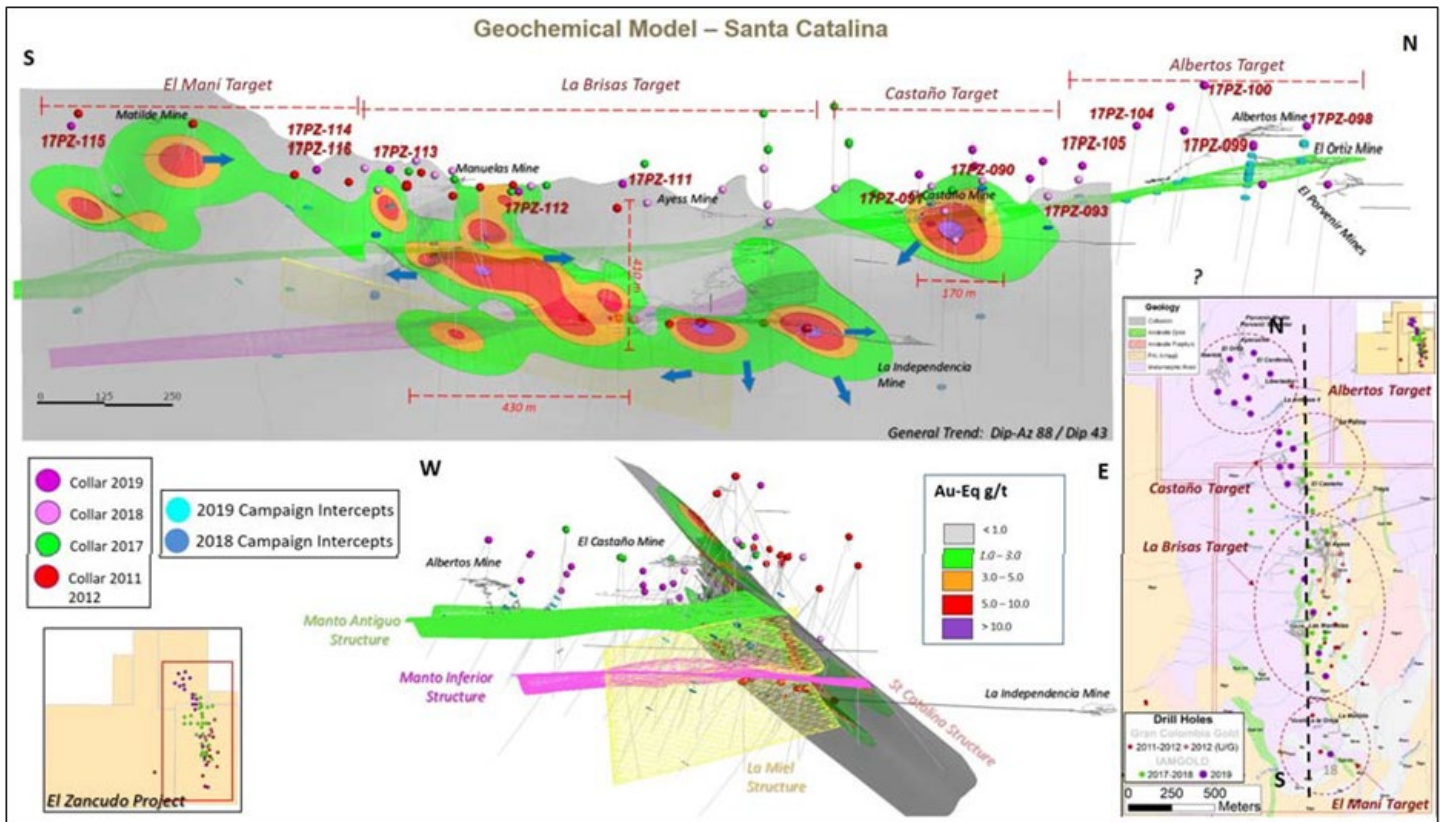
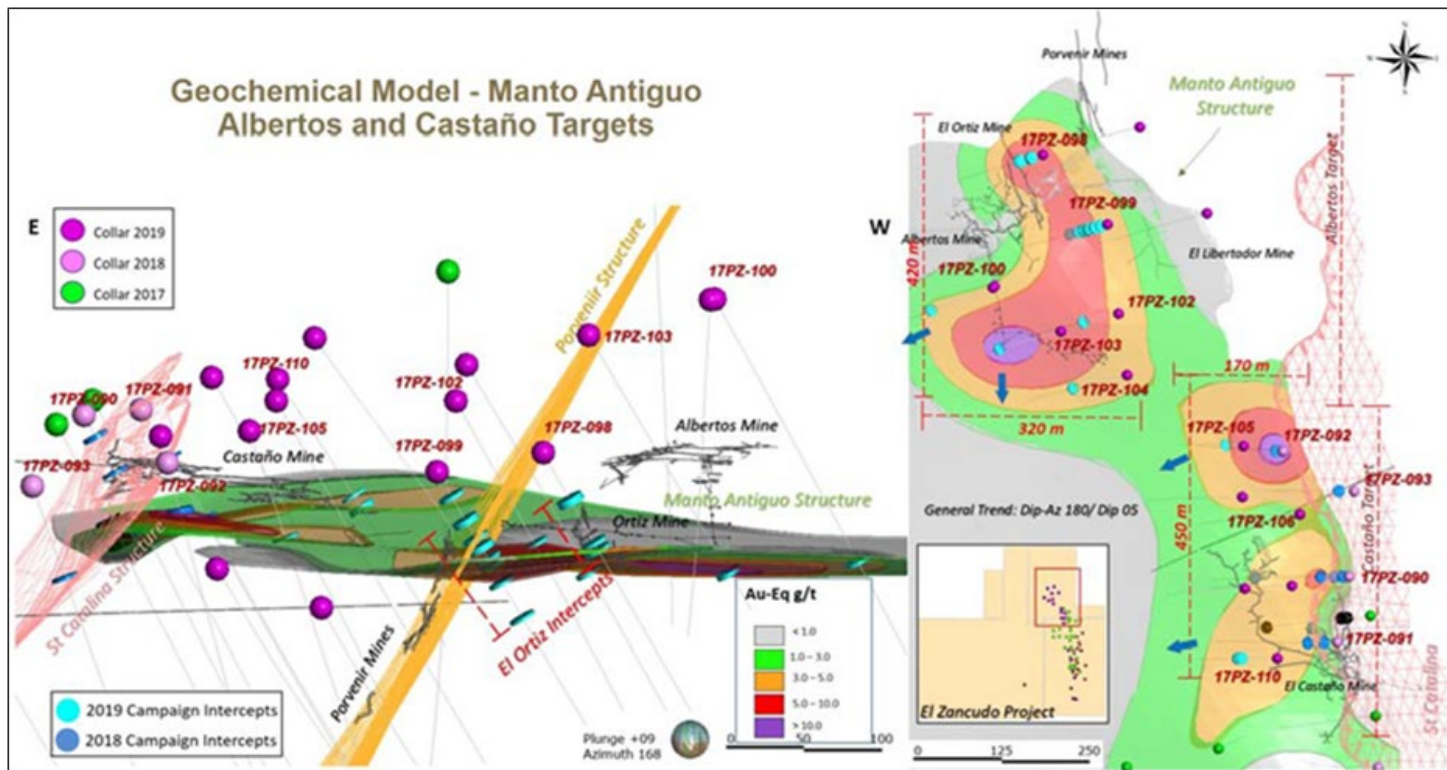


Figure 7-6: The Geometry of the Vein Systems at Zancudo Showing Drillholes

Source: EVS, 2021

Note: Top: long section of the Santa Catalina Vein with contoured AuEq grades of drill intersections. Bottom: 3D image showing the geometry of the Santa Catalina, Manto Antiguo and Manto Inferior Veins.



Source: EVS, 2021

Figure 7-7: The Geometry of the Veins in the Northern Zone at Zancudo (Albertos and Castaño targets) showing 3D Model with Drill Intersections (left) and Plan with Contoured AuEq Grades of Drillholes in the Manto Antiguo Vein (right)

7.5 ALTERATION

The alteration types defined for logging by IAMGOLD Colombia are argillic (sericite, illite-smectite, \pm quartz, calcite, dolomite, pyrite), intermediate argillic (kaolinite/dickite, illite-smectite, quartz, pyrite), propylitic (chlorite, calcite, epidote, albite, pyrite) and silicic (quartz or chalcedony (IAMGOLD, 2020). Argillic, intermediate argillic and silicic alteration form alteration halos to the mineralized structures. Pervasive propylitic alteration affects diorite.

7.6 MINERALIZATION

Mineralization at Zancudo occurs in multiple steep or flat lying vein/structures that have been exploited over a strike length of 2,500 m. The known vertical extent of mineralization is at least 650 m.

Gold mineralization at Zancudo occurs in two different types of structures. Mineralization in flat-lying veins and dissemination in conglomerates and sandstones at or near the base of the sedimentary sequence at the unconformity with the underlying schists. These were historically mined in sub-horizontal structures called "mantos" near surface at Zancudo and Otra Mina and most of the historical gold production came from these. A near continuous zone of flat lying veins occurs west of the Zancudo Fault over a strike length of 1,600 m with a strike of N30°W and a width of 400 m in the northern zone (PPM, 2002, 2003).

Mineralization in higher angle structures is hosted by N-S striking, steeply dipping veins in chlorite schists. These were mined by several long crosscuts with the levels defined in meters above the La Independencia level, namely: Chaverra (+269 m level), Castaño (+230 m), Sucre (+189 m), Palma (+189 m), Troya (+140 m) and La Independencia (0 m level, at 923 m altitude). These were all made before 1923 and were described by Botsford (1926) and Grosse (1926). The Independencia Mine has a crosscut 740 m long in direction 254°, and four veins (Colmena, Platanal and splays) were exploited over a strike length of about 300 m and to 125 m above the Independencia level.

The veins have early stage, base metal sulfides (pyrite, sphalerite, galena, arsenopyrite) infilled by quartz or quartz-carbonate gangue, with banded textures that are typical of epithermal veins. The vein minerals, in order of decreasing abundance, are pyrite, galena, arsenopyrite, sphalerite, silver-sulfosalts, bournonite, boulangerite and jamesonite, with minor chalcopyrite, pyrhotite, native gold

or electrum, and native silver. The gangue minerals are quartz, calcite and clay minerals. The clay minerals identified are kaolinite, muscovite and sericite. Wall rock alteration is sericite, carbonate and disseminated sulfides.

All three types of structure have halos of argillic alteration. The vein textures are massive sulfide with grain size up to 20 mm; banded quartz-sulfide with wall rock clasts; and quartz veins with cockscomb banding, colloform banding, druses, bladed quartz replacement of calcite, and banded textures. The principal sulfides are arsenopyrite, pyrite, galena, sphalerite, and chalcopyrite.

The Santa Catalina structure follows an andesitic dike that may have strong argillic alteration with a stockwork of narrow sulfide veinlets (IAMGOLD, 2020). The wall rocks may be mylonitized in schists, brecciated in schists and sedimentary rocks, or have strong argillic alteration with quartz veinlets. Disseminated sulfides are common in the matrix of sedimentary wall rock and along the foliation of schists.

The low angle structures or mantos typically have a hydrothermal breccia texture with clasts of quartz and wall rock with sericite alteration, and a quartz-sulfide matrix (IAMGOLD, 2020). Another important texture is a stockwork of narrow quartz-sulfide veinlets.

The sub-vertical structures commonly have quartz veins with low sulfidation epithermal textures as described above.

There are occurrences of porphyry-style magnetite \pm quartz (M type) and quartz \pm pyrite (A and B type) veining accompanied by potassic alteration overprinted by propylitic alteration in andesite porphyry, diorite and basalt in the western area of the property.

Gold/electrum occur as inclusions in sphalerite, pyrite, arsenopyrite, and may also be partially surrounded by pyrite, arsenopyrite, sphalerite, and tetrahedrite. About 80% of the gold/electrum grains are below 30 microns in size. Much of the gold/electrum occurs as small inclusions of less than 10 microns in pyrite and arsenopyrite, or intergrown with other minerals. A small proportion of gold occurs in fractures in other minerals. A small percentage is coarse grained (>100 microns). The average Au/Ag ratio is 72/28, and varies from 67/33 to 74/26 (Gallego et al., 2005). Native silver occurs in minor amounts as small grains in contact with silver-rich sulfosalts. The silver-bearing sulfosalts identified are argentian tetrahedrite ((Cu,Fe)₁₂As₄S₁₃)- freibergite ((Ag,Cu,Fe)₁₂Sb₄S₁₃) solid solution, andorite (PbAgSb₃S₆), miargyrite (AgSbS₂), diaphorite (Pb₂Ag₃Sb₃S₈) and owyheeite (Pb₁₀Ag₃Sb₁₁S₂₈). The lead-antimony sulfosalts identified are bournonite (CuPbSbS₃), jamesonite (Pb₄FeSb₆S₁₄), and boulangerite (Pb₅Sb₄S₁₁). The FeS content of sphalerite varies from 0.91 molar percentage (mol %) in the early generation to higher FeS in the later stages that show zoning from 4 to 20 mol %, with a dominant range of 9 to 16 mol % FeS.

7.7 SIGNIFICANT MINERALIZED ZONES

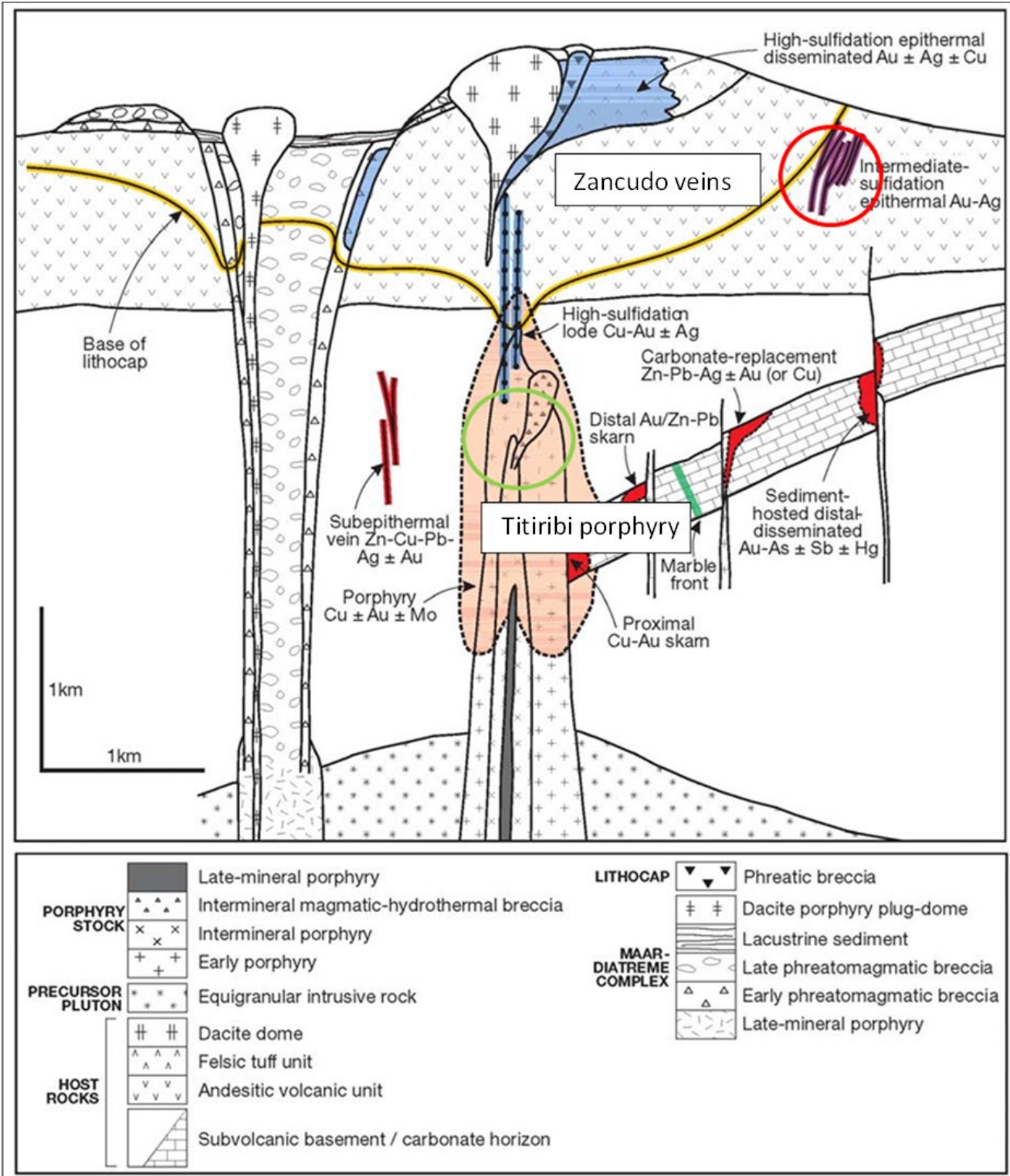
Exploration drilling to date has revealed both steeply dipping veins and shallower, blanket-like manto vein systems in the mineralized zones. These veins exhibit diverse textures, including massive sulfides with grains up to 20 millimeters across; banded quartz-sulfide layers incorporating wall rock fragments; and quartz veins displaying cockscomb and colloform banding, open drusy cavities, bladed quartz replacing calcite, and overall banded patterns. The primary sulfide minerals consist of arsenopyrite, pyrite, galena, sphalerite, and chalcopyrite. Low-angle mantos typically show hydrothermal breccia textures, featuring clasts of quartz and sericite-altered wall rock within a quartz-sulfide matrix (IAMGOLD, 2020), alongside stockwork networks of thin quartz-sulfide veinlets. Sub-vertical veins, in turn, host quartz with low-sulfidation epithermal characteristics akin to those described. Initial evaluations of potential underground mining stopes, intended to inform further exploration strategies, have highlighted several promising targets. The known mineralization extends along a strike length of approximately 2.5 kilometers, with dips varying from 40° to 60° in the steeper structures and approaching sub-horizontal in the manto-style deposits.

8 DEPOSIT TYPES

The Zancudo deposit is classified as an intermediate-sulfidation epithermal gold-silver vein and manto-style system, with characteristics transitional from low-sulfidation epithermal styles and locally extending into the mesothermal realm (deposition temperatures exceeding 300°C). This deposit type is characterized by high-grade, structurally controlled mineralization hosted primarily in schists of the Late Jurassic-Early Cretaceous Arquía Complex and Oligocene-Miocene sedimentary rocks of the Amagá Formation (conglomerates, sandstones, shales, and coal seams), with Late Miocene andesite/dacite porphyry intrusions (Titiribí stocks, dated 7.6–9.0 Ma) providing the magmatic heat source and potential metal budget. The system reflects a genetic linkage to an underlying or proximal porphyry gold-copper intrusive center approximately 3.5 km southwest, where ascending magmatic-hydrothermal fluids drove epithermal deposition under a sinistral transpressional regime, reactivating N-S to N20°W-striking reverse faults and thrusts as shear zones.

Mineralization occurs in multiple stacked, low-angle mantos (e.g., Manto Antiguo, up to 1,600 m strike and 400 m downdip) and steeply dipping veins (e.g., Santa Catalina Vein, 2,700 m strike, 50–70°E dip), forming a continuous corridor over 2,500–3,500 m strike length and 400–650 m vertical extent, with individual vein widths averaging 0.35 m (up to 3 m). Key features include banded quartz-sulfide veins with colloform/cockscorn textures, hydrothermal breccias (quartz-sulfide matrix with wall-rock and quartz clasts), and stockwork veinlets; dominant sulfides are pyrite, galena, arsenopyrite, and sphalerite, with accessory silver sulfosalts (e.g., tetrahedrite, miargyrite), and native electrum/gold (Au:Ag ratio ~72:28, grains mostly <30 µm). Associated wall-rock alteration comprises sericite-dominant argillic to intermediate argillic halos, silicification, and propylitic envelopes, with elevated arsenic (average 2,860–14,550 ppm). The deposit remains open at depth and along strike, supporting ongoing exploration for expansion.

High sulfidation epithermal deposits may occur in lithocaps above porphyry Cu deposits (Figure 8-1), where massive sulfide lodes tend to develop in deeper feeder structures and Au ± Ag-rich, disseminated deposits within the uppermost 500 m or so. Less commonly, intermediate sulfidation epithermal mineralization, chiefly veins, may develop on the peripheries of the lithocaps. The alteration in porphyry Cu deposits is zoned upward from barren, early sodic-calcic through potentially ore-grade potassic, chlorite-sericite, and sericitic, to advanced argillic, the latter forming the lithocap, which may attain >1 km in thickness if not eroded. Low sulfidation state chalcocopyrite ± bornite assemblages are characteristic of potassic zones, whereas higher sulfidation state sulfides are generated progressively upwards as a result of temperature decline and the accompanying greater degrees of hydrolytic alteration, culminating in pyrite ± enargite ± covellite in the shallow parts of the lithocaps. The porphyry Cu mineralization occurs in a distinctive sequence of quartz-bearing veinlets as well as in disseminated form in the altered rock between them. Magmatic-hydrothermal breccias may form during porphyry intrusion, with some of them containing high-grade mineralization because of their intrinsic permeability. In contrast, most phreatomagmatic breccias, constituting maar-diatreme systems, are poorly mineralized because they formed late in the evolution of systems.



Source Sillitoe 2010

Figure 8-1: Porphyry System Model Showing the Zancudo Intermediate Sulfidation Epithermal Au-Ag Veins and the Titiribi Porphyry Au-Cu Deposits

9 EXPLORATION

Exploration at the Zancudo Project has primarily involved geological mapping, soil geochemical sampling, rock chip and channel sampling, and limited geophysical surveys. Systematic work was carried out by Gran Colombia Gold and IAMGOLD Colombia between 2011 and 2022. Denarius Metals has focused recent efforts on resource conversion drilling..

9.1 RELEVANT EXPLORATION WORK

Exploration activities completed on the property are summarized in Table 9-1. Early programs by CDI (1994–2007) were limited and primarily related to mining activities. Gran Colombia and IAMGOLD Colombia conducted more systematic surface and underground exploration, including detailed geological mapping, soil sampling, and rock sampling. These programs successfully identified gold anomalies associated with known vein systems and defined new targets for drilling.

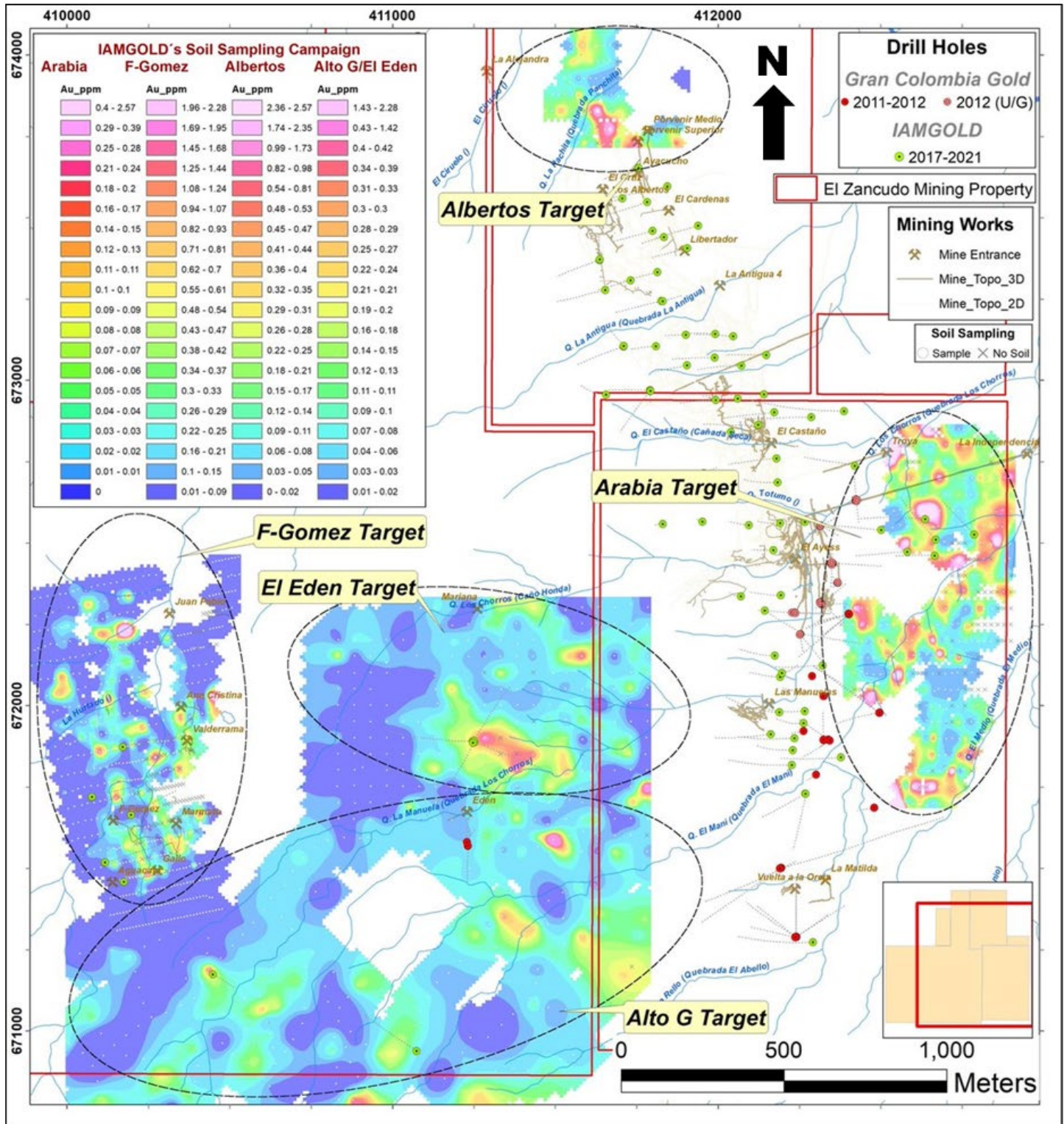
Table 9-1: Summary of Exploration Carried Out at the Zancudo Project

Year	Company	Survey	Units	Number	Notes
1994-2007	CDI	Underground mapping	m	Not known	
		Underground rock sampling	Samples	Not known	
2011-2012	Gran Colombia	Topography	ha	>1050	Aster satellite image, 30 m DEM and contours
		Geological mapping	ha	750	Concessions C5521011 and HDWA-02
		Rock sampling	Samples		
		Underground surveying	m	Not known	Digitize historical mine plans; survey mines
		Underground channel sampling	Samples	116	
		Thin section petrography	Samples	15	E. Tidy, (2012)
		Mineralogy by SEM-EDS	Samples	22	G. Di Prisco, (2013)
2014	Anglo American	Stream sediment sampling	Samples	26	
		Rock chip sampling	Samples	12	
2017-2021	IAMGOLD	Geological mapping	ha	1055	Whole property
		Soil sampling	Samples	1429	Albertos, Arabia, F-Gomez, Alto-G Targets, El Eden Targets
		Rock sampling	Samples	526	Surface and underground

Source: ESV, 2021

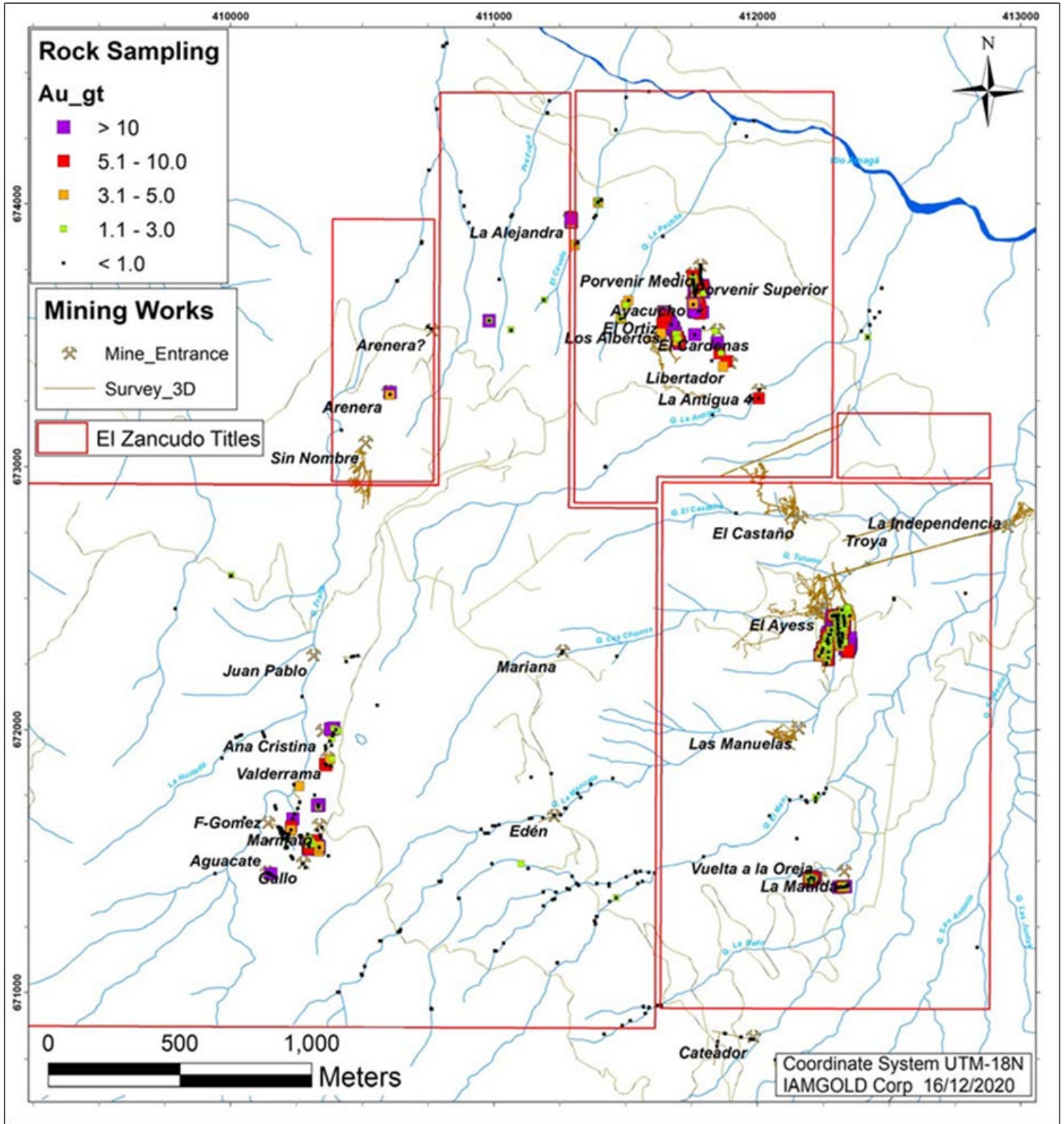
9.2 SAMPLING METHODS AND SAMPLING QUALITY

IAMGOLD Colombia conducted soil sampling on local grids over the Albertos, Arabia, F-Gomez, and Alto-G targets. Gold-in-soil results (Figure 9-1) were used to guide subsequent drill programs. Extensive rock chip and channel sampling was also completed on surface and underground (Figure 9-2). The geochemical data have been instrumental in delineating gold anomalies associated with the principal vein and manto structures and in supporting the current Mineral Resource Estimate.



Source: IAMGOLD, 2021

Figure 9-1: Analysis of Soil Sampling Results for Gold at Zancudo



Source: IAMGOLD, 2021

Figure 9-2: Rock Sampling Results for Gold at the Zancudo Project

10 DRILLING

Drilling has been the primary method used to define and expand the Zancudo mineral resource. A total of 200 diamond drillholes totaling 48,327 meters have been completed on the property. Table 10-1 summarizes drilling by company, Table 10-2 summarizes drilling types and contractors, and Table 10-3 lists significant intercepts. Drillhole collar locations are shown on Figure 10-1.

10.1 DRILLING COMPLETED BY COMPANY

Early drilling (pre-2011) was limited and primarily exploratory. Significant modern drilling was completed by Gran Colombia Gold and IAMGOLD between 2011 and 2022. Denarius Metals initiated its first drilling campaign in 2024, completing approximately 7,500 meters of diamond core drilling focused on resource conversion in the Manto Antiguo and Santa Catalina zones. Only post-2011 drilling was used in the current Mineral Resource Estimate.

A summary of the total drilling per company is shown in Table 10-1 and collar plot in Figure 10-1.

Table 10-1: Summary of Drilling Completed by Company

Year	Company	Hole No. from	Hole No. to	Total Holes	Length (m)
1999	CDI*	CDI-01-1999		1	590.7
2002-2003	CDI*	CDI-02-2002	CDI-06-2003	5	407.5
2011	Gran Colombia	DDH-ZG-11-001	DDH-ZG-11-033	33	10,370.7
2012	Gran Colombia	DZ-0034	DZ-0049	16	2,003.5
2012	Mineros Nacionales	DZ-0050	DZ-0066	17	1,747.8
2017	IAMGOLD	17PZ-067	17PZ-077	11	3,905.4
2018	IAMGOLD	17PZ-078	17PZ-095	18	6,416.3
2019	IAMGOLD	17PZ-096	17PZ-116	21	5,903.8
2020	IAMGOLD	17PZ-117	17PZ-121	5	1,191.4
2021	IAMGOLD	17PZ-122	17PZ-149	28	8,560.9
2024	Denarius	ZM-150	ZM-194	45	7,228.9
Total				155	48,326.9

* Excluded from Mineral Resource estimates

Table 10-2: Summary of Drilling Types and Drilling Contractors Used at the Zancudo Project

Year	Company	Contractor	Rig Type	Type	Rigs	Holes	Core Size
1999	CDI	Geominas	Not known	DDH	1	1	NQ
2002-2003	CDI	Geominas	Not known	DDH-UG	1	5	NQ
2011-2012	Gran Colombia	Mincivil	Longyear LF-70(?)	DDH	1	38	HQ, NQ
2012	Gran Colombia/Mineros Nacionales	Explomin	Sandvik H-200-1	DDH-UG	1	28	HQ, NQ, BQ
2017	IAMGOLD	Perfotec SAS	Longyear LF-70/Atlas Copco CS 1000 P4	DDH	1	11	HQ
2018	IAMGOLD	Perfotec SAS	Atlas Copco CS 1000 P4	DDH	1	18	HQ
2019	IAMGOLD	Perfotec SAS	Atlas Copco CS 1000 P4	DDH	1	21	HQ
2020	IAMGOLD	Perfotec SAS	Longyear LF-70	DDH	1	5	HQ
2021	IAMGOLD	Perfotec SAS	Atlas Copco CS 1000 P4	DDH	1	8	HQ
2024	Denarius	Explomin	Hydracore or Mancore	DDH	2	45	HQ

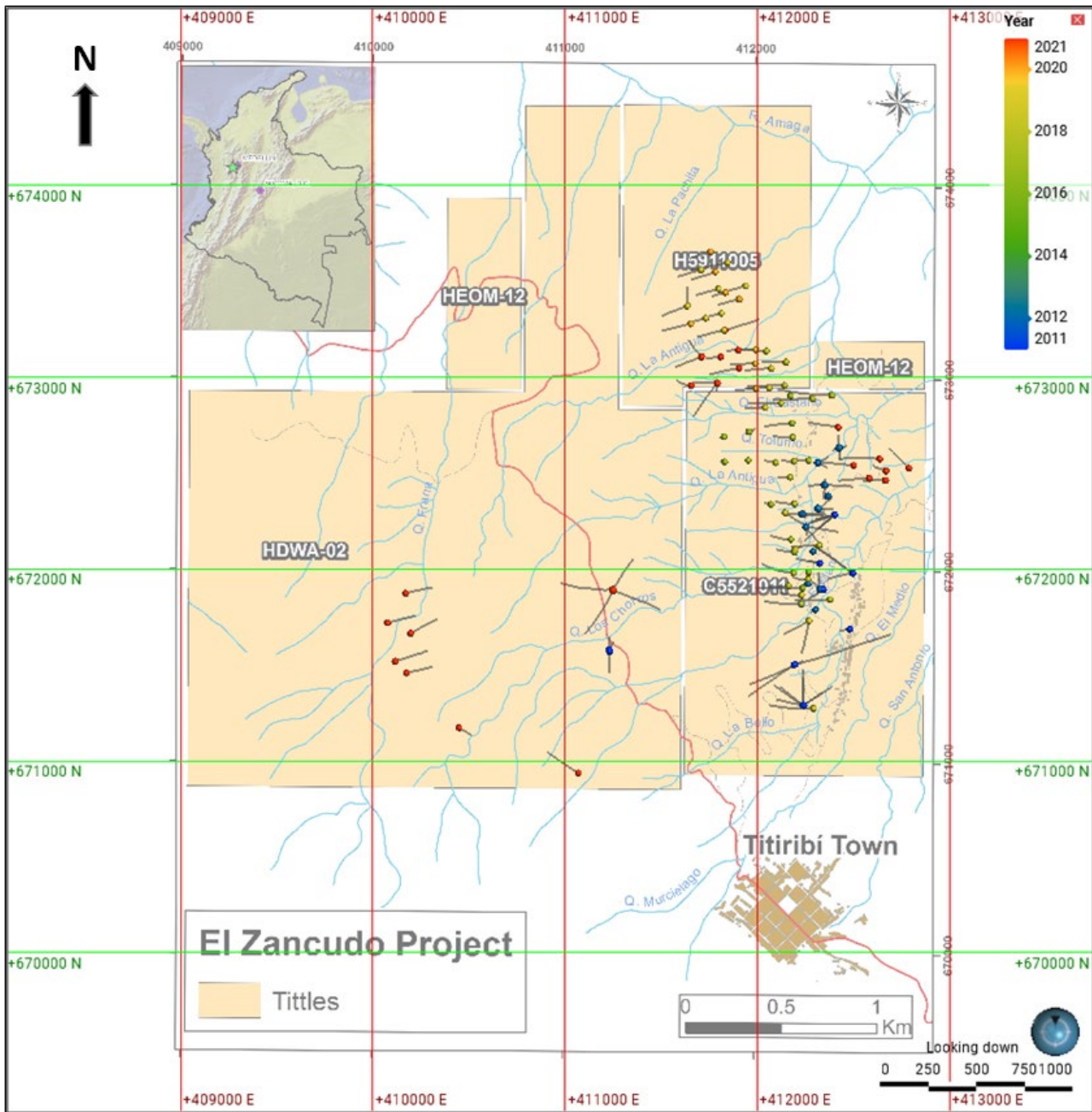


Figure 10-1: Location Map of Drillhole Collars

10.2 DRILLING PROCEDURES

All drilling was conducted using HQ and NQ diamond core techniques by reputable contractors. Core recovery was generally excellent (>95% in mineralized zones). Downhole surveys were completed at regular intervals using electronic multi-shot tools. Collar locations were surveyed by differential GPS. Significant intercepts from the 2024 Denarius program confirmed vein continuity and grade continuity in key resource areas.

10.2.1 SIGNIFICANT INTERCEPTS FROM THE DENARIUS 2024-7,225 METER DRILLING PROGRAM

Table 10-3: Significant Intercepts

Hole ID	Target	Structure/Vein	From (m)	To (m)	Width (m)	Au (g/t)	Ag (g/t)	AuEq (g/t)
ZM-150	Los Albertos	Ortiz A	60.2	60.6	0.4	4.05	229	6.9
And	Los Albertos	Ortiz A	62	62.7	0.7	3.73	22	4
And	Los Albertos	Ortiz System	72.1	74.1	2	4.77	87	5.9
Including	Los Albertos	Ortiz System	72.1	72.4	0.3	15.64	533	22.3
And	Los Albertos	Ortiz System	73.7	74.1	0.4	10.09	23	10.4
And	Los Albertos	Ortiz System	82	82.5	0.5	3.68	210	6.3
And	Los Albertos	Ortiz B	87.3	88	0.7	3.21	110	4.6
And	Los Albertos	Manto Antiquo	92.8	94.2	1.3	10.11	41	10.6
Including	Los Albertos	Manto Antiquo	93.1	93.5	0.4	29.53	91	30.7
ZM-151	Los Albertos	Ortiz System	90.5	102.5	12	6.04	92	7.2
Including	Los Albertos	Ortiz B	91.1	92.8	1.7	5.49	200	8
And	Los Albertos	Manto Antiquo	96.2	98.8	2.6	10.41	153	12.3
Including	Los Albertos	Manto Antiquo	96.2	96.8	0.6	5.71	344	10
And	Los Albertos	Manto Antiquo	96.8	97.6	0.8	21.41	94	22.6
And	Los Albertos	Ortiz System	101.2	101.8	0.6	15.75	275	19.2
And	Los Albertos	Ortiz System	101.8	102.5	0.7	25.94	245	29
And	Los Albertos	Unknown	109.6	109.9	0.3	19.25	90	20.4
ZM-152	Los Albertos	Ortiz A	49.7	51	1.3	4.71	50	5.3
And	Los Albertos	Ortiz System	53.8	54.3	0.5	4.29	366	8.9
And	Los Albertos	Ortiz System	55.6	56.3	0.7	16.36	1	41
And	Los Albertos	Ortiz System	60.6	60.9	0.3	7.52	227	10.4
And	Los Albertos	Manto Antiquo	81.3	82.6	1.3	16.54	93	17.7
Including	Los Albertos	Manto Antiquo	81.3	81.9	0.7	22.7	155	24.6
And	Los Albertos	Manto Antiquo	81.9	82.6	0.6	10.38	32	10.8
And	Los Albertos	Ortiz B	109	109.3	0.3	7.77	31	8.2
ZM-153	Los Albertos	Unknown	90.2	91	0.9	5.61	11	5.8
Including	Los Albertos	Unknown	90.2	90.5	0.3	15.3	30	15.7
And	Los Albertos	Manto Antiquo	98.1	100	1.9	2.58	237	5.5
Including	Los Albertos	Manto Antiquo	98.1	98.7	0.5	3.3	314	7.2
And	Los Albertos	Unknown	106.4	107.2	0.8	7.59	7	7.7
ZM-154	Los Albertos	Ortiz System	42.3	43.4	1.2	8.89	10	9
Including	Los Albertos	Ortiz System	42.9	43.4	0.5	12.89	16	13.1
And	Los Albertos	Ortiz System	58.7	59	0.3	7.88	187	10.2
And	Los Albertos	Ortiz B	113.8	114.1	0.3	14.21	385	19
And	Los Albertos	Ortiz B	116.7	118	1.3	21.75	465	27.6
Including	Los Albertos	Ortiz B	117.2	117.6	0.4	37.6	1	190
And	Los Albertos	Ortiz B	117.6	118	0.5	28.24	31	28.6
ZM-155	Los Albertos	Unknown	47.5	48.9	1.4	3.86	28	4.2
And	Los Albertos	Manto Antiquo_Upper	125	125.5	0.5	6.64	48	7.2
And	Los Albertos	Manto Antiquo	139.6	140.1	0.5	5.6	17	5.8

Hole ID	Target	Structure/Vein	From (m)	To (m)	Width (m)	Au (g/t)	Ag (g/t)	AuEq (g/t)
ZM-156	Los Albertos	Ortiz System	50.4	51.7	1.4	20.66	62	21.4
Including	Los Albertos	Ortiz System	50.4	50.8	0.4	53.51	154	55.4
And	Los Albertos	Ortiz System	53.2	53.9	0.7	13.04	157	15
And	Los Albertos	Ortiz System	68.1	68.8	0.7	7.06	56	7.8
And	Los Albertos	Ortiz System	71.6	71.9	0.3	5.32	54	6
And	Los Albertos	Ortiz System	94.9	95.6	0.7	5.82	59	6.6
And	Los Albertos	Ortiz System	141.5	141.8	0.3	4.84	263	8.1
And	Los Albertos	Ortiz B	147.1	149.4	2.3	7.51	537	14.2
Including	Los Albertos	Ortiz B	147.1	147.6	0.5	12.77	324	16.8
And	Los Albertos	Ortiz B	147.6	148.6	1	6.18	274	9.6
ZM-157	Los Albertos	Ortiz System	64.3	64.7	0.4	9.57	33	10
And	Los Albertos	Ortiz A	71.9	73.7	1.8	5.8	415	11
Including	Los Albertos	Ortiz A	71.9	72.3	0.4	3.43	281	6.9
And	Los Albertos	Ortiz A	72.3	73	0.7	8.03	367	12.6
And	Los Albertos	Ortiz System	78.3	78.8	0.5	6.05	287	9.6
And	Los Albertos	Manto Antiquo	84.8	85.7	0.9	9.49	155	11.4
Including	Los Albertos	Manto Antiquo	85.2	85.7	0.5	14.31	202	16.8
ZM-158	Los Albertos	Manto Antiquo_E	46.8	49.7	3	7.67	150	9.5
Including	Los Albertos	Manto Antiquo_E	46.8	47.3	0.5	14.31	15	14.5
And	Los Albertos	Manto Antiquo_E	47.7	48.3	0.5	16.18	756	25.6
And	Los Albertos	Manto Antiquo_E	49.4	49.7	0.4	11.16	40	11.7
And	Los Albertos	Unknown	56.5	56.8	0.3	12.81	<100	>13.0
ZM-159	Los Albertos	Manto Antiquo_E	42.9	44.3	1.4	4.99	124	6.5
Including	Los Albertos	Manto Antiquo_E	43.6	44.3	0.7	4.88	228	7.7
And	Los Albertos	Manto Antiquo	58.6	59.4	0.8	4.02	24	4.3
And	Los Albertos	Manto Antiquo	60.6	62.1	1.6	7.74	890	18.9
Including	Los Albertos	Manto Antiquo	61.7	62.1	0.4	22.37	2	752
And	Los Albertos	Ortiz B	131.4	132.2	0.7	20.8	387	25.6
ZM-181	Las Brisas	Unknown	160.5	162.4	1.9	3.03	11	3.2
Including	Las Brisas	Unknown	160.5	161.1	0.6	4.33	11	4.5
ZM-183	Las Brisas	Manto Antiquo	162.2	163.2	1	3.65	143	5.4
Including	Las Brisas	Manto Antiquo	162.2	162.5	0.3	12.05	469	17.9
And	Las Brisas	Manto Brisas	187.3	188.9	1.6	4.51	43	5
Including	Las Brisas	Manto Brisas	188.2	188.9	0.7	5.73	35	6.2
ZM-184	Las Brisas	Manto Antiquo	200.7	201.8	1.1	2.28	82	3.3
Including	Las Brisas	Manto Antiquo	201.4	201.8	0.4	5.44	192	7.8
ZM-185	Las Brisas	Manto Antiquo	135.4	136.4	1	5.93	586	13.3
Including	Las Brisas	Manto Antiquo	135.8	136.1	0.3	18.27	1	819
And	Las Brisas	Manto Brisas	164.9	165.9	1	6.46	50	7.1

Hole ID	Target	Structure/Vein	From (m)	To (m)	Width (m)	Au (g/t)	Ag (g/t)	AuEq (g/t)
Including	Las Brisas	Manto Brisas	164.9	165.4	0.5	12.12	93	13.3
ZM-186	Las Brisas	Unknown	19.5	20	0.5	13.03	4	13.1
And	Las Brisas	Unknown	83.7	84	0.3	5.24	810	15.4
ZM-187	Las Brisas	Unknown	66.4	67.4	1	2.54	26	2.9
Including	Las Brisas	Unknown	66.7	67.1	0.4	6.98	68	7.8
And	Las Brisas	Unknown	152.4	153.4	1	6.21	57	6.9
Including	Las Brisas	Unknown	152.7	153.1	0.4	16.52	143	18.3
And	Las Brisas	Manto Antiguo	175	176.2	1.2	1.79	53	2.5
Including	Las Brisas	Manto Antiguo	175	175.4	0.4	5.6	143	7.4
ZM-188	Las Brisas	Santa Catalina	61.2	62.3	1.1	4.34	39	4.8
Including	Las Brisas	Santa Catalina	61.5	61.9	0.4	13.17	90	14.3
And	Las Brisas	Unknown	136.2	137.4	1.2	2.58	29	2.9
Including	Las Brisas	Unknown	136.6	137.1	0.5	5.62	59	6.4
And	Las Brisas	Manto Antiguo	144.8	146	1.2	3.52	30	3.9
Including	Las Brisas	Manto Antiguo	145.2	145.7	0.5	9.56	64	10.4
And	Las Brisas	Santa Catalina	54.1	55.2	1.1	3	27	3.3
Including	Las Brisas	Santa Catalina	54.5	54.8	0.4	7.93	72	8.8
ZM-190	Las Brisas	Santa Catalina	129.1	130.1	1	13.93	196	16.4
Including	Las Brisas	Santa Catalina	129.1	129.8	0.7	14	96	15.2
And	Las Brisas	Manto Antiguo	160.4	161.3	0.9	1.47	82	2.5
Including	Las Brisas	Manto Antiguo	160.9	161.3	0.3	3.09	167	5.2
And	Las Brisas	Manto Antiguo	164.1	165	0.9	7.67	402	12.7
Including	Las Brisas	Manto Antiguo	164.5	165	0.6	12.19	642	20.2
ZM-191	Las Brisas	Manto Antiguo	147.1	148.2	1.1	3.07	158	5
Including	Las Brisas	Manto Antiguo	147.1	147.9	0.8	4.36	160	6.9
And	Las Brisas	Manto Antiguo	153.2	154.1	0.9	13.57	636	21.5
Including	Las Brisas	Manto Antiguo	153.2	153.8	0.6	21.02	984	33.3
ZM-192	Las Brisas	Santa Catalina	94.7	95.4	0.7	8.93	53	9.6
Including	Las Brisas	Santa Catalina	94.7	95.1	0.3	17.2	101	18.5
And	Las Brisas	Manto Antiguo	150.2	151.7	1.5	2.58	94	3.8
Including	Las Brisas	Manto Antiguo	151.3	151.7	0.4	4.18	46	4.8
And	Las Brisas	Unknown	132.9	133.7	0.8	1.87	48	2.5
Including	Las Brisas	Unknown	132.9	133.3	0.4	3.77	93	4.9
ZM-193	Las Brisas	Manto Antiguo	143	144.1	1.1	8.83	605	16.4
Including	Las Brisas	Manto Antiguo	143	143.4	0.4	23.11	1	652
ZM-194	Las Brisas	Santa Catalina	103.4	104.1	0.7	3.37	32	3.8
Including	Las Brisas	Santa Catalina	103.4	103.8	0.4	5.8	60	6.6

10.2.2 COLLAR SURVEYS

Drillhole collars were initially laid out by the geologist using GPS. Upon completion the drill collars were surveyed by total station by a service company using a network of survey points that were surveyed by differential GPS. The underground drillhole collars were surveyed by total station.

All of the surface drill platforms were restored and revegetated after use. The Gran Colombia collars were marked by a cement monument with the hole number in paint and plastic pipe in the top of the hole. The IAMGOLD Colombia and Denarius collars are marked by a cement monument with plastic pipe in the top of the hole and a metal plaque with the hole information.

10.2.3 DOWNHOLE SURVEYS

Downhole directional surveys using a wireline Reflex multishot instrument. Surveys are carried out downhole with readings at every 50 m depth during drilling using a wireline Reflex RZ-Trac multishot instrument and corroborated this with a second multishot survey on completion of each hole. The drill collars were surveyed by total station in a closed polygon with a local network of five survey points surveyed by differential GPS.

10.2.4 CORE TRANSPORT AND STORAGE

Core is stored in several secure buildings at Sitio Viejo including two purpose-built core stores. A short description of the chain of custody is summarized below.

- Staff takes custody of the core from the drill contractor when it comes out of the core barrel. Zancudo Colombia has a technician at the drill.
- The core is cleaned, oriented and marked with the orientation line.
- The core is put in plastic boxes with depth markers (tacos) and the boxes marked.
- The core boxes with lids are collected from the drill platform daily. If there is no road access to the platform, the boxes are carried to the road by mule.
- The core boxes are delivered to the core logging facility in Sitio Viejo. In 2022 this was adjusted to core logging and storage being in close proximity (walking distance), to the exploration office.

10.2.5 CORE LOGGING

A short summary of the core logging processes is discussed below.

- A geotechnical log is made of recovery and RQD and input to Excel.
- A geological quick log is made and input to Excel.
- A geological log is made using Gems Logger software on a laptop computer.
- Magnetic susceptibility readings are made.
- Density measurements are made.
- Samples intervals are selected for assay. The sampling is selective of the veins and wall rock only, and not of the complete hole. The minimum sample length is 0.5 m, and the maximum is 1.5 m. Sample cards are filled in, the samples are marked on the boxes, and sample tickets are stapled on the boxes.
- Photographs are taken of the boxes of whole core.
- The core is cut lengthwise by a diamond saw. One half of the cut core is put in a plastic bag. The sample number is written in indelible marker on the bag and the sample number ticket is taped inside the top of the bag. The samples are stored in the patio of the office at the core logging facility.
- The core boxes are stored in the core warehouse.

11 SAMPLE PREPARATION, ANALYSIS AND SECURITY

Sample preparation, analysis, and security procedures for the Zancudo Project were conducted using industry-standard methods at accredited laboratories. All work supporting the current Mineral Resource Estimate followed appropriate protocols and included a comprehensive QA/QC program.

11.1 SAMPLE PREPARATION

Core samples were prepared at the SGS laboratory in Medellín, Colombia (or equivalent accredited facility). Preparation involved drying, crushing to 80% passing 2 mm, splitting, and pulverizing to 85% passing 75 µm (Table 11-1). Procedures were consistent across all drilling campaigns.

11.2 ANALYTICAL METHODS

A Gold was analyzed by fire assay with atomic absorption finish (30 g charge). Silver and multi-element geochemistry were determined by ICP-AES or ICP-MS methods (Table 11-2). Over-limit samples were re-assayed by appropriate methods. Primary analyses were performed at SGS laboratories in Colombia, with check assays at independent laboratories as part of the QA/QC program.

Table 11-1: Summary of Sample Preparation Methods and Primary Laboratory Used

Program	Laboratory	Method	Code	Procedure
CDI	Not known	Preparation	Not known	Not known
Gran Colombia	SGS, Medellín & Callao, Peru	Preparation	PRP93	Dry, crush to >90% passing 10 mesh, split 250 g and pulverize to >95% passing 140 mesh.
IAMGOLD	ALS Minerals, Medellín & Callao, Peru	Preparation	PREP-33D	Dry, crush to >90% passing -2 mm, riffle split 1000 g and pulverize to >95% passing 106 microns.
Denarius	SGS Medellín	Preparation	PRP93	Dry, crush to >90% passing -2 mm, riffle split 250g and pulverize to >95% passing 106 microns.

TABLE 11-2: SUMMARY OF SAMPLE ANALYSIS METHODS AND PRIMARY LABORATORY USED

Program	Laboratory	Method	Code	Procedure
CDI	Not known	Au, Ag	Not known	Not known
Gran Colombia	SGS, Medellín & Callao, Peru	Au	FAA313	Fire assay 30 g, AAS
		Au overlimit	FAG303	Fire assay 30 g, gravimetry
		Multielement	ICP12B	34 elements by nitric and hydrochloric acid digestion, ICP-OES
		Ag, As, Fe, Pb, Zn grade	AAS41B	Multi-acid digestion, AAS
		S	CSA24V	LECO
IAMGOLD	ALS Minerals, Medellín & Callao, Peru	Au	Au-AA24	Fire assay 50 g, AAS
		Au overlimit	Au-GRA22	Fire assay 50 g, gravimetry
		Multielement	ME-ICP41	35 elements aqua regia digestion, ICP-AES
		Ag overlimit	Ag-GRA22	Fire assay g, gravimetry
		As, Cu, Pb, Zn grade	AA46	Aqua regia digestion, AAS
Denarius	SGS Laboratories, Medellín & Callao, Peru	Au	FAA313	Fire assay 30g, AAS finish
		Au overlimit	FAG303	Fire assay 30g, gravimetry
		Multielement	ICP12B	34 elements aqua regia digestion, ICP-OES spectroscopy

		Ag	Included in FAA313 and FAG303	Fire assay 30g, gravimetry
		Ag, As, Fe, Pb, Zn	AAS41B	Four-acid (HNO ₃ -HCl-HClO ₄ -HF) total digestion; AAS finish for targeted elements.
		Sulfur	CSA24V	LECO combustion-infrared detection for total sulfur content.

11.3 QUALITY ASSURANCE AND QUALITY CONTROL

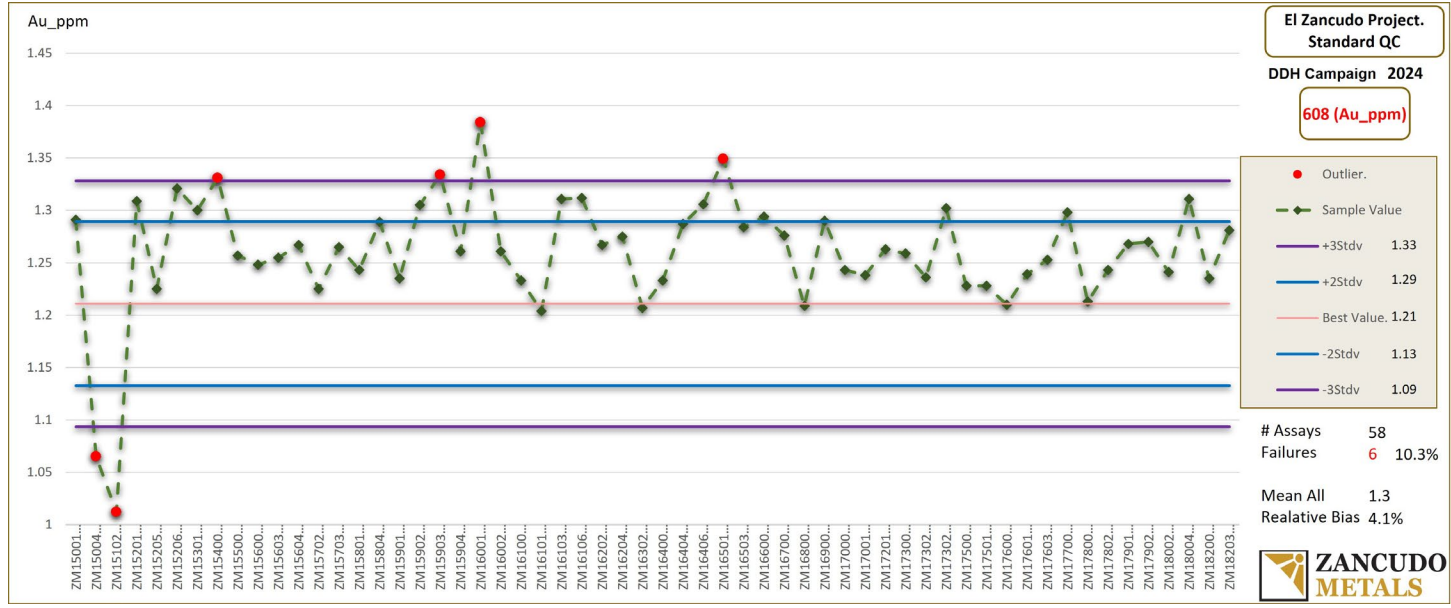
The QA/QC program included insertion of certified reference materials (standards), blanks, and field, coarse, and pulp duplicates at regular intervals. Results of the 2024 Denarius drilling campaign are illustrated in Figures 11-1 through 11-3. The QP considers the QA/QC results to be acceptable and within industry norms, confirming that the assay data are reliable for use in the Mineral Resource Estimate.

11.4 SAMPLE SECURITY

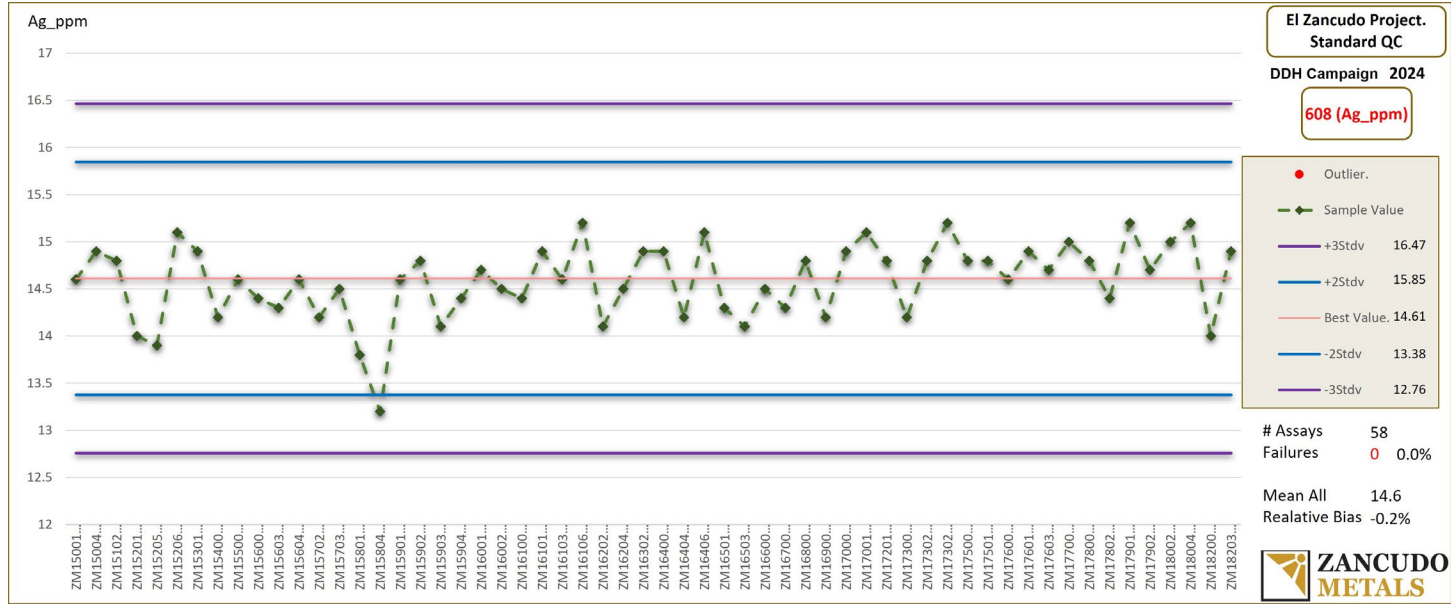
Core was logged and sampled under the supervision of qualified geologists. Samples were placed in sealed bags and transported directly from the site to the laboratory via secure courier with documented chain-of-custody procedures. No security issues have been identified.

11.5 QP OPINION

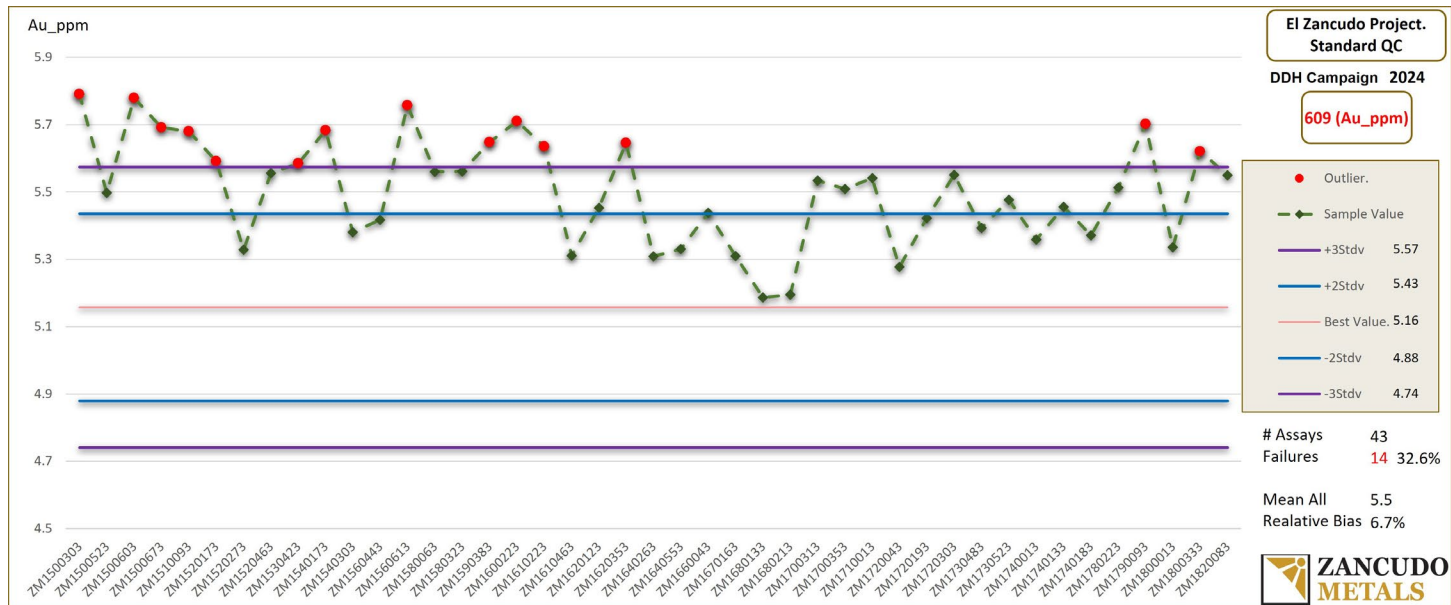
In the opinion of the Qualified Person, the sample preparation, security, and analytical procedures are appropriate for the style of mineralization and are adequate to support the current Mineral Resource Estimate.



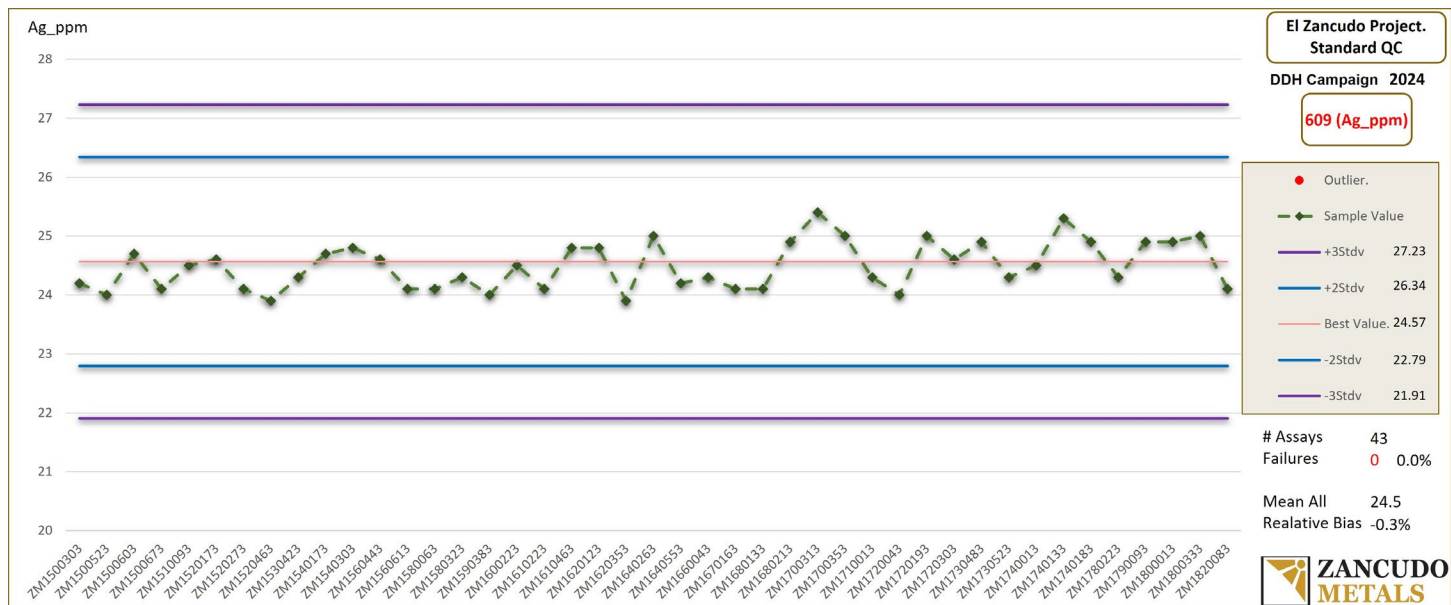
Gold



Silver

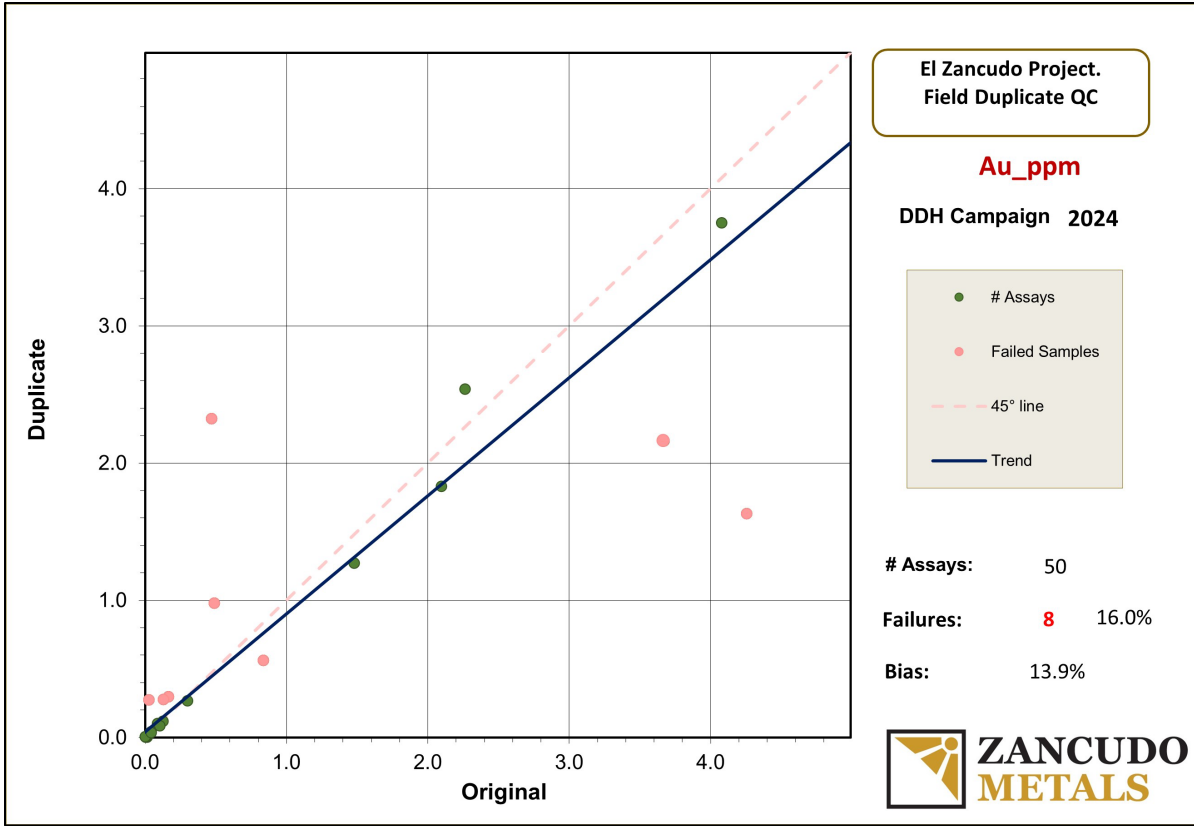


Gold

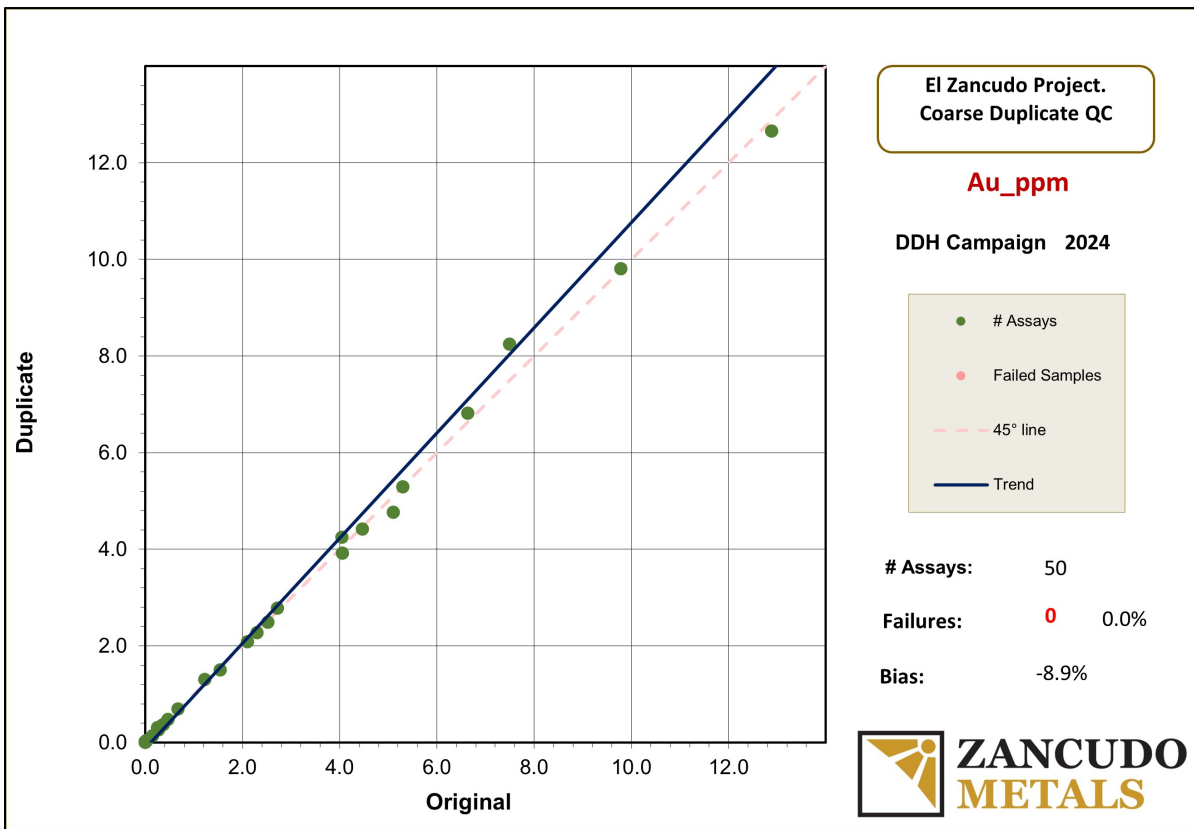


Silver

Figure 11-1: Example of Certified Reference Samples Submitted During the 2024 Drilling Campaign.



Field Duplicates



Coarse Duplicates

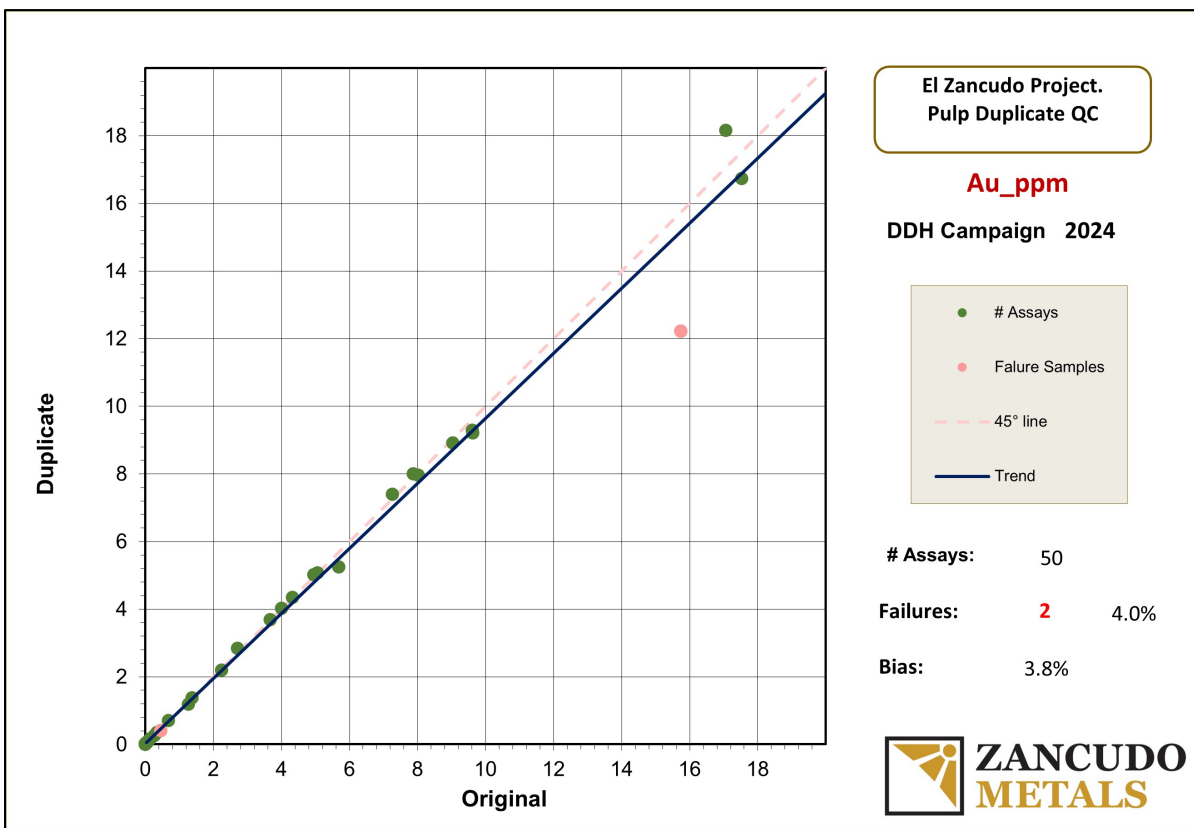


Figure 11-3: Summary of Duplicate Submissions by Sample Type

12 DATA VERIFICATION

The Qualified Person (Scott E. Wilson, CPG, SME-RM) conducted a personal site visit to the Zancudo Project from July 30 to August 2, 2024. During the visit, the QP inspected drill core from the 2024 Denarius drilling campaign, reviewed core logging and sampling procedures, examined underground exposures in historical workings, and verified surface infrastructure and drill collar locations.

The QP performed independent checks on the project database, including verification of a representative selection of drillhole collars, downhole surveys, assay certificates, and geological logs against primary source data. No material discrepancies were identified. The database is maintained in a secure, industry-standard format with built-in validation protocols.

In the opinion of the Qualified Person, the exploration data, drilling results, and supporting information are adequate and reliable for the purposes of the Mineral Resource Estimate and the Preliminary Economic Assessment contained in this Technical Report.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 TESTING AND PROCEDURES

13.1.1 HISTORIC

The Zancudo deposit has undergone limited metallurgical test work in the past. In 2012-13, Terra Mineralogical Services, using 22 core samples, conducted a predictive metallurgical study using scanning electron microscope SEM-EDS scans of polished thin sections to help determine gold deportment and metallurgical response. Initial results of the study indicated gravity extraction followed by regrind and whole material cyanidation may be an efficient and economic extractive method for Zancudo gold-silver mineralization types. After additional metallurgical test work it was determined that the initial assessment was invalid for the global Zancudo deposit, and a simpler gravity and flotation flow sheet was selected. A summary of the metallurgical testing used to support the selected process follows in the following sections. Summary of Short Channel Sampling Program (December 2022).

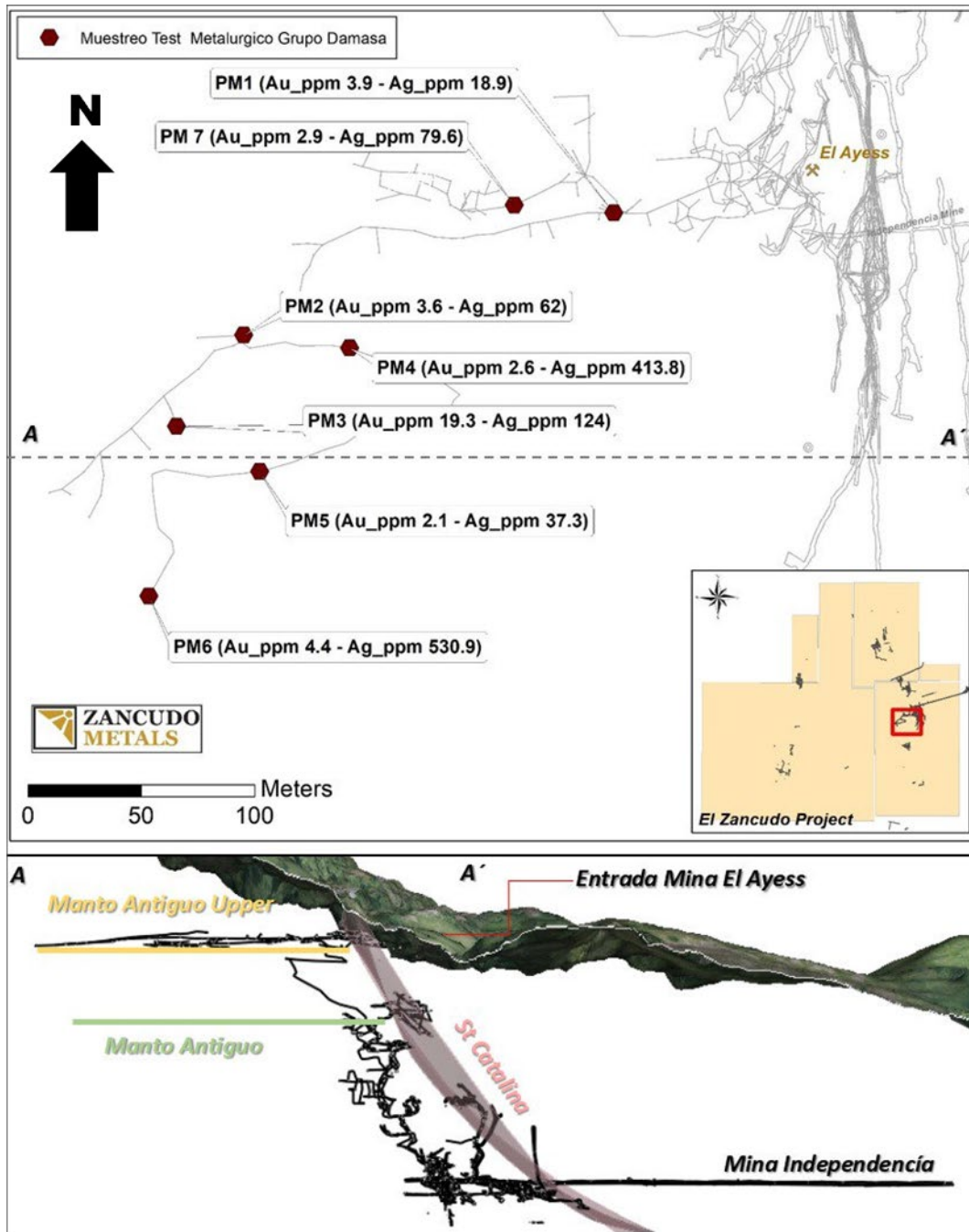
Sample Selection

A total of seven bulk composite samples were selected near the main portal of the Ayess Mine (Figure 13-1) for initial test work. The combined composites weighed approximately 450 kg, and sampling was completed at Aris Mining Corporation's ("Aris") Segovia Laboratory in Colombia. The blended composites had an average grade of 7.4 g/t Au and 297.3 g/t Ag, with the results per composite shown in Table 13.1. It should be noted that the sample gold grade on Especial PM3 is much higher than the others, potentially skewing the results higher for both grade and recovery. The same can be said for samples Especial PM4 and PM6 for silver.

Table 13-1: Assay Results for Au and ag (g/t) for Samples

Description	% Moisture	Grade Au g/t	Grade Ag g/t
ESPECIAL PM1	15.6	3.9	18.9
ESPECIAL PM2	16.4	3.6	62
ESPECIAL PM3	4.5	19.3	124
ESPECIAL PM4	7.3	2.6	413.8
ESPECIAL PM5	8.3	2.1	37.3
ESPECIAL PM6	12	4.4	530.9
ESPECIAL PM7	5.1	2.9	79.6
Average Blend (PM1-7)	9.4	7.4	297.3
ESPECIAL TITIRIBÍ	8.6	5.2	129.8

Source: Denarius, 2023



Source: Denarius 2023

Figure 13-1: Location of Composites Taken for Initial Metallurgical Testwork

Leaching

The blended sample was ground to 400 mesh (38 μm) and subjected to a cyanide bottle-roll test. Average gold and silver extractions were 85% and 90%, respectively. However, benchmarking against regional operators and reviewing reports from previous Zancudo operators indicated the results were not representative due to sample grade and repeatability concerns. Accordingly, the laboratory results were discounted, and additional test work was initiated using more representative samples to confirm repeatability.

13.1.2 SUMMARY OF ARIS BLENDING TEST PROGRAM (JUNE 2023)

Introduction

A representative sample of Zancudo mineralization was submitted to Aris Mining Corporation’s (“Aris”) Segovia Laboratory in Colombia for metallurgical testwork to evaluate gold recovery via flotation and leaching. In addition, blending tests were completed using Zancudo concentrate and Aris material in a 12.5% and 87.5% ratio, respectively, to approximate anticipated daily production proportions in the event a toll-treatment agreement is executed.

Sample Selection

A 71.2 kg sample of gold-bearing mineralization was shipped from Zancudo for metallurgical testing. The sample was split and then ground to 80% passing (P80) 106 µm for rougher flotation tests and to P80 38 µm for leaching test work.

A size-by-size assay analysis was completed to determine the gold department by size fraction (Table 13-2).

Table 13-2: Analysis of Au Distribution by Size Fraction

Mesh	Au (g/t)	Mass (g)	% Distribution Au
Mesh +140	28.9	9.2	20%
Mesh +200	11.6	10.1	9%
Mesh +325	5.3	52.6	21%
Mesh -325	3.6	181.4	50%
Recalculated Head	5.2	253.3	

Source: Denarius 2023

Rougher Flotation

Rougher flotation testing was conducted at the Maria Dama process plant in Segovia under standard processing conditions (35% solids slurry density; 12-minute retention time). For Zancudo mineralization, the tests yielded 62.4% Au recovery and 68.9% Ag recovery to a rougher flotation concentrate grading 31.6 g/t Au and 699.5 g/t Ag (Table 13-3).

Table 13-3: Bulk Rougher Flotation Results

	Mass (g)	Au (g/t)	Ag (g/t)	Rec Au%	Rec Ag%
Head	1000	4.8	96.5	62.5%	68.9%
Concentrate	95	31.6	699.5		
Tail	905	2.0	33.2		

Source: Denarius 2023

Cyanide Leaching

A blended flotation concentrate comprising 12.5% Zancudo and 87.5% Segovia concentrate (based on estimated mine mass fractions) was ground to a P80 of 38 µm and subjected to standard cyanide leach testing at 1,000 ppm NaCN and 31% solids. Gold and silver extractions from the blended concentrate were 96.6% and 62.1%, respectively (Table 13-4). These results reflect leach performance of the concentrate and do not account for metal reporting to the flotation tailing.

Table 13-4: Leaching Results on the Blended Concentrate

	Au (g/t)	Ag (g/t)	Extraction Au%	Extraction Ag%
Head	101.40	301.62	96.6%	62.1%
Tail	3.46	114.21		

Source: Denarius 2023

The Zancudo test whole ore composite (P80 = 38 µm) was processed using direct cyanide leaching at 31% solids and 1,000 ppm NaCN. Gold and silver recoveries were lower than those achieved in the blended composite leach tests, with extractions of 62.3% Au and 69.1% Ag (Table 13-5). No cyanide leach testing was performed on the Zancudo rougher flotation concentrate.

Table 13-5: Results of Direct Leaching Zancudo Ore

	Au (g/t)	Ag (g/t)	Extraction Au%	Extraction Ag%
Head	4.80	96.50	62.3%	69.1%
Tail	1.81	29.81		

13.1.3 SUMMARY OF SGS TEST PROGRAM (JUNE 2023)

Introduction

Zancudo hired SGS Laboratories in Lima, Peru, to test three composite samples from different mineralogical structures (Santa Catalina, Manto Antiguo, and La Miel) and evaluate the metallurgical performance of the deposit. The tests included mineralogy, grinding kinetics, gravity, rougher/cleaner flotation, and diagnostic leaching to estimate the gold and silver recoveries.

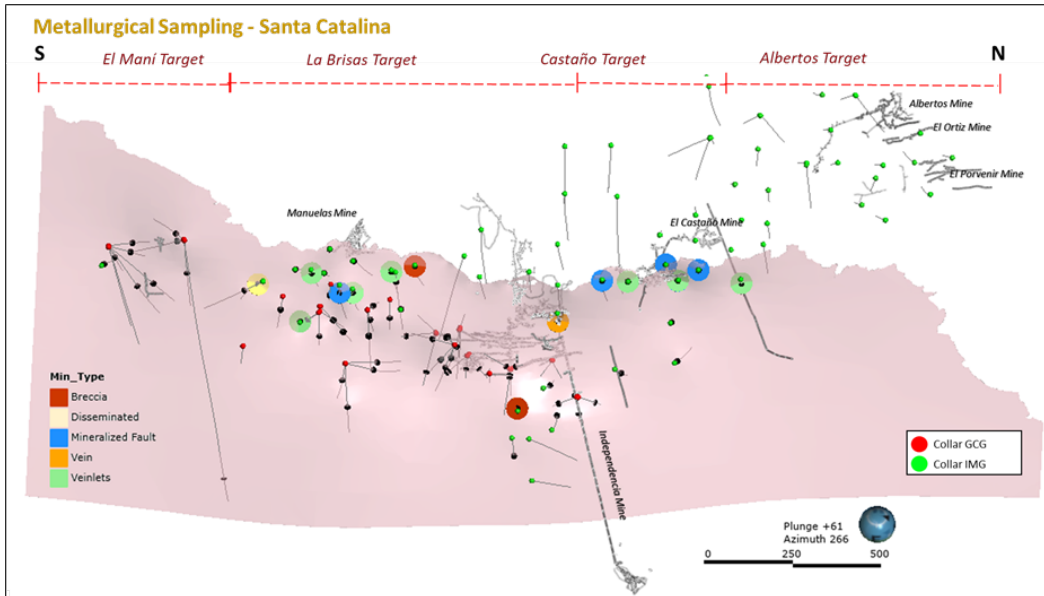
Sample Selection

The test samples received by SGS were graded and quantified as shown in Table 13-6. The gold content of each sample varied from 0.44 g/t to 22.36 g/t, while the silver content of each sample varied from 1.4 g/t to 788 g/t. A notable observation is that the arsenic content ranged from 153 ppm to 53,421 ppm. The test composites were derived from the drillhole locations depicted in Figure 13-2, Figure 13-3, and Figure 13-4.

Table 13-6: Metallurgical Test Composites

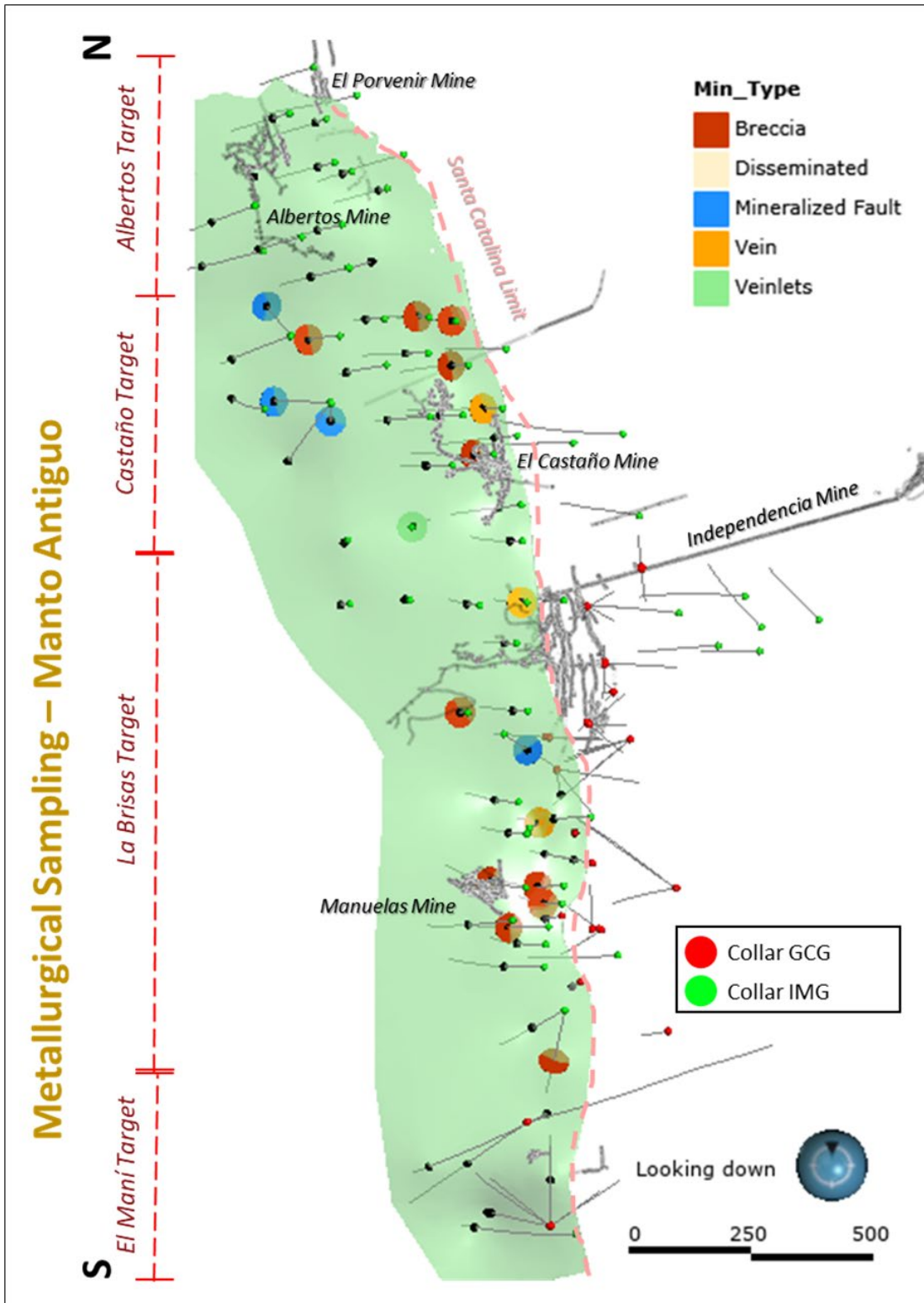
Structure	Metallurgical Sample	Number of Samples	Weight (kilograms (kg))	Assayed Au (g/t)	Assayed Ag (ppm)	Assayed As (ppm)
Santa Catalina	ZM-01M	16.00	35.2	2.23	58.67	3,855
Manto Antiguo	ZM-02M	26.00	53.0	6.15	166.60	14,299
La Miel	ZM-03M	16.00	43.9	2.15	21.12	6,173

Source: Denarius 2023



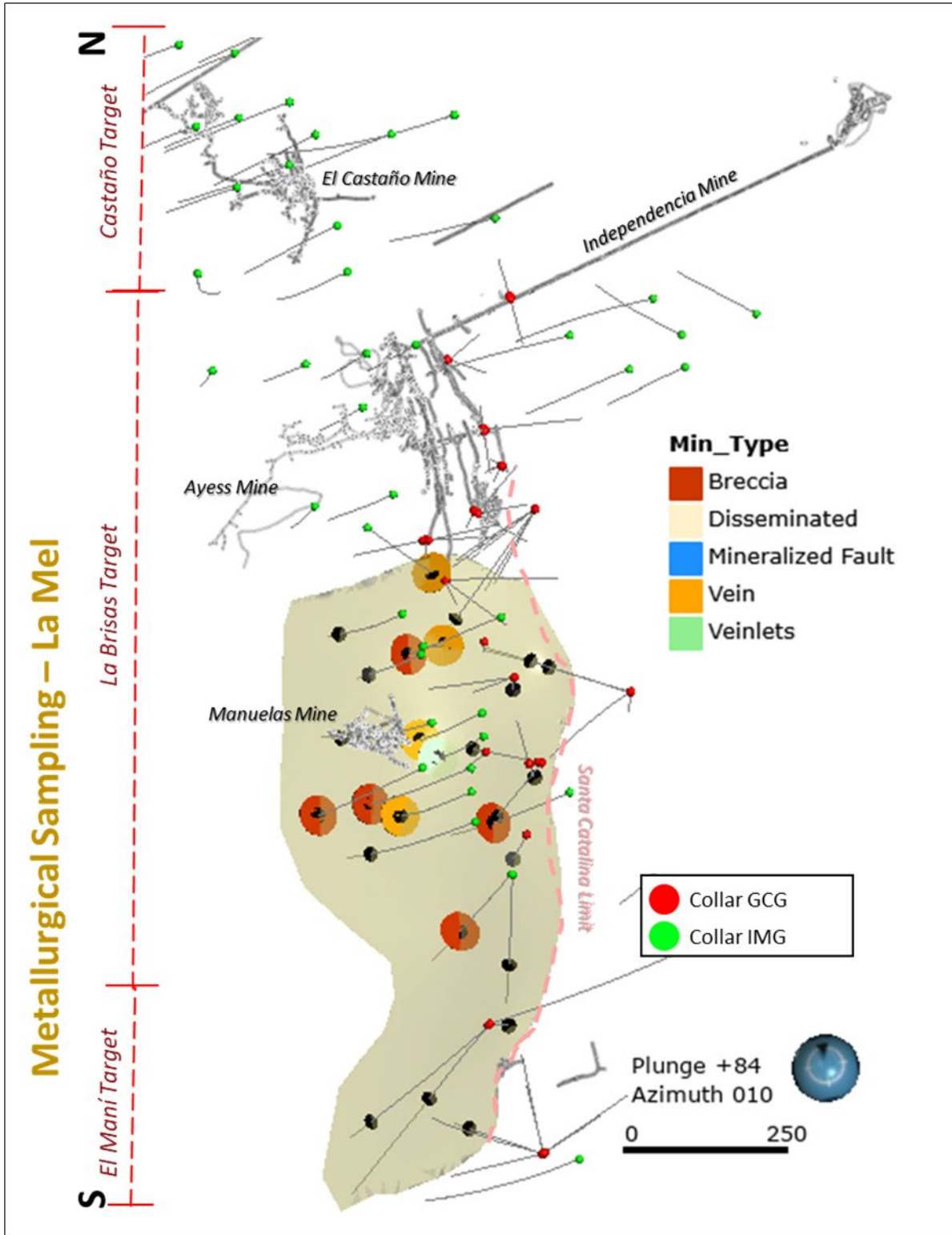
Source: Denarius 2023

Figure 13-2: Drillhole Locations for the Santa Catalina Metallurgical Composite



Source: Denarius 2023

Figure 13-3: Drillhole Locations for the Manto Antiguo Metallurgical Composite



Source: Denarius 2023

Figure 13-4: Drillhole Locations for the La Miel Metallurgical Composite

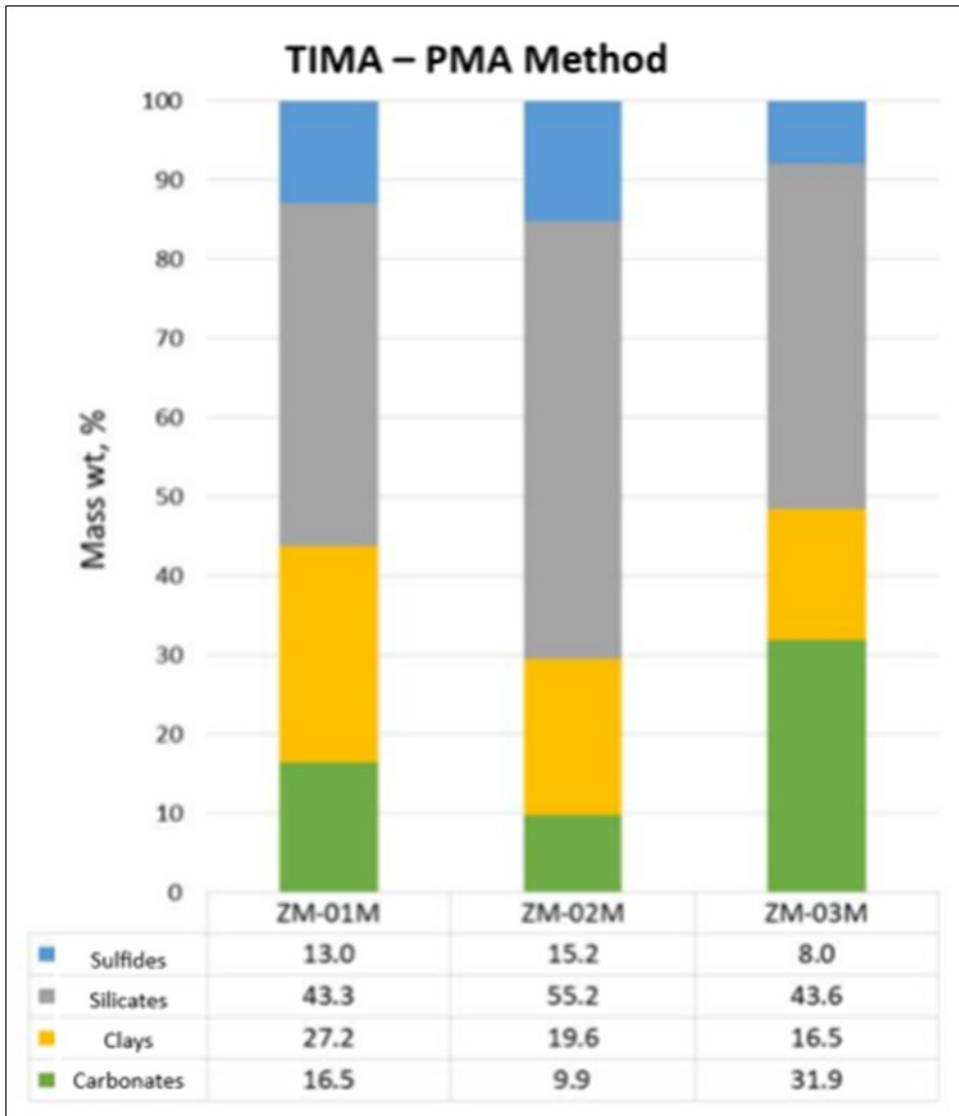
The tested domains (Santa Catalina, Manto Antiguo, and La Miel) represent 57% of the Inferred resource, while the remaining 43% comes from the non-tested domains (Porvenir, Manto Antiguo Lower, Manto Antiguo Upper, Manto Inferior, Panal, Ortiz A, and Ortiz B). The gold content of the tested domains varies significantly: Santa Catalina and La Miel have 10% and 13%, respectively, while Manto Antiguo has 39%. The average grades of Santa Catalina and La Miel are also lower (by a factor of 3 to 2) than the current mineral resources, which may affect the representativeness of the whole domains.

No samples were collected, composited, or tested from the Porvenir, Manto Antiguo Lower, Manto Antiguo Upper, Manto Inferior, Panal, Ortiz A, or Ortiz B structural domains.

Mineralogy

The mineralogical characterization of the three head mineral samples was done by grinding them to P80 of 212 μm and using the TESCAN Integrated Mineral Analyzer (TIMA) in two modes: trace mineral analysis (TMS) and particle mineral analysis (PMA). The samples were also analyzed by X-ray diffraction. The TIMA-TMS results revealed that gold occurs as native gold and electrum, which are amenable to gravity, flotation and cyanidation methods. The gold was found to be associated with sulfides: pyrite, arsenopyrite, galena and sphalerite.

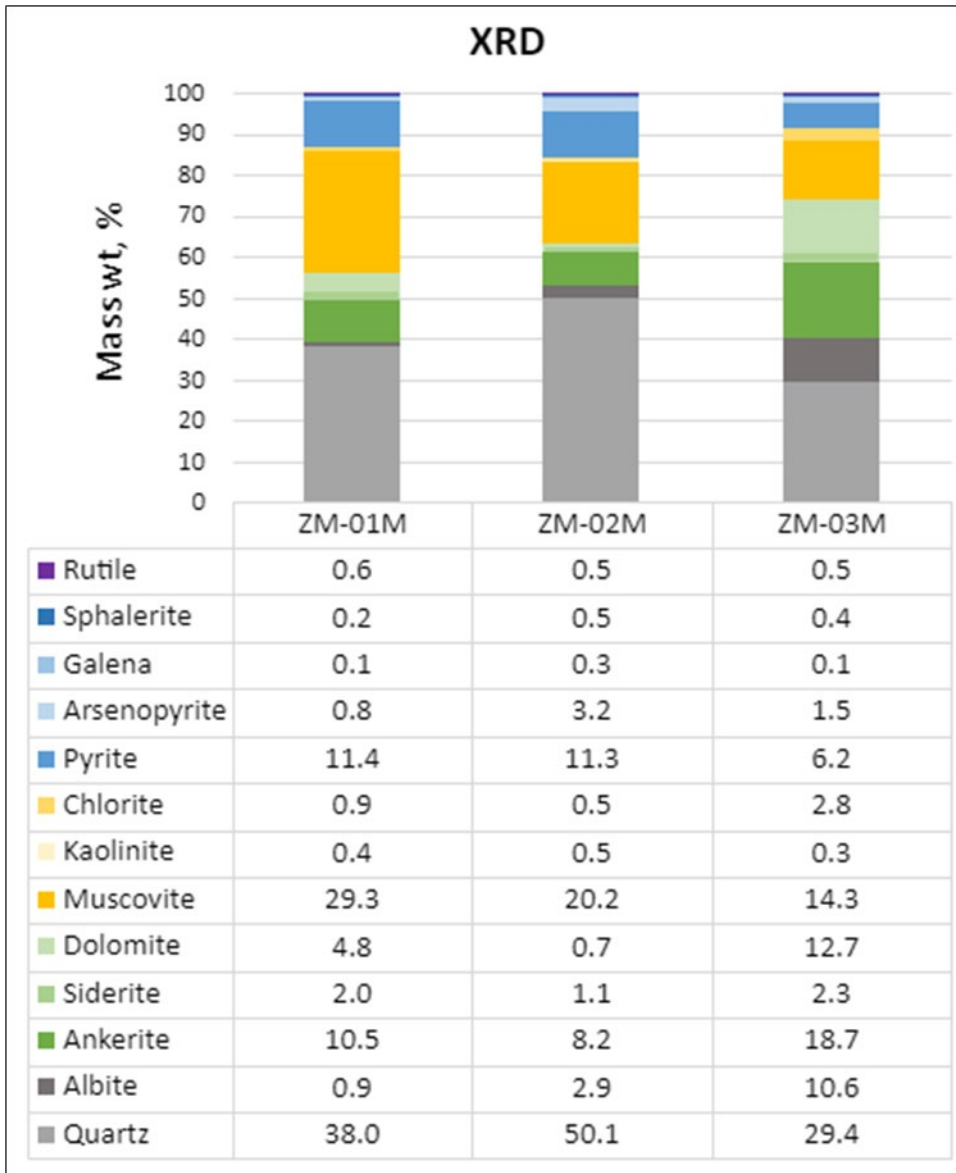
The TIMA-PMA results showed that silicates were the dominant minerals in all three samples. Sulfides varied from 8% to 15%, clays from 16% to 27% and carbonates from 10% to 32%. Clays and carbonates can affect the gold recovery during flotation, so dispersants and gangue mineral depressants were used in the flotation tests.



Source: Denarius 2023 (modified by SRK, 2023)

Figure 13-5: TIMA-PMA Mineralogy

Mineral content in the composite samples was determined by X-ray diffraction (XRD) analysis (Figure 13-6). Pyrite contents were approximately 11% in samples ZM-01M and ZM-02M, and 6.2% in ZM-03M. Arsenopyrite, which can adversely affect leach recovery and smelting costs, was highest in ZM-02M at 3.2%. Clay minerals (confirmed as illite by additional analysis) were present at high levels in all composites, ranging from 14.3% to 29.3%, with the highest proportion in ZM-01M. Ankerite, a carbonate mineral that can interfere with sulfide recovery, ranged from 8.2% to 18.7%. Quartz contents ranged from 29.4% to 50.1%.



Source: Denarius 2023 (modified by SRK, 2023)

Figure 13-6: XRD Mineralogical Analysis

Comminution

The SGS test program did not include any comminution test work. The next phase of metallurgical testing will need to perform comminution test work such as Bond low energy impact (CWi), Bond ball mill work index (BWi) and abrasion index (Ai) to establish the comminution criteria for designing the process plant.

Gravity

A two-stage gravity concentration test using a centrifugal Falcon concentrator was used to conduct tests on a 10 kg sample of each composite. The sample was ground to P80 of 212µm and fed to the concentrator. The concentrate was collected, and the tailings from the first stage were reprocessed in the concentrator. The concentrate from both stages was assayed and used to estimate the total gravity recovery. The recovery results for gold and silver are shown in Table 13-7.

As a side note, the gravity concentration method may be useful as an analytical method for grade control during future production operations.

Table 13-7: Gravity Recovery Results

Structure	Metallurgical Sample	Gravity Au Recovery (%)	Gravity Au Grade (g/t)	Gravity Ag Recovery (%)	Gravity Ag Grade (g/t)
Santa Catalina	ZM-01M	19.0	15.1	7.99	155
Manto Antiguo	ZM-02M	23.2	60.3	4.6	281
La Miel	ZM-03M	19.6	15.4	9.4	76.7

Source: Denarius 2023

The two-stage gravity concentration gold and silver recoveries for the three composite samples had an average gold recovery of 20.6%. The gravity concentrates averaged 30.3 g/t Au, indicating a relatively low-grade product that may require further upgrading prior to sale. Leachability of the concentrate under conventional and intensive conditions has not yet been determined.

Flotation

To optimize the flotation response and achieve the highest precious metal recovery, while minimizing mass pull, a series of tests were performed on three different composites. The tests focused on the following parameters:

- Grind size
- Dispersants
- pH
- Depressants
- Frothers
- Collectors
- Activators

The effect of grind size on gold recovery was evaluated at three P80 targets: 106 µm, 150 µm, and 212 µm. Optimal grind size varied by sample due to clay content and its impact on froth stability. A P80 of 150 µm was selected for the remainder of the metallurgical program; however, this should be revisited in the next study phase. De-sliming testwork is also recommended to determine whether it should be incorporated into the final process flowsheet.

Five dispersants were evaluated for depressing clays and silicates. All dispersants increased gold recovery; however, none fully depressed the clay. Sodium silicate and guar gum performed best, and guar gum was selected for the remainder of the program due to superior froth stability.

Gold recovery was evaluated across a pH range of 7–11. Recovery increased with increasing pH. This trend may be linked to pH-dependent changes in pyrite flotation, which can influence overall Au recovery.

Sodium carbonate was used as a depressant to minimize the effect of clays on gold and silver recovery and froth conditions. The use of sodium carbonate enhanced both gold and silver recovery and improved the froth quality.

Two frothers, MIBC and MT352, were compared and MIBC was found to be superior.

The flotation collectors, PAX (potassium amyl xanthate) and MT4064, were assessed during the program and PAX was determined to be more effective and selective than MT4064. Therefore, PAX was used for the remaining test work.

The optimal dosages of CuSO4 and A-407 activator for gold recovery were investigated with five different conditions. The results showed that higher CuSO4 dosages (35 to 50 g/t) were more effective than lower ones.

However, the Santa Catalina composite (ZM-01M) did not have enough material to complete all the tests, so its recovery results may not be optimal. The recovery of the Manto Antiguo and La Miel composites improved later in the test work program, and the Santa Catalina composite might have a similar improvement since it behaved like them in the early tests. The best recovery results and the corresponding test numbers for each composite are summarized in Table 13-8.

Table 13-8: Metallurgical Rougher Flotation Test Composite Recovery Results

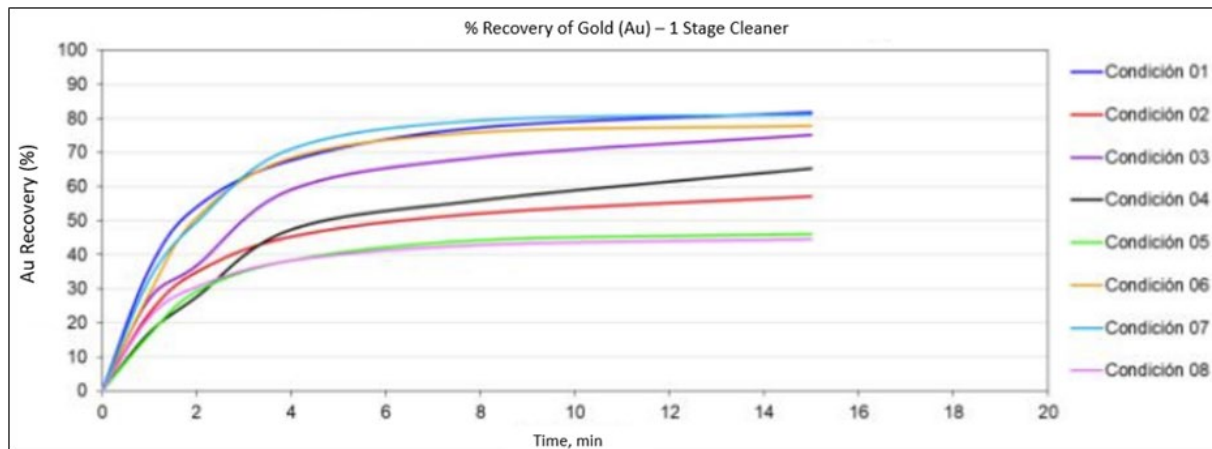
Structure	Metallurgical Sample	Au Recovery (%)	Conc Grade Au(g/t)	Program Test Number	Ag Recovery (%)	Conc Grade Ag(g/t)	Program Test Number
Santa Catalina	ZM-01M	75.8	7.7	15B	88.1	240	15B
Manto Antiguo	ZM-02M	82.5	28.5	24B	86.8	681	24B
La Miel.	ZM-03M	85.0	13	20	88.4	135	13F

Source: Denarius 2023

As shown in Table 13-8, the optimal individual tests for gold and silver recoveries are shown separately. Further optimization is required to find the conditions that maximize both gold and silver recoveries in a single test. Gold recovery varies from 75.8% to 85.0%, but this may be underestimated for the Santa Catalina composite, as discussed earlier. The gold grade of the concentrates is also low, ranging from 7.7 to 28.5 g/t Au and averaging 16.4 g/t Au.

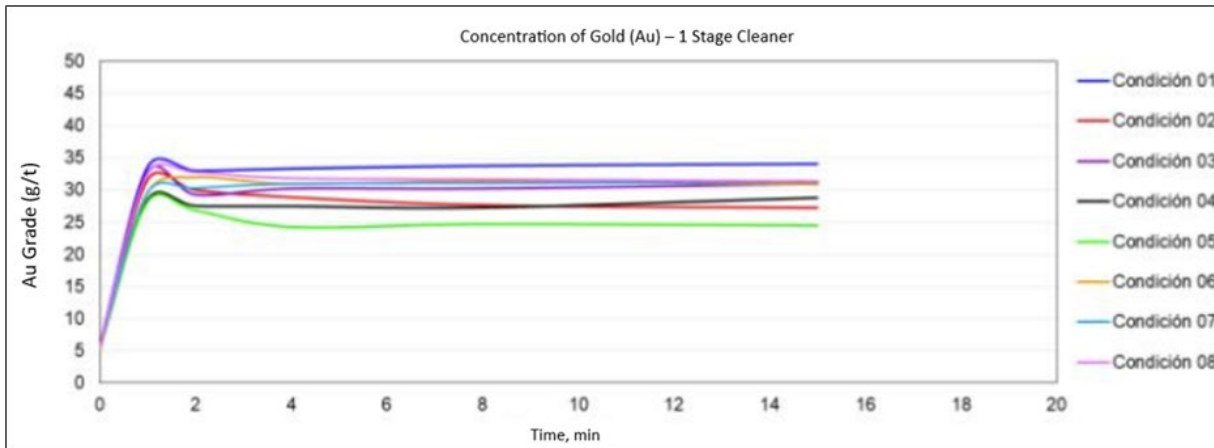
The flotation rougher concentrate was analyzed by ICP and the arsenic values exceeded 10,000 ppm. This should be considered when evaluating further processing options, such as bio-oxidation, and the potential penalties associated with smelting of a final concentrate.

Cleaner flotation tests were conducted on ZM-02M to assess if higher concentrate grades could be obtained while maintaining gold recoveries. The effects of particle size, pH, and PAX dosage were investigated in different conditions to optimize the cleaner flotation circuit. The results from these tests are summarized in the grade and recovery versus time curves in Figure 13-7 and Figure 13-8.



Source: Denarius 2023

Figure 13-7: Gold Recovery vs. Time in Cleaner Flotation - Evaluation of P80, pH, and PAX



Source: Denarius 2023

Figure 13-8: Gold Grade vs. Time in Cleaner Flotation - Evaluation of P80, pH, and PAX

As shown in Table 13-9, ZM-02M without regrind, 20 g/t of PAX and pH of 11.5 achieved the highest cleaner grades for both gold and silver, with 4.6 g/t Au and 119.5 g/t Ag. However, this condition also resulted in lower recovery rates for both metals, with 5.5% Au and 4.7% Ag less than the rougher stage performance for the same condition.

Table 13-9: Metallurgical Cleaner Flotation Test Composite Recovery Results

Structure	Metallurgical Sample	Stage	Au Recovery (%)	Grade (g/t)	Program Test Number	Ag Recovery (%)	Grade (g/t)	Program Test Number
Manto Antiguo	ZM-02M	Rougher	84.9	26.5	32	87.4	640	32
		Cleaner	79.4	31.1	32	82.7	760	32

Source: Denarius 2023

Diagnostic Leach Tests

To determine the gold and silver department and the refractory nature of the mineralized material, each composite was subjected to a diagnostic leach test (DLT) using 200g of material ground to P95 105 µm. DLTs are useful for identifying the mineral associations of gold and silver and the extent to which the material may need additional processing methods such as pressure oxidation, roasting or finer grinding.

Table 13-10: Diagnostic Leach Test Results

DLT Stage	Mineralogy Association	ZM-01M Au Extraction (%)	ZM-01M Ag Extraction (%)	ZM-02M Au Extraction (%)	ZM-02M Ag Extraction (%)	ZM-03M Au Extraction (%)	ZM-03M Ag Extraction (%)
NaCN	Free or liberated	47.2	68.6	49.19	76.36	16.55	64.86
Hydrochloric acid (HCl)	Associated with carbonates	6.85	4.97	1.77	10.41	4.95	10.29
Agua regia	Associated with sulfides	14.01	22.06	15.69	10.51	26.11	24.04
Residue	Encapsulated in silicates	31.94	4.37	33.34	2.72	52.39	0.82

Source: Denarius 2023

13.1.4 SAMPLE REPRESENTATIVITY

Each metallurgical test program describes the representativity of the samples and can be found in the corresponding sections. However, some of the mineralization domains have a limited number of samples, making it difficult to assess their variability. Additional testing and analyses are required when additional samples are available after exploration and drilling activities resume. Sample selection should be based on a geo-metallurgical model if possible.

13.2 RELEVANT RESULTS

The best results for recovering gold and silver from the ZM-02M composite were 52.5% and 65.8%, as shown in Table 13-11 and Table 13-12. The ZM-02M sample was the only one analyzed because the other two samples, ZM-01M and ZM-03M, did not match the current Mineral Resource and were not relevant for the study.

Table 13-11: Metallurgical Test Composite, Gold Recovery Results

Structure	Metallurgical Sample	Gravity Au Recovery (%)	Flotation Au Recovery* (%)	Leaching Au Extraction** (%)	Overall Au Recovery*** (%)
Manto Antiguo	ZM-02M	23.2	82.5	49.2	52.3

Table 13-12: Metallurgical Test Composite, Silver Recovery Results

Structure	Metallurgical Sample	Gravity Ag Recovery (%)	Flotation Ag Recovery* (%)	Leaching Ag Extraction** (%)	Overall Ag Recovery*** (%)
Manto Antiguo	ZM-02M	4.62	86.8	76.4	65.8

The test work on the Zancudo ZM-02M sample showed that gold recovery by gravity concentration was 23.2%, which is a reasonable value. However, more test work is needed to determine if this method is economically feasible and if gold is recovered by subsequent flotation without gravity concentration. Moreover, the gravity concentrate should be further tested to see how much gold can be extracted by additional processing. The industry preference is the recovery of the gold as soon in the process as possible, considering it is economically feasible.

Flotation gold recovery ranged from 62% to 87%, depending on the sample and test program. Recovery may be improved through optimization using a representative sample of the orebody. Cleaner flotation tests on ZM-02M did not achieve higher concentrate grades without reducing gold recovery.

Cyanide leach recovery was 49.2%, based on a diagnostic leach of whole mineral samples using sodium cyanide (NaCN). This is lower than the 62.3% recovery obtained previously for an Aris whole-ore sample; however, the Aris result is not directly comparable to ZM-02M and should not be used to benchmark the ZM-02M gravity and flotation results. Bottle roll results for ZM-02M are pending. Cyanide leach recovery may be improved through further optimization.

Table 13-13 summarizes the gravity and flotation results for ZM-02M, which achieved 86.6% gold recovery and 87.4% silver recovery. These values exclude cyanide leaching and therefore apply only to a final concentrate produced by gravity concentration and flotation.

Table 13-13: Gravity Results

	Gravity Recovery (%)	Gravity Grade (g/t)	Flotation Recovery (%)	Flotation Grade (g/t)	Overall Recovery (%)	Overall Grade (g/t)
Gold (Au)	23.2	60.3	82.5	28.5	86.6	32.8
Silver (Ag)	4.6	281.2	86.8	680.9	87.4	626.5

Source: Denarius 2023

13.3 SIGNIFICANT FACTORS

Denarius Metals is constructing a mineral processing plant with crushing, grinding, gravity concentration, flotation, concentrate handling, and tailings separation. The goal is to produce a gravity concentrate for onsite smelting and a bulk sulfide concentrate rich in precious metals for sale. Combined gravity and flotation circuits are expected to recover 86.6% Au and 87.4% Ag from the ZM-02M, Manto Antiguo sample.

In the 2023 metallurgical tests, two recovery types were identified using separate processing solutions. For Mineral Resources reporting and assessing prospects for economic extraction, two options remain:

- A rougher concentrate was produced from three composite samples, yielding average recoveries of 85% gold and 87% silver. These recoveries may lower the CoG from 4.0 g/t to about 3.5 g/t, if other costs remain unchanged.
- Testing at Segovia using Aris' Maria Dama Plant showed lower recoveries (62% Au, 69% Ag) than before. As a result, the CoG would rise from 4.0 g/t to about 4.6 g/t, assuming costs remain unchanged.

Based on the variability presented recoveries of 75% Au and 80% Ag are recommended as the basis of reporting Mineral Resource Estimates. Further test work and engineering work to assess the preferred processing route for the Project should be evaluated.

14 MINERAL RESOURCE ESTIMATES

14.1 SUMMARY

The Mineral Resource Estimate (“MRE”) for this report has been determined by using a combination of inverse distance cubed (ID3) and ordinary kriging techniques for the Project. Assay data was derived from the current drilling database, including drill holes the recently completed 2024 drilling campaign. Mineralized domain solids were created from the coding of drill data in a three-dimensional (3D) geological modeling program. Drilling intercept assay values were capped for each mineralized domain using statistical analysis and subsequently composited forming the sample set used for the MRE grade estimates. The MRE has been determined according to the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 29, 2019). Mineral Resources have been reported in accordance with the disclosure requirements under NI 43-101.

The MRE is subdivided into the two prevalent structural types identified for the deposit; 1) veins and 2) mantos. Mantos are stratiform, blanket-like bodies of mineralization whereas veins are typically steeply dipping tabular structures. Using the compiled and modeled 3D drill data, combined with local geological knowledge, the Denarius geologists have identified eight veins and five mantos. The largest vein deposit is Santa Catalina representing a volume of nearly 2,300,000 m³ and the largest manto is Manto Antiguo with a volume of approximately 2,000,000 m³.

Reasonable prospects of eventual economic extraction assume underground mining of the deposit, surface mill processing and production of saleable concentrates. Mineral Resources are reported at a Gold Equivalent (AuEq) cutoff grade of 3.25 g/t AuEq.

AuEq is calculated by assigning a metal selling price to Au and Ag, assuming a processing recovery percentage for each metal, royalties and a value factor based on those parameters. Parameters forming the basis of the AuEq are found in section 14.8.

The formula used to estimate AuEq is:

$$\text{AuEq} = (\text{Au} \times 85\% \times \text{US}\$2,400 + \text{Ag} \times 87\% \times \text{US}\$28) / (85\% \times \text{US}\$2,400)$$

Table 14-1 and Table 14-2, respectively present the Indicated and Inferred Mineral Resource Estimates. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources will be converted into Mineral Reserves.

Table 14-1: Zancudo Indicated Mineral Resource Estimate – Effective date: October 31, 2025

Geological Domain	Block Model Domain	Tonnes	Au g/t	Au Oz.	Ag g/t	Ag Oz.	Au Eq g/t	AuEq Oz
Manto Antiguo	101	243,145	6.98	54,542	136.30	1,065,500	8.61	67,265
Manto Antiguo Block E	106	33,319	6.05	6,476	78.72	84,329	6.99	7,483
Santa Catalina	201	422,633	7.87	106,935	55.66	756,272	8.54	115,966
Porvenir	202	56,357	4.62	8,365	72.58	131,512	5.48	9,935
Ortiz A	204	16,322	4.41	2,315	69.54	36,491	5.24	2,750
Ortiz B	205	207,143	5.81	38,665	87.50	582,707	6.85	45,623
Total Tonnes		978,919	6.90	217,298	84.42	2,656,811	7.91	249,022

- Notes:
1. Scott Wilson, CPG, President of RDA is responsible for this mineral resource estimate and is an independent Qualified Person as such term is defined by NI 43-101.
 2. Reasonable prospects of eventual economic extraction were assessed by enclosing the mineralized material, in the block model estimate, in 3D wireframe shapes that were constructed based upon geological interpretations as well as adherence to a minimum mining unit with geometry appropriate for underground mining.
 3. The cutoff grade of 3.25 g/t AuEq considered parameters of:
 - a. Metal selling prices: Au-US\$2,400/oz, Ag-US\$28/oz.
 - b. Recoveries of Au 85%, Ag 87%.
 - c. Operating costs of (US\$105/t mining, US\$42/t processing, US\$21/t G&A/off-site)
 - d. Royalty of 6.7%
 4. Gold Equivalent Grade (“AuEq”) is estimated by the formula:
 - a. $\text{AuEq} = (\text{Au} \times 85\% \times \text{US}\$2,400 + \text{Ag} \times 87\% \times \text{US}\$28) / (85\% \times \text{US}\$2,400)$
 5. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
 6. Figures may not add up due to rounding.
 7. The QP knows of no other legal, political, environmental, or other risks that could materially affect the potential development of the mineral resources for the Project.

Table 14-2: Zancudo Inferred Mineral Resource Estimate – Effective date: October 31, 2025

Geological Domain	Block Model Domain	Tonnes	Au g/t	Au Oz.	Ag g/t	Ag Oz.	Au Eq g/t	AuEq Oz
Manto Antiguo	101	1,690,186	6.31	342,757	93.22	5,065,630	7.42	403,246
Manto Antiguo Upper	102	37,830	2.84	3,460	148.59	180,722	4.62	5,618
Manto Antiguo Lower	103	394,712	5.51	69,924	66.59	845,035	6.31	80,014
Manto Inferior	104	814,712	4.08	106,932	84.27	2,207,190	5.09	133,288
La Miel	105	351,515	6.58	74,325	85.21	962,982	7.59	85,824
Manto Antiguo Block E	106	81,930	6.64	17,498	90.71	238,937	7.73	20,351
Santa Catalina	201	589,321	5.53	104,843	51.30	971,881	6.15	116,449
Porvenir	202	491,573	4.60	72,769	99.39	1,570,818	5.79	91,526
Ortiz A	204	4,420	4.37	620	67.72	9,624	5.18	735
Ortiz B	205	180,148	6.77	39,216	78.67	455,623	7.71	44,657
Total Tonnes		4,636,346	5.58	832,344	83.92	12,508,442	6.59	981,708

- Notes:
1. Scott Wilson, CPG, President of RDA is responsible for this mineral resource estimate and is an independent Qualified Person as such term is defined by NI 43-101.
 2. Reasonable prospects of eventual economic extraction were assessed by enclosing the mineralized material, in the block model estimate, in 3D wireframe shapes that were constructed based upon geological interpretations as well as adherence to a minimum mining unit with geometry appropriate for underground mining.
 3. The cutoff grade of 3.25 g/t AuEq considered parameters of:
 - a. Metal selling prices: Au-US\$2,400/oz, Ag-US\$28/oz.
 - b. Recoveries of Au 85%, Ag 87%.
 - c. Operating costs of (US\$105/t mining, US\$42/t processing, US\$21/t G&A/off-site)
 - d. Royalty of 6.7%
 4. Gold Equivalent Grade ("AuEq") is estimated by the formula:
 - a. $AuEq = (Au \times 85\% \times US\$2,400 + Ag \times 87\% \times US\$28) / (85\% \times US\$2,400)$
 5. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
 6. Figures may not add up due to rounding.
 7. The QP knows of no other legal, political, environmental, or other risks that could materially affect the potential development of the mineral resources for the Project.

14.2 MINERAL MODELS

Each vein and manto domain was individually assessed for general, capping, and geostatistics. Gold and silver grades were estimated using ordinary kriging (OK), inverse distance cubed (ID3), and nearest neighbor (NN) techniques. These estimates were compared with composite statistics and visually checked for accuracy, after which the best grade estimate was selected for the MRE of each domain. The next section explains the mineralization estimation process for Manto Antiguo in detail; a summarizing table will present parameters for the other domains. All structures underwent the same evaluation.

14.2.1 MANTO ANTIGUO

Manto Antiguo is intercepted by 93 drillholes. Within these holes there are 182 distinct assay intervals. Gold assays demonstrate smoothness with coefficient of variation (CV) of 1.24. Gold was not capped. Silver has an elevated CV at 2.90; assays were capped at 642 ppm, removing 10 samples, which reduce the CV to 1.55.

Manto Antiguo									
Variable name Drilling\Manto_Antiguo\antiguo_101.dhd:ASSAY:AU_PPM									
Number of samples: 182					Skewness: 1.917755				
Minimum: 0.003000					Fisher Kurtosis: 3.758497				
Maximum: 34.510000					Nat. log mean: 0.483958				
Range: 34.507000					Nat. log variance: 4.697457				
Average: 5.379989					Coef. of variance: 1.246392				
Standard deviation: 6.705575					Sichel t: 16.991054				
Variance: 44.964731					Q1: 0.650000				
Geometric mean: 1.622484					Median: 2.860000				
Geometric variance: 109.667952					Q3: 7.030000				
Harmonic mean: 0.065694									
Table of distribution percentiles									
95:	21.220	99:	31.903	98:	23.053	97:	22.383	96:	21.540
90:	15.090	94:	20.701	93:	18.107	92:	17.061	91:	15.369
85:	10.760	89:	14.744	88:	14.256	87:	12.786	86:	12.053
80:	9.513	84:	10.569	83:	10.200	82:	9.713	81:	9.558
75:	7.030	79:	8.506	78:	8.031	77:	7.494	76:	7.333
70:	5.816	74:	6.728	73:	6.442	72:	6.106	71:	6.040
65:	5.383	69:	5.717	68:	5.623	67:	5.482	66:	5.430
60:	4.262	64:	5.254	63:	4.954	62:	4.767	61:	4.561
55:	3.358	59:	4.158	58:	3.859	57:	3.615	56:	3.590
50:	2.860	54:	3.298	53:	3.218	52:	3.172	51:	2.987
45:	2.407	49:	2.700	48:	2.579	47:	2.532	46:	2.458
40:	1.997	44:	2.300	43:	2.200	42:	2.111	41:	2.023
35:	1.309	39:	1.878	38:	1.697	37:	1.577	36:	1.396
30:	0.800	34:	1.279	33:	1.234	32:	1.176	31:	0.921
25:	0.650	29:	0.771	28:	0.753	27:	0.688	26:	0.662
20:	0.435	24:	0.595	23:	0.568	22:	0.535	21:	0.493
15:	0.172	19:	0.389	18:	0.346	17:	0.314	16:	0.286
10:	0.053	14:	0.131	13:	0.125	12:	0.103	11:	0.081
5:	0.010	9:	0.040	8:	0.031	7:	0.024	6:	0.022
		4:	0.009	3:	0.005	2:	0.003	1:	0.003

Figure 14-1: Manto Antiguo Gold Assay General Statistics

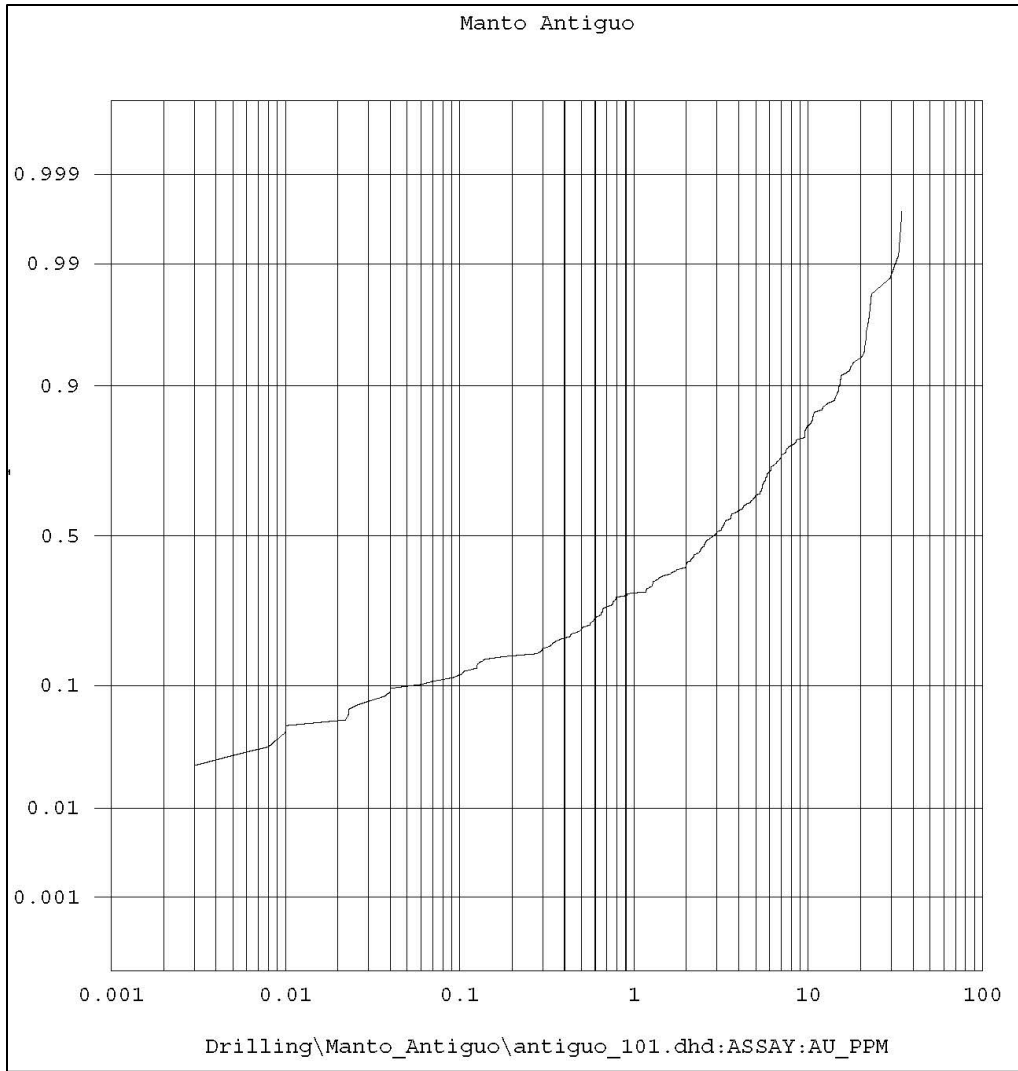


Figure 14-2: Manto Antiguo Gold Assay log probability plot, showing a continuous population

14.2.2 MANTO ANTIGUO COMPOSITE STATISTICS

The nature of the thickness of the veins and mantos are suitable for geology/vein width compositing. The general statistic for the composites demonstrates there are no zero grade composites and that the CV has been lowered which constrains the effect of higher grades being over estimated and over weighted for the MRE Figure 14-3. The average composite length is 1.42 meters, which approximates the modelled thickness of the manto.

Variable name AUCAP		Skewness: 2.201715						
Number of samples: 89		Fisher Kurtosis: 7.361644						
Minimum: 0.003000		Nat. log mean: 0.872871						
Maximum: 33.020000		Nat. log variance: 3.028406						
Range: 33.017000		Coef. of variance: 1.037982						
Average: 5.127239		Sichel t: 10.881608						
Standard deviation: 5.321982		Q1: 1.247500						
Variance: 28.323495		Median: 3.518546						
Geometric mean: 2.393774		Q3: 6.950158						
Geometric variance: 20.664259								
Harmonic mean: 0.098847								
Table of distribution percentiles								
	99:	28.488	98:	20.039	97:	16.134	96:	14.115
	95:	13.596	94:	13.439	93:	13.195	92:	12.981
	90:	12.148	89:	11.889	88:	11.566	87:	10.918
	85:	10.460	84:	10.187	83:	9.732	82:	9.502
	80:	8.513	79:	7.758	78:	7.646	77:	7.399
	75:	6.950	74:	6.880	73:	6.713	72:	6.381
	70:	5.920	69:	5.902	68:	5.820	67:	5.693
	65:	5.501	64:	5.281	63:	5.120	62:	5.059
	60:	4.983	59:	4.842	58:	4.682	57:	4.591
	55:	4.364	54:	4.270	53:	4.181	52:	3.923
	50:	3.519	49:	3.305	48:	3.240	47:	3.182
	45:	2.934	44:	2.673	43:	2.582	42:	2.581
	40:	2.529	39:	2.521	38:	2.517	37:	2.467
	35:	2.317	34:	2.289	33:	2.228	32:	1.877
	30:	1.809	29:	1.674	28:	1.620	27:	1.589
	25:	1.248	24:	1.192	23:	1.170	22:	0.986
	20:	0.806	19:	0.784	18:	0.749	17:	0.701
	15:	0.649	14:	0.557	13:	0.513	12:	0.501
	10:	0.402	9:	0.370	8:	0.349	7:	0.304
	5:	0.057	4:	0.025	3:	0.011	2:	0.004
							1:	0.003

Figure 14-3: Capped Au Composites Manto Antiguo

14.2.3 MANTO ANTIGUO VARIOGRAPHY

Variography was evaluated for all veins and mantos at Zancudo using Sage2001 analysis software. Ultimately only structures that yielded decent variograms were Manto Antiguo, Manto Inferior, Manto Brisas, Vein Santa Catalina and Vein Ortiz B. Figure 14-4 displays the variogram used for Manto Antiguo. The modeled variogram and anisotropy are displayed in Figure 14-5.

14.2.4 DRILL, COMPOSITE INTERCEPTS AND MINERAL GRADE ESTIMATES FOR MANTO ANTIGUO

Manto Antiguo has been drilled and identified in 93 holes. Twenty-seven (27) of the 45 2024 holes intercepted the structure. Figure 14-6 shows the drilling in relation to the structure. The 2024 drilling and drill collars/platforms are shown in blue while the 2024 drill traces are shown in red. The dollars to the north are in the Albertos area the collars to the south are Las Brisas area.

Figure 14-7 shows the capped composite assays for the structure, including the modeled variogram and search anisotropy for the structure. The unique methodologies were applied individually to all structures for the mineral deposit.

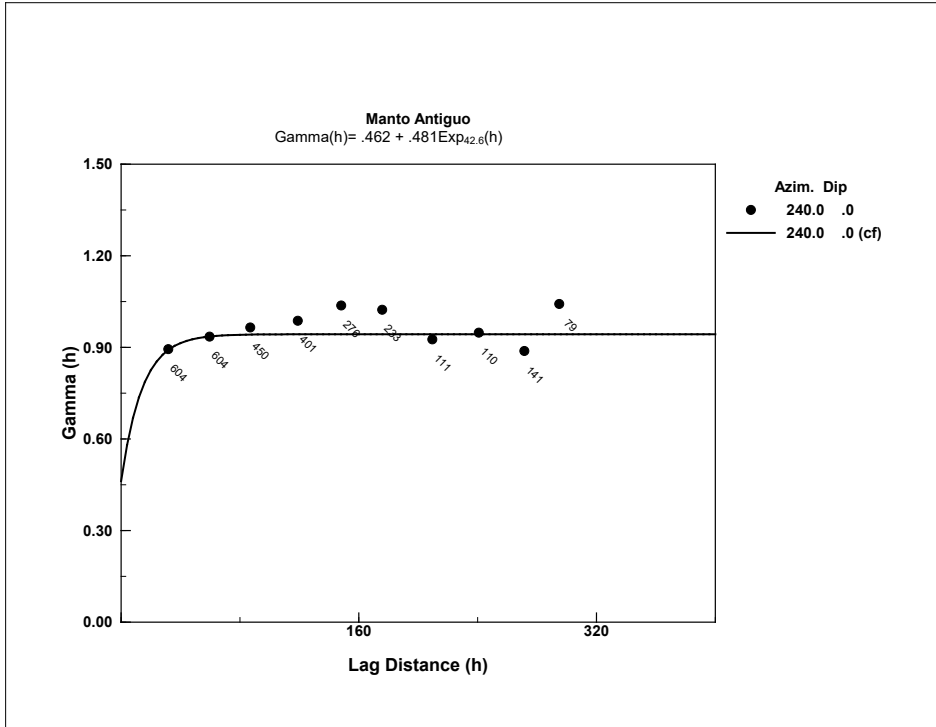


Figure 14-4: Fit variogram for Manto Antiguo

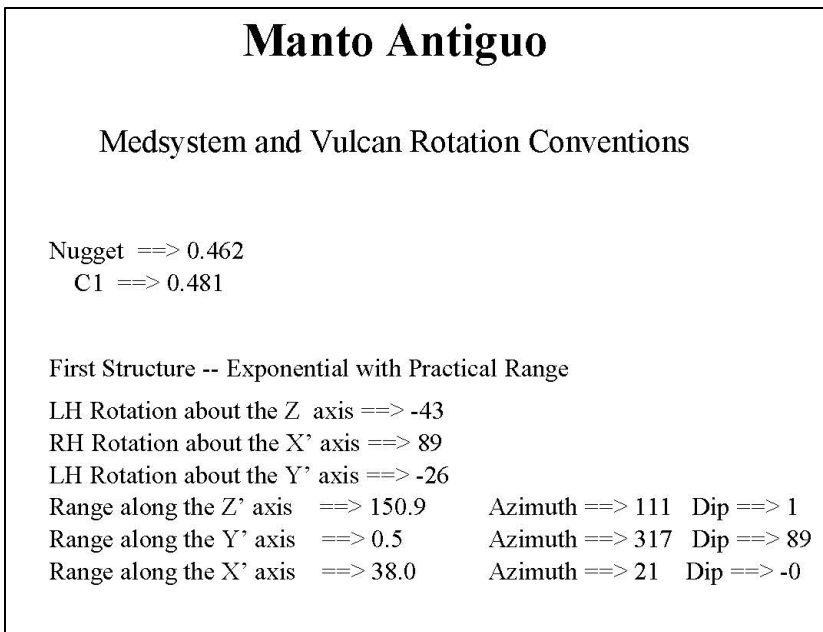


Figure 14-5: Modelled variogram for Manto Antiguo

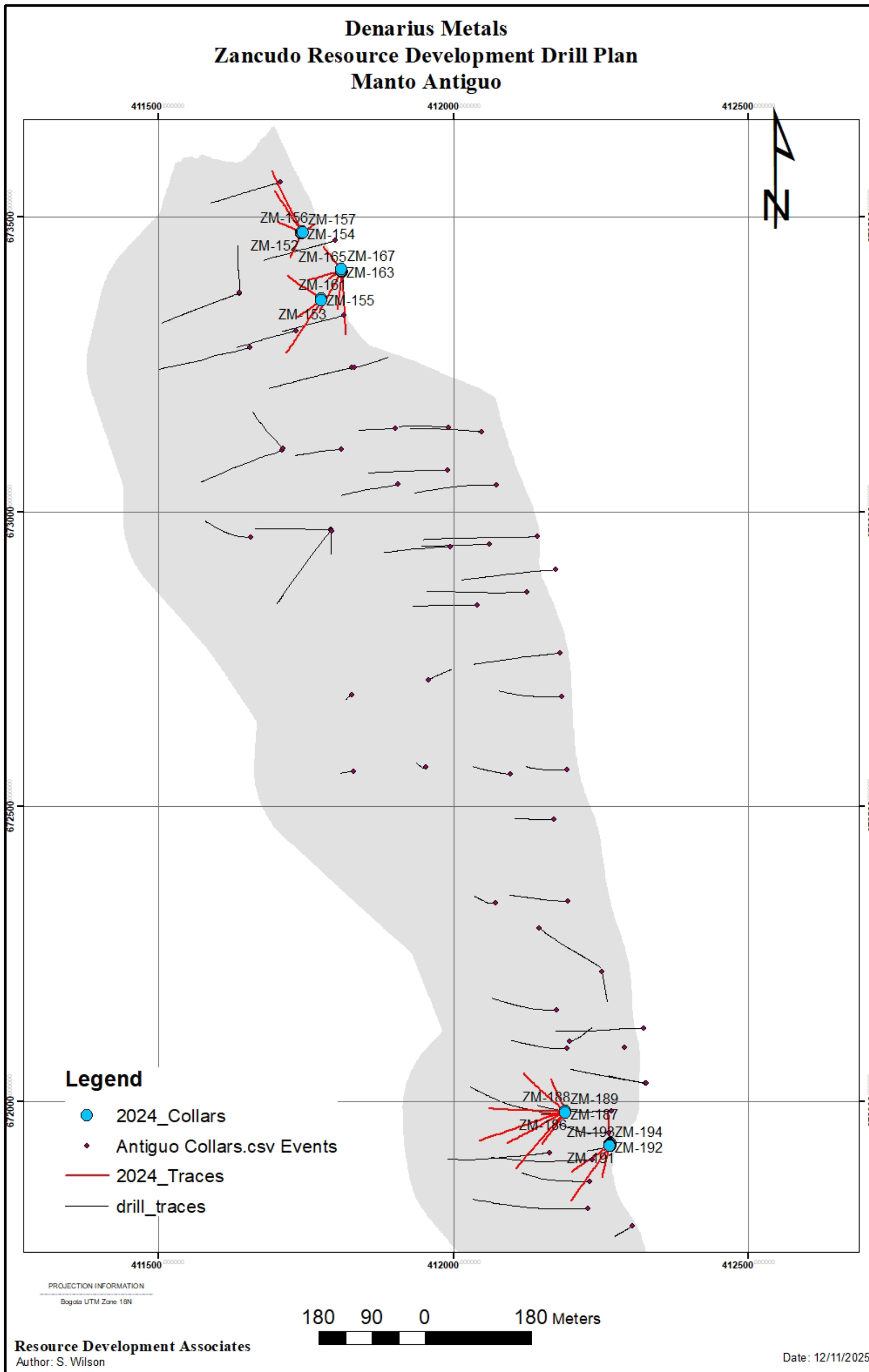


Figure 14-6: Manto Antigo showing the 93 drillholes that intercept the structure. Twenty-seven (27) holes from the 2024 program intercepted the structure. 2024 Collars identified in blue. Drill traces identified as red.

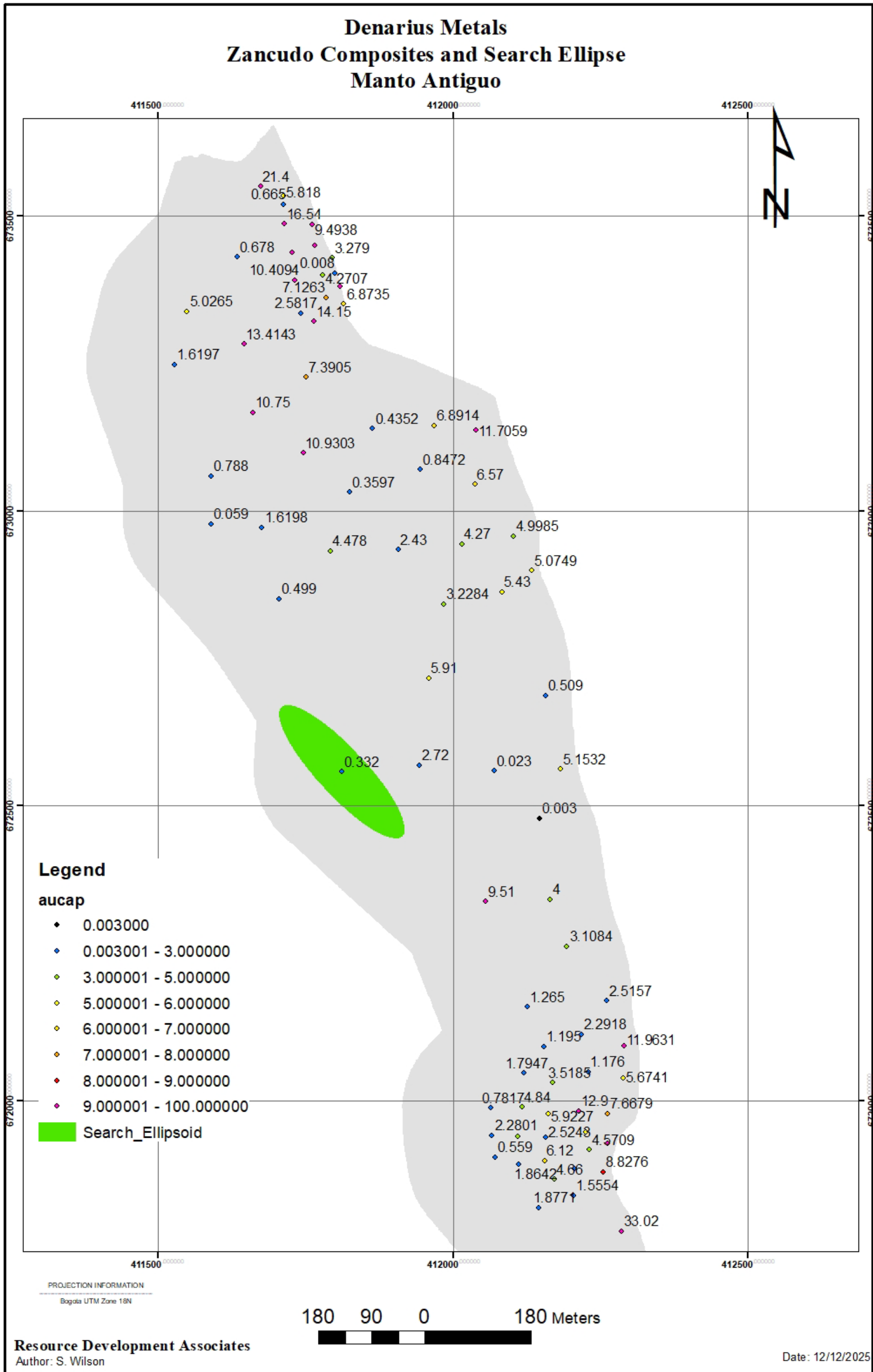


Figure 14-7: Manto Antigo structure shows the capped composites used for the mineral estimate. The search ellipsoid is shown in green.

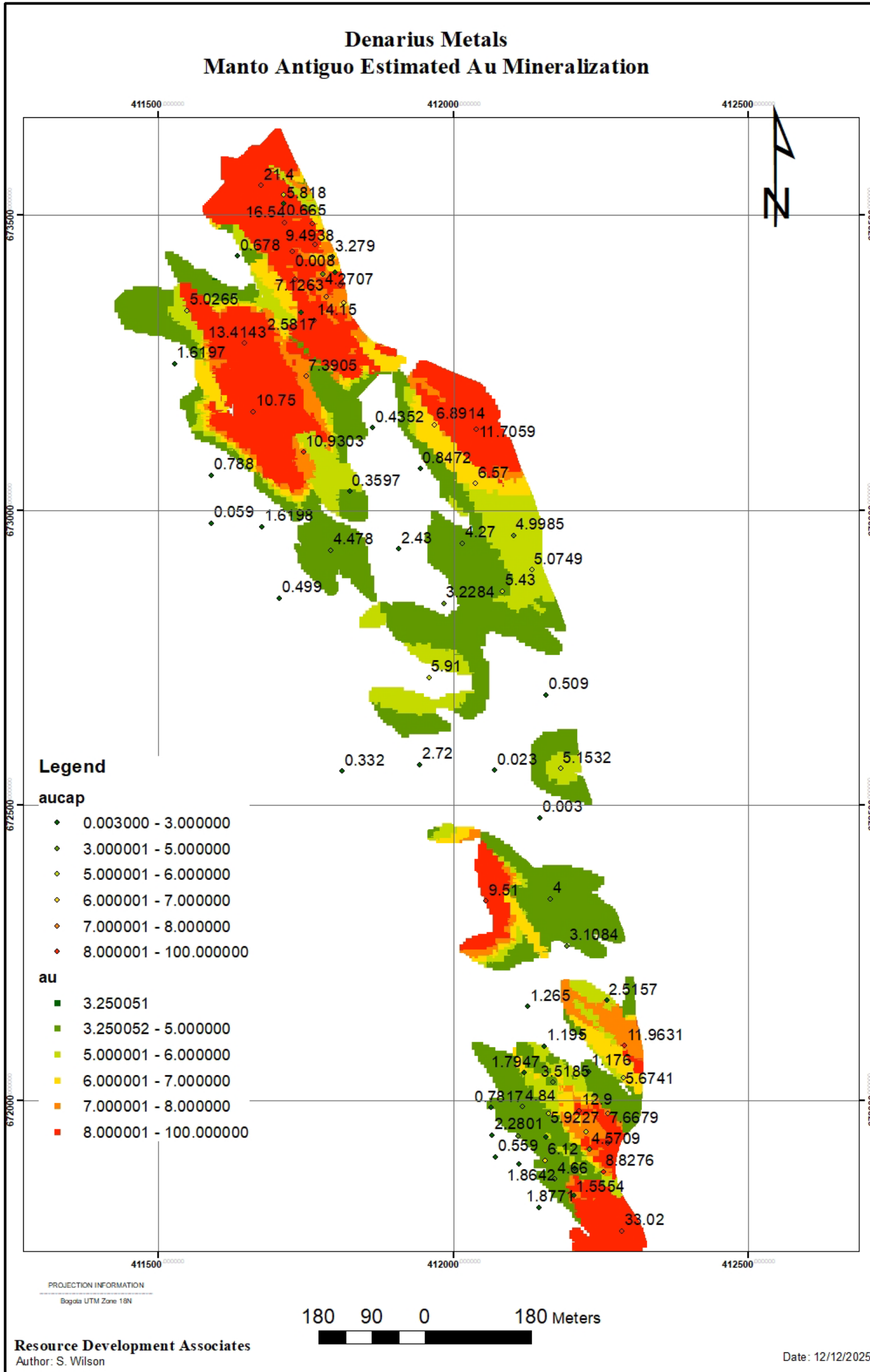


Figure 14-8: Manto Antigo Kriged Au Estimate with Composites used for the Estimation

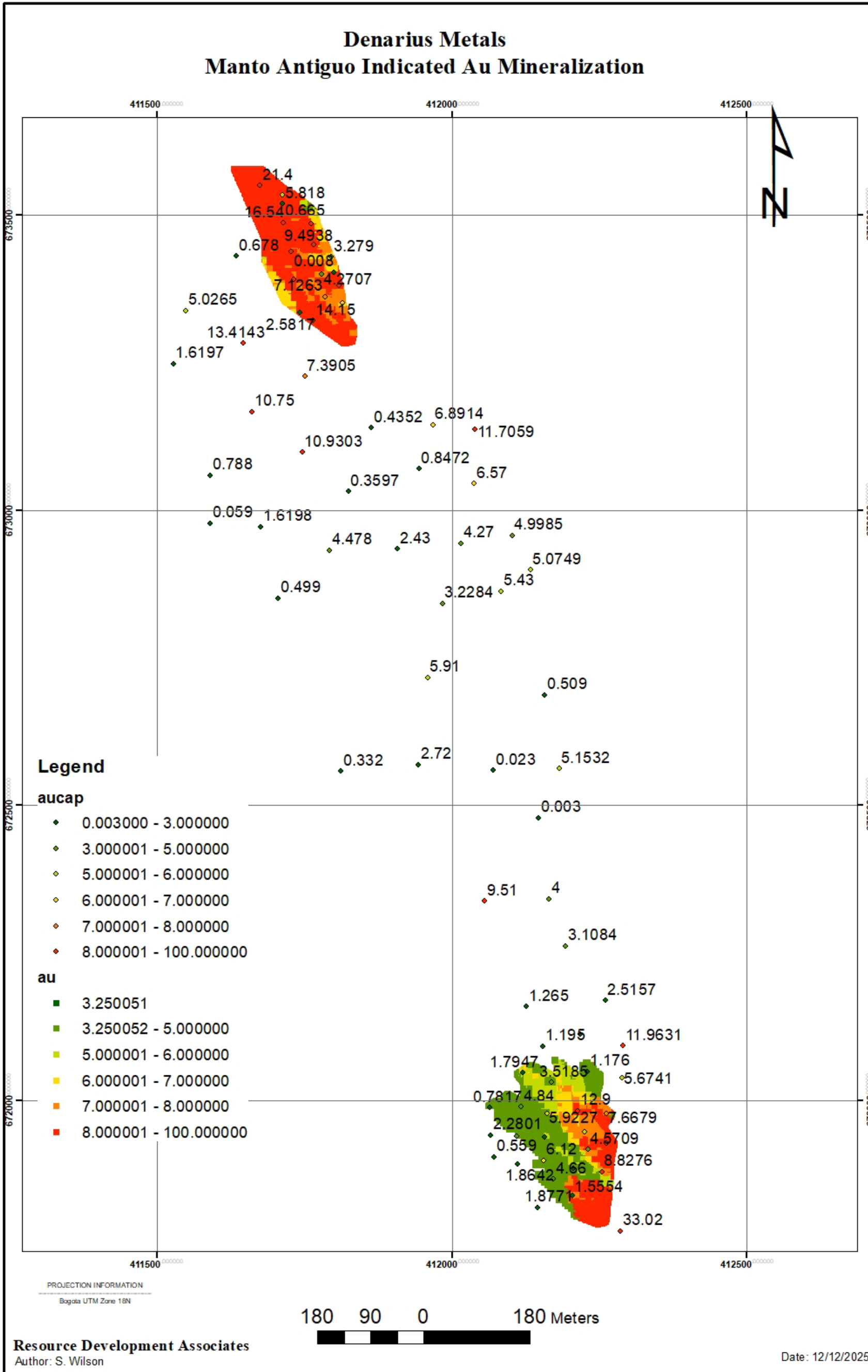


Figure 14-9: Manto Antigo Kriged Au Estimate with Composites used for the Estimation. Display limited to Indicated Mineralization

14.2.5 ZANCUDO DRILLING AND COMPOSITING STATISTICS

Table 14-3: Gold Assay Statistics and Gold Composites subsequent to Compositing and Capping

Au Assay Statistics										
Au Domain	101	102	103	104	105	106	201	202	204	205
Count	182	25	47	87	57	25	237	79	50	64
Mean	5.38	2.22	4.28	2.8	4.02	6.92	3.76	2.46	3.03	5.16
Std Dev	5.7	2.31	6.8	4.76	8.31	8.63	11.52	3.54	4.04	7.18
CoV	1.24	1.14	1.58	1.7	2.06	1.24	3.06	1.9	1.33	1.39
Minimum	0.003	0.003	0.003	0.003	0.003	0.008	0.003	0.003	0.003	0.003
Maximum	34.51	9.51	41.86	29.98	38.89	37.27	68.12	17.53	20.5	37.6
Capped Au Composite Statistics										
Au Domain	101	102	103	104	105	106	201	202	204	205
Count	89	19	27	42	28	11	81	50	17	36
Mean	5.12	2.15	3.92	2.77	3.37	6.94	3.32	3.15	3.83	5.52
Std Dev	5.32	2.2	3.89	3.23	3.71	6.7	5.47	2.98	4.7	5.21
CoV	1.03	1.02	0.99	1.16	1.1	0.96	1.64	0.94	1.22	0.94
Minimum	0.003	0.004	0.014	0.003	0.022	0.011	0.003	0.003	0.003	0.003
Maximum	33.02	9.18	13.15	14	10	23.47	35.5	11.75	20.5	20.8
Cap Value	None	None	14	14	10	None	35.5	23.3	none	20.8

Table 14-5: Gold Assay Statistics and Gold Composites subsequent to Compositing and Capping

Ag Assay Statistics										
Ag Domain	101	102	103	104	105	106	201	202	204	205
Count	182	25	47	87	57	25	237	79	50	64
Mean	151	166	50	61	51	95	65	65	48	88
Std Dev	440	565	91	163	132	163	209	139	94	192
CoV	2.9	3.5	1.81	2.64	2.57	1.72	3.2	2.12	1.92	2.17
Minimum	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Maximum	3960	2920	495	1268	751	756	1880	862	424	1190
Capped Ag Composite Statistics										
Ag Domain	101	102	103	104	105	106	201	202	204	205
Count	89	19	27	42	28	11	81	50	17	36
Mean	94	105	38	51	42	92	34	60	51	80
Std Dev	116	197	56	77	68	63	46	69	74	103
CoV	1.23	1.88	1.45	1.15	1.59	0.68	1.35	1.15	1.45	1.28
Minimum	0.1	0.1	0.9	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Maximum	642	906	242	306	200	228	200	250	250	300
	642	906	242	340	200	228	200	250	250	300

14.3 GRADE ESTIMATION PARAMETERS

Table 14-4: Grade Estimation Parameters for Gold and Silver

Domain	Domain Name	Estimation Type	Major Axis Length	Semi Major Length	Minor Axis Length	Bearing	Plunge	Dip	Minimum Samples	Maximum Samples
101	Manto Antiguo	Ordinary Kriging (OK)	150	40	50	317	10	9	5	20
102	Manto Antiguo Upper	OK	150	40	50	317	10	9	5	20
103	Manto Antiguo Lower	OK	150	40	50	317	10	9	5	20
104	Manto Inferior	Inverse Distance Cubed (ID3)	150	40	50	0	0	0	5	20
105	La Miel	ID3	150	40	50	20	-10	15	5	20
106	Manto Antiguo Block E	OK	150	40	50	322	19	4	5	20
201	Santa Catalina	ID3	100	75	15	5	0	-45	5	20
202	Porvenir	OK	110	75	15	12	-60	110	5	20
204	Ortiz A	OK	110	75	15	12	-40	110	5	20
205	Ortiz B	OK	100	75	15	0	-60	100	5	20

The search ellipses follow the typical orientation of the mineralized structures, and where appropriate, were aligned along higher-grade plunging features within the mineralized domains where possible. Statistical characteristics such as search volume used, variance measures, and number of samples used in an estimate, were also computed, and stored in each individual model blocks for descriptive evaluations.

14.4 BLOCK MODEL

A single block model was created to encompass all ten mineralized domain solids. Due to the thickness variability of the mineralized zones, the block model was sub-blocked to better conform to locally thin areas of the solids. Smaller blocks allow for a more accurate representation of the modeled domains. Parent block dimensions are 5m x 5m x 5m in the wall rock of the model but are sub-blocked and forced to a maximum of 1m x 1m x 1m the veins and mantos. Within the veins and mantos the blocks are sub-blocked to 1m x 1m x 0.5m in order to respect local variations in domain thickness and as a basis for the selective mining unit.

Table 14-5 present the location and dimensions of the model and blocks.

Table 14-5: Model Coordinates

Model Origin	Coordinates	Offset	Length
East	411200	East	1600m
North	671000	North	300m
Elevation	600	Elevation	1000m

14.5 DENSITY

A total of 222 values were included in the density analysis which consisted of samples from most domains in the model. Only 60 samples lie within the vein and mantos solids, creating an area of risk to the current mineral resource. These samples have been coded by the final estimation domain models for final analysis. It should be noted this may result in some splitting of samples and therefore the sum of the s Average Density by Company and Estimation Domain from Mineralization Model samples may differ slightly from the original. A breakdown of the average density per domain is shown in Table 14-7

Table 14-6: Average Density by Company and Estimation Domain from Mineralization Model

Name	Count	Sum Length (m)	Mean (g/cm ³)
Miel	7	0.77	3.15
Manto Inferior	6	0.51	3.14
Manto Antiguo	15	1.43	2.94
Manto Antiguo Lower	1	0.13	2.65
Porvenir	2	0.12	2.39
Subtotal	31	0.98	2.98
Santa Catalina	24	2.02	2.83
Subtotal	24	2.02	2.83
Ortiz B	3	0.20	2.93
Ortiz A	2	0.21	2.86
Subtotal	5	0.20	2.90
LG Outside	24	2.58	2.83
Unknown	138	17.82	2.85
Subtotal	162	0.27	2.84

Based on the above, Densities are applied to the model by the following script.

```
density = 2.84
if (domain ge 101 and domain le 108) then
    density = 2.98
elseif (domain eq 201) then
    density = 2.83
elseif (domain eq 202) then
    density = 2.98
elseif (domain eq 204 or domain eq 205) then
    density = 2.9
endif
end
```

14.6 MODEL VALIDATION

All IDW estimations in individual domains were validated using visual comparison of grade to nearby sampling, statistical population comparisons, and swath plots comparing estimates to drilling and a Nearest Neighbor (NN) estimate.

14.6.1 VISUAL COMPARISON

Estimation results were verified by visual comparison of samples and estimated blocks. An example is shown above in Figure 14-8 for the gold grades in the Manto Antiguo domain. Note, that cool colors for gold grades in samples (spheres) are paired with areas of cool colors in the block model. The same is true for warmer colors, with a reasonable level of gradation between the two relatives to the level of sampling. More drilling may result in more variability in the future. This visual check was performed for each vein individually, to ensure reasonable estimations with as few artifacts as possible. Artifacts are defined as areas in the model where mathematically the estimation calculation produces improbable grade domains.

The visual comparison of the composites to the estimated grades shows no obvious bias with a fair reflection of both the high and low-grade. It is the QP opinion that a reasonable correlation between the block estimates and composite data can be observed.

14.7 RESOURCE CLASSIFICATION

Denarius successfully completed an in-fill drilling program in 2024. A portion of the mineral deposit has been converted from Inferred Mineral Resources to Indicated Mineral Resources. For the veins and mantos which were kriged, a kriging variance threshold at or below 0.4 satisfied the criteria to be considered indicated mineralization. Figure 14-9 above demonstrated the indicated mineral resources in Manto Antiguo.

14.8 MINERAL RESOURCE STATEMENT

CIM defines a Mineral Resource as:

“(A) concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth’s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge”.

The reasonable prospects for eventual economic extraction requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade (CoG), taking into account extraction scenarios and processing recoveries. To meet this requirement, the QP considers for the purpose of this exercise that the Project is amenable for underground mining.

Reasonable prospects of eventual economic extraction assume underground mining of the deposit, surface mill processing and production of saleable concentrates. Mineral Resources are reported at a Gold Equivalent (AuEq) cutoff grade of 3.25 g/t AuEq.

AuEq is calculated by assigning a metal selling price to Au and Ag, assuming a processing recovery percentage for each metal, royalties and a value factor based on those parameters.

The formula used to estimate AuEq is:

$$\text{AuEq} = (\text{Au} \times 85\% \times \text{US}\$2,400 + \text{Ag} \times 87\% \times \text{US}\$28) / (85\% \times \text{US}\$2,400)$$

Table 14-7 and Table 14-8, respectively present the Indicated and Inferred Mineral Resource Estimates. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources will be converted into Mineral Reserves.

Table 14-7: Zancudo Indicated Mineral Resource Estimate – Cutoff 3.25 g/t Au – Effective date: October 31, 2025

Geological Domain	Block Model Domain	Tonnes	Au g/t	Au Oz.	Ag g/t	Ag Oz.	Au Eq g/t	AuEq Oz
Manto Antiguo	101	243,145	6.98	54,542	136.30	1,065,500	8.61	67,265
Manto Antiguo Block E	106	33,319	6.05	6,476	78.72	84,329	6.99	7,483
Santa Catalina	201	422,633	7.87	106,935	55.66	756,272	8.54	115,966
Porvenir	202	56,357	4.62	8,365	72.58	131,512	5.48	9,935
Ortiz A	204	16,322	4.41	2,315	69.54	36,491	5.24	2,750
Ortiz B	205	207,143	5.81	38,665	87.50	582,707	6.85	45,623
Total Tonnes		978,919	6.90	217,298	84.42	2,656,811	7.91	249,022

- Notes:
1. Scott Wilson, CPG, President of RDA is responsible for this mineral resource estimate and is an independent Qualified Person as such term is defined by NI 43-101.
 2. Reasonable prospects of eventual economic extraction were assessed by enclosing the mineralized material, in the block model estimate, in 3D wireframe shapes that were constructed based upon geological interpretations as well as adherence to a minimum mining unit with geometry appropriate for underground mining.
 3. The cutoff grade of 3.25 g/t AuEq considered parameters of:
 - a. Metal selling prices: Au-US\$2,400/oz, Ag-US\$28/oz.
 - b. Recoveries of Au 85%, Ag 87%.
 - c. Operating costs of (US\$105/t mining, US\$42/t processing, US\$21/t G&A/off-site)
 - d. Royalty of 6.7%
 4. Gold Equivalent Grade (“AuEq”) is estimated by the formula:
 - a. $\text{AuEq} = (\text{Au} \times 85\% \times \text{US}\$2,400 + \text{Ag} \times 87\% \times \text{US}\$28) / (85\% \times \text{US}\$2,400)$
 5. Mineral resources are not mineral reserves and do not have demonstrated economic viability.
 6. Figures may not add up due to rounding.
 7. The QP knows of no other legal, political, environmental, or other risks that could materially affect the potential development of the mineral resources for the Project.

Table 14-8: Zancudo Inferred Mineral Resource Estimate – Effective date: October 31, 2025

Geological Domain	Block Model Domain	Tonnes	Au g/t	Au Oz.	Ag g/t	Ag Oz.	Au Eq g/t	AuEq Oz
Manto Antiguo	101	1,690,186	6.31	342,757	93.22	5,065,630	7.42	403,246
Manto Antiguo Upper	102	37,830	2.84	3,460	148.59	180,722	4.62	5,618
Manto Antiguo Lower	103	394,712	5.51	69,924	66.59	845,035	6.31	80,014
Manto Inferior	104	814,712	4.08	106,932	84.27	2,207,190	5.09	133,288
La Miel	105	351,515	6.58	74,325	85.21	962,982	7.59	85,824
Manto Anitguo Block E	106	81,930	6.64	17,498	90.71	238,937	7.73	20,351
Santa Catalina	201	589,321	5.53	104,843	51.30	971,881	6.15	116,449
Porvenir	202	491,573	4.60	72,769	99.39	1,570,818	5.79	91,526
Ortiz A	204	4,420	4.37	620	67.72	9,624	5.18	735
Ortiz B	205	180,148	6.77	39,216	78.67	455,623	7.71	44,657
Total Tonnes		4,636,346	5.58	832,344	83.92	12,508,442	6.59	981,708

- Notes:
- Scott Wilson, CPG, President of RDA is responsible for this mineral resource estimate and is an independent Qualified Person as such term is defined by NI 43-101.
 - Reasonable prospects of eventual economic extraction were assessed by enclosing the mineralized material, in the block model estimate, in 3D wireframe shapes that were constructed based upon geological interpretations as well as adherence to a minimum mining unit with geometry appropriate for underground mining.
 - The cutoff grade of 3.25 g/t AuEq considered parameters of:
 - Metal selling prices: Au-US\$2,400/oz, Ag-US\$28/oz.
 - Recoveries of Au 85%, Ag 87%.
 - Operating costs of (US\$105/t mining, US\$42/t processing, US\$21/t G&A/off-site)
 - Royalty of 6.7%
 - Gold Equivalent Grade ("AuEq") is estimated by the formula:
 - $AuEq = (Au \times 85\% \times US\$2,400 + Ag \times 87\% \times US\$28) / (85\% \times US\$2,400)$
 - Mineral resources are not mineral reserves and do not have demonstrated economic viability.
 - Figures may not add up due to rounding.
 - The QP knows of no other legal, political, environmental, or other risks that could materially affect the potential development of the mineral resources for the Project.

14.9 MINERAL RESOURCE SENSITIVITY

Mineral resources at Zancudo are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the block model quantities and grade estimates are presented in Table 14-12 at linear increases in the cut-off grades for the Inferred Mineral Resources at Zancudo. The sensitivity of mineralization to the cutoff grade below the cutoff grade of 4g/t AuEq suggests there is a smooth distribution of mineralization and the any nugget effect in the mineralization has been constrained locally.

The reader is cautioned that Table 14-14 should not be misconstrued as a mineral resource. The reported quantities and grades are only presented as a sensitivity of the resource model to the selection of cut-off grades. Mineral resources are not mineral reserves and do not have demonstrate economic viability.

Table 14-9: Grades and Material Content at Various Equivalent Gold Cut-Off Grades

Cut-Off AuEq (g/t)	Mass (Mt)	Average Value				Material Content (koz)		
		AuEq (g/t)	Au (g/t)	Ag (g/t)	Width (m)	AuEq	Au	Ag
2.50	6.65	6.3	5.1	86	1.92	1,355	1,095	18,465
3.00	5.72	6.9	5.5	92	1.95	1,260	1,020	17,000
3.25	5.28	7.1	5.8	96	1.96	1,210	980	16,250
3.50	4.87	7.4	6.0	99	1.96	1,160	940	15,535
3.75	4.49	7.7	6.2	103	1.95	1,115	905	14,845
4.00	4.07	8.1	6.5	107	1.91	1,060	860	14,090
4.25	3.73	8.4	6.8	112	1.90	1,005	815	13,400
4.50	3.35	8.8	7.2	117	1.85	950	770	12,630
4.75	3.10	9.1	7.4	122	1.82	910	740	12,125
5.00	2.82	9.5	7.7	127	1.79	860	700	11,520

14.10 RELEVANT FACTORS

The QP is not aware of any additional environmental, permitting, legal, title, taxation marketing or other factors that could affect the mineral resource estimate. The Project contains anomalous levels of arsenic in the estimation domains (ranging from an average of 2,860 ppm to 14,554 ppm). The presence of high arsenic does not negatively affect the Au recovery as shown in met testing study run by SGS at their facilities in Lima. The results of the analysis indicate gravity and rougher flotation recoveries in the order of 86.6% Au and 87.4% Ag. Though high arsenic values are discussed in Chapter 13, the high metal recoveries mitigate any environmental concerns for the Project.

15 MINERAL RESERVES

There are no mineral reserves estimated for the Project.

16 MINING METHODS

This preliminary economic assessment is preliminary in nature, and there is no certainty that the reported results will be realized. The Mineral Resource estimate used for the PEA includes Inferred Mineral Resources which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the projected economic performance will be realized. The basis of the PEA is to demonstrate the economic viability of the Zancudo Project, and the results are only intended as an initial, first-pass review of the Project economics based on preliminary information. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves.

16.1 MINERALIZED CONFIGURATION

Mineralization at the Zancudo Project occurs in several near vertical veins and flat lying structures under mountainous terrain, as can be seen in Figure 16-1. The updated December 2025 Resource Block Model by Resource Development Associates (RDA) identifies ten (10) distinct mining zones. Six steeply dipping vein structures (Veins) consist of the Santa Catalina, Porvenir, Panal, Antiguo East, Ortiz A, and Ortiz B; in addition, four flat lying mineralized structures (Mantos) have been identified as Manto Antiguo, Manto Antiguo Lower, Manto Inferior, and La Miel. Mine Stope Optimization (MSO) has been applied to the block model to identify minable stope blocks. Due to strict economic guidance, only three zones (Santa Catalina, Manto Antquo, and La Miel) have been included in the mine plan.



Figure 16-1: Zancudo General Area of Mineralization and Visual Topography

16.2 MINING METHODS

VEINS: Three different mining methods shall be employed to exploit the vertical oriented stopes based on the orientation and width of the mineralization and geotechnical constraints. A rescue mining method is appropriate where waste rock serves as backfill as the

stope is advanced in an overhand manner. This method is highly selective and allows for mining narrow widths down to 0.5m. A second method shall be traditional Long Hole Open Stopping (LHOS), where the mineralization width is 2.3 meters minimum. Thirdly, Cut and Fill shall be employed where the orientation of the mineralization prohibits effective bulk mining utilizing either the RESUE or LHOS methods.

Resue: A stope block is identified having minimum approximate dimensions of 30 to 100 meters along strike, 15 meters high, and minimum width of 1.5 meters. The centroid of the stope block is identified, and an access drift is developed. A scam drift is developed along strike in both directions cautiously segregating the mineralized material from the waste. Following completion of the scam, an overhand mineralization extraction and removal is initiated, followed by installation of a cribbed manway and ore-pass. Drill and blast of the remaining waste which is used as backfill to create a working platform. Continuation of the cycle commences until the 15 meters are exhausted. Figure 16-2 demonstrates the phased cross section of the mining sequence. The current mine plan does not include any Resue stopes; however, this method is viable to reduce dilution if the mineralization width shrinks.

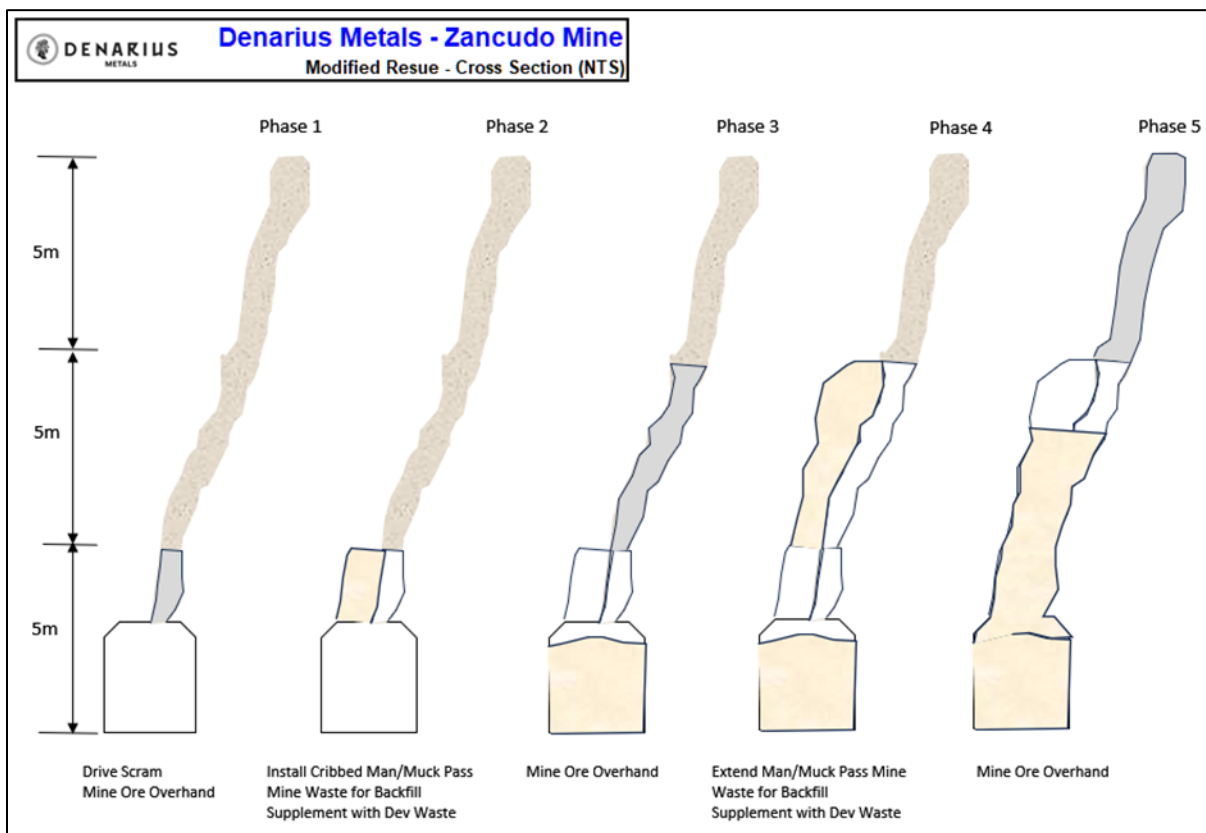


Figure 16-2: Modified Resue Vein Mining Sequence

Long Hole Open Stopping (LHOS): This mining method is less selective than cut-and-fill mining however can be accomplished at a lower cost due to greater labor efficiencies and reduced primary ground support and backfill requirement. Long-hole panels are established by driving a top cut and bottom cut into the mineralized zone leaving a bench between the upper and lower cuts. This bench is then extracted utilizing the top cut as the drilling and loading access and the lower cut for the mucking access. LHOS are typically mucked with remote control equipment for safety. As the stopes are mined-out, they are filled with a backfill media to create the mucking platform for the next stope in sequence, Figure 16-3 Long Hole Open Stopping.

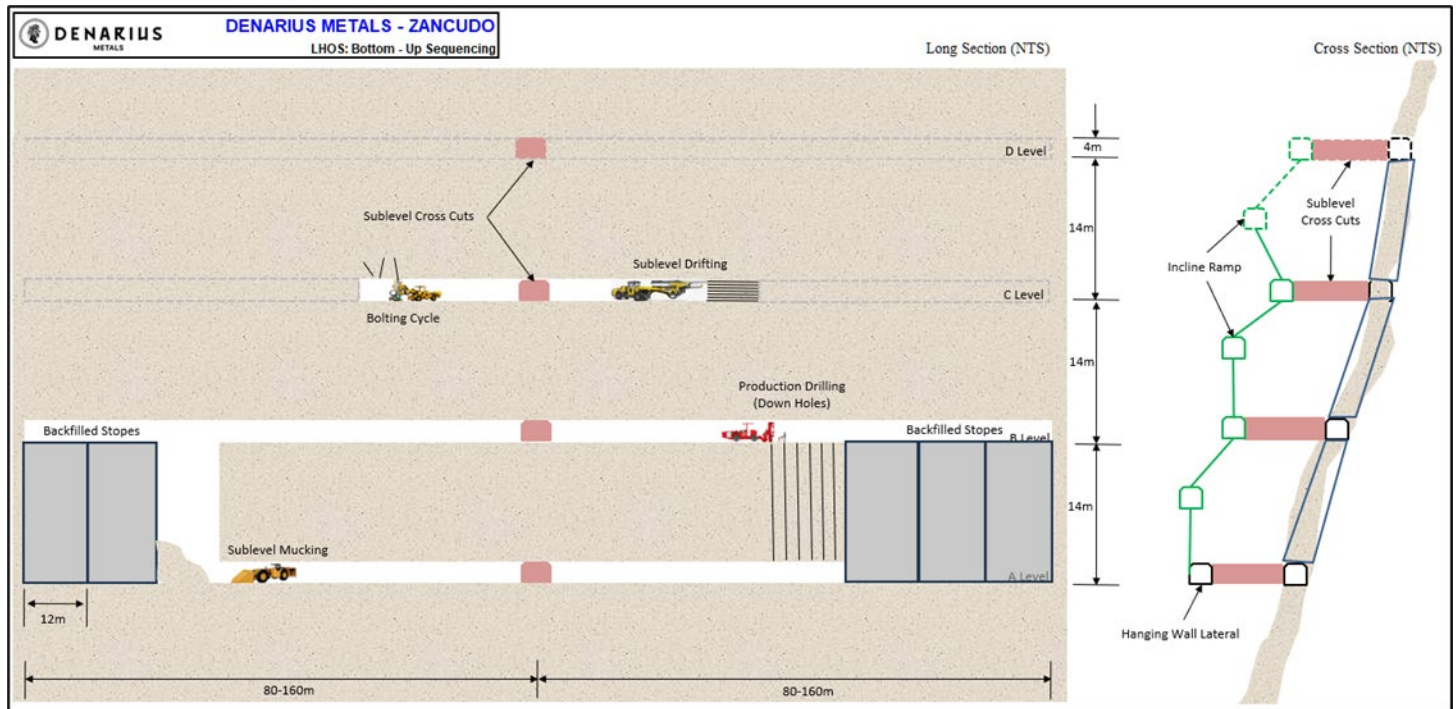


Figure 16-3: Long Hole Open Stopping (LHOS)

Cut and Fill: Overhand cut-and-fill mining is a selective method that can maintain grade and minimize dilution. It has been a staple of underground mining for narrow steeply dipping mineralization. Overhand mining is a bottom-up method to mine successive stope cuts between main mining levels. Typical cut dimensions are estimated at 4 meters by 4 meters. Ground support is installed as required during each cut. As each cut is completed, it is filled with an engineered backfill. Then the next stope cut is taken on top of the placed fill and the process repeated until the mining panel between main mine levels is extracted, Figure 16-4 Cut-and-Fill Mining.

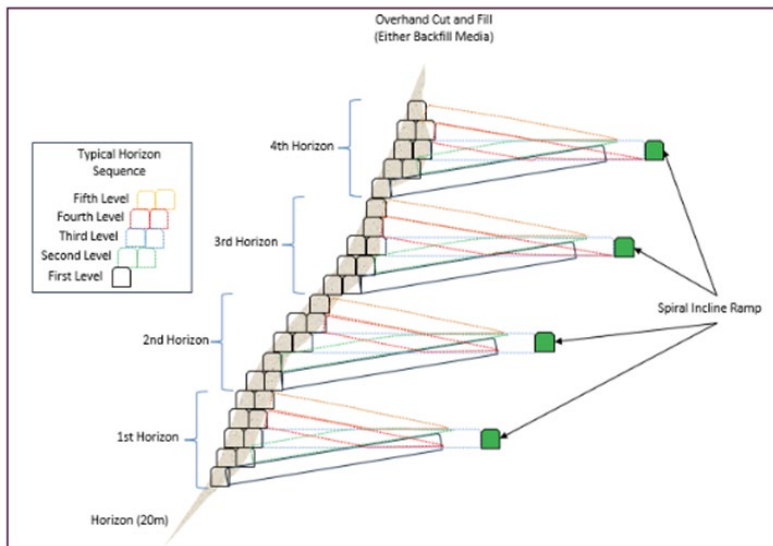


Figure 16-4: Cut and Fill Mining

MANTOS: The room and pillar design are developed on a grid basis where applicable. Pillar sizes are determined by geotechnical calculations and practical observations. Additional work needs to occur to insure adequate pillar dimensions. The flat lying Mantos are planned to be mined in a room and pillar sequencing method.

Room and Pillar: The Mantos are accessed via spatially efficient cross cuts that allows maximum heading availability. The maximum drive cross-sectional dimensions are 3.0m (w) x 2.5m (h); however, the mine contractor may adjust these dimensions to reflect improved efficiency. Contiguous drives are developed creating rooms, when the excavation meets geotechnical design constraints pillars are left to ensure geotechnical integrity. If applicable and ground conditions allow, pillar extraction may occur in a retreating method, Figure 16-5 Room and Pillar Mining. The extensive Manto mineralization allows for high quantity of headings. The Manto mine production schedule is based on 100/tonnes/day per heading.

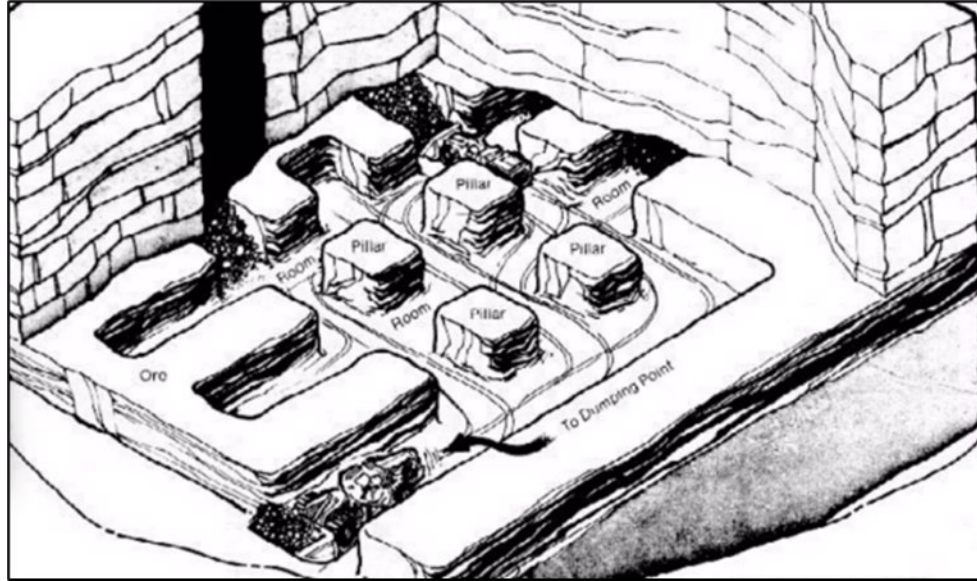


Figure 16-5: Room and Pillar Mining

16.3 GEOTECHNICAL FINDINGS AND ASSUMPTIONS

Work completed by others state that geotechnical core-logging data for 148 drill holes around the Zancudo Project area were provided, with the holes being drilled and logged between 2011 and 2021. The provided data from the 148 drill holes at a minimum includes the basic geotechnical parameters of RQD per drill run, see Figure 16-6. Additionally, 82 of the 148 logged drill holes also include data (estimated across an entire drill run) for:

- Field Estimated Intact Rock Strength (following ISRM guidelines)
- Joint Roughness (Bieniawski RMR89 system)
- Joint Weathering (Bieniawski RMR89 system)
- Fill mineral type
- Estimated joint aperture (Bieniawski RMR89 system; note, joint aperture is best estimated from downhole televiewer, not from geotechnical core logging)

Estimated joint persistence (Bieniawski RMR89 system) was collected for only 1 drillhole (note, joint persistence is best estimated from mapping, not from geotechnical core logging).

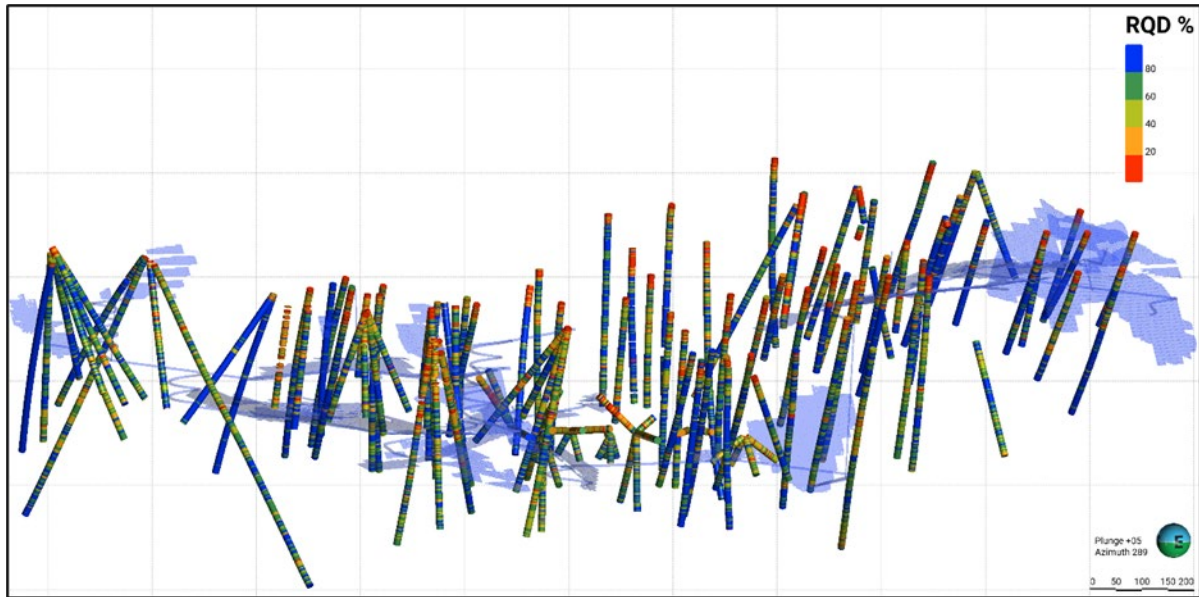


Figure 16-6: RQD Data

While full RMR89 logging parameters were not available for all intervals, RMR89 estimates were approximated based upon the geotechnical logging data provided, the available laboratory strength testing data, and assumed worst, medium, and best-case scenarios for each parameter based upon observations from the site visit to the Zancudo Project and core photographs. Ground water was estimated (under the RMR89 classifications) to be 'damp' (<10 liters/minute) to 'wet' (10-25 liters/minute) based upon observations during the site visit and available hydrogeologic data. (Bieniawski) RMR89 ranges were then converted to (Barton) Q values utilizing the conversion formula: $RMR89 = 9 \cdot \ln(Q) + 49$.

The approximated Q values can be seen in Figure 16-7 as Low, Mid, and High estimates based upon the assumed worst, medium, and best-case scenarios for each geotechnical parameter. These approximated Q estimates are considered sufficient for a PEA level study, however, are insufficient for final design and construction purposes. A more detailed assessment and additional data collection will be necessary during future studies to refine Q estimations.

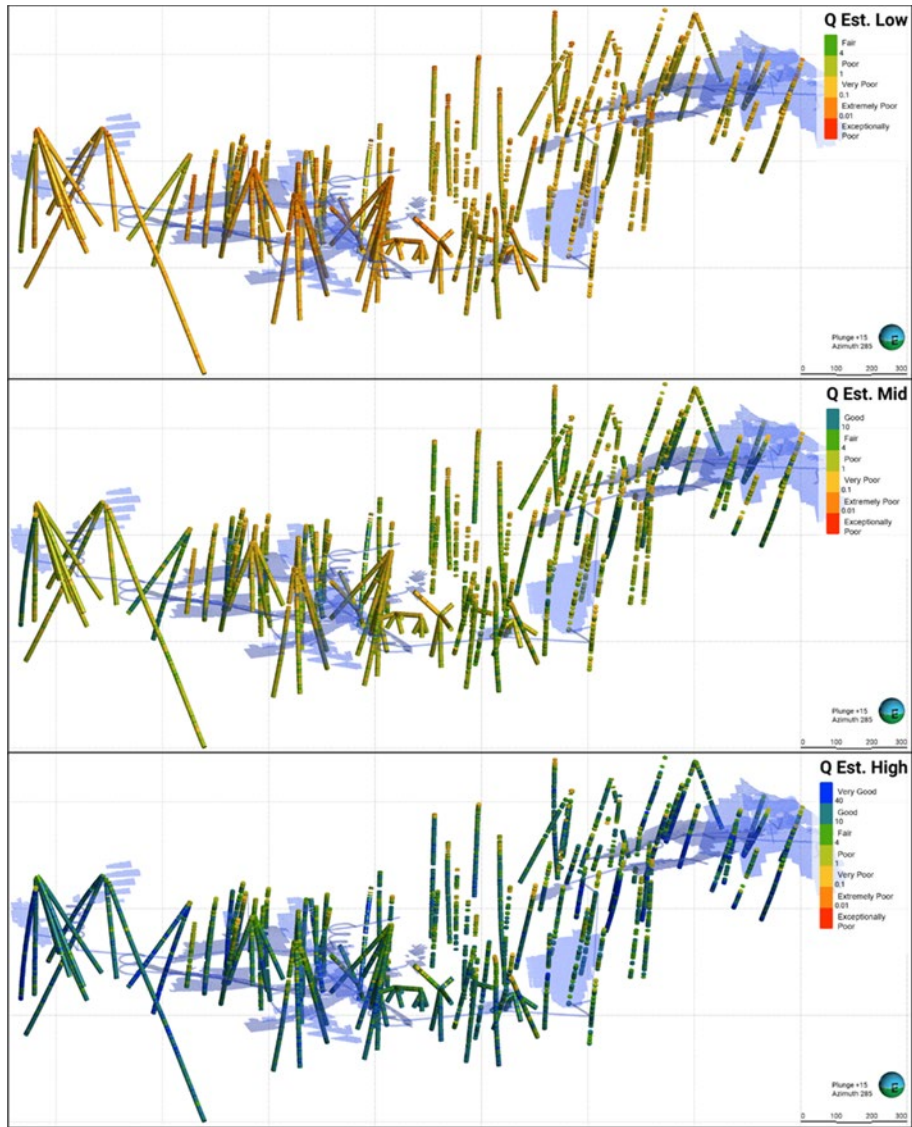


Figure 16-7: Approximate Q Estimates

In the Qualified Person's opinion, the rock stability of the excavated drifts is sufficient as a preliminary design basis, but confirming rock mechanics and geotechnical assumptions should be performed to verify the mining approach and details of the PEA layout and design.

16.3.1 GROUND SUPPORT ASSUMPTIONS

The rock stability in the existing Zancudo excavations observed is assumed to be representative of the conditions that will occur with the progress of vertical and horizontal methods, and of the extensive waste development. If ground conditions deteriorate artificial ground support consisting of 1.8 m friction rock stabilizers (rock bolts) on a 1.2 m pattern in the back, with welded wire mesh and steel straps is recommended on the specified portion of the development drifts and stope excavations. In addition, on rare occasions it may be necessary to employ historical blocking methods by stacking waste material to support the compromised areas.

16.4 WASTE BACKFILL

Due to limited surface area for a waste dump, cost improvements and efficiencies, a mine plan had to be generated utilizing underground waste rock placement. The vertical mining methods and sequencing quickly provides the necessary platform for waste rock storage underground. Following the extraction of the primary production cut and subsequent overhead excavation; partial waste fill can be placed to establish the next working level. The coordinated production sequencing and backfill placement is critical for

direct underground placement in the open voids. Blasted waste assumes a swell factor of 30%; therefore, over the life of mine mineralization volumes exceed available waste. This variance is favorable as there is enough underground capacity to house all of the waste generated. The lack of backfill does not impact the production schedule as the mining sequence and spacing allows for unfilled stopes.

16.5 MINING LAYOUT

The mining layout is illustrated in Figure's 16-8 and 16-9 providing isometric views of the mining and development layout of the Manto Antigo, Santa Catalina, and La Miel mineralized zones. NSR values determined economic parameters, and the block model dictated the nominal dimensions and orientation of the excavations. These parameters were applied to the MSO which produced the individual mining blocks containing volume and grade.

The development layout in the Vulcan model is produced by strings (lines), a primitive attribute was applied to these strings producing a volume. Main development drifts, ventilation crosscuts and raises, and production crosscuts can be observed in the illustrations.

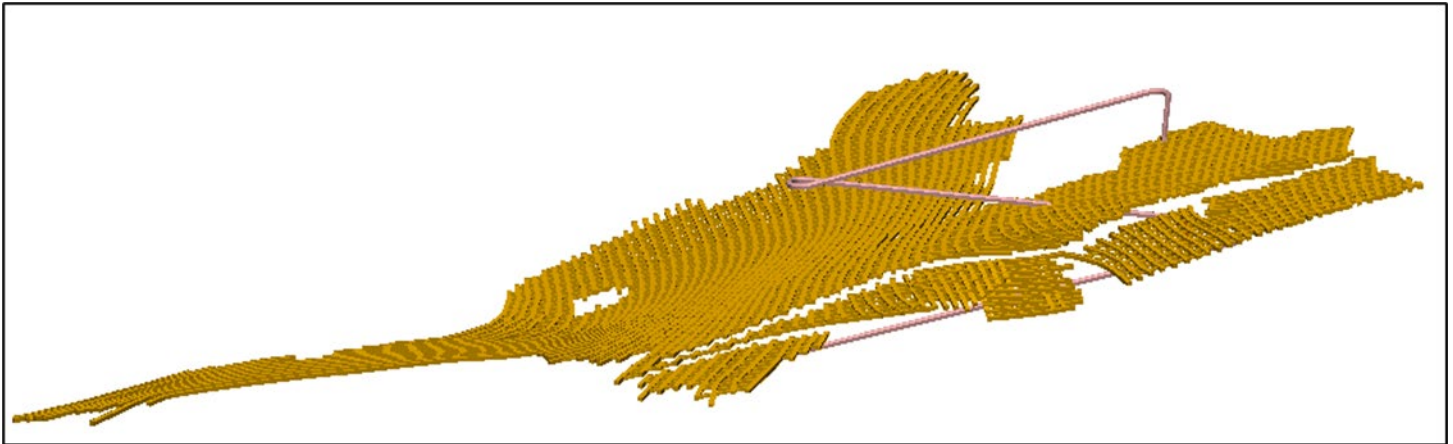


Figure 16-8: Manto Antigo Zone 7 Room and Pillar Isometric View (NTS)

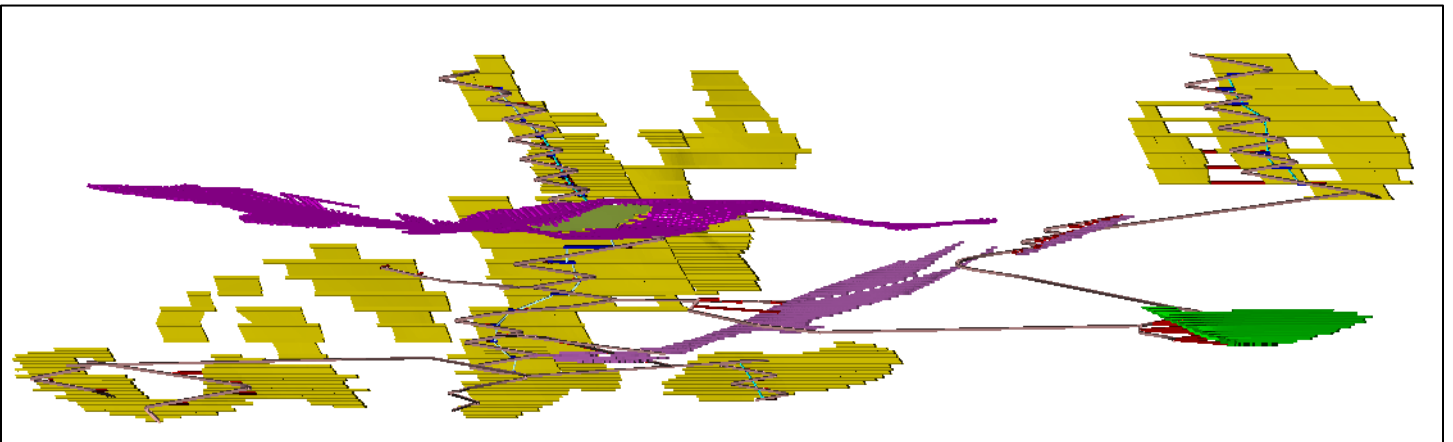


Figure 16-9: Generalized Mine Layout Santa Catalina, Manto Antigo, La Miel Isometric View (NTS)

The mine is accessed from surface via existing portals or by the new portal excavated on the mountain. The location of the new portal is governed by the existing road network on the mountain.

Ventilation air would be drawn into the mine from surface portals (either existing mined excavations or newly developed ramps) and into the stopes. Ventilation raises will be excavated vertically along the stope blocks and would be connected between the main ventilation levels (intake and exhaust) before production could begin in the stope block. Ventilation raises (2.0 m x 2.0 m) would be constructed at each location with a short ventilation access drift connecting to the stope. The ventilation raises would provide conduits

for electrical power, compressed air, make up water into the stope blocks, and a secondary egress ladder network would also be constructed.

Rock mechanics analysis of the layout should be conducted to project rock stability impacts of the planned geometry. No analysis of ramp locations in the hanging wall has been conducted, and interactions between historical workings need to be simulated. Stand-off distances of ramps and ventilation raises need to be evaluated to assure stability of the raise and infrastructure as the mining proceeds vertically.

16.6 MINING PRODUCTION

The MSO inventory of stope shapes and development strings were scheduled utilizing Microsoft Excel. The resulting schedule produced the development and production schedule including the metal profile. An external dilution factor of 5% at zero grade is included into the production schedule to account for over-break.

Mine scheduling was controlled by the development primary ramps and ventilation circuits which provide fresh air to the working areas. For individual stoping blocks, a ramp would be developed between the lower and upper extents of the contiguous stope areas, which would be connected by a vertical raise. The ventilation raises would also provide secondary egress from the stope working area and provide the pathways for electrical, compressed air and make-up water services required for mining. Sustaining development to the various stope production areas was scheduled to maintain a sufficient buffer of stopes ahead of required mineralization production.

Development and production schedules were driven by the peak mill throughput of 335,790 diluted tonnes per year. Operating schedule is based on 24 hour – 26 day per month, 312 days per year.

The development and production rates per underground operating day used for the scheduling were:

- Ramps and access drifts = 3 meters/day (single heading); maximum advance 9 meters/day
- Vein Production Target = 50 tonnes/day, maximum headings 11
- Manto Production Target: 100 tonnes/day, maximum headings 5

The development for the mine initially focuses on creating the access and ventilation circuit for the first stoping block in the Santa Catalina. Development priorities then focus on the Manto Antiguo and La Miel zones.

Initial production is targeted at 40 tonnes/day utilizing historical Artisanal and select cut and fill mining methods gradually ramping to 500 tonnes/day. Following completion of the Zancudo processing plant, production ramps to the desired target of 1,075 diluted tonnes/day. The physical units in the underground production schedule are listed in Table 16.1 and 16.2, for the detailed mine output, the Production and Development Schedule by year, respectively.

Table 16-1: Detailed Mine Layout

Denarius Metals Corporation Zacudo	LOM 2026-2036	2026 *ZM_SRP	2027 *ZM_SRP	2028	2029	2030	2031	2032	2033	2034	2035	2036
Diluted Minable Resource												
Preliminary Minable Resource												
Scheduled Cut and Fill (CF)												
Ore, tonnes	5%	888,942	68,458	242,315	-	-	95,304	121,146	97,674	243,349	20,696	-
AuEq, g/t		6.49	6.32	6.64	-	-	6.78	6.82	6.09	5.41	-	-
Au, g/t		5.82	5.68	5.99	-	-	6.04	5.87	6.05	5.57	5.09	-
Ag, g/t		51.39	51.38	52.16	-	-	55.89	71.50	56.01	39.64	20.21	-
Scheduled Room and Pillar (RP)												
Ore, tonnes	5%	1,595,081	-	-	267,540	248,426	-	-	-	92,441	315,095	335,790
AuEq, g/t		7.01	-	-	6.137	6.137	-	-	-	7.811	7.734	7.521
Au, g/t		5.95	-	-	4.948	4.948	-	-	-	6.857	6.776	6.552
Ag, g/t		88.32	-	-	99.545	99.545	-	-	-	79.904	80.230	81.132
Scheduled Sublevel Development (AXS)												
Ore, tonnes	5%	379,821	-	-	26,250	36,964	86,371	107,386	122,850	-	-	-
AuEq, g/t		5.05	-	-	5.048	5.048	5.048	5.048	5.048	-	-	-
Au, g/t		4.64	-	-	4.636	4.636	4.636	4.636	4.636	-	-	-
Ag, g/t		34.47	-	-	34.467	34.467	34.467	34.467	34.467	-	-	-
Scheduled Long Hole Open Stopping (LHOS)												
Ore, tonnes	5%	469,039	-	-	42,000	50,400	154,115	107,259	115,266	-	-	-
AuEq, g/t		6.23	-	-	6.226	6.226	6.226	6.226	6.226	-	-	-
Au, g/t		5.73	-	-	5.725	5.725	5.725	5.725	5.725	-	-	-
Ag, g/t		41.92	-	-	41.919	41.919	41.919	41.919	41.919	-	-	-
Artisinal Mining (Direct Input)												
Ore, tonnes	0%	15,372	7,260	8,112	-	-	-	-	-	-	-	-
AuEq, g/t		10.30	10.30	10.30	-	-	-	-	-	-	-	-
Au, g/t		9.62	9.62	9.62	-	-	-	-	-	-	-	-
Ag, g/t		54.54	54.51	54.57	-	-	-	-	-	-	-	-
Scheduled Diluted Mine Production												
Ore, tonnes		3,348,255	75,718	250,427	335,790	335,790	335,790	335,790	335,790	335,790	335,790	335,790
AuEq, g/t		6.55	6.70	6.76	6.06	6.03	6.08	6.06	5.96	6.56	7.59	7.52
Au, g/t		5.75	6.06	6.10	5.02	5.03	5.54	5.43	5.42	5.92	6.67	6.55
Ag, g/t		66.71	51.68	52.24	87.25	83.73	45.60	53.15	44.72	53.84	76.95	81.13

Table 16-2: Zancudo Development Schedule

Denarius Metals Corporation Zancudo			LOM 2026-2036	2026 *ZM_SRP	2027 *ZM_SRP	2028	2029	2030	2031	2032	2033	2034	2035	2036
Waste Development			Waste Density 2.91											
Capital Development			W	x	H									
Horizontal														
Primary Declines & Ore Access, m (DENARIUS C)			4.5	x	4.5	3,481	900	1,800	781	-	-	-	-	-
Primary Declines, tonnes						219,030	56,629	113,259	49,142	-	-	-	-	-
Primary Ramps & Ore Access, m (CONTRACTO)			4.5	x	4.5	6,796	150	1,200	1,440	720	720	720	720	406
Primary Ramps & Cross Cuts, tonnes						62.9	9,438	75,506	90,607	45,303	45,303	45,303	45,303	25,546
Primary Ventilation Cross Cuts, m (DENARIUS C)			3.5	x	3.5	300	-	200	100	-	-	-	-	-
Primary Ventilation Cross Cuts, tonnes						11,631	-	7,754	3,877	-	-	-	-	-
Primary Ventilation Cross Cuts, m (CONTRACTO)			3.5	x	3.5	560	-	40	80	80	80	80	80	40
Primary Ventilation Cross Cuts, tonnes						21,710	-	1,551	3,101	3,101	3,101	3,101	3,101	1,551
Miscellaneous (muck bays, sumps, power bays, etc), m						668	63	194	144	48	48	48	48	27
Miscellaneous (muck bays, sumps, power bays, etc), tonnes						25,906	2,442	7,537	5,585	1,861	1,861	1,861	1,861	1,037
Primary Drift Rehabilitation, m						130	130	-	-	-	-	-	-	-
Horizontal Development, m						11,805	1,113	3,434	2,545	848	848	848	848	473
Horizontal Development, tonnes						705,891	68,510	205,605	152,312	50,266	50,266	50,266	50,266	28,134
Exploration Development, m			3.0	x	3.0	-	-	-	-	-	-	-	-	-
Exploration Development Waste, tonnes						-	-	-	-	-	-	-	-	-
Exploration Drilling, m						7,500	7,500	-	-	-	-	-	-	-
Delineation Drilling, m						7,500	7,500	-	-	-	-	-	-	-
Total Capital Horizontal Advance, m						11,805	1,113	3,434	2,545	848	848	848	848	473
Total Capital Horizontal Waste, tonnes						705,891	68,510	205,605	152,312	50,266	50,266	50,266	50,266	28,134
Vertical														
Ventilation Raise, m (DENARIUS COVERS COS)			2.0	x	2.0	400	-	225	175	-	-	-	-	-
Ventilation Raise, tonnes						5,381	-	3,027	2,354	-	-	-	-	-
Ventilation Raise, m (CONTRACTOR COVERS C)			2.0	x	2.0	295	-	20	40	40	40	40	45	30
Ventilation Raise, tonnes						3,968	-	269	538	538	538	538	605	404
Vertical Development, m						695	-	245	215	40	40	40	45	30
Vertical Development Waste, tonnes						9,349	-	3,296	2,892	538	538	538	605	404
Total Capital Vertical Advance, m						695	-	245	215	40	40	40	45	30
Total Capital Vertical Waste, tonnes						9,349	-	3,296	2,892	538	538	538	605	404

16.7 MINE MOBILE EQUIPMENT

Nummos Aureos S.A.S. (“Nummos”) is the current mine contractor and has committed the necessary resources to meet the production profile. Currently, Zancudo Colombia is expecting to maintain this relationship and rely on the contractor to supply the necessary equipment to meet the targets. Therefore, underground equipment determination is not required and relies entirely on Nummos.

Aside from the surface support equipment, Zancudo Colombia will be responsible for all primary material haulage on the surface including from the portal to the process facility. The truck specification and quantity determination must be completed when the haulage profile is established.

16.8 UNDERGROUND MINE MANPOWER

The mine underground operating workforce is provided by Nummos. This includes mine contractor administration, operating labor, and direct maintenance. Zancudo Colombia’s general and administrative workforce at the Project level are described in Section 21-2. Nummos has agreed to the development and production targets and have committed the necessary manpower resources to meet the targets.

16.9 UNDERGROUND VENTILATION

The Zancudo mine layout is based on vertical and horizontal stoping of different vein bodies which are located relatively close to the topographic surface. Historical mining excavations have been constructed at various elevations to allow access to the veins, and some have been incorporated into the mine access and ventilation system concepts for the PEA. The general ventilation system concept is the same for development of all the vein and manto systems and would rely on multiple intake and exhaust surface points controlled by fans in bulkheads. The establishment of individual vein ventilation circuits would follow the steps of:

- Develop primary access, haulage ramp, resource crosscuts, and ventilation bays;
- Construct a ventilation raise system (2.0 m x 2.0 m) between resource crosscuts at a nominal setback distance from the vein to direct intake air to the working faces;
- Install fans in bulkheads on the ventilation crosscut to draw air from the surface;
- Develop next raise on subsequent vent crosscuts and tie in with raise to pull fresh air to the next level.
- Fresh air reports to the working areas and exhaust out primary ramp.

As mining develops in the stope areas, several raise fan installations would be working in parallel resulting in the total ventilation intake substantially exceeding the requirements of the operating equipment and personnel. Figure 16-12 illustrates the ventilation concept in the Penal Vein. The ventilation raises would be cast down with the individual raise fans controlling the split of air flow, and serial flow mixing as the air moves towards the exhaust level. The series of ventilation raises also act as a secondary egress.

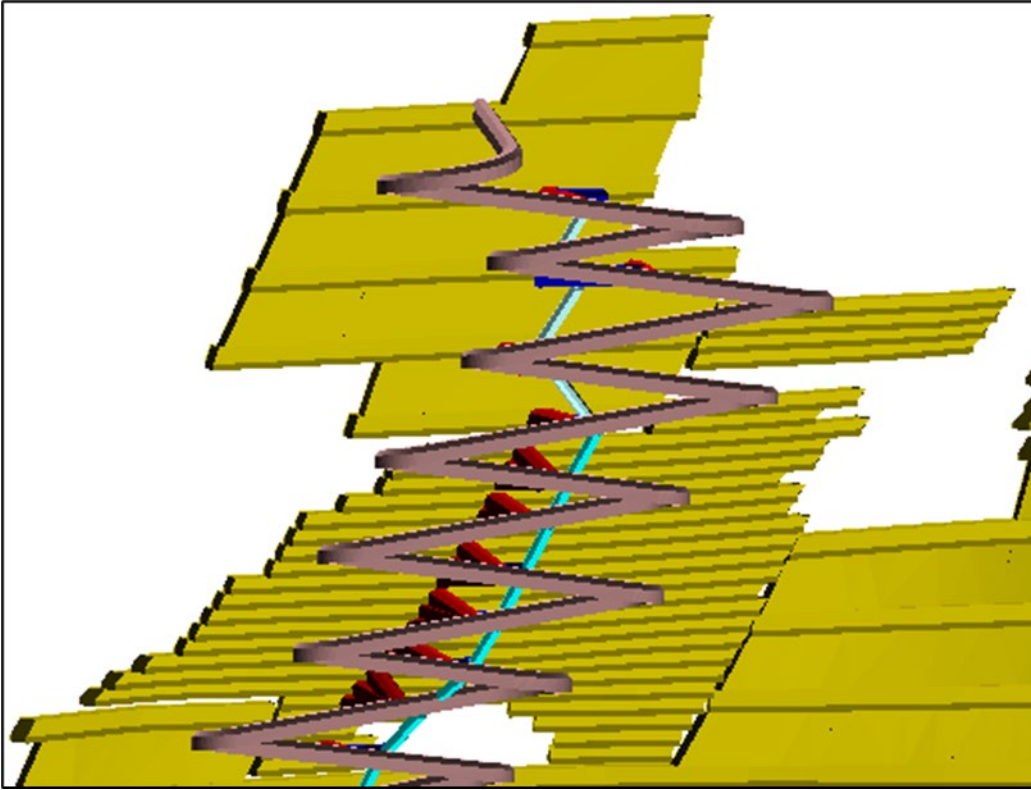


Figure 16-10: Santa Catalina Conceptual Ventilation System

16.10 UNDERGROUND INFRASTRUCTURE

The Zancudo mine is scheduled to produce 27,983 diluted tonnes per month at full production with direct feed to the process facility. Dry mining conditions are assumed based on the existing mine excavations, the proximity of the veins to the mountain, and the elevation of the mining above the local river drainage. No extensive mine pumping system has been included in the design.

Underground electrical power is sourced via the existing local overhead power lines distribution. The underground power cable will be installed during the excavation of the of the primary ramp to each working area that requires power. Mine Load Centers (MLC) and switchgear will be strategically placed next to the working areas. As mining progresses, the power MLC will be advanced corresponding to development and production. Voltage loss shall occur with long runs; therefore, when applicable boreholes will be drilled and power cable installed to minimize run length.

Make-up water would be supplied by a pipe network that connects to the existing natural mine drainage and the many tributaries located near the mine.

Infrastructure utility costs are included in the Nummos set contract rate.

16.11 MINING OPERATING COSTS

Mine operating and capital development costs have been provided by Nummos. The agreed terms between Zancudo Colombia and Nummos is a simple straight charge of 42% of Gold Net Smelter Return (NSR) when the mine achieves commercial production; initially Nummos will receive a 48% NSR. This is a unique concept which has been implemented at other Columbian mines, particularly Segovia, an Aris property. Table 16-3 projects total site mine costs as currently scheduled.

Table 16-3: Site Operating Costs

Denarius Metals Corporation Zancudo	LOM 2026-2036	2026 *ZM_SRP	2027 *ZM_SRP	2028	2029	2030	2031	2032	2033	2034	2035	2036
Total Operating, \$USD												
Mining	782.7	18.5	62.1	68.5	68.6	75.5	74.1	74.0	80.8	91.0	89.4	80.2
Site Administration and Social Programs	26.5	1.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Processing	163.3	2.2	13.1	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4
Shipping and Port Handling	82.3	4.2	6.4	7.0	7.0	7.7	7.6	7.6	8.3	9.3	9.1	8.2
Royalties	155.6	3.5	12.0	14.3	14.2	14.6	14.5	14.3	15.7	18.1	17.9	16.4
Selling and Marketing	38.7	0.9	3.0	3.5	3.5	3.7	3.6	3.6	4.0	4.5	4.4	4.0
Total Operating Costs and Royalties, \$USD	1,249.1	30.6	99.2	112.3	112.3	120.5	118.7	118.4	127.7	141.9	139.8	127.8

17 RECOVERY METHODS

This preliminary economic assessment is preliminary in nature, and there is no certainty that the reported results will be realized. The Mineral Resource estimate used for the PEA includes Inferred Mineral Resources which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the projected economic performance will be realized. The basis of the PEA is to demonstrate the economic viability of the Zancudo Project, and the results are only intended as an initial, first-pass review of the Project economics based on preliminary information. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves.

17.1 HIGH LEVEL DESIGN CRITERIA

To support development a High-Level Process Design Criteria (HLPDC) was developed to document key process variables and assumptions. The HLPDC is provided in Table 17-1. Key points are the daily production rate of 1,000 tpd with a nominal feed grade of 6.15 ppm Au and 166.6 ppm Ag. The process method includes crushing, grinding, gravity concentration and froth flotation to produce a high precious metal content bulk sulfide concentrate consisting of primarily pyrite and arsenopyrite and other base metals. Precious metal recoveries are expected to be 85 % and 87 % for gold and silver respectively using gravity concentration followed by flotation.

Table 17-1:High Level Process Design Criteria

Revision		D	Design Parameters	
Design Criteria, Bulk Flotation-Gravity		Units	Parameter	Source
Feed Source		ID	Zancudo Mine	Denarius Metals
Resource Tonnes Material		t		
Au Head Grade		g/t	6.15	ZM-02M-Composito
Ag Head Grade		g/t	166.60	ZM-02M-Composito
Process Annual Throughput		dktpy	328.5	Calc.
Operation Days per Year		dpy	365	Calc.
Shifts per Day		shifts/d	2	Calc.
Hours per Shifts		h/shift	12	WPS
Hours per Day		h/d	24	Calc.
Process Availability		%	90%	Calc.
Hourly Throughput		dtph	46	Calc.
Daily Throughput		dtpd	1,000	Denarius Metals
Ore Prep. Method			Crushed 3 Stages Closed Circuit	JLW
Feed % Moisture		%	4.00	JLW

Feed SG		2.76	Testwork
Crusher Work Index	kWh/t	TBD	Testwork
Ball Mill Bond Work Index	kWh/t	13.50	JLW
Crusher Availability	%	80%	JLW
Crushing Rate	tph	52.08	Calc
Feed P100	mm	150	
Product P80	mm	9.60	JLW
Grinding Circuit Type		Conventional Direct Closed Circuit	
Process Availability	%	95%	
Feed F80	mm	9.525	
Product P80	microns	212	
Concentration Process		Gravity + Flotation	
Gravity Concentrator		Knelson	
Gravity Conc Mass Pull	%	2%	TBC
Au Recovery	%	23%	Testwork
Ag Recovery	%	10%	Testwork
Flotation Circuit Configuration		Rougher + Scavenger with 2 Cleaners Stages	
Residence Time Rougher	min	14.3	WSP
Residence Time Scavenger	min	10.7	WSP
Mass Pull Rougher	%	16.0%	Testwork
Collector Type		PAX	Testwork
Frother Type		MIBC	Testwork
Promotor Type		A -407	Testwork
Ro + Scv Au Recovery	%	84.9%	Testwork
Ro + Scv Ag Recovery	%	87.4%	Testwork
Ro + Scv Grade Conc Au	g/t	26.5	Testwork
Ro + Scv Grade Conc Ag	g/t	640.0	Testwork
Final Conc Slurry	m ³ /h	5.28	Calc
Final Concentrate	dt/h	0.89	Calc
Cleaner Au Recovery	%	79.40%	Testwork
Cleaner Ag Recovery	%	82.70%	Testwork
Cleaner Grade Conc Au	g/t	31.1	Testwork
Cleaner Grade Conc Ag	g/t	759.5	Testwork
Bulk Concentrate Thickener	Type	High Rate	WPS
Quantity	#	1	WPS

Feed rate	dtph	0.89	Calc
Concentrate Filter	Type	Filter Press	WPS
Quantity	#	1	WPS
Cake Moisture	%	10	PPWM
Tailings Thickener	Type	High Rate	WPS
Quantity	#	1	WPS
Thickener Unit Area	m ² /tpd	TBD	Testwork
Tailings Filter press	Type	Filter Press	WPS
Quantity	#	1	WPS
Dry Stack Cake Moisture	%	15	PPWM
Fresh Water Make Up	m ³ /d	265	calc
Process: Installed Power	hp	3,450	PPWM

17.2 PROCESS DESCRIPTION

The envisioned process method consisting of crushing, grinding, gravity separation, froth flotation and liquid solid separation via thickening and filtration are considered industry standard process operations. The following sections describe the process in greater detail.

17.2.1 CRUSHING

The process begins with the arrival of raw material coming from the mine through the portal via underground haulage equipment discharging into Ore Bin (OB-01). The material then reports to a Crusher Feed Chute Feeder (CF-01) equipped with a grizzly. Grizzly oversize reports to the primary Jaw Crusher (JC-01) where it is crushed to smaller fragments. Jaw Crusher JC-01 is capable of processing 1,000 metric tons per day. Grizzly undersize goes directly to Primary Crushed Product Belt Conveyor (CV-01), this conveyor moves material to a Circular Vibratory Screen (VS-01). The Vibratory Screen separates the material into three fractions, coarse, medium coarse and fine. Coarse material is directed to a Fine Crushing Jaw Crusher (JC-02), with the crushed product reporting to Belt Conveyor (CV-02), medium coarse product reports directly to Belt Conveyor (CV-02) as well, and fines are sent to Belt Conveyor (CV-03) which transfers the material to a (FB-01) Storage Bin ready for the next processing stage (Grinding).

Material on Belt Conveyor CV-02 passes through a Belt Magnet (IR-01) to remove tramp iron or other metallic scrap. Following the Belt Magnet, the material passes through a Metal Detector (MD-01) which will trip the belt if tramp metal is detected. The Belt Magnet and Metal Detector are intended to protect the tertiary crusher, a Cone Crusher (CC-01) which operates in closed circuit reporting Belt Conveyor CV-01 (Figure 17-1).

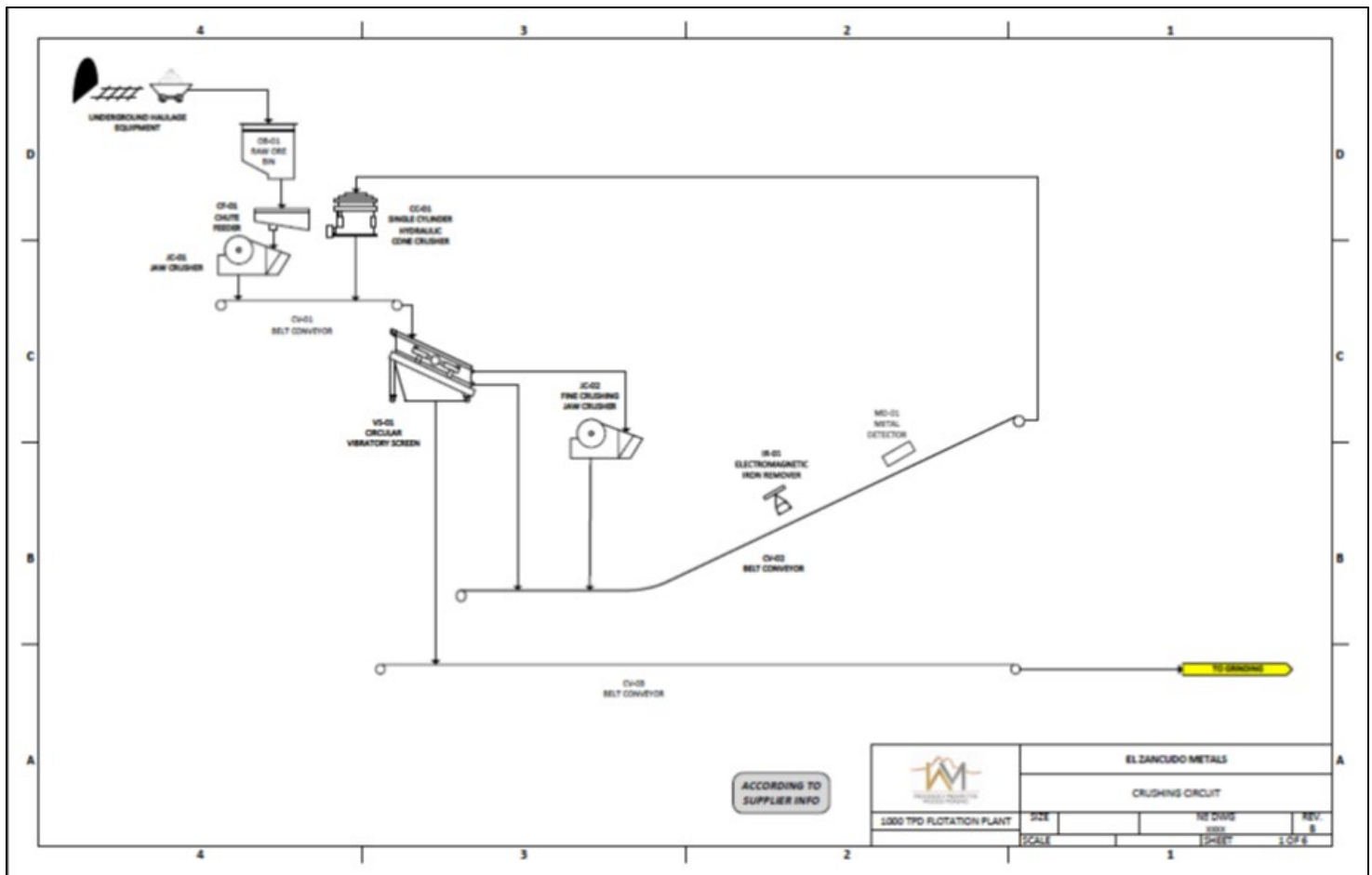


Figure 17-1: Crushing Circuit

17.2.2 GRINDING AND CONCENTRATION

Once the material has been finely crushed to a P80 of 3/8" and sent to Buffer Storage Bin (FB-01) the material is reclaimed via Belt Feeder (BF-01A, BF-01B) reporting to the Ball Mill Feed Conveyor (CV-04) which feeds the primary grinding Ball Mill (BM-01). The Primary Ball Mill operates in closed circuit with the Grinding Vibrating Screen (VS-02). The Ball Mill discharges to the Vibrating Screen (VS-02), that separates product in two fractions oversize and undersize. Oversize material returns to the Ball Mill via Belt Conveyor (CV-05), undersize material reports to a pump box (PB-01).

Once in the pump box, material flows forward using a XPA wear resistant rubber slurry pump (PP-01 A PP-01B) which feeds a Knelson Concentrator (KC-01), the underflow product of the concentrator moves to a XS Shaking Table (ST-01), while the overflow product bypass the Shaking Table to a Pump Box (PB-02). Shaking Table coarse gold/silver (for melting after settling), and the underflow goes to Pump Box (PB-02).

From PB-02 the material is pumped to a Classification hydro-cyclone for separation based on size (HC-01). Cyclones are crucial for classification and separating the finely ground material into two streams:

- Cyclone Overflow: The finer material reports to the cyclone overflow. It is then processed using a trash screen (linear vibrating screen VS-03) for further removal of large particles, wood scrap and trash.
- Cyclone Underflow: The coarser fractions report to the cyclone underflow.

The trash free material from the cyclone overflow, now considered flotation feed proceeds to rougher flotation circuit for processing to recovery precious metals in a bulk sulfide concentrate.

The cyclone underflow reports back to the ball mill for additional grinding., which contains the coarser and any material that has not been successfully liberated, is sent back to the ball mill. This recirculation process is crucial for maximizing the efficiency of the milling operation and ensuring that no valuable material is wasted.

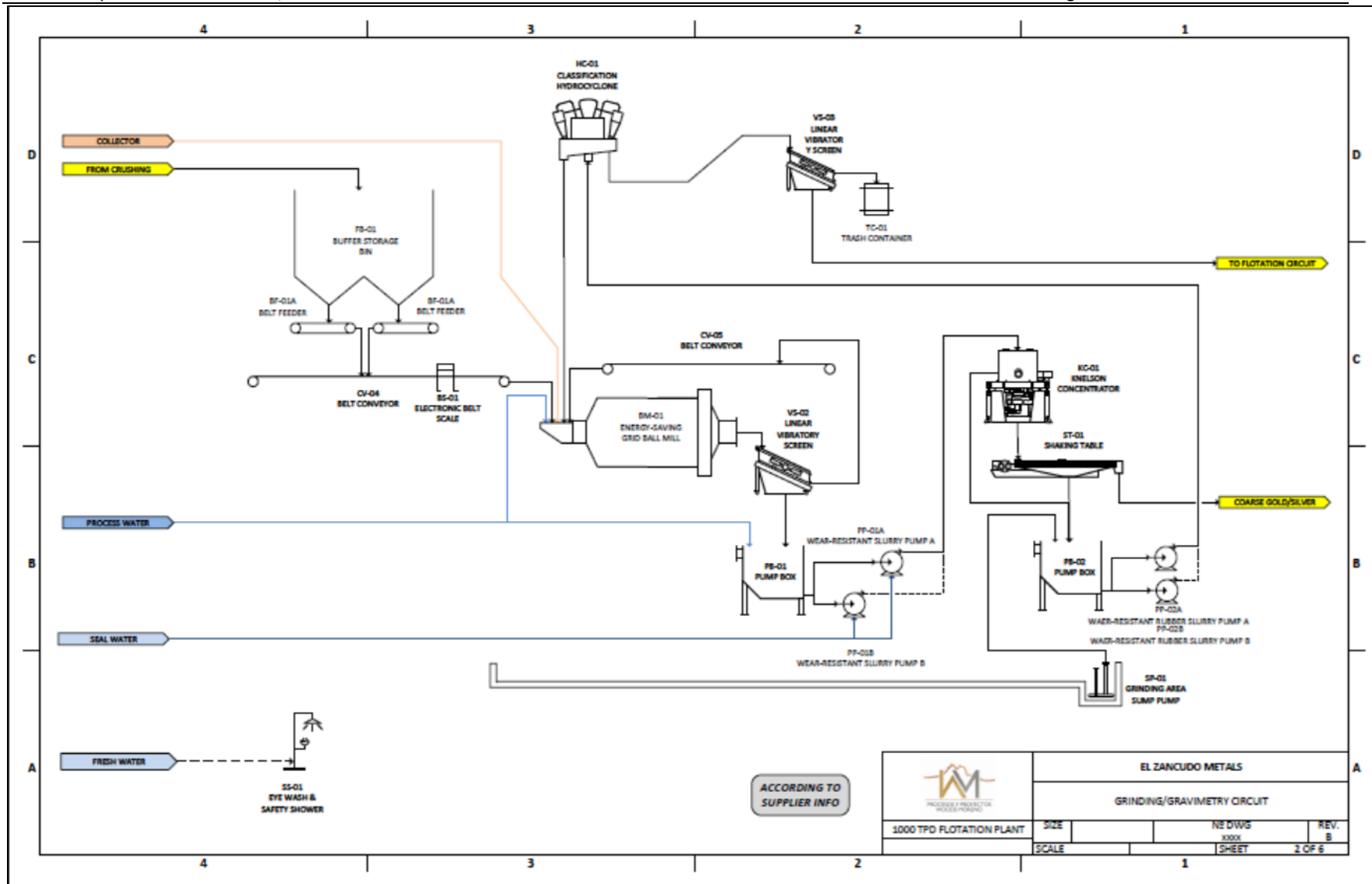


Figure 17-2: Grinding and Gravity Circuit

17.2.3 ROUGHER SCAVENGER AND CLEANER FLOTATION

From the grinding circuit the material is introduced to the Flotation Conditioning Tank (TK-01), where flotation reagents are added to the slurry. A specific type of reagent called a collector is added to the slurry in the conditioning tank and is adsorbed on the desired mineral surface rendering it hydrophobic.

After conditioning, the conditioned material is directed to a bank of five rougher flotation cells (FC-01). These cells are designed to create an initial separation, where desired minerals are attached to air bubbles and float to the surface in the mineral frother separating it from the waste minerals.

The tailings from the rougher flotation cells are then directed to a bank of four scavenger flotation cells operating in series (FC-05). These cells recover any remaining desired minerals that may have escaped the initial rougher flotation stage.

From scavenging 1st stage, the material flows into a bank of 2nd scavenger flotation cell (FC-04) inflatable stirring flotation unit (scavenging 2nd stage)., 2nd stage flotation concentrate flows countercurrent back to scavenging 1st stage where the 1st scavenger concentrate reports back to roughing flotation trough cell number 2. The Second Scavenger Flotation residue reports directly to the tailing s pump box, Pump Box (PB-03)

Flotation concentrate from roughing flotation flows reports to the 1st cleaning stage (FC-02). And then from cleaning 1st stage to cleaning 2nd stage (FC-03) if required, once this procedure is performed the concentrate is dumped into Foam Pump (PP-04) waiting to be sent to next process stage. Rejected material reports back to roughing flotation.

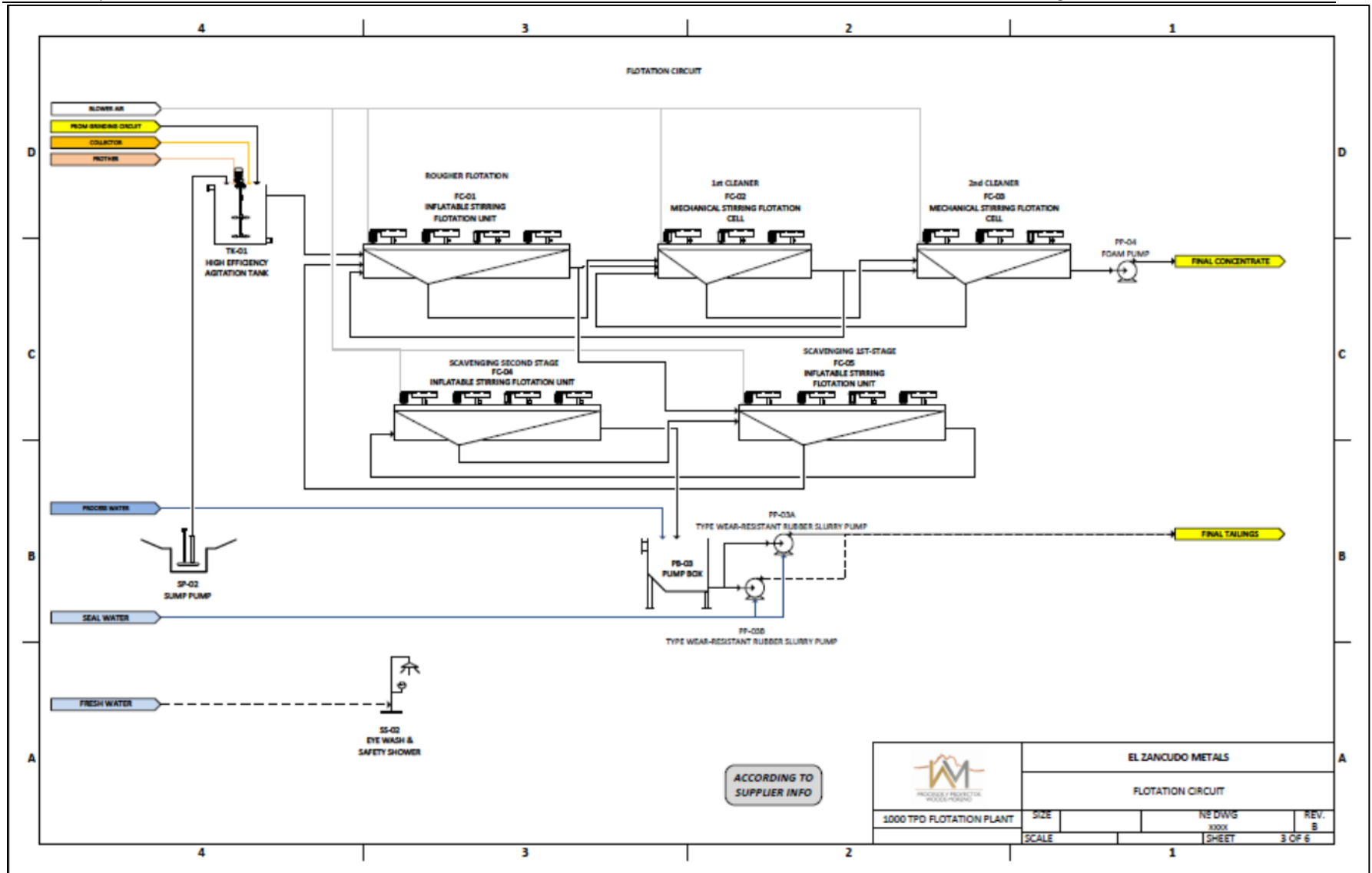


Figure 17-3: Flotation Circuit

17.2.4 TAILINGS FILTRATION

The tailings filtration circuit focuses on the efficient management of flotation tailings generated by the Flotation Stage where the connecting point is Rougher Scavenger 2nd stage.

From Pump Box (PB-03), the flotation tailings are pumped to the High-Rate Thickener (TH-01) using a wear resistant rubber lined slurry pump (PP-03A PP-03B). To the tailings thickener feed, flocculant is added to facilitate liquid/solids separation, with the thickened slurry reporting to the thickener underflow and the clear solution reporting to the thickener overflow.

The tailings slurry now concentrated and thickened, settle at the bottom of the thickener. The underflow from the thickener consists of a slurry with a high concentration of solids. This underflow via (PP-05) is then reports to the thickener underflow pump box (PB-04) and move the material with a process pump (PP-06A PP-06B) , which pumps the material to a thickened tailings storage tank (TK-02). The thickener slurry is temporarily stored in a storage tank before further processing.

From the thickened tailings storage tank, the thickened slurry is pumped to Filter Press (FP-01) for additional dewatering by way of the wear resistant rubber slurry pump (PP-07A PP-07B). The filter press applies pressure to filter excess water from the slurry, leaving a filter cake.

The filter cake discharges from the filter press on a batch basis and is conveyed through (CV-06) to a stockpile designed for dry stacking. Dry stacking is a method for the efficient and environmentally responsible disposal of filtered tailings. It involves stacking the dried waste material in a manner that minimizes environmental impact. (There may be an option to transport the unfiltered wet tailings to an old coal mine many kms away)

The thickener overflow, being a clear decant, is recycled in the plant for further use. Excess solution is directed to a sedimentation pond and after a recycling water pond, where it can be treated and reused within the mineral-processing operation or managed in an environmentally responsible manner. The water is reclaimed back to the flotation plant through SH Water Pump.

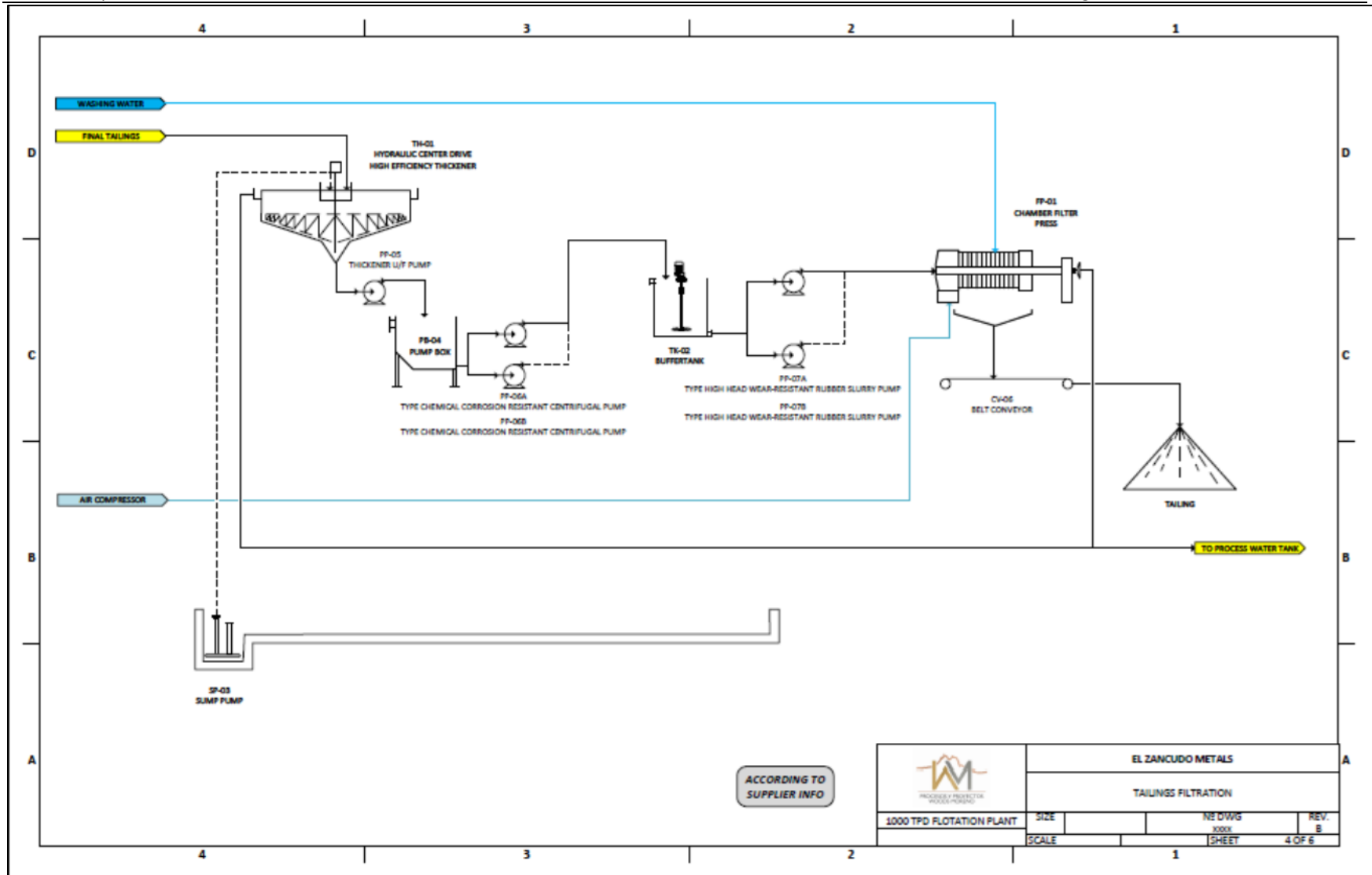


Figure 17-4: Tailings Filtration

17.3 POWER, WATER AND PROCESS MATERIALS

Using the process flow diagram, a preliminary equipment list was generated and preliminary equipment installed horse powers determined. The connected horsepower loads are summarized by Process Operating Area in the following table (Table 5-2). Process power requirements are expected to be below 2.6 MW.

Table 17-2: Power Requirements

Area	HP Summary	Kw
Cushing	655	489
Grinding/Gravity	971	724
Flotation	572	427
Concentrate Handling	244	182
Tailings Filtration	288	215
Reagents 1	4	3
Reagents 2	1	1
Utilities	715	533
Total	3449	2573

Make-up water requirements are estimated to be 265 m³/d and will likely be supplied by mine dewatering activities.

18 PROJECT INFRASTRUCTURE

The following site infrastructure and ancillary facilities will adhere to excellent engineering and construction practices and comply to municipal and federal government regulations.

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18.1 SITE ACCESS ROAD

Access to the town of Titiribi is by paved or improved roads. Small and large cities surround the Zancudo Project providing a significant workforce. Figure 18-1 displays the road infrastructure in relation to surrounding communities.

In lieu of directing traffic through Titiribi, Zancudo Colombia is currently developing a more direct route on the outskirts of the city to alleviate congestion. The new road connects the highway directly to the process and mine facilities.



Figure 18-1: Titiribi Road Infrastructure

18.2 POWER SUPPLY AND DISTRIBUTION

The electricity required for the Zancudo Project is sourced from the existing overhead country distribution system. Mine personnel indicated that up to 8 Megawatts of power are available which is assumed to be more than sufficient to operate the underground mine and process facility. Final load tabulation needs to be completed to confirm this assumption.

No secondary system has been considered.

18.3 WATER SUPPLY AND DISTRIBUTION

Water for mining and milling operations will be supplied from the underground natural flowing dewatering system. If necessary, additional make-up water will be supplied through the extensive river tributary network located near the mine.

Process water will be recycled within the milling circuit with an estimate of approximately 70% of mill process water being recovered and reused in ongoing milling operations.

18.4 WAREHOUSE

A general warehouse will be built for the storage and control of all materials and spare parts required for the total operation of the Mine. Due to the proximity of the mine to extensive industrial businesses, limited amount of warehousing will be required.

18.5 MINE DRY

A separate mine dry will be provided, that will include showers and lockers to be used by mine, plant, and maintenance personnel.

18.6 ASSAY LABORATORY

Facilities for the assay laboratory will include sample preparation with drying, crushing and pulverizing. An AA spectrometer for multi metal analysis, fire assaying for gold-silver and complete equipment for metallurgical testing is considered. This lab will have the sufficient capacity to assay all samples.

18.7 FUEL STORAGE

Diesel fuel and gasoline for the equipment will be transported to the mine via local distributors and stored in surface tanks. All the fuel storage tanks and fuel transport equipment will meet existing regulations and safety requirements.

19 MARKET STUDIES AND CONTRACTS

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The Preliminary Economic Assessment economic analysis presented in Section 22 assumes that all gold and silver concentrates produced from the Zancudo Project will be sold at prevailing market prices. No independent market studies were undertaken for this PEA.

19.1 OFFTAKE AGREEMENT

In April 2024, Denarius signed a commercial agreement with Trafigura Pte. Ltd. (“Trafigura”) for the sale, at market prices, of 100% of the gold-silver concentrates to be produced at the Zancudo Project over the next eight years.

Zancudo Colombia commenced mining operations at the Zancudo Project in April 2025. During the current “early production phase” (until the 1,000 tpd processing plant enters commercial operation in 2026), Zancudo Colombia is delivering crushed ROM material from the Zancudo Project to port, where it is sold to Trafigura under the long-term offtake agreement. During this early production phase, Trafigura’s payability rates range from 30% to 70% for gold and 20% to 40% for silver, depending on the grades of the material delivered. These payability rates reflect the additional costs incurred by Trafigura to bring the material to a saleable condition.

Once the processing plant becomes operational and Zancudo Colombia begins shipping concentrates, payability rates are expected to increase to 86% to 90% for gold and 35% to 45% for silver, depending on the grades of the concentrates delivered.

Pursuant to the offtake agreement, Trafigura also charges Zancudo Colombia a freight rollback, included in shipping and port handling costs, covering the difference in freight costs between the local port to which Zancudo Colombia delivers the ROM material or concentrates and Trafigura’s international destination for delivery on a CIF basis.

19.2 PLANT CONSTRUCTION AND PROCESSING AGREEMENT

In March 2026, Zancudo Colombia engaged a local civil engineering and industrial construction services firm with extensive experience in extractive industries projects (the “Plant Contractor”) for the construction, installation, operation and maintenance of the new 1,000 tpd processing plant on a contract basis.

The Plant Contractor has agreed to finance its fees for the plant installation services, valued at US\$3 million, through the issuance of 2,529,000 common shares of Denarius at a price of CA\$0.76 per share (equivalent to US\$1.4 million), with the balance to be settled through processing fees paid by Zancudo Colombia during plant operation. The term of the agreement spans the first 11 years of the mine life and may be extended by mutual agreement.

Pursuant to the agreement, Zancudo Colombia will pay a monthly fee calculated using the number of tonnes processed in the month and a rate per tonne established by a tariff table based on the daily average tonnes processed. Starting in the fifth month following plant start-up, the monthly fee will be subject to a minimum charge based on 400 tpd. The tariff rates will be updated annually in accordance with the annual variation of the Consumer Price Index (CPI) applicable in the Republic of Colombia as published by DANE. Zancudo Colombia will also pay any excess amount for energy consumption beyond certain established cost-per-tonne parameters in the agreement.

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

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20.1 PROJECT PERMITTING REQUIREMENTS

All mineral resources in Colombia belong to the State. Mining activities are regulated by the National Mining Agency (ANM) and the Ministry of Mines and Energy under Mining Law 685 of 2001 (and predecessor Decree 2655 of 1988 for older titles). Concession contracts cover exploration, construction, and exploitation phases for an initial 30-year term (extendable by another 30 years).

The regional environmental authority for the Titiribí area is CORANTIOQUIA. For projects exceeding certain production thresholds, the National Authority of Environmental Licenses (ANLA) assumes responsibility. Both agencies enforce compliance with environmental licenses and permits.

Exploration activities require environmental permits but not a full environmental license. Construction and exploitation require an environmental license (or approval of an Environmental Management Plan – PMA) from CORANTIOQUIA (or ANLA, as applicable). The process includes preparation of an Environmental Impact Statement (EIS) or update to an existing PMA, public consultation (including with local, indigenous, and Afro-descendant communities), and issuance of the license which encompasses water, air, biodiversity, and other permits.

20.2 CURRENT STATUS OF ENVIRONMENTAL PERMITS AND APPROVALS

- **Combined Unique Exploration and Exploitation Program (PUEE):** Approved by ANM Resolution 2023060352975 (December 11, 2023) for integration of titles H5911005, HDWA-02, and HEOM-12.
- **Environmental License:** Full environmental license issued by CORANTIOQUIA under Resolution 040-RES2412-6009 dated December 31, 2024, for concession C5521011.
- **Programa de Trabajos y Obras (PTO):** Formally approved for the integrated concession H5911005 by Resolution GNET-1289 dated April 13, 2026. The PTO confirms the project as *mediana minería* (medium-scale mining) and incorporates underground mining methods, resource estimates, and environmental management requirements.
- The integrated H5911005 concession (executed February 9, 2026, registered March 12, 2026) now covers approximately 810 ha. Water management, tailings, and other operational aspects are incorporated into the approved PTO framework.
- Zancudo Colombia continues to coordinate with CORANTIOQUIA for any supplementary registrations or updates required for full-scale operations under the integrated title.

20.3 WATER QUALITY AND WATER RIGHTS

Water rights are administered independently by CORANTIOQUIA. Historical applications for water use and discharge permits have been granted. With the 2024 environmental license and 2026 PTO approval, water supply, recycling, treatment, and discharge requirements are now formally addressed within the approved exploitation framework. No material issues regarding water availability or permitting have been identified.

20.4 AIR QUALITY, NOISE, FAUNA, FLORA, RIPARIAN AREAS, AND CULTURAL HERITAGE

The Project must comply with Colombian standards for air quality (Decree 948/1995, Resolutions 650/2010, 2154/2010), noise, biodiversity protection, riparian buffers (Resolution 077/2011), and cultural/archaeological heritage (Law 397/1997). Baseline studies and monitoring programs will be implemented as required by the environmental license and PTO.

20.5 PERFORMANCE AND RECLAMATION BONDING

Zancudo Colombia maintains the required mining and environmental insurance policy in accordance with Law 685 of 2001. The policy guarantees compliance with environmental obligations during all phases and for three years post-termination.

20.6 ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) CONSIDERATIONS

Denarius has maintained proactive community engagement, including local employment and support for community initiatives. Exploration and development activities have had limited social impact to date. The shift to underground mining methods has reduced potential community concerns previously associated with open-pit concepts. ESG principles are integrated into project planning, with ongoing consultation and benefit-sharing programs in the area of influence.

20.7 MINE CLOSURE

Article 209 of Law 685 of 2001 requires submission of a closure and reclamation plan. The approved PTO and environmental license include progressive rehabilitation and final closure obligations. Closure costs will be addressed in future economic studies; the environmental insurance policy remains in force for three years after termination.

20.8 ARSENIC AND OTHER ENVIRONMENTAL CONSIDERATIONS

Metallurgical test work demonstrates high gold and silver recoveries into concentrate, with the majority of arsenic reporting to the saleable concentrate (which is removed from site). Tailings are expected to have low arsenic levels and will be managed via dry-stacking as per the approved process design. No material acid-rock drainage or other environmental liabilities from historical mining have been identified by CORANTIOQUIA.

20.9 QUALIFIED PERSON'S OPINION

The Qualified Person is not aware of any material environmental, permitting, social, or community issues that would prevent the reasonable prospects of eventual economic extraction of the Zancudo mineral resources as reported in this Technical Report. All required permits for current exploration and planned development are either in place or advancing in accordance with Colombian regulations. Additional baseline studies, monitoring, and detailed closure planning will be completed as the Project advances to feasibility.

21 CAPITAL AND OPERATING COSTS

This preliminary economic assessment is preliminary in nature, and there is no certainty that the reported results will be realized. The Mineral Resource estimate used for the PEA includes Inferred Mineral Resources which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the projected economic performance will be realized. The basis of the PEA is to demonstrate the economic viability of the Zancudo Project, and the results are only intended as an initial, first-pass review of the Project economics based on preliminary information. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resources estimated will be converted into mineral reserves.

Capital and operating costs used for the Zancudo Project were developed from cost build up from first principles engineering along with vendor and contractor quotations/agreements. In addition, all available project technical data and metallurgical test work were considered to build up a processing operating cost estimate.

A project configuration which included the underground mines and a central process facility was developed as the basis for capital cost estimation. Preliminary site infrastructure alternatives (process plant, tails storage facility, and power) were examined as a basis to estimate costs. Generalized arrangements were evaluated to establish a physical basis for the capital costs estimates. Cost accuracy is estimated to be + or - 20%.

21.1 CAPITAL COSTS

Capital costs were developed based on production rates and from design assumptions. The costs are collected in two separate categories; initial capital (construction costs to initiate mining operations including Engineering, Procurement, and Construction Management (“EPCM”), mining and processing equipment, and contingency), and sustaining capital (additional equipment and equipment rebuilds). The estimated capital costs are listed in Table 21-1. Contingency was calculated on applicable items at a rate of 5%. Contingency was applied to all direct initial capital cost items. The contingency rate was determined based on confidence levels on capital used in the cost build up.

Table 21-1: Zancudo Total Capital Costs

Capex Summary		
Initial Capex		
Development	USD	2,289,600
Access Road	USD	2,194,775
Crushing Plant	USD	107,744
Crushing Electrical	USD	49,208
Civil Works	USD	-
Processing Plant	USD	361,559
Tailings Storage Facility	USD	687,290
Permitting	USD	3,333,478
Indirect	USD	1,150,000
Owner's	USD	449,621
Subtotal	USD	10,623,275
Contingency	USD	416,684
Total	USD	11,039,959
Sustaining Capex		
Exploration	USD	2,520,000
Development	USD	13,364,111
Other Sustaining	USD	17,063
Total	USD	15,901,173
Total capex		26,941,132

21.2 OPERATING COSTS

Operating costs are listed in Table 21-2.

Table 21-2: Zancudo Unit Operating Costs

LOM Operating Costs		
Mining Cost	USD/ t milled	236.25
Processing, Shipping, Port Handling Cost	USD/ t milled	74.15
Site Administration and Social Programs	USD/ t milled	8.00
Total Operating Cost	USD/ t milled	318.40
LOM Cash Costs		
Mining Cost	USD/Au	1,681
Processing, Shipping, Port Handling Cost	USD/Au	528
Site Administration and Social Programs	USD/Au	57
Silver Credit	USD/Au	(235)
Royalties, Selling & Marketing	USD/Au	417
Sustaining	USD/Au	34
AISC	USD/Au	2,482

22 ECONOMIC ANALYSIS

The preliminary economic assessment is preliminary in nature, and there is no certainty that the reported results will be realized. The Mineral Resource estimate used for the PEA includes Inferred Mineral Resources which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the projected economic performance will be realized. The purpose of the PEA is to demonstrate the economic viability of the Zancudo Project, and the results are only intended as an initial, first-pass review of the Project economics based on preliminary information. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability

The economic performance of the Zancudo Project was evaluated with a cash flow based economic model using project costs and revenues as the financial basis. The revenue factors for the project are dependent on metal prices calculating into the net smelter return. Key parameters and assumptions are shown in Table 22-1.

Table 22-1: Key Parameters and Assumptions

Project Overview		
LOM Realized Pricing		
Gold	USD/oz	4,000
Silver	USD/oz	50
LOM Operations		
Total Ore Mined	tonnes	3,348,255
Total Waste Mined	tonnes	715,240
Total Material Mined	tonnes	4,063,494
Average Grade Gold (Diluted)	g/t Au	5.75
Average Grade Silver (Diluted)	g/t Ag	66.71
	AuEq Milled Grade (Diluted)	6.55
Contained Gold Processed	ounces	619,467
Contained Silver Processed	ounces	7,181,170
Gold Recovered	ounces	527,116
Silver Recovered	ounces	6,251,745
Payable Gold (Concentrate)	%	88.5%
Payable Silver (Concentrate)	%	35.0%
Payable Gold	ounces	465,606
Payable Silver	ounces	2,188,111
LOM All-In Sustaining Cost Breakdown		
Mining	USD/Au	1,681
Processing, Shipping, Port Handling Cost	USD/Au	528
Site Administration and Social Programs	USD/Au	57
Royalties, Selling & Marketing	USD/Au	417
Sustaining Capital	USD/Au	34
Silver Credit	USD/Au	(235)
AISC	USD/Au	2,482
LOM Capital		
Initial CAPEX	USD	(11,039,959)
Sustaining CAPEX	USD	(13,381,173)
Exploration	USD	(2,520,000)
Total LOM CAPEX	USD	(26,941,132)

22.1 LOM OPERATING AND FINANCIAL DATA

The net revenue of the project is based on the net smelter return. The costs and payable metal values from the produced concentrate are calculated to give the NSR. The detailed LOM operating and financial data from Zancudo is detailed in Table 22-2.

Table 22-2: LOM Operating and Financial Data

Summary Economic Results		
Project		
LOM Cash Flow (unfinanced)		
Total Revenue	USD	1,971,830,427
Mining Cost	USD	(782,694,487)
Processing, Shipping, Port Handling Cost	USD	(245,660,433)
Royalties, Selling & Marketing	USD	(194,281,351)
Site Administration and Social Programs	USD	(26,512,500)
Total Opex	USD	(1,249,148,770)
Gross Profit	USD	722,681,657
Gross Profit Margin	%	37%
Taxes Paid	USD	(243,509,184)
Capex and exploration	USD	(26,941,132)
Project Cash Flow	USD	452,231,341
<i>After Tax</i>		
Project Cash Flow	USD	452,231,341
NPV (5%)	USD	323,782,175
NPV (8%)	USD	269,156,555
NPV (10%)	USD	239,398,963
IRR	%	558.5%
Payback	Year	2027

- Notes:
- All figures are rounded to reflect the relative accuracy of the estimate.
 - Includes production and cash flow from early-stage mining operations and sale of run-of-mine ("ROM") material during the construction period. Processing plant operations and sale of gold-silver concentrates commencing August 2026.
 - Production represents payable gold and silver from the sale of ROM material and concentrates.
 - Total revenue is based on spot gold and silver prices of US\$4,000 and US\$50 per ounce, respectively, and the payability rates in the Trafigura long-term offtake contract..
 - Operating costs as outlined in Table 1-5.
 - AISC is a non-IFRS measure and is calculated on a by-product credit basis by deducting revenue from silver production from the sum of operating costs and royalties and sustaining capex, divided by the number of gold ounces produced.
 - Please see "Cautionary Statement on PEA and Use of Inferred Resources" below for the limitations, explanations and cautionary language on the use of the PEA.

Cautionary Statement on PEA and Use of Inferred Resources

The preliminary economic assessment is preliminary in nature, and there is no certainty that the reported results will be realized. The Mineral Resource estimate used for the PEA includes Inferred Mineral Resources which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the projected economic performance will be realized. The purpose of the PEA is to demonstrate the economic viability of the Zancudo Project, and the results are only intended as an initial, first-pass review of the Project economics based on preliminary information. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.

22.2 CASH FLOW

The production schedules presented in Section 16 and 17 have been used in conjunction with the cost data discussed in Section 21 to create a model for the Zancudo Project's economic performance. Costs are in constant 2026 US\$, no escalation of cost has been

assumed. Operating costs are generated based on production physicals (tonnes) and unit rates. The detailed cash flow model for the Zancudo Project is presented in Table 22-3.

Table 22-3: Zancudo Project Cash Flows

Denarius Metals Corporation Zancudo	LOM 2026-2036	2026 *ZM_SRP	2027 *ZM_SRP	2028	2029	2030	2031	2032	2033	2034	2035	2036
EBITDA, \$USD (000's)												
Net Revenue, \$USD	1,889.5	40.6	147.9	170.5	170.2	179.6	177.5	175.9	192.9	220.1	217.0	197.3
Colombia, NSR Royalty 3.2%	90.8	2.1	7.0	8.4	8.4	8.4	8.4	8.3	9.1	10.5	10.5	9.6
Private Royalties, \$USD 3.5%	64.8	1.4	5.1	5.8	5.8	6.2	6.1	6.0	6.6	7.5	7.4	6.8
Selling Commission 2.0%	38.7	0.9	3.0	3.5	3.5	3.7	3.6	3.6	4.0	4.5	4.4	4.0
Operating Cost, \$USD	972.5	22.0	77.7	87.5	87.6	94.5	93.0	92.9	99.8	110.0	108.4	99.2
EBITDA, \$USD	722.7	14.2	55.1	65.2	64.9	66.8	66.3	65.1	73.5	87.5	86.3	77.7
Earnings, \$USD (000's)												
EBITDA, \$USD	722.7	14.2	55.1	65.2	64.9	66.8	66.3	65.1	73.5	87.5	86.3	77.7
Depreciation, \$USD	26.9	0.8	1.8	2.4	2.4	2.6	2.6	2.6	2.8	3.2	3.1	2.8
Taxable Income, \$USD	695.7	13.5	53.3	62.8	62.5	64.2	63.8	62.5	70.7	84.3	83.2	74.9
Colombia Income Tax 35%	243.5	4.7	18.7	22.0	21.9	22.5	22.3	21.9	24.7	29.5	29.1	26.2
Earnings, \$USD	452.2	8.8	34.7	40.8	40.6	41.7	41.4	40.6	46.0	54.8	54.1	48.7

22.3 TAXES, ROYALTIES AND OTHER INTERESTS

Tax calculations in the financial model are based on current tax laws in Colombia which are 35%. Payable royalties for the project are outlined in Table 22-3

22.4 SENSITIVITY ANALYSIS

To estimate the relative economic strength of the Project, base case sensitivity analyses have been completed analyzing the economic sensitivity to several parameters including changes in gold price, capital costs and operating costs.

The economic results are most sensitive to the fluctuations in gold prices. In addition to gold revenues, which represent approximately 95% of total revenues, mining costs, royalties and sales and marketing costs, are all impacted by changes in gold prices. The PEA economic results have been based on a long-term spot gold price of US\$4,000 per ounce. Table 22-4 sets out the key economic results under various long-term gold price scenarios from US\$3,000 per ounce (75% variation) up to US\$5,000 per ounce (125% variation).

Table 22-4: Zancudo Project Sensitivity to Gold Price

Gold Price (\$/oz Au)	Revenue (\$000)	Operating costs and royalties (\$000)	Operating Cash Flow (\$000)	Project Cash Flow (\$000)	AISC (\$/oz Au)	NPV at Discount Rate (\$000)			IRR (%)
						5%	8%	10%	
3,000	1,506,224	1,008,204	333,142	306,201	1,965	217,180	179,429	158,902	233.4
3,100	1,552,785	1,032,299	347,745	320,804	2,016	227,840	188,402	166,952	254.3
3,200	1,599,345	1,056,393	362,348	335,407	2,068	238,500	197,374	175,002	277.0
3,300	1,645,906	1,080,488	376,951	350,010	2,120	249,160	206,347	183,051	301.7
3,400	1,692,467	1,104,582	391,554	364,613	2,172	259,821	215,320	191,101	328.6
3,500	1,739,027	1,128,677	406,157	379,216	2,223	270,481	224,293	199,151	358.0
3,600	1,785,588	1,152,771	420,760	393,819	2,275	281,141	233,265	207,200	390.3
3,700	1,832,149	1,176,865	435,363	408,422	2,327	291,801	242,238	215,250	425.9
3,800	1,878,709	1,200,960	449,966	423,025	2,379	302,462	251,211	223,300	465.4
3,900	1,925,270	1,225,054	464,569	437,628	2,430	313,122	260,184	231,349	509.3
4,000	1,971,830	1,249,149	479,172	452,231	2,482	323,782	269,157	239,399	558.5
4,100	2,018,391	1,273,243	493,775	466,834	2,534	334,442	278,129	247,449	614.0
4,200	2,064,952	1,297,338	508,378	481,437	2,586	345,103	287,102	255,498	676.9
4,300	2,111,512	1,321,432	522,982	496,040	2,637	355,763	296,075	263,548	748.9
4,400	2,158,073	1,345,527	537,585	510,643	2,689	366,423	305,048	271,598	832.2
4,500	2,204,634	1,369,621	552,188	525,246	2,741	377,084	314,020	279,647	929.4
4,600	2,251,194	1,393,715	566,791	539,849	2,793	387,744	322,993	287,697	1,044.5
4,700	2,297,755	1,417,810	581,394	554,452	2,844	398,404	331,966	295,747	1,182.8
4,800	2,344,315	1,441,904	595,997	569,055	2,896	409,064	340,939	303,796	1,352.0
4,900	2,390,876	1,465,999	610,600	583,658	2,948	419,725	349,912	311,846	1,564.0
5,000	2,437,437	1,490,093	625,203	598,261	3,000	430,385	358,884	319,896	1,836.9

For capital costs and operating costs and royalties, the sensitivities are based on +/- 25% of the base case. Table 22-5 sets out the after-tax sensitivity analysis.

Table 22-5: Zancudo Project Sensitivity to Capital Costs and Operating Costs and Royalties

Parameter/ Variation (%)	Variation (\$000)	NPV at Discount Rate (\$000)				IRR (%)
		0%	5%	8%	10%	
Capital Costs						
75%	20,206	456,609	328,301	273,681	243,906	1,790.9
90%	24,247	453,983	325,590	270,966	241,202	774.1
100%	26,941	452,231	323,782	2869,157	239,399	558.5
110%	29,635	450,480	321,975	267,347	237,596	435.6
125%	33,676	447,853	319,264	264,632	234,892	326.4
Operating Costs and Royalties (1)						
75%	1,181,826	495,991	356,012	296,425	263,944	800.9
90%	1,222,220	469,735	336,674	280,064	249,217	640.7
100%	1,249,149	452,231	323,782	269,157	239,399	558.5
110%	1,276,078	434,727	310,890	258,249	229,581	490.3
125%	1,316,471	408,472	291,552	241,888	214,854	407.1

(1) Refer to table 1-5 for details of the Project's operating costs and royalties. The variation % in each case is applied to processing, shipping and port handling, and site administration and social programs costs. As mining costs, royalties, and selling and marketing costs are determined principally by reference to production and gold/silver prices, the variation % has not been applied to these operating costs. Refer to Table 22-4 for the impact of variations in gold prices on these costs included in total operating costs and royalties.

Figure 22-1 and Figure 22-2 present graphical representations of the after-tax sensitivities. Variations in gold price have the largest influence on the sensitivity of the Project. The economic indicators chosen for sensitivity evaluation are the IRR and NPV @ 5% discount rate.

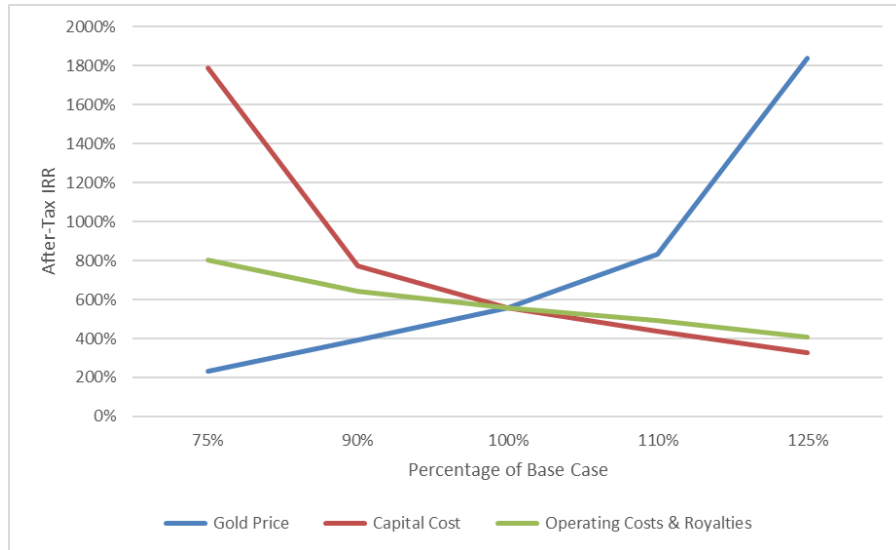


Figure 22-1 Zancudo Project After-Tax Sensitivity Analysis - IRR

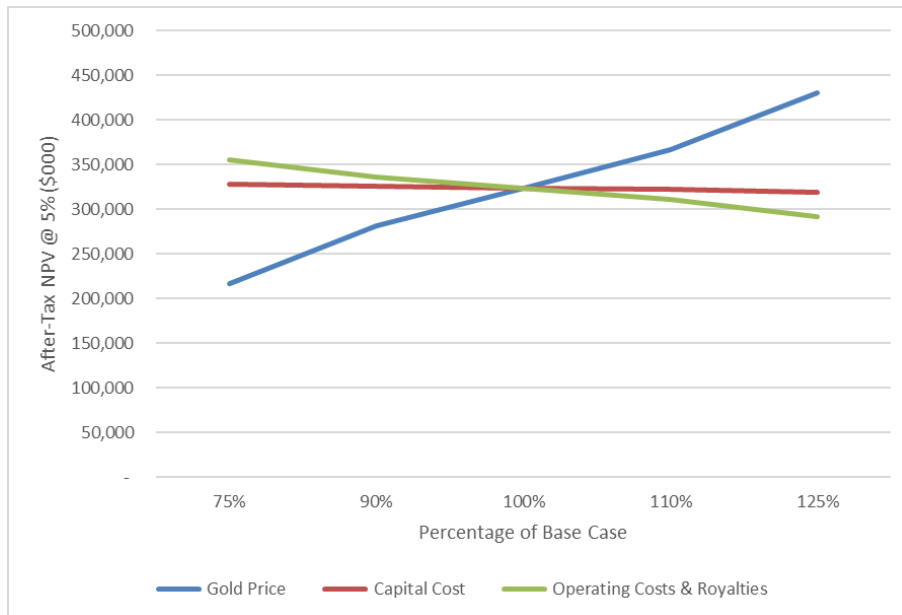


Figure 22-2 Zancudo Project After-Tax Sensitivity Analysis – NPV @ 5%

23 ADJACENT PROPERTIES

The Zancudo Project lies on the northern side of the Titiribí Project where porphyry Au-Cu mineralization was discovered by Gold Fields of South Africa Limited and Muriel Mining S.A. in 1998 (Meldrum, 1998). The project was subsequently explored by Gold Plata Mining (formerly Muriel Mining) with partners Debeira Goldfields in 2006-2008, Windy Knob Resources in 2008 and 2009, and Sunward Resources Ltd. in 2009 through 2013 (Kantor & Cameron, 2013). Sunward Resources was subsequently acquired by NovaCopper Inc. in 2015, Brazil Resources Inc. in 2016, and is now called GoldMining Inc. No drilling has been carried out at the Titiribí Project since 2013.

The Titiribí project has NI 43-101 mineral resources that comprise measured mineral resources of 51.6 Mt grading 0.49 g/t Au and 0.17% Cu containing 0.82 Moz Au and 195.1 million pounds (Mlb) Cu, indicated mineral resources of 234.2 Mt grading 0.51 g/t Au and 0.09% Cu containing 3.82 Moz Au and 459.3 Mlb Cu and inferred mineral resources of 207.9 Mt grading 0.49 g/t Au and 0.02% Cu containing 3.26 Moz Au and 77.9 Mlb Cu, all estimated at a 0.3 g/t Au cutoff (Kantor & Cameron, 2016). The resources are hosted in three deposits: the Cerro Vetas porphyry Au-Cu deposit, the Chisperos breccia Au deposit, and the NW Breccia Au deposit.

However, the author has been unable to verify the information in this report regarding the Titiribí project and the information is not necessarily indicative of the mineralization on the Zancudo Project that is the subject of this Technical Report.

24 OTHER RELEVANT DATA AND INFORMATION

The Authors know of no other relevant data and information that would make the report more understandable and not misleading.

25 INTERPRETATIONS AND CONCLUSIONS

The Zancudo Gold-Silver Project hosts a robust intermediate sulfidation epithermal vein and manto system with significant exploration upside. The October 31, 2025 Mineral Resource Estimate, prepared in accordance with CIM guidelines, demonstrates a substantial inventory of gold and silver mineralization that is amenable to underground mining methods.

The Preliminary Economic Assessment (PEA) demonstrates that the Zancudo Project has strong economic potential as a high-grade underground gold-silver operation. Key conclusions from the study include:

- **Mineral Resources:** The deposit contains 979 kt at 7.91 g/t AuEq in the Indicated category and 4.64 Mt at 6.59 g/t AuEq in the Inferred category (3.25 g/t AuEq cut-off). The mineralization remains open along strike and at depth, particularly in the northern and central zones.
- **Mining:** The selected underground mining methods (primarily modified resue for steep veins and appropriate stoping for shallow-dipping manto structures) are well suited to the geometry and geotechnical conditions of the deposit. The mine plan supports a ~10-year life with an average processing rate of approximately 925–1,000 tpd.
- **Processing and Recovery:** Metallurgical testing confirms that a conventional three-stage crushing, grinding, gravity, and flotation flowsheet can achieve overall recoveries of approximately 85% for gold and 87% for silver, producing a high-grade gold-silver concentrate suitable for sale to smelters.
- **Capital and Operating Costs:** Initial capital requirements are modest at approximately US\$11.04 million (including contingency), reflecting the relatively small-scale underground operation and use of contract mining. Life-of-mine sustaining capital and exploration total US\$15.90 million. All-in sustaining costs (AISC) are estimated at US\$2,477 per payable gold ounce on a by-product credit basis.
- **Economic Results:** At long-term prices of US\$4,000/oz gold and US\$50/oz silver, the Project generates robust economics with:
 - LOM after-tax free cash flow of US\$452.2 million;
 - After-tax NPV5% of US\$323.8 million;
 - After-tax IRR of 558.5%;
 - Payback period in 2027 (less than 2 years from start of full production).

The Project benefits from excellent infrastructure access near Titiribí, a supportive local workforce, and existing permitting progress. It is expected to provide significant socio-economic benefits to the Municipality of Titiribí and surrounding communities through employment, local procurement, and community programs.

Risks and Opportunities: While the PEA demonstrates positive economics, the estimate is preliminary in nature and based in part on Inferred Mineral Resources. There is no certainty that the projected results will be realized. Key risks include metal price volatility, permitting timelines, geotechnical conditions, and concentrate marketability. Opportunities exist to improve economics through resource expansion, optimization of mining methods, and further metallurgical refinements.

Overall Conclusion: The Qualified Persons consider the Zancudo Project to be a high-quality, advanced-stage exploration asset with clear potential to become a profitable underground gold-silver producer. Additional infill and step-out drilling, detailed engineering, and environmental studies are recommended to advance the Project toward a Pre-Feasibility Study.

26 RECOMMENDATIONS

The Qualified Persons recommend a focused, phased work program to de-risk the Zancudo Project and continuing to advance the Project. The next step in the work program, expected to be completed over the next 12 months, would include

Drilling (15,000 - 20,000 m): infill drilling to convert additional Inferred Resources to the Indicated category in the priority Santa Catalina, Manto Antiguo, Brisas and El Castaño zones. Step-out drilling along strike and down-plunge in the Independencia Mine area to test extensions of known mineralization.

Metallurgical Optimization: Additional locked-cycle flotation tests, variability testing on new domains, and concentrate characterization/deleterious element analysis to support offtake agreements.

Geotechnical Studies: Detailed geotechnical logging and testing of existing and new core. Installation of piezometers and hydrogeological monitoring wells. Rock mechanics testing to refine ground support designs and stope stability parameters.

Updated Mineral Resource Estimate: Incorporate all new drilling and prepare an updated MRE.

PEA / Scoping Study Update: Refine the current PEA with the latest costs, metallurgical recoveries and progression in the detailed underground mine design and scheduling of new areas in conjunction with the mine contractor.

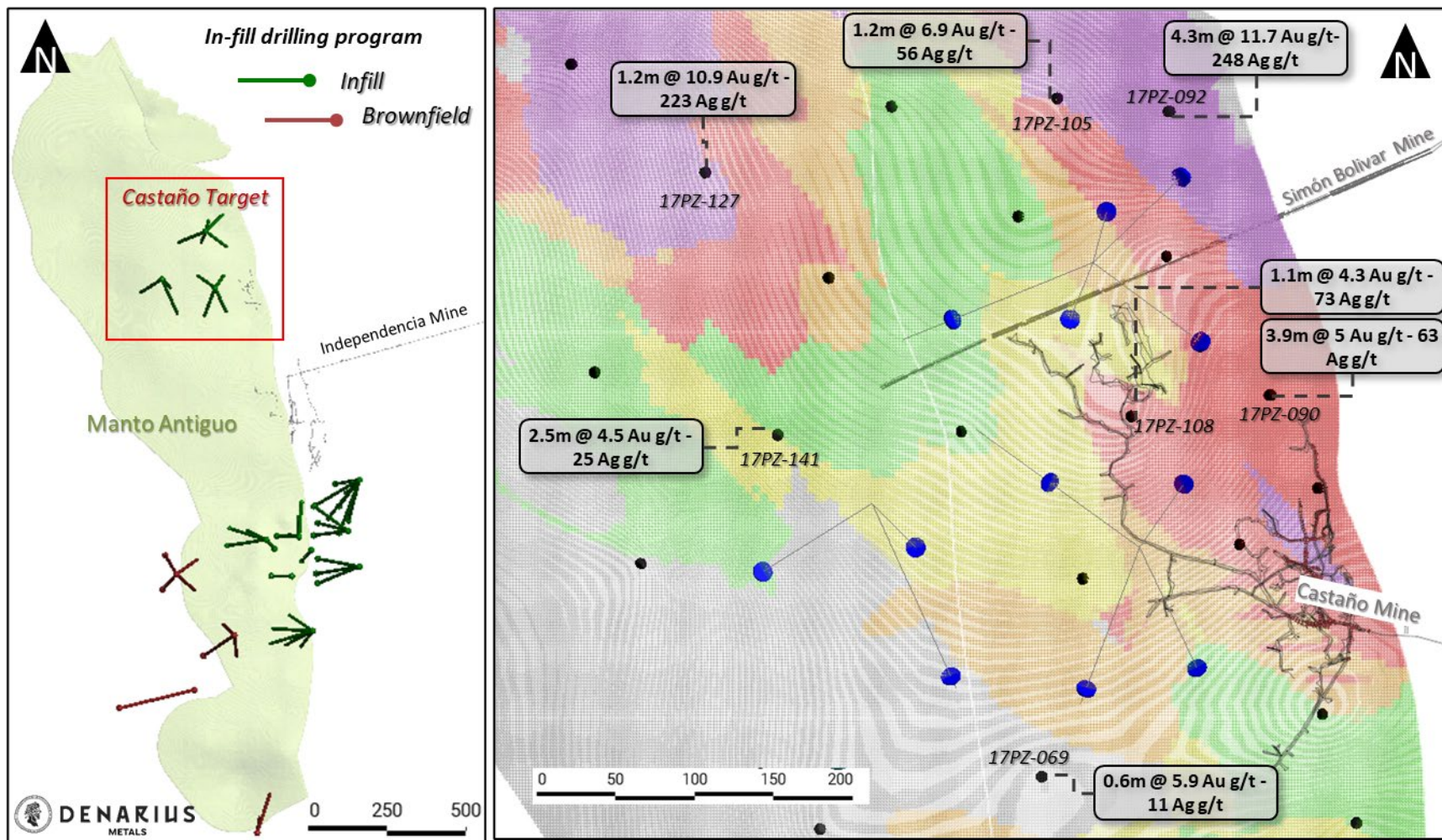
Baseline Environmental and Social Studies: Expand environmental baseline data collection (water, air, noise, biodiversity) and continue community engagement programs.

Table 26-1: Recommended work program for Project Advancement over the Next 12 Months

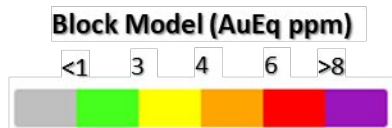
Type of Work	Description	Cost (US\$)
Exploration/Resource Conversion Drilling	15,000–20,000 m diamond drilling	1,800,000 - 2,400,000
Metallurgical Testwork	Variability & locked-cycle tests	300,000
Updated MRE & PEA Refinement	New resource model and economic study	650,000
Environmental & Social Baseline Expansion	Additional monitoring and community programs	400,000
Phase 1 Subtotal		3.1 - 3.8 million
Contingency (15%)		450,000 - 570,000
Phase 1 Total		3.55 – 4.37 million

The recommended program is designed to efficiently advance the Project by improving resource confidence toward an eventual reserve declaration. Successful execution of Phase 1 is expected to further de-risk the Project and enhance confidence in the project economics.

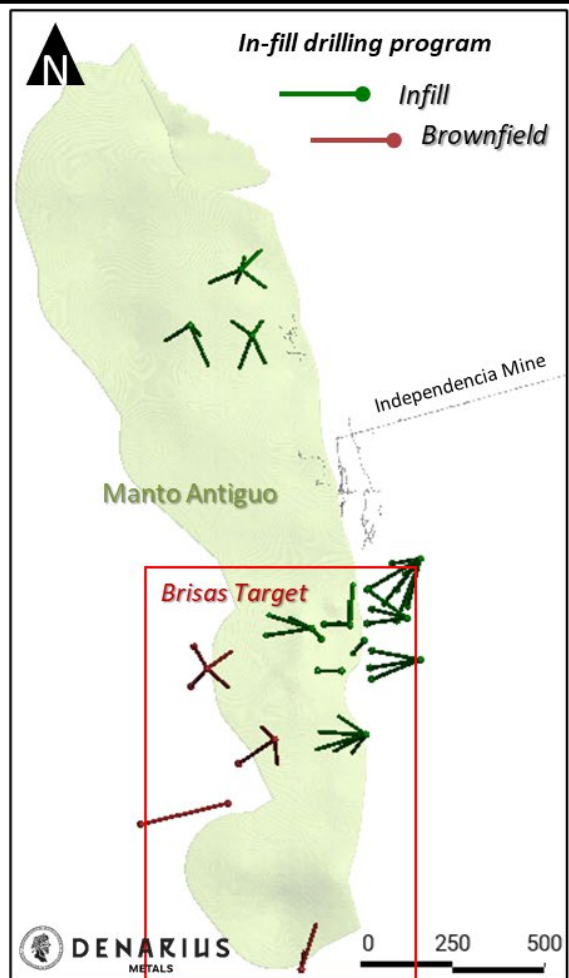
The QP believes these recommendations are reasonable and necessary to advance the Zancudo Project in a prudent and cost-effective manner.



Castaño Target - Manto Antiguo In-fill Drilling Program



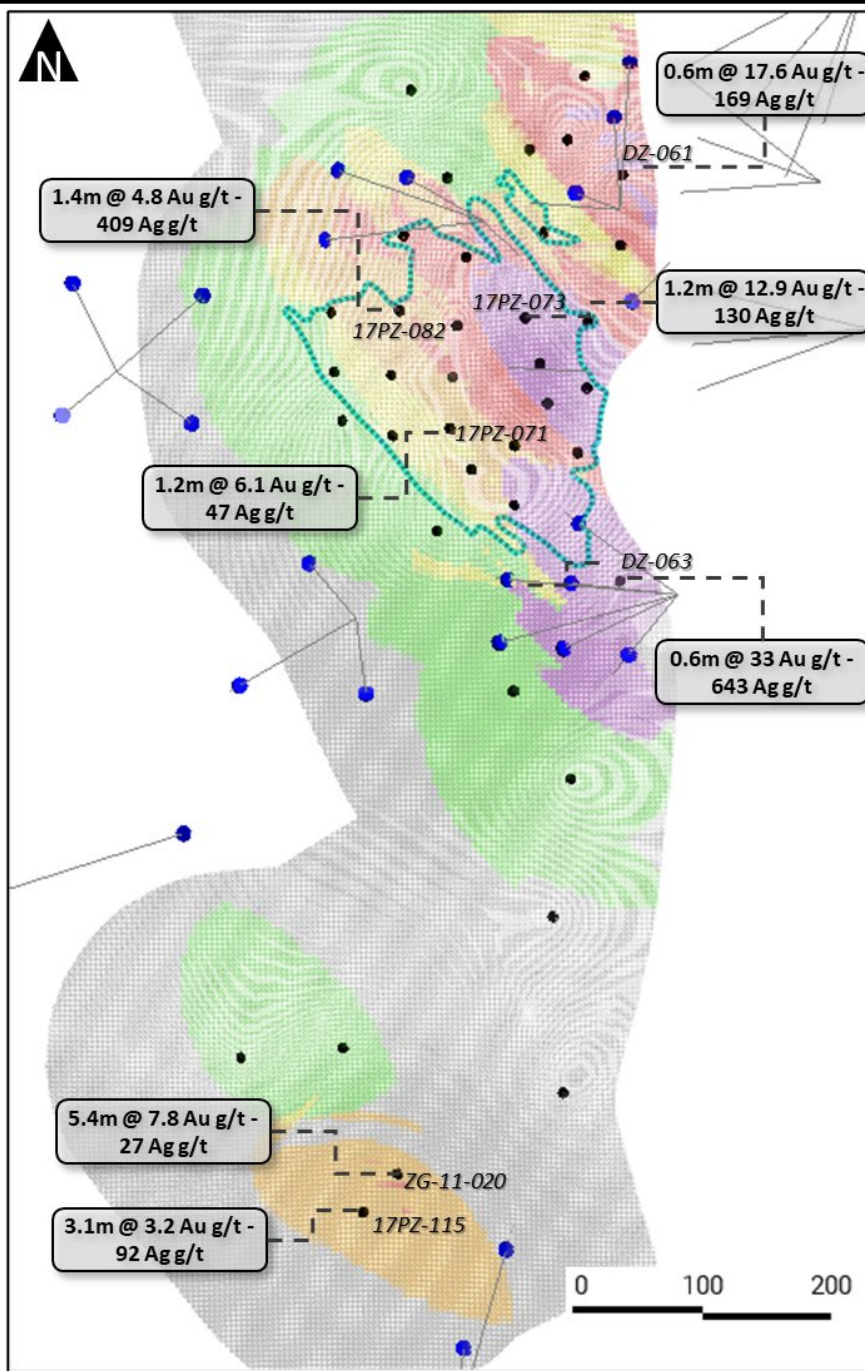
- New Intercept
- Historical Intercept

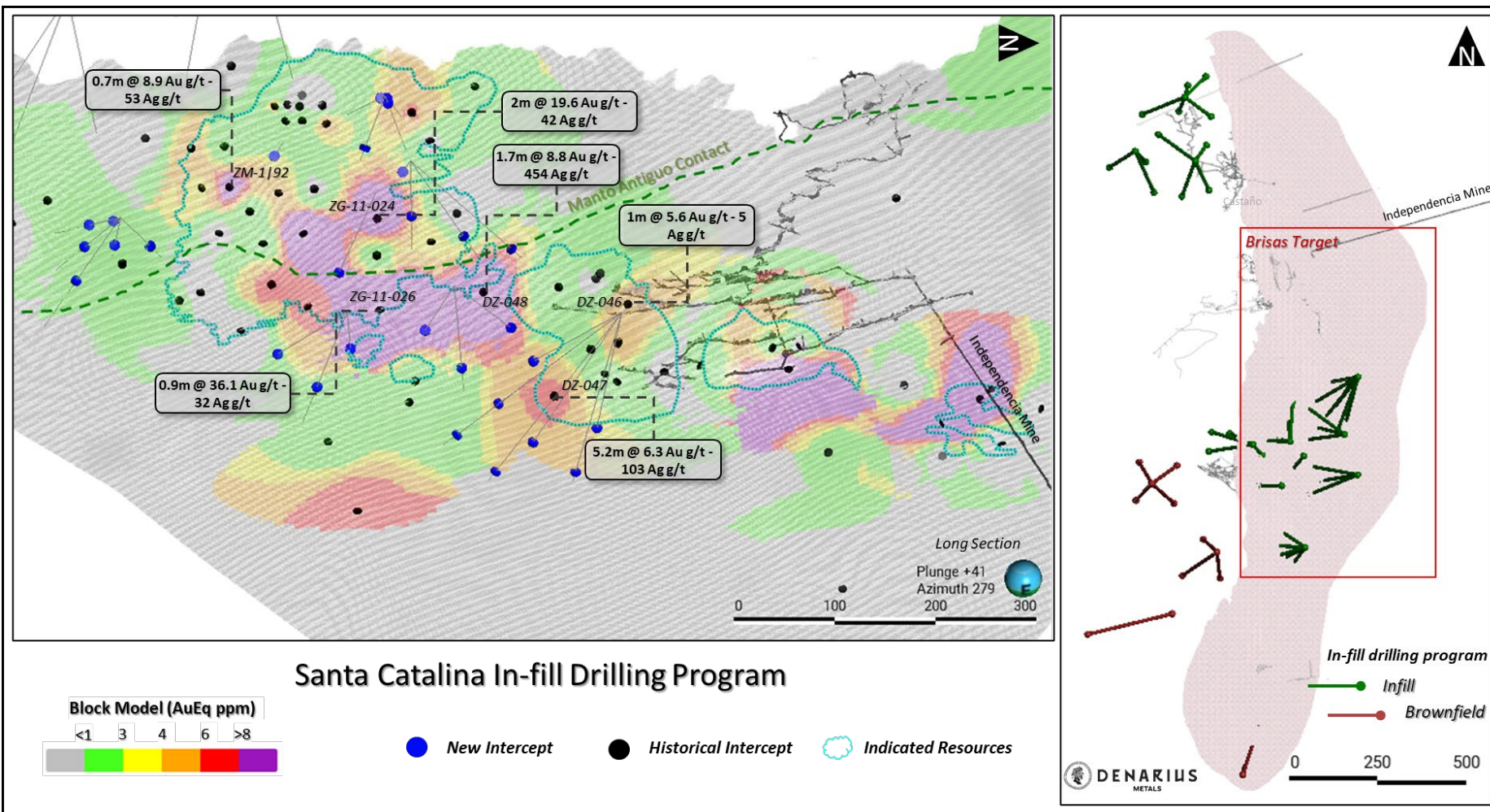


Brisas Target
 Manto Antiguo In-fill Drilling Program

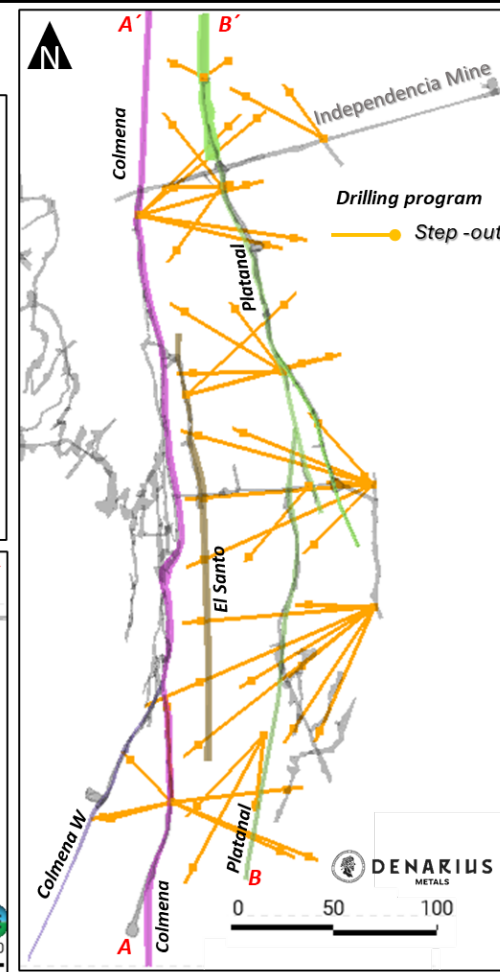
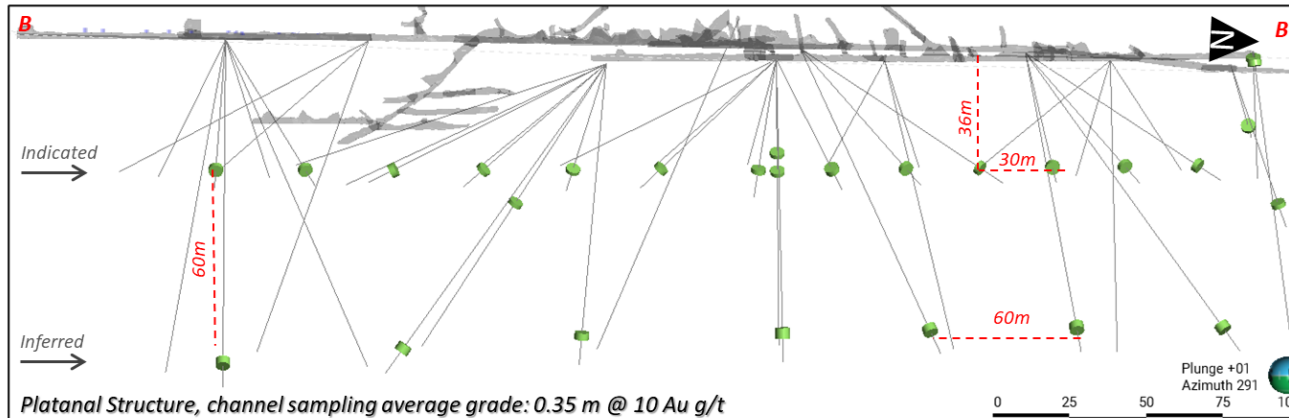
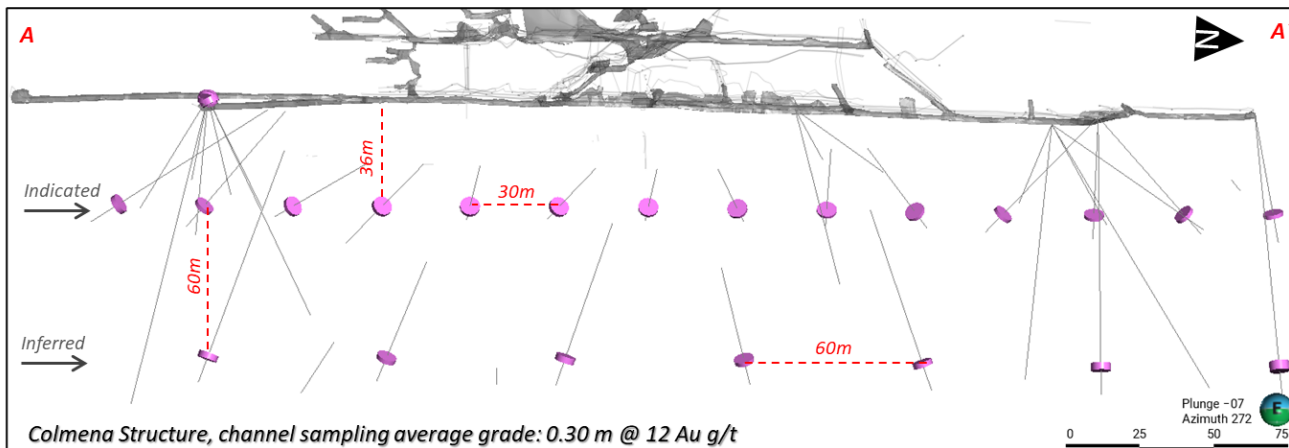
- New Intercept
- Historical Intercept
- ☁ Indicated Resources

Block Model (AuEq ppm)





Independencia Mine – Sub-vertical Structures Step-out Drilling Program



27 REFERENCES

- CIM (2014). Canadian Institute of Mining, Metallurgy and Petroleum Standards on Mineral Resources and Reserves: Definitions and Guidelines, May 10, 2014.
- Botsford, R. S., 1926. The Zancudo Mining District. Report for Sociedad de Zancudo, 94 p.
- Carillo, V.M., 2003. Cartografía Geológica de la Licencia 5521 (Escala 1:5000) y Programa de Exploración de las Propiedades Mineras de CDI S.A.: Región de Titiribí, Departamento de Antioquia, Colombia. Report for Consorcio De Inversionistas, C.D.I., S.A., 30 December 2003, 47 p.
- Carillo, V.M., 2004. Cartografía Geológica de las Propiedades Mineras de CDI S.A.: Contrato de Concesión 5747, y Licencia 4985-S21, Escala 1:5,000, Municipio de Titiribí, Departamento de Antioquia, Colombia. Report for Consorcio De Inversionistas, C.D.I., S.A., 7 April 2004, 22 p.
- CDI, 1994. Informe Anual, Permiso 5521, Titiribí, Antioquia, Republica de Colombia. Report by Consorcio De Inversionistas, C.D.I., S.A., 15 October 1994, 165 p.
- CDI, 2007. Informe Anual de Labores Por el Año 2006, Respeto al Contrato de Concesión Nro. 5521. Report by Consorcio De Inversionistas, C.D.I., S.A., 2007, 25 p.
- Cediel, F. & Cáceres, C., 2000, Geological Map of Colombia. Bogotá, Colombia, Geotec Ltda, 3rd edition. 7 thematic maps at 1:1,000,000 scale.
- Cediel, F., Shaw, R. P. & Cáceres, C., (2003), Tectonic Assembly of the Northern Andean Block. In: Bartolini, C., Buffler, R. T. & Blickwede, J. (eds), The Circum-Gulf of Mexico and the Caribbean: Hydrocarbon habitats, basin formation, and plate tectonics. American Association of Petroleum Geologists Memoir 79, p. 815-848.
- Di Prisco, G., 2013. Mineralogy Examination of the Zancudo Project Gold Mineralization, Antioquia State, Colombia. Report by Terra Mineralogical Services Inc. for Gran Colombia Gold Corp., 9 July 2013, 18 p.
- Emmons, W.H., (1937), Gold Deposits of the World. First Edition. New York & London, McGraw-Hill Book Company, Inc., 562 p.
- Flores, A., 1991. Titiribí Mining and Slag Recycling Project, Colombia, S.A. Summary Report – Feasibility for Compañía de Reciclaje Minero (COREMINE), June 1991 (quoted in James, 2006).
- Gallego, A. N. & Akasaka, M., 2007. Silver-bearing and Associated Minerals in El Zancudo Deposit, Antioquia, Colombia. Resource Geology, Vol. 57, No. 4, p. 386-399.
- Gallego, A & Akasaka, M., 2009. Argentotetrahedrite-freibergite solid solution from the El Zancudo deposit as a geothermometer of ore mineralization. Annual Meeting of the Japan Association of Mineralogical Sciences, Sapporo, 8-10 September 2009, p. 70.
- Gallego, A. & Zapata, D. M., 2003. Caracterización mineralógica como soporte para la implementación y mejoramiento del proceso de extracción de oro, Mina de oro El Zancudo, Titiribí, Antioquia. Unpublished graduate thesis, Universidad Nacional de Colombia, Medellín, 203 p.
- Gallego, A. N., Zapata, D. M. & Márquez, M.A., 2005. Mineralogía aplicada a la definición del tipo de refractariedad en la mina de oro El Zancudo, Titiribí, Antioquia. Boletín de Geología, Vol. 27, No. 2, p. 87-97.
- Gallego, C. A., 2014. Informe de la Visita Realizada a la Zone de Titulos Zancudo Gold. Report, Anglo American Colombia Exploration S.A., June 2014, 18 p.
- Gaviria, G. J., Hartmann, W. & Ceballos, J., 2013. Zancudo Gold Sucursal Colombia, Proyecto Zancudo – Titiribí, Antioquia, Informe Final. Report, Mineros Nacionales S.A., March 2013, 59 p.
- Gonzalez, H., 1976. Geologia de cuadrangulo J-8 Sonson. Ingeominas, Informe 1704, 421p.
- Grosse, E., 1926. Estudio Geologico del Terciario Carbonifero de Antioquia en la parte occidental de la Cordillera Central de Colombia entre el Rio Arma y Sacaojal ejecutado en los anos de 1920 – 1923 para el Gobierno del Departamento de Antioquia (Ferrocarril de Antioquia). Berlin, Dietrich Reimer (Ernst Vohsen), 361 p.
- Grosse, E., 1932. Zur Kenntnis der Gold-Silberlagerstätten von Titiribí. Zeitschrift für praktische Geologie, Vol. 40, p. 44–45.

- IAMGOLD, 2020. Descripción de Rocas y Alteraciones, Proyecto El Zancudo. IAMGOLD Corporation report, 22 p.
- James, J. A. A., 2006. El Zancudo Property, Municipality of Titiribí, Department of Antioquia, Republic of Colombia. Preliminary Due Diligence Report. Report by J. A. Mine, Inc., Denver, Colorado for Reservas Minerales de Colombia, S.A., 20 June 2006, 18 p plus annexes.
- Jimenez, A., 2012. Antecedentes históricos título 5521, Municipio de Titiribí, Departamento de Antioquia. Report, Mineros Nacionales S.A., 22 p.
- Kantor, J. A. & Cameron, R. E., 2013. Technical Report on the Titiribí Project, Department of Antioquia, Colombia. NI 43-101 technical report by Behre Dolbear & Company (USA), Inc. for Sunward Resources Limited, 9 September 2013, 187 p.
- Kantor, J. A. & Cameron, R. E., 2016. Technical Report on the Titiribí Project, Department of Antioquia, Colombia. NI 43-101 technical report by Behre Dolbear & Company (USA), Inc. for Brazil Resources Inc., 28 October 2016, 179 p.
- Leal Mejía, H., Castañeda, M., Shaw, R. P., Melgarejo, J. C. & Sepúlveda, O. I., 2006. Mineralogía del yacimiento de oro “Independencia”, Distrito Minero de Titiribí, Colombia. Abstract, 4 p., XXVI Spanish Society of Mineralogy (SEM) Meeting, Oviedo, Spain, 11-14 September 2006.
- Leal-Mejía, H., Shaw, R. P. & Melgarejo, J. C., 2019. SPatial-temporal migration of granitoid magmatism and the tectono-magmatic evolution of the Colombian Andes. In: Cediél, F. & Shaw, R. P. (eds), Geology and Tectonics of Northwestern South America: The Pacific- Caribbean-Andean Junction. Springer International Publishing AG, Cham, Switzerland, p. 253–410.
- Meldrum, S. J., 1998. Titiribí Porphyry Copper Project, Antioquia, Colombia: Data Compilation and Porphyry Model. Report for Gold Fields of South Africa Limited, 1 October 1998, 42 p.
- Miller, B. L. & Singewald, J. T., 1919. The Mineral Deposits of South America. McGraw-Hill Book Company, Inc., New York and Hill Publishing Co. Ltd., London, 598 p.
- Molina, L. F., 2003. La Empresa Minera del Zancudo (1848-1920). In: Ladrón de Guevara, C. D. (ed.), Empresas y empresarios en la historia de Colombia. Siglos XIX-XX. Una colección de estudios recientes. Bogotá, Grupo Editorial Norma, Vol. 2, p. 633-677.
- Molina, L. F., 2011. La “industrialización” de la minería de oro y plata en Colombia en el siglo XIX. Revista Credencial Historia, Bogota, No. 258, June 2011.
- Ortiz, H. H., 2003. Reservas de Mineral en la mina La Independencia. Report for Consorcio De Inversionistas, C.D.I., S.A., December 2003, 36 p.
- Parsons, B., 2023, NI 43-101 Technical Report, El Zancudo Mineral Resource Estimate, Colombia. Prepared by SRK Consulting, Effective Date July 31, 2023, 163p.
- PPM, 2002. Exploración del Distrito Minero de Titiribí. Report by Promoción de Proyectos Mineros ppm Ltda for Consorcio de Inversionistas, C.D.I., S.A., December 2002, 35 p.
- PPM, 2003. Exploración del Distrito Minero de Titiribí. Report by Promoción de Proyectos Mineros ppm Ltda for Consorcio de Inversionistas, C.D.I., S.A., February 2003, 54 p.
- Ramos, J. D., 2007. Oro: Un recorrido por la tecnología minera en Antioquia. Medellín, Fondo Editorial Universidad EAFIT, 597 p.
- Redwood, S. D., 2010. NI 43-101 Technical Report for the El Zancudo Project, Department of Antioquia, Republic of Colombia. Report for Tapestry Resource Corp., Vancouver and Gran Colombia Gold, S.A., Bogota, Colombia. Effective date 6 April 2010, signature date 31 July 2010, 70 p.
- Redwood, S. D., 2012. Review of exploration at the El Zancudo Gold Project, Antioquia, Colombia. Report for Gran Colombia Gold Corp., 23 April 2012, 17 p.
- Redwood, S. D., 2021. NI 43-101 Technical Report for the Zancudo Gold-Silver Project, Municipality of Titiribí, Department of Antioquia, Colombia for ESV Resources Ltd
- Restrepo, V., 1885. Estudio sobre las minas de oro y plata de Colombia. Bogota, 1885; New York, 1886 (English); Bogota, 1888, 1937 and 1952.

- Ross, C., Richards, J., Sherlock, R. & Gomez, D., 2019. Geology of the Titiribí Porphyry Deposit, Antioquia Department, Colombia. Abstract, 1 p., Society of Economic Geologists (SEG) 2019 Conference, South American Metallogeny: Sierra to Craton, Santiago, Chile, 7-10 October 2019.
- Shaw, R. P., Leal-Mejia, H. & Melgarego i Draper, J. C., 2019. Phanerozoic Metallogeny in the Colombian Andes: A Tectono-Magmatic Analysis in Space and Time. In Cediél, F. & Shaw.
- R. P. (eds), Geology and Tectonics of Northwestern South America: The Pacific-Caribbean- Andean Junction. Springer International Publishing AG, Cham, Switzerland, p. 411-549.
- Sillitoe, R. H., 2010. Porphyry Copper Systems. *Economic Geology*, Vol. 105, p. 3-41.
- Simmons, S. F., White, N. C. & John, D. A., 2005. Geological Characteristics of Epithermal Precious and Base Metal Deposits. *Economic Geology 100th Anniversary Volume*, p. 485- 522.
- Telluris Consulting Ltd., 2012. Structural Study of the Zancudo Project, Titiribí, Colombia. Report for Gran Colombia Gold Corp., May 2012, 17 p.
- Telluris Consulting Ltd., 2013. Structural Review of the Zancudo Project, Titiribí, Colombia. Preliminary Conclusions, January 2013. Report for Gran Colombia Gold Corp., February 2013, 5 p.
- Tidy, E., 2012. Informe Estudio Petrografico, Proyecto Zancudo Gold. Report by Tidy y Cia. Ltda., Santiago, Chile for Gran Colombia Gold Corp., 30 July 2012, 15 p.
- Uribe, C. A., 2013. Hydrothermal Evolution of the Titiribí Mining District. Unpublished BSc thesis, EAFIT University, Medellin, Colombia, 142 p.
- Wilson, et al, 2023. Technical Report and Preliminary Economic Assessment for the Zancudo Gold-Silver Mineral Deposit, Prepared by Resource Development Associates, Effective date October 24, 2023, 163 p.
- Wilson, Scott, 2025. Technical Report for the Zancudo Gold-Silver Mineral Deposit, Prepared by Resource Development Associates, Effective date October 31, 2025, 103 p.

Definition of Terms

Term	Definition
Assay	The chemical analysis of mineral samples to determine the metal content.
Capital Expenditure	All other expenditures not classified as operating costs.
Composite	Combining more than one sample result to give an average result over a larger distance.
Concentrate	A metal-rich product resulting from a mineral enrichment process such as gravity concentration or flotation, in which most of the desired mineral has been separated from the waste material in the ore.
Crushing	Initial process of reducing particle size to render it more amenable for further processing.
Cut-off Grade (CoG)	The grade of mineralized rock, which determines as to whether or not it is economic to recover its gold content by further concentration.
Dilution	Waste, which is unavoidably mined with ore.
Dip	Angle of inclination of a geological feature/rock from the horizontal.
Fault	The surface of a fracture along which movement has occurred.
Footwall	The underlying side of an orebody or stope.
Gangue	Non-valuable components of the ore.
Grade	The measure of concentration of gold within mineralized rock.
Hangingwall	The overlying side of an orebody or slope.
Haulage	A horizontal underground excavation which is used to transport mined ore.
Hydrocyclone	A process whereby material is graded according to size by exploiting centrifugal forces of particulate materials.
Igneous	Primary crystalline rock formed by the solidification of magma.
Kriging	An interpolation method of assigning values from samples to blocks that minimizes the estimation error.
Level	Horizontal tunnel the primary purpose is the transportation of personnel and materials.
Lithological	Geological description pertaining to different rock types.
LoM Plans	Life-of-Mine plans.
LRP	Long Range Plan.
Material Properties	Mine properties.
Milling	A general term used to describe the process in which the material is crushed and ground and subjected to physical or chemical treatment to extract the valuable metals to a concentrate or finished product.
Mineral/Mining Lease	A lease area for which mineral rights are held.
Mining Assets	The Material Properties and Significant Exploration Properties.
Ongoing Capital	Capital estimates of a routine nature, which is necessary for sustaining operations.
Ore Reserve	See Mineral Reserve.
Pillar	Rock left behind to help support the excavations in an underground mine.
RoM	Run-of-Mine.
Sedimentary	Pertaining to rocks formed by the accumulation of sediments, formed by the erosion of other rocks.
Shaft	An opening cut downwards from the surface for transporting personnel, equipment, supplies, and mineralized material.
Sill	A thin, tabular, horizontal to sub-horizontal body of igneous rock formed by the injection of magma into planar zones of weakness.
Smelting	A high temperature pyrometallurgical operation conducted in a furnace, in which the valuable metal is collected to a molten matte or doré phase and separated from the gangue components that accumulate in a less dense molten slag phase.
Stope	Underground void created by mining.
Stratigraphy	The study of stratified rocks in terms of time and space.
Strike	Direction of line formed by the intersection of strata surfaces with the horizontal plane, always perpendicular to the dip direction.

Term	Definition
Sulfide	A sulfur bearing mineral.
Tailings	Finely ground waste rock from which valuable minerals or metals have been extracted.
Thickening	The process of concentrating solid particles in suspension.
Total Expenditure	All expenditures including those of an operating and capital nature.
Variogram	A statistical representation of the characteristics (usually grade).

Abbreviations

Abbreviation	Unit or Term
A	ampere
AA	atomic absorption
A/m ²	amperes per square meter
ANFO	ammonium nitrate fuel oil
Ag	silver
Au	gold
AuEq	gold equivalent grade
°	degree
°C	degrees Centigrade
CCD	counter-current decantation
CIL	carbon-in-leach
CoG	cut-off grade
cm	centimeter
cm ²	square centimeter
cm ³	cubic centimeter
cfm	cubic feet per minute
ConfC	confidence code
CRec	core recovery
CSS	closed-side setting
CTW	calculated true width
°	degree (degrees)
dia.	diameter
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
FA	fire assay
ft	foot (feet)
ft ²	square foot (feet)
ft ³	cubic foot (feet)
g	gram
gal	gallon
g/L	gram per liter
g-mol	gram-mole
gpm	gallons per minute
g/t	grams per tonne
ha	hectares
HDPE	Height Density Polyethylene
hp	horsepower
HTW	horizontal true width
ICP	induced couple plasma
ID2	inverse-distance squared

Abbreviation	Unit or Term
ID3	inverse-distance cubed
IFC	International Finance Corporation
ILS	Intermediate Leach Solution
kA	kiloamperes
kg	kilograms
km	kilometer
km ²	square kilometer
koz	thousand troy ounce
kt	thousand tonnes
kt/d	thousand tonnes per day
kt/y	thousand tonnes per year
kV	kilovolt
kW	kilowatt
kWh	kilowatt-hour
kWh/t	kilowatt-hour per metric tonne
L	liter
L/sec	liters per second
L/sec/m	liters per second per meter
lb	pound
LHD	Long-Haul Dump truck
LLDDP	Linear Low Density Polyethylene Plastic
LOI	Loss On Ignition
LoM	Life-of-Mine
m	meter
m ²	square meter
m ³	cubic meter
masl	meters above sea level
MARN	Ministry of the Environment and Natural Resources
MDA	Mine Development Associates
mg/L	milligrams/liter
mm	millimeter
mm ²	square millimeter
mm ³	cubic millimeter
MME	Mine & Mill Engineering
Moz	million troy ounces
Mt	million tonnes
Mt/y	million tonnes per year
MTW	measured true width
MW	million watts
m.y.	million years
NGO	non-governmental organization
NI 43-101	Canadian National Instrument 43-101
OSC	Ontario Securities Commission
oz	troy ounce
%	percent
PLC	Programmable Logic Controller
PLS	Pregnant Leach Solution
PMF	probable maximum flood
ppb	parts per billion

Abbreviation	Unit or Term
ppm	parts per million
QA/QC	Quality Assurance/Quality Control
RC	rotary circulation drilling
RoM	Run-of-Mine
RQD	Rock Quality Description
SEC	U.S. Securities & Exchange Commission
sec	second
SG	specific gravity
SPT	standard penetration testing
st	short ton (2,000 pounds)
t	tonne (metric ton) (2,204.6 pounds)
t/h	tonnes per hour
t/d	tonnes per day
t/y	tonnes per year
TSF	tailings storage facility
TSP	total suspended particulates
µm	micron or microns
V	volts
VFD	variable frequency drive
W	watt
XRD	x-ray diffraction
y	year