



# Mineral Resource Estimate NI 43-101 Technical Report Gurupi Project

Prepared for:



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Prepared by:

**G MINING SERVICES INC.**

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**Effective Date: February 3, 2025**

**Issue Date: April 8, 2025**

## **IMPORTANT NOTE**

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# Mineral Resource Estimate NI 43-101 Technical Report – Gurupi Project

Revision #

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**April 08, 2025**

## Qualified Persons

Prepared by:

Pascal Delisle /s/

Date: April 08, 2025

Pascal Delisle, P. Geo.,  
Director of Geology and Resources  
G Mining Services Inc.

Neil Lincoln /s/

Date: April 08, 2025

Neil Lincoln, P.Eng.  
Vice President Metallurgy  
G Mining Services Inc.

Carl Michaud /s/

Date: April 08, 2025

Carl Michaud, Mining. Eng. MBA  
Vice President of Mining Engineering  
G Mining Services Inc.

# Qualified Persons Certificates and Consents



## CERTIFICATE OF QUALIFIED PERSON

### Pascal Delisle, P. Geo

This certificate applies to the technical report entitled, "N.I. 43-101 Mineral Resource Estimate, Gurupi Project, Maracaçumé Brazil" prepared for G Mining Ventures Corp. with an effective date of February 3, 2025, and a report date of April 8, 2025 (the "Technical Report").

I, Pascal Delisle, P. Geo, do hereby certify that:

- 1) I am currently employed as Director of the Geology and Resource by G Mining Services Inc., with an office located at 5025, boulevard Lapinière, Bureau 1010, Brossard, Québec, Canada, J4X 1N5
- 2) I graduated from l'Université Laval with a B.Sc. (Geology) in 2009.
- 3) I am a Professional Geologist registered in good standing with the "Ordre des Géologues du Québec" (OGQ-Licence: 1378).
- 4) I have practiced my profession continuously in the mining industry since my graduation from university. I have been involved in mining operations, exploration geology and project studies for 16 years.
- 5) I have read the definition of "qualified person" set out in the National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements to be a qualified person for the purposes of NI 43-101.
- 6) I am a contributing author for the preparation of the Technical Report and am responsible for the following sections and subsections 1.1-1.12, 1.14, 1.23-1.27, 2-12, 14, 23-27
- 7) I visited the site property that is the subject of this Technical Report;
- 8) As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections and sub-sections of the Technical Report listed in item 6 above contain all scientific and technical information that is required to be disclosed to make these sections and sub-sections of the Technical Report not misleading.
- 9) I have read NI 43-101 and believe that the sections and sub-sections of the Technical Report listed in item 6 above have been prepared in accordance with NI 43-101.
- 10) I am not independent of G Mining Ventures Corp. as independence is defined in Section 1.5 of NI 43-101. I
- 11) I have prior involvement with the project since September 2024, as G Mining Services Inc.

Dated this 08th day of April 2025,

*/signed and sealed/*

---

Pascal Delisle, P. Geo  
Director of the Geology and Resource  
G Mining Services Inc.

## CERTIFICATE OF QUALIFIED PERSON

### NEIL LINCOLN

This certificate applies to the technical report entitled, "N.I. 43-101 Mineral Resource Estimate, Gurupi Project, Maracaçumé Brazil" prepared for G Mining Ventures Corp. with an effective date of February 3, 2025, and a report date of April 8, 2025 (the "Technical Report").

I, Neil Lincoln, P.Eng., do hereby certify that:

- 1) I am currently under contract as VP, Metallurgy, at G Mining Services located at 5025, boulevard Lapinière, Bureau 1010, Brossard, Québec, Canada, J4X 1N5
- 2) I graduated from the University of the Witwatersrand, South Africa, in 1994 with a Bachelor of Science in Metallurgy and Materials Engineering (Minerals Process Engineering) degree.
- 3) I am a professional engineer in good standing with the Professional Engineers of Ontario (PEO) in Canada (no. 100039153).
- 4) I have practiced my profession in the mining industry continuously since graduation. I have over 29 years experience as a metallurgist and study manager. I have sufficient relevant experience having worked on numerous projects ranging from scoping studies, prefeasibility and feasibility studies to project implementation related to mineral processing plants. My mineral processing commodity and unit operations experience includes precious metals, base metals and industrial minerals covering metallurgical test work to process plant design. As a result of my experience and qualifications, I am a Qualified Person as defined in NI 43-101. Select gold projects include:
  - Tocantinzinho Gold Project (Feasibility Study) for G Mining Ventures, Brazil
  - Cerro Blanco Gold Project (Feasibility Study) for Bluestone Resources, Guatemala
  - Aurizona Gold Mine Expansion (Pre-Feasibility Study) for Equinox Gold Corp, Maranhão, Brazil
  - Natougou Gold Project (Feasibility Study) for Semafo (now Endeavour Mining), Burkina Faso
- 5) I have read the definition of "qualified person" set out in the National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements to be a qualified person for the purposes of NI 43-101.
- 6) I have participated in the preparation of the Technical Report and am responsible for the supervision or creation of section 13.
- 7) I have not visited the Gurupi Project site.
- 8) As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections and sub-sections of the Technical Report listed in item 6 above contain all scientific and technical information that is required to be disclosed to make these sections and sub-sections of the Technical Report not misleading.
- 9) I have read NI 43-101 and believe that the sections and sub-sections of the Technical Report listed in item 6 above have been prepared in accordance with NI 43-101.
- 10) I have read and understand NI 43-101 and I am considered independent of the issuer as defined in section 1.5 of NI 43-101 Rules and Policies.

Dated this 08th day of April 2025.

**Neil Lincoln /s/**

---

Neil Lincoln, P.Eng.,  
VP, Metallurgy  
G Mining Services



## CERTIFICATE OF QUALIFIED PERSON

**Carl Michaud, P.Eng., MBA**

This certificate applies to the technical report entitled, "N.I. 43-101 Mineral Resource Estimate, Gurupi Project, Maracaçumé Brazil" prepared for G Mining Ventures Corp. with an effective date of February 3, 2025, and a report date of April 8, 2025 (the "Technical Report").

I, Carl Michaud, P.Eng., MBA., do hereby certify that:

- 1) I am currently employed as Vice President of Mining Engineering by G Mining Services Inc., with an office located at 5025, boulevard Lapinière, Bureau 1010, Brossard, Québec, Canada, J4X 1N5
- 2) I graduated from l'Université Laval with a B.Sc. (Mine Engineering) in 1996. In addition, I obtained an M.B.A. from the Université du Québec à Chicoutimi, in 2012.
- 3) I am a Professional Engineer registered in good standing with the "Ordre des Ingénieurs du Québec" (OIQ-Licence: 117090).
- 4) I have practiced my profession continuously in the mining industry since my graduation from university. I have been involved in mining operations, engineering and financial evaluations for 29 years. I have occupied different positions, both technical and operational, related to mining engineering, in Underground and Open pit operation. This experience includes Kiena and Sigma Gold mine (Placer Dome), Éléonore Mine (Goldcorp) and Mont Wright Mine (Arcelor Mittal).
- 5) I have read the definition of "qualified person" set out in the National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements to be a qualified person for the purposes of NI 43-101.
- 6) I am a contributing author for the preparation of the Technical Report and am responsible for the following sections and subsections 14.11.2
- 7) I have not visited the site property that is the subject of this Technical Report;
- 8) As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections and sub-sections of the Technical Report listed in item 6 above contain all scientific and technical information that is required to be disclosed to make these sections and sub-sections of the Technical Report not misleading.
- 9) I have read NI 43-101 and believe that the sections and sub-sections of the Technical Report listed in item 6 above have been prepared in accordance with NI 43-101.
- 10) I am independent of G Mining Ventures Corp. as independence is defined in Section 1.5 of NI 43-101. I
- 11) have prior involvement with the project since September 2024, as G Mining Services Inc.

Dated this 08th day of April 2025,

*/signed and sealed/*

---

Carl Michaud P.Eng., MBA.  
Vice President of Mining Engineering  
G Mining Services Inc.



## CONSENT OF QUALIFIED PERSON

G Mining Ventures Corp.

Autorité des Marchés Financiers, as Principal Regulator  
British Columbia Securities Commission  
Alberta Securities Commission  
Financial and Consumer Affairs Authority of Saskatchewan  
Manitoba Securities Commission  
Ontario Securities Commission  
Financial and Consumer Services Commission (New Brunswick)  
Nova Scotia Securities Commission  
Financial and Consumer Services Division (Prince Edward Island)  
Office of the Superintendent of Securities Service Newfoundland and Labrador  
Office of the Superintendent of Securities, Northwest Territories  
Office of the Yukon Superintendent of Securities  
Office of the Superintendent of Securities, Nunavut

Dear Sirs/Madams:

**Re: G Mining Ventures Corp. – Mineral Resource Estimate – Gurupi Project, located Maracaçumé, Brazil**

---

I, Pascal Delisle, consent to the public filing of the technical report entitled “NI 43-101 Technical Report and Mineral Resource Estimate, Gurupi Project”, located in the Maracaçumé region, Brazil and dated effective April 8, 2025 (the “Technical Report”) prepared for G Mining Ventures Corp (the “Company”).

I also consent to any extracts from, or a summary of, the Technical Report in the press release of the Company dated February 20, 2025 (the “Disclosure”) in which findings of the Technical Report are disclosed.

I certify that I have read the Disclosure and that it fairly and accurately represents the information in the Technical Report for which I am responsible.

Dated this 08<sup>th</sup> day of April 2025

*/signed and sealed/*

---

Pascal Delisle, P. Geo  
Director of the Geology and Resource  
G Mining Services Inc.



## CONSENT OF QUALIFIED PERSON

G Mining Ventures Corp.

Autorité des Marchés Financiers, as Principal Regulator  
British Columbia Securities Commission  
Alberta Securities Commission  
Financial and Consumer Affairs Authority of Saskatchewan  
Manitoba Securities Commission  
Ontario Securities Commission  
Financial and Consumer Services Commission (New Brunswick)  
Nova Scotia Securities Commission  
Financial and Consumer Services Division (Prince Edward Island)  
Office of the Superintendent of Securities Service Newfoundland and Labrador  
Office of the Superintendent of Securities, Northwest Territories  
Office of the Yukon Superintendent of Securities  
Office of the Superintendent of Securities, Nunavut

Dear Sirs/Madams:

**Re: G Mining Ventures Corp. – Mineral Resource Estimate – Gurupi Project, located Maracaçumé, Brazil**

---

I, Neil Lincoln, consent to the public filing of the technical report entitled “NI 43-101 Technical Report and Mineral Resource Estimate, Gurupi Project”, located in the Maracaçumé region, Brazil and dated effective April 8, 2025 (the “Technical Report”) prepared for G Mining Ventures Corp (the “Company”).

I also consent to any extracts from, or a summary of, the Technical Report in the press release of the Company dated February 20, 2025 (the “Disclosure”) in which findings of the Technical Report are disclosed.

I certify that I have read the Disclosure and that it fairly and accurately represents the information in the Technical Report for which I am responsible.

Dated this 08<sup>th</sup> day of April 2025

*/signed and sealed/*

---

Neil Lincoln, P.Eng.  
Vice-president metallurgy  
G Mining Services Inc.



## CONSENT OF QUALIFIED PERSON

G Mining Ventures Corp.

Autorité des Marchés Financiers, as Principal Regulator  
British Columbia Securities Commission  
Alberta Securities Commission  
Financial and Consumer Affairs Authority of Saskatchewan  
Manitoba Securities Commission  
Ontario Securities Commission  
Financial and Consumer Services Commission (New Brunswick)  
Nova Scotia Securities Commission  
Financial and Consumer Services Division (Prince Edward Island)  
Office of the Superintendent of Securities Service Newfoundland and Labrador  
Office of the Superintendent of Securities, Northwest Territories  
Office of the Yukon Superintendent of Securities  
Office of the Superintendent of Securities, Nunavut

Dear Sirs/Madams:

**Re: G Mining Ventures Corp. – Mineral Resource Estimate – Gurupi Project, located Maracaçumé, Brazil**

---

I, Carl Michaud, consent to the public filing of the technical report entitled “NI 43-101 Technical Report and Mineral Resource Estimate, Gurupi Project”, located in the Maracaçumé region, Brazil and dated effective April 8, 2025 (the “Technical Report”) prepared for G Mining Ventures Corp (the “Company”).

I also consent to any extracts from, or a summary of, the Technical Report in the press release of the Company dated February 20, 2025 (the “Disclosure”) in which findings of the Technical Report are disclosed.

I certify that I have read the Disclosure and that it fairly and accurately represents the information in the Technical Report for which I am responsible.

Dated this 08<sup>th</sup> day of April 2025

*/signed and sealed/*

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Carl Michaud, P.Eng., MBA  
Vice President of Mining Engineering  
G Mining Services Inc.

# Table of Contents

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<b>1. SUMMARY .....</b>	<b>1-1</b>
<b>1.1 Introduction.....</b>	<b>1-1</b>
<b>1.2 Terms of Reference .....</b>	<b>1-1</b>
<b>1.3 Description of the Mineral Properties – Gurupi Project .....</b>	<b>1-2</b>
1.3.1 Location and Access.....	1-2
1.3.2 Property Description and Title .....	1-3
1.3.3 Mineral Tenure and Requirements.....	1-3
1.3.4 Surface Rights .....	1-4
1.3.5 Royalties .....	1-4
1.3.6 Environmental Liability .....	1-4
<b>1.4 History .....</b>	<b>1-4</b>
<b>1.5 Geological Setting and Mineralization.....</b>	<b>1-6</b>
<b>1.6 Deposit Type .....</b>	<b>1-7</b>
<b>1.7 Exploration.....</b>	<b>1-7</b>
<b>1.8 Drilling.....</b>	<b>1-7</b>
<b>1.9 Sampling and Analysis.....</b>	<b>1-8</b>
<b>1.10 Data Verification .....</b>	<b>1-8</b>
<b>1.11 Metallurgical Testing and Mineral Processing.....</b>	<b>1-9</b>
<b>1.12 Mineral Resource Estimate .....</b>	<b>1-9</b>
<b>1.13 Adjacent Properties &amp; Other Relevant Data and Information .....</b>	<b>1-10</b>
<b>1.14 Interpretation and Conclusions .....</b>	<b>1-10</b>
<b>1.15 Recommendations.....</b>	<b>1-11</b>
<b>2. INTRODUCTION .....</b>	<b>2-1</b>
<b>2.1 Scope of Work.....</b>	<b>2-2</b>
<b>2.2 Sources of Information and Data.....</b>	<b>2-2</b>
<b>2.3 Site Visit .....</b>	<b>2-3</b>
<b>2.4 Effective Date .....</b>	<b>2-3</b>
<b>2.5 Sources of Information.....</b>	<b>2-4</b>
2.5.1 Previous Technical Reports .....	2-4
<b>2.6 Agreements, Mineral Tenure, Surface Rights and Royalties .....</b>	<b>2-4</b>
2.6.1 Mineral Tenure .....	2-4
2.6.2 Surface Rights .....	2-4
2.6.3 Royalties .....	2-5
<b>2.7 Units of Measure, Abbreviations and Nomenclature.....</b>	<b>2-5</b>

<b>3. RELIANCE ON OTHER EXPERTS .....</b>	<b>3-1</b>
<b>4. PROPERTY DESCRIPTION AND LOCATION .....</b>	<b>4-1</b>
4.1 Location.....	4-1
4.2 Property Description and Title .....	4-2
4.3 Mineral Tenure and Requirements .....	4-3
4.4 Gurupi Project Ownership and Agreements .....	4-10
4.5 Surface Rights .....	4-10
4.6 Royalties and Oher Encumbrances.....	4-10
4.7 Environmental Liability .....	4-10
<b>5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY .....</b>	<b>5-1</b>
5.1 Accessibility and Roads.....	5-1
5.2 Physiography .....	5-3
5.3 Climate and Meteorological Conditions .....	5-6
5.3.1 Regional Climate Overview .....	5-6
5.3.2 Historical Climate Data.....	5-6
5.3.3 Evaporation and Hydrological Balance.....	5-7
5.3.4 On-Site Monitoring .....	5-8
5.4 Local Resources .....	5-8
5.5 Infrastructure .....	5-9
5.5.1 Services Buildings and Ancillary Facilities .....	5-10
<b>6. HISTORY .....</b>	<b>6-1</b>
<b>7. GEOLOGICAL SETTING AND MINERALIZATION .....</b>	<b>7-1</b>
7.1 Regional Geology .....	7-1
7.2 Deposit Geology – Blanket and Contact .....	7-3
7.2.1 Lithology and Alteration .....	7-4
7.2.2 Structure .....	7-6
7.2.3 Mineralization.....	7-6
7.3 Deposit Geology – Chega Tudo .....	7-10
7.3.1 Lithology.....	7-10
7.3.2 Alteration .....	7-12
7.3.3 Structure .....	7-13
7.3.4 Mineralization.....	7-13
7.4 Weathering .....	7-14
<b>8. DEPOSIT TYPES .....</b>	<b>8-1</b>
<b>9. EXPLORATION .....</b>	<b>9-1</b>
9.1 Grids and Surveys .....	9-1

9.2	Geological Mapping.....	9-2
9.3	Surface Geochemistry.....	9-2
9.4	Trenching and Auger.....	9-3
9.5	Geophysical Surveys.....	9-4
9.6	Other Studies .....	9-5
<b>10.</b>	<b>DRILLING .....</b>	<b>10-1</b>
10.1	Drilling Statistics by Period .....	10-1
10.2	General Drilling Procedures.....	10-1
10.2.1	Hole Numbering .....	10-1
10.2.2	Drill Rig Supervision .....	10-1
10.2.3	Drill site preparation.....	10-2
10.2.4	Drill Hole Surveys .....	10-2
10.2.5	Environmental Management.....	10-4
10.3	Drilling Procedure.....	10-4
10.3.1	Drill Hole Spacing .....	10-5
10.4	Recovery .....	10-5
<b>11.</b>	<b>SAMPLE PREPARATION, ANALYSES AND SECURITY.....</b>	<b>11-1</b>
11.1	Core Handling and Sampling .....	11-1
11.1.1	Transportation of drill core boxes .....	11-1
11.1.2	Preparation of Drill Core Box for Description and Sampling.....	11-1
11.1.3	Determination of RQD (rock quality designation) .....	11-3
11.1.4	Cutting and Splitting Drill Core .....	11-3
11.1.5	Drilling Core Sampling and Sending to the Laboratory .....	11-4
11.2	RC Sample Handling and Sampling.....	11-5
11.3	Channel Sampling.....	11-5
11.4	Sample Transit, Security and Chain of Custody.....	11-6
11.5	Data Management .....	11-7
11.6	Density Measurements.....	11-8
11.7	Quality Assurance and Quality Control (QAQC) Procedures .....	11-10
11.7.1	Blanks .....	11-10
11.7.2	Certified Reference Materials .....	11-12
11.7.3	Duplicates.....	11-19
11.7.4	Umpire Check Assays.....	11-25
11.8	External Audit .....	11-28
11.8.1	SRK Consulting (2011).....	11-29
11.8.2	AMC Consultants (2020) .....	11-29
11.9	QP Conclusions and Recommendations .....	11-29
<b>12.</b>	<b>DATA VERIFICATION.....</b>	<b>12-1</b>

12.1	Site Visit .....	12-1
12.2	QP Duplicate Samples .....	12-2
12.3	Drill Core Inspection.....	12-1
12.4	Drillhole Database Verification .....	12-2
12.4.1	Collar Validation .....	12-3
12.4.2	Survey Validation.....	12-3
12.4.3	Assay Validation .....	12-6
12.5	QP Commentary and Conclusions .....	12-7
<b>13.</b>	<b>MINERAL PROCESSING AND METALLURGICAL TESTING.....</b>	<b>13-1</b>
13.1	Introduction.....	13-1
13.2	Mineralogy.....	13-1
13.3	2017 Metallurgical Test Work.....	13-2
13.4	2018 and 2019 Testwork.....	13-9
13.5	Gold Recoveries .....	13-9
13.5.1	Hard Rock Material .....	13-9
13.5.2	Saprolite and Transition Material.....	13-12
13.6	Recommendations.....	13-13
<b>14.</b>	<b>MINERAL RESOURCE ESTIMATE .....</b>	<b>14-1</b>
14.1	Introduction.....	14-1
14.2	Estimation Methodology .....	14-3
14.3	Resource Database.....	14-4
14.4	Geological Models .....	14-7
14.4.1	Lithology Model .....	14-7
14.4.2	Weathering Models.....	14-11
14.4.3	Mineralization Model .....	14-13
14.5	Assays, Capping and Compositing .....	14-17
14.5.1	Raw Assays.....	14-17
14.5.2	Topcut.....	14-19
14.5.3	Compositing.....	14-25
14.6	Density Measurements.....	14-28
14.7	Variography.....	14-33
14.8	Block Modelling .....	14-1
14.9	Block Model Interpolation .....	14-7
14.10	Grade Estimation Validation .....	14-9
14.10.1	Visual Validation .....	14-9
14.10.2	Global Statistical Validation .....	14-12
14.10.3	Local Statistical Validation – Swath Plot.....	14-14

<b>14.11 Mineral Resources .....</b>	<b>14-16</b>
14.11.1 Mineral Resources Classification .....	14-16
14.11.2 Reasonable Prospects of Eventual Economic Extraction (RPEEE).....	14-20
<b>14.12 Mineral Resource Statement.....</b>	<b>14-25</b>
14.12.1 Cut-Off Grade Sensitivities .....	14-27
<b>15. MINERAL RESERVE ESTIMATES .....</b>	<b>15-1</b>
<b>16. MINING METHODS .....</b>	<b>16-1</b>
<b>17. RECOVERY METHODS.....</b>	<b>17-1</b>
<b>18. PROJECT INFRASTRUCTURE.....</b>	<b>18-1</b>
<b>19. MARKET STUDIES AND CONTRACTS.....</b>	<b>19-1</b>
<b>20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY     IMPACT .....</b>	<b>20-1</b>
<b>21. CAPITAL AND OPERATING COSTS .....</b>	<b>21-1</b>
<b>22. ECONOMIC ANALYSIS .....</b>	<b>22-1</b>
<b>23. ADJACENT PROPERTIES .....</b>	<b>23-1</b>
23.1 GoldMining Inc.....	23-2
23.1.1 Mineral Rights .....	23-2
23.1.2 Exploration Work .....	23-4
23.1.3 Mineral Resources.....	23-5
<b>24. OTHER RELEVANT DATA AND INFORMATION .....</b>	<b>24-1</b>
<b>25. INTERPRETATION AND CONCLUSIONS .....</b>	<b>25-1</b>
<b>26. RECOMMENDATIONS .....</b>	<b>26-1</b>
26.1 Community Engagement.....	26-1
26.2 Data Acquisition and Analysis.....	26-1
26.3 Exploration and Development.....	26-1
26.4 Data Management and Quality Assurance .....	26-2
26.5 Geology and Mineral Resources.....	26-2
26.6 Metallurgical and Geometallurgical Studies .....	26-2
26.7 Mining.....	26-3
26.8 Project Infrastructure and Plant Design.....	26-3
26.9 Environmental and Permitting .....	26-4
26.10 Future Studies and Economic Assessment.....	26-5
<b>27. REFERENCES .....</b>	<b>27-1</b>

# List of Figures

---

Figure 1.1: Gurupi Project Location .....	1-3
Figure 4.1: Location Map of the Gurupi Project, Maracaçumé, Brazil .....	4-1
Figure 4.2: Gurupi Project and Tenements .....	4-2
Figure 4.3: Gurupi Project Tenements .....	4-3
Figure 5.1: Project Location and Access .....	5-2
Figure 5.2: Local Roads in the Gurupi Project Area .....	5-3
Figure 5.3: Local Physiography of the Gurupi Project .....	5-5
Figure 5.4: Powerline Proposition to the Gurupi Project.....	5-10
Figure 5.5: Portelinha Admin Base in Centro Nodo do Maranhão, Maranhão .....	5-13
Figure 5.6: Core Logging and Storage Facilities in Chega Tudo, Pará .....	5-14
Figure 5.7: Jibóia Village Camp in Cachoeira do Piriá, Pará.....	5-14
Figure 7.1: Property Scale Geological Map .....	7-1
Figure 7.2: Geology of the Contact and Blanket Deposits .....	7-3
Figure 7.3: Lithology of the Contact and Blanket Deposits .....	7-5
Figure 7.4: Representative Section Through Blanket Showing Grade Distribution Relative to Arenite Contact .....	7-7
Figure 7.5: Drill Core Showing Silicified High-Grade Zone with Sulphides .....	7-8
Figure 7.6: Representative Section Through Contact Showing Grade Distribution Relative to Arenite Contact (contact fault) .....	7-9
Figure 7.7: Chega Tudo Deposit Geology .....	7-11
Figure 7.8: Lithology of Chega Tudo Deposit .....	7-12
Figure 7.9: Representative Section Through Chega Tudo Showing Grade .....	7-14
Figure 8.1: Gold Deposits .....	8-2
Figure 9.1: Soil and Grab Samples on the Gurupi Project.....	9-3
Figure 9.2: Channel and Auger Samples on the Gurupi Project.....	9-4
Figure 9.3: Magnetic Geophysical Survey Flown Over the Gurupi Project (total magnetic intensity) .....	9-5
Figure 11.1: Blank Control Chart for Gold by Lab – Intertek.....	11-11
Figure 11.2: Blank Control Chart for Gold by Lab – Lakefield, SGS & Acme .....	11-12
Figure 11.3: Sample Control Chart of CRM OREAS 218 .....	11-14
Figure 11.4: Sample Control Chart of CRM OREAS 254 .....	11-15
Figure 11.5: Sample Control Chart of CRM HiSilk2 .....	11-16
Figure 11.6: Sample Control Chart of CRM SJ53.....	11-17
Figure 11.7: Sample Control Chart of CRM OxC30.....	11-18
Figure 11.8: Sample Control Chart of SF12.....	11-19
Figure 11.9: Quarter Core Field Duplicates .....	11-21

Figure 11.10: Half Core Field Duplicates .....	11-22
Figure 11.11: Intertek Lab Pulp Duplicate Check .....	11-23
Figure 11.12: SGS Lab Pulp Duplicate Check.....	11-24
Figure 11.13: Lakefield Lab Pulp Duplicate Check.....	11-25
Figure 11.14: Chemex Check Assays vs Nomos Originals .....	11-27
Figure 11.15: Chemex Check Assays vs Lakefield Originals .....	11-28
Figure 12.1: Core Storage Facilities .....	12-1
Figure 12.2: Core Logging Facilities at Gurupi Project.....	12-2
Figure 12.3: Scatter Plot Showing Original Assays (Y-axis) vs. QP Duplicate Assays (X-axis).....	12-1
Figure 12.4: Typical High-Grade Intervals with Intense Silica-Sericite Alteration Assemblages from the Blanket (top) and Contact (bottom) Deposits.....	12-2
Figure 13.1: Blanket Zone Gold Recoveries .....	13-10
Figure 13.2: Contact Zone Gold Recoveries.....	13-11
Figure 13.3: Chega Zone Gold Recoveries .....	13-11
Figure 13.4: Blanket Zone Saprolite .....	13-12
Figure 14.1: Cipoeiro Area Drill Hole Database Received from GMIN, Classified by Drill Hole Types... 14-6	
Figure 14.2: Chega Tudo Drill Hole Database Received from GMIN, Classified by Drill Hole Types .....	14-7
Figure 14.3: Blanket Lithological Model .....	14-9
Figure 14.4: Contact Lithological Model.....	14-10
Figure 14.5: Chega Tudo Lithological Model .....	14-11
Figure 14.6: Cipoeiro Weathering Model .....	14-12
Figure 14.7: Chega-Tudo Weathering Model.....	14-13
Figure 14.8: Blanket Mineralization Model.....	14-15
Figure 14.9: Contact Mineralization Model .....	14-16
Figure 14.10: Chega Tudo Mineralization Model .....	14-17
Figure 14.11: Histograms, Log Probability Plots, Mean and Variance Plots, and Cumulative Metal Plots for Gold Within the BL_02 Mineralized Domain .....	14-21
Figure 14.12: Histograms, Log Probability Plots, Mean and Variance Plots, and Cumulative Metal Plots for Gold Within the CN_01 Mineralized Domain .....	14-22
Figure 14.13: Histograms, Log Probability Plots, Mean and Variance Plots, and Cumulative Metal Plots for Gold Within the CT_04 Mineralized Domain.....	14-23
Figure 14.14: Histogram of Sampled Interval Lengths in the Gurupi Project for Mineralized Domains by Deposit .....	14-27
Figure 14.15: Comparative Bar Charts of the Gurupi Project Composited and Uncomposited Length for Mineralized Domains by Deposit .....	14-28
Figure 14.16: Cipoeiro Density Model Coloured by Density Value.....	14-31
Figure 14.17: Chega Tudo Density Model Coloured by Density Value .....	14-32

Figure 14.18: Blanket Deposit Experimental Variograms for Mineralized Domain BL_02 .....	14-33
Figure 14.19: Contact Deposit Experimental Variograms for Mineralized Domain CN_01 .....	14-34
Figure 14.20: Chega Tudo Deposit Experimental Variograms for Mineralized Domain CT_04 .....	14-34
Figure 14.21: Blanket Mineralized Domains Block Model .....	14-4
Figure 14.22: Contact Mineralized Domains Block Model .....	14-5
Figure 14.23: Chega Tudo Mineralized Domain Block Model .....	14-6
Figure 14.24: Blanket Visual Validation of the Block Model and Composites (BL-01, BL-02) .....	14-10
Figure 14.25: Contact Visual Validation of the Block Model and Composites CN-01, CN-02, CN-05 ..	14-11
Figure 14.26: Chega Tudo Visual Validation of the Block Model and Composites CT-02, CT-04 and CT-07 .....	14-12
Figure 14.27: Swath Plots for X, Y and Z for Mineralized Domain Blanket .....	14-14
Figure 14.28: Swath Plots for X, Y and Z for Mineralized Domain Contact.....	14-15
Figure 14.29: Swath Plots for X, Y and Z for Mineralized Domain Chega Tudo .....	14-16
Figure 14.30: Blanket Pit Constrained Resource Classification .....	14-18
Figure 14.31: Contact Pit Constrained Resource Classification .....	14-19
Figure 14.32: Chega Tudo Pit Constrained Resource Classification .....	14-20
Figure 14.33: Open-Pit Optimization with Block Model Coloured by Gold Grades (g/t Au) .....	14-24
Figure 14.34: Open-Pit Optimization with Block Model Coloured by Gold Grades (g/t Au) .....	14-25
Figure 14.35: Blanket Grade-Tonnage Curves .....	14-29
Figure 14.36: Contact Grade-Tonnage Curves.....	14-30
Figure 14.37: Chega Tudo Grade-Tonnage Curves .....	14-31
Figure 23.1: Adjacent Mineral Permits.....	23-2
Figure 23.2: Mineral Title Held by GoldMining.....	23-3

# List of Tables

Table 1.1: Mineral Resource Estimate at Gurupi Project.....	1-10
Table 2.1: Summary of Qualified Persons .....	2-2
Table 2.2: Site Visit Dates of Qualified Person .....	2-3
Table 2.3: Abbreviations .....	2-5
Table 4.1: Mining Tittles .....	4-4
Table 4.2: Coordinates Defining the Gurupi Project Claim Blocks .....	4-7
Table 5.1: Summary of Physiographic Features in the Gurupi Project Area .....	5-5
Table 5.2: Lithological and Weathering Profiles.....	5-6
Table 5.3: Physiographic Features Monthly Precipitation (Zé Doca Station, 1986–2017) .....	5-7
Table 5.4: Monthly Evaporation (Zé Doca Station, 1986–2017).....	5-7
Table 5.5: Summary of Key Structures .....	5-12
Table 7.1: Deformation History of the Gurupi Project (Blenkinsop, 2007).....	7-2
Table 10.1: Drilling (DDH-RC) Conducted Each Project Area by Period .....	10-2
Table 10.2: Collar Survey Methods by Period .....	10-3
Table 10.3: Downhole Survey Methods by Period.....	10-3
Table 10.4: DDH Drilling Recovery by Weathering Domain .....	10-6
Table 11.1: History of Assay Methods and Laboratories .....	11-7
Table 11.2: Host Rock Density Statistics by Domain.....	11-9
Table 11.3: Summary of CRM Performance Results.....	11-13
Table 11.4: Quality Control Duplicates Submitted by Deposit.....	11-20
Table 11.5: Umpire Assays Submitted by Deposit.....	11-26
Table 12.1: QP Core Duplicates Results .....	12-3
Table 12.2: Downhole Survey Errors and Corrections .....	12-4
Table 12.3: Assay Table Errors .....	12-6
Table 13.1: Gurupi Mineralogy.....	13-1
Table 13.2: Tests with Same Reagents Tested at SGS-Lakefield – 2010 Blends from Blanket and Contact Zones .....	13-3
Table 13.3: Tests 2010 Blanket and Contact Zone Blend A Composites.....	13-5
Table 13.4: Tests 2017 CZ Composites with Three-Stage Flotation and Estimating Gravity Separation on Cleaner Tails .....	13-7
Table 14.1: In-pit Mineral Resources Estimate at Gurupi Project.....	14-2
Table 14.2: Summary of Drill Holes and Assays Used in the Gurupi Project Resource Estimate .....	14-5
Table 14.3: Mineralized Domains by Deposits.....	14-14
Table 14.4: Statistics of Gold Assays for Gurupi Project (length weighted) .....	14-18
Table 14.5: Statistics of Gold Assays for Mineralized Domains (length weighted).....	14-18

Table 14.6: Capping Applied to Gurupi Project Mineralized Domains.....	14-20
Table 14.7: Statistics of Uncapped and Capped Assays of the Gurupi Project, per Mineralized Domain (length weighted).....	14-24
Table 14.8: Statistics of Uncomposited and 1 m Composited Assays of Gurupi Project, per Mineralized Domain (length weighted) .....	14-25
Table 14.9: Density Statistics of the Gurupi Project .....	14-30
Table 14.10: Variogram Parameters Used for the Mineral Resource Estimation Gurupi Project, per Mineralized Domains.....	14-35
Table 14.11: Cipoeiro Block Model Parameters .....	14-1
Table 14.12: Chega Tudo Block Model Parameters .....	14-1
Table 14.13: Cipoeiro Area Mineralized Domain Wireframe Volumes Compared to Block Model Volumes .....	14-2
Table 14.14: Chega Tudo Mineralized Domain Wireframe Volumes Compared to Block Model Volumes .....	14-3
Table 14.15: Estimators and Search Parameters Used in Gurupi Project Mineralized Domains.....	14-7
Table 14.16: Sample Search Criteria for Gurupi Project .....	14-8
Table 14.17: Mean Grade Comparison Between Composites and Blocks, per Mineralized Domains..	14-13
Table 14.18: Parameters Used for the Open Pit Whittle Optimization of Blanket Deposit .....	14-21
Table 14.19: Parameters Used for the Open Pit Whittle Optimization of Contact Deposit.....	14-21
Table 14.20: Parameters Used for the Open Pit Whittle Optimization of Chega Tudo Deposit .....	14-22
Table 14.21: In-Pit Mineral Resources Estimate of the Gurupi Project .....	14-26
Table 14.22: Gurupi Project Cut-Off Grade Sensitivity Scenario.....	14-27
Table 14.23: Blanket Sensitivity Scenario.....	14-28
Table 14.24: Contact Sensitivity Scenario .....	14-28
Table 14.25: Chega Tudo Sensitivity Scenario.....	14-29

## **1. SUMMARY**

### **1.1 Introduction**

G Mining Ventures Corp. (“GMIN” or the “Company”) mandated G Mining Services Inc. (“GMS”) as lead consultant along to prepare a Mineral Resource Estimate (“MRE”) under the supervision of the QPs for the Gurupi Project (“Gurupi” or “Project”), located in Pará and Maranhão states in the north of Brazil.

This Technical Report is prepared in accordance with the guidelines of the Canadian Securities Administrators’ National Instrument 43-101 (“NI 43-101”) and Form 43-101F1.

This Report declares the same MRE statement published on February 20, 2025. The objective of this Report is to update the JORC-compliant gold resource to meet National Instrument 43-101 Standards of Disclosure for Mineral Projects. The objective of this Report and the MRE is to determine and define the tonnage and grade of the ore deposits and supporting geological information obtained on September 2, 2024. Since it was transmitted, GMS has carried out its validation of information, modelling and estimation of the mineral resources. The details of the data verification can be found in Chapter 12. The effective date of the MRE is February 3, 2025. The Mineral Resource statement reported herein was prepared in conformity with generally accepted CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines. The Gurupi Project does not contain Mineral Reserves.

The qualified persons (“QP”) of this Technical Report are the following:

- M. Pascal Delisle, P. Geo., Director Geology & Resources for G Mining Services.
- M. Neil Lincoln, P.Eng., Vice-President Metallurgy for G Mining Services.
- M. Carl Michaud, P.Eng., Vice-President Mining Engineering for G Mining Services.

Pascal Delisle visited the Project site between September 23 to September 24, 2024.

### **1.2 Terms of Reference**

Unless otherwise stated, all the information and data contained in the Report or used in its preparation has been provided by GMIN up to February 20, 2025. The units of measure presented in this Technical Report unless noted otherwise are in the metric system. Currency is expressed in United States dollars (“USD”), unless stated otherwise.

### **1.3 Description of the Mineral Properties – Gurupi Project**

The following description of the Gurupi Project is principally derived from the PFS (as defined hereinafter) prepared by MIPTEC Engenharia & Consultoria Ltda. (“MIPTEC”) for OZ Minerals Limited (“OZ Minerals”) and updated by management of the Corporation in connection with the drafting of the Gurupi Project Technical Report that will be filed on SEDAR+ ([www.sedarplus.ca](http://www.sedarplus.ca)) under the Corporation’s issuer profile within 45 days of the February 20, 2025, news release (see above).

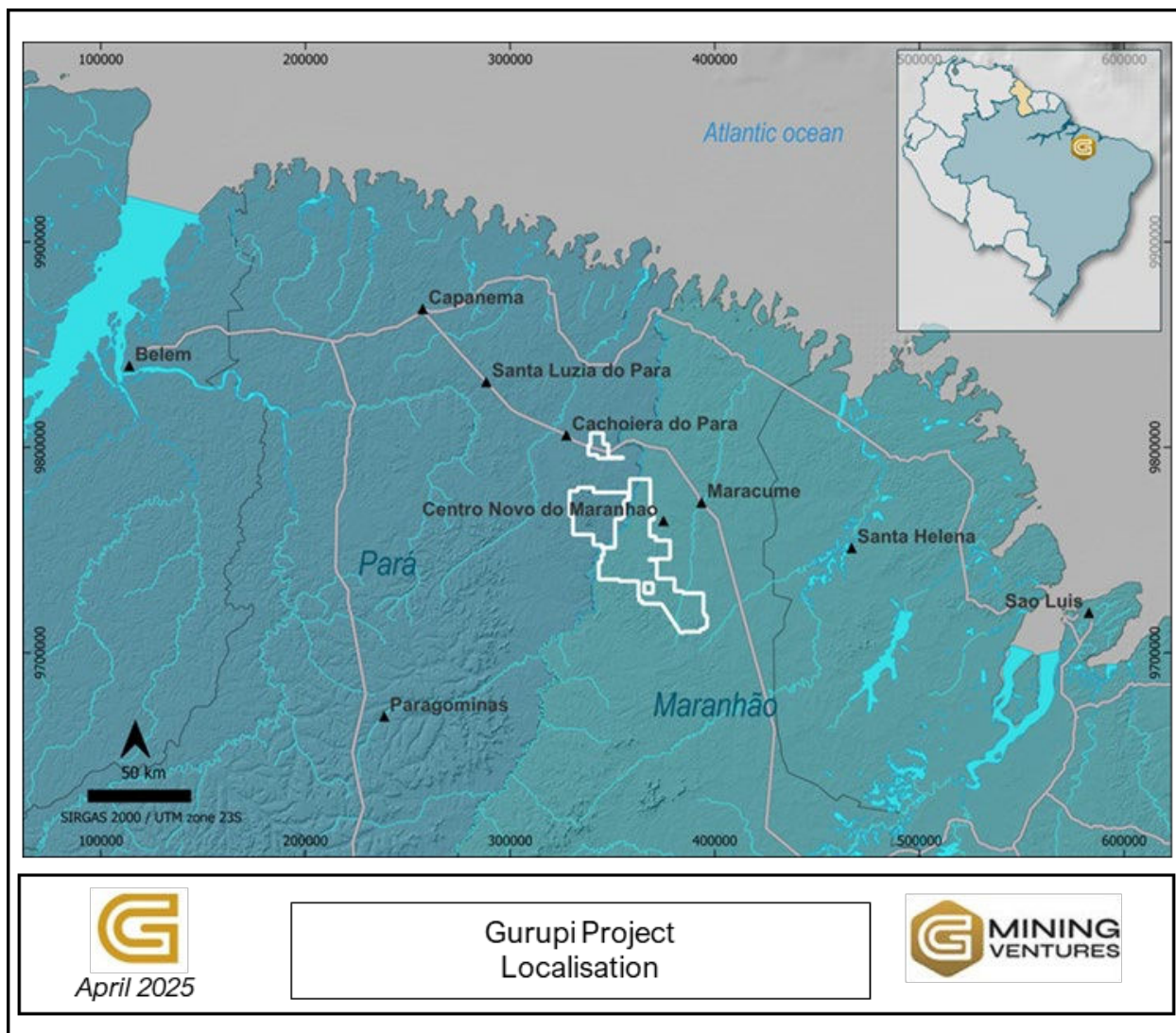
#### **1.3.1 Location and Access**

The Gurupi Project (formerly known as the Centro Gold Project) is located in the Gurupi Province. It straddles the States of Pará and Maranhão in the northeastern part of Brazil, South America. It is located approximately 380 km southeast of Belém, capital of the State of Pará, and 500 km west-northwest of São Luis, capital of the State of Maranhão, Brazil, South America (Figure 1.1). The nearest significant town is Maracaçumé, within the western portion of the State of Maranhão.

Access to the Gurupi Project is via sealed road from Belém to Maracaçumé. The Gurupi Project is situated 55 km from the national highway BR316, which connects São Luis to Belém, and passes through Gusingle-lane dirt road from Centro Novo. From Maracaçumé, access is via a single-lane, 6.5-7.5 m wide municipal dirt road to the village of Chega Tudo. Cipoeiro (Contact and Blanket deposits) is accessed from Chega Tudo via a 5.5 m wide dirt road. Seven (7) wooden bridges and one concrete bridge stand between Cipoeiro and Maracaçumé. Both the bridges and the roads require upgrading to support the anticipated increase in both truckload size, and traffic frequency expected during mine construction and operations phases.

An airstrip capable of handling light aircraft is accessible at Maracaçumé. Flights into Belém from São Paulo occur on a daily basis and take approximately four (4) hours.

**Figure 1.1: Gurupi Project Location**



### 1.3.2 Property Description and Title

The property hosting multiple identified gold targets along a +80 km mineralized trend, including the Blanket and Contact deposits in the Cipoeiro area and Chega Tudo deposit. Artisanal mining has occurred sporadically within the Project area since the 17<sup>th</sup> century.

### 1.3.3 Mineral Tenure and Requirements

Effective December 20, 2024, GMIN has a 100% stake in the Gurupi Project through its indirect, wholly owned subsidiaries MCT and ACG. The Gurupi project comprises a contiguous 48 tenements covering ~1,900 km<sup>2</sup> situated along a highly prospective trend.

#### **1.3.4 Surface Rights**

The surface area corresponding to the above-described mineral tenure is located in Pará and Maranhão states. Within the Gurupi area, there are indigenous land, traditional quilombola communities and settlements (assentamentos); therefore, an extensive stakeholder engagement will be necessary, including the National Institute of Colonization and Agrarian Reform (the “INCRA”).

#### **1.3.5 Royalties**

Gurupi Project third party gold royalties consist of:

- 1.0% NSR royalty on the first 1 million ounces of gold produced at the Project and 1.5% NSR on gold production thereafter payable to BHP.
- 1.0% to 2.0% NSR royalty on gold production covering Centro Gold project payable to Metalla, upon reaching commercial production as determined by production levels.
- 1.0% of NSR on gold produce payable to Franco Nevada.
- 0.75% of NSR on gold produced payable to Vaaldiam Mining.
- 1.0% to 2.0% NSR royalty on gold production covering Centro Gold project payable to Maverix, upon reaching certain Net Value sales.
- Federal government royalty of 1.0% on reported profit.

#### **1.3.6 Environmental Liability**

Gurupi’s deposits are on the mining lease applications that are currently pending the pre-requisite issue of an environmental licence, which was issued previously and subsequently suspended due to an oversight in the legal provisions of certain surface rights. The Corporation intends to correct the regulatory / legal exceptions and expect the mining lease application will proceed accordingly.

### **1.4 History**

Gold was first discovered in the Gurupi Project area in the 17<sup>th</sup> century by colonial settlers. During the early 1900s and again in the mid-1980s, intermittent small-scale production took place as part of a region-wide rush of *garimpeiros*. Gold was exploited from oxidized and weathered material from open pits limited to about 40 m in depth. UG mining of fresh primary material has not previously occurred. Exploration around Chega Tudo commenced in 1985 and was undertaken by Serra Mineração Ltda. (“SML”) and Rio Tinto. This was followed by exploration by Companhia Nacional de Mineração Ltda. (“CNM”) around the Cipoeiro

region in 1994; and by TVX Gold Inc (“TVX”) in 1995. A joint venture between TVX and Santa Fe Pacific Corporation (“SFPG”) was established in 1995.

From 1994 to 1997, exploration work programs were comprised of soil, saprolite, grab and channel sampling, information acquisition from airborne-photogrammetry programs, topographic data generation, ground magnetic geophysical surveys, reconnaissance geological mapping, airborne magnetic and gamma-ray surveys, core and reverse circulation (“RC”) drilling, and metallurgical test work. This work resulted in the discovery of the Contact and Blanket deposits and the development of an initial MRE for Cipoeiro and the completion of a scoping study by Kilborn Engineering Ltd in 1996 for SFPG.

In 1997, SFPG was taken over by Newmont Corporation who assumed control of Gurupi Project. Between 1997 and 2000, Newmont conducted exploration work at the Gurupi Project, including geological mapping, geochemical sampling, airborne electromagnetic survey, ground magnetic and induced polarization (“IP”) surveys. Drilling programs were completed and a phase of re-logging of older drill holes was undertaken. Geological models and resource estimates were subsequently completed; however, were not publicly released. A phase of metallurgical and comminution test work was also completed by Newmont during this time.

In 1999, TVX completed an independent Mineral Reserve Estimate prior to Newmont placing the Gurupi Project on care-and-maintenance in 2000. In 2003, Kinross Gold Corporation acquired 100% of the Gurupi Project, following a merger with TVX, which had purchased Newmont’s interest therein. Kinross completed infill and definition core drilling programs at the Chega Tudo and Cipoeiro targets (Blanket and Contact), metallurgical test work, bulk and solid density determinations, and updated the MRE. In 2005, an unpublished Feasibility Study (“FS”), was commissioned and completed by AMEC. This study found that the Gurupi Project was not significantly profitable in a sub-\$500/oz gold price environment, using a conventional open-pit mining operation with SAG and ball mills, followed by a leaching-CIP circuit with stripping and an electrowinning plant. From 2006 through 2008, Kinross resumed mineral exploration around the Gurupi Project with the intention of investigating other potential targets that could increase previously reported Mineral Resources.

In 2009, Jaguar entered negotiations with Kinross to acquire MCT, the then Kinross Brazilian subsidiary that controlled the Gurupi Project. Jaguar then commissioned Pincock, Allen and Holt (“PAH”) to conduct a re-estimation of Mineral Resources, which was completed in early December 2009 (PAH, 2009). Shortly thereafter, Jaguar acquired MCT and commissioned AMEC to prepare a Pre-Feasibility Study (“PFS”) to identify cost savings and other areas, which required additional drilling to conduct a Feasibility Study. AMEC’s prefeasibility was completed and filed on SEDAR in May 2010 (AMEC, 2010). Between 2011 and

2016, Jaguar completed no further work on the Gurupi Project, as it was then focused on developing other assets in Brazil.

In October 2016, Jaguar entered into an earn-in agreement with Avanco Resources Limited (“Avanco”), where Avanco could earn up to 100% of the Gurupi Project. In October 2017, all MCT shares were transferred to Avanco, which undertook a drilling program at the Blanket and Contact deposits and produced two (2) MREs in February and March 2018. Subsequent development drilling at both the Blanket and Contact deposits continued through the Avanco takeover by OZ Minerals Limited (August 2018) through to the end of 2019. MIPTEC completed a Pre-Feasibility Study, with additional optimization studies in July 2019.

OZ Minerals published a scoping study on Chega Tudo in September 2021 and AMC Mining consultants updated the PFS in October 2021. Updated MREs for both Chega Tudo and Cipoeiro were completed in-house in June 2022. AMC provided another PFS update in April 2023. OZ Minerals was acquired by BHP in 2023. As indicated above, information under Section 7.4 of this AIF is substantially derived from the PFS, as updated in September 2021. In September 2024, GMIN entered into a purchase and sale agreement with BHP to acquire the Gurupi Project and closed that transaction as of December 20, 2024.

Most of the gold deposits of the Gurupi greenstone belt, including Cipoeiro and Chega Tudo are hosted in structures associated with the strike-slip, sinistral Tentugal shear zone. The dominant geological structures in the Gurupi Project area were formed by NE-SW shortening, resulting in NW-SE trending thrust sheets and folds, and EW to ESE-WSW zones on scales from kilometres to tens of kilometres.

## **1.5 Geological Setting and Mineralization**

The Gurupi Belt hosts a Paleoproterozoic gold province located in northeastern Brazil, at the borders of Pará and Maranhão states. It is considered to be an extension of the prolific West African Craton’s Birimian gold province into South America. The Gurupi Project encompasses two primary mineralized zones, the Cipoeiro and Chega Tudo deposits, located eight (8) kilometres apart within the Lower Proterozoic Gurupi Greenstone Belt along the Tentugal Shear Zone.

The Cipoeiro deposits are hosted by tonalite and arkosic arenite, with quartz-sericite-pyrite alteration prevalent throughout. Gold is similarly associated with pyrite. The area is characterized by two (2) main deposits: Blanket, which dips shallowly and can reach thicknesses of up to 50 m and Contact, consisting of steeply dipping shears extending approximately 600 m in strike length with widths ranging from a few metres to up to 60 m. The weathering profile shows varying thicknesses of saprolite, thinner within the arenite and thicker over the tonalite (up to 30 m).

In contrast, the Chega Tudo deposit is hosted within dacitic metavolcanic rocks that have undergone quartz-sericite-pyrite alteration. Gold is primarily associated with pyrite and occurs in elongated pods along steeply dipping shear zones that extend northwest and dip southwest. These mineralized pods vary in width from a few metres to up to 30 m, forming broader zones up to 200 m wide. Weathering has resulted in the development of a saprolite zone up to 40 m thick at Chega Tudo, where gold occurs as free grains.

Both deposits are classified as typical mesothermal vein-style gold deposits, where gold is predominantly found in association with pyrite within quartz-sericite-pyrite altered zones. Minor sulfide minerals include pyrrhotite, arsenopyrite, chalcopyrite, along with trace amounts of silver tellurides.

## **1.6 Deposit Type**

The Gurupi deposits are considered to be typical of mesothermal vein-style, or orogenic-style gold deposits. Mineralization styles vary from stockworks and breccias in shallow, brittle regimes, through laminated crack-seal veins and sigmoidal vein arrays in brittle-ductile crustal regions, to replacement- and disseminated-type orebodies in deeper, ductile environments. Mineralization can be disseminated or veins hosted, and displays a timing that is structurally late, and is syn-to post-peak metamorphic. Quartz is the primary constituent of veins, with lesser carbonate and sulfide minerals. Minor accessory albite, chlorite, white mica (fuchsite in ultramafic host rocks), tourmaline and scheelite can accompany the veins. Carbonates include calcite, dolomite and ankerite. Sulfide minerals can include pyrite, pyrrhotite, chalcopyrite, galena, sphalerite and arsenopyrite. Gold is usually associated with sulfide minerals but can occur as free gold.

## **1.7 Exploration**

Exploration activities at the Gurupi Project have included the acquisition of airborne photogrammetry and topographic data, as well as reconnaissance, regional, and detailed geological mapping. Sampling efforts have encompassed soil, saprolite, rock chip, and channel sampling. Additionally, both ground and airborne geophysical surveys have been conducted, alongside RC and diamond drilling (DDH). Studies on mineralization characterization and metallurgical testing of samples have also been carried out. Further analyses include petrographic studies, fluid inclusion and stable isotope studies, and density measurements of various lithologies.

## **1.8 Drilling**

Several drilling campaigns have been conducted on the Gurupi Project and include both shallow scout RC and DDH. DDH diameter was typically HQ in size (6.35 cm sample diameter) through the oxide and

saprolitic horizons and NQ in size (4.76 cm sample diameter) in unweathered bedrock. RC drill holes were sampled consistently every metre from the collar to the end of hole. DDH were typically sampled at one (1) metre intervals, except where intervals were extended or terminated to respect geological and mineralogical boundaries. The minimum allowable sampling length was 20 cm. Any sample shorter than this was combined with the preceding sample. Sample recovery was not recorded for RC holes. For DDH, recovery was recorded as a measured value and was very good for mineralized lithologies (i.e., saprolite, saprock and tonalite). Drill core recovery was consistently above 90% on the project, with drill core recovery in tonalite averaging 97%.

A total of 192 DDH and 208 RC holes were drilled between 1995 and 1999 by SFPG / Newmont. Between 2003 and 2008, 152 DDH and 16 RC holes were drilled under Kinross. Jaguar drilled 116 DDH between 2011 and 2012. Avanco / Oz Minerals drilled 266 DDH starting in 2017. No drilling happened at Gurupi Project since 2019. The Project has a total of 725 DDH and 224 RC holes that define the three (3) deposits.

## **1.9 Sampling and Analysis**

Historic drill samples were crushed to minus 10 mesh; then a two (2) kg split was pulverized to a nominal 90% passing 150 mesh, using a ring pulveriser. An assay split of 250 g was collected from the pulp for a 50 g fire assay digestion, and atomic absorption spectroscopy (AAS) determination for gold. The results greater than 10 g/t Au were re-assayed with a gravimetric finish.

Recent (2017–2019) drill samples were crushed to minus 10 mm, with a two (2) kg split taken and pulverized to a nominal 85% passing 100 mesh screens. A 250 g pulp was collected from which a 50 g charge was taken for fire assay digestion, with an AAS finish. Crushing and assay were undertaken by Intertek Laboratories in Parauapebas, Brazil.

## **1.10 Data Verification**

To comply with NI 43-101, Pascal Delisle conducted a site visit to the Gurupi Project from September 23 to 24, 2024. No drilling activities were ongoing during the visit. GMS examined drill cores from the Blanket, Contact and Chega Tudo deposits, inspected core storage facilities, and reviewed drilling and exploration procedures. Additionally, selected core samples from diamond drill holes were re-sampled for database validation (QP Samples). GMS also performed database verification and implemented quality assurance and quality control (QAQC) measures.

### **1.11 Metallurgical Testing and Mineral Processing**

The metallurgical tests conducted on the Gurupi Project between 2017 and 2019 confirmed that the samples from the deposits are suitable for conventional gold processing methods, including flotation and cyanidation. No new metallurgical tests have been conducted since 2019.

The Gurupi deposits consist of both hard rock and saprolite. Gold is found both as free gold and as inclusions in sulfides such as pyrite and chalcopyrite. The saprolite, rich in clays, can affect gold recovery during the flotation.

In 2017, the focus was on optimizing the flotation to maximize gold recovery. The presence of 10% saprolite did not have a significant impact on recovery, and pre-concentration by gravity separation did not improve the recovery results.

Between 2018 and 2019, the flotation scheme from 2017 was validated and improved. More efficient gold recovery was achieved with different grinding tests, resulting in a 3% increase in recovery from the Blanket deposit and a 1.5% increase from the Contact deposit.

For gold recovery, a 2.5% increase was achieved in the Blanket deposit through gravity separation, while the Contact deposit showed a 1.5% improvement. Gold from gravity concentrates is extracted using intensive cyanidation, which yields a 99% recovery rate. The CIL circuit recovers 94% of the gold.

For saprolitic and transitional materials, the recovery rates varied. In the Blanket deposit, a fixed recovery rate of 50% is recommended, but recovery can vary from 35% to 75%. The recovery rate for transitional materials averages 36%, with the saprolite in the Contact deposit showing a 40% recovery, while saprock and colluvial materials achieved a 43% recovery.

In conclusion, the metallurgical tests conducted from 2017 to 2019 allowed for the optimization of flotation processes and improvement of gold recovery models. Hard rock materials provided high and consistent recoveries, while saprolite and transitional materials showed more variability, which necessitates more cautious recovery estimates.

### **1.12 Mineral Resource Estimate**

The MRE is contained within three (3) deposits: Blanket and Contact (Cipoeiro area) and Chega Tudo. The results are presented in the Table 1.1. The MRE is based on 715 DDH, 220 RC holes, totalling 126,193 m performed between 1995 and 2019. This MRE includes 32 infill DDH that were not included in the database

for the previous PFS completed by past operators, OZ Minerals. Although Blanket and Contact deposits are spatially close, only a few drill holes tested the continuity of the grade in between the two, representing an opportunity for growth of the Mineral Resources in the future.

**Table 1.1: Mineral Resource Estimate at Gurupi Project**

Deposits	Indicated Resources			Inferred Resources		
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
	kt	g/t Au	koz Au	kt	g/t Au	koz Au
Blanket	14,068	1.39	629	7,316	1.37	322
Contact	12,228	1.74	685	4,806	1.34	207
Chega Tudo	17,216	0.93	516	6,395	1.17	240
<b>Total</b>	<b>43,512</b>	<b>1.31</b>	<b>1,830</b>	<b>18,517</b>	<b>1.29</b>	<b>770</b>

The Gurupi deposits open-pit Mineral Resource is stated using a lower cut-off grade of 0.34 g/t Au in transition rock and 0.35 g/t Au in rock for Cipoeiro and a lower cut-off grade of 0.36 g/t Au for transitional and 0.37 g/t Au for rock for Chega Tudo. No saprolite material is reported in the MRE. The resources are constrained within the \$1,950 resource pit.

### **1.13 Adjacent Properties & Other Relevant Data and Information**

According to the National Mining Agency (“ANM”), the Gurupi Project exploration permit is surrounded by several mining-related areas, including medium-scale mining and exploration permits held by various Brazilian title holders and a group of mining and exploration permits held by Brazil Resource Inc. Brazil Resources Inc., which became “GoldMining Inc.”, effective December 6, 2016.

A Mineral Resource Estimate was produced by Tetra Tech Inc. on April 17, 2013. Tetra Tech Inc. has categorized the Cachoeiro Gold Project’s Mineral Resources into “indicated” and “inferred” categories, assuming open-pit mining. Tetra Tech, Inc. Open pit indicated Mineral Resources are estimated at 17.5 Mt at 1.23 g/t Au for 692 koz Au. Open pit inferred Mineral Resources are estimated at 15.7 Mt at 1.07 g/t Au for 538 koz Au.

### **1.14 Interpretation and Conclusions**

This Technical Report is prepared in accordance with the guidelines of the Canadian Securities Administrators’ National Instrument 43-101 (“NI 43-101”) and Form 43-101F1. The objective of this

MRE Report is to confirm and estimate the presence of gold resources at the Gurupi Project. The MRE report assesses the presence of resources that could potentially lead to a technical investigation and the potential economic viability of the project, particularly in the context of an open pit mine.

### **1.15 Recommendations**

Key strategic recommendations to optimize the evaluation and development of the Gurupi Project are focused on improving geological data, exploration activities, data management, community engagement and environmental considerations.

Key actions include conducting a new LiDAR survey, implementing structured geological logging and sampling procedures, and using AI-driven core scanning to enhance data reliability. Exploration efforts should continue with drilling in deposit extensions, geophysical surveys and geostatistical studies to refine resource estimation.

Metallurgical and geometallurgical studies are recommended to assess ore processing characteristics, while geotechnical investigations improve pit slope stability and infrastructure planning. Environmental and permitting studies will ensure regulatory compliance and assess long-term sustainability.

Lastly, advancing a Preliminary Economic Assessment (PEA) will help evaluate the project's economic viability and guide future investment decisions. These recommendations collectively aim to enhance project efficiency, sustainability, and resource optimization.

## **2. INTRODUCTION**

G Mining Ventures Corp. mandated G Mining Services Inc. as lead consultant to prepare a Mineral Resource Estimate under the supervision of the QPs for the Gurupi Project, located northeast of Brazil.

GMIN is a gold mining company focusing on acquisition, exploration and development of precious metal projects. Its flagship property is Tocantinzinho Gold Project, located in the State of Pará, Brazil. Additionally, the company owns the Oko West Gold Project located in the Cuyuni-Mazaruni Mining Districts, Guyana, for which the Feasibility Study is expected to be completed in the second quarter of 2025. The Company's common shares trade on the Toronto Stock Exchange (TSX: GMIN) and the OTC markets (OTCQX: GMINF).

On December 20, 2024, G Mining Ventures Corp. ("GMIN") acquired claims in the Gurupi Gold Belt from wholly owned subsidiaries of BHP Group Limited ("BHP"). The acquisition gives GMIN a 100% interest in the tenements, including the CentroGold Project, renamed "Gurupi Project" In consideration for the acquisition, GMIN will grant BHP a 1.0% NSR royalty on the first 1 million ounces of gold produced at the tenements and a 1.5% NSR royalty on gold production thereafter.

This Technical Report is prepared in accordance with the guidelines of the Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101") and Form 43-101F1. The objective of this Report is to update the JORC-compliant gold resource to meet National Instrument 43-101 Standards of Disclosure for Mineral Projects. This MRE aims to determine and define the tonnage and grade of the ore deposit and support geological information. It is based, for the most part, on a drill database received on September 2, 2024. Since it was transmitted, GMS has carried out its validation and correction. The details of the modifications can be found in Chapter 12. The effective date of the MRE is February 3, 2025. The report contains all technical information relating to past exploration of the Project, drilling methods, sampling and QAQC protocols, data verification performed by the Qualified Person for this technical report, results of historical metallurgical test programs and the MRE for the Project published on February 20, 2025. The Gurupi Project does not contain any mineral reserves at this stage.

The Mineral Resource statement reported herein was prepared in conformity with generally accepted CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines. The Gurupi Project does not contain Mineral Reserves.

The intention of this Technical Report is to provide sufficient, clear and unambiguous technical and scientific information relating to the Project available at the effective date of the report. The qualified persons ("QP")

understand that a copy of this Report will be filed with the Canadian securities commissions and be publicly available.

## 2.1 Scope of Work

All sections of this Technical Report have been prepared by G Mining Services Inc., a mining consulting firm based out of Brossard, Québec, Canada. The QPs are not independent of the issuer (G Mining Ventures Corp.) as described in Section 1.5 of the NI 43-101 standard of disclosure for mineral projects. The QPs involved in the mandate do not hold an interest in the issuer or its related entities. The relationship between GMIN and GMS is solely professional, and GMS is being compensated based on a commercial-fee basis that is not contingent on the results presented in this Technical Report.

The QPs responsible for each section of the Technical Report are mentioned in Table 2.1.

**Table 2.1: Summary of Qualified Persons**

Qualified Person	Company	Title	Report Sections
Pascal Delisle, P.Geo. (OGQ 01378)	GMS	Director of the Geology and Resources	1.1-1.10, 1.12-1.15, 2-12, 14, 23-27.
Neil Lincoln, P.Eng. (PEO 100039153)	GMS	Vice President Metallurgy	1.11, 1.14, 1.15, 13, 25-27.
Carl Michaud, Mining Eng. MBA (OIQ 117090).	GMS	Vice President of Mining Engineering	14.11.2

## 2.2 Sources of Information and Data

Unless otherwise stated, all the information and data pertaining to the Mineral Resource Estimate contained in the Report or used in its preparation has been provided by GMIN up to April 8<sup>th</sup>, 2025. The above-named QPs have no reason to doubt the reliability of the information provided.

Sources of information include:

- Discussions with GMS and GMIN personnel.
- Inspection of the Gurupi Project area.
- Geological Interpretations, provided by GMIN.
- Exploration data, compiled and provided by GMIN.
- Historical metallurgical test works results.

- Technical and scientific reports by external consultants.
- All figures and tables cited using references in Section 27.

All currencies in this Report are expressed in United States dollars (USD) unless otherwise stated.

### 2.3 Site Visit

In accordance with NI 43-101 regulations, a current personal inspection was completed by the below mentioned QP to the Gurupi Project as part of the data validation process in Table 2.2.

**Table 2.2: Site Visit Dates of Qualified Person**

Qualified Person	Site Visit Scope	Dates
Pascal Delisle, P.Geo.	Geology and Resources	September 23 to September 24, 2024
Carl Michaud, Mining Eng. MBA	Did not visit the site	N/A
Neil Lincoln, P.Eng.	Did not visit the site	N/A

The site visits covered the following aspects:

- Drill core inspection and visual comparison with assay values.
- Audit of logging, sampling, and QAQC protocols.
- Taking validation samples (QP samples).
- Inspection of the core storage facilities.
- Reviewed drilling and exploration procedures.
- Selected core samples from diamond drill holes were re-sampled for database validation (QP samples).
- Database verification and assessed quality assurance and quality control (QAQC) measures.

### 2.4 Effective Date

The effective date of the MRE is February 3, 2025 (the “MRE”).

The issue date of the Technical Report is April 8, 2025.

## **2.5 Sources of Information**

### **2.5.1 Previous Technical Reports**

The information contained in the following reports was used for reference purposes. However, other historical reports exist and may also have been consulted as needed. A comprehensive list can be found in the references in Chapter 27.

JORC Chega Tudo Mineral Resource Estimation Report Maracaçumé Brazil, OZ Minerals Limited., Effective Date: June 30, 2022, Issue Date: June 30, 2022.

JORC Centrogold Mineral Resource Estimation Blanket and Contact Deposit Maracaçumé Brazil, OZ Minerals Limited., Effective Date: June 30, 2022, Issue Date: June 30, 2022.

## **2.6 Agreements, Mineral Tenure, Surface Rights and Royalties**

The issuer provided details regarding mining titles, royalty agreements, environmental liabilities, mineral agreement and permits. The QPs are not qualified to offer any legal opinion on property titles, ownership, or potential litigation.

### **2.6.1 Mineral Tenure**

Effective December 20, 2024, GMIN has a 100% stake in the Gurupi Project through its indirect, wholly owned subsidiaries MCT and ACG. The Gurupi Project comprises a contiguous 48 tenements covering ~1,900 km<sup>2</sup> situated along a highly prospective trend.

### **2.6.2 Surface Rights**

The surface area corresponding to the above-described mineral tenure is located in Pará and Maranhão states. Within the Gurupi area, there are indigenous land, traditional *quilombola* communities and settlements (*assentamentos*); therefore, an extensive stakeholder engagement will be necessary, including the National Institute of Colonization and Agrarian Reform (the “INCRA”).

### 2.6.3 Royalties

Gurupi Project third party gold royalties consist of:

- 1.0% NSR royalty on the first 1 million ounces of gold produced at the Project and 1.5% NSR on gold production thereafter payable to BHP.
- 1.0% to 2.0% NSR royalty on gold production covering Centro Gold project payable to Metalla, upon reaching commercial production as determined by production levels.
- 1.0% of NSR on gold produce payable to Franco Nevada
- 0.75% of NSR on gold produced payable to Vaaldiam Mining.
- 1.0% to 2.0% NSR royalty on gold production covering Centro Gold project payable to Maverix, upon reaching certain Net Value sales.
- Federal government royalty of 1.0% on reported profit.

### 2.7 Units of Measure, Abbreviations and Nomenclature

The units of measure presented in this Technical Report, unless noted otherwise, are in the metric system. All dollar figures quoted in this report refer to United States dollars (USD, US\$ or \$), unless otherwise noted. A list of the main abbreviations and terms used throughout this Technical Report is presented in Table 2.3. Unless otherwise specified, source for tables and figures is GMS, 2025.

**Table 2.3: Abbreviations**

Abbreviations	Full Description
AA	Atomic-Absorption
Ag	Silver
ANM	Agência Nacional de Mineração / National Mining Agency
As	Arsenic
Au	Gold
BHP	BHP Group Limited
C	Carbon
CAD	Canadian Dollar
CIL	Carbon-in-leach
CoG	Cut-off Grade
CRM	Certified Reference Material

<b>Abbreviations</b>	<b>Full Description</b>
Cu	Copper
DDH	Diamond Drill Holes
DGPS	Differential Global Positioning System
FA	Fire Assay
Fe	Iron
FS	Feasibility Study
g	Gram
gpt or g/t	Grams per tonne
g/L	Gram per litre
GMIN	G Mining Ventures Corp.
GMS	G Mining Services Inc.
gpm	Gallons per minute (US)
GPS	Global Positioning System
ha	Hectares
h	Hour
h/d	Hours per day
h/y	Hours per year
h/wk	Hours per week
ISO	International Organization for Standardization
kg	Kilograms
kg/t	Kilograms per tonne
km	Kilometre
km/h	Kilometre per hour
L	Litre
M	Mega or Millions (000,000s)
m	Metre
m <sup>2</sup>	Square metre
m <sup>3</sup>	Cubic metre
mg	Milligram
mm	Millimetre
MME	Ministry of Mines and Energy

Abbreviations	Full Description
ml	Millilitre
min	Minute
MRE	Mineral Resource Estimate
Mt	Million tonnes
Mtpa	Million tonnes per annum
NI 43-101	National Instruments 43-101- Canadian Standards of Disclosure for Mineral Projects
NQ	Drill Core Diameter (47.6 mm)
oz	Troy Ounce (31.10348 grams)
PEA	Preliminary Economic Assessment
PFS	Pre-feasibility Study
Pb	Lead
ppb	Parts per Billion
ppm	Parts per Million
QP	Qualified Person
RC	Reverse Circulation
S	Sulphur
SD	Standard Deviation
Sec	Second (time)
t	Tonnes (1,000 kg) (metric ton)
t/y or tpy	Tonnes per year
t/d or tpd	Tonnes per day
t/h or tph	Tonnes per hour
t/m <sup>3</sup>	Tonnes per cubic metre
USD	United States Dollar
wk	Week
XRF	X-ray Fluorescence
y	Year

### **3. RELIANCE ON OTHER EXPERTS**

This Technical Report has been prepared by GMS, under the supervision of the QPs, for GMIN. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to GMS at the time of the preparation of this Report.
- Assumptions, conditions, and qualifications as set forth in this Report.
- Data, reports, and opinions supplied by GMIN.

The QPs of this Technical Report believe that the basic assumptions contained in the information indicated above are factual and accurate and that the interpretations are reasonable. The QPs of this Technical Report have, to the extent applicable, relied on this data and have no reason to believe that any material facts have been withheld. The QPs of this Technical Report have taken all appropriate steps, in their professional judgment, to ensure that the work, information, or advice from the above indicated information is sound and the QPs do not disclaim any responsibility for this Technical Report.

In preparing this Report, the QPs have fully relied upon certain work, opinions and statements of experts concerning environmental, legal, political or tax matters. The following companies and consultants have been retained by GMIN, to prepare various reports for the Project and have been relied upon in preparation of this Technical Report.

The company and its involvement are presented below:

- GMS: Overall Report and MRE coordination, property description and location, accessibility, history, geological setting, deposit type, exploration, drilling, sample preparation, data verification, review of historical metallurgical testing and recovery methods, mineral resource estimation and adjacent properties.

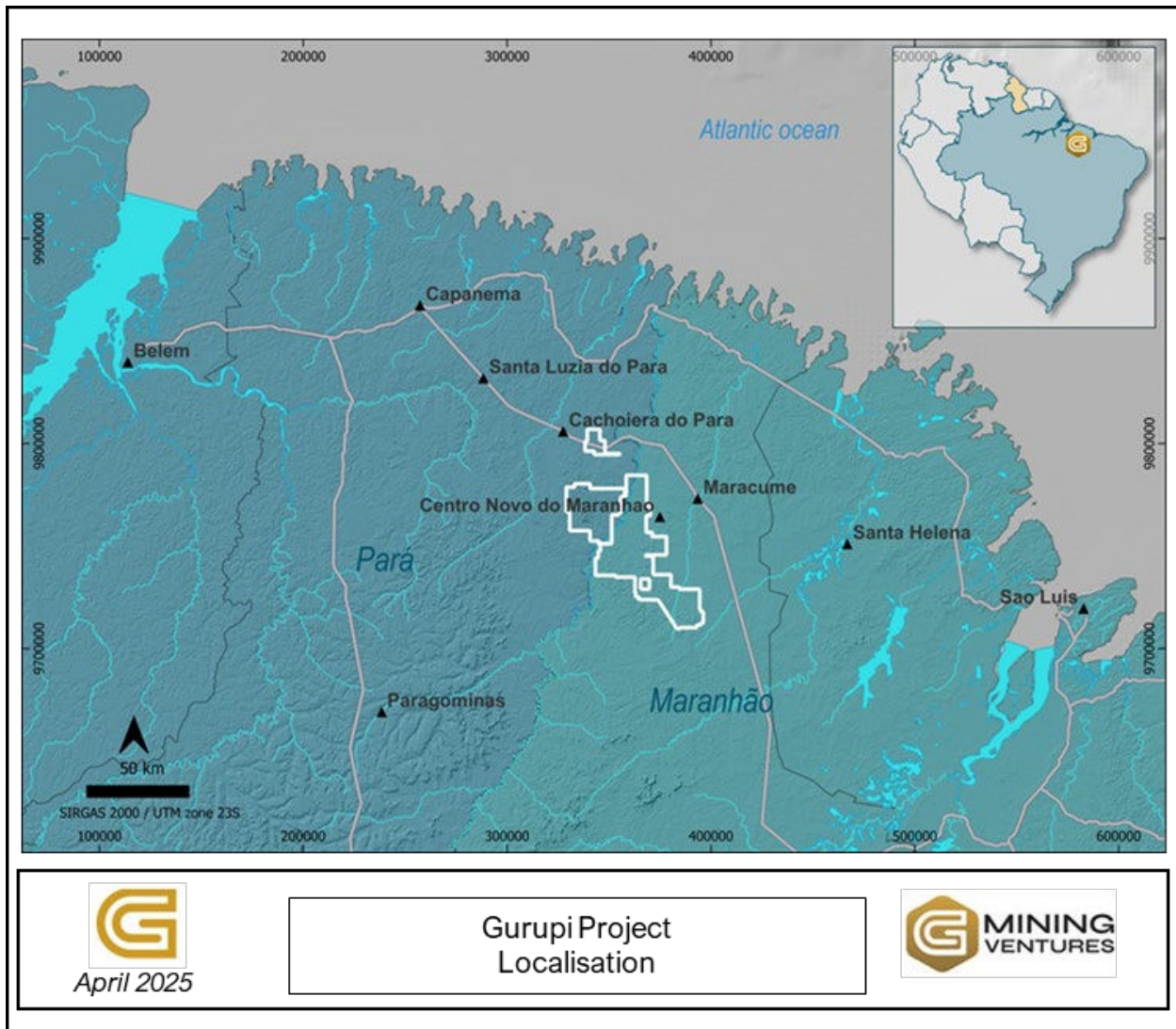
The results and opinions expressed in this Technical Report are conditional upon the information provided by the Experts listed as being current, accurate and complete as of the effective date of the Technical Report. The authors wish to emphasize that they are QPs only in respect of the areas in this Technical Report identified in their "Certificates of Qualified Persons" submitted with this Technical Report to the Canadian Securities Administrators. Except for the purposes contemplated under provincial securities laws, any other use of this Technical Report by any third party is at the party's sole risk.

## 4. PROPERTY DESCRIPTION AND LOCATION

### 4.1 Location

The Gurupi Project (formerly known as the CentroGold Project) straddles the states of Pará and Maranhão in the northeastern part of Brazil, South America. The Project is located approximately 380 km southeast of Belém, capital of the State of Pará, and 500 km west-northwest of São Luis, capital of the State of Maranhão (Figure 4.1). The significant nearest town is that of Maracaçumé, within the western portion of the State of Maranhão.

**Figure 4.1: Location Map of the Gurupi Project, Maracaçumé, Brazil**

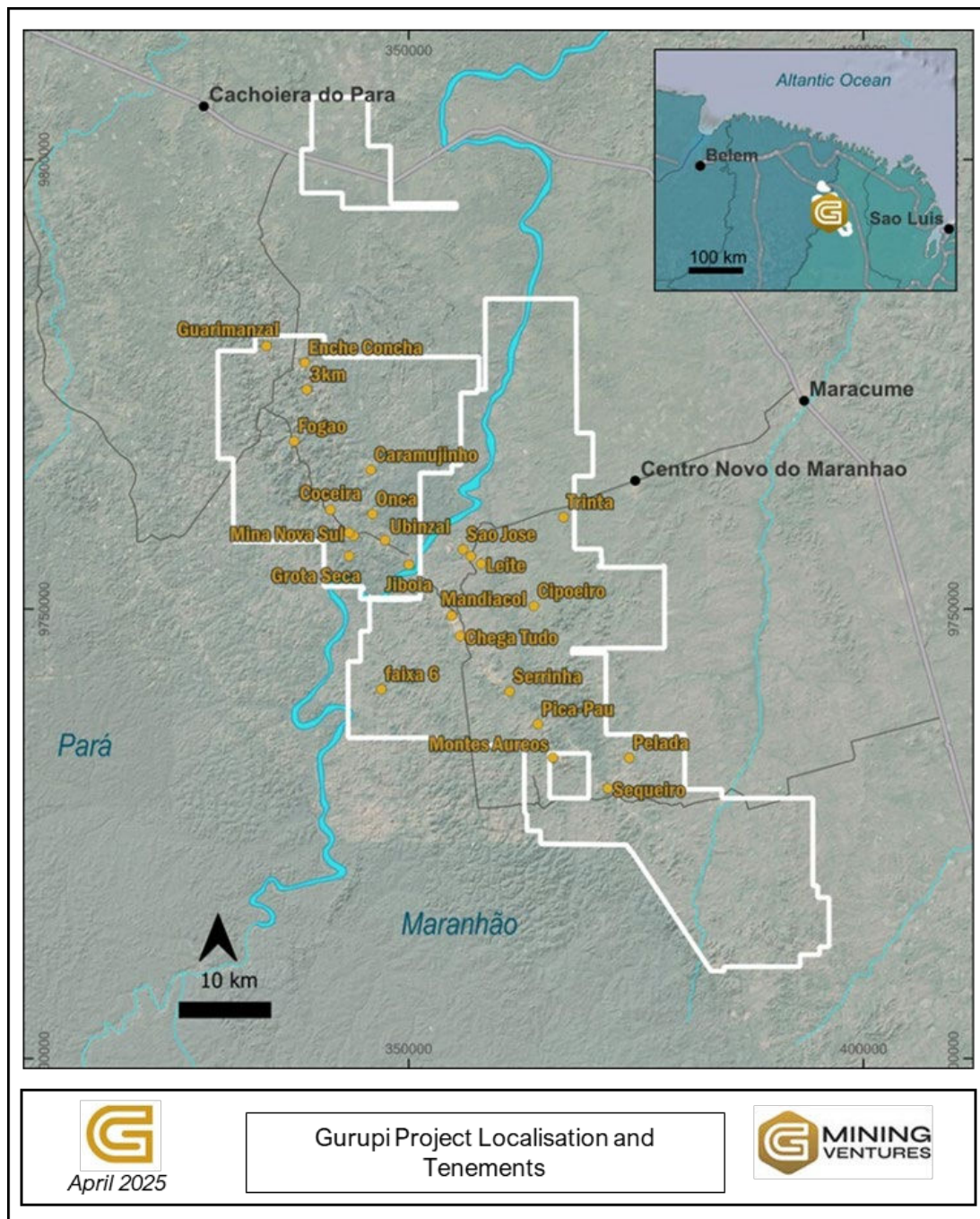


Source: GMIN 2025

#### 4.2 Property Description and Title

The property hosting multiple identified gold targets (Figure 4.2) along a +80 km mineralized trend, including the Blanket and Contact deposits in the Cipoeiro area and Chega Tudo deposit. Artisanal mining has occurred sporadically within the Project area since the 17<sup>th</sup> century.

**Figure 4.2: Gurupi Project and Tenements**



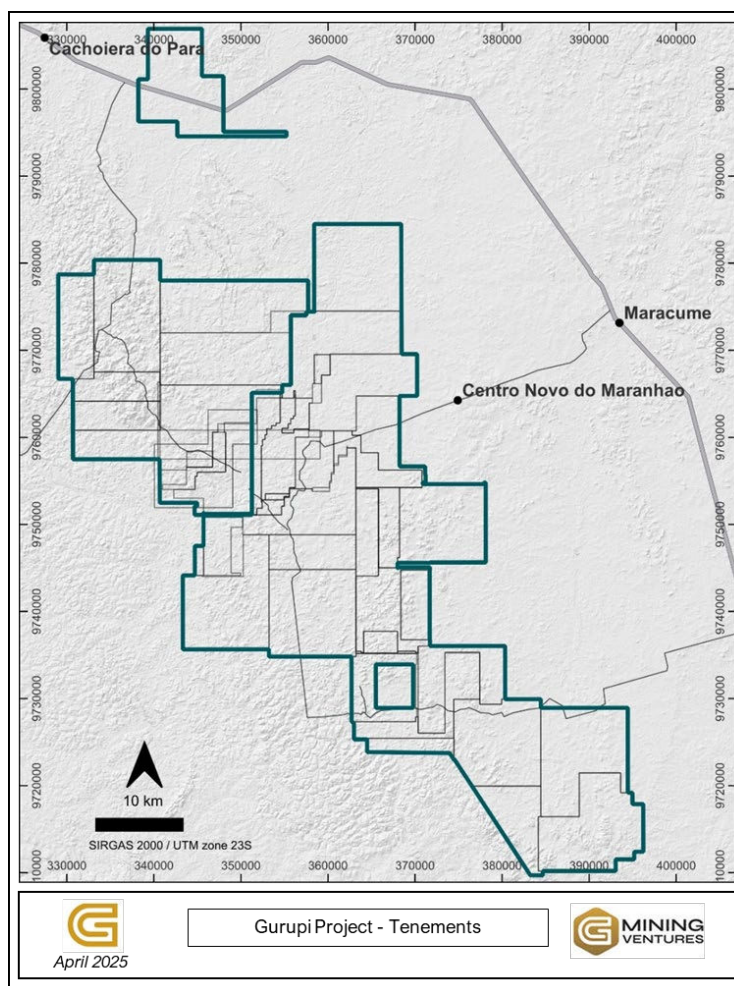
Source: GMIN, 2025

### 4.3 Mineral Tenure and Requirements

Under Brazilian law, the property of mineral resources differs from the property of the surface as the former is of exclusive ownership of the Federal Government. Therefore, to explore and exploit mineral resources, one must obtain an exploration licence and a mining concession, respectively. Since the granting of a mining concession depends on the results of prior exploration, the first step in obtaining a mining concession is actually to apply for an exploration licence from the National Mining Agency (Agência Nacional de Mineração or “ANM”); exploration licences are granted on a first-come, first-served basis.

Effective December 20, 2024, GMIN has a 100% stake in the Gurupi Project through its wholly-owned subsidiaries of BHP Group Limited (“BHP”) (ASX: BHP, NYSE: BHP, LSE: BHP, JSE: BHG). The Gurupi Project comprises a contiguous 48 tenement covering ~1,900 km<sup>2</sup> situated along a highly prospective trend. (Figure 4.3).

**Figure 4.3: Gurupi Project Tenements**



Source: GMIN, 2025

Exploration applications by public tender process are for those lands which have been held by other landholders, but which have been allowed to lapse. Table 4.1 summarizes the mineral tenure information for the mining concessions and Table 4.2 summarizes the coordinates of the Claim Blocks. The ANM is the authority responsible for the enforcement and application of mineral legislation in Brazil, under the control of the Ministry of Mines and Energy (“MME”). Although exploration licences have no physical boundaries, they are issued on the basis of digital geographic map staking, that is, they are not required to be legally surveyed and are subject to an annual rental fee. The mineral resources reported herein for the Gurupi Project deposits are located within the mining concessions 800.180/1990, 800.090/1985 and 800.089/1985.

**Table 4.1: Mining Tittles**

Phase	ANM-ID	Status	Granting Date (yyyy-mm-dd)	Expiry Date (yyyy-mm-dd)	Area (ha)
<b>Exploration</b>	806.109/2003	Final Report Submitted	2022-02-07	2025-02-06	971.92
<b>Permits</b>	850.061/2016	Exploration Licence Extended	2022-03-11	2025-03-10	3,491.04
	850.650/2010	Exploration Licence Extended	2022-03-29	2025-03-28	744.94
	850.651/2010	Exploration Licence Extended	2022-03-29	2025-03-28	2,420.15
	850.652/2010	Exploration Licence Extended	2022-03-29	2025-03-28	352.97
	850.864/2011	Exploration Licence Extended	2022-03-29	2025-03-28	650.03
	806.056/2018	Exploration Licence	2023-08-09	2026-08-03	3,647.32
	806.052/2018	Exploration Licence	2023-08-09	2026-08-03	3,826.43
	806.051/2018	Exploration Licence	2023-08-09	2026-08-03	4,525.46
	806.001/2015	Exploration Licence Extended	2023-10-03	2026-10-01	2,372.15
	806.308/2008	Exploration Licence Extended	2023-10-20	2026-10-15	2,624.07
	806.309/2008	Exploration Licence Extended	2023-10-20	2026-10-15	2,806.10
	806.055/2018	Application for Exploration	N/A	N/A	8,551.00
	850.021/2012	Application for Exploration	N/A	N/A	325.91
	800.090/1985	Exploitation Application	N/A	N/A	3,996.96

Phase	ANM-ID	Status	Granting Date (yyyy-mm-dd)	Expiry Date (yyyy-mm-dd)	Area (ha)
	800.180/1990	Exploitation Application	N/A	N/A	2,584.22
	806.204/2004	Exploitation Application	N/A	N/A	18.35
	806.241/2014	Exploration Licence	N/A	N/A	3,373.01
	806.023/1999	Final Report Submitted	N/A	N/A	462.32
	806.071/2001	Final Report Submitted	N/A	N/A	5,291.16
	800.088/1985	Final Report Submitted	N/A	N/A	10,000.00
	800.089/1985	Final Report Submitted	N/A	N/A	6,389.17
	806.053/2018	Licence Extension Requested	N/A	N/A	9,724.86
	806.049/2018	Licence Extension Requested	N/A	N/A	9,876.41
	806.050/2018	Licence Extension Requested	N/A	N/A	9,949.58
	806.062/2019	Licence Extension Requested	N/A	N/A	9,520.49
	850.408/2018	Licence Extension Requested	N/A	N/A	7,088.06
	806.091/2006	Licence Extension Requested	N/A	N/A	4,183.72
	806.147/2003	Licence Extension Requested	N/A	N/A	2,235.38
	856.082/1994	Exploration Licence Extended	2023-08-15	2026-08-10	1,216.99
	806.364/2012	Exploration Licence Extended	2023-10-03	2026-10-01	3,151.59
	850.953/2021	Licence Extension Requested	N/A	N/A	105.23
	806.362/2012	Licence Extension Requested	N/A	N/A	3,304.37
	850.950/2021	Licence Extension Requested	N/A	N/A	9,701.70
	850.956/2021	Licence Extension Requested	N/A	N/A	4,910.15
	806.306/2008	Final Report Presented	N/A	N/A	5,027.31
	850.270/2016	Licence Extension Requested	N/A	N/A	2,676.64

Phase	ANM-ID	Status	Granting Date (yyyy-mm-dd)	Expiry Date (yyyy-mm-dd)	Area (ha)
	850.319/2016	Licence Extension Requested	N/A	N/A	5,171.52
	850.272/2013	Licence Extension Requested	N/A	N/A	9,791.28
	850.552/2015	Application for Exploration	N/A	N/A	544.98
	806.320/2012	Licence Extension Requested	N/A	N/A	31.04
	806.321/2012	Licence Extension Requested	N/A	N/A	25.11
	850.545/2004	Bid	N/A	N/A	9,138.17
	850.525/1990	Bid	N/A	N/A	9,000.00
	850.785/2012	Application for Exploration	N/A	N/A	9.26
	806.363/2012	Application for Exploration	N/A	N/A	3,330.52
	851.196/2012	Application for Exploration	N/A	N/A	6,480.78
	806.319/2012	Application for Exploration	N/A	N/A	31.06
<b>Total</b>					<b>189,160.84</b>

**Table 4.2: Coordinates Defining the Gurupi Project Claim Blocks**

Coordinate ID	SIRGAS 2000, UTM Zone 23S		Coordinate ID	SIRGAS 2000, UTM Zone 23S		Coordinate ID	SIRGAS 2000, UTM Zone 23S	
	Easting	Northing		Easting	Northing		Easting	Northing
A	333,112.9	9,780,378.8	BA	371,157.4	9,756,666.4	DA	353,221.9	9,735,661.0
B	340,726.7	9,780,385.6	BB	371,158.2	9,755,716.9	DB	343,331.1	9,735,650.3
C	340,728.9	9,778,016.9	BC	371,225.1	9,755,717.0	DC	343,322.1	9,744,148.9
D	357,726.7	9,778,026.9	BD	371,225.8	9,754,851.8	DD	344,705.6	9,744,150.5
E	357,731.0	9,774,434.4	BE	370,890.7	9,754,851.5	DE	344,703.6	9,747,532.3
F	357,522.2	9,774,434.2	BF	370,890.9	9,754,627.2	DF	345,705.4	9,747,535.0
G	357,521.7	9,774,036.5	G	377,916.8	9,754,633.1	DG	345,700.8	9,751,370.6
H	357,521.7	9,774,027.3	BH	377,916.8	9,754,804.2	DH	345,720.0	9,751,370.6
I	355,731.6	9,774,025.7	BI	378,127.7	9,754,805.4	DI	345,720.4	9,751,018.4
J	355,737.9	9,766,026.8	BJ	378,135.2	9,745,649.5	DJ	350,209.0	9,751,022.6
K	354,739.8	9,766,025.9	BK	371,711.1	9,745,644.2	DK	350,209.0	9,751,102.7
L	354,740.6	9,765,123.7	BL	371,710.5	9,745,590.6	DL	351,267.3	9,751,104.4
M	351,254.6	9,765,120.6	BM	367979.3	9,745,588.5	DM	351,254.6	9,765,120.6
N	351,253.9	9,761,541.4	BN	367,977.7	9,744,972.6	DN	338,224.0	9,796,276.6
O	351,262.0	9,751,222.0	BO	368,007.6	9,744,972.6	DO	338,219.6	9,801,134.5
P	350,256.3	9,751,213.3	BP	368,008.0	9,745,068.5	DP	339,324.5	9,801,135.4
Q	345,563.6	9,751,208.9	BQ	371,711.0	9,745,071.7	DQ	339,320.0	9,806,930.4
R	345,563.7	9,751,099.1	BR	371,711.3	9,744,766.4	DR	345,517.7	9,806,935.1
S	344,680.4	9,751,098.4	BS	371,683.5	9,744,766.4	DS	345,521.8	9,801,493.4

Coordinate ID	SIRGAS 2000, UTM Zone 23S		Coordinate ID	SIRGAS 2000, UTM Zone 23S		Coordinate ID	SIRGAS 2000, UTM Zone 23S	
	Easting	Northing		Easting	Northing		Easting	Northing
T	344,679.6	9,752,098.3	BT	371,690.1	9,736,767.9	DT	347,978.9	9,801,495.3
U	344,979.5	9,752,098.5	BU	371,718.3	9,736,767.9	DU	347,990.9	9,795,100.3
V	344,979.2	9,752,499.5	BV	371,719.3	9,736,037.9	DV	355,235.3	9,795,105.7
W	340,685.9	9,752,488.8	BW	380,355.5	9,736,044.6	DW	355,235.7	9,794,575.0
X	340,659.7	9,757,502.2	BX	380,360.9	9,729,928.0	DX	342,698.5	9,794,570.1
Y	330,705.4	9,757,492.4	BY	384,446.8	9,729,933.5	DY	342,697.2	9,796,280.2
Z	330,696.2	9,766,715.1	BZ	384,447.1	9,728,929.5	DZ	338,224.0	9,796,276.6
AA	329,024.0	9,766,723.3	CA	394,445.5	9,728,940.2	EA	365,781.9	9,728,929.2
AB	329,012.3	9,778,713.7	CB	394,452.1	9,719,190.8	EB	365,781.9	9,728,933.5
AC	333,113.3	9,778,700.0	CC	394,977.5	9,719,190.4	EC	365,503.7	9,728,933.3
AD	333,112.9	9,780,378.8	CD	394,981.4	9,717,884.6	ED	365,499.2	9,733,929.8
AE	351,254.6	9,765,120.6	CE	396,218.1	9,717,885.5	EE	369,776.9	9,733,931.7
AF	354,740.6	9,765,123.7	CF	396,231.3	9,712,418.8	EF	369,781.2	9,728,932.6
AG	354,739.8	9,766,025.9	CG	395,188.7	9,712,413.5	EG	365,781.9	9,728,929.2
AH	355,737.9	9,766,026.8	CH	395,178.5	9,711,538.2			
AI	355,731.6	9,774,025.7	CI	393,044.6	9,711,536.6			
AJ	357,521.7	9,774,036.5	CJ	393,053.2	9,710,202.5			
AK	357,522.2	9,774,425.1	CK	384,672.4	9,710,199.0			
AL	357,730.0	9,774,425.3	CL	384,682.2	9,709,699.2			
AM	357,730.0	9,774,428.2	CM	383,245.1	9,709,718.0			

Coordinate ID	SIRGAS 2000, UTM Zone 23S		Coordinate ID	SIRGAS 2000, UTM Zone 23S		Coordinate ID	SIRGAS 2000, UTM Zone 23S	
	Easting	Northing		Easting	Northing		Easting	Northing
AN	358,500.7	9,774,428.8	CN	376,555.2	9,719,943.5			
AO	358,500.6	9,774,501.1	CO	374,502.3	9,723,053.4			
AP	358,500.6	9,774,503.9	CP	374,500.8	9,722,948.7			
AQ	358,420.6	9,774,503.8	CQ	373,974.8	9,723,750.8			
AR	358,413.4	9,784,502.3	CR	364,501.8	9,723,860.6			
AS	368,411.8	9,784,509.3	CS	364,500.6	9,725,320.5			
AT	368,464.2	9,769,564.1	CT	362,998.3	9,725,319.1			
AU	370,246.0	9,769,565.4	CU	362,996.5	9,727,172.9			
AV	370,249.6	9,764,766.3	CV	362,861.6	9,727,172.8			
AW	368,217.1	9,764,764.8	CW	362,861.5	9,727,339.7			
AX	368,223.4	9,756,775.0	CX	362,716.3	9,727,339.6			
AY	368,244.8	9,756,775.0	CY	362,708.6	9,734,832.6			
AZ	368,244.9	9,756,664.0	CZ	353,223.2	9,734,823.9			

#### **4.4 Gurupi Project Ownership and Agreements**

On September 9, 2024, GMIN announced that it has agreed to purchase the Centro Gold Project from BHP in exchange for a 1.0% NSR royalty on the first million ounces of gold produced at the project and a 1.5% NSR on gold production thereafter. The transaction was finalized on December 20, 2024. Thus, GMIN will hold 100% of the rights to the entire tenement of the Gurupi project, for the mining concession.

#### **4.5 Surface Rights**

The Brazilian Government holds the surface rights to the Prospecting Licence area. The rights allow the company to occupy the area.

#### **4.6 Royalties and Other Encumbrances**

Gurupi Project third party gold royalties consist of:

- 1.0% NSR royalty on the first 1 million ounces of gold produced at the Project and 1.5% NSR on gold production thereafter payable to BHP.
- 1.0% to 2.0% NSR royalty on gold production covering Centro Gold project payable to Metalla, upon reaching commercial production as determined by production levels.
- 1.0% of NSR on gold produce payable to Franco Nevada
- 0.75% of NSR on gold produced payable to Vaaldiam Mining.
- 1.0% to 2.0% NSR royalty on gold production covering Centro Gold project payable to Maverix, upon reaching certain Net Value sales.
- Federal government royalty of 1.0% on reported profit.

#### **4.7 Environmental Liability**

The Project has faced significant regulatory hurdles related primarily to environmental licensing. The project's Preliminary (LP) and Installation Licences (LI), initially granted, were suspended in 2013 following a court injunction. This legal action questioned the validity of the licensing process, particularly regarding land tenure regularization and the lack of proper consultation with potentially affected communities.

The suspension was based on a lawsuit against the State of Maranhão and MCT Mineração Ltda., citing noncompliance with legal provisions concerning surface rights, including oversight of areas under INCRA's jurisdiction and the potential presence of traditional communities.

Since then, the company has been working to correct the legal and land-related inconsistencies. In 2018, Brazil's land reform agency (INCRA) concluded that the area known as Vila Cipoeiro was no longer being used for agrarian reform purposes. INCRA recommended the area be released for mining activities, highlighting potential benefits such as job creation and increased local tax revenue. However, this recommendation still requires federal court approval and formal adoption of a resettlement plan.

Recently, the Project is focusing on additional environmental and social studies needed to reactivate or restart the licensing process. The advancement of the project remains contingent on resolving the following key issues:

- Land tenure regularization of both public and private lands.
- Consultation and compensation to any affected communities.
- Approval of a new Environmental Impact Assessment (EIA/RIMA) and Resettlement Action Plan.
- Validation of studies by relevant authorities (SEMA, INCRA, Federal Public Prosecutor's Office, etc.).

In the meantime, the Project is also getting new environmental permits for exploration, since this activity is not tied to the lawsuit and will be the focus in the next few years.

These unresolved environmental matters currently represent the project's main regulatory liability. The reissuance of environmental licences will depend on fully addressing these legal, land and socio-environmental issues, which may require a new licensing procedure under updated regulatory standards.

## **5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY**

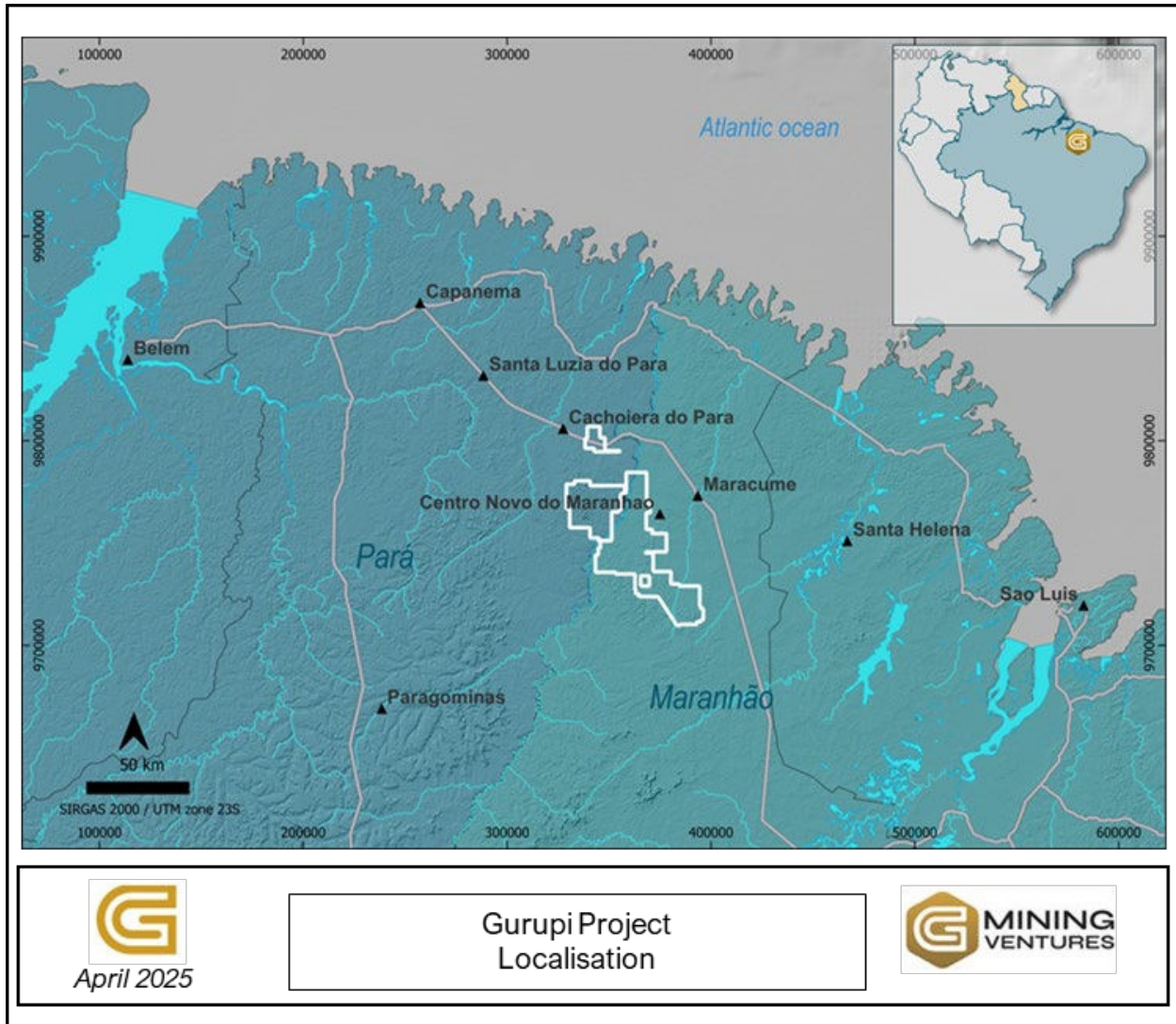
### **5.1 Accessibility and Roads**

Access to the project is via a single-lane municipal road from Maracaçumé, located on the BR-316 Federal Highway - a paved route connecting Belém (338 km west) to São Luís (454 km east). The 23 km road from Maracaçumé to Centro Novo do Maranhão is a poorly maintained paved road. From Centro Novo, the mining area is accessed via a 20 km route, consisting of 9 km along State Highway MA-306 and 12 km on municipal dirt roads (Figure 5.1).

Cipoeiro and Chega Tudo are accessed from Centro Novo do Maranhão via a 5.5 m wide, poorly maintained dirt road (Figure 5.2). The current access to the deposits does not permit an increase in traffic frequency and will need upgrading to support mine construction infrastructure. Both the bridges and the roads require upgrading to support the anticipated increase in both truckload size, and traffic frequency expected during mine construction and operations.

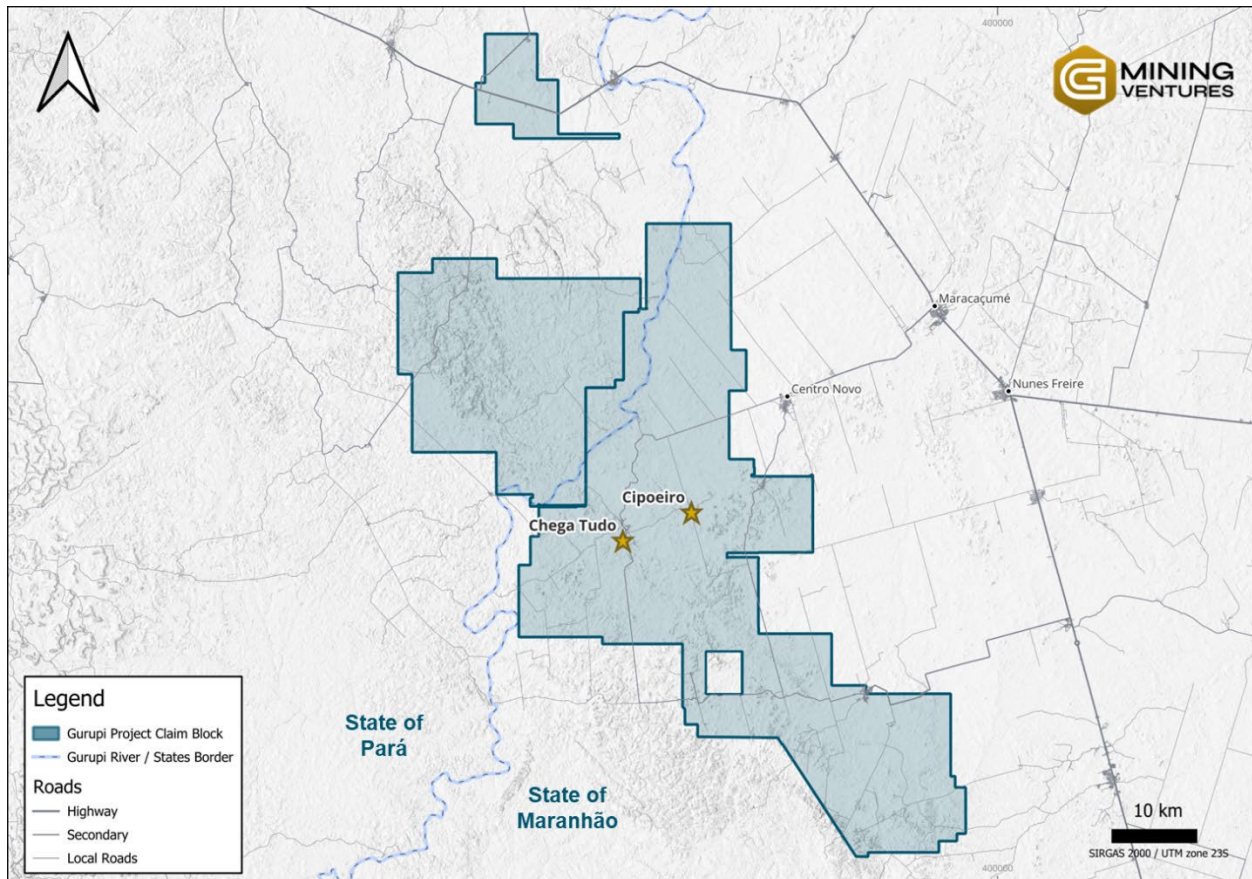
An airstrip capable of handling light aircraft is accessible at Maracaçumé. Flights into Belém from São Paulo occur daily and take approximately 4 hours.

**Figure 5.1: Project Location and Access**



Source: GMIN, 2025

**Figure 5.2: Local Roads in the Gurupi Project Area**



Source: GMIN, 2025

## 5.2 Physiography

The Gurupi Project is located in the northwestern region of Brazil, within the Gurupi Greenstone Belt geological province. The project area lies in a transitional zone between the Amazonian lowlands and the northeastern Brazilian uplands. From a physiographic perspective, the area comprises low-relief landforms, including gentle hills, expansive alluvial valleys, and flat or slightly rolling plateaus (Figure 5.3 and Table 5.1).

The elevation ranges from approximately 30 to 100 metres above sea level, with a general slope trending westward toward the Gurupi River basin. The regional geomorphology is a result of long-term tropical weathering processes acting on Proterozoic basement rocks, producing thick lateritic crusts and deep saprolitic profiles that can exceed 40 metres in thickness.

The substrate comprises primarily weathered tonalites, metavolcanic and metasedimentary rocks of the Gurupi Group, forming saprolite, saprock, and laterite layers. These weathering products are common

throughout the region and play an important role in controlling surface drainage, slope stability, and geotechnical behaviour.

Soils in the project area are predominantly yellow-red latosols (oxisols), which are deep, acidic, and nutrient-poor, typical of tropical rainforests. Despite this, many areas have been cleared for pasture, artisanal mining, and subsistence agriculture, leading to altered surface conditions and increased erosion in some locations.

The natural vegetation was originally dominated by dense tropical rainforest (ombrophilous forest), part of the Amazon biome. However, the original forest cover has been significantly disturbed and replaced by secondary growth, pastureland and shrub vegetation. Land use change and deforestation have exposed portions of the lateritic surface and contributed to changes in local hydrology.

The drainage system is well-developed and dendritic, with seasonal flow variability reflecting the distinct climatic regime. The main watercourses are ephemeral to perennial, and their discharge is strongly dependent on rainfall patterns. The Gurupi River and its tributaries form the dominant hydrological network. Stream channels are typically shallow with moderate gradients, and their response to precipitation events is rapid, especially during the peak of the wet season.

Hydrogeologically, the area is influenced by a shallow aquifer system located within the weathered saprolitic zone. These aquifers show variable permeability and transmissivity, often related to the degree of weathering and fracturing of the basement rocks. Groundwater recharge occurs mainly during the rainy season, and its availability is an important consideration for mine dewatering, tailings management, and environmental sustainability planning.

The physiographic and geological conditions of the Gurupi Project site are critical inputs for engineering design and mine planning. The characteristics of the saprolitic and lateritic profiles directly influence pit slope geometry, waste dump stability, and the geotechnical behavior of foundation materials. Lithological and Weathering Profiles are resume in Table 5.2.

Most of the area adjacent to the Project site is used for cattle ranching, farming and logging activities. Chega Tudo and Cipoeiro areas are crossed by small intermittent streams and have rural villages on the margins of the northern extent of mineralization.

**Figure 5.3: Local Physiography of the Gurupi Project**



Source: GMIN, 2025

**Table 5.1: Summary of Physiographic Features in the Gurupi Project Area**

Parameter	Description
Elevation Range	30–100 metres above sea level
Topographic Relief	Low to moderate
Dominant Landforms	Undulating hills, alluvial valleys
Surface Drainage Pattern	Dendritic
Drainage Direction	Westward toward Gurupi River basin
Dominant Soils	Yellow-red latosols (oxisols)
Soil Depth	>2 metres (deep weathered profiles)
Weathering Profile Thickness	10–40+ metres (saprolite and laterite)
Vegetation Cover	Secondary forest, pasture, shrublands
Land Use	Pasture, artisanal mining, subsistence ag.

**Table 5.2: Lithological and Weathering Profiles**

Lithological Unit	Weathering Product	Approximate Thickness (m)
Tonalite	Saprolite	15–30
Metarenite	Saprolite / Saprock	10–25
Volcaniclastics	Laterite / Saprolite	10–20
Mafic intrusives	Saprolite	10–25

### 5.3 Climate and Meteorological Conditions

#### 5.3.1 Regional Climate Overview

The Gurupi Project is located on the northeastern coastal plain of Brazil at an elevation of approximately 50 meters above sea level. The region is characterized by two well-defined seasons: a wet season extending from January through June, and a dry season from July through December. The Gurupi Project falls under the Tropical Monsoon Climate (Am) according to the Köppen climate classification system. This classification is characterized by a short dry season, with the driest month receiving less than 60 mm of precipitation but more than 4% of the total annual rainfall. The climate is equatorial, dry in winter, with a wet season in summer (December to June). The average annual precipitation is approximately 2,000 mm, with about 890 mm considered available for surface runoff and groundwater recharge annually.

Temperatures range from a minimum of 22°C to a maximum of 36°C, with an annual average of 26°C. July is the coolest month, with minimum temperatures occasionally dropping to 12–14°C. Seasonal winds, particularly the northeast trade winds in August and September, also influence the region's climatic dynamics.

#### 5.3.2 Historical Climate Data

Meteorological records from the Zé Doca Station (1986–2017) form the basis for long-term climate analysis for the Gurupi Project. The collected data shows significant seasonal rainfall, peaking in the first half of the year. Monthly rainfall data indicates median wet season values reaching up to 597 mm in March and as low as 3 mm during the dry season in September and October. Table 5.3 presents the precipitation records by month.

**Table 5.3: Physiographic Features Monthly Precipitation (Zé Doca Station, 1986–2017)**

Month	Dry (mm)	Median Dry (mm)	Median (mm)	Median Wet (mm)	Wet Max (mm)
Jan.	23.5	205.4	237	273.7	448.8
Feb.	126.1	237.2	270.8	355.1	456.2
Mar.	111.9	309.3	350.7	382.0	597.1
Apr.	162.3	305.7	338.2	381.4	541.8
May	50.1	163.5	203.4	245.3	409.6
Jun.	4.4	57.7	92.8	110.2	275.3
Jul.	6.1	28.5	32.0	51.9	158.9
Aug.	0	3.4	9.1	19.4	101.5
Sep.	0	3.3	11.2	20.3	80.4
Oct.	0.2	3.4	7.4	19.9	138.0
Nov.	0	13.8	28.0	47.2	174.5
Dec.	3.0	58.5	82.1	108.8	422.8

*\*Note: Annual Total: 487.6 mm (Dry) – 3,804.9 mm (Wet)*

### 5.3.3 Evaporation and Hydrological Balance

Evaporation data from the same monitoring station shows a total annual evaporation ranging from 888.2 mm (dry year) to 2,328.4 mm (wet year), with peak evaporation generally occurring between August and October. Table 5.4 presents the evaporation by month records.

**Table 5.4: Monthly Evaporation (Zé Doca Station, 1986–2017)**

Month	Dry (mm)	Median Dry (mm)	Median (mm)	Median Wet (mm)	Wet Max (mm)
Jan.	53.9	80.4	87.8	89.8	187.6
Feb.	40.7	56.0	63.1	72.8	94.9
Mar.	47.3	56.1	61.4	64.7	84.8
Apr.	45.8	55.9	59.6	62.9	77.3
May	50.3	70.6	74.5	81.1	105.2
Jun.	69.6	82.1	91.0	99.0	138.5
Jul.	83.9	100.7	110.1	124.3	174.7

Month	Dry (mm)	Median Dry (mm)	Median (mm)	Median Wet (mm)	Wet Max (mm)
Aug.	86.6	125.0	135.8	149.2	250.3
Sep.	100.1	142.4	152.8	175.9	306.7
Oct.	116.7	157.0	167.9	180.7	377.8
Nov.	109.6	142.0	155.6	171.7	283.2
Dec.	83.7	130.3	141.2	170.2	247.4

*\*Note: Annual Total: 888.2 mm (Dry) – 2,328.4 mm (Wet)*

#### 5.3.4 On-Site Monitoring

An automatic weather station was installed in 2018 at the project office, and it has since collected localized precipitation, temperature, humidity, and evaporation data, confirming the broader meteorological patterns observed in regional data.

Key Observations from On-site Data (2018–2020):

- Peak rainfall: March–April (over 700 mm in 2020)
- Peak evaporation: September–October (over 200 mm/month)
- Confirmed dry period: July–October
- Annual rainfall in 2020: Over 2,400 mm

It is expected that mining operations will be conducted year-round. Exploration field seasons are usually limited to the dry season as activities can be dependent on rainfall intensity.

#### 5.4 Local Resources

The closest town that can provide local supplies is Maracaçumé, 48 km to the northeast of the project and the nearest large community is Centro Novo do Maranhão.

The terrain surrounding the deposits is adequate for construction of administration, camp, mine, plant, tailings and rejects, and waste rock disposal facilities.

At the effective date of the report, GMIN holds sufficient tenure to accommodate the required infrastructure, however the law in Brazil do not give surface right to. The study of infrastructure will be carried out in the future.

## 5.5 Infrastructure

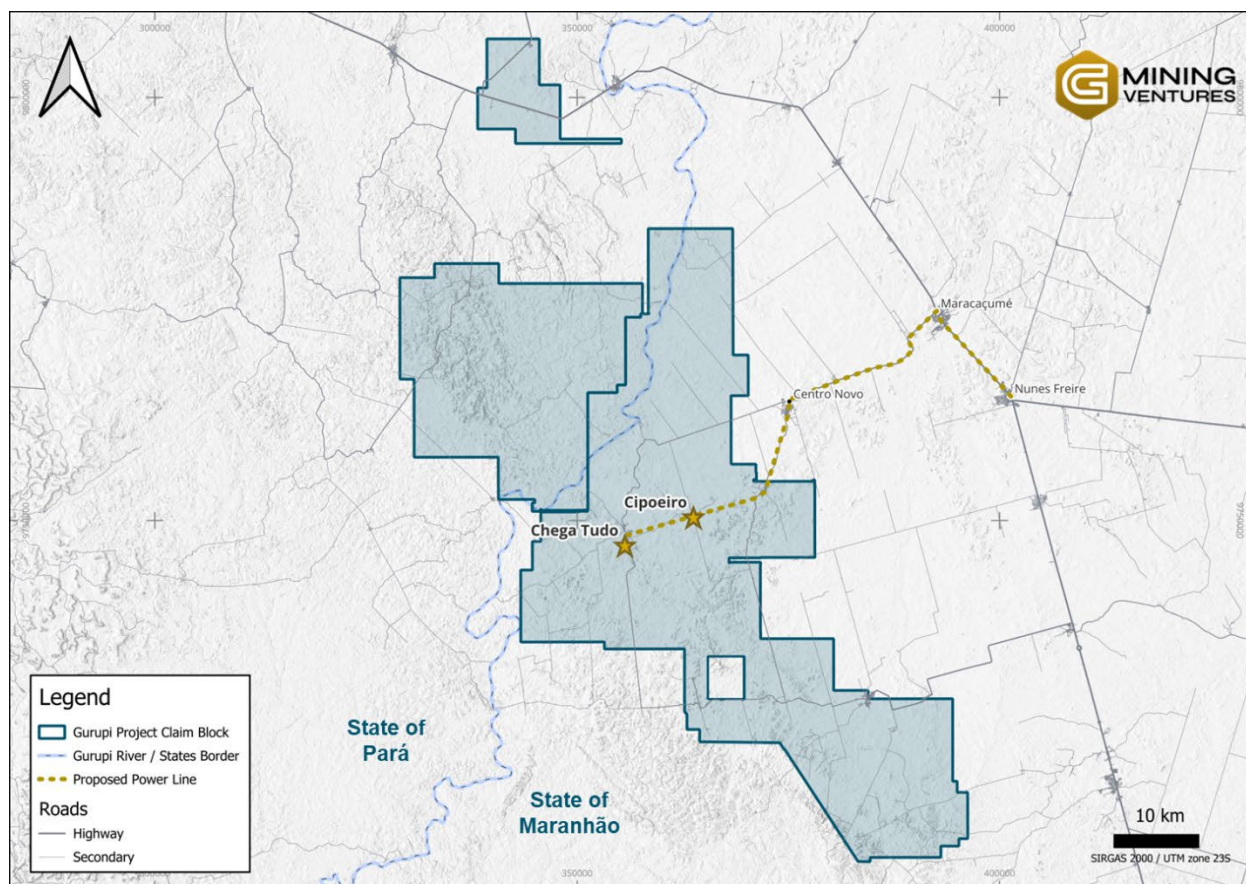
The recommended main supply port for the Project is the Porto Itaqui, located close to the city of São Luis in the State of Maranhão, and about 500 km from the Project. The port has an annual capacity of 15.15 Mtpy, receives about 50 ships per month, with a maximum depth of 19 m, and permits ship sizes of up to Aframax class (160,000 deadweight ton). The port is appropriately equipped to handle supplies for the Gurupi Project.

Power to the project site is currently supplied by the local utility company CEMAR. The current plan for the project's energy system involves a 15 MW supply via the 69 kV Encruzo Substation, located in the city of Governador Nunes Freire (Figure 5.4). This includes the construction of a new 69 kV transmission line approximately 60 km long. Based on previous engineering studies and energy flow simulations, the local energy distributor, CEMAR, had confirmed the capacity of the existing system and identified the necessary reinforcement of existing substations. However, this plan may evolve as the project advances, with adjustments made as needed to accommodate future requirements.

On June 8, 2018, the National Water Agency granted the previous project operator, MCT, preliminary rights for water use (Document No. 663/2018) to extract water from the Gurupi River at a rate of 300 m<sup>3</sup>/hour. This license remains valid for 10 years from its publication date in the Official National Gazette (June 15, 2018).

With GMIN now as the current owner, this study will be revised to ensure it aligns with the project's evolving needs and any updated regulatory or operational requirements.

**Figure 5.4: Powerline Proposition to the Gurupi Project**



Source: GMIN, 2025

### 5.5.1 Services Buildings and Ancillary Facilities

The Gurupi Project comprises three (3) main facility sites: the Portelinha Admin Base, the Chega Tudo Core Shed and the Jibóia Village Camp.

The Project currently benefits from a well-established services infrastructure designed to support the ongoing exploration activities (Table 5.5). The site includes a robust and strategically distributed set of buildings and facilities, which collectively provide maintenance, logistical, administrative and accommodation functions. These structures are located across key operational zones within the mineral rights area, allowing proximity to drilling sites, access roads and support zones.

Current Infrastructure Overview:

- Administrative and Technical Buildings:
  - A main operations office constructed with masonry walls and ceramic roofing, housing workspaces for geology, engineering, environmental and logistics teams.

- Modular offices support overflow personnel and specialized functions, such as sample management and environmental monitoring.
- Air conditioning, network connectivity (high-speed internet), printers, and meeting rooms with projection equipment are available.
- Core Logging and Sampling Facilities (Chega Tudo Core Shed):
  - A large core shed constructed with a metal frame and covered roofing, featuring concrete floors, core racks and lighting.
  - Adjacent sampling area with benches, sample splitting equipment, and storage for sample bags and boxes.
  - Secure archive room for storage of historical core and pulps.
- Maintenance and Support Workshop:
  - Open-sided covered maintenance area with concrete floor for light servicing of field vehicles and equipment.
  - Includes fuel and oil storage, tool kits, portable lighting and basic lifting equipment.
  - Separate areas for mechanical tools and spare parts are kept in secure storage units.
- Accommodation Facilities (Portelinha Admin Base):
  - A permanent accommodation complex with capacity for approximately 80–100 personnel.
  - Buildings constructed with concrete foundations and insulated roofing, including:
    - Dormitories with bunk beds, mattresses, and individual storage lockers
    - Fully equipped kitchen and dining hall.
    - Laundry room and sanitation facilities (toilets, showers, handwashing stations).
    - Recreation room with TV, internet access and rest lounges
- Security, Utilities and Support Structures:
  - Site perimeter is controlled by gated access points with 24/7 security personnel.
  - Diesel generators provide continuous power supply (two units: 60 kVA and 100 kVA), with redundancy for critical operations.
  - Water supply sourced from on-site wells, treated and distributed through a pressurized system.
  - Septic systems and wastewater channels ensure safe disposal of effluent.
  - Emergency response area includes:

- First-aid room with basic medical supplies.
- Fire extinguishers and sand buckets in all main buildings.
- Communication base with two-way radios with 50 km range.
- Field Logistics and Storage Areas:
  - Covered warehouses for fuel drums, drilling supplies, and personal protective equipment (PPE).
  - Open yards for storage of steel pipes, drilling rods, timber, and construction materials.
  - Vehicle parking and turnaround zones with compacted gravel base.

**Table 5.5: Summary of Key Structures**

Facility Type	Description	Construction Type
Administrative Office	Geology, ESG, HSS, admin teams	Masonry with tile roofing
Core Shack	Core storage, logging, splitting	Metal roof, concrete floor
Accommodation Camp	Dormitories, kitchen, laundry, recreation	Masonry and prefab structures
Warehouse and Yard Storage	Drilling and maintenance materials, PPE	Metal sheds, open yard
Water and Power Systems	Wells, generators, fuel storage	On-site, distributed
Emergency and Safety Area	First aid, radios, extinguishers, evacuation protocols	Integrated throughout site

These facilities offer a strong foundation to support both the current exploration program and future development phases. All structures were built in compliance with Brazilian occupational safety and environmental standards (NR-18, NR-24), and align with ABNT technical specifications. Their presence significantly reduces the need for major new construction during the future initial stages of mine development.

#### 5.5.1.1 Portelinha Admin Base

The Portelinha Admin Base, situated in Centro Novo do Maranhão, consists of 79 houses constructed by Jaguar Mining Inc. Of these, 20 are fully furnished and completed. Currently, eight (8) houses serve as accommodation, dining facilities, administrative offices and maintenance spaces. An additional 12 houses are in good condition and available to accommodate staff and visitors. Each house can host up to three (3) workers when used for lodging.

**Figure 5.5: Portelinha Admin Base in Centro Nodo do Maranhão, Maranhão**



Source: GMIN, 2025

#### **5.5.1.2 Chega Tudo Core Shed**

The Chega Tudo Core Shed is located in the village of Chega Tudo and comprises a core logging and handling facility, a core sawing facility and a core storage facility.

**Figure 5.6: Core Logging and Storage Facilities in Chega Tudo, Pará**



Source: GMIN, 2025

### **5.5.1.3 Jibóia Village Camp**

Located in the Jibóia village area of Cachoeira do Piriá, in Pará, this facility features three buildings with four (4) rooms that can accommodate up to seven people. It also includes two (2) meeting rooms, a dining area and a workspace.

**Figure 5.7: Jibóia Village Camp in Cachoeira do Piriá, Pará**



Source: GMIN, 2025

## **6. HISTORY**

Gold was first discovered in the Centro Gold Project area in the 17<sup>th</sup> century by colonial settlers. During the early 1900s and again in the mid-1980s, intermittent small-scale production took place as part of a region-wide rush of artisan miners, known in Brazil as “garimpeiros”. Gold was exploited from oxidized and weathered material from open pits limited to about 40 m in depth. Underground mining of hard rock has not previously occurred.

Exploration around Chega Tudo commenced in 1985 and was undertaken by Serra Mineração Ltda (“SML”) and Rio Tinto. This was followed by exploration by Companhia Nacional de Mineração Ltda (“CNM”) around the Cipoeiro region in 1994; and by TVX Gold Inc (“TVX”) in 1995. A joint venture between TVX and Santa Fe Pacific Corporation (“SFPG”) was established in 1995.

From 1994 to 1997, exploration work programs comprised soil, saprolite, rock chip and channel sampling, information acquisition from airborne-photogrammetry programs, topographic data generation, ground magnetic geophysical surveys, reconnaissance geological mapping, airborne magnetic and gamma-ray surveys, core and RC drilling, and metallurgical testwork. This work resulted in the discovery of the Contact and Blanket deposits and the development of an initial Mineral Resource Estimate for Cipoeiro and the completion of a Scoping Study by Kilborn Engineering Ltd in 1996 for SFPG.

In 1997, SFPG was taken over by Newmont who assumed control of the Project. Between 1997 and 2000, Newmont conducted exploration work at the property, including geological mapping, geochemical sampling, airborne electromagnetic survey, ground magnetic and induced polarization (“IP”) surveys. Drilling programs were completed and a phase of re-logging of older drill holes was undertaken. Geological models and Resource Estimates were subsequently completed, however were not publicly released. Newmont also conducted metallurgical and comminution testwork during this period.

In 1999, TVX completed an independent Mineral Reserve Estimate prior to Newmont placing the project on care-and-maintenance in 2000.

In 2003, Kinross acquired 100% of the project, following a merger with TVX, which had purchased Newmont’s interest in the project. Kinross completed infill and definition core drill programs at the Chega Tudo and Cipoeiro targets (Blanket and Contact), metallurgical testwork, bulk and solids density determinations, and updated the Mineral Resource Estimates. In 2005, an unpublished Feasibility Study was commissioned and completed by AMEC. This study indicated the Project yielded no significant profit based on a conventional open pit mine feeding a semi-autogenous grinding (“SAG”) Mill, Ball Milling, and Stripping and Electrowinning Plant following a Leaching-CIP circuit.

From 2006 through 2008, Kinross resumed mineral exploration around the project with the intention of investigating other potential targets that could increase previously reported Mineral Resources.

In 2009, Jaguar entered into negotiations with Kinross to acquire MCT Mineração Ltda. (“MCT”), the Kinross Brazilian subsidiary that controlled the project. Jaguar then commissioned Pincock, Allen and Holt (“PAH”) to conduct a re-estimation of Mineral Resources, which was completed in early December 2009 and filed on SEDAR (PAH, 2009). Shortly thereafter, Jaguar acquired MCT and commissioned AMEC to prepare a Prefeasibility Study to identify cost savings and additional areas which required additional drilling with the aim of proceeding to a Feasibility Study. AMEC’s Prefeasibility was completed and filed on SEDAR in May 2010 (AMEC, 2010).

Between 2011 and 2016, Jaguar completed no further work on the Project as they were focused on developing other assets within Brazil.

In October 2016, Jaguar entered into an earn-in agreement with Avanco Resources Limited (“Avanco”) where Avanco could earn up to a 100% interest in the Gurupi Project. In October 2017, this deal was finalized, and the project was sold to Avanco and all shares in MCT Mineração Ltd owned by Jaguar were transferred to Avanco. Avanco undertook a program of drilling at the Blanket and Contact deposits and produced a pair of Mineral Resource Estimates in February and March 2018, respectively. Subsequent development drilling at both the Blanket and Contact deposits continued through the Avanco takeover by OZ Minerals (August 2018) through to the end of 2019. MIPTEC Engenharia & Consultoria Ltda. completed a Prefeasibility Study (“PFS”) with additional optimization studies in July 2019.

OZ Minerals published a Scoping Study on Chega Tudo in September 2021 and AMC Mining consultants updated the PFS in October 2021. Updated Mineral Resource Estimates for both Chega Tudo and Cipoeiro were completed in-house in June 2022. AMC provided another PFS update in April 2023. OZ Minerals was acquired by BHP Group Limited (BHP) in 2023.

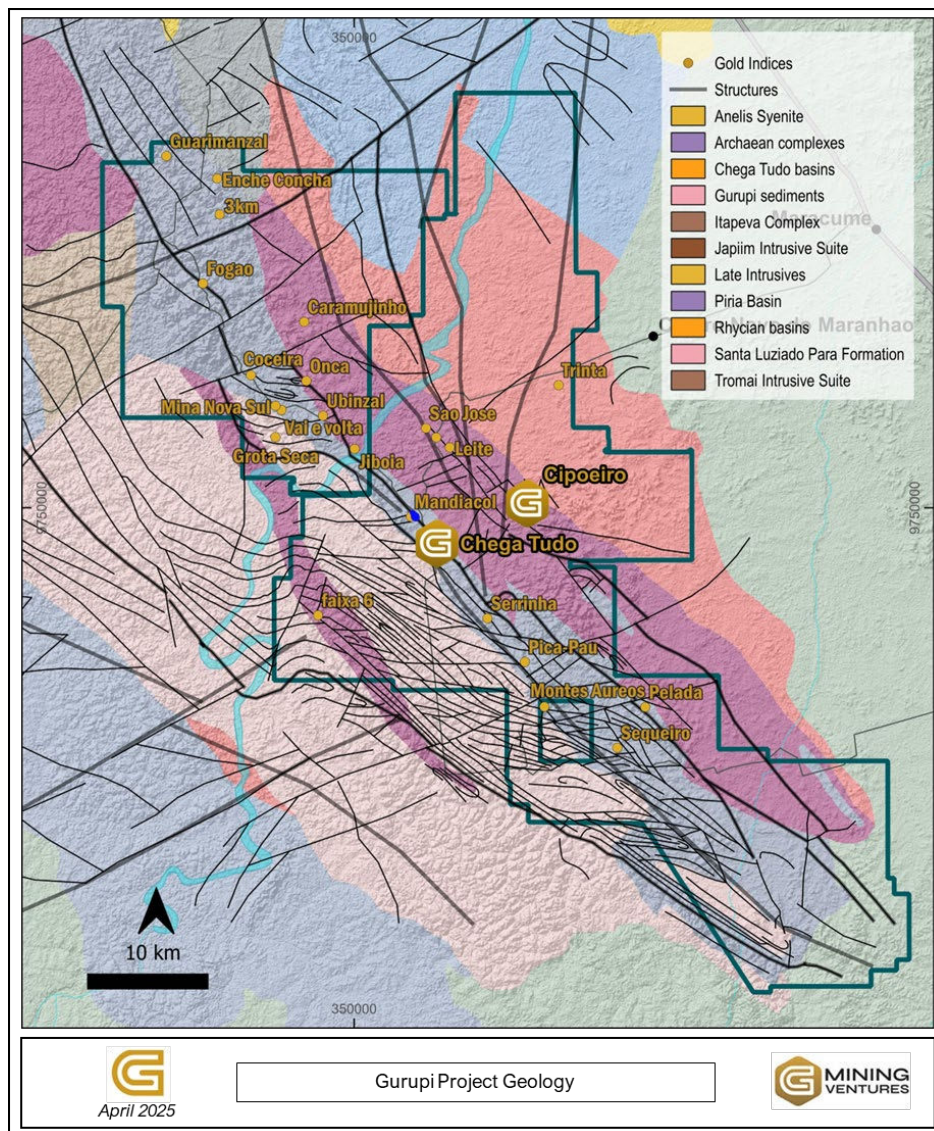
In September 2024, G Mining Ventures Corp. entered into a purchase and sale agreement with BHP to acquire the Gurupi Project. On December 20<sup>th</sup>, 2024, GMIN announced the closure of the acquisition of tenements in the Gurupi Gold Belt from wholly owned subsidiaries of BHP. In consideration for the acquisition, GMIN granted BHP a 1.0% NSR royalty on the first 1 million ounces of gold produced at the tenements and a 1.5% NSR royalty on gold production thereafter (GMIN Press Release, December 2024).

## 7. GEOLOGICAL SETTING AND MINERALIZATION

### 7.1 Regional Geology

The Gurupi Project is located within the Gurupi Belt (Figure 7.1), a Paleoproterozoic gold province in northeastern Brazil, near the borders of Pará and Maranhão states. This region is considered an extension of the prolific Birimian gold province of the West African Craton in South America. The Gurupi Project encompasses three (3) primary mineralized zones, Blanket and Contact deposits part of Cipoeiro and the Chega Tudo deposits, located 8 km apart within the Lower Proterozoic Gurupi Greenstone Belt along the Tentugal Shear Zone.

**Figure 7.1: Property Scale Geological Map**



Source: GMIN, 2025, and CPRM, 2012.

The Project area lies within the northwest-southeast-trending Tentugal shear zone developed along the boundary between the Lower Proterozoic Gurupi greenstone belt and the southwestern margin of the Archaean São Luis craton. The Tentugal shear zone is continuous for over 120 km and in places reaches 30 km in width, forming a corridor of shear zones with variable structural aspects that were developed under ductile–brittle and greenschist facies conditions.

The Gurupi greenstone belt comprises sedimentary and metasedimentary sequences that are tectonically intercalated with amphibolite-facies gneisses and intruded by different generations of granitoids. The highly strained rocks correspond to metasediments and metavolcanic rocks of the Chega Tudo Formation, whereas the less deformed rocks correspond to coarse-grained tonalites of the Tromaí Intrusive Suite.

Most of the gold deposits of the Gurupi greenstone belt, including Cipoeiro and Chega Tudo deposits, are hosted in structures associated with the strike-slip, sinistral Tentugal shear zone. The dominant geological structures in the project area were formed by NE-SW shortening, resulting in NW-SE trending thrust sheets and folds, and EW to ESE-WSW oblique ramps or transfer zones on scales from kilometres to tens of kilometres. The deformation history, which consists of six (6) identified different events, is summarized in Table 7.1.

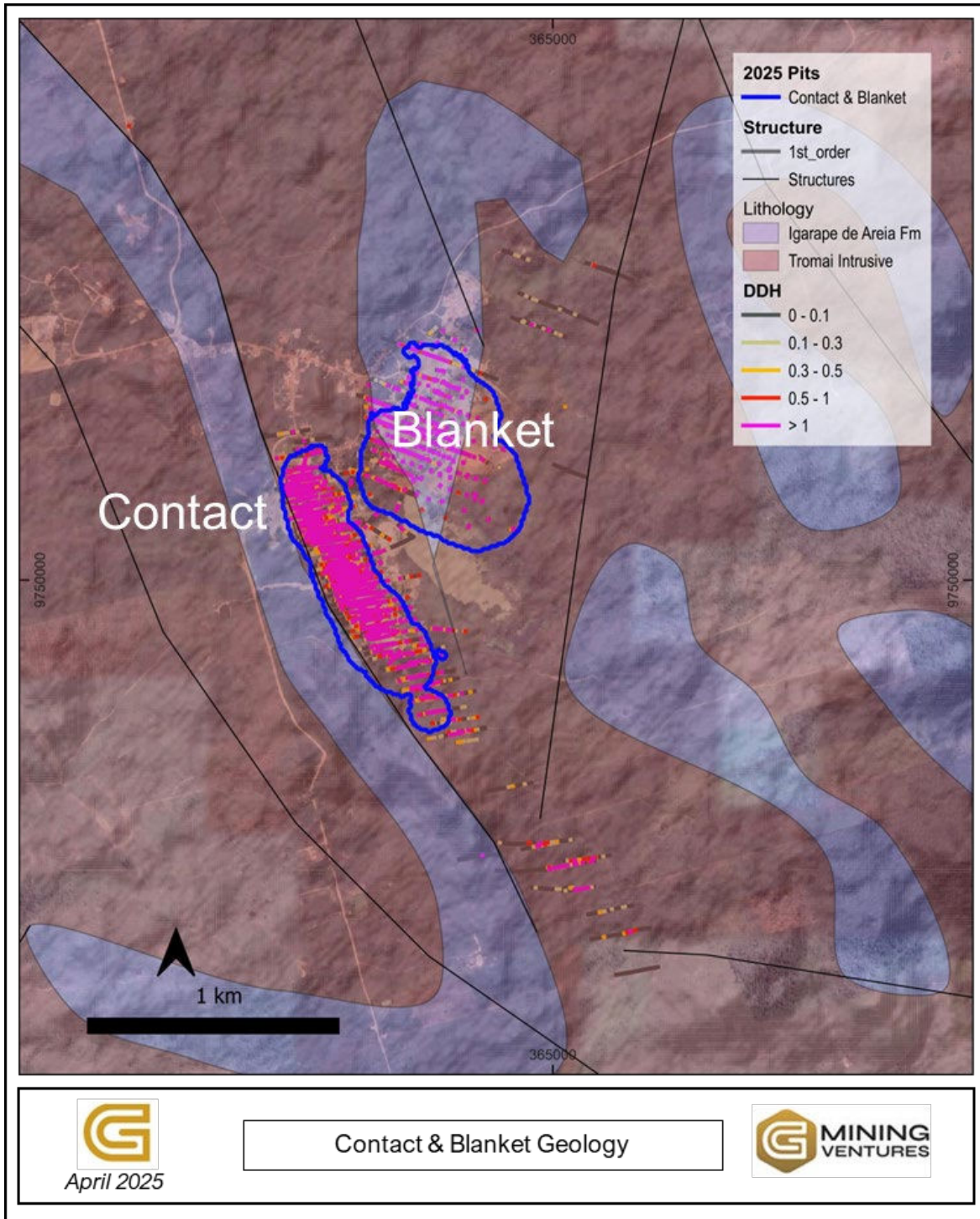
**Table 7.1: Deformation History of the Gurupi Project (Blenkinsop, 2007)**

D#	Structures	Strain
D6	Normal faults on Palaeozoic basin margins	-
D5	Sinistral faulting on NW-SE structures; e.g., Chega Tudo dextral faulting on EW faults	NW-SE shortening
D4	NS dykes	-
D3	NS kink bands	EW to NW-SE shortening
D2	Main S2 foliation, rarely a crenulation cleavage	NE-SW shortening, NW horizontal extension, sub-vertical extension
	NE directed thrusts	
	NW-SE folds with horizontal axes, e.g., Cipoeiro	
	Pinch-and-swell and boudinage of veins sub-parallel to S2	
	Folding of veins that are at high angles to S2	
	Internal boudinage of S2	
	EW sinistral shear zones	
NS <i>en echelon</i> vein arrays in tonalite		
D1	Bedding parallel veins + possible early S1 cleavage	NE-SW shortening

**7.2 Deposit Geology – Blanket and Contact**

Figure 7.2 shows the local geology map of the Contact and Blanket deposit.

**Figure 7.2: Geology of the Contact and Blanket Deposits**



Source: GMIN 2025.

### 7.2.1 Lithology and Alteration

The primary mineralization host is a coarse equigranular tonalite (Tromai Intrusive). The west side of the deposit is bounded by a thick package of fine to medium-grained arkosic arenite with common magnetite layers and cross-bands and minor bands of quartz–pebble conglomerates (Igarape Formation). The clastic sediment unit is several hundred metres thick, strikes parallel to the NW-trending Tentugal shear zone and dips moderately to the SW. The main lithologies are presented in Figure 7.3.

Calcitic plagioclase is the most abundant mineral phase in the tonalite, with up to 15% biotite and lesser amphibole dispersed in a fine-grained quartz–feldspar matrix. At the surface, the saprolite is up to 5 to 30 m thick. Based on geophysical data and drill intercepts, the tonalite forms a large intrusive body that is elongated in a north-westerly direction. The body extends for several tens of kilometres and may be up to 4-km-wide.

**Figure 7.3: Lithology of the Contact and Blanket Deposits**



Source: OZ Minerals, 2022.

### **7.2.2 Structure**

The Blanket and Contact deposits lie adjacently to the structural contact with the arenite sediments of the Chega Tudo formation. The contact between the arenite and the tonalite is marked by a 5 m to 20 m unmineralized fractured / broken zone of brittle shearing, chlorite-sericite alteration and variable silicification. This zone is called the “Contact Fault / Shear Zone” and has been active prior and post mineralization. The “Contact Fault / Shear Zone” parallels the general strike of the Tentugal Shear Zone and has an azimuth of 330° and steep dip of approximately 60° to 70° to the northeast in the southern part of the Contact deposit. At the northernmost point of the Contact deposit, the strike of the contact trends more north-south and the dip shallows to approximately 50° to 60° degrees to the east prior to intersecting with the late stage “Central Fault”.

The Central Fault postdates mineralization and demarcates the boundary between the Contact deposit to the south and the Blanket deposit to the North. The Central Fault offsets the deposit to the east by approximately 200 m. The location of the Central Fault has not been accurately defined by drilling but has been interpreted based on the location and offset of mineralization. The Central Fault has been interpreted to trend approximately 110° and dip moderately (65°) to the SSW.

The North fault demarcates the known boundary of the Blanket deposit to the north. As per the Central Fault, this fault has been interpreted to trend approximately 110° and dip moderately (65°) to the SSW. Further drilling to the north and northeast of the Blanket deposit will result in the accurate demarcation of this structure and confirm whether further extensions to mineralization are present to the northeast.

### **7.2.3 Mineralization**

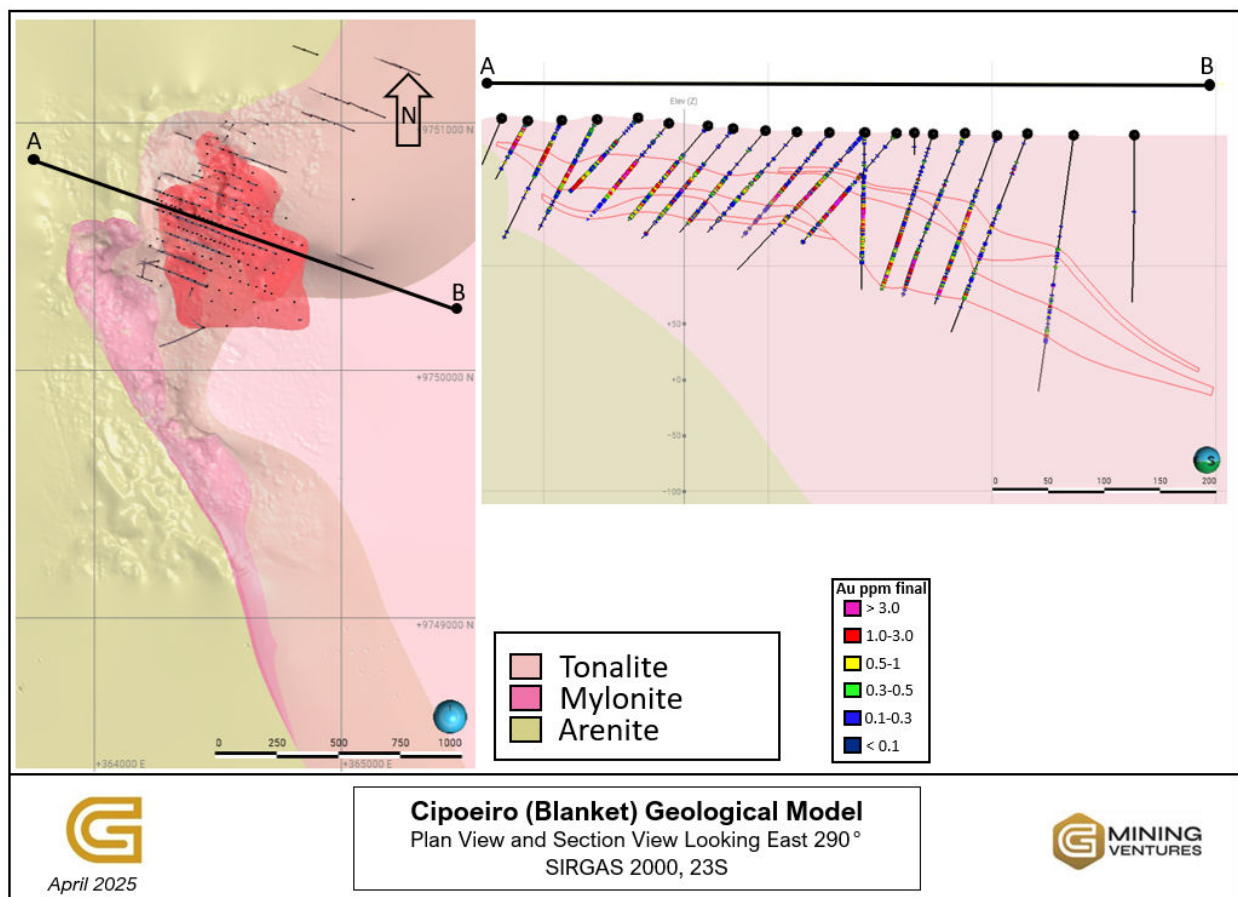
Mineralization at the Blanket and Contact deposits is hosted entirely within the host tonalite. Mineralization has not been identified yet within the adjacent arenite sediments of the Chega Tudo formation. The mineralized zones within the host tonalite typically parallel the dip and strike of the contact with the arenite sediments of the Chega Tudo formation (Figure 7.4). The most important controls for gold deposition appear to be the brittle fracturing, shearing, and folding of the host tonalite.

Mineralization at the Blanket deposit has been deposited in the same structural setting as the Contact deposit. Mineralization is in close proximity to the arenite contact (Figure 7.6) and ranges from a few metres up to 50 m in width.

The Blanket deposit has a strike length of about 800 m, outcrops at the surface to the west, and is open down-dip, at depths below 150 m to the east. It has a semi-convex shape with a 20° to 40° azimuth and

10° to 50° south-easterly dip that flattens eastward, away from the tonalite–arenite fault contact. Mineralization follows diffuse ductile shears that crosscut the tonalite and is associated with quartz-sericite-pyrite alteration within moderately to strongly foliated tonalite. It is proposed the deposit is bounded on the south by the CFZ and on the north by the North Fault Zone (“NFZ”). However, the accurate demarcation of these fault zones has yet to occur as limited drilling has occurred in the vicinity of the proposed fault zones.

**Figure 7.4: Representative Section Through Blanket Showing Grade Distribution Relative to Arenite Contact**

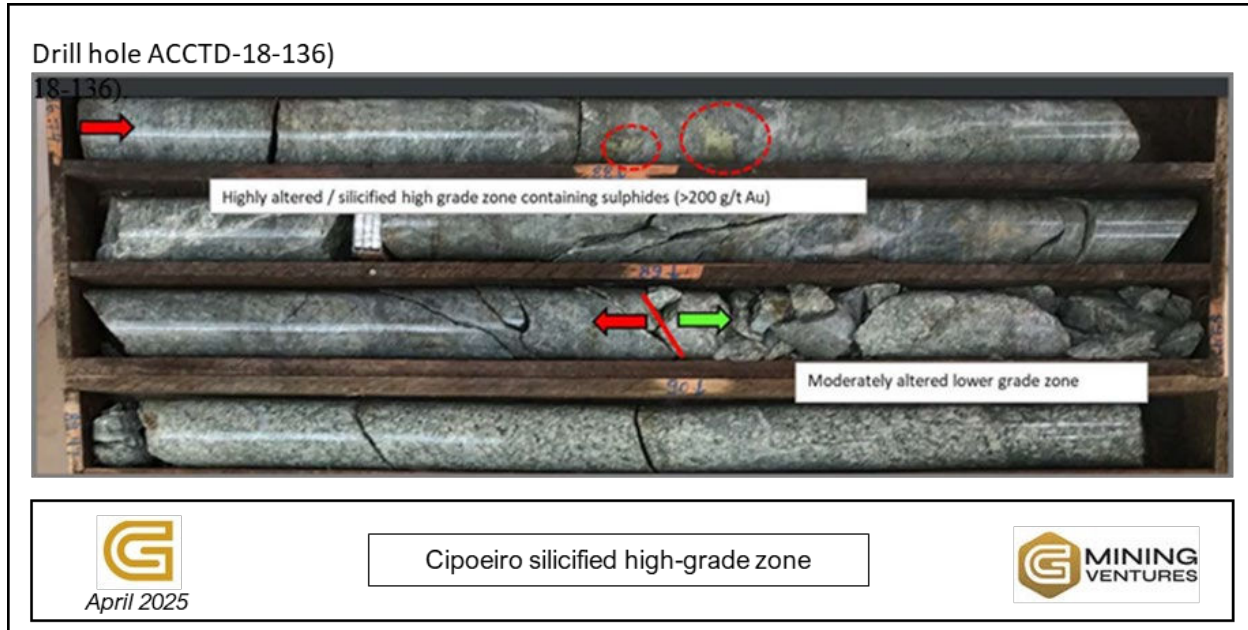


Source: GMS, 2025.

At the Contact deposit, mineralization is concentrated in discrete shear zones / high strain areas where mineralizing fluids have been focused into areas of increased permeability. High-grade lenses vary in thickness from only a couple of metres up to 20 m wide and sit within a broader zone of lower-grade mineralization which can extend up to 100 m from the sheared contact with the arenite sediments. High-grade lenses within the broader low-grade region are characterized by a notable increase in alteration / silicification (Figure 7.5). High-grade zones may also exhibit to some degree a sigmoidal form

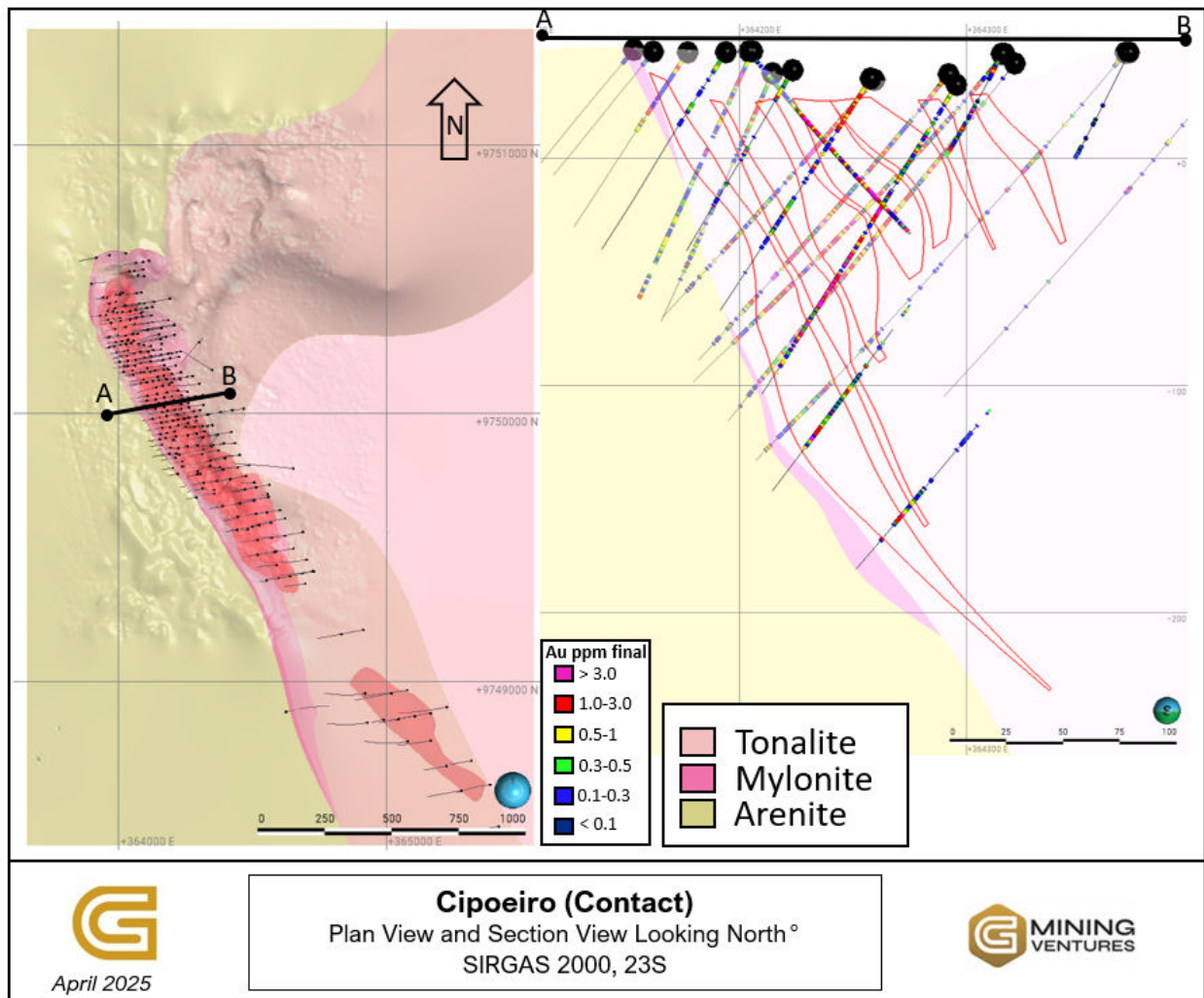
in sections where higher grades are thicker, and steeper-dipping mineralized regions become thinner and more flattened as you progress up and down the dip.

**Figure 7.5: Drill Core Showing Silicified High-Grade Zone with Sulphides**



Source: OZ Minerals, 2022.

**Figure 7.6: Representative Section Through Contact Showing Grade Distribution Relative to Arenite Contact (contact fault)**



Source: GMS, 2025.

Gold is associated with pyrite veinlets and quartz–sericite alteration. Chloritic alteration is strong within the core of the ductile shears and as a widespread saussuritic halo affecting the biotite and amphibole mafic minerals, together with carbonate alteration of the feldspars.

Extensive silicification plus or minus chalcopyrite is noted in higher-grade gold zones. Geochemical analyses of mineralized lenses highlighting gold mineralization is associated with an increase in Ag, Cu, Pb and S values with a corresponding decrease in Ca, Na, Al, Li and Sr values.

The hydrothermal paragenesis, chlorite–pyrite coexistence, temperature of ore formation, and sulfur isotope evidence indicate relatively reduced fO<sub>2</sub> conditions for the mineralizing fluid. Mineralizing fluids have been interpreted as having a metamorphic origin (Klein, 2014).

### 7.3 Deposit Geology – Chega Tudo

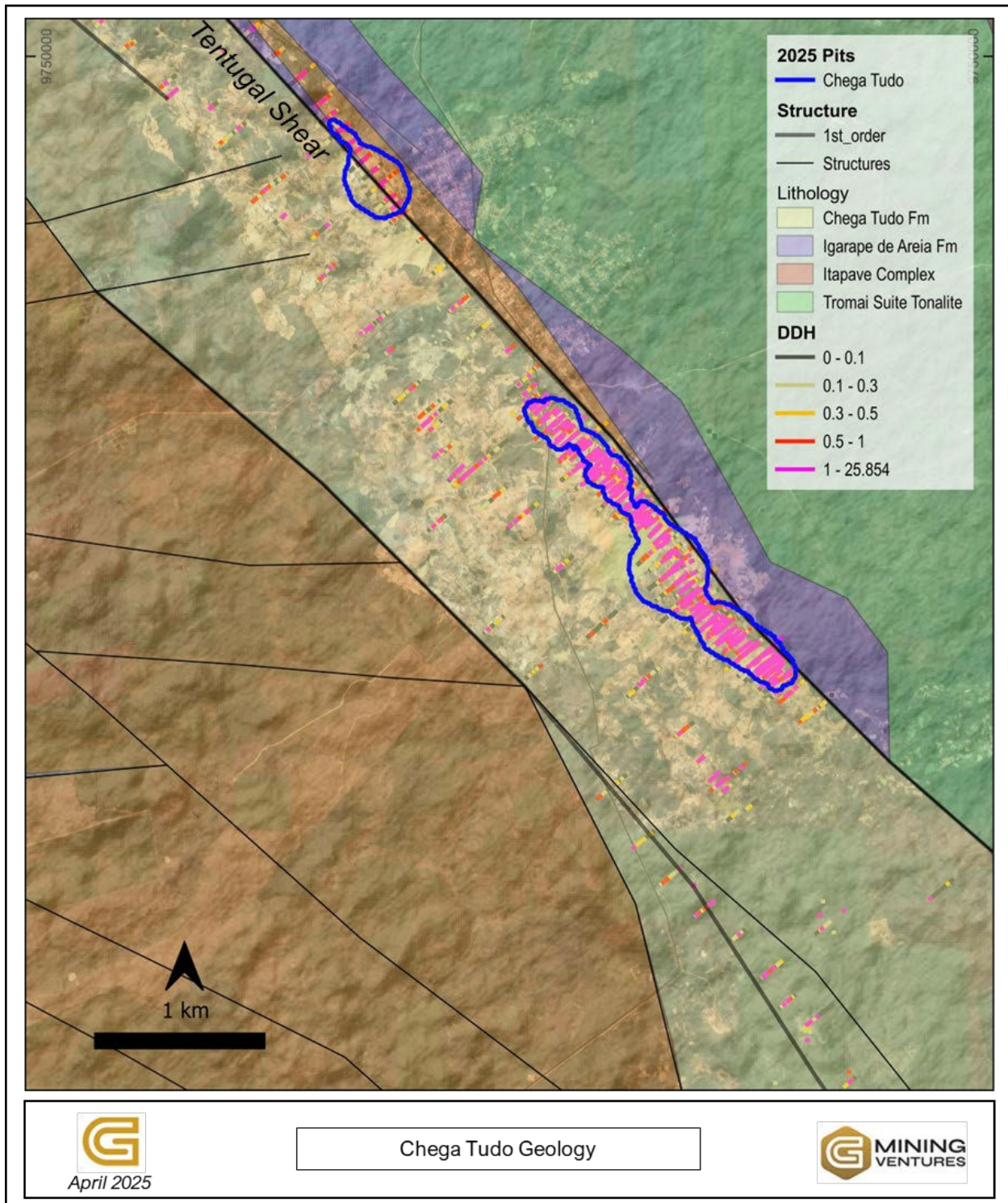
#### 7.3.1 Lithology

The Chega Tudo deposit comprises a series of discontinuous mineralized zones that are confined to highly strained rocks related to 50-150 m wide shear zones developed over the intermediate volcanic rocks of the Chega Tudo Formation. These are bound to the west by a mafic volcanic / sedimentary unit and to the east by an arenite unit developed from the tonalites of the Tromai Intrusive Suite. Mineralized zones are broadly conformable to the subvertical mylonitic foliation and are parallel to the strike.

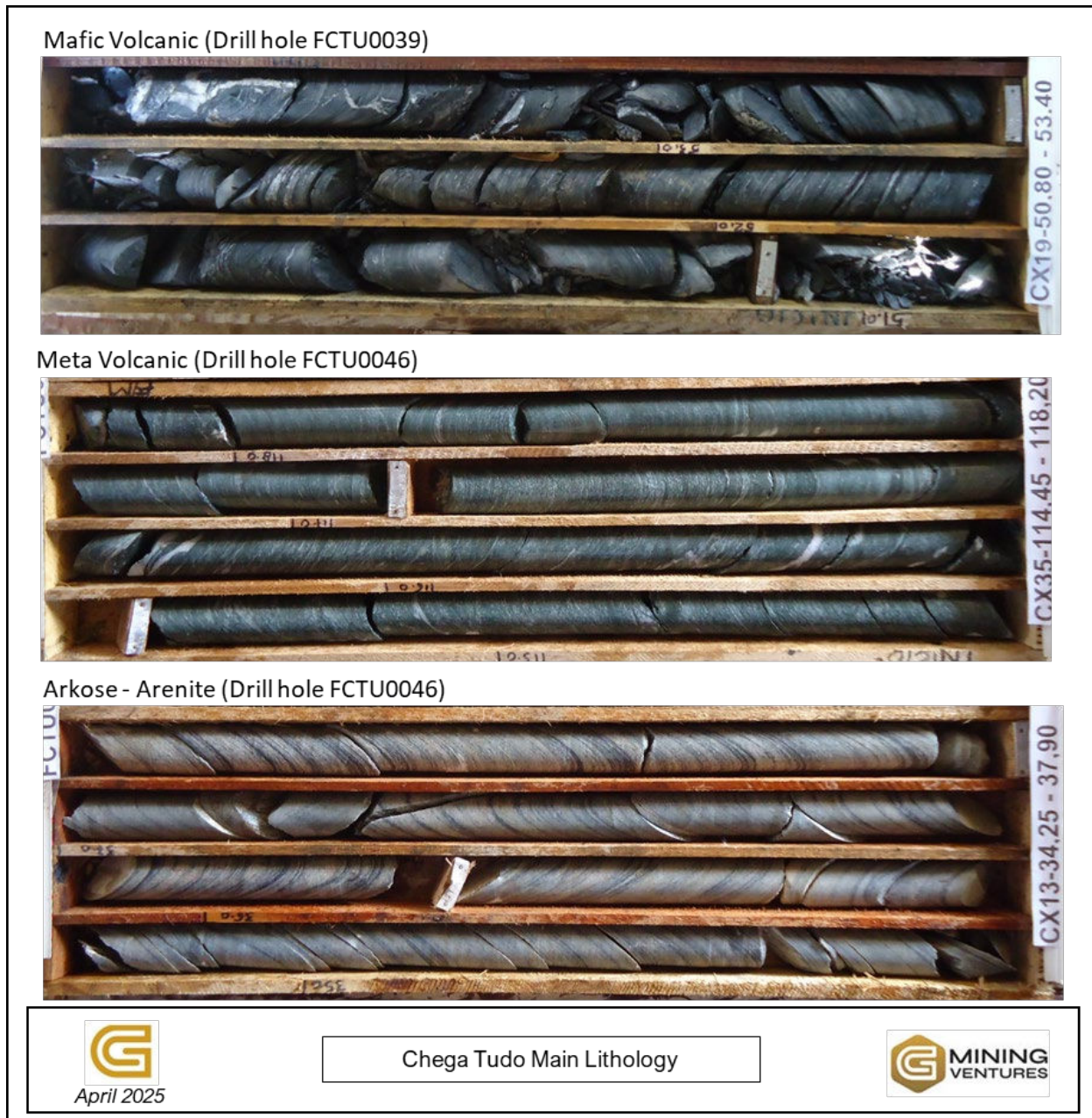
The intermediate metavolcanic unit from the Chega Tudo Formation is well foliated, almost schistose with strong mylonitic bands. The rock is primarily composed of quartz, sericite and plagioclase. Mafic minerals are rare, with chlorite and biotite present in areas of shearing or lesser alteration. Where mineralized, pyrite reaches 1% or more in abundance, along foliation seams and less commonly with quartz as cross-cutting veinlets. The unit reaches 100 m in thickness and can be followed for about 2 km of strike.

The Tromai Suite is formed by a 50 m to 200 m thick package of fine- to medium-grained arkosic arenite. This metasedimentary unit forms a 30 m topographic high elongated parallel to the shear. Sericite to coarse muscovite is common, along with bands and layers of magnetite. The arenite hosts a very minor amount of mineralization, typically as discrete quartz veins up to 2 m in width and persisting along a few hundred metres of strike. Structurally above the intermediate volcanic package that contains the Chega Tudo mineralization is a thick sequence of very fine-grained sedimentary rocks / mafic tuffs that has strongly developed foliation. Lithologies vary from chlorite schist to graphite schist and sericite schist. The section hosts gold mineralization along most of its known strike-length of +20 km; however, the occurrences tend to consist of narrow quartz veins of limited strike length. The main lithologies are presented in Figure 7.8, and Figure 7.7 shows the local geology of the Chega Tudo deposit area.

**Figure 7.7: Chega Tudo Deposit Geology**



Source: GMS, 2025.

**Figure 7.8: Lithology of Chega Tudo Deposit**


Source: GMS, 2025.

### 7.3.2 Alteration

A wide variety of alteration assemblages has developed depending upon the original lithology; however, two (2) principal alteration assemblage have been mappable: quartz sericite pyrite and chlorite carbonate epidote.

Mineralization is found solely within zones of quartz-sericite-pyrite alteration, whereas the chlorite-carbonate-epidote alteration extends throughout the Tentugal shear zone. Mineralization is closely related to the degree of pyrite introduction. Sericite and quartz replacement forms a broader more diffuse halo beyond the limits of potentially economic gold deposition. Pyrite occurs as thin stringers and disseminations along the foliation planes; to a lesser degree, it occurs with quartz as thin veinlets conformable to locally cross-cutting foliation. Pyrite content ranges from zero to upwards of 5%, typically averaging about 1% to 2% with mineralization.

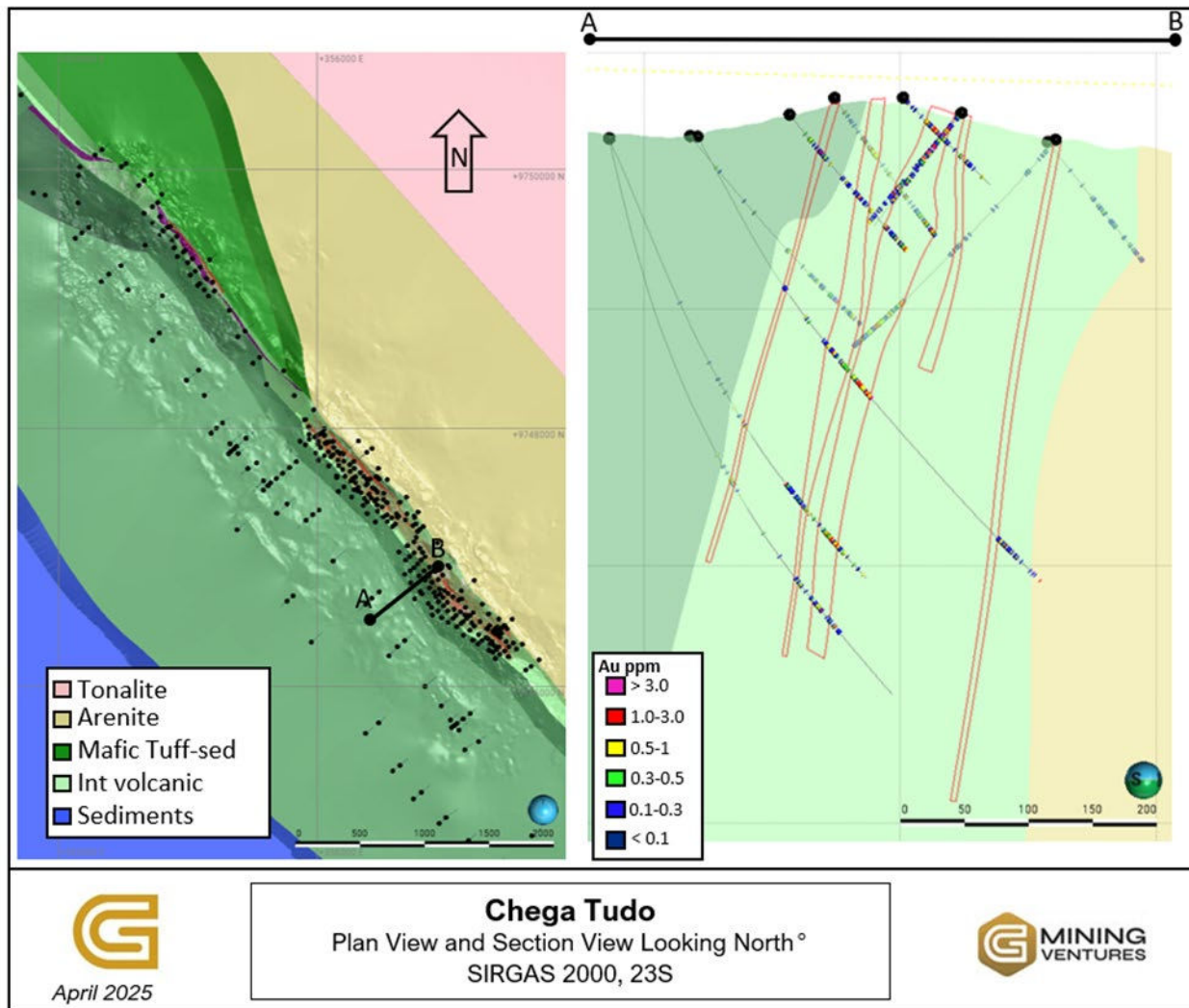
### **7.3.3 Structure**

The Chega Tudo deposit is found within the central core of the 120 km long Tentugal Shear zone. Gold occurrences are known throughout the entire length of this major Gurupi Greenstone Belt and are concentrated within the highest-strain portion that can reach 300 m in width.

The shear has produced intense foliation and cleavage planes striking at 320° and dipping steeply west to vertical. Zones of gold mineralization are closely conformable with the foliation and appear to plunge steeply north. No cross faults have been mapped in the deposit area due to the paucity of outcrop. Northwest-trending faults are interpreted to cut the deposit based on topographic features and rapid changes in the width of rock units.

### **7.3.4 Mineralization**

Gold is associated with quartz sericite pyrite alteration that is generally conformable to the N40W, 80-90 SW foliation trend of the shear zone. Typically, mineralization forms *en echelon* pods elongated with the shear foliation and persisting for tens to hundreds of metres of strike and a similar distance down dip. These northwest-trending, steeply southwest-dipping mineralized zones range from a few metres to as much as 30 m in width and can form multiple pods that can be several hundred metres in length. Mineralization is hosted entirely within volcanic from the Chega Tudo Formation (Figure 7.9).

**Figure 7.9: Representative Section Through Chega Tudo Showing Grade**


Source: GMS, 2025.

#### 7.4 Weathering

Surficial weathering has completely destroyed the original mineralogy and textures, forming a saprolitic clay to depths as great as 40 m with an average of approximately 25 m. In this saprolite zone, gold occurs as free grains in an oxidized matrix. Laterite is absent over the deposit area; it was likely formed along with the saprolite but has been stripped by erosion.

## **8. DEPOSIT TYPES**

The Project deposits are considered typical of mesothermal or orogenic-style gold deposits. The discussion below is sourced from Moritz (2000), Goldfarb and al., (2005), and Groves and al., (1998; 2003). Orogenic deposits have many synonyms, including mesozonal and hypozonal deposits, lode gold, shear zone-related quartz-carbonate deposits, or gold-only deposits.

Orogenic gold deposits occur in variably deformed metamorphic terranes formed during Middle Archaean to younger Precambrian, and continuously throughout the Phanerozoic. The host geological environments are typically volcano-plutonic or clastic sedimentary terranes, but gold deposits can be hosted by any rock type. There is a consistent spatial and temporal association with granitoids of a variety of compositions. Host rocks are metamorphosed to greenschist facies but can locally achieve amphibolite or granulite facies conditions.

Examples of orogenic gold deposits worldwide include Muruntau (Uzbekistan), Golden Mile (Australia), Hollinger-McIntyre-Moneta (Canada), Jamestown (USA), and Obuasi (Ghana). Gold deposition occurs adjacent to first-order, deep-crustal fault zones. These first-order faults, which can be hundreds of kilometres long and kilometres wide, show complex structural histories. Economic mineralization typically formed as vein fill of second- and third-order shears and faults, particularly at jogs or changes in strike along the crustal fault zones.

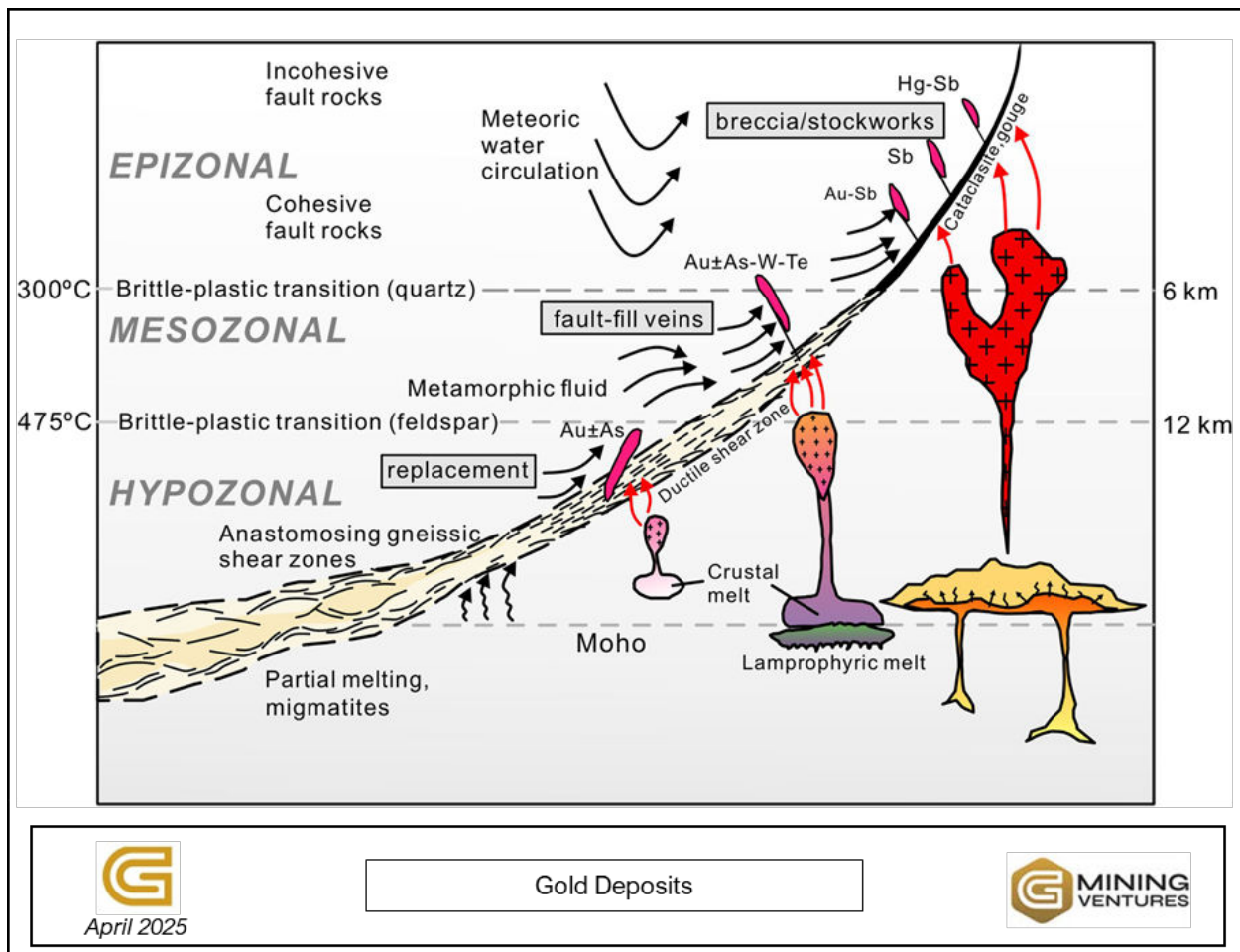
Mineralization styles range from stockworks and breccias in shallow, brittle regimes to laminated crack-seal veins and sigmoidal vein arrays in brittle-ductile regions, and replacement- or disseminated-type orebodies in deeper, ductile environments. Mineralization can be disseminated or vein hosted, and displays a timing that is structurally late, and is syn- to post-peak metamorphic. Quartz is the primary constituent of veins, with lesser carbonate and sulfide minerals. Minor accessory albite, chlorite, white mica (fuchsite in ultramafic host rocks), tourmaline and scheelite can accompany the veins. Carbonates include calcite, dolomite, and ankerite. Sulfide minerals can include pyrite, pyrrhotite, chalcopyrite, galena, sphalerite and arsenopyrite. Gold is usually associated with sulfide minerals but can occur as free gold.

In volcano-plutonic settings, pyrite and pyrrhotite are the most common sulfide minerals in greenschist and amphibolite grade host rocks, respectively. Arsenopyrite can be the predominant sulfide mineral in mineralization hosted by sedimentary rocks. Gold-to-silver ratios typically range from 5:1 to 10:1 but can occasionally reach 1:1. Most orogenic gold deposits contain 2% to 5% sulfide minerals and gold fineness greater than 900 µm. Alteration intensity is related to distance from the hydrothermal fluid source and typically displays a zoned pattern. Scale, intensity and mineralogy of the alteration are functions of wall rock composition and crustal level. The main alteration minerals include carbonate (calcite, dolomite, and

ankerite), sulfides (pyrite, pyrrhotite or arsenopyrite), alkali-rich silicate minerals (sericite, fuchsite, albite, and less commonly, K-feldspar, biotite, paragonite), chlorite, and quartz.

The larger examples of orogenic deposits are generally 2 km to 10 km long, about 1 km wide, and can extend vertically over 1 to 2 km. Figure 8.1 presents a schematic image of mesozonal gold deposits.

**Figure 8.1: Gold Deposits**



Source: Goldfarb et al., 2022

## **9. EXPLORATION**

This section describes all non-drilling-related exploration work carried out in the Project area. Drilling is discussed in Section 10 of this report. Exploration was undertaken by TVX, SFPG, Newmont, Kinross, Jaguar, Avanco or OZ Minerals, using their own personnel or contractors.

Exploration activities on the Project have included acquisition of airborne photogrammetry base, topographic data, reconnaissance, regional and detailed geological mapping, soil, saprolite, rock chip and channel sampling, ground and airborne geophysical surveys, RC and DDH, mineralization characterization studies and metallurgical testing of samples. Petrographic, fluid inclusion, stable isotope studies, and density measurements on the different lithologies have also been carried out.

### **9.1 Grids and Surveys**

Initial exploration activity used a local grid. During the initial Project work, about 1,603-line km of grid were cut.

During 2004, Kinross contracted SERTOPLAN to perform a 2 m resolution topographic survey of the artisanal miner pits with a precision GPS and IBGE landmark coordinates. This corrected minor inaccuracies in the previous georeferencing of the grid. Topography was checked based on field surveys completed by licensed Brazilian surveyors using modern Total Station survey instruments. The field surveys confirmed the current limits of the artisanal miner pits in the topographic surface.

The local grid was eschewed in favor of UTM coordinates (WGS84, 23S) in 2007. An additional series of geodetic landmark pairs were emplaced at this time.

In 2009, topography issue was noticed by PAH in preparation for the Cipoeiro Technical Report. This is attributed to inaccurate georeference and the resultant transformation between local grid systems. The drill collars were considered known points with accurate surveys, so to minimize errors, MCB and PAH agreed that modifying the existing topography to include the drill hole collars for the purposes of the 2009 Technical Report, would result in the most accurate representation of the topography in the old grid system and for the 2009 PAH Mineral Resource Estimate.

A review of the modified topography by PAH indicated that this surface represented the topography appropriately. Although there were some problematic areas, PAH was of the opinion that these areas were not material to the Cipoeiro deposits and did not result in inclusion or exclusion of a significant amount of material.

In 2011, Jaguar contracted licensed surveyors to check coordinates of topographic landmarks, and monuments, and to install new landmarks for the Detailed Engineering phase. TechnoMine reviewed the surveyors work and confirmed that accuracy was sufficient for a feasibility level of confidence. The UTM system SIRGAS 2000 replaced the WGS84 system as the project default in the latter half of the year.

A new LiDAR survey (Figure 9.1) was flown in 2019 and post-processed into Digital Terrain Models for use in Mineral Resource Estimation. A review of the supplied topographic surface against drill hole collar coordinates highlights a good correlation for all drill holes which were drilled on the natural surface.

## **9.2 Geological Mapping**

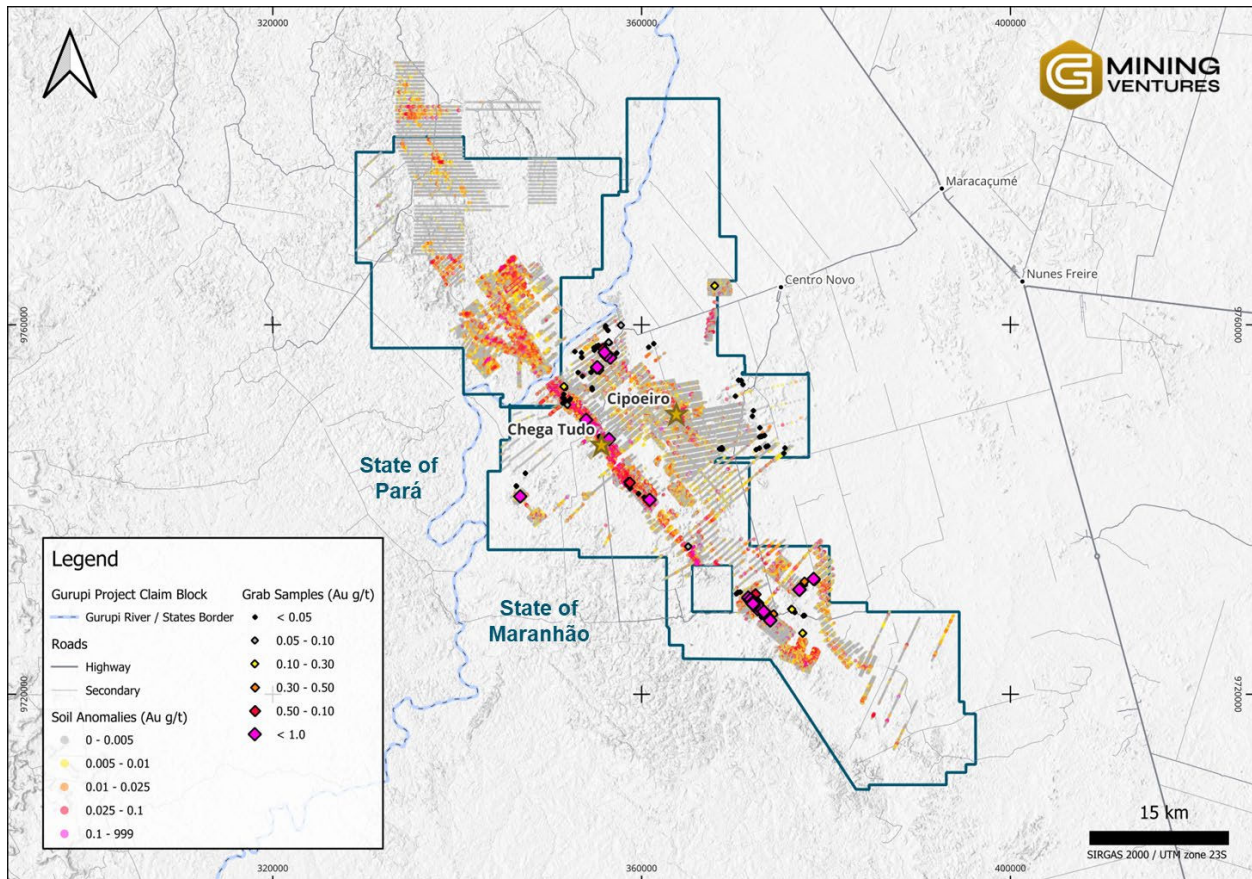
Regional and detailed geological mapping was completed in several phases, with map scales varying from regional (1:50,000) to local (1:500). Regional-scale mapping was conducted using photogrammetric data, while prospect-scale mapping relied on grid-based control.

The geological mapping has been a continuous effort carried out by successive project owners since the initial discovery. Mapping results were used to identify areas of quartz veining, alteration and sulfide outcrops that warranted further investigation. Additionally, the interpretation of aerial imagery helped vector into areas requiring more detailed geological mapping and sampling.

## **9.3 Surface Geochemistry**

Soil and grab samples were utilized to assess mineralization potential and identify exploration targets. A comprehensive total of 59,506 soil samples and 1,016 grab samples were systematically collected throughout the Gurupi Project (Figure 9.1). Positive sample results underwent further analysis, contributing to the refinement of prospective areas within the project.

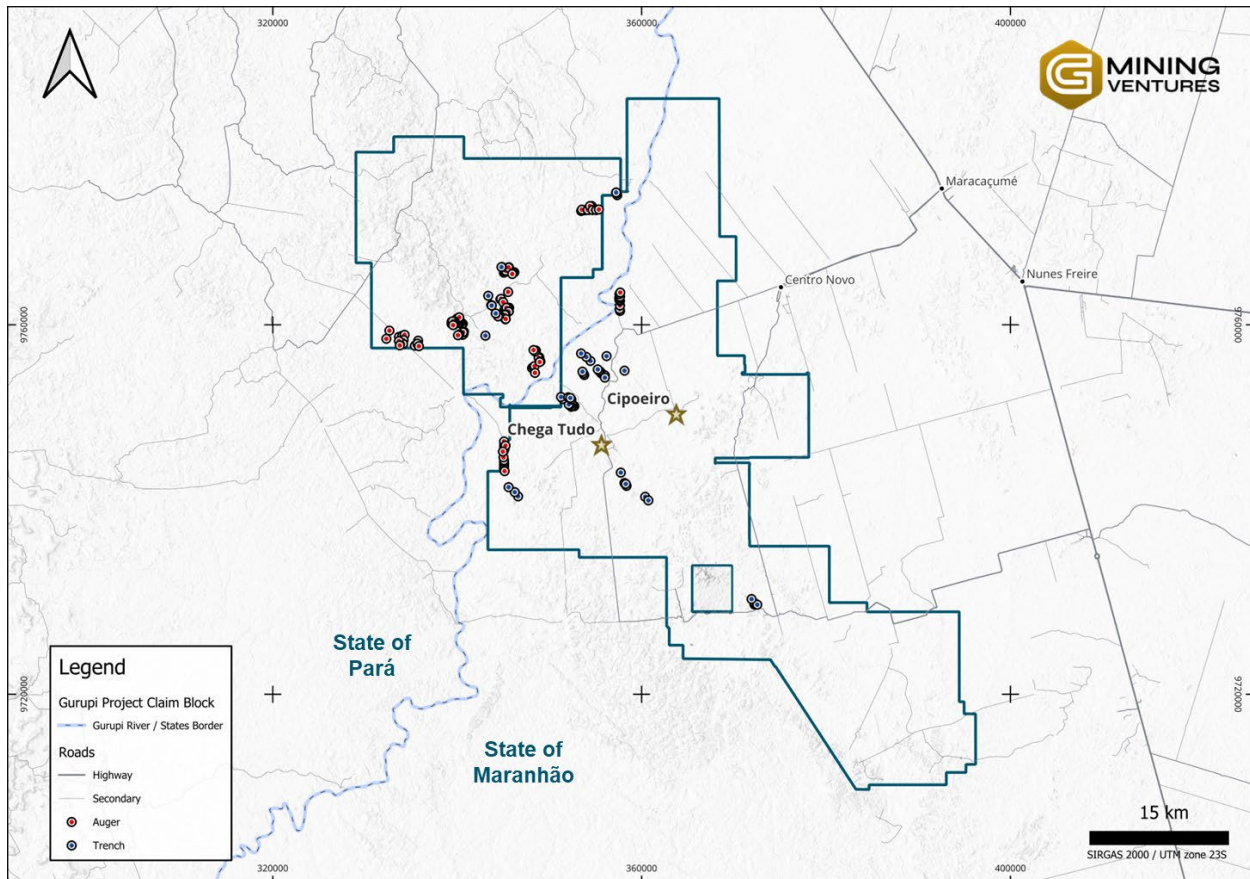
**Figure 9.1: Soil and Grab Samples on the Gurupi Project**



Source: GMIN, 2025

#### 9.4 Trenching and Auger

In areas where additional exploration was warranted following positive results from soil and grab sample campaigns, auger and channel sampling were conducted to generate targets for RC and DDH. A total of 136 auger and 54 trenches were completed within the project area (Figure 9.2).

**Figure 9.2: Channel and Auger Samples on the Gurupi Project**


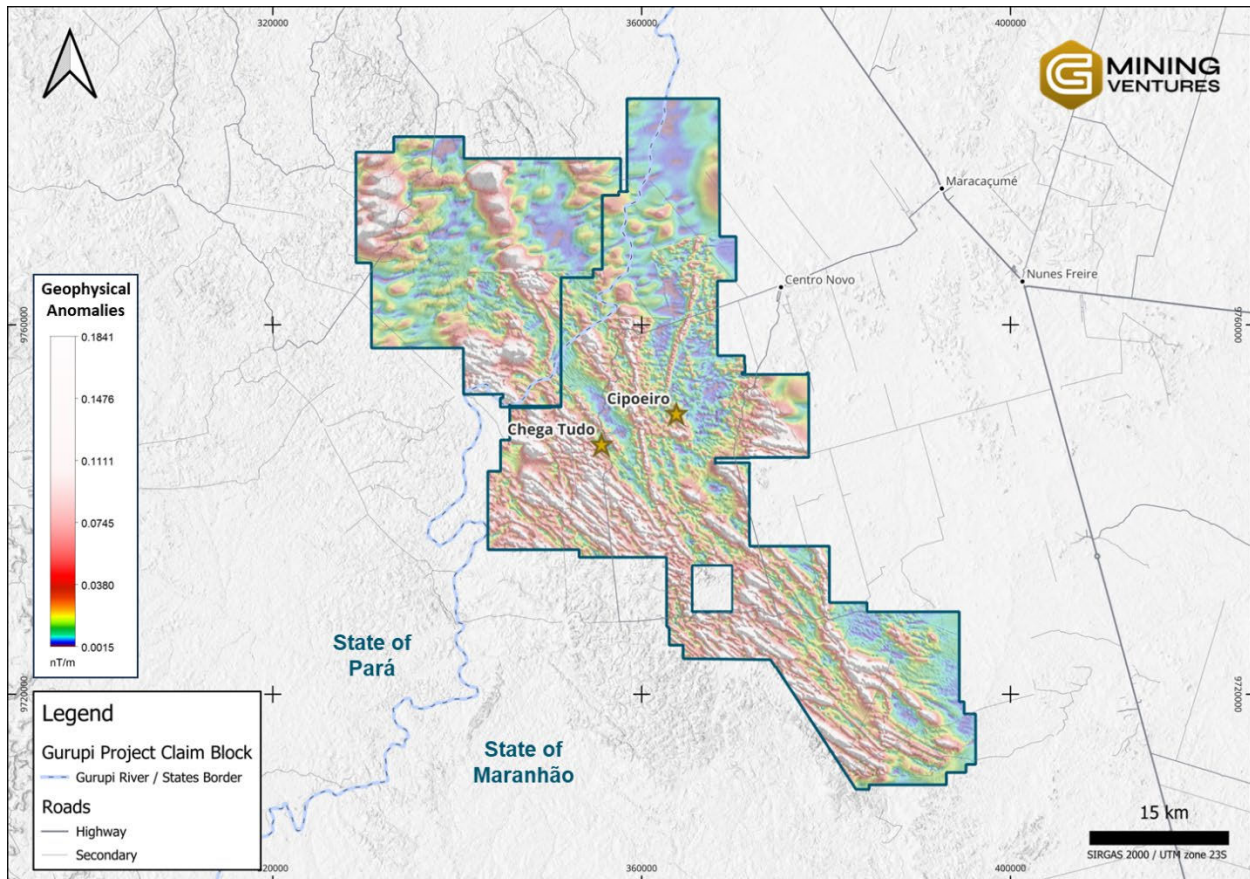
Source: GMIN, 2025

## 9.5 Geophysical Surveys

Airborne geophysical surveys, comprising magnetic, radiometric and electromagnetic (“EM”) data acquisition, treatment, and interpretation were used to vector into mineralization and generate targets for drill programs.

Surveys were performed by contract expert geophysical firms. The airborne magnetic and radiometric survey covered about 10,180-line km, in an area of about 1,900 km<sup>2</sup> (Figure 9.3). The EM Survey covered an area of about 497 km<sup>2</sup>, corresponding to approximately 2,655-line km. Airborne geophysical anomalies were checked on the ground using ground geophysics Magnetics and Induced Polarization (“IP”) surveys.

Ground surveys were performed by Newmont and Kinross personnel. Ground magnetic surveys were performed at Chega Tudo, covering 43-line km and an area of approximately 10 km<sup>2</sup>. A total of 64-line km of IP surveys were completed at Cipoeiro and Chega Tudo, covering a total area of 22 km<sup>2</sup>. Geophysical surveying has been effective in mapping sulfide mineralization, which could include gold mineralization associated with regional structural trends and associated splay structures.

**Figure 9.3: Magnetic Geophysical Survey Flown Over the Gurupi Project (total magnetic intensity)**


Source: GMIN, 2025

## 9.6 Other Studies

The Brazilian Geological Service (“CPRM”) undertook detailed geological, mineralogical, isotopic and age-dating studies on the Gurupi Belt, which included generating chemical data for hydrothermal chlorites and stable isotope (O, H, C, S) compositions of silicate, carbonate, and sulfide minerals from the Chega Tudo and Cipoeiro deposits. These chemical and isotopic results, in addition to field, structural, and petrographic information, enabled the CPRM staff participating in the studies to discuss petrogenesis-related variables of the Cipoeiro and Chega Tudo deposits, including temperature and redox conditions of mineralization, as well as possible sources for fluids and metals.

Such data have a major influence on metallogeny models for exploration, and therefore on exploration program layouts. Five (5) mineralization samples were examined using scanning electron microscopy to aid in gold mineralogy determinations.

## **10. DRILLING**

This section includes details on drilling procedures employed at the Gurupi Project, and a compilation of drilling statistics by drilling type. Drilling can be summarized into the following types:

- Shallow scout RC holes which were typically 4-5 inches in diameter.
- DDH which was typically HQ size through the oxide and saprolitic horizons and NQ size in bedrock.

Core orientation was used during the 2017–2019 period by Avanco / Oz Minerals.

### **10.1 Drilling Statistics by Period**

A summary of the drill campaigns performed by each company on each project is tabulated in Table 10.1.

**Table 10.1: Drilling (DDH-RC) Conducted Each Project Area by Period**

Company	Period	Deposit	Diamond Drilling			Reverse Circulation		
			Number of Holes	Total Length (m)	Assayed Length (m)	Number of Holes	Total Length (m)	Assayed Length (m)
SFPG / Newmont	1995-1999	Blanket	60	10,386.1	10,278.0	32	3,297.0	3,296.0
		Contact	64	10,611.7	10,604.5	23	2,295.0	2,295.0
		Chega Tudo	70	11,850.5	11,775.2	152	16,045.1	16,021.1
Kinross	2003-2008	Blanket	24	3,492.8	3,488.4	-	-	-
		Contact	28	4,480.0	4,390.9	6	740.0	740.0
		Chega Tudo	100	14,119.6	14,112.7	10	1,188.0	1,188.0
Jaguar	2011-2012	Blanket	19	2,986.1	2,660.8	-	-	-
		Contact	31	6,131.2	5,638.8	-	-	-
		Chega Tudo	66	17,540.5	12,682.4	-	-	-
Avanco / Oz Minerals	2017-2019	Blanket	87	10,916.9	6,223.2	-	-	-
		Contact	179	22,773.8	22,773.2	-	-	-
		Chega Tudo	-	-	-	-	-	-
<b>Total</b>			<b>728</b>	<b>115,288.9</b>	<b>104,627.8</b>	<b>223.0</b>	<b>23,565.1</b>	<b>23,540.1</b>

## 10.2 General Drilling Procedures

### 10.2.1 Hole Numbering

The drill hole numbering convention has varied by historical period.

- **Avanco / Oz Minerals** used an alpha prefix denoting the company and deposit name (e.g. Avanco Cipoeiro Contact zone) followed by one (1) letter indicating the drill type (e.g. “D” for diamond, “R” for reverse circulation). A dash is then followed by a two-digit year and a second dash is followed by a numeric suffix (e.g. ACCTD-18-102).
- **Jaguar** used an alpha prefix F and two (2) letters denoting the deposit name followed by a four-digit numeric suffix (e.g. FCP0022). Blanket and Contact were both labelled as CP for Cipoeiro.
- **Kinross** used a three-character alpha prefix denoting the company name and deposit name (e.g., Kinross Chega Tudo) followed by a two- or three-character numeric suffix. (e.g. KCT260). Blanket and Contact were both labelled as CP for Cipoeiro. For RC holes, the third letter was replaced with an R (e.g. KCR04), losing the distinction between deposits.
- **SFPG / Newmont** used alpha prefix using GU to denote the Gurupi Project or GX to denote Gurupi RC holes followed by two (2) letters to denote the target followed by a 4-digit numeric sequence. (e.g., GUMD0053 indicates the Gurupi Project Mandiocal target within Chega Tudo). Many of the original targets are now grouped into overarching deposits.

For each generation, a single drill hole suffix sequence was used across all deposits. It is sequential from year-to-year, i.e. did not revert to “1” each year. Re-drilled holes consistently have the same Hole-ID as the original with a character suffix (e.g. ACCTD-18-083A).

### 10.2.2 Drill Rig Supervision

The following section was summarized from Oz Minerals Standard Operating Procedures (SOP).

On the Gurupi Project, drill rig supervision is done by a geologist, or his subordinate. They perform the following tasks:

1. Pre-Drilling Inspection:
  - a. Check the site and complete the drilling checklist.
  - b. Approve or notify the supervisor if issues need resolution.
2. During Drilling:
  - a. Monitor safety, environment, and organization.

- b. Take photos for records.
3. Post-Drilling Checks:
  - a. Verify product standards (core boxes labelled, closed, and documented).
  - b. Ensure correct final depth calculation: Final depth = (Number of rods × Rod length) + Core barrel length – Drill rig height.
  - c. Discard leftover rods if not cleared.
4. Finalization:
  - a. Complete and archive the drilling checklist in the drill hole folder on the company server.

### **10.2.3 Drill site preparation**

The layout of the drill site permits safe drilling operations following these guidelines:

- Use topographic maps and GPS to locate drill points.
- Communicate with landowners before starting work.
- Assess the suitability of drill points for equipment size, safety, and environmental impact.
- Mark suitable points with wooden stakes; propose alternatives if needed.
- Prepare access routes and drill yards with heavy machinery, noting if earthmoving or grounding is required.
- Approval from the survey company is mandatory before moving equipment to the site.

### **10.2.4 Drill Hole Surveys**

#### **10.2.4.1 Collar Survey**

Initial exploration was done on a local grid, with approximately 1,603-line km of grid being cut during the initial Project work. During the 1990s, collars were surveyed with handheld GPS units (presumed WGS84, 23 S) and converted to the local grid. Total Stations or Differential GPS (DGPS) devices were used to survey collars from 2003 onwards. Starting in 2007, the local grid was retired, and all subsequent work was done in UTM. All collar data was entered into the database by hand and visually checked. Table 10.2 summarizes the collar survey methods and datums used during each time period.

**Table 10.2: Collar Survey Methods by Period**

Company	Period	Collar Survey Method	Datum Used
SFPG / Newmont	1995	Local grid only?	Local grid only?
	1996–1999	Handheld GPS + Local grid	WGS84, 23 S + Local grid
Kinross	2003	Total Station or DGPS	WGS84, 23 S + Local grid
	2004	Total Station or DGPS	WGS84, 23 S + Local grid (corrected)
	2007–2008	Total Station or DGPS	WGS84, 23 S
Jaguar	2011–2012	Total Station or DGPS	SIRGAS 2000, 23 S
Avanco / Oz Minerals	2017–2019	Total Station or DGPS	SIRGAS 2000, 23 S

#### 10.2.4.2 Downhole survey

Downhole survey methodology and tools have varied by company and time period. RC holes typically do not have downhole surveys. Historical DDH had single shot surveys taken approximately every 40 m. Recent DDH typically have multishot surveys on 3 m intervals taken once the hole is completed. All survey data were manually entered into the database and visually checked. No validation procedures are known. Table 10.3 summarizes the downhole survey tools and known practices during each time period.

**Table 10.3: Downhole Survey Methods by Period**

Company	Period	Downhole Survey Tool	Measurement Interval	Tool Specifications
SFPG / Newmont	1995-1999	Tropari	unknown	Noted in previous reports, no specific records found. Accuracy +/- 6.5°
		EZ-Shot	~ 40 m	
Kinross	2003-2004	EZ-Shot	~ 40 m	Magnetic single shot. Az +/- 0.5°, Dip +/- 0.2°
	2007-2008	Fotobor DDI	3 m	Gyro multishot. Requires reference azimuth input. Accuracy unknown
Jaguar	2011-2012	Maxibor II	3 m	Non-magnetic multishot. Accuracy +/- 0.5°
Avanco / Oz Minerals	2017-2019	EZ-Trac	3 m	Magnetic multishot. Accuracy +/- 0.25°
		Maxibor II	3 m	

### **10.2.5 Environmental Management**

No specific procedures for drilling have been implemented on the Gurupi Project. However, all personnel working on the project are regularly trained regarding health, safety, and environmental risks related to hazardous substance spills. It aims to minimize risk and environmental impact while ensuring compliance with legislation and standards. The procedure applies to all employees, contractors, and sub-contractors:

1. Evaluation and Notification:
  - a. Evaluate the spill safely, identify the substance, and assess the risks.
  - b. Notify the Site Lead or Supervisor and implement control measures.
  - c. For hazardous substances, follow emergency management protocols.
2. Isolation and Containment:
  - a. Secure the area using PPE and safety procedures as per SDS.
  - b. Isolate ignition sources and ventilate the area if possible.
  - c. Use absorbing booms to contain spills.
3. Clean-up and Decontamination:
  - a. Gases / Vapors: Ventilate and decontaminate as specified.
  - b. Liquids: Use absorbent materials; dispose of contaminated materials appropriately.
  - c. Solids: Sweep and bag contaminated materials for disposal.
  - d. Soil: Remove visibly contaminated soil and validate cleanliness.
4. Disposal: Dispose of hazardous and non-hazardous waste according to the OZ Minerals Hazardous Waste Management Procedure.
5. Incident Reporting and Investigation:
  - a. Incident reports must include:
    - i. Location, time, and date of the incident.
    - ii. Chemicals involved, injuries, and control measures taken.
    - iii. Root cause analysis for each reportable spill.
6. Close-Out: Ensure all the equipment used is cleaned and returned. Spill kits must be restocked immediately after use.

### **10.3 Drilling Procedure**

The first exploration campaign on the Gurupi Project started in 1995 using both diamond and reverse circulation drilling. There is no active drilling at present.

Diamond drilling, typically followed these procedures:

- DSFPG / Newmont typically drilled the lateritic profile is drilled with HQ core size (63.5 mm core diameter), reducing to NQ-size (47.6 mm core diameter) in unweathered bedrock.
- The drill core is placed to core boxes with pertinent Hole-ID, drill run and depth information at the drill site and transported by the drilling company to the camp core shed for logging and sampling.
- During oriented drill campaigns, the drilling crew performed drill core orientation in unweathered rocks as often as practically possible.
- The drill crew will perform down-hole surveys using the prescribed equipment at the end of each hole.

### **10.3.1 Drill Hole Spacing**

Drill holes have typically been drilled on oblique NE-SW 50 m drill fences (i.e. holes drilled at 50 m intervals along these sections).

At Chega Tudo, drill holes are based on a grid with a NE-SW baseline. Sections along the base line have irregular spacing, ranging from 25 to 80 m. Drill holes are completed along the sections at 30-60 m spacing. The majority of the holes have angles between 40°-60° to the SW. However, due to restrictions on collar locations in areas close to Chega Tudo village, some holes were directed to the NE. Several holes have slight variations in orientation to the fences.

For the Cipoeiro deposits, the drilling is on sections spaced at about 75 m with drill holes spaced at about 50 m on section lines. At Contact, the majority of the drilling has a 60° angle to the SW. The drilling at Blanket has a variety of angles due to the varying dip of the deposit, but the majority of the drilling is directed to the SW.

### **10.4 Recovery**

Detailed measurements of core recovery have been routinely recorded on geological logs for virtually all core holes. Fresh rock recoveries generally exceeded 92%. Although recovery in near-surface, saprolitic material varied considerably, the overall recovery consistently exceeded 82% as shown in Table 10.4.

Sample recovery was not recorded for RC holes.

**Table 10.4: DDH Drilling Recovery by Weathering Domain**

<b>Deposit</b>	<b>Weathering Domain</b>	<b>Num. of Measurements</b>	<b>Avg. Sample Recovery %</b>
<b>Blanket</b>	Saprolite	2,655	88.9
	Transition	1,036	82.3
	Rock	13,119	95.9
<b>Contact</b>	Saprolite	2,720	87.6
	Transition	1,433	82.8
	Rock	20,493	92.0
<b>Chega Tudo</b>	Saprolite	4,566	94.2
	Transition	305	89.9
	Rock	11,082	96.6

## **11. SAMPLE PREPARATION, ANALYSES AND SECURITY**

This section describes the sample preparation, analysis, and security procedures for the diamond drilling, reverse circulation drilling, and channel sampling programs performed by the various operators throughout the history of the Project. It includes a quality assurance and quality control (QAQC) program as part of the sample assaying process.

### **11.1 Core Handling and Sampling**

The following section was summarized from Oz Minerals Standard Operating Procedures (SOP) on the Gurupi Project.

#### **11.1.1 Transportation of drill core boxes**

Transportation of drill core boxes is done by the drilling company and supervised by a geologist, or his subordinate. All personnel involved in handling materials wear appropriate personal protective equipment (PPE), including gloves, safety boots, and safety goggles. On the drill rig, additional PPE such as leggings, helmets, and dampers is required. Safety and transportation guidelines are described below :

- Each core box is labeled by the drill crew with the unique drill hole number and a sequential box number.
- The drilling company delivers the core boxes at the end of each shift, along with the corresponding drilling report.
- Core boxes must be securely closed with a nailed cover, tightly fastened with a rope, and transported in an appropriate vehicle to prevent contamination from dust and water.
- The delivery vehicle must maintain a safe and controlled speed, adapting to road conditions to prevent material loss and avoid unnecessary stress on the rock core.

#### **11.1.2 Preparation of Drill Core Box for Description and Sampling**

The following activities ensure the accuracy and validation of drilling operations, including depth marking at one-meter intervals, drill core photography, and data reconciliation. Once these tasks are completed, the drill core is available for logging and sampling.

All work is carried out by a geology technician under the supervision of a senior technician or geologist, following strict safety protocols and using the necessary PPE.

They performed the following tasks:

- Receiving drill core boxes:
  - Receive the boxes of drilling reports with their respective drilling sheets, issued and delivered by the drilling company.
  - Arrange the boxes in sequential order on the stand.
- Quality assurance and quality control on drilling operations:
  - Receive full drilling bulletin.
  - Verify daily drill logs.
  - Calculate interval recoveries with a measuring tape:
    - Measurements are taken only within the drill core box and compared to the drilling bulletin records and small wooden depth markers.
  - Recovery is calculated using this formula:
    - $\text{Recovery (\%)} = (\text{Actual Interval Length} \div \text{Drilling Advance Length}) \times 100$ .
  - Verify the accuracy of data recorded in the bulletin and on the depth markers.
    - If discrepancies are found, corrections must be requested.
  - All records are documented in the: “Drill core box closing worksheet” and “Drilling Recovery Worksheet”.
- Drill core depth marking:
  - Depths are marked metre by metre using a permanent marker, always on the left side of the corresponding drill core, with an arrow indicating depth direction.
  - If recovery is less than 100%, the loss is distributed evenly across the missing interval, and the recovery percentage is recorded next to the wooden depth marker.
- Drill Core Photography:
  - Arrange three (3) drill core boxes at a time on the photo stand.
  - Fill in the information on the photo nameplate.
  - Take two (2) photos of the same set of boxes, one with dry core and the other with wet core (only for unweathered core).

- Archiving information:
  - The generated products should be archived in suspended folders organized by hole and together with the digital files of each generated product should be delivered to the database technician to feed the project database.

### **11.1.3 Determination of RQD (rock quality designation)**

Geotechnical parameters were added to the logging process by Kinross in 2003.

### **11.1.4 Cutting and Splitting Drill Core**

It consists of sawing the cores in half and/or in quarters. This work was carried out by a geology technician and supervised by a senior technician or geologist. The technician used appropriate and necessary PPE to conduct work safely (helmet, ear protector, apron, goggles, gloves, respirator and safety boots).

Actions and Methods:

- Marking and transport:
  - Before sawing, an orthogonal line to foliation is marked on the core by the technician or geologist to ensure accurate cutting.
  - If no visible foliation is present, alternative structural features such as veins, dikes, or sulfide fractures are used as a reference.
  - Once marked, drill core boxes are transported to the saw house using a 4×4 vehicle.
- Sawing:
  - The boxes are placed three (3) at a time on the saw table.
  - Large samples should be broken with a hammer so that they fit into the saw table gutter, then sawing the sample in half, following the previously performed marked line.
  - Samples identified as duplicates are further cut into quarters .
  - Once sawing is completed, the core boxes are transported to the core stands, where the core sampling process takes place.

### **11.1.5 Drilling Core Sampling and Sending to the Laboratory**

Consists of collecting core samples for shipment and laboratory analysis. This work was carried out by a geology technician or a prospector and supervised by a senior technician or geologist. The worker used appropriate and necessary PPE to conduct work safely.

#### Actions and Methods:

- Identification of bags and marking of core boxes:
  - Write the identification numbers of the samples on the sampling bags for the core sampling.
  - Identify the fibre bags with the company name and design on the outer bag, and the name of the hole and the sequence of samples in the inner bag.
  - Arrange the core boxes in ascending order on the bench.
  - With the sawed sample in the middle and the sampling plan in hand, mark the identification numbers of the samples throughout the hole. The marking should be done at the beginning of each interval to be sampled. Scrape the box with chisel and write the number corresponding to the sample with black marker.
- Sampling:
  - Collect the corresponding test interval, according to the sampling plan, always on the right side of the box. Use shovel to sample unconsolidated materials (saprolite, fractured areas).
  - Insert the control samples according to the sampling plan (duplicate samples should be sawn to quarters. The first sampled sample represents the routine sample (the sample); the second, the duplicate sample.
  - Insert the label corresponding to the collected sample.
  - Organize the samples in batches of 10 (regular) to take photographs so that it is possible to identify the sample number in the bag and the internal label.
  - Photograph each standard sample so that it is possible to identify the sample number on the bag, the label and the standard sample name (e.g., OREAS 228).
  - Tie the bags with string.
- Shipping batch organization:
  - Bag the sequence of samples in double bags previously identified with hole and corresponding numbering. Tie bags and weigh.

- Weighing is performed using three random volumes from the unweathered rock, thus generating a mean for the batch of the drillhole (e.g., average Kg X number of packages = total lot weight).
- Weigh bags and send to the person responsible for the database the pertinent information for the delivery of transport invoices and the requisition for analysis (number of packages, total samples and lot weight).

Core samples are usually 1 m in length, but sample lengths were locally adjusted to avoid splitting contacts in lithology, mineralization or alteration. Recorded sample lengths range from 0.2-2.3 m. Until 2008, holes were sampled along their entire length. After 2008, selective sampling was done on visually logged mineralized zones.

Diamond drill core samples were cut in half longitudinally with a core saw. One half of the core was sampled, while the other half was kept in the core box and stored on site as a record.

Blanks, certified standards, and duplicates were inserted during the sampling process. QA/QC practices for each company are detailed in Section 12.

### **11.2 RC Sample Handling and Sampling**

- RC cuttings were logged using standard logging procedures.
- RC samples were collected as 1 m sample intervals from collar to end of hole.
- SFPG / Newmont samples were collected in plastic bags at the drill rig cyclone. They were transported to the sample preparation facility where they were dried and split using cone and quartering methods before shipment to the laboratory.

### **11.3 Channel Sampling**

- Channel samples were systemically sampled and assayed over a 1 m interval with the objective of providing representative samples of the saprolite hosted mineralization. These samples were considered suitable for inclusion in previous Mineral Resource Estimations.
- Since 2010, channel samples have been used as a guide when interpreting geology and grade domains but are no longer used to inform grade or tonnage estimates.

#### 11.4 Sample Transit, Security and Chain of Custody

- SFPG (1996-1998) shipped pulps prepared on site to Nomos Analyses Minerais (Nomos) in Belo Horizonte. Documentation of security practices for onsite facilities between 1995-1998 could not be found. Kinross notes that access to the logging and sampling facilities was unrestricted during that period. Reject pulps were organized and stored on site.
- Kinross (2003-2008) packaged the half core in identified plastic bags, which were placed in bags and shipped to the Lakefield-Geosol Laboratories (Lakefield) in Belo Horizonte with sample submission forms included in the shipment. Lakefield was later acquired by SGS and became SGS-Geosol (SGS) in 2008.
- Any discrepancies were reported by the laboratory upon receipt. Sample rejects were stored on site, at porthelina facilities.

#### Sample Analysis Methods:

- Prior to 1996, sampling methodologies were not well documented; Kinross believed that they met industry standards based on their communications with site personnel.
- In 1996, SFPG established a sample preparation facility on site for drill core, RC and surface geochemical samples. Drill samples were crushed to a -10 mesh; a 2 kg split was pulverized to a nominal 90% passing 150 mesh using a ring pulveriser. A sample split of 250 g was collected and shipped to Nomos Labs in Belo Horizonte for a 50 g fire assay with AA finish. Gold assays greater than 10 g/t were re-assayed with a gravitational finish.
- Kinross (2003-2008) shipped the half core samples to the Lakefield Geosol Laboratory (later SGS Geosol) for preparation as well as fire assays. Sample preparation was the same except that the samples were crushed and pulverized in their entirety to 95% passing 150 mesh.
- Jaguar (2011-2012) shipped samples to SGS or Acme, which followed a similar process using 200 mesh rather than 150. Jaguar appears to have occasionally used an in-house lab (MSOL) for the lower priority portions of some holes; MSOL is the abbreviation for Jaguar's subsidiary company MCT Mineração Ltda.
- Intertek laboratory sample preparation included oven drying, coarse crush, homogenization, quartering and pulverization of 1 kg of the sample to a nominal 95% passing 150 mesh. After pulverization, the sample was re-homogenized and split with a Jones riffle splitter to produce a sub-sample of 125-250 grams which was further sub-sampled for a 50-gram fire assay with an AAS finish.

- Further variations between laboratories are not known. Table 11.1 below summarizes the laboratories and assay methods used over the life of the project.

**Table 11.1: History of Assay Methods and Laboratories**

Company	Period	Laboratory	Assay Method	Au Detection Limit (ppm)	Report Format
SPFG	1995	Nomos(?)*	FAA (50 g)*	0.010	Fax + hardcopy*
SPFG / Newmont	1996-1999	Nomos	FAA (50 g)	0.010	Fax + hardcopy
Kinross	2003-2004	Lakefield	FAA (50 g)	0.005	PDF + hardcopy
Kinross	2008	SGS	FAA505	0.005	PDF + hard copy
Jaguar	2011-2012	SGS	FAA505	0.005	PDF + hard copy
		MSOL (Jaguar internal)	FAA (50 g)*	0.050	PDF
		ACME	G6-50 / AAS finish	0.005	PDF
Avanco / Oz Minerals	2017-2019	Intertek	FA50-AAS	0.005	PDF and xlsx

No check samples were carried out by SPFG / Newmont. Kinross sent both historical and ongoing check samples to ALS Chemex Labs. Bondar Clegg (acquired by ALS Chemex in 2001) and Cone Laboratories (unknown certification status) were also listed as umpire labs in previous reports; no certificates from these labs were provided. There is no record of check samples carried out by Jaguar. Avanco used SGS as their umpire lab.

### 11.5 Data Management

- Drill hole collar and down hole survey data were entered manually into the database. Geological data from early drill programs were entered into spreadsheets.
- Recent assay results were received as both PDF and as an Excel spreadsheet as outlined in Table 11.1. In previous periods the results were received in PDF format and/or as hard copies. Results were either manually entered into the database or uploaded from a disc or emailed file.
- Note that the assay certificate data entry has not been completed for 582 holes in the combined database. It is known that some samples processed at Acme are incorrectly attributed to SGS. This was not corrected at the time of reporting; thus, SGS and Acme have generally been treated together in the QAQC charts in the sections below.

## 11.6 Density Measurements

Density measurements were taken primarily on half core, although some measurements were taken on bulk samples taken from artisanal miner's pits. The frequency and spacing of density samples varied by company. All measurements were taken using water-immersion techniques. Measurements were performed by Newmont and SFPG personnel, Zonge Engineering and Lakefield Laboratory.

This is a summary of the OZ Minerals Standard Operating Procedures (SOP) on the Gurupi Project for the apparent density measurements using the hydrostatic method. A Mettler Toledo precision balance with a minimum resolution of  $\pm 0.1$  g was used for the measurements.

- Scale calibration:
  - Place a 1.0 kg standard weight at the center of the scale to verify accuracy.
  - Weigh a Patent Metal sample ( $7.852 \text{ g/cm}^3$ ) to confirm precision.
  - Record the dry tray weight (e.g., 1.7820 kg).
- Measurement process:
  - Weigh the dry sample.
  - Weigh the sample immersed in water.
- Density Calculation:
  - Displacement = (Dry weight - Immersed weight).
  - Density ( $\text{g/cm}^3$ ) = (Dry weight / Displacement).
- Samples preparation:
  - Clean each sample, removing dust and debris.
  - Exclude core pieces smaller than 10 cm, unless they contain mineralization.
  - Mark samples and prepare for weighing.
- Weighing procedures:
  - The tray must be cleaned between each measurement.
  - The water for immersion of the samples must be changed whenever contamination is observed.
- Record all information on a spreadsheet.
- Return samples to their correct boxes and depth intervals to avoid misplacement.

There are currently 459 density values for Chega Tudo, 1,451 for Blanket, and 3,879 samples for Contact. Table 11.2 below summarizes the density statistics by weathering and geological domain.

**Table 11.2: Host Rock Density Statistics by Domain**

Area	Weathering Domain	Geological Domain	Count	Mean $\rho$ (g/cm <sup>3</sup> )	Minimum	Median	Maximum
Blanket	Overburden	-	2	1.62	1.47	<b>1.47</b>	1.78
	Saprolite	Tonalite	119	1.71	1.24	<b>1.70</b>	2.62
	Transitional	Tonalite	12	2.69	2.57	<b>2.63</b>	2.85
	Rock	Tonalite	1,313	2.78	2.18	<b>2.77</b>	3.00
		Meta-Arenite	5	2.86	2.69	<b>2.84</b>	2.96
<i>Subtotal</i>			<b>1,451</b>				
Contact	Overburden	-	71	1.68	1.32	<b>1.70</b>	2.04
	Saprolite	Tonalite	65	1.68	1.29	<b>1.72</b>	2.65
	Transitional	Tonalite	19	2.21	1.45	<b>1.92</b>	2.81
	Rock	Tonalite	3,359	2.77	2.20	<b>2.77</b>	3.24
		Mylonite	186	2.72	2.39	<b>2.73</b>	2.84
		Meta-Arenite	179	2.70	2.42	<b>2.71</b>	2.93
<i>Subtotal</i>			<b>3,879</b>				
Chega Tudo	Overburden	-	2	1.82	1.78	<b>1.78</b>	1.86
	Saprolite	Arenite	1	1.55	1.55	<b>1.55</b>	1.55
		Int. Volcanics	10	1.78	1.47	<b>1.66</b>	2.63
		Mafic Tuff-sed	18	1.64	1.42	<b>1.63</b>	1.82
	Transitional	Int. Volcanics	2	2.35	1.86	<b>1.86</b>	2.84
	Rock	MTF_HW	8	2.76	2.56	<b>2.73</b>	3.04
		Arenite	35	2.74	2.62	<b>2.73</b>	2.94
		Int. Volcanics	325	2.71	2.34	<b>2.70</b>	2.98
		Mafic Tuff-sed	51	2.72	2.15	<b>2.73</b>	2.93
Gabbro		7	2.82	2.58	<b>2.78</b>	2.95	
<i>Subtotal</i>			<b>459</b>				

## 11.7 Quality Assurance and Quality Control (QAQC) Procedures

The following section outlines the procedures for the insertion of blank and standard material, field and laboratory duplicate samples, and check samples sent to umpire laboratories. Procedures and known records vary by company. Note that some historic QAQC samples such as blanks and standards are missing from the current database due to incomplete records.

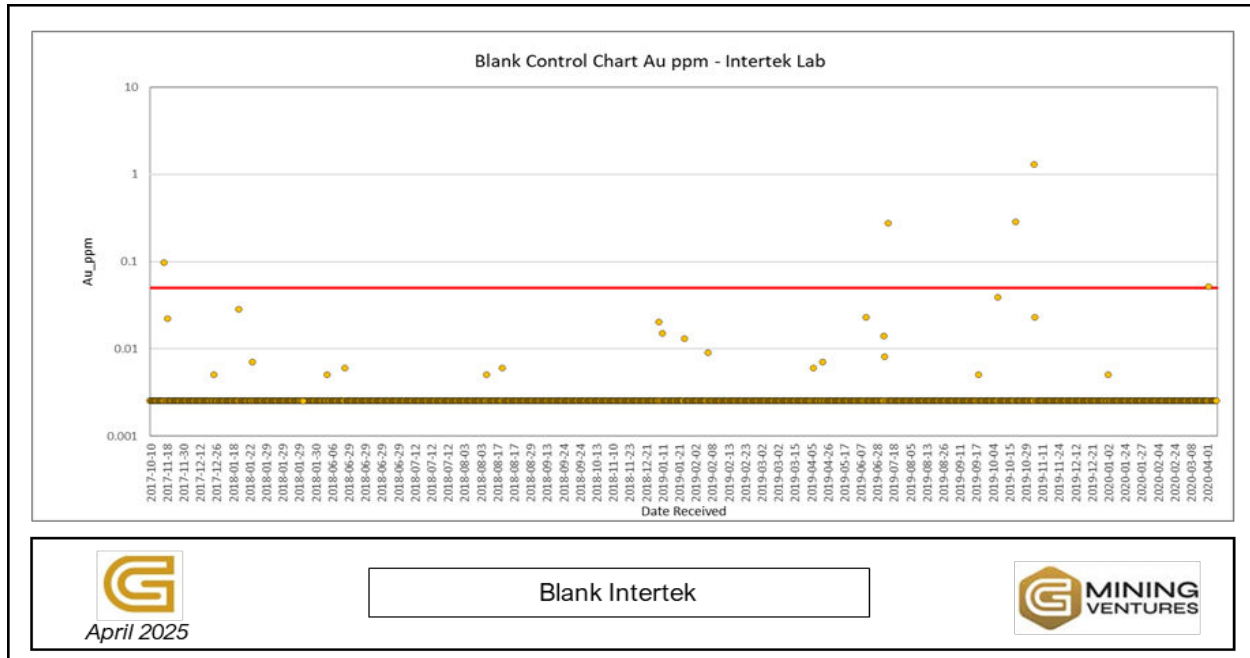
- SFPG / Newmont (1995-1999) inserted coarse rock blanks at an unknown frequency; the source material is unknown. Nomos Analytical analyzed a pulp duplicate approximately every 20 samples.
- Kinross (2003-2008) inserted a set of 2 blank rock standards, and 4 to 6 pulp gold standards in each drill hole batch of 70-180 samples representing approximately 4% of the total submitted samples. Certified standards were sourced from Rocklabs in New Zealand. Blanks were uncertified and manufactured on-site from locally sourced barren granite. The Lakefield Laboratory performed a check of the pulverization quality by screening one in every 20 samples and inserted their own laboratory blanks, standards, and duplicates to monitor internal laboratory quality.
- Jaguar (2011-2012) inserted coarse rock blanks at an unknown frequency; the source material is unknown. Gold pulp standards sourced from Rocklabs in New Zealand were also inserted at an unknown frequency. Both the SGS and Acme labs regularly inserted their own blanks, standards, and pulp duplicates; details on frequency are not known.
- Avanco / Oz Minerals (2017-2019) inserted blank rock standards and pulp gold standards regularly, representing around 4% of the submitted samples. Field duplicates of quarter core or half core were taken every 40 samples. Intertek's internal lab QAQC details have not been provided.

### 11.7.1 Blanks

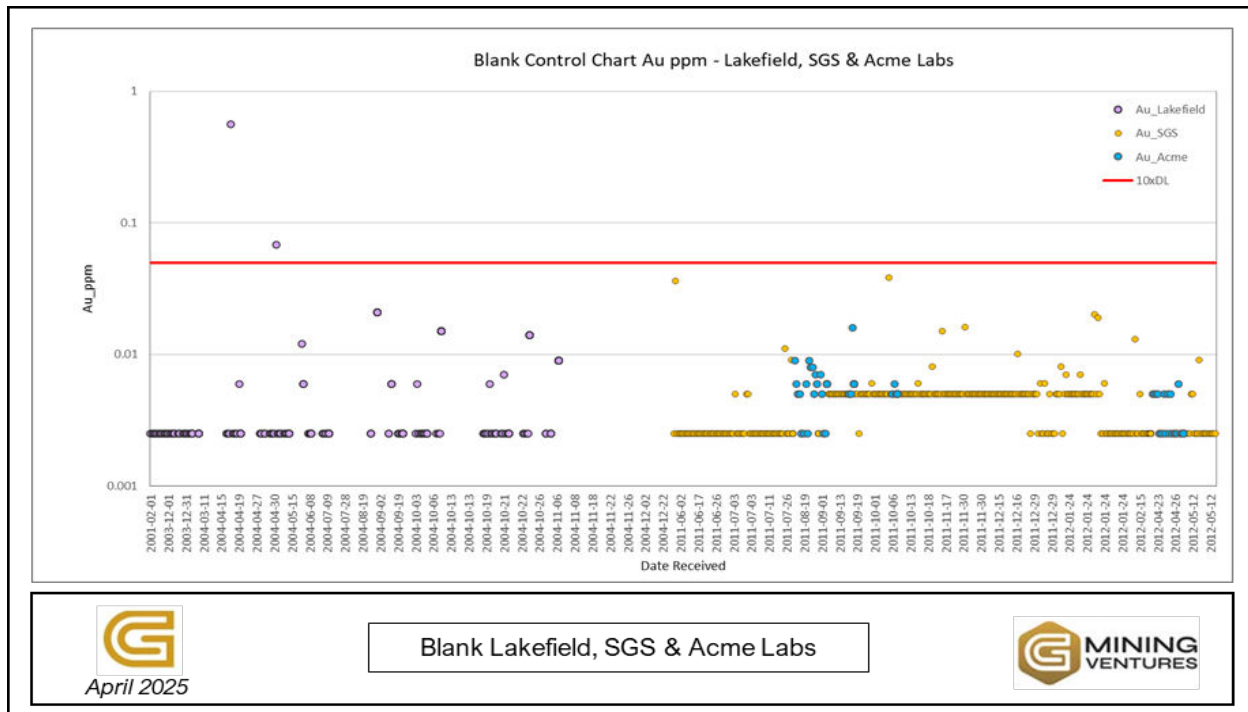
- To monitor any contamination during the sample preparation and assaying at the laboratory, blank materials are inserted into the sampling stream.
- Blank materials were considered failed when the returned gold values exceeded 0.05 ppm, which is equivalent to ten times the lower detection limit (DL) of 0.005 ppm for the fire assay analytical methods. Note that the detection limit is 0.01 ppm for Nomos Laboratories and 0.05 ppm for MSOL, so these samples have a higher failure threshold. A total of 2,033 blank sample results are currently in the database (527 for Blanket, 971 for Contact, and 535 for Chega Tudo). The results are considered good, with 99.6% of blanks falling within the accepted control limit; this demonstrates that the samples show no systematic contamination with contiguous mineralized intervals.

- Figure 11.1 and Figure 11.2 show the performance of the blank samples within the control limits (10 times DL) submitted by all companies during the recent drilling programs. The Nomos and MSOL samples were excluded from the graphs as they only represent 11 data points with no failures.

**Figure 11.1: Blank Control Chart for Gold by Lab – Intertek**



Source: GMS 2025

**Figure 11.2: Blank Control Chart for Gold by Lab – Lakefield, SGS & Acme**


Source: GMS 2025

### 11.7.2 Certified Reference Materials

- Certified reference materials (CRM or standards) were chosen within low and high gold grades ranges and from two (2) types of material, oxide, and sulfide, used to monitor the laboratory performance and to assess bias on the analytical results.
- No records have been found of CRMs being used during the 1995-1999 period.
- For drill campaigns from 2003 to 2012, commercial CRMs from Rocklabs (New Zealand) were in use. Rejection criteria were set at +/- 5% of the certified value for a given CRM. Failures observed in the CRM results were investigated and replaced by the re-analyzed value when it was considered necessary. Failures within a mineralized zone were consistently re-assayed; non-mineralized zones were commonly not re-assayed.
- For drill campaigns from 2017-2020, commercial CRMs prepared by Ore Research and Exploration (Australia) (OREAS) were used. Rejection criteria were set at +/- 2SD (Standard Deviations) of the certified CRM values.
- In this report, all quality control samples are classified as failures if the results are outside  $\pm$  three standard deviations ( $\pm 3$  SD) of the certified CRM value. Rerun values are considered final data where present. A total of 21 failures remains after reruns: 16 of those fall within the expected value range of another standard from the same era or a blank, suggesting insertion errors. Overall,

the results tabulated below indicate that the CRMs are good with minimal bias regarding the precision of the expected values vs the assayed value is present through the assaying period.

- The analytical quality control data produced by the CRM samples used by time period on the Gurupi Project are summarized in Table 11.3.

**Table 11.3: Summary of CRM Performance Results**

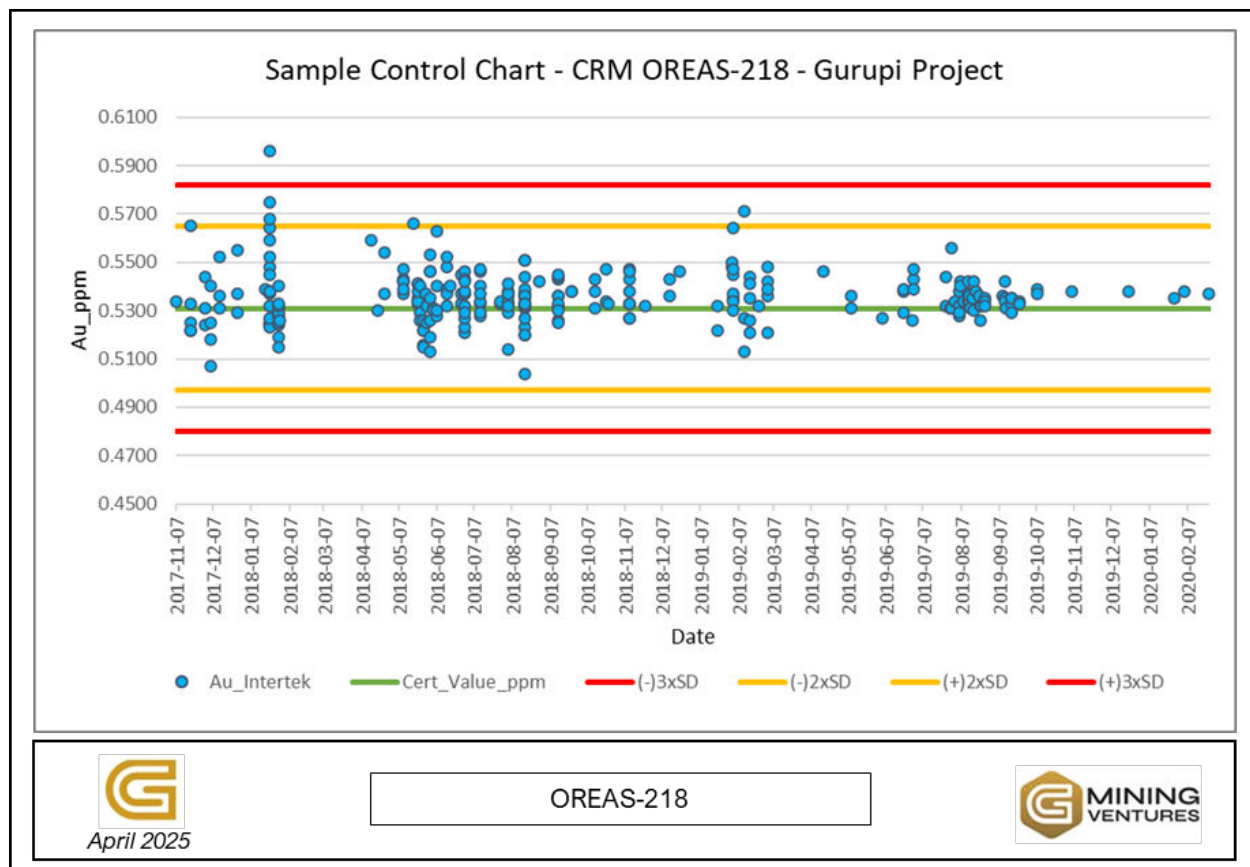
Period	Material Type	Certified Standard (CRM)	Certified Au Value (g/t)	Standard Deviation (SD)	95% Confidence (+/-)	No. of Submitted CRM	No. of Failure	% Passing
2017-2020	Sulphide	OREAS-218	0.531	0.017	0.005	264	1	99.6%
	Sulphide	OREAS-221	1,060	0.026	0.01	221	3	98.6%
	Sulphide	OREAS-228	8,730	0.279	0.1	233	1	99.6%
	Oxide	OREAS-254	2.55	0.076	0.03	249	0	100%
2011-2012	Sulphide	HiSiIK2	3.474	0.087	0.034	66	6	90.1%
	Oxide	OxA71	0.0849	0.0056	0.0022	15	5	65.7%
	Oxide	OxE56	0.611	0.015	0.006	16	1	93.7%
	Oxide	OxF65	0.805	0.034	0.014	8	0	100%
	Oxide	OxG60	1.025	0.028	0.011	10	2	80%
	Oxide	OxG84	0.922	0.033	0.01	8	0	100%
	Oxide	Oxi67	1.817	0.062	0.024	11	0	100%
	Oxide	Oxi81	1.807	0.033	0.011	4	0	100%
	Sulphide	SH41	1.344	0.041	0.015	43	1	97.7%
	Sulphide	SJ53	2.637	0.048	0.016	48	1	97.9%
	Sulphide	SK43	4.086	0.1*	0.036	4	0	100%
	Sulphide	SK52	4.107	.0806*	0.029	8	4	50%
	Sulphide	SK62	4.075	0.140	0.045	35	1	97.1%
	Sulphide	SL51	5.909	0.136	0.047	72	7	90.3%
2003-2005	Oxide	OxC 30	0.2	0.0278*	0.01	126	7	94.4%
	Oxide	Oxi 23	1,844	0.2556*	0.092	121	2	98.3%
	Sulphide	SF12	0.819	0.1139*	0.041	112	5	95.5%
	Sulphide	SJ10	2,643	0.3667*	0.132	24	0	100%

Period	Material Type	Certified Standard (CRM)	Certified Au Value (g/t)	Standard Deviation (SD)	95% Confidence (+/-)	No. of Submitted CRM	No. of Failure	% Passing
	Sulphide	SK11	4,823	0.6694*	0.241	92	0	100%

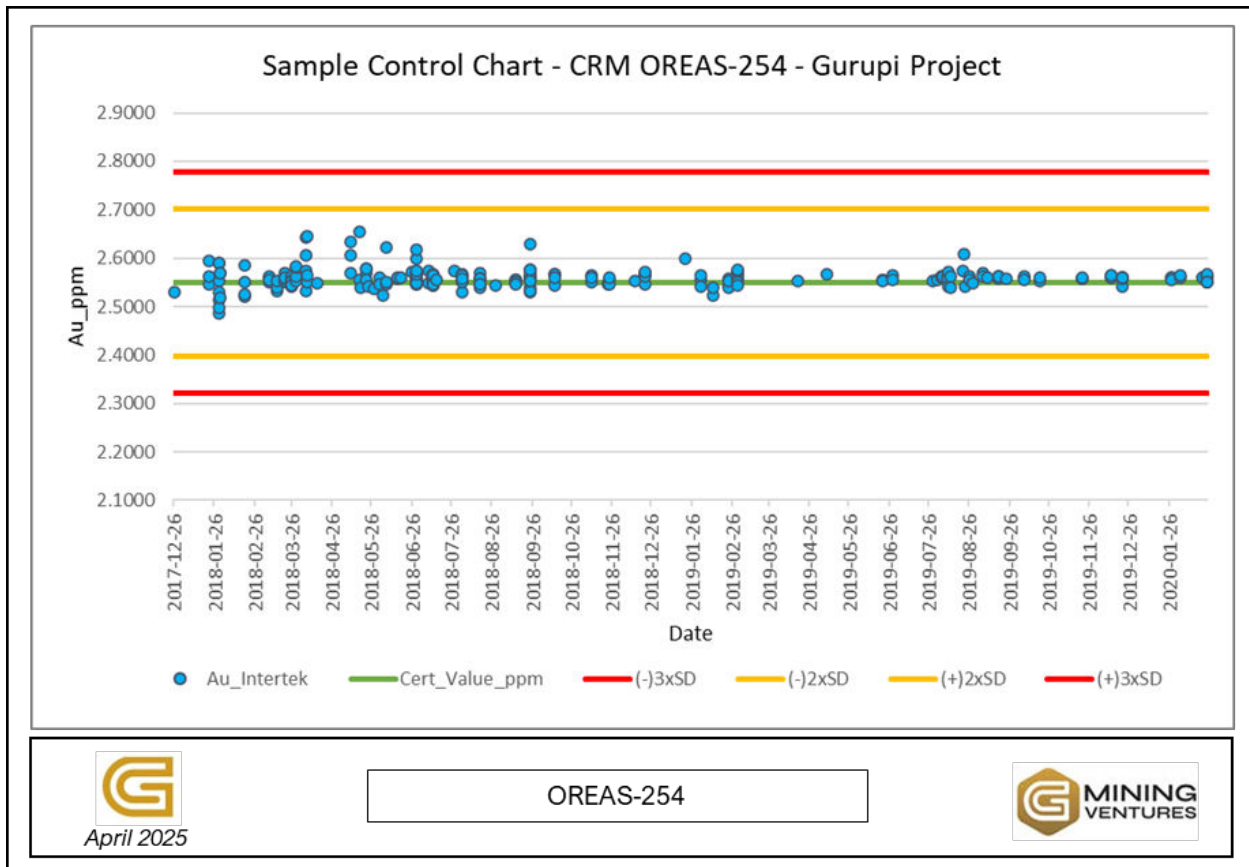
\*Note: SD value back calculated from 95% confidence using an average Rocklabs conversion value

The performance of the CRMs was also validated on time-series control charts to monitor for analytical drift and abnormal assay batches. After verification, the CRMs generally performed well over time, with the majority of results falling within the control limits of  $\pm 3$  times standard deviation (3SD) of the certified recommended value. The few that performed poorly were not discontinued after a brief period (e.g., OxA71 and SK52). Some of the control charts of CRMs by laboratory are illustrated in Figure 11.3 to Figure 11.8.

**Figure 11.3: Sample Control Chart of CRM OREAS 218**

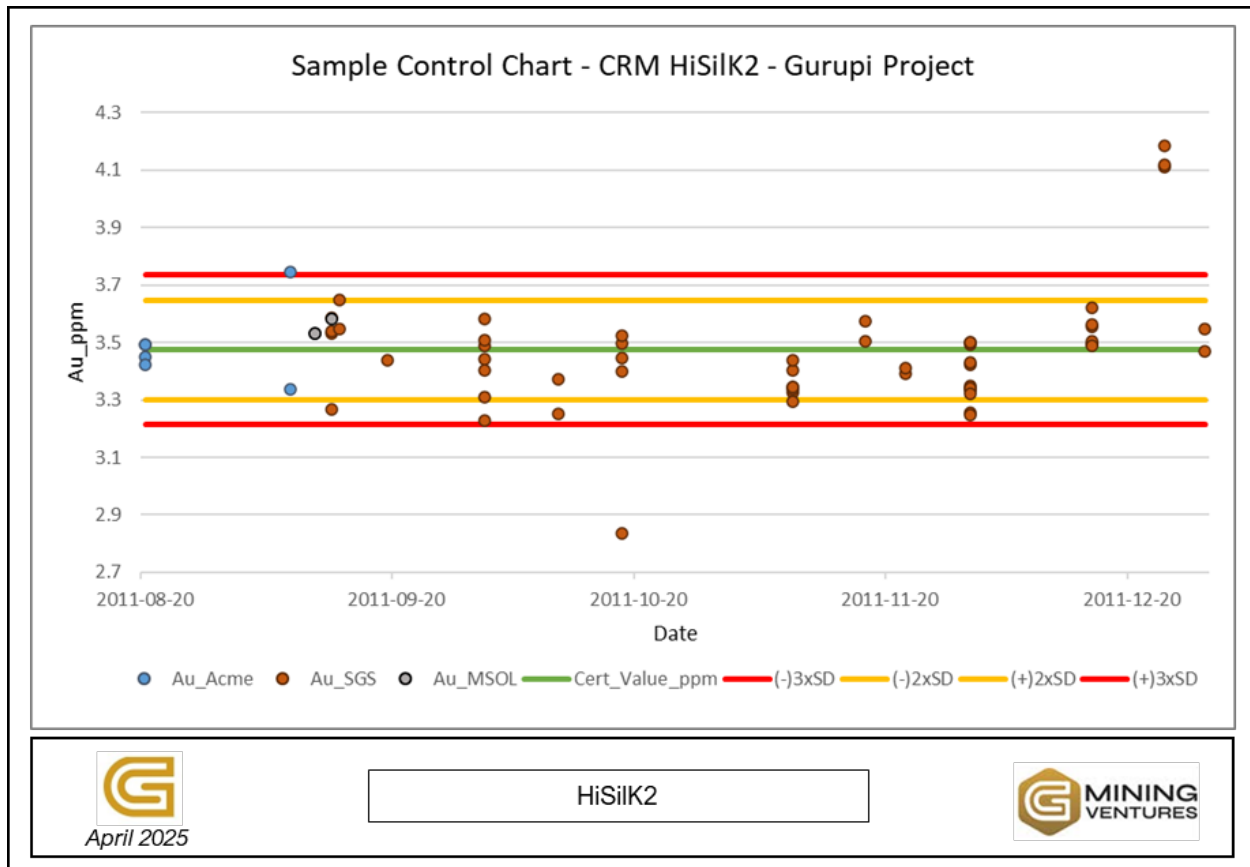


Source: GMS, 2025

**Figure 11.4: Sample Control Chart of CRM OREAS 254**


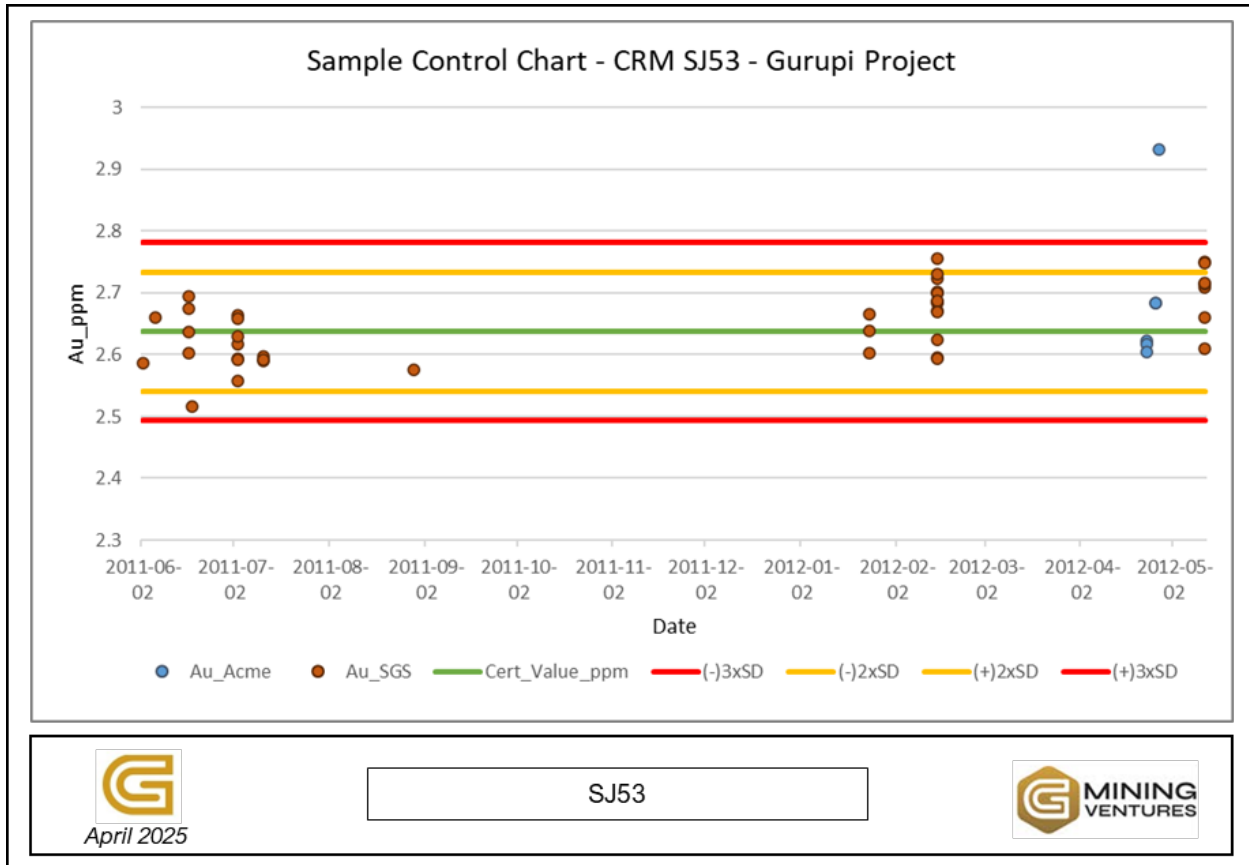
Source: GMS, 2025

Figure 11.5: Sample Control Chart of CRM HiSiIK2



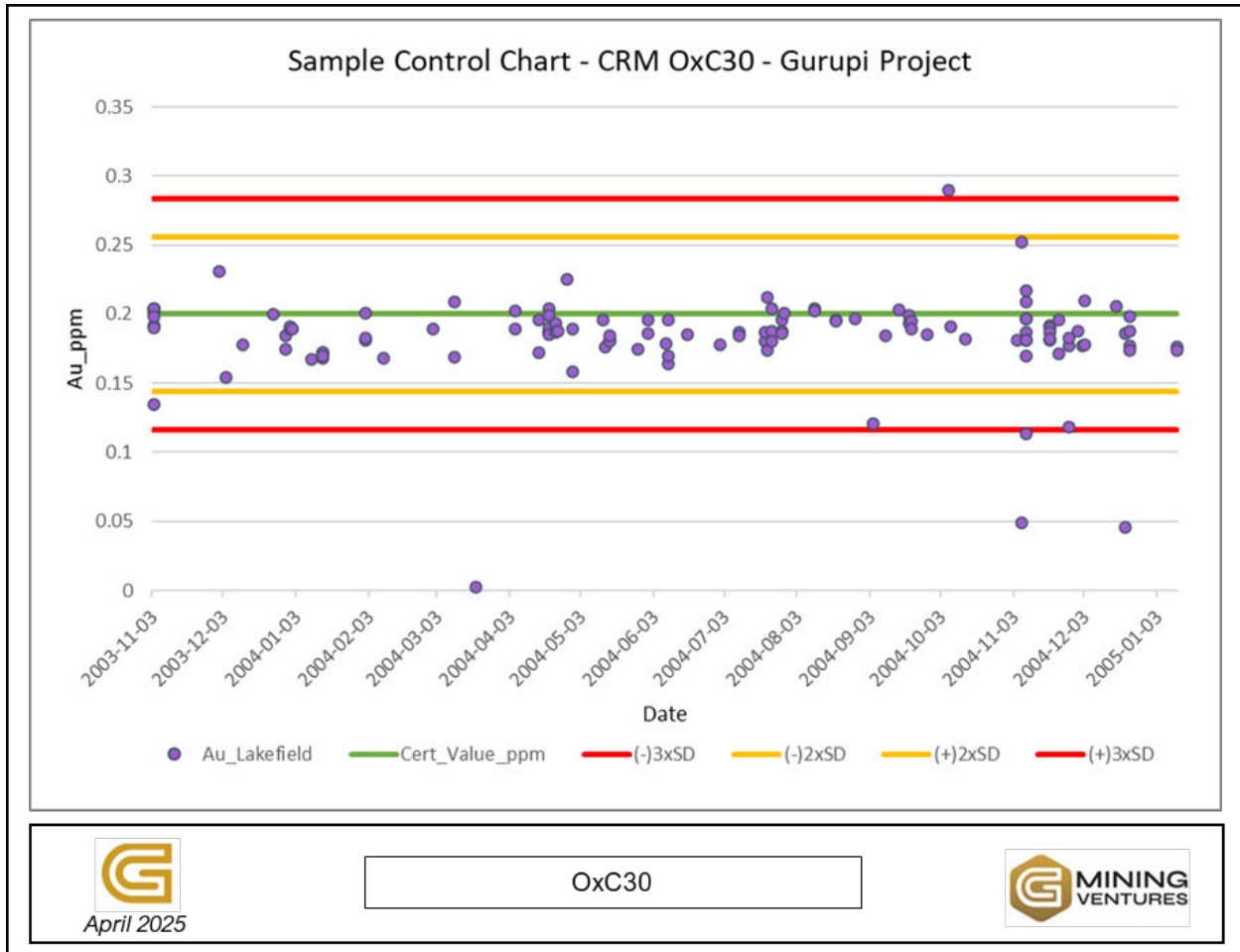
Source: GMS, 2025

Figure 11.6: Sample Control Chart of CRM SJ53

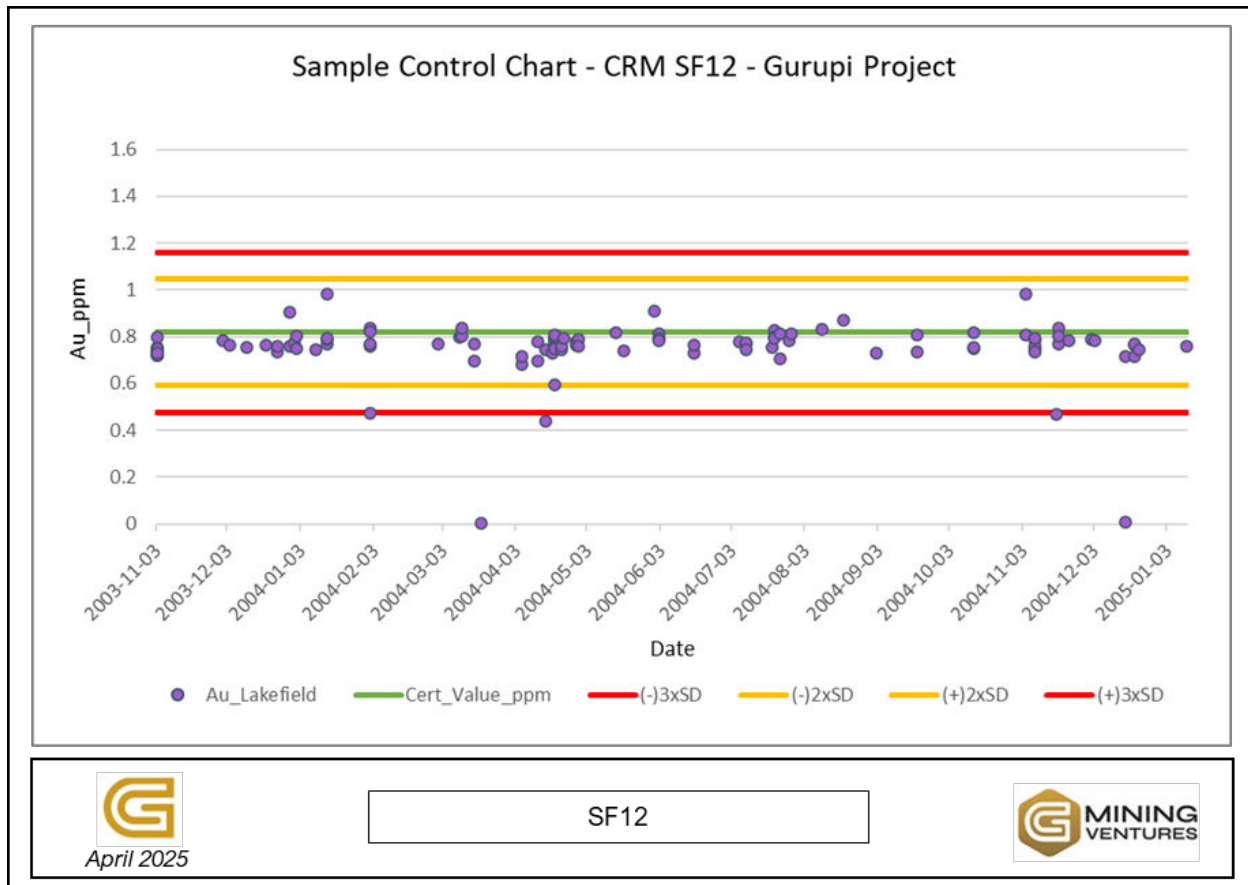


Source: GMS, 2025

Figure 11.7: Sample Control Chart of CRM OxC30



Source: GMS, 2025

**Figure 11.8: Sample Control Chart of SF12**


Source: GMS, 2025

### 11.7.3 Duplicates

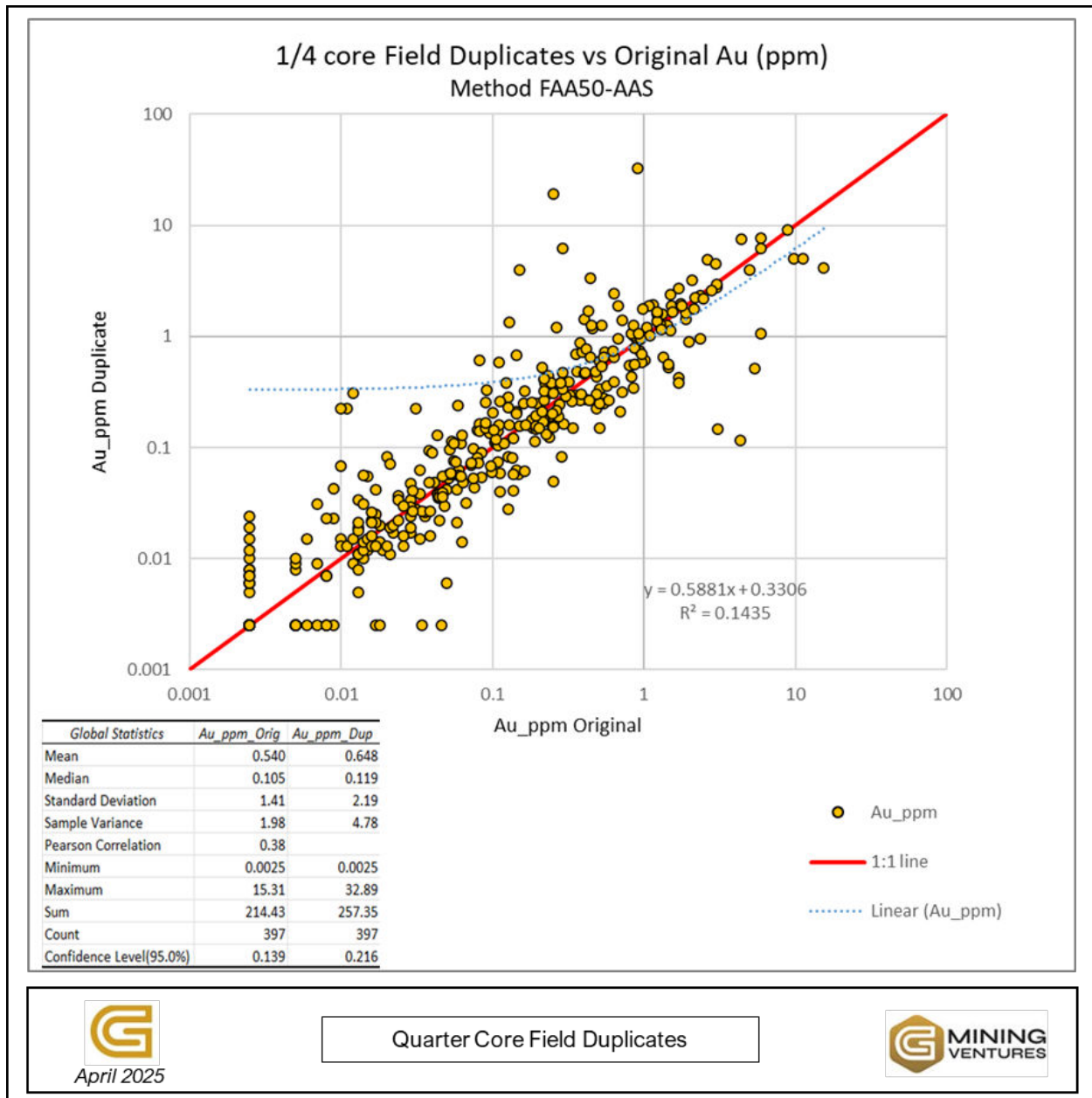
- Prior to 2017, no information on official duplicate QAQC program is available.
- During the 2017-2019 drilling campaigns, Avanco / Oz Minerals incorporated core field duplicates to assess grade variability among assayed samples in addition to monitoring the laboratory. Field duplicates of core were taken every 40 samples.
- Initially, ¼ HQ core duplicates were taken. A review in April 2019 showed a notable scatter in the results, causing concern that the ¼ core sample size was not representative for the style of mineralization present. The sampling program was subsequently changed to ½ HQ core duplicates, ensuring comparison of equal sample masses.
- A total of 995 field duplicates were collected and submitted for analysis using methods FAA50-AAS to assess the reproducibility of assays and identify if there is any sampling bias. Table 11.4 summarizes the number of samples submitted by duplicate type and deposit. A total of 995 field

duplicates were assayed with 688 of the samples grading >0.05 g/t Au. 32% of ¼ core duplicate pairs and 41% of ½ core duplicate pairs are reporting within +/- 20%.

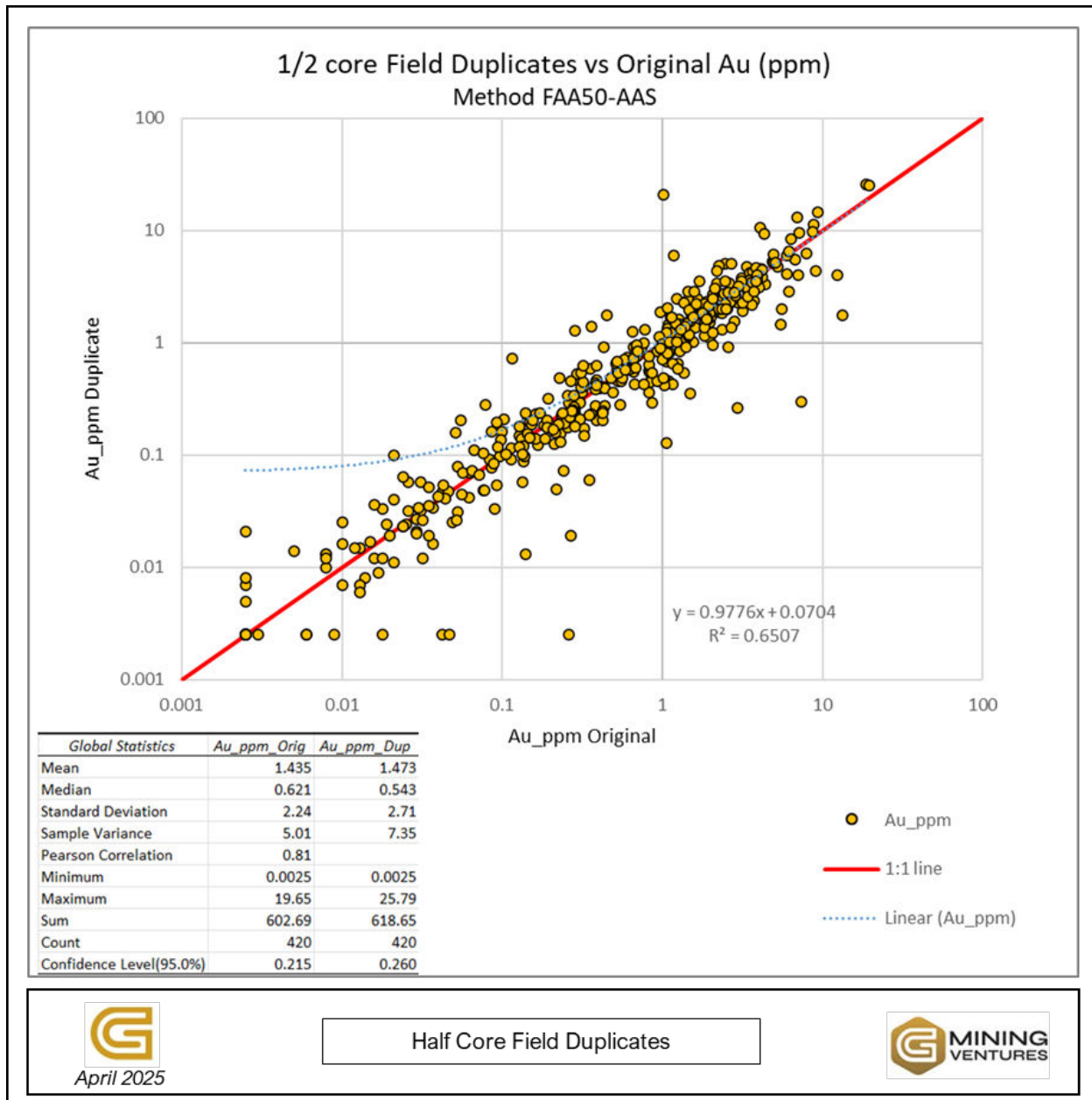
- The log scatter plots present only the field duplicate data with known sample types, all of which were sent to the Intertek laboratory. The ¼ core duplicates (Figure 11.9) show poor correlation < 40% and a strong nugget effect. The ½ core duplicates (Figure 11.10) show a significant improvement to 80% correlation.

**Table 11.4: Quality Control Duplicates Submitted by Deposit**

Duplicate Sample Type	Blanket Total Samples	Contact Total Samples	Chega Tudo Total Samples	Total Samples
Field Duplicate (1/4)	172	226	0	398
Field Duplicate (1/2)	189	230	0	419
Field Duplicate (unknown)	0	100	78	178
Pulp Duplicate (Lab)	854	1,976	1,236	4,066
<b>Total</b>	<b>1,215</b>	<b>2,532</b>	<b>1,314</b>	<b>5,061</b>

**Figure 11.9: Quarter Core Field Duplicates**


Source: GMS, 2025

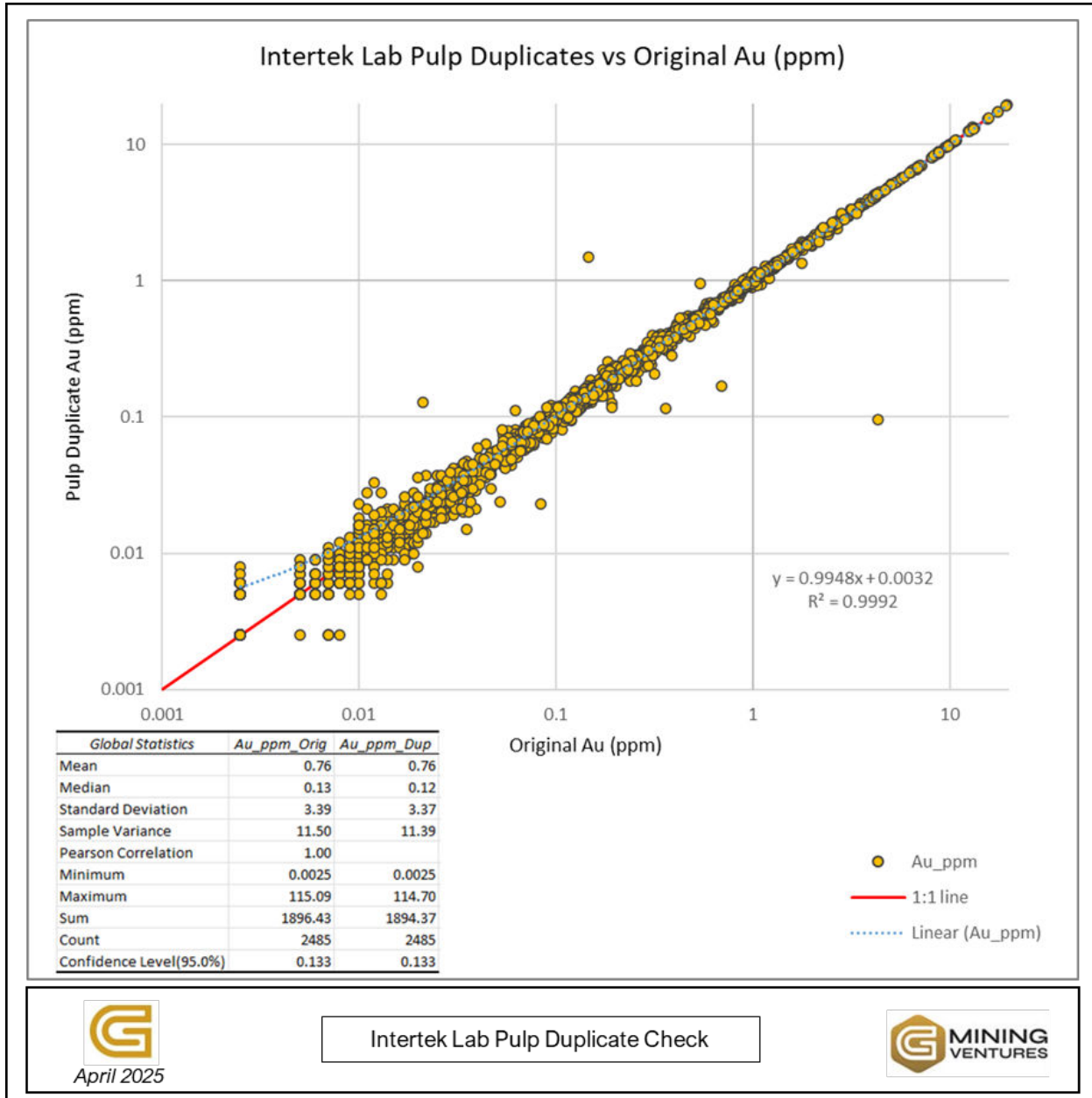
**Figure 11.10: Half Core Field Duplicates**


Source: GMS, 2025

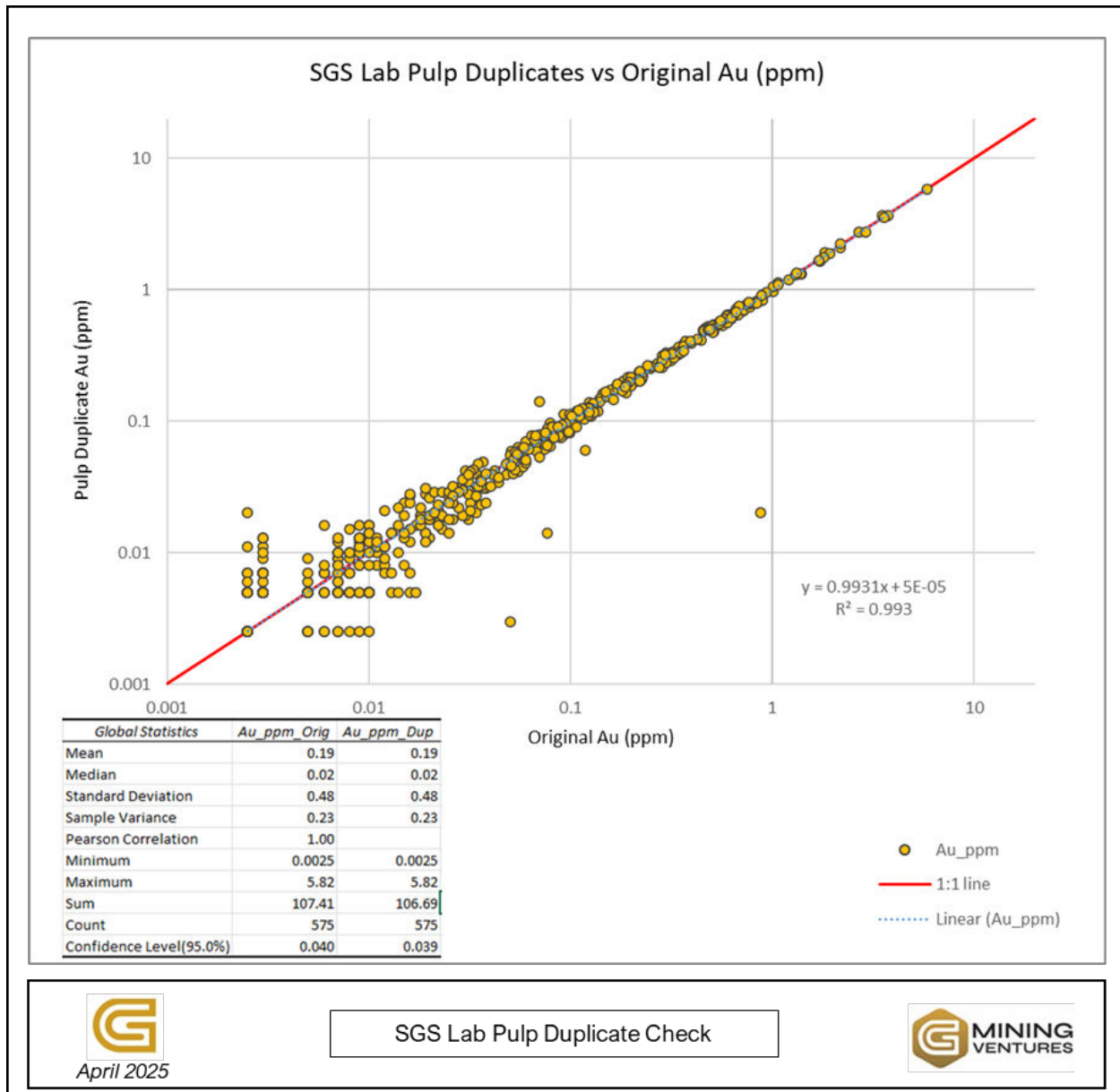
- No RC field duplicates, or coarse duplicates have been included in any QAQC duplicate programs on the Project to date.
- Commercial laboratories routinely assay a second aliquot of the sample pulp, usually for one (1) in 20 samples. The data are used by the laboratory for their internal quality control monitoring. These data are provided to the clients at no additional cost.
- Gold results are available for a total of 4,066 pulp duplicates, with 2,247 samples grading >0.05 g/t Au. Figure 11.11 through Figure 11.13 show a good correlation between the pulp

duplicates and the original gold values for the three (3) laboratories representing the majority of the data. A 64% of the sample pair results report within +/- 10% of each other.

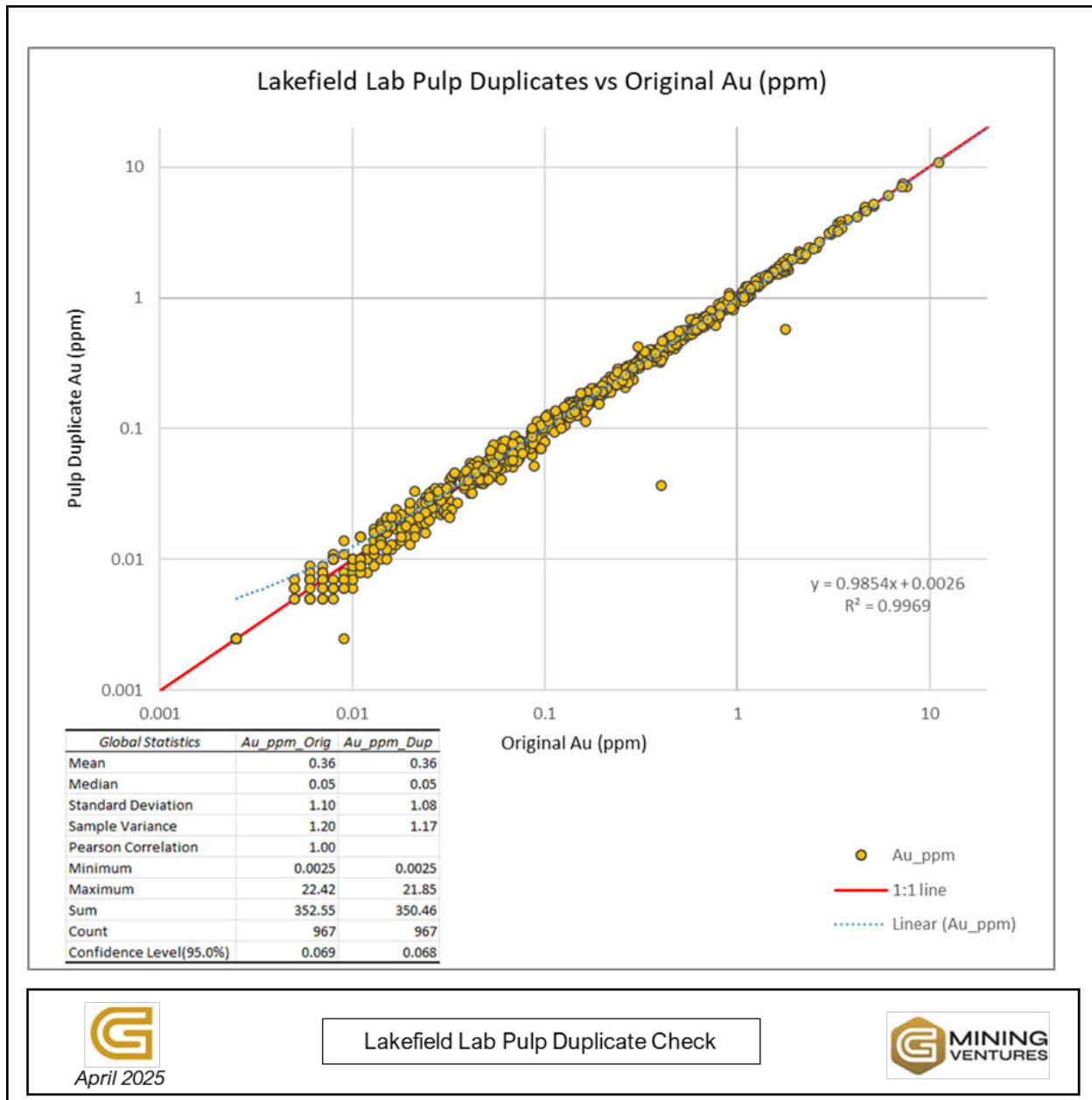
**Figure 11.11: Intertek Lab Pulp Duplicate Check**



Source: GMS, 2025

**Figure 11.12: SGS Lab Pulp Duplicate Check**


Source: GMS, 2025

**Figure 11.13: Lakefield Lab Pulp Duplicate Check**


Source: GMS, 2025

#### 11.7.4 Umpire Check Assays

- Umpire check assays were used to validate laboratory accuracy by re-assaying selected mineralized sample pulps via an independent third-party laboratory.
- In 2004, Kinross sent a selection of their samples assayed at Lakefield as well as a selection of the historic samples assayed at Nomos to Chemex for validation. Subsequent check assay campaigns were mostly completed during the same period as the original assays.

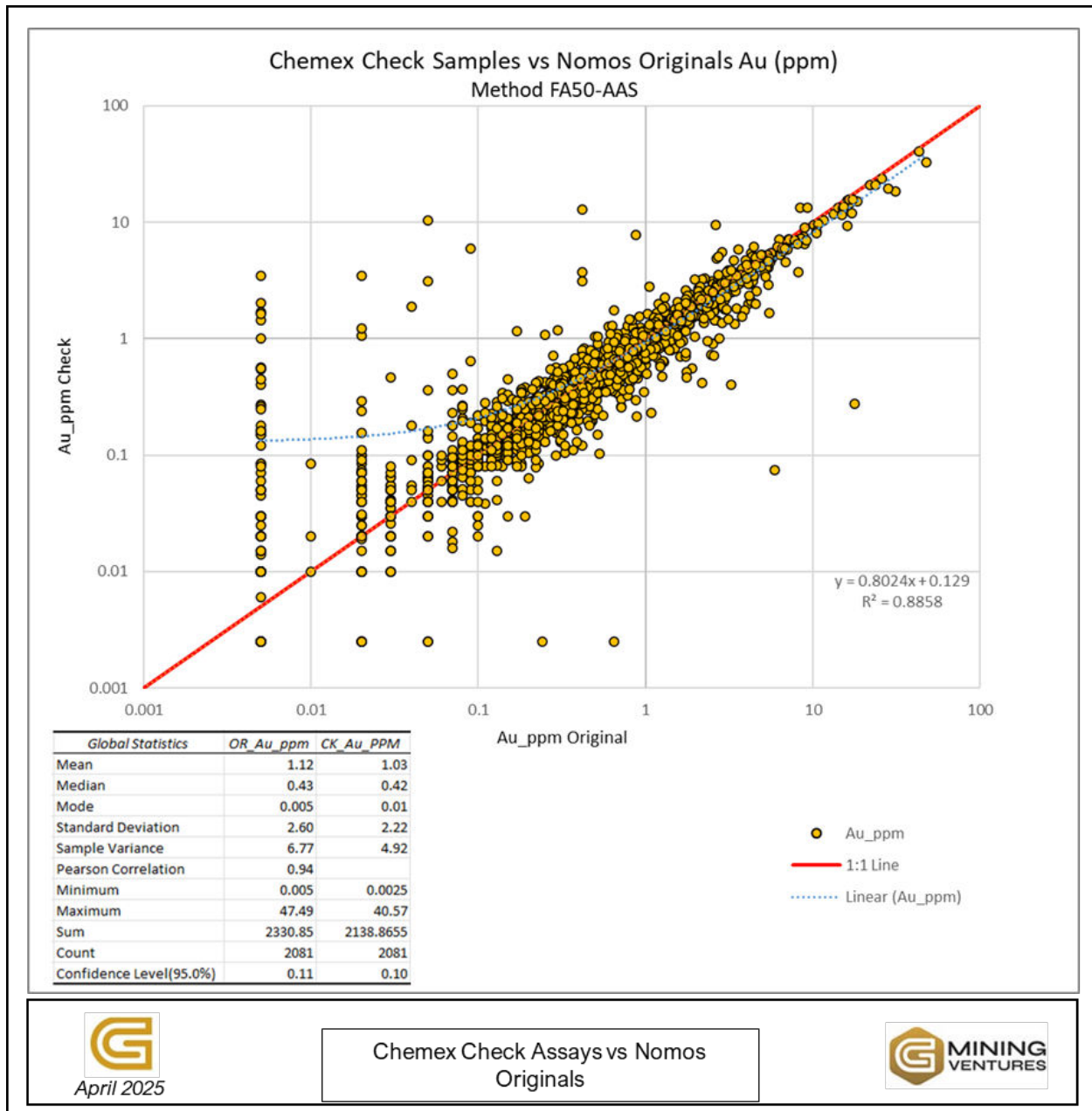
- See Table 11.5 for a summary of check samples sent to each pair of laboratories and results.

**Table 11.5: Umpire Assays Submitted by Deposit**

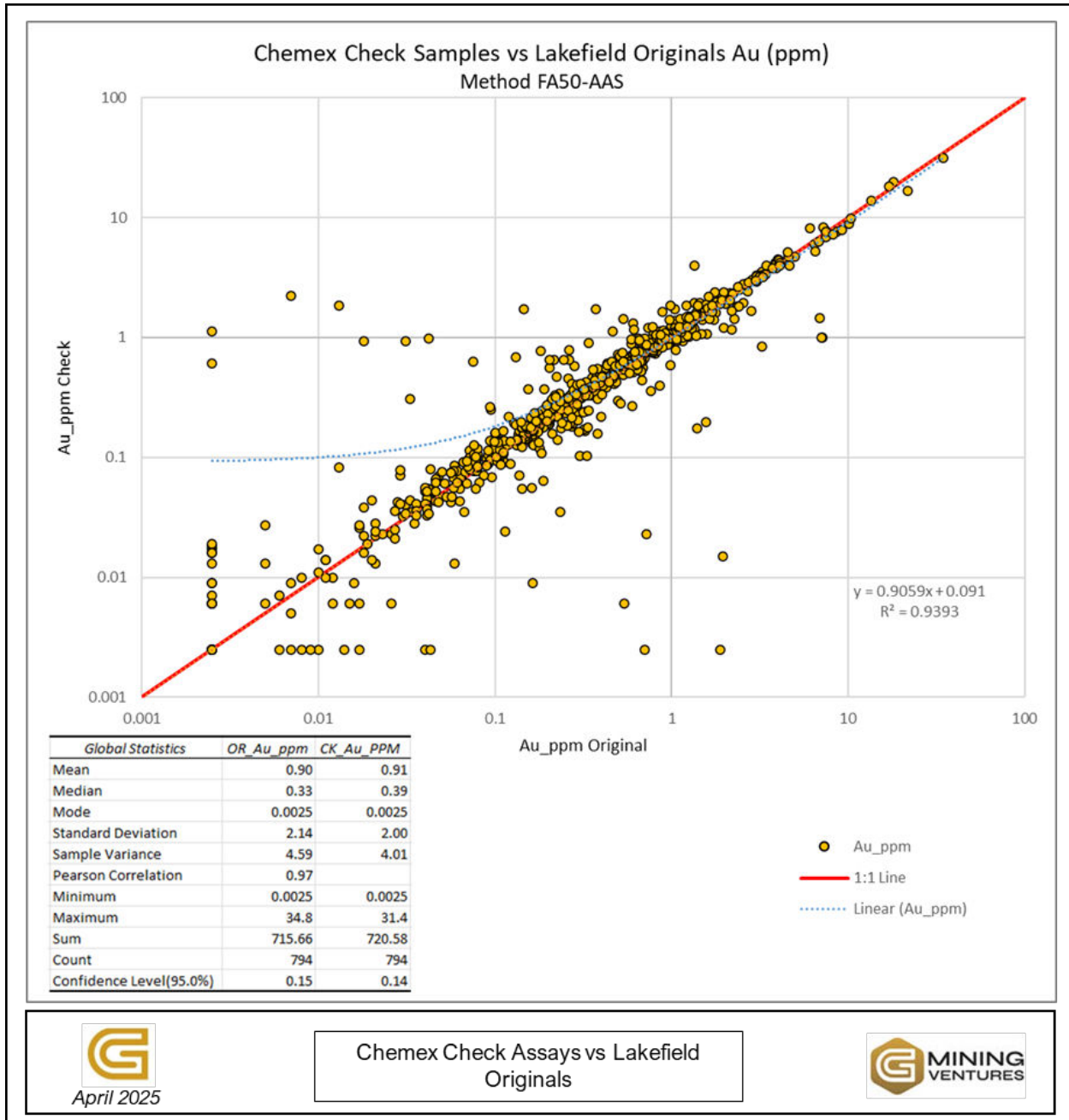
Lab / Umpire Lab	Blanket Samples	Contact Samples	Chega Tudo Samples	Total Samples	Within +/-10%
Nomos / Chemex	1,110	593	378	2,081	28%
Lakefield / Chemex	129	210	455	794	39%
SGS / Acme	0	0	160	160	30%
Intertek / SGS	54	0	0	54	76%
<b>Total</b>	<b>1,293</b>	<b>803</b>	<b>993</b>	<b>3,089</b>	<b>32%</b>

- A total of 3,089 check assays were completed, of which 2,701 have gold grades values above 0.05 ppm gold. The umpire check assays across all labs have 32% of the duplicate samples reporting within  $\pm 10\%$ . As illustrated in the Figure 11.14, the mean gold grades obtained by the global statistical analysis, MSA Labs pulp duplicates are slightly higher than the primary Laboratory. The average relative percent difference between all pairs of laboratories is 32%. GMS considers the check assay results to be below industry standard.
- Figure 11.14 and Figure 11.15 present a selection of the results of pulp duplicates from the umpire labs compared to the original Au values.

Figure 11.14: Chemex Check Assays vs Nomos Originals



Source: GMS, 2025

**Figure 11.15: Chemex Check Assays vs Lakefield Originals**


Source: GMS, 2025

### 11.8 External Audit

At least two (2) external audits were performed at various time on the Gurupi Project. The most relevant are summarized below.

### **11.8.1 SRK Consulting (2011)**

In 2011, SRK Consulting (SRK) was mandated by Jaguar to undertake an independent review of the Gurupi Project. The review included land tenure, mining rights, geology and resources, mine plans, infrastructures, environmental and social permitting, capital cost (CAPEX), operational cost (OPEX) and life of mine.

SRK recommended continued drilling to expand resources and improve confidence, particularly in the Chega Tudo area. The mine schedule had to account for seasonal disruptions, and an emergency stockpile was deemed necessary. Cut-off grades needed refinement by weathering classification, and the Chega Tudo pit required reassessment. Optimizing bench height and reviewing mining equipment selection were identified as opportunities for efficiency improvements. Additional metallurgical testing was recommended, particularly for flotation and gravity concentration, and process modifications were suggested to prevent gold loss. Infrastructure planning needed to address haul road flooding risks. Permitting delays had the potential to impact on the construction schedule, making the timely completion of the Detailed Engineering Phase essential.

### **11.8.2 AMC Consultants (2020)**

In 2020, MCT commissioned AMC Mining Consultants Ltd (AMC) to undertake a technical review of the Gurupi Project 2019 Mineral Resource estimate. A complete review of the estimation was completed and AMC confirmed that the Mineral Resource estimate was completed using recognized methods and quality assurance procedures. Data collection followed industry standards, with established relationships with laboratories and suitable processes for bulk density determination. The geological interpretation and block model allocation were validated through statistical checks and comparisons. AMC recommended conducting a geochemical study on elements related to gold mineralization, including their relationship and influence on gold liberation. AMC also noted that the Standard Operating Procedures of MCT could be more descriptive and that sampling procedures needed some refinement. Finally, MCT recommended creating a single detailed sample preparation and analytical QAQC report for the project.

## **11.9 QP Conclusions and Recommendations**

The QP concludes that the sample preparation, analysis, and security procedures applied by the previous owner are acceptable. Documentation of sampling procedures used to support the diamond and reverse circulation drilling programs are considered by GMS as best industry practise.

In the opinion of the QP, sample preparation, analysis, and security procedures implemented since 1995 are comparable with the best industry standards, and robust controls are in place to ensure the integrity of

the assay database. A statistical analysis of the quality control data from 1995 to 2019 sampling programs did not expose any significant analytical issues. The QP believes that the drilling database is robust and reliable.

## 12. DATA VERIFICATION

### 12.1 Site Visit

Pascal Delisle, P.Geo., Director of Geology and Resources at G Mining Services (GMS) and qualified person (QP) under NI 43-101 regulations, visited the Gurupi Project between September 23 and September 24, 2024. No drilling activities were ongoing during the visit, but GMS was assisted by GMIN personnel with prior drilling experiences on the project. The QP examined drill core from the Blanket, Contact and Chega Tudo deposits, inspected core storage facilities, and reviewed drilling and exploration procedures (see Figure 12.1 and Figure 12.2). Drill core review permitted to observe clear relationships between gold grades (or presence of mineralization) and rock alteration / strain within mineralized domains. Additionally, selected core samples from diamond drill holes were re-sampled for database validation (QP Samples). The samples were selected based on grade and geological characteristic of the mineralization domains. GMS also performed database verification and assessed quality assurance and quality control (QAQC) measures. Work practices observed during this site visit at Gurupi Project aligns with the CIM Best Practices Guidelines (2019).

**Figure 12.1: Core Storage Facilities**



**Figure 12.2: Core Logging Facilities at Gurupi Project**

## **12.2 QP Duplicate Samples**

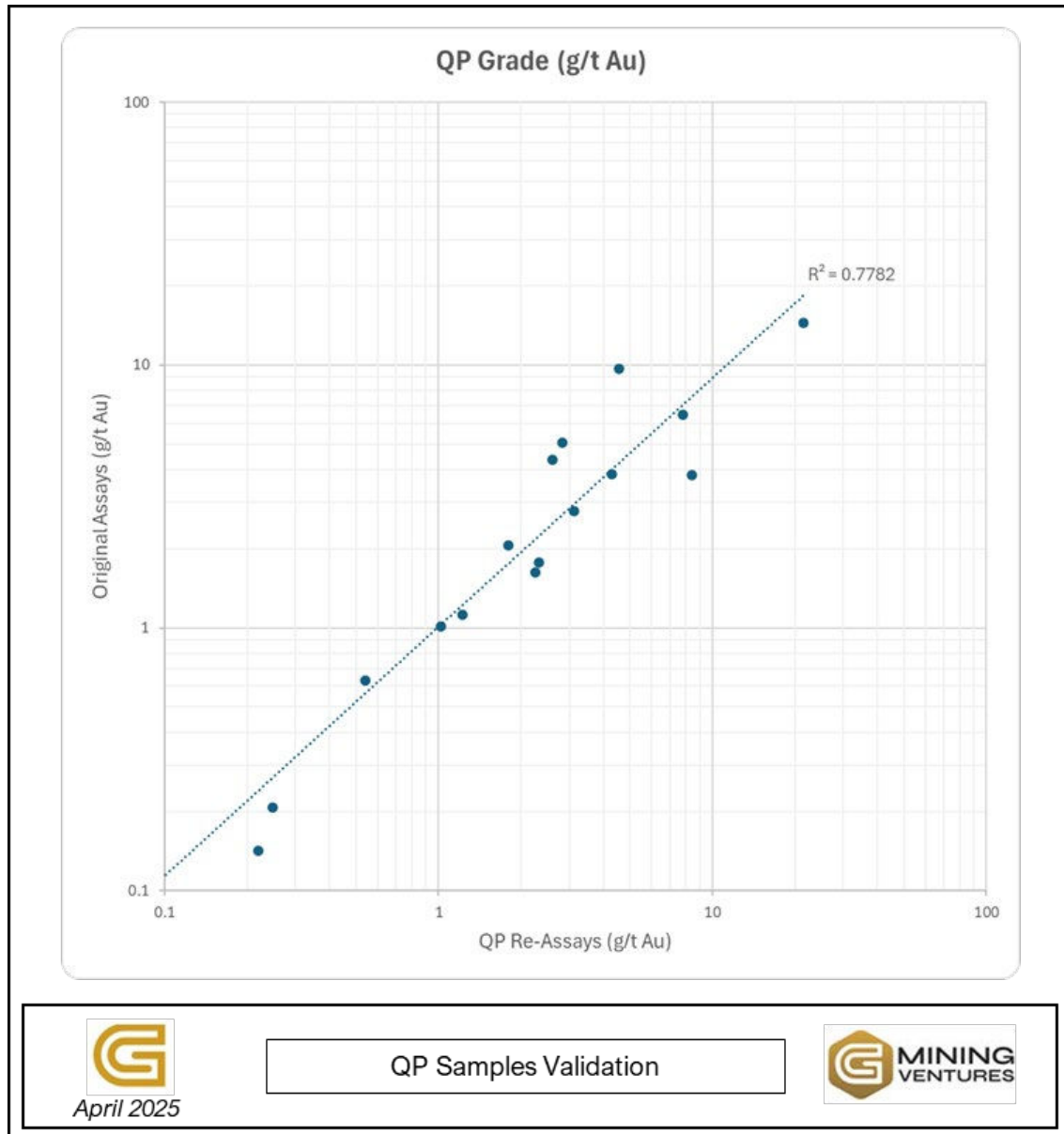
During the site visit, GMS collected 17 half-core duplicates from mineralized intervals derived from five (5) drill holes distributed through the three (3) deposits; only unoxidized material was sampled. The 17 duplicates were bagged and sealed using security tags under the QP supervision. Samples were then prepared at ALS Laboratories in Cuiaba, Brazil, and subsequently analyzed at ALS Laboratories in Lima, Peru. The entire sampling and transport process was supervised by the qualified person. The results and a comparison with the original assays are presented in Table 12.1 and Figure 12.3.

**Table 12.1: QP Core Duplicates Results**

Deposit	Drillhole	From	To	OG Sample Number	QP Sample Number	OG Grade (g/t Au)	QP Grade (g/t Au)	Variance
Blanket	ACBKD-19-194	69.0	70.0	CG-36831	B00333486	7.81	6.45	-1.36
Blanket	ACBKD-19-194	115.0	116.2	CG-36886	B00333487	1.80	2.06	0.26
Blanket	ACBKD-19-194	116.2	117.1	CG-36887	B00333488	8.43	3.81	-4.62
Blanket	ACBKD-19-196	55.8	57.1	CG-36347	B00333489	0.54	0.63	0.09
Blanket	ACBKD-19-196	80.0	81.0	CG-36378	B00333490	21.52	14.45	-7.07
Blanket	ACBKD-19-196	81.0	82.0	CG-36380	B00333491	4.31	3.85	-0.46
Contact	ACCTD-17-018	64.0	65.0	CG-02819	B00333492	0.08	0.12	0.04
Contact	ACCTD-17-018	65.0	66.0	CG-02821	B00333493	2.33	1.78	-0.56
Contact	ACCTD-17-018	124.0	125.0	CG-02886	B00333494	4.57	9.69	5.12
Contact	ACCTD-17-018	125.0	126.0	CG-02888	B00333495	1.22	1.12	-0.10
Contact	ACCTD-17-018	126.0	127.1	CG-02889	B00333496	0.25	0.21	-0.04
Chega Tudo	FCTU0045	265.0	266.0	45000247	B00333497	2.26	1.63	-0.63
Chega Tudo	FCTU0045	266.0	267.0	45000248	B00333498	2.84	5.06	2.22
Chega Tudo	FCTU0045	267.0	268.0	45000249	B00333499	2.60	4.35	1.75
Chega Tudo	FCTU0047	152.0	153.0	47000079	B00333500	0.22	0.14	-0.08
Chega Tudo	FCTU0047	153.0	154.0	47000080	B00327141	3.13	2.77	-0.36
Chega Tudo	FCTU0047	154.0	155.0	47000081	B00327142	1.02	1.015	0.00

The assay results from the QP duplicates show a generally good correlation with the original assays found within the database. Some variability is expected due to the nugget effect of gold mineralization, especially in higher grade mineralized intervals. No bias was identified.

**Figure 12.3: Scatter Plot Showing Original Assays (Y-axis) vs. QP Duplicate Assays (X-axis)**



### 12.3 Drill Core Inspection

GMS reviewed numerous mineralized intersections from five (5) holes distributed evenly throughout the three (3) deposits. A clear relationship was observed between gold grades, sulfide content, alteration, veining and strain intensities. The intensity of the silica-sericite alteration assemblages appears to be

directly related to the gold-grades observed in assays. Visible gold was also observed on numerous occasions. GMS notes that sulfide content is typical when compared to other orogenic deposits, with locally elevated content in chalcopyrite, sphalerite and galena. Figure 12.4 presents typical examples of alteration assemblages associated with mineralization.

**Figure 12.4: Typical High-Grade Intervals with Intense Silica-Sericite Alteration Assemblages from the Blanket (top) and Contact (bottom) Deposits**



#### 12.4 Drillhole Database Verification

An independent validation and verification of the database were undertaken by GMS.

### 12.4.1 Collar Validation

A total of 168 collar survey certificates were validated out of a total database of 951 holes, representing ~17% of the database. This included all available collar certificates prior to 2017 and 29% of certificates from 2017 to 2019.

- **2017 to 2019 holes (n = 81)** gave a perfect match ( $\pm 0.001$  m) except for four (4) holes: ACCTD-17-026, ACCTD-17-031, the X value on ACCTD-18-102 and ACCTD-17-026. After review, we believe the certificates are erroneous and the database values are correct for the first three (3) holes.  
ACCTD-17-026 used the manually entered collar location from the EZ-Trac survey; the hole will be excluded due to lack of validation.
- **2011 holes (n = 18)** gave a close match in XY ( $\pm 0.4$  m). Z values were consistently ~19.4 m higher on the certificate. No elevation datum was stated on the certificates. The difference is within the 30 m error alarm range of a Total Station.
- **2007 holes (n = 8)** gave a close match in XY (+0.6 m in X, -0.3 m in Y). Z values were ~24.8 m lower on the certificate on average. No elevation datum was stated on the certificates. The difference is within the 30 m error alarm range of a Total Station.
- **2003 to 2004 holes (n = 61)** gave a XY difference that matched the expected conversion values for that era. We believe it was measured in the local grid version of WGS84. The Z value was consistently ~56.2 or ~57.5 m higher on the certificate rather than the expected 81 m, which is within the 30 m alarm range of a Total Station.

It was noted that the azimuth and dip in the collar table has not been consistently updated to match the 0 m survey data. While this data has no impact on the modelling or resource, it is recommended to update or eliminate these database columns in the future to avoid the presence of contradictory data.

### 12.4.2 Survey Validation

Survey values were validated against the raw survey files for 180 of 951 holes, which translates to 4,736 out of 18,242 survey readings, representing 19% of the holes and ~26% of the survey values in the combined databases.

The following observations were made:

- The survey tool was not recorded in the DB for any of the projects. The raw survey files often lack complete peripheral data (e.g. date, tools used, magnetics).

- No magnetic readings were collected at any point to assess and validate the readings made with magnetic survey tools.
- 0 m reading typically matches the 0 m reading on the downhole survey.
- Azimuth data for 13 subvertical holes has been replaced with 0°. Only dip data was uploaded. (e.g., ACBKD-17-001). This is an acceptable practice.
- Errors found were generally very low impact such as rounded decimal values or minor typos. The frequency and type of error are outlined in Table 12.2 below.
- Of greatest note is that over 2,400 azimuth and dip readings showed deviations of greater than 10° per 100 m. While there is no critical impact on the hole positions, it is strongly recommended that a survey QAQC procedure be established for future drill programs.
- One (1) hole (KCP393) was excluded from the resource for an unexplained azimuth correction (also in the table below).

**Table 12.2: Downhole Survey Errors and Corrections**

# Holes Impacted	# Readings Impacted	% of DB Readings	Description	Correction
20	107	0.60%	Decimal typos where dip or azimuth is missing a 0 after the decimal in ACBKD-19 holes (e.g., -50.07 is entered as -50.7)	Updated with corrected values.
16	437	2.40%	Values in some holes have been rounded to eliminate the decimal. Three (30 instances where only one (1) significant figure was missing. (Mainly KCP holes.)	Updated with corrected values.
4	4	0.00%	Incorrect decimal value entered in the DB.	Updated with corrected values.
1	73	0.40%	In FCTU0010 all azimuth data in the DB is offset by 0.5° compared to the raw data file. 12 readings are offset by 0.6°	The Maxibor II requires manual input of the reference azimuth, so correction of a user input error is plausible but does not explain the inconsistency in the offset. After 3D review, it was corrected to a consistent 0.5° offset.

# Holes Impacted	# Readings Impacted	% of DB Readings	Description	Correction
1	79	0.40%	In KCP393 the azimuth data is all offset by 180° compared to the raw data file (also represented in the rounded data).	It is not possible to set a reference azimuth with a Fotobor DDI, so a user input error is not possible. Exclude hole from resource.
1	3	0.00%	KCT308 has three EZ-shot readings that were not entered in the DB due to bad azimuth data (possibly magnetics). Planned collar data was left in the DB instead	After 3D review, it was decided to use the measured dips (not impacted by mag) along with the planned azimuth data.
Unknown	> 2,400	13.20%	Rate of azimuth and/or dip deviation is greater than 10° per 100 m.	Low overall impact on hole locations; no corrections were made at this time. A QAQC procedure is recommended going forward.
20	107	0.60%	Decimal typos where dip or azimuth is missing a 0 after the decimal in ACBKD-19 holes (e.g., -50.07 is entered ats-50.7)	Updated with corrected values.
16	437	2.40%	Values in some holes have been rounded to eliminate the decimal. Three instances where only one significant figure was missing. (Mainly KCP holes.)	Updated with corrected values.
4	4	0.00%	Incorrect decimal value entered in the DB.	Updated with corrected values.
1	73	0.40%	In FCTU0010 all azimuth data in the DB is offset by 0.5° compared to the raw data file. 12 readings are offset by 0.6°	The Maxibor II requires manual input of the reference azimuth, so correction of a user input error is plausible but does not explain the inconsistency in the offset. After 3D review, it was corrected to a consistent 0.5° offset.
1	79	0.40%	In KCP393 the azimuth data is all offset by 180° compared to the raw data file (also represented in the rounded data).	It is not possible to set a reference azimuth with a Fotobor DDI, so a user input error is not possible. Exclude hole from resource.

# Holes Impacted	# Readings Impacted	% of DB Readings	Description	Correction
1	3	0.00%	KCT308 has three EZ-shot readings that were not entered in the DB due to bad azimuth data (possibly magnetics). Planned collar data was left in the DB instead	After 3D review, it was decided to use the measured dips (not impacted by mag) along with the planned azimuth data.
Unknown	> 2,400	13.20%	Rate of azimuth and/or dip deviation is greater than 10° per 100 m.	Low overall impact on hole locations; no corrections were made at this time. A QAQC procedure is recommended going forward.

### 12.4.3 Assay Validation

To validate all the assay data, a compilation of database assay data and all available QAQC assay data was created for each of the three (3) deposits.

In each deposit, the database assay values were validated against the original assay certificate values. All available certificates in spreadsheet format were validated. All available certificates with a clean PDF format that were easily converted to spreadsheet format were validated. For the remaining pdfs that were not easily converted to spreadsheets, manual data entry was used to validate a minimum of 5%.

Validation was completed on 42% of the Blanket assay values, 93% of the Contact assay values, and 9% of the Chega Tudo assay values; this represents 47% of the combined databases. A total of 41 erroneous values were corrected, most of which represented a change of < 0.02 g/t Au. The most common error was incorrectly entered values for sub-detection limit results. Table 12.3 below summarizes the assay value errors found during validation and QAQC.

**Table 12.3: Assay Table Errors**

# Readings Impacted	% of DB Readings	Description	Correction
1,582	1%	Incorrect sub-Detection Limits value entered	Corrected to 1/2 of the Detection Limits for the applicable laboratory
41	0.03%	Incorrect value entered (typos, value in the wrong field, etc.)	Corrected to assay certificate value
40	0.03%	Missing sample interval (1) and rerun values (39)	Added

Other non-material errors observed include lab name errors or combinations, missing QAQC data, incorrectly labelled QAQC, and missing data for date/lab/certificates.

## **12.5 QP Commentary and Conclusions**

In the QP's opinion, the procedures observed during the site visit are consistent with the CIM Best Practices Guidelines (2019). The sampling equipment and logging facilities were deemed to be of adequate quality, and the sample storage facilities were found to be suitable. The site visit also reflected the commitment of previous project operators, with database validation supporting this impression.

Inspection of the drill core showed a strong correlation between alteration and gold grades, while the QP's duplicate assays aligned well with the original assay database, showing acceptable levels of error. The QP has no concerns regarding the validity of the drilling database.

The validation work carried out on the Gurupi project drillhole database including collar, downhole survey, and assay data verification, allowed for the identification and correction of a number of minor errors, with no significant impact on the overall quality of the database. The discrepancies observed, whether related to data entry errors, coordinate system variations, or technical limitations of historical tools, remained within acceptable ranges for work of this nature.

The integration of the validation results has improved the rigor and reliability of the database. As a result of this work, we now have a good level of confidence in the data used for the mineral resource estimation. This level of confidence is considered sufficient to support subsequent geological interpretation, modeling, and mine planning phases of the project.

## **13. MINERAL PROCESSING AND METALLURGICAL TESTING**

### **13.1 Introduction**

Various metallurgical test work campaigns have been conducted on the Gurupi Project. Previous metallurgical testing has indicated that samples from the Gurupi deposits are amenable to conventional treatment flowsheets used by the gold mining industry, i.e., gravity and flotation followed by intensive cyanidation of high-grade concentrates and cyanidation leaching of flotation concentrates to produce doré.

Relevant metallurgical test work results from 2017-2019 test work programs and gold recoveries related to the Blanket and Contact (Cipoeiro area), and Chega Tudo deposits of the Gurupi Project are summarized in this section. No new metallurgical test work has been completed since 2019.

Leaching of material and concentrates has been extensively tested and high gold recoveries have been achieved with samples from Cipoeiro and Chega Tudo deposits. 2017-2019 test work focused on flotation for process optimization. Tests were planned by Rezende Consultoria em Tratamento de Minérios Ltda (Rezende) and conducted at SGS-Geosol and Rezende metallurgical laboratories.

### **13.2 Mineralogy**

The Gurupi deposit is composed of hard rock and saprolite material. Estudio Calcagráfico completed an ore mineralogy study on four (4) Gurupi samples in August 2004. The gold in samples was fine grained and present both as free particles and associated with sulphides such as pyrite and chalcopyrite. A summary of this study is provided in Table 13.1

**Table 13.1: Gurupi Mineralogy**

<b>Sample</b>	<b>Mineralogy</b>
Chega Tudo GUED-39 from 172.9 m Assay 11.1 g/t Au	<ul style="list-style-type: none"> <li>• Strong foliation, abundant sulphides.</li> <li>• Abundant Pyrite, minor Chalcopyrite and Native Gold (Pyrite &gt;&gt;&gt; Au &gt; Chalcopyrite).</li> <li>• Native Gold: Frequent as free grains (up to 60 µm) as well as inclusions in Pyrite (grain size 5 µm to 50 µm).</li> </ul>
Chega Tudo GULD-175 from 210.44 m Assay 8.3 g/t Au	<ul style="list-style-type: none"> <li>• Abundant disseminated sulphides following foliation or as veinlets.</li> <li>• Sulphides: Pyrite, Sphalerite, Chalcopyrite, traces of Pyrrhotite and Galena (Pyrite &gt;&gt;&gt; Chalcopyrite &gt; Sphalerite &gt; Pyrite &gt; Gold).</li> <li>• Native Gold: Rare fine gold (20 µm to 30 µm) at interphase of Chalcopyrite inclusion in Pyrite.</li> </ul>

Sample	Mineralogy
Cipoeiro GUPD-106 from 110.0 m Assay 9.3 g/t Au	<ul style="list-style-type: none"> <li>• Abundant Pyrite and Chalcopyrite mainly parallel to foliation planes.</li> <li>• Metal abundance: Pyrite &gt; Chalcopyrite.</li> <li>• No Gold was observed in the polished section.</li> </ul>
Cipoeiro GUPD-142 from 62.2 m Assay 105 g/t Au	<ul style="list-style-type: none"> <li>• Abundant Pyrite, minor Chalcopyrite, Native Gold, Silver, Freibergite, Sphalerite and Galena.</li> <li>• Metal abundance: Pyrite &gt; Chalcopyrite &gt; Sphalerite &gt; Galena &gt; Native Gold &gt; Native Silver &gt; Freibergite.</li> <li>• Native Gold: Fine free grains (10 µm to 30 µm), frequently included in Chalcopyrite as well as associated with Native Silver, Galena or probable sulphosalts of silver such as Freibergite (up to 40 µm).</li> </ul>

The Amtel Ltd April 2015 report, “Department of Gold in Gurupi Saprolite and Ag Fresh Gold Ores” details gold deportment, gold composition and gold natural size distribution and composition of gangue minerals in hard rock and saprolite samples from both Cipoeiro and Chega Tudo deposits. The hard rock samples were composed of feldspar, quartz and amphiboles (60-80%) followed by mica and clays (15-30%) and carbonates (3-6%). The main sulphide mineral was pyrite (0.6-1.3%) with minor presence of arsenopyrite in Chega Tudo (<0.1%) and chalcopyrite (0.02%). The saprolite samples had feldspars almost depleted but still present (2-8%) and replaced by mica / clays (mainly kaolinite 46-48%). Quartz became relatively more important (~40%) and goethite was a major component of these material types (4-12%). Sulfide and cyanide minerals were negligible.

The hard rock samples contained much less clay materials (less than 15-30%) than the saprolite samples (almost 50%). Small proportion of clays may have negligible impact on flotation, but higher proportions probably drop gold recoveries and increase mass pull to concentrates in flotation.

### **13.3 2017 Metallurgical Test Work**

The 2017 Metallurgical test work program mainly focused on flotation test work. One of the objectives was to float with small mass pulls as practiced at the Morro do Ouro site in Paracatu, Brazil, but also to increase recovery, because the feed grades at Gurupi may average ~2.0 g/t. It was decided to use rougher flotation times of up to 15 minutes in the case of two-stage rougher flotation and 21 minutes with three-stage rougher flotation and introduce cleaning flotation stages.

The Morro do Ouro flowsheet involves sequential flotation, with the first rougher stage using reagents more specific for gold and producing high grade concentrates in low masses, taking advantage of the fast gold

flotation kinetics. The following stages retreated the tailings of the first stage and focused on recovering auriferous sulphides using a strong xanthate collector.

Some of the metallurgical balances for the 2017 tests include gold recoveries by flotation alone and other recoveries by flotation plus estimated gravity recoveries on cleaner tails.

Samples tested during the 2017 campaign used drill core samples from 2010 and 2017 campaigns. Select test results are provided in the tables below.

**Table 13.2: Tests with Same Reagents Tested at SGS-Lakefield – 2010 Blends from Blanket and Contact Zones**

Sample	Flotation Conditions	Primary Grind Size. P80 µm	Head Grade (g/t Au)	Product	% Mass Pull	Grade (g/t Au)	Gold Recovery (%)
BZ 2010 HR / SAP Blend A	Rougher; A-208 & PAX	150	2.7	Total conc.	4.8	45.5	81.8
BZ 2010 HR / SAP Blend B	Rougher; A-208 & PAX	106	2.5	Total conc.	4.5	45.4	81.3
CZ 2010 HR / SAP Blend A	Rougher & Cleaner; A-208 & PAX	150	3.0	High grade conc.	2.3	108	81.3
				Low grade conc.	2.4	11.3	9.1
				Total conc.	4.7	58.1	90.4
CZ 2010 HR / SAP Blend B	Rougher; A-208 & PAX	150	3.0	Total conc.	4.9	52.8	88.5

Blend A contained only the coarse (> 180 µm) fraction of saprolite ores, considering mined proportion of 10% saprolite and 90% hard rock (tonalite). Blend B contained the full 10% saprolite material with 90% hard rock.

Similar gold recoveries in tests with 2010 Blends A and B from the Blanket and Contact Zone indicate no negative effect of the 10% fine saprolite in Blend B during flotation. Note that this conclusion is valid for the saprolite sample tested in 2017; the geometallurgical testing in 2018-2019 has demonstrated that quality of saprolite varies and the ores with higher clay content cannot be blended with hard rock before treatment.

A pre-gravity concentration test confirmed no improvement of gold recovery.

Further tests were done on a blend of saprolite ores from the Blanket and Contact Zone, resulting in low gold recovery with high mass pulls of concentrates.

The average of two (2) tests done on the 2010 Blanket and Contact Zone composites using two-stage flotation was used to calculate the mass balance for the study at the time (refer to Table 13.3). The mass pull was 8.0%, and gold recovery was 90.7%.

**Table 13.3: Tests 2010 Blanket and Contact Zone Blend A Composites**

Test / Sample	Test Conditions	Primary Grind Size, P80 µm	Head Grade (g/t Au)	Product	% Mass Pull	Grade (g/t Au)	Gold Recovery (%)
TBZA2; BZ 2010 HR / SAP Blend A	A-3743 & A-7249 1 <sup>st</sup> stage fast, rougher cleaner; PAX 2 <sup>nd</sup> stage rougher, cleaner and recleaner	150	2.43	1 <sup>st</sup> stage cleaner conc.	1.4	119	67.8
				2 <sup>nd</sup> stage recleaner conc.	0.4	56	9.1
				2 <sup>nd</sup> stage recleaner tail.	1.72	10.6	7.5
				Subtotal hg conc.	3.5	58.8	84.5
				2 <sup>nd</sup> stage cleaner tail.	4.8	1.87	3.7
				Total conc.	8.3	25.9	88.2
TBZA2; CZ 2010 HR / SAP Blend A	A-3743 & A-7249 1 <sup>st</sup> stage fast rougher cleaner; PAX 2 <sup>nd</sup> stage rougher, cleaner and recleaner	150	3.04	1 <sup>st</sup> stage cleaner conc.	0.9	208	58.4
				2 <sup>nd</sup> stage recleaner conc.	1.0	60	20.5
				2 <sup>nd</sup> stage recleaner tail.	1.33	20.6	9.0
				Subtotal hg conc.	3.23	82.7	87.9
				2 <sup>nd</sup> stage cleaner tail.	4.5	2.8	4.1
				Total conc.	7.7	36.4	92.0
AVERAGE FOR TWO (2) TESTS ABOVE	AS ABOVE	AS ABOVE	2.86	1 <sup>st</sup> stage cleaner conc.	1.1	163	64
				2 <sup>nd</sup> stage recleaner conc.	0.7	59	14.7
				2 <sup>nd</sup> stage recleaner tail.	1.5	15.6	8.3
				Subtotal hg conc.	3.4	74	86.9
				2 <sup>nd</sup> stage cleaner tail.	4.6	2.3	3.8
				Total conc.	8.0	32.5	90.7

Tests were done using different reagents, flotation schemes and numbers of cleaning stages. The inclusion of cleaner flotation after a short flotation time at rougher at the first stage allows the production of high-grade concentrates. Considering the samples tested, about 40% of the gold could be recovered by flotation in 0.3% mass pulls with grades around 420 g/t Au. The Morro do Ouro plant uses a batch discharge Knelson gravity concentrator to generate a high-grade concentrate with lower mass pulls for feeding an intensive leach reactor.

The last flotation scheme tested in the 2017 campaign and later adopted in the geometallurgical testing consisted of three-staged rougher and staged cleaners, with rougher concentrates feeding their corresponding cleaner stages and the tailings of each rougher or cleaner feeding the next stage of the same level. As mentioned before, the last cleaner tail of such flotation sequence could be further processed in a continuous gravity concentrator for recovering extra gold in a medium grade concentrate that can be treated by leaching with the other medium grade concentrates produced by flotation.

Table 13.4 summarizes the results of tests performed on composites of Contact Zone from the 2017 drilling campaign.

**Table 13.4: Tests 2017 CZ Composites with Three-Stage Flotation and Estimating Gravity Separation on Cleaner Tails**

Test / Sample	Test Conditions	Primary Grind Size, P <sub>80</sub> µm	Head Grade (g/t Au)	Product	% Mass Pull	Grade (g/t Au)	Gold Recovery (%)
T 50; CZ 7 2017 HR	3 stages rougher and cleaners, A-6697 1 <sup>st</sup> stage fast rougher cleaner; PAX 2 <sup>nd</sup> and 3 <sup>rd</sup> stages	150	4.23	1 <sup>st</sup> stage cleaner conc.	0.57	443	59.9
				2 <sup>nd</sup> stage recleaner conc.	3.5	31.3	25.7
				2 <sup>nd</sup> stage recleaner tail.	2.8	7.5	5.0
				2 <sup>nd</sup> stage cleaner tail.	6.75	1.14	1.8
				Subtotal hg conc.	6.9	55.8	90.6
				Subtotal gravity conc.	0.34	13.68	1.09
				Total conc.	7.2	53.2	91.7
T 51; CZ 9 & 13 2017 HR	3 stages rougher and cleaners, A-6697 1 <sup>st</sup> stage fast rougher cleaner; PAX 2 <sup>nd</sup> and 3 <sup>rd</sup> stages	150	1.82	1 <sup>st</sup> stage cleaner conc.	0.80	110.9	48.7
				2 <sup>nd</sup> stage recleaner conc.	3.79	16.55	34.4
				2 <sup>nd</sup> stage recleaner tail.	3.52	1.46	2.8
				2 <sup>nd</sup> stage cleaner tail.	7.68	0.5	2.1
				Subtotal hg conc.	8.1	19.3	85.9
				Subtotal gravity conc.	0.38	6.0	1.26
				Total conc.	8.5	18.4	87.2
T 52; CZ 11 2017 HR	3 stages rougher and cleaners, A-6697 1 <sup>st</sup> stage fast rougher cleaner; PAX 2 <sup>nd</sup> and 3 <sup>rd</sup> stages	150	3.45	1 <sup>st</sup> stage cleaner conc.	0.60	352.5	61.7
				2 <sup>nd</sup> stage recleaner conc.	2.8	28.3	23.0
				2 <sup>nd</sup> stage recleaner tail.	2.72	6.39	5.0
				2 <sup>nd</sup> stage cleaner tail.	7.28	1.17	2.5
				Subtotal hg conc.	6.1	50.6	89.8
				Subtotal gravity conc.	0.36	14.04	1.48

Test / Sample	Test Conditions	Primary Grind Size, P <sub>80</sub> µm	Head Grade (g/t Au)	Product	% Mass Pull	Grade (g/t Au)	Gold Recovery (%)
				Total conc.	6.5	47.7	91.2
T 53; CZ 11 2017 HR	3 stages rougher and cleaners, A-6697 1 <sup>st</sup> stage fast rougher cleaner; PAX 2 <sup>nd</sup> and 3 <sup>rd</sup> stages	150	0.96	1 <sup>st</sup> stage cleaner conc.	0.94	42.6	42.0
				2 <sup>nd</sup> stage recleaner conc.	4.21	7.21	31.7
				2 <sup>nd</sup> stage recleaner tail.	4.5	1.75	8.2
				2 <sup>nd</sup> stage cleaner tail.	9.11	0.30	2.9
				Subtotal hg conc.	9.6	8.1	81.9
				Subtotal gravity conc.	0.46	3.6	1.71
				Total conc.	10.1	7.8	83.6

### **13.4 2018 and 2019 Testwork**

The laboratory flotation scheme developed for the 2017 test work campaign was used to test fresh rock composites for the 2018-2019 geometallurgical campaign. Four (4) different schemes with and without desliming were tried on various saprolite ores; one considered more adequate for qualifying the saprolite, colluvium and saprock composites included two-stage desliming and grinding of the coarser / harder fraction of the composites.

Flotation tests conducted on hard rock samples with coarser grind with a P80 of 150 µm had similar average gold recoveries to previous estimations from the 2017 campaign.

Some composites had only 2-3 kg of material for testing, so the grinding flotation scheme changed. Instead of using two (2) 1-kg samples for determining the grind curve and 1-kg samples for flotation, two (2) grinding times were used on two (2) 1-kg samples. An unexpected set of gold recoveries resulted from these series of tests with two (2) grinding sizes. In some composites, the higher recoveries resulted when coarser grind was used, in others the opposite, and in others no difference in recoveries with different grind sizes.

After these results, the geometallurgical campaign changed to systematically testing composites with two (2) grinds. As a result, the average gold recovery increased by over 3% in the Blanket Zone and over 1.5% in the Contact Zone when the highest gold recoveries were considered. Considering the tests already done, the recovery curve for Blanket Zone resulted better than the curve for Contact Zone.

### **13.5 Gold Recoveries**

Gold recovery algorithms, developed by Rezende for studies in 2019 and updated in 2020, have been adopted for the Gurupi Project.

#### **13.5.1 Hard Rock Material**

Metallurgical test work results from the 2017-2019 campaigns were used to derive gold recovery algorithms for Blanket and Contact hard rock material and based on the following parameters and assumptions:

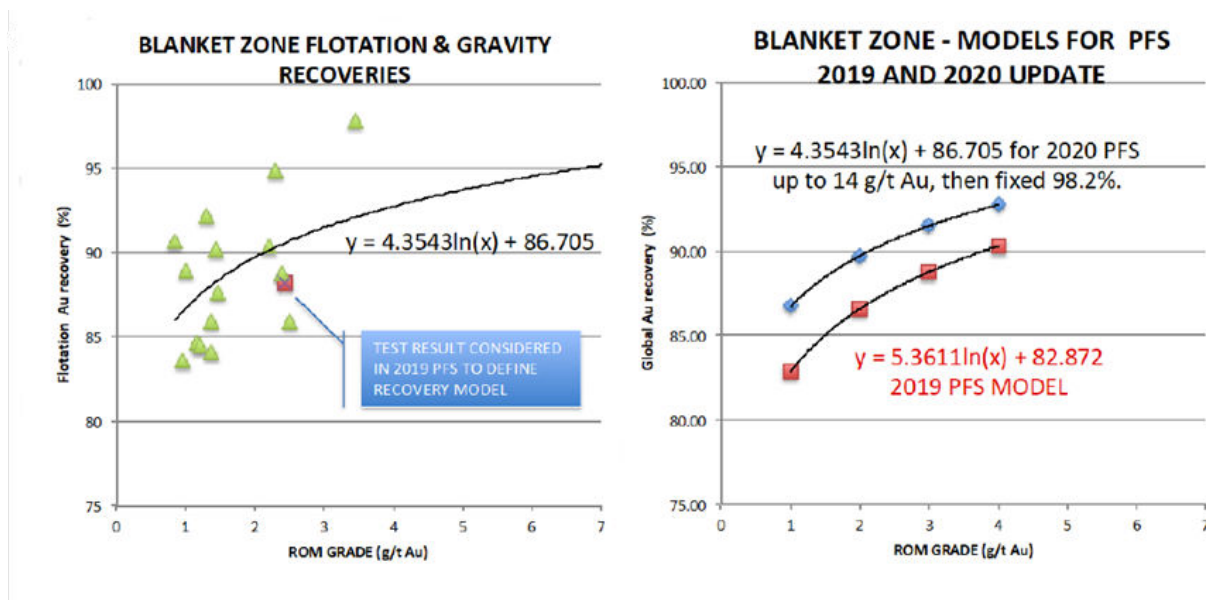
- Additional 2.5% gold recovery at Blanket Zone with gravity separation on flotation tails.
- Additional 1.5% gold recovery at Contact Zone with gravity separation on flotation tails.
- Fixed 60% of the contained gold is recovered by gravity systems and is treated by a dedicated intensive cyanidation and electrowinning circuit.
- Total gold sent to CIL = total gold recovered in gravity + flotation – 60%.

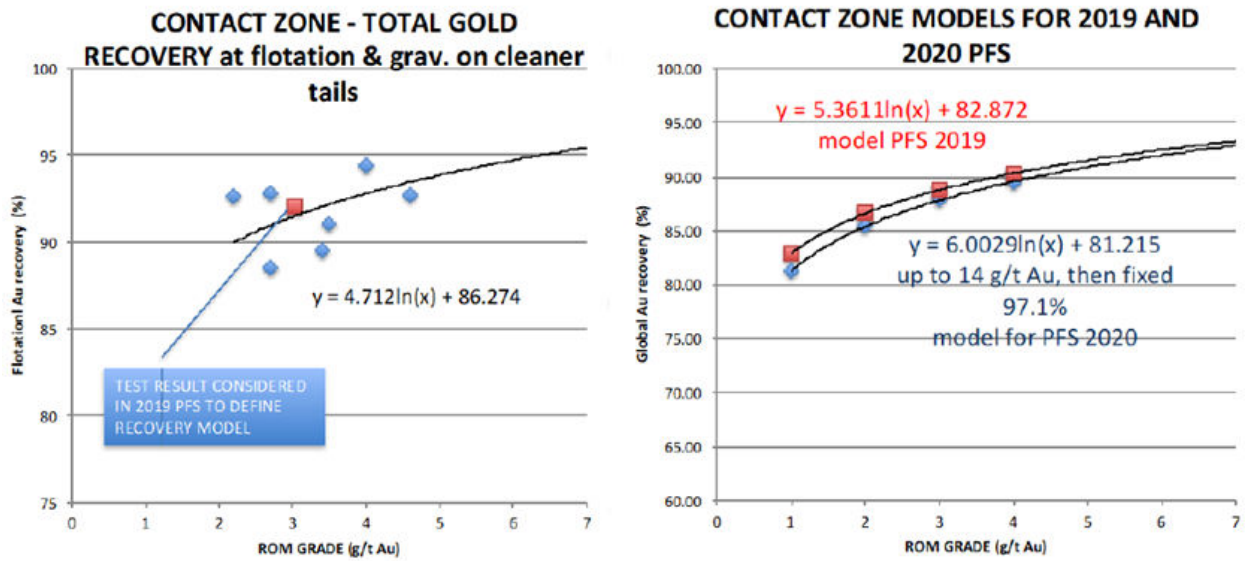
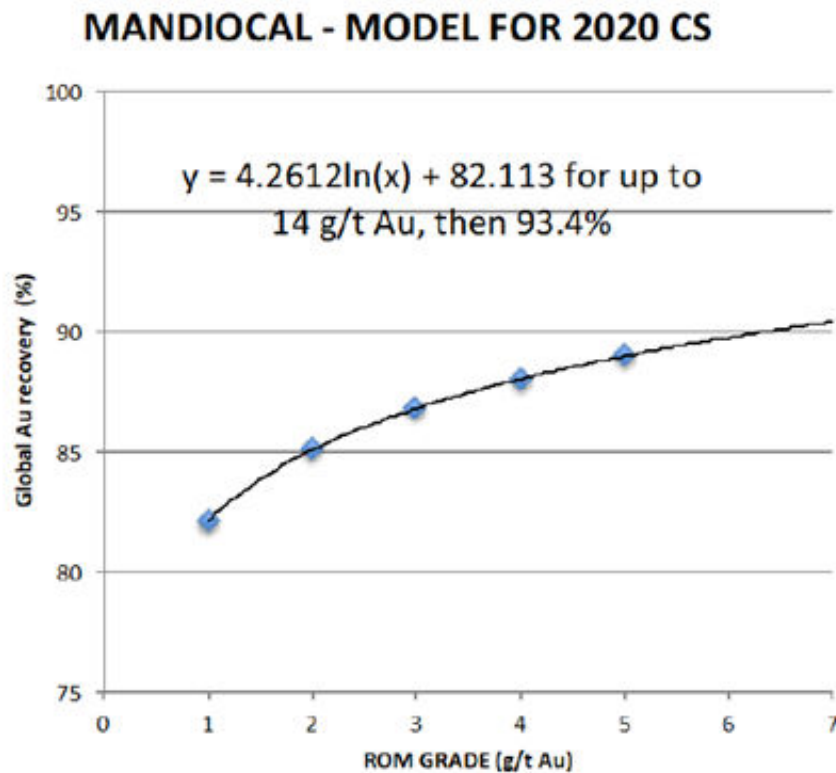
- Intensive cyanidation extraction of 99%.
- CIL extraction and elution circuit recovery of 94%.

Test work results and subsequent global gold recoveries are provided for Blanket and Contact material in Figure 13.1 and Figure 13.2.

For the Chega Tudo deposit, metallurgical test results from the 2017 campaign were used to develop the gold recovery model and is provided in Figure 13.3.

**Figure 13.1: Blanket Zone Gold Recoveries**

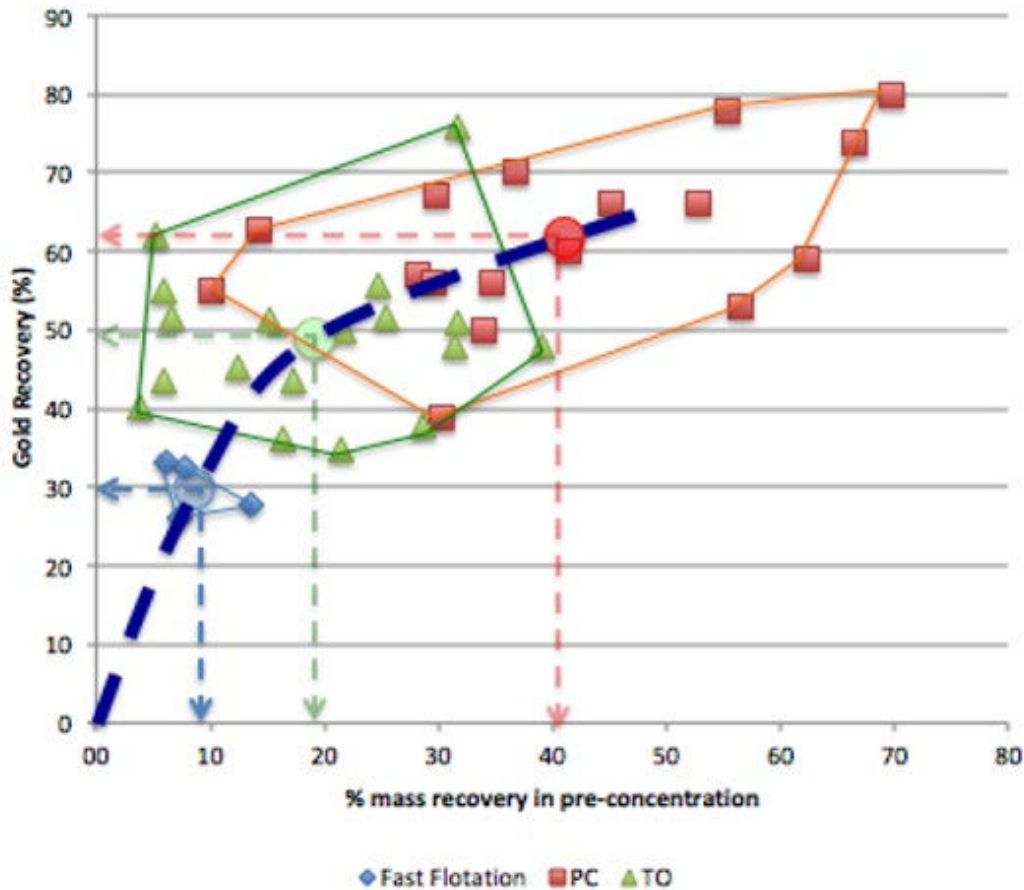


**Figure 13.2: Contact Zone Gold Recoveries**

**Figure 13.3: Chega Zone Gold Recoveries**


### 13.5.2 Saprolite and Transition Material

Samples of saprolite material from the Blanket zone were tested using different schemes of concentration; one (1) with direct fast flotation with small reagent addition and two (2) schemes with desliming before normal flotation and summarized in Figure 13.4.

Figure 13.4: Blanket Zone Saprolite



The blue line shows a rapid increase in gold recovery up to 20% mass pull to concentrates, probably reaching the optimal number for saprolites in this deposit. A fixed 50% recovery is recommended for saprolite material. However, when the actual material is treated in a commercial process plant, mass pulls will vary (green results) from 5% to 40% and recoveries will vary from 35% to 75%.

Samples of transition zone material from the Blanket zone such as saprock and colluvial have similar characteristics. Due to variable metallurgical test results, an average recovery of 36% is recommended.

Tests were conducted in February 2019 on a limited number of saprolite and saprock / colluvial composites from the Contact Zone. Gold recoveries of 40% and 43% are recommended for saprolite and saprock / colluvial, respectively.

Limited metallurgical tests have been conducted on Chega Tudo saprolite material, and 65% gold recovery is recommended for this material.

### **13.6 Recommendations**

It is recommended to complete a metallurgical test work campaign on representative core samples from the Blanket, Contact and Chega Tudo zones to further define the metallurgical response of the various material types. This will further develop the flowsheet to support the development of the project.

The test work scope is to include testing domains and variability test work, i.e.:

- Head assays and ICP analysis.
- Quantitative mineralogy tests.
- Comminution tests.
- Gravity flotation tails tests.
- Whole ore leaching tests and leaching of gravity tails.
- Rougher / cleaner flotation tests.
- Grind-leach determination tests.
- Flotation concentrate leach tests.
- Cyanide destruction tests.
- Sequential triple contact carbon lading tests.
- Oxygen uptake tests.
- Static and dynamic settling tests.
- Flocculant screening tests.
- Viscosity (shear-rate) tests.
- Acid-base accounting.

## **14. MINERAL RESOURCE ESTIMATE**

### **14.1 Introduction**

The following chapter presents the Mineral Resource Estimates (MRE) for the Gurupi Project, which includes the deposits in the Blanket and Contact deposits, located in the Cipoeiro area, as well as the Chega Tudo deposit. The MRE was prepared by Pascal Delisle, P.Geo, Director of Geology and Resources at GMS, and Émile Boily-Auclair, P.Eng., Project Engineer in Geology in Mineral Resources Estimation GMIN. The MRE presented in this section, along with all steps leading to its completion, has been revised and approved by M. Delisle, an independent qualified person (QP) as defined by the National Instruments 43-101.

GMIN personnel and the QP visited the Gurupi Project in September 2024 to review the geological data, historic drilling program and sampling protocols. Independent verification samples from drill cores were collected during this site by GMS personnel (see Section 12).

The MRE was prepared in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (2014), and in accordance with CIM Guidelines (2019) for Estimation of Mineral Resources and Reserves. The effective date of the MRE is February 3, 2025, and the MRE statement is listed in Table 14.1.

The latest drillhole used in these MREs was completed on 2019-07-10 for the Blanket deposit, on 2019-08-07 for the Contact deposit, and on 2011-09-13 for the Chega Tudo deposit.

**Table 14.1: In-pit Mineral Resources Estimate at Gurupi Project.**

Project	Weathering	Indicated Mineral Resources			Inferred Mineral Resources		
		Tonnes	Grade	Au Content	Tonnes	Grade	Au Content
		kt	g/t	koz	kt	g/t	koz
Cipoeiro	Transitional	971	1.41	44	274	1.09	10
	Rock	25,326	1.56	1,270	11,847	1.36	520
	Total	26,296	1.55	1,314	12,122	1.36	529
	COG	0.34 g/t Au for transitional and 0.35 g/t Au for Rock					
Chega Tudo	Transitional	212	0.93	6	38	1.26	2
	Rock	17,004	0.93	510	6,358	1.17	239
	Total	17,216	0.93	516	6,395	1.17	240
	COG	0.36 g/t Au for transitional and 0.37 g/t Au for Rock					

**\*Notes on Mineral Resources:**

The Mineral Resource described above have been prepared in accordance with the CIM Standards (Canadian Institute of Mining, Metallurgy and Petroleum, 2014) and follow the Best Practices outline by the CIM (2019).

- The QP for this MRE is Pascal Delisle, P. Geo. of G Mining Services Inc. M. Delisle is a member of l'Ordre des Géologues du Québec (# 1378).
- The effective date of the MRE is February 3, 2025.
- Density is applied by rock types and weathering patterns, as presented in Section 14.6.
- Mineral Resources are reported inside potentially mineable volume and include above cut-off material.
- The Gurupi deposits have been classified as Indicated and Inferred Mineral Resources according to drill spacing. No Measured Mineral Resource has been estimated.
- A minimum thickness of 3 metres and a minimum grade of 0.30 g/t Au was used to guide the interpretation of the mineralized domains.
- This MRE is based on subblock models with a main block size of 5 m × 5 m × 5 m, with subblocks of 1.25 m × 1.25 m × 1.25 m for Cipoeiro (Blanket and Contact deposits) and a main block size of 5 m × 5 m × 5 m, with subblocks of 2.5 m × 1.25 m × 2.5 m for Chega Tudo deposit, and have been reported inside an optimized pit shell. Gold grades were interpolated with 1 m composites using Ordinary Kriging for all mineralized domains.
- Topcut was applied in mineralized domains for Cipoeiro deposits, ranging from 20 g/t Au to 60 g/t Au. For Chega Tudo, given the homogeneity of the zones, a topcut of 20 g/t Au was applied to all zones.
- Open pit optimization parameters and cut-off grades assumptions are as follows:
  - Gold price of US\$1,950/oz
  - Total ore-based costs for Cipoeiro of US\$16.50/t for transition with an 85.0% processing recovery and US\$17.00/t for rock based on 85.0% processing recovery.
  - Total ore-based costs for Chega Tudo deposit of US\$18.50/t for transition with an 88.97% processing recovery and US\$19.00/t for rock based on 88.97% processing recovery.
  - Cipoeiro overall slop angles of 47° in transitional and 47° in rock.
  - Chega Tudo deposit overall slop angles of 45° in transitional and 45° in rock.
  - Royalty rate of 6.75%.
- These Mineral Resources assume no mining dilution and losses.
- These Mineral Resources are not Mineral Reserves as they have not demonstrated economic viability. The quantity and grade of reported Inferred Mineral Resources in this news release are uncertain in nature and there has been insufficient exploration to define these resources as indicated or measured; however, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

The open-pit Mineral Resources for the Cipoeiro area (e.g., Blanket and Contact deposits) is stated using a cut-off grade calculated at 0.34 g/t Au in transitional material and 0.35 g/t Au in rock. The open-pit Mineral Resources for the Chega Tudo deposit is stated using a cut-off grade calculated at 0.36 g/t Au in transitional material and 0.37 g/t Au in rock.

The total Indicated Mineral Resource is reported at 43,512 kt at 1.31 g/t Au, for a total of 1,830 koz. The Inferred Mineral Resource is reported at 18,517 kt at 1.29 g/t Au, for a total of 770 koz. Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources will be converted into Mineral Reserves.

The QP has identified one significant risk factor that could impact the MRE, beyond the typical risks associated with mining projects, such as environmental, permitting, socio-economic, fiscal, marketing and political risks. This risk arises from the presence of artisanal and organized miners within the local community actively exploiting the weathered profile of the deposits. For this reason, the QP has deemed it reasonable to exclude weathered material (sapolite) from the mineral estimations of the Cipoeiro and Chega Tudo deposits. It is not currently possible to assess the quantity of remaining weathered material on the project for GMIN mining operations, making its exclusion the more conservative approach.

It was determined that the databases used in the estimates are reliable and that the current drilling information is trustworthy for interpreting the boundaries of the gold mineralization with confidence. In addition, the assay data used for the MRE, and the block modelling are considered reliable by the QP. Details of the processing and modifications applied to the database can be found in Chapter 12. The Mineral Resource Estimation methodology and key assumptions considered by the QP are described in the following sections.

## **14.2 Estimation Methodology**

The Mineral Resources presented in this report have been estimated by interpolation into two Octree sub-block models, each corresponding to the modelled mineralized domains of the Cipoeiro and Chega Tudo deposits of the Gurupi Project.

The estimation methodology is summarized below:

- Drill hole database validations and selection of the drill holes to be included in the Mineral Resource Estimation.
- 3D modelling of host units based on available geological data (drill logs, surface and downhole geophysics, surface plan maps, drill core photography, etc.) using Leapfrog Geo™ 2024.1.
- 3D modelling of gold-rich domains based on geology, strain, alteration, sulfide content, assays and drill core photography using Leapfrog Geo™ 2024.1.
- Geostatistical analysis for data conditioning: mineralized domain validation, density assignment, capping assumptions, compositing and variography using Leapfrog Geo™ 2024.1 and Supervisor™ v. 9.0.

- Block modelling and grade estimation using Leapfrog Edge™ 2024.1.
- Resource classification and grade interpolation validations.
- Grade and tonnage sensitivities to different cut-off grade scenarios.

### **14.3 Resource Database**

In August 2024, GMS received from GMIN a series of data containing information on the Gurupi Project. The database includes information such as collar locations, drill hole types, downhole surveys, assays, drill logs, density measurements and geological interpretations. Other information was also included, such as various historical reports as well as geological and geophysical maps.

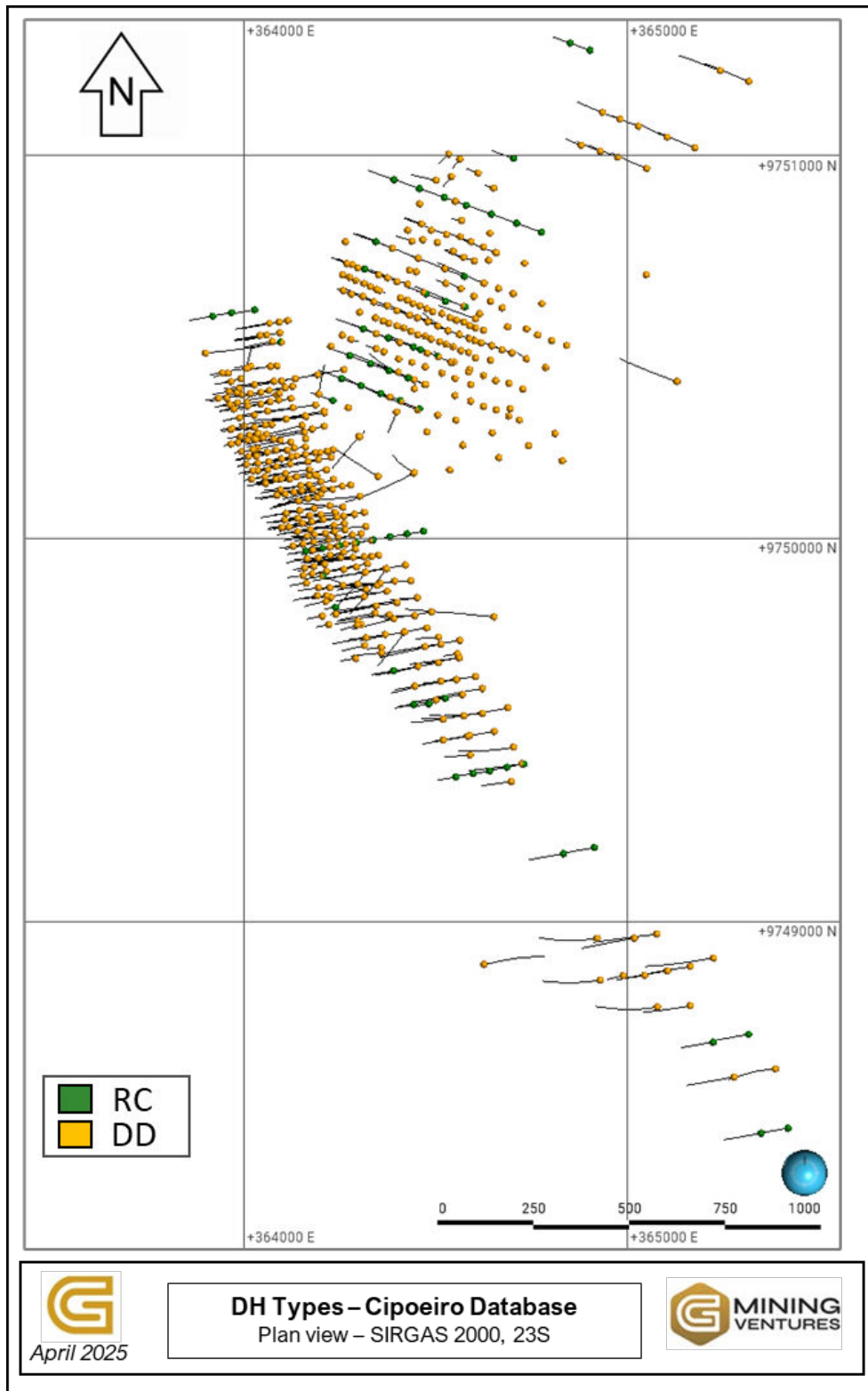
When available, drill hole collar elevations were verified using the collar survey certificates. Digital elevation models (DEM) were provided to GMS by GMIN for the Gurupi Project deposits and were used to construct the topographic surfaces. A 1-m resolution DEM from 2019 was provided for the Cipoeiro deposits and a 1-metre resolution DEM from 2017 was provided for the Chega Tudo deposit. The available topographic surface does not represent the surface on which the historical holes were collared, nor the current surface because of ongoing illegal mining activities on the project. All drill collar elevations have been left unchanged. Drilling surveys were checked for inconsistencies using the LeapFrog Geo™ 3D viewer. Dip and direction variations greater than 5 degrees per 100 m were flagged and investigated. Only one (1) survey was excluded from the resource database after investigation (DDH KCP393).

Some drill holes on the Gurupi Project have been drilled down dip of the mineralized shear zones resulting in local clusters of assays not reflecting the current drill spacing of the Project. This inconsistency in distribution could affect the accuracy of the resource estimation. To address this issue, drill holes from the original database were excluded from the resource estimate if the assayed intervals of mineralization were more than three (3) times the average length of the mineralized domains. This step ensures that the resource estimation is based on data that better reflects the current drill spacing and orientation of mineralized lenses of the Project.

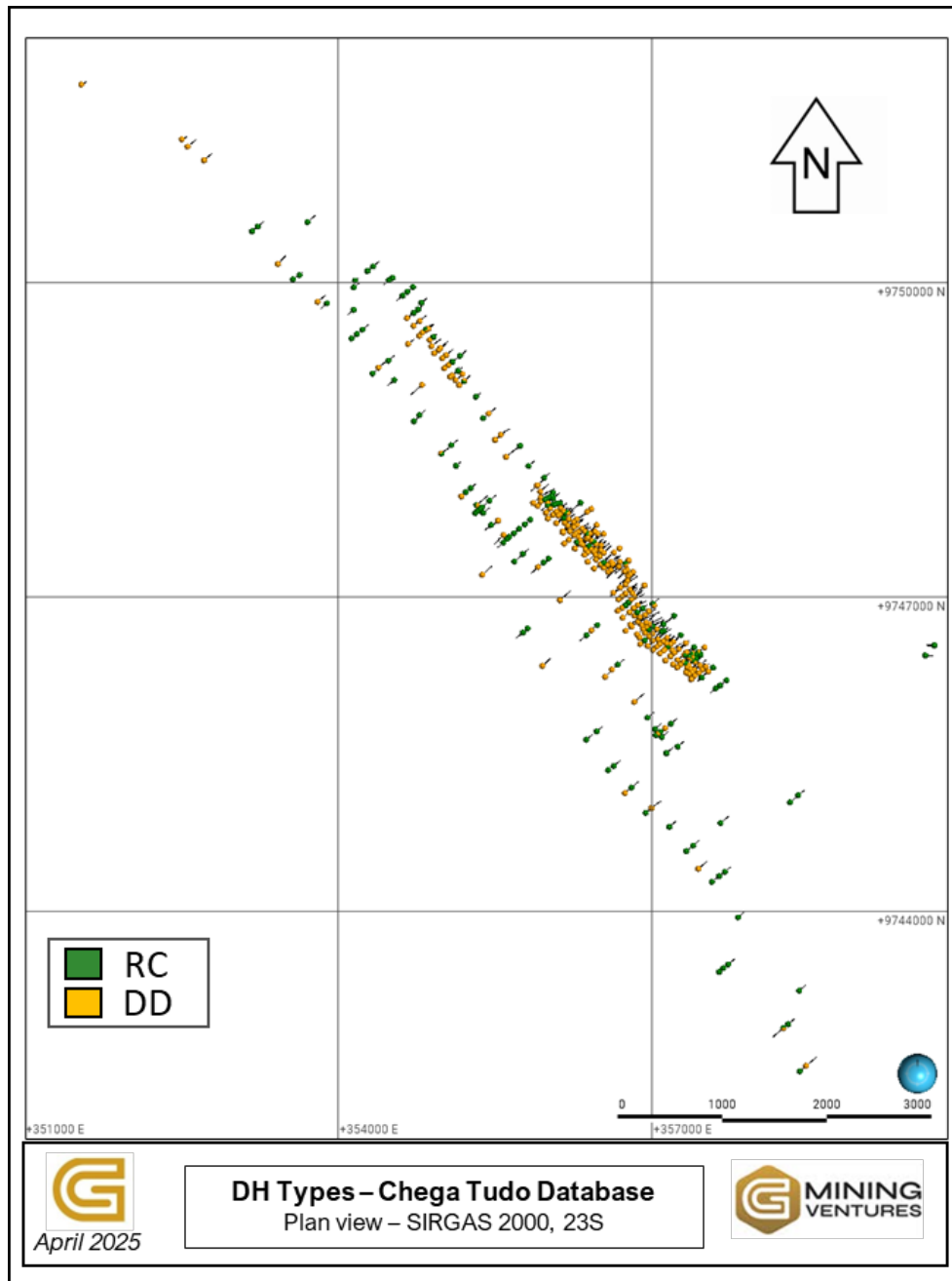
Table 14.2 summarizes the original drill hole database received from GMIN and the filtered one used for the resource estimation of the Gurupi Project. Figure 14.1 and Figure 14.2 present a plan view of the Cipoeiro and Chega Tudo deposits drill hole collars.

**Table 14.2: Summary of Drill Holes and Assays Used in the Gurupi Project Resource Estimate**

Deposits	Bore Hole Types	Original Database				Resource Estimate Database			
		Total Number of Drillholes	Total Drilled Metres	Total Assayed Metres	Total Number of Assays (Au)	Total Number of Drillholes	Total Drilled Metres	Total Assayed Metres	Total Number of Assays (Au)
Blanket	RC	32	3,297.0	3,296.0	3,296	31	3,182.0	3,181.0	3,181
	DDH	190	27,781.8	22,649.3	22,994	189	27,649.3	22,924.2	22,861
	Total	222	31,078.8	25,945.3	26,290	220	30,831.3	26,105.2	26,042
Contact	RC	29	3,035.0	3,035.0	2,665	27	2,785.0	2,785.0	2,415
	DDH	302	43,996.5	43,364.4	44,241	293	42,743.4	42,249.2	43,057
	Total	331	47,031.5	46,399.4	46,906	320	45,528.4	45,034.2	45,472
Chega Tudo	RC	162	17,233.1	17,209.1	16,617	162	17,233.1	17,209.1	16,617
	DDH	236	43,510.6	38,570.3	39,477	233	42,720.1	37,844.7	38,735
	Total	398	60,743.7	55,779.4	56,094	395	59,953.2	55,053.8	55,352
Gurupi Project	RC	223	23,565.1	23,540.1	22,578	220	23,200.1	23,175.1	22,213
	DDH	728	115,288.9	104,583.9	106,712	715	113,112.8	103,018.0	104,653
	Total	951	138,854.1	128,124.1	129,290	935	136,312.9	126,193.2	126,866

**Figure 14.1: Cipoeiro Area Drill Hole Database Received from GMIN, Classified by Drill Hole Types**


Source: GMS, 2025

**Figure 14.2: Chega Tudo Drill Hole Database Received from GMIN, Classified by Drill Hole Types**


Source: GMS, 2025

## 14.4 Geological Models

### 14.4.1 Lithology Model

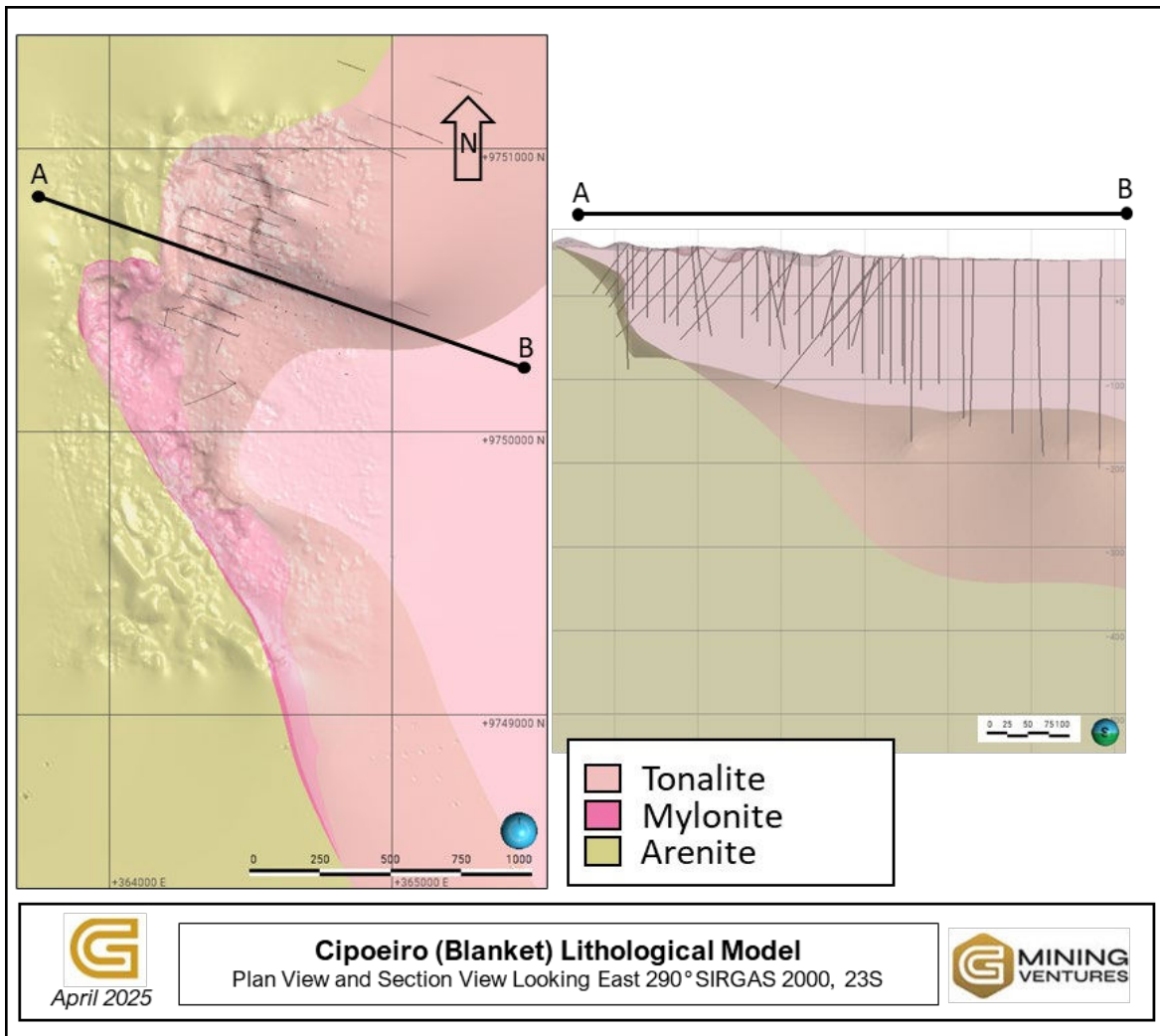
The 3D geological models for the Cipoeiro and the Chega Tudo deposits were created by GMS using historical lithological domains provided in mesh by GMIN. The available geological information, such as drill

hole logs, surface geological maps and geophysical maps were used to improve the models. Manual selections and editing were completed to smooth surfaces. The modelled units are presented below, from the footwall to the hanging wall of the mineralized domains:

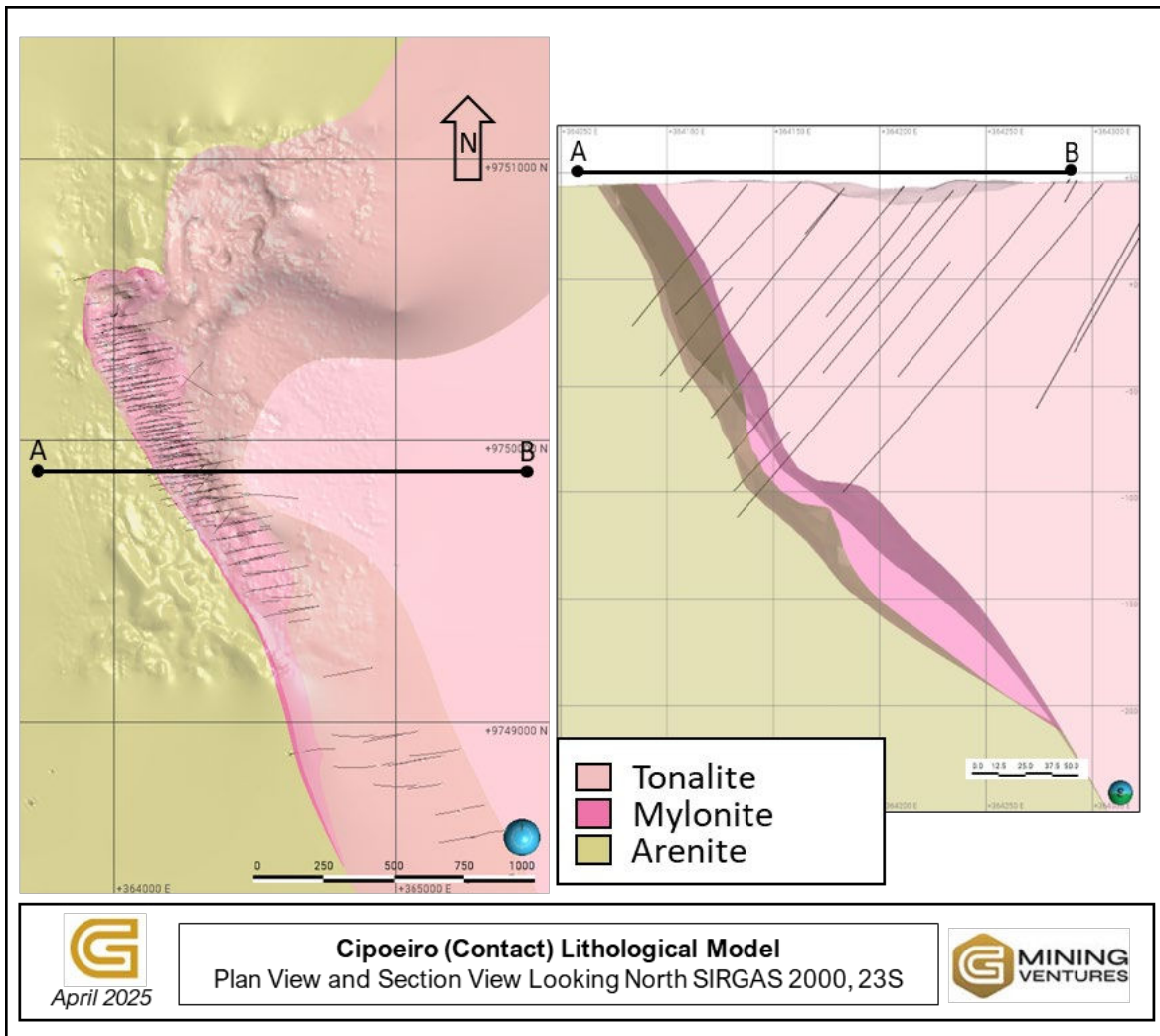
- Cipoeiro area:
  - Arenite (Q)
  - Mylonite (MY)
  - Tonalite (TO)
- Chega Tudo area:
  - Tonalite (TO)
  - Arenite (Q)
  - Mafic tuff-sediments (MTF)
  - Intermediate volcanic (IV)
  - Gabbro (GB)
  - Mafic tuff-sediments 2 (MTF)
  - Sediments (S)

Figure 14.3 to Figure 14.5 presents the lithological models used for this MRE.

**Figure 14.3: Blanket Lithological Model**

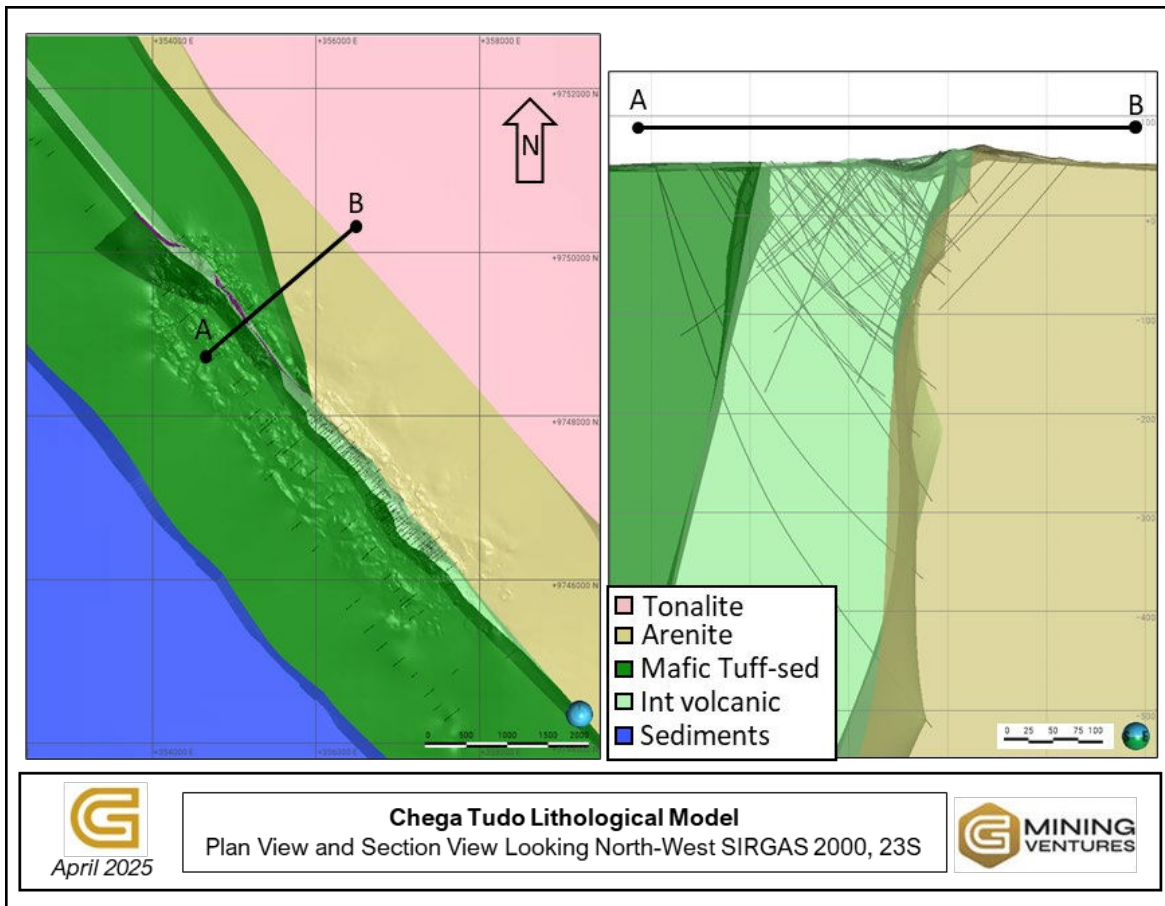


Source: GMS, 2025

**Figure 14.4: Contact Lithological Model**


Source: GMS, 2025

**Figure 14.5: Chega Tudo Lithological Model**



Source: GMS, 2025

#### 14.4.2 Weathering Models

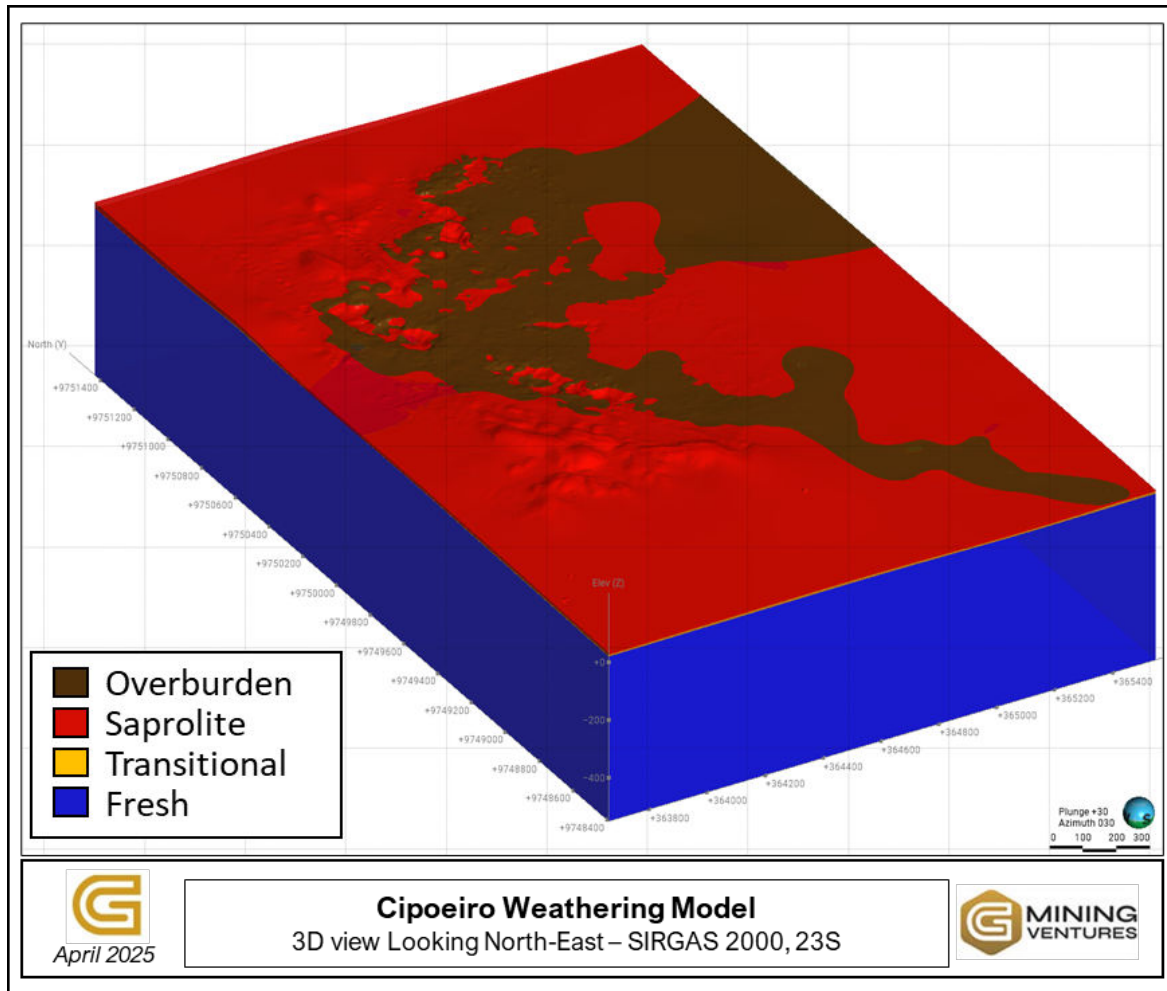
Weathering models for the Cipoeiro deposits and the Chega Tudo deposit were created by GMS using GMIN drill hole logs. Overburden models were integrated with those weathering models and were created using lithology and alteration logs. Manual selections and editing were completed to smooth surfaces.

For all models, the same units were modelled and are presented below:

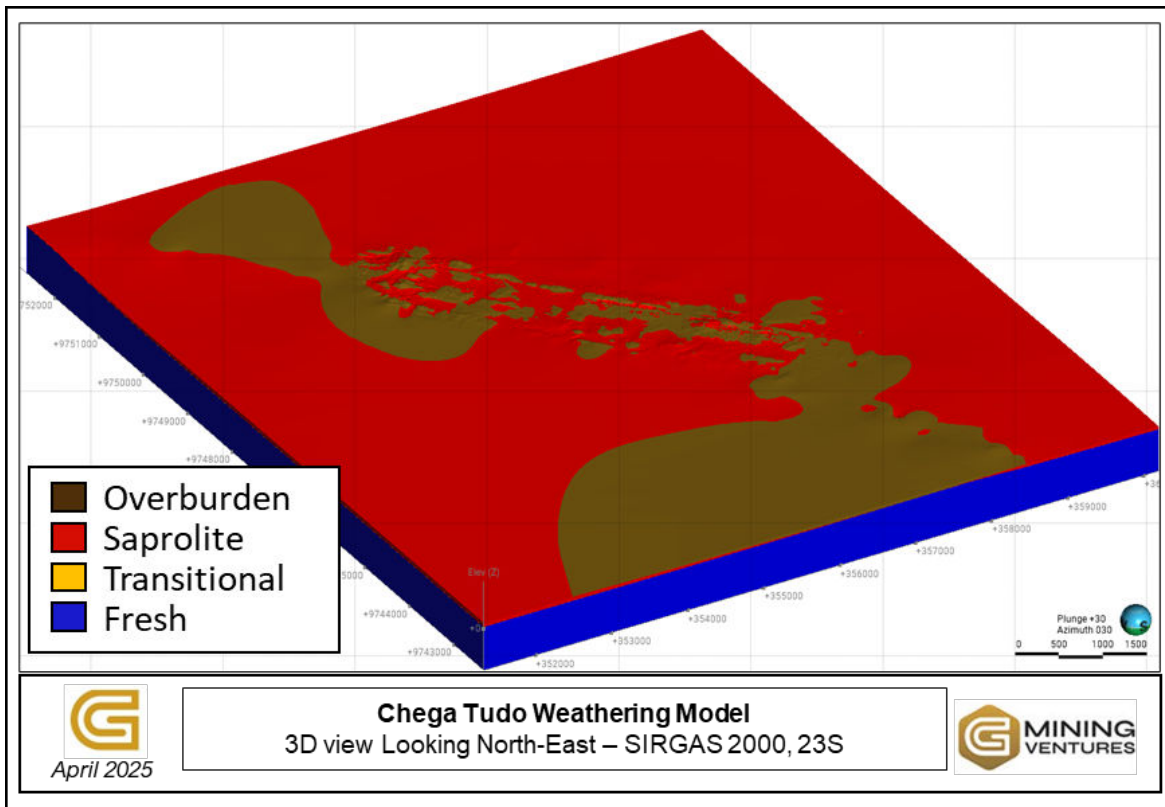
- Overburden (OVBN)
- Saprolite (SAP)
- Transitional material (TRANS)
- Rocks (FRESH)

All models were created in LeapFrog Geo™ and were used to assign density in the block model. Sets of density domains were generated by combining the modelled rock types and weathering profiles. A total of eight (8) density domains were created for the Cipoeiro deposits, while 14 density domains were created for the Chega Tudo deposit. Figure 14.6 to Figure 14.7 presents the weathering models used for this resource estimate. It is important to note that overburden outside the study area and in the extremities is not constrained by the data and therefore remains unknown.

**Figure 14.6: Cipoeiro Weathering Model**



Source: GMS, 2025

**Figure 14.7: Chega-Tudo Weathering Model**


Source: GMS, 2025

#### 14.4.3 Mineralization Model

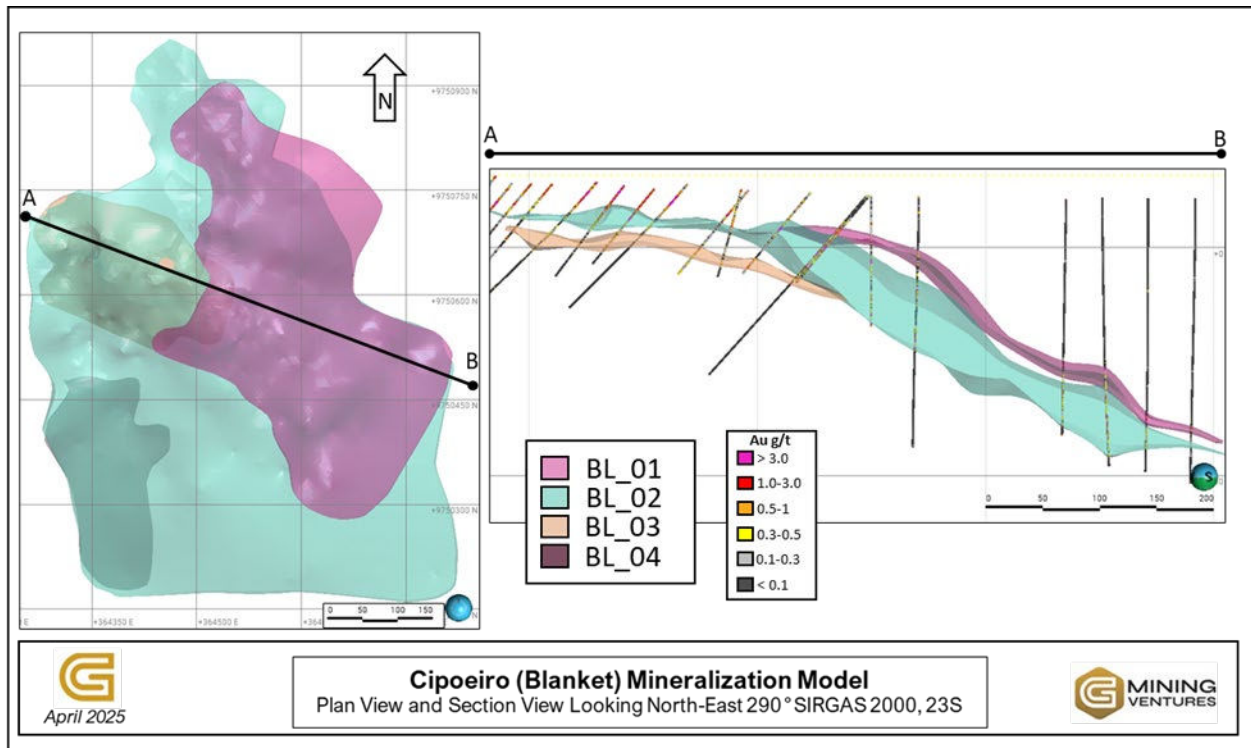
Three (3) separate mineralization models were created for the Gurupi Project MRE (e.g., Blanket, Contact and Chega Tudo). Drill logs assay intervals were used to model the mineralized domains for each of these deposits using LeapFrog Geo™ interval selection method. The Blanket deposit has four (4) distinct gold-bearing mineralized domains, while the Contact and Chega Tudo deposits each have 12 distinct gold-bearing mineralized domains. The mineralization model was built based on several parameters or inputs, such as: lithologies (geological model), alteration types and intensity, strain, sulfide content, vein types, vein density and gold content to properly assign mineralized intervals to their respective domains to preserve domain stationarity. The modelled mineralized domains of the Blanket deposit are parallel to the shear zones within the tonalite, while the modelled mineralized domains of the Contact deposit are parallel to the mylonitized footwall contact between the arenite and the tonalite. For the Chega Tudo deposit, mineralized domains are hosted within the intermediate volcanic unit and are parallel to the footwall contact with the arenite. Each mineralized domain possesses its own characteristics and was modelled independently for better estimation accuracy. A lower cut-off of 0.3 g/t Au and a minimum true thickness of three (3) metres was used to constrain the mineralized domains. The models were improved by using

manual editing such as insertions of points, polylines and structural data. Table 14.3 present the modelled mineralized domains by deposit.

**Table 14.3: Mineralized Domains by Deposits**

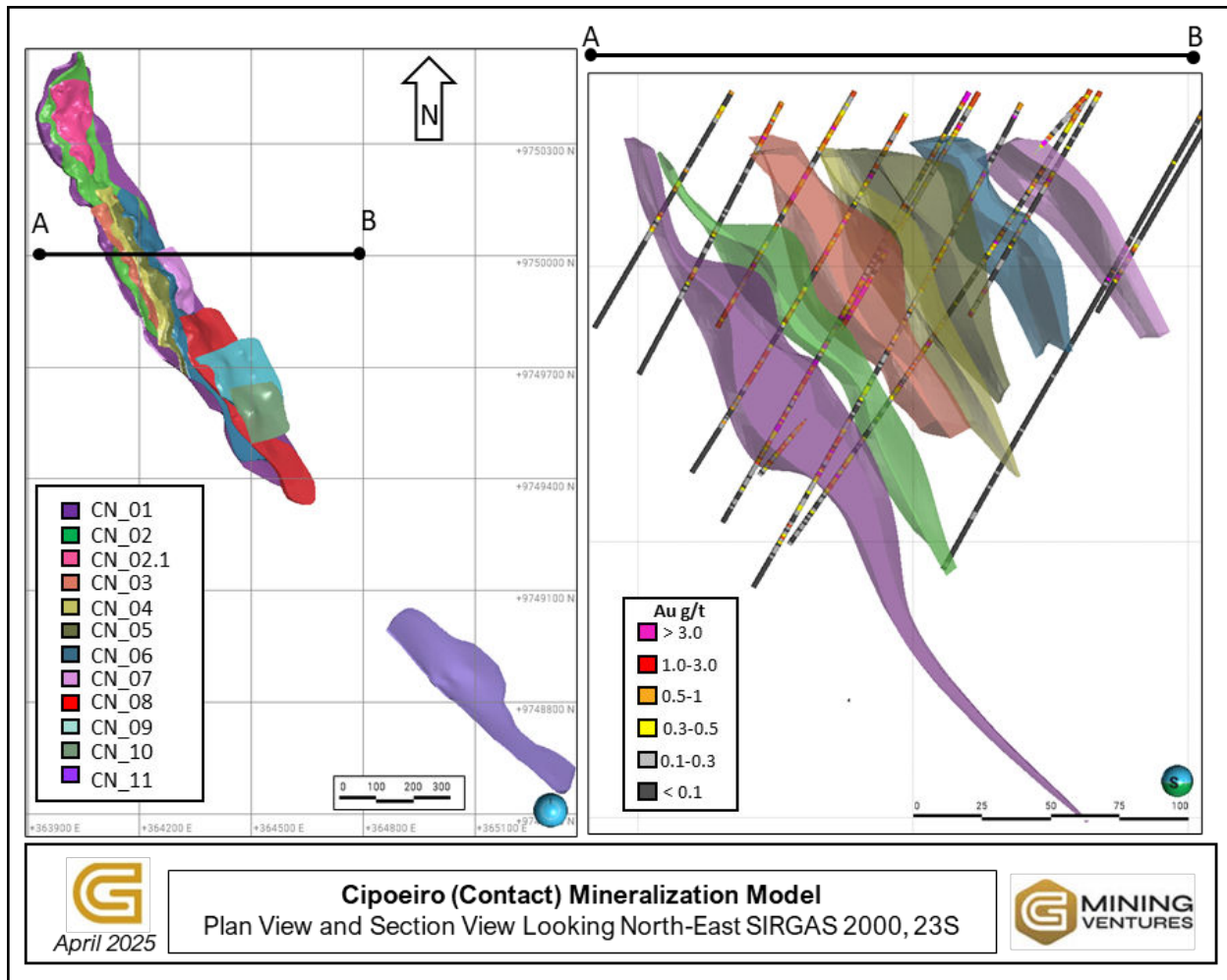
Deposits	Blanket	Contact	Chega Tudo
<b>Mineralized Domains</b>	BL_01	CN_01	CT_01
	BL_02	CN_02	CT_02
	BL_03	CN_02.1	CT_02.1
	BL_04	CN_03	CT_03
		CN_04	CT_04
		CN_05	CT_05
		CN_06	CT_06
		CN_07	CT_07
		CN_08	CT_08
		CN_09	CT_09
		CN_10	CT_10
		CN_11	CT_11

The main mineralized domains of Blanket (e.g., BL\_2, BL\_1) span over 800 m at the surface and extend to depths over 200 m below the surface. The mineralized domains are characterized by a consistent shallow dip of about 20 degrees towards the southeast. Figure 14.8 to Figure 14.10 present cross-sections and plan views of the mineralized domains by deposits.

**Figure 14.8: Blanket Mineralization Model**


Source: GMS, 2025

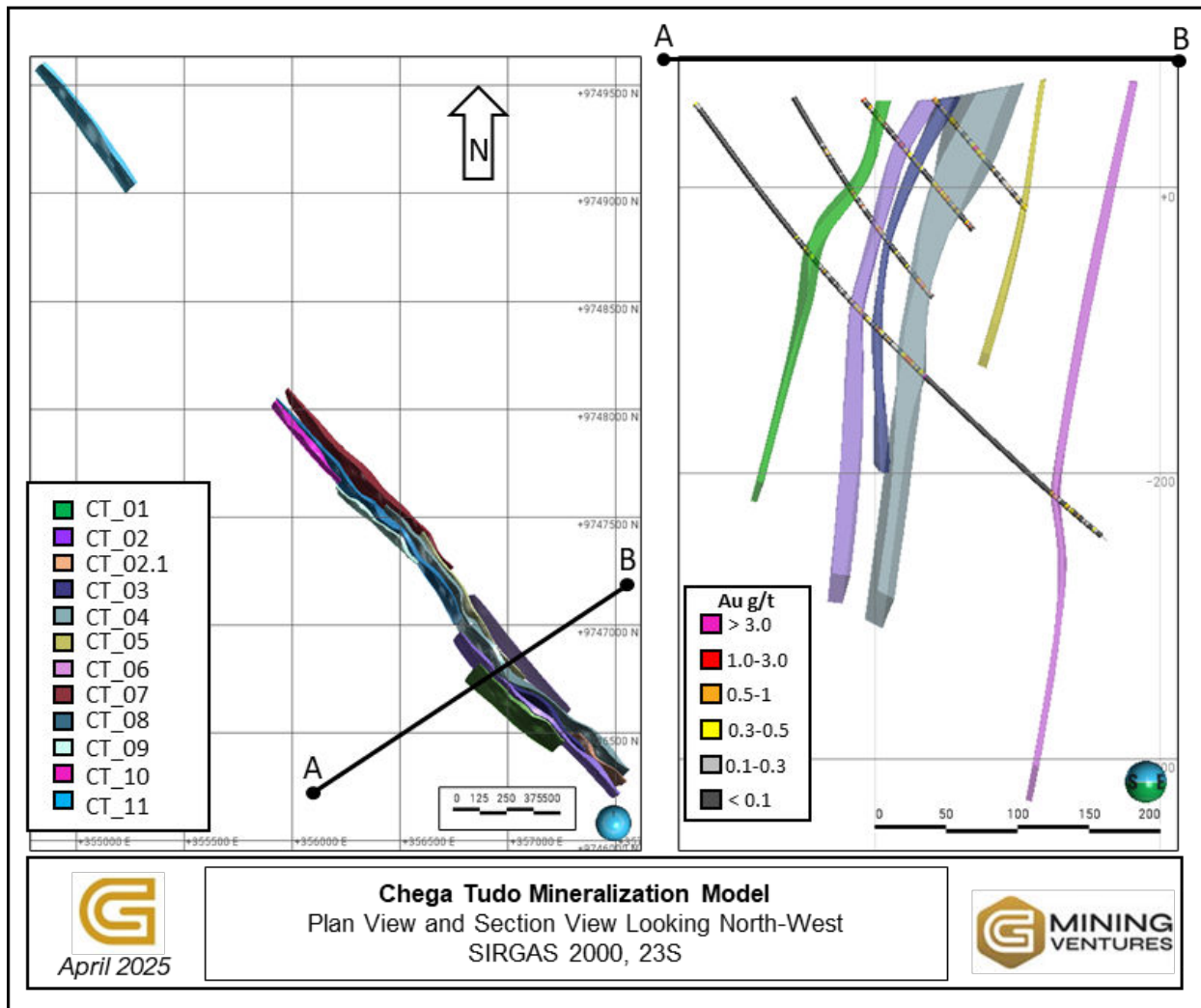
The main mineralized domains of Contact (e.g., CN\_01, CN\_02, CN\_06) span over 2,300 m at the surface and extend to depths over 300 m below the surface. All mineralized domains are characterized by a consistent N325° orientation and a general 60° dip to the east.

**Figure 14.9: Contact Mineralization Model**


Source: GMS, 2025

The main mineralized domains of the Chega Tudo deposit (e.g., CT\_02, CT\_04, CT\_07, CT\_08) span over 4,300 m at the surface and extend to depths over 500 m below the surface. All mineralized domains are characterized by a consistent N140° orientation and a general 75° dip to the west.

**Figure 14.10: Chega Tudo Mineralization Model**



Source: GMS, 2025

## 14.5 Assays, Capping and Compositing

### 14.5.1 Raw Assays

Assay statistics for the Gurupi Project are presented below, by deposits. Assay values reported below the detection limits were assigned half the detection limit for statistical analysis and grade estimation purposes. Unsampled drill intervals were assigned a value of 0 g/t Au. Assay values missing from the database were left blank. Table 14.4 and Table 14.5 present the descriptive statistics of gold assays used for the resource estimations of the Gurupi Project.

**Table 14.4: Statistics of Gold Assays for Gurupi Project (length weighted)**

Deposits	Blanket	Contact	Chega Tudo
Stats	Au (g/t)	Au (g/t)	Au (g/t)
Length (m)	30,782.6	45,498.7	42,667.7
Count	30,872	45,488	38,907
Minimum	0.0025	0.0025	0.0000
Maximum	48.06	377.99	70.17
Mean	0.37	0.49	0.23
Standard Deviation	1.30	4.00	1.01
CV	3.53	8.08	4.42
Median	0.03	0.04	0.02

**Table 14.5: Statistics of Gold Assays for Mineralized Domains (length weighted)**

Deposits	Min. Domains	Length (m)	Count	Min. (g/t Au)	Max. (g/t Au)	Mean (g/t Au)	SD	CV	Median (g/t Au)
Blanket	BL_01	770.7	790	0.0025	30.89	0.89	1.96	2.20	0.47
	BL_02	4,754.0	4,885	0.0025	36.35	1.42	2.37	1.67	0.73
	BL_03	362.6	379	0.0050	5.22	0.63	0.63	1.01	0.47
	BL_04	82.8	82	0.0200	4.97	0.69	0.92	1.34	0.32
Contact	CN_01	3,693.0	3,827	0.0025	198.13	1.81	6.46	3.57	0.64
	CN_02	1,968.1	2,051	0.0025	175.98	1.73	5.48	3.17	0.59
	CN_2.1	182.7	187	0.0025	88.40	1.84	6.27	3.41	0.55
	CN_03	910.5	953	0.0025	377.99	3.96	21.73	5.48	0.85
	CN_04	728.2	762	0.0025	41.73	1.35	2.89	2.13	0.65
	CN_05	659.8	686	0.0025	23.20	1.06	1.92	1.82	0.53
	CN_06	476.3	503	0.0025	57.06	1.28	3.87	3.02	0.51
	CN_07	126.3	135	0.0025	21.48	1.40	3.25	2.33	0.39
	CN_08	222.0	227	0.0050	27.60	1.29	2.90	2.26	0.50
	CN_09	89.2	90	0.0050	13.99	0.96	2.01	2.10	0.38
	CN_10	58.3	58	0.0060	6.98	0.60	1.11	1.85	0.32
CN_11	141.1	140	0.0200	4.61	0.66	0.81	1.23	0.38	

Deposits	Min. Domains	Length (m)	Count	Min. (g/t Au)	Max. (g/t Au)	Mean (g/t Au)	SD	CV	Median (g/t Au)
<b>Chega Tudo</b>	CT_01	218.8	223	0.0025	20.00	0.90	2.02	2.25	0.40
	CT_02	1,203.8	1,212	0.0025	27.22	0.75	1.55	2.06	0.39
	CT_02.1	209.6	211	0.0025	5.82	0.50	0.65	1.30	0.35
	CT_03	389.8	400	0.0025	13.90	0.74	1.29	1.75	0.37
	CT_04	2,442.9	2,510	0.0000	23.40	0.84	1.52	1.80	0.43
	CT_05	456.4	475	0.0025	20.18	0.78	1.53	1.97	0.42
	CT_06	123.8	125	0.0025	12.86	0.52	1.20	2.31	0.32
	CT_07	1,119.2	1,146	0.0025	27.43	0.74	1.45	1.95	0.34
	CT_08	1,529.9	1,557	0.0025	70.17	0.77	2.61	3.40	0.30
	CT_09	455.4	455	0.0025	12.15	0.51	0.93	1.82	0.26
	CT_10	374.3	377	0.0025	43.51	0.74	2.39	3.23	0.42
CT_11	464.7	473	0.0025	31.40	1.04	1.92	1.86	0.55	

#### 14.5.2 Topcut

Topcut is a technique used to mitigate the impact of outliers, specifically extremely high-grade values, in the estimation of Mineral Resources. It involves establishing a threshold or limit on the maximum value that can be utilized in the estimation process. The selection of this limit takes into consideration the geological characteristics of the deposits, as well as the outcomes of statistical analyses conducted on the data.

For each deposit, capping analysis was conducted independently by mineralized domain, examining assay statistics (including, but not limited to, coefficient of variation), histograms, cumulative probability plots, and conducting decile analyses to identify potential grade capping. Additionally, the spatial distribution of outliers was assessed in three dimensions (3D) to identify any clustering patterns or localized high-grade areas within the mineralized domains.

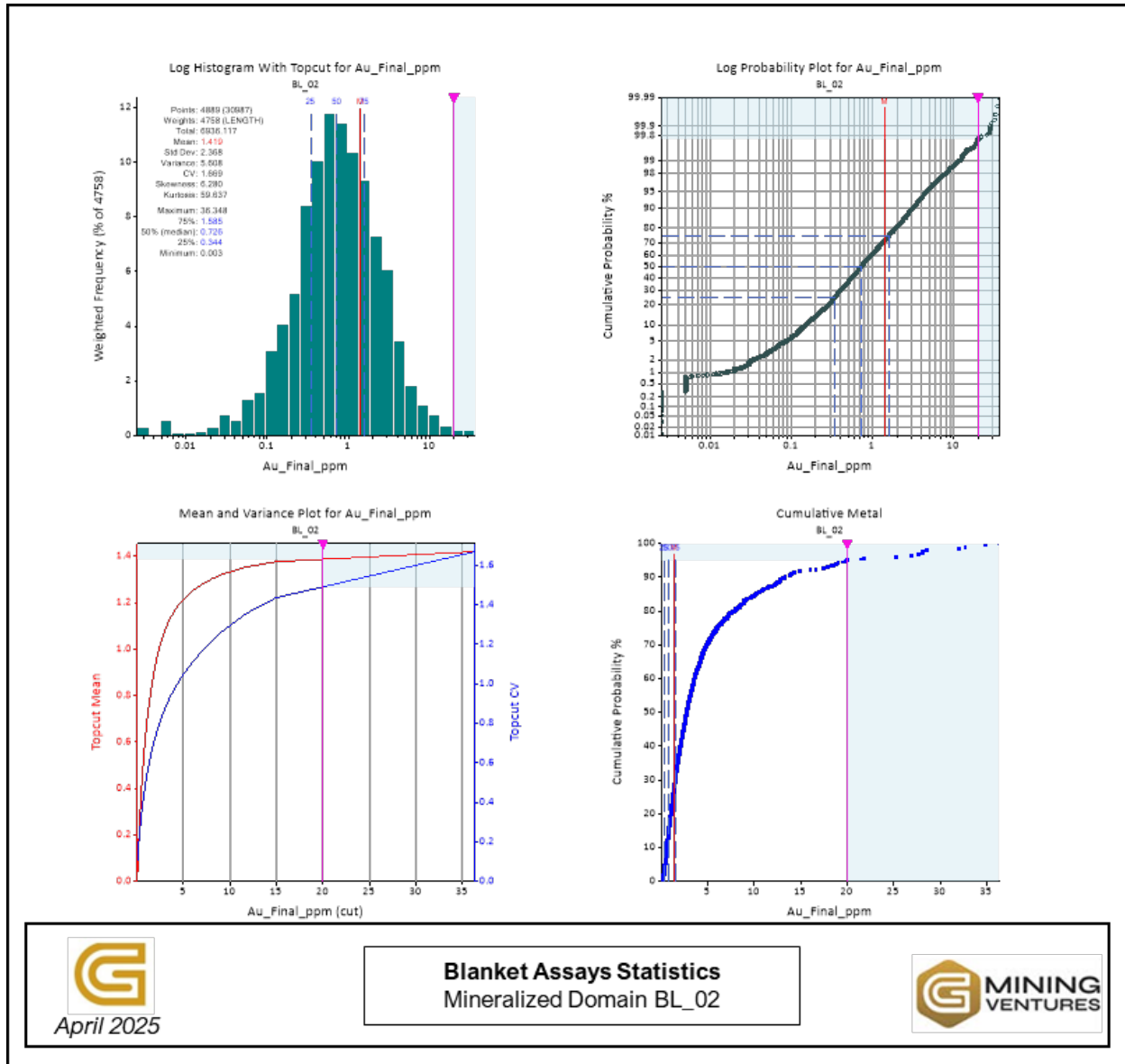
Capping assumptions for Gurupi Project mineralized domains are presented by deposits in Table 14.6.

**Table 14.6: Capping Applied to Gurupi Project Mineralized Domains**

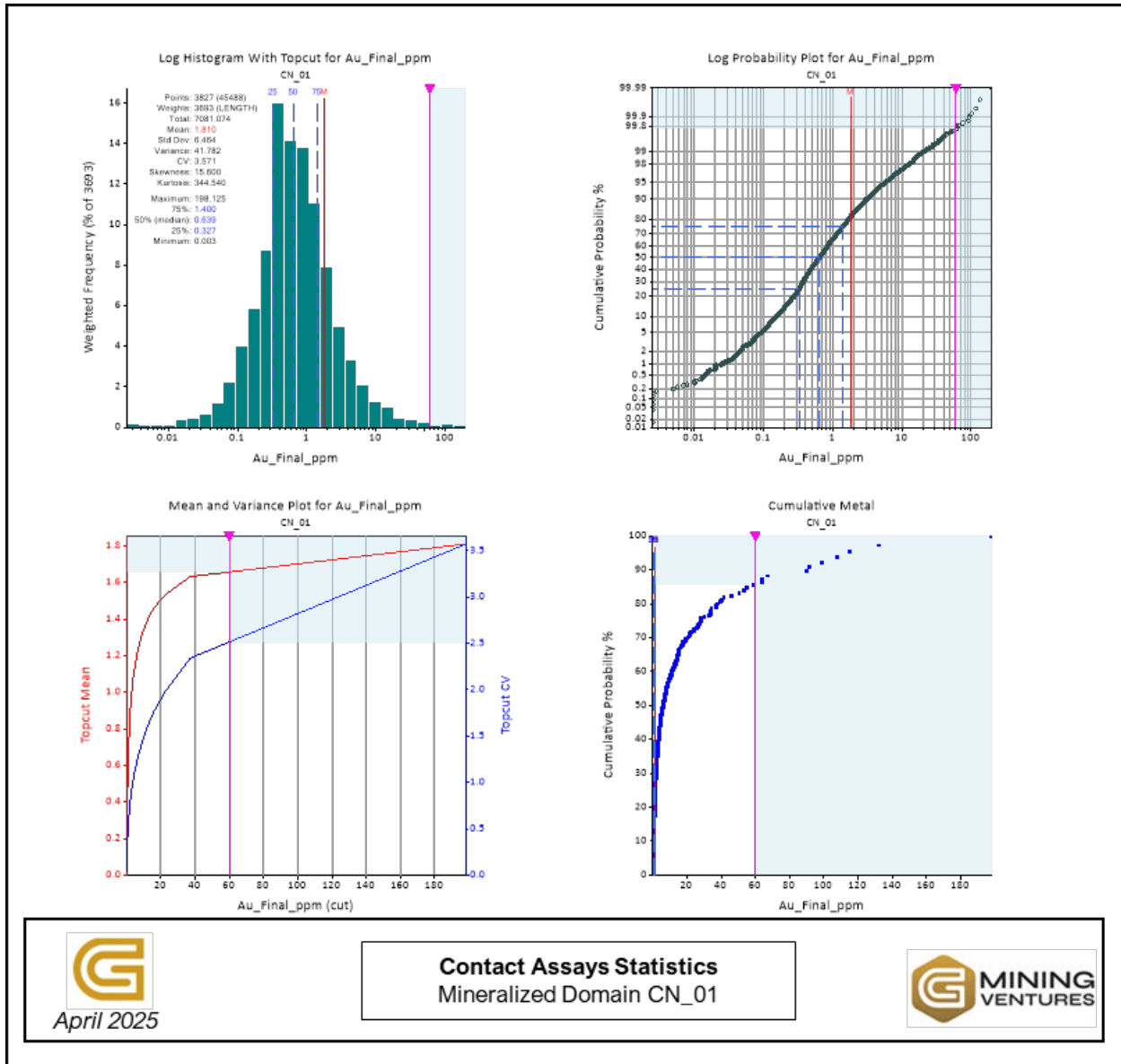
<b>Deposits</b>	<b>Domain</b>	<b>Au Capped (g/t)</b>
<b>Blanket</b>	BL_01	20
	BL_02	20
	BL_03	N. A.
	BL_04	N. A.
<b>Contact</b>	CN_01	60
	CN_02	50
	CN_2A	45
	CN_03	50
	CN_04	25
	CN_05	N. A.
	CN_06	20
	CN_07	N. A.
	CN_08	N. A.
	CN_09	N. A.
	CN_10	N. A.
CN_11	N. A.	
<b>Chega Tudo</b>	CT_01	20
	CT_02	20
	CT_02.1	N. A.
	CT_03	N. A.
	CT_04	20
	CT_05	20
	CT_06	N. A.
	CT_07	20
	CT_08	20
	CT_09	N. A.
	CT_10	20
CT_11	20	

Figure 14.11 to Figure 14.13 present histograms, log probability plots, mean and variance plots, as well as cumulative metal plots for gold within the Gurupi Project, by deposit. Table 14.7 compares statistics for uncapped and capped assays of the Gurupi Project, per mineralized domains.

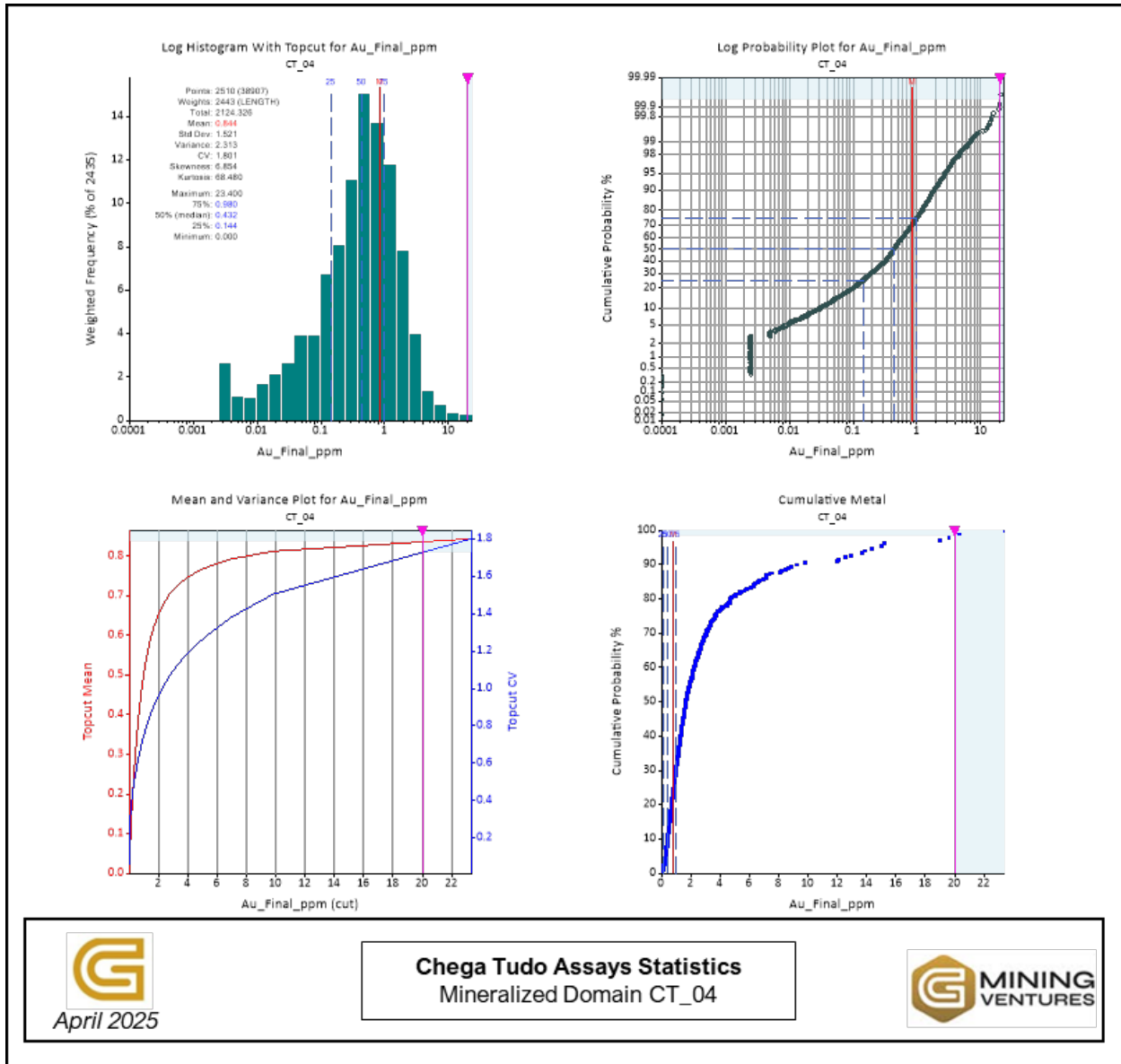
**Figure 14.11: Histograms, Log Probability Plots, Mean and Variance Plots, and Cumulative Metal Plots for Gold Within the BL\_02 Mineralized Domain**



Source: GMS, 2025

**Figure 14.12: Histograms, Log Probability Plots, Mean and Variance Plots, and Cumulative Metal Plots for Gold Within the CN\_01 Mineralized Domain**


Source: GMS, 2025

**Figure 14.13: Histograms, Log Probability Plots, Mean and Variance Plots, and Cumulative Metal Plots for Gold Within the CT\_04 Mineralized Domain**


Source: GMS, 2025

**Table 14.7: Statistics of Uncapped and Capped Assays of the Gurupi Project, per Mineralized Domain (length weighted)**

Deposits	Domain	Num. of Assays	Au Uncapped (g/t)			Num. of Assays Capped	Au Capped (g/t)			Metal Loss (%)
			Max	Mean	CV		Max	Mean	CV	
Blanket	BL_01	790	30.89	0.89	2.20	2	20.00	0.87	1.88	2.8%
	BL_02	4,885	36.35	1.42	1.67	12	20.00	1.40	1.53	1.5%
	BL_03	379	5.22	0.63	1.01	-	5.22	0.63	1.01	-
	BL_04	82	4.97	0.69	1.34	-	4.97	0.69	1.34	-
Contact	CN_01	3,827	198.13	1.81	3.57	10	60.00	1.71	2.71	5.7%
	CN_02	2,051	175.98	1.73	3.17	5	50.00	1.66	2.54	3.8%
	CN_2.1	187	88.40	1.84	3.41	1	45.00	1.70	2.68	7.7%
	CN_03	953	377.99	3.96	5.48	9	50.00	2.70	2.40	31.8%
	CN_04	762	41.73	1.35	2.13	3	25.00	1.33	1.96	1.8%
	CN_05	686	23.20	1.06	1.82	-	23.20	1.06	1.82	-
	CN_06	503	57.06	1.28	3.02	3	20.00	1.14	2.04	11.1%
	CN_07	135	21.48	1.40	2.33	-	21.48	1.40	2.33	-
	CN_08	227	27.60	1.29	2.26	-	27.60	1.29	2.26	-
	CN_09	90	13.99	0.96	2.10	-	13.99	0.96	2.10	-
	CN_10	58	6.98	0.60	1.85	-	6.98	0.60	1.85	-
CN_11	140	4.61	0.66	1.23	-	4.61	0.66	1.23	-	
Chega Tudo	CT_01	260	20.00	0.84	2.25	-	20.00	0.84	2.25	-
	CT_02	1,477	27.22	0.82	1.91	2	20.00	0.81	1.77	1.1%
	CT_02.1	252	5.82	0.45	1.37	-	5.82	0.45	1.37	-
	CT_03	465	13.90	0.73	1.72	-	13.90	0.73	1.72	-
	CT_04	2,834	23.40	0.87	1.79	2	20.00	0.87	1.77	0.2%
	CT_05	485	20.18	0.77	1.97	1	20.00	0.77	1.96	0.1%
	CT_06	144	12.86	0.46	2.43	-	12.86	0.46	2.43	-
	CT_07	1,372	27.43	0.78	1.88	1	20.00	0.77	1.76	0.8%
	CT_08	1,987	70.17	0.74	3.23	6	20.00	0.69	2.28	6.0%
	CT_09	566	12.15	0.48	1.78	-	12.15	0.48	1.78	-
	CT_10	492	43.51	0.81	2.67	1	20.00	0.76	1.67	6.1%
CT_11	609	31.40	1.10	1.78	2	20.00	1.08	1.57	1.8%	

### 14.5.3 Compositing

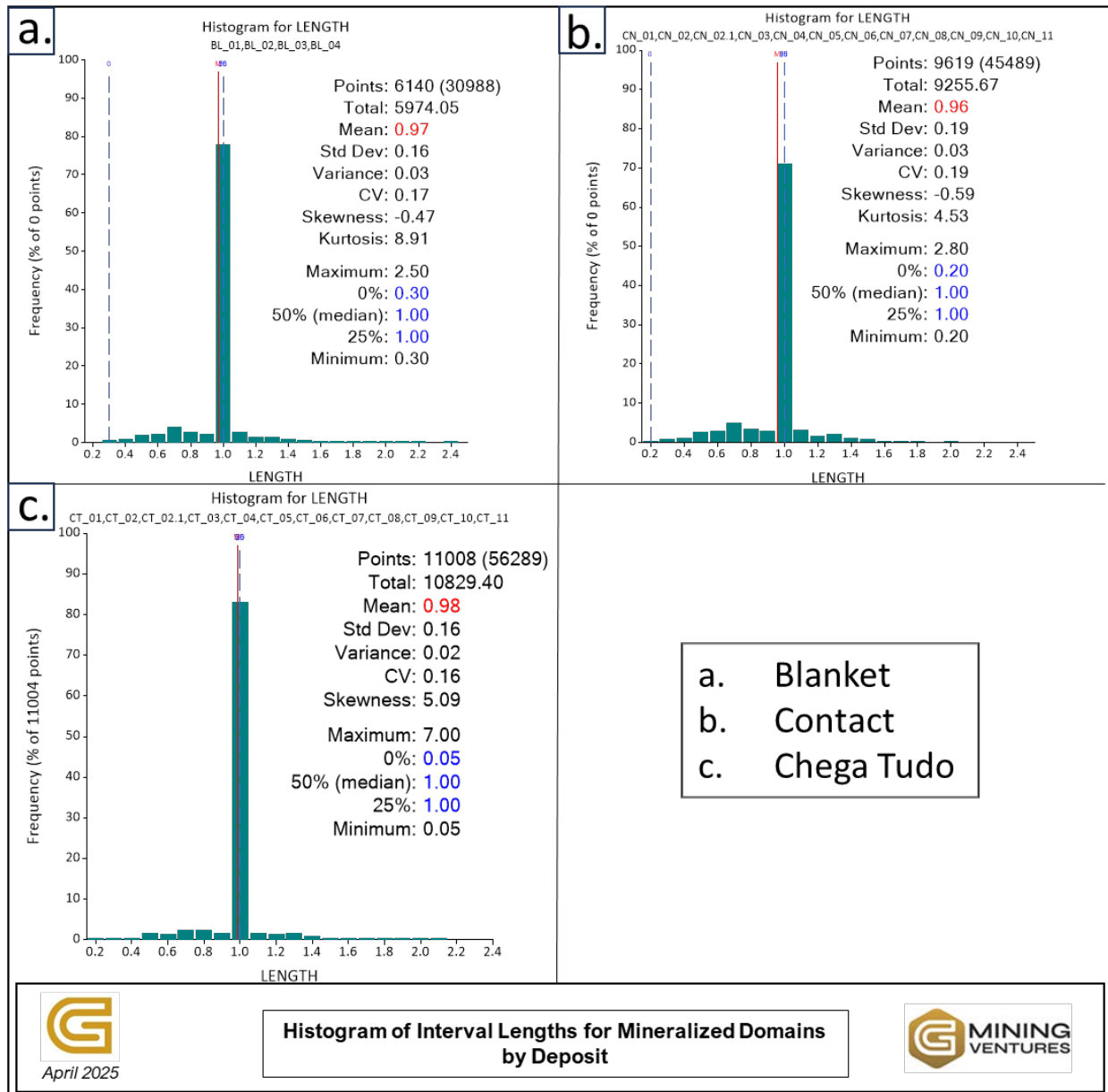
Following the application of assay capping, the samples were composited downhole within the boundaries of each mineralized domain. Compositing was done to mitigate data variability and create a more representative dataset for estimation. The length of the composites was determined through statistical analysis of the sample lengths, taking into consideration factors such as the most sampled interval length (i.e. mode), block sizes and modelled mineralized domain sizes.

Composites of one (1) metre were retained after analysis of the deposits of the Gurupi Project assays intervals. Composite residuals of less than 0.5 m were distributed equally through the interval length of the corresponding domain. A sample coverage of at least 50% was needed for composites to be created. Table 14.8 presents the statistics for uncomposited and composited samples, per mineralized domain. Figure 14.14 presents the histogram of interval length on the deposits of the Gurupi Project, while Figure 14.15 compares length values before and after compositing was applied.

**Table 14.8: Statistics of Uncomposited and 1 m Composited Assays of Gurupi Project, per Mineralized Domain (length weighted)**

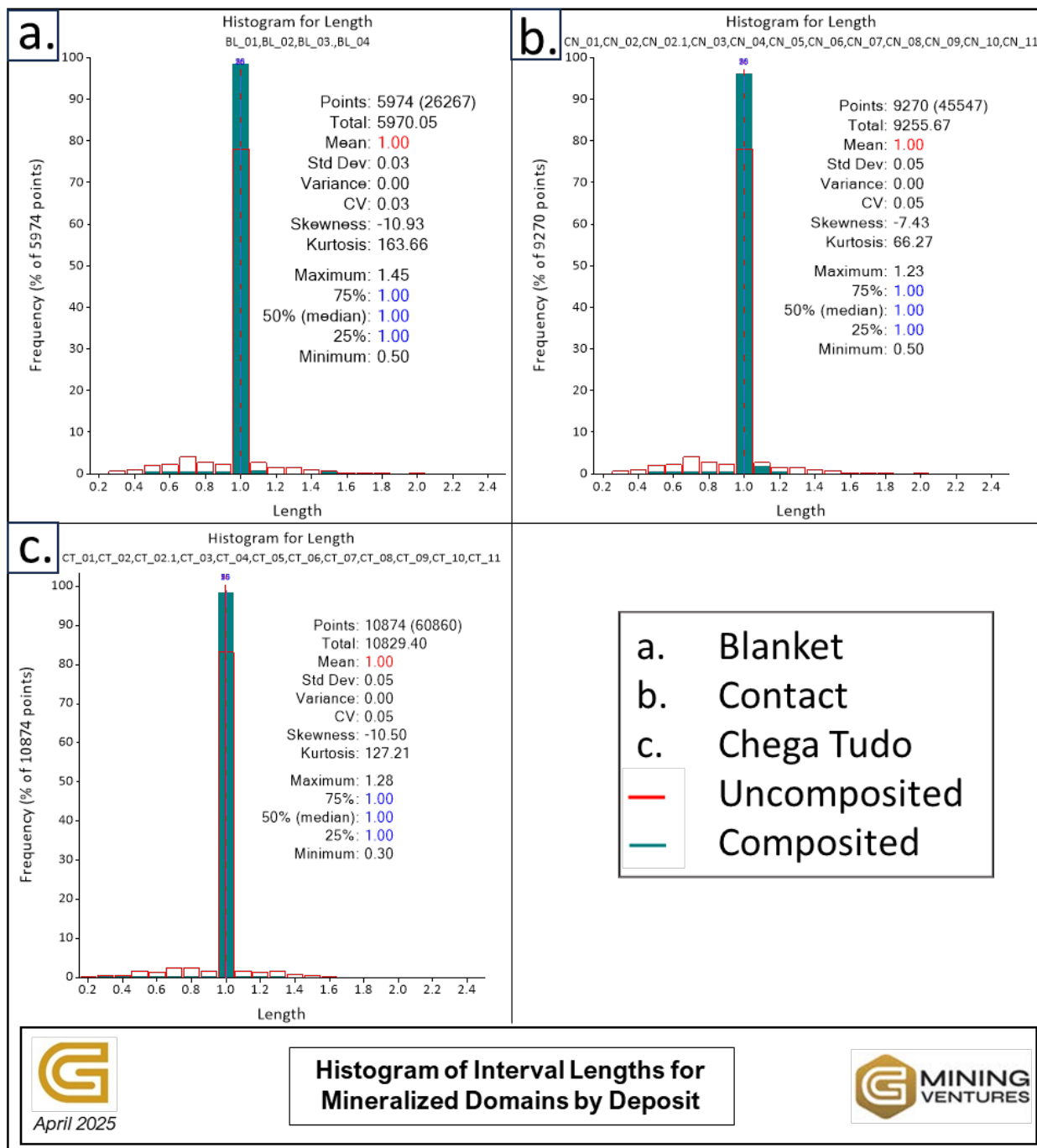
		Uncomposite assays by domain				1 m Composites assays by domain			
Deposits	Domains	Number Samples	Length	Mean	CV	Number Samples	Length	Mean	CV
Blanket	BL_01	790	770.7	0.89	2.20	772	770.7	0.87	1.80
	BL_02	4,885	4,754.0	1.42	1.67	4,756	4,754.0	1.40	1.50
	BL_03	379	362.6	0.63	1.01	363	362.6	0.63	0.94
	BL_04	82	82.8	0.69	1.34	83	82.8	0.69	1.30
Contact	CN_01	3,827	3,693.0	1.71	2.71	3 697	3 693.1	1.71	2.52
	CN_02	2,051	1,968.1	1.66	2.54	1 971	1 968.1	1.66	2.16
	CN_2.1	187	182.7	1.70	2.68	184	182.7	1.70	2.29
	CN_03	953	910.5	2.70	2.40	912	910.5	2.70	2.26
	CN_04	762	728.2	1.33	1.96	731	728.2	1.33	1.87
	CN_05	686	659.8	1.06	1.82	663	659.8	1.06	1.66
	CN_06	503	476.3	1.14	2.04	477	476.3	1.14	1.84
	CN_07	135	126.3	1.40	2.33	126	126.3	1.40	1.87
	CN_08	227	222.0	1.29	2.26	220	222.0	1.29	2.21
	CN_09	90	89.2	0.96	2.10	90	89.2	0.96	2.04
CN_10	58	58.3	0.60	1.85	58	58.3	0.60	1.69	

		Uncomposite assays by domain				1 m Composites assays by domain			
Deposits	Domains	Number Samples	Length	Mean	CV	Number Samples	Length	Mean	CV
	CN_11	140	141.1	0.66	1.23	141	141.2	0.66	1.17
Chega Tudo	CT_01	260	255.8	0.84	1.89	257	255.8	0.84	1.87
	CT_02	1,477	1,468.8	0.81	1.43	1,469	1,468.8	0.81	1.74
	CT_02.1	252	453.8	0.73	1.25	456	453.8	0.73	1.59
	CT_03	465	2,767.1	0.87	1.53	2,770	2,767.1	0.87	1.71
	CT_04	2,834	466.4	0.77	1.51	467	466.4	0.77	1.94
	CT_05	485	142.8	0.46	1.12	143	142.8	0.46	2.43
	CT_06	144	1,347.0	0.77	1.36	1,350	1,347.0	0.77	1.70
	CT_07	1,372	1,955.1	0.69	1.58	1,960	1,955.1	0.69	2.18
	CT_08	1,987	566.1	0.48	0.85	567	566.1	0.48	1.72
	CT_09	566	492.3	0.76	1.28	492	492.3	0.76	1.63
	CT_10	492	250.6	0.45	0.61	251	250.6	0.45	1.33
CT_11	609	600.7	1.08	1.69	601	600.7	1.08	1.56	

**Figure 14.14: Histogram of Sampled Interval Lengths in the Gurupi Project for Mineralized Domains by Deposit**


Source: GMS, 2025

**Figure 14.15: Comparative Bar Charts of the Gurupi Project Composited and Uncomposited Length for Mineralized Domains by Deposit**



Source: GMS, 2025

### 14.6 Density Measurements

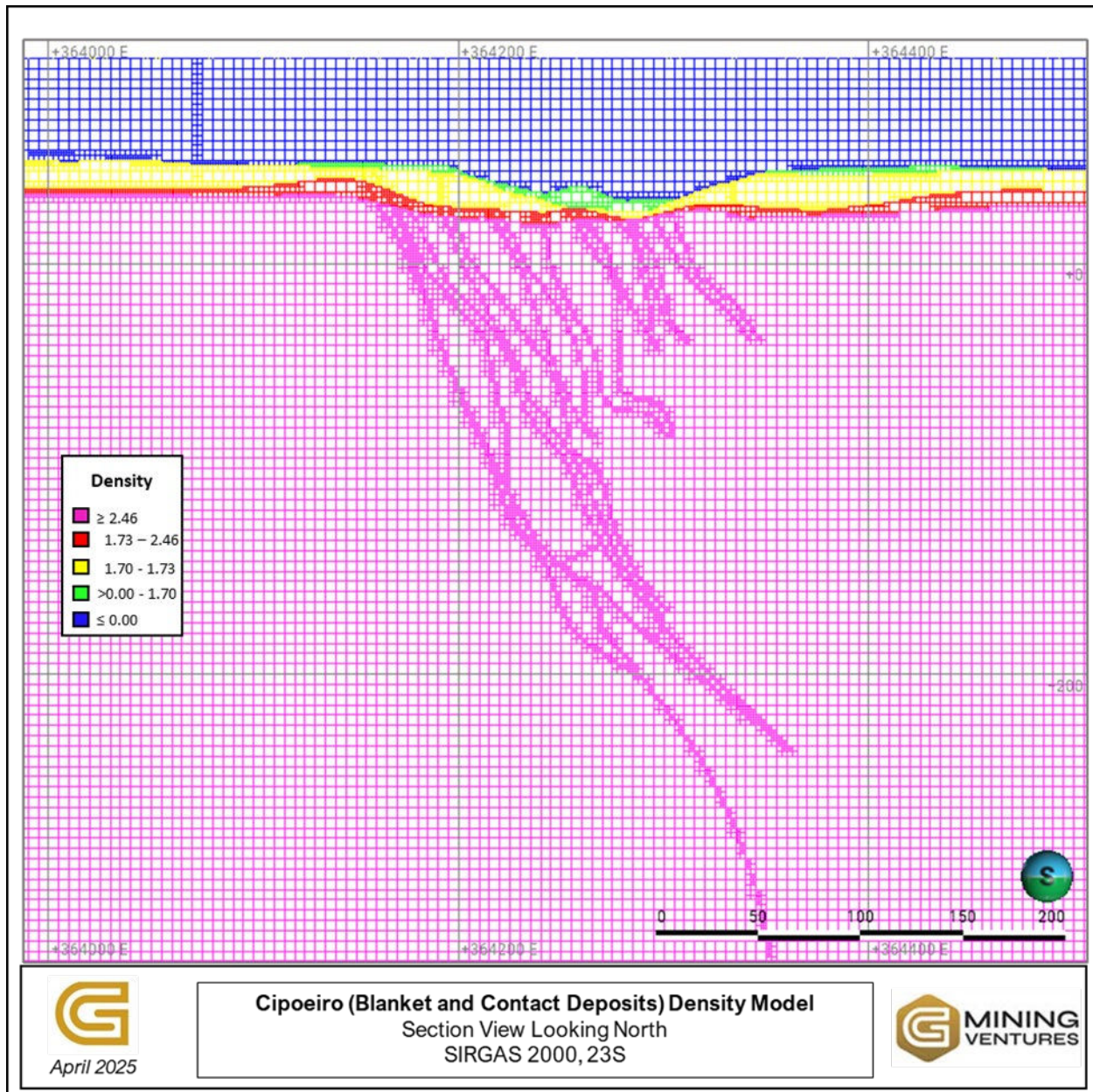
Density measurements were collected for every deposit of the Gurupi Project. A total of 1,451 density analyses were collected for the Blanket deposit; 3,885 for the Contact deposit and 444 for the Chega Tudo

deposit. Both wet and dry density measurements were taken, primarily on half-core samples representing the various bedrock units and weathering levels of the deposit. Additionally, some measurements were conducted on bulk samples collected from artisanal miners' pits. A two (2) percent reduction was applied to the dry density values obtained using the water immersion method.

A total of 5,540 density measurements were collected to determine lithological densities of the Gurupi Project. For the Blanket and Contact deposits, 5,081 measurements were collected, while 459 measurements for the Chega Tudo deposit. The median specific gravity was used to assign densities to each modelled lithological domain. An arbitrary density of 0.00 was assigned to the Air domain, while the weighted median of the Rock values was used for the unknown domain. In the case of Chega Tudo, there was only one (1) arenite measurements collected in the saprolite, and it was therefore discarded from the study. Since no density measurement was available for the Tonalite at Chega Tudo, the value from the Tonalite at Cipoeiro was used for this lithological domain. Table 14.9 shows the number of measurements, and the median density used in the modelled geological domains. Figure 14.16 and Figure 14.17 show a cross-section of the Gurupi Project density model.

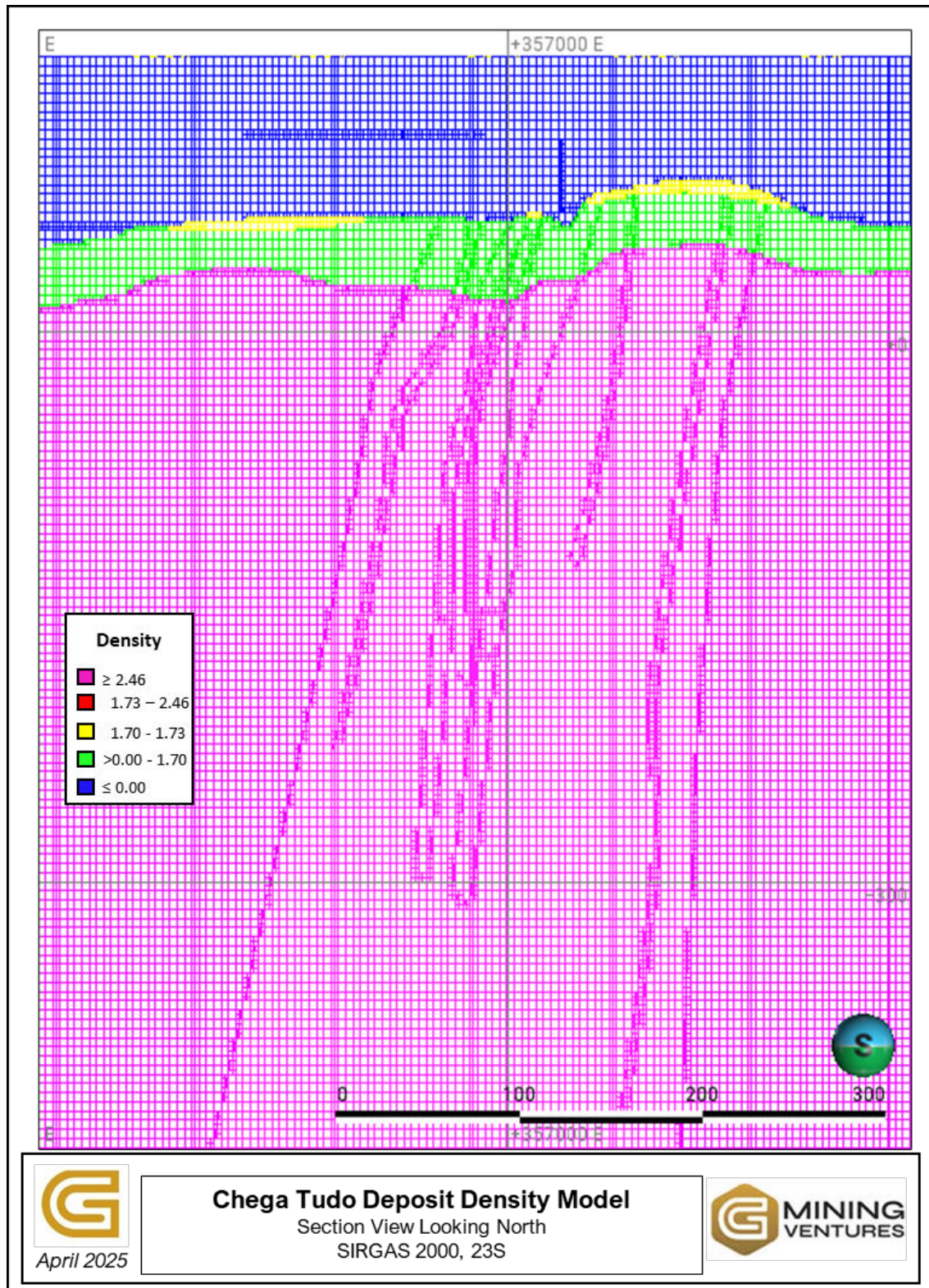
**Table 14.9: Density Statistics of the Gurupi Project**

	<b>Weathering Domain</b>	<b>Lithological domain</b>	<b>Count</b>	<b>Mean</b>	<b>Minimum</b>	<b>Median</b>	<b>Maximum</b>
<b>Cipoeiro</b>	Overburden	Tonalite	75	1.68	1.32	1.70	2.04
	Saprolite	Tonalite	185	1.69	1.24	1.70	2.65
	Transitional	Tonalite	35	2.39	1.45	2.58	2.87
	Rock	Tonalite	4,434	2.77	2.18	2.77	3.24
		Mylonite	177	2.71	2.39	2.73	2.94
		Meta-Arenite	175	2.70	2.42	2.71	2.96
<b>Chega Tudo</b>	Overburden	Intermediate volcanic	2	1.82	1.78	1.78	1.86
	Saprolite	Arenite	1	1.55	1.55	1.55	1.55
		Intermediate volcanic	10	1.78	1.47	1.66	2.63
		Mafic Tuff-sed	18	1.64	1.42	1.63	1.82
	Transitional	Intermediate volcanic	2	2.35	1.86	2.84	2.84
	Rock	MTF_HW	8	2.76	2.56	2.74	3.04
		Arenite	35	2.74	2.62	2.73	2.94
		Intermediate volcanic	325	2.71	2.34	2.70	2.98
		Mafic Tuff-sed	51	2.72	2.15	2.73	2.93
		Gabbro	7	2.82	2.58	2.78	2.95

**Figure 14.16: Cipoeiro Density Model Coloured by Density Value**


Source: GMS, 2025

\*Note: The Transition Between Overburden (Green), Saprolitic Material (Yellow), Transitional Material (Red) and Rocks (Pink).

**Figure 14.17: Chega Tudo Density Model Coloured by Density Value**


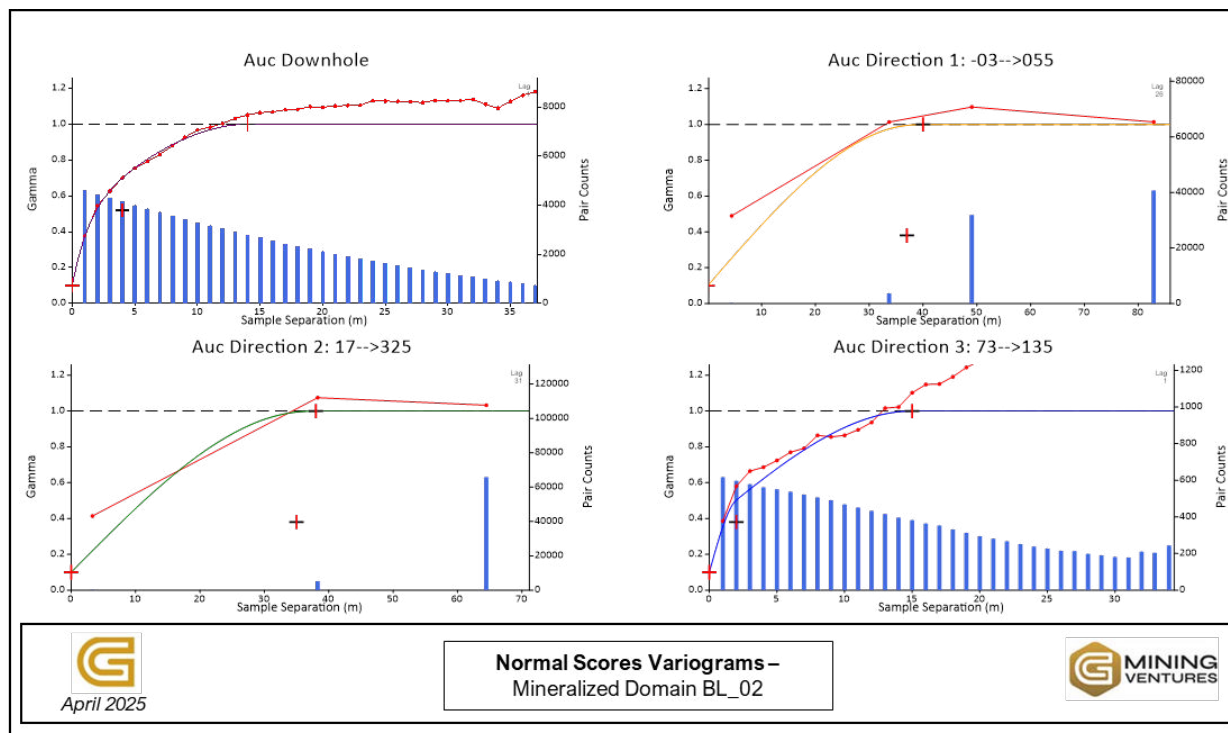
Source: GMS, 2025

\*Note: The Transition Between Overburden (Yellow), Saprolitic Material (Green) and Rocks (Pink).

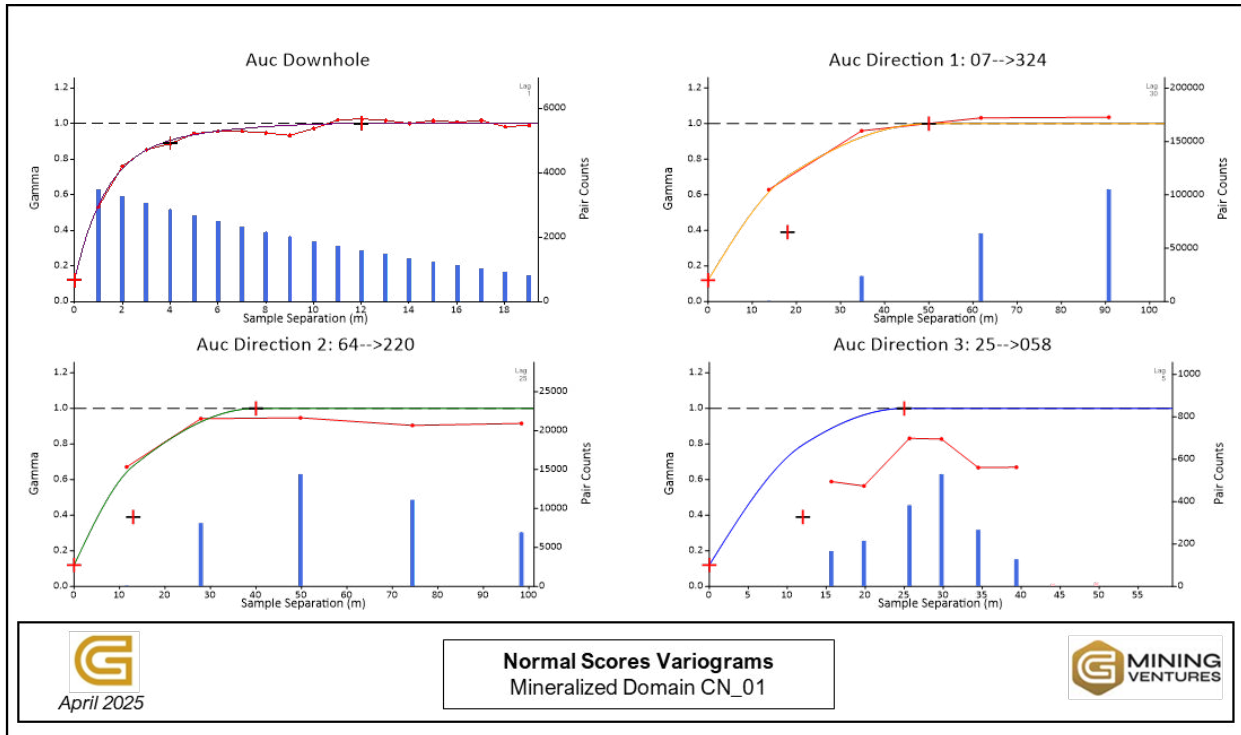
## 14.7 Variography

Variography is a statistical tool used in resource estimation to evaluate the spatial distribution of grades within a mineralized domain. Experimental variograms were produced for each mineralized domain, based on the 1 m composites presented above. Some similar mineralized domains were merged to obtain more coverage and facilitate variogram interpretation (e.g., mineralized domain CN\_02 and CN\_02.1). Variograms for BL\_04, CN\_2.1, CN\_07, CN\_08, CN\_09, CN\_10, CN\_11 and CT\_06 could not be adequately interpreted due to the insufficient number of composites. Table 14.10 presents the variogram parameters used for the Gurupi Project, while Figure 14.18 to Figure 14.20 present examples of variography of mineralized domains for the Gurupi Project deposits.

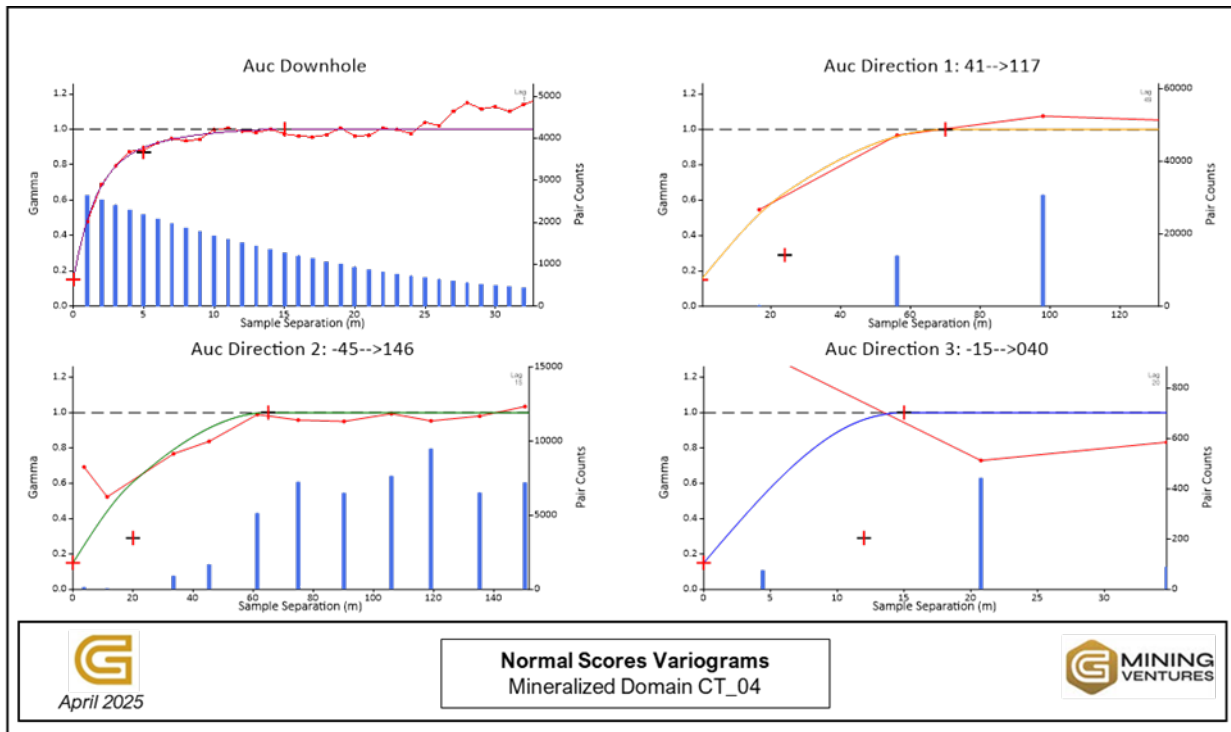
**Figure 14.18: Blanket Deposit Experimental Variograms for Mineralized Domain BL\_02**



Source: GMS, 2025

**Figure 14.19: Contact Deposit Experimental Variograms for Mineralized Domain CN\_01**


Source: GMS, 2025

**Figure 14.20: Chega Tudo Deposit Experimental Variograms for Mineralized Domain CT\_04**


Source: GMS, 2025

**Table 14.10: Variogram Parameters Used for the Mineral Resource Estimation Gurupi Project, per Mineralized Domains**

Deposits	Domain	Direction			Normalized Nugget	Structure 1				Structure 2			
		Dip	Dip Azimuth	Pitch		Normalized Sill	Major	Semi-Major	Minor	Normalized Sill	Major	Semi-Major	Minor
Blanket	BL_01	17.5	135.0	10.0	0.16	0.5	37	35	2	0.34	40	38	15
	BL_02	17.5	135.0	10.0	0.16	0.5	37	35	2	1.490.34	40	38	15
	BL_03	17.5	135.0	10.0	0.16	0.5	37	35	2	0.34	40	38	15
	BL_04	17.5	135.0	10.0	0.16	0.5	37	35	2	0.34	40	38	15
Contact	CN_01	65.0	57.5	172.0	0.24	0.49	18	13	12	0.27	50	40	25
	CN_02	62.5	62.5	172.0	0.18	0.68	22	18	12	0.14	45	35	15
	CN_02.1	62.5	62.5	172.0	0.18	0.68	22	18	12	0.14	45	35	15
	CN_03	62.5	62.5	172.0	0.18	0.66	29	19	12	0.16	65	35	14
	CN_04	62.5	65.0	172.5	0.4	0.33	28	17	10	0.27	55	30	12
	CN_05	62.5	60.0	172.5	0.3	0.52	25	25	8	0.18	50	32	10
	CN_06	62.5	60.0	172.5	0.3	0.52	25	25	8	0.18	50	32	10
	CN_07	62.5	60.0	172.5	0.3	0.52	25	25	8	0.18	50	32	10
	CN_08	62.5	60.0	172.5	0.3	0.52	25	25	8	0.18	50	32	10
	CN_09	62.5	60.0	172.5	0.3	0.52	25	25	8	0.18	50	32	10
	CN_10	62.5	60.0	172.5	0.3	0.52	25	25	8	0.18	50	32	10
CN_11	62.5	60.0	172.5	0.3	0.52	25	25	8	0.18	50	32	10	

Deposits	Domain	Direction			Normalized Nugget	Structure 1				Structure 2			
		Dip	Dip Azimuth	Pitch		Normalized Sill	Major	Semi-Major	Minor	Normalized Sill	Major	Semi-Major	Minor
Chega Tudo	CT_01	80.0	225.0	120.0	0.314	0.31	29	36	12	0.376	140	60	15
	CT_02	80.0	225.0	120.0	0.314	0.31	29	36	12	0.376	140	60	15
	CT_02.1	80.0	225.0	120.0	0.314	0.31	29	36	12	0.376	140	60	15
	CT_03	80.0	225.0	120.0	0.314	0.31	29	36	12	0.376	140	60	15
	CT_04	75.0	220.0	137.5	0.248	0.31	24	20	12	0.442	70	65	15
	CT_05	75.0	220.0	137.5	0.248	0.31	24	20	12	0.442	70	65	15
	CT_06	75.0	220.0	137.5	0.248	0.31	24	20	12	0.442	70	65	15
	CT_07	85.0	225.0	110.0	0.09	0.419	21	23	12	0.491	70	50	15
	CT_08	85.0	230.0	120.0	0.207	0.561	36	24	12	0.232	85	50	15
	CT_09	85.0	230.0	120.0	0.207	0.561	36	24	12	0.232	85	50	15
	CT_10	85.0	230.0	120.0	0.207	0.561	36	24	12	0.232	85	50	15
CT_11	85.0	230.0	120.0	0.207	0.561	36	24	12	0.232	85	50	15	

## 14.8 Block Modelling

Block models were created separately for the Cipoeiro area, which includes the Blanket and Contact deposits, and for the Chega Tudo deposit.

For the Cipoeiro area, the modelling of each block was carried out by adopting a parent block size of 5 m × 5 m × 5 m and a sub-block count of 4 × 4 × 4 for a minimum block size of 1.25 m × 1.25 m × 1.25 m. The sub-block triggers are the weathering, the lithology and the mineralization models. For the Chega Tudo deposit, the modelling of each block was carried out by adopting a parent block size of 5 m × 5 m × 5 m and a sub-block count of 2 × 4 × 2 for a minimum block size of 2.5 m × 1.25 m × 2.5 m. The sub-block triggers are the weathering, the lithology and the mineralization models. To validate the accuracy of the geological unit wireframe volumes, GMS compared them with the block model volumes. The results indicate that the block model parent and sub-block sizes have effectively captured the volumes of the geological units and mineralized domains. Table 14.11 and Table 14.12 respectively present the block model parameters of Cipoeiro block model and Chega Tudo.

**Table 14.11: Cipoeiro Block Model Parameters**

Description	Easting (m)	Northing (m)	Elevation (m)
Origin Coordinates	363,660	9,748,400	100
Parent / Sub-block Count	5/4	5/4	5/4
Minimum Block Size	1.25	1.25	1.25
Number of Blocks	377	604	90
Rotation	0°		
Sub-block Triggers	Weathering, lithology and mineralized domain model		

**Table 14.12: Chega Tudo Block Model Parameters**

Description	Easting (m)	Northing (m)	Elevation (m)
Origin Coordinates	353,830	9,749,320	150
Parent / Sub-block Count	5/2	5/4	5/2
Minimum Block Size	2.5	1.25	2.5
Number of Blocks	1,053	325	130
Rotation	50°		
Sub-block Triggers	Weathering, lithology and mineralized domain model		

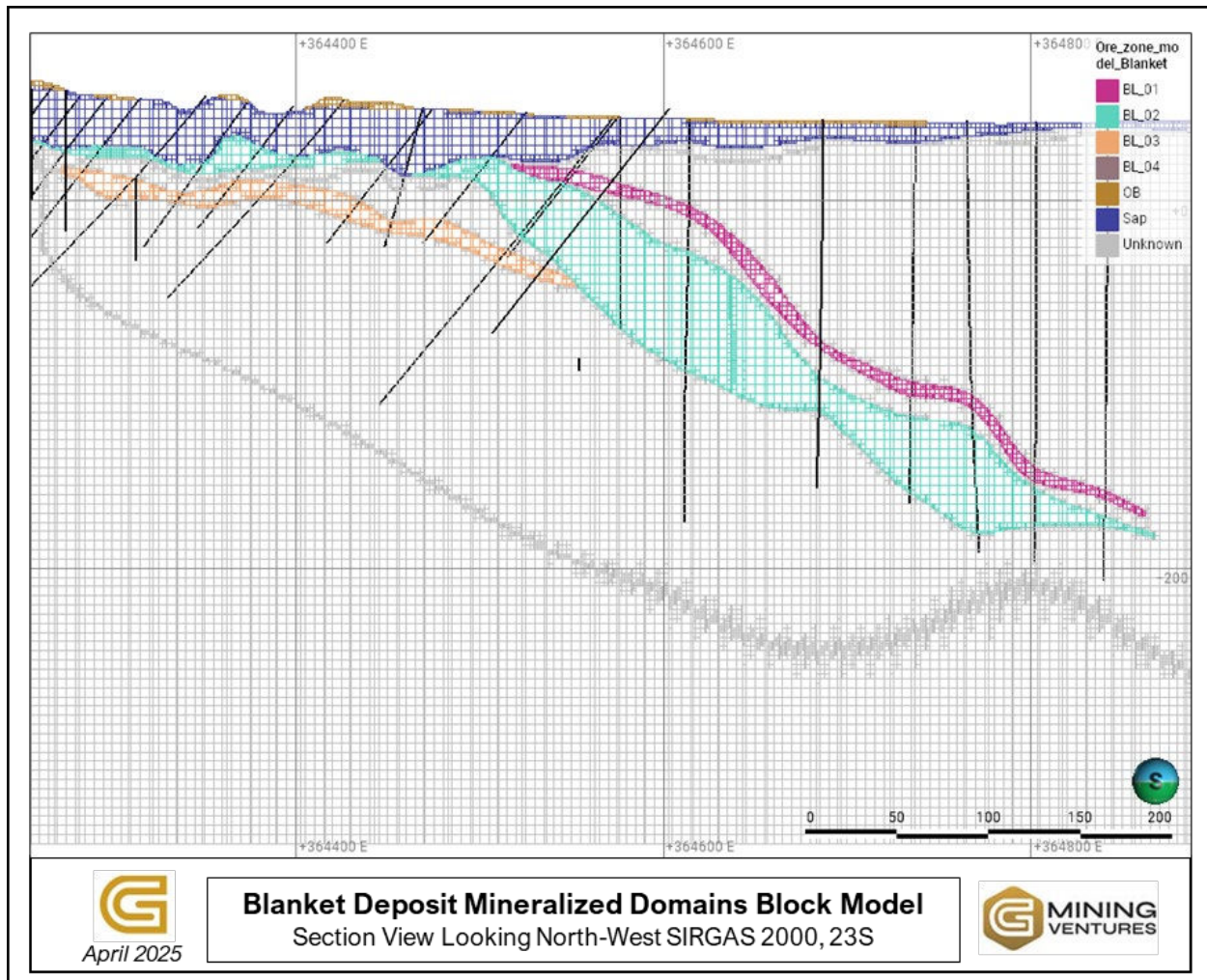
Table 14.13 and Table 14.14 present the comparison of the wireframe and block model volumes for Cipoeiro deposits and Chega Tudo deposit, while Figure 14.21 to Figure 14.23 present a cross-section of the block model mineralization domain trigger.

**Table 14.13: Cipoeiro Area Mineralized Domain Wireframe Volumes Compared to Block Model Volumes**

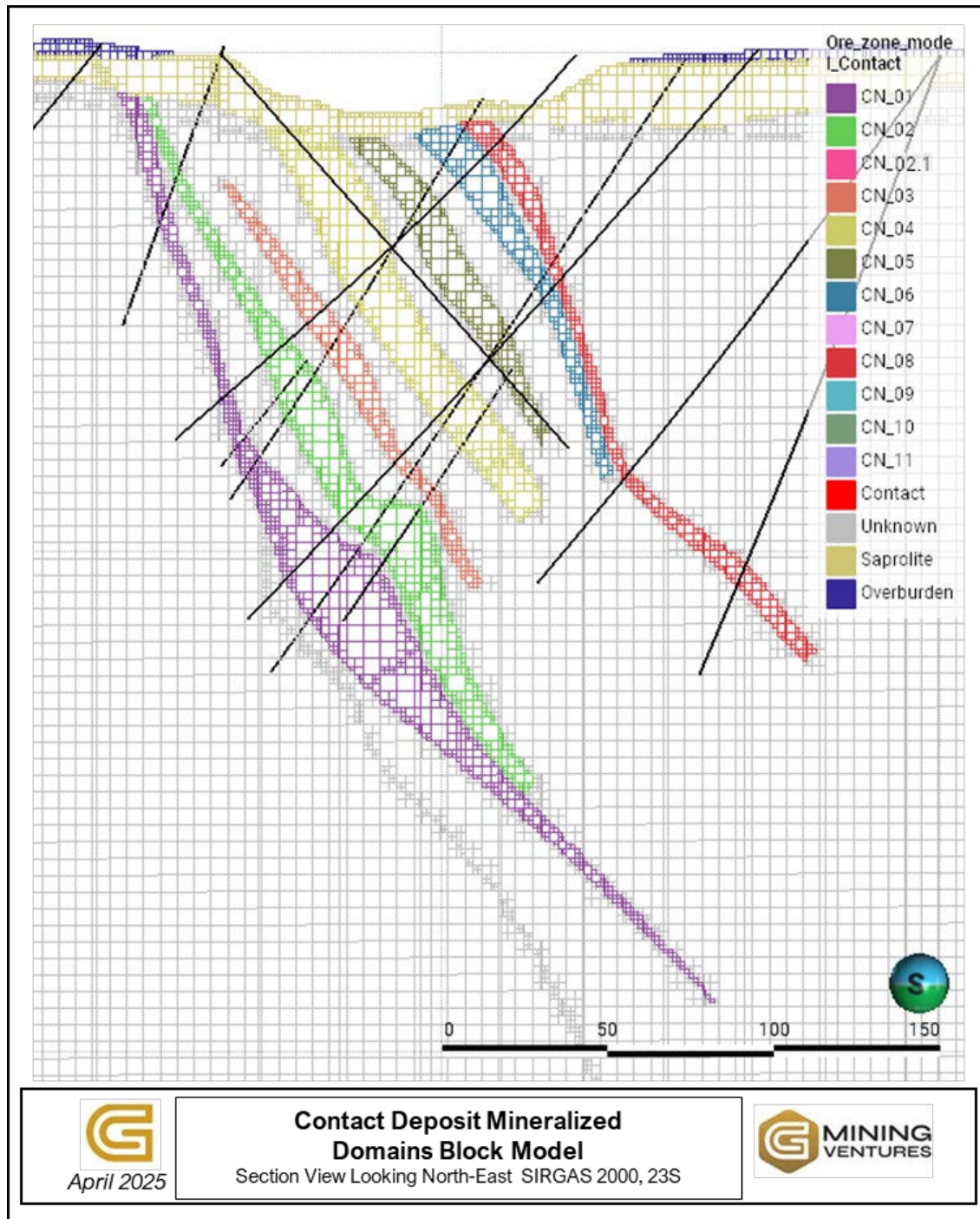
Deposits	Domain	Wireframe Volume (m <sup>3</sup> )	Block Model Volume (m <sup>3</sup> )	Difference (%)
<b>Blanket</b>	BL_01	1,501,700	1,501,873	0.01%
	BL_02	9,232,700	9,232,641	0.00%
	BL_03	337,060	336,992	-0.02%
	BL_04	283,600	283,396	-0.07%
<b>Contact</b>	CN_01	3,443,400	3,443,361	0.00%
	CN_02	1,440,500	1,440,420	-0.01%
	CN_02.1	104,120	104,084	-0.03%
	CN_03	508,120	508,316	0.04%
	CN_04	499,480	499,223	-0.05%
	CN_05	551,580	551,643	0.01%
	CN_06	458,520	458,797	0.06%
	CN_07	81,910	81,900	-0.01%
	CN_08	416,550	416,629	0.02%
	CN_09	211,940	211,861	-0.04%
	CN_10	118,120	118,014	-0.09%
CN_11	1,921,400	1,921,375	0.00%	

**Table 14.14: Chega Tudo Mineralized Domain Wireframe Volumes Compared to Block Model Volumes**

Deposits	Domain	Wireframe Volume (m <sup>3</sup> )	Block Model Volume (m <sup>3</sup> )	Difference (%)
<b>Chega Tudo</b>	CT_01	905,160	904,016	-0.13%
	CT_02	4,513,500	4,512,773	-0.02%
	CT_02.1	534,610	534,086	-0.10%
	CT_03	1,229,200	1,228,805	-0.03%
	CT_04	7,877,000	7,878,219	0.02%
	CT_05	1,945,800	1,946,086	0.01%
	CT_06	1,965,100	1,964,711	-0.02%
	CT_07	4,112,000	4,111,930	0.00%
	CT_08	5,435,500	5,435,078	-0.01%
	CT_09	1,445,100	1,445,945	0.06%
	CT_10	1,190,600	1,188,617	-0.17%
CT_11	3,042,300	3,039,156	-0.10%	

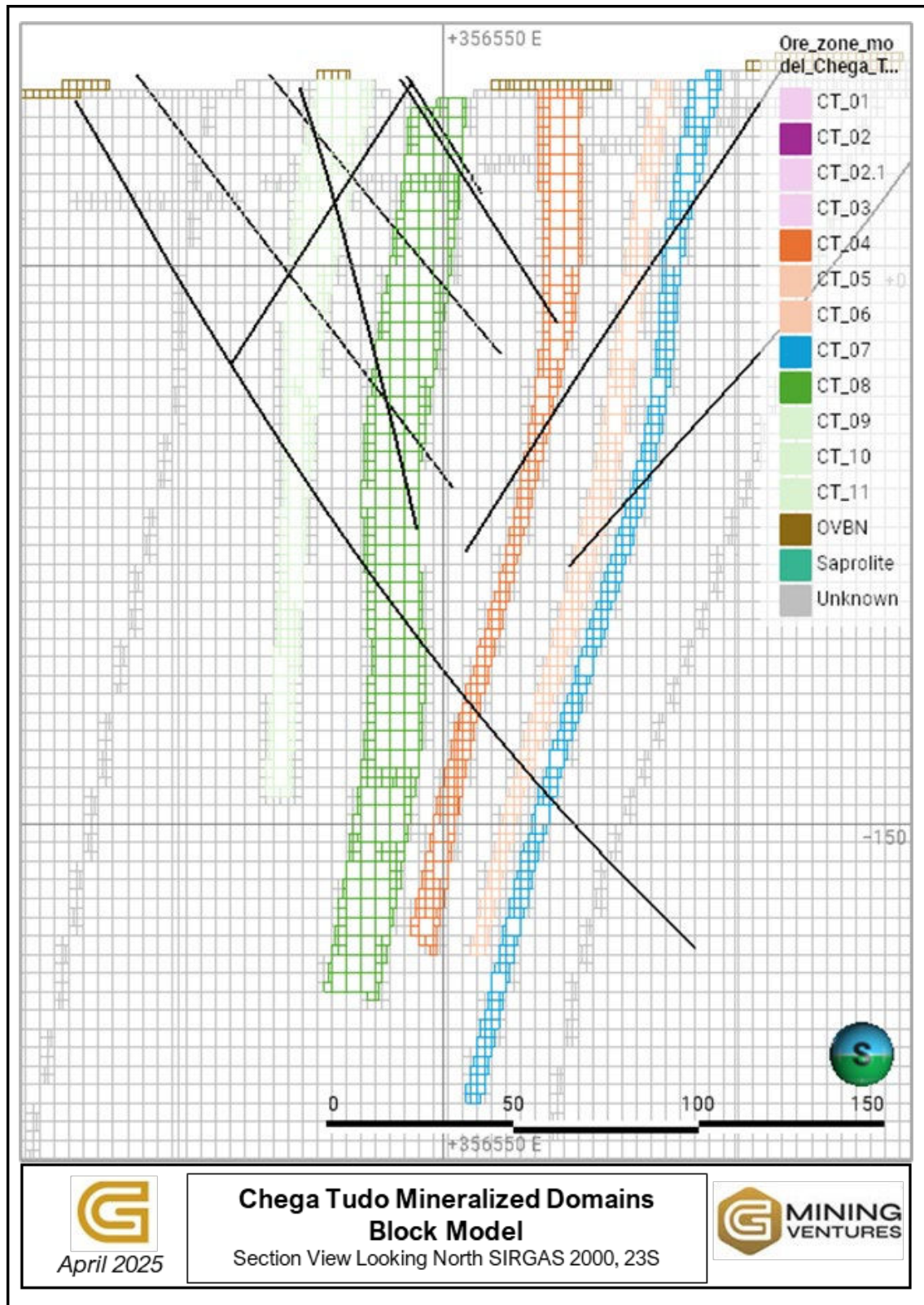
**Figure 14.21: Blanket Mineralized Domains Block Model**


Source: GMS, 2025

**Figure 14.22: Contact Mineralized Domains Block Model**


Source: GMS, 2025

**Figure 14.23: Chega Tudo Mineralized Domain Block Model**



Source: GMS, 2025

### 14.9 Block Model Interpolation

The Ordinary Kriging (OK) interpolation method was used to interpolate block grades based on the variogram models presented in Section 14.7. A 4 × 4 × 4 discretization in X, Y and Z was applied to the blocks. A four-pass approach was applied per domain, with an increasing ellipsoid size after each pass estimate. All blocks falling outside the mineralized domains were assigned a value of 0.00 g/t Au. For the ellipsoidal orientation, Leapfrog Edge “Dynamic Anisotropy” (DA) was used based on the geometry of each mineralized domain. The variable ellipsoidal orientation (or DA) was validated for each mineralized domain and no inconsistencies were observed. Table 14.15 and Table 14.16 present the parameters and search criteria used for the Gurupi Project Resource Estimation.

**Table 14.15: Estimators and Search Parameters Used in Gurupi Project Mineralized Domains**

Deposits	Domain	Interpolator	Ellipsoid Ranges (m)											
			Pass 1			Pass 2			Pass 3			Pass 4		
			Max.	Int.	Min.	Max.	Int.	Min.	Max.	Int.	Min.	Max.	Int.	Min.
Blanket	BL_01	OK	45	40	10	67.5	60	15.0	90	80	20	180	160	35
	BL_02	OK	45	40	10	67.5	60	15.0	90	80	20	260	220	40
	BL_03	OK	45	40	10	67.5	60	15.0	90	80	20	180	160	35
	BL_04	OK	45	40	10	67.5	60	15.0	90	80	20	180	160	35
Contact	CN_01	OK	35	30	10	52.5	45	12.5	70	60	15	180	150	35
	CN_02	OK	35	30	10	52.5	45	12.5	70	60	15	140	120	30
	CN_02.1	OK	35	30	10	52.5	45	12.5	70	60	15	140	120	30
	CN_03	OK	35	30	10	52.5	45	12.5	70	60	15	140	120	30
	CN_04	OK	35	30	10	52.5	45	12.5	70	60	15	140	120	30
	CN_05	OK	35	30	10	52.5	45	12.5	70	60	15	140	120	30
	CN_06	OK	35	30	10	52.5	45	12.5	70	60	15	140	120	30
	CN_07	OK	35	30	10	52.5	45	12.5	70	60	15	140	120	30
	CN_08	OK	35	30	10	52.5	45	12.5	70	60	15	140	120	30
	CN_09	OK	35	30	10	52.5	45	12.5	70	60	15	140	120	30
	CN_10	OK	35	30	10	52.5	45	12.5	70	60	15	140	120	30
CN_11	OK	35	30	10	52.5	45	12.5	70	60	15	180	150	35	

Deposits	Domain	Interpolator	Ellipsoid Ranges (m)											
			Pass 1			Pass 2			Pass 3			Pass 4		
			Max.	Int.	Min.	Max.	Int.	Min.	Max.	Int.	Min.	Max.	Int.	Min.
Chega Tudo	CT_01	OK	60	50	15	90.0	75	20.0	120	100	25	200	175	30
	CT_02	OK	60	50	15	90.0	75	20.0	120	100	25	240	200	40
	CT_02.1	OK	60	50	15	90.0	75	20.0	120	100	25	200	175	30
	CT_03	OK	60	50	15	90.0	75	20.0	120	100	25	180	150	30
	CT_04	OK	60	50	15	90.0	75	20.0	120	100	25	200	175	30
	CT_05	OK	60	50	15	90.0	75	20.0	120	100	25	200	175	30
	CT_06	OK	60	50	15	90.0	75	20.0	120	100	25	280	240	40
	CT_07	OK	60	50	15	90.0	75	20.0	120	100	25	240	200	40
	CT_08	OK	60	50	15	90.0	75	20.0	120	100	25	200	175	30
	CT_09	OK	60	50	15	90.0	75	20.0	120	100	25	180	150	30
	CT_10	OK	60	50	15	90.0	75	20.0	120	100	25	180	150	30
CT_11	OK	60	50	15	90.0	75	20.0	120	100	25	180	150	30	

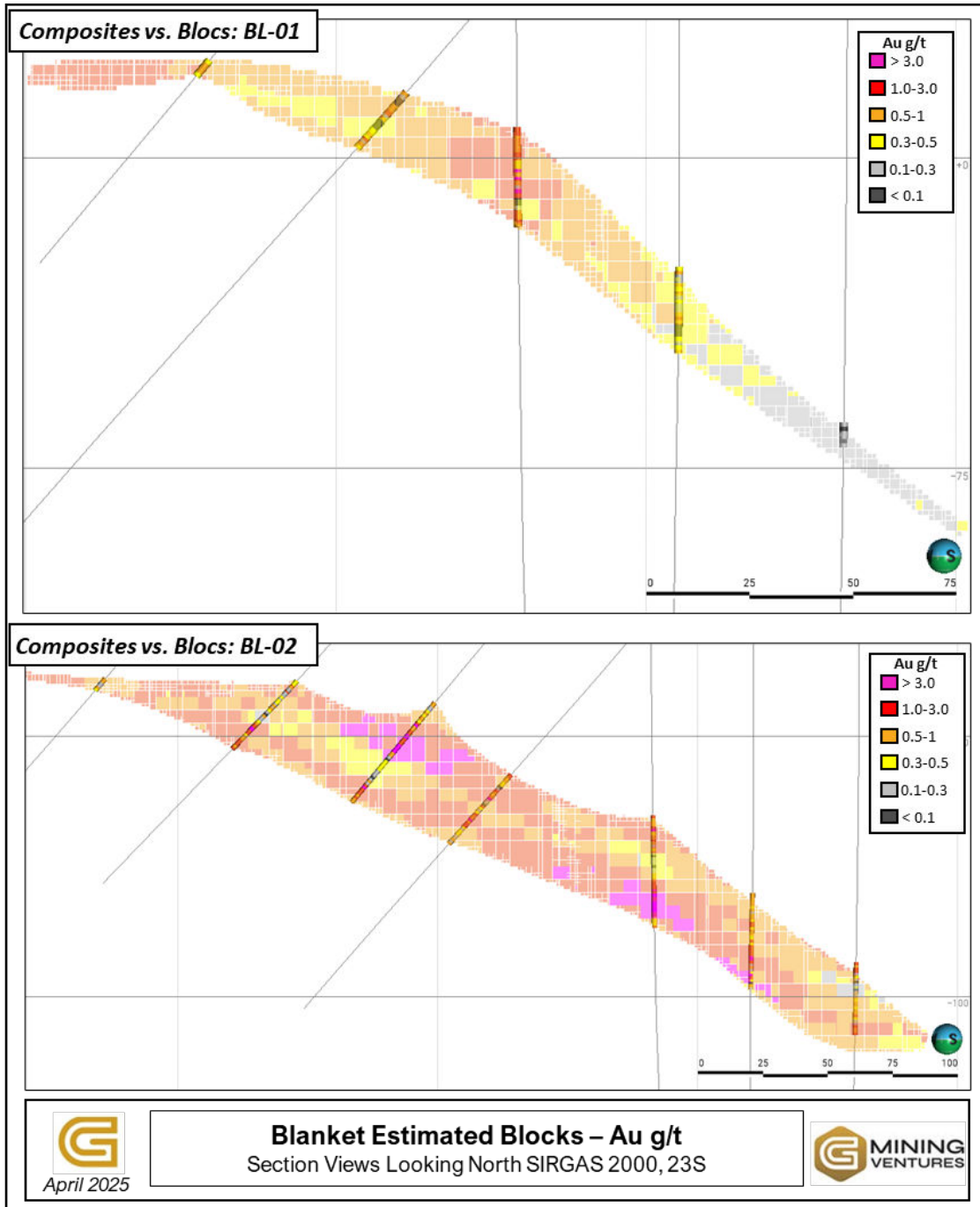
**Table 14.16: Sample Search Criteria for Gurupi Project**

Deposits	Pass	Composites			Minimum DDH
		Min.	Max	Max/DDH	
Blanket	Pass 1	10	20	4	3
	Pass 2	10	20	4	3
	Pass 3	10	16	4	3
	Pass 4	5	12	4	2
Contact	Pass 1	10	20	4	3
	Pass 2	10	20	4	3
	Pass 3	10	16	4	3
	Pass 4	5	12	4	2
Chega Tudo	Pass 1	10	20	4	3
	Pass 2	10	20	4	3
	Pass 3	10	16	4	3
	Pass 4	5	12	4	2

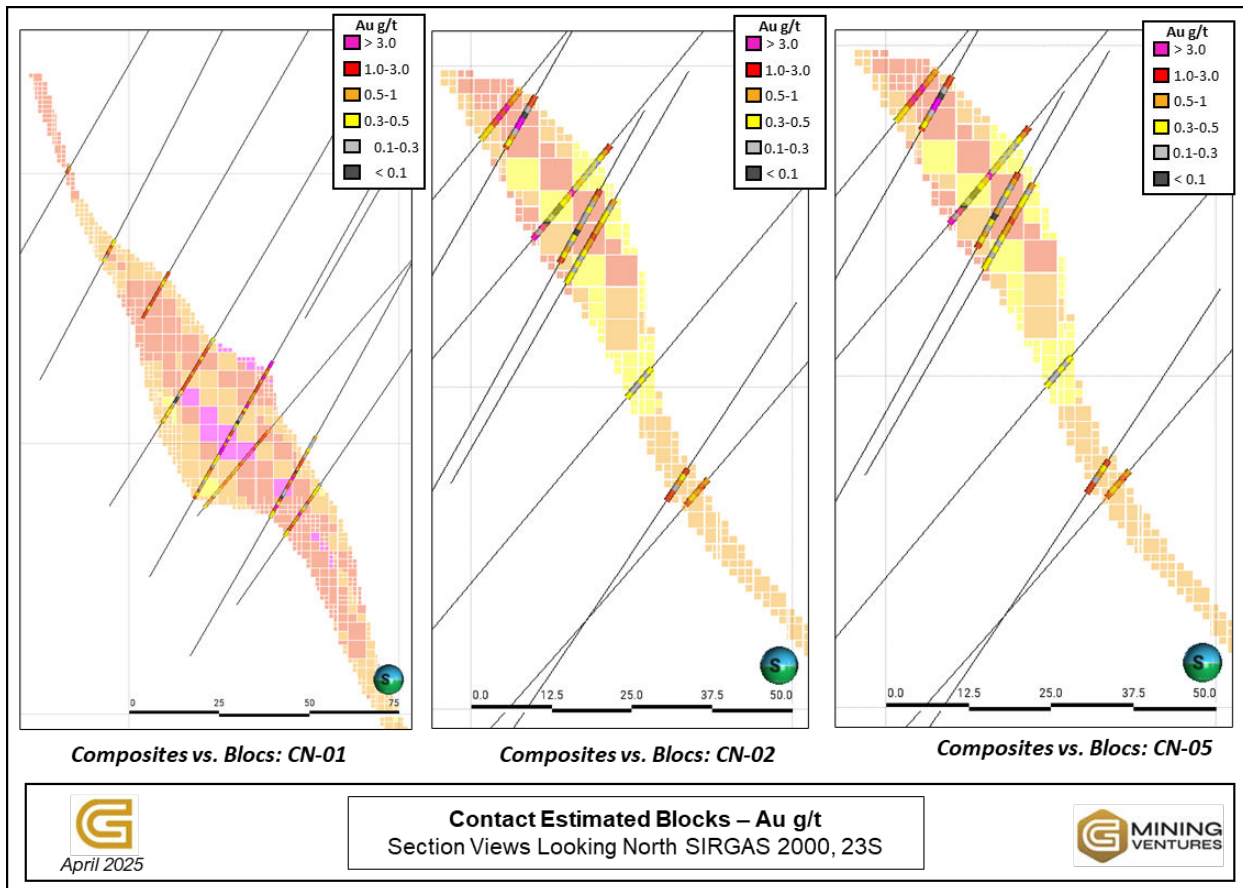
## **14.10 Grade Estimation Validation**

### **14.10.1 Visual Validation**

A visual validation process was conducted to confirm that the ellipsoid orientation matches the modelled veins orientation. To ensure that estimated blocks are a robust interpretation of the composites, various validation methods were used. Visual checks of the block model, section per section, were used as validation of the interpolation outputs. Figure 14.24 to Figure 14.26 present global cross-sections of the interpolated block models against composites by deposit. The estimated blocks are good representations of composites.

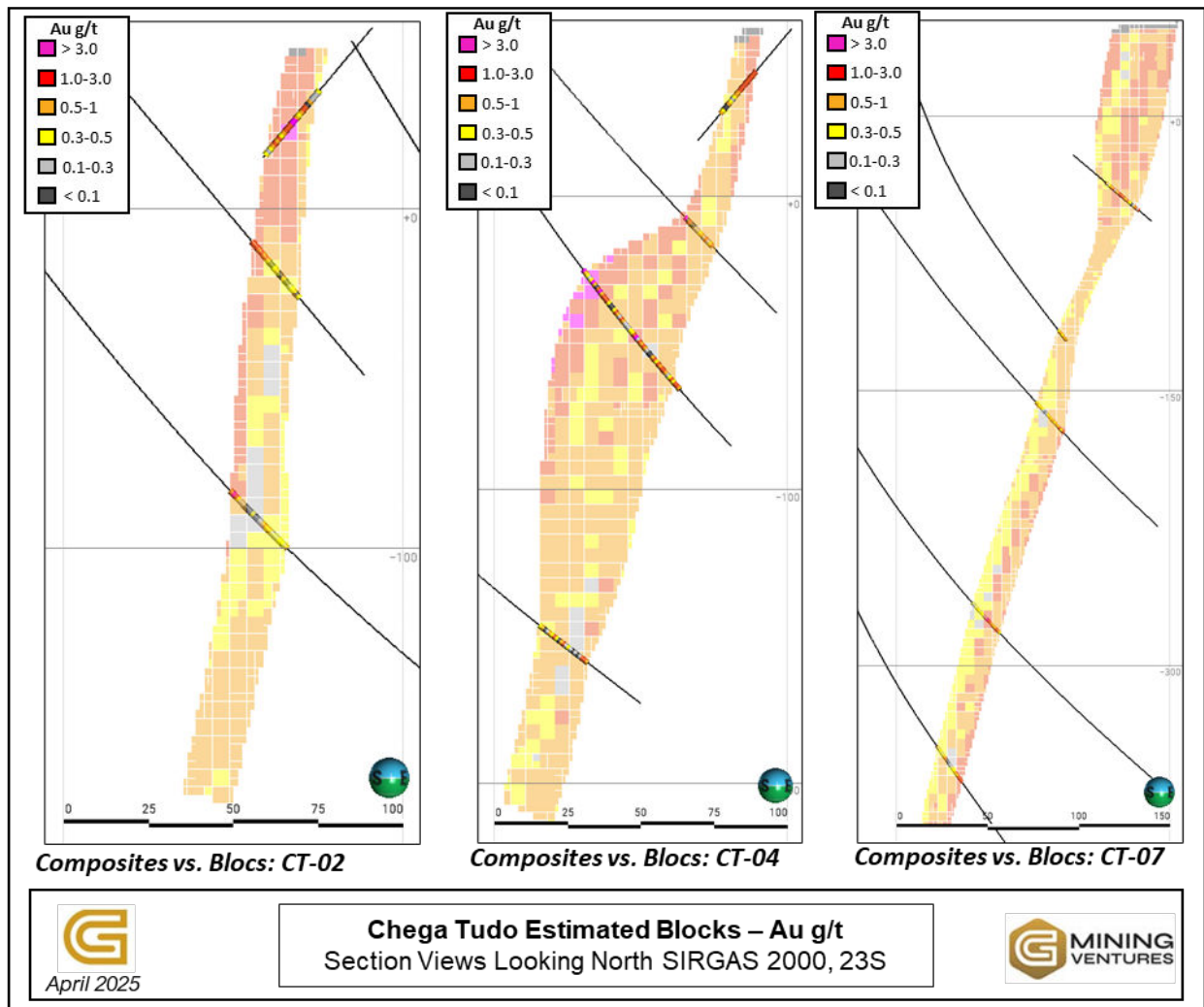
**Figure 14.24: Blanket Visual Validation of the Block Model and Composites (BL-01, BL-02)**


Source: GMS, 2025

**Figure 14.25: Contact Visual Validation of the Block Model and Composites CN-01, CN-02, CN-05**


Source: GMS, 2025

**Figure 14.26: Chega Tudo Visual Validation of the Block Model and Composites CT-02, CT-04 and CT-07**



Source: GMS, 2025

#### 14.10.2 Global Statistical Validation

To ensure proper composite representation in each domain, a statistical comparison was made between the global composite mean and the global interpolated block mean for various interpolation methods. Table 14.17 shows a summary of global means, per domain. Based on the results, the interpolation using OK is judged to be valid and a good representation of composite grades and no important bias is observed between the interpolation methods.

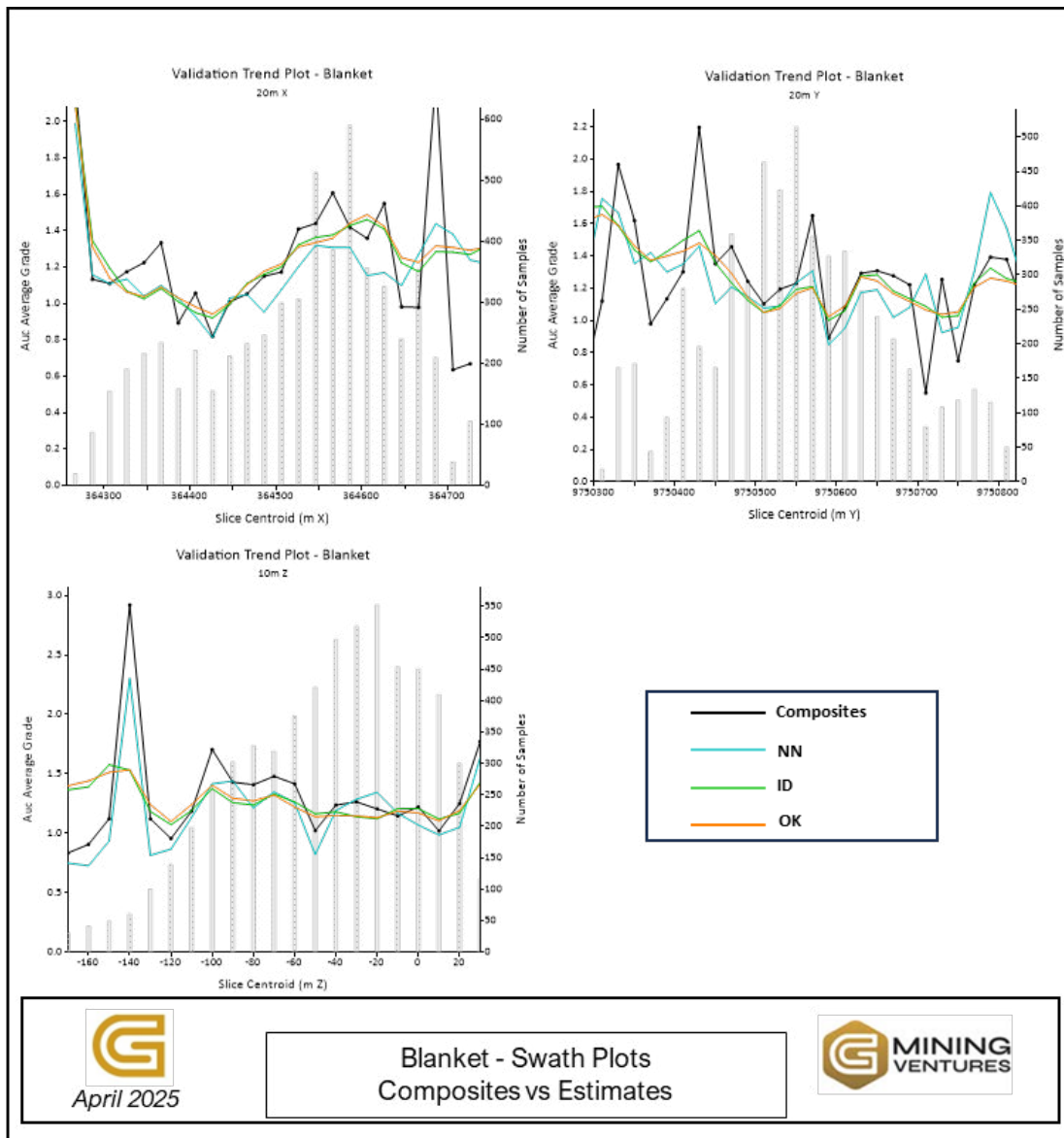
**Table 14.17: Mean Grade Comparison Between Composites and Blocks, per Mineralized Domains**

Deposits	Domains	Comp. (Au g/t)	Block OK (Au g/t)	Block ID2 (Au g/t)	Block NN (Au g/t)
<b>Blanket</b>	BL_01	0.87	<b>0.77</b>	0.77	0.83
	BL_02	1.40	<b>1.42</b>	1.40	1.32
	BL_03	0.63	<b>0.61</b>	0.61	0.62
	BL_04	0.69	<b>0.45</b>	0.44	0.64
<b>Contact</b>	CN_01	1.70	<b>1.65</b>	1.68	1.37
	CN_02	1.66	<b>1.65</b>	1.62	1.56
	CN_02.1	1.70	<b>1.76</b>	1.86	1.53
	CN_03	2.70	<b>2.21</b>	2.24	2.44
	CN_04	1.33	<b>1.35</b>	1.35	1.35
	CN_05	1.07	<b>0.95</b>	0.95	0.99
	CN_06	1.14	<b>1.15</b>	1.10	1.28
	CN_07	1.40	<b>1.57</b>	1.58	1.82
	CN_08	1.29	<b>1.21</b>	1.18	1.58
	CN_09	0.97	<b>0.95</b>	0.84	1.31
	CN_10	0.59	<b>0.67</b>	0.70	0.68
CN_11	0.65	<b>0.67</b>	0.70	0.42	
<b>Chega Tudo</b>	CT_01	0.85	<b>0.62</b>	0.61	0.58
	CT_02	0.81	<b>0.69</b>	0.67	0.71
	CT_02.1	0.45	<b>0.48</b>	0.47	0.57
	CT_03	0.73	<b>0.65</b>	0.65	0.72
	CT_04	0.87	<b>0.81</b>	0.82	0.87
	CT_05	0.77	<b>0.85</b>	0.89	0.84
	CT_06	0.46	<b>0.41</b>	0.42	0.39
	CT_07	0.74	<b>0.67</b>	0.67	0.63
	CT_08	0.71	<b>0.66</b>	0.66	0.66
	CT_09	0.49	<b>0.74</b>	0.66	1.01
	CT_10	0.76	<b>0.71</b>	0.72	0.70
CT_11	1.08	<b>1.10</b>	1.11	1.01	

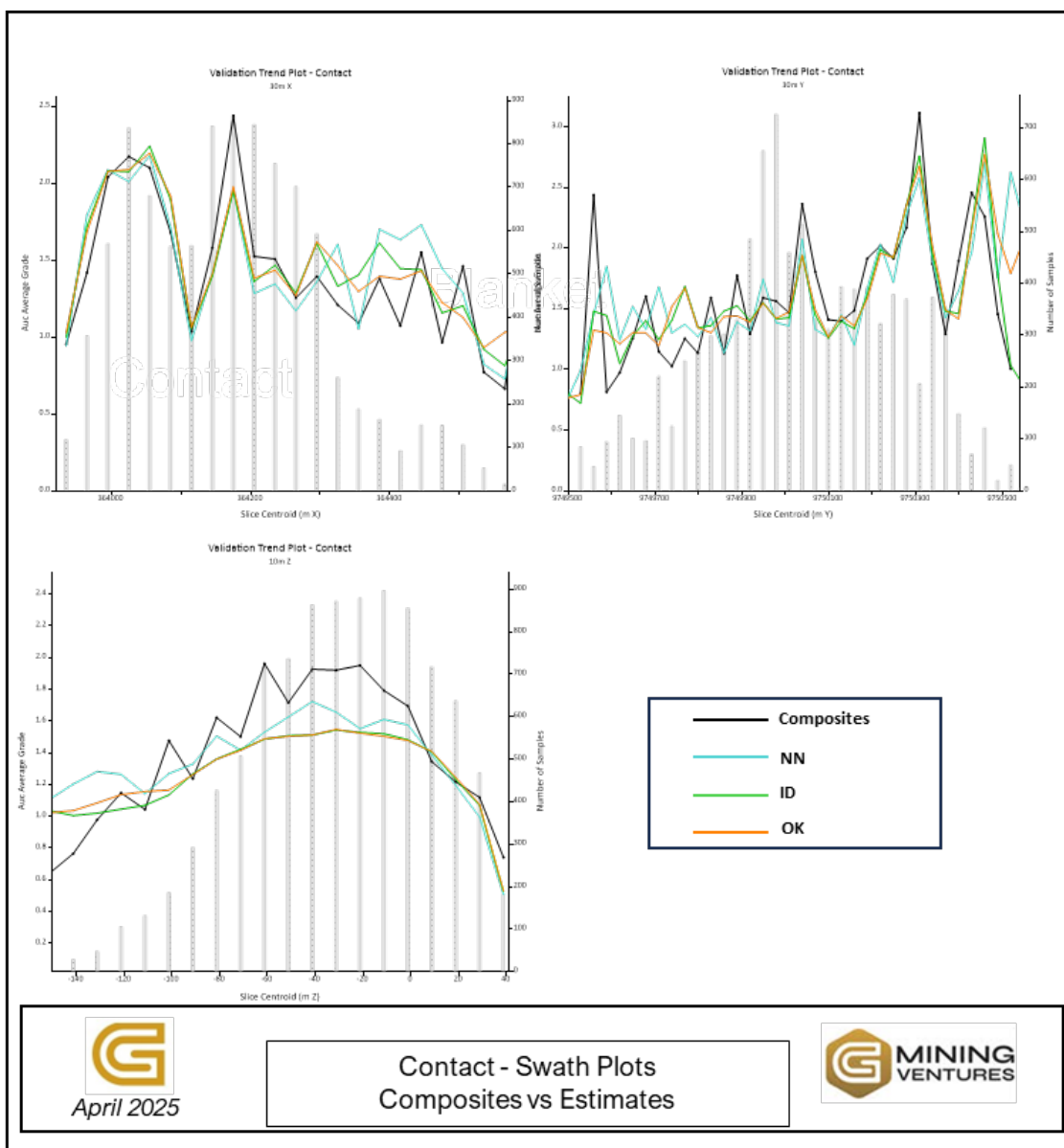
### 14.10.3 Local Statistical Validation – Swath Plot

Finally, swath plots were created to validate local estimation. The method involves comparing the predicted values of a block from the interpolation model to the actual values obtained from drill hole samples (i.e., composites). When enough samples were available for swath plot analysis, peaks and troughs in composite grades generally follows peaks and troughs in block grades. Figure 14.27 to Figure 14.29 present swath plots along the X, Y and Z-axis. In general, composite gold grades are well represented within estimated block gold grades and the smoothing inherent to OK appears reasonable.

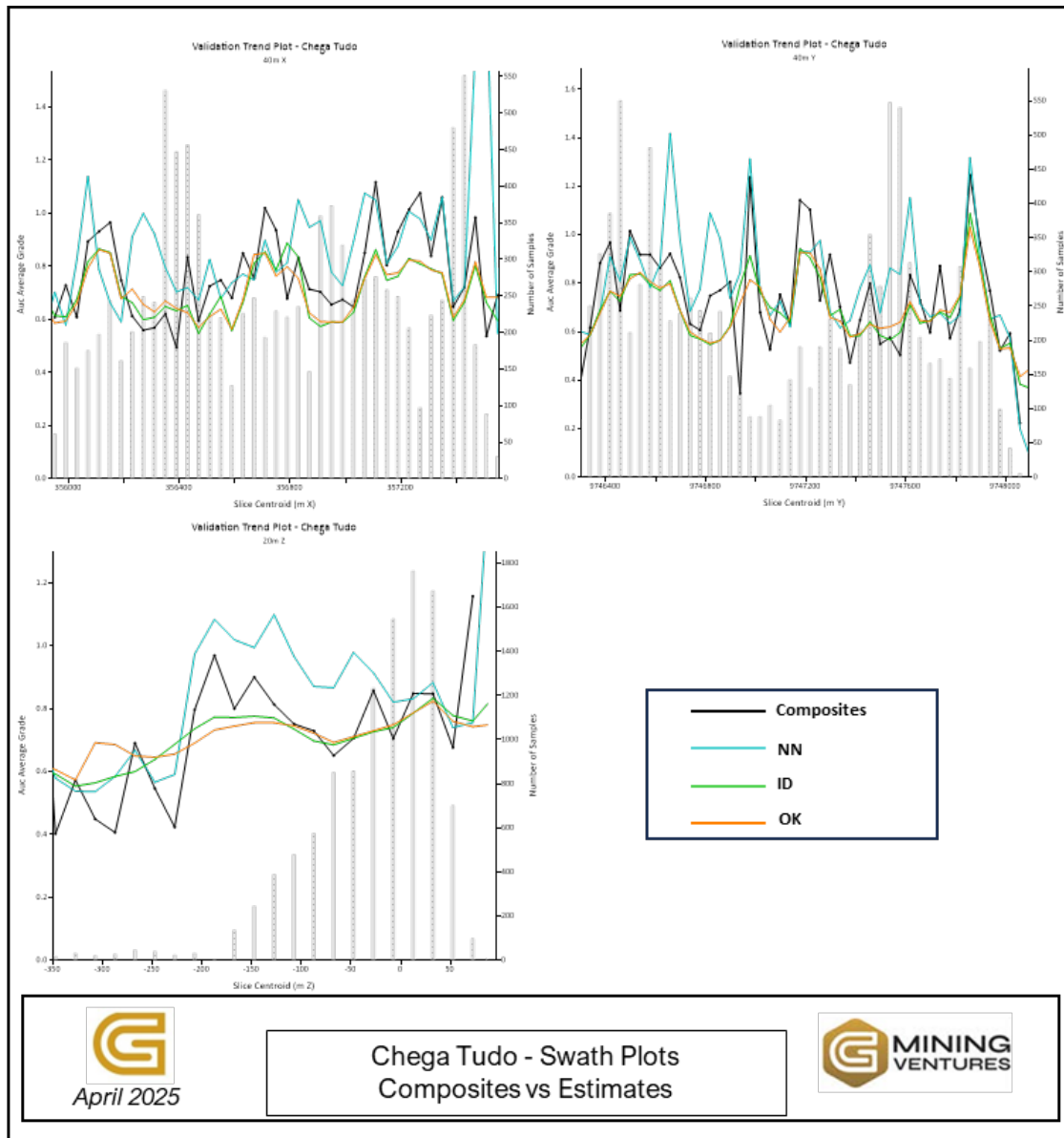
**Figure 14.27: Swath Plots for X, Y and Z for Mineralized Domain Blanket**



Source: GMS, 2025

**Figure 14.28: Swath Plots for X, Y and Z for Mineralized Domain Contact**


Source: GMS, 2025

**Figure 14.29: Swath Plots for X, Y and Z for Mineralized Domain Chega Tudo**


Source: GMS, 2025

## 14.11 Mineral Resources

### 14.11.1 Mineral Resources Classification

The estimated blocks were classified according to CIM's "Definition Standards for Mineral Resources and Mineral Reserves" (2014) and adhere to the CIM "Estimation of Mineral Resources and Mineral Reserves Best Practices Guidelines" (2019). The Mineral Resources at Gurupi Project were classified as Indicated and Inferred Mineral Resources.

As stated in CIM's "Definition Standards for Mineral Resources and Mineral Reserves":

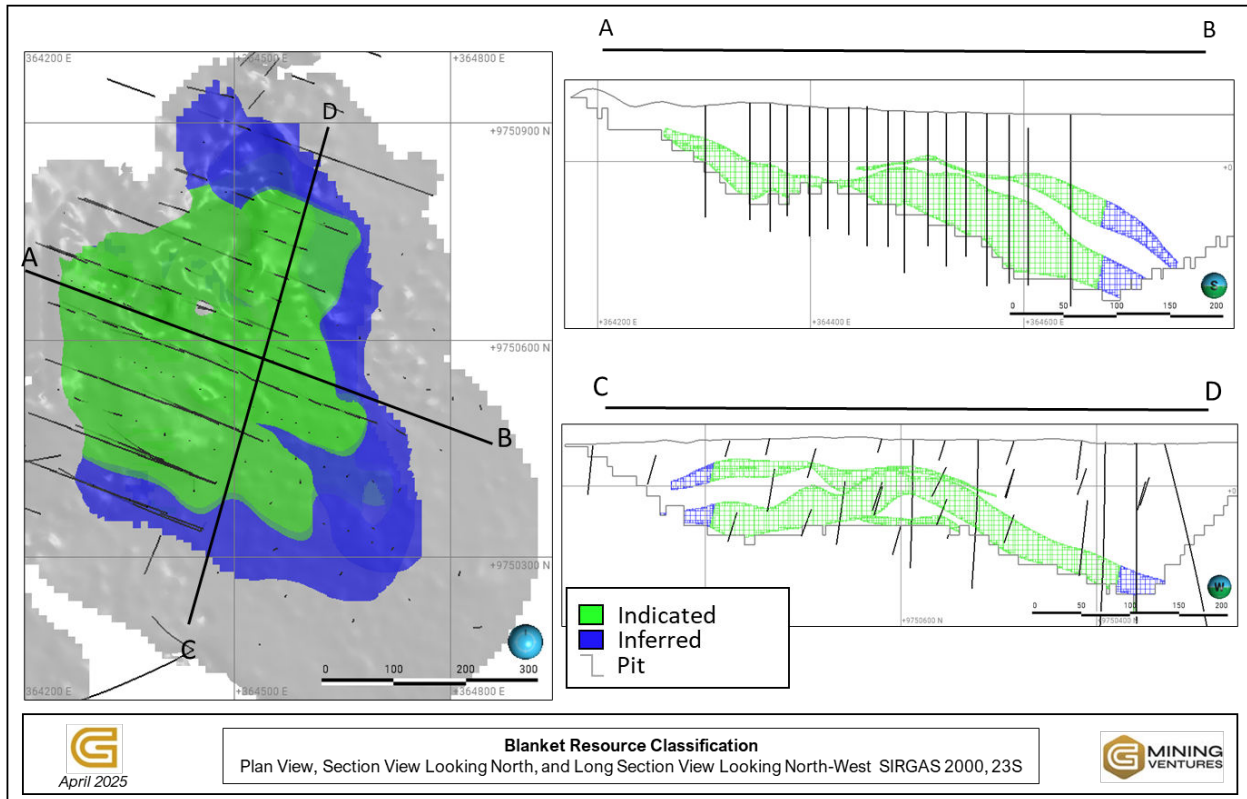
*"An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, density, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit."*

*"An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity."*

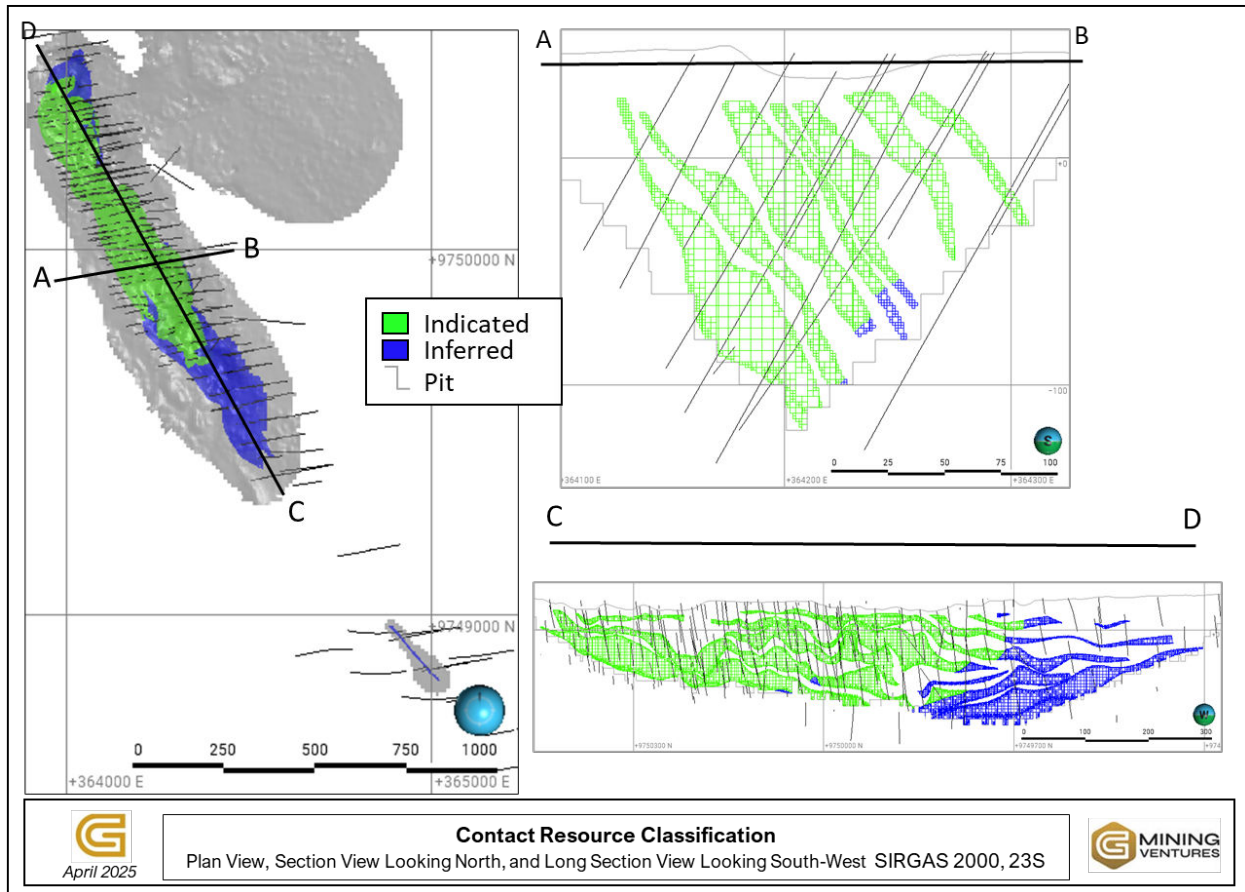
GMS considered variogram ranges, drill hole spacing, confidence in the geological interpretation and recovery methods to determine parameters that will define the resource categories. The final Mineral Resource classification is mostly based on average drill hole spacing and manual editing to avoid isolated blocks. The principal assumptions to classify the Mineral Resources as Indicated and Inferred are summarized below:

- No Measured Mineral Resources are defined at Gurupi Project at this stage of the Project;
- Indicated Mineral Resources are defined where blocks have an average distance to the nearest three (3) drill holes of less than 30-35 m;
- Inferred Mineral Resources are defined where blocks have an average distance to the nearest three (3) drill holes of less than 60-70 m. This limit corresponds to sectors with sparse drilling and less lateral and horizontal continuity; and
- Final categories of all domains were manually edited to avoid isolated clusters of blocks.

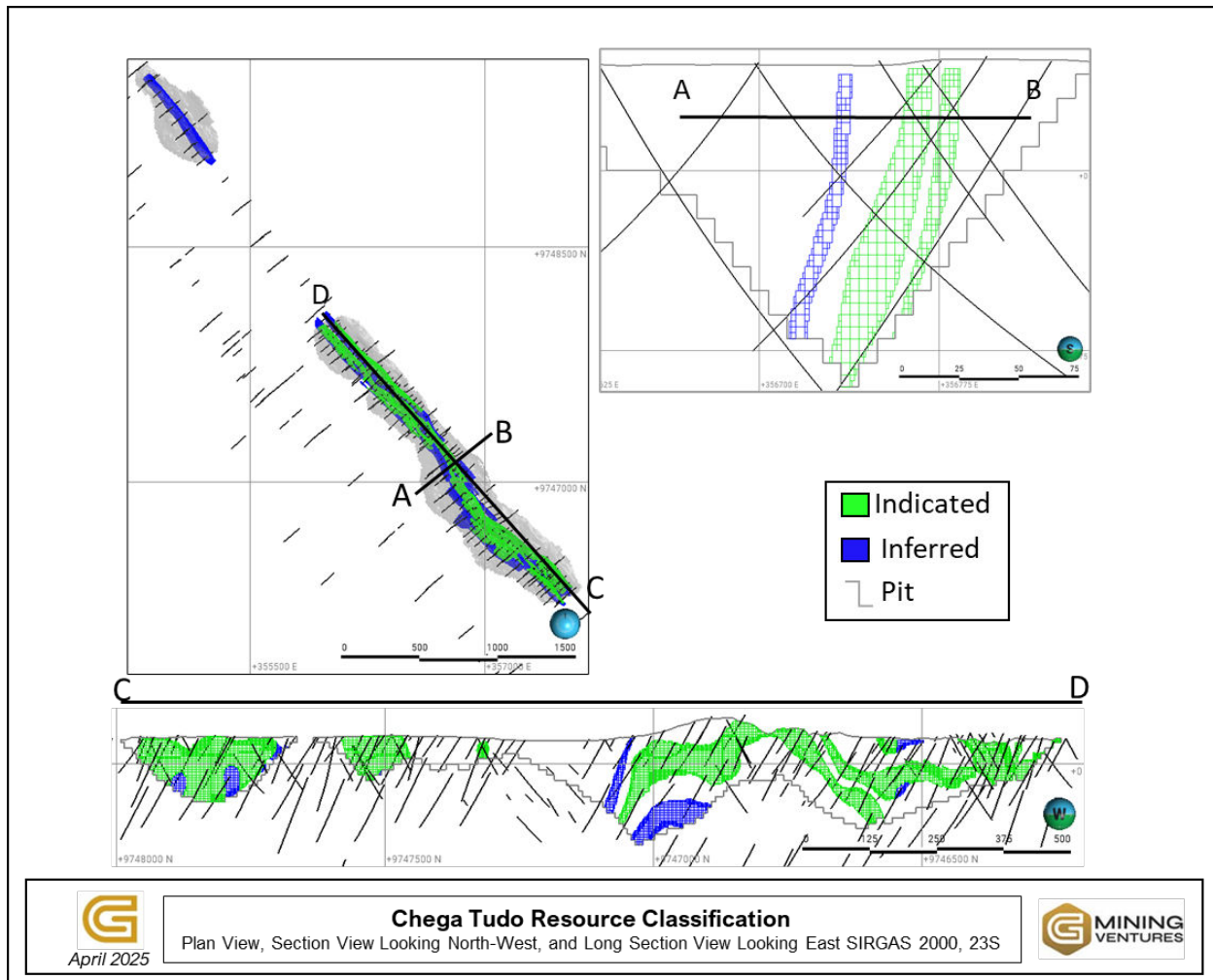
The final classification of Mineral Resources is displayed by deposits in Figure 14.30 to Figure 14.32 for the in-pit resource.

**Figure 14.30: Blanket Pit Constrained Resource Classification**


Source: GMS, 2025

**Figure 14.31: Contact Pit Constrained Resource Classification**


Source: GMS, 2025

**Figure 14.32: Chega Tudo Pit Constrained Resource Classification**


Source: GMS, 2025

#### 14.11.2 Reasonable Prospects of Eventual Economic Extraction (RPEEE)

Deposits of Gurupi Project are constrained by a Whittle pit shell for the open pit. Whittle pit shell and were modelled by GMS mine engineering personnel. To define resource pits, different parameters were selected according to the surface alteration intensity (i.e., weathering) of the host rocks. The parameters for pit and cut-off grade assumptions are presented in Table 14.18 to Table 14.20. The optimization of the Mineral Resource pit is presented in Figure 14.33 and Figure 14.34 by deposits.

**Table 14.18: Parameters Used for the Open Pit Whittle Optimization of Blanket Deposit**

<b>Blanket Deposit</b>			
<b>Optimization Parameters</b>		<b>Resources Parameters</b>	
		<b>Transitional</b>	<b>Rock</b>
Discount Rate	%	5%	5%
Gold Price	USD/oz	1,950	1,950
Payable Metal	%	99.5%	99.5%
Transport & Refining Cost	USD/oz	10.00	10.00
Royalty Rate	%	6.75%	6.75%
Royalty Cost	USD/oz	130.30	130.30
Net Ore Value	USD/oz	1,799.95	1,799.95
Nominal Milling Rate	t/d	9,589	9,589
Plant Throughput	kt/yr	3,500	3,500
Recovery*	%	85.00%	85.00%
<b>Total Ore Based Cost</b>	<b>USD/t</b>	<b>16.50</b>	<b>17.00</b>
Mining Dilution	%	0%	0%
Mining Loss	%	0%	0%
<b>Total Mining Reference Cost</b>	<b>USD/t mined</b>	<b>2.79</b>	<b>2.83</b>
Incremental Bench Cost	USD/10 m bench	0.04	0.04
OSA Slope	degree	47	47
Mine Cut Off Grade	g/t Au	0.24	0.25

\*Note: Blanket deposit recovery is calculated using the following formula:  $4.3543 * LN (Au \text{ grade}) + 86.705 \text{ Cap at } 98.2\%$ .

**Table 14.19: Parameters Used for the Open Pit Whittle Optimization of Contact Deposit**

<b>Contact deposit</b>			
<b>Optimization Parameters</b>		<b>Resources Parameters</b>	
		<b>Transitional</b>	<b>Rock</b>
Discount Rate	%	5.0%	5.0%
Gold Price	USD/oz	1,950	1,950
Payable Metal	%	99.5%	99.5%

Transport & Refining Cost	<i>USD/oz</i>	10.00	10.00
Royalty Rate	%	6.75%	6.75%
Royalty Cost	<i>USD/oz</i>	130.30	130.30
Net Ore Value	<i>USD/oz</i>	1,799.95	1,799.95
Nominal Milling Rate	<i>t/d</i>	9,589	9,589
Plant Throughput	<i>kt/yr</i>	3,500	3,500
Recovery*	%	85%	85%
<b>Total Ore Based Cost</b>	<b><i>USD/t</i></b>	<b>16.50</b>	<b>17.00</b>
Mining Dilution	%	0%	0%
Mining Loss	%	0%	0%
<b>Total Mining Reference Cost</b>	<b><i>USD/t mined</i></b>	<b>2.79</b>	<b>2.83</b>
Incremental Bench Cost	<i>USD/10 m bench</i>	0.04	0.04
OSA Slope	<i>degree</i>	47	47
Mine Cut Off Grade	<i>g/t Au</i>	0.24	0.25

\*Note: Contact deposit recovery is calculated using the following formula:  $6.0029 * LN (Au \text{ grade}) + 81.215 \text{ Cap at } 97.1\%$

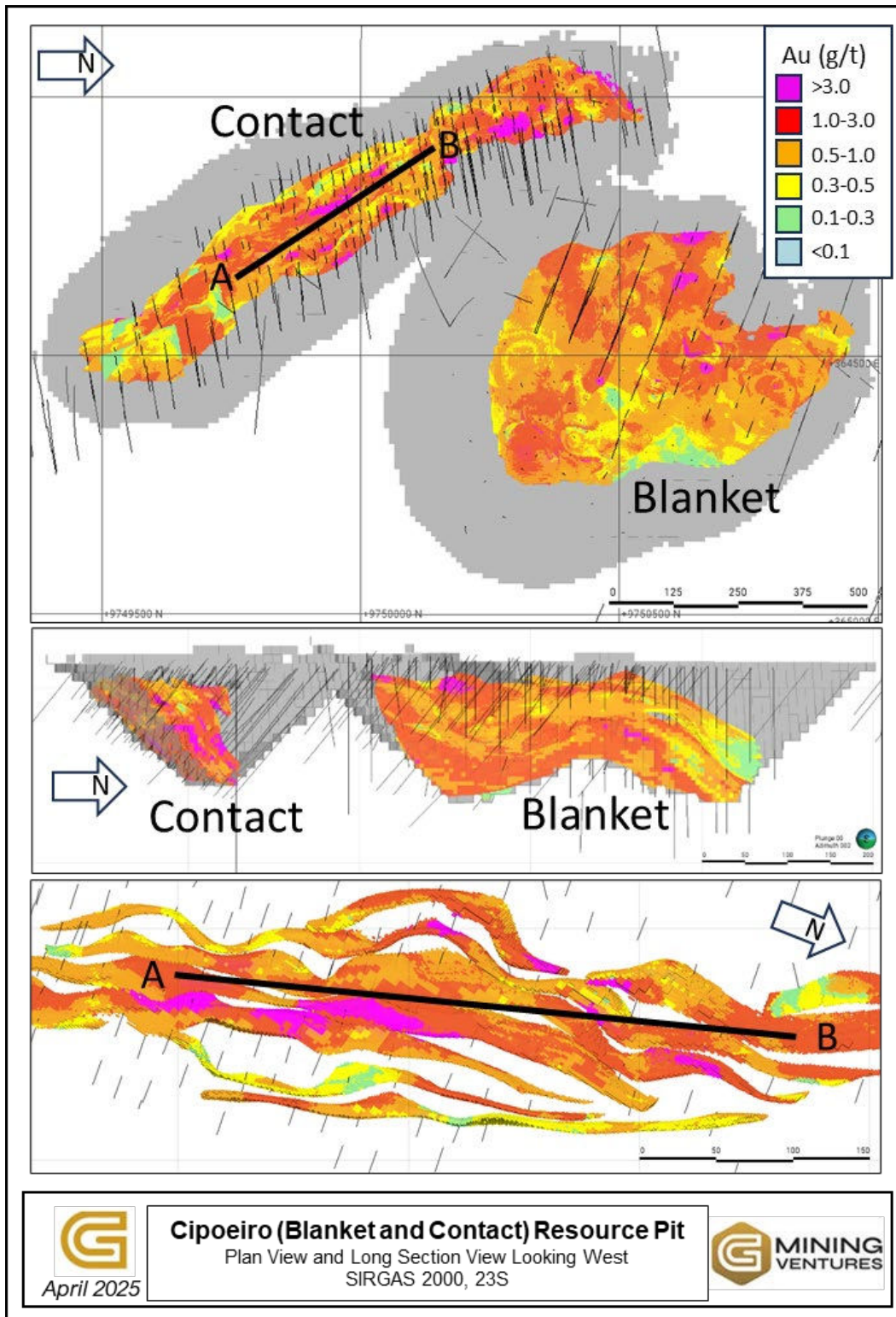
**Table 14.20: Parameters Used for the Open Pit Whittle Optimization of Chega Tudo Deposit**

<b>Chega Tudo Deposit</b>			
<b>Optimization Parameters</b>		<b>Resources Parameters</b>	
		<b>Transitional</b>	<b>Rock</b>
Discount Rate	%	5%	5%
Gold Price	<i>USD/oz</i>	1,950	1,950
Payable Metal	%	99.5%	99.5%
Transport & Refining Cost	<i>USD/oz</i>	10.00	10.00
Royalty Rate	%	6.75%	6.75%
Royalty Cost	<i>USD/oz</i>	130.30	130.30
Net Ore Value	<i>USD/oz</i>	1,799.95	1,799.95
Nominal Milling Rate	<i>t/d</i>	9,589	9,589

Plant Throughput	<i>kt/yr</i>	3,500	3,500
Recovery*	%	88.97%	88.97%
<b>Total Ore Based Cost</b>	<b><i>USD/t</i></b>	<b>18.50</b>	<b>19.00</b>
Mining Dilution	%	0%	0%
Mining Loss	%	0%	0%
<b>Total Mining Reference Cost</b>	<b><i>USD/t mined</i></b>	<b>2.79</b>	<b>2.83</b>
Incremental Bench Cost	<i>USD/10 m bench</i>	0.04	0.04
OSA Slope	<i>degree</i>	45	45
Mine Cut Off Grade	<i>g/t Au</i>	0.26	0.27

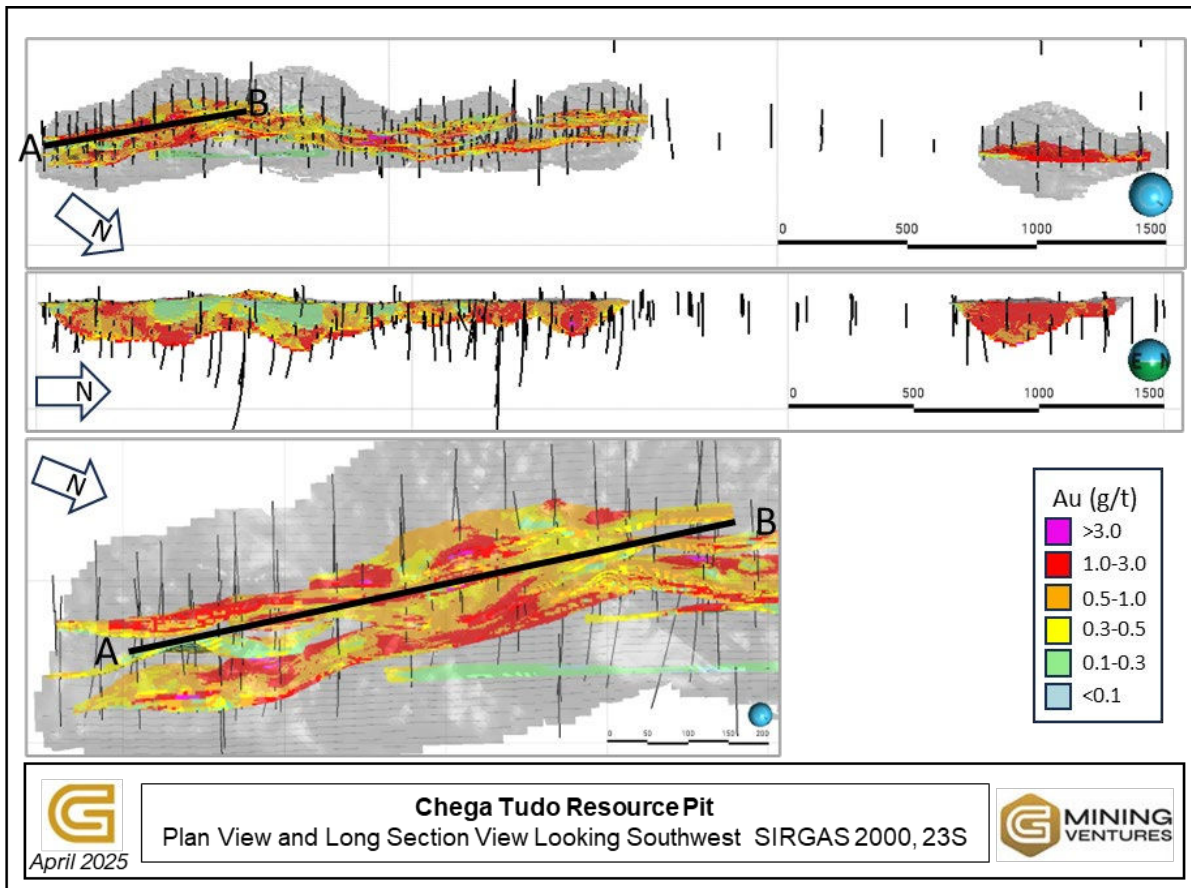
\*Note: Chega Tudo deposit recovery is calculated using the following formula:  $4.2612 \ln(\text{AU grade}) + 82.113$  over 14 g/t cap a 93.4.

**Figure 14.33: Open-Pit Optimization with Block Model Coloured by Gold Grades (g/t Au)**



Source: GMS, 2025

**Figure 14.34: Open-Pit Optimization with Block Model Coloured by Gold Grades (g/t Au)**



Source: GMS, 2025

### 14.12 Mineral Resource Statement

The Gurupi Project open-pit Mineral Resources for Cipoeiro deposits are stated using a lower cut-off grade calculated at 0.34 g/t Au in transitional and 0.35 g/t Au in rock. The open-pit Mineral Resources of the Chega Tudo deposit are stated using a lower cut-off grade calculated at 0.36 g/t Au in transitional, and 0.37 g/t Au in rock. The resources are reported within the resource pit, calculated by GMS' mine engineering department. Results, by classifications, are presented in Table 14.21. An estimated 43,512 kt at 1.31 g/t Au has been estimated for the indicated category, while an estimated 18,517 kt at 1.29 g/t Au has been estimated for the inferred category.

**Table 14.21: In-Pit Mineral Resources Estimate of the Gurupi Project**

Project	Weathering	Indicated Mineral Resources			Inferred Mineral Resources		
		Tonnes kt	Grade g/t Au	Au Content koz	Tonnes kt	Grade g/t Au	Au Content koz
Gurupi	Transitional	1,182	1.32	50	312	1.11	11
	Rock	42,330	1.31	1,780	18,205	1.30	759
	Total	43,512	1.31	1,830	18,517	1.29	770

*\*Notes on Mineral Resources:*

The Mineral Resource described above have been prepared in accordance with the CIM Standards (Canadian Institute of Mining, Metallurgy and Petroleum, 2014) and follow the Best Practices outline by the CIM (2019).

1. The QP for this MRE is Pascal Delisle, P.Geo. of G Mining Services Inc. M. Delisle is a member of l'Ordre des Géologues du Québec (# 1378).
2. The effective date of the MRE is February 3, 2025.
3. Density is applied by rock types and weathering patterns, as presented in Section 14.6.
4. Mineral Resources are reported inside potentially mineable volume and include above cut-off material.
5. The Gurupi deposits have been classified as Indicated and Inferred Mineral Resources according to drill spacing. No Measured Mineral Resource has been estimated.
6. A minimum thickness of 3 metres and a minimum grade of 0.30 g/t Au was used to guide the interpretation of the mineralized domains.
7. This MRE is based on subblock models with a main block size of 5 m × 5 m × 5 m, with subblocks of 1.25 m × 1.25 m × 1.25 m for Cipoeiro (Blanket and Contact deposits) and a main block size of 5 m × 5 m × 5 m, with subblocks of 2.5 m × 1.25 m × 2.5 m for Chega Tudo deposit, and have been reported inside an optimized pit shell. Gold grades were interpolated with 1 m composites using Ordinary Kriging for all mineralized domains.
8. Topcut was applied in mineralized domains for Cipoeiro deposits, ranging from 20 g/t Au to 60 g/t Au. For Chega Tudo, given the homogeneity of the zones, a topcut of 20 g/t Au was applied to all zones.
9. Open pit optimization parameters and cut-off grades assumptions are as follows:
  - a. Gold price of US\$1,950/oz
  - b. Total ore-based costs for Cipoeiro of US\$16.50/t for transition with an 85.0% processing recovery and US\$17.00/t for rock based on 85.0% processing recovery.
  - c. Total ore-based costs for Chega Tudo deposit of US\$18.50/t for transition with an 88.97% processing recovery and US\$19.00/t for rock based on 88.97% processing recovery.
  - d. Cipoeiro overall slop angles of 47° in transitional and 47° in rock.
  - e. Chega Tudo deposit overall slop angles of 45° in transitional and 45° in rock.
  - f. Royalty rate of 6.75%.
10. These Mineral Resources assume no mining dilution and losses.
11. These Mineral Resources are not Mineral Reserves as they have not demonstrated economic viability. The quantity and grade of reported Inferred Mineral Resources in this news release are uncertain in nature and there has been insufficient exploration to define these resources as indicated or measured; however, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Pascal Delisle, P.Geo., has determined that there is one (1) known factor that could have a significant impact on the MRE, other than normal risks faced by mining in terms of environmental, permitting, taxation, socio-economic, marketing and political factors, and additional risk factors regarding indicated and inferred resources. This additional risk factor is attributable to the presence of artisanal and organized miners within the local community who are currently exploiting the weathered part of the deposit. It is for this very reason that overburden and saprolite are excluded from the actual estimate. It is not currently possible to assess the quantity of weathered material that will still be available for GMIN mining operations, and it is therefore more prudent not to include it.

These Mineral Resources are not Mineral Reserves as they have not demonstrated economic viability. The quantity and grade of reported inferred Mineral Resources in this report are uncertain in nature and there

has been insufficient exploration to define these resources as indicated or measured; however, it is reasonably expected that the majority of inferred Mineral Resources could be upgraded to indicated Mineral Resources with continued exploration.

#### 14.12.1 Cut-Off Grade Sensitivities

The sensitivity of the open pit to different cut-off grades scenarios are summarized in Table 14.22 to Table 14.25. Figure 14.35 to Figure 14.37 presents the grade-tonnage curves for the three deposits varying gold cut-offs of the indicated and inferred open-pit Mineral Resource. The tonnages and grade at differing cut-offs shown below are for comparison purposes only and do not constitute an official Mineral Resource. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

As seen from the following table and graphs, the open pit of Gurupi area shows a low sensitivity to cut off grades. Gold content in the Indicated category remains stable with increasing cut-offs below 0.60 g/t Au. The Inferred category constrained within the pit does not reflect the sensitivity of the deposit and only accounts for less than 10% of the total gold content.

**Table 14.22: Gurupi Project Cut-Off Grade Sensitivity Scenario**

Gold Price (USD/oz)	Blanket		Contact		Chega Tudo	
	Transitional	Fresh	Transitional	Fresh	Transitional	Fresh
1,200	0.55	0.56	0.55	0.56	0.59	0.60
1,450	0.45	0.47	0.45	0.47	0.48	0.50
1,700	0.39	0.40	0.39	0.40	0.41	0.42
<b>1,950</b>	<b>0.34</b>	<b>0.35</b>	<b>0.34</b>	<b>0.35</b>	<b>0.36</b>	<b>0.37</b>
2,200	0.30	0.31	0.30	0.31	0.32	0.33
2,450	0.27	0.27	0.27	0.27	0.29	0.29
2,700	0.24	0.25	0.24	0.25	0.26	0.27

\*Note: COG = Cut-Off Grade

**Table 14.23: Blanket Sensitivity Scenario**

Gold Price (USD/oz)	Blanket					
	Indicated			Inferred		
	Tonnes (kt)	Au Grade (g/t)	Au content (koz)	Tonnes (kt)	Au Grade (g/t)	Au Content (koz)
1,200	12,695	1.49	608	6,312	1.51	307
1,450	13,438	1.44	620	6,784	1.44	315
1,700	13,861	1.41	626	7,111	1.40	320
<b>1,950</b>	<b>14,068</b>	<b>1.39</b>	<b>629</b>	<b>7,316</b>	<b>1.37</b>	<b>322</b>
2,200	14,197	1.38	630	7,433	1.35	323
2,450	14,284	1.37	631	7,512	1.34	324
2,700	14,330	1.37	631	7,540	1.34	324

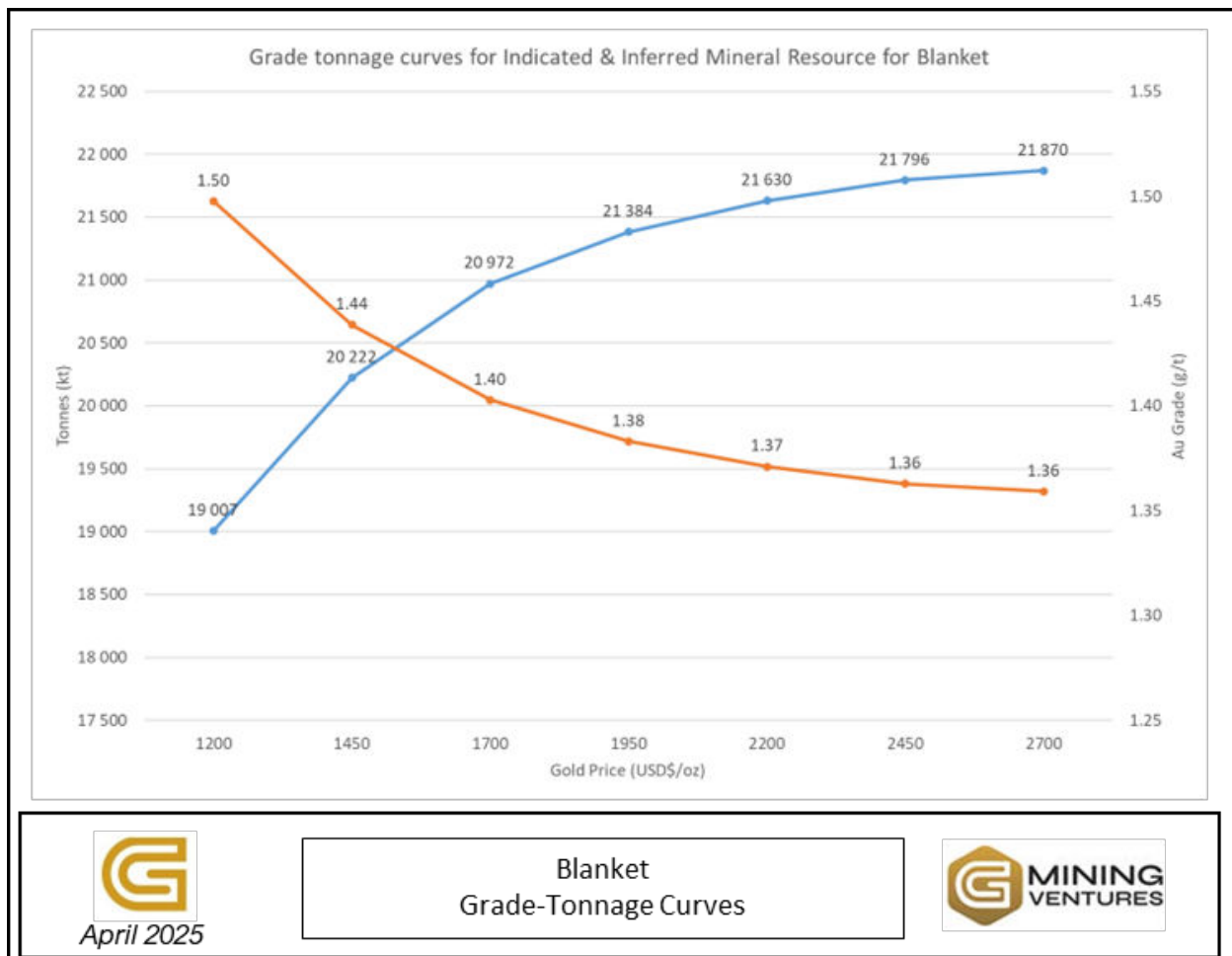
**Table 14.24: Contact Sensitivity Scenario**

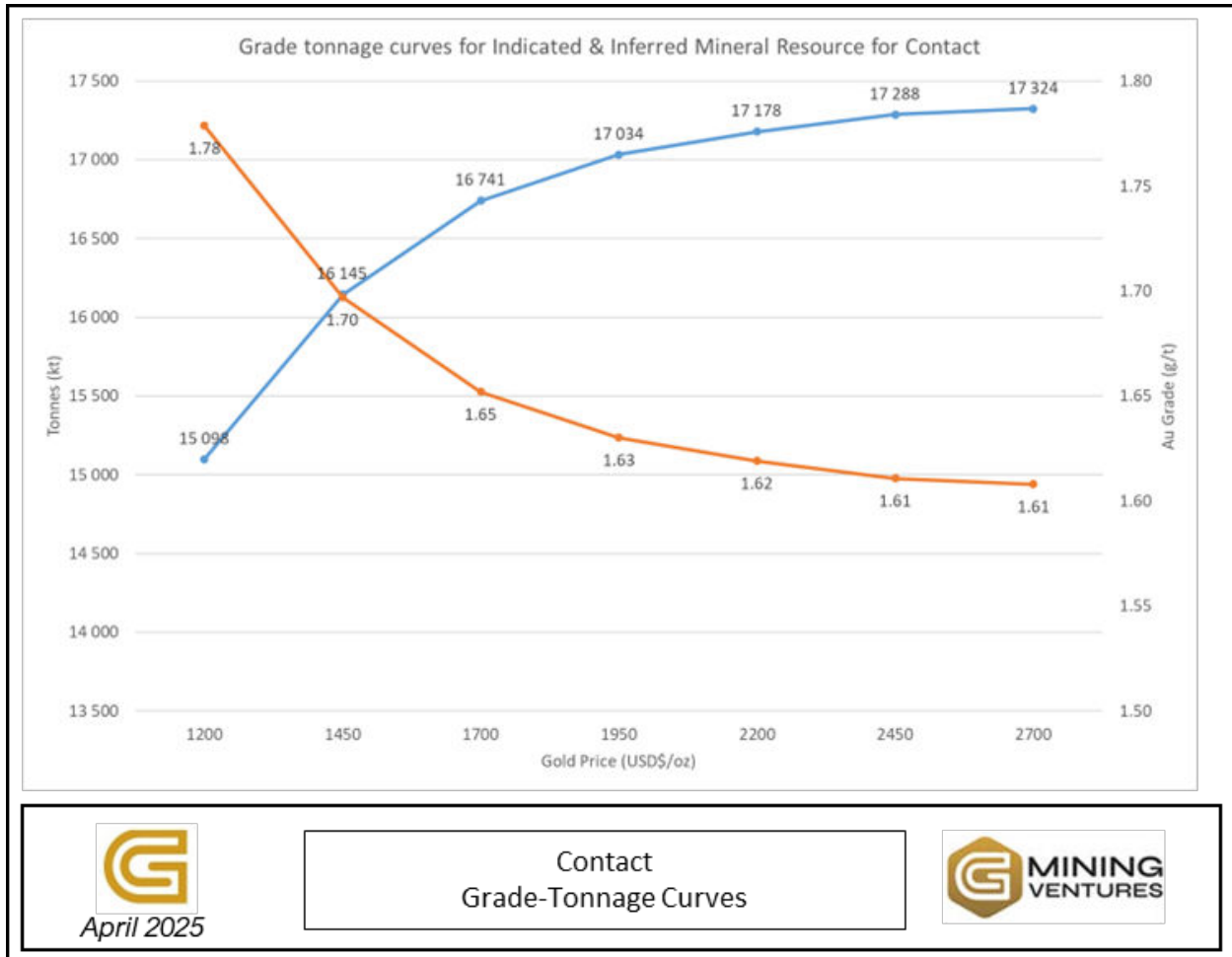
Gold Price (USD/oz)	Contact					
	Indicated			Inferred		
	Tonnes (kt)	Au Grade (g/t)	Au Content (koz)	Tonnes (kt)	Au Grade (g/t)	Au Content (koz)
1200	11,059	1.88	668	4,039	1.51	196
1450	11,703	1.80	678	4,441	1.42	202
1700	12,051	1.76	683	4,690	1.37	206
<b>1950</b>	<b>12,228</b>	<b>1.74</b>	<b>685</b>	<b>4,806</b>	<b>1.34</b>	<b>207</b>
2200	12,322	1.73	686	4,856	1.33	208
2450	12,392	1.72	687	4,896	1.32	208
2700	12,411	1.72	687	4,912	1.32	208

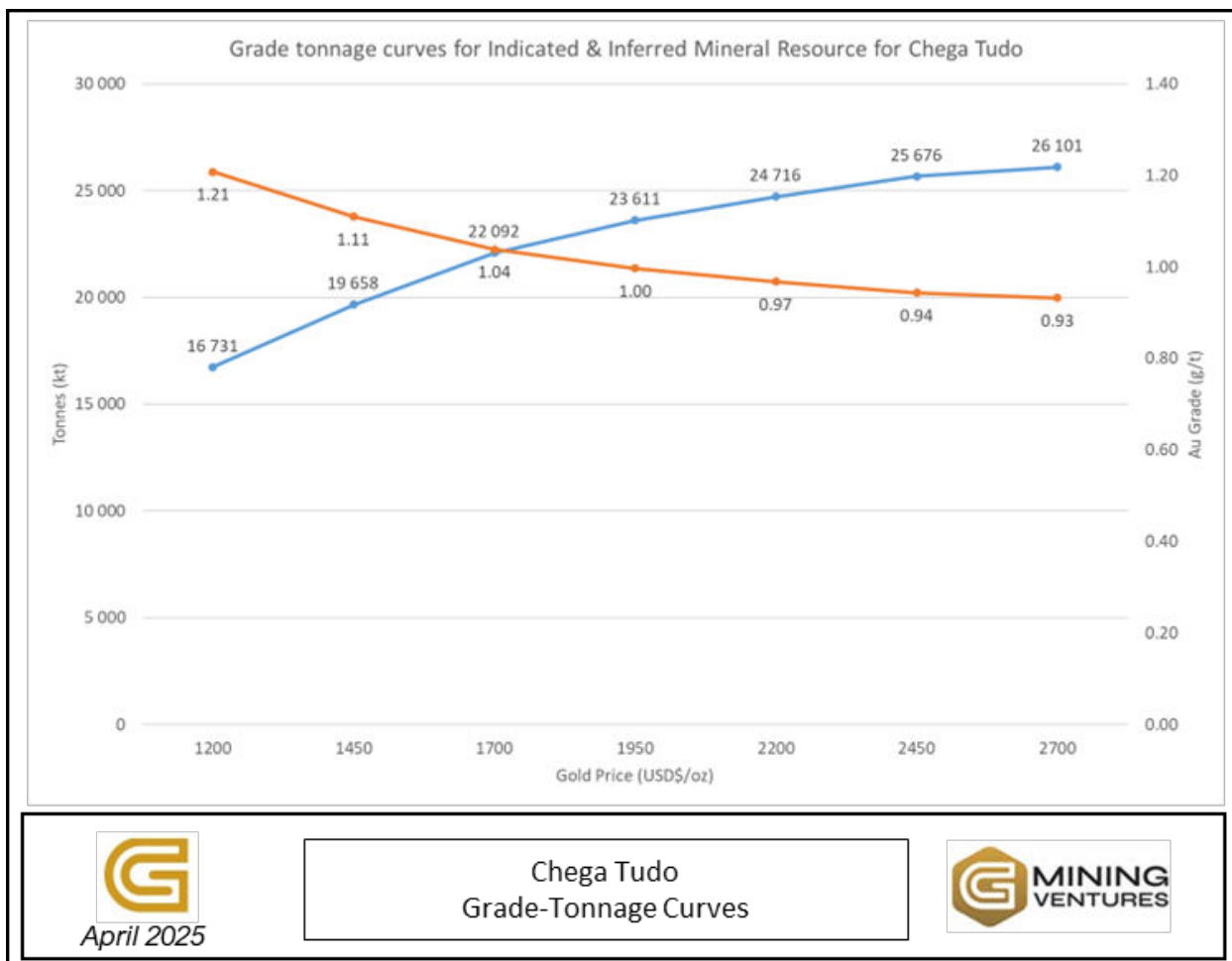
**Table 14.25: Chega Tudo Sensitivity Scenario**

Gold Price (USD/oz)	Chega Tudo					
	Indicated			Inferred		
	Tonnes (kt)	Au Grade (g/t)	Au Content (koz)	Tonnes (kt)	Au Grade (g/t)	Au Content (koz)
1,200	12,023	1.13	435	4,708	1.42	214
1,450	14,273	1.04	475	5,385	1.31	226
1,700	16,099	0.97	502	5,993	1.22	235
<b>1,950</b>	<b>17,216</b>	<b>0.93</b>	<b>516</b>	<b>6,395</b>	<b>1.17</b>	<b>240</b>
2,200	18,024	0.91	525	6,692	1.13	244
2,450	18,689	0.89	532	6,987	1.10	247
2,700	18,969	0.88	535	7,132	1.08	248

\*Note: Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The tonnages and grade at differing cut-offs shown below are for comparison purposes only and do not continue an official MRE.

**Figure 14.35: Blanket Grade-Tonnage Curves**


**Figure 14.36: Contact Grade-Tonnage Curves**


**Figure 14.37: Chega Tudo Grade-Tonnage Curves**


## **15. MINERAL RESERVE ESTIMATES**

This Mineral Resource Estimates for the Gurupi project is based on indicated and inferred resources. The Estimate of Mineable Mineral Reserve has been not completed yet, because as detailed mine planning has not yet been carried out.

## **16. MINING METHODS**

Detailed mine planning has not yet been carried out.

## **17. RECOVERY METHODS**

There is no information for this section of the technical report because the property is not in production or has not progressed toward a mining study.

## **18. PROJECT INFRASTRUCTURE**

There is no information for this section of the technical report because the property is not in production or has not progressed toward a mining study.

## **19. MARKET STUDIES AND CONTRACTS**

There is no information for this section of the technical report because the property is not in production or has not progressed toward a mining study.

## **20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT**

There is no information for this section of the technical report because the property is not in production or has not progressed toward a mining study.

## **21. CAPITAL AND OPERATING COSTS**

There is no information for this section of the technical report because the property is not in production or has not progressed toward a mining study.

## **22. ECONOMIC ANALYSIS**

This section of the technical report contains no information as the property has not advanced to the stage of a mining study.

## **23. ADJACENT PROPERTIES**

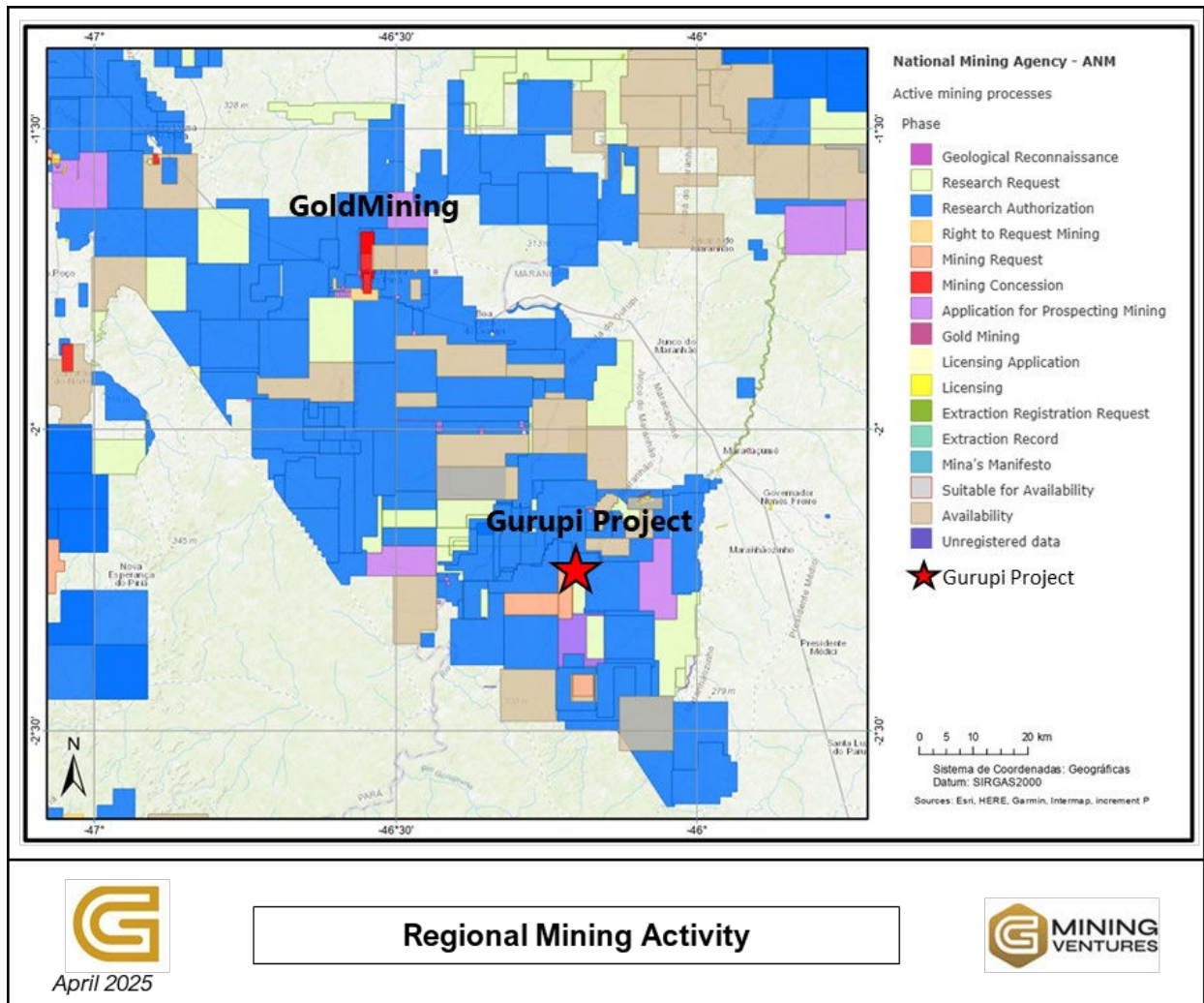
According to the National Mining Agency, the Gurupi Project exploration permit is surrounded by several mining-related areas, including medium-scale mining and exploration permits held by various Brazilian title holders and a group of mining and exploration permits held by Brazil Resource Inc. which became “GoldMining Inc.”, effective December 6, 2016 (Figure 23.1).

The company is not aware of any ongoing exploration work in the area. Significant artisanal mining activity is present on the permits located near and on the permits controlled by Brazil Resource Inc.

The section below describes the exploration work being done on the permits controlled by GoldMining Inc. A Technical Report in relation to the Cachoeira property was filed on SEDAR on April 17, 2013, and is available at [www.sedarplus.ca](http://www.sedarplus.ca).

The QP has been unable to verify the information on the adjacent property and the information provided herein is not necessarily indicative of the mineralization on the Gurupi Project.

**Figure 23.1: Adjacent Mineral Permits**



**Regional Mining Activity**



Source: GMIN, 2025

**23.1 GoldMining Inc.**

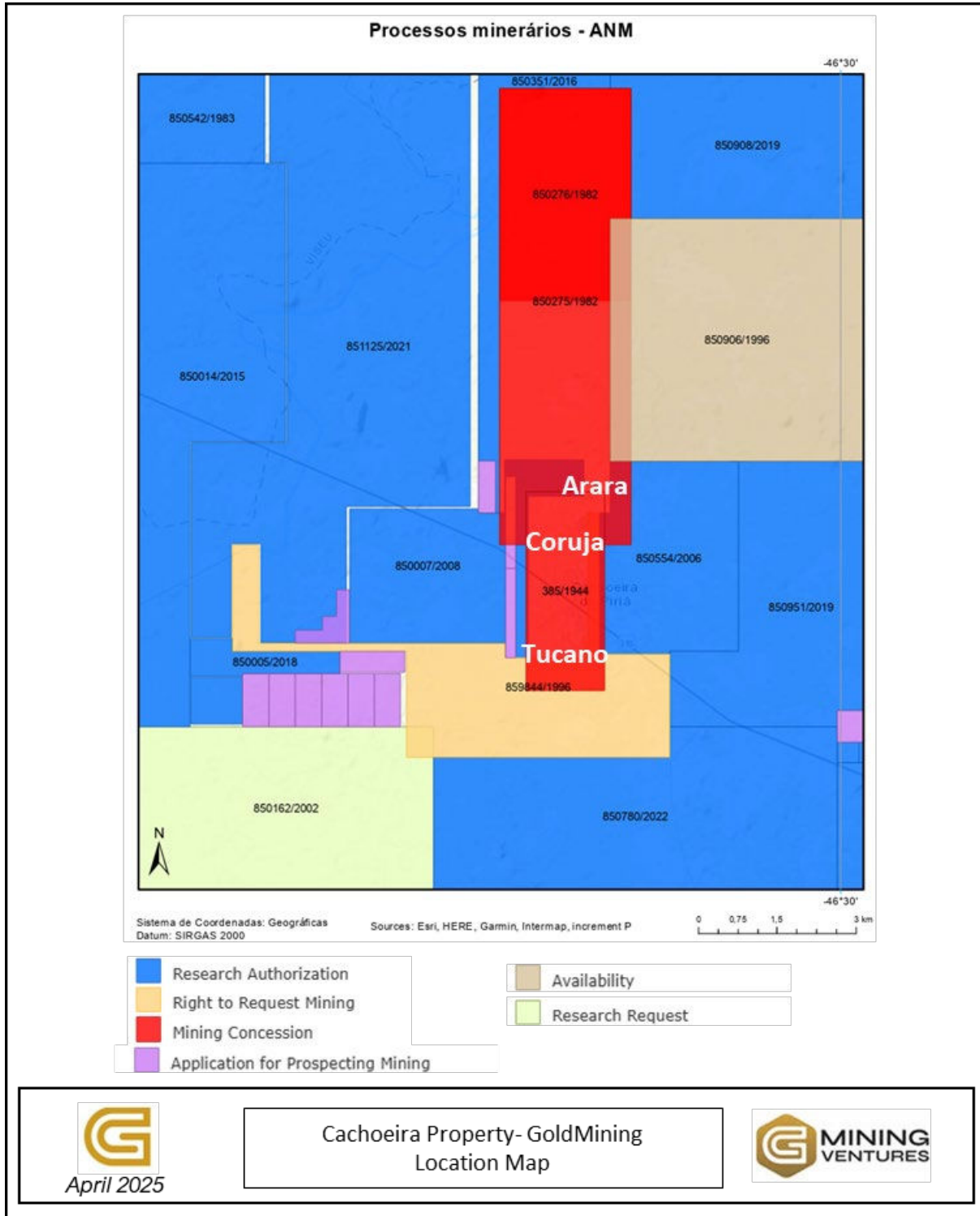
**23.1.1 Mineral Rights**

The Cachoeira project has a long history of gold mining dating back to the 17th century, with more recent exploration by Goldfields, Vale, and Trek Mining (formerly Luna Gold). Cachoeira’s greenstone-hosted orogenic gold mineralization is distributed across three drill-defined deposits averaging 125 m depth: Tucano, Coruja, and Arara. All three deposits are covered by mining concessions.

The regional land package, which comprises of two (2) mining concessions and one (1) exploration permit, totals 4,761 ha (47.6 km<sup>2</sup>) (see Figure 23.2). On September 24, 2012, Brazil Resources acquired 100% of

said companies from Luna Gold Corp. (Luna Gold) under the terms of a share purchase agreement dated July 10, 2012.

**Figure 23.2: Mineral Title Held by GoldMining**



Source: ANM and GMS, 2025

### **23.1.2 Exploration Work**

The current owner of the project has not carried out any exploration on the property since its acquisition in 2012. The last exploration work was carried out by the previous owner. Gold has been known in the area since the 1600s, with intermittent mining operations documented since the late 1800s. Artisanal mining has occurred in two (2) main waves: the early 1900s and from the 1980s to the present. Most formal exploration efforts have focused on the Tucano (south) and Coruja (north) zones. Here is a summary of the historical exploration activity on the property.

#### **23.1.2.1 Early Exploration and Initial Drilling**

- 1941–1947: First mining licence granted at Cachoeira. Brascan conducted trenching, pitting, and 3,100 m of diamond drilling at Tucano before relinquishing the licence.
- 1975–1978: Noranda conducted soil sampling, trenching, and mapping, identifying Tucano and Coruja as the most prospective zones.

#### **23.1.2.2 1980s – Significant Exploration by CMP**

- 1982: Antonio Carlos de Novais Araújo acquired rights to the Arara area, conducting grid establishment, banka drilling, pitting and soil sampling (518 samples), focused in part on alluvial gold.
- 1983–1992: Companhia Paraense de Minérios (CMP) carried out exploration works at Tucano and Cojura, including 63 core holes, 90 RC holes, auger and banka drilling, trenching, underground development, sampling (744 samples) and metallurgical studies.
- 1987–1989: Mineração CCO Ltda. (CCO) acquired PL 1163 from Araújo and conducted mapping, soil and geochemical sampling, geophysics, trenching (3,864 m), pitting (223 pits, 429 samples), and 32 DDHs (2,595 m) at Arara.

#### **23.1.2.3 1990s – Data Compilation and Geophysics**

- 1998–1999: Brazilian Goldfields Ltd. (BGZ) conducted geophysical surveys (TDEM, IP, magnetics), geological mapping, sampling, and 14 DDHs (2,380 m), followed by a Resource Estimate and Scoping Study.

#### **23.1.2.4 2000s – Joint Ventures and Regional Expansion**

- 2000: Goldfields Ltd. entered a JV with BGZ, reinterpreted geophysical data, drilled 22 DHs, 9 RC, and 10 RC/DH holes, and submitted metallurgical samples
- 2003–2006: CCO and Vale entered a JV for Arara. Vale collected 1,152 soil samples and 1,775 rock / channel samples, conducted mapping, and drilled 20 DDHs (3,124 m), along with ground geophysical surveys.
- 2007–2008: Luna Gold acquired the Property and initiated a comprehensive exploration program. This program involved compiling historical data, conducting surveys, mapping, and re-logging historic core samples. The activities carried out included soil sampling (4,325 samples) across the entire Property, auger drilling (5,798 metres) at all three main zones, and diamond drilling (28 holes totaling 6,005 metres) – 9 holes at Tucano, 7 at Coruja, and 12 at Arara. Additionally, channel sampling was performed (2,698 metres), along with digital terrain mapping, geological modeling, and land rights surveying.
- 2010: Continued geologic modelling and sampling work by Luna Gold to refine resource estimates.

#### **23.1.3 Mineral Resources**

Brazil Resources Inc. (currently “GoldMining Inc.”) had contracted Tetra Tech Inc. to update the Mineral Resource Estimate for the Cachoeiro Project. This estimate includes the three (3) principals and similar, zones of gold mineralization within the Property that, from north to south, are named Arara, Coruja, and Tucano. This estimate is based on available drilling data up to 2010, with an effective date of April 17, 2013. Tetra Tech Inc. has categorized the Cachoeiro Gold Project’s Mineral Resources into “indicated” and “inferred” categories, assuming open pit mining. Tetra Tech, Inc. used a gold price of US\$1,238/oz, a recovery of 90%, a mining cost of US\$2.60/t and a processing cost of US\$10/t. Cut-off grades of 0.35 g/t Au.

Open pit indicated Mineral Resources are estimated at 17.4 Mt at 1.23 g/t Au for 692 koz Au, and inferred Mineral Resources are estimated at 15.7 Mt at 1.07 g/t Au for 538 koz Au.

## **24. OTHER RELEVANT DATA AND INFORMATION**

There is no other relevant data and information for the Gurupi project.

## **25. INTERPRETATION AND CONCLUSIONS**

This Technical Report is prepared in accordance with the guidelines of the Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101") and Form 43-101F1. The objective is to confirm and estimate the presence of gold resources at the Gurupi Project. The MRE report assesses the presence of resources that could potentially lead to a technical investigation and the potential economic viability of the project, particularly in the context of an open pit mine.

This NI 43-101 Technical Report confirms the resource in gold of the Gurupi Project. It is recommended to advance the Project to the PEA Study phase. The Gurupi Project is a newly acquired gold asset by GMIN. It is located in the Gurupi Greenstone Belt in Brazil, South America. The project consists of three (3) main deposits: Blanket and Contact (in the Cipoeiro region), as well as Chega Tudo. The current Mineral Resource Estimate has been conducted in accordance with NI 43-101 guidelines and best practices established by the CIM, with an effective date of February 3, 2025.

The analysis of historical and recent data, along with the review of exploration and drilling work, confirms that the Gurupi deposits host significant gold mineralization, associated with sheared structures and hosted in altered metasedimentary and metavolcanic rocks. The Mineral Resource Estimate is based on a database comprising 715 diamond drill holes and 220 RC drill holes, totalling 126,193 assayed metres. It has identified a total indicated resource of 1.83 million ounces of gold at an average grade of 1.31 g/t Au, along with an inferred resource of 0.77 million ounces of gold at a grade of 1.29 g/t Au.

Metallurgical tests conducted between 2017 and 2019 confirmed that the Gurupi mineralization responds well to conventional gold recovery processes, including flotation and cyanidation. Recovery rates vary depending on the material type, with hard rock exhibiting high and consistent recoveries, whereas saprolites and transitional materials show greater variability. These results highlight the importance of specific adaptation measures to optimize recovery across different lithologies.

The assessment of Mineral Resources and project infrastructure indicates that improvements and further study will be required to enable efficient material transportation. Additionally, pending environmental permits necessitate further regulatory procedures before the project can advance to a more developed stage.

In conclusion, the Gurupi Project represents a promising gold opportunity with strong expansion potential, although technical and environmental challenges remain. Recommendations for the next steps include a detailed PEA, an additional exploration program focused on the continuity of mineralization between the

mains deposits, and an in-depth analysis of processing and extraction options to optimize the project's profitability.

## **26. RECOMMENDATIONS**

To optimize the evaluation and development of the Gurupi Project, several strategic recommendations are formulated. These recommendations cover various aspects, including the improvement of geological data, exploration, data management and community engagement.

### **26.1 Community Engagement**

Communication Plan: Implement a structured communication plan with the local community and artisanal miners. The objective is to identify their issues, needs and priorities to foster harmonious collaboration and sustainable coexistence among the various stakeholders.

### **26.2 Data Acquisition and Analysis**

LiDAR Survey: Conduct a new LiDAR survey to obtain an update on the actual situation on file. This initiative will help better understand the impact of informal mining and adjust exploration and development strategies accordingly.

Structured Logging and Sampling Procedures: Implement clear and standardized procedures for drill core logging, allowing for more efficient identification of key elements influencing the understanding of the deposits.

Standardization of Geological Logging: Establish uniform procedures to improve consistency in lithological, structural and mineralization descriptions, ensuring better comparability of geological data.

Additional Sampling: Identify and sample historically omitted drill sections located in host lithologies and mineralized zones to enhance the understanding of the deposit.

### **26.3 Exploration and Development**

Deposits Extensions: Continue drilling the extensions of the known deposit and explore new targets in the periphery of already identified zones to maximize the project's mineral potential.

Fieldwork: Continue field campaigns, including trenches, channels, grab sampling and detailed mapping, to refine geological models.

Investigation of Intermediate Zones: Investigate areas between distant deposits, particularly between the main deposit zones Contact and the southern zone (CN-11), as well as between the main deposit zones Chega Tudo and the northern zone (CT-11). These investigations could reveal mineralized extensions and improve geological connectivity between known deposits.

Additional Exploration Studies: Conduct geophysical surveys (magnetic, electromagnetic, or gravimetric) to identify new targets and refine geological interpretations.

Prepare a geostatistical study to determine the optimal drill spacing for Measured Mineral Resource.

Continue infill drilling to convert Inferred Mineral Resources to Indicated Mineral Resources.

#### **26.4 Data Management and Quality Assurance**

Geological Database: Continue improving the database by integrating all assay certificates, further validating data, and conducting twin holes for validation and check assays. The goal is to ensure a robust and sustainable database.

Data Management Procedures: Establish rigorous protocols for receiving, validating and integrating new analytical and geological information.

Development of a Structured Database: Implement a formalized database system that ensures data integrity, traceability and long-term sustainability for future studies.

#### **26.5 Geology and Mineral Resources**

Update the geological 3D model using all available or new information, including the geochemical and geostructural databases.

#### **26.6 Metallurgical and Geometallurgical Studies**

Metallurgical Testing: Conduct initial metallurgical analyses to provide insights into ore recovery potential, even at an early resource evaluation stage. It is recommended to proceed at variability metallurgical test work of the main material domains to predict the metallurgical response across material zones, which includes the following scope of work:

- Head assays and ICP analysis.

- Quantitative mineralogy tests.
- Comminution tests.
- Gravity tests.
- Grind-leach determination tests.
- Whole ore leach tests.
- Pre-robbing tests.
- Gravity and gravity tails leach and CIL tests.
- Cyanide destruction tests.
- Sequential triple contact carbon loading tests.
- Oxygen uptake tests.
- Static and dynamic settling tests.
- Flocculant screening tests.
- Viscosity (shear-rate) tests.
- Acid-base accounting tests.

Geometallurgical Program: Based on the current knowledge and the metallurgical response, develop a program aimed at evaluating the presence of elements or minerals that could impact ore processing and environmental effects. Specific investigations should be conducted on the presence of graphite, which could pose challenges depending on the treatment methods used, as well as on deleterious elements that may have environmental impacts.

## **26.7 Mining**

Geotechnical Studies for Pit Slopes: It is recommended to proceed with a targeted program of geotechnical drilling and analysis for the next phase of project development to better understand potential bench configurations and overall pit slope angles.

## **26.8 Project Infrastructure and Plant Design**

The following is recommended to be completed during the detailed engineering phase of the future surface plant and required infrastructure:

- Geotechnical investigation for the plant foundations. Balance cut and fill requirements.

- Perform geotechnical investigation for off-site infrastructure including barge landing, power plant and logistics hub.
- Engineering for transmission line.
- Complete test work required to confirm adequate source of on-site sand for concrete quality requirements.
- Evaluate hydrology and water management.
- Evaluate scenario of power plant.
- Evaluate scenario for TSF dams and water management.

## **26.9 Environmental and Permitting**

Additional environmental and social data will need to be collected, and additional studies will be required to contribute to the next stages of Project design, the identification and mitigation of potential impacts on its receiving environment and the submission of an environmental impact assessment (EIA) for regulatory purposes. These studies will need to further incorporate ancillary project components such as power supply and site access roads.

- Treatment of TSF discharge may be required for specific parameters of concern to meet regulatory requirements and/or mitigate against environmental impacts. Active treatment of contact water may also be required for some time post mine closure. The following work is required to inform the stages of design:
  - Evaluate water resources and related baseline studies (surface water, groundwater, sediment, climate).
  - Preparation of a site-wide water balance and water quality numerical model to support the advancement of a water management plan and associated infrastructure design (water and waste management).
- In order to evaluate the closure planning and closure cost estimating, it is recommended further studies take place with regards to:
  - A detailed materials balance, to ensure that an adequate quantity and quality of closure materials will be available at cessation of operations.
  - Studies to further refine the geochemical characterization of the waste rock, ore and tailings, to adequately assess closure criteria, objectives and activities.
  - Further studies indicate timings of pit recharge and anticipated water quality.

## **26.10 Future Studies and Economic Assessment**

Preliminary Economic Assessment (PEA): Continue conducting studies with the objective of eventually producing a Preliminary Economic Assessment (PEA). This will help evaluate the project's economic viability and guide future investment and development decisions.

The recommendations outlined in this chapter provide a comprehensive roadmap to optimize the evaluation and development of the Gurupi Project. By focusing on key aspects, such as community engagement, data acquisition, exploration and metallurgical studies, these initiatives aim to improve geological understanding, enhance Resource Estimation, reliability, and support sustainable project development.

Target metallurgical testing and geotechnical studies will allow the evaluation of processing strategies and safe mining operations. Environmental and permitting considerations remain critical, with further studies required to assess potential impacts and develop mitigation strategies. Infrastructure planning, water management and closure studies will also be essential.

Finally, continued exploration, infill drilling and the advancement of a Preliminary Economic Assessment (PEA) will provide the necessary economic and technical insights to support informed decision-making. By implementing these recommendations, the project will be well-positioned for its next phases of development, maximizing its mineral potential while ensuring responsible resource management.

## **27. REFERENCES**

- AMC Consultants Ltd (2020). *Report: CentroGold Review, MCT Mineracao Ltda.*, Issued on November 13, 2020.
- AMEC. (2010). NI 43-101 *Feasibility Study Report of the Gurupi Gold Project, Doc. No. 145691*. Issued on April 13, 2010.
- AMEC. (2005). NI 43-101 *Feasibility Study Report of the Gurupi Project*. Issued on March 31, 2005.
- Blenkinsop, (2007). *Structural Analysis of the Gurupi Project (1.2.1.17.14.10 Structural Analysis Kinross Gurupi Report.pdf)*. Issued on October 1, 2007.
- Collin Lollo (2022). JORC Technical Report, *CentroGold – Blanket & Contact Block Model Estimation Report*, Issued on 30 June 2022.
- Collin Lollo (2022). JORC Technical Report, *Chega Tudo Mineral Resource Estimation Report*. Issued on 30 June 2022.
- CSA. (2012). *Geological Inspection on Carajas Copper-Gold Projects, Para - Northern Brazil*. Issued on February 27, 2012.
- CSA. (2018). *Mineral Resource Estimate Blanket and Contact Zones, CentroGold Project. Brazil*. Issued on April 10, 2018.
- CSA. (2018). *Mineral Resource Estimate Chega Tudo Deposit CSA Global Report N° R385.2017*. Issued on March 8, 2018.
- Elenilton Bezerra Uchoa, Nilton Cesar Vieira Silva, Christiano Magini, Raimundo Mariano Gomes Castelo Branco, Reinhardt Adolfo Fuck, Fabiano Mota da Silva, Jackson Alves Martins, Charles Régis Maia Silva (2020). *Magnetotelluric transect across the Sao Luís cratonic fragment, the Gurupi belt and the Parnaíba basin, N-NE Brazil*. Journal of South American Earth Sciences.
- Evandro L. Klein et al. (2007) *The Cipoeiro gold deposit. Gurupi Belt. Brazil: Geology, chlorite geochemistry, and stable isotope study*. Journal of South American Earth Sciences.
- Evandro L. Klein et al. (2008) *Geology and Fluid Characteristics of the Mina Velha and Mandiocall Orebodies and the Implications for the Genesis of the Orogenic Chega Tudo Gold Deposit. Gurupi Belt. Brazil*. Economic Geology.
- Evandro L. Klein, (2014). *Ore fluids of orogenic gold deposits of the Gurupi Belt. Brazil: a review of the physico-chemical properties, sources, and mechanisms of Au transport and deposition*. Journal of the Geological Survey of Brazil.

- OZ Minerals (2019). *CentroGold Project Combined 'Blanket' and 'Contact' Mineral Resource as at 06 May 2019 and Ore Reserve as at 24 June 2019. Statement and Explanatory Notes*. Issued on June 24, 2019.
- Reinaldo Fontoura de Melo Junior, Evandro L. Klein, Jean Michel Lafon, Chris Harris (2020). *Fluid inclusion and isotope (O, H, C, Sr) constraints on the orogenic gold mineralization at the Enche Concha and Tunel prospects, Gurupi Belt, Brazil*. Journal of the Geological Survey of Brazil.
- Richard J. Goldfar, Iain Pitcairn (2022). *Orogenic gold: is a genetic association with magmatism realistic?* Mineralium Deposita.
- SRK Consulting (2011). *Independent Review of Feasibility Study, Gurupi Project*. Issued on March 31, 2011.
- Technomine Services (2011). *NI 43-101 Gurupi Gold Project Cipoeiro and Chega Tudo Feasibility Study Report*. Issued on January 31, 2011.
- Tetra Tech inc. (2013). *NI 43-101 Technical Report and Resource Estimate on the Cachoeira Property, Pará State, Brazil*. Issued on April 17, 2013, and amended and re-stated: October 2, 2013.
- Whittaker (2020), *Chega Tudo Mineral Resource Internal Review*. Issued on 28 October 2020.