

**NI 43-101 Technical Report
Mineral Resource for the Cerrito Gold Prospect
Rio Grande do Sul, Brasil**

Prepared for:

Lavras Gold Corp.

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Prepared by:

VMG Consultoria e Soluções Ltda.

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Report: NI 43-101 Technical Report	Rev. Final
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DATE AND SIGNATURE PAGE – VMG Consultoria e Soluções Ltda.**NI 43-101 Technical Report - Mineral Resource for the Cerrito Gold Prospect, Rio Grande do Sul, Brasil****Prepared for:**

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Prospect Location:

Lavras do Sul, Rio Grande do Sul, Brazil

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Report: NI 43-101 Technical Report	Rev. Final
Title: NI 43-101 Technical Report Mineral Resource for Cerrito Gold Prospect	Page : 3 / 176

CERTIFICATE OF QUALIFIED PERSON

I, Volodymyr Myadzel, MAIG, do hereby certify that:

1. I am Principal Geologist with VMG Consultoria e Soluções Ltda. (“VMG”), having its business address at Av. Do Contorno, 2905, Sala 405, Santa Efigênia, Belo Horizonte – MG – Brasil. 30110-915.
2. This certificate applies to the technical report (the “Technical Report”) titled “NI 43-101 Technical Report Mineral Resource for Cerrito Gold Prospect”, originally dated May 31, 2022, as amended on November 15, 2024, and prepared for Lavras Gold Corp. by VMG Consultoria and co-authored by Volodymyr Myadzel, MAIG, MAIG #3974 and PhD and Frank Richard Baker, B.Met, MMet, MIMMM, MAusIMM;
3. I graduated with a degree in Geology from Kryvyi Rih National University, Kryvyi Rih, Ukraine in 1999. In addition, I have obtained a PhD in Geology from Kryvyi Rih National University, Kryvyi Rih, Ukraine in 2004. I am a member #3974 of the Australasian Institute of Geoscientists. I have worked as a Geologist for a total of 22 years since my graduation from university. My relevant experience includes modeling and resource and reserve estimation of deposits, prospecting and surveying, geological mapping, mineralogy and petrology of metamorphic rocks and ore deposits. I have read the definition of “qualified person” set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I am a “qualified person” for the purposes of NI 43-101.
4. I visited the Cerrito Prospect most recently on November 24, 2020, November 25, 2020, and November 26, 2020, for a duration of three days in total.
5. I am responsible for the preparation or supervising the preparation of the whole of this Technical Report.
6. I am independent of the issuer as described in section 1.5 of NI 43-101. I am independent of the vendor of the Cerrito Prospect.
7. I have not had prior involvement with the property that is the subject of the Technical Report.
8. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101.
9. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Signed this 15th day of November 2024 in Belo Horizonte, Minas Gerais, Brazil.

"Volodymyr Myadzel"

Volodymyr Myadzel MAIG #3974, PhD

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ITEM 1: SUMMARY

VMG Consultoria e Soluções Ltda. (“VMG”) has been retained by Lavras Gold Corp. (“Lavras Gold” or the “Company”) to prepare a technical report and gold resource estimate for the Cerrito Gold Prospect (“Cerrito Prospect”), which forms part of the Lavras do Sul gold project (the “Lavras Project”). This report has been prepared in accordance with National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101” or “43-101”) and its related Form 43-101F1. VMG visited the property from November 24 to November 26, 2020.

Lavras Gold is a corporation incorporated under the *Business Corporations Act* (British Columbia) and that holds its assets directly and through its Brazilian subsidiaries consisting primarily of (i) shares of LDS Mineracao Do Brasil Ltda (“LDS”) representing 99.99% of its outstanding equity; (ii) the various contractual rights through which Lavras Gold holds, directly or indirectly, all interests in the Lavras Project, including the Cerrito Prospect; (iii) cash; and (iv) a 2% net smelter return royalty over certain of Amarillo Gold’s (now Hochschild’s) exploration properties located outside of the current Posse resource and mine plan at the Mara Rosa property located in the state of Goias, Brazil.

1.1 Property Location

The Cerrito Prospect is located 2km northeast of the town of Lavras do Sul, in the state of Rio Grande do Sul, Brazil. Access from Porto Alegre, the state capital, is by travelling west along highway BR290, and then south along RS357, approximately 320km or a 4.5hrs drive. The last 2km from the village to the prospect is by dirt road. The general location of the project can be seen in the following (Figure 1.1). The geographic coordinates of the town of Lavras do Sul is 21°14’42”S 45°00’00”W.

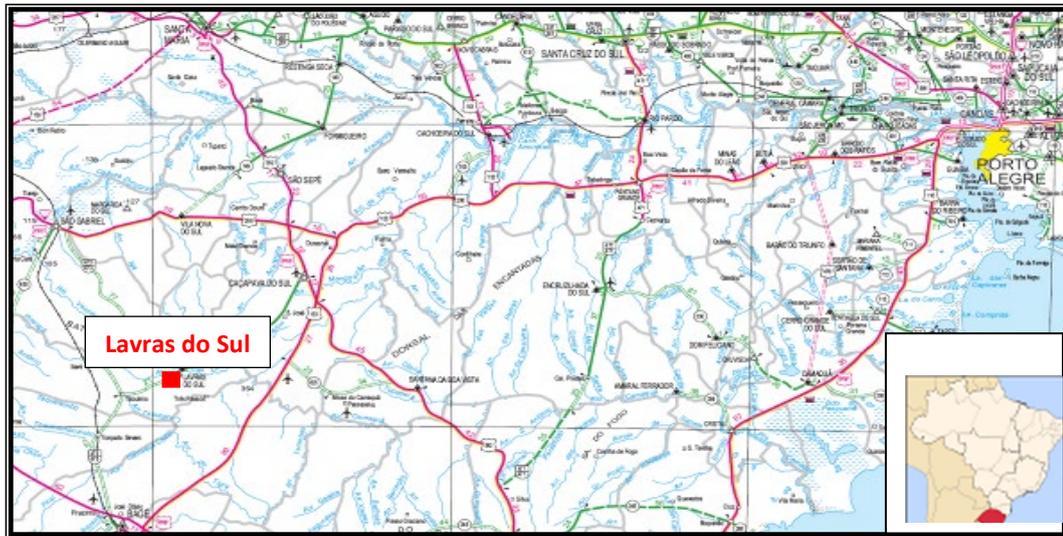


Figure 1.1 - Lavras do Sul location.

1.2 Claim Status

The Cerrito Prospect lies on exploration permit granted under administrative proceedings N^o. 810.316/1979 and 810.147/1987. Table 1.1 shows the Mineral Rights for the Cerrito Prospect.

Table 1.1 - ANM claim status

ANM Process Number	Owner	Area (Hectares)	ANM Status
810.316/1979	Mineração Carbre Ltda	1,000	"Right to Require Mining"
810.147/1987	Mineração Carmec Ltda	75	"Right to Require Mining"

The status of the claims can be reviewed on the Internet site:

<https://sistemas.anm.gov.br/SCM/Extra/site/admin/dadosProcesso.aspx> .

1.3 Geological Setting and Mineralization

The Lavras do Sul intrusive suite is situated in the far south of the Neoproterozoic Mantiqueira Province, a 2700-km long belt of tectonically and magmatically accreted terrains from the Tonian (1000-850 Ma) through the Cryogenian (850- 650 Ma) to the Neoproterozoic III (650- 540 Ma) periods. It stretches as far south as the coastline of central Uruguay into southern Bahia in Brazil.

There are many precious metal, base metal, and non-metallic occurrences throughout the Mantiqueira Province and the subordinate Dom Feliciano Belt and Vila Nova Belta (Bizzi et al. 2003), although many are currently thought to be small and sub-economic.

The Lavras do Sul Suite of late Neoproterozoic III age intrudes rocks of various ages, including units of an early Cryogenic ocean-basin remnant. To the west, it intrudes granites and gneisses probably of Neoproterozoic age according to Gastal and Lafon (1998). The intrusive suite itself has an exposed diameter of some 11 km, necessarily suggesting a multiphase intrusion from one or many sources. Surface textures suggest that the preserved intrusion is relatively shallow.

The Lavras do Sul Suite comprises an inner core of granodiorite or monzodiorite in parts porphyritic, 9 km in diameter and centered on the town of Lavras do Sul. It is surrounded by a variably thick and narrow rim of calc-alkaline to alkaline K- feldspar pink granite. A third, late phase of syenite and nepheline occurs as plugs and dykes.

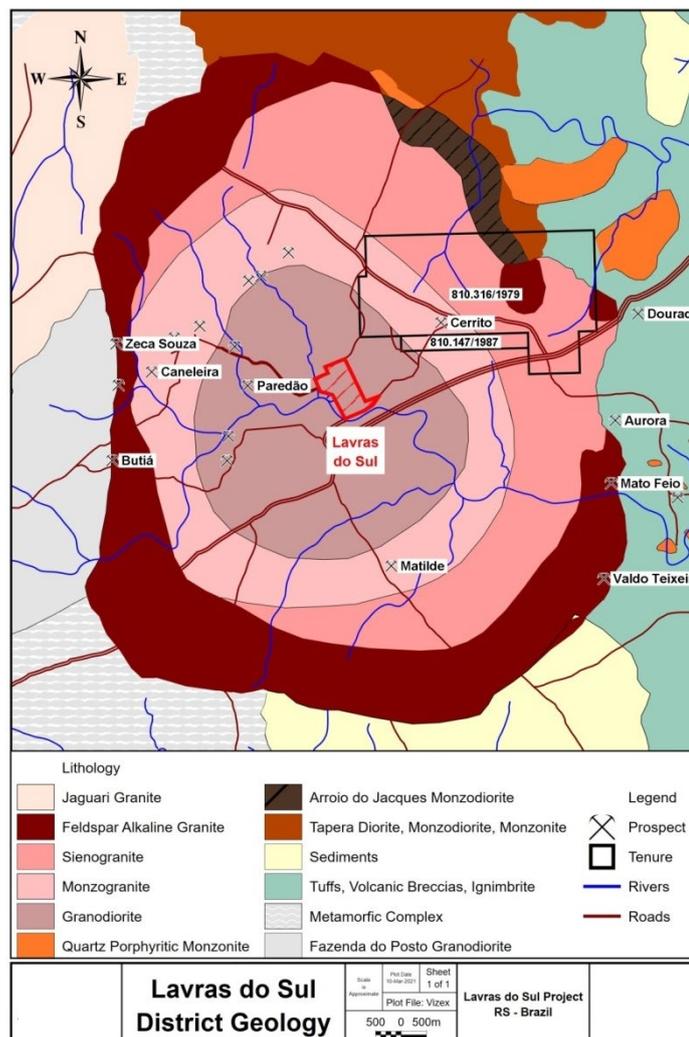


Figure 1.2 - Lavras do Sul district geology

The late-tectonic nature of the Lavras do Sul Intrusive Suite is borne out by the age for crystallization of the unit by Mexias (2000) at 597 Ma during the late Neoproterozoic III period. Mineralization is dated by Mexias (2000) by studying hydrothermal zircons that are synchronous with the hydrothermal mineralization assemblage. The age is shown to be 580 Ma. (Baars, 2008)

The Lavras do Sul mineralization does not fit neatly into any one deposit type classification. Petrographic work carried out by Amarillo (now Lavras Gold) has identified the following points related to the mineralization.

Lavras do Sul has a two-stage gold precipitation history that occurred through a single fluid evolution path from extremely alkaline and silica undersaturated to quartz-flooding with increased fluid focus.

The type of mineralization and some sterile rocks existing within the Cerrito Prospect can be classified as sericite-microbreccia. It is a hydrothermal and structurally altered, igneous rock, whose inter-grain boundaries have been completely recrystallized insofar as the rock can be characterized as being a rounded or oval loophole.

An evident aspect in Lavras do Sul is the strong reaction of replacing quartz with feldspar, where the precipitated mineral is predominantly sericite. This is a metasomatic reaction that changes the granite intensely, producing a sericite-microbreccia.

The rocks hosting the mineralization include monzogranite and to a lesser extent, granodiorite, both belonging to Lavras do Sul Intrusive Complex (LDIC). The intervals of higher content are related to areas of intense brecciation, a high degree of hydrothermal alteration and/or the presence of veinlets and quartz veins.

In general, the main characteristics of gold mineralization in the Cerrito Prospect are:

- Disseminated mineralization and vein mineralization, of low to medium grade and moderate thickness, associated with hydrothermal alteration zones arranged in subvertical and subparallel bodies, hosted in granitoids of the Lavras do Sul Intrusive Complex and interspersed with portions of fresh and altered rock.
- It occurs in the form of simple quartz veins, associated with shear failures and fractures or extension fractures. Sometimes it occurs as parallel veins (leaf veins) and the more specific these veins branch and intertwine forming zones of stockwork.
- Mineralogical association with sericite, chlorite, albite, calcite, silicification, pyrite, gold pyrite, with less frequent presence of galena, sphalerite, molybdenite, arsenopyrite, fluorite and visible gold.

- The most promising hydrothermal strips for the occurrence of gold mineralization have tabular geometries, sometimes wavy, with orientations that range from N80 ° E to N80 °W with variable, high-angle dips, predominantly in the south quadrant.

1.4 Exploration

The preliminary exploration work consisted of interpretation of aerogeophysical gradiometric and gamma spectrometric airborne survey, using a fixed wing aircraft, surface geological mapping and soil sampling aiming at the recognition of the area and the generation of targets for detailed research from drilling.

The topographic surface covering the Cerrito Prospect and surrounding area was acquired in 2012 by the GeoEye satellite, with a distance between the level curves of 1 meter. The holes drilled have been surveyed using RTK DGPS to Omnistar. The coordinates are therefore to an accuracy of $\pm 0.10\text{m}$. The UTM coordinate data for the drillholes were obtained in two Datums: SAD69 and WGS84.

The assignment of the density values to the block model was made by the direct assignment of 2.62 t/m³ for each block. The same density was considered for the entire saprolitic part of the model and fresh rock part of the model. The density was obtained from the average of 218 density measurements, 193 density measurements for fresh rock and 25 measurements for saprolitic rock. It should be noted that the average density value for the saprolite is above expectation. It is recommended to increase the number of saprolite samples to obtain a data set that best represents the saprolitic rock density.

The drilling database is composed of drilling information performed on an irregular grid, with distances between holes that vary between 25 and 100 meters. 24 vertical sections were created with N-S orientation and an average distance of 50 meters between sections. A summary of the drilling database is presented in the Table below.

Table 1.2 - Drilling Database Information

Description	Quantity
Diamond Drill Holes	92
Rotary Diamond Drilling metreage	14,593
Drill hole sampling assay	7,842
Notes on drill holes geological database	596
Density Analyses	218

The chemical analyses were performed at ACME ANALYTICAL LABORATORIES LTD and ALS Chemex Lab following an internal QA/QC program from Lavras Gold Corp.

1.5 Mineral Processing and Metallurgical Testing

Lavras Gold submitted drill core rock samples from the Cerrito Prospect to the SGS Geosol Laboratory in Belo Horizonte, Brazil for preliminary metallurgical test work. The core samples were collected from eight separate drill holes representing different areas of the mineral deposit to create a representative composite sample.

Key findings are as follows:

- SGS calculated an average gold grade of 0.88 g/t from the composite sample that compares favourably with the individual drill-hole assay of 0.86 g/t Au.
- Grinding tests indicate rock material from Cerrito is relatively hard having a Bond work index of 17.5kWh/tonne.
- Two simulated heap leach tests on samples crushed to ¼ inch were carried out in a stop/go bottle testing system for five days. Recoveries averaged 43.1%. Leach kinetics indicate most of the gold extraction occurred in the first 24 hours of leaching.
- Gravity separation using a 20 kg sample ground to P80 75 microns yielded an average gold recovery of 38.2%.
- Samples exposed to direct CIL for 24 hours demonstrated a gold recovery of 72.7% at P80 75 microns and 78.3% at P80 25 microns.
- Samples subjected to direct flotation followed by cyanidation achieved gold recoveries of 70.8% at P80 75 microns and 77.9% at P80 of 25 microns.
- Gravity separation using a 20 kg sample ground to P80 75 microns, with the gravity tail subjected to CIL yielded an overall recovery of 74.9%.
- Gravity separation using a 20 kg sample ground to P80 75 microns, with the gravity tail subjected to both CIL and flotation, and the flotation concentrate being exposed to cyanidation yielded an overall recovery of 73.2%.
- Overall, these preliminary results demonstrate reasonable gold recoveries, and that future optimization work is warranted as there is room for improvement.

1.6 Resource Estimate

VMG estimated the Indicated Mineral Resources and Inferred Mineral Resources for the Cerrito Prospect reported herein in accordance with NI 43-101 and the current CIM Definition

Standards on Mineral Resources and Mineral Reserves adopted by CIM Council on May 10, 2014. The mineral resources were estimated in conformity with the CIM Estimation of Mineral Resource and Mineral Reserves Best Practices guidelines.

The results of the evaluation of resources, based on the block model interpolated by the Ordinary Kriging (OK) method, of gold mineralization for the Cerrito Prospect are presented in the following table.

The influence of the nugget effect on the geological resource estimation has been verified by capping the results of the calculation for interpolated grades with and without capping. The high grades samples were cut to 3.07 ppm Au. For gold, the difference in relative percentage is 8.98%, which shows the high influence of the high-grade samples in the geological resource estimation. The resource estimation is shown with and without capping.

Table 1.3 - Gold Resources Calculated by Ordinary Kriging (OK) Method Assuming a 0.3 ppm Au cut-off grade

CUT-OFF Au (ppm)	CLASS	TYPE	TONNES t (000)	Au ⁽¹⁾ ppm	M_Au ⁽²⁾ oz (000)	Au_CUT ⁽³⁾ ppm	M_Au_CUT ⁽⁴⁾ oz (000)
0.30	Indicated	SAPROLITE	474	0.87	13	0.78	12
		HARD ROCK	7,775	0.78	196	0.70	176
	Inferred	SAPROLITE	286	0.80	7	0.66	6
		HARD ROCK	12,871	0.76	314	0.69	287

Notes:

- (1) Au – Average gold grade without application of capping.
- (2) M_Au – Resource estimation without application of capping.
- (3) Au-CUT – Average gold grade with application of capping.
- (4) M_Au_CUT – Resource estimation with application of capping.

1.7 Interpretations and Conclusions

VMG conducted the evaluation of mineral resources of the Cerrito Prospect, for Amarillo Gold Corporation and then Lavras Gold in compliance with the NI 43-101 form. The work took place from November 2020 to April 2021 and updated in April 2022.

The main activities developed by VMG were:

- Site visit, discussions with the technical staff from Lavras Gold, understanding of the geology and mineralization of the deposit, and verification of the geological work performed by Lavras Gold and contractors on site, as well as verification of the materiality of the achieved results. Independent verification that no material work or updates have been completed on the project through a review of public press releases and discussions with Lavras Gold management.
- Validation of the drilling database and the topography information.

- Verification of the QA/QC program established by Lavras Gold for geological work and of its conduction.
- Selection of the drilling data used in the definition of mineral resources.
- Interpretation of the geological model.
- Conducting statistical and geostatistical studies.
- Estimation of mineral resources, as well as their quantification and classification.
- Disclosure of the mineral resources for the Cerrito Prospect according to NI-43-101 (CIM 2019) guidelines.

VMG observed that the results obtained from QA/QC were acceptable, despite the high precision¹ values sampling accuracy. VMG did not visit the assay laboratories, but the ACME and ALS Chemex Lab laboratories are reputable international groups that meet or exceed the industry standards for sample preparation and analysis.

The materiality of the work developed by Lavras Gold, as well as the materiality of the deposit and the developed studies, are sufficient to support the disclosure of mineral resources of the Cerrito Prospect according to the NI-43-101 form.

1.8 Recommendations

VMG, based on the studies and work carried out on the mineral resources of the Cerrito Prospect, owned by Lavras, makes the following recommendations:

Geology and Mineral Resources:

- Organization and systematization of the core storage and storage for duplicates of samples;
- Database: validate the name of standards;
- QA/QC: the laboratory pulp duplicates should be inserted into the assay batches;
- Increase the quantity of density samples to obtain a dataset that represents better the saprolitic rock density;
- Make instrumental topographic survey of the area;

¹ The accuracy of the quality control analyzes, referring to the percentage difference between an analysis and its repetition. For example, an accuracy of 10% would mean that the initial analysis and the repetition differ by 10%.

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-
- Infill drilling will be necessary to upgrade the Indicated Resources to Measured Resources for the main mineral deposit;
 - Detailed metallurgical tests; and
 - Environmental studies.
-

ITEM 2: INTRODUCTION

Lavras Gold Corp. (“Lavras Gold” or the “Company”) is Brazil-focused exploration company, based in Toronto, Ontario. Lavras Gold is focused on the exploration of the Cerrito Prospect (“Cerrito Prospect”), which forms part of the Lavras do Sul gold project (the “Lavras Project”).

Lavras Gold is incorporated under the *Business Corporations Act* (British Columbia) and holds its assets directly and through its Brazilian subsidiaries. Formed after Hochschild Mining PLC (“Hochschild”) acquired Amarillo Gold Corporation (“Amarillo”), its assets consists primarily of (i) shares of LDS Mineração Do Brasil Ltda (“LDS”) representing 99.99% of its outstanding equity; (ii) the various contractual rights comprising the Lavras Project, including the Cerrito Prospect and the Butiá Prospect, which form part of the Lavras Project; (iii) cash; and (iv) a 2% net smelter return royalty over certain of Hochschild exploration properties located outside of the current Posse resource and mine plan at the Mara Rosa property.

Lavras Gold owns 99.9% of LDS, which has a material interest in Lavras do Sul Mineração Ltda. (“LDSM”), through its 49% equity ownership of LDSM, its irrevocable option to acquire the remaining 51% of the equity for the paid in capital amount thereof, its right to enjoy the use and advantages of 100% of the benefits of LDSM and other related rights.

Lavras Gold’s common shares are listed on the TSX Venture Exchange (the “TSXV”) under the ticker symbol LGC-V.

2.1 Terms of Reference and Purpose of the Report

VMG Consultoria e Soluções Ltda. (“VMG”) was retained by Lavras Gold Corp. (“Lavras Gold” or the “Company”) to prepare this technical report and resource estimate of the gold for the Cerrito Prospect (“Cerrito Prospect”), which forms part of the Lavras do Sul gold project (the “Lavras Project”). This report has been prepared for Lavras Gold by VMG according to National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (“NI 43-101” or “43-101”) and its related Form 43-101F1.

A technical report (the “Original Report”) titled “*NI 43-101 Technical Report – Mineral Resource for the Cerrito Gold Prospect, Rio Grande do Sul, Brasil*”, dated May 31, 2022 was prepared for Lavras Gold by VMG and Volodymyr Myadzel, MAIG #3974 as qualified person, and co-authored by Frank Richard Baker, B.Met, MMet, MIMMM, MAusIMM. This report revises the Original Report to reflect certain changes to the Original Report requested by the Ontario Securities Commission, is dated November 15, 2024, and is effective May 31, 2022, the date of the Original Report.

The Mineral Resource statement presented herein for the Cerrito Prospect has been prepared according to NI 43-101 and the meaning ascribed to such term by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council on May 10, 2014.

2.2 Qualified Persons

This report was prepared by Volodymyr Myadzel, MAIG, of VMG who is independent of Lavras Gold, as defined in Section 1.5 of NI 43-101. Dr. Myadzel is a qualified person as such term is defined in NI 43-101 and assumes overall responsibility for all items of this report.

The co-author of certain parts of this report, Frank Richard Baker, B.Met, MMet, MIMMM, MAusIMM, is a qualified person within the meaning of NI 43-101 and may not be considered independent of Lavras Gold as at the effective date of this report. Dr. Myadzel, an independent qualified person, has assumed overall responsibility for all items of this report.

2.3 Details of Inspection

VMG, represented by geologist Volodymyr Myadzel, visited the Cerrito Prospect area between November 24 and November 26, 2020. The visit was attended by LDS's officials: Guilherme Marques (Exploration Geologist) and Geandro Pereira Lima (Prospector).

The site visit was carried out over three days. On the first day, Dr. Myadzel inspected the Cerrito Prospect property and deposit area. On the second and third days he made inspections of the core shack, where he reviewed the stored drill core. Full access to all relevant requested data available was given to VMG during Dr. Myadzel's site visit.

The above-mentioned personal inspection of the Cerrito Prospect by Dr. Myadzel constitutes the current personal inspection referred to in subsection 6.2(1) of NI 43-101. Although some time has passed since the property visit, there is no new material scientific or technical information about the Cerrito Prospect as of the date of this report. To ensure that the report contains all material information about the property, Dr. Myadzel verified independently that there has been no material work done on the property since his last site visit. Among other things, he has confirmed that this is the case by reviewing Lavras Gold's relevant public disclosure documents filed on www.sedar.com since his last visit, and through discussions and communications with Lavras' geologists, and consultants.

Frank Richard Baker has made personal inspection of the Cerrito Prospect property on several occasions, including on February 21, 22 and 23, 2017 for a total of three days and, most recently, on May 8, 9, 10 and 11, 2017, for a duration of four days.

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2.4 Sources of Information

VMG's opinions are based on information provided by the Company that reflect the technical conditions at the time of preparation of the study. VMG is dependent on information and data provided by the Company. However, whenever possible, VMG verified the provided data independently. VMG made a technical visit to the Project site to check the physical evidence of the deposit.

2.5 Units of Measure

In this report the metric measurement system was adopted.

The data in these reports refer to datum WGS84, meridian 51 and zone 22J.

ITEM 3: RELIANCE ON OTHER EXPERTS

3.1 Responsibility

VMG has not carried out detailed checks and is not responsible for the legal status and environmental issues of the project. VMG did not carry out samplings on the material of the project during the preparation of this work.

The information here presented about the status of the mining right constituting the project was based on open information published by the government's Agência Nacional de Mineração (ANM) and is available at:

<https://sistemas.anm.gov.br/scm/extra/site/admin/dadosprocesso.aspx>

It is not the scope of this report to conduct a detailed assessment of legal issues regarding Mining Law.

Likewise, it is not the scope of this report to conduct a detailed assessment of the environmental and legal issues involving the project.

VMG did not visit the chemical analysis laboratories used by [Empresa] the chemical analysis work had already been finished before the work developed by VMG was produced. But it is noteworthy that VMG has visited the used laboratories that were used several times and is familiar with their routines and procedures.

VMG is not aware of any other information that may have an impact on the results and conclusions of this report.

VMG is not an insider, associate nor an affiliate of [Empresa]. VMG nor any of its associates acted as a consultant to [Empresa] or its affiliates involved in the project. The results of the technical evaluation produced by VMG do not depend on any prior agreement on the purposes to be achieved, and there are no undisclosed understandings regarding future businesses.

The Qualified Person for this report relied on:

- Guilherme Marques of Lavras Gold Corp., Camila Esmeris formerly of Amarillo Gold for certain exploration and historical drilling information; and
- Frank Baker from Baker Mineração Limited for the Mineral Processing and Metallurgical Testing section.

ITEM 4: PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Cerrito Prospect is located 2km northeast of the town of Lavras do Sul, in the state of Rio Grande do Sul, Brazil. Access from Porto Alegre, the state capital, is by travelling west along highway BR290, and then south along RS357, approximately 320km or a 4.5 hour drive. The last 2km from the village to the prospect is by dirt road. The general location of the project can be seen in Figure 4.1. The geographic coordinates of the town of Lavras do Sul is 21°14'42"S 45°00'00"W.



Figure 4.1 - Lavras do Sul location

4.2 Tenure

The Lavras do Sul property (Lavras Project) area covers 220 square kilometres and is in the state of Rio Grande do Sul, approximately 320 kilometres by paved road southwest of the state capital Porto Alegre. The Cerrito Prospect is located 2km northeast of the town of Lavras do Sul.

4.2.1 CERRITO PROSPECT - CONTRACTUAL RIGHTS

The interest of Lavras Gold and LDSM in the mineral rights comprising the Cerrito Prospect are derived from the asset purchase agreement (the “CBC Purchase Agreement”) dated November 16, 2021 between Amarillo Gold, AMB, LDS, LDSM and Companhia Brasileira do Cobre, Mineração Carmec Ltda, and Mineração Carbre Ltda (collectively, “CBC”), and the related assignment (the “CBC Assignment”) thereof by Amarillo and AMB of its respective rights to, and the assumption of obligations thereunder by Lavras Gold, dated March 10, 2022. A summary description of the CBC Agreement is set out below.

CBC Purchase Agreement

On November 16, 2021, Amarillo, AMB, LDS, LDSM and CBC entered into the CBC Purchase Agreement. Under the terms of the CBC Purchase Agreement, CBC agreed to assign and transfer a 100% interest in the mineral rights (the “CBC Mineral Rights”) set out in Table 4-1 below, which include the mineral rights related to the Cerrito Prospect contained within the Lavras Project, subject to the CBC Royalty (as defined below). Pursuant to the CBC Assignment, all rights and obligations of Amarillo and AMB were assigned to, and assumed by LDS and LDSM, as applicable.

In consideration for the rights granted under the CBC Purchase Agreement, LDSM agreed to pay to CBC the following amounts, payable in Brazilian Reais:

- (a) USD 250,000 within 10 days of the date of execution of the CBC Purchase Agreement (paid); and either
- (b) USD 750,000 within one year of the date of execution of the CBC Purchase Agreement if all mineral rights are assigned and transferred to LDSM within one year of the CBC Purchase Agreement date; or
- (c) USD 150,000 and six annual installments of USD 100,000, the first of which being payable within one year, after the payment set out in (b) above if all mineral rights are assigned and transferred to LDSM after one year of the CBC Purchase Agreement date.
 - For clarity, the total aggregate amount of payment for (b), (c) and (d) above is USD 1,000,000.

LDSM also agreed to grant to CBC a royalty (the “CBC Royalty”) in an amount that is equal to 1.5% of the gross revenue of the future undertaking of the transferred CBC Mineral Rights, if and when there is mining activity in the area of the Mineral Rights. LDSM has a right of first refusal with respect to any proposed transfer by CBC of the CBC Royalty.

The CBC Purchase Agreement provides that, if mining activities in the area of the CBC Mineral Rights are not initiated within 10 years from the date of the CBC Purchase Agreement, CBC shall be entitled to a payment in an amount of Brazilian Reais equivalent to fifty thousand United States dollars per annum until mining activities are commenced.

In accordance with the CBC Purchase Agreement, the parties have entered into definitive instruments of assignment of the CBC Mineral Rights, which have been submitted to ANM for its approval of the transfer. Pursuant to the terms of the CBC Purchase Agreement and the related power of attorney granted by CBC to LDSM, LDSM has the full power to represent CBC with respect to matters related to the CBC Mineral Rights. Among other thing, these powers, include the right to represent CBC before the ANM, environmental authorities, and any other governmental body or any third party in connection with the Mineral Rights.

There are no known environmental liabilities associated with the mineral rights underlying the Cerrito Prospect and Lavras Project as a whole. Lavras Gold must obtain permission from the local landowners to access the properties prior to commencing exploration work.

There are no permits required to conduct exploration activities. There are no known factors that may affect title, or lead to the inability of Lavras Gold to access the properties to perform exploration work. Lavras Gold needs to complete sufficient exploration work to keep the exploration tenements in good standing. A partial report is required to be submitted to the ANM to provide an update of exploration activities completed and money expended. The registered holder of mineral rights has three years from the time exploration rights are issued to complete work and submit a final geological assessment report to the ANM.

The registered holder has the right to apply to extend exploration rights for an additional three years from the end date of the first exploration rights grant. Upon approval, and after the second three-year period, the registered holder is required to file a final report with the ANM. The final report includes information including an estimate of the potential geological resource of a mineral occurrence on the property and a preliminary economic study. In parallel with the submission of a final report, Lavras Gold can apply for a mining concession. Upon the grant of a mining concession, there is no set deadline that Lavras Gold can retain the concession, but typically it is until the exhaustion of mineable reserves occurs. Alternatively, if insufficient geological resources have been established on an exploration concession, registered holder can allow the exploration rights to expire.

4.3 Cerrito Prospect

The Cerrito Prospect lies on exploration permits granted under administrative proceeding N^o. 810.316/1979 and 810.147/1987 which is owned by CBC's subsidiary Mineração Carmec Ltda

(Table 4.1 and Figure 4.2). The status of the claims 810.316/1979 (Cerrito); can be reviewed on the Internet site: <https://sistemas.anm.gov.br/SCM/Extra/site/admin/dadosProcesso.aspx>

Table 4.1 - ANM claim status

ANM Process Number	Owner	Area Hectares	ANM Status
810.316/1979	Mineração Carbre Ltda	1000.00	“Right to Request Mining”
810.147/1987	Mineração Carmec Ltda	75.00	“Right to Request Mining”

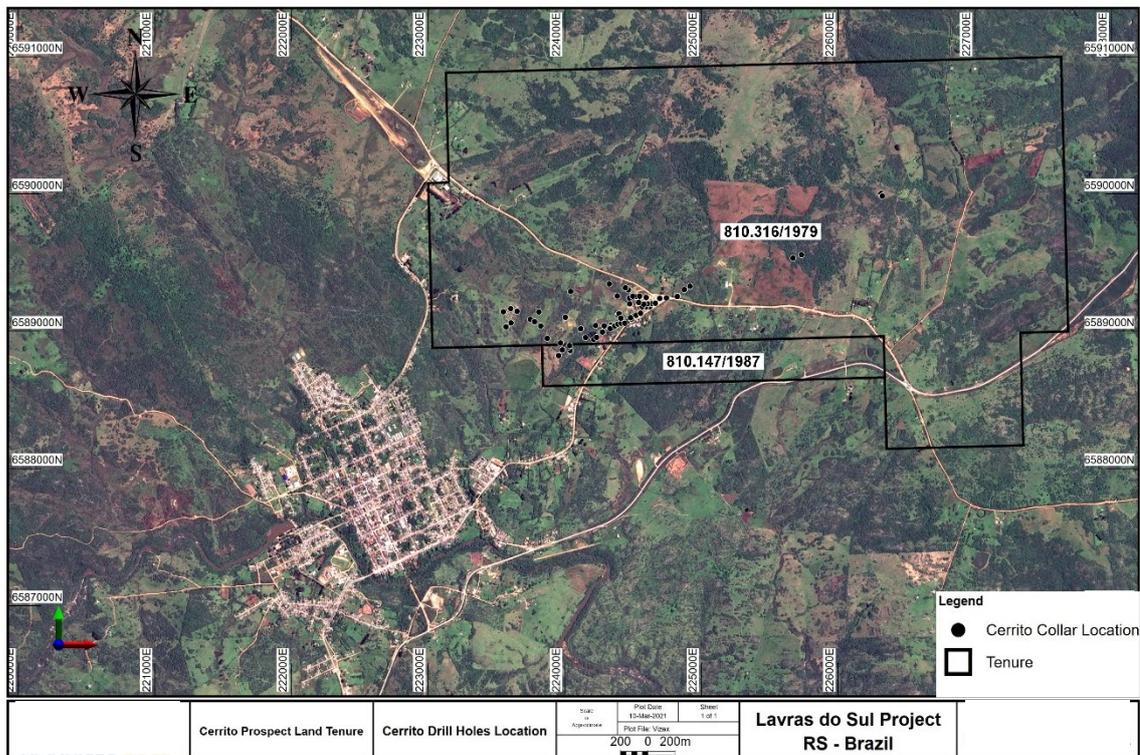


Figure 4.2 - Cerrito Prospect Land Tenure and Drill Holes Location

4.1 Brazilian Border Law

The Brazilian Federal Constitution defines as border area the strip of up to 150km width parallel to the Brazilian terrestrial border (the “Border Area”). This area is considered of special interest for national defense, and, for this reason, legislation may establish special conditions for the occupation and use of the Border Area. Regarding mining, the Constitution expressly authorizes legislation to create special conditions for exploration and mining activities within the Border Area.

Federal Law No. 6634/79, together with the Regulations passed by Decree No. 85064/1980 (collectively the “Border Law”), establishes restrictions to foreign investment on exploration and mining in the Border Area and provides that mining companies can only operate and/or hold mineral properties within the Border Area if they meet the following requirements:

- 51% of its capital held by Brazilian nationals;
- 2/3 of the workforce composed of Brazilian nationals;
- management entrusted to a majority of Brazilian nationals.

The Lavras Project is in the Border Area. Lavras Gold Corp has established a corporate structure that permits the exercise of the option rights described herein in compliance with Border Law requirements.

4.4 Royalty and Liens Agreements

The Cerrito Prospect is subject to a 1.5% gross revenue royalty under the CBC Purchase Agreement, and a 0.5% net smelter returns royalty under the RTDM Option Agreement.

4.5 Permits and Licenses

Section 4.1 details the status of the various mineral tenements. There are no environmental licenses.

ITEM 5: ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The Cerrito Prospect is 2 km from the town of Lavras do Sul. Access is by dirt road. The capital of the state Rio Grande do Sul, Porto Alegre, is 320 km from the prospect. Access is via asphalt highway RS-375 to Caçapava do Sul for a distance of 62.5 km and then by main roads BR-392 and BR-290 to the capital. The journey takes approximately 4.5 hours by road. Porto Alegre has an international airport. Figure 5.1 shows the location of the project.

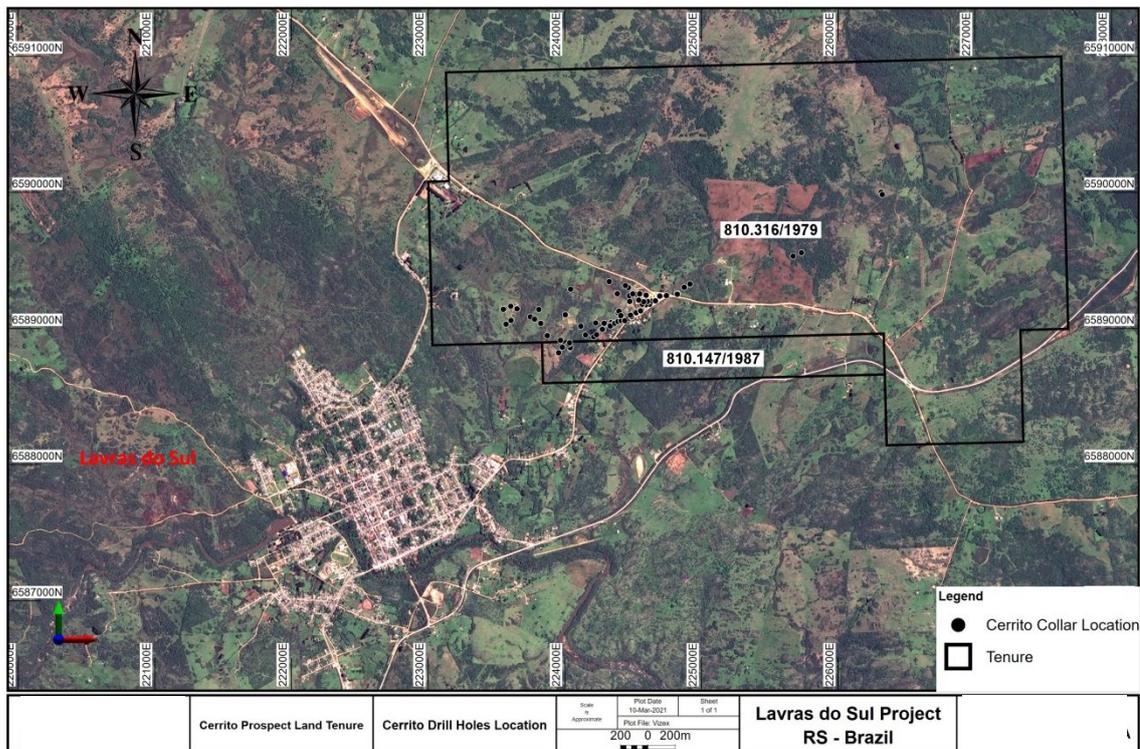


Figure 5.1 - Cerrito location

5.2 Geography

5.2.1 CLIMATE

Lavras do Sul region is a humid subtropical environment, with four well-defined seasons, very harsh summers, and winters. The region is quite vulnerable to the advancement of the polar masses. It especially happens in the winter when the cold winds – called Minuano - coming from the south quadrant reach the region. In summer, temperatures can reach 40° C, and in winter, temperatures average from 6° C to 12° C, and can easily reach 0° C, with a high

occurrence of frosts. The rains are distributed equally throughout the year, although periods of drought may occasionally occur.

5.2.2 LOCAL RESOURCES AND INFRASTRUCTURE

The town of Lavras do Sul has a population of approximately 7,444 inhabitants, with a GDP - **Gross Domestic Product** of R\$ 33,585.41 for 2020, according to the IBGE, Brazilian Institute of Geography and Statistics survey.

The town has primary and secondary schools, a municipal hospital, two public health clinics, an Emergency mobile care service - SAMU, a municipal daycare center, three bank branches, and a reasonably dynamic trade. The CORSAN water supply company supplies treated water for all the municipality, and the BRASIL TELECOM company offers local and international telephone call systems. The city also has wireless internet connection and the municipal school enrollment rate is 98.5%.

The municipality of Caçapava do Sul, 62.5km from Lavras do Sul via RS357, is the headquarters of the Federal University of Unipampa, which has three courses related to Geosciences, including: Bachelor in Geophysics (since 2006), Bachelor in Geology (since 2011) and Mining Technologist (since 2009). These courses were implemented in Caçapava do Sul to reflect the relevance of the region to the country's mining resource sector, with a wide occurrence of ores, rocks, and fossils.

LDS Mineração do Brasil Ltda in Lavras do Sul has the necessary infrastructure to carry out all phases of a mineral research program and operational activities. In the city, the company maintains a central office with excellent computers connected to a Proxy server, meeting room, wireless internet, and security monitoring via cameras and alarm 24 hours a day. It also has three large warehouses for the safe storage of drill bits and field materials.

There is an extensive network of drains and watercourses in the Cerrito Prospect area, with flow capacity during the 12 months of the year. The site topography is favourable for both the plant construction and for the storage of mining tailings because of its gently sloping terrain. The region's climate would allow a mining operation to operate uninterrupted. The electricity supply must be made by the CEEE concessionaire. The supply is through a transmission line derived from the Bagé substation, about 90km from the area.

The main economic activities in Lavras do Sul are livestock breeding (sheep and cattle for leather extraction and slaughter), trade and services (more than 200 commercial establishments), and tourism, practiced on a small scale.

Livestock breeding and local agriculture are activities that require a large amount of space for potential development. The cattle and sheep make Lavras house one of the 10 largest herds

in RS in these categories. The municipality holds constant calf fairs in spring and autumn, and its Rural Union, located five minutes from the city center, is a model and reference in the Campanha region.

Mineral exploration was dormant for many years. However, it was reactivated from 2006 onwards, with the advance of research carried out in the region by the companies LDS Mineração LTDA (gold), Água Fertilizantes (phosphate), and Nexa Resources SA (copper).

Lavras do Sul has about 1,400 rural properties in its territory. There are no significant conflicts over land ownership in the municipality.

Regarding the land structure (that is, the distribution of the extension of rural establishments), Lavras has 70% of rural properties with more than 500 hectares.

5.2.3 PHYSIOGRAPHY

Lavras do Sul has several categories of physiography: Alto Camaquã (microregion of which it was part in the 1980s, according to IBGE), Southwest Rio-Grandense, Serra do Sudeste, Central Region, Pampa, Campanha Region, Fronteira and Southern Campanha (the latter is the current IBGE classification).

Lavras do Sul is the 22nd largest municipality in the Rio Grande do Sul in area, consisting of 2,600 km² and divided into two districts: Sede, with 1,260 km² and Ibaré, with 1,340 km². It has an east/west extent of more than 140 km. Lavras' total area represents 0.9669% of the state, 0.4613% of the south region of Brazil, and 0.0306% of the Brazilian territory.

Geomorphologically, the Lavras do Sul region is classified as the Planalto Sul-Rio-Grandense, based on the Escudo Sul-Rio-grandense. Reliefs are moderately dissected, with hills called coxilhas, with extensive smooth to moderate slopes and low elevation levels, varying between 150m and 600m. The headquarters of the city is located at 277m of altitude in the Lavras region. The municipality has elevations above 300m. It can reach 440m in some small mountains, such as Serra do Batovi, Coxilha do Tabuleiro and the Rincão do Inferno.

One can find herbaceous formation, like the prairies of temperate climate, consisting of fields. It is a peculiar characteristic of the region. The vegetation is denser in the eastern area and typical of the Campanha region, in the western portion. There are varied species of plants in Lavras territory, from the typical ones such as capões de mato to species that are residuals from other Brazilian biomes, such as pines and cactus. There are also wetlands and extensive pastures for beef cattle in the municipality.

The Municipality of Lavras do Sul is on the coast Hydrographic Region in the Hydrographic Basin of the Camaquã River. To the west, in the interior of Lavras do Sul, there is a natural

watershed between the hydrographic basins of the rivers Camaquã (Hydrographic Region of the Coast) and Santa Maria (Hydrographic Region of Uruguay).

The main rivers that cross the municipality are the Camaquã das Lavras Stream. There is also the Jacques and Hilário streams, all of which flow into and form the Camaquã river; Arroio Ivaró and Arroio Santo Antônio, which flow into the Santa Maria River, covering a small portion at the western end of the municipality, on the border with Dom Pedrito.

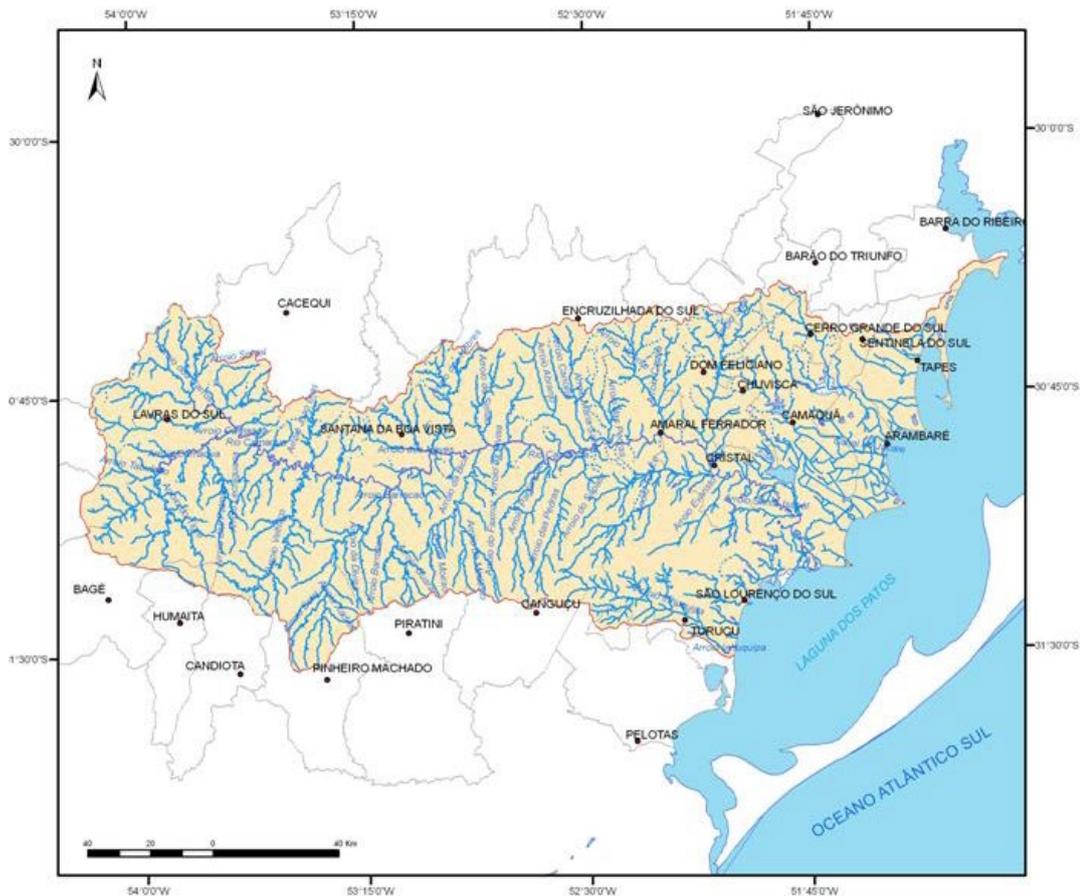


Figure 5.2 - Map showing the Camaquã River Basin, highlighting Lavras do Sul that is inserted in this basin

Source: <http://www.sema.rs.gov.br/>

ITEM 6: HISTORY

Lavras do Sul (“diggings of the south”) was the subject of successive gold rushes in the 1880s and 1930s. There are numerous diggings and excavations throughout the area in the oxide soil horizons where the gold was liberated and relatively easy to extract using the technology of the time.

According to Herlinger (2008), gold was discovered by Portuguese-led pioneers bandeirantes, at Lavras do Sul in 1776, possibly with the influence of a Tupi Indian legend regarding the existence of a golden hill in the vicinity of Lavras do Sul. Mexias (2000) attributes the discovery to miners from Minas Gerais embedded in the Portuguese forces fighting the Spanish.

A succession of predominantly garimpeiro activities was initiated thereafter, henceforth being known as the arroio Camaquã das Lavras (Teixeira & Leinz 1942 in Ramgrab et al. 2002). Herlinger (2008) reports that alluvial gold was produced by the Fazenda Real of the Portuguese Empire employing some one thousand people. The Frenchman Daniel Laut built the first mill to treat ore in 1870 (Teixeira & Leinz 1942 in Mexias 2000).

An English company, the Gold Mining Company, mined the area and started to build the town of Lavras do Sul but this prospect was not successful (Herlinger 2008).

In 1898 the Companhia Lopes e Tallouard, under the title of Messrs. Spaniard Francisco Lopes and Frenchman Paul Tallouard, mined the area using a Uruguayan mill but this prospect also ended in failure (Herlinger 2008).

In 1901, the Belgian Compagnie de Mines d’Or du Cerrito, on the strength of the shares of the Gold Mining Company and the capital of the sold interests and assets of the Companhia Lopes e Tallouard, raised stock capital in Brussels. They purchased crushers, cyanide tanks and built dams but by 1909, the Belgian firm sold all its interests and assets to the English company called Brazilian Goldfields. The latter produced gold for three years and thereafter the area was only mined by garimpeiros.

In 1936 the Ouro do Bloco Butiá Ltda. company purchased the exploration rights over Butiá (Herlinger 2008) and built a mill using the remnants of the Belgian firm’s equipment. Gold was sold to the Banco do Brazil. In 1938 it sold 18 tonnes of pyrite concentrate at 69 ppm Au to Japan.

In 1941 the federal monopoly forced companies to sell their gold product to the Banco do Brazil at a discount to the international market than the international market offered. There

were reportedly 673 excavations in the district at the time (Ramgrab et al. 2002). By 1950 no companies were working in the Lavras do Sul district due to this change in the law.

In 1981 the public Companhia Riograndense de Mineração attempted to mine gold from the Volta Grande metavolcanic succession at the Homonym mine but due to technical problems failed to extract gold from oxidized material (Mexias 2000 and Herlinger 2008).

Between 1980 and 1990 the Companhia Brasileira do Cobre (CBC) carried out detailed surface mapping (Reischl 1980) and drilling exploration, mainly at Butiá and Cerrito areas (Reischl 1999 in Mexias 2000). They drilled 1,520m in 13 holes at Butiá. Not much usable material remains from this work as the core storage shed was burned in a forest fire. All the CBC assets including Lavras do Sul land rights and datasets were sold in a public auction in 2001.

From 2003 to 2006 RTDM (Rio Tinto) and IAMGOLD carried out exploration in the Lavras do Sul district. RTDM was first attracted to the area by the analogy with Paracatu, a profitable Brazilian gold mine formerly owned by the Rio Tinto Group. During this period RTDM consolidated the mineral title in the area by staking ground and making deals with underlying title owners CBC and Maria Lucia Vidal. In 2005 RTDM completed 793.85m of drilling in 04 holes at Cerrito. This core is intact and kept at Lavras's storage facility at Lavras do Sul.

The drilling that has been carried out in the Lavras do Sul district, before the involvement of Lavras, is summarized in Table 6.1.

Table 6.1 - Lavras do Sul drilling summary

Company	Target	Nº Drill Holes	Metres Drilled
CBC	Cerrito	40	3,368.30
CBC Total		40	3,368.30
RTDM	Cerrito	4	793.85
RTDM Total		4	793.85
Totals		44	4,162.15

ITEM 7: GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Lavras do Sul intrusive suite is situated in the far south of the Neoproterozoic Mantiqueira Province, a 2700 km long belt of tectonically and magmatically accreted terrains from the Tonian (1000-850 Ma) through the Cryogenian (850- 650 Ma) to the Neoproterozoic III (650-540 Ma) periods. It stretches as far south as the coastline of central Uruguay into southern Bahia in Brazil, the famous landscape of Rio de Janeiro is part of this belt.

Figure 7.1 summarizes the geology of the belt, showing that it is a northwest-verging system. The Lavras do Sul deposit is located within the region of the geographic interplay the Camaquã foreland basins and post-tectonic granites, west of the Pelotas magmatic arc (also named the Dom Feliciano Belt) and east of the older São Gabriel nascent arc system. Small Palaeoproterozoic remnants are preserved within the Pelotas Origen and Camaquã foreland basins.

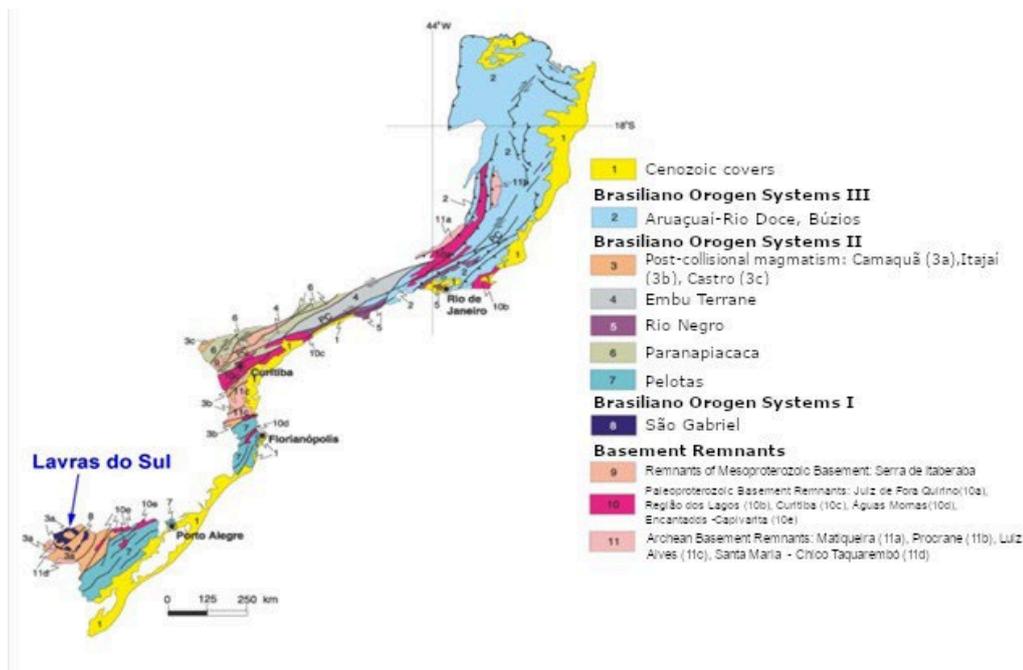


Figure 7.1 - Neoproterozoic Mantiqueira Province

Figure 7.2 shows the southernmost Brazilian portion of the Mantiqueira Province, sometimes called the Rio Grande do Sul Shield, the tectonic framework for the Lavras do Sul Intrusive Suite, and its associated gold mineralization. According to Chemale Jr. (2000), the Lavras do Sul Suite is situated within the Vila Nova Belt (Figure 7.3), where it is shaded black. The belt

itself records a very complex history of continental collision and welding between 760 and 700 Ma, sedimentation, granitic and basic to intermediate volcanic volcanism generated during the late to post-orogenic stages of the Dom Feliciano Event centered in the magmatic arc and Tijucas Belt further to the east, at around 610 to 470 Ma.

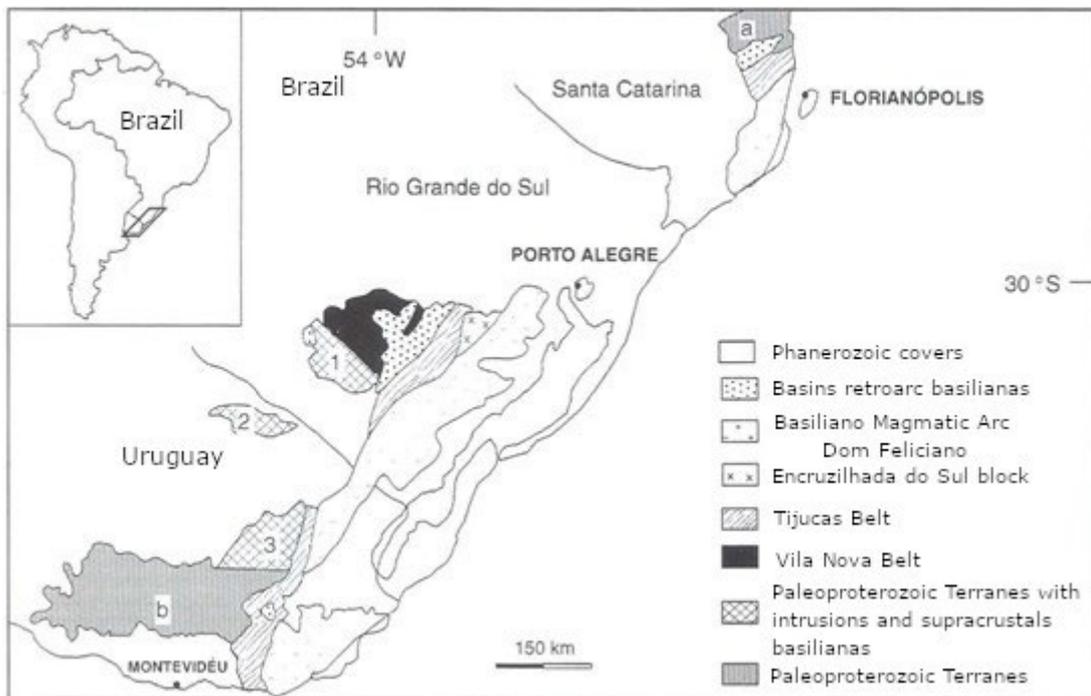


Figure 7.2 - Southern Mantiqueira Province

Further complexity shown on Figure 7.2 is highlighted by the presence of the Taquarembó Block immediately to the south of the NW-SE Ibaré Lineament, a fossil transform fault. The unit is comprised of the Santa Maria Chico Granilite Complex, containing Palaeoproterozoic and Archaean rocks with variably Archaean Sm-Nd model ages.

Figure 7.3 shows the strong asymmetry of the Neoproterozoic belt. The Vila Nova Belt, a foreland-preserved back-arc basin overlying a juvenile mobile belt is interpreted, orthogonally juxtaposed against Palaeoproterozoic granulites.

Figure 7.3 also provides the definitive context of the Lavras do Sul Intrusive Suite. It very clearly reflects the internal complexity of the Vila Nova Belt and the frequency of the high-K, post-tectonic Lavras do Sul type intrusions in the region. These intrusive suites are typically emplaced into Cambaí Group gneissic hosts, the latter interbedded to the west with either mafic-ultramafic rocks or Vacacaí Group banded magnesian schists, serpentinites, metabasalts or quartzites, and are overlain by Camaquã Group intermediate to acid volcanic and volcanoclastic rocks and sediments. This geological record is compacted into some 200 km² of which some 15% of the surface consists of the late to post-tectonic granites.

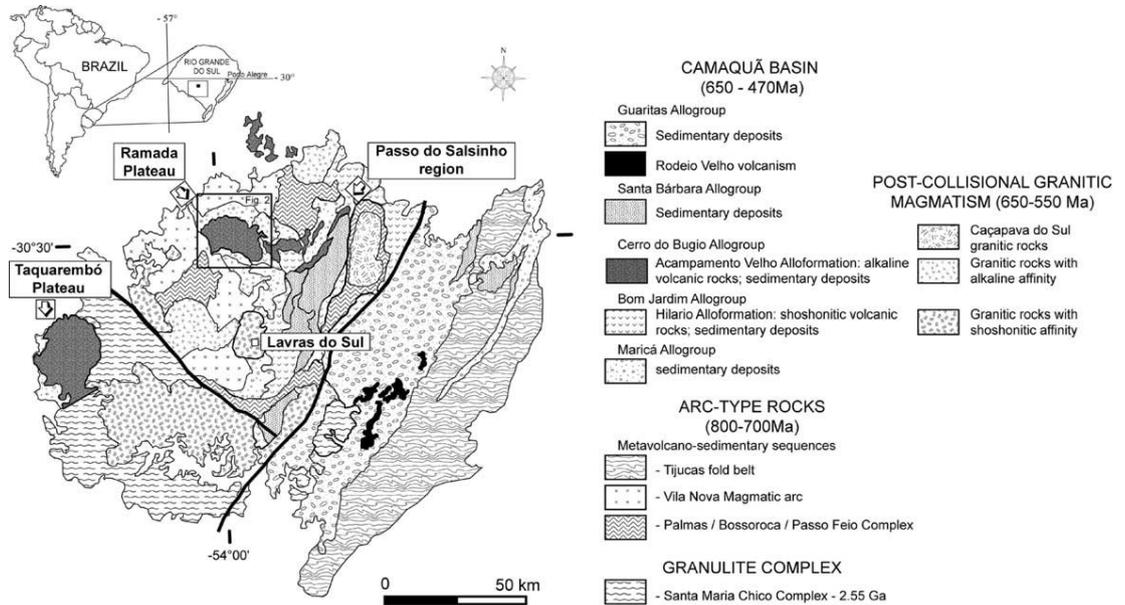


Figure 7.3 - Geological map of the Vila Nova Belt and the Taquarém Block, Sommer (2006)

The tectonic evolution of the crust containing the Lavras do Sul Intrusive Suite is shown in the model proposed by Chemale (see Figure 7.4 to Figure 7.7 Chemale (2002)). The model consists of four-phases. First, two early 900-800 Ma nascent ocean floors (Figure 7.4), separated by an intra-oceanic arc, were compressed, and partially subducted to the east between the South American Rio del Plata Craton and the African Kalahari Craton.

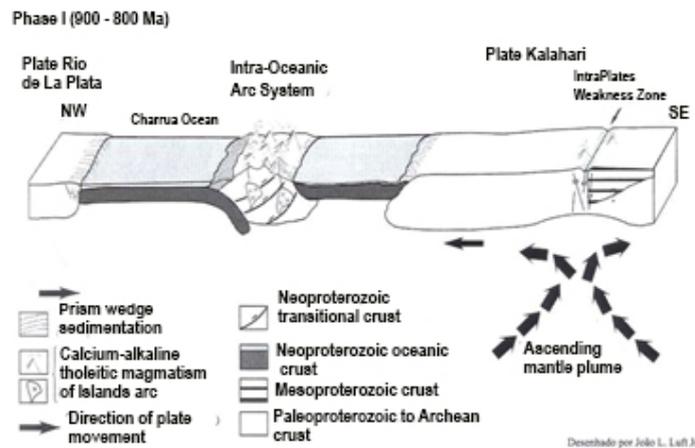


Figure 7.4 - Evolutionary model for the Rio Grande do Sul Shield, Tonian and early Cryogenia, Modified from Chemale Jr. (2000)

Secondly, full subduction and obduction occurred at 800-700 Ma (Figure 7.5) led the Palma Metamorphic Complex, the Tijuca Continental arc Belt, the foreland Encantadas Microcontinent and, in Namibia, the Gariep back-arc Rift.

Phase II (800 - 700 Ma)

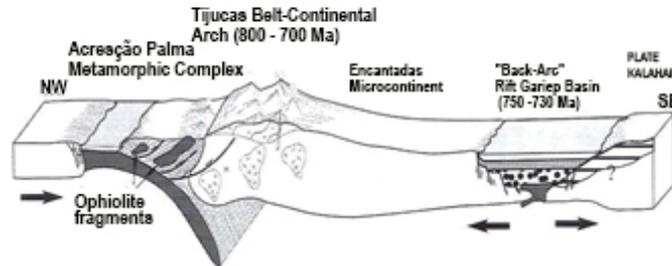


Figure 7.5 - Evolutionary model for the Rio Grande do Sul Shield, Cryogenian Periods of the Neoproterozoic Erathem. Modified from Chemale Jr. (2000)

During the third stage, between 650 and 595 Ma, the Gariep Rift developed into a full-fledged ocean floor (Figure 7.6), effectively reversing the tectonic vectors in the Rio del Plata hinterland, producing a major west-vergence in the Dom Feliciano Belt (Pelotas Orogen), including its magmatic arc. Although little importance has been given to the Ibaré Lineament, the suggestion that it is a fossil on-land transform fault is fundamental regarding tectonic, metamorphic and metallogenic aspects and should be pursued. It separates the juvenile foreland Vila Nova Belt that formed at this stage from the basement, and possible metamorphic dome complexes.

Phase III (650 - 595 Ma)

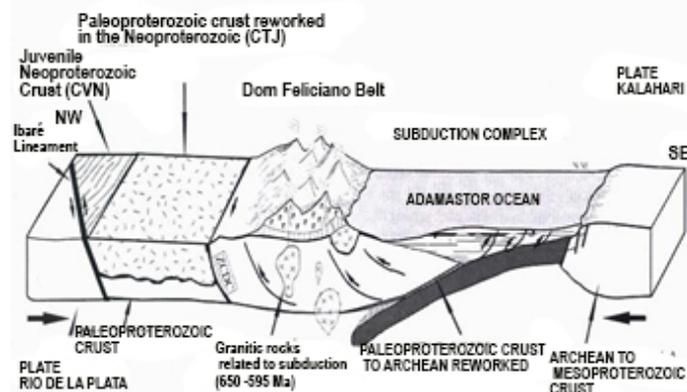


Figure 7.6 - Evolutionary model for the Rio Grande do Sul Shield, Early Neoproterozoic III. Modified from Chemale Jr. (2000)

The final stage (Figure 7.7), between 595 and 540 Ma, resulted in the emplacement of voluminous late- to post- tectonic high-K granite suites mainly but not exclusively in the foreland and later the development of the volcanic and sedimentary back- arc Camaquã basin.

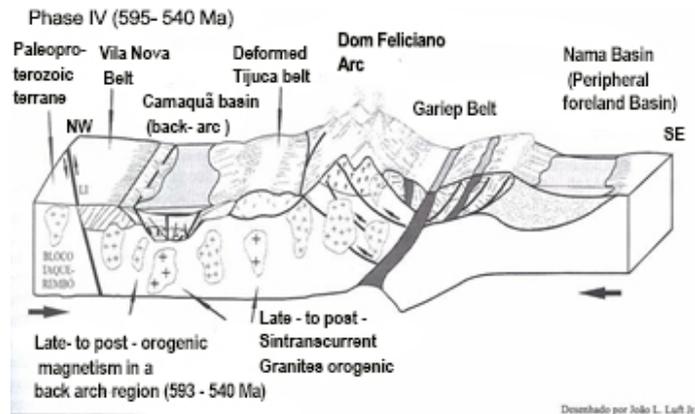


Figure 7.7 - Evolutionary model for the Rio Grande do Sul Shield, Late Neoproterozoic III Periods of the Neoproterozoic Erathem. Modified from Chemale Jr. (2000)

7.2 Regional Metallogenic Potential

There are many precious metal, base metal, and non-metallic occurrences throughout the Mantiqueira Province and the subordinate Dom Feliciano Belt and Vila Nova Belt (Bizzi et al. 2003), although many are currently thought to be small and sub-economic. Large parts of the province have low-grade metamorphic facies and there are numerous epithermal mineralization occurrences (Castro, Campo Largo, Guaratubinha, Camarinha, Camaquã) and low-temperature mineralization is widespread, most notably in the Vale do Ribeira.

In Rio Grande do Sul, the metallogenic patterns of the Dom Feliciano and Vila Nova Belt, while poorly documented, are clearly those of classic orogenic or foreland belts with base metal and precious metal clusters and zonations. There has been little systematic exploration in the area.

7.3 District Geology

The Lavras do Sul Suite of late Neoproterozoic age intrudes rocks of various ages, including units of an early Cryogenic ocean-basin remnant. To the west, it intrudes granites and gneisses probably of Neoproterozoic age according to Gastal and Lafon (1998). The intrusive suite itself has an exposed diameter of some 11 km, suggesting a multiphase intrusion from one or many sources. Surface textures suggest that the preserved intrusion is relatively shallow.

The Lavras do Sul Suite comprises an inner core of granodiorite or monzodiorite in parts porphyritic, 9 km in diameter and centered on the town of Lavras do Sul. It is surrounded by a variably thick and narrow rim of calc-alkaline to alkaline K- feldspar pink granite. A third, late

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phase of syenite and nepheline occurs as plugs and dykes. See Figure 7.8 Lavras do Sul district geology.

It is important to note that Mexias (2000) refers to a rock called “episyenite” being present, i.e., a rock that essentially appears to be a syenite but clearly is not one (as per the IUGS recommendation, Zharikhov et al. 2007). In the case of Lavras do Sul, the preliminary petrographic work indicates that the protolith granite is preserved, despite advanced “episyenitic” metasomatism and therefore the term episyenite is probably inappropriate. The episyenite should be called a microbrecciated sericitic granite. Further work should be carried out on the petrographic and petrogenetic characterization of these igneous rocks to clarify this point.

The late-tectonic nature of the Lavras do Sul Intrusive Suite is borne out by the age for crystallization of the unit by Mexias (2000) at 597 Ma during the late Neoproterozoic III period. Mineralization is dated by Mexias (2000) by studying hydrothermal zircons that are synchronous with the hydrothermal mineralization assemblage. The age is shown to be 580 Ma. (Chemale Jr 2000 in Baars 2008).

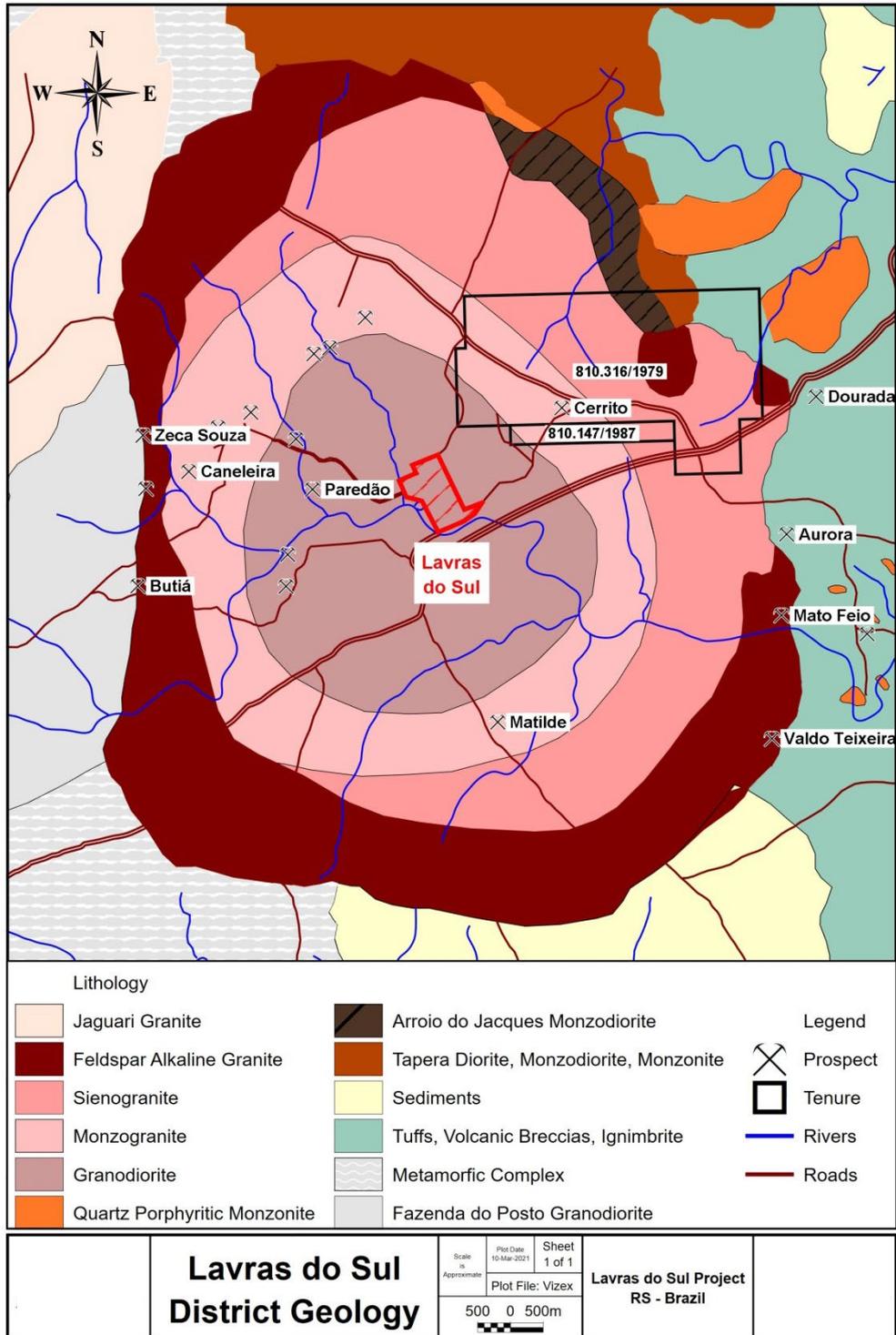


Figure 7.8 - Lavras do Sul district geology

7.4 Lavras do Sul Suite Geophysics

The airborne geophysical signature of the Lavras do Sul Intrusive Suite not only provides an exceptional view of the internal differentiation of the igneous body, but also gives access to the structural make-up of the unit and thereby direct indications to fluid mineralization

channels and sites. Figure 7.9 below demonstrate the internal complexities, particularly regarding ground composition and structural variations.

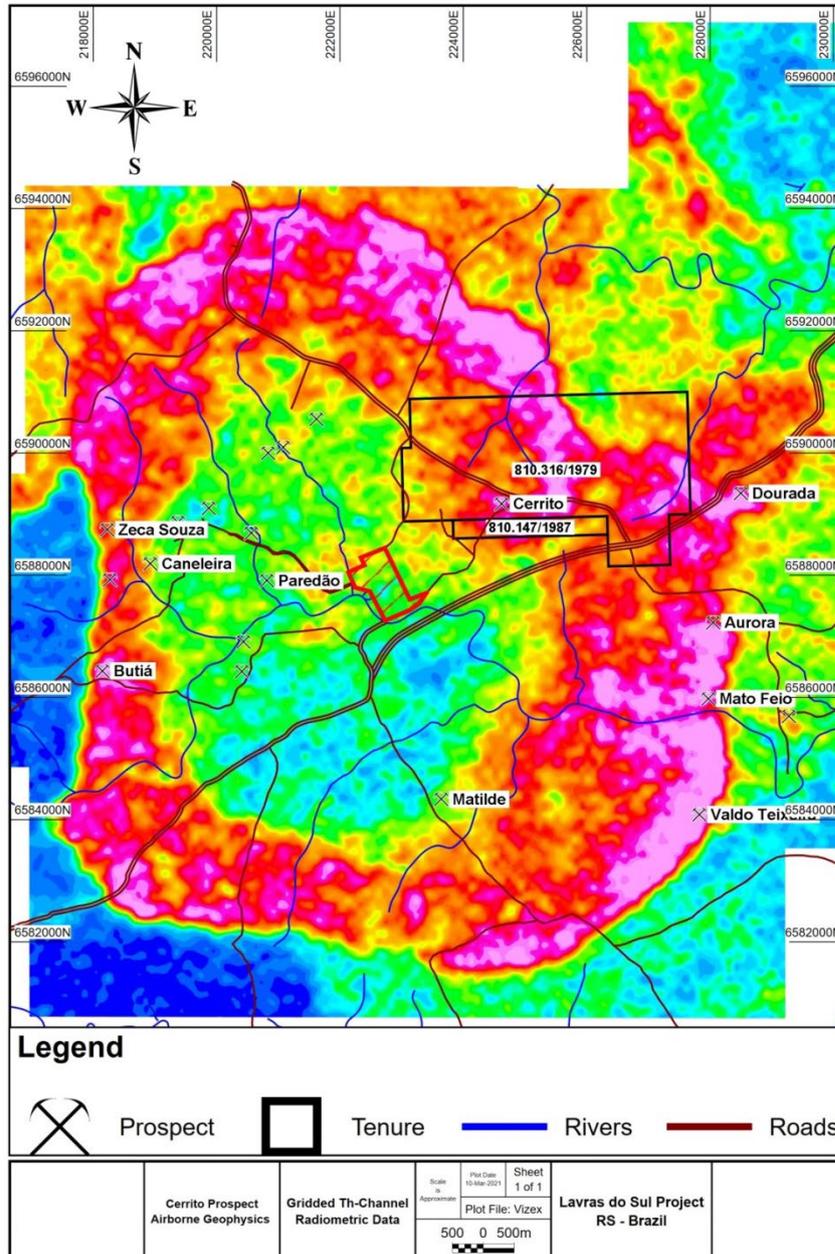


Figure 7.9 - Airborne Geophysics Gridded K-channel Radiometric Data

A striking features of the airborne geophysical signature is the very high radiometric character of the outer rim of K-feldspar granite of the intrusive suite with thorium being the best channel to identify the margins of the units. The central monzogranite to granodiorite appears to be demagnetized in its northern hemisphere with respect to the southern hemisphere and also the outer rim. It has been suggested that this may reflect the product of a hydrothermal magnetite- destruction process. There are also significant radiometric differences between the northern and southern hemispheres.

In terms of magnetic survey data, the central monzogranite to granodiorite appears to be demagnetized in its northern hemisphere with respect to the southern hemisphere and the outer rim. It has been suggested that this may reflect the product of a hydrothermal magnetite destruction process. Another striking feature that shows up in magnetic survey data is a network of brittle crisscrossing and radial structures from the central and eastern rim of the Lavras Intrusive suite. The EW through ESE-WNW and SE-NW structures appear to coincide in the field with zones of sericite alteration. These features have been used to guide the selection of drill targets that potentially host gold mineralization in planar bodies. The structures do not appear to penetrate country rock outside of the intrusive, although further work is required to verify this. Since mineralized fluids are known to have been confined to the suite, all structures within the suite are considered potentially mineralized targets.

7.5 Lavras do Sul Suite Petrogenesis

Limited scientific work has been published on the petrogenetic development of the Lavras do Sul Intrusive Suite. Nevertheless, the general dogma is that the Lavras do Sul Intrusive Suite are host rock to the mineralizing event. And while some argue that the parent rocks of the Lavras do Sul Intrusive Suite were the source of the mineralizing fluids this has not yet been definitively proven.

There are late-stage syenitic phases of the Lavras do Sul Intrusive Complex that are known to intrude the earlier-stage and more voluminous granitic phases, and this may have exploration implications. However, it appears unlikely that they are the differentiated equivalents of the granites, since the petrochemical evolutions of a calc-alkaline granitic suite and an under saturated alkaline suite are quite distinct and unlikely to have the same parent magma or the same metallogenetic associations. Based on limited geological evidence, it is suggested that the late syenitic magma may be responsible for generating the hydrothermal magmatic fluid responsible for Lavras do Sul gold mineralization. Nevertheless, significant systematic petrography is required and recommended to better understand the petrogenetic evolution of the intrusive and most importantly its mineralization.

7.6 Mineralization

As previously mentioned, Lavras do Sul mineralization cannot easily be classified into any one specific mineral deposit model or category. However, petrographic work carried out by Lavras Gold has identified the following observations related to the mineralization.

The mineralization and some barren wall rocks from the Lavras do Sul suite are classified as breccias. These breccias are intensely hydrothermally and structurally altered igneous rock

whose inter-grain boundaries have been completely recrystallized to the extent that the rock can be characterized as being a rounded or ovoid breccia.

Figure 7.10 shows the evidence of arrested brecciation and consumption of quartz offset by sericite precipitation. This is evidence of the presence of an early quartz-undersaturated mineralizing fluid, later re-saturated in silica and enriched in gold.

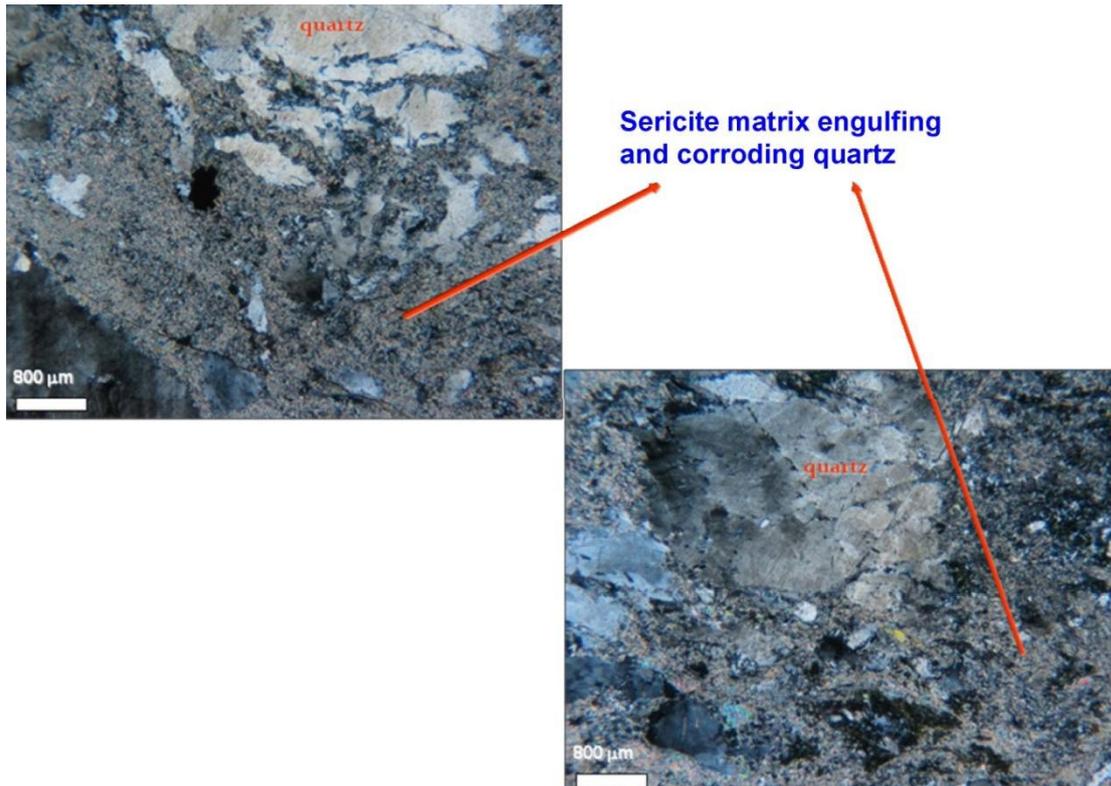


Figure 7.11 - Evidence of arrested brecciation and consumption of quartz

Observations in drill core at Lavras do Sul also shows evidence of strong quartz and feldspar replacement reactions where the precipitate mineral is exclusively sericite. This is thought to be a metasomatic reaction producing a sericite micro-brecciated granite derived from the original granite. It is hard to calculate the thickness of this early, proximal alteration zone with certainty, however, it is suspected to be on the order of 100 to 200 m around a structural fluid channel. The fluid was postulated to be an alkaline, silica-undersaturated gold-bearing fluid that migrated along secondary fluid pathways, including inter-crystalline microchannels, where fluid partial pressure was sufficiently low and alkalinity was still high enough in the early phases to promote broad, low-grade, poorly focused, low-temperature (250°C) Au mineralization. It is inferred that this silica-undersaturated fluid originated from syenite or similar intrusive plugs in the Lavras do Sul Intrusive Suite at 580 Ma, although there may be deeper sources that have not yet been discovered.

Nevertheless, the fluid evolved into a silica-saturated and more neutral solution that also deposited other alteration species in a long and complex paragenetic sequence, forming more intermediate altered and poorly to non-mineralized rocks at lower temperatures (200°C): sericite-zircon-phengite-chlorite-quartz-albite-pyrite-rutile-titanomagnetite. This may explain why the minerals are spatially present where the gold mineralization occurs, but show no abundant correlation with it, in that they represent an overprint of a slightly later-stage hydrothermal alteration.

A third phase in fluid evolution represents the most important phase of mineralization from an economic point of view. As the fluid interacted with the relatively acid granitic wall-rock, the fluid became acidic and silica-saturated passing the critical pH barrier beyond which gold is insoluble in the fluid. As the fluid passed through narrow and focused channel ways, high-grade brecciating vein-hosted gold precipitated out of the fluids overprinting the earlier micro-breccias.

Lavras do Sul mineralization is thought to have evolved from a two-stage gold precipitation history involving a single fluid path that was originally extremely alkaline and silica undersaturated to one characterized by quartz saturation with increased fluid focus.

In general, the main characteristics of gold mineralization in the Cerrito Prospect are:

- Disseminated mineralization and vein mineralization, of low grade and moderate thickness, associated with hydrothermal alteration zones arranged in subvertical and subparallel bodies, hosted in granitoids of the Lavras do Sul Intrusive Complex and interspersed with portions of fresh and altered rock.
- It occurs in the form of simple quartz veins, associated with shear failures and fractures or extension fractures. Sometimes it occurs as parallel veins (leaf veins) and the more specific these veins branch and intertwine forming zones of stockwork.
- Mineralogical association include sericite, chlorite, albite, calcite, silicification (quartz), pyrite, auriferous pyrite, and less frequent occurrence of galena, sphalerite, molybdenite, arsenopyrite, fluorite and visible gold.
- The most promising hydrothermal zones favourable for the occurrence of gold mineralization usually have tabular geometries, sometimes wavy, with orientations that range from N80 ° E to N80 °W with variable, high-angle dips.



Figure 7.12 - Photo in detail, showing an intense hydrothermal alteration with quartz and calcite veinlets, associated with Chl and Ser. LDH hole 171 depths between 46.30m (upper left corner) to 48.70m (lower right corner)



Figure 7.13 - Detail of quartz vein associated with sericite, chlorite and calcite, with the presence of intense Pyrite. Extracted from the borehole LDH-172, at depths of 35.90m to 36.10m



Figure 7.14 - Failure zone with intense fracturing giving the rock the appearance of a hydrothermal breach. Presence of quartz veinlets accompanied by calcite. Intense sericitization. Hole LDH-171.



Figure 7.15 - Failure zone. Intensely fractured interval, with a breach aspect. Intense hydrothermal alteration, with visible silicification and increased pyrite. At 286.20m there is a quartz vein with pyrite and fluorite. Hole LDH-166.

ITEM 8: DEPOSIT TYPE

The deposit at Lavras do Sul is not easy to classify into one deposit type and there is no deposit in the literature that has the same features as those at Lavras do Sul.

Most of the academic papers classified the Lavras do Sul Gold Mineralization as a porphyry system (Mexias, Gastal), but authors like Bongiolo (2008) defend the idea that the deposit has characteristics of both epithermal and porphyry system.

In Rio Grande do Sul, the metallogenic patterns of the Dom Feliciano and Vila Nova Belt, are clearly those of classic orogenic or foreland belts with base metal and precious metal mineralization.

While the substrate is unclear, it is likely to be Paleoproterozoic gneiss implying significant crustal contamination and possibly assimilation into the differentiating peralkaline granitic stock. The temporal and geographical distance from the magmatic arc, crustal contamination and advanced alkaline differentiation would have jointly promoted single-metal, gold favourability.

The Lavras do Sul gold mineralization is within the area of foreland, late-tectonic alkaline granite emplacement, with possible back-arc development with several porphyry system and epithermal features.

8.1 Porphyry Type Deposits

Most of the academic papers have classified Lavras do Sul gold mineralization as a porphyry system (Mexias, Gastal). However, authors like Bongiolo (2008) defend the idea that the deposit has characteristics of both epithermal and porphyry styles of mineralization.

In Rio Grande do Sul, the metallogenic patterns of the Dom Feliciano and Vila Nova Belt, are related to orogenic or foreland belts hosting base metal and precious metal mineralization.

While the substrate is unclear, it is likely to be Paleoproterozoic gneiss implying significant crustal contamination and possibly assimilation into the differentiating peralkaline granitic stock. The temporal and geographical distance from the magmatic arc, crustal contamination and advanced alkaline differentiation could have promoted single-metal gold favourability.

The Lavras do Sul Intrusive complex occurs within the foreland basin and is associated with late-tectonic alkaline granite emplacement. Subsequent back-arc development appears to have promoted the development of porphyry systems and epithermal mineral occurrences.

8.1.1 PORPHYRY TYPE DEPOSITS

Porphyry copper systems host some of the most widely distributed mineralization types at convergent plate boundaries, including porphyry deposits centered on intrusions; skarn, carbonate-replacement, and sediment-hosted gold deposits in increasingly peripheral locations; and supergene high- and intermediate-sulfidation epithermal deposits (Sillitoe 2010).

The authors Sillitoe (1996) and Hedenquist (1997) have performed extensive research into porphyry-type deposits. Porphyry deposits are predominantly formed by the association of intrusive igneous rocks with porphyritic texture with mineralization having anomalous concentrations of Cu, Au, and to a lesser extent Mo, W and Sn, which may or may not occur in the same deposit.

Porphyry-type deposits are typically composed of disseminated sulfides and in veinlets located close to or even contained in porphyritic intrusions of felsic to intermediate composition, at average depths of 2 to 5 kilometers. For the formation of porphyry-type deposits, the presence of hypersaline hydrothermal fluids at high temperatures (500-600 °C) is required. Mineral deposits typically associated with porphyry system is represented in Figure 8.1.

Broad-scale alteration and mineralization zoning patterns in Porphyry-type deposits are formed as the fluids and gases from the magma, which are the source of the metallic elements, migrate out of the intrusion, cool, and react with the adjacent rocks. This configuration can be characterized as zones of alteration (Sillitoe, 1996), as described below:

- Sodic Calcic alteration zone: Deep, including below porphyry. Key minerals include calcium-sodium amphiboles (actinolite, actinolite-hornblende or hornblende), plagioclase (albite or oligoclase) and magnetite. Possible ancillary minerals include diopside, epidote, garnet. This mineral association can occur as a replacement in the wall rock, as well as in veinlets. Sulphides are typically absent.
- Potassium alteration zone: core zone of porphyry copper deposits. Its mineral association is characterized by the presence of biotite (veinlets or as a replacement for other minerals), and potassium feldspar. Other subsidiary minerals may include magnetite, actinolite, epidote, sericite, andalusite, albite, carbonate, and tourmaline. Principal sulphides

occur in veinlets and disseminations including chalcopyrite, bornite, +- digenite, +- chalcocite concomitantly with quartz veins in the form of stockworks. This type of alteration zone occurs predominantly in all gold-rich porphyry-type deposits and is the most important contributor to ore.

- **Phyllic alteration zone:** Upper part of porphyry copper deposits (ubiquitous, except with alkaline intrusions). This alteration zone is characterized by quartz-sericite-pyrite assemblages. Pyrophyllite, carbonate, tourmaline, and specularite are possible ancillary minerals. Pyrite occurs as the main sulfide, which may be accompanied by chalcopyrite in the form of veins (\pm quartz) and/or disseminated form. Other sulphide minerals include enargite, tennantite, pyrite-bornite+-chalcocite, and pyrite-sphalerite.
- **Intermediate Clay alteration zone:** Upper portion of porphyry Cu core zones (common, particularly in Au-rich deposits). This alteration assemblage is composed of muscovite (sericite), chlorite, illite and smectite. Possible carbonate epidote and smectite also occurs as ancillary minerals. It usually imparts a green to light green coloration to the rocks due to the variable concentration of sulfides (pyrite, \pm chalcopyrite) and oxides (specular hematite, magnetite).
- **Advanced Clay alteration zone:** Above porphyry Cu deposits - represents the lithocap. The common mineral assembly is composed of quartz, pyrophyllite, dickite and kaolinite. Barite normally occurs in forms of late-stage veins. Pyrite can occur in Marcasite aggregates, accompanied by quartz.
- **Propylitic alteration zone:** Marginal parts of porphyry copper systems, below lithocaps. This zone is characterized by the presence of chlorite, epidote and carbonate and albite. Ancillary minerals include Actinolite, hematite and magnetite. Sulfides usually consist of pyrite+-sphalerite+-galena.

The general appearance of a deposit within a porphyry system is shown in Figure 8.1 below.

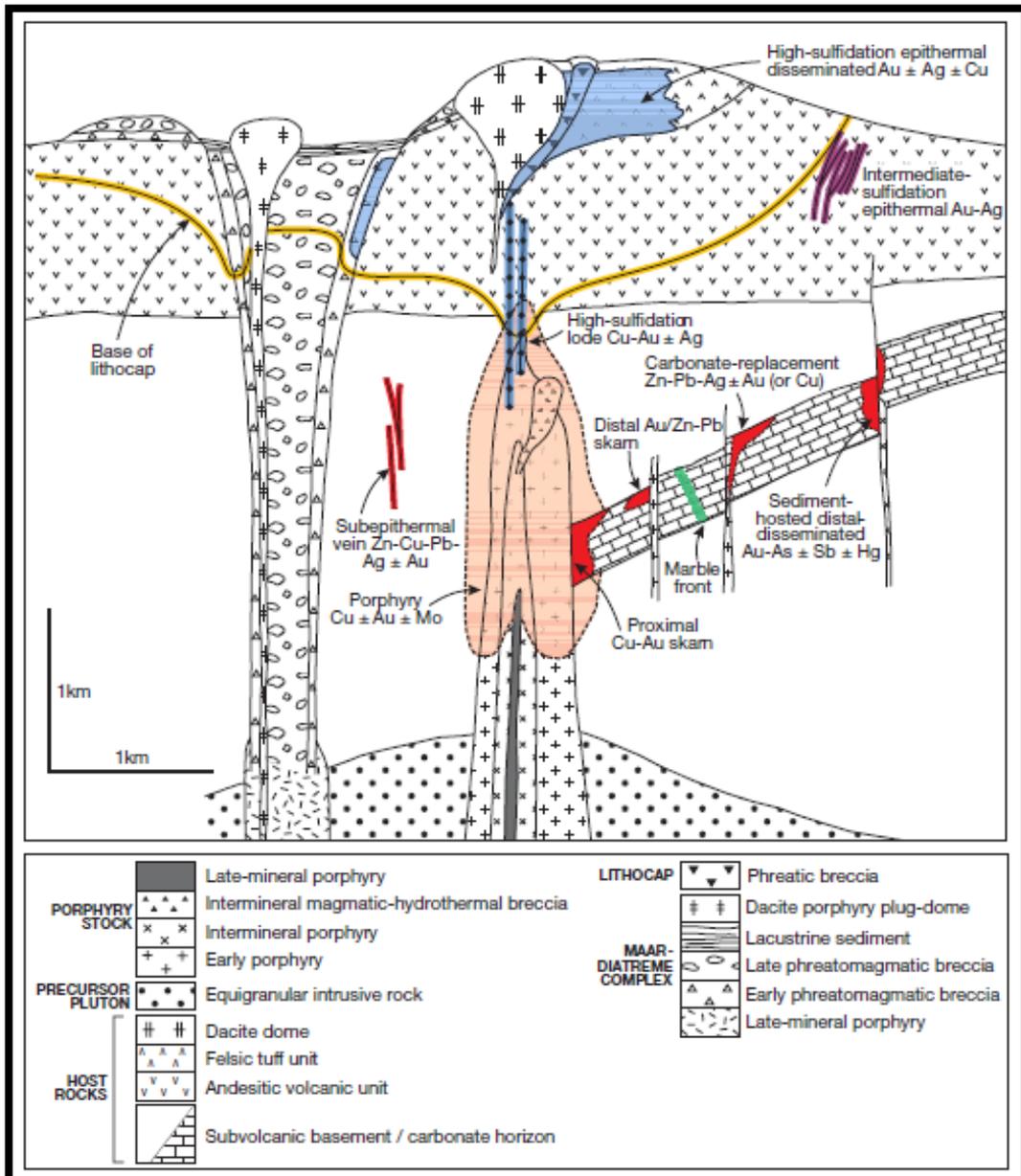


Figure 8.1 - Representation of the anatomy of a telescoped porphyry copper system (Sillitoe, 2010)

8.1.2 Epithermal Gold Deposits

Epithermal deposits are formed by hydrothermal solutions of relatively shallow temperatures and depths (temperature below 300 ° C and located up to 2 kilometers from the surface).

According to Hedenquist (1997), these deposits can be divided into two main types depending on the mineralogical association, which comes from the chemical composition of the different hydrothermal fluids that interact in the system (Figure 8.2).

- High Sulphidation: represented by the presence of high oxidation state sulphur (enargite and luzonite). It is formed from acidic and oxidized fluids, being derived from hydrothermal fluids directly from the intrusion. These deposits usually form proximal to Cu-Au-Porphyry deposits.
- Low Sulphidation: represented by the presence of low oxidation state sulphur (pyrite, sphalerite, chalcopyrite). These deposits form from geothermal systems in which the magmatic fluid is cooled and diluted by meteoric water and the pH is neutralized at depth. Low sulphidation epithermal deposit originate from reduced fluids with an almost neutral pH (eg. geothermal systems) more distal to magmatism. Typical alteration minerals include adularia and sericite.

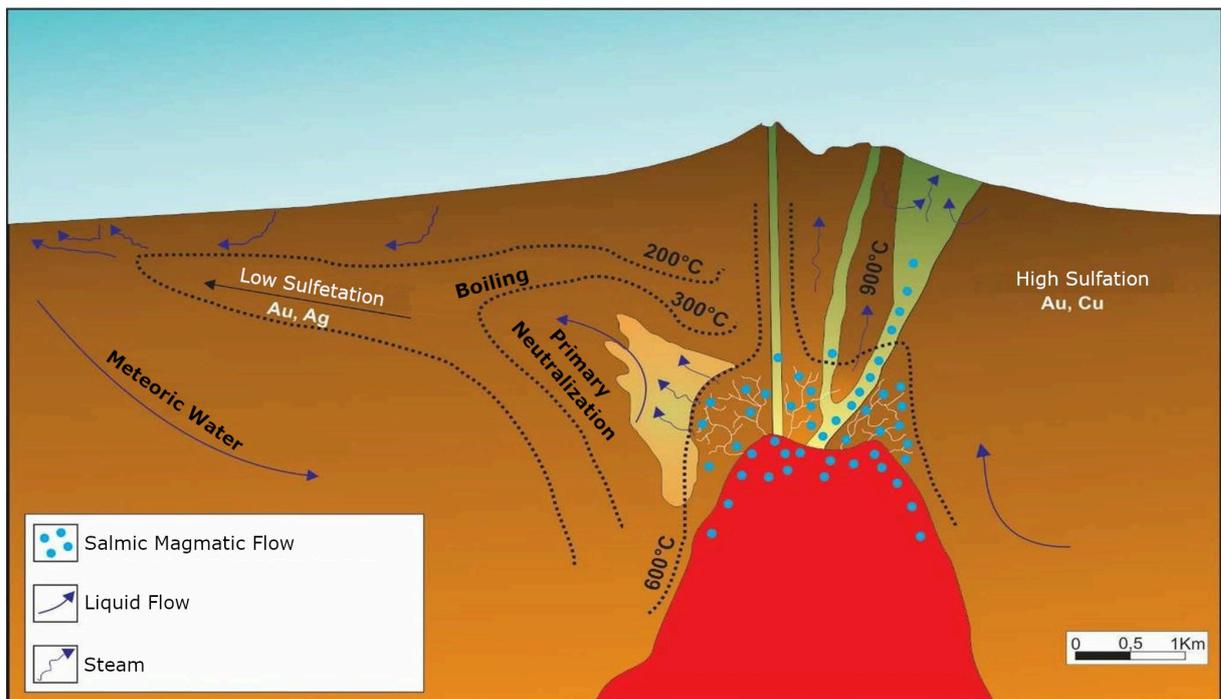


Figure 8.3 - Schematic representation of high and low sulfide Epithermal deposits. Hedenquist (1997)

El- Shazly, 2004, summarized the characteristics of different types of gold deposits, which may be classified based on their gold/silver ratios. However, they are also broadly classified into two major groups:

A – Gold veins, which include two types:

1. Epithermal deposits associated with volcanic and intrusive sequences.

In addition to the general characteristics of epithermal deposits, epithermal gold veins are thought to form from solutions with pH values between 4 and 6, high Eh values (oxidation states above those of the stability field of magnetite), and intermediate to high sulfidation states. Ore deposition is generally believed to be related to sharp temperature drops or to boiling as the fluid approaches the surface. They are associated with intense alkali leaching, sericitic and argillic alteration, silicification and alunite. The host rock for these veins is commonly Tertiary in age.

II. Metamorphic gold-quartz veins (Hypothermal to mesothermal)

These veins occur in Mesozoic or older metamorphic terrains and are thought to form at temperatures higher than those of the “epithermal” veins described above (and may thus be grouped with the “mesothermal deposits”). Their formation is somewhat related to regional metamorphism, and their fluids are characterized by a lower oxidation and sulfidation state. These gold deposits are structurally controlled, often occurring in metamorphosed ultramafic rocks, suggesting that the komatiites may be the ultimate source of the gold.

B – Disseminated Au deposits, which include:

I. Disseminated and stockwork gold – silver deposits in igneous intrusives:

Characterized by grades of 8 -16 ppm Au. They occur in highly fractured acidic to basic intrusives in orogenic belts of all ages on all continents.

II. Gold - Silver deposits in volcanic flows and volcanoclastics:

Characterized by low grades of 0.02 - 0.03 ppm, and occur in large volumes of altered rhyolites, andesites and basalts.

III. Carlin type deposits:

Mineral deposits are often tabular, occurring in many different rock types which include carbonates, volcanic, or volcanic hot spring - related. The most important property of the host rock is its high permeability which allows the fluids to pass through, depositing the ore in disseminated form resulting from abrupt changes in the physicochemical properties of the solutions. On a large scale, Carlin type deposits seem to occur in areas of back arc rifting, or in island arcs.

ITEM 9: EXPLORATION

9.1 Topography

The topographic surface covering the Cerrito Prospect and surrounding area was acquired in 2012 from GeoEye satellite, with a distance between the level curves of 1 m (Figure 9.1).

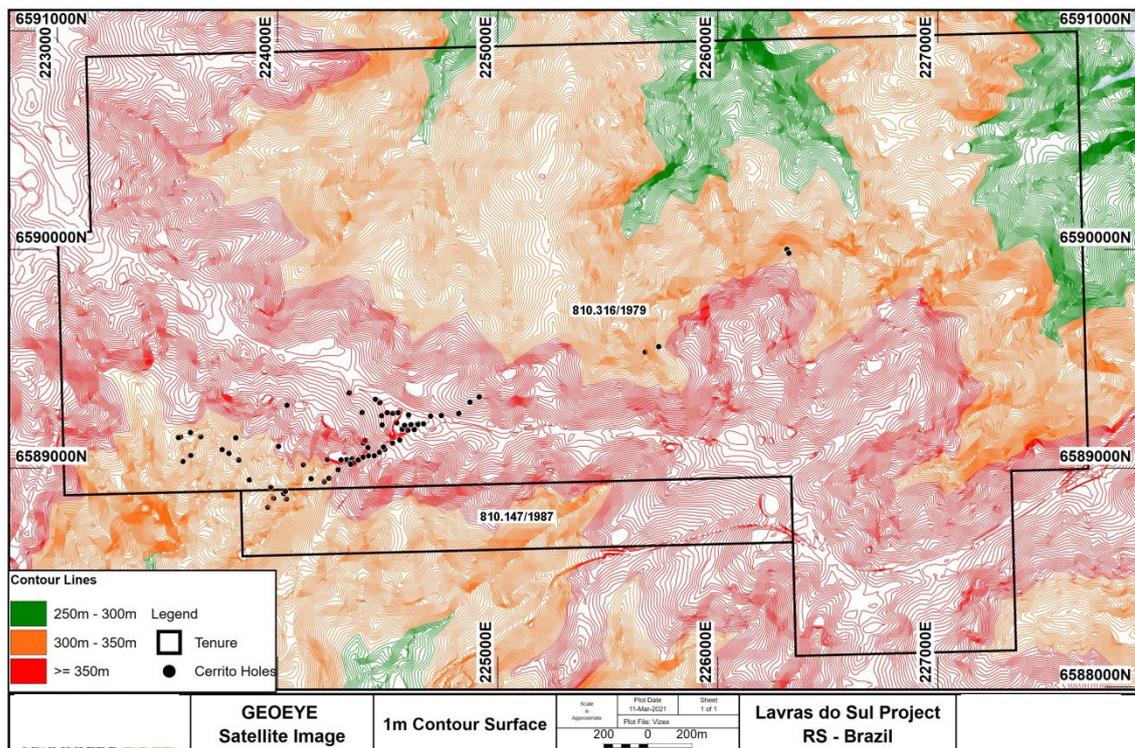


Figure 9.1 - Topography

9.2 Geological Mapping

The Company carried out surface geological mapping of the Lavras do Sul area and the Cerrito Prospect. A total of 84 surface samples were taken (chip samples) – Figure 9.2.

Between 2007 and 2008, 73 fire assay samples were completed. The Fire Assay method (Au-AA24) was used for gold. In 2010 and 2011 the analysis of 11 samples also included the ICP-MS 1DX2 methodology for 36 elements. All samples were sent to the ACME laboratory in Aparecida de Goiânia, Goiás.

Geological mapping focused on lithological contacts, quartz veins, main structural lineaments, hydrothermal alteration surface (sericite + chlorite), and the historical excavations. (Figure 9.2).

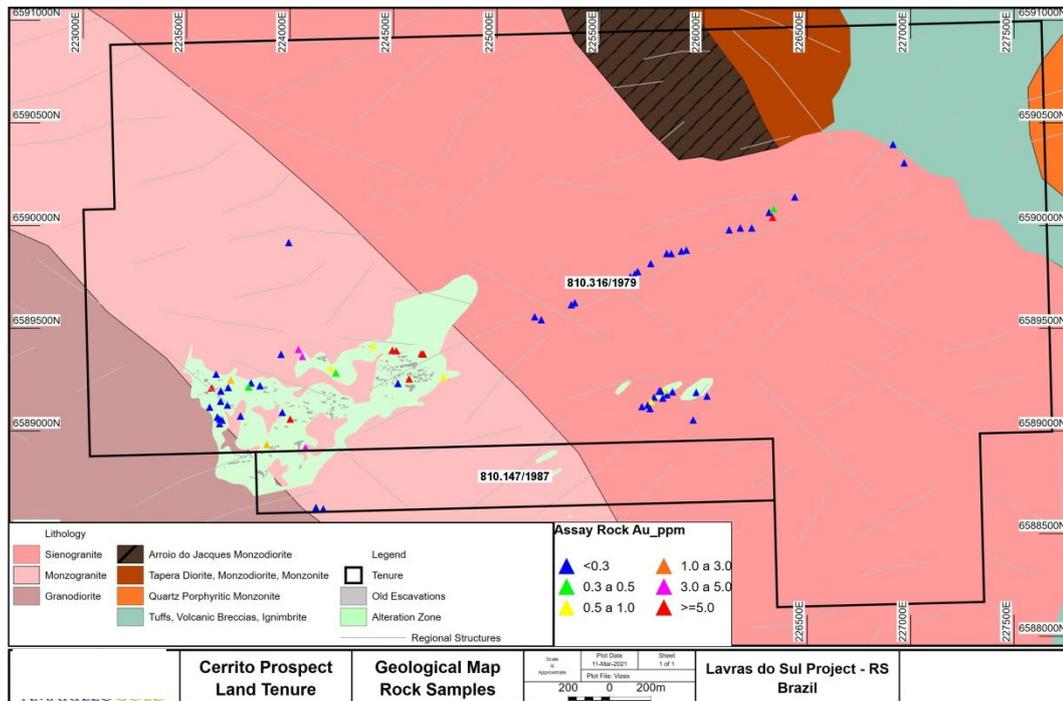


Figure 9.2 - Cerrito Prospect Geology

9.3 Soil Geochemistry

Soil geochemical sampling on licenses 810.316/1979 and 810.147/1987 was completed in 2011 and 2012, with 173 samples collected. The spacing of the lines was about 200m, and the samples were collected every 25m (Figure 9.3).

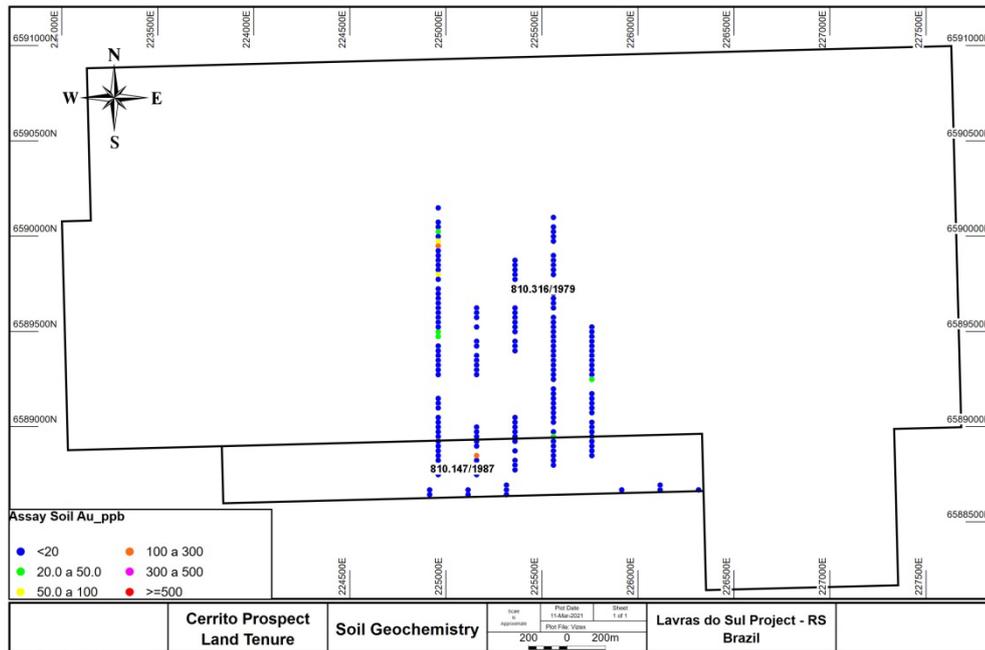


Figure 9.3 - Geochemical Sampling of Soil

The soil collection procedure adopted was compound sampling, with an opening of 2 to 4 holes around the central collection point, with an average depth ranging from 25cm to 50cm. The sampled horizon is the **B** horizon of the soil, which is the most suitable horizon for the halo detection of gold mineralization. It is the horizon of the biggest hydromorphic dispersion of the elements, which causes broader and more uniform areolas of the dispersion elements. It is also a horizon with more homogeneous material. If the soil profile is less developed, samples are collected sporadically on horizon **A**. Soil samples are not taken in areas of excavation that contain historical mining waste or old workings in outcrop rock locations, slopes of roads, close to alluviums, and in flooded wetlands, due to the possibility of resulting false geochemical anomalies.

Samples are typically collected using an iron-rounded shovel and/or a wolf-mouth shovel. The soil is placed on a plastic canvas and visually inspected. Each sample is then described based on physical characteristics such as colour, granulometry, and lithological composition. The sample is then fractionated, quartered, and homogenized with the disposal of all organic matter and rock fragments. The sample is then placed in a plastic bag and labeled with a unique identification. A wooden stake is then placed in the sample location with the appropriate identification sample number and the UTM coordinate.



Figure 9.4 - Soil sample collection



Figure 9.5 - Field Marking

In situations where there are stone lines at the collection point, sampling should occur below this zone. The term pebble line or stone line refers to a horizon of angular to subangular fragments, sometimes rounded, quartz veins, quartzites, lateritic breastplates, heavy minerals, or other materials that are resistant to chemical change present within the pedological coverage in vast areas of the intertropical zones. In general, the lines of pebbles are arranged parallel to the topographic surface, being limited above by a relatively homogeneous horizon of sandy-silty-clay texture and below by the altered rock. Although the origin of the pebble lines and their covering material is still a strongly debated topic, the collection of soil samples were standardized below it since one of the hypotheses of its origin is linked to its allochthonous character of transported material.

The collected and bagged samples are packaged at the Lavras Gold office in Lavras do Sul. The samples are separated into batches with chemical analysis requests and transport notes filled out for each sample. After reaching a volume sufficient for loading via the Planalto carrier's freight truck, they were dispatched to the ACME laboratory, in the city of Aparecida de Goiânia – Goiás.

In the laboratories, the samples are analyzed to detect gold at the super traction level plus a multi-element package by digestion with aqua regia, using a nominal weight of 50g. In the ACME laboratory, samples are analyzed using the ICP-MS 1DX2 method, including gold (lower detection limit of 0.5ppb) and 36 more elements.

The results of the soil samples identified point gold anomalies in the monzogranite and syenogranite with results of up to 147 ppb, Figure 9.7.

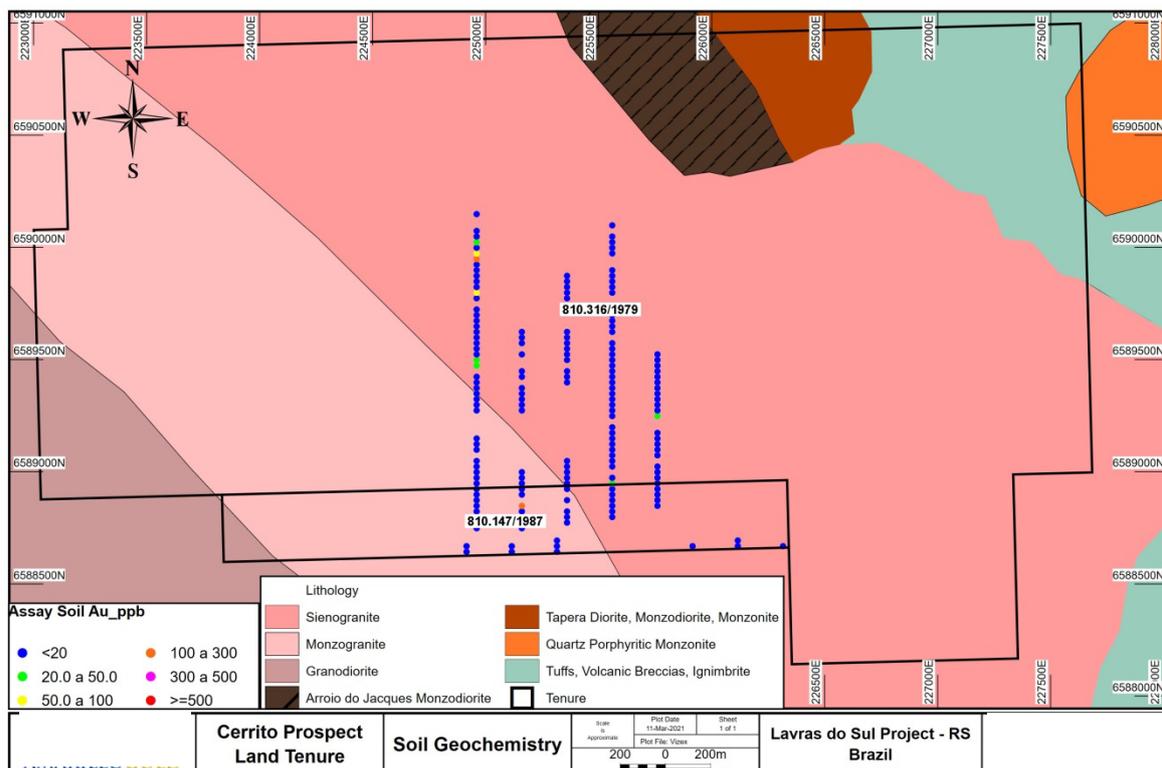


Figure 9.6 - Result of soil sampling x field mapping

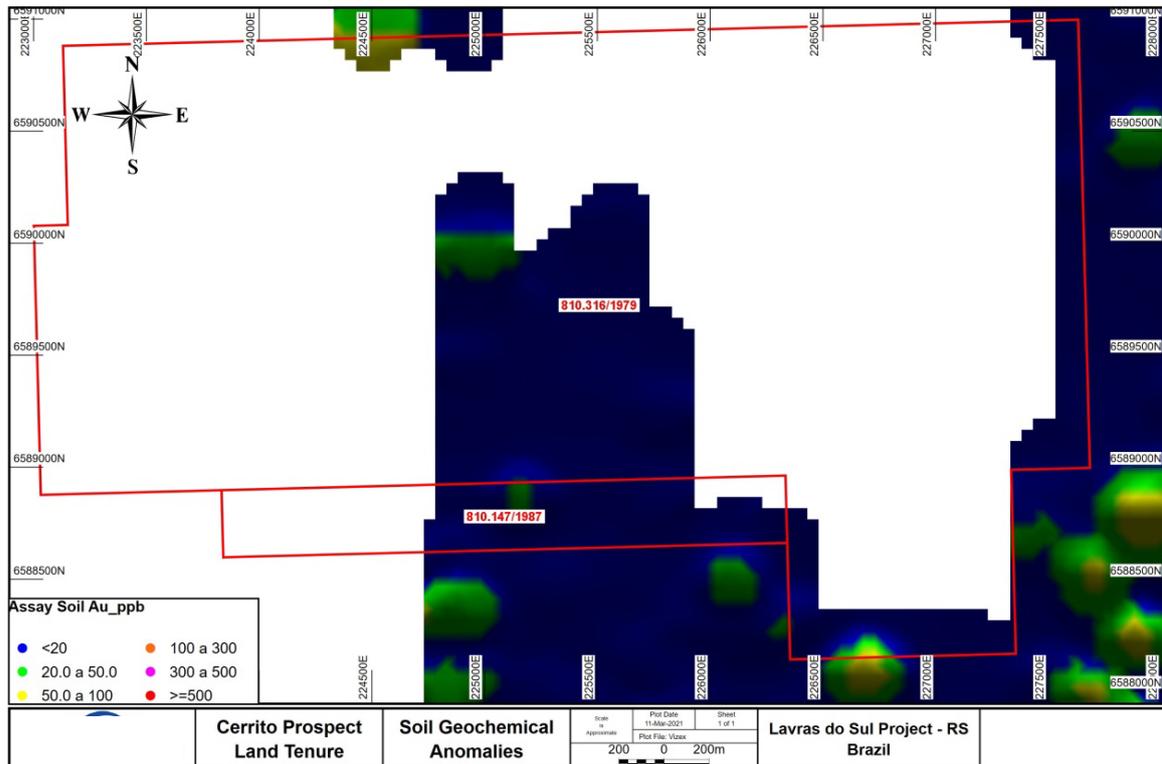


Figure 9.7 - Soil Anomalies – Au(ppb)

9.4 Airborne Geophysical survey

In April 2007, Prospectors Aerolevantamentos e Sistemas Ltda. was contracted by Amarillo Mineração do Brasil Ltda to execute a gradiometric and gamma spectrometric airborne survey, using a fixed wing aircraft, over a pre-defined block, situated in the state of Rio Grande do Sul. Flight operation began on July 07, 2007. A total of 12 flights were completed between July 07, 2007 and July 24, 2007 covering an area of 2,500.46 linear kilometers.

The technical objective of the airborne survey was to provide gradiometric and gamma spectrometric airborne geophysical data of highest quality and provide support for mineral exploration and geologic mapping studies conducted by Lavras.

Table 9.1 presents coordinates of Lavras do Sul block limits. Figure 9.8 shows a theoretical area flight lines map and the Table 9.2 presents flight parameters.

Table 9.1 - Lavras do Sul Block

AMARILLO MINERAÇÃO DO BRASIL LTDA				
LAVRAS DO SUL BLOCK				
All coordinates in SAD 69-Brazil (UTM ZONE 22 S)				
Corner	UTM Easting	UTM Northing	Longitude	Latitude
1	216941.94	6589667.06	-53.57.28.72	-30.47.32.11
2	216941.93	6594377.57	-53.57.24.04	-30.44.59.29
3	226749.85	6594366.57	-53.51.15.63	-30.45.07.91
4	226749.84	6597106.05	-53.51.13.01	-30.43.39.03
5	230170.05	6597106.05	-53.49.04.56	-30.43.41.83
6	230170.04	6589104.56	-53.49.12.13	-30.48.01.44
7	233634.85	6589104.55	-53.47.01.90	-30.48.04.26
8	233634.85	6583530.05	-53.47.07.12	-30.51.05.13
9	229290.57	6583530.06	-53.49.50.49	-30.51.01.59
10	229290.53	6580729.55	-53.49.53.16	-30.52.32.45
11	216977.24	6580729.57	-53.57.36.29	-30.52.22.08
12	216977.19	6584837.05	-53.57.32.20	-30.50.08.83
13	212785.04	6584822.05	-54.00.09.81	-30.50.05.68
14	212785.03	6589667.55	-54.00.04.92	-30.47.28.50
15 = 1	216941.94	6589667.06	-53.57.28.72	-30.47.32.11

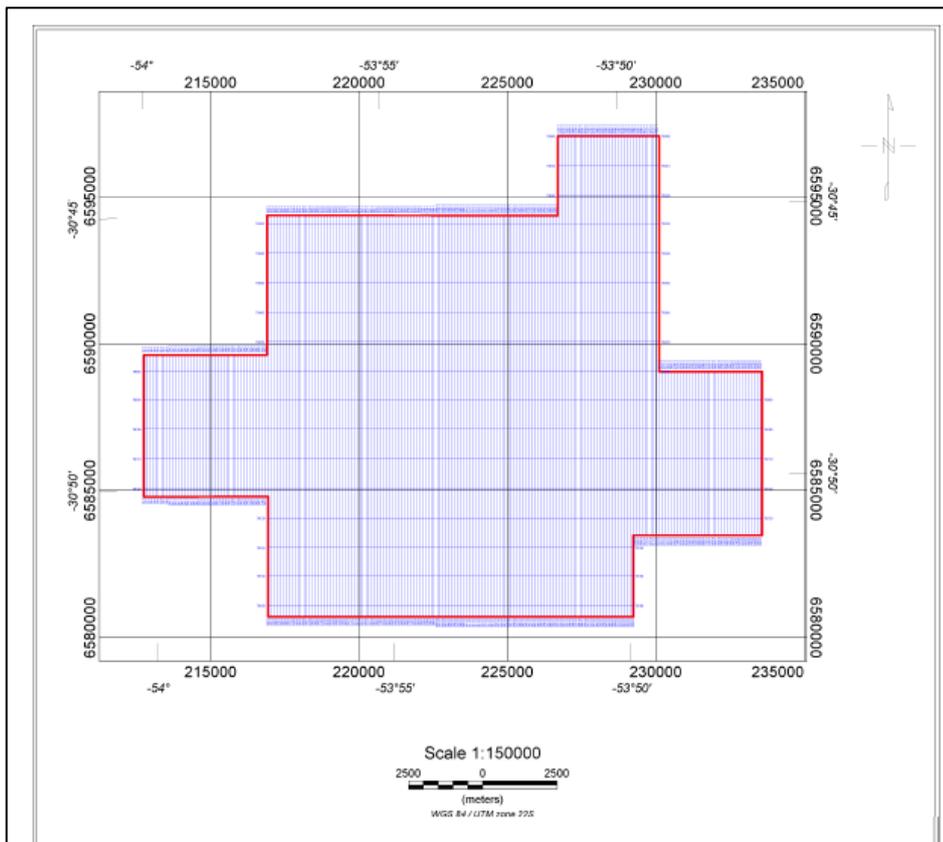


Figure 9.8 - Theoretical area flight lines map

Table 9.2 - Flight Parameters

PARAMETER	SPECIFICATION
LAVRAS DO SUL BLOCK	
Traverse Line Spacing	100 metres
Traverse Line Direction	0°(NS)
Tie Line Spacing	1000 metres
Tie Line Direction	90°(EW)
Aircraft Clearance	100 metres
Sample Interval (10hz)	7-8 metres (MAG) – 70-80 (SPEC)

BLOCK	AREA (KM ²)	TRAVERSE LINES				TIE LINES				TOTAL LINES	TOTAL LKM
		SPACING (m)	DIR	#	LENGTH (km)	SPACING (m)	DIR	#	LENGTH (km)		
LAVRAS DO SUL	226.64	100	0°	209	2269.68	1000	90°	17	230.79	226	2500.47
TOTAL	226.64	100	0°	209	2269.68	1000	90°	17	230.79	226	2500.47

9.5 Aircraft and Equipment

9.5.1 AIRCRAFT

A Piper Navajo/Chieftain PA 31-350 twin-engine aircraft, **PR-PRS** register, was used for this airborne survey. The airborne geophysical equipment's and auxiliary systems were installed in Canada. Preparation of aircraft included 'de-gaussing', using National Research Council facilities, at Uplands Airport, Ottawa, to assure maximum magnetic cleanness. Aircraft operates with a magnetic configuration of horizontal gradient (sensors on wings and tail).

9.5.2 GEOPHYSICAL SYSTEM ON BOARD

Magnetic Sensors

Cesium vapor sensors with optical pumping, Geometrics G822-A, were installed on wing tips and inside a stinger on the tail. Relative position of each sensor is represented in Figure 9.9.

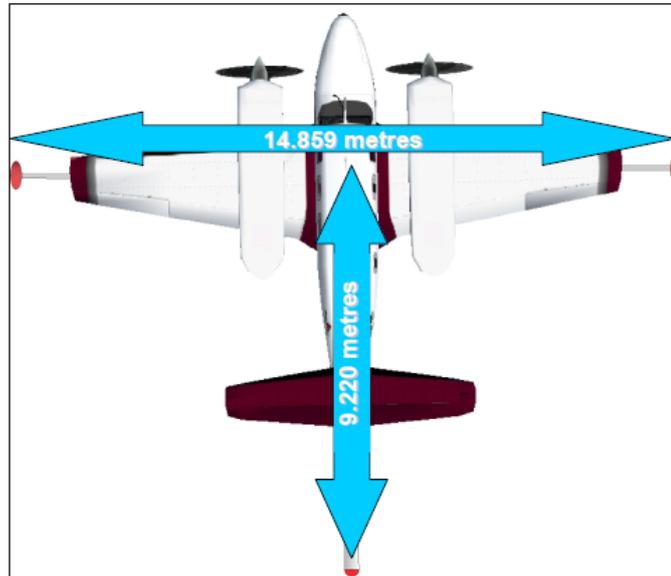


Figure 9.9 - Location of sensors on aircraft

Fluxgate Magnetometer

A three-axial fluxgate Develco 9200 magnetometer was installed inside tail stinger. Due to the physical proximity of primary sensors (Cesium) on aircraft, measured signals are influenced by dynamic effects caused by aircraft movement through earth magnetic field. The fluxgate magnetometer supplies directional magnetic data, which are subsequently used to correct, or compensate, primary magnetic signals from those effects.

Magnetic Compensator

A real time magnetic compensator RMS AADC II was installed in the equipment rack. This instrument processes signals emitted by Cesium sensors using internal counters and subsequently compensating processes signals from aircraft dynamic effects using directional magnetic data supplied by equipment.

Radar Altimeter

A Terra TRA 3000 radar altimeter coupled with TRI 40 Digital Pilot indicator, was installed to measure height of aircraft over terrain and supply a precise indication for pilot. This instrument supplies precise readings of heights from 40 feet up to a maximum height of 2,500 feet.

Barometric Altimeter

A Setra 276 transducer barometric altimeter was also installed in aircraft. Sampling at 10 Hz, data of those equipment's are used to produce draft pseudo-topographic data.

Receiver

A MID-TECH RX400P DGPS receiver is used to provide airborne survey positioning and time information.

Navigation Control

A Picodas AgNav P141-K Gold system was used to integrate positioning data supplied by DGPS, with digital flight plan allowing a precise navigation control. Real aircraft position, together with the trace of planned flight line are presented in the form of a 2D map for the operator. Cross track information is presented to the pilot, through an LCD indicator (pilot-indicator) mounted on the aircraft panel.

Data Acquisition

Magnetometer, compensation equipment, altimeter, and auxiliary sensors outputs, together with DGPS coordinates are recorded by the data acquisition system RMS-DGR33A. An analog recorder RMS-GR33 coupled to this equipment supplies a paper graph with various geophysical parameters. On-board operator monitors performance of geophysical equipment observing this graph. Data is recorded on compact flashes, allowing an efficient transfer of data, up to flight conclusion.

Video System

A coloured video camera JVC TK-9804U was used to image flight lines. Images are recorded digitally, through a video caption and, over images are recorded positioning information, such as, latitude/longitude or UTM coordinates, flight direction, flight velocity, hour, and date. Data is digitally stored on a DVR OEM PV380 and later recorded in DVD format.

9.5.3 GROUND MONITORING SYSTEM

9.5.3.1 Magnetometer

To measure the daily variations of earth magnetic field, a Pico Envirotec PGIS MMS-4 (HSMAG) magnetometer was used as base station, using a Cesium vapor sensor Scintrex CS-1 (or,

alternatively a nuclear precession magnetometer Gem GSM-19 Overhauser). Sensor output data are digitally recorded and synchronized with GPS time ('time-stamped') for a perfect integration with data collected on board.

9.5.3.2 Recording

Magnetic monitor output data and DGPS are digitally recorded on a dedicated laptop computer. A visual recording of the last 20 minutes activity are maintained on monitor screen (GEM GSM-19) allowing an updated and immediate evaluation of daily activities. At the end of each production flight, original data from GPS, magnetometer, and all other auxiliary systems are transferred to the central computer, by means of flash cards.

9.5.4 FIELD COMPILATION SYSTEM

For field processing a desktop computer was used with a Pentium IV-3.2Ghz processor. All digital data was checked in relation to its consistency and recorded in accordance with survey specifications.

9.5.5 AIRBORNE SURVEY PARAMETERS

Navigation	Global Positioning System GPS
<i>Interval between readings</i>	0.1 Second for Magnetometer 1.0 second for Spectrometry and GPS
<i>Air Velocity (nominal)</i>	270 km/h
<i>Sampling interval (nominal)</i>	8-10 meters (mag) and 80-100 meters (gamma)
<i>Data recorded on-board</i>	Radar Altimeter Barometric Altimeter Total Magnetic Field right wing (original) Total Magnetic Field tail (original) Total Magnetic Field left wing (compensated) Total Magnetic Field right wing (compensated) Total Magnetic Field tail (compensated) Total Magnetic Field tail (compensated) Fluxgate Three-axial (Vx, Vy, Vz) Time (Local and GPS) Original data from GPS. Spectrometric channels: - Total Count - Potassium channel, integral - Uranium channel, integral - Thorium channel, integral - Cosmic channel - Uranium channel, Up, integral - 256 spectral channels
<i>Base Station Recording</i>	Total Magnetic Field Original data from GPS
	Time (GPS)
<i>Flight line spacing</i>	100 meters
<i>Tie line spacing</i>	1,000 meters
<i>Nominal Height from Ground</i>	100 meters
<i>Flight lines direction</i>	0°
<i>Tie lines direction</i>	90°

9.5.6 DATUM AND PROJECTION

Spheroid: WGS84

Major Semi-axis (a): 6378137.000

Minor Semi-axis (b): 6356752.314

Local Datum: WGS84 (World)

Central Meridian: 51o W

Scale fator: 0.9996

False East: 500.000

False North: 10.000.000

Projection: UTM Zone: 22 S

9.5.7 FINAL PRODUCTS

(Lavras do Sul Block) –1:50,000 scale

- 1) Analytic signal map (tail sensor);
- 2) Ground digital model;
- 3) Lateral gradient map;
- 4) Longitudinal gradient map;
- 5) Magnetic field vertical derivate (Figure 9.10);
- 6) Total magnetic field map (tail sensor) reduced from IGRF;
- 7) Potassium radiometric concentration map, in %;
- 8) Total count radiometric concentration map, in $\mu\text{R/h}$ (Figure 9.11);
- 9) Thorium radiometric concentration map, in ppm (Figure 9.12);
- 10) Uranium radiometric concentration map, in ppm;
- 11) Total magnetic field (tail sensor);
- 12) K, U and Th elements ternary radiometric distribution map.

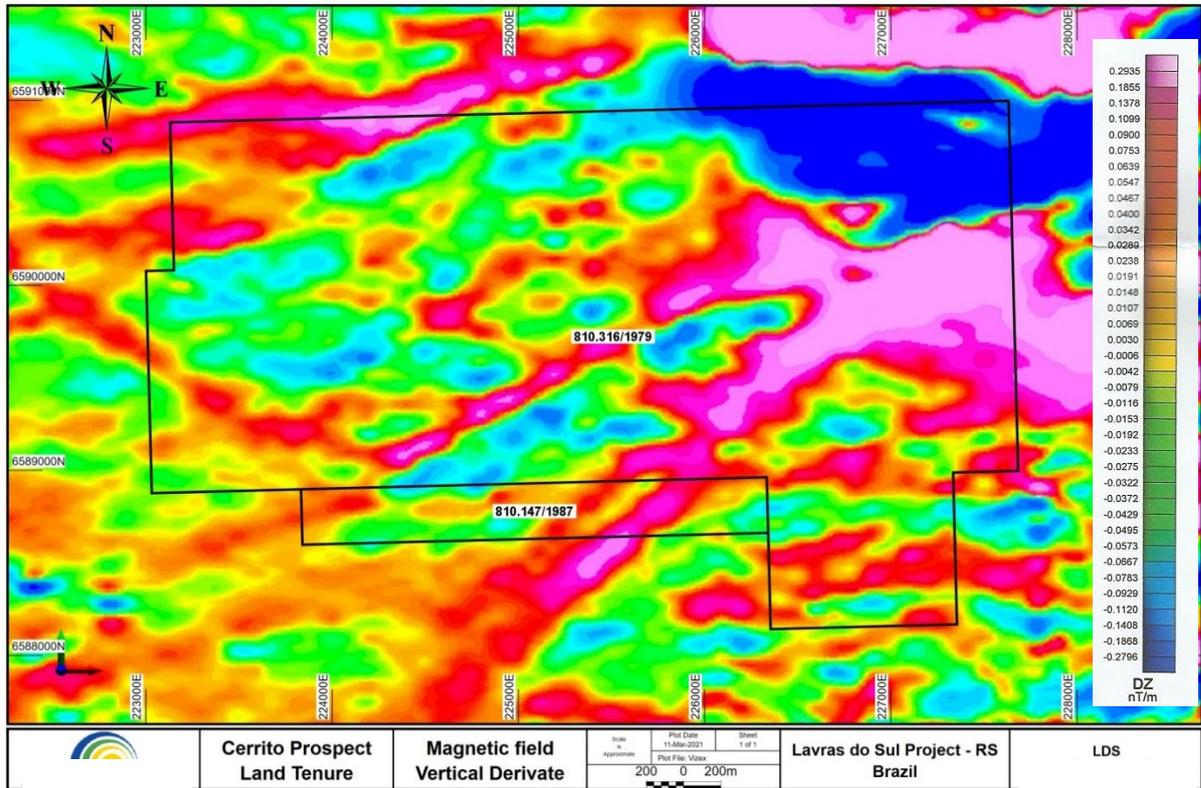


Figure 9.10 - Magnetic field vertical derivate

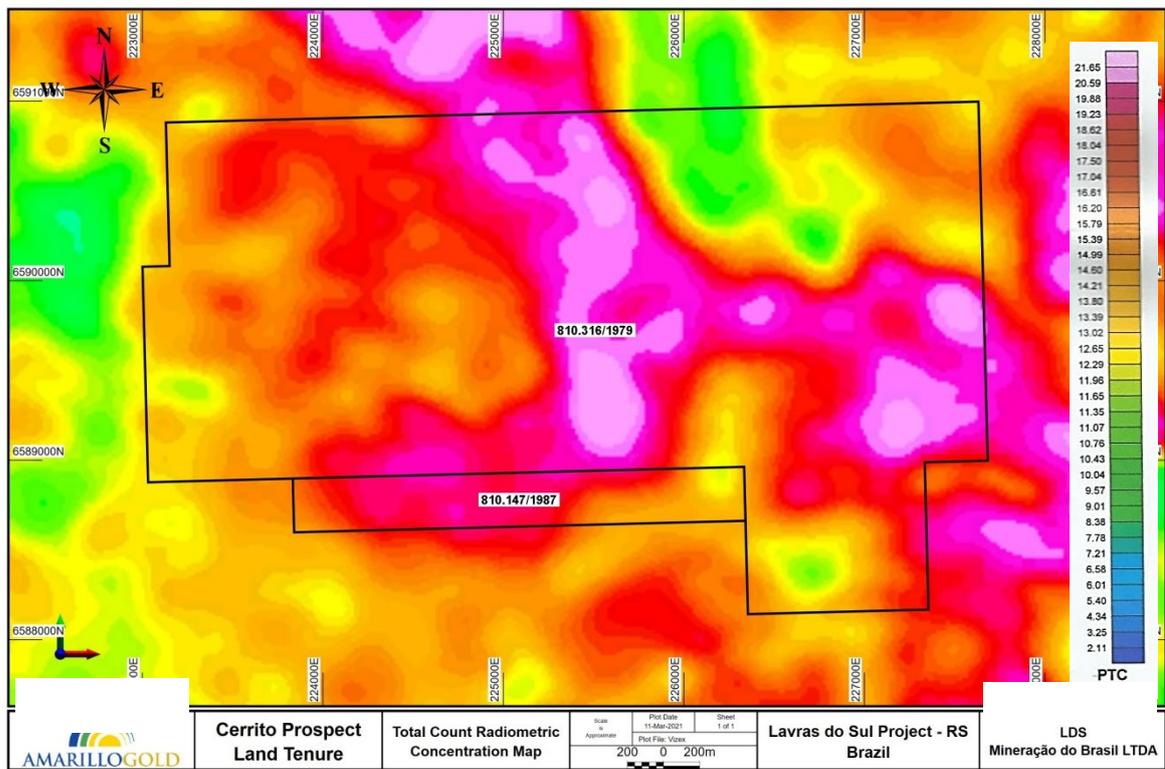


Figure 9.11 - Total count radiometric concentration map

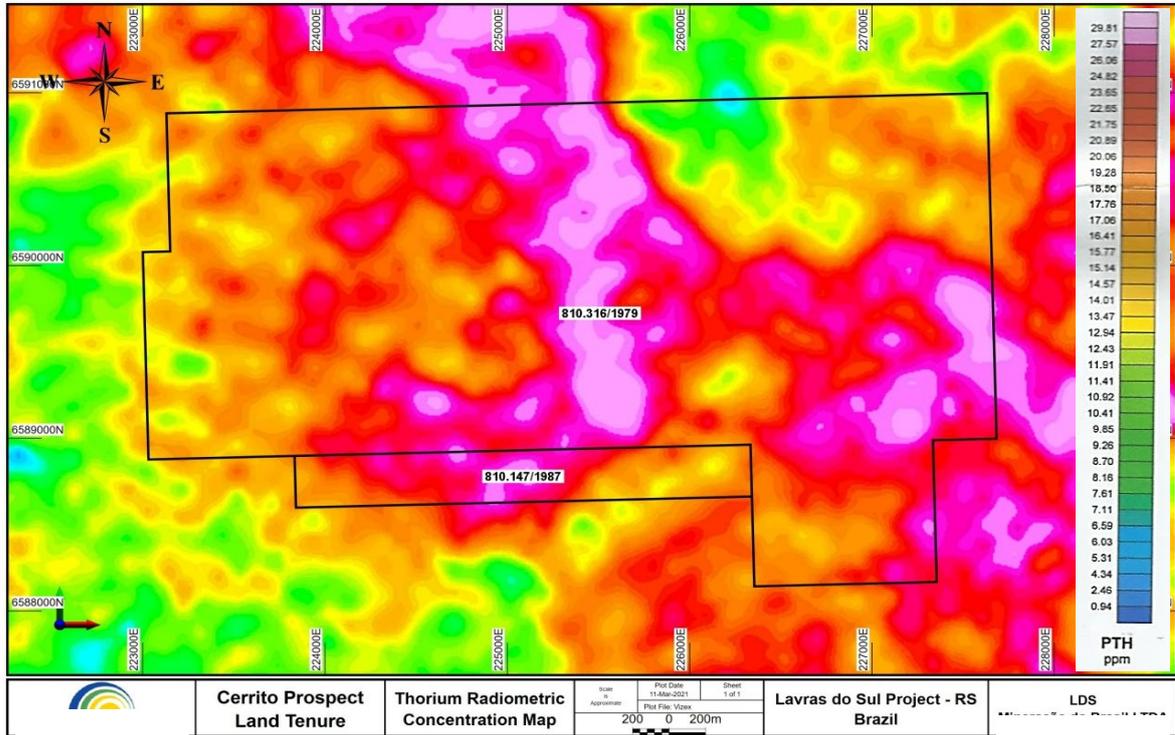


Figure 9.12 - Thorium radiometric concentration map

ITEM 10: DRILLING

10.1 Historical Drilling

10.1.1 CBC AND RTDM DRILLING

Between 1984 and 1985 CBC carried out detailed surface exploration and drilling at Cerrito. A total of 3,368.30 m in 40 holes was drilled (Table 10.1, Figure 10.1). Not much usable material remains from this work as the core storage shed was burned in a forest fire.

In 2005 RTDM completed 793.85m of drilling in 04 holes at Cerrito (Table 10.1, Figure 10.2). This core is intact and kept at LDS Mineração storage facility at Lavras do Sul. The original logging and the assay results have been imported into the LDS Mineração drilling database so that they can be used in the geological and resource modeling.

The RTDM data is used in the Lavras Gold resource calculation. The original data is available and is of a very high quality. RTDM carried out QA/QC monitoring of their sampling and assaying. The half core that was not used for assay sampling is stored in the Lavras Gold core storage shed and is in a good condition.

Table 10.1 - CBC and RTDM drill holes

CBC	1984 to 1989	40	3,368.30	C-F01-84 to C-F01-89 C-F02-84 to C-F02-89 C-F03-84 to C-F03-89 C-F04-84 to C-F04-89 C-F05-84 to C-F05-89 C-F06-84 to C-F06-89 C-F07-84 to C-F07-89 C-F08-84 to C-F08-87 C-F09-84 to C-F12-84	CBC
RTDM	2005	4	793.85	2005LG006DD to 2005LG009DD	RTDM

10.2 Amarillo Gold Drilling

Amarillo Gold carried out drill programs on the Cerrito Prospect from 2006, drilling a total of 10,430.85 metres between December 2006 and May 2012. See details in Table 10.2 and the location of the drill holes in Figure 10.3.

Table 10.2 - Cerrito Drilling

Company	Year	Nº of Drill Holes	Metres Drilled	Drill holes	Contractor	Drilling Program
AGC	2007 to 2008	27	3,814.80	LDH-004 to LDH-011 LDH017to LDH-035	AGC/MT	1
AGC	2010 to 2011	18	5,645.40	LDH-163 to LDH-183	AGC/Geologica	2
AGC	2012	03	970.65	LDH-225 to LDH-227	AGC/SBPM	3
TOTAL		48	10,430.85			

The drilling was completed by three different companies: Minas Trading (MT), Geologica and Sondagem Brasileira de Pesquisa Mineral (SBPM).

During the first drilling program Amarillo drilled used HQ/HW core. During the second drilling program the drill holes were drilled using HQ/HW down to 100m and NQ after 100m (LDH-163 to LDH-169). During the drilling program the drill holes from the hole LDH-170 were drilled using HQ/HW only in the unconsolidated material, and NQ in consolidated rock. In the last drilling program, the drill holes used HQ/HW only in the unconsolidated material, and NQ in consolidated rock (LDH-225 to LDH-227).

The core recovery is very good in the fresh rock with over 98% recovery average. The core recovery for the HQ core in the Saprolite is 80% and the oxidized rock is 85%. The recovery in diameter NQ is 99% in oxidized rock and fresh rock. The core recovery for the Amarillo drilling at the Cerrito Prospect is summarized in the Table 10.3.

Table 10.3 - Core recovery

Weathering	Core Size	Recovery %	Metres Drilled	Nº Runs
Soil	HQ	84%	107.90	145
Soil	HW	91%	38.75	52
Saprolite	HQ	80%	70.50	87
Saprolite	HW	92%	12.80	11
Oxide	HQ	85%	249.75	226
Oxide	HW	92%	147.90	288
Oxide	NQ	99%	81.10	52

Weathering	Core Size	Recovery %	Metres Drilled	Nº Runs
Fresh	HQ	97%	3,846.30	2,565
Fresh	HW	96%	9.35	10
Fresh	NQ	99%	5,845.80	2,404



Figure 10.3 - Diamond drill rig at Cerrito

The drill holes are drilled mainly on 26 sections lines. The section lines have north-south directions and are spaced 50 m apart. Drill hole azimuths vary ranging from 10° to 340° (Figure 10.4).

There are two holes to the east of the drilling grid, about 1500m away (LDH-034 and LDH-035) drilled to check the possibility of the extension of mineralization.

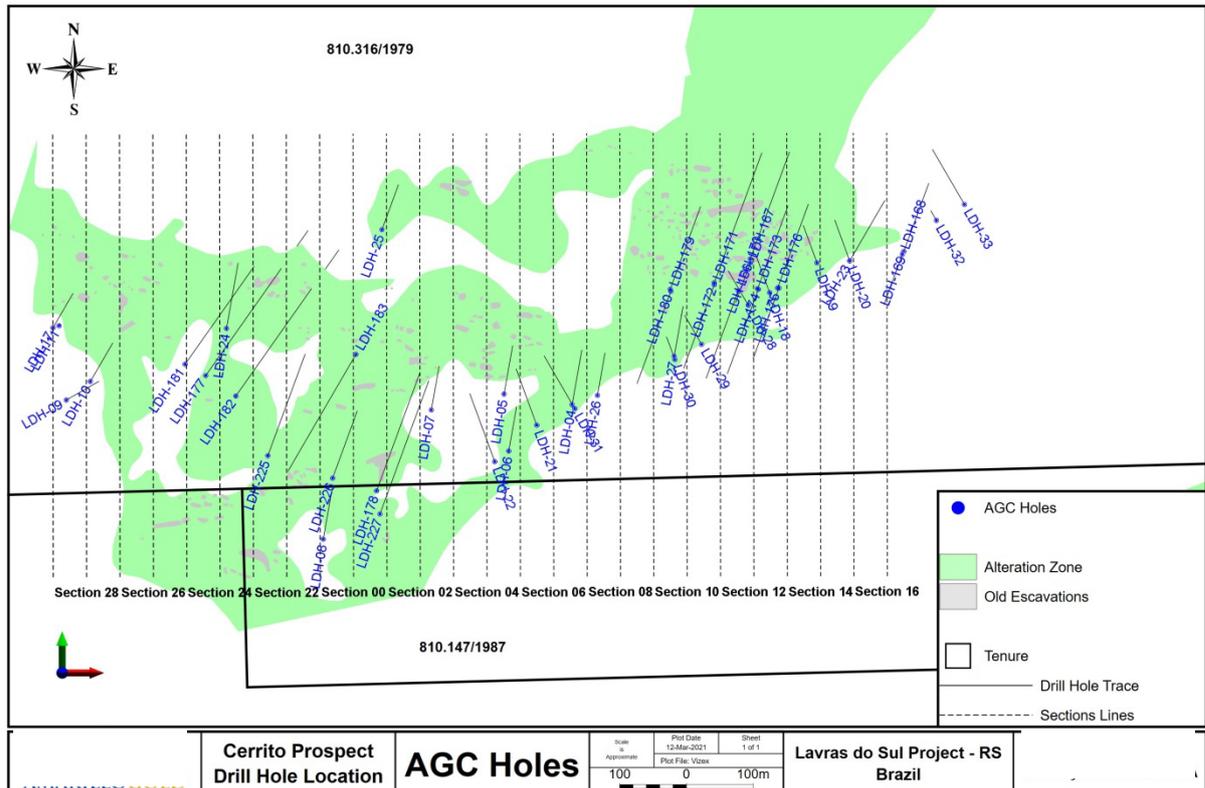


Figure 10.4 - Cerrito drill hole location

In November 2020 a field survey was completed to check the quality of the drilling bases at the Cerrito Prospect. Of the total of 92 holes drilled, (4 RTDM holes, 40 CBC holes and 48 AGC holes) 21 holes had drilling bases lost in the field. These holes are documented in Table 10.4.

Table 10.4 - Misplaced Holes

Drill Hole	Status	Company
2005LG006DD to 2005LG007DD	Misplaced	RTDM
C-F01-85, C-F01-87, C-F01-89 C-F03-89, C-F04-89, C-F05-84 C-F05-89, C-F06-84, C-F06-86 C-F06-89, C-F07-84, C-F07-86 C-F08-84, C-F09-84, C-F10-84	Misplaced	CBC
LDH-06, LDH-018 LDH-27 to LDH-28	Misplaced	AGC

10.3 Surveys

The holes drilled by CBC, RTDM and AGC have been surveyed using RTK DGPS to Omnistar. The coordinates are therefore to an accuracy of $\pm 0.10\text{m}$. The survey using the DGPS was carried out by the LDS Mineração do Brasil LTDA team, through training provided by the Canadian company KIVI Geoscience Inc. The UTM coordinate data for the drillholes were obtained in two Datums: SAD69 and WGS84.

The holes LDH-017 to LDH-022 and the hole LDH-032 did not have the deviation readings performed due to a defect in the equipment used to perform this measurement. For these holes, the dip and azimuth measurements of the hole mouth were used. The hole LDH-011 had no deviation reading as it was a hole located in the wrong position, and abandoned with 7m of depth.

For the drill holes LDH-004 to LDH-010, LDH-023 to LDH-031 and LDH-033 to LDH-035, measurements were taken on average every 50m using the Tropari instrument made by Pajari Instruments Ltda.

For the drill holes LDH-166 to LDH-183 measurements were taken every 30m using the Globaltech's Pathfinder instrument.

For the drill holes LDH-225 to LDH-227 measurements were taken every meter using the Peewee instrument made by Devido.

The drill holes do not have strong deviation or curvature. The maximum deviation over the whole drill hole is 20.98° in the azimuth and 6.9° in the inclination. The average deviation in the azimuth is 9.4° and the inclination is 0.73° .

There is little magnetite in core and the magnetic susceptibility for the core is measured every meter for all LDH holes. The magnetic susceptibility readings are low, in generally, and will not affect the down hole survey readings. The maximum reading is 92.59×10^3 SI Units. The average reading is 5.39×10^3 SI Units.

All azimuth readings are magnetic readings. To correct the reading to true north 13° was subtracted from the magnetic reading to account for the magnetic declination.

ITEM 11: SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 Sampling Method and Approach

Systematic and rigorous inspection, checking, and monitoring procedures have been implemented and maintained throughout all drilling campaigns. Internal protocols are also maintained for marking boxes, records, and LOGGING, as described below.

All core boxes are marked with a stamped metal plate showing the core box number, drill hole number and depth of the core by the drilling contractor. Markers showing the depth at the end of each core run and the core recovery are stamped on metal plates that are nailed inside the core boxes, Figure 11.1.



Figure 11.1 - Core boxes clearly marked

At the end of each shift the drilling contractor transports the sealed core boxes from the drill site to the core logging facility in the town of Lavras do Sul. The Lavras Gold technical team check the end depths and the core recovered against the markers (Figure 11.2 and Figure 11.3).



Figure 11.2 - Drilling manoeuvres conference



Figure 11.3 - Marking the test boxes meter by metre

The geotechnical log is prepared by an Lavras Gold technician who records the number of fractures in each run and the length of core over 15cm long to HQ and 10cm long to NQ. From this the RQD percentage is calculated. Rock strength, fracture roughness, fracture fill and the weathering are also measured and recorded (Figure 11.4).

Project: *Cerrito*

Target: *Cerrito*

Date logged	Logged by	Hole ID	From	To	Interval	Rec	Fract	>15 cm	Rock Strength	Fract Roughness	Fracture infill	Weathering	Core size
09/01/11	CE	LH-103	37.40	38.21	0.81	0.90	5	0.0	S	M	Sa, cl, cal, PR		
			38.21	39.05	0.84	1.40	7	0.64	S	M	Sa, cl, cal, PR	FA	1/2
			39.05	40.15	1.10	3.07	13	1.70	S	H	Sa, cl, cal, PR		
			40.15	41.30	1.15	1.55	9	0.20	M	H	Sa, cl, cal, PR		
			41.30	42.40	1.10	0.42	8	0.0	M	M	Sa, cl, cal, PR		
			42.40	43.70	1.30	0.30	8	0.0	M	M	Sa, cl, cal, PR		
			43.70	44.20	0.50	2.13	6	2.51	S	H	cl, Sa, cal, PR		
			44.20	44.25	0.05	3.08	2	3.08	S	H	cl, Sa, cal, PR		
			44.25	45.30	1.05	3.08	7	3.23	S	H	Sa, cl, cal, PR		
			45.30	45.40	0.10	3.05	0	3.05	S	M			
			45.40	45.45	0.05	3.05	7	3.60	S	M			
			45.45	45.55	0.10	3.01	0	2.86	S	M	Sa, cl, cal		
			45.55	46.50	0.95	3.58	9	3.74	S	H	cl, cal, cal, cal		
			46.50	47.70	1.20	1.39	3	0.85	S	H	cl, cal, cal, cal		
			47.70	47.85	0.15	1.34	3	0.80	S	M	cl, cal, cal		
			47.85	48.55	0.70	3.22	3	3.10	S	H	cl, cal, cal		
			48.55	49.55	1.00	3.22	3	3.06	S	H	cl, cal, cal		
			49.55	50.65	1.10	3.20	5	3.50	S	H	Horn, cl, cal		
			50.65	51.65	1.00	3.01	3	3.01	S	M	Horn, cl, cal		
			51.65	52.05	0.40	3.04	8	1.94	S	M	Horn, cl, cal		
			52.05	53.15	1.10	3.05	8	3.05	S	H	Sa, cl, cal, cal		
02/10/11	CE	LH-103	85.70	87.45	1.75	1.38	5	1.33	S	H	Sa, Horn, cal	FA	1/2
			87.45	88.80	1.35	1.35	5	1.15	S	H	cl, Sa, cal		
			88.80	89.95	1.15	2.13	10	1.15	S	H	cl, Sa, cal		
			89.95	91.85	1.90	2.30	8	0.30	M	M	Sa, cl, cal, cal		
			91.85	94.25	2.40	2.30	17	1.30	S	H	Sa, cl, Horn, cal		
			94.25	95.25	1.00	3.10	11	3.10	S	H	Horn, cl, Sa, cal		
			95.25	96.10	0.85	3.10	8	3.60	M	M	cl, Sa, cal, Horn		
			96.10	97.05	0.95	2.96	8	2.20	S	H	cl, Sa, cal, Horn		
			97.05	97.70	0.65	3.05	9	3.00	S	H	Sa, cl, cal		
			97.70	98.40	0.70	3.05	7	3.00	S	H	Sa, cl, cal		
			98.40	99.10	0.70	3.04	13	1.40	S	M	cl, Sa, Horn, cal		

Figure 11.4 - Geotechnical log

The geological logging includes the lithology, percentage of sulphides, percentage of minerals, alteration, weathering, alpha angles for fractures and veins (Figure 11.5).

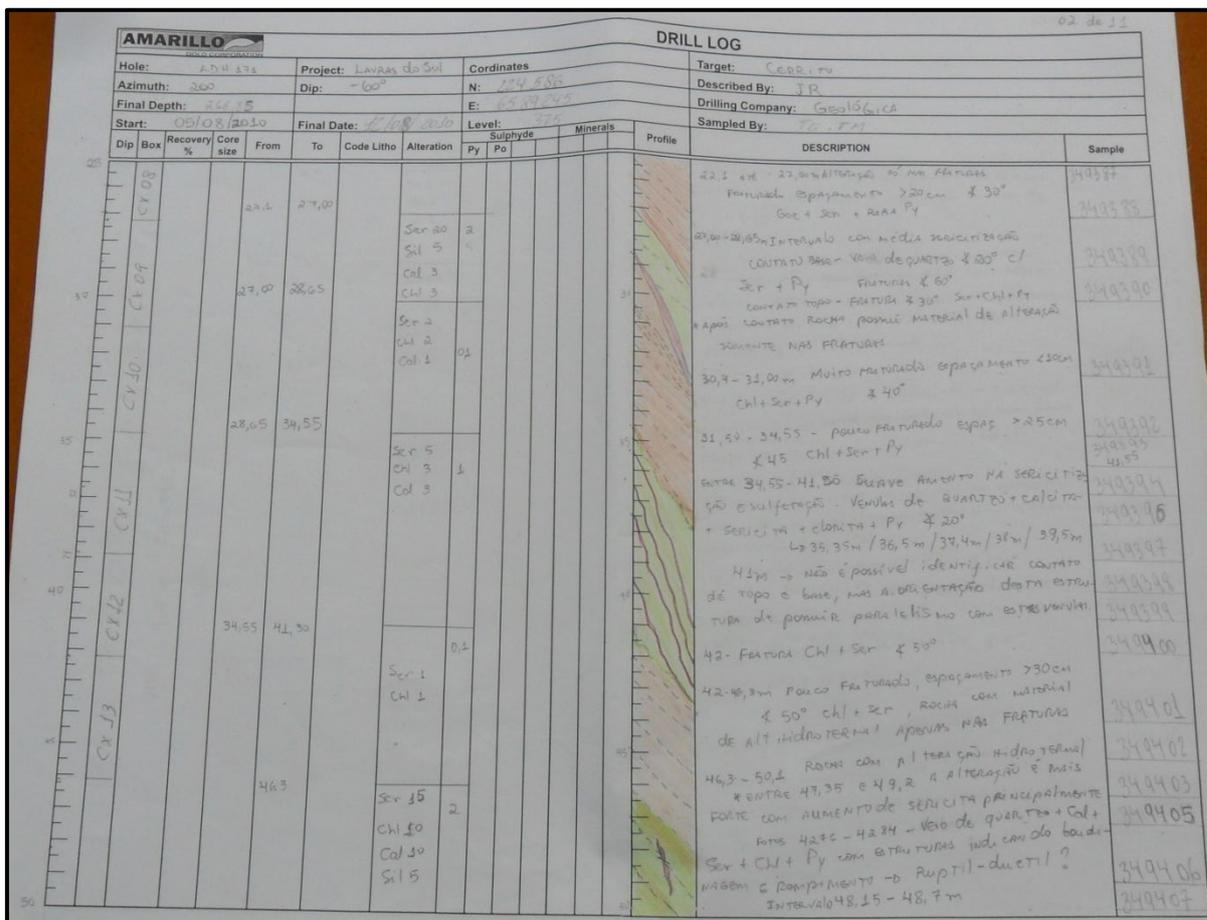


Figure 11.5 - Geological log

Each core box is photographed with a white board indicating the box number and the meters drilled (Figure 11.6).



Figure 11.6 – Core box photo

The magnetic susceptibility is measured using one reading for every meter (Figure 11.7).

PP9 02

AMARILLO

MAGNETIC SUSCEPTIBILITY

PROJECT: LAVRAS CONSULT-RS

HOLE: LDH-178 DATE: 16-10-2010 INITIALS: M.M

Depth (m)	X 10 ³ SI units	Depth (m)	X 10 ³ SI units	Depth (m)	X 10 ³ SI units	Depth (m)	X 10 ³ SI units
121,00	13,9	151,00	1,75	181,00	7,05	211,00	8,29
122,00	9,80	152,00	6,46	182,00	7,91	212,00	2,74
123,00	3,84	153,00	5,58	183,00	5,31	213,00	1,40
124,00	10,3	154,00	4,35	184,00	13,3	214,00	12,4
125,00	3,49	155,00	1,51	185,00	3,97	215,00	8,27
126,00	13,06	156,00	1,46	186,00	9,97	216,00	1,41
127,00	5,57	157,00	0,01	187,00	4,11	217,00	0,36
128,00	3,58	158,00	0,32	188,00	7,85	218,00	1,91
129,00	5,88	159,00	0,19	189,00	6,84	219,00	1,49
130,00	10,01	160,00	0,35	190,00	7,63	220,00	0,40
131,00	6,02	161,00	0,32	191,00	4,07	221,00	7,61
132,00	9,86	162,00	0,13	192,00	4,71	222,00	10,3
133,00	1,62	163,00	0,21	193,00	5,26	223,00	4,83
134,00	9,63	164,00	0,03	194,00	5,17	224,00	8,17
135,00	9,35	165,00	0,06	195,00	4,57	225,00	4,26
136,00	8,44	166,00	0,38	196,00	8,38	226,00	5,32
137,00	13,05	167,00	0,27	197,00	2,17	227,00	2,26
138,00	10,05	168,00	0,45	198,00	2,52	228,00	8,63
139,00	11,02	169,00	1,33	199,00	10,5	229,00	5,85
140,00	8,66	170,00	0,01	200,00	3,63	230,00	2,48
141,00	11,03	171,00	1,281	201,00	6,62	231,00	4,23
142,00	11,02	172,00	0,11	202,00	10,1	232,00	11,0
143,00	3,63	173,00	7,92	203,00	6,98	233,00	0,51
144,00	6,63	174,00	8,14	204,00	6,22	234,00	5,79
145,00	1,60	175,00	7,48	205,00	5,12	235,00	5,09
146,00	7,73	176,00	1,25	206,00	4,82	236,00	7,25
147,00	2,42	177,00	0,08	207,00	2,55	237,00	0,80
148,00	3,09	178,00	0,39	208,00	0,29	238,00	0,40
149,00	1,49	179,00	5,80	209,00	0,26	239,00	0,06
150,00	6,47	180,00	2,89	210,00	8,53	240,00	0,07

Figure 11.7 - Magnetic susceptibility log

Once the geotechnical, geological, photographs and the magnetic susceptibility logs have been checked, the geologist marks the core for sampling. The core is joined together, and a line is marked where the core should be cut (Figure 11.8).

The samples intervals are marked (Figure 11.9). The sample size is generally 1m samples in the mineralized zones and 2.5 metres in areas with little visible mineralization. Exception the samples are marked in the lithological contacts, hydrothermal alteration zones, veins, dykes and in the changes of diameters HQ to NQ. In these situations, the samples may have different intervals than 1.0m and 2.5m, however not less than 50cm, nor greater than 3.0m.



Figure 11.8 - Line marked where the core should be cut



Figure 11.9 - Sample intervals (yellow)

The drill core is stored in the urban area of the municipality of Lavras do Sul in three covered warehouses rented by Lavras Gold Corp., where the core samples are protected from the weather (Figure 11.10). All core boxes from the RTDM and Amarillo drilling exist. A fire at a previous storage area destroyed some of the CBC core boxes.



Figure 11.10 - Core storage area at Lavras do Sul

The core is cut using a diamond saw (Figure 11.11). One half of the core is placed in a plastic bag with a card indicating the sample number. The sample is then placed in a second plastic bag and another card with the sample number is placed in the sample bag so that it is visible.



Figure 11.11 - Core cutting using a diamond saw

Quality control samples are inserted into sample batches. Approximately every 25 samples blanks, duplicates and standards are inserted. For standards, three different types are used in each sample lot, with low, medium and high gold grade. These are placed in sample bags and given sequential number by the geologist. The bag is sealed with string.

The standards used were purchased from ACME ANALYTICAL LABORATORIES SUDAMERICA (Santiago, Chile), CDN Resource Laboratories Ltd. (British Columbia), and ROCKLABS Ltd. (New Zealand), and are listed in Table 11.1 below:

Table 11.1 - Standards Used

Laboratory	Standard		Average Auppb	+1std dvtm
ACME ANALYTICAL LABORATORIES SUDAMERICA	STD 1		4208	4360
Laboratory	Standard		Average Auppm	Standard Deviations
CDN Resource Laboratories Ltd.	GS-1P5A		1.37	± 0.12 g/t
	GS-1P5B		1.46	± 0.12 g/t
	GS-5C		4.74	± 0.28 g/t
	GS-P3		0.30	± 0.04 g/t
	GS-P5B		0.44	± 0.04 g/t
Laboratory	Standard		Average Auppm	Standard Deviations
ROCKLABS Ltd.	OxE86		0.613	0.021 ppm
	SF45		0.848	0.028 ppm
	OxH55		1.282	0.038 ppm
	Si54		1.780	0.034 ppm
	SK43		4.086	0.093 ppm
	SN50		8.685	0.180 ppm
	OXE74		0.615	0.017 ppm

The sample bags are placed in large white bags where the number of the bag, type of sample and the sample sequence numbers are written (Figure 11.12). The bags are sealed with string and tape and an address label added. A form is filled out with the batch number, samples sequence and analysis desired. A copy of this form is sent with the samples and copies emailed to ACME or ALS CHEMEX and the geologist. A copy of the form is stored in Lavras Gold office.

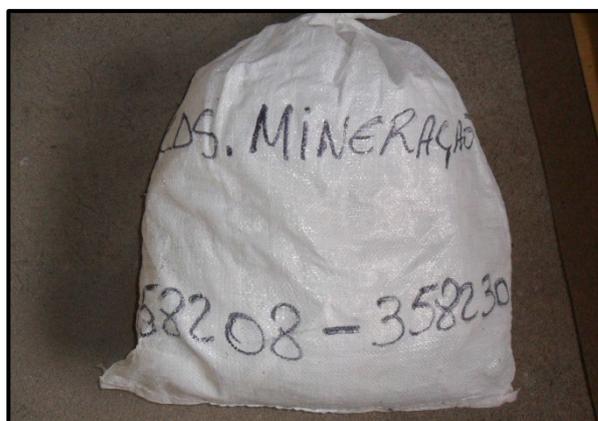




Figure 11.12 - Sample bags

An invoice is prepared indicating the type of material, weight, and the destination (Figure 11.13). Copies are sent by email to the ACME or ALS Chemex laboratory and geologists, one copy is filed at the Lavras office and two copies are sent with the bags. The bags are transported from Lavras do Sul to Canoas city using the company Monte Claro (2007 to 2010) and company Turijuí (2011) then from Canoas to ACME or ALS Chemex lab in Goiás state (Figure 11.14). In 2012, the company Planalto Transportes collected the samples at the company's headquarters in Lavras do Sul, sending the samples to the respective analysis laboratory.

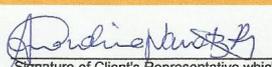
Requisition for Laboratory Services - South America						
		Acme Analytical Laboratories S.A. Av. Claudio Arrau 7152 Pudahuel, Santiago, Chile		E-mail / web: info.sa@acmelab.com www.acmelab.com Phone: +56 2 748 6771 Fax: +56 2 748 6772		
LABORATORY USE ONLY				Acme Job Number:		
Number of Parcels:	Carrier & Waybill:	Date Received:				
CLIENT INFORMATION		Project: Lavras do Sul	Shipment ID: LDS_PM_12_4114	PO#:		
Primary Client Contact: (certificate will bear this name)		Invoice To:		<input type="checkbox"/> Same as Primary Contact		
Company: LDS Mineração do Brasil LTDA		Company:		buddy@amarillogold.com		
Address: Praça Carlos Chagas, 49, sala 504. Bairro Lourdes CEP:30170-913 – Belo Horizonte - MG		Address:		rickbrown@attglobal.net		
				camila@amarillogold.com		
Attn: Luís Carlos F. da Silva		Attn:		luana@amarillogold.com		
Email: luis@amarillogold.com		Email:		ana@amarillogold.com		
Phone: (55-31)32615974 Fax:		Phone:		Fax:		
Additional Copies To:			Data Format (check box)			
Name:	Company:	Email:	<input type="checkbox"/> CSV	<input type="checkbox"/> XLS	<input type="checkbox"/> PDF	
Name:	Company:	Email:	<input type="checkbox"/> CSV	<input type="checkbox"/> XLS	<input type="checkbox"/> PDF	
Name:	Company:	Email:	<input type="checkbox"/> CSV	<input type="checkbox"/> XLS	<input type="checkbox"/> PDF	
Name:	Company:	Email:	<input type="checkbox"/> CSV	<input type="checkbox"/> XLS	<input type="checkbox"/> PDF	
ANALYSES						
Sample Type	Quantity	Sample Sequence: From - To		Prep Code	Analytical Package or Elements Wanted	Rush x2 quote price
Drill Core	324	357845	- 358168		ICP-MS 1DX2 FA G601	<input type="checkbox"/>
		-	-			<input type="checkbox"/>
		-	-			<input type="checkbox"/>
		-	-			<input type="checkbox"/>
		-	-			<input type="checkbox"/>
		-	-			<input type="checkbox"/>
		-	-			<input type="checkbox"/>
		-	-			<input type="checkbox"/>
		-	-			<input type="checkbox"/>
		-	-			<input type="checkbox"/>
		-	-			<input type="checkbox"/>
TOTAL	324					<input type="checkbox"/>
Special Instructions:						
STORAGE & DISPOSAL: BELOW SECTION MUST BE FILLED IN BEFORE ANY PREP OR ANALYSIS WILL BEGIN						
Rejects (Rock and Core)		Pulps (All samples)		Return Address: <input type="checkbox"/> Same as Primary Contact		
<input type="checkbox"/> Dispose at 90 days		<input type="checkbox"/> Dispose at 90 days		Company:		
<input type="checkbox"/> Return at Cost		<input type="checkbox"/> Return at Cost		Address:		
<input type="checkbox"/> Paid Disposal after 90 days		<input type="checkbox"/> Paid Disposal after 90 days				
<input checked="" type="checkbox"/> Paid Storage after 90 days		<input checked="" type="checkbox"/> Paid Storage after 90 days		Attn:		
<input type="checkbox"/> RJSV (Soil, till, sediment, vegetation)				Tel:		
<small>Failure to indicate instructions for rejects and pulps, or failure to pay storage charges upon notice, will result in disposal of all samples at the Client's cost. Soil, till, sediment and vegetation rejects will be immediately disposed of after sample preparation unless prep code RJSV is indicated above. All soils originating outside of British Columbia, Canada cannot be returned when shipped to Vancouver, Canada and DIP2 fees will apply. Exceptions apply, see Terms and Conditions in our current price brochure.</small>						
AUTHORIZATION						
This Requisition for Laboratory Services, when signed by the Client's representative and accepted by Acme, becomes a binding contract on the terms herein and the Terms and Conditions in our current price brochure found at www.acmelab.com . Client hereby requests Acme to perform the above services						
						Date: 20/06/12
Signature of Client's Representative which binds the Client						

Figure 11.13 - Analysis request

NOTA FISCAL AVULSA Nº 821524

SAÍDA ENTRADA

EMITENTE
 NOME/RAZÃO SOCIAL: AMARILLO MINERAÇÃO DO BRASIL
 ENDEREÇO: R. SANTO ANTÔNIO 385 BAIRRO/DISTRITO: CENTRO
 MUNICÍPIO: LAURAS DO SUL UF: RS
 FONE/FAX: (55) 3282-2048 CEP: 97390.000
 CNPJ/CPF: 42799486/0001-10
 INSCRIÇÃO ESTADUAL: 10-347-277-4

NATUREZA DA OPERAÇÃO: SIMPLES REMESSA

DESTINATÁRIO / REMETENTE
 NOME/RAZÃO SOCIAL: ACME ANALITICA LABORATORIOS LTDA
 ENDEREÇO: AV. NOSSA SENHORA DE LURDES VILASANTA Qd 06 LTO1 CEP: 74912-595
 MUNICÍPIO: APARECIDA DE GOIÁS FONE/FAX: (62) 3264-8537 UF: GO
 CNPJ/CPF: 02861-221/0001-80
 INSCRIÇÃO ESTADUAL: 10-347-277-4

DATA DA EMISSÃO: 17-11-09
 DATA LIMITE PARA EMISSÃO: 00.00.00

DADOS DO PRODUTO

CÓD. PROD.	DESCRIÇÃO DOS PRODUTOS	CL. FISC.	SITUAÇÃO TRIBUTARIA	UNID.	QUANT.	VALOR UNITÁRIO	VALOR TOTAL	ALÍQUOTAS ICMS IPI	VALOR DO IPI
	AMOSTRAS PARA ANÁLISE			UN	21	7.00	147.00		

CÁLCULO DO IMPOSTO

BASE DE CÁLCULO DO ICMS	VALOR DO ICMS	BASE DE CÁLCULO ICMS SUBSTITUIÇÃO	VALOR DO ICMS SUBSTITUIÇÃO	VALOR TOTAL DOS PRODUTOS
				147.00
VALOR DO FRETE	VALOR DO SEGURO	OUTRAS DESPESAS ACESSÓRIAS	VALOR TOTAL DA NOTA	
			147.00	

TRANSPORTADOR / VOLUMES TRANSPORTADOS

NOME/RAZÃO SOCIAL: MONTE CLARO COMERCIO E TRANSP.	FRETE POR CONTA: 1. EMITENTE	PLACA DO VEÍCULO	UF	CNPJ/CPF
ENDEREÇO: AV. KENEDY 597	2. DESTINATÁRIO		RS	03119560/000
MUNICÍPIO: CACAPAVA DO SUL			RS	096/2743456
QUANTIDADE: 21	ESPECIE: VOLUME	NÚMERO	PESO BRUTO	PESO LÍQUIDO
				765kg

DADOS ADICIONAIS

INFORMAÇÕES COMPLEMENTARES: COBRAR FRETE NESTE ENDEREÇO R. FERNAMBUCO 353 SALA 409, BAIRRO FUNCIONARIOS - BELO HORIZONTE CEP - 30130-151 CNPS - 42799486/0001-10

RESERVADO AO FISCO

RECEBEMOS OS PRODUTOS CONSTANTES DA NOTA FISCAL INDICADA AO LADO

DATA DO RECEBIMENTO: IDENTIFICAÇÃO E ASSINATURA DO RECEBEDOR

NOTA FISCAL AVULSA Nº 821524

Figure 11.14 - Invoice for shipping the samples

On receipt of the samples, they are checked against the shipping documents and an email is sent confirming receipt.

11.2 Database and data capture

The logging is carried out on paper logs and then is input into Excel spreadsheets. There is one spreadsheet for each drill hole with separate worksheets for each data type. The raw data is imported into the Geotic Log database. The database is used to merge the logging and sampling data with the assay certificates. The merged data can be exported back in Excel and for analysis of the QAQC.

11.3 Density Determination

A total of 218 samples have been measured for density: 193 rock samples were analyzed in 10 holes and 25 saprolite samples, analyzed in 8 different holes.

The samples were sent to the SGS Geosol laboratory, for rock density analysis where the Bulk Density method (PHY04V) was used to determine apparent density, where:

- 1) Prior to the analysis beginning, water temperature is measured and the weight of the aluminium billet in the air immersed in the water is determined.
- 2) After drying the sample, it is wrapped in PVC film and weighed.
- 3) This same sample is immersed in water, and a new weighing is done.

The density calculation is as follows:

$$SG = \frac{\text{Air weight}}{\text{Air weight} - \text{Water weight}} * \text{Correction Factor}(\text{°C water})$$

Element	Lower Limit	Upper limit	Unit
Density	1	10	g/cm ³

The average density for the monzogranite was 2.63 g/cm³ (Table 11.2).

Table 11.2 - Monzogranite density

Description	All Samples
Average	2.63
Max	2.80
Min	2.40

Samples were sent to the SGS Geosol laboratory, whose density for saprolite was analyzed using the density determination method in alcohol – pycnometer (PHY03F), real density, where:

- The pycnometer is tared with ethyl alcohol.
- The sample is weighed on the pycnometer and added to the alcohol. We check the pycnometer and weigh it again.

This method is applicable for samples with lower density or with superfine grain sizes that generate surface tension and supernatant without water.

The average density for the saprolite was 2.62 g/cm³ (Table 11.3).

Table 11.3 – Saprolite densities

Description	Density g / cm ³
Average	2.62
Max	2.73
Min	2.56

11.4 Sample Preparation, Analyses and Security

The samples collected by Amarillo have been assayed in the ALS Chemex laboratory in Belo Horizonte and the ACME Labs in Vancouver (Table 11.4).

The ALS Chemex preparation laboratory crushes the half core samples to 70% -2MM and then split using a riffle splitter. A 1000-gram split is pulverized 85% passing 75 microns. The gold fire assays are carried out on a 50 grams sample with an AA finish. All samples are assayed using the Au-AA24 process with a detection limit of 0.005 ppm and maximum detection limit of 10 ppm gold.

The ICP assays are carried out using 35 Element Aqua Regia ICP-AES analysis.

The ACME samples are prepared in their preparation laboratory in Goiás state Brazil. The 1 kg of sample is crushed to 85% passing 150 mesh, split 250g and pulverize to 85% passing 200 mesh (R-200). The samples are then shipped to Acme Vancouver where they are analyzed by the by ICP and Fire Assay. The ICP process is for sample splits of 15g are leached in hot (95°C) Aqua Regia and analyzed using ICP-MS for 36 elements.

For the drill holes LDH-004 to LDH-005 and LDH-017 to LDH-032, 0.50 g sample leached with 3 ml 2-2-2 HCL-HNO₃-H₂O at 95°C for one hour diluted 10ml analysed by ICP/ES & MS (GROUP 1F). Precious metals by Fire Assay from 50 sample (GROUP 6).

For the drill holes LDH-006 to LDH-010, 0.25g sample leached with HCLO₄-HNO₃-HCL-HF for one hour diluted 10ml analysed by ICP/ES & MS (GROUP 1E). Precious metals by Fire Assay from 50 sample (GROUP 6).

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Title: NI 43-101 Technical Report Mineral Resource for Cerrito Gold Prospect	Page. : 92 / 176

For the drill holes LDH-166 to LDH-183 and LDH-225 to LDH-227 all samples were assayed using Aqua Regia digestion and ICP-MS analysis (1DX2). Precious metals are analyzed by Fire Assay (G601) on a 30g split with a lower detection limit 0.005 ppm and an upper limit of 10 ppm. All samples with values of greater than 10 ppm are automatically assayed using G6 Lead collection fire assay fusion with a gravimetric finish.

In the opinion of the author, Dr. Myadzel, the sample preparation, security, and analytical procedures used in the work conducted for mineral analysis in connection with the mineral resource estimate in this report are acceptable and consistent with generally accepted industry best practices. Specifically, in his opinion: the sampling procedures are good, and the samples are good quality and generally representative; the drill core handling, logging and sampling protocols are consistent with conventional industry standards and conform to generally accepted practices; and the analytical procedures are appropriate for the collection of data suitable for a mineral resource estimate.

Table 11.4 – Preparation Laboratory and Type of Analyses

Hole	Laboratory	Preparation	Analysis	Test Wgt (g)
LDH-004 to LDH-005 LDH-017 to LDH-032	ACME		GROUP 1F ICP 0.50 g sample leached with 3 ml 2-2-2 HCL-HNO3-H2O at 95 deg. C for one hour diluted 10ml analysed by ICP/ES & MS	0.50
			GROUP 6 Fire Assay Precious metals by Fire Assay from 50 sample	
LDH-006 to LDH-010	ACME		GROUP 1E ICP 0.25 g sample leached with HCLO4-HNO3-HCL-HF for one hour diluted 10ml analysed by ICP/ES & MS	0.25
			GROUP 6 Fire Assay Precious metals by Fire Assay from 50 sample	
LDH-033 to LDH-035	ALS CHEMEX	Prep-31B Fine crushing 70% <2mm Pulverize 1000g to 85% <75 um	Au-AA24 Fire Assay Au 50g FA AA Ore Grade Au 50 FA AA	
			ME-ICP41 ICP 35 Element Aqua Regia ICP-AES	
LDH-166 to LDH-183 LDH-225 to LDH-227	ACME	R200 Crush split and pulverize 250g drill core to 200 mesh	1DX2 ICP Aqua Regia digestion ICP-MS analysis	15
			G601 Fire Assay Fire Assay fusion Au by ICP-ES	30
			G6 Grav Assay Fire assay Au by gravimetric finish	30

11.1 QA/QC Analyses

ACME ANALYTICAL LABORATORIES LTD was hired as the main laboratory by Amarillo for physical preparation and chemical analysis of the resource samples of the Cerrito Prospect.

Two drilling campaigns and chemical analysis were carried out, and the verifications were carried out together for both campaigns. The verifications and conclusions are described in the following items.

The following files <<Lavras_BD_11_05_2015_CERRITO.xlsx>> and <<RELAÇÃO DE REQUISIÇÕES.xlsx>> with the routine description for 54 batches of chemical analysis were delivered to VMG Consultoria. A total of 1212 quality control samples were selected. Of these 1209 samples, 466 are duplicates, 384 are Standards and 359 are Blanks. The following elements were analyzed: gold.

The topics below present the accuracy of the quality control analyzes, referring to the percentage difference between an analysis and its repetition. For example, an accuracy of 10% would mean that the initial analysis and the repetition differ by 10%.

11.2 SAMPLING PRECISION

Sampling accuracy was assessed using the repeated analysis method, for gold. Out of a total of 7842 samples, 466 samples were reanalyzed, which represents 5.94% of the total number of assays.

The internal quality control data were presented as a single data batch, without separations of the samples by dates of sample collection. Samples with a gold grade below 0.3 ppm and above 3.07 ppm were excluded for analysis. High and low grades show the greatest variation when sampled. Two evaluative methods were used, Simple Linear Regression and QQ (Quantis Quantis) Plot.

The tests for gold ppm presented a precision of 33.7%. These high precision values are derived from some outlying samples. It is believed that these outliers are probably due to nugget effect during the sampling or chemical analysis process. If such outlying values are excluded from consideration, then the accuracy of tests would be within the required confidence interval.

The correlation coefficient of the regular control samples values is above 0.81. Thus, one can conclude that the tests for the gold (ppm) of the studied ore were conducted with satisfactory and acceptable precision. The results of data processing are shown in Figure 11.15 and Figure 11.16.

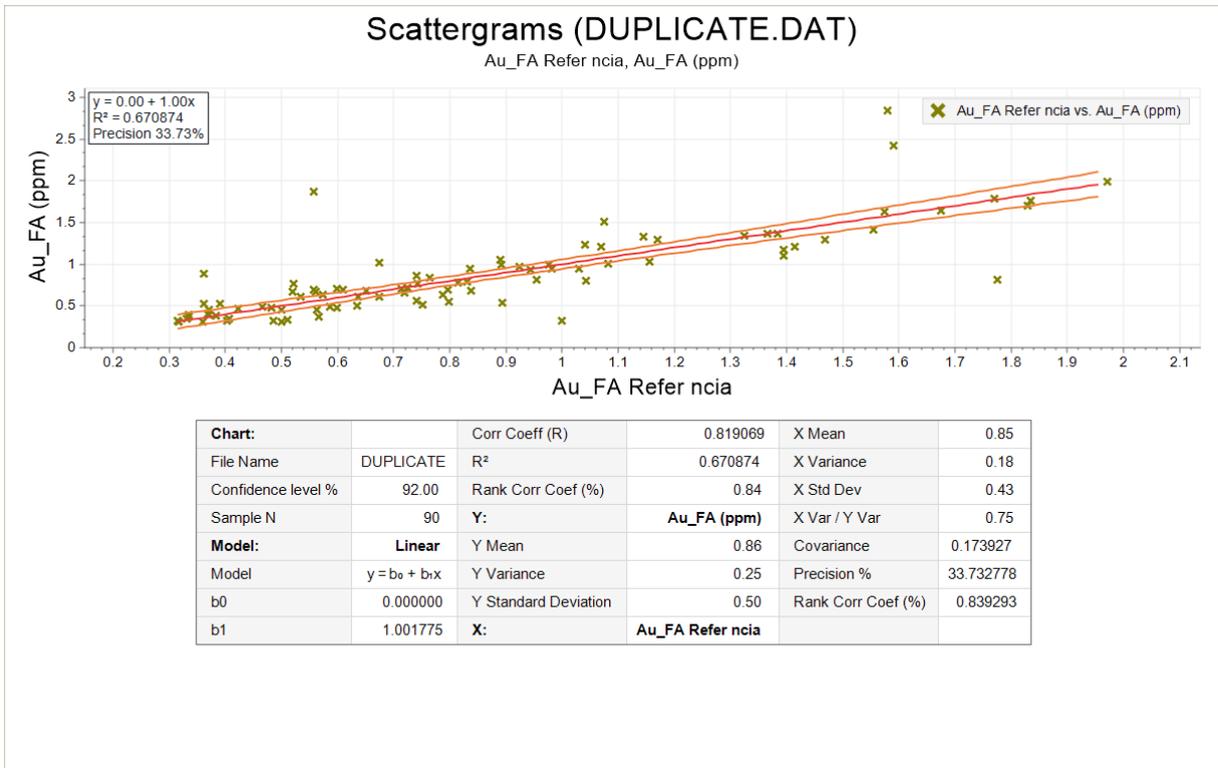


Figure 11.15 - Linear Regression Diagram for Au ppm, field duplicate, class: all data, internal control results, ACME ANALYTICAL LABORATORIES LTD

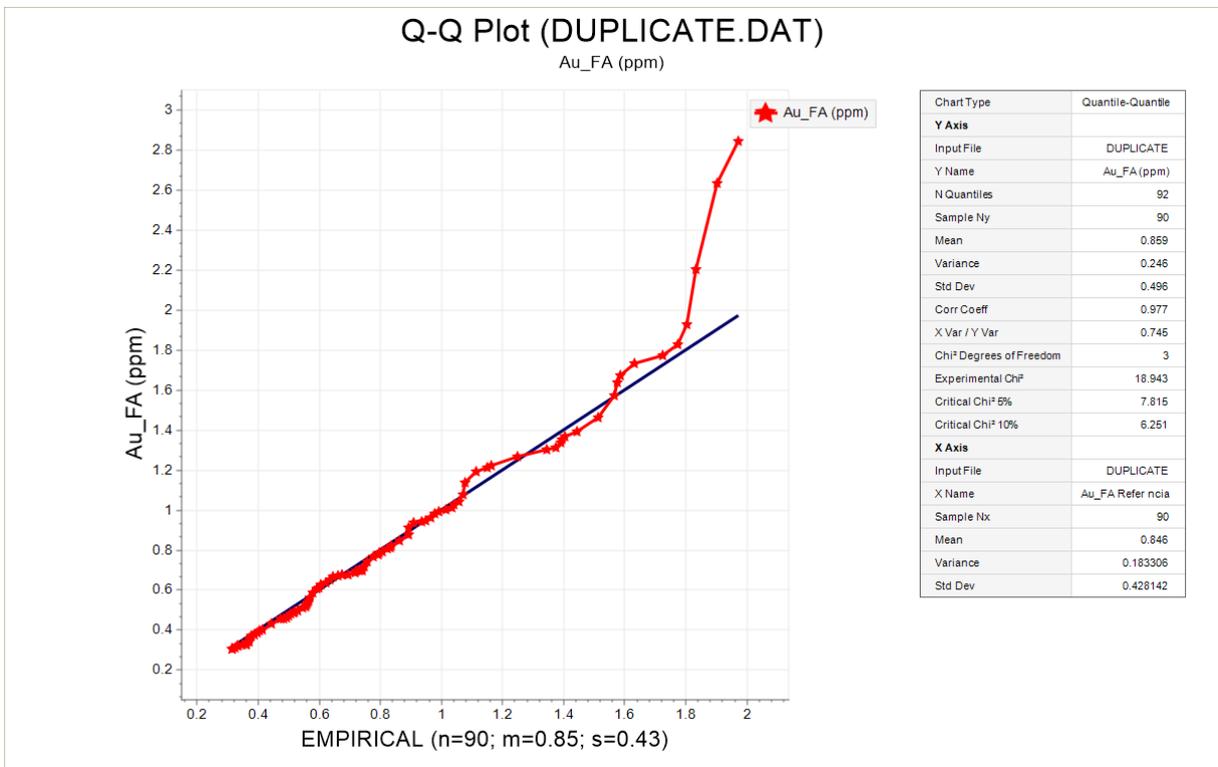


Figure 11.16 - Quantis plotting for Gold ppm, field duplicate, class: all data, internal control results, ACME ANALYTICAL LABORATORIES LTD

11.3 STANDARDS

For the quality control, 384 Standards were used, representing 4.89% of the total amount of the analyzed samples.

Reference of the used standard samples:

GS1P5A - certificate from CDN Resource Laboratories Ltd. (22 analyses results)

GS1P5B - certificate from CDN Resource Laboratories Ltd. (75 analyses results)

GS3C - certificate from CDN Resource Laboratories Ltd. (83 analyses results)

GS5C - certificate from CDN Resource Laboratories Ltd. (27 analyses results)

GSP3 - certificate from CDN Resource Laboratories Ltd. (25 analyses results)

GSP5B - certificate from CDN Resource Laboratories Ltd. (79 analyses results)

OXE86 - certificate from ROCLABS (70 analyses results)

OXH55 - certificate from ROCLABS (1 analyze result)

RTZ95-H - **certificate is not localized** (24 analyses results)

RTZ95-L - **certificate is not localized** (21 analyses results)

SF45 - certificate from ROCLABS (1 analyze result)

SK43 - certificate from ROCLABS (1 analyze result)

SN50 - certificate from ROCLABS (66 analyses results)

SP37 - certificate from ROCLABS (38 analyses results)

STD1 - certificate from ACME Analytical Laboratories S.A. (34 analyses results)

Si54 - certificate from ROCLABS (22 analyses results)

In general, the analyzed results, provided by the ACME ANALYTICAL LABORATORIES LTD, do not present problems when compared with the known results. The analyzed data are shown in Figure 11.17 to Figure 11.28.

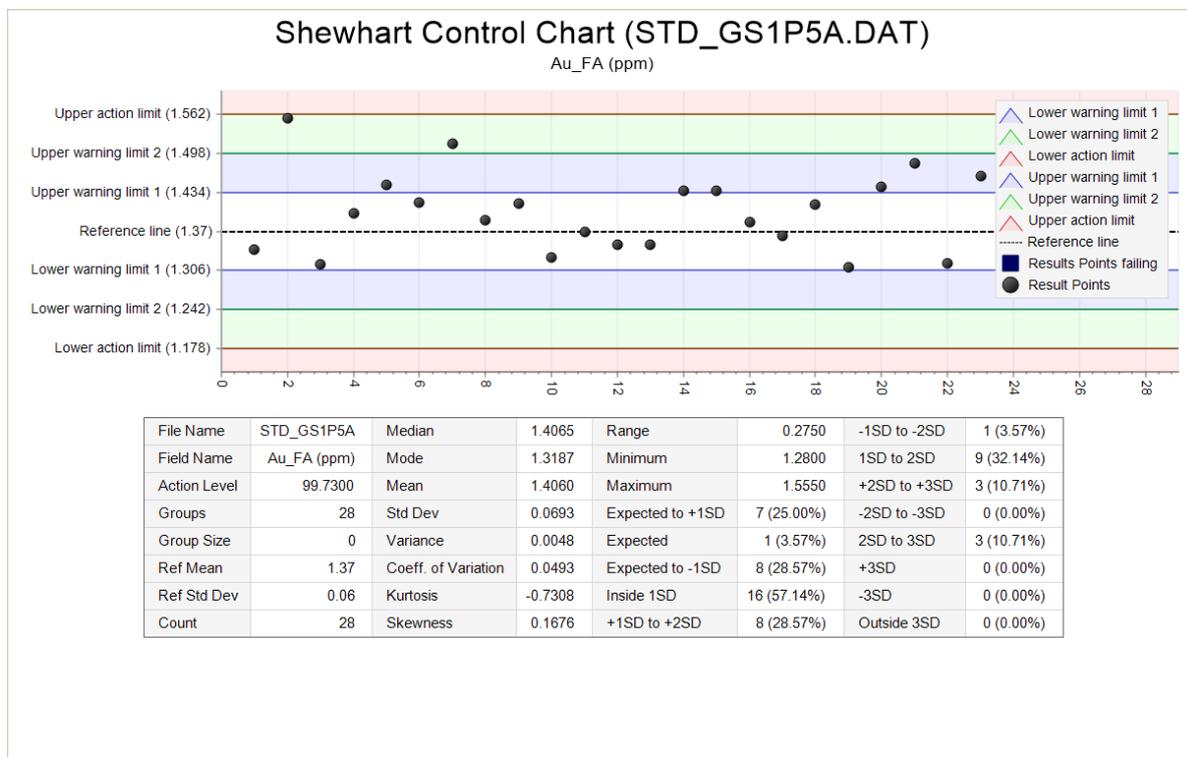


Figure 11.17 - Standard GS1P5A, element Au ppm, ACME ANALYTICAL LABORATORIES LTD.

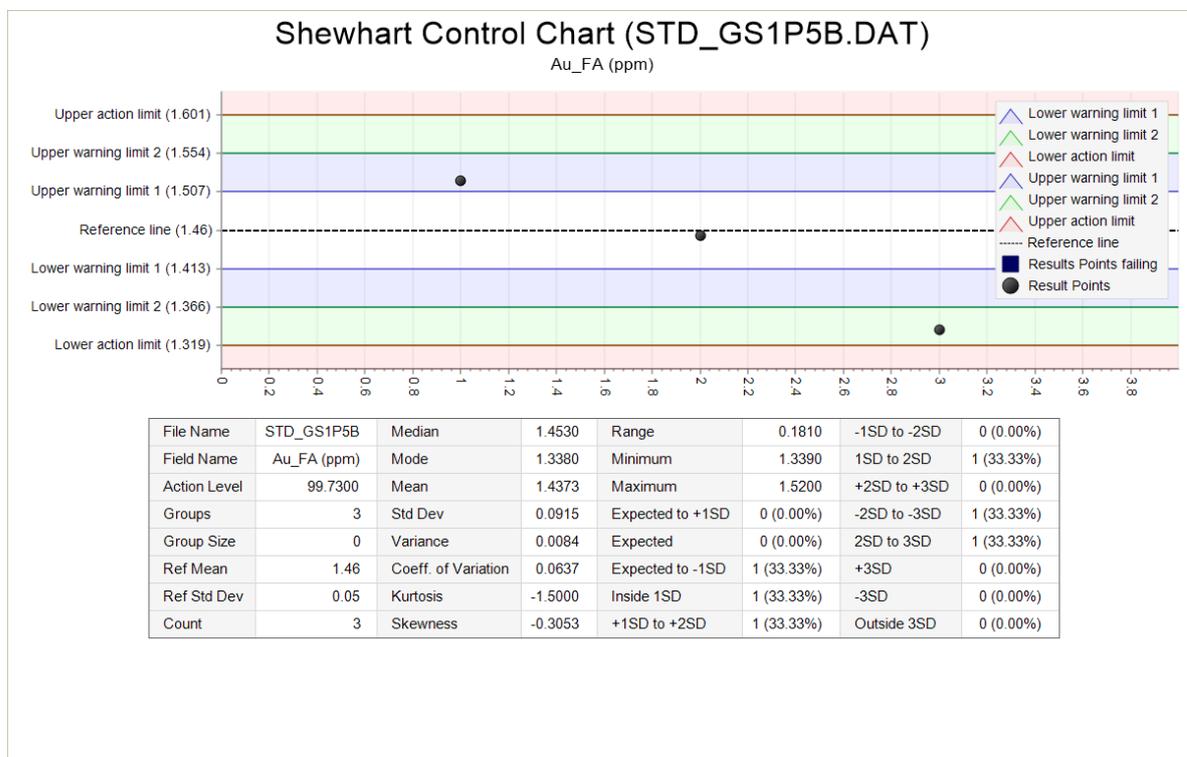


Figure 11.18 - Standard GS1P5B, element Au ppm, ACME ANALYTICAL LABORATORIES LTD.

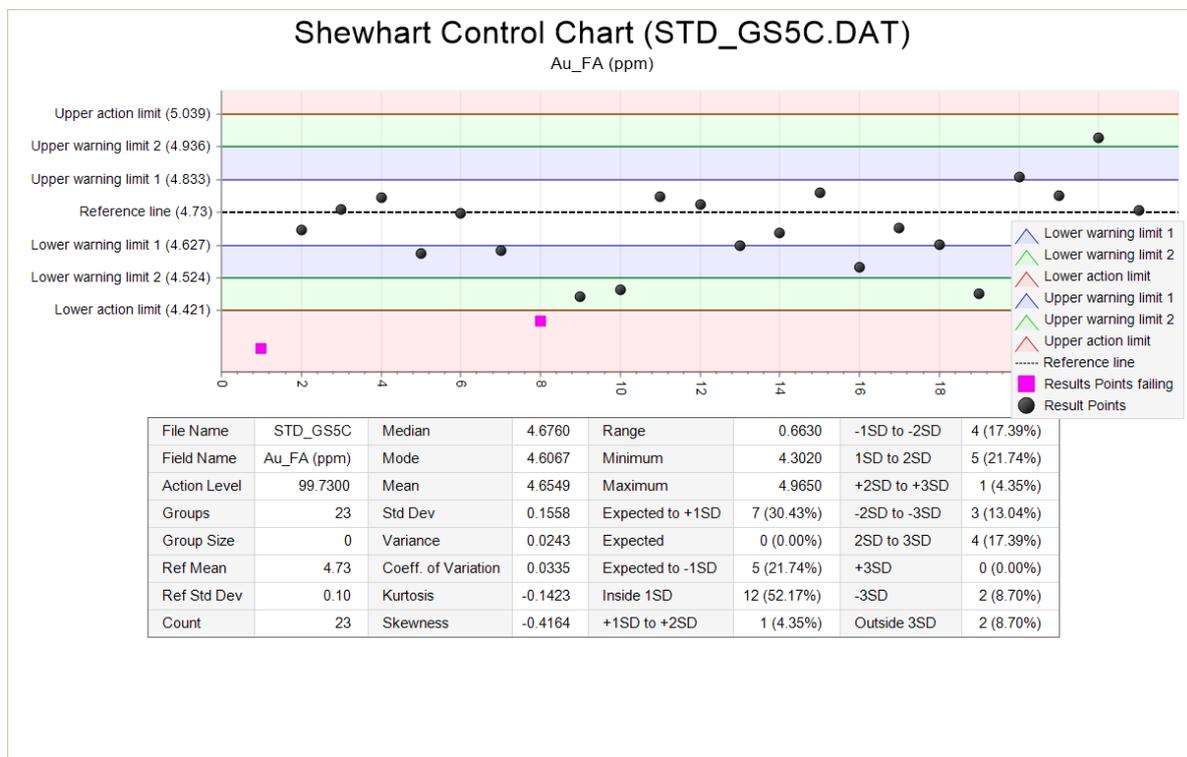


Figure 11.19 - Standard GS5C, element Au ppm, ACME ANALYTICAL LABORATORIES LTD.

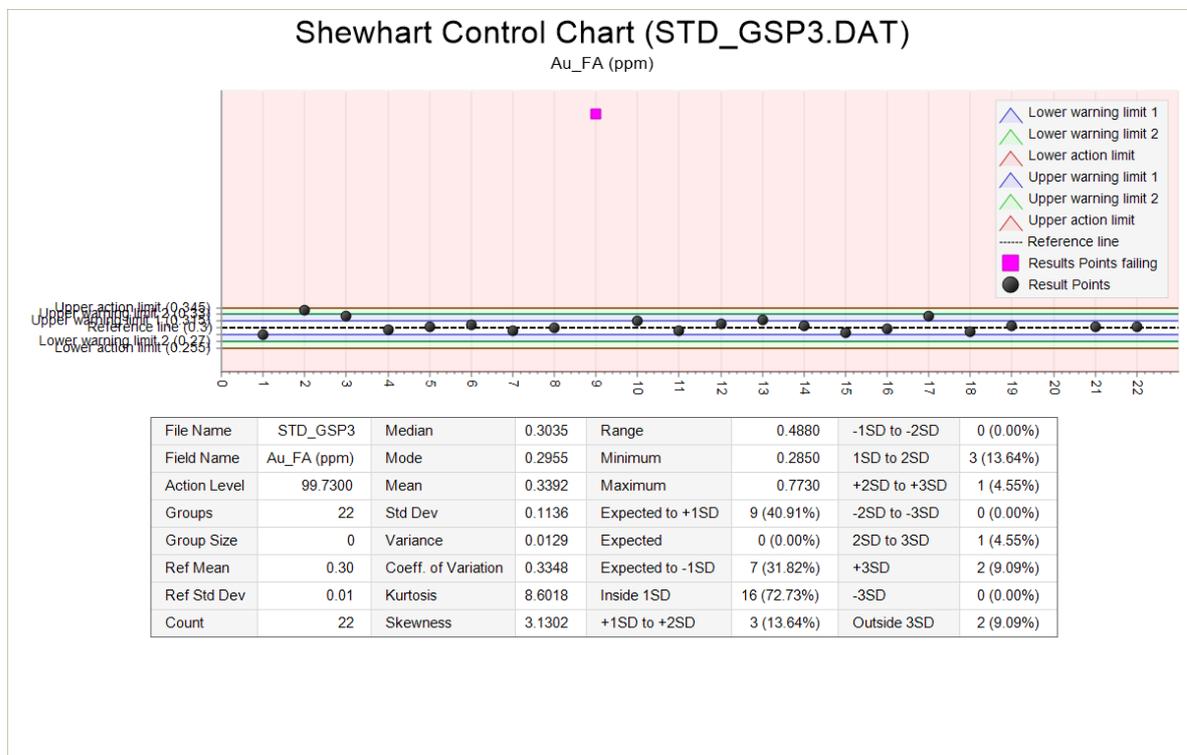


Figure 11.20 - Standard GSP3, element Au ppm, ACME ANALYTICAL LABORATORIES LTD.

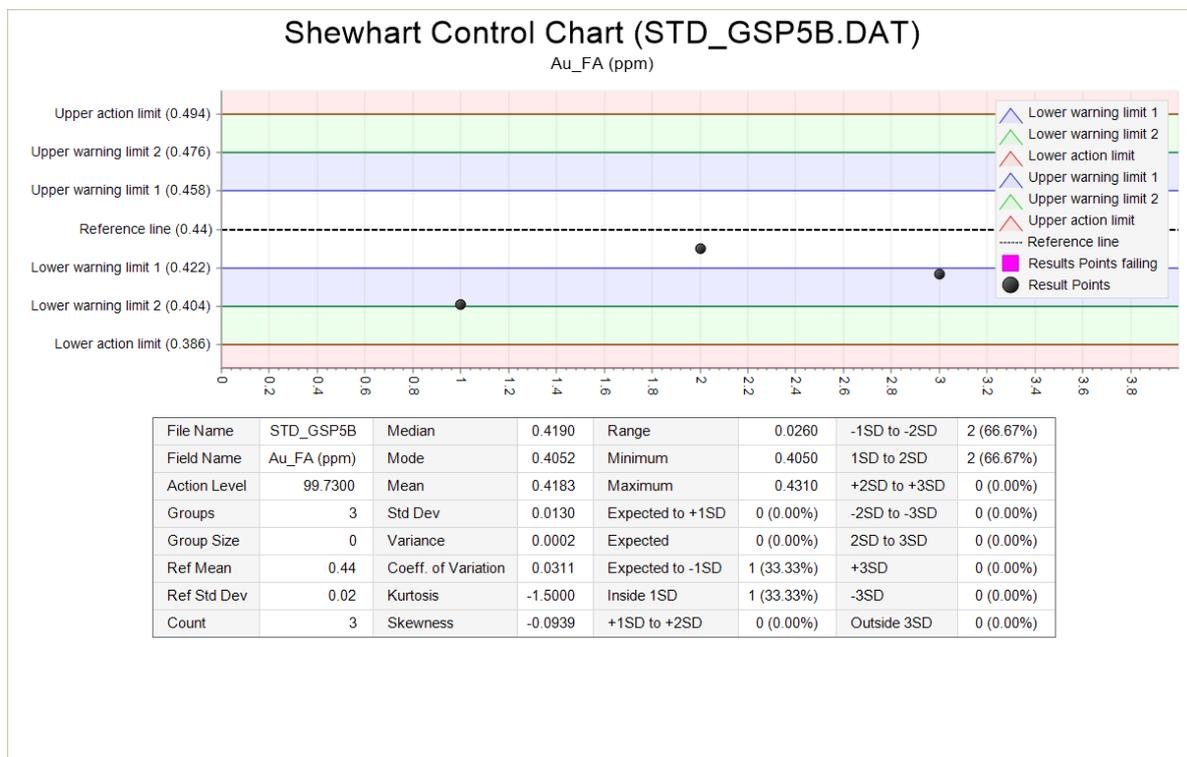


Figure 11.21 - Standard GSP5B, element Au ppm, ACME ANALYTICAL LABORATORIES LTD.

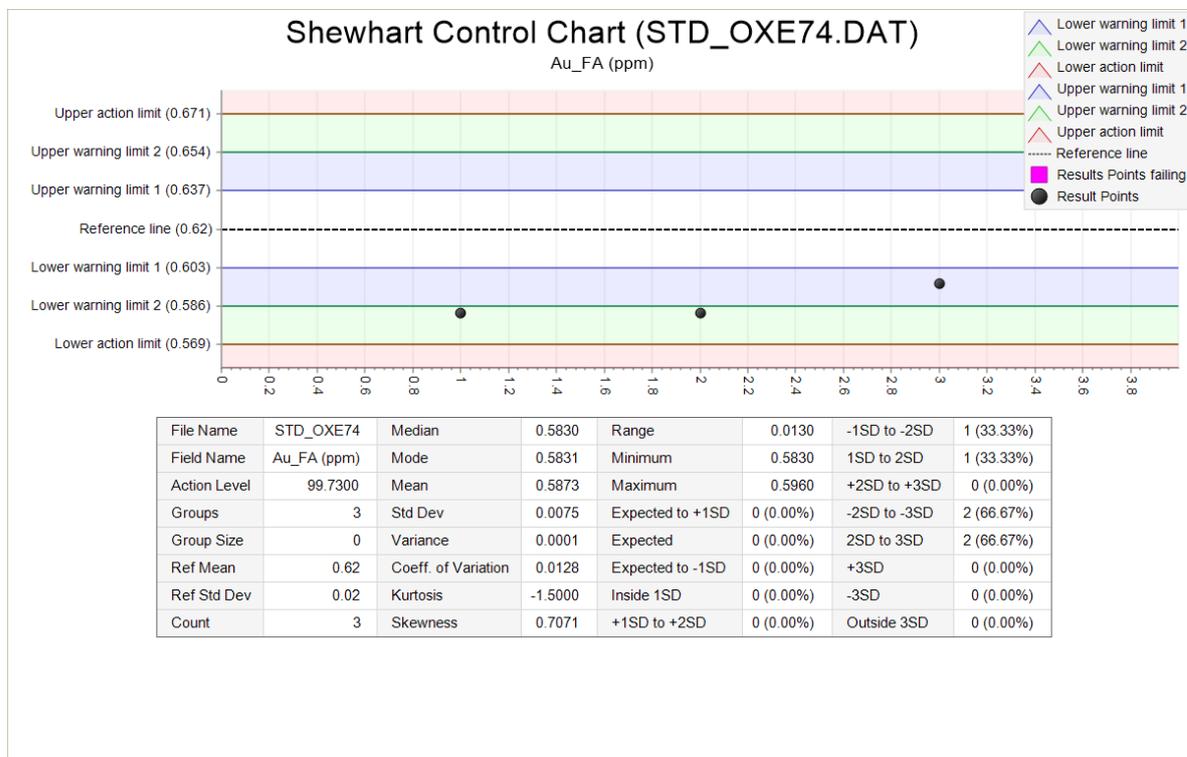


Figure 11.22 - Standard OXE74, element Au ppm, ACME ANALYTICAL LABORATORIES LTD.

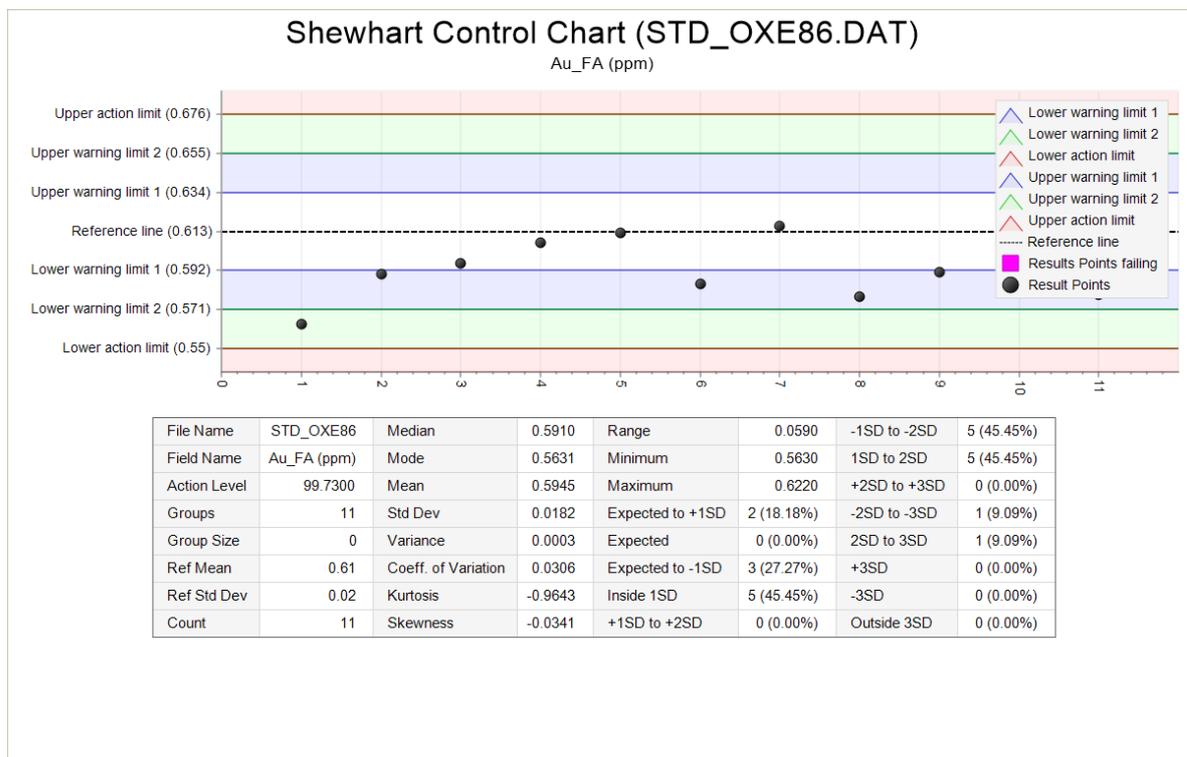


Figure 11.23 - Standard OXE86, element Au ppm, ACME ANALYTICAL LABORATORIES LTD.

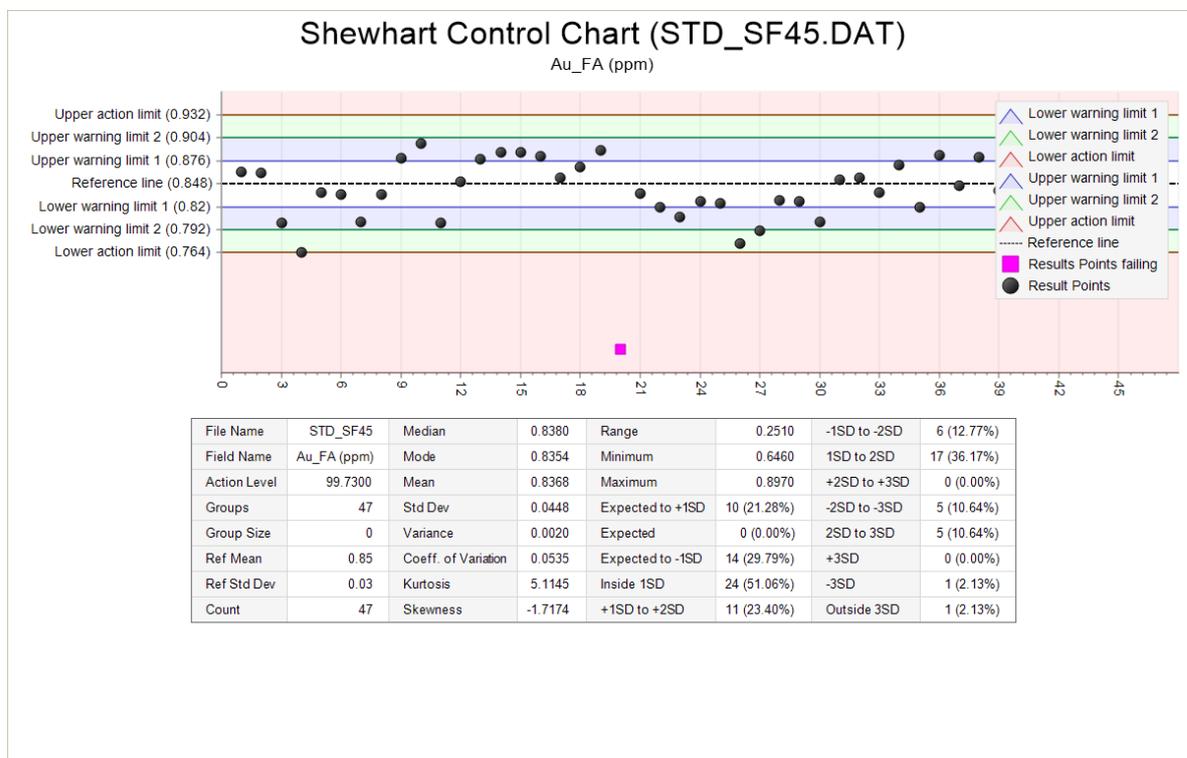


Figure 11.24 - Standard SF45, element Au ppm ACME ANALYTICAL LABORATORIES LTD.

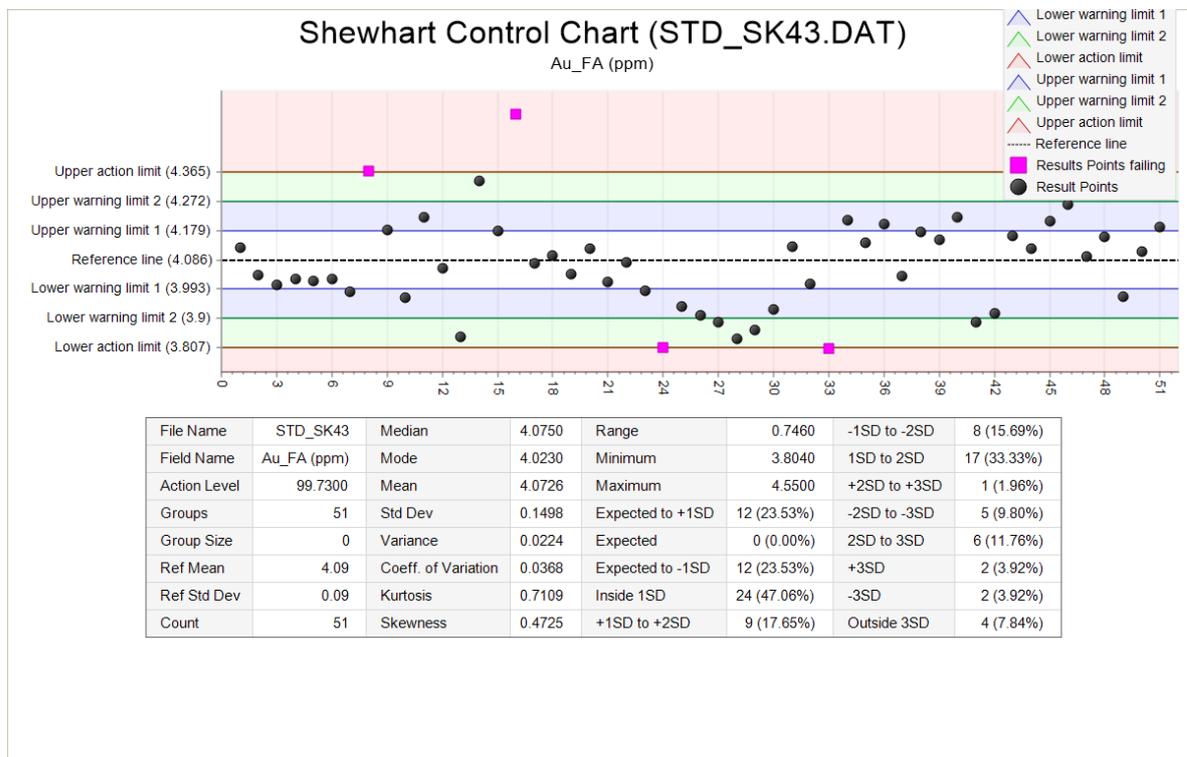


Figure 11.25 - Standard SK43, element Au ppm, ACME ANALYTICAL LABORATORIES LTD.

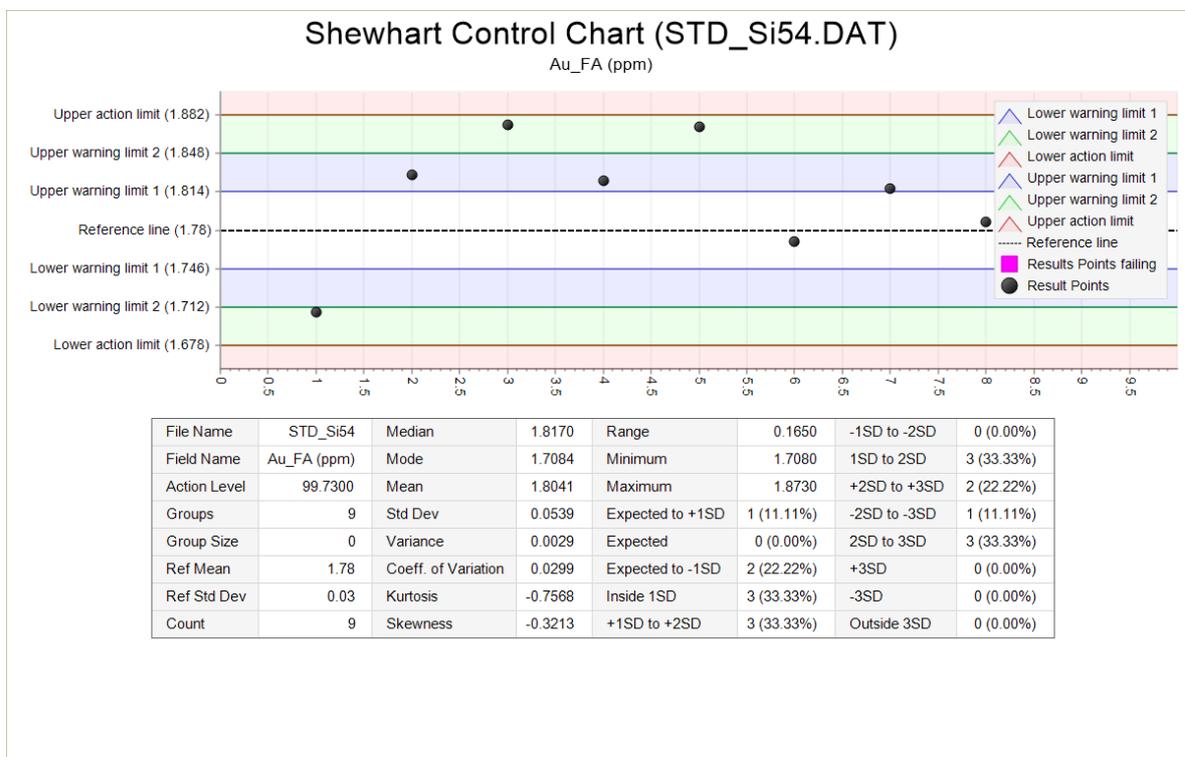


Figure 11.26 - Standard Si54, element Au ppm, ACME ANALYTICAL LABORATORIES LTD.

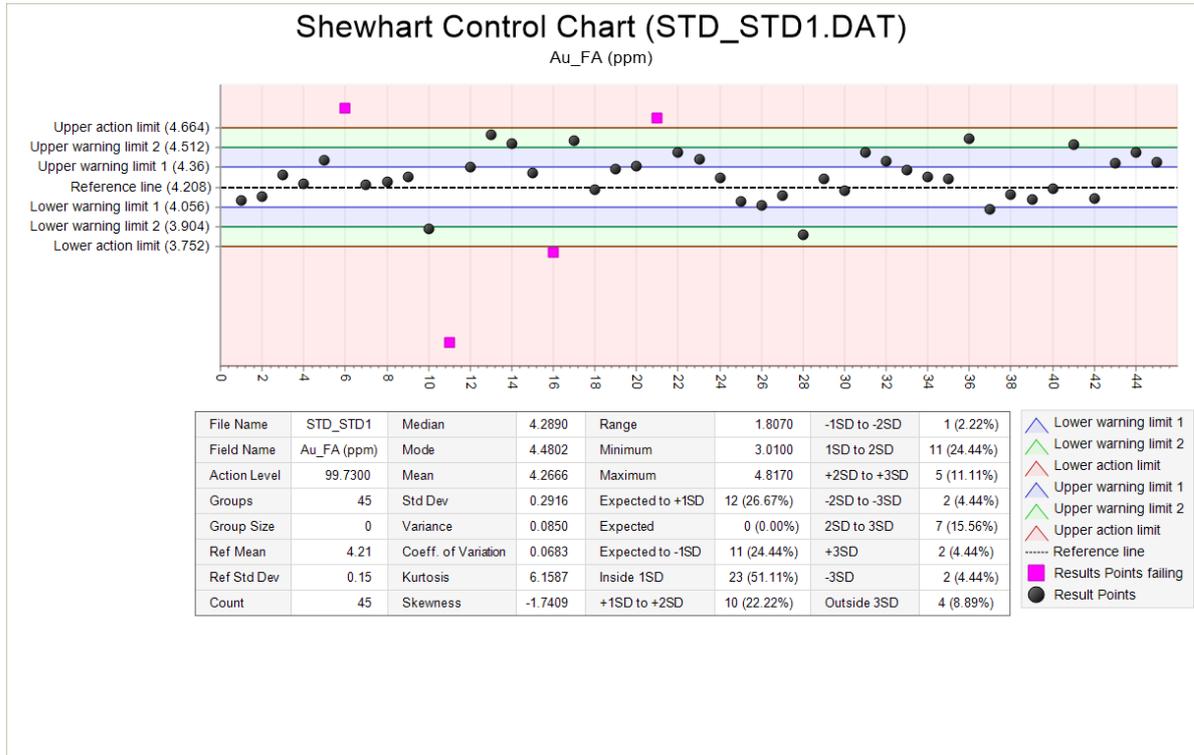


Figure 11.27 - Standard STD1, element Au ppm, ACME ANALYTICAL LABORATORIES LTD.

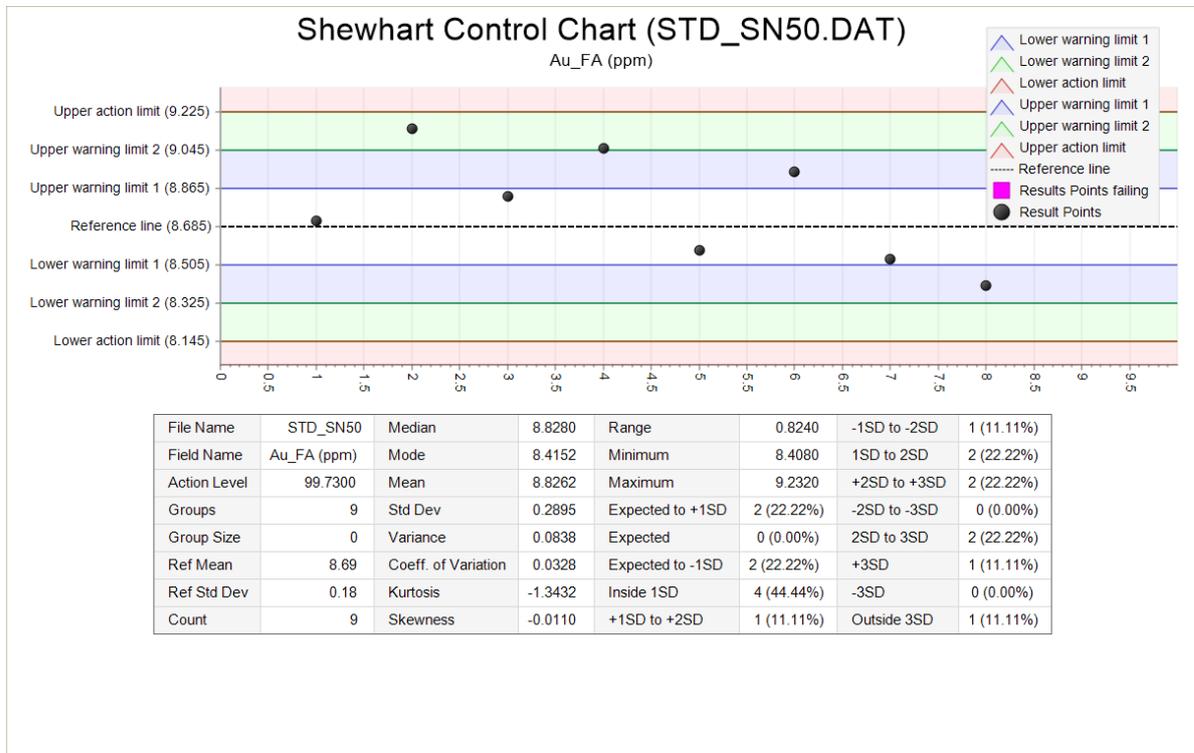


Figure 11.28 - Standard SN50, element Au ppm, ACME ANALYTICAL LABORATORIES LTD.

11.4 BLANK SAMPLES

For the contamination control of the sample preparation process, 359 Blank Samples were used, which represents 4.57% of the total amount of the analyzed samples.

The reference of the blank samples is the low gold material Certificates AuBlank31 and AuBlank34B. The blank samples contains less than 0.002 ppm gold.

The results of analyzes performed for the gold is shown in Table 11.5 below. The analysis for the Blanks, however, presented some outliers. This is due to potential contamination from sample preparation, and/or due to wear and cleanliness of the equipment. The analysis of data has demonstrated that all the results are within the range of the confidence level.

Table 11.5 - Descriptive statistics of the chemical analysis results of the blank samples

Field Name	Minimum	Maximum	Number of points	Average	Median	Variance	Std. Dev
Au ppm	0.0005	0.183	359	0.003591	0.0025	0.000102	0.010098

ITEM 12: DATA VERIFICATION

12.1 Site Visit

VMG, represented by geologist Volodymyr Myadzel, visited the Cerrito Prospect area between November 24 and November 26, 2020. The visit was attended by LDS's officials: Guilherme Marques (Exploration Geologist) and Geandro Pereira Lima (Prospector).

The purpose of the visit was to get to know the project and verify the geological exploration work done in the field. The technical visit covered the core storage shack, the project area, and the mineralized zone in the field.

VMG performed the following independent data verification in the following three areas:

- validation of the drilling database
- validation of the QA/QC data (see Section 11.0)
- validation of the geological exploration procedure.

The images below show photos taken during the site visit (Figure 12.1 and Figure 12.2).



Figure 12.1 - Core Box from Technical site visit



Figure 12.2 - Shack visit

Most drillholes were clearly marked with concrete plugs (Figure 12.3). A metal tag was hammered into the concrete plugs that show the hole number, depth and azimuth. All drill holes were picked up following the drilling campaign by a surveyor using a total station.

The concrete plugs of drillholes 2005LG006DD, 2005LG007DD, C-F01-85, C-F01-87, C-F01-89, C-F03-89, C-F04-89, C-F05-84, C-F05-89, C-F06-84, C-F06-86, C-F06-89, C-F07-84, C-F07-86, C-F08-84, C-F09-84, C-F10-84, LDH-06, LDH-18 LDH-27 and LDH-28 were not found.



Figure 12.3 - Drill Hole Collar from Technical site visit

During the visit, it was observed that the Lavras Gold (formerly Amarillo Gold) technical team has been developing the work following the best practices of the mining industry. The author is of the opinion that the company has adequately followed proper sample preparation, security and analytical procedures, and industry best practices have been applied regarding the collection of information and maintenance of the database.

12.2 Data Import And Validation

12.2.1 DATABASE

The database used for Geological Modeling includes topographical data, information from the drillhole database and data for each sampling interval (test values for each controlled variable, lithological descriptions and deviation measures when appropriate). This data was obtained by application of best industry practices and verified by a consistent QA / QC routine, which was applied not only to data but also to the methodology of work as a whole.

The main database used in this work is Excel file *Lavras_BD_11_05_2015_CERRITO.xlsx*, which consists of tables:

- Índice - Index of tables
- Informação - Drillhole information
- Posição - Collar
- Desvio - Survey
- Litologia principal - Lithology
- Alteração - Alteration
- Estrutura - Structural Information
- Mineralização - Mineralization Information
- Veio - Vein
- Magnetismo - Magnetometry
- RQD - Core Recovery
- Análise - Assay
- QAQC - QAQC data
- Geoquímica - Geochemistry data

The Excel file ***Densidade_Cerrito.xlsx***, with density tests results.

In relation to the topographic surface, the data was given in a file in *.STR format, called ***Topografia_Geoeye.STR***.

Amarillo (now Lavras Gold Corp.) provided separate files for all assay certificates in Excel and Adobe pdf format.

The information about the initial data of the database is presented in Table 12.1.

Table 12.1 - Presentation of initial data

Description	Quantity
Diamond Drill Holes	92
Rotary Diamond Drilling metreage	14,593
Drill hole sampling assay	7,842
Notes on drill holes geological database	596
Density Analyses	218

The drill holes are distributed irregularly on a grid, with distances between holes that vary between 25m and 100m. 24 vertical sections with N-W orientation, with an average distance of 50 meters between sections. The drill holes and the vertical sections used in the interpretation are shown in Figure 12.4 below.

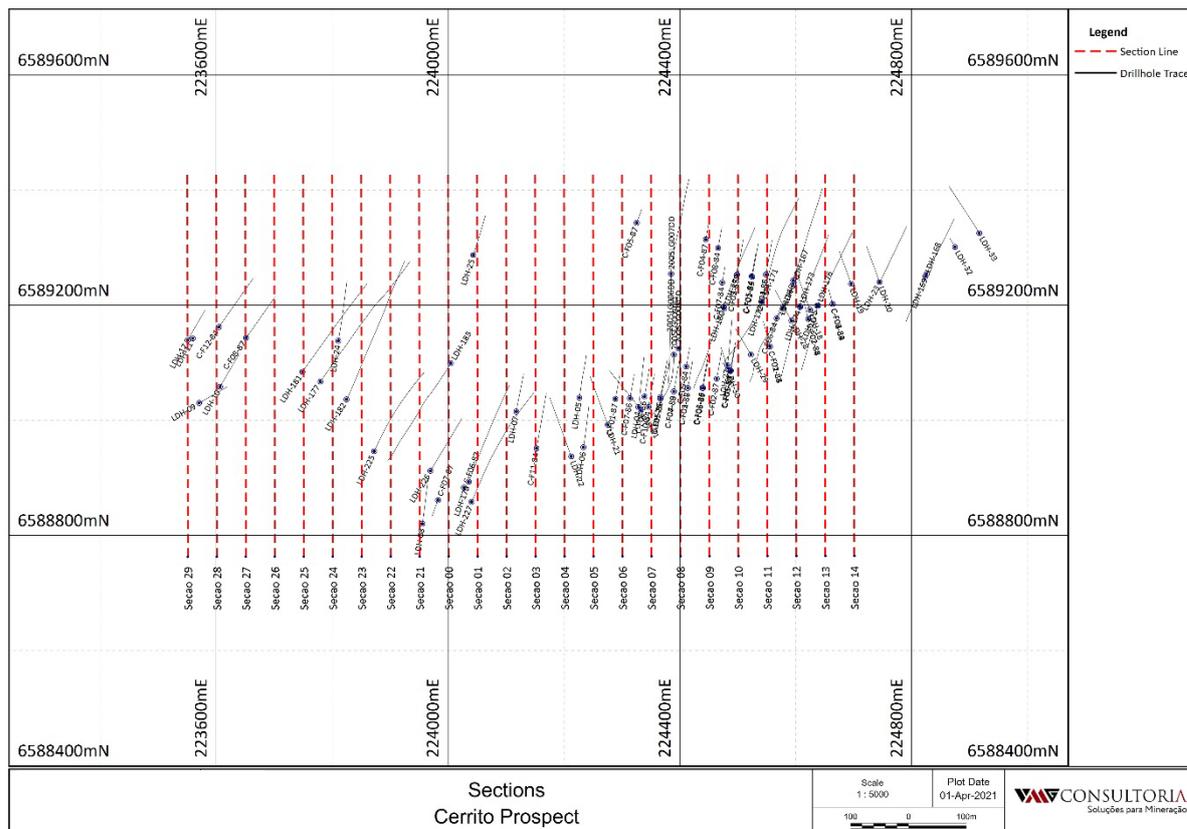


Figure 12.4 - Holes and vertical sections used for the interpretation of the Cerrito Prospect

The batch list of analyzed gold and descriptive statistics is presented in Table 12.2 and analyzed other elements chemical were: Ag (ppm), Ag (ppb), Al (%), As (ppm), Au (ppb), Au (ppm), B (ppm), Ba (ppm), Be (ppm), Bi (ppm), Ca (%), Cd (ppm), Co (ppm), Cr (ppm), Cu (ppm), Fe (%), Ga (ppm), Hg (ppb), Hg (ppm), K (%), La (ppm), Li (ppm), Mg (%), Mn (%), Mn (ppm), Mo (ppm), Na (%), Nb (ppm), Ni (ppm), P (%), P (ppm), Pb (ppm), Pd (ppb), Pd (ppm), Pt (ppb), Pt (ppm), Rb (ppm), Re (ppb), S (%), Sb (ppm), Sc (ppm), Se (ppm), Sn (ppm), Sr (ppm), Ta (ppm), Te (ppm), Th (ppm), Ti (%), Tl (ppm), U (ppm), V (ppm), W (ppm), Y (ppm), Zn (ppm), Zr (ppm).

Table 12.2 - Gold Analysis for all samples in the database

Chemical analyses	Quantity	Minimum	Maximum	Average
Au ppm	7842	0.001	19.750	0.2486

It is important to note that, for sampling intervals without samples, no numerical values were assigned.

12.2.2 DATABASE VERIFICATION PERFORMED AT THE MICROMINE SYSTEM

The database was tested using specific processes to verify the existence of the errors listed below:

- The name of the drill hole is present in the collar file but is missing from the analytical database.
- The name of the drill hole is present in the analytical database, but is absent in the collar file.
- The name of the drill hole appears repeated in the analytical database and in the collar file.
- The name of the drill hole does not appear in the collar file and in the analytical database.
- One or more coordinate notes are absent from the collar file.
- FROM or TO are not present in the analytical database.
- FROM>TO in the analytical database.
- Sampling intervals are not continuous in the analytical database (there are gaps between the logs).
- Sampling intervals overlap in the analytical database.
- The first sample does not correspond to 0 m in the analytical database.
- The azimuth is not in the range of 0-360 degrees.
- The dip is not in the range of 0-90 degrees.
- Azimuth or dip of the hole is missing.
- The total depth of the hole is shallower than the depth of the last sample.

Some minor errors were identified, mainly due to incorrectly entered intervals. The errors were checked with the Amarillo project geologist and the database updated.

12.3 Author's Considerations

About the drilling program, the author has been able to confirm the accuracy of locations of drill holes by checking them with his own handheld GPS unit. During his visits to the property during the drilling programs, the author confirmed that sampling was being conducted according to the protocols described in Section 11 above, and therefore data collected on drill samples to date is accurate.

Assay data used in the Mineral Resource model were spot checked and cross-checked against the original assay certificates after the data had been imported into the model.

There have been no limitations on the author on his verification of any of the data presented in this report. The author's opinion is that all data presented in this report are adequate for the purposes of this report and is presented so that it is not misleading.

ITEM 13: MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Testwork

Lavras Gold Corp. (formerly Amarillo Gold) submitted drill core rock samples from the Cerrito Prospect to the SGS Geosol Laboratory in Belo Horizonte, Brazil for preliminary metallurgical test work. The core samples were collected from nine separate drill holes representing different areas of the mineral deposit to create a representative composite sample. The samples consisted of rock drill core that was quarter cut and measured in one metre intervals. In aggregate, 100 kg of material was collected from 66 drill core samples. The weighted average gold grade of the samples was 0.86 g/t based on drill log assay records.

13.2 Testwork Results

SGS Geosol prepared a final report titled "Gravity Separation, Flotation and Leaching Test work on Gold Ore Samples from the Cerrito and Butiá Projects" dated 16 March 2021. The Test work flowsheet is shown in Figure 13.1 below. The workflow included sample preparation, Bond BWI, determination of grinding curves, gravity separation, flotation, and leaching test work at P80 75 microns and P80 25 microns. The report from SGS includes results from another deposit called Butiá which are excluded from this report. The results presented in this report are for the Cerrito Prospect.

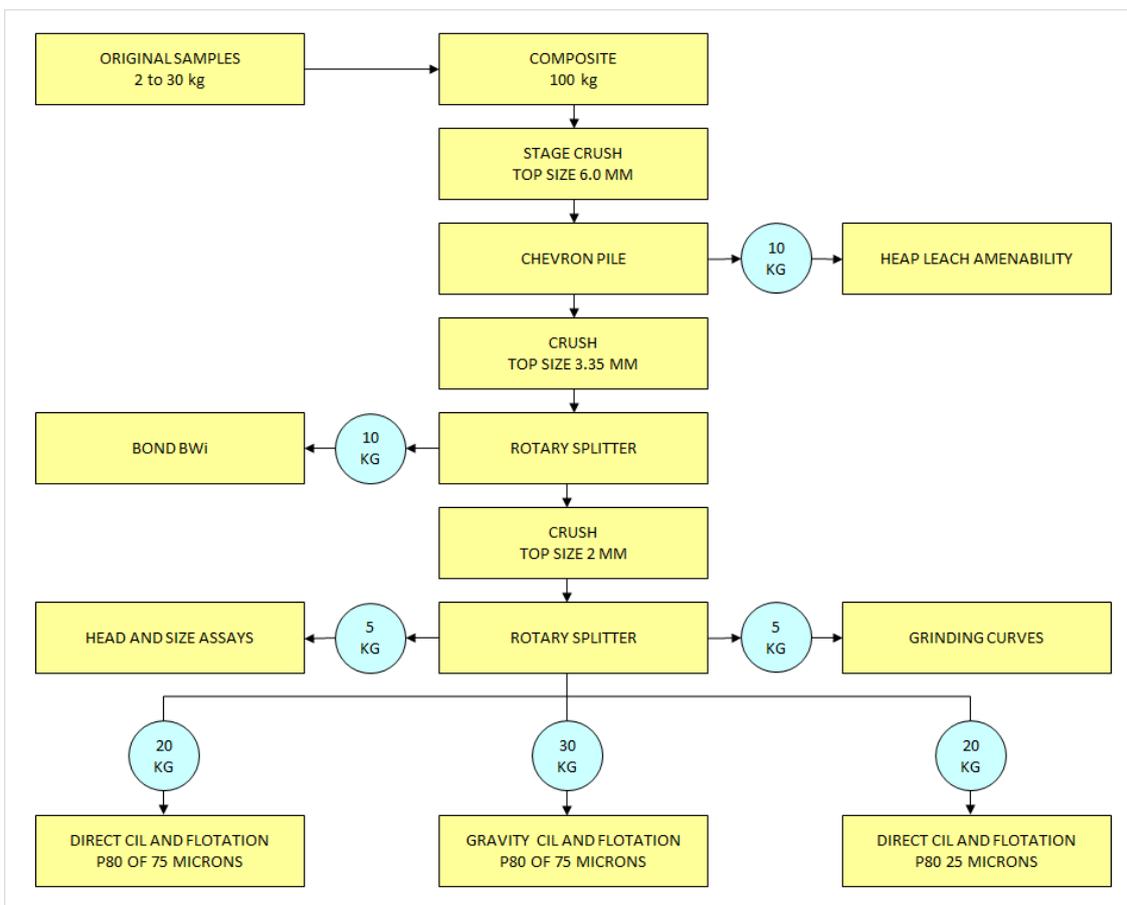


Figure 13.1 - Test work flowsheet

A Summary of results is shown in Table 13.1.

Table 13.1 - Summary of Metallurgical Test-work for Cerrito Prospect

CERRITO TESTWORK RESULTS					
Head Assay Au ppm	Head Assay Ag ppm	Head Assay S total %	Bond BWI kWh/tonne	Gold Recovery % Heap Leach Top size 6 mm	Gold Recovery % Gravity Separation P80 75 microns
0.88	<3	0.90	17.5	43.1	38.2
Gold Recovery % Direct CIL P80 75 microns	Gold Recovery % Direct CIL P80 25 microns	Gold Recovery % Direct Flotation plus CYAN P80 75 microns	Gold Recovery % Direct Flotation plus CYAN P80 25 microns	Gold Recovery % Gravity Separation plus CIL P80 75 microns	Gold Recovery % Gravity Separation plus Flotation plus CYAN P80 75 microns
72.7	78.3	70.8	77.9	74.9	73.2

Key findings are as follows:

- SGS calculated an average gold grade of 0.88 g/t from the composite sample which compares favourably with the individual drill-hole assay of 0.86 g/t gold.
- Grinding tests indicate rock material from Cerrito is relatively hard having a Bond work index of 17.5 kWh/tonne.

Report: NI 43-101 Technical Report	Rev. Final
Title: NI 43-101 Technical Report Mineral Resource for Cerrito Gold Prospect	Page. : 112 / 176

- Two simulated heap leach tests on samples crushed to ¼ inch were carried out in a stop/go bottle testing system for 5 days. Recoveries averaged 43.1%. Leach kinetics indicate most of the gold extraction occurred in the first 24 hours of leaching.
- Gravity separation using a 20 kg sample ground to P80 75 microns yielded an average gold recovery of 38.2%.
- Samples exposed to direct CIL for 24 hours demonstrated a gold recovery of 72.7% at P80 75 microns and 78.3% at P80 25 microns.
- Samples subjected to direct flotation followed by cyanidation achieved gold recoveries of 70.8% at P80 75 microns and 77.9% at P80 of 25 microns.
- Gravity separation using a 20 kg sample ground to P80 75 microns, with the gravity tail subjected to CIL yielded recoveries of 74.9%.
- Gravity separation using a 20 kg sample ground to P80 75 microns, with gravity tail subjected flotation concentrate and cyanidation yielded an overall recovery of 73.2%.
- A financial analysis focusing on capital cost and operating cost for each of the options outlined above should be completed to determine the most cost-effective processing route. Overall, these preliminary results demonstrate reasonable gold recoveries, and that future optimization work is warranted as there is room for improvement.

ITEM 14: MINERAL RESOURCE ESTIMATE

14.1 Introduction

This section describes the methodology and devices used in the resource evaluation of the ANM Permit N° 810.316/1979 and N° 810.147/1987 of the gold deposit from Cerrito Prospect, located in the city of Lavras do Sul, Rio Grande do Sul, Brazil.

While the economic factors listed in this report will be important to the possible viability of the deposit, the deposit has yet to undergo much more rigorous testing that must be performed before a mining decision can be made. Mineral Resources are not Mineral Reserves, and as such, have not demonstrated economic viability.

The Cerrito Prospect lies on exploration permits granted under administrative procedures and administered by the National Mining Agency (ANM). Therefore, the permitting process for any mining operation is well established and has been tested on many past projects. There are no known unusual legal, environmental, socio-economic, taxation or permitting problems associated with the subject claims that would adversely affect the development of the property, other than the Border Area (See discussion in Section 4.4). Also, there are historical underground mine workings at the site of the deposit. Mined out areas have not been considered when calculating the resource due to lack of information.

Dr. Myadzel is responsible for the resource estimation methodology. Dr. Myadzel is independent of the issuer of this report and applied all the tests described in Section 1.5 of the NI 43-101 form.

The data for the Mineral Resource estimate were generated using the Micromine program, sold by Micromine Pty Ltd.

The resource estimate was made in accordance with the standards accepted by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) for Measured, Indicated and Inferred resources in accordance with NI 43-101 - Standards for Disclosure of Mineral Projects.

The effective date of this estimate is the receipt date of the latest data on the resource estimate, which is May 31, 2022.

14.2 General Economic factors

For the development of this mineral resource estimate, consideration has been given to economic factors such as mining and processing costs to determine whether the deposit has reasonable prospects for economic extraction. The primary factors in favour of the economic extraction determination are:

- A large portion of the deposit occurs at or near the surface, greatly reducing mining costs.
- The mining method would most likely be an open pit. The size and number of pieces of equipment will be determined by mining engineers once the final size and configuration of the operation is determined. The location of the processing plant, overburden storage and spent material storage regarding the deposit have yet to be determined.
- Preliminary testing for the extraction of the gold from the mined material (see Item 13) suggests a conventional processing circuit using standard industry methods and a well understood unit cost structure.
- The infrastructure near the prospect is very good. Electric power, well-developed transportation routes and the potential for a local mining workforce are all positive factors.
- Assessment of economic parameters and factors are based heavily on other similar projects which are more advanced than Cerrito Prospect.

14.3 Statistical Analysis

This report used a classical statistical analysis to perform the following tasks:

- Assess the need to separate populations if there is more than one population.
- Evaluate the effect of population mixing.
- Determine the grade distribution.

Statistical analysis was performed for gold (ppm) samples grouped throughout the data matrix (Figure 14.1). Then the analysis was performed for the samples internal to the mineralized zone. See Figure 14.2.

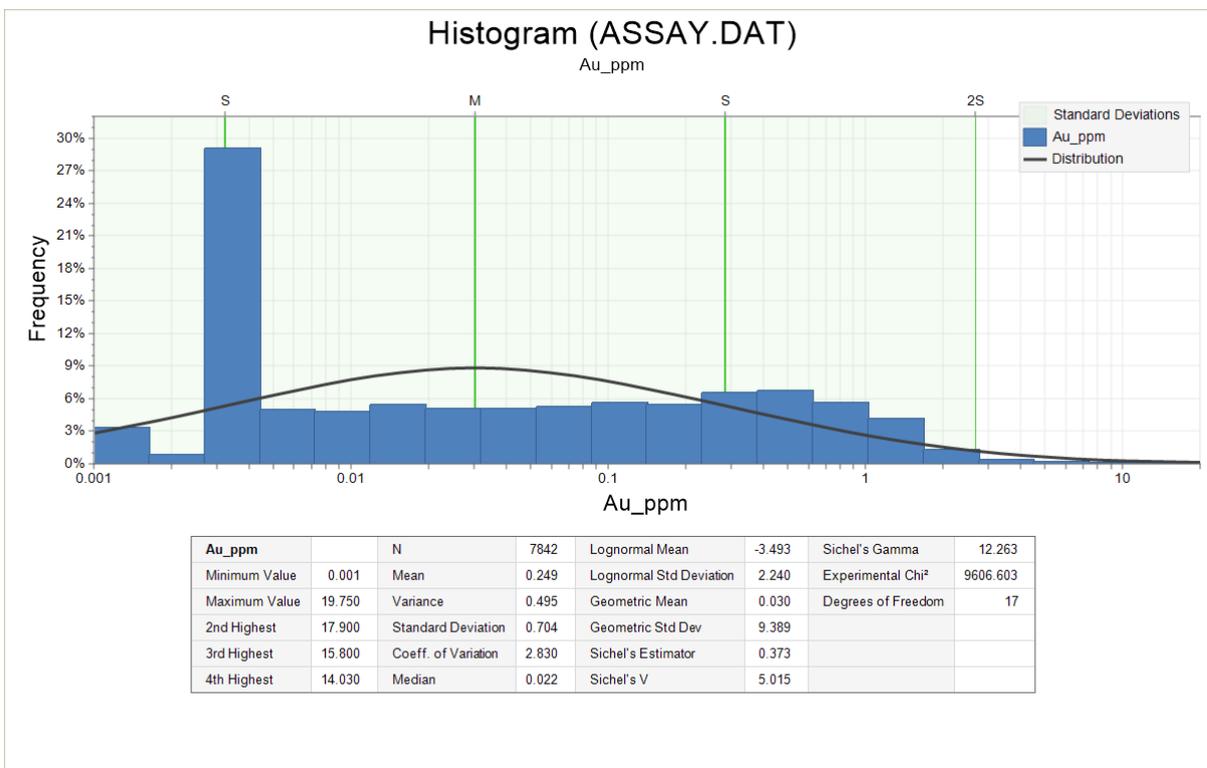


Figure 14.1 - Histogram of Au (ppm) grade distribution for all samples

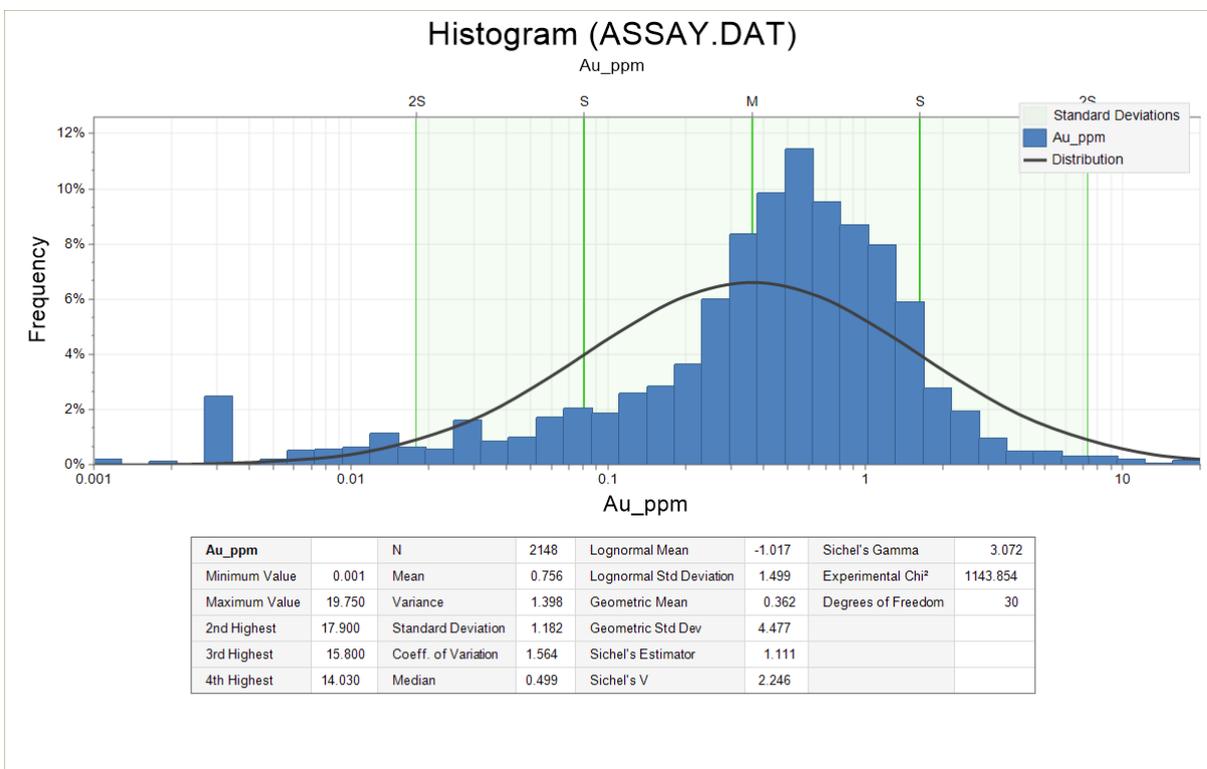


Figure 14.2 - Histogram of Au (ppm) grade distribution for samples inside the mineralization zone

Table 14.1 summarizes the statistical analysis of gold from the database.

Table 14.1 - Summary of the statistical analysis of gold grades

Substance	Sample Quantity	Minimum	Maximum	Mean	Median	Variance	Std. Deviation
All samples							
Au (ppm)	7842	0.001	19.750	0.249	0.022	0.495	0.704
Samples inside the mineralization zone							
Au (ppm)	2148	0.001	19.750	0.756	0.499	1.398	1.182

14.4 Interpretation

The geological interpretation was generated by VMG Consultoria using the 3D software package Micromine. Wireframe surfaces were generated by connecting cross-sectional interpretations to model the topographical, supergene alteration zones of rocks and mineralization zone limits.

Rotary Diamond (DD) drilling data were used to perform the mineral deposit interpretation. The drill hole grid in the work area is characterized by its irregularity. The interpretation lines were created in the string format (*.str) of the Micromine software. All interpretation strings have a close connection to the sampling intervals.

Mineralized zones were defined by applying grade composite criteria. Intervals grading above 0.3 g/t were interpreted as mineralization. The geological interpretation was performed in two steps.

The first step was the interpretation of all mineral deposits by 24 vertical sections. In the second step, horizontal sections were verified as correct interpretations based on the geological data.

All strings of interpretation have a close connection with the sampling intervals, as shown in Figure 14.3.

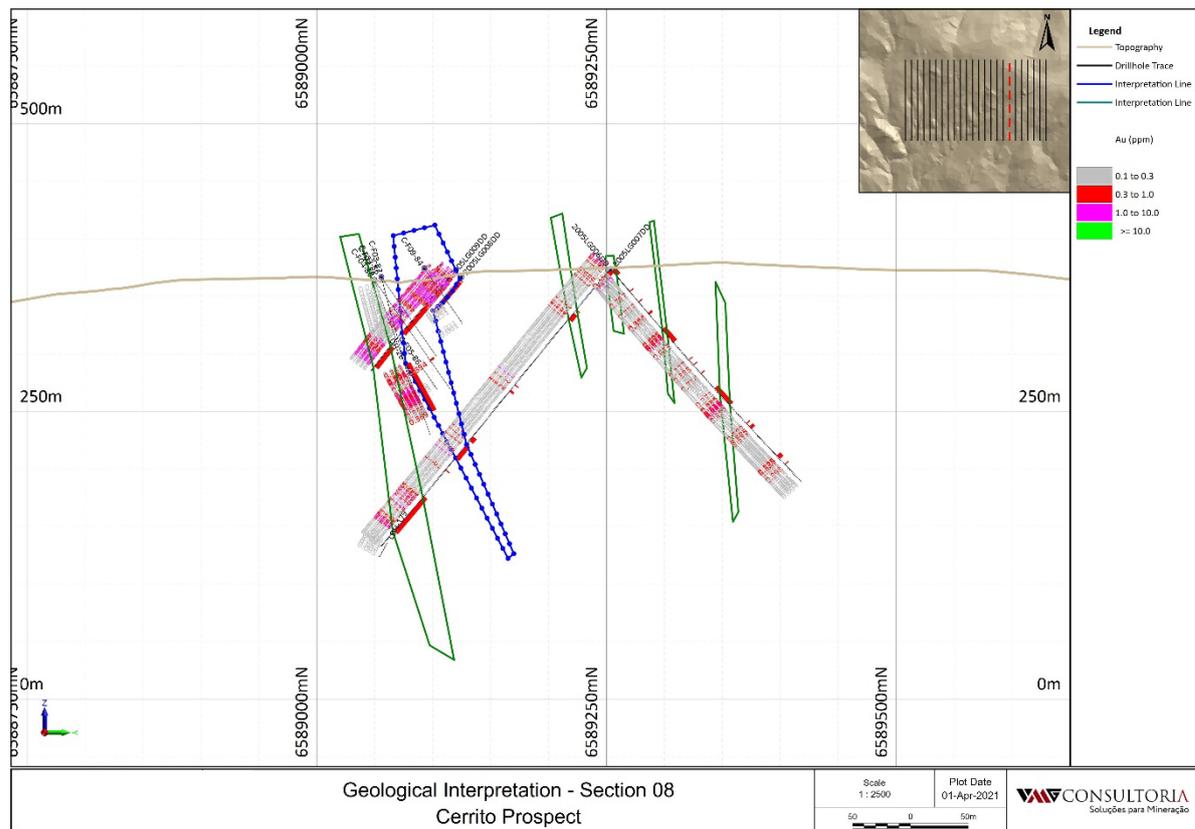


Figure 14.3 - Geological interpretation, section 09

All strings interpreted were extrapolated above the topographic surface to ensure that there were no voids between the topographic surface and the top of the mineralized body. Scanned strings were used to assist in visualizing the overall geological structure of the deposit.

When interpreting geological boundaries of the mineralized zones, interpolation was performed at a half-distance in each area while maintaining the thickness of the mineralized zone.

The following criteria was used in the interpretation of the mineralized zones:

- The interpretation was based on the element gold and lithological code originally described.
- All strings were interpreted accurately and connected to the appropriate holes.
- The interpretation was built up to half the distance of the exploitation network, corresponding to the first and last section probed.

In vertical sections the bodies of gold mineralization were interpreted according to the data sampling.

14.5 Triangulation

The triangulation may be divided into closed wireframe (mineralized zones) and building surface (topography and alteration zones).

14.5.1 TOPOGRAPHY

String data files *.STR were used to Construct a Digital Surface Model (DSM), resulting in the topographic surface shown in Figure 14.4 and Figure 14.5.

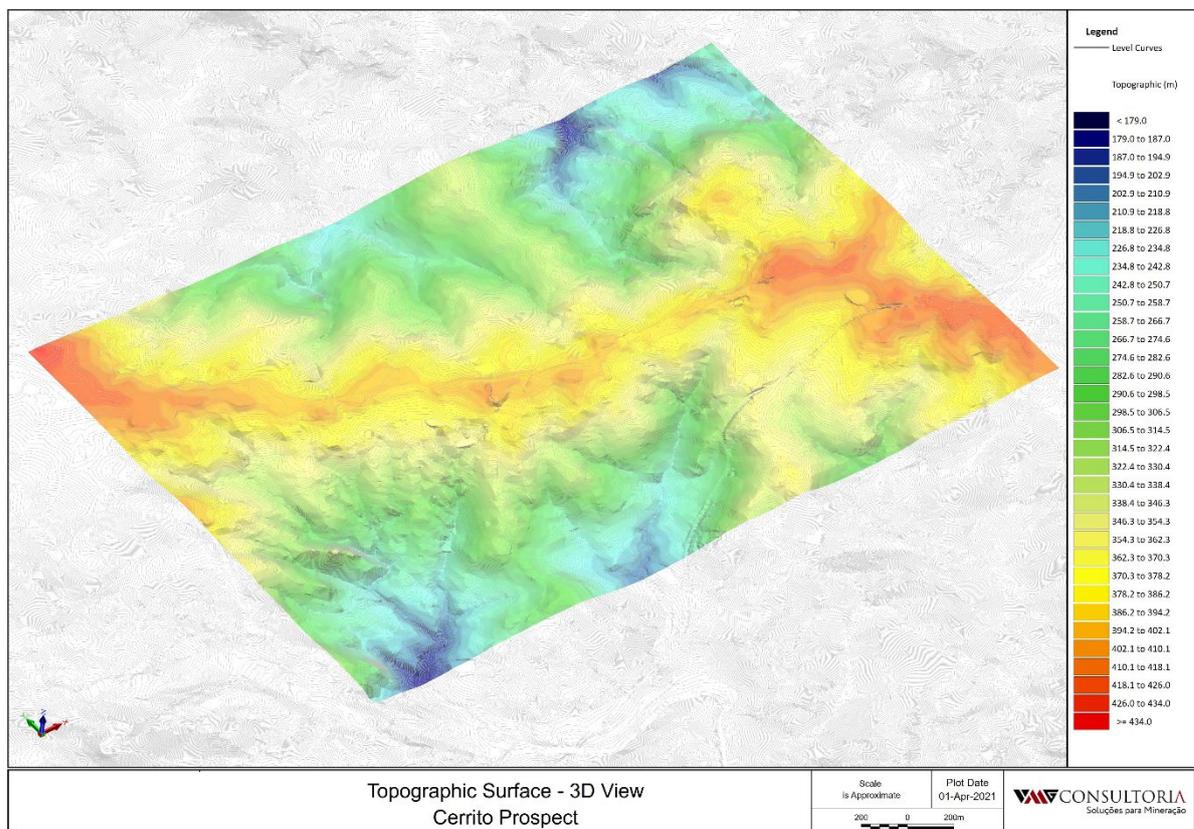


Figure 14.4 - Surface digital topographic base - 3D View

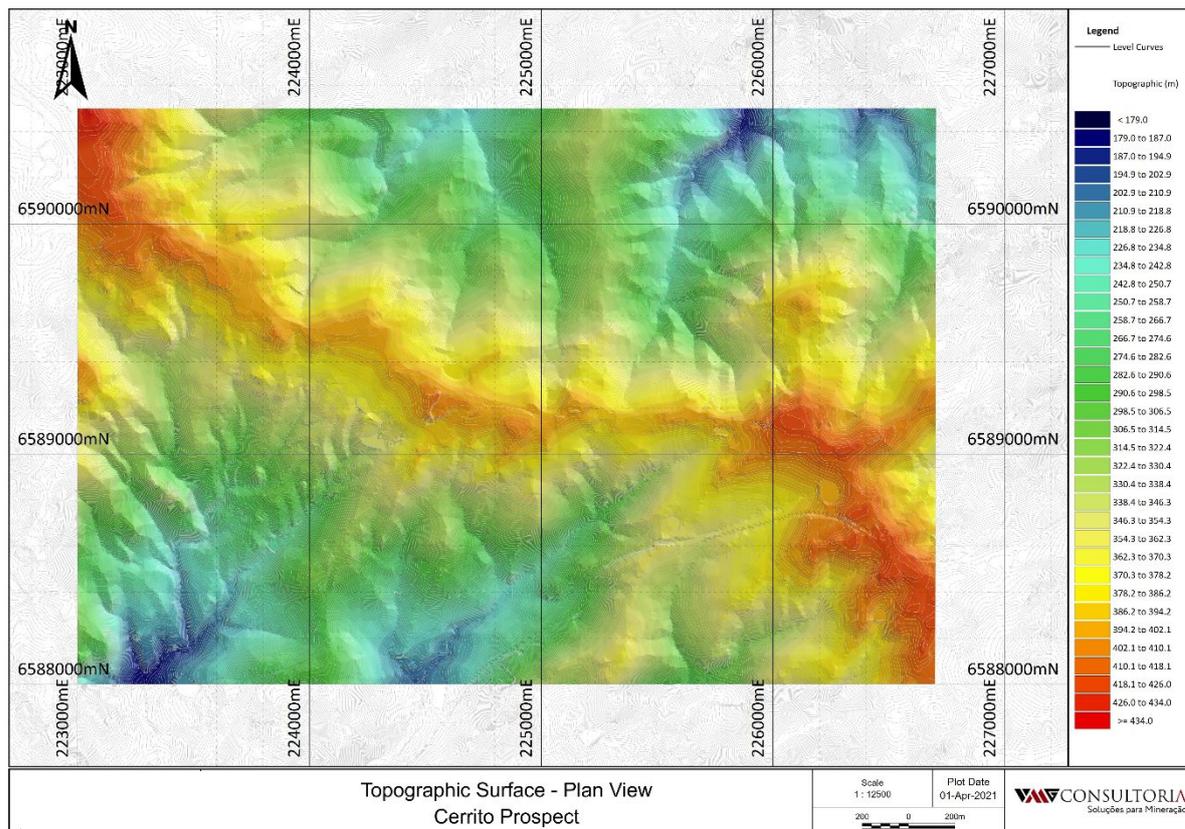


Figure 14.5 - Surface digital topographic base - Plan View

14.5.2 ALTERATION ZONE

The alteration zone that determines the separation of friable and hard rock ore was based primarily on interpreting the hardness and friability data from the geological logs and reviewing drill core photos. The contact of the alteration zone was interpreted as the contact between friable and hard rock material.

From the file LITHOLOGY.DAT which was corrected manually, base surfaces of the alteration zone were created. From the file SEAM_SAP_FLOOR.DAT which was corrected manually, Base surfaces of the alteration zone were created. Grid creation method was used with IDW2 interpolation method. Cell size is 1×1 meters. Grids were converted into digital surfaces DTM (Digital Terrain Model), as shown in Figure 14.6.

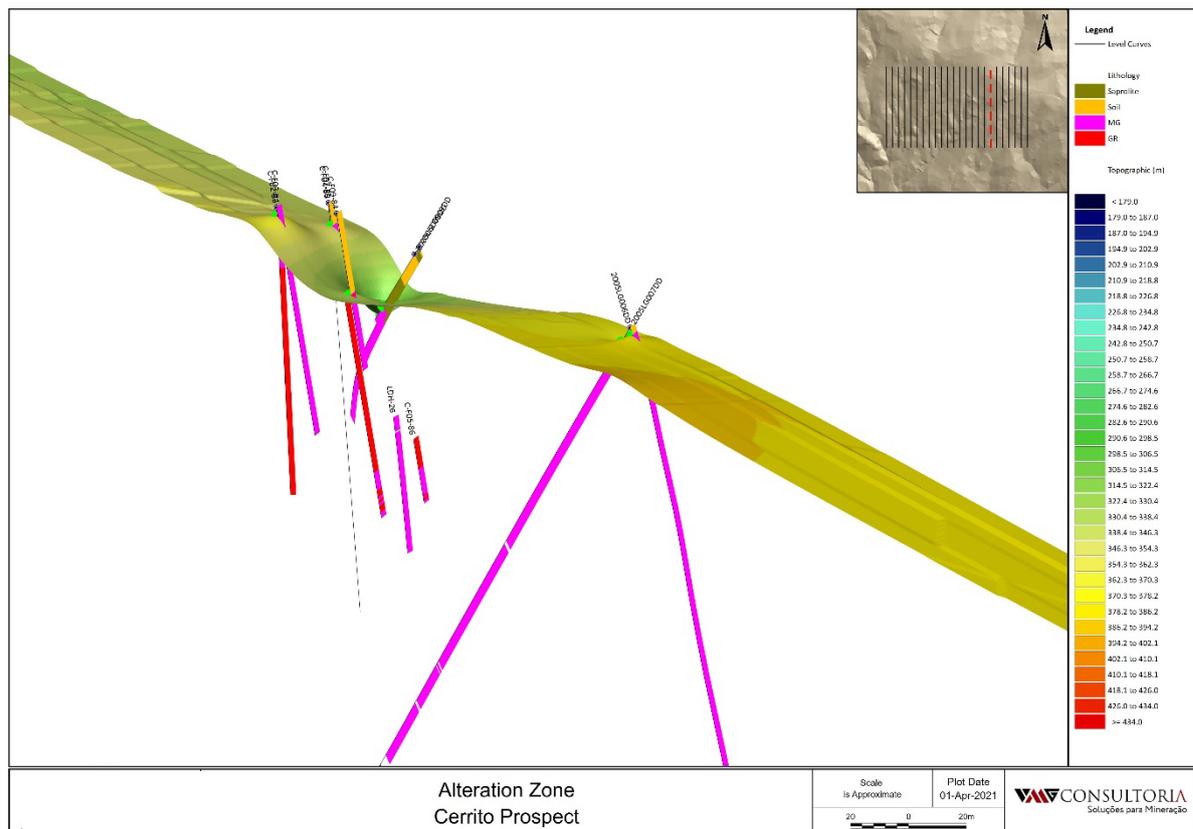


Figure 14.6 - Surface digital alteration zone

14.5.4 WIREFRAME CLOSED

The strings were used in the interpretation model to generate a continuous three-dimensional triangulated mesh for each of the mineralized zones. The strings of the sections are shown on the screen, consequently, intertwine with strings interpretation of subsequent sections (Figure 14.7).

The interpretation of the mineralized zones was extrapolated above topography. Triangulation of the extrapolated mineralized zones occurred where the solids were cut by the topographic surface. This procedure was used to ensure the continuity of the mineralized zones to the topography without loss of volume and mass. In Figure 14.8 shows the results of triangulation of all mineralized zones cut by the topographic surface.

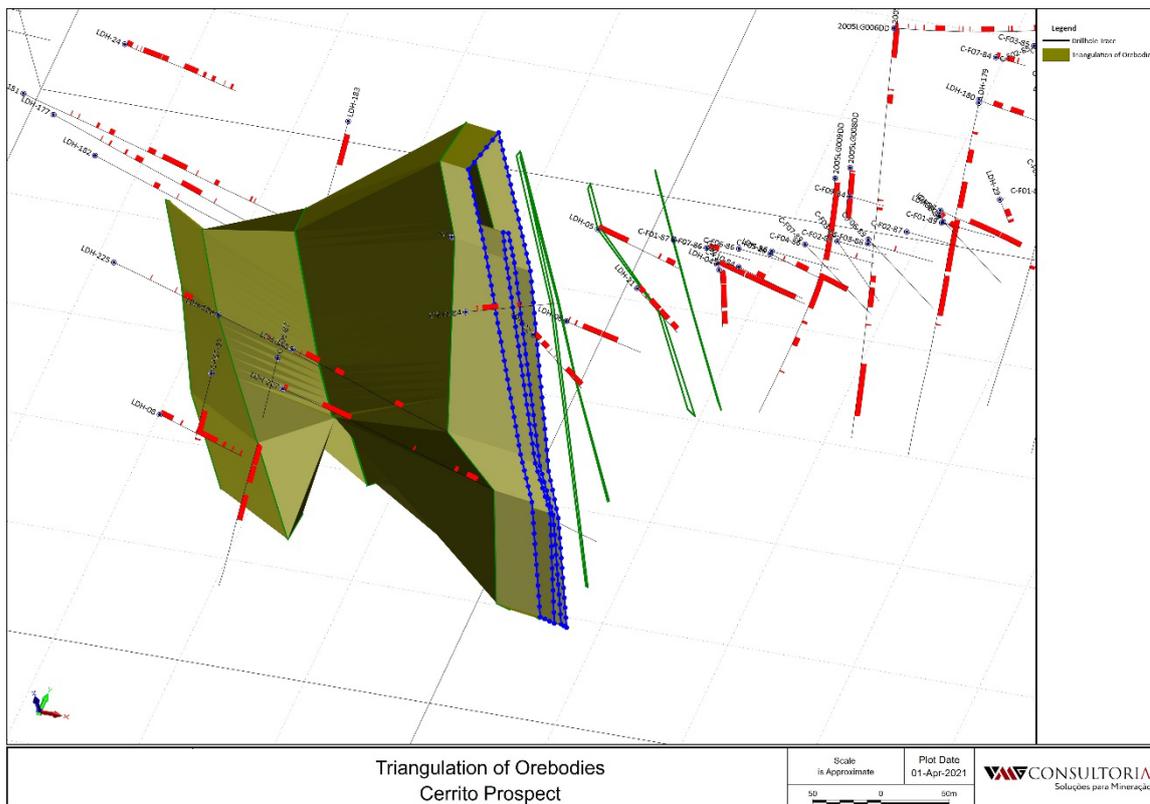


Figure 14.7 - Triangulation of mineralized zones

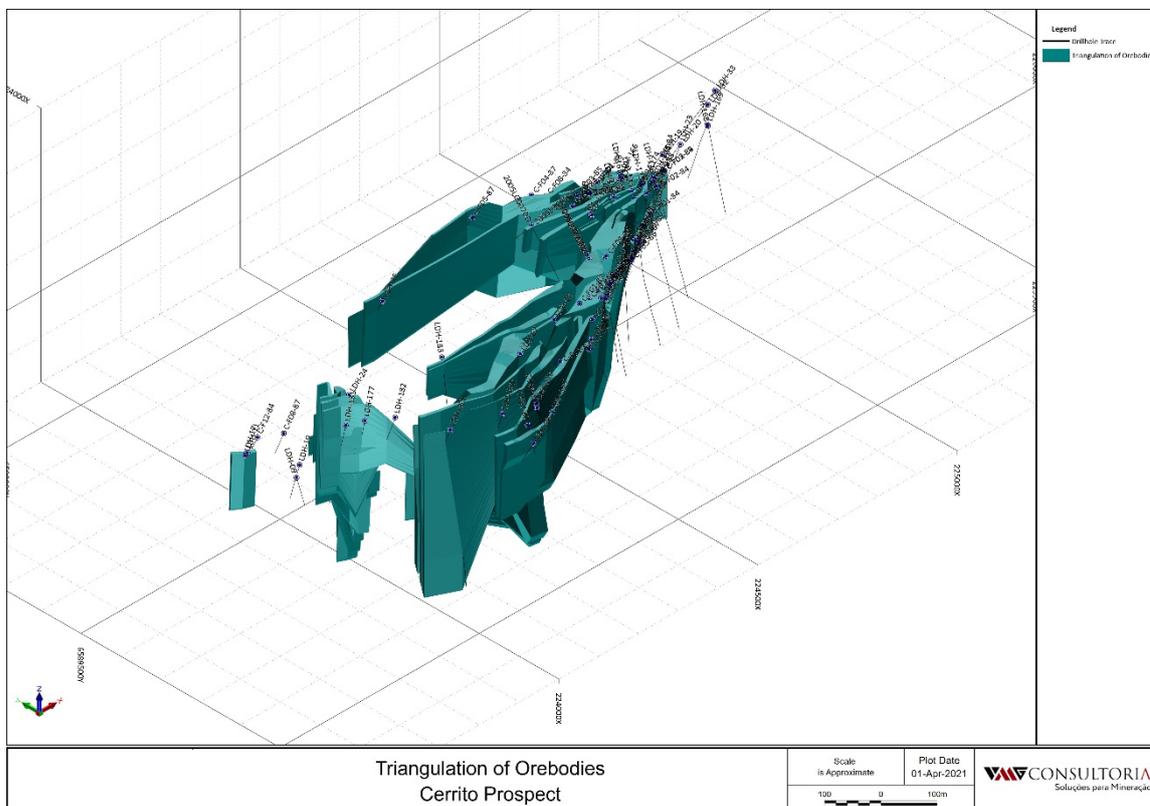


Figure 14.8 - Triangulation of the mineralized zones cut by topographic surface. View all mineralized zones in the area

14.6 Data Selection

The selection of drillhole data is a standard certification procedure. It is essential that, in classical statistical analysis, geostatistics and the grade interpolation process, the correct samples are used. The solids of the element to be analyzed were used for the drill holes sample selection.

In order that the samples used for the interpolation had the same weight by size, an analysis was completed to define the size of the composites. The results of the analysis of sample size indicate that values range from 0.50m to 7.00 m with a mean of 1.168 m.

An analysis of samples of the mineralized zones indicates that about 85% of the samples have a length of 1m. Figure 14.9 shows a graph of sampling length distribution.

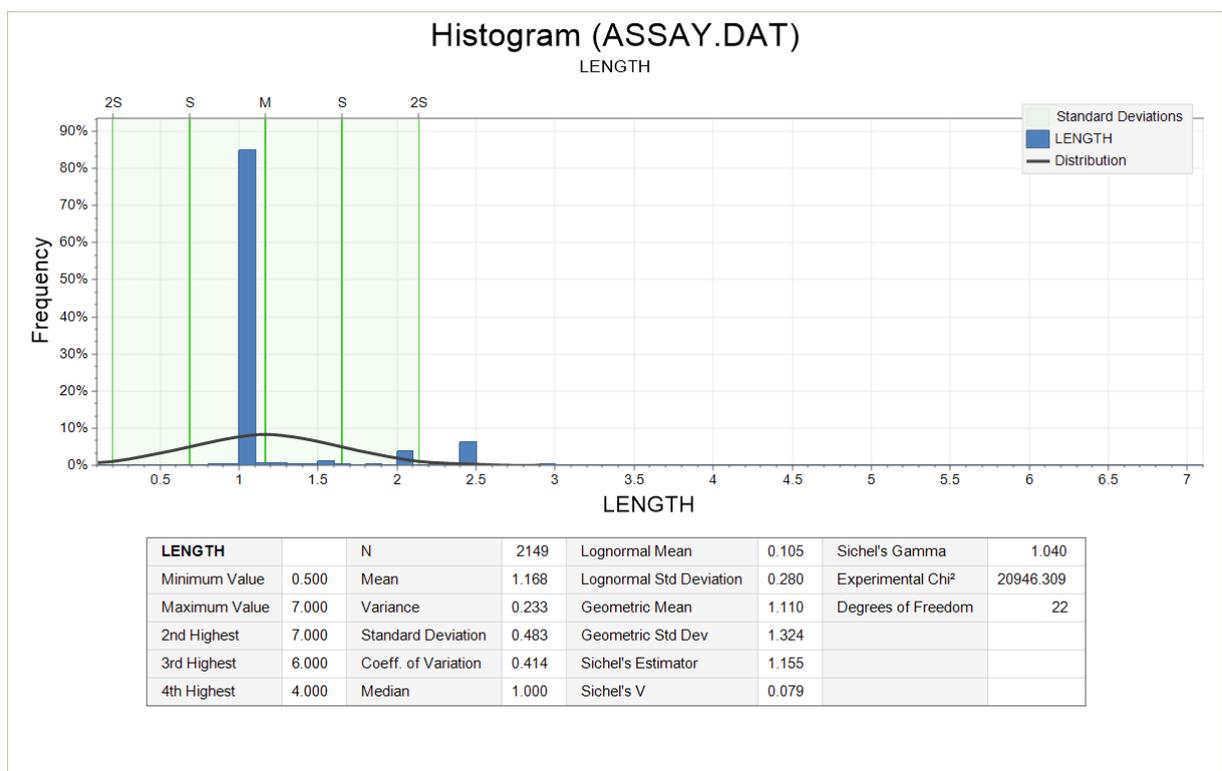


Figure 14.9 - Histogram of size distribution of samples inside the mineralized zone

Accordingly, the length of 1 m was adopted for the composite samples, converting all the samples into 1 meter. The process of creating the composite intervals started at the hole collar and proceeded in the direction of drilling (downwards). Intervals below 0.80 m were excluded. The results of statistical analyses of Samples composited are shown in Table 14.2.

Table 14.2 - Results of statistical analysis performed

Element	Number of samples	Minimum	Maximum	Mean	Median	Variance	Standard deviation
Samples composited							
Au	2487	0.001	19.750	0.708	0.463	1.203	1.097

14.7 Capping

To determine the impact of high-grade gold values (Au ppm) on the geological resource estimate, a probability graph of gold grade was constructed as shown in Figure 14.10. The first step of the curve, which represents the end of the normal data distribution, occurs at 8.25 ppm Au. The descriptive statistics of all composite samples shows that 3.07 ppm Au grade represents the 97.7 percentile (+2 SD) statistic. Through a comparison of the data, it was defined to use capping of 3.07 ppm, since its influence on the calculation will be significant.

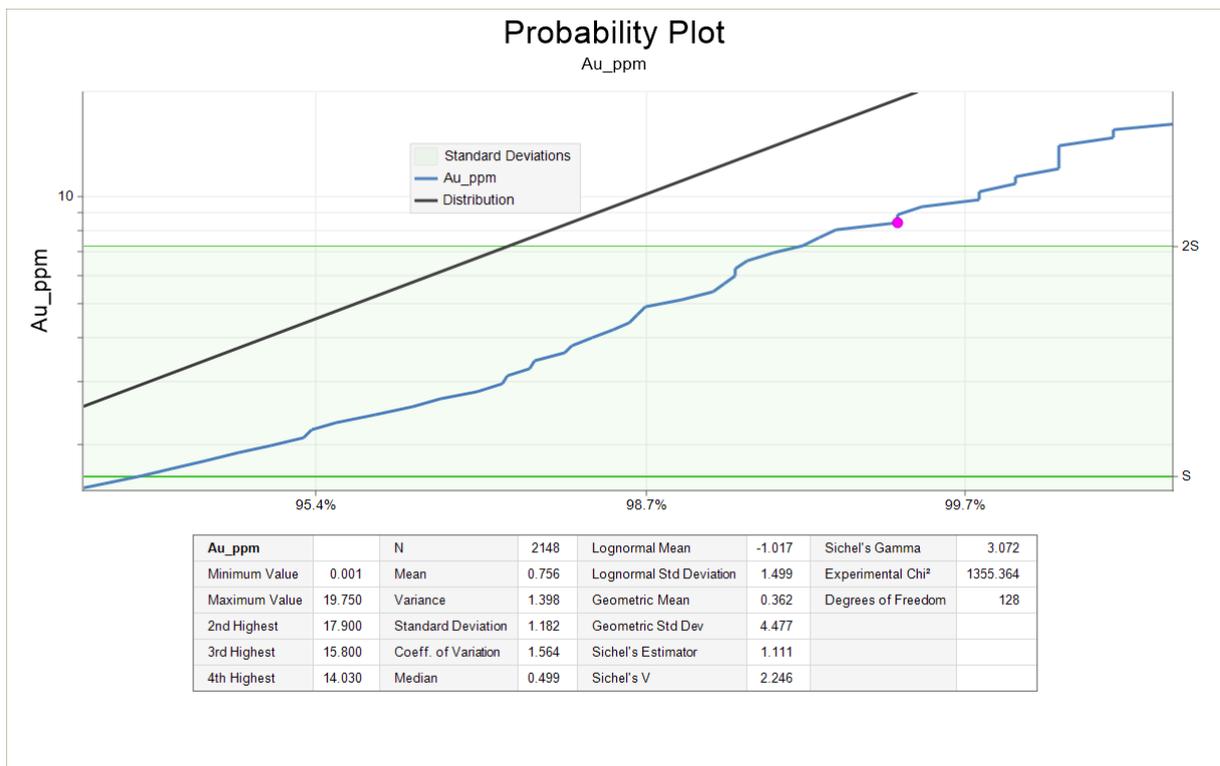


Figure 14.10 - Graph of the probability of distribution of Au (ppm)

14.8 Modelling

The block model was generated from the discretization of the three-dimensional solids into blocks of defined dimensions. The parameters of the blocks are listed below, in Table 14.3.

The process of discretization of the solid included the sub-blocking process. Initially, the model was filled with blocks measuring 10 (X) by 10 (Y) by 10 (Z) meters, which were divided into

subunits of smaller size, with a factor for size subdivision of 10 by 10 by 10 in contact with the surrounding three-dimensional solids.

As a result, at the limit with solids, the size of the blocks became 1.0 (X) by 1.0 (Y) by 1.0 (Z) meters. The initial size of the blocks was chosen based on the morphology of the orebodies and the size of the exploration grid at 1/2 of the main grid. This model contains 253,197 blocks.

The solid was used to create a block model within the mineralized geological body. This solid was used to encode the respective blocks. The digital model of the topographic surface was used to limit the block models by the vertical axis. The blocks were generated with faces parallel to the North/South and East/West axes.

Table 14.3 - Block model parameters

Directions	Minimum	Maximum	Block Size (m)	Minimum sub-block size (m)	Number of primary blocks
East	223534	224804	10	1.00	128
North	6588836	6589376	10	1.00	55
RL - Elevation	-120	380	10	1.00	5139

14.9 Geostatistical Analysis

For the study of geostatistics two domains were defined according to the structural position of the ore body of the targets, according to Figure 14.11, defining that the Domain 1 is formed by the ore bodies OB_01, OB_02, OB_03, OB_06, OB_07, OB_10, OB_18, OB_24 and OB_37; the Domain 2 is formed by the body OB_04, OB_05, OB_08, OB_09, OB_11, OB_12, OB_13, OB_14, OB_15, OB_16, OB_17, OB_19, OB_20, OB_21, OB_22, OB_23, OB_25, OB_26, OB_27, OB_28, OB_29, OB_30, OB_31, OB_32, OB_33, OB_34, OB_35 and OB_36.

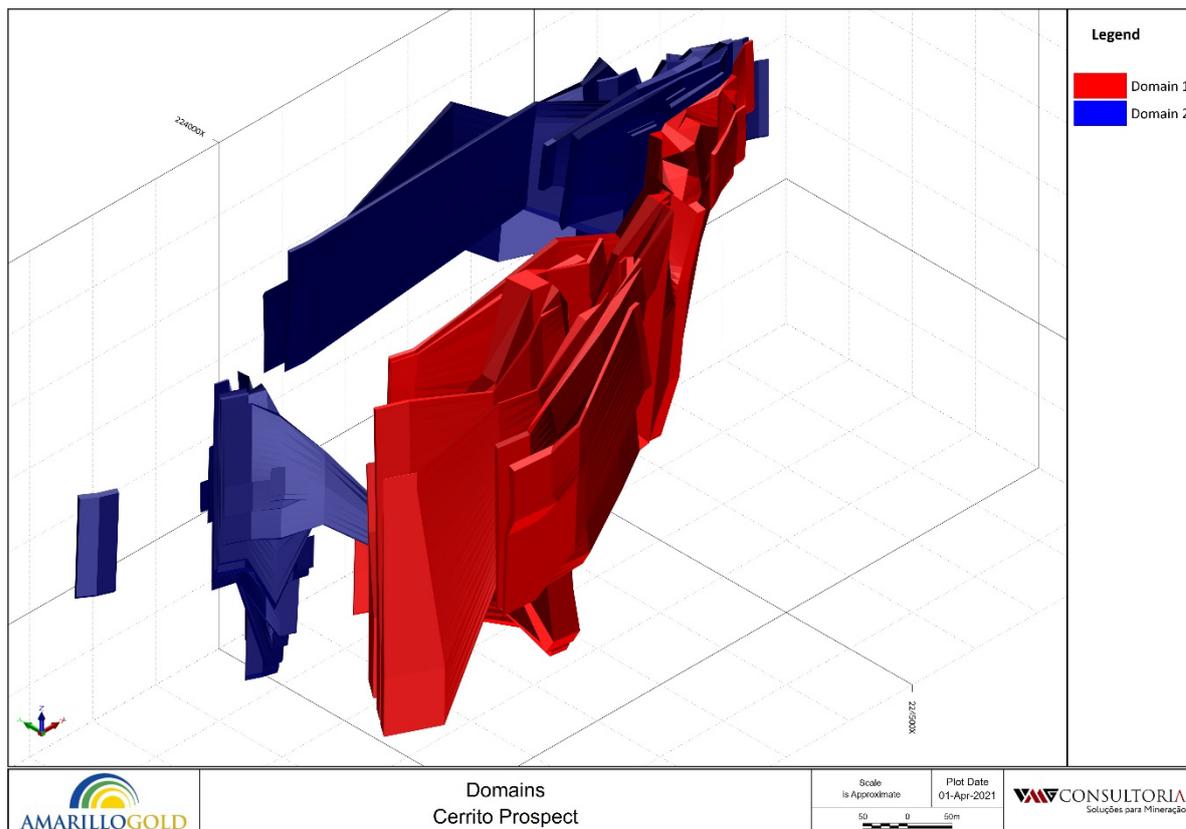


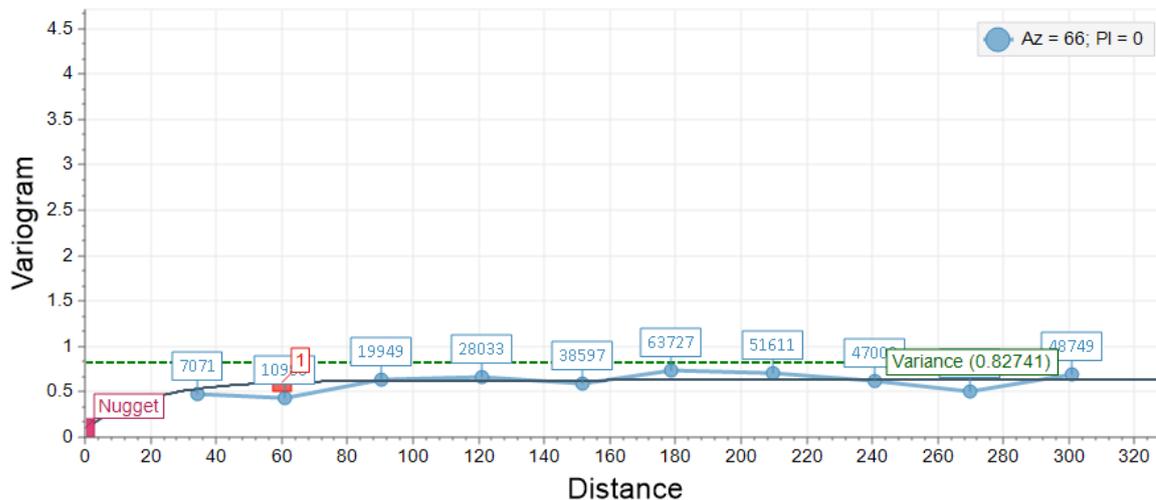
Figure 14.11 - Domains

Geostatistical studies were carried out for Domain 1 and Domain 2 of mineralized zone. The file of the 1m composite sample was used for the construction of the Semi Variograms. Semi Variograms were made on the analysis of the gold (Au ppm).

The following figures (Figure 14.12 to Figure 14.14) illustrate the semi Variograms generated for the gold (Au ppm) for Domain 1.

To verify the variograms, the cross-validation process was used, which presented a low value for the statistical error of data interpolation. The cross-validation verification results for the gold (Au ppm) is presented in Table 14.1. A linear dependence diagram between the data of the composite samples file and the estimate of the grade obtained by the Cross-Validation process was also constructed. The results for the Au ppm are shown in Figure 14.15.

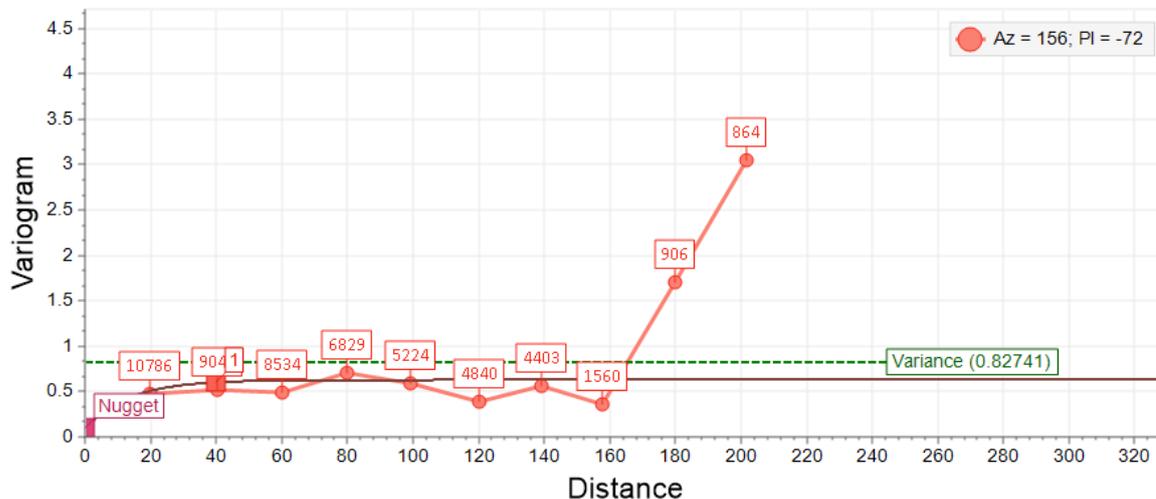
Semi Variograms (COMP_1m_D1.DAT)



Type	Variogram	Au_ppm	Mean	0.71	Std Dev	0.91
Number of Points	1705	Values	1705	Variance	0.83	

Figure 14.12 - First axis to Au (ppm), Domain 1

Semi Variograms (COMP_1m_D1.DAT)



Type	Variogram	Au_ppm	Mean	0.71	Std Dev	0.91
Number of Points	1705	Values	1705	Variance	0.83	

Figure 14.13 - Second axis to Au (ppm), Domain 1

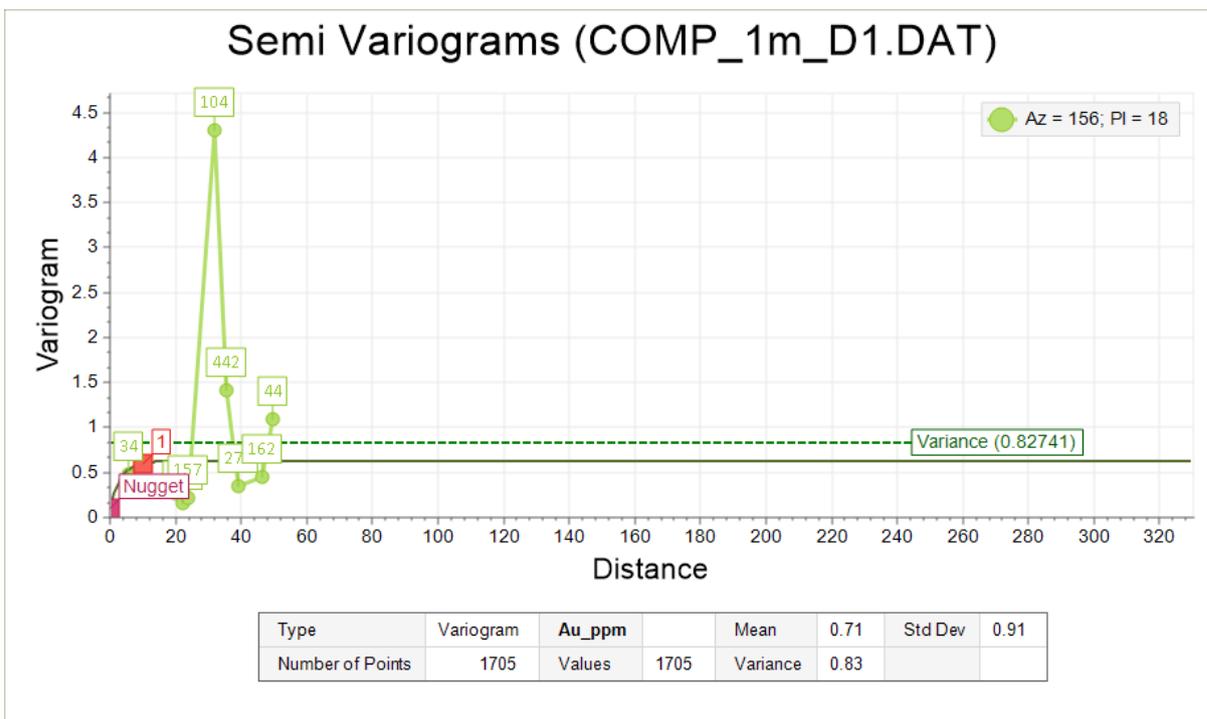


Figure 14.14 - Third axis to Au (ppm), Domain 1

Table 14.4 - Cross-Validation verification results for Au (ppm)

Analysis varb	Au_ppm			
Transformation	None			
Number of points	1705		Mean	Std Dev
Raw Data		Au_ppm	0.713362676	0.909872784
Standard error		STD_ERROR	0.446368364	0.038280055
Estimate		ESTIMATE	0.712548863	0.575730793
Residual		RESIDUAL	0.000813813	0.841436630
Error statistic		ERROR_STAT	0.002101608	1.897279775
RMSE			0.841190087	

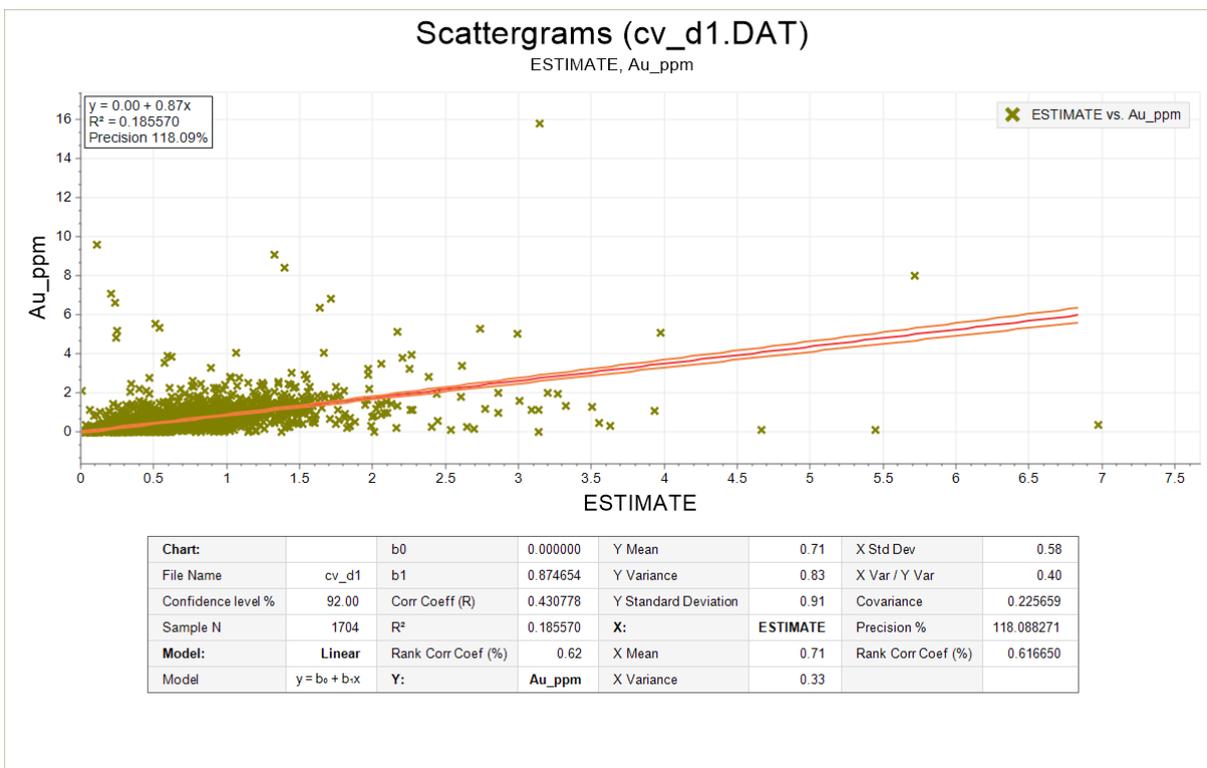
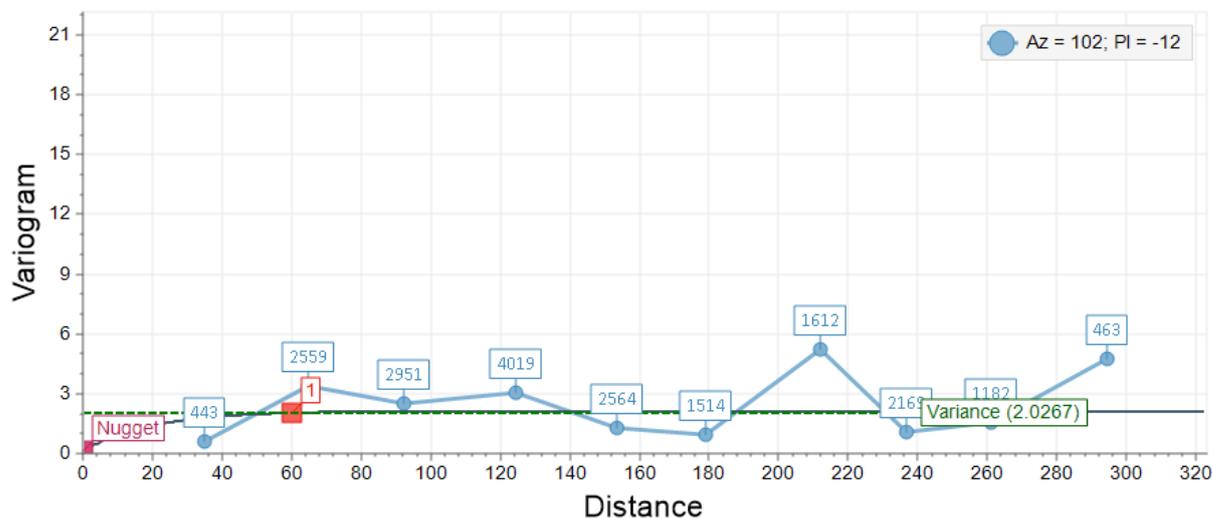


Figure 14.15 - Linear diagram of dependence between composite samples data and Au grade (ppm) estimates, Domain 1

The following figures (Figure 14.16 to Figure 14.18) illustrate the semi Variograms generated for the gold (Au ppm) for Domain 2.

To verify the variograms, the cross-validation process was used, which presented a low value for the statistical error of data interpolation. The cross-validation verification result for the gold (Au ppm) is presented in Table 14.5. A linear dependence diagram between the data of the composite samples file and the estimate of the grade obtained by the Cross-Validation process was also constructed. The results for the Au ppm are shown in Figure 14.19.

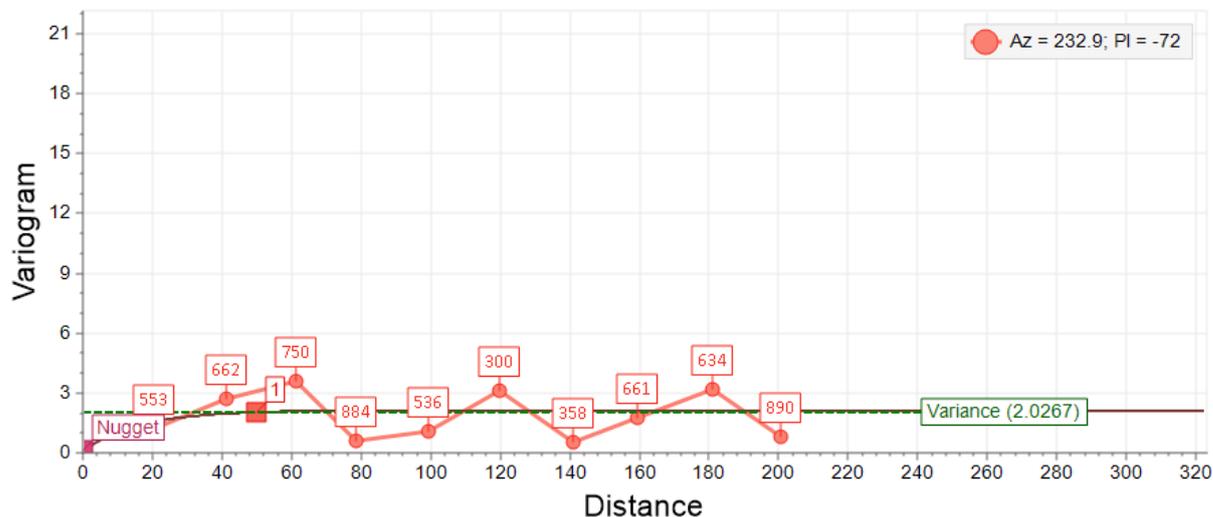
Semi Variograms (COMP_1m_D2.DAT)



Type	Variogram	Au_ppm	Mean	0.70	Std Dev	1.42
Number of Points	782	Values	782	Variance	2.03	

Figure 14.16 - First axis to Au (ppm), Domain 2

Semi Variograms (COMP_1m_D2.DAT)



Type	Variogram	Au_ppm	Mean	0.70	Std Dev	1.42
Number of Points	782	Values	782	Variance	2.03	

Figure 14.17 - Second axis to Au (ppm), Domain 2

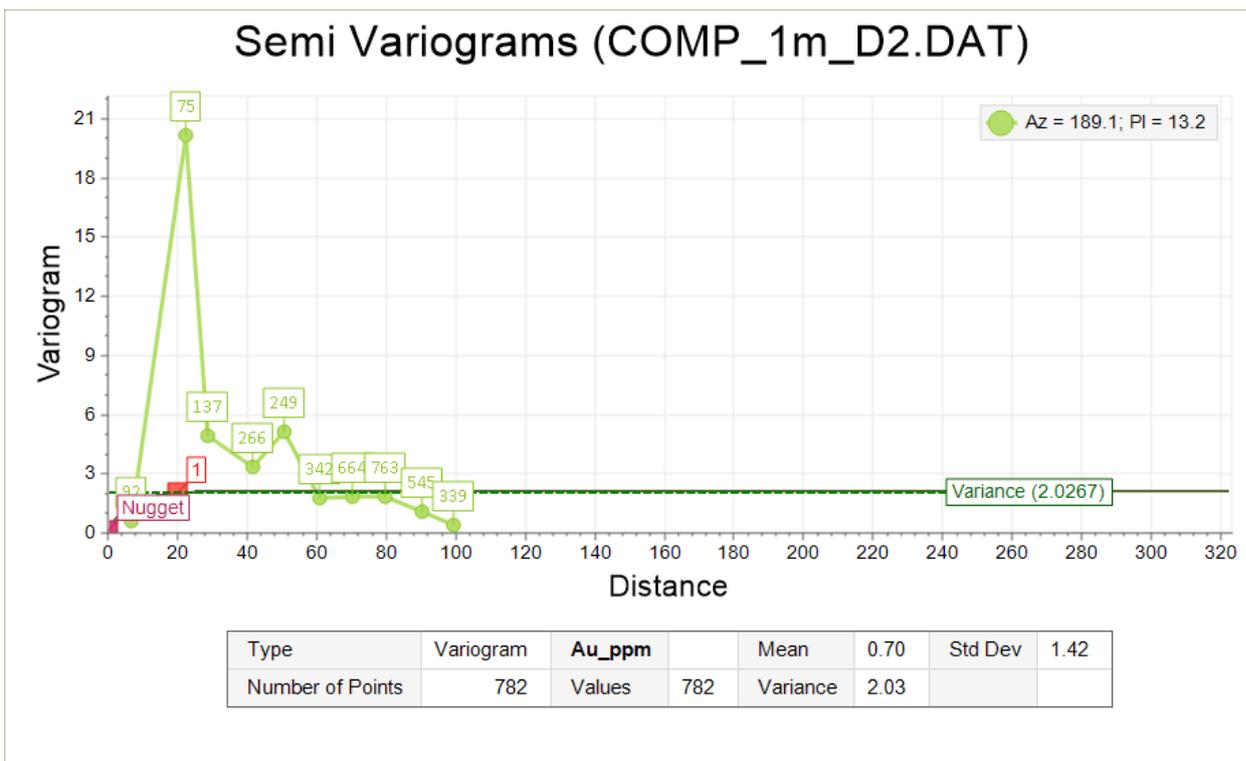


Figure 14.18 - Third axis to Au (ppm), Domain 2

Table 14.5 - Cross-Validation verification results for Au (ppm), Domain 2

Analysis varb	Au_ppm			
Transformation	None			
Number of points	782		Mean	Std Dev
Raw Data		Au_ppm	0.696856777	1.423639057
Standard error		STD_ERROR	0.636662116	0.086070346
Estimate		ESTIMATE	0.670580922	0.987202465
Residual		RESIDUAL	0.026275856	1.624373793
Error statistic		ERROR_STAT	0.019228285	2.302904761
RMSE			1.623547499	

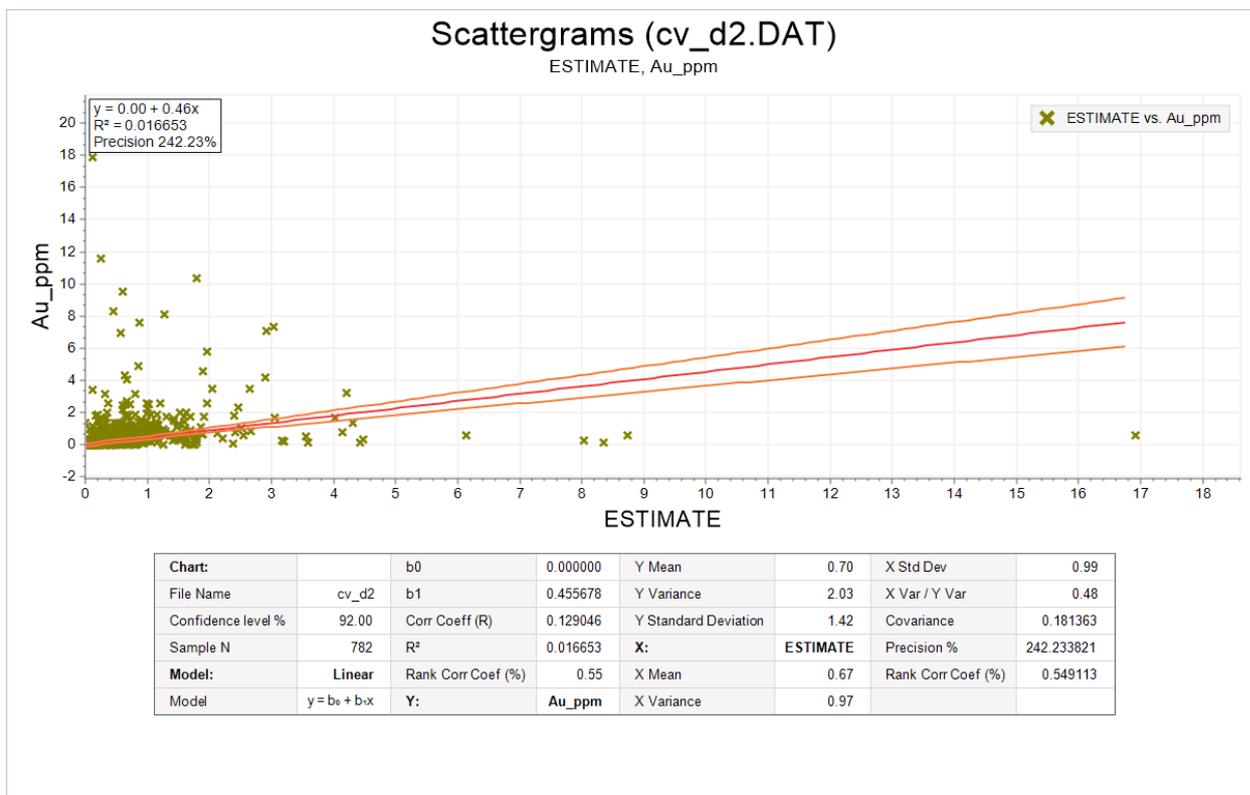


Figure 14.19 - Linear diagram of dependence between composite samples data and Au grade (ppm) estimates, Domain 2

14.10 Grade Interpolation And Mineral Resource Classification

14.9.1. GRADE INTERPOLATION

Gold (Au ppm) was interpolated to the empty block model using Ordinary Kriging (OK), IDW2 (Inverse Distance Weighting with weight 2) and IDW3 (Inverse Distance Weighting with weight 3) methods. The parameters used for all three methods were the same and are described below.

The grade estimation was performed in five consecutive steps (rounds) using different sizes of search radius, criteria of number of composite samples and number of holes.

The definition of the search ellipse parameters was made through the geostatistical analysis. The search ellipsoid was divided into four sectors. The search radii were determined by the range of the variograms. The orientation of the search ellipsoid and the axes sizes for interpolated element are described in Table 14.6 and Table 14.7. The parameters of the search ellipse radii and interpolation parameters for each step (round) of the grade estimation are described in Table 14.8.

Table 14.6 - Direction of the search ellipsoid axes for Au (ppm)

Element	First axis azimuth	First axis dip	Second axis dip
Domain 1			
Au (ppm)	66	0	-72
Domain 2			
Au (ppm)	102	-12	-72

Table 14.7 - Direction of the search ellipsoid axes and search ellipse parameters for Au (ppm)

Element	Axis	Length (meters)
Domain 1		
Au (ppm)	1	60
	2	40
	3	10
Domain 2		
Au (ppm)	1	60
	2	50
	3	20

Table 14.8 - Search radius and interpolation parameters for Au (ppm) and interpolation methods

Round	Search ellipse size factor	Minimum composites	Maximum composites	Minimum hole number
1	0.667	3	12	2
2	1	2	12	2
3	2	2	12	1
	3	1	12	1
4	100	1	12	1

The blocks for each zone of the mineralized body were interpolated using only composite samples belonging to the corresponding part of the mineralized body, i.e. the waste samples were not used. During the interpolation, the discretization process for each block, evaluated by the X, Y and Z axes with a factor of 2, was used. This makes it possible to evaluate each block in eight (8) positions and assign to the center of the block an average of these evaluations. This increases the precision of the grade estimation in each block.

The limitations presented by each sector of a search ellipse are: the maximum number of points in the sector and the minimum total number of points in the interpolation that varies depending on the size of the ellipse, from 3 to 1. Thus, the maximum total number of samples involved in the interpolation was 12 samples.

To evaluate the influence of the nugget effect on the estimation of geological resources, the following element was interpolated Au (ppm)_CUT with application of cut-off grades (capping). A 97.7 Percentile (+2 SD) was chosen as capping grade definition criteria. Table 14.9 shows the capping values.

Table 14.9 - Cut-off grade values

Element	Cut-off Grade
Au (ppm)	3.07

14.9.2. MINERAL RESOURCE CLASSIFICATION

The classification of resources was carried out according to NI 43-101. The resources were classified as Indicated Resources and Inferred Resources according to the degree of reliability of the different rounds and data used for the interpolation of the block model. Solids were created and were used to stamp the inner blocks to each of these reliability zones.

For the **Indicated Resource**, a solid that encompasses the area with a 50m regular drilling grid was created, areas in which more than 90% of the blocks were stamped in the first-third rounds corresponding to 2 of the search radius. For interpolation, a minimum of 1 hole and 2 composite samples were used, and the average distance of interpolation samples is 50 meters.

The other blocks were classified as **Inferred Resource**.

The three-dimensional visualization of the block model with the spatial distribution of the resource classes is shown in Figure 14.20.

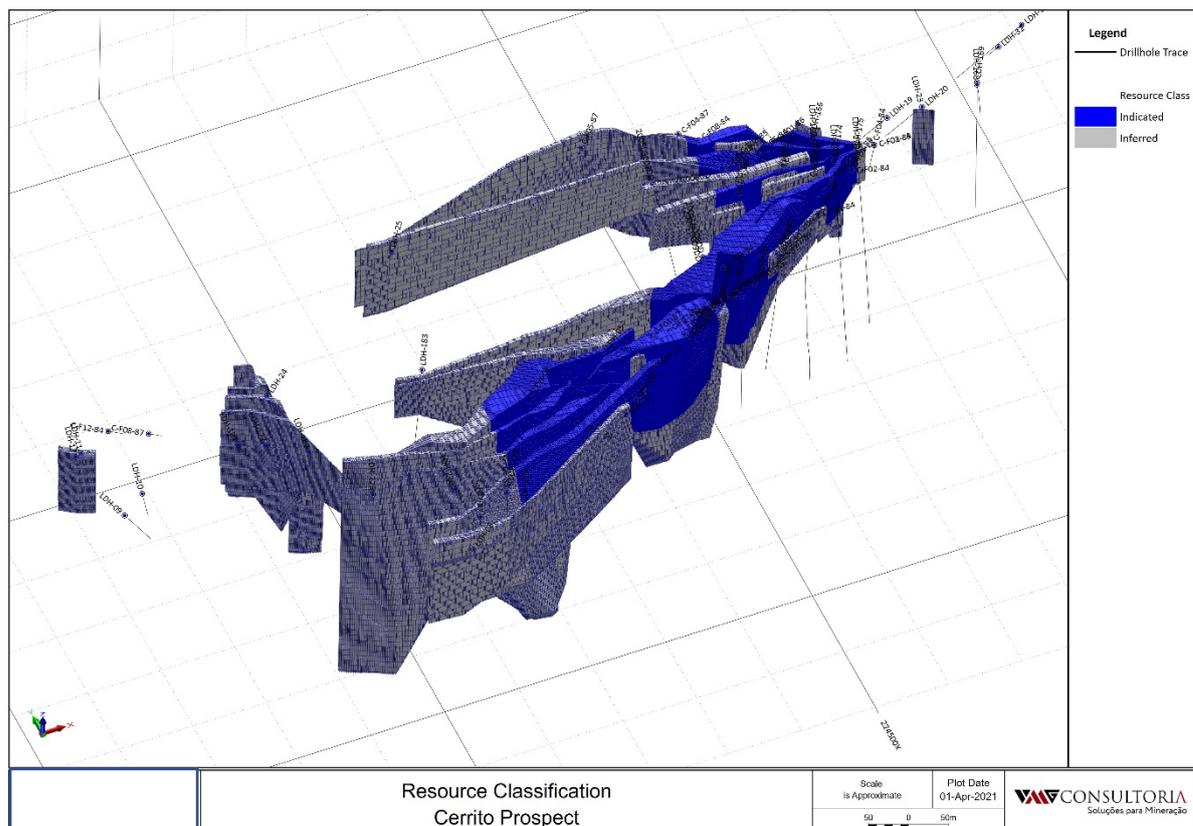


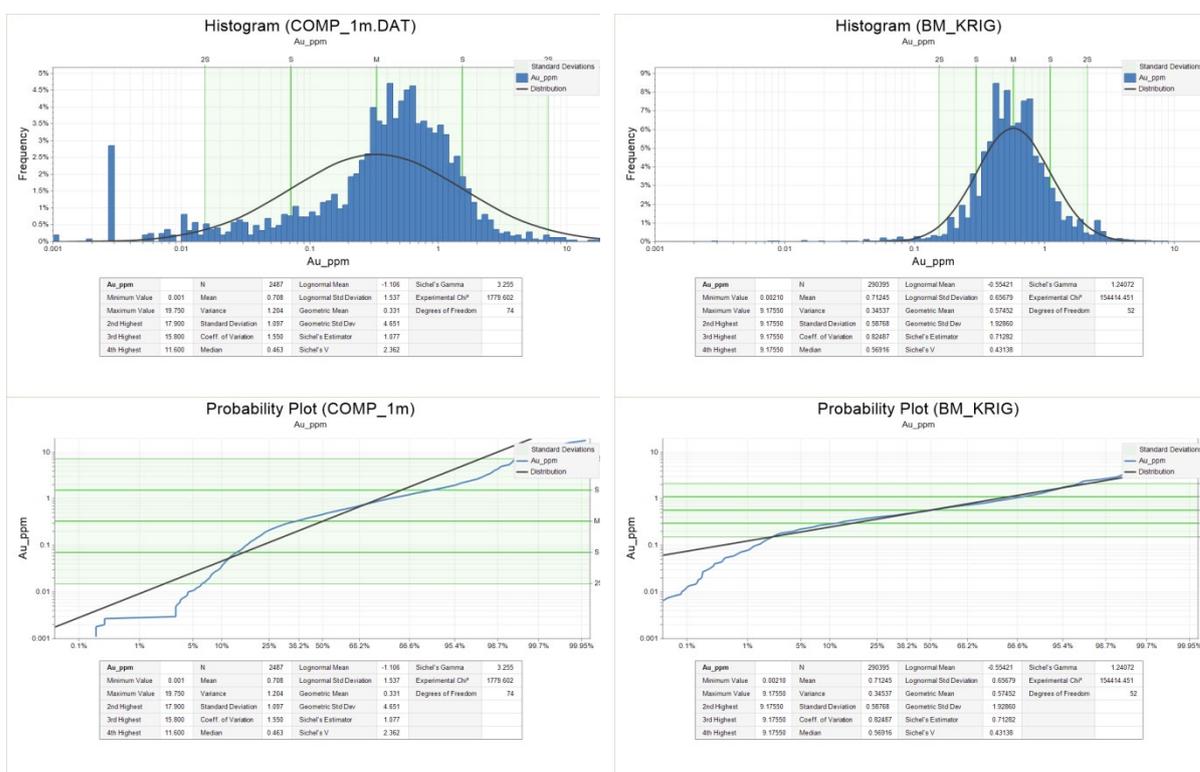
Figure 14.20 - Resources classified as Indicated and Inferred

14.11 Density Values For The Block Model

The assignment of the density values to the block model was made by the direct assignment of 2.62 t/m³ for each block. The same density was considered for the entire saprolitic part of the model and fresh rock part of the model. The density was obtained from the average of 218 density measurements, 193 density measurements for fresh rock and 25 measurements for saprolitic rock. It should be noted that the average density calculated for saprolite appears higher than expectations. It is recommended to increase the number of saprolite density samples to obtain a data set that better represents the saprolitic rock density.

14.12 Verification Of The Block Model

The block model with interpolated grades was subjected to visual and statistical verification. Histograms and probability graphs of the interpolated grades were built. Then, the interpolated grades of the block model were compared with the same histograms and probability graphs of the composite samples. The histograms and graphs of the interpolated grades and composite samples were similar, and the block model histograms were smoother than the composite histograms. The comparisons confirmed the validity and consistency of the built block model. The comparison histograms and probability plots are illustrated in Figure 14.21.



In addition, the interpolated grades were compared visually with the actual sample grades. A comparison between the actual samples and interpolated grades shows an approximate relation, indicating the precision of the estimated grades of the block model. Several sections were constructed showing the grades of the block model and the grades along the drill holes. The visual comparison is illustrated in the following figures (Figure 14.22 to Figure 14.24). Appendix I collates all sections used in the analysis.

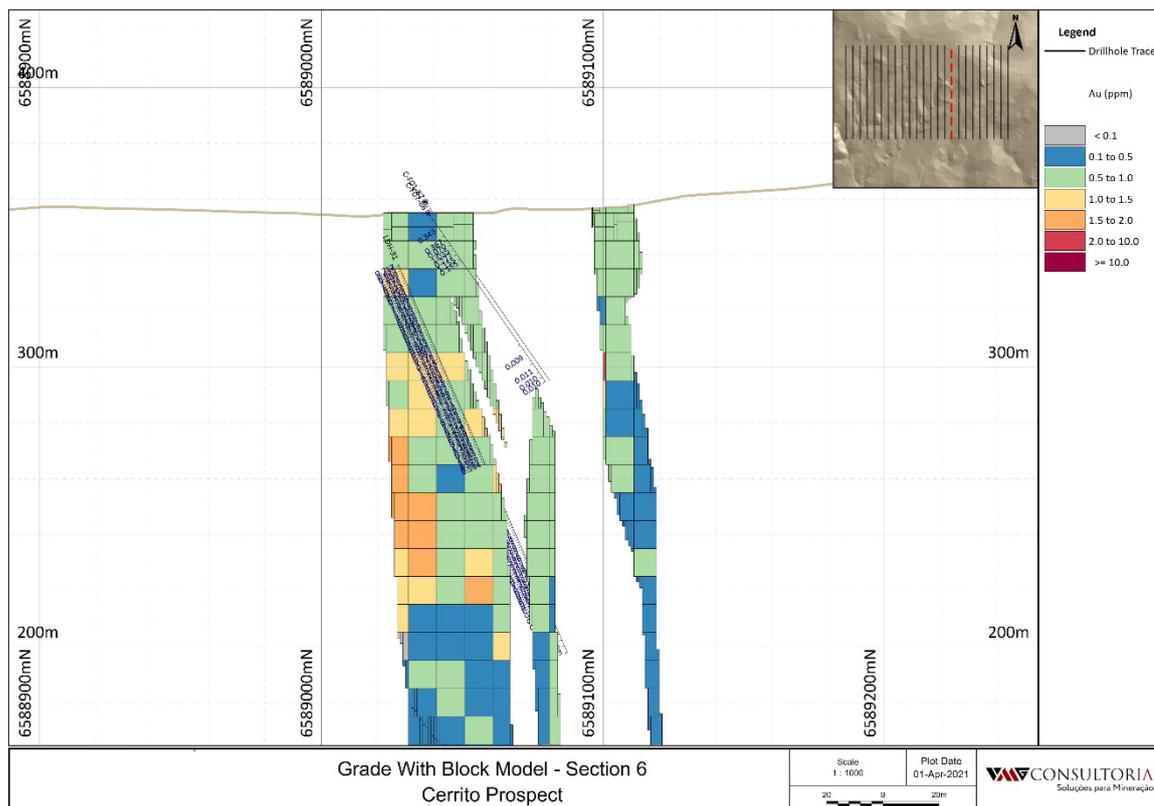


Figure 14.22 - Au (ppm) visualization with block model - Section 06

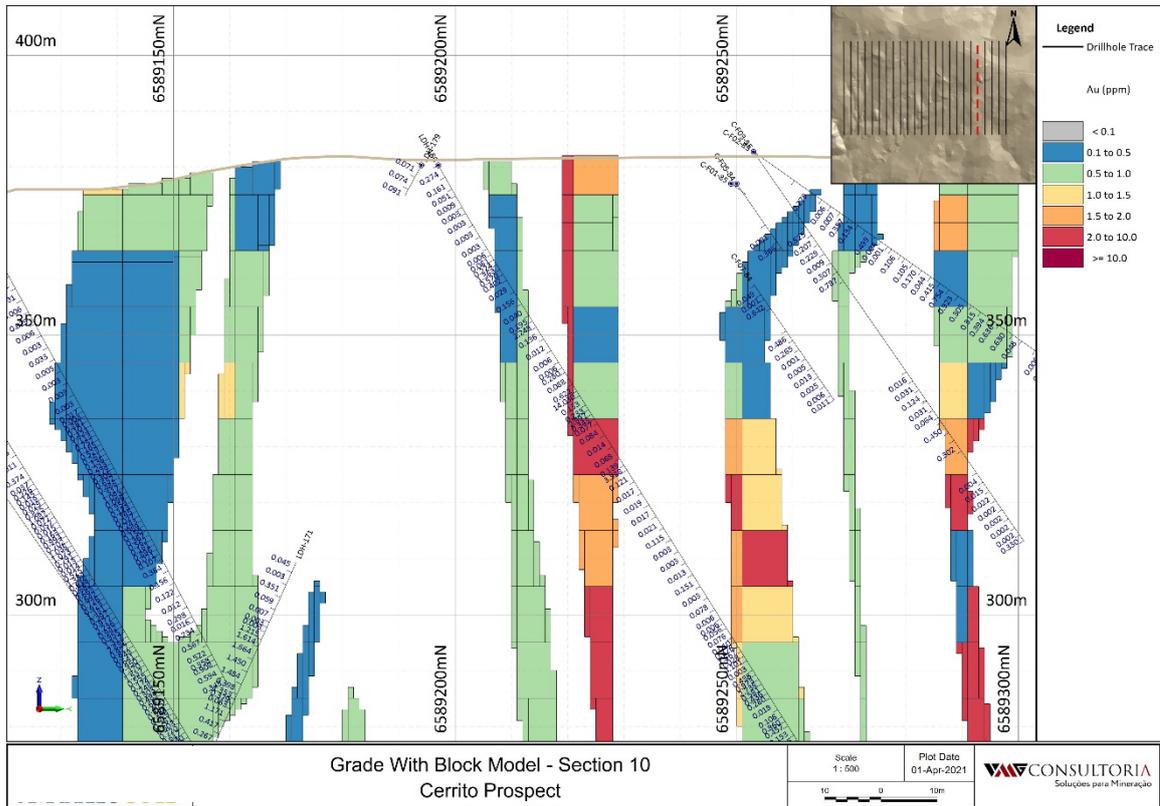


Figure 14.23 - Au (ppm) visualization with block model - Section 10

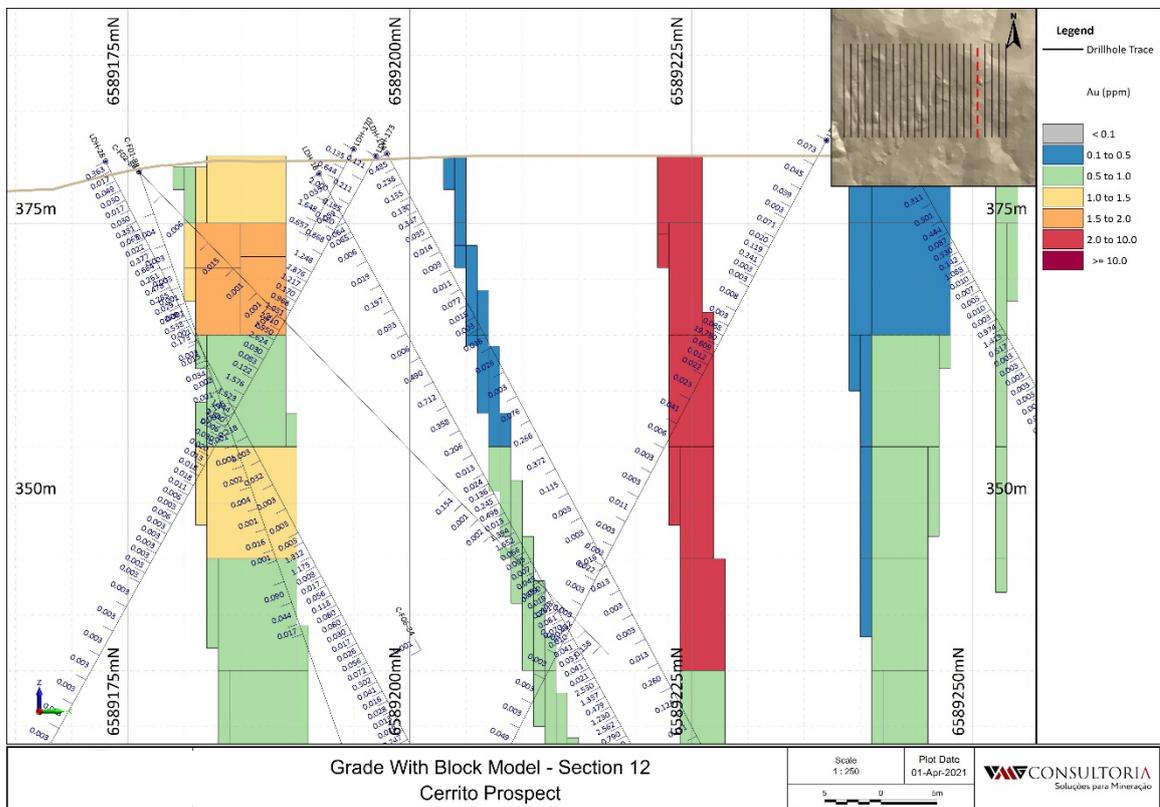


Figure 14.24 - Au (ppm) visualization with block model - Section 12

The average grade of the chemical variable from the model was compared with the average grade of the chemical variable from the sampling interval file for all elements interpolated by the three used methods. The comparison showed a very satisfactory result.

A comparison was made between a provisional polygonal estimation using the "interval" weighting method and the interpolation data by the Kriging, IDW2 and IDW3 methods for orebodies. This comparison is presented in Table 14.10. The average difference between the average grades of Au (ppm) for all interpolation methods, in relative percentages, is lower than 4.5 % and the difference between the volumes of the solid and of the block model is less than 0.0028%. These results confirm the good convergence and high reliability of the estimated block model data. The analysis for the Au (ppm) with application of capping (Au_CUT) was also satisfactory. A difference in the average grades of Au (ppm) between solids and the block model estimated by Kriging 6.2% (relative percent), is expected and satisfactory.

Table 14.10 - Data comparison between different estimation methods for Au (ppm)

ESTIMATION METHOD	VOLUME m ³	TONNES t	DENSITY t/m ³	Au ppm	Au_CUT ppm
Block Model (Krig)	9,388,816	24,598,698	2.62	0.70	0.63
Block Model (IDW2)	9,388,816	24,598,698	2.62	0.73	0.65
Relative difference %	0.00	0.00	0.00	-4.24	-3.40
Block Model (Krig)	9,388,816	24,598,698	2.62	0.70	0.63
Block Model (IDW3)	9,388,816	24,598,698	2.62	0.73	0.65
Relative difference %	0.00	0.00	0.00	-4.35	-3.53
Block Model (Krig)	9,388,816	24,598,698	2.62	0.69	0.63
Solid	9,388,553	24,598,009	2.62	0.71	0.64
Relative difference %	0.00	0.00	0.00	-2.00	-1.62

In order to verify the influence of the nugget effect on the geological resource estimation, the results of the calculation for interpolated grades with and without capping were compared. The results of this comparison are shown in Table 14.11. For gold, the difference in relative percentage is 8.98%, which shows the large influence of the high-grade samples in the geological resource estimation.

Table 14.11 - Resource calculation comparison with and without capping for gold

Au ppm ppm	Au_CUT ppm	Relative Def. Au-Au_CUT %
0.698	0.635	8.98

14.12. Results Of the Resource Evaluation

VMG estimated the Indicated Mineral Resources and Inferred Mineral Resources for the Cerrito Prospect reported herein in accordance with NI 43-101 and the current CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council on May 10, 2014. The mineral resources were estimated in conformity with the CIM Estimation of Mineral Resource and Mineral Reserves Best Practices guidelines.

The CIM Definition Standards on Mineral Resources and Mineral Reserves require that an estimated mineral resource must have reasonable prospects for eventual economic extraction. The Mineral Resource estimate discussed herein has been constrained by reasonable potential mining open pit design parameters, using economic and technical assumptions appropriate for an open pit mining scenario. The potential mining open pit shells described below are preliminary and conceptual in nature.

VMG has based the resource categories and cut-off grades of the deposit in the resource estimate stated herein on the requirement of “reasonable prospects for eventual economic extraction”, assuming an open pit mining method production scenario. Dr. Myadzel believes this is warranted for the deposit given the following:

- Long-term gold price based on a 3-year rolling average annual trailing average
- Exchange rate for US\$ to R\$ based on the 2021 average of 4.75
- Mineral process recovery of 80% for gold based on the metallurgical testing described in section 13 of this report
- Operating costs (mining, processing, general and administrative) have been considered
- The scale of the deposit
- The near surface mineral resource with 100% of the reported resource tonnes within 300 metres of the surface
- The disseminated and continuous nature of gold mineralization making the deposit amenable to low-cost bulk mining open pit methods
- The host rocks are granitoids suggesting the potential for exceptionally stable rock stability and geomechanics likely resulting in steep pit walls
- Above average infrastructure including power, roads, water resulting in relatively efficient capital and operating cost requirements

Pit shells were derived from first principles using Micromine pit optimization software to estimate material in the block model with reasonable prospects for eventual economic extraction. Pit shells were developed by considering blocks measuring 1m x 1m x 1 m on constraining boundaries. The overall pit slope angle was judged to be 70°. The main input

assumptions are summarized in Table 14.12. A plan view and section view of the assumed pit constraints are illustrated in Figure 14.25 and Figure 14.26 respectively.

Table 14.12 – Open Pit Constrained Resource Inputs and Assumptions

Inputs	Unit	Value
Gold Price	US\$/oz	1655.00
Exchange Rate	US\$/R\$	4.75
Mining Dilution	Percent	15.00
OPEX Mining Cost	US\$/tonne (material mined)	2.00
Processing Cost	US\$/tonne	10.00
G&A Cost	US/tonne	1.00
Au Recovery	Percent	80.00
Pit Slope Angles	Degrees	70.00
Strip Ratio	Waste tonnes: Above cut-off tonnes	3.51 to 1.00

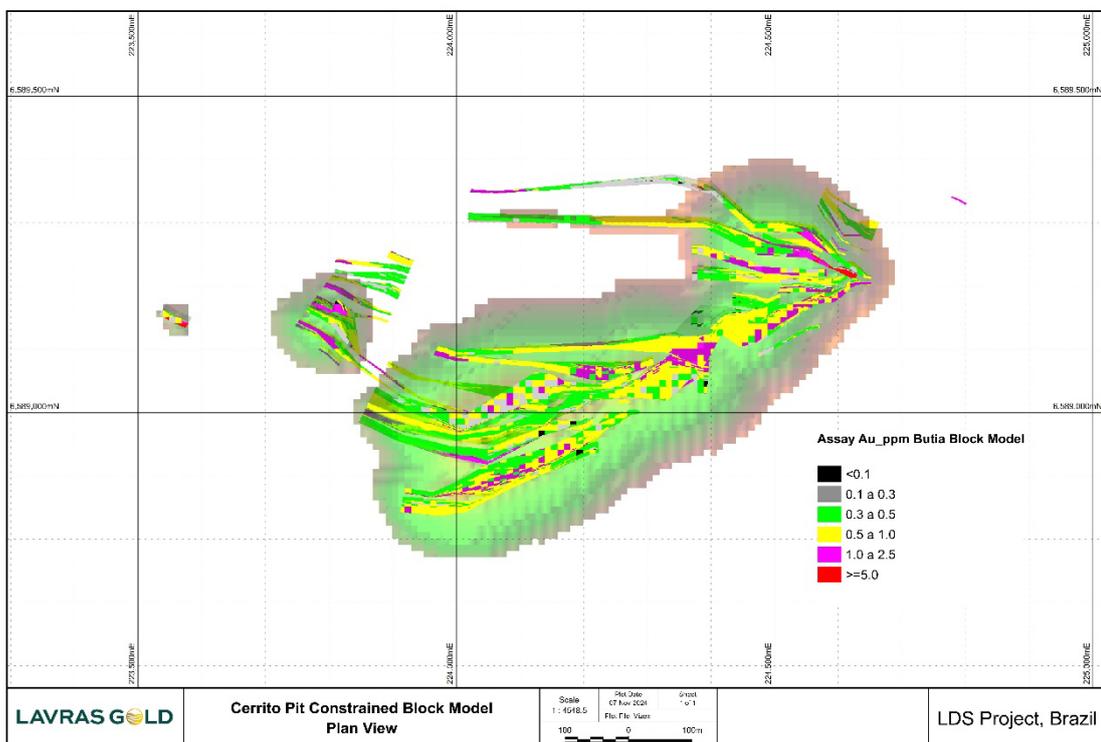
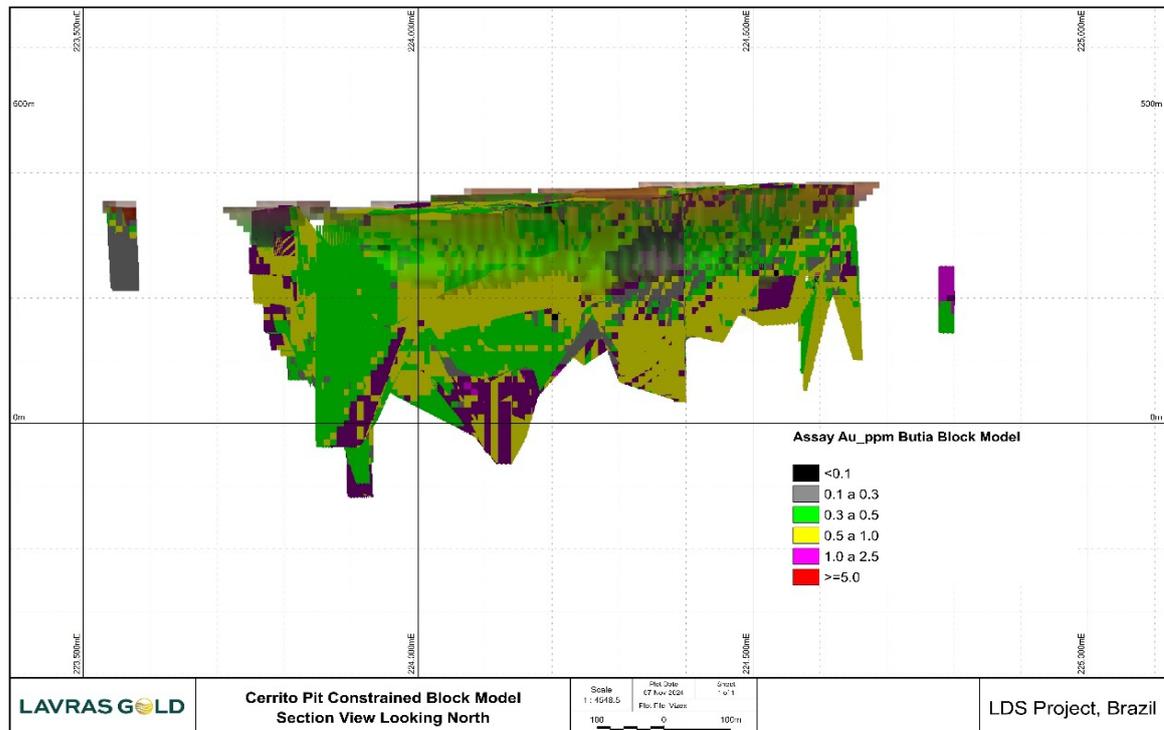


Figure 14.25 – Pit Constraining surface around estimated Block Model (0.30 g/t Au cut-off grade) – Plan View

Figure 14.26 – Pit Constraining Surface around estimated Block Model (0.30 g/t Au cut-off grade) – Section View Looking North



The results of the evaluation of resources, based on the block model interpolated by the Ordinary Kriging (OK) method, of gold mineralization of the Cerrito Prospect is presented in Table 14.13. The sensitivity of gold resource estimates to the application of several cut off grades are presented in Appendix II.

To determine the influence of the nugget effect on the geological resource estimation, the results of the calculation for interpolated grades with and without capping were compared. The high-grade samples were cut to 3.07 ppm Au. For gold, the difference in relative percentage is 8.98%, which shows the high influence of the high-grade samples in the geological resource estimation. The resource estimation presented with application of capping and without application of capping is shown in Table 14.13.

Table 14.13 - Gold Resources Calculated by Ordinary Kriging (OK) Method Assuming a 0.3 ppm Au cut-off grade

CUT-OFF Au (ppm)	CLASS	TYPE	TONNES t (000)	Au ⁽¹⁾ ppm	M_Au ⁽²⁾ oz (000)	Au_CUT ⁽³⁾ ppm	M_Au_CUT ⁽⁴⁾ oz (000)
0.30	Indicated	SAPROLITE	474	0.87	13	0.78	12
		HARD ROCK	7,775	0.78	196	0.70	176
	Inferred	SAPROLITE	286	0.80	7	0.66	6
		HARD ROCK	12,871	0.76	314	0.69	287

Notes:

- (1) Au – Average gold grade without application of capping.
- (2) M_Au – Resource estimation without application of capping.
- (3) Au-CUT – Average gold grade with application of capping.
- (4) M_Au_CUT – Resource estimation with application of capping.

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ITEM 23: ADJACENT PROPERTIES

There are no Adjacent Properties.

ITEM 24: OTHER RELEVANT DATA AND INFORMATION

In addition to the Cerrito Prospect, the Lavras do Sul Project hosts several other gold prospects. The Butiá prospects are located approximately 2 km northeast of the town of Lavras do Sul. The Butiá prospect is associated with an east-west gold in soil anomaly and zones of hydrothermal alteration within granitoids. Geological mapping, trenching, and sampling suggest hydrothermally altered rocks associated with east-west structures. A total of 22,656 meters of drilling in 96 holes have been carried out at these prospects. Lavras Gold plans to continue to evaluate the Butiá prospects and, if Lavras Gold's management deems appropriate, conduct follow-up work to test for possible extensions to known mineralization.

The Zeca Souza prospect is located approximately 4 km northwest of the town of Lavras do Sul. Five drill holes totalling 719m have tested the target returning elevated gold values that require follow-up work. Elevated gold values are associated with structures within hydrothermally altered granitoids.

The Matilde prospect is associated with a large east-west soil anomaly that measures approximately 3.0 km in length. The prospect is located about 3.5 km south of the town of Lavras do Sul. The gold anomaly is associated with a gold-bearing structural zone hosted within granitoids. A total of 22 holes totalling 6,309m have been drilled into the Matilde prospect. Some of the better drill intercepts include 20MT001 that returned 62.53m grading 0.62 g/t Au, and 20MT002 that returned multiple intercepts from surface including 144.60m grading 0.69 g/t Au. The Matilde East Extension is associated with a north-south trending gold in soil anomaly that measures about 3.0 km in extent.

The Valdo Teixeira prospect is located about 5.0 km southeast of the town of Lavras do Sul. Six holes totaling 1,785 meters have been drilled into the target. Gold mineralization is hosted in hydrothermally altered granitoids. Some of the better holes include LDH-191 that returned 2.0m grading 7.90 g/t Au from 19.00m, and LDH-193 that returned 1.00m grading 1.36 g/t Au.

The Dourada prospect is located about 4.0 km northeast of the town of Lavras do Sul. The target is characterized by a very large hydrothermal alteration system within altered granitoids. A total of 7 holes totalling 1,703 meters have been drilled into the target.

The Cerro Rico prospect is located approximately 7.0 km east of the town of Lavras do Sul. Hydrothermally altered volcanics are associated with a gold in soil anomaly that measures approximately 1.0 km in an east-west direction. Seven drill holes have tested the target returning multiple narrow anomalous gold values. Some of the better values include 1.00

meters grading 5.28 g/t Au in hold LDH-184, and 8.58 g/t Au over 1.0 meters grading 8.58 g/t Au in hold LDH 186.

Caneleira is located about 3.0 km west of the town of Lavras do Sul. The target is an east-west hydrothermally altered structural zone that measures approximately 1.0 km in strike length within granitoids. A total of 12 drill holes totalling 2,490m has been drilled into the target. Some of the better drill hole intercepts include 19.10m grading 1.99 g/t Au from 70.40 meters and 11.00m grading 1.13 g/t Au from 98.50m in hole LDH-110, and 16.75 grading 0.82 g/t Au from 181.25m in drill hole LDH-114.

The Volta Grande, Aurora and Volta Grande South prospects are located about 6 km southeast of the town of Lavras do Sul. These properties host gold in soil anomalies and several old trenches and mining galleries. Surface exploration work including rock sampling, trenching and soil surveys are required to define drilling targets.

24.1 OTHER CONTRACTUAL RIGHTS

The interest of Lavras Gold and LDSM in the mineral rights comprising the Lavras Project, other than with respect to the Cerrito Prospect (the subject of this report), are derived from the following agreements:

1. the asset purchase agreement (the “IAMGOLD Purchase Agreement”), dated May 28, 2021, between the Amarillo, Border Prospecções Minerais Ltda. (“BPML”), and, as intervenors, IAMGOLD Corporation (“IAMGOLD”) and IAMGOLD Brasil Prospecção Mineral Ltda (“IAMGOLD Brasil”), and the related assignment (the “IAMGOLD Assignment”) thereof by Amarillo of its rights to, and the assumption of obligations thereunder by Lavras Gold, dated March 10, 2022 by Lavras Gold, dated March 10, 2022;
2. the option agreement (the “RTDM Option Agreement”) dated October 9, 2006 between AMB and Rio Tinto Desenvolimentos Minerais Ltda. (“RTDM”), among others, as amended on January 28, 2021, and the related assignment (the “RTDM Assignment”) thereof by AMB of its rights to, and the assumption of obligations thereunder by, LDS, dated January 17, 2022; and
3. the option agreement (the “Vidal de Souza Option Agreement”) dated August 30, 2004, between RTDM, Maria Lúcia Vidal de Souza, Luzia Jurema Vidal de Souza, Maria Deniz Vidal de Souza, Ursula Emilia Vidal de Souza and Paulo Alcides Vidal de Souza.

A summary description of the above-mentioned agreements is set out below.

Iamgold Purchase Agreement

On May 28, 2021, Amarillo, BPML, IAMGOLD and IAMGOLD Brasil entered into the IAMGOLD Purchase Agreement. Under the terms of the IAMGOLD Purchase Agreement, BPML agreed to assign and transfer to Amarillo a 100% interest in the mineral rights (the “BPML Mineral Rights”) set out in Table 4.2 below. Pursuant to the IAMGOLD Assignment, all rights and obligations of Amarillo have been assumed by Lavras Gold and LDSM.

The purchase price payable by Lavras Gold for the BPML Mineral Rights is USD 700,000, payable as follows:

- (a) USD 50,000, payable within 12 months from the date of execution of the IAMGOLD Purchase Agreement;
- (b) USD 50,000, within 10 days from the date the BPML Mineral Rights are transferred and assigned to Lavras Gold;
- (c) USD 100,000, within 10 days from the date that Lavras Gold submits to the ANM an economic exploitation plan with respect to any of the titles comprising the BPML Mineral Rights, and which indicates the technical and economic feasibility of the project;
- (d) USD 100,000, within 10 days from the date that Lavras Gold discloses in a news release for the first time a feasibility study with respect to any of the titles comprising the BPML Mineral Rights;
- (e) USD 400,000, within 12 months from the date that Lavras Gold discloses in a news release for the first time the commencement of commercial production with respect to any of the titles comprising the BPML Mineral Rights.

In addition, IAMGOLD received a 3.0% net smelter return royalty on the titles comprising the BPML Mineral Rights.

As additional consideration, USD 50,000 is payable by Lavras Gold to BPML in each of the following events: (i) the requests for assignment of the mineral rights are not lodged with the ANM within one year from the execution of the agreement; and (ii) the assignment of the mineral rights is not annotated by the ANM within one year from the date the requests for assignments are lodged with the ANM.

The IAMGOLD Purchase Agreement provides that the completion of the assignment and transfer of the BPML Mineral Rights will occur after all necessary authorizations and consents therefore are obtained by Lavras Gold, including as required pursuant to the Border Law.

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Table 24.1 - BPML Mineral Rights

DNPM Number	Status ⁽¹⁾	Tenement in:	Partial Report in ⁽³⁾	Final Report in	Remarks ⁽²⁾⁽³⁾	Registered	Project	Area (Ha)
17 810.085/2008	Research Authorization	25/03/2019 - 2nd		5/10/2023	Final Report	Border Propecções Minerais Ltda.	Matilde	1263.20
18 810.086/2008	Research Authorization	05/02/2020 - 2nd		8/17/2024	Final Report	Border Propecções Minerais Ltda.	Mateo Feio	1263.20
19 810.131/2009	Research Authorization	25/03/2019 - 2nd		5/10/2023	Final Report	Border Propecções MineraisLtda.	Dourada/Cerro Rico	1414.04
20 810.001/2016	Research Authorization	27/07/2020 - 1st	7/31/2024		Partial Report	Border Propecções Minerais Ltda.	Valdo Teixeira	1911.39

Notes:

1. "Research Authorization" means an exploration authorization.
2. "Final Report" means a final report evidencing the applicable discoveries, has been submitted to the ANM after the exploration phase under an exploration authorization is concluded.
3. "Partial Report" means a report evidencing the applicable discoveries, has been submitted to the ANM before the conclusion of the exploration phase under an exploration authorization.

RTDM Option Agreement

On August 30, 2004, RTDM entered into an option agreement (the “CBC Option Agreement”) with CBC and on October 22, 2004, it entered into the Vidal de Souza Option Agreement, pursuant to which it acquired the option to earn an interest in the CBC Mineral Rights and the Vidal de Souza Mineral Rights (as defined below), in each case, with respect to the Lavras Project.

In accordance with the terms of the RTDM Option Agreement, AMB acquired all of RTDM’s rights to the CBC Option Agreement and the Vidal de Souza Option Agreement. On November 16, 2021, Amarillo, AMB, LDS, LDSM and CBC entered into the CBC Purchase Agreement, which replaced the CBC Option Agreement. Pursuant to the RTDM Assignment, all rights and obligations of AMB were assigned to, and assumed by LDS.

As a result of the RTDM Assignment, LDS is the holder of the contractual rights to acquire an interest in certain mineral rights (the “Vidal de Souza Mineral Rights”) as set out in Table 4.3 below, which were initially granted to RTDM under the Vidal de Souza Option Agreement, subsequently transferred to AMB and acquired by LDS from AMB pursuant to the RTDM Assignment. The terms of Vidal de Souza Option Agreement are set out below.

Vidal de Souza Option Agreement

The Vidal de Souza Option Agreement provides that, as long as RTDM incurs exploration expenditures in the amount of USD 800,000 with respect to the Vidal de Souza Mineral Rights, RTDM would be entitled to a 60% interest in such mineral rights to be conveyed through the incorporation of a joint venture company to which the mineral rights will be transferred. Further, the Vidal de Souza Option Agreement provides that cash calls will be made pro rata based on the equity of each shareholder, and that failure to participate or meet a cash call will cause dilution of the non-participating shareholder. If the equity interest of either shareholder in the joint venture company falls below 10%, such shareholder must transfer all its interest in the joint venture company to the other shareholder in exchange for a 1.5% net smelter returns royalty. Prior to the commencement of commercial production, the net smelter returns royalty may be converted into a cash payment of USD 5,000,000.

AMB incurred more than USD 800,000 of exploration expenditures with respect to the Vidal de Souza Mineral Rights within the first three years of the Vidal de Souza Option Agreement. However, as of the date hereof, the joint venture with respect to the Vidal de Souza Mineral Rights has not yet been formed.

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Table 24.2 - Vidal de Souza Mineral Rights

	DNPM Number	Status ⁽¹⁾⁽²⁾	Tenement in:	Partial Report in ⁽³⁾	Final Report in	Remarks ⁽⁴⁾⁽⁵⁾⁽⁶⁾	Registered	Project	Area (Ha)
21	002.122/1936	Mining Concession					Luzia Jurema Vidal de Souza	Caneleira, Caneleira Norte Paredao, Taruman, Pitangueira Fazenda Da Chacara, Olaria Santo Exedito	1778.30
22	212.201/1936	Mining Concession	10/29/1936		5/4/2022	Mine Closure	Luzia Jurema Vidal de Souza	Volta Grande, Merita, Aurora	1064.87
23	810.499/2007	Research Authorization	28/06/2018 - 2nd	Not Applied		Partial Report	Maria Lucia Vidal de Souza	Saraiva	1131.23
24	810.171/2007	Research Authorization	05/02/2020 - 2nd		8/17/2024	Final Report	Maria Lucia Vidal de Souza	Santa Jovita	38.55
25	810.224/2008	Research Authorization	20/02/2020 - 2nd		9/1/2024	Final Report	Maria Lucia Vidal de Souza	Hilario	568.55

Notes:

1. "Mining Concession" means that a mining concession has been granted.
2. "Research Authorization" means an exploration authorization.
3. "Not Applied" means all the application or other ANM process has been submitted to the ANM and the ANM's related decision remains pending in the normal course.
4. "Mine Closure" means a report with respect to mine closure plans.
5. "Final Report" means a final report evidencing the applicable discoveries, has been submitted to the ANM after the exploration phase under an exploration authorization is concluded.
6. "Partial Report" means a report evidencing the applicable discoveries, has been submitted to the ANM before the conclusion of the exploration phase under an exploration authorization.

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24.2 LDSM OWNED PROPERTIES

LDSM has a 100% interest in the mineral rights (the “LDSM Mineral Rights”), set out in Table 24.3

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Table 24.3 - LDSM Mineral Rights

DNPM Number	Status ⁽¹⁾	Tenement in:	Partial Report in ⁽²⁾	Final Report in	Remarks ⁽³⁾⁽⁴⁾	Registered	Project	Area (Ha)
26 810.334/2020	Research Authorization	23/07/2021 - 1st		8/1/2024	Partial Report	Lavras do Sul Mineração Ltda	Maria Hildara	863.59
27 810.486/2021	Research Authorization	18/06/2021 - 1st	Not Applied		Application	Lavras do Sul Mineração Ltda	Panteras II	652.97
28 810.104/2010	Research Authorization	07/12/2020 - 1st		7/31/2024	Partial Report	Lavras do Sul Mineração Ltda	Hilario II	750.30

Notes:

1. "Research Authorization" means an exploration authorization.
2. "Not Applied" means all the application or other ANM process has been submitted to the ANM and the ANM's related decision remains pending in the normal course.
3. "Partial Report" means a report evidencing the applicable discoveries, has been submitted to the ANM before the conclusion of the exploration phase under an exploration authorization.
4. "Application" means the ANM has not yet given its authorization to begin research.

ITEM 25: INTERPRETATION AND CONCLUSIONS

This report primarily refers to the Cerrito Prospect that lies on exploration permits 810.316/1979 and 810.147/1987. The Lavras Gold Project hosts several earlier-stage exploration prospects and showings that will be systematically explored in the future.

The Lavras do Sul mineralization does not fit neatly into any one deposit type classification, has a two-stage gold precipitation history resulting from a single fluid path that evolved from extremely alkaline and silica undersaturated to quartz-saturated with increased fluid focus. The mineralization style at the Cerrito Prospect can be classified as sericite-microbreccia.

The exploration work consisted of interpreting airborne geophysical gradiometric and gamma spectrometric surveys; surface geological mapping; soil sampling; topographic surface; and diamond drill holes.

The model generated for the mineral resource estimate was based on drilling information performed on an irregular grid, with distances between holes that vary between 25 and 50 meters.

The model herein reports an Indicated Mineral Resource of 8.2 million tonnes at a grade of 0.78 ppm Au, and an Inferred Mineral Resource of 13 million tonnes at a grade of 0.76 ppm Au. The estimate assumes a pit constrained gold cut-off grade of 0.30 ppm and no capping grade is applied. Preliminary economic indicators are that the deposit may be economically extractable at some point. The level of confidence, i.e., the category, of a resource estimate may change with additional exploratory work, such as sampling, drilling and metallurgical testing, along with other modifying factors. Some factors that require further investigation include density measurements associated with saprolite, and more detailed surveying of old workings and voids. Both factors are considered to have a minor impact on the resource estimate presented in this report.

VMG conducted the evaluation of mineral resources of the Cerrito Prospect, for Lavras Gold Corp (formerly Amarillo Gold Corporation), in compliance with the NI 43-101 form. The work

took place from November 2020 to April 2021. The work was subsequently updated for this report for Lavras Gold Corp.

The main activities developed by VMG were:

- Site visit, discussions with the technical staff from Amarillo (now Lavras Gold), understanding of the geology and mineralization of the deposit, and verification of the geological work performed by Amarillo (now Lavras Gold) and contractors on site, as well as verification of the materiality of the achieved results;
- Validation of the drilling database and the topography information;
- Verification of the QA/QC program established by Amarillo Gold (now Lavras Gold) for geological work and of its conduction;
- Selection of the drilling data used in the definition of mineral resources;
- Interpretation of the geological model;
- Conduction of statistical and geostatistical studies;
- Estimation of mineral resources, as well as their quantification and classification;
- Disclosure of the mineral resources from the Cerrito Prospect according to the NI-43-101 form.

VMG observed that the results obtained from QA/QC were acceptable, despite high precision value sampling accuracy. VMG did not visit the assay laboratories, but the ACME and ALS Chemex Lab laboratories are reputable international groups which meet or exceed the industry standards for sample preparation and analysis. The density values for saprolite material were the same as for fresh rock. Usually, the density value of saprolite material is less than fresh rock. Therefore, VMG recommends that further density tests be taken for saprolite and fresh rock to better characterize possible differences as there is a risk that this could have a minor impact the on the resource calculations. VMG also recommends that the old workings and cavities at the Cerrito Prospect be properly located and surveyed as this may have a minor impact on the resource calculations. Although lower density values and void spaces from old workings, if sufficiently large, could have a negative impact on the project's economic viability, the risk of this appears very small.

The materiality of the work developed by Lavras Gold Corp, as well as the materiality of the deposit and the developed studies, are sufficient to support the disclosure of mineral resources of the Cerrito Prospect according to NI-43-101.

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VMG has not identified any known legal, political, environmental, or other risks that would materially affect the continued exploration and potential future development of the mineral resources at the Cerrito Prospect. There is the risk that Lavras Gold and its applicable subsidiaries may not be able to secure from governmental authorities (i) the necessary approvals for the transfer of contractual mineral rights, and (ii) permits or authorizations that may from time to time be needed for the exploration and operation of the Cerrito Prospect, but VMG is not aware of any issues that would prevent those approvals and permits from being withheld under the normal approval and permitting process.

ITEM 26: RECOMMENDATIONS

26.1. WORK PROGRAM

VMG, based on the studies and work carried out on the mineral resources of the Cerrito Prospect, owned by Lavras Gold Corp, makes the following recommendations:

- Organization and systematization of the core storage and storage for duplicates of samples.
- Database: validate the name of standards.
- Infill drilling will be necessary to upgrade the Indicated Resources to Measured Resources for the main mineral deposit.
- QA/QC: the crushing duplicates should be inserted into the assay batches.
- QA/QC: the laboratory pulp duplicates should be inserted into the assay batches.
- Increase the quantity of density samples to obtain a dataset that represents better the saprolitic rock density.
- Detailed metallurgical tests.
- Environmental studies.
- Instrumental topographic survey of the area.

26.2. BUDGET

The estimated budget for this work program is shown in Table 26.1.

Table 26.1 - Estimated Budget

Work Program	Units Type Work	Units	Unit Cost	Cost US\$
Instrumental topographic survey	Km2	4	2,000	8,000
Drilling	Meters	3,000	150	450,000
Assaying	Sample	27,000	25	675,000
Density test	Sample	50	15	750
Mineralogical studies	Study			8,000
Metallurgical tests	Sample	5	2,000	10,000
Environmental studies	Study			100,000
Work on the organization of geological data and materials				50,000
Administrative expenses				30,000
TOTAL				1,331,750

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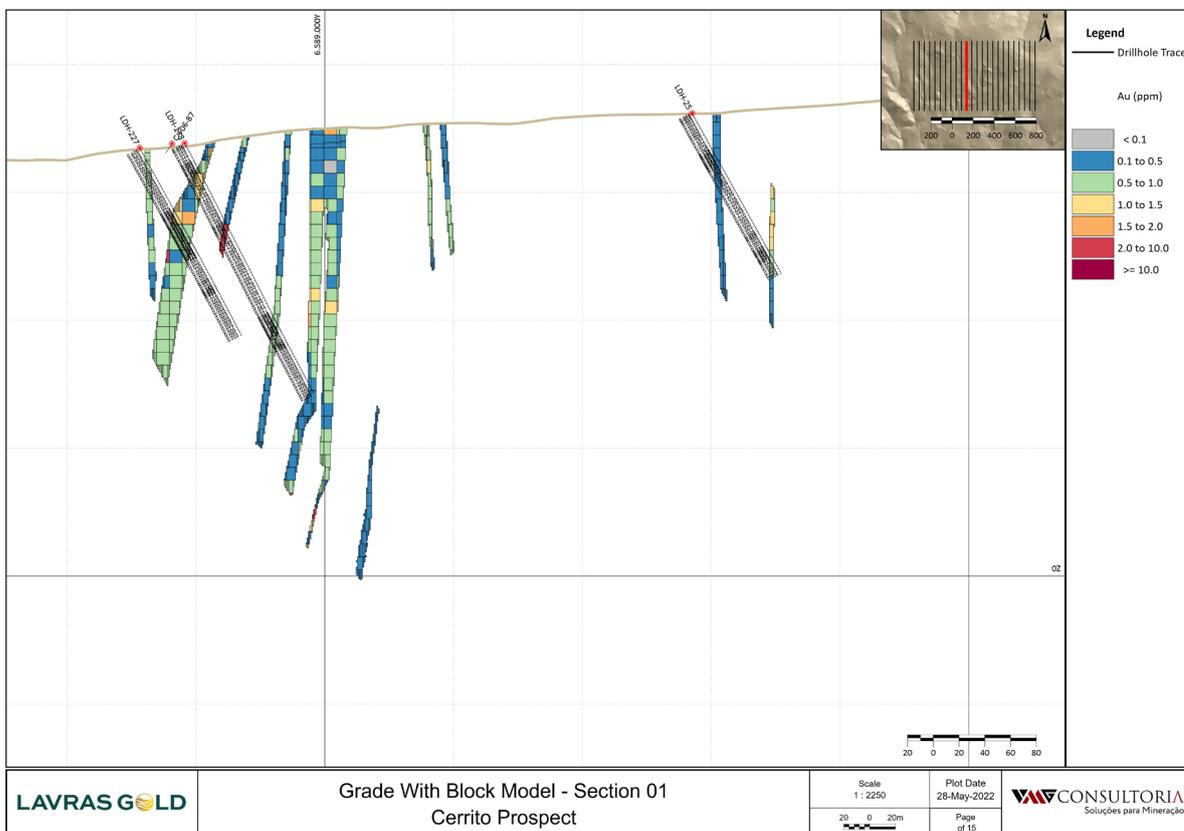
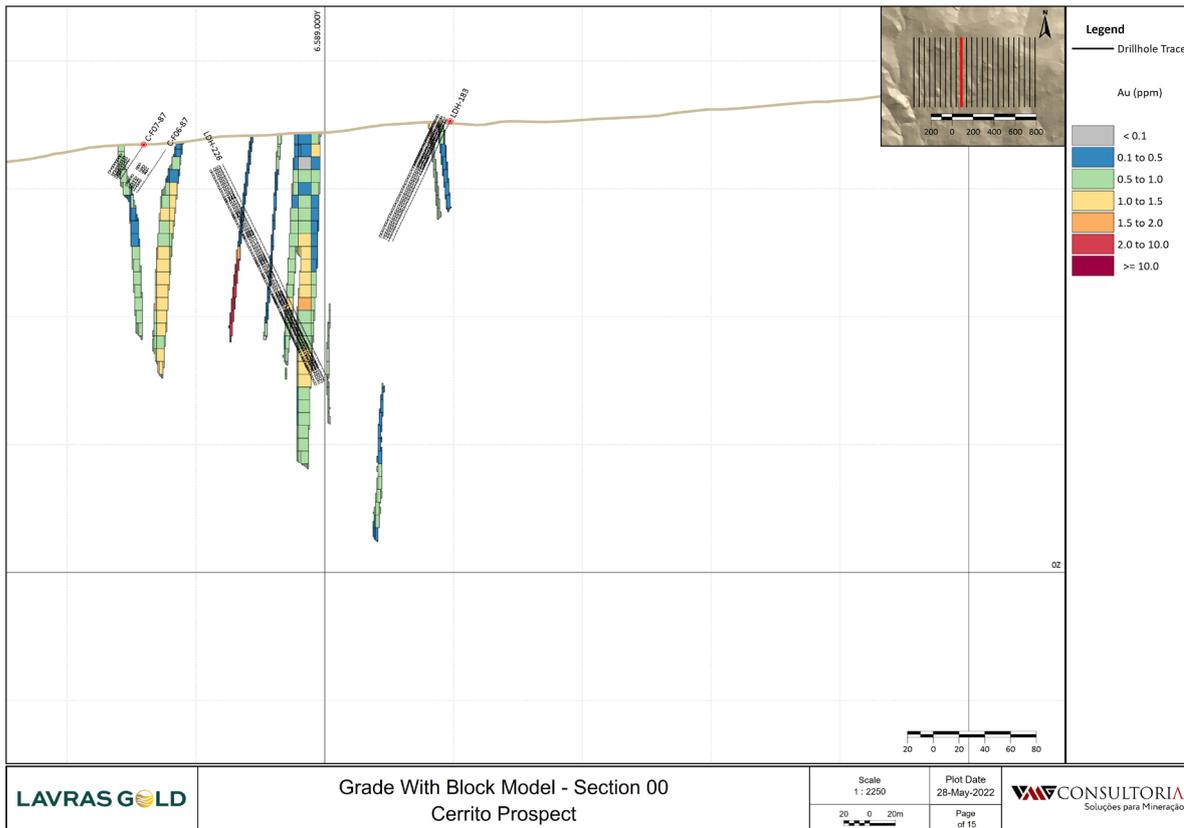
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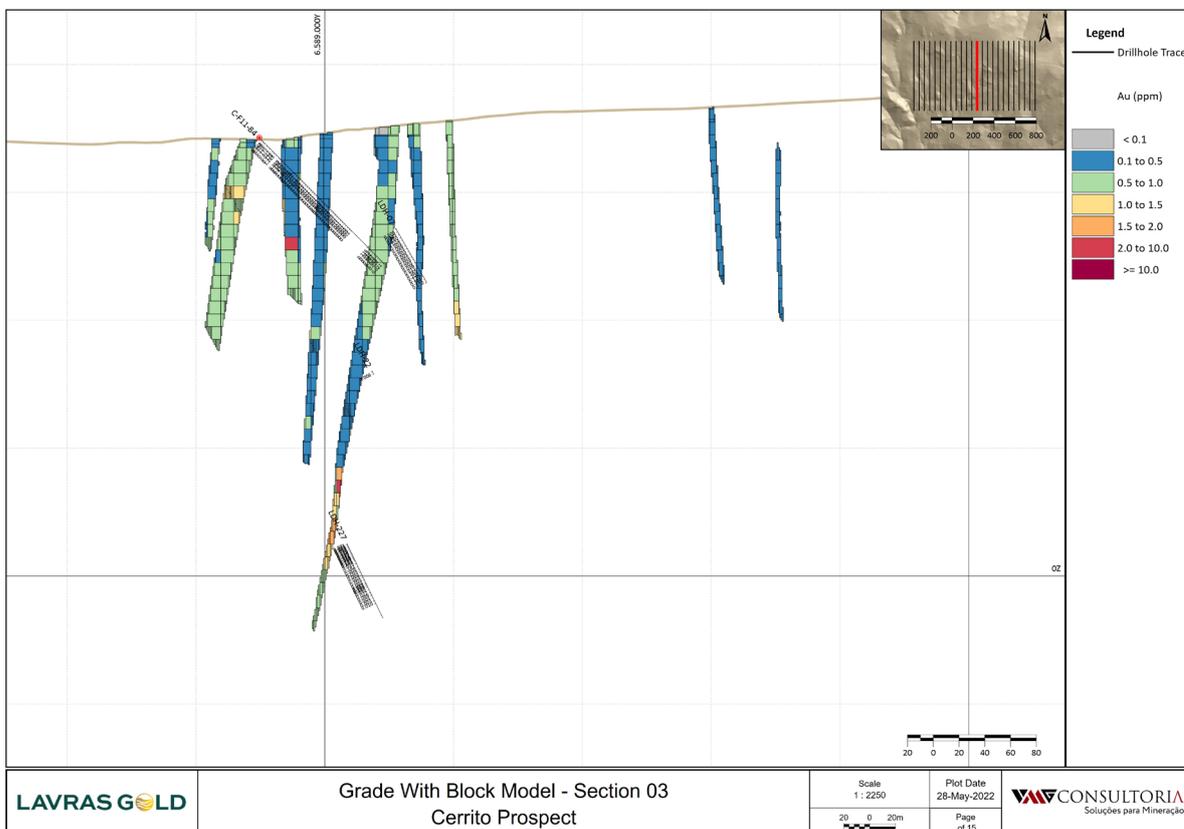
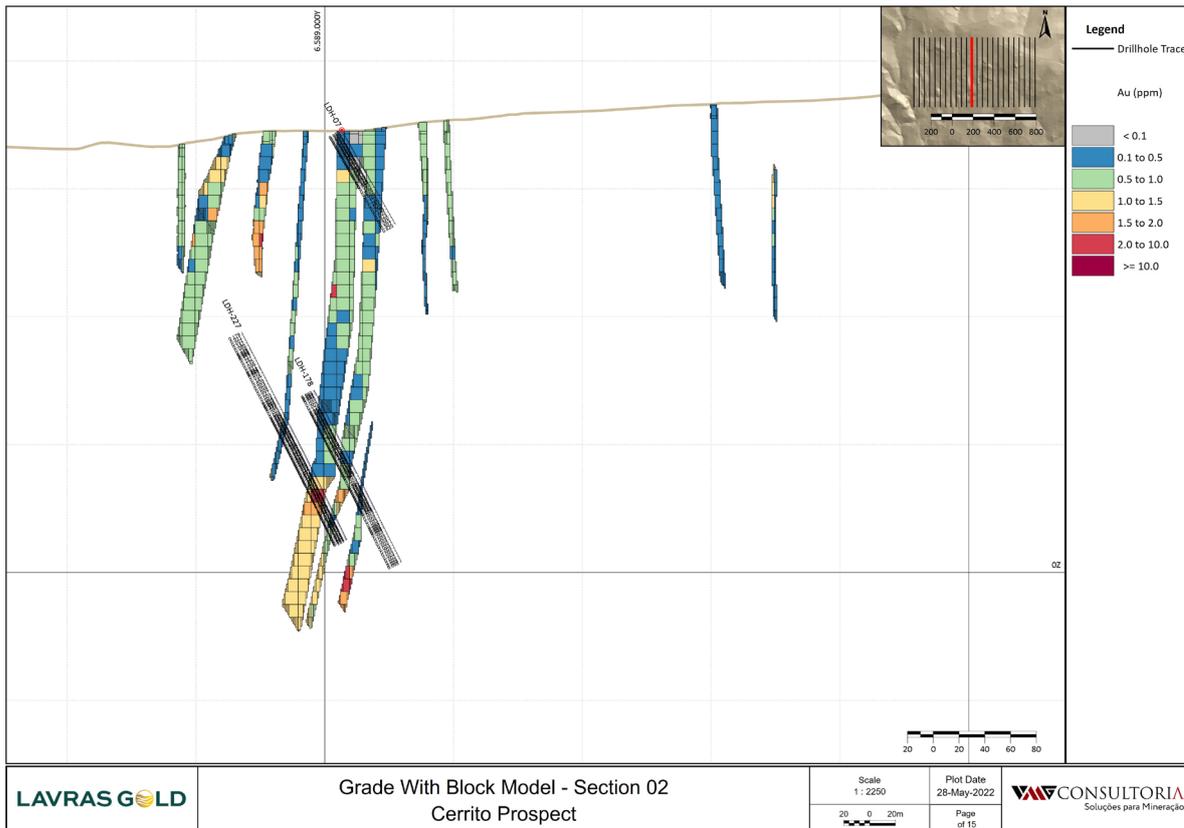
%	Percent
3D	Three-dimensional
Au	Gold
Assay	Measured amount of material within a sample
Anisotropy	Characteristic of a variable having different physical properties when measured in different ways
Azimuth	Azimuth angle at which an exploration hole has been drilled (northward deviation)
Correlation coefficient	A statistical measure of the degree of similarity between two parameters
Coefficient of variation	In statistics, a normalized measure of the variation present in a sample from the population
Collar	Geographic coordinates of a drill hole or starting point of a shaft
Compositing	In sampling and resource estimation, process designed to turn all samples into a given equal size
Cut Off grade	The threshold above which the material is selectively mined or used
DD	Rotary Diamond Core Drilling
Declustering	In geostatistics, the process that allows the restricted grouping of samples within the octant sectors
Standard Deviation	A statistical measure of the dispersion of sample data around the mean value
ANM	Agência Nacional de Mineração
Geostatistics	Science that studies and describes the spatial continuity of any type of natural phenomenon
Cumulative frequency plot	Graphical representation of the data sorted in ascending or descending order, which are shown in a non-decreasing function between 0% and 100%. The forms of percentage frequency and percentage cumulative frequency are interchangeable, since one can be obtained from the other
Probability graph	Plot showing cumulative frequencies on different intervals in a probability plot on a logarithmic scale
ha	Hectare
HG	High Grade
Histogram	A graphical representation of the data distribution by frequency of occurrence
Inverse Distance Weighting	Geostatistical method for calculating mineral resources. Since this method causes the weight of each sample to be inversely proportional to its distance from the point that is being estimated, this gives more weight to the nearest samples and less to those that are more distant. The method works very efficiently with regularly scaled data. Extreme versions of the Inverse Distance Weighting are the global declustering methods such as the polygonal method and the local sample average method
IDW	Inverse Distance Weighting
Km	Kilometers

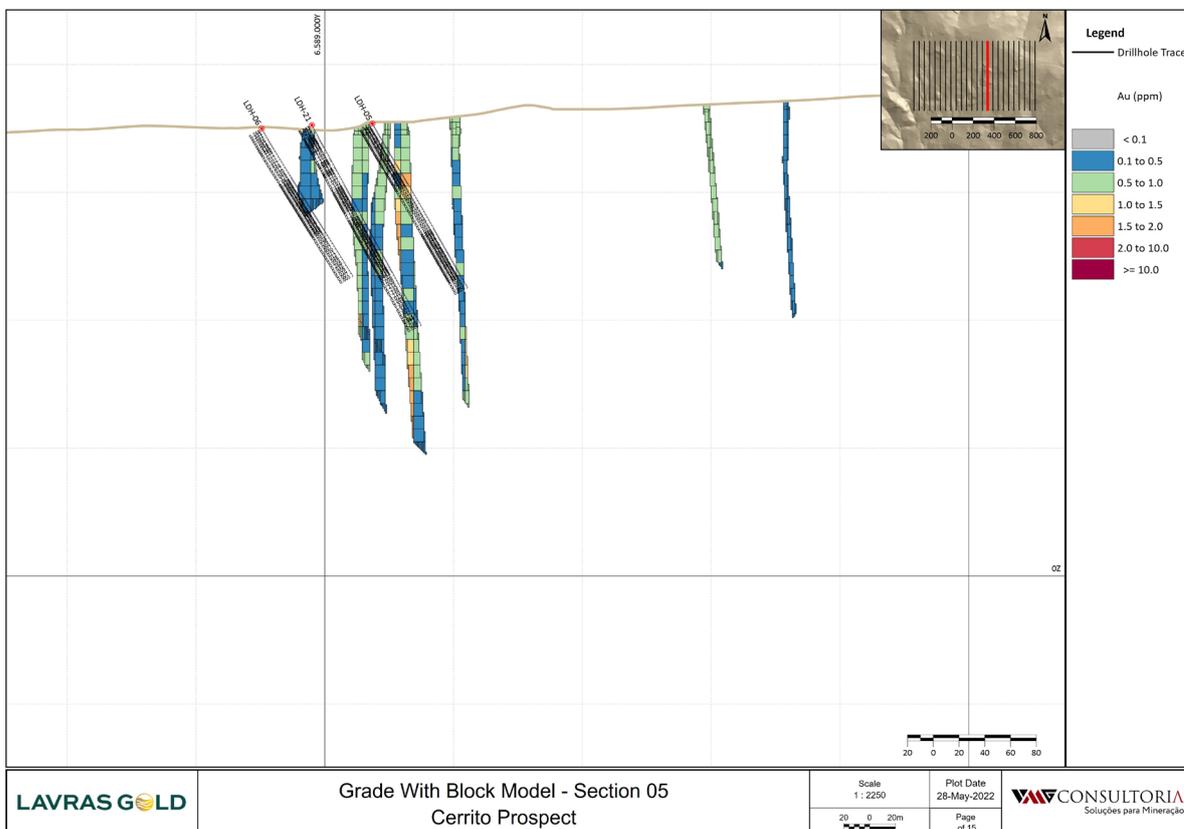
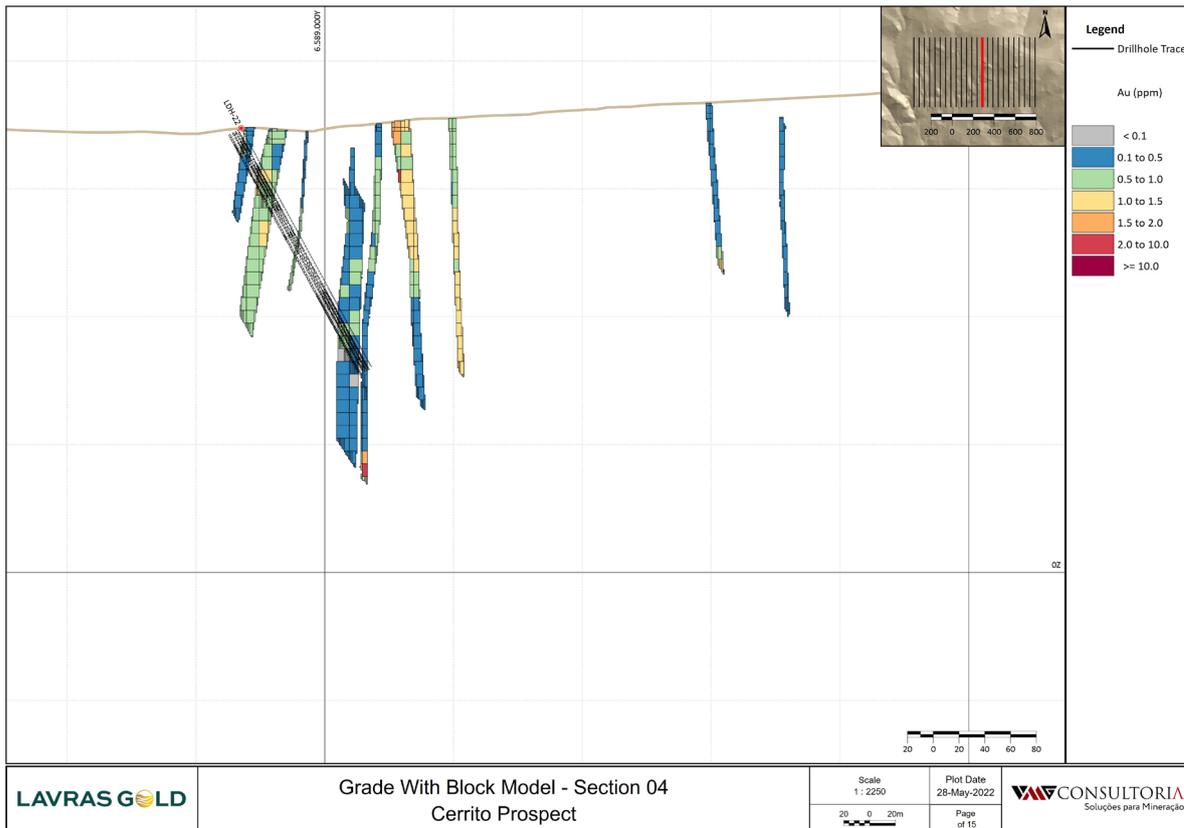
Ordinary Kriging	Kriging is a regression method used to approximate or interpolate data
LG	Low Grade
lithology	File with the lithological description of the Samples
Lognormal	Refers to the distribution of a variable whose logarithm's distribution is normal.
LOI	Loss on ignition
m	Meter
M	Million or mega
Median	Value of the average sample in a data set arranged in class order.
Mt	Millions of tons.
NI 43 -101	National Instrument 43-101
° C	Celsius Degrees
OK	Ordinary Kriging
Percentil	One hundredths of the total data. The 50th percentile is the median.
PIB	Gross domestic product
Population	In geostatistics population include up properties that show the same (or close) geostatistical characteristics. Ideally, a population is characterized by linear distribution
ppm	Parts per million
Precision	The precision of quality control analyzes refers to the percentage of difference between an analysis and its repetition, for example, a precision of 10% would mean that the initial analysis and the repetition differ by 10%. The closer to 0%, the better is the precision
Range	Distance at which the variogram reaches its plateau
RC	Rotary-percussive drilling
Resource	Geological mineral resources (mineable and not mineable)
RL	Reduced level, that is, elevation relative to a local datum
SG	Specific Gravity (unit in grams per cubic centimeter)
t	Metric Tonnes
t/m ³	Tonne per cubic meter
Triangular Mesh	Three-dimensional surface defined by triangles
Solid triangular mesh	Closed triangular mesh
Ton.	Tonnes
Variance	In statistics, a measure of the dispersion over the average value of a data set

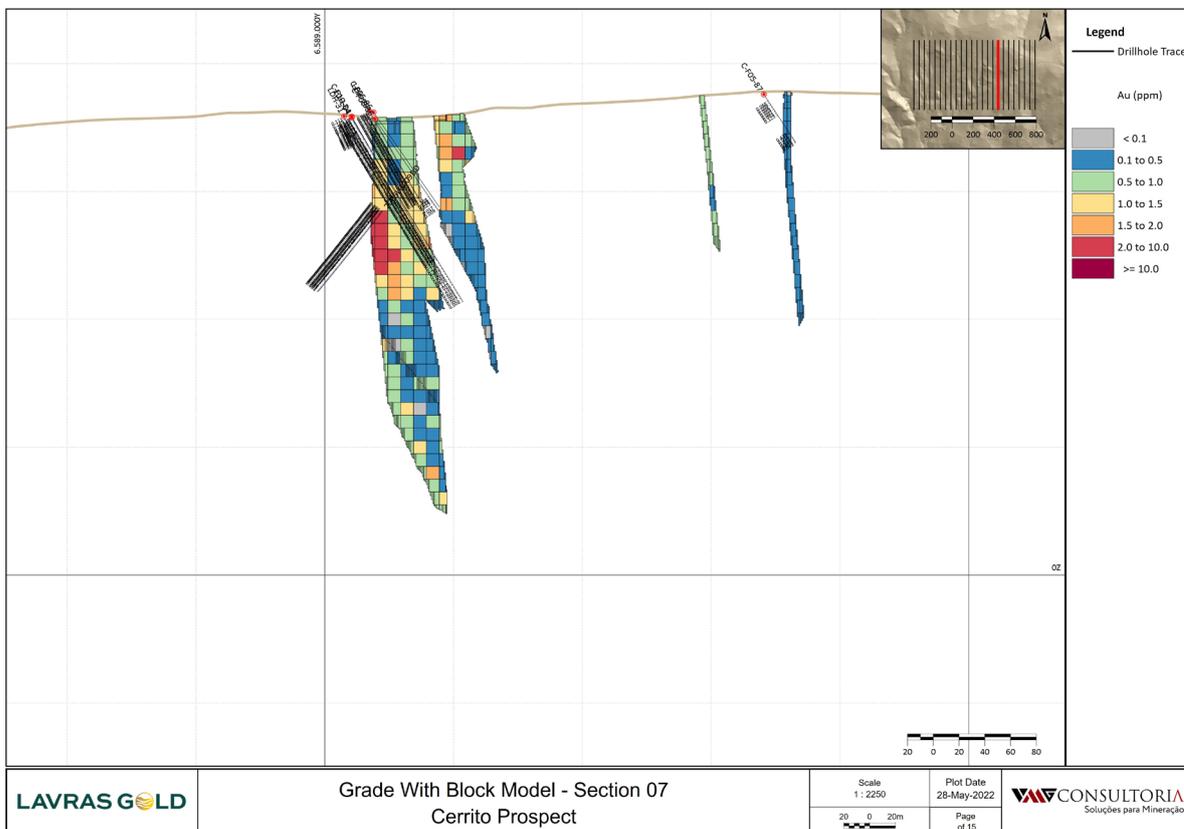
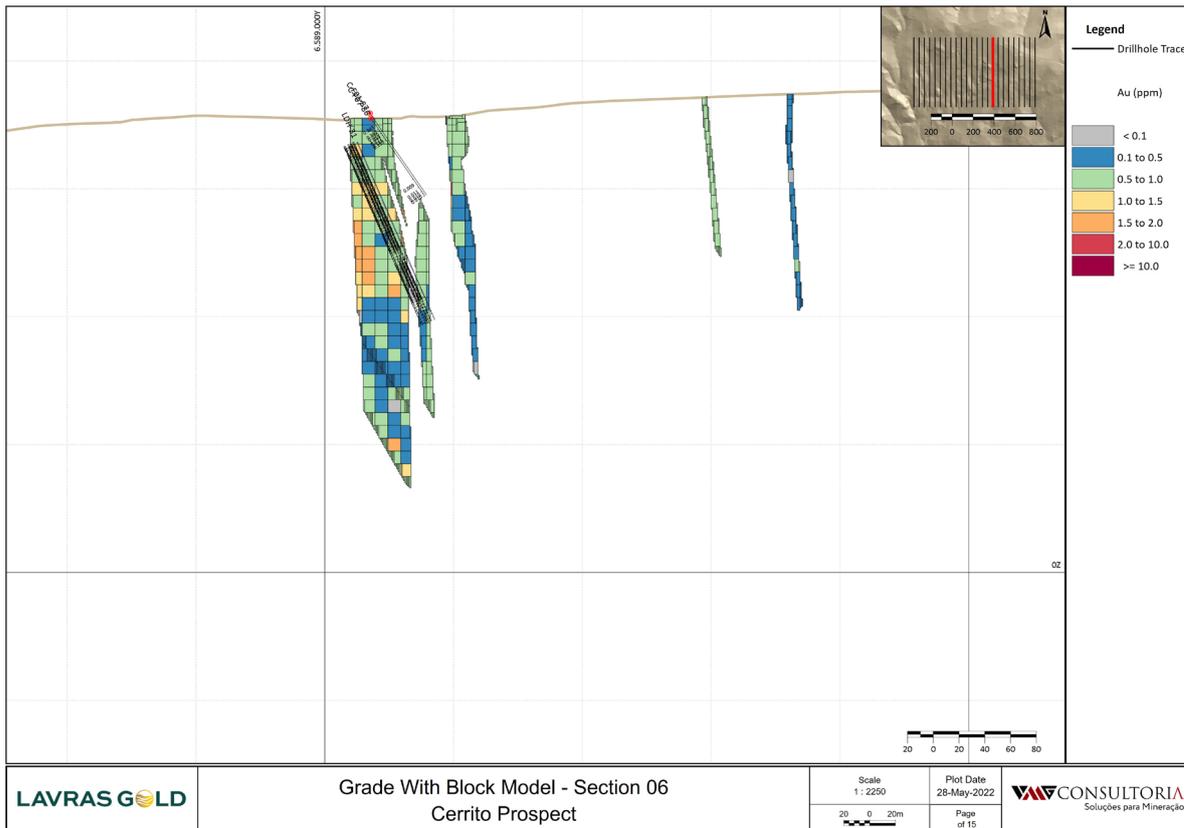
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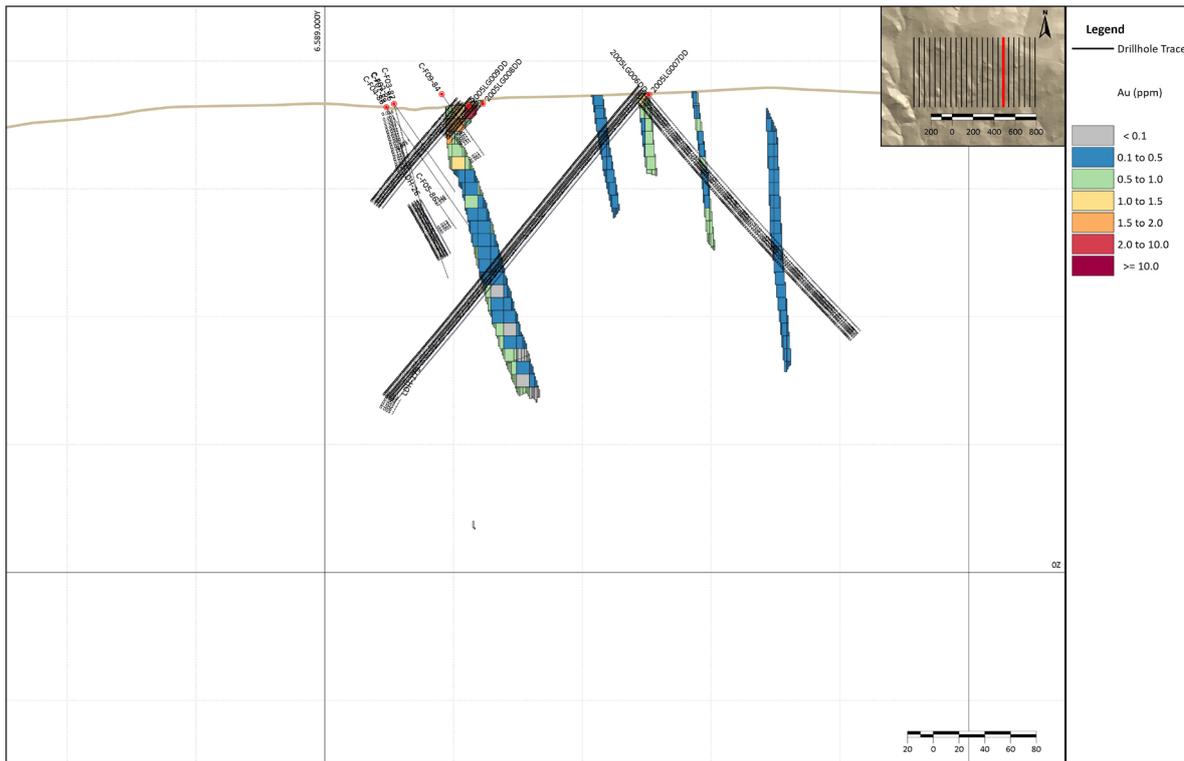
APPENDIX I - CROSS SECTIONS FOR CERRITO PROSPECT







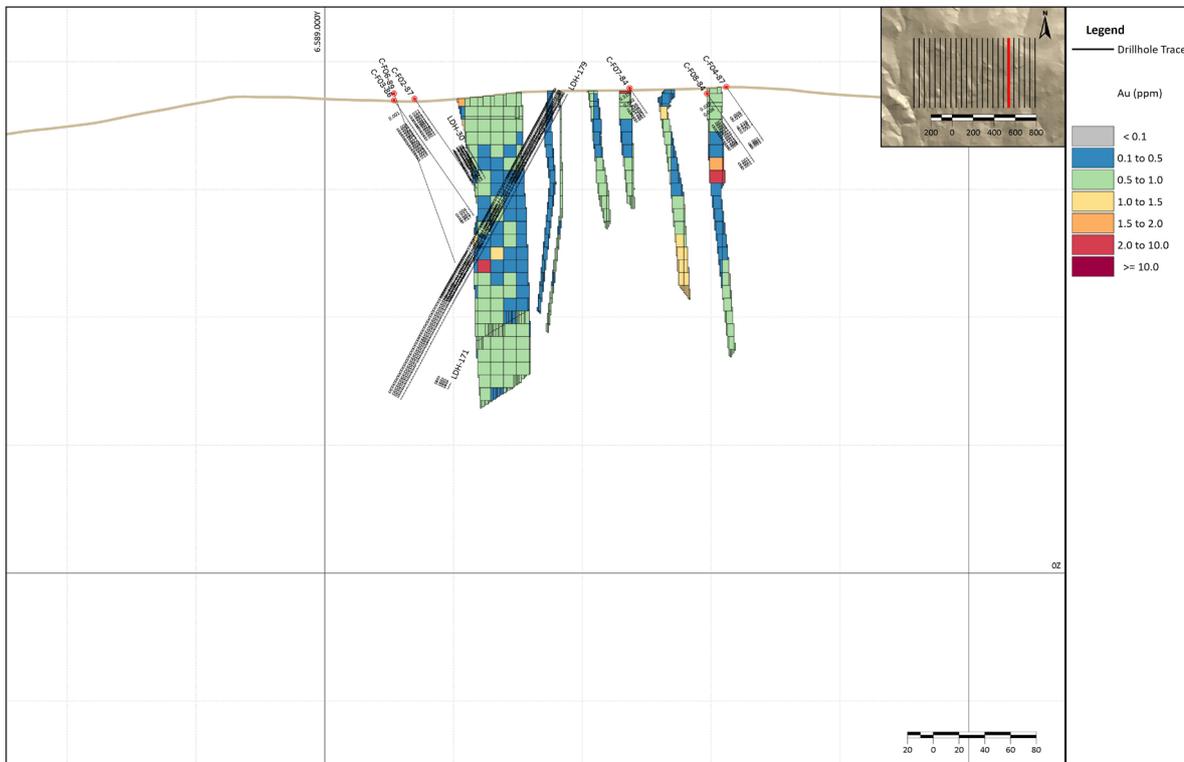




LAVRAS GOLD **Grade With Block Model - Section 08**
Cerrito Prospect

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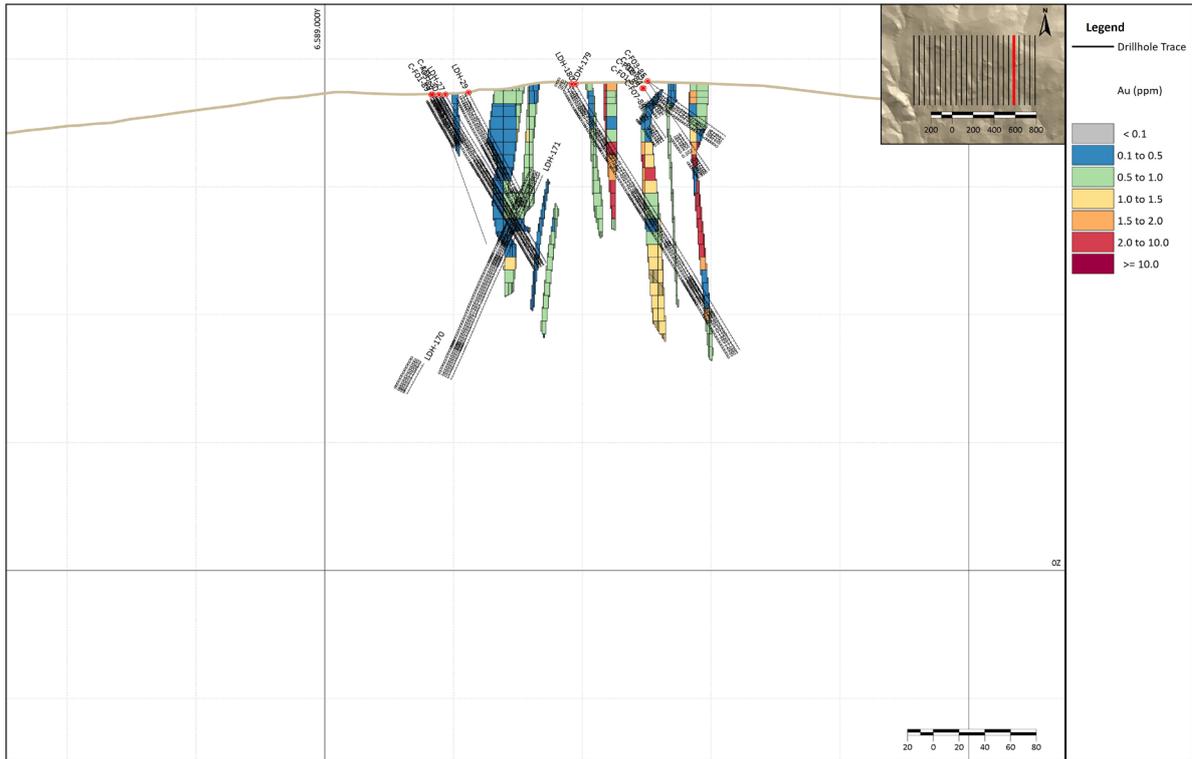
CONSULTORIA
Soluções para Mineração



LAVRAS GOLD **Grade With Block Model - Section 09**
Cerrito Prospect

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CONSULTORIA
Soluções para Mineração



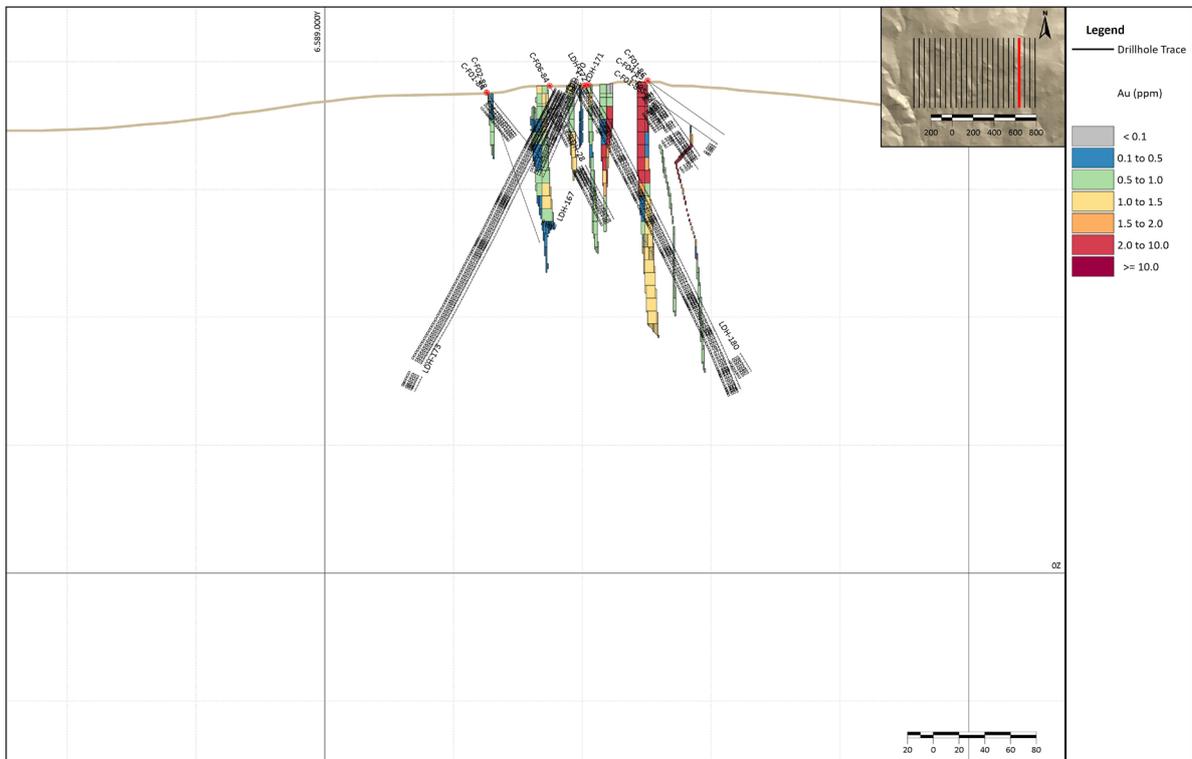
LAVRAS GOLD

Grade With Block Model - Section 10
Cerrito Prospect

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CONSULTORIA
Soluções para Mineração



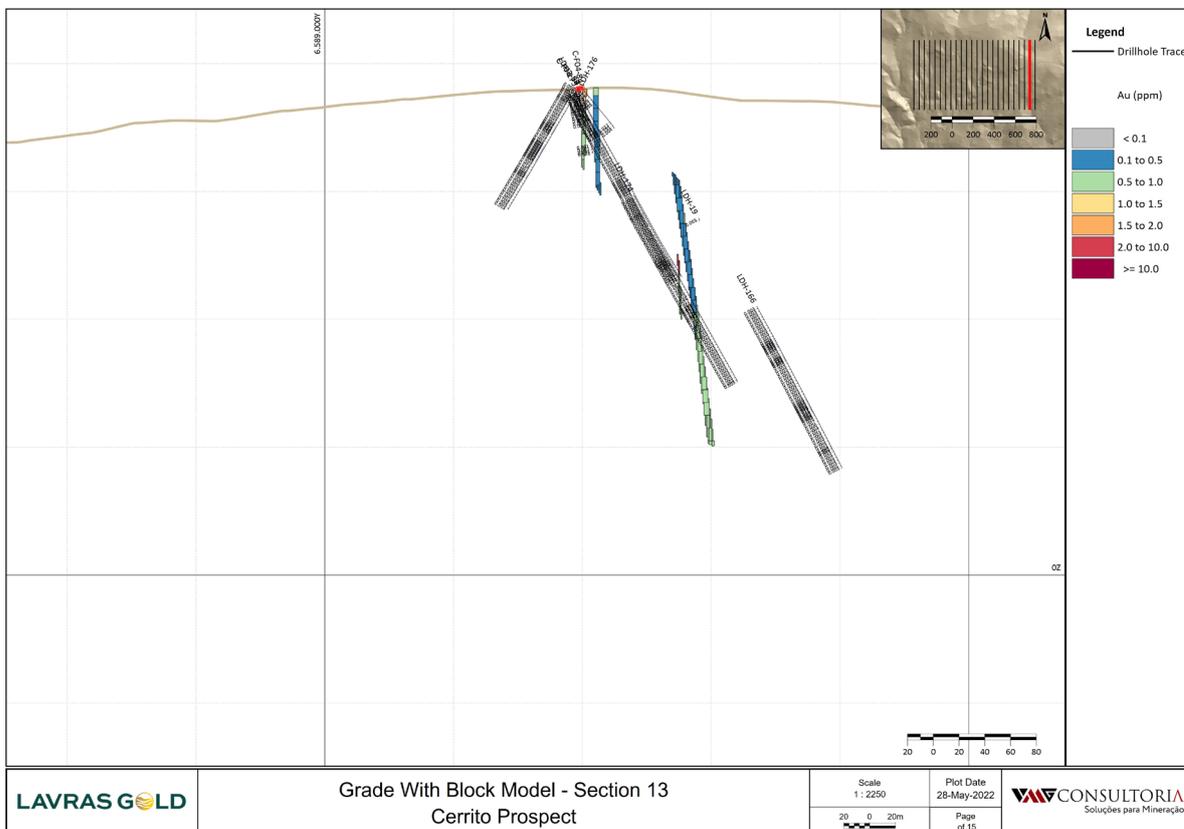
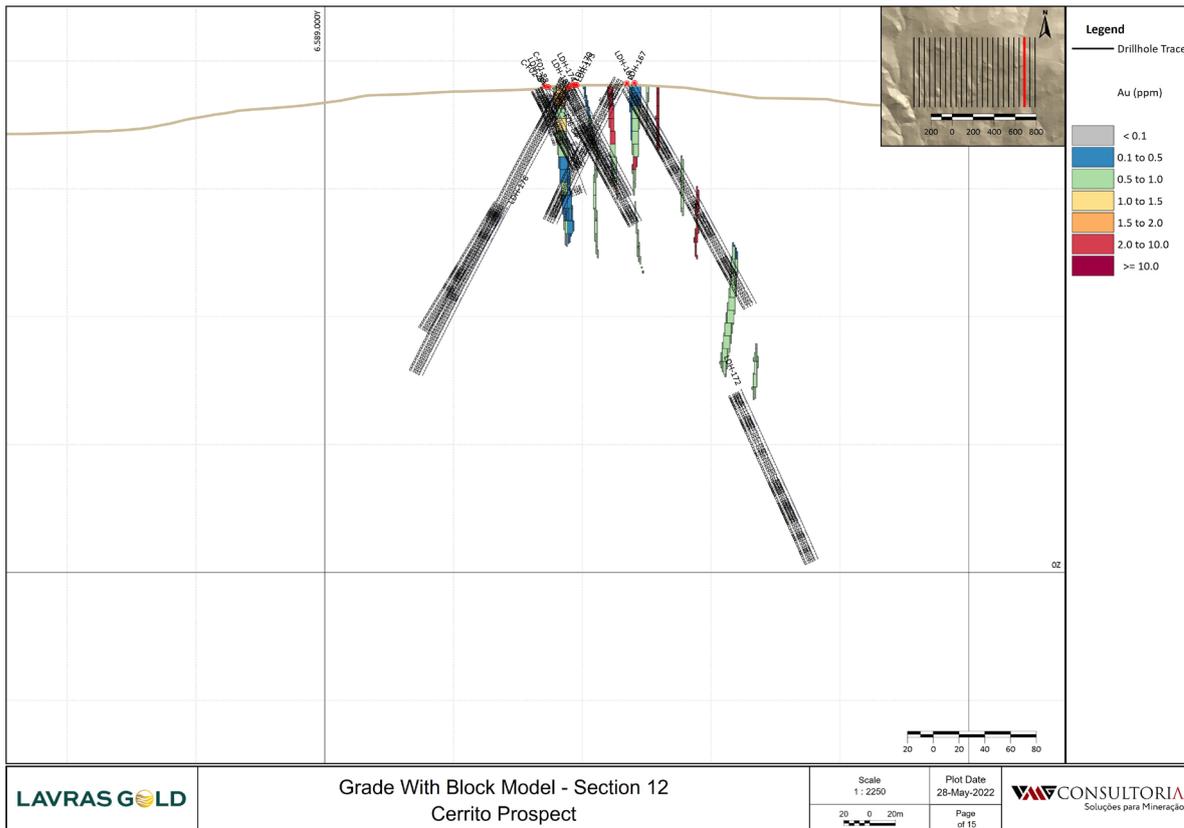
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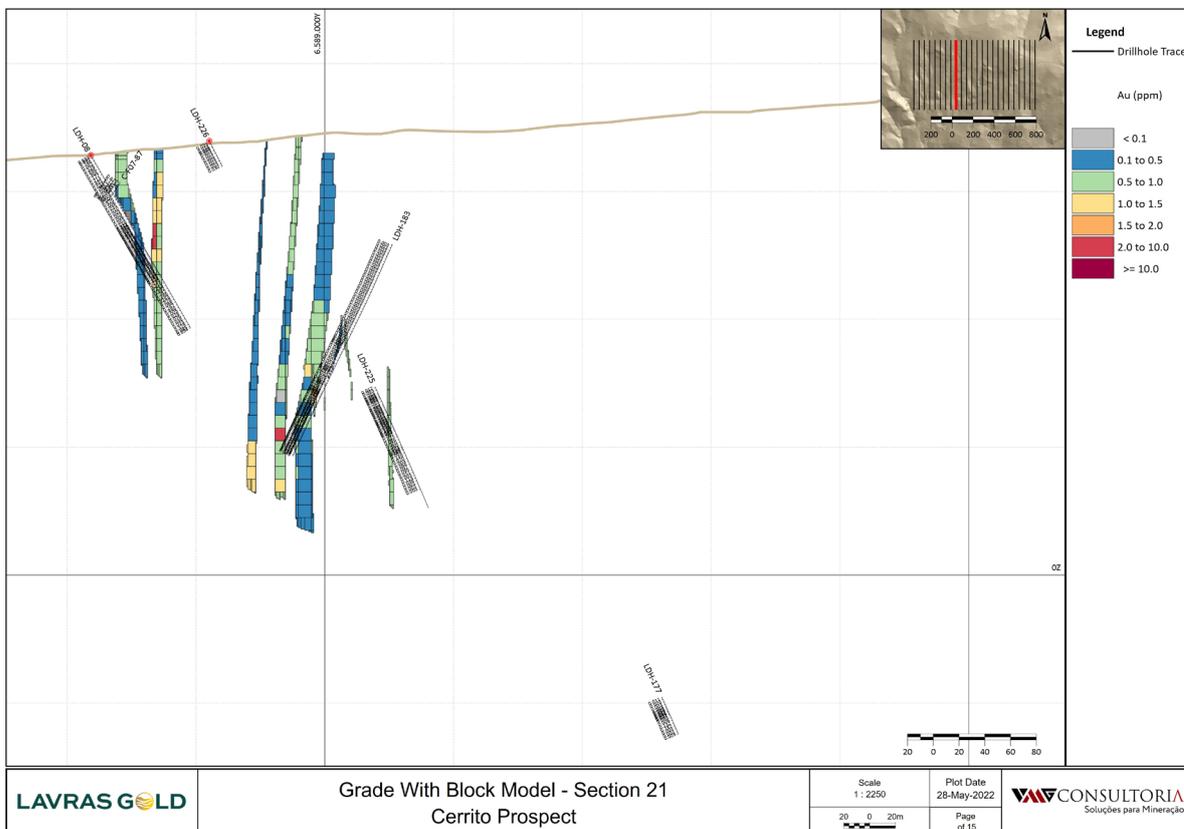
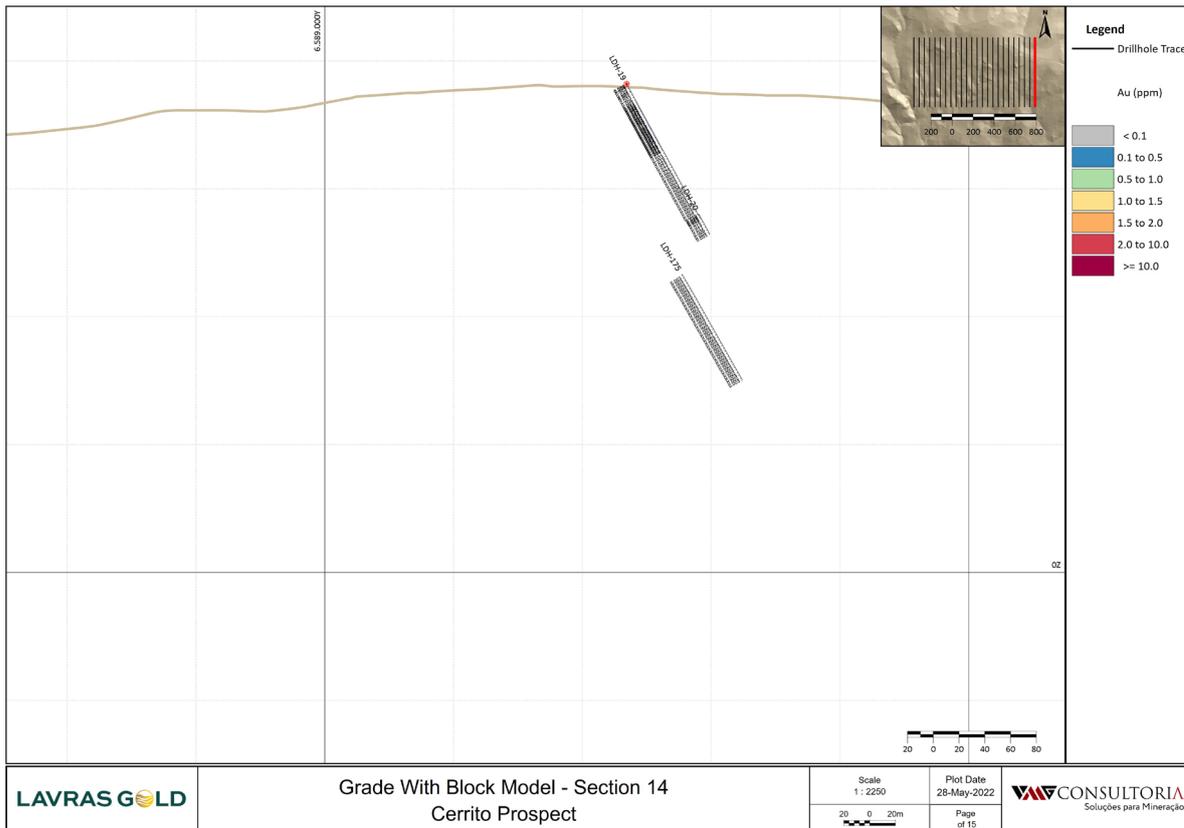
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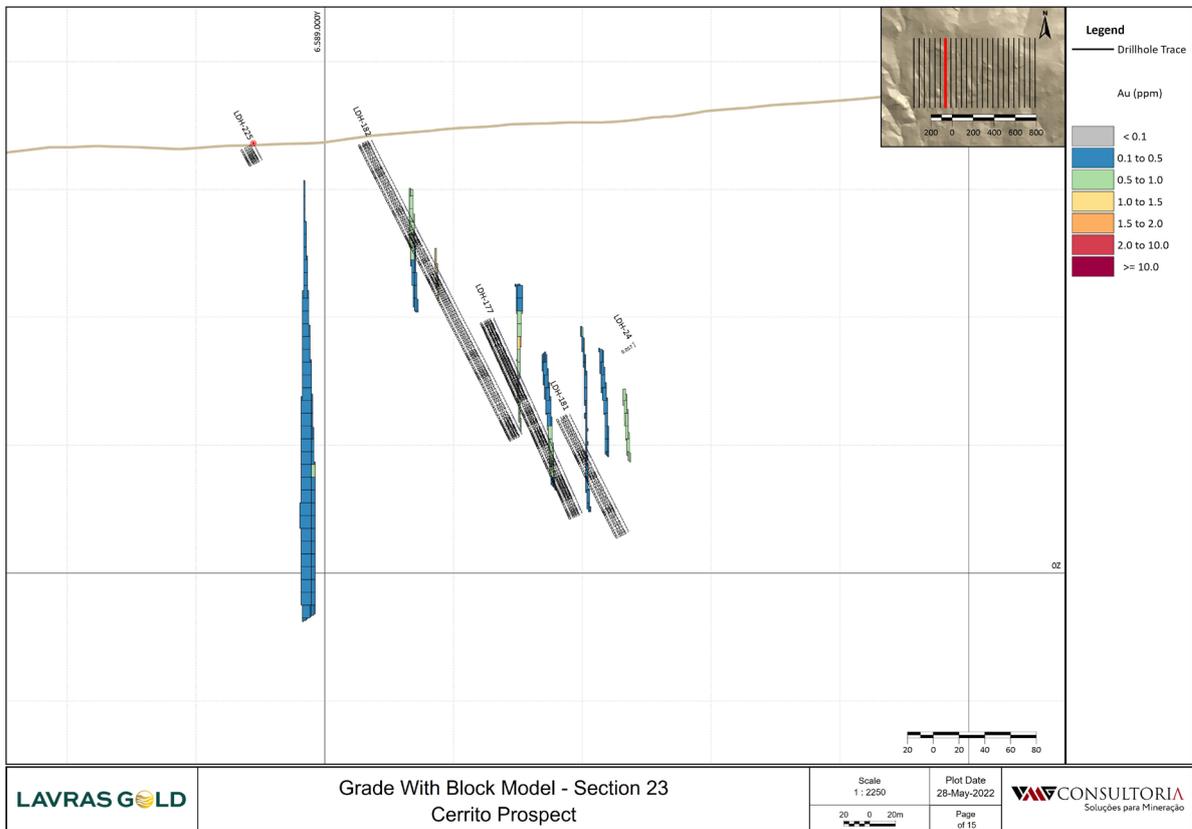
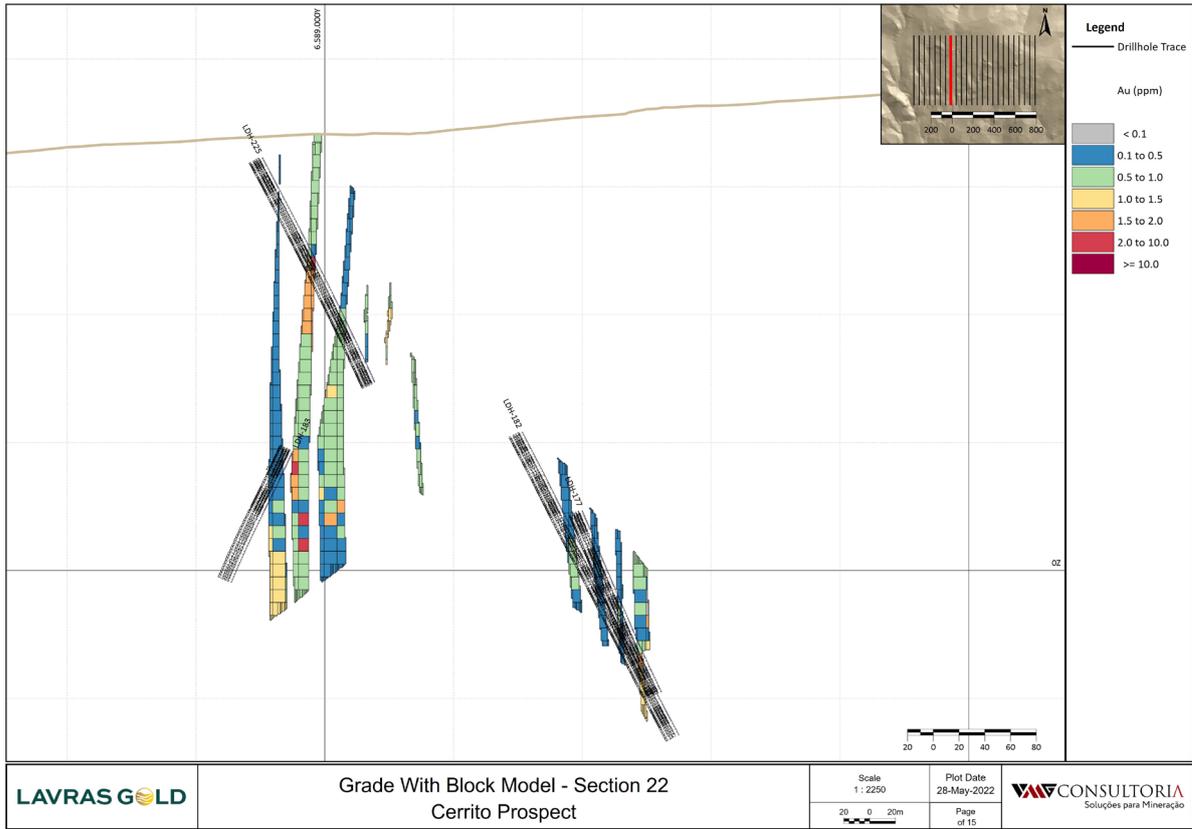
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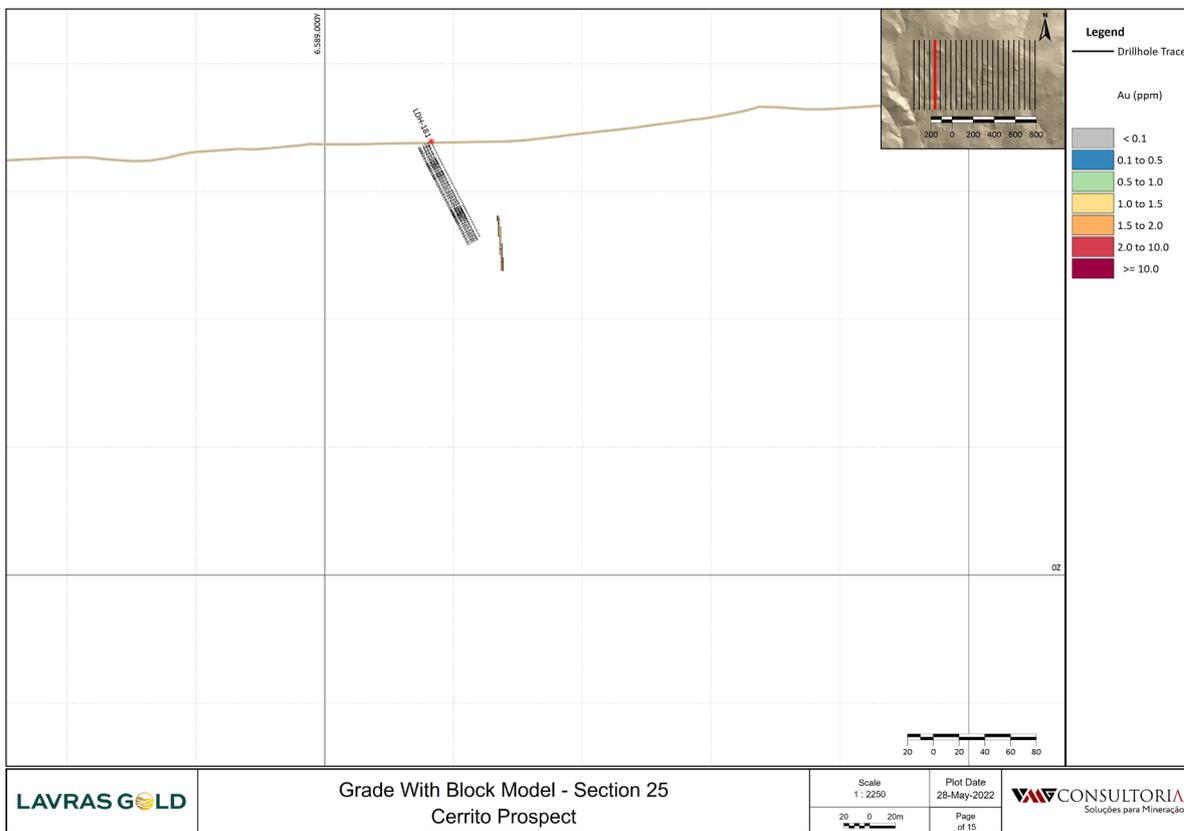
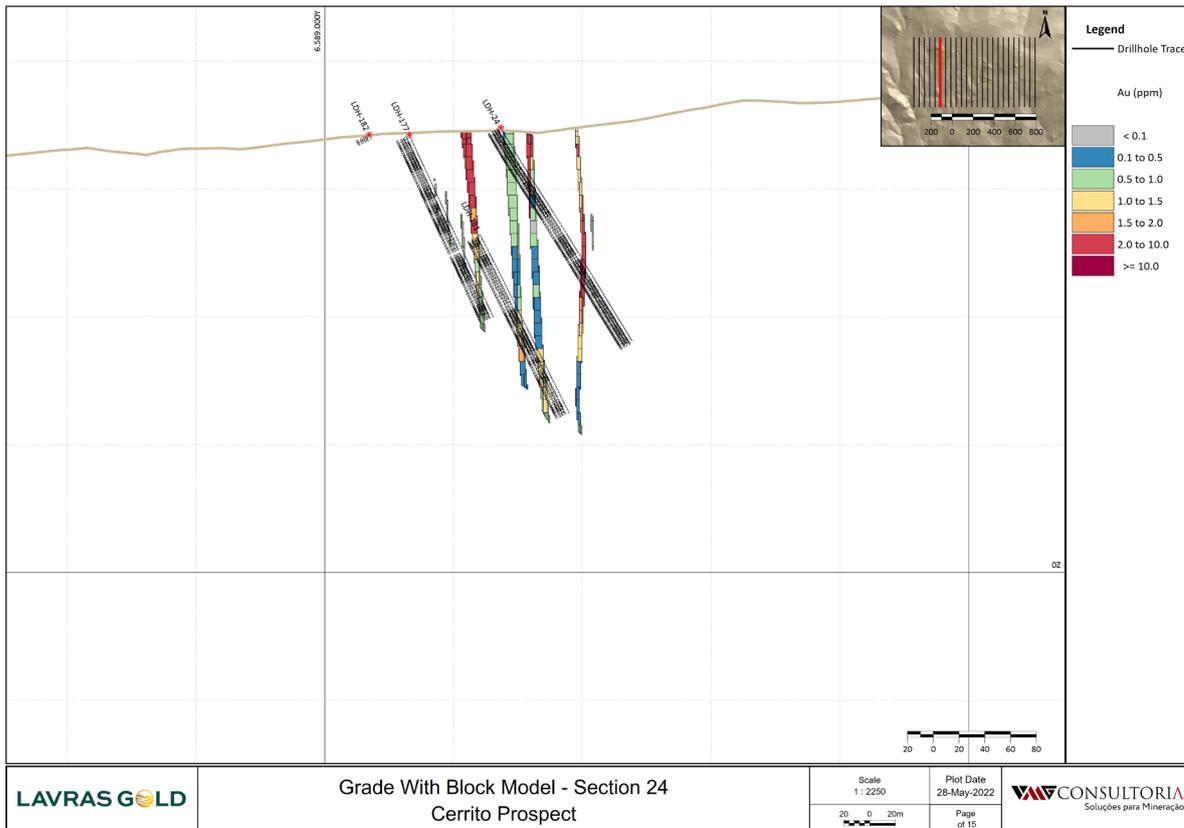
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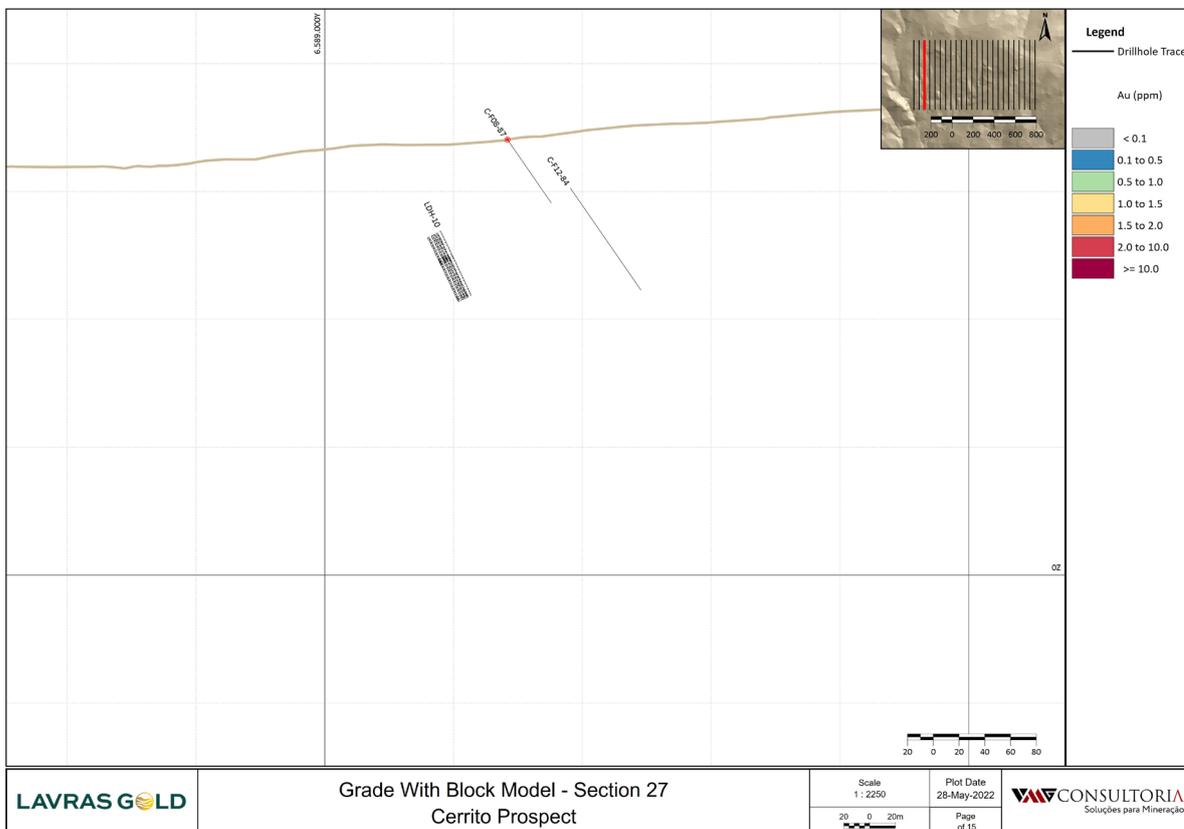
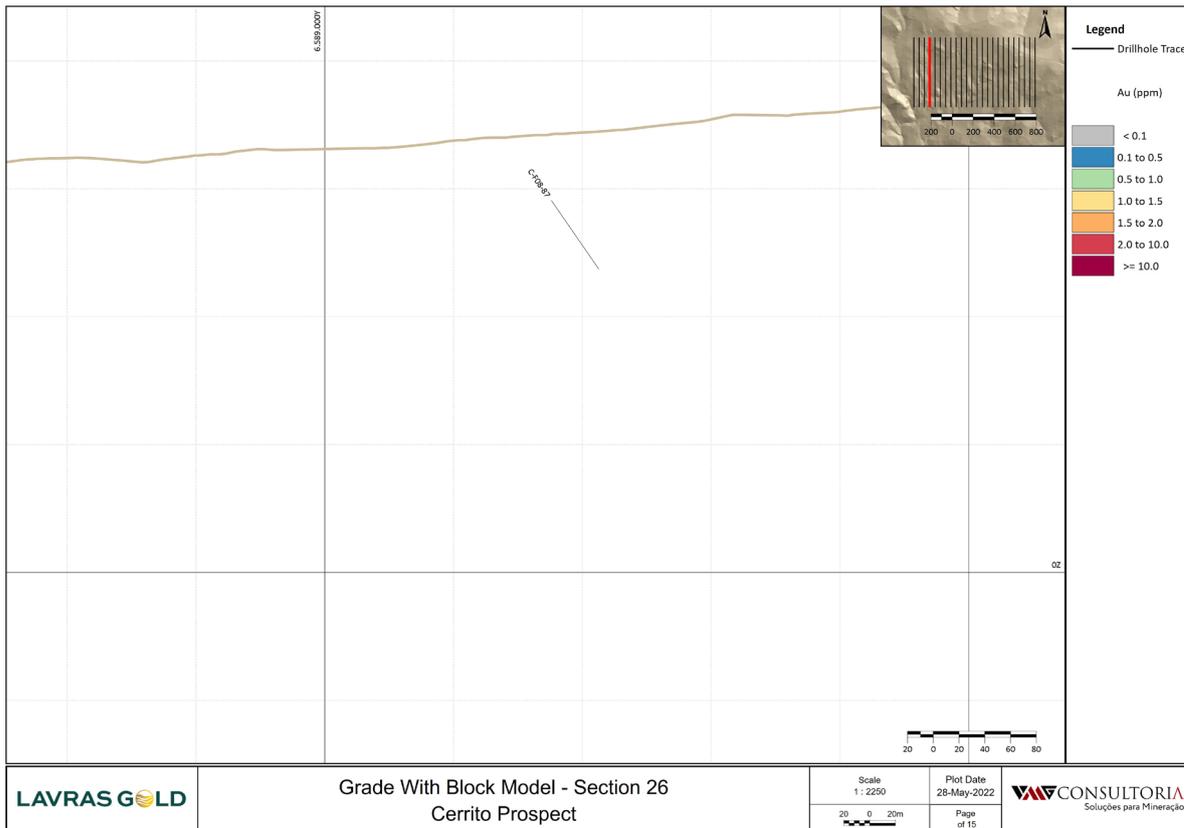
CONSULTORIA
Soluções para Mineração

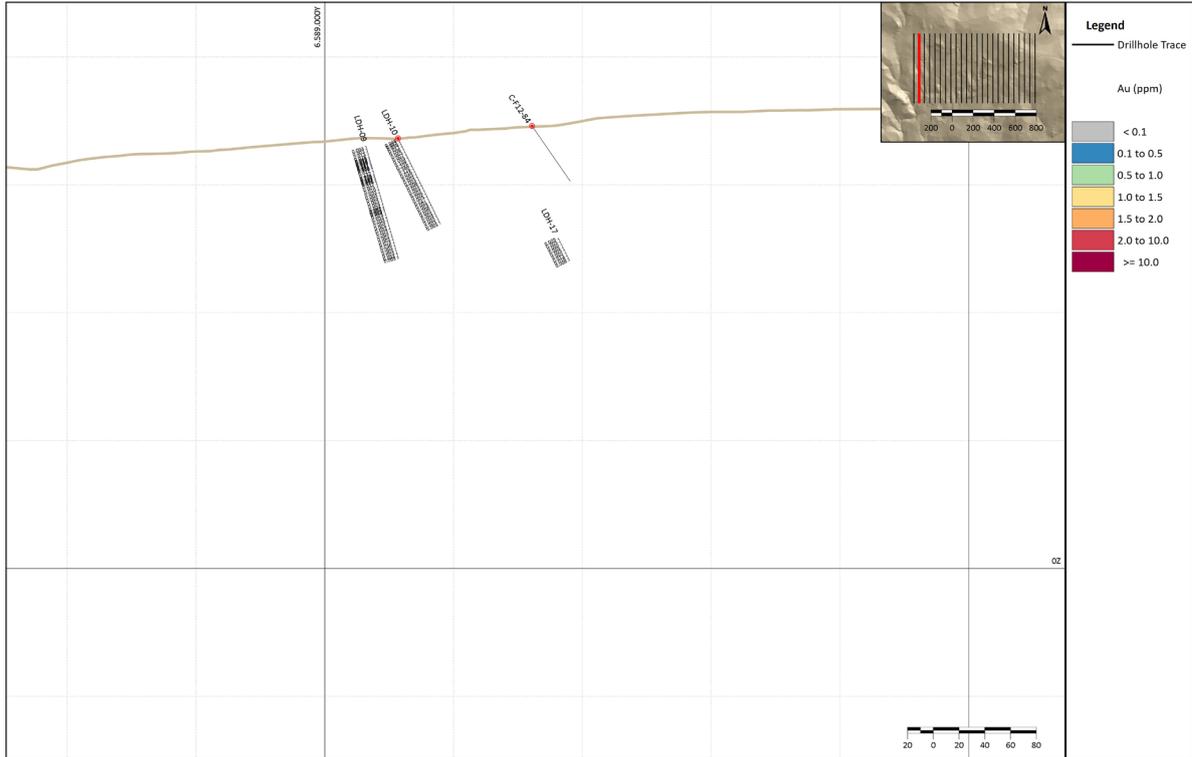




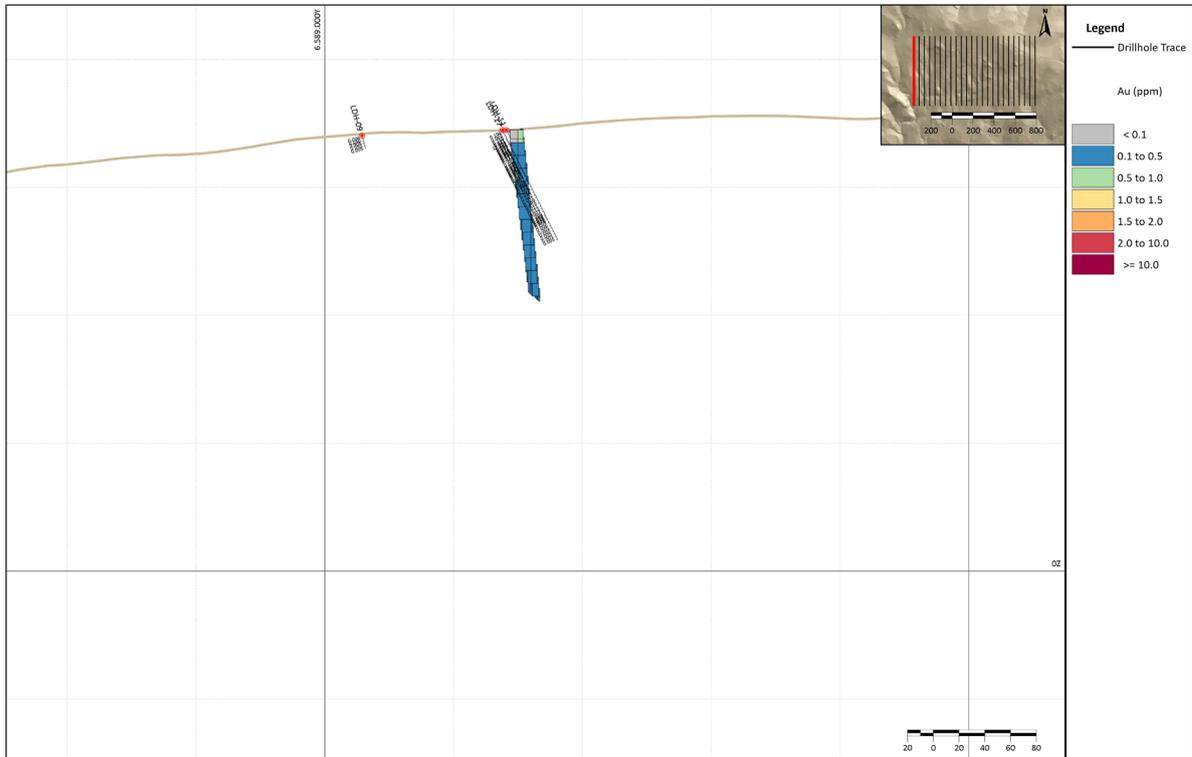








	<p align="center">Grade With Block Model - Section 28 Cerrito Prospect</p>	<p>Scale 1 : 2250</p>	<p>Plot Date 28-May-2022</p>	
		<p>Page of 15</p>		



	<p align="center">Grade With Block Model - Section 29 Cerrito Prospect</p>	<p>Scale 1 : 2250</p>	<p>Plot Date 28-May-2022</p>	
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**APPENDIX II - SENSITIVITY OF GOLD RESOURCE ESTIMATES
TO GOLD CUT-OFF GRADES FOR CERRITO PROSPECT**

18.01.2021

Arquivo de modelo de bloco: BM_KRIG.DAT

Arquivo relatório de recursos: REP_KRIG_CLASS.REP

Método de interpolação: KRIGING

Observação: Capping Au = 3.070 ppm

CUT-OFF Au (ppm)	CLASS	TYPE	TONNES T (000)	Au ppm	M_Au Oz (000)	Au_CUT ppm	M_Au_CUT Oz (000)
0.00	Indicated	saprolite	520	0.82	14	0.73	12
		hardrock	9,198	0.69	205	0.63	185
	Inferred	saprolite	333	0.71	8	0.60	6
		hardrock	14,548	0.70	326	0.64	299
0.10	Indicated	saprolite	514	0.82	14	0.73	12
		hardrock	9,045	0.70	205	0.64	185
	Inferred	saprolite	328	0.72	8	0.61	6
		hardrock	14,396	0.70	326	0.65	299
0.20	Indicated	saprolite	499	0.84	14	0.75	12
		hardrock	8,559	0.74	202	0.66	183
	Inferred	saprolite	312	0.75	8	0.63	6
		hardrock	14,054	0.72	324	0.66	297
0.30	Indicated	saprolite	474	0.87	13	0.78	12
		hardrock	7,775	0.78	196	0.70	176
	Inferred	saprolite	286	0.80	7	0.66	6
		hardrock	12,871	0.76	314	0.69	287
0.40	Indicated	saprolite	439	0.92	13	0.81	11
		hardrock	6,704	0.85	184	0.76	164
	Inferred	saprolite	244	0.87	7	0.71	6
		hardrock	11,110	0.82	294	0.75	267
0.50	Indicated	saprolite	377	0.99	12	0.87	11
		hardrock	5,389	0.95	165	0.84	145
	Inferred	saprolite	184	1.01	6	0.80	5
		hardrock	8,605	0.93	258	0.84	231
0.60	Indicated	saprolite	307	1.09	11	0.95	9
		hardrock	4,107	1.08	142	0.93	122
	Inferred	saprolite	141	1.15	5	0.88	4
		hardrock	6,780	1.04	227	0.92	200
0.70	Indicated	saprolite	227	1.25	9	1.05	8
		hardrock	3,238	1.19	124	1.00	104
	Inferred	saprolite	110	1.30	5	0.95	3
		hardrock	5,433	1.14	198	0.98	171

0.80	Indicated	saprolite	171	1.41	8	1.15	6
		hardrock	2,273	1.38	101	1.11	81
	Inferred	saprolite	79	1.53	4	1.04	3
		hardrock	3,760	1.31	158	1.09	132
0.90	Indicated	saprolite	131	1.59	7	1.24	5
		hardrock	1,771	1.53	87	1.18	67
	Inferred	saprolite	54	1.84	3	1.12	2
		hardrock	3,015	1.42	138	1.15	112
1.00	Indicated	saprolite	104	1.75	6	1.32	4
		hardrock	1,418	1.68	76	1.25	57
	Inferred	saprolite	42	2.10	3	1.17	2
		hardrock	2,333	1.56	117	1.21	91
1.50	Indicated	saprolite	37	2.71	3	1.50	2
		hardrock	583	2.38	45	1.44	27
	Inferred	saprolite	24	2.73	2	1.18	1
		hardrock	885	2.19	62	1.35	38
2.00	Indicated	saprolite	22	3.42	2	1.47	1
		hardrock	282	3.11	28	1.55	14
	Inferred	saprolite	17	3.14	2	1.23	1
		hardrock	341	2.87	31	1.42	16
2.50	Indicated	saprolite	17	3.79	2	1.40	1
		hardrock	193	3.52	22	1.67	10
	Inferred	saprolite	8	3.98	1	1.31	0
		hardrock	212	3.23	22	1.41	10
3.00	Indicated	saprolite	7	5.37	1	1.19	0
		hardrock	80	4.71	12	1.38	4
	Inferred	saprolite	5	4.98	1	1.56	0
		hardrock	68	4.29	9	1.62	4
3.50	Indicated	saprolite	6	5.56	1	1.19	0
		hardrock	63	5.10	10	1.41	3
	Inferred	saprolite	5	5.09	1	1.58	0
		hardrock	46	4.81	7	1.70	3
4.00	Indicated	saprolite	6	5.83	1	1.19	0
		hardrock	50	5.45	9	1.36	2
	Inferred	saprolite	2	6.67	0	1.33	0
		hardrock	27	5.56	5	1.67	1
5.00	Indicated	saprolite	4	6.09	1	1.19	0
		hardrock	30	6.14	6	1.35	1
	Inferred	saprolite	1	7.48	0	1.32	0
		hardrock	15	6.55	3	1.77	1

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