

# TECHNICAL REPORT ON THE VALENCIANA MINES COMPLEX, GUANAJUATO, MEXICO



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# 1 Summary

## 1.1 Introduction

This Technical Report (the “Report”) was prepared by APEX Geoscience Ltd. (“APEX”) and P&E Mining Consultants Inc. (“P&E”) at the request of the Issuer, Guanajuato Silver Company Ltd. (“GSilver” or the “Company”). GSilver is a Vancouver, British Columbia based mining company listed on the TSX Venture Exchange (TSX-V) under the stock symbol “GSVR”.

The focus of this Report is on the Valenciana Mines Complex (“VMC”, “VMC Property” or the “Property”), formerly known as the Guanajuato Mine Complex (the “GMC”), a silver-gold exploration project located within the Guanajuato Mining District in Guanajuato State. The Guanajuato Mining District represents a zone of a polymetallic mineralized belt that runs from south-central Mexico, through Guanajuato, and onwards to north-central Mexico (Carrillo-Chávez et al., 2003). Globally, the Guanajuato Mining District represents one of the largest silver producing districts in the world with continuous mining activity occurring for nearly 500 years (Moncada and Bodnar, 2012).

This Report provides an independent, up-to-date technical summary of the relevant location, tenure, historical, geological, production, and processing information for the VMC, a summary of recent work conducted by the Company, and recommendations for future exploration programs. This Report summarizes the technical information available up to the Effective Date of December 31, 2023.

This Report was prepared by Qualified Persons (“QPs”) in accordance with disclosure and reporting requirements set forth in the National Instrument 43-101 (“NI 43-101”) Standards of Disclosure for Mineral Projects (effective May 9, 2016), Companion Policy 43-101CP Standards of Disclosure for Mineral Projects (effective February 25, 2016), Form 43-101F1 (effective June 30, 2011) of the British Columbia Securities Administrators, the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) Mineral Exploration Best Practice Guidelines (November 23, 2018), the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 29, 2019) and the CIM Definition Standards (May 10, 2014).

## 1.2 Authors and Site Inspection

The authors of this Technical Report (the “Authors”) are Mr. Christopher Livingstone, B.Sc., P.Geo., Mr. Michael B. Dufresne, M.Sc., P. Geol., P. Geo., and Ms. Fallon T. Clarke, B.Sc., P.Geo., of APEX and Mr. James L. Pearson, P.Eng. of P&E. The Authors are independent of the Issuer and are QPs as defined in the NI 43-101.

Mr. Livingstone conducted site inspections of the Property for verification purposes from August 13 to 14, 2023, and April 7 to 8, 2022. The August 2023 site inspection comprised a tour of the VMC Property, including entering several underground workings, collection of two underground verification samples, and a review of the VMC

3D data compilation. The April 2022 site inspection comprised entering several underground workings, a review of drill core to verify reported geology and mineralization, and collection of verification samples. Mr. Livingstone also toured the Cata offices, core shack, processing plant, and analytical laboratory. Mr. Dufresne, Ms. Clarke, and Mr. Pearson did not visit the Property, as Mr. Livingstone's visit was deemed sufficient by the QPs.

### 1.3 Property Location and Description

The VMC is situated within and to the north and northeast of the city of Guanajuato, approximately 380 km to the northwest of Mexico City. The Property includes the Cata processing plant and associated infrastructure. The Property comprises 19 contiguous mineral concessions that cover approximately 679.76 hectares (ha). The concessions are held 100% by Minera Mexicana el Rosario, S.A. de C.V. ("MMR"), a wholly owned subsidiary of GSilver. As of the Effective Date of this Report, the VMC Property is an operating mine.

On June 29, 2022, GSilver signed a binding definitive agreement with Great Panther Mining Ltd. ("Great Panther") to acquire MMR and its assets, including the VMC Property; in addition to the San Ignacio Property, the Topia mine and production facility (collectively known as the Topia Property), and the El Horcón and Santa Rosa exploration projects. Under the terms of the agreement, GSilver agreed to pay to Great Panther an aggregate base purchase price of USD\$14.7M, subject to certain closing adjustments, as follows: (a) USD\$6.7M by issuance of 25,787,200 common shares in GSilver; and (b) USD\$8.0M in cash, subject to adjustments. GSilver also agreed to pay up to an additional USD\$2.0M in contingent bonus payments based on production performance and published silver prices (Comex). GSilver closed the MMR acquisition on August 4, 2022, and took over operations of the VMC Property and the other MMR assets.

### 1.4 Geology

The Property lies within a favourable geological setting. The Guanajuato Mining District is underlain by Mesozoic marine sediments and predominantly mafic submarine lava flows of the Luz and Esperanza Formations, which are weakly metamorphosed and intensely deformed. This basal sequence is cut by a variety of intrusive bodies ranging in composition from pyroxenite to granite, with tonalitic and dioritic intrusive being the most volumetrically significant. The three main north-west trending precious metal-bearing vein systems in the VMC region are the Veta Madre, La Luz and Sierra systems.

The Guanajuato area is underlain by a series of Tertiary volcanic rocks that lie unconformably on top of the La Luz Basalt. The lower Guanajuato Conglomerate is widespread and is of mid-Eocene to early Oligocene age. Later volcanic rocks were deposited unconformably on the Guanajuato conglomerate in a caldera setting at the intersection of regional northeast and northwest mid-Oligocene extensional fracture

systems. The local geology of Guanajuato includes the juxtaposition of Oligocene age sedimentary and volcanic rocks onto Mesozoic age sedimentary and intrusive rocks along the Veta Madre vein system.

## 1.5 Mineralization

The primary deposit type of interest at the VMC Property is low sulphidation epithermal silver-gold mineralization.

Mineralization at Guanajuato occurs in structurally complex multi-generational vein quartz dominated stockwork and breccia zones along the Veta Madre. The northwest trending Veta Madre extends over a strike length of 25 km and dips 45° to the southwest. Historical work at Guanajuato has defined six mineralized areas, including Cata, Los Pozos, Santa Margarita, Promontorio, Valenciana and Guanajuatito. Average silver (Ag) grades of the mineralized material at Guanajuato typically range from 100 to 500 gram per tonne (g/t) Ag and locally can exceed 1,000 g/t Ag. Gold (Au) grades generally range from 0.5 to 2 g/t Au, except for Santa Margarita where average grades range from 5 to 7 g/t Au.

The Guanajuato mineralizing event comprises three stages of mineralization and is interpreted to have taken place during a period of intense felsic volcanic activity in the early Oligocene. The three stages of mineralization at Guanajuato are summarized as follows: 1) the first phase consists of trace silver and gold with accessory quartz and adularia; 2) the second phase is an early silver-rich phase associated with adularia, as well as a later low-silver variant, which is typified by calcite and quartz; and 3) the last “post-mineralized material” phase is precious metal poor, with accessory calcite, dolomite and fluorite.

## 1.6 Historical Exploration

The Guanajuato Mining District has a lengthy history of mining and exploration dating back to 1548, when silver mineralization was discovered in the La Luz area by Spanish colonists. Since then, greater than 1 billion ounces of silver have been mined in the district (Brown and Nourpour, 2022).

The Sociedad Cooperativa Minera Metalurgica Santa Fe de Guanajuato (“the Cooperative”) operated several mines in the district throughout the latter half of the 20th century into the 2000s, including Guanajuato. The Cooperative conducted limited surface and underground diamond drilling at Guanajuato, with the last drill program completed in 2000. The historical drilling intersected silver-gold mineralization at depth under the existing workings at Guanajuato.

Exploration at the VMC by Great Panther from 2005 to 2021 comprised geological mapping, underground channel sampling and diamond drilling, as well as underground development including geological mapping, sampling, and mining. From 2005 to 2021, Great Panther completed 1,593 drillholes, totalling 208,167.40 m, at the VMC. The

drilling intersected significant precious metal mineralization and led to the calculation of several historical Mineral Resource Estimates (MREs) at the VMC.

In the opinion of the Author, the sample collection, sample preparation, security and analytical procedures used by Great Panther at the VMC Property from 2005 to 2022 are appropriate for the stage of the project and for the deposit style and type of mineralization that is being evaluated. The Author notes that although the Cata laboratory is non-independent and was previously managed by Great Panther (currently managed by GSilver), the umpire checks at the independent and certified SGS-Durango laboratory verify the performance of the Cata laboratory and the reproducibility of the Ag-Au analyses. To conclude, in the opinion of the Author, the Great Panther data are appropriate for use in this Report.

## 1.7 Production History

Mining of the Veta Madre trend, the principal host structure of the VMC, has occurred since the 16<sup>th</sup> century. Limited information is available regarding production at Guanajuato prior to Great Panther's ownership. A summary of Great Panther's production of the VMC from 2006 to 2021 is presented in Table 1.2.

Great Panther commenced production at the VMC operation in 2006. The VMC is an underground operation, and the production process consists of conventional mining incorporating Cut and Fill and Resue methods. Mineralized material from the VMC was treated at the Cata processing plant. The Cata processing plant utilized five stages, including: crushing, milling, flotation, thickening and filtering, as well as concentrate dewatering circuits to generate sulphide concentrates containing silver and gold, which are sent offsite for smelting and refining. Blending of the Guanajuato and San Ignacio material began in July 2016 and the processing (milling) of the blended material continued until Guanajuato was placed on care and maintenance in November 2021. The VMC operation was placed on care and maintenance effective early January 2022 while awaiting permits to extend the tailings facility or find other alternatives to maximize the value of the VMC.

**Table 1.1 Production Summary of the VMC**

Year	Tonnes Mill/Mine VMC	Tonnes Mill/Mine San Ignacio	Tonnes (milled) <sup>(1)</sup>	Ag (oz)	Au (oz)
2006	86,111	-	86,111	105,480	988
2007	203,968	-	203,968	521,225	3,794
2008	155,079	-	155,079	848,083	5,488
2009	138,517	-	138,517	1,019,751	6,748
2010	144,112	-	144,112	1,019,856	6,619
2011	169,213	-	169,213	959,490	7,515
2012	174,022	-	174,022	1,004,331	10,350
2013	220,463	1,082	221,545	1,079,980	15,063

Year	Tonnes Mill/Mine VMC	Tonnes Mill/Mine San Ignacio	Tonnes (milled) <sup>(1)</sup>	Ag (oz)	Au (oz)
2014	213,658	54,154	267,812	1,239,009	15,906
2015	180,691	129,253	309,944	1,708,061	21,126
2016 <sup>(2)</sup>	136,349	183,694	320,043	1,473,229	21,626
2017	131,335	185,475	316,810	1,386,964	21,501
2018	88,364	212,650	301,014	1,096,757	19,073
2019	7,610	179,886	187,610	590,781	11,588
2020	33,248	119,560	151,001	520,903	6,779
2021	37,975	111,354	149,329	485,315	6,659
<b>Totals</b>	<b>1,685,834</b>	<b>1,177,108</b>	<b>3,296,130</b>	<b>15,059,215</b>	<b>180,823</b>

Source: Great Panther Annual reports for 2006 to 2021 inclusive

- 2006-2015 reported figures reflect tonnes milled; 2016-2021 reported figures reflect tonnes mined which has a small discrepancy to tonnes milled.
- Blending of the VMC and San Ignacio mineralized material began in July 2016, therefore, the 2016-2021 reported figures reflect total production from both operations.

## 1.8 GSilver Exploration

Exploration completed by GSilver at the VMC from September 2022 to the Effective Date of this Report has included underground sampling, diamond drilling, surface and underground development and mining. Exploration and drilling results were reported as silver (Ag), gold (Au), and/or silver equivalent (AgEq\*), with AgEq\* calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a Ag to Au ratio of 80:1. This remains consistent with the ratio that was utilized internally and in public disclosure of exploration results by GSilver and is maintained herein.

From September 2022 to December 2023, GSilver collected a total of 15,993 underground channel samples from 6,613 channels at the VMC. Channel sampling, of variable lengths ranging from 0.3 to 14.8 m and averaging 1.5 m in length, was completed in accessible stopes and development headings. Most of the samples were collected in the Los Pozos mineralized area (n=11,040), with additional samples collected from Santa Margarita (n=1,744), Cata (n=1,348), Rayas (n=1,081), Valenciana (n=631) and SVS (n=149) mineralized areas.

Greater than 100 g/t AgEq\* was returned from 27% of the samples (n=4,381), with assays ranging from 101 g/t AgEq\* up to a maximum value of 42,478 g/t AgEq\*, 7% of the samples (n=1,171) returned greater than 500 g/t AgEq\* ranging from 502 g/t AgEq\* to 42,478 g/t AgEq\*, and 3% of the samples (n=544) returned greater than 1,000 g/t AgEq\*, ranging from 1,002 g/t AgEq\* to 42,478 g/t AgEq\*. Significant values include 42,478 g/t AgEq\* (416 g/t Ag and 525.78 g/t Au) over a sample length of 0.5 m returned from sample 568682 collected from Santa Margarita on mine level 390 and 16,683 g/t AgEq\* (11,195 g/t Ag and 68.61 g/t Au) over a sample length of 0.8 m returned from sample 1168514 collected from Los Pozos on mine level 275.

\* AgEq values are calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a Ag to Au ratio of 80:1

The underground channel sampling at the VMC aided in the delineation of un-mined mineralized material and provided confidence in the continuity of mineralization in several

underground areas. In addition, underground sampling at El Borrego vein returned anomalous silver and gold mineralization, including 56 g/t Ag and 0.033 g/t Au from the intermediate adit and 84 g/t Ag and 0.488 g/t Au from the southern adit.

GSilver completed 3 diamond drillholes (DDH) totalling 1,151.5 m at the VMC in June to August 2023. The diamond drill program was designed to intersect and define the orientation of the El Borrego vein that runs parallel to the Veta Madre. The El Borrego vein represents a new target for potential gold and silver mineralization at the VMC. Results from the drill program include:

- 5.44 g/t Au over 0.65 m core length in hole UGBO23-001
- 3.43 g/t Au with 1,041 g/t Ag over 0.75 m core length in hole UGBO23-002
- 0.24 g/t Au with 98 g/t Ag over 0.85 m core length in hole UGBO23-003

## 1.9 Mining, Mineral Processing and Infrastructure

Production was halted and the VMC was placed on care and maintenance by Great Panther in November 2021 due to a lack of tailings capacity; however, after acquiring the Property, GSilver engineering staff determined that the existing tailings facility had sufficient capacity to restart operations, in conjunction with the implementation of a hydraulic fill system utilizing select voids and open stopes in the historical workings to store tailings. Based on the newly identified tailings capacity, production was restarted at the VMC in November 2022.

The VMC is an underground mining operation, and the production process consists of conventional mining incorporating Cut and Fill and Resue methods for extracting insitu mineralized material, and production of broken mineralized material from historical draw points using a scoop tram.

The mineralized material produced from the VMC has been processed at two GSilver subsidiary owned processing plants: the Cata processing plant located immediately adjacent to the Company's administrative offices within the VMC Property, and the El Cubo plant, which is also referred to as the CMC processing plant, located at GSilver's El Cubo Mines Complex.

From November 2022 to December 2023, a total of 118,952 dry metric tonnes (DMT) of material extracted from the VMC were processed at Cata and El Cubo plants: 116,064 DMT were processed at the Cata plant, and 2,888 DMT were processed at the El Cubo plant. The VMC mineralized material processed resulted in a total of 320,818 silver ounces and 3,952.9 gold ounces at Cata, and 5,786 silver ounces and 95.3 gold ounces at El Cubo. Average head grades and recoveries at the Cata processing plant in 2023

averaged 105 g/t Ag at 81.7% recovery for silver and 1.22 g/t Au at 86.5% recovery for gold at the Cata plant.

Mineralized material from the San Ignacio operation was blended with mineralized material from GSilver's VMC Guanajuato operation prior to processing at the Cata plant, and with mineralized material from GSilver's El Cubo operation prior to processing at the El Cubo plant. The total tonnage values for each operation were determined using haul truck tonnage weights compared against a control file. The silver and gold grades were estimated using monthly mine grade control data as the primary reference, with grades refined based on monthly plant production grades. Recoveries are based on total plant production from all operations. Metal production values are pro-rated for each operation using the tonnage and grade data.

Infrastructure, such as power supply, water supply, and roads, are established and operational.

### **1.10 Environmental and Permitting**

All necessary permits and authorizations are in place for mining at the VMC, as well as operation of the Cata and El Cubo processing plants and associated tailings storage facilities.

In the opinion of the Author, there does not appear to be any apparent significant legal, environmental, or political considerations that would have an adverse effect on the extraction and processing of the VMC mineralized material. Environmental and social issues at the VMC appear to be conducted to adequate standards with cooperation from local communities.

### **1.11 Economic Analysis**

There are no current estimates of Mineral Reserves on the Property. In addition, GSilver has yet to conduct Mineral Resource modelling or estimations and there are no known current Mineral Resources outlined at the VMC Property. The Company made decisions to enter production at the Property without having completed final feasibility studies. Accordingly, the Company did not base its production decisions on any feasibility studies of Mineral Reserves demonstrating economic and technical viability of the Property. As a result, there may be increased uncertainty and risks of achieving any level of recovery of minerals from the Property or the costs of such recovery. As the Property does not have established Mineral Reserves, the Company faces higher risks that anticipated rates of production and production costs, such as those provided in this technical report, will not be achieved. These risks could have a material adverse impact on the Company's ability to continue to generate anticipated revenues and cash flows to fund operations from and ultimately achieve or maintain profitable operations at the Property. As a result, the Author has determined that it is not permitted to provide an economic analysis of the VMC.

## 1.12 Conclusions and Recommendations

Based upon a review of available information, historical exploration and production data, and Mr. Livingstone's recent site inspection, the Authors outline the Valenciana Mines Complex as a property of merit prospective for the discovery of additional silver-gold low sulphidation epithermal deposits. This contention is supported by knowledge of:

- The favourable geological setting of the VMC Property and its central position within the Guanajuato Mining District. Key northwest trending precious metal-bearing vein systems in the district include the Veta Madre, La Luz and Sierra systems.
- Historical surface and drilling by Great Panther that intersected significant precious metal mineralization at the VMC.
- Significant results of silver and gold mineralization returned from recent channel sampling and drilling programs conducted by GSilver.
- VMC historical and recent production, head grade and metal recovery records from the Cata and El Cubo processing plants from 2006 to 2021 and 2022 to 2023 (Sections 6.4 and 16.2).

As a property of merit, a 2-phase work program is recommended to increase the confidence level of the precious metal mineralization at the VMC and to advance the Property toward potential Mineral Resource estimation and support ongoing production.

Phase 1 should focus on step out and infill surface drilling, underground exploration drilling, and development at the VMC. The Authors recommend a diamond drill program of approximately 2,800 metres intended to a) drill test targets along strike and down dip for additional zones of mineralization, as well as extensions to existing zones of mineralization, with focus on the Valenciana, Los Pozos, Promontorio and Guanajuatito mineralized zones and b) to define the orientation and test the mineralization potential of the El Borrego vein. The estimated cost of the Phase 1 work program for the VMC Property totals USD\$1,190,000, not including contingency funds or taxes.

Phase 2 exploration is dependent on the results of Phase 1 and should comprise additional drilling and development at the VMC. The Phase 2 drilling should follow up on the results of the Phase 1 exploration program at the Valenciana, Los Pozos, Promontorio, Guanajuatito, and El Borrego mineralized zones. Furthermore, the Authors recommend completing a new MRE and NI 43-101 technical report incorporating GSilver production, drilling and underground sampling. The estimated cost of the Phase 2 work program for the VMC Property totals USD\$1,175,000, not including contingency funds or taxes.

Collectively, the estimated cost of the recommended work programs for the VMC totals USD\$2,940,000, not including contingency funds or taxes.

## 2 Introduction

### 2.1 Issuer and Purpose

This Technical Report (the “Report”) on the Valenciana Mines Complex (“VMC”, “VMC Property” or the “Property”), formerly known as the Guanajuato Mine Complex (the “GMC”), was prepared by APEX Geoscience Ltd. (“APEX”) and P&E Mining Consultants Inc. (“P&E”) at the request of the Issuer, Guanajuato Silver Company Ltd. (“GSilver” or the “Company”). GSilver is a Vancouver, British Columbia based mining company listed on the TSX Venture Exchange (TSX-V) under the stock symbol “GSVR”.

The VMC is situated within the central portion of the Guanajuato Mining District in Guanajuato State, Mexico; an area that represents one of the largest silver producing districts in the world, with continuous mining activity occurring for nearly 500 years (Moncada and Bodnar, 2012). The VMC is situated within and to the north and northeast of the city of Guanajuato, approximately 380 km to the northwest of Mexico City (Figure 2.1). The Property comprises 19 contiguous mineral concessions that cover approximately 679.76 hectares (ha). The concessions are held 100% by Minera Mexicana el Rosario, S.A. de C.V. (“MMR”), a wholly owned subsidiary of GSilver. As of the Effective Date of this Report, the VMC Property is an operating mine.

On June 29, 2022, GSilver signed a binding definitive agreement with Great Panther Mining Ltd. (“Great Panther”) to acquire MMR and its assets, including the VMC Property; in addition to the San Ignacio Property, the Topia mine and production facility (collectively known as the Topia Property), and the El Horcón and Santa Rosa exploration projects. Under the terms of the agreement, GSilver agreed to pay to Great Panther an aggregate base purchase price of USD\$14.7M, subject to certain closing adjustments, as follows: (a) USD\$6.7M by issuance of 25,787,200 common shares in GSilver; and (b) USD\$8.0M in cash, subject to adjustments. GSilver also agreed to pay up to an additional USD\$2.0M in contingent bonus payments based on production performance and published silver prices (Comex). GSilver closed the MMR acquisition on August 4, 2022, and took over operations of VMC and the other MMR assets.

The Property includes the VMC mining operation, the Cata processing plant, and associated infrastructure. GSilver’s San Ignacio Property was previously included as part of the VMC, as reported in a 2022 technical report on the Property (Livingstone et al., 2022). In this Report and moving forward, the Company considers each of the VMC and San Ignacio to be a separate mineral project with distinct geological characteristics, mineral deposits, exploration and development work, and underground mining infrastructure. Mineralization from the VMC and San Ignacio are both processed at the VMC Cata processing plant, located in the city of Guanajuato. VMC material is also processed as necessary at the El Cubo processing plant, at GSilver’s El Cubo Mine Complex (“CMC”), located east of Guanajuato. In addition to the processing plant, the Cata facility includes an analytical laboratory, core storage and logging facilities, and geological and administrative offices, which are used to support activities at the VMC, San Ignacio, and the Company’s other exploration projects in the Guanajuato region.

**Figure 2.1 Property Location**



This Report provides an independent, up-to-date technical summary of the relevant location, tenure, historical, geological, production, and processing information for the VMC, a summary of recent work conducted by the Company, and recommendations for future exploration programs. This Report summarizes the technical information available up to the Effective Date of December 31, 2023.

This Report was prepared by Qualified Persons (“QPs”) in accordance with disclosure and reporting requirements set forth in the National Instrument 43-101 (“NI 43-101”) Standards of Disclosure for Mineral Projects (effective May 9, 2016), Companion Policy 43-101CP Standards of Disclosure for Mineral Projects (effective February 25, 2016), Form 43-101F1 (effective June 30, 2011) of the Canadian Securities Administrators, the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) Mineral Exploration Best Practice Guidelines (November 23, 2018), the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 29, 2019), and the CIM Definition Standards (May 10, 2014).

## 2.2 Authors and Site Inspection

The authors of this Technical Report (the “Authors”) are Mr. Christopher Livingstone, B.Sc., P.Geo., Mr. Michael B. Dufresne, M.Sc., P. Geol., P. Geo., and Ms. Fallon T. Clarke, B.Sc., P.Geo., of APEX and Mr. James L. Pearson, P.Eng. of P&E. The Authors are independent of the Issuer and are QPs as defined in NI 43-101. NI 43-101 and CIM define a QP as “an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project and the technical report; and is a member or licensee in good standing of a professional association.”

Mr. Livingstone is a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia (“EGBC”; Member #: 44970) and has worked as a geologist for more than 13 years since his graduation from university. Mr. Livingstone has experience with exploration for precious and base metal mineralization of various deposit types in North America, including epithermal silver-gold mineralization, polymetallic veins, and sediment-hosted precious and base metals. Mr. Livingstone takes responsibility for Sections 1 to 5, 7, 8, 12, and 25 to 27 of the Report.

Mr. Dufresne is a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta (“APEGA”; Member #: 48439), a Professional Geoscientist with EGBC (Member #: 37074), the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (“NAPEG”; Member #: L3378), the Association of Professional Engineers & Geoscientists of New Brunswick (“APEGNB”; Member #: F6534) and the Professional Geoscientists of Ontario (“PGO”; Member #: 3903), and has worked as a mineral exploration geologist for more than 40 years since his graduation from university. Mr. Dufresne has been involved in all aspects of mineral exploration and Mineral Resource estimations for precious and base metal mineral projects and deposits in Canada and globally. Mr. Dufresne takes responsibility for Sections 6.3, 6.4, 13, and 14 of the Report. Mr. Dufresne also made contributions to Sections 1, 25 and 26.

Ms. Clarke is a Professional Geologist with the Association of Professional Engineers and Geoscientists of Saskatchewan (“APEGS”; Member #: 27238) and has worked as a geologist for more than 12 years since her graduation from the University of Saskatchewan. Ms. Clarke has experience with exploration for precious and base metal deposits of various deposit types in North America, including epithermal silver-gold mineralization. Ms. Clarke takes responsibility for Sections 6.1, 6.2, 9 to 11, 23 and 24 of the Report. Ms. Clarke also made contributions to Sections 1, 25 and 26.

Mr. Pearson is a Mining Engineer Consultant contracted by P&E Mining Consultants Inc. and is a Professional Engineer with Professional Engineers Ontario (“PEO”; Member # 36043016). Mr. Pearson has worked as a mining engineer for more than fifty years since his graduation from Queen’s University. Mr. Pearson has experience with reviewing and reporting on exploration and mining projects around the world for due

diligence and regulatory requirements and has worked as a Project Manager and Superintendent of Engineering and Projects at several underground operations in South America. Mr. Pearson takes responsibility for Sections 15 to 22 of the Report. Mr. Pearson also made contributions to Sections 1 and 25.

Mr. Livingstone conducted site inspections of the Property for verification purposes from August 13 to 14, 2023, and April 7 to 8, 2022. The August 2023 site inspection comprised a tour of the VMC Property, including entering several underground workings, collection of two underground verification samples, and a review of the VMC 3D data compilation. The April 2022 site inspection comprised entering several underground workings, a review of drill core to verify reported geology and mineralization, and collection of verification samples. Mr. Livingstone also toured the Cata offices, core shack, processing plant, and analytical laboratory. Mr. Dufresne, Ms. Clarke, and Mr. Pearson did not visit the Property, as Mr. Livingstone's visit was deemed sufficient by the QPs.

### **2.3 Sources of Information**

This Report is a compilation of proprietary and publicly available information. It is largely based on sections derived from the technical report titled, "Technical Report on the Valenciana mines complex, Guanajuato, Mexico" prepared for GSilver by Livingstone et al. (2022), as well as an earlier technical report titled "NI 43-101 Mineral Resource Update Technical Report on the Guanajuato Mine Complex, Guanajuato and San Ignacio Operations, Guanajuato State, Mexico", prepared for Great Panther by Brown and Nourpour (2022), as well as previous reports on the Property by Rennie and Bergen (2011), Smith (2011), Brown (2012), Waldegger (2012), Brown and Sprigg (2013), Brown (2014), Waldegger and Brown (2014), Brown (2015; 2016; 2017), Wunder (2018) and Brown and Nourpour (2020; 2020b; 2020c). Additional information regarding historical exploration conducted by Great Panther is sourced from publicly available company listings, including Great Panther Mining Ltd. (2013; 2021; 2022; 2022b; 2022c) and Guanajuato Silver Company Ltd. (2023; 2024).

In support of the technical sections of this Report, the Authors have independently reviewed reports, data, and information derived from work completed by GSilver, Great Panther and their consultants. Journal publications listed in Section 27 "References" were used to verify background geological information regarding the regional and local geological setting and mineral deposits of the VMC Property. The Authors have deemed these reports, data, and information as valid contributions to the best of their knowledge.

Based on the Property visit and review of the available literature and data, the Authors take responsibility for the information herein.

## 2.4 Units of Measure

With respect to units of measure, unless otherwise stated, this Report uses:

- Abbreviated shorthand consistent with the International System of Units (International Bureau of Weights and Measures, 2006).
- 'Bulk' weight presented in both United States short tons ("tons"; 2,000 lbs or 907.2 kg) and metric tonnes ("tonnes"; 1,000 kg or 2,204.6 lbs.).
- Geographic coordinates are projected in the Universal Transverse Mercator ("UTM") system relative to Zone 14 of the North American Datum ("NAD") 1983.
- Elevations reported as metres above sea level (masl).
- Block models and wireframes referenced to local grid coordinates.
- Currency in United States dollars (USD\$), unless otherwise specified (e.g., Canadian dollars, CAD\$, Mexican pesos, MXN\$).

### 3 Reliance on Other Experts

This Report incorporates and relies on contributions of other experts who are not Qualified Persons, or information provided by the Company, with respect to the details of legal, political, environmental, or tax matters relevant to the VMC Property, as detailed below. In each case, the Authors disclaim responsibility for such information to the extent of their reliance on such reports, opinions, or statements.

#### 3.1 Legal Status & Mineral Tenure

The Authors relied on GSilver to provide all pertinent information concerning the legal status of the Company, as well as current legal title, material terms of all agreements, and tax matters that relate to the Property. Copies of documents and information related to legal status, property agreements, and mineral tenure were reviewed, and relevant information was included elsewhere in the Report; however, the Report does not represent a legal, or any other, opinion as to the validity of the agreements or mineral titles. The following documents and information, provided by GSilver Management, were relied upon to summarize the legal status and mineral tenure status of the Property:

- Section 4.1: “Title Opinion, Minera Mexicana El Rosario, S.A. de C.V.” prepared for Guanajuato Silver Company Ltd. by Alberto Mauricio Vázquez Sánchez of the firm Tête À Tête Consultores, S.C., located in Mexico City, Mexico, and dated August 10, 2023 (provided to the Authors by Susana del Rio, Director of Administration for GSilver, via Microsoft SharePoint, on September 7, 2023).
- Section 4.2.1: “Great Panther Mining Limited and 1352168 B.C. Ltd. and Guanajuato Silver Company Ltd. Share Purchase Agreement” dated June 29, 2022 (provided to the Authors by Richard Silas, Director of GSilver on October 5, 2023).
- Section 4.3.2: Details regarding mining taxes and royalties for the years 2022 and 2023 were provided to the Authors by Hernán Dorado Smith, Director and Chief Strategy Officer of GSilver, via email on February 29, 2024.

### 3.2 Environmental Matters

The Authors relied on GSilver to provide all pertinent information concerning permitting and environmental matters that relate to the Property. Copies of relevant environmental permits listed in Tables 4.2 and 20.1 were reviewed, along with other documents and information related to various environmental audits and reviews, and relevant information was included elsewhere in the Report; however, the Report does not represent a legal, or any other, opinion as to the validity of the permits or environmental status of the Property. These documents and information, provided to the Authors by María del Rosario Torres Aldana, Environmental Manager for GSilver, via Microsoft SharePoint on September 11, 2023, and Hernán Dorado Smith, Director and Chief Strategy Officer for GSilver, via email on February 22, 2024, were relied upon to summarize the environmental, permit and social or community impact status of the Property in Sections 4.4, 20.1 and 20.2. Select examples of documents reviewed by the Authors include:

- Sections 4.4.1 and 20.1: SEMARNAT document: “Modificaciones de Impacto Ambiental Segunda Ampliación de la Presa de Jales No. 9” (Modification of Environmental Impact Assessment Second Extension of Tailings Dam No. 9); Authorization No. GTO.131.1/123/2022; issued to MMR on February 24, 2022.
- Sections 4.4.1 and 20.1: SEMARNAT document: “Registro del Plan de Manejo de Residuos” (Mining Waste Management Plan); Authorization No. NRA: MMRSP1101511, RPMRMM: 11-PMM-1-0190-2019; issued to MMR on February 1, 2019.
- Sections 4.4.1 and 20.1: Municipality of Guanajuato document: “Constancia de Verificación de Condiciones y Uso” (Land Use License for Tailings Dam); Authorization No. DAU/V/ 36083/2023; issued to MMR on November 17, 2023.
- Sections 4.4.3 and 20.2: GSilver document: “Guanajuato Complex Closure Cost Estimate, Asset Retirement Obligation”, dated December 2022.

## 4 Property Description and Location

### 4.1 Description and Location

The VMC includes the VMC operation, the Cata processing plant and associated infrastructure. The VMC is situated within and surrounding the city of Guanajuato in Guanajuato State, Mexico, in the historical Guanajuato Mining District (Figure 4.1). The main operations of the VMC are located approximately 380 km to the northwest of Mexico City and are centred at approximately 21° 03' N latitude and 101° 15' W longitude; NAD 1983 UTM 266,135 m Easting and 2,327,884 m Northing).

The VMC comprises 19 contiguous mineral concessions and encompasses a total area of approximately 679.76 ha (Table 4.1 and Figure 4.2). The mineral concessions are held 100% by Minera Mexicana el Rosario, S.A. de C.V. (“MMR”), a wholly owned subsidiary of GSilver. The boundaries of the mineral concessions have been legally surveyed.

**Table 4.1 VMC Property Mineral Concession Details**

Mineral Concessions	Title No.	Area (ha)	Date of Record	Expiration Date
La Victoria	168162	28.7718	02/03/1981	01/03/2031
Cata	168163	91.6040	02/03/1981	01/03/2031
Esperanza	168164	47.4890	02/03/1981	01/03/2031
Valenciana	168165	91.9428	02/03/1981	01/03/2031
Rayas	168167	88.6727	02/03/1981	01/03/2031
1ra. Ampliacion de Esperanza	168169	8.9073	02/03/1981	01/03/2031
Primera Ampl. de Valenciana	168170	97.3097	02/03/1981	01/03/2031
El Borrego	168171	24.0000	02/03/1981	01/03/2031
El Progreso	180370	30.8635	25/03/1987	24/03/2037
El Promontorio	180371	10.3232	26/03/1987	25/03/2037
El Caliche	233320	7.8465	10/02/2009	09/02/2059
Animas o Espiritu Santo	233312	4.1400	23/05/1930	04/02/2059
San Vicente	233311	3.0552	05/02/2009	04/02/2059
Pipichagua	160650	6.0000	10/10/1974	09/10/2024
Nueva Seguridad	160674	27.0000	10/10/1974	09/10/2024
La Guadalupana	161526	16.0000	25/04/1975	24/04/2025
Socavon de La Fe	189664	15.0000	05/12/1990	04/12/2040
El Zapote	214890	80.7106	04/12/2001	03/12/2051
El Triangulo	229058	0.1237	28/02/2007	27/02/2057
<b>Total</b>		<b>679.76</b>		

Figure 4.1 VMC Mineral Concession Groups

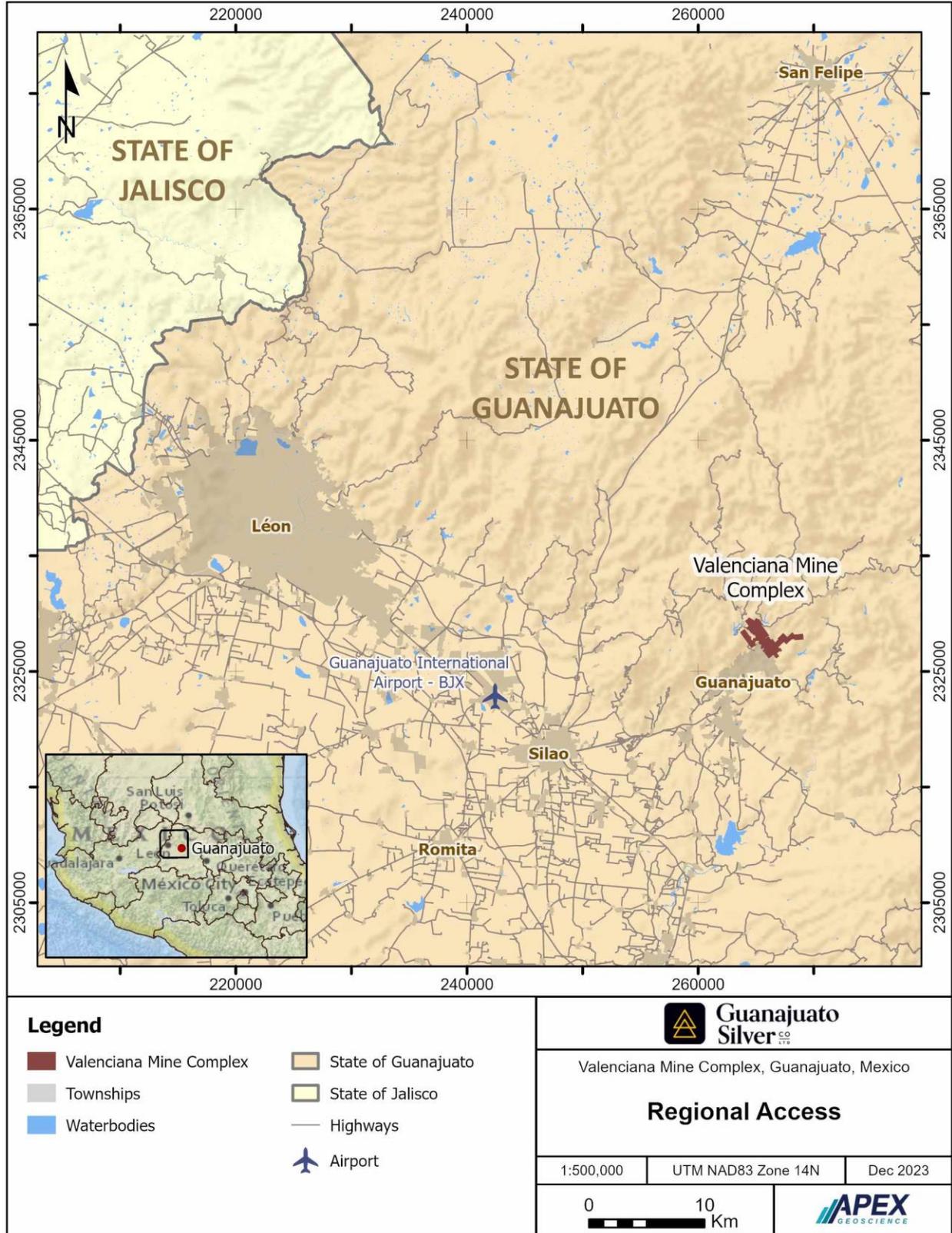
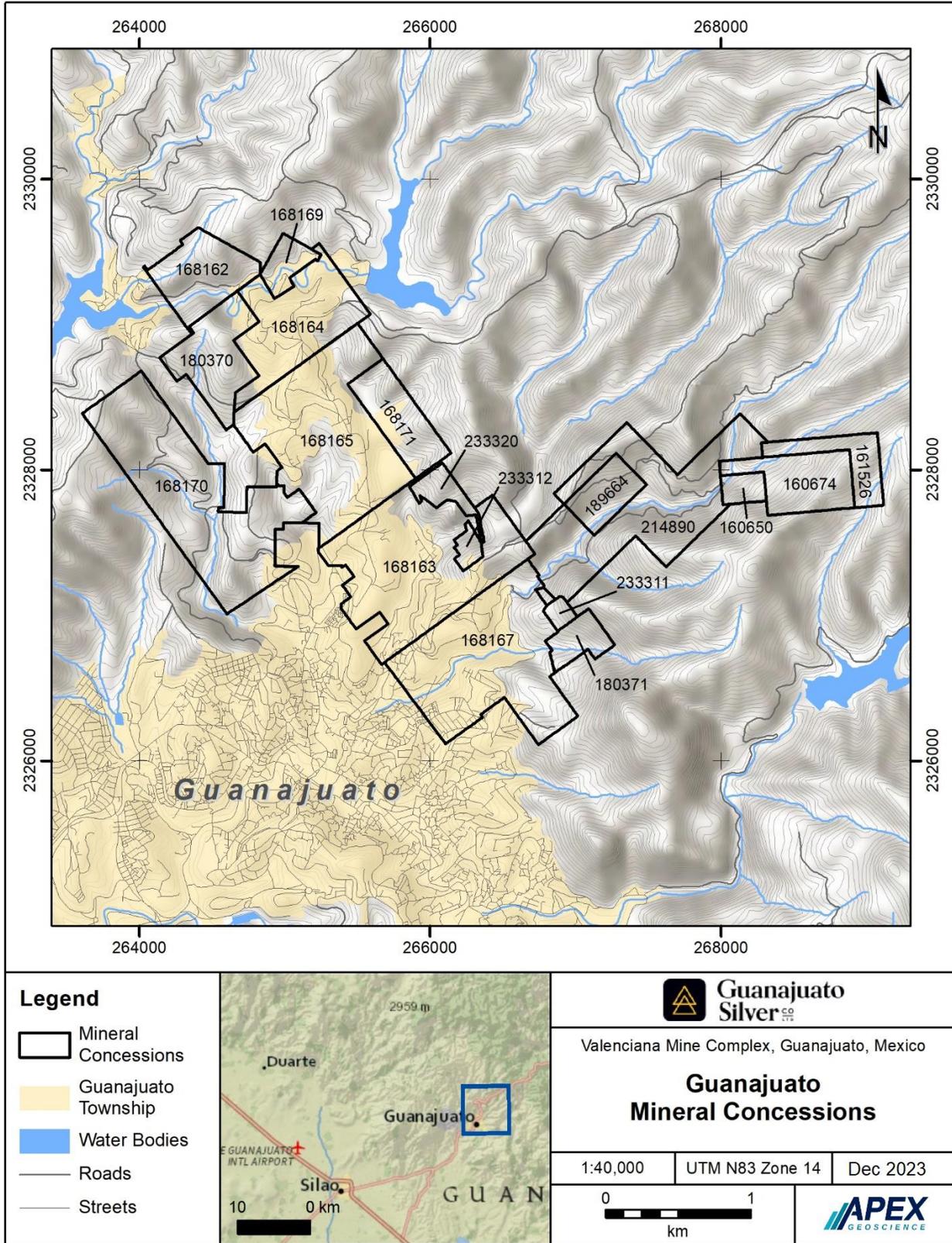


Figure 4.2 Mineral Concessions



The Author did not independently verify the legal status of the VMC concessions. According to a legal title opinion report prepared by Vázquez Sánchez (2023), the concessions forming the VMC Property are valid, in force and effect, and are in good standing with respect to biannual mining duty payments, including the mining duties due on July 31, 2023, filing of annual Work Assessment Reports, and filing of Production Reports. The concessions are free and clear of any lien, encumbrance, burden, or contracts in effect, registered or in process to be registered with the Public Registry of Mining (“RPM”). MMR is the registered holder of 100% rights and ownership of the VMC concessions (Vázquez Sánchez, 2023).

## 4.2 Ownership Agreements and Royalties

### 4.2.1 Great Panther Agreement

On June 29, 2022, GSilver signed a binding definitive agreement (the “Agreement”) with Great Panther to acquire all of Great Panther’s Mexican assets through the purchase of Great Panther’s Mexican subsidiary, MMR, including the Guanajuato mine and Cata processing plant, (collectively known as the Valenciana Mines Complex, or “VMC”; formerly known as the Guanajuato Mine Complex, or “GMC”); in addition to the San Ignacio mine, Topia mine and production facility (collectively known as the Topia Property), and the El Horcón and Santa Rosa exploration projects.

GSilver closed the MMR acquisition on August 4, 2022, with the execution of customary closing documents in Mexico and Canada, and with the payment to Great Panther of US\$14.7M, as follows:

- USD\$6.7M in GSilver common shares at a deemed price of CAD\$0.335 per share, for a total issuance of 25,787,200 (the “Consideration Shares”); and
- USD\$8.0M in cash (the “Cash Consideration”).

The Consideration Shares were subject to a statutory hold period of four months and one day expiring December 5, 2022. In addition to the statutory hold period, the Consideration Shares were subject to voluntary hold periods as follows:

- 8 months for 25% of total Consideration Shares expiring April 4, 2023; and
- 12 months for 25% of total Consideration Shares expiring August 4, 2023.

GSilver also paid USD\$1.35M in working capital adjustments to Great Panther for excess working capital left in MMR over and above the agreed upon target working capital. Total acquired working capital included USD\$500k in cash.

GSilver also agreed to pay Great Panther up to an additional USD\$2.0M in contingent payments as follows:

- USD\$500,000 upon Guanajuato Silver producing 2,500,000 ounces of silver from the purchased MMR assets;

- USD\$750,000 if the price of silver closes at or above USD\$27.50 per ounce for 30 consecutive days within two years after closing; and
- USD\$750,000 if the price of silver closes at or above USD\$30.00 per ounce for 30 consecutive days within three years after closing.

#### **4.2.2 Other Royalties**

A 2% NSR Royalty is payable to Compañía Minera Blanca Alicia, S.A. De C.V. for concessions “Reducción Salaverna”, title 219875; “Reducción Salaverna Norte I”, title 217140; “Clavellina”, title 211241 and “Nuevo Guerrero”, title 186242 (Rodríguez del Bosque, 2021).

### **4.3 Mining Royalties & Taxes**

#### **4.3.1 Mining Law**

The mining industry in Mexico is controlled by the Secretaría de Economía – Dirección General de Minas, which is located in, and administered from, Mexico City. The Mexican Mining Law, its Regulation (collectively, the “Mining Law”), and Article 27 of the Mexican Constitution regulate mining issues. Mining concessions in Mexico may only be obtained by Mexican nationals or Mexican companies incorporated under Mexican laws. The construction of processing plants requires further governmental approval. In Mexico, surface land rights are distinct from mining concessions.

After an amendment to the Mining Law on April 28, 2005, there is no longer a distinction between the exploration mining concessions and exploitation mining concessions. The Mining Law grants the holder of a mining concession exclusive rights to conduct exploration for the purpose of identifying mineral deposits and quantifying and evaluating economically usable reserves, to prepare and to develop exploitation works in areas containing mineral deposits, and to extract mineral products from such deposits.

Mining concessions are granted for 50 years from the date of their registration with the Public Registry of Mining to the concession holder as a matter of law if all regulations have been complied with. During the final five years of this period, the concession holder may apply for one additional 50-year period, which is automatically granted provided all other concession terms have been complied with. Mining rights in Mexico can be transferred by their private holders with no restrictions or requirements other than to register the transaction with the Public Registry of Mining.

To maintain a concession in good standing holders are required to provide evidence of the exploration and/or exploitation work carried out on the claim under the terms and conditions stipulated in the Mining Law, and to pay semi-annual mining duties based on the number of hectares covered by the concession area, established under the Federal Duties Law. Exploration work can be evidenced with investments made on the lot covered by the mining claim, and the exploitation work can be evidenced the same way,

or by obtaining economically utilizable minerals. Non-compliance with these requirements is cause for cancellation only after the Secretariat of Economy of Mexico communicates in writing to the concessionaire of any such default, granting the concessionaire a specified time frame in which to remedy the default.

If a concession holder does not carry out exploration or exploitation activities for two continuous years within the first 11 years of its concession title, it will be required to pay an additional charge equal to 50% of the two-year concession duty. The concession duty increases to 100% for continued inactivity after the 12th year. Payment of the additional concession duty is due 30 days after the end of the two-year period.

Mining companies are subject to an annual special mining duty of 7.5% on profits derived from the sale of minerals minus authorized deductions, and an annual extraordinary mining duty of 0.5% on the gross value of sales of gold, silver and platinum.

On May 8, 2023, several amendments to existing statutes were passed by the Mexican Congress that materially changed mining regulations in Mexico. The changes affect Mexico's Mining Law, National Water Law (Ley de Aguas Nacionales), General Law for Ecological Balance and Environmental Protection (Ley General de Equilibrio Ecológico y Protección al Ambiente) ("LGEEPA"), and General Law for the Prevention and Integral Management of Waste (Ley General para la Prevención y Gestión Integral de los Residuos) ("LGPGIR").

The amendments to the Mining Law condition granting of mining concessions on the availability of water and modify the current process for obtaining concessions by adding a public bidding process. The awarded bidder will receive the concession only after securing any and all necessary environmental, social, and/or labour authorizations and permits. This includes revised and expanded indigenous and public consultation rules and processes, with costs covered by the winner of the bid. The amendments eliminate the preferential status of mining activities; concession holders will no longer be entitled to request land access and superficial rights to conduct mining activities and must instead form an agreement between the landowner and the mining company.

Under the amended regulations, the term of a mining concession is shortened to 30 years, with a one-time renewal for a second term of 25 years. Transfer of mining concessions now requires the prior approval of the Ministry of Economy (Secretaría de Economía). Mining concessions may now be used as collateral by their owners only in the event the mine is operating. Concessions assigned to Mexican government-owned companies will have an indefinite term and will be non-transferrable.

Mining concession titles will now be granted for the exploitation of a specific mineral. Mining exploration activities will be the exclusive responsibility of the Mexican Geological Survey (Servicio Geológico Mexicano) ("SGM"). Private parties may submit relevant data and information to the Ministry of Economy regarding the existence of minerals or metals in a given area that is neither allocated or subject to a concession, for

the Ministry to review and consider issuing bids for mining concessions or advise the SGM whether to enter into a collaboration agreement with the parties to perform exploration work.

#### **4.3.2 Mining Royalties & Tax Status**

According to a legal title report prepared by Vázquez Sánchez (2023), the VMC concessions are in good standing with respect to biannual mining duty payments, including the mining duties due on July 31, 2023, filing of annual Work Assessment Reports, and filing of Production Reports.

The special mining duty is levied at a rate of 7.5% on each company's income, taking into account almost all sources of income and deductions for the calculation of income tax. However, it excludes interest, foreign exchange gains, annual adjustments, and investment deductions. For the years 2022 and 2023, MMR's expenses surpassed its income, therefore no basis for this tax is generated.

The extraordinary mining tax is calculated based on revenues derived from the sale of gold and silver, without allowing for any deductions, at a fixed rate of 5%. MMR made a payment of \$1,567,968 MXN for the year 2022 and will pay \$3,967,899 MXN for the year 2023, no later than March 31st.

#### **4.4 Environmental Liabilities, Permitting and Significant Factors**

##### **4.4.1 Permitting**

Article 27 of the Mexican Constitution establishes that natural resources are part of the nation's heritage and, therefore, the Federal Government is responsible for the regulation of resource management. Although the Mining Legislation for Mexico emanates from Article 27, there are many secondary laws that complement the regulatory framework.

At the federal level, the unit authorized to generate, apply, supervise and monitor compliance with environmental regulations is the Ministry of Environment and Natural Resources (Secretaría de Medio Ambiente y Recursos Naturales; "SEMARNAT"). Additional organizations related to monitoring mining activity, include:

- National Water Commission (Comisión Nacional del Agua; "CONAGUA").
- National Commission of Natural Protected Areas (Comisión Nacional de Áreas Naturales Protegidas; "CONANP").
- Federal Office of Environmental Protection (Procuraduría Federal de Protección al Ambiente; "PROFEPA").

At the state level, the unit responsible for monitoring compliance in environmental matters is the Institute of Ecology (Instituto de Ecología) for the State of Guanajuato.

The municipal level is monitored by the General Directorate of Ecology and Environment (Dirección General de Ecología y Medio Ambiente).

To commence exploration at a property, a company may be required to complete necessary studies in accordance with SEMARNAT, including an environmental impact evaluation, an environmental impact assessment, a preventive report, or a change in the use of land authorization.

All necessary permits are in place to conduct planned exploration at the VMC. The main permits in place for the VMC are presented in Table 4.2.

Great Panther placed the VMC on care and maintenance status in November 2021 due to lack of tailings capacity and applied for a permit from the Comisión Nacional del Agua ("CONAGUA") to expand the tailings storage facility at the VMC. GSilver's engineering staff calculates that the facility has a remaining capacity of approximately 47,000 cubic metres, which is equivalent to over 4 months of capacity at full usage. The Great Panther application was ultimately rejected due to a lack of approval from CONAGUA. The Company is currently evaluating plans to prepare a new submission to SEMARNAT to extend the tailings facility, and potentially implement dry stacking to expand tailings capacity. Meanwhile, operations will continue by backfilling tailings underground at the VMC using a hydraulic fill system, making use of select voids and open stopes that have been created over the past 450 years of underground mining.

Additional details regarding VMC permitting are presented in Section 20.1.

**Table 4.2 VMC Permit Summary**

Level	Authority	Environmental Permit	Status	Register Number	Authorization Number	Authorization Date
FEDERAL	SEMARNAT	ENVIRONMENTAL IMPACT ASSESSMENT OPERATION OF TAILING DAM No.9	VALID	11/MP-0216/06/12	GTO.131.1.1/0642/2012.	2012-11-23
		CHANGE OF LAND USE FOR EXPANSION OF TAILING DAM No. 9	VALID	11/DS-0005/05/14	GTO.131.1.2/0658/2015.	2015-09-02
		ENVIRONMENTAL IMPACT ASSESSMENT SECOND EXTENSION OF TAILING DAM No. 9	VALID	11/MP-0099/06/18	GTO.131.1.1/0859/2018	2018-11-09
		MODIFICATION OF ENVIRONMENTAL IMPACT ASSESSMENT SECOND EXTENSION OF TAILING DAM No. 9	VALID	11/MP-0099/06/18	GTO.131.1/123/2022	2022-02-24
		CHANGE OF LAND USE FOR SECOND EXTENSION OF TAILING DAM No.9 "COMPLEMENTARY POLYGON"	VALID	11/DS-0004/06/19	GTO.131.2/156/2021	2021-04-23
		UPDATING OF THE REGISTRY AS A GENERATOR OF HAZARDOUS WASTE "MILL PLANT"	VALID	11/HR-0098/03/17	NRA: MMRSP1101511	2017-03-22
		REGISTRY AS A GENERATOR OF HAZARDOUS WASTE "SAN VICENTE MINE"	VALID	11/EV-0096/03/17	NRA: MMR1101500027	2017-03-22

Level	Authority	Environmental Permit	Status	Register Number	Authorization Number	Authorization Date	
		UPDATING OF THE REGISTRY AS A GENERATOR OF HAZARDOUS WASTE	VALID	09/HP-0840/08/17	NRA: MMRSP1101511 RPMRMM: 11-PMM-I-0042-2010	2017-09-07	
		UNIQUE ENVIRONMENTAL LICENSE (LAU, BY ITS ACRONYM IN SPANISH)	VALID	11/LU-0010/02/06	NRA: MMRSP1101511	2006-08-30	
		MODIFICATION OF THE UNIQUE ENVIRONMENTAL LICENSE (LAU, BY ITS ACRONYM IN SPANISH)	VALID	11/LU-0173/08/18	NRA: MMRSP1101511 LAU: before LAU-11-47/01501/2006, after LAU: LAU-11/0047-2006 (GTO.131.1/501/2019)	Concession: 30/08/2006 1st. Update: 18/02/2013 2nd. Update: 29/07/2019	
		MINING WASTE MANAGEMENT PLAN	VALID	09/GC-0398/05/18	NRA: MMRSP1101511 RPMRMM: 11-PMM-I-0190-2019	2019-02-01	
		UPDATE OF ANNUAL OPERATING CERTIFICATE (COA, BY ITS ACRONYM IN SPANISH) MILL PLANT 2022	VALID	11/COW0376/06/23	BITÁCORA: 11/COW0376/06/23.	2023-06-26	
		UPDATE OF ANNUAL OPERATING CERTIFICATE 2021 SAN VICENTE MINE	VALID	11/COW0378/06/23	BITÁCORA: 11/COW0378/06/23	2023-06-26	
	CONAGUA	WATER CONCESSION TITLE (EXTENSION)	VALID	GUA-L-2531-19-11-15	08GUA107052/12FMDL11	2016-10-24	
		FEDERAL ZONE OCCUPANCY CONCESSION TITLE "ARROYO LOS MEXICANOS".	VALID	B00.910.01.1/001982(DIC)	Título No. 834164 (GUA-L-2797-20-12-17)	2020-12-09	
		FEDERAL ZONE OCCUPANCY TITLE "ARROYO SANTA ROSA".	VALID	B00.910.01.1/001981(DIC)	Título No. 834171 (GUA-L-2800-20-12-17)	2020-12-09	
		HYDROLOGIC STUDY	VALID		B00.7/02-0190	2023-09-21	
	STATE	SMOAT	REGISTER AS A GENERATOR OF SPECIAL MANAGEMENT WASTE	VALID	GUA-GRME-221/2011	GUA-GRME-221/2011	2022-08-01
			SPECIAL WASTE AND URBAN SOLIDS MANAGEMENT PLAN	VALID	PM-000200/2017	IEE-DIAMIR-3115/2017	2017-09-20
MUNICIPAL	DGEMA	LAND USE LICENSE: (HACIENDA DE BUSTOS)	VALID	OF. No. DAU/V/25782/2022	EXP. DPUPA/2352/2013	2022-10-11	
		LAND USE LICENSE: TAILINGS DAM	VALID	OF. No. DAU/V/25855/2022	EXP. DPUPA/3155/2016	2022-10-11	
		LAND USE LICENSE RAYAS MINE.	VALID	DPUPA/3401/2016	DAU/V/36023/2023	2023-10-23	
		LAND USE LICENSE TIRO KURTS (SAN VICENTE)	VALID	DPUPA/2899/2017	DAU/V/36028/2023	2023-10-23	
		LAND USE LICENSE TIRO CATA	VALID	DPUPA/3783/2016	DAU/V/36092/2023	2023-10-23	
		LAND USE LICENSE ENCARNACIÓN I	VALID	DPUPA/3782/2016	DAU/V/36096/2023	2023-10-23	
		LAND USE LICENSE ENCARNACIÓN II	VALID	DPUPA/3781/2016	DAU/V/36126/2023	2023-10-23	
		LAND USE LICENSE TIRO GENERAL VALENCIANA "MUSEO".	VALID	DAU/V/0357/2020	DAU/V/33333/2023	2023-07-26	

#### 4.4.2 Surface Rights

Surface rights sufficient for underground mining operations at VMC are maintained by GSilver. The Company, through its wholly owned Mexican subsidiary MMR, owns certain surface rights at the VMC including the area surrounding the Cata processing plant, laboratory, and office, as well as the tailings storage facility.

The Company also owns several blocks of ground over the present underground development (new roads, mine rock dumps, and surface infrastructure). Surface access elsewhere on the Property is negotiated with various individual owners.

#### **4.4.3 Environmental Liabilities**

There are no known environmental liabilities associated with the VMC mining concessions, other than the provisions recognized in GSilver's Consolidated Financial Statements and detailed in the document "Guanajuato Complex Closure Cost Estimate, Asset Retirement Obligation", for the estimated present value of future reclamation, rehabilitation, and monitoring of the VMC. This value comprises the costs associated with mining infrastructure, waste stockpile, Cata processing plant, the tailings storage facility, and related infrastructure of the VMC. As of December 31, 2022, the cost for closure of the VMC is estimated to be USD\$9,920,559.

#### **4.4.4 Significant Factors**

The Author is not aware of any other environmental liabilities, significant factors or risks that would affect access, title, or the ability to perform work at the VMC.

## 5 Accessibility, Local Resources, Infrastructure, Climate and Physiography

### 5.1 Accessibility

The Valenciana Mines Complex is situated within and to the north and northeast of the city of Guanajuato in Guanajuato State, Mexico, approximately 380 km to the northwest of Mexico City. The VMC is accessible via Guanajuato city streets in the northern and northeast portion of the city. Panoramica street leads to the Guanajuato operation.

Regional access to the VMC is presented in Figure 5.1.

### 5.2 Climate

The climate of the Property area is generally dry for most of the year, with a wet season from June to September, during which time rainfall averages 600 millimetres. Weather records from the city of Guanajuato indicate that the average January maximum and minimum temperatures are 23 and 7 degrees Celsius (°C), respectively. July average maximum and minimum temperatures are 27 and 14°C (National Oceanic and Atmospheric Administration, 2022).

Exploration and mining work can be conducted year-round, uninterrupted by weather.

### 5.3 Local Resources and Infrastructure

The Property area has a lengthy history of mining; skilled labour, goods and services are available from the nearby cities of Guanajuato, León and San Felipe. Mining completed at the VMC by Great Panther from 2006 to 2021 was conducted by contractors, primarily sourced from nearby communities. The municipality of Guanajuato hosts a population of approximately 184,239, according to 2015 census data, and is located approximately 50 km from the Guanajuato International Airport (Del Bajío international airport at León), Mexico. León hosts a population of approximately 2,140,094, according to 2020 census data, and is a full-service community.

The surface and underground infrastructure at the VMC includes the following:

- Extensive underground workings from surface to approximately 600 m below surface, including multiple shafts and adits from surface, as well as internal shafts, ramps, and drives within and linking to adjacent mines.
- Two main shafts: the Rayas, for personnel and materials, and the Cata shaft, for rock hoisting.
- Conventional and mechanized underground mining equipment.
- Access roads to the mines.
- Cata processing plant: nominal 1,200 tpd flotation concentrator with surface bins, crushing facilities, grinding mills, flotation cells, and concentrate dewatering circuit.
- Tailings storage facility.

- Historical tailings storage facility.
- Cata analytical laboratory.
- Mine, geology, processing, and administrative offices in several locations. Primary location is adjacent to the Cata processing plant and laboratory.
- Connection to the national electrical power grid.
- Water and compressed air reticulation systems.
- Utility water is available for the mine and plant.
- Communications systems (internet based).

Energy, water, and waste disposal services are well established at the VMC. As listed above, the infrastructure at the VMC includes ancillary infrastructure for senior management, technical services, assay laboratory, warehousing, finance and other administrative services, and are located adjacent to the Cata processing plant. There are other smaller mine buildings located at San Vicente.

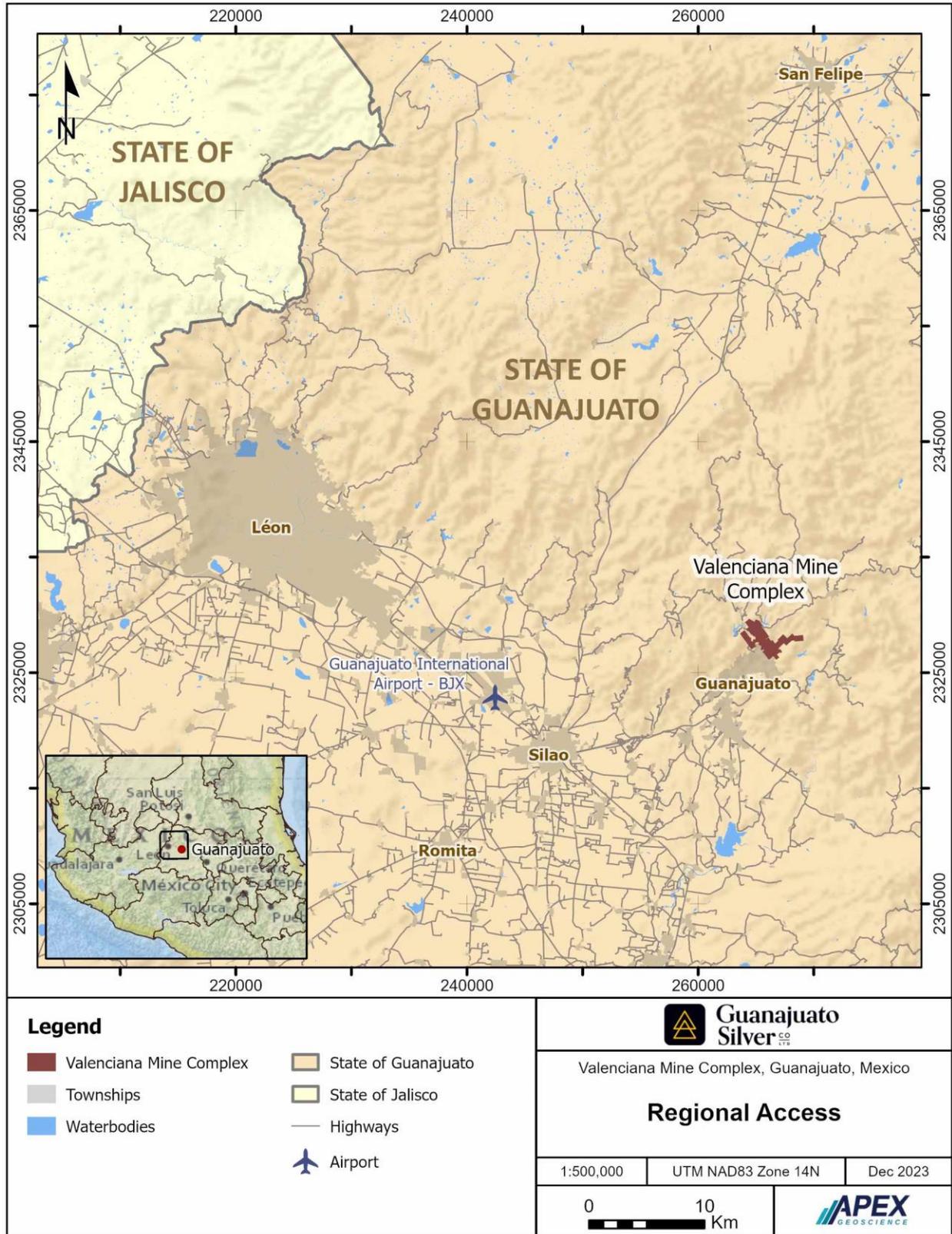
Electrical Power for the VMC is provided by the Federal Electricity Commission (CFE Comision Federal de Electricidad) which is owned by the Mexican Government. There is one power transmission line (13,200 V) that provides the electrical power supply for the plant and mine. At the VMC, there are eight electrical substations of different capacities, including two compact substations, one for the Cata shaft hoist and Cata compressors. There are seven transformers with different capacities, two of 1500 KVA, one of 600 KVA, three of 500 KVA and one of 225 KVA. Water for the operations comes from storage in historical underground workings.

During the site inspection, the lead Author observed the VMC Property access and infrastructure listed above. Access is sufficient for year-round operations, and all facilities and infrastructure required to continue exploration and mining operations are in place and appear to be in good working condition. Sources of power, water, and personnel are adequate for continued mining operations.

#### **5.4 Physiography**

The VMC is situated in the Central Plateau of Mexico in the Sierra Guanajuato Mountains. The topography of the Guanajuato is moderately rugged, with elevations ranging from 1,600 to 2,400 m above sea level (masl). Hillsides are deeply incised by drainage and slopes are moderately to extremely steep. Vegetation consists of grasses, small trees, shrubs, and cacti. Larger trees grow in the valley bottoms.

Figure 5.1 Regional Access



## 6 History

### 6.1 Early History of the Valenciana Mines Complex (pre-2005)

The Guanajuato Mining District has a lengthy history of mining and exploration dating back to 1548, when silver mineralization was discovered in the La Luz area by Spanish colonists. In 1550, an outcrop of the Veta Madre was found on what is now the Rayas mineral claim. Mining in the district took place on a relatively small scale until the early 1700s, when the application of explosives for tunnelling resulted in a significant increase in mining productivity.

Antonio Obregón y Alcocer financed the discovery and development of the Valenciana Mine (within the present Valenciana mineral claim), in the latter portion of the 18<sup>th</sup> century, and at the time, the Valenciana Mine accounted for a third of global annual silver production.

Mining in the Guanajuato Mining District ceased in 1816 and all production facilities were destroyed during the Mexican War of Independence.

In 1868, British capital reopened the Valenciana Mine, with production continuing until 1878. Lack of rail facilities and the necessity for hauling heavy equipment from the coast by mule hindered production during this period.

In the early 1900s, mining production declined due to low metal prices. During this time, American interests acquired and reopened many of the mines in the district. Old dumps and tailings were reprocessed to extract gold and silver using the newly discovered cyanide process; however, the onset of the Civil War in 1910 severely curtailed mining activity in the country and resulted in a decades-long slump in production.

In 1939, the mines in the district were turned over to the Sociedad Cooperativa Minera Metalurgica Santa Fe de Guanajuato (“the Cooperative”), following public demands for higher compensation and better working conditions. The Cooperative operated several mines in the district throughout the latter half of the 20<sup>th</sup> century into the 2000s, including Guanajuato. During this time the Cooperative amassed the San Ignacio property located within the La Luz mining camp of the Guanajuato Mining District.

The Cooperative conducted limited surface and underground diamond drilling at Guanajuato with the last Cooperative drill program completed in 2000. The historical drilling intersected silver-gold mineralization at depth under the existing workings at Guanajuato.

Historical drill core from Cooperative drill programs at VMC no longer exists; however, hard copy logs and assays from the historical drill programs are available at the Cata mine site at Guanajuato.

Great Panther acquired the VMC from the Cooperative in 2005.

## 6.2 Exploration by Great Panther (2005-2022)

### 6.2.1 Summary of Historical Non-Drilling Exploration Activity

Non-drilling exploration activity completed by Great Panther at the VMC comprised geological mapping and underground channel sampling, as well as underground development including geological mapping, sampling, and mining. Plan and isometric views of the underground exploration and underground sampling completed by Great Panther at Guanajuato are presented in Figures 6.1 to 6.3.

In 2006, during an initial assessment of the VMC, underground sampling of the walls of old stopes in the Valenciana Mine returned silver (Ag) grades ranging from 1,100 to 30,468 grams per tonne (g/t) Ag and gold (Au) grades ranging from 19 to 177 g/t Au in 27 selective grab samples. On average, the samples also contained 0.34% copper (Cu), 0.24% lead (Pb) and 0.87% zinc (Zn). The sampling was a first-pass assessment of the tenor and mineralization that was left by historical hand mining operations dating back to the early 19<sup>th</sup> century. Initial surface rock sampling completed at Promontorio identified a gold-rich zone of mineralization over 100 m within the Veta Madre structure. Two channel samples returned 5.2 g/t Au over 3.2 m and 7.6 g/t Au over 3.0 m (Great Panther Mining Ltd., 2005).

From 2012 to 2022, underground sampling was completed as part of a comprehensive review of historical data, and re-mapping and re-sampling of accessible historical areas was conducted to develop zones of interest for drill targeting. A total of 66,773 collar locations for chip and channel underground samples collected from 2012 to 2021 are contained in Great Panther's database.

In 2016, Great Panther initiated a geological mapping program to re-evaluate the "Old Stopes" throughout the VMC and to identify potential unmined mineralized segments of the Veta Madre or hanging- and foot-wall structures. The exploration started in the upper part of the Rayas area and progressed at depth and to the northwest. It continued through 2017 and into 2018 on an ad hoc basis. A program of geological mapping and sampling was carried out on all accessible levels from November 2018. This work continued as additional historical levels were checked and rehabilitated.

Figure 6.1 VMC Historical Underground Exploration Sampling, Plan View (Brown and Nourpour, 2022)

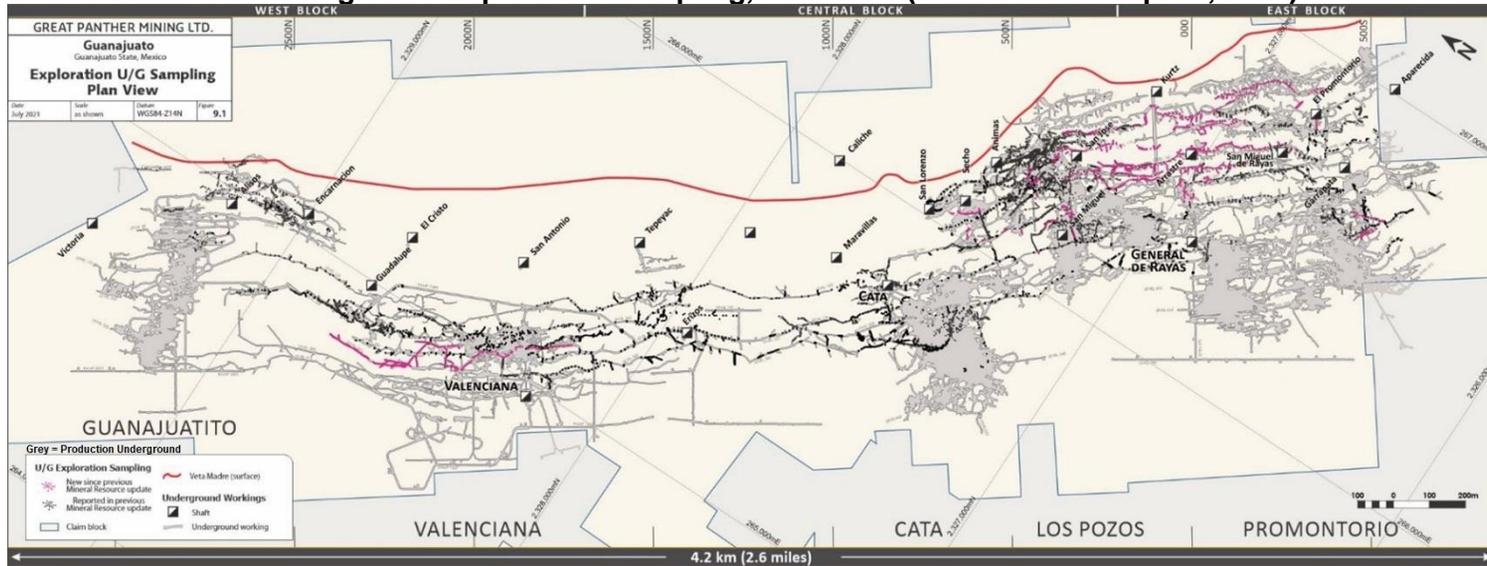


Figure 6.2 VMC Historical Underground Sampling, Plan View (Brown and Nourpour, 2022)

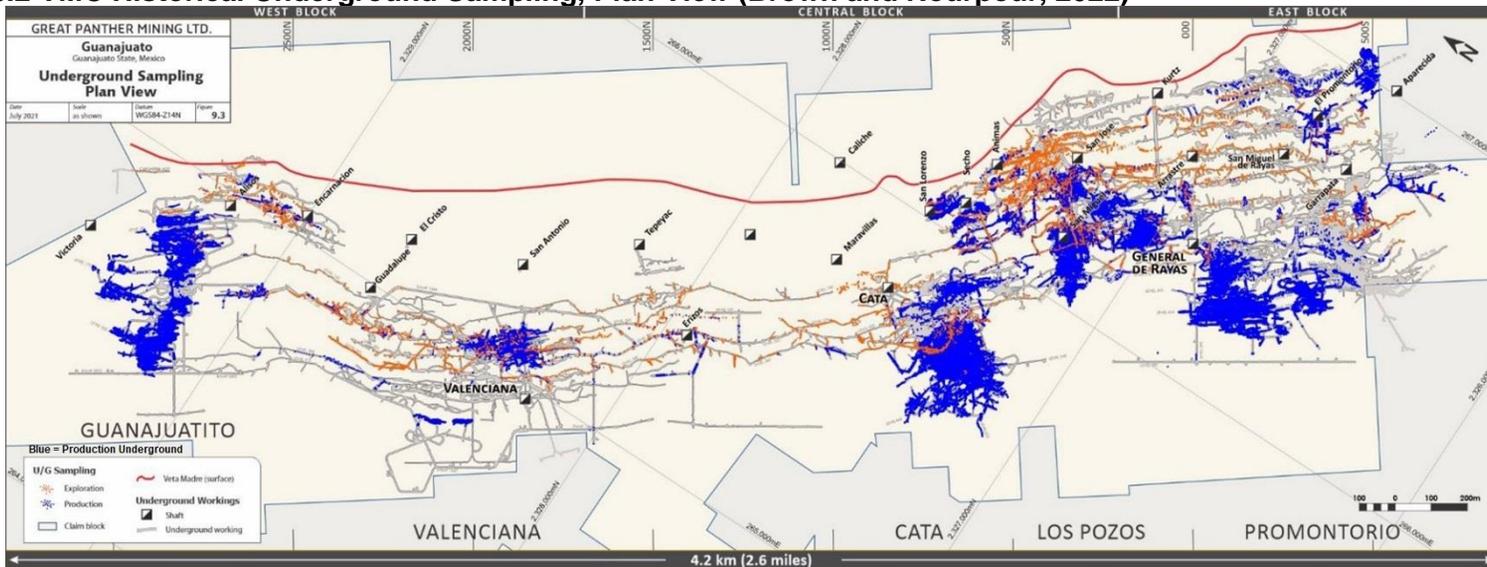
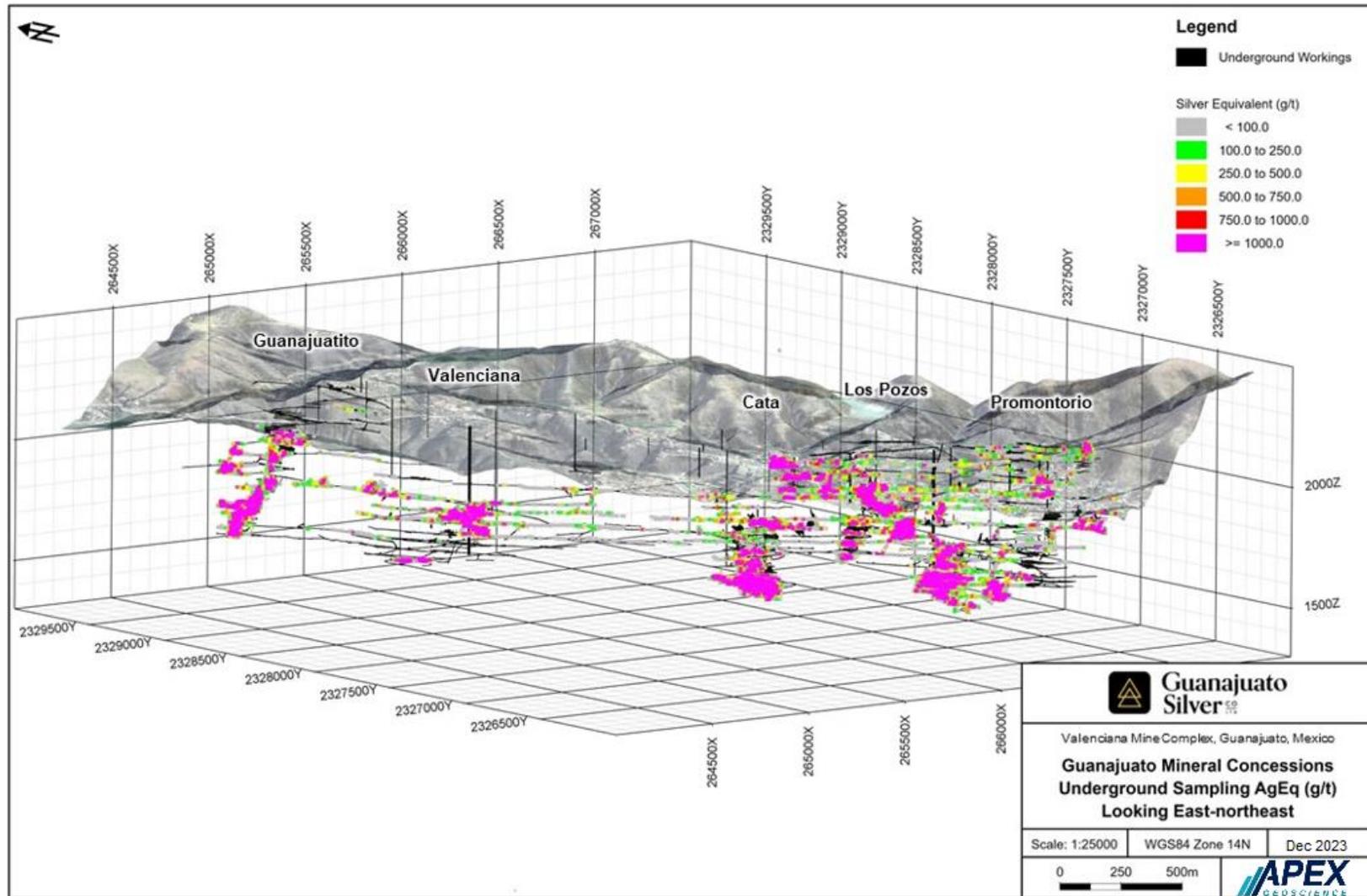


Figure 6.3 VMC Historical Underground Sampling Showing Silver Equivalent Geochemistry, Looking East-Northeast



\* AgEq values are calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a Ag to Au ratio of 80:1

## 6.2.2 Summary of Historical Drilling

From 2005 to 2021, Great Panther completed 1,593 drillholes, totalling 208,167.40 m, at the VMC. A summary of the Great Panther drilling at the VMC is presented in Table 6.1.

**Table 6.1 Summary of Great Panther Drilling at the VMC (2005 to 2021)**

Year	No. of Drillholes	Total Depth (m)
2005	8	1,567.30
2006	44	6,388.10
2007	65	10,148.00
2008	61	8,214.90
2009	32	1,559.40
2010	125	17,565.00
2011	158	22,752.80
2012	189	29,295.90
2013	160	26,324.20
2014	138	12,559.00
2015	108	12,219.00
2016	34	7,042.20
2017	77	13,603.80
2018	75	9,968.10
2019	123	8,792.80
2020	114	12,102.50
2021	82	8,064.40
Total	1,593	208,167.40

The drilling at was divided into two general modes of operation, including 1) exploration drilling, and 2) production drilling. Production drilling is predominantly concerned with definition and extension of the known zones, to confirm and upgrade the resources and to guide development and mining and is generally done to provide access for sampling and localized knowledge of the vein position which regularly pinches and swells. Exploration drilling is conducted further from the active mining area with the goal of expanding the Mineral Resource base. Great Panther used the drilling results from both programs in the estimation of several historical Mineral Resource Estimates (Section 6.3) and in subsequent production (Section 6.4).

The Great Panther drillhole collar surveys were completed using total station instruments and uploaded directly to a database for merging with the downhole logging data. Downhole surveys were performed every 50 m using a Reflex instrument with the survey data manually input into the database. Downhole surveys were typically not performed on shorter production drillholes measuring less than 60 m. For the shorter production drillholes, the orientation was measured only at the collar. Additionally, no downhole survey measurements were collected for Great Panther drillholes UGG10-001 to UGG11-021.

Great Panther's first surface drill program in 2005 was designed to verify and extend the mineralization intersected in historical drillhole 317: 5.35 m core length of 3.34 g/t Au and 81.5 g/t Ag, including 1.55 m of 10.65 g/t Au and 165 g/t Ag. The drill program targeted the Veta Madre trend, under and to the northwest of the Guanajuato ramp, approximately 1 km to the northwest of the Valenciana Mine. Silver-gold mineralization was intersected in the Veta Madre and a second previously undiscovered zone of Au - arsenic (As) – antimony (Sb) was intersected in the hanging wall. Significant results of Great Panther's 2005 drill program are presented in Table 6.2.

**Table 6.2. Significant Results of Great Panther's 2005 VMC Drill Program (modified from Great Panther Mining Ltd., 2005b)**

Hole ID	Zone	From	To	Width (m)	True Width (m)	Ag (g/t)	Au (g/t)
GTT0-05-001	HW Breccia	108.00	113.20	5.20	5.20	-	1.02
GTT0-05-002	HW Breccia	115.00	118.00	3.00	2.70	-	0.27
GTT0-05-003	HW Breccia	84.50	93.50	9.00	9.00	-	0.20
GTT0-05-004	HW Breccia	88.00	101.00	13.00	9.20	-	0.74
GTT0-05-004	Veta Madre	131.70	137.50	5.80	4.10	692	5.17
Including		131.70	133.15	1.45		648	4.49
and		133.15	134.65	1.50		330	2.55
and		134.65	135.05	0.40		682	5.59
and		135.05	137.50	2.45		1,120	8.17
GTT0-05-006	HW Breccia	150.50	161.00	10.50	7.40	-	0.44
GTT0-05-006	Veta Madre	110.50	113.00	2.50	1.77	1,096	4.15
Including		110.50	111.70	1.20		767	3.96
and		111.70	113.00	1.30		1,400	4.32
GTT0-05-006	HW Breccia	83.50	88.00	4.50	3.20	-	0.26
GTT0-05-006	Veta Madre	113.50	115.00	1.50	1.06	209	1.55

Following initial verification and exploration work, Great Panther commenced production at the Guanajuato Mine in June 2006 (see Section 6.4). Exploration and production drilling from 2006 to 2021 identified new mineralization, and delineated existing zones of mineralization for further development. Great Panther's drill programs are summarized in Table 6.3, with drillhole collars illustrated in Figures 6.4 to 6.6. Overall, the core recovery of mineralized zones at the VMC averaged 93%. In 2021, Great Panther's drill programs at the VMC focused on the Promontorio, Los Pozos, Santa Margarita, Guanajuatito and Valenciana areas. All exploration drilling was suspended in November 2021, coinciding with the VMC and the Cata processing plant being placed on care and maintenance (Great Panther Mining Ltd., 2022).

**Table 6.3 Great Panther Drillhole Summary (2005 to 2021)**

Year	Zone	Drilling Company	Location	Drillhole ID	Total Depth (m)	No. of Holes
2005	Esperanza	BD Drilling Mexico	Surface	GTT05-001 to GTT05-006, GTT-317 and GTT-318	1,567.30	8
2006	Animas	MMR	Underground	GTM06-001 to GTM06-013	687.10	13
	Esperanza	BD Drilling Mexico	Surface	GTT06-007 to GTT06-019	3205.00	13
	Animas	BD Drilling Mexico	Surface	GTT06-020 to GTT06-027	1,375.10	8
	Promontorio	BD Drilling Mexico	Surface	GTT06-028 to GTT06-034	1,010.00	7
	Guanajuatito	Canrock Drilling / HD Drilling (name change)	Underground	UG06-014 to UG06-016	111.00	3
2007	Cata	Canrock Drilling / HD Drilling (name change)	Underground	EUG07-001 to EUG07-009	1,664.30	9
	SVS	Canrock Drilling / HD Drilling (name change)	Surface	SG07-035 to SG07-045	2,135.00	12
	Tepeyac	Canrock Drilling / HD Drilling (name change)	Surface	SG07-046 to SG07-052	1,477.40	7
	Remedios	Canrock Drilling / HD Drilling (name change)	Surface	SG07-053 to SG07-058	1,154.60	6
	Promontorio	Canrock Drilling / HD Drilling (name change)	Surface	SG07-059 to SG07-068	2,641.60	10
	Animas	MMR	Underground	UG07-017 to UG07-021, UG07-028	180.30	6
	SVN	MMR	Underground	UG07-022 to UG07-025, UG07-032	239.10	5
	Rayas	MMR	Underground	UG07-029 to UG07-031, UG07-034 to UG07-035, UG07-037	366.20	6
	Guanajuatito	MMR	Underground	UG07-033, UG07-036, UG07-039 to UG07-040	289.50	4
2008	Cata	Canrock Drilling / HD Drilling (name change)	Underground	EUG07-010 to EUG07-037, UG08-043, UG08-049 to UG08-056, UG08-060, UG08-067	6,494.20	35
	Guanajuatito	BD Drilling Mexico MMR	Surface/ Underground	SG08-069 to SG08-070, UG07-038, UG07-041, UG07-044 to UG07-048, UG07-050, UG07-052 to UG07-053, UG07-057 to UG07-058, UG07-061 to UG07-063	1178.60	17
	Rayas	MMR	Underground	UG07-042	44.20	1
	Pozos	MMR	Underground	UG08-055, UG08-059, UG08-064 to UG08-066, UG08-068, UG08-070 to UG08-071	497.90	8
2009	Cata	MMR	Underground	UG08-069, UG08-072 to UG08-078, UGC09-001 to UGC09-011	1,088.30	19
	Guanajuatito	MMR	Underground	UG09-079 to UG09-087, UG09-093 to UG09-094	337.40	11
	Pozos	MMR	Underground	UG09-091 to UG09-092	133.70	2

Year	Zone	Drilling Company	Location	Drillhole ID	Total Depth (m)	No. of Holes
2010	Cata	Landdrill International, Mexico MMR, Energold Drilling Corp.	Underground	EUG10-079 to EUG10-081, UG10-115, UG10-118, UGC10-012 to UGC10-017, UGC10-037 to UGC10-041	1,707.90	16
	Guanajuatito	Energold Drilling Corp.	Underground	UG09-095 to UG09-097, UGG10-001 to UGG10-021	2,519.60	24
	Rayas	Landdrill International, Mexico	Underground	EUG10-038 to EUG10-078, UG10-112 to UG10-113, UG10-116 to UG10- 117	10,827.80	45
	Pozos	Landdrill International, Mexico	Underground	UG10-098 to UG10-107, UGC10-018 to UGC10-036	1,661.80	29
	SV	Landdrill International, Mexico	Underground	UG10-108 to UG10-111	69.80	4
	Valenciana	Energold Drilling Corp.	Underground	UGV10-042 to UGV10-048	778.10	7
2011	Cata	Landdrill International, Mexico MMR	Underground	EUG11-082 to EUG11-090, UG11-132 to UG11-158	2,363.50	36
	Guanajuatito	Landdrill International, Mexico	Underground	UGG11-022 to UGG11-054	6,937.40	33
	Rayas	Landdrill International, Mexico	Underground	EUG11-101 to EUG11-131, EUG11-133, UG11-119 to UG11-131, UGM11-003 to UGM11-010	8,516.30	52
	Pozos	MMR	Underground	UGM11-001 UGM11-002	51.20	2
	Santa Margarita	Landdrill International, Mexico	Underground	UGSM11-001 to UGSM11-019	1,630.00	19
	Valenciana	Landdrill International, Mexico	Underground	EUG11-091 to EUG11-100, UGV11-001 to UGV11-005	2,845.00	15
	Valenciana		Surface	EV11-001	409.40	1
2012	Cata	MMR Servicios Drilling, Mexico	Underground	UG12-159 to UG12-174, UGC12-042 to UGC12-043, UGM12-024, UGM12-029 to UGM12-030, UGM12-051	1,262.80	22
	Guanajuatito	Landdrill International, Mexico Major Drilling, Mexico	Underground	UGG12-055 to UGG12-095, UGM12-012 to UGM12-015, UGM12-027 to UGM12-028	11,685.80	47
	Rayas	MMR Servicios Drilling, Mexico	Underground	UGM12-011, UGM12-016 to UGM12-023, UGM12-025 to UGM12-026, UGM12-031 to UGM12-035, UGM12-046 to UGM12-047, UGM12-050, UGSM12-020 to UGSM12-021, UGSM12-037, UGSM12-039	1,731.20	23
	Pozos	MMR	Underground	UGM12-048 to UGM12-049	93.20	2
	San Cayetano	Servicios Drilling, Mexico	Underground	UGSC12-001 to UGSC12-011	2,786.20	11
	Santa Margarita	Servicios Drilling, Mexico Landdrill International, Mexico	Underground	UGM12-036 to UGM12-045, UGM12-052 to UGM12-055 UGSM12-022 to UGSM12-036, UGSM12-038, UGSM12-040 to UGSM12-044	4,947.80	36
	Valenciana	Landdrill International, Mexico Servicios Drilling, Mexico	Underground	UGV12-006 to UGV12-053	6,788.90	48
2013	Cata	Diamec 232	Underground	UGC13-044 to UGC13-084, UGDC13-032 to UGDC13-034	5,626.60	45
	Guanajuatito	Servicios Drilling, Mexico	Underground	UGG13-096 to UGG13-117	4,062.40	22
	Rayas	Diamec 232	Underground	UGD13-056 to UGD13-058	296.80	3

Year	Zone	Drilling Company	Location	Drillhole ID	Total Depth (m)	No. of Holes
	Pozos	Diamec 232	Underground	UGDP13-035, UGP13-001 to UGP13-031	1,995.30	32
	San Cayetano	Servicios Drilling, Mexico	Underground	UGSC13-012 to UGSC13-015	1,118.70	4
	Santa Margarita	Servicios Drilling, Mexico	Underground	UGSM13-046 to UGSM13-080	9,565.10	35
	Valenciana	Servicios Drilling, Mexico	Underground	UGV13-054 to UGV13-072	3,659.30	19
2014	Cata	Diamec 232	Underground	UGC14-001 to UGC14-010, UGC14-040 to UGC14-050, UGC14-053, UGC14-079 to UGC14-084, UGC14-169	3,073.20	29
	Guanajuatito	Servicios Drilling, Mexico	Underground	UGG14-001 to UGG14-005	208.70	5
	Pozos	Diamec 232	Underground	UGDP14-036 to UGDP14-041	258.70	6
	San Cayetano	Servicios Drilling, Mexico	Underground	UGSC14-016 to UGSC14-040	1,970.40	25
	Santa Margarita	Servicios Drilling, Mexico	Underground	UGDSM14-001 to UGDSM14-028, UGSM14-081 to UGSM14-090	3,763.80	37
	Valenciana	Servicios Drilling, Mexico	Underground	UGMV14-001 to UGMV14-009, UGV14-001 to UGV14-0029	3,284.20	36
2015	Cata	Diamec 232	Underground	UGC14-077, UGC15-055 to UGC15-073, UGCN15-001 to UGCN15-006	3,190.60	26
	Pozos	Diamec 232	Underground	UGDP15-042 to UGDP15-051, UGP15-001 to UGP15-010, UGP15-047	1,932.20	21
	San Cayetano	Servicios Drilling, Mexico	Underground	UGSC15-041 UGSC15-049	940.40	8
	Santa Margarita	Servicios Drilling, Mexico	Underground	UGDSM15-001 to UGDSM15-004, UGSM15-005 to UGSM15-007	688.80	7
	Valenciana	Servicios Drilling, Mexico	Underground	UGV15-030 to UGV15-073, UGVN15-002, UGVN15-004	5,467.00	46
2016	Los Pozos	Versa Perforaciones SA de CV	Underground	UGP-001 to UGP16-003	792.00	3
	Guanajuatito	Versa Perforaciones SA de CV	Underground	UGG16-001 to UGG16-011, UGGM16-001 to UGGM16-006	3,473.70	17
	Santa Margarita	Versa Perforaciones SA de CV	Underground	UGDSM16-001 to UGDSM16-002, UGMP16-001, UGP16-004	421.50	4
	Valenciana	Versa Perforaciones SA de CV	Underground	UGV16-001 to UGV16-010	2,355.00	10
2017	Cata	Versa Perforaciones SA de CV	Underground	UGC-001 to UGC17-010, UGDC17-001	2,434.00	11
	GTTO	Versa Perforaciones SA de CV		UGG17-001 to UGG17-011	3,516.00	11
	Los Pozos	Versa Perforaciones SA de CV		UGP17-002	200.00	1
	Rayas	Versa Perforaciones SA de CV		UGMPM17-001 to UGMPM17-004, UGMR17-001, UGP17-001, UGPM17-001 to UGPM17-004	1,518.00	10
	Santa Margarita	Versa Perforaciones SA de CV		UGMSM17-001 to UGMSM-003	98.10	3
	Valenciana	Versa Perforaciones SA de CV		UGDV17-001, UGV17-001 to UGV17-040	5,837.70	41

Year	Zone	Drilling Company	Location	Drillhole ID	Total Depth (m)	No. of Holes
2018	Rayas	DR Drilling	Underground	PZDR18-003 to PZDR18-010	285.00	8
	Los Pozos	DR Drilling		PZDR18-001 to PZDR18-002, PZDR18-011 to PZDR18-013	232.80	5
	Los Pozos	Versa Perforaciones SA de CV		UGMR18-001 to UGMR18-003, UGPM18-002	313.00	4
	Cata	Versa Perforaciones SA de CV		UGCM18-003 to UGCM18-006	152.50	4
	GTTO	Versa Perforaciones SA de CV		UGG18-001 to UGG18-018, UGGD18-001 to UGGD18-004, UGDG18-005, UGGD18-006	4,855.30	24
	Santa Margarita	Versa Perforaciones SA de CV		UGDSM18-001 to UGDSM18-004	201.90	4
	Rayas	Versa Perforaciones SA de CV	Underground	UGMPM18-001, UGPM18-001, UGPM18-004	337.60	3
	Valenciana	Versa Perforaciones SA de CV	Surface/ Underground	UGV18-001 to UGV18-021, UGDV18-001 to UGDV-002	3590.00	23
2019	Los Pozos	OV Drilling	Surface/ Underground	UGP19-001 to UGP19-044, SP19-001 to SP19-007, UGDP19-001 to UGDP19-015	4450.70	66
	Promontorio	OV Drilling	Underground	UGPM19-001 to UGPM19-040	2,523.10	39
	Valenciana	OV Drilling	Underground	UGV19-001 to UGV19-018	1,819.00	18
2020	Guanajuatito	KAV Drilling	Underground	UGG20-001 to UGG20-06	437.00	6
	Los Pozos	KAV Drilling	Underground	UGP20-001 to UGP20-091, UGSM20-008	6,897.00	92
	Santa Margarita	KAV Drilling	Underground	UGSM20-001 to UGSM20-007, UGSM20-009	2,012.50	8
	Valenciana	KAV Drilling	Underground	UGV20-001 to UGV20-008	2,756.00	8
2021	Guanajuatito		Underground	UGG21-001 to UGG21-015	2,507.00	15
	Cata			UGC21-001 to UGC21-016	702.50	16
	Los Pozos		Underground	UGP21-001 to UGP21-018, UGPZI21-012 to UGPZI21-014	1,664.50	21
	Promontorio			UGPRI21-008 to UGPRI21-011	284.00	4
	Valenciana		Underground	UGV21-001 to UGV21-019, UGVI21-001 to UGVI21-007	2,906.40	26
<b>Total</b>					<b>208,167.40</b>	<b>1,593</b>

Figure 6.4 Plan View of Great Panther Drillhole Collars and Traces

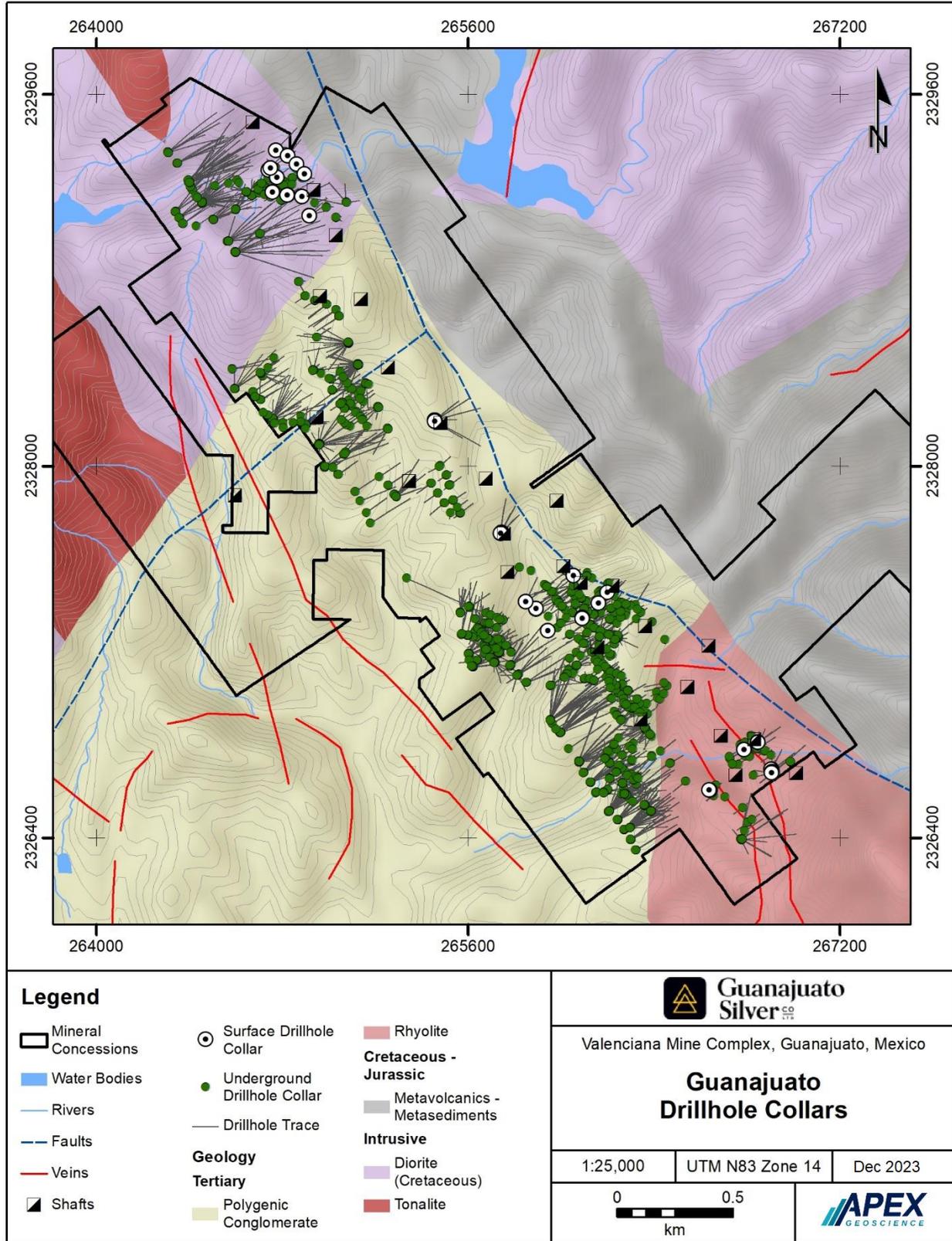
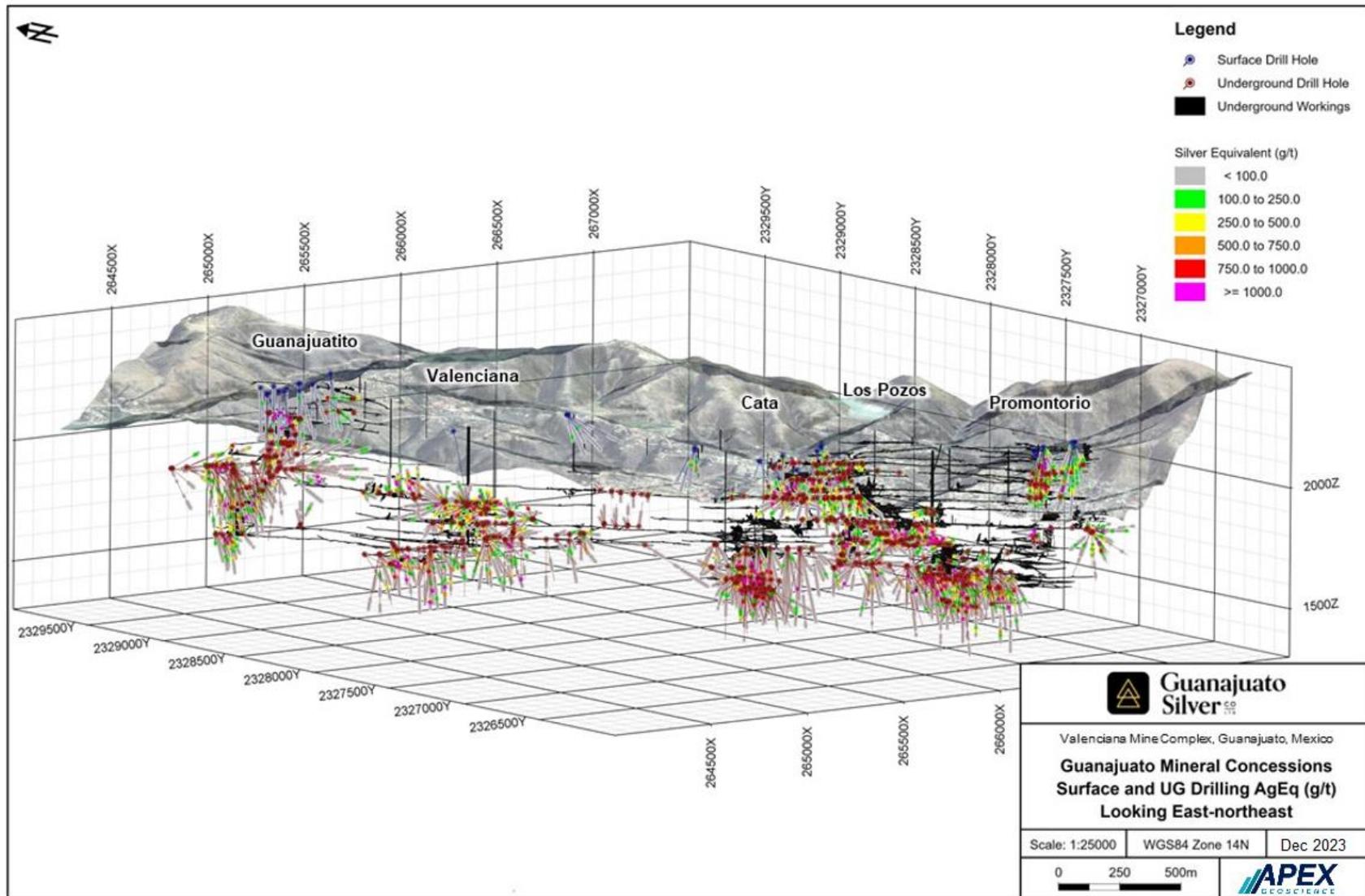
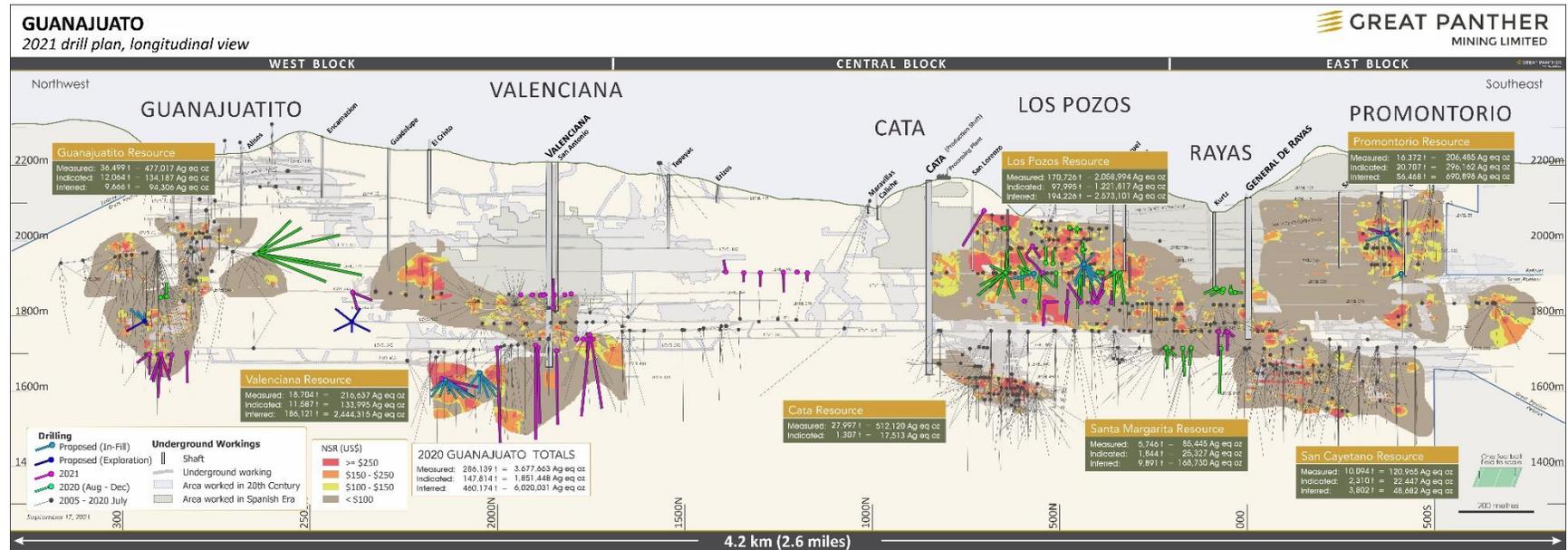


Figure 6.5 VMC Surface and Underground Drilling Showing Silver Equivalent Geochemistry, Looking East-Northeast



\* AgEq values are calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a Ag to Au ratio of 80:1

Figure 6.6 Overview of Great Panther Drilling and Historical Mineral Resource Estimates\* (dated September 17, 2021).



\*Note: The Author is referring to the Great Panther Mineral Resource Estimates as "historical resources" and the reader is cautioned not to treat them, or any part of them, as a current resource. To verify the historical MRE as a current Mineral Resource, a Qualified Person would need to complete database validation, undertake a full review of estimation parameters and procedures, and complete an updated Mineral Resource estimate and NI 43-101 technical report incorporating additional production, drilling and underground sampling completed at the VMC since July 31, 2021. The reader is referred to Section 6.3.2 for additional information on historical resources at the VMC.

### 6.3 Historical Mineral Resource Estimates

The following text summarizes historical Mineral Resource estimates (“MREs”) calculated by previous operators for the Valenciana Mines Complex, formerly known as the Guanajuato Mine Complex. The Author of this Report has reviewed the information in this section, as well as that within the cited references, and have determined that it is suitable for disclosure.

#### 6.3.1 Historical Mineral Resource Estimates for the Valenciana Mines Complex (2009 to 2020)

Several historical MREs have been calculated for the VMC from 2009 to 2020 (Table 6.4). A number of the historical MREs presented in Table 6.4 were calculated prior to the implementation of the standards set forth in NI 43-101 and Canadian Institute of Mining (CIM) Definition Standards for Mineral Resources and Mineral Reserves (May 2014) and CIM Estimation of Mineral Resources & Mineral Reserves Best Practices Guidelines (November 2019).

The Author of this Report has not done sufficient work to classify any of the historical estimates discussed in this section as current mineral reserves or Mineral Resources. The Author has referred to these estimates as “historical resources” and the reader is cautioned not to treat them, or any part of them, as current Mineral Resources. The historical resources summarized below have been included simply to demonstrate the mineral potential, and to provide the reader with a complete history of the Property. The historical MREs in Table 6.4 are superseded by the historical MRE in Section 6.3.2 (Brown and Nourpour, 2022).

**Table 6.4 Summary of Historical Mineral Resources (2009 to 2020; Brown and Nourpour, 2022)**

Effective Date	Company	Class	Tonnes	Au (g/t)	Ag (g/t)	Method	Cut-off
05/31/2009	Wardop Engineering Inc	Indicated	351,995	1.19	359	ID2	USD\$37.50
		Inferred	24,233	0.98	296		
01/31/2011	Scott Wilson Roscoe Postle Associates Inc.	Measured	188,000	1.64	306	ID3	136 g/t AgEq
		Indicated	211,000	2.55	270		
		M & I	399,000	2.12	287		
		Inferred	212,000	4.39	106		
01/31/2012	Robert F. Brown	Measured	275,800	2.21	264	ID3	Measured and Indicated Mineral Resources are estimated at a cut-off grade of 50 g/t AgEq. For Inferred: cut-off grades are 145, 115, 150 and 180g/t AgEq for Cata, Pozos, SM and GTTO
		Indicated	232,600	2.66	122		
		M & I	508,500	2.41	199		
		Inferred	223,200	2.1	221		
07/01/2013	Robert F. Brown & Linda Sprigg	Measured	362,000	1.82	179	ID3	Measured Mineral Resources are estimated at a cut-off grade of 50 g/t AgEq. Inferred Mineral Resources are reported at area-specific cut-offs as follows: Cata 176 g/t AgEq, Guanajuatito 164 g/t AgEq, Pozos 178 g/t AgEq, San Cayetano 169 g/t
		Indicated	142,600	1.22	163		
		M & I	504,700	1.65	174		
		Inferred	433,900	2.32	140		

Effective Date	Company	Class	Tonnes	Au (g/t)	Ag (g/t)	Method	Cut-off
							AgEq, Santa Margarita 166 g/t AgEq, Valenciana 167 g/t AgEq and Promontorio 166 g/t AgEq.
07/31/2014	Robert F. Brown	Measured	184,530	3.24	309	ID3	AgEq cut-off for Cata 248 g/t, Pozos 260 g/t, Guanajuatito 352 g/t, Santa Margarita 274 g/t, Valenciana 360g/t, Promontorio 260 g/t, San Cayetano 274 g/t.
		Indicated	36,017	2.2	335		
		M & I	220,546	3.07	313		
		Inferred	163,583	3.37	101		
07/31/2015	Robert F. Brown	Measured	90,365	1.81	285	ID3	USD\$74 per tonne cut-off
		Indicated	59,352	1.04	245		
		M & I	149,716	1.5	269		
		Inferred	135,571	2.3	151		
07/31/2016	Robert F. Brown	Measured	114,695	1.53	264	ID3	Cut-offs are based on the marginal operating costs per mining area: USD\$76/tonne for Cata, USD\$85/tonne for Santa Margarita / San Cayetano, USD\$72/tonne for Los Pozos, USD\$66/tonne for Guanajuatito, and USD\$74/tonne for Valenciana
		Indicated	36,480	1.19	216		
		M & I	151,175	1.45	253		
		Inferred	147,327	2.13	129		
08/31/2017	Matthew C. Wunder	Measured	170,978	1.5	227	ID3	Cut-offs are based on the marginal operating costs per mining area: USD\$76/tonne for Cata, USD\$70/tonne for Santa Margarita / San Cayetano, USD\$68/tonne for Los Pozos, USD\$93/tonne for Guanajuatito, and USD\$80/tonne for Valenciana / Promontorio.
		Indicated	43,929	1.25	215		
		M & I	214,907	1.45	224		
		Inferred	158,846	2.04	136		
07/31/2019	Robert F. Brown & Mohammad Nourpour	Measured	256,260	1.72	206	ID3	Cut-offs are based on full operating costs per mining area: USD\$113/tonne for Cata, USD\$75/tonne for Santa Margarita / San Cayetano, USD\$77/tonne for Los Pozos, USD\$124/tonne for Guanajuatito, and USD\$197/tonne for Valenciana and USD\$60/tonne for Promontorio.
		Indicated	87,476	1.62	199		
		M & I	343,736	1.69	204		
		Inferred	208,609	2.32	168		
07/31/2020	Robert F. Brown & Mohammad Nourpour	Measured	296,139	1.63	253	ID3	Cut-offs are based on full operating costs per mining area: USD\$115/tonne for Cata, USD\$115/tonne for Santa Margarita / San Cayetano, USD\$89/tonne for Los Pozos, USD\$100/tonne for Guanajuatito, and USD\$102/tonne for Valenciana and USD\$125/tonne for Promontorio.
		Indicated	147,814	1.65	241		
		M & I	433,953	1.64	249		
		Inferred	460,174	2.07	220		

### 6.3.2 Historical Mineral Resource Estimates for the Valenciana Mines Complex (2021)

On February 28, 2022, Great Panther reported a MRE for the VMC (Table 6.5). The MRE is supported by a technical report titled, “NI 43-101 Mineral Resource Update Technical Report on the Guanajuato Mine Complex, Guanajuato and San Ignacio Operations, Guanajuato State, Mexico”, prepared for Great Panther by Brown and Nourpour (2022), with an effective date of July 31, 2021. The historical resource for the

VMC includes the Guanajuatito, Valenciana, Cata, Los Pozos, Santa Margarita and Promontorio areas.

The Author is referring to the 2021 Great Panther MRE as “historical resources” and the reader is cautioned not to treat them, or any part of them, as a current resource. The assumptions, parameters and methods used to prepare the 2021 Great Panther historical MREs are summarized from Brown and Nourpour (2022) in the following text. Based on this information, as well as literature and data review, and the recent site visit conducted for this Report, the Author considers the 2021 Great Panther Estimate to be relevant and reliable. The resource was prepared by a reputable company that is intimately familiar with, and knowledgeable about, the Property, as well as the geology and resource potential of the Property. The historical resource provides an indication of the extent of mineralization identified by previous operators at the VMC. To verify the historical MRE as a current Mineral Resource, a Qualified Person would need to complete database validation, undertake a full review of estimation parameters and procedures, and complete an updated Mineral Resource estimate and NI 43-101 technical report incorporating additional production (mining depletion), drilling and underground sampling completed at the VMC since July 31, 2021.

**Table 6.5 Summary of Great Panther Mineral Resource Estimate 2021, Guanajuato (Effective Date July 31, 2021; Brown and Nourpour, 2022)**

Class	Tonnes	Ag(g/t)	Ag(oz)	Au(g/t)	Au(oz)	AgEq (g/t)	AgEq (oz)	Au eq (g/t)	Au eq (oz)
Total Measured	166,262	255	1,362,426	1.81	9,681	409	2,185,272	4.81	25,709
Total Indicated	85,404	240	658,767	1.68	4,600	382	1,049,757	4.5	12,350
Total M&I	251,666	250	2,021,193	1.76	14,280	400	3,235,029	4.7	38,059
Total Inferred	220,760	225	1,597,357	1.95	13,873	391	2,776,596	4.6	32,666

Notes:

1. Cut-offs were based on the marginal operating costs per mining area being USD\$135.70/tonne for Cata, USD\$135.70/tonne for Santa Margarita, USD\$96.50/tonne for Los Pozos, USD\$124.90/tonne for Guanajuatito, USD\$148.50/tonne for Promontorio, and USD\$113.10/tonne for Valenciana.
2. Block model grades converted to USD\$ value using plant recoveries of 87.15% Ag, 86.70% Au, and net smelter terms negotiated for concentrates.
3. Rock Density for Cata is 2.66t/m<sup>3</sup>, 2.65t/m<sup>3</sup> Santa Margarita, Los Pozos 2.68t/m<sup>3</sup>, Guanajuato 2.69t/m<sup>3</sup>, Promontorio and Valenciana 2.67t/m<sup>3</sup>.
4. Totals may not agree due to rounding.
5. Grades in metric units.
6. Contained silver and gold in troy ounces.
7. Minimum true width 0.5m.
8. Metal Prices USD\$20.00/oz silver, and USD\$1,650.00/oz gold.
9. AgEq oz were calculated using 85:1 Ag:Au ratio.

The historical MRE was classified using the definitions set out in the CIM Definition Standards (May 2014). Geological modelling and subsequent Mineral Resource estimation were performed by Great Panther under the supervision of a QP in accordance with the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 2019).

The MRE was completed using Leapfrog and Micromine three-dimensional (3D) geological software, and the inverse distance cubed (ID3) estimation technique for the

estimation of grade to each of the block model blocks. The estimated Mineral Resources are a categorized compilation of blocks greater than the full operational costs of the various mining areas (Great Panther Mining Ltd., 2021). The resources were estimated from 6 area-specific block models. A set of wireframes representing the mineralized zones served to constrain the block models and data subsequently used in ID3 Au and Ag grade interpolation. The historical resource wireframes and block models are presented in Figures 6.7 to 6.8.

Underground channel and drillhole sample data were compiled and stored within a Microsoft SQL database. Sample intervals with assay values lower than the detection limit for silver and gold were imported at the detection limit. The SQL database used in the modelling consisted of 1,584 drillholes and 189,867 underground channel samples.

A total of 67,643 recovery and rock quality designation (RQD) measurements were returned from the Microsoft SQL database. Of these, only 921 were found to be within the mineralized zones showing a 63% RQD and 93% recovery.

All drill samples were composited to a length of 1.5 m (maximum allowable drill assay interval length as documented in core processing protocols) prior to use in grade interpolation. Underground samples were stored as intervals and composited to a length of 1 m prior to use in grade interpolation. Area specific grade caps were applied to assay values for Au and Ag. The net impact of the capping on drilling was to reduce the average Au and Ag assay grades by 36% and 48%, respectively. For underground sampling, the average reductions related to capping were 40% and 45% respectively.

The block dimensions used in the block model for all models were 2.5 m by 2.5 m by 2.5 m. Each block located at least partly within a wireframe was assigned a domain name, the per cent of the wireframe occupying the block, the average distance of, and number of, holes/composites used in the estimate of grade for the block, the distance to the nearest hole, and the grade of the closest composite. Grades were estimated only to those blocks coincident with one of the zones.

Figure 6.7 Historical Resource Wireframes (dated July 31, 2021)

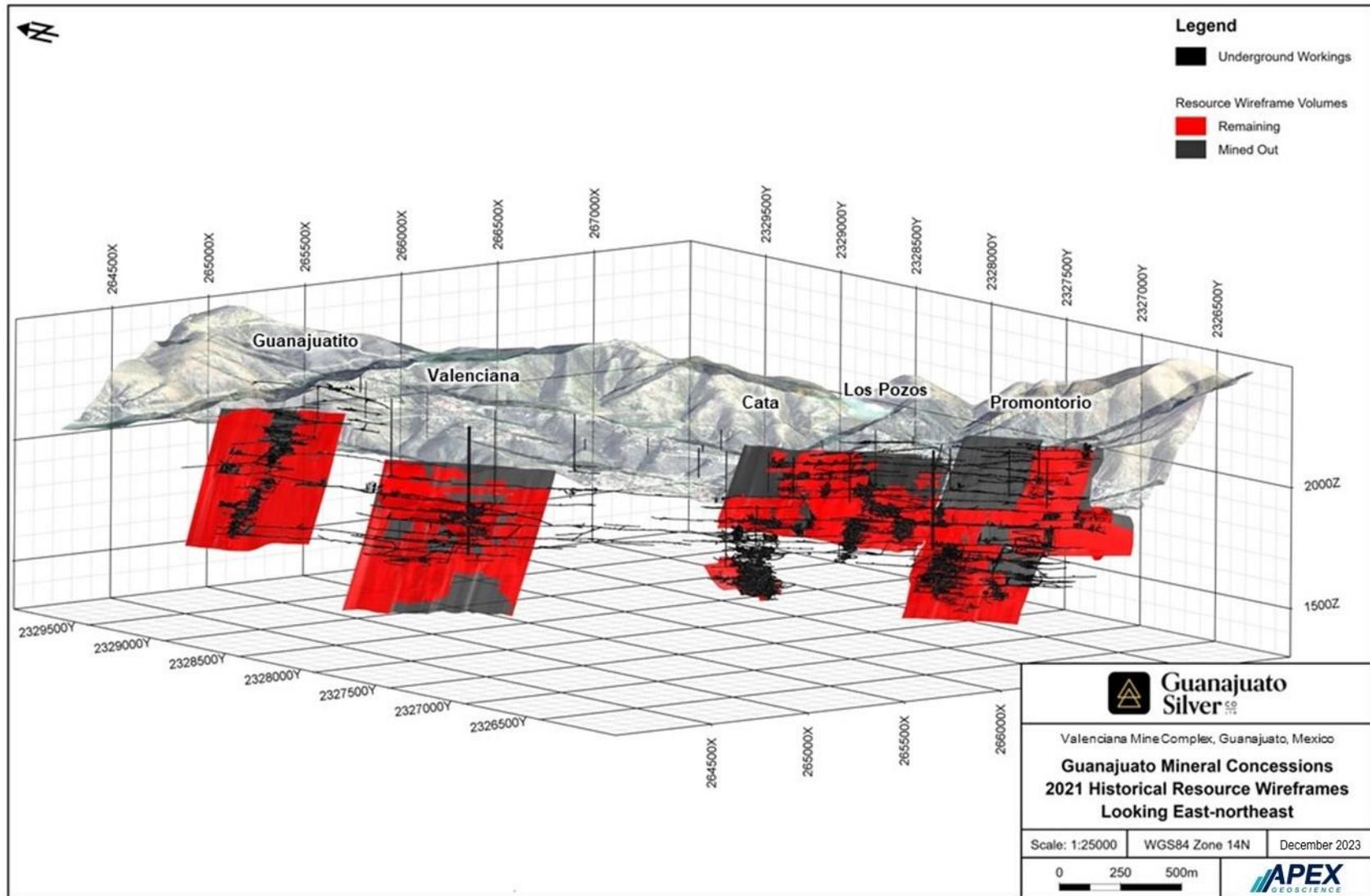
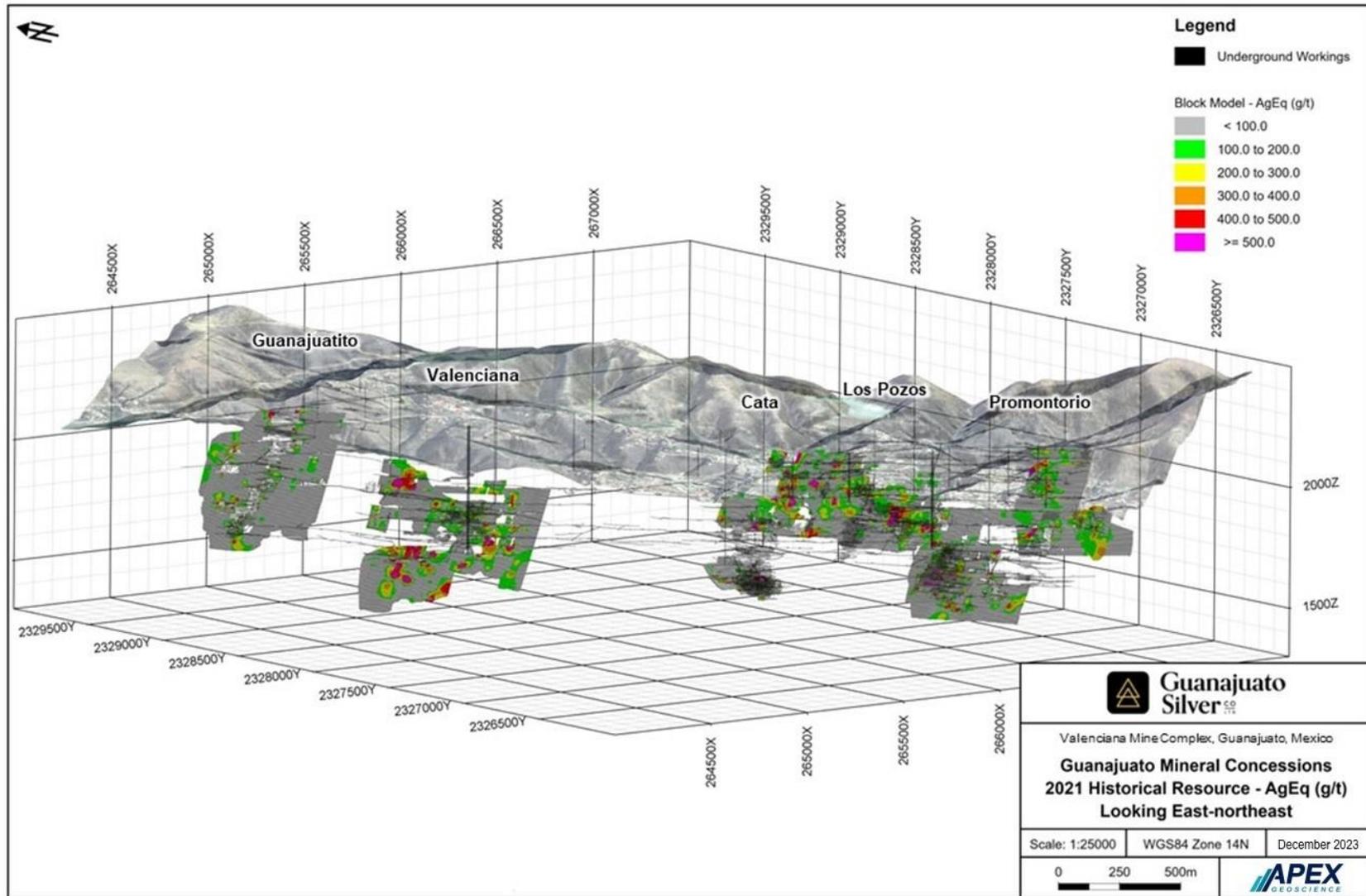


Figure 6.8 Historical Block Models (dated July 31, 2021)



\* AgEq values are calculated using metal prices set at US\$1,650/oz Au and US\$20/oz Ag, with 86.7% recovery for Au and 87.15% recovery for Ag, yielding a Ag to Au ratio of 85:1

Variogram analysis was undertaken for both Au and Ag to characterize the spatial variance of each. Single-structure ranges were developed in the average plane of all zones for each area. Long ranges were found to be between 4 to 20 m for Ag and 3 to 20 m for Au, while the nugget (C0) values ranged from 14-60% and 21-65% of total sill (C0+C1) for Ag and Au, respectively. These results indicated that while there is a demonstrable spatial correlation between samples within each zone, local estimates of grade are not expected to be particularly accurate given the high nugget values reported above.

Grade interpolation for both Au and Ag was executed as a series of three passes, each of which were performed via the ID3 method. Given the short major axis ranges and high nugget values determined during the variogram analysis, the ID method was deemed to be the most appropriate method of grade interpolation. A power of three was selected for this reason also, as greater influence is given to grades more proximal to the block than they would otherwise be given if a power of two had been used. Kriging was not used as the primary method of interpolation due to concerns regarding potential over-smoothing of grades. Block grades were interpolated from drillhole and underground samples. A minimum of two and a maximum of six composites were allowed for interpolation to each block. In estimating block grades, it was required that the block zone code be the same as the composite zone code for interpolation to occur (Brown and Nourpour, 2022).

In comparison to the 2020 historical MRE (Brown and Nourpour, 2020; Table 6.5), the 2021 historical MRE (Brown and Nourpour, 2022) indicated:

- A 35% decrease in contained Au, a 41% decrease in contained Ag, and a 41% decrease in contained AgEq oz for the Measured Resource classification.
- A 41% decrease in contained Au, a 42% decrease in contained Ag, and a 43% decrease in contained AgEq oz for the Indicated Resource classification.
- A 55% decrease in contained Au, a 51% decrease in contained Ag, and a 54% decrease in contained AgEq oz for the Inferred Resource classification.

These changes reflect the decreases in tonnes and silver equivalent ounces that came from the Pozos zones and account for most of the decreases in Measured and Indicated Mineral Resources. The decrease is due to both a re-interpretation of the geology and using fewer wireframes, and the better definition of historical mining areas through drilling and development in the Los Pozos area leading to a larger volume removed from the block models. These changes also reflect the overall negative effects of a tighter classification system of Measured and Indicated Mineral Resources (the 2020 historical MRE used 0 to 15 m and 15 to 30 m, and the 2021 historical MRE used 0 to 10 m and 10 to 20 m, respectively). The basic rationale to constrain the classification of Measured and Indicated from that in the 2020 historical MRE is that the volume of the various zones containing grade has been decreasing over the past number of years. As such, the conservative approach was to constrain the classification size. Other

significant effects included mine depletion and a significant increase in total operating costs, only slightly offset by higher silver metal prices.

#### **6.4 Production History of the Valenciana Mines Complex (2006 to 2021)**

Mining of the Veta Madre trend, the principal host structure of the VMC, has occurred since the 16<sup>th</sup> century. Limited information is available regarding production at the VMC prior to Great Panther's ownership.

Mine development by Great Panther commenced in October 2006. The VMC, formerly known as the Guanajuato, operation consists of previously independent, now interconnected, mines that include Promontorio, Santa Margarita, Rayas, Los Pozos, Cata, Valenciana and Guanajuatito. The mining method is predominately Cut and Fill stoping, with some pillar recovery in old workings and a few zones of mineralized extensions. Mining was generally more selective using jacklegs; however, whenever possible mechanical Cut and Fill was used. Two main shafts provide access to the active mine areas and several older shafts provide ventilation support. The Rayas shaft was used for the transportation of personnel and supplies. The Cata shaft was used to transport the mineralized material for milling. These are currently de-energized; the access of personnel, supplies and mineralized material is via the Rayas ramps, San Vicente and Guanajuatito (Great Panther Mining Ltd., 2022).

A summary of the historical production of each mineralized area is as follows:

- **Guanajuatito Zone:** Production came predominantly from the 1730, 1700, 1605, and 1540 masl elevations (430, 400, 305 and 260 levels) with hanging-wall ramp completed to the 1730 masl elevation (430 level).
- **Valenciana Zone:** Exploration development commenced on the 245, 360 and 460 levels; production restarted in late 2016. Exploitation is within several footwall zones to the Veta Madre.
- **Cata Zone:** Mining of the Cata Clavo reached the 550 level where development and stoping was carried out on the Veta Madre vein. Mining at Cata was discontinued in late 2018. Cata Clavo is a relatively steeply dipping structure that has been identified for mining from the 1550 masl elevation (550 level) to the 1665 masl elevation (435 level). The Veta Madre FW, Contact, Veta Madre HW, and Alto 1 to Alto 4 zones are located on the hanging wall side of the Veta Madre and the multiple zones are close to each another. In some areas, the combined Veta Madre to Alto 4 generates an overall width exceeding 30 metres.
- **Los Pozos Zone:** At the Los Pozos SE zone mining is underway above the 310 level, both on remnant mineralization as well as recovery of old pillars. Mineralization is related to both the Veta Madre and Santa Margarita (hanging wall) structures as well as transverse structures. The Los Pozos deposits are relatively steeply dipping structures that have been identified for mining from the

2025 masl elevation (75 / 83 levels), 1980 masl (120 level), 1940 masl (160 level), to the 1790 masl elevation (310 level).

- Santa Margarita: The Santa Margarita gold rich vein has been explored by ramp development from the 390 level to the 500 level. The ramp has been driven from the 1710 masl elevation (390 level) and extended down to the 1560 masl elevation (540 level). Production occurred from March 2009 to late 2018.
- Promontorio Zone: Production restarted in March 2017 and exploration development continues to define this zone. It is a quartz stockwork system within the hanging-wall conglomerates, immediately above the Veta Madre. Minor production came from the 110 level before care and maintenance commenced at the end of 2018. Production in mid 2021 was from the 160 and 275 levels.

The material extracted was trucked to the Cata processing plant, a pyrite-silver-gold flotation circuit. Blending of the VMC mineralized material and mineralized material from Great Panther's San Ignacio operation began in July 2016 and the processing (milling) of the blended material continued until the VMC was placed on care and maintenance in November 2021.

A summary of Great Panther's production of the VMC from 2006 to 2021 is presented in Table 6.6. The increase in production shown in the years 2014 to 2017 reflects the increase in production from San Ignacio. In 2018, production declined at the VMC and was increasingly dominated by San Ignacio. In 2019 and 2020, production was almost entirely from San Ignacio, with the VMC placed on care and maintenance from January to July 2019, with limited production once operations resumed. On the account of the directive of the Mexican Federal Government, both mining operations were suspended from April 2 to June 3, 2020, to mitigate the spread of the COVID-19 virus. The VMC and the Cata processing plant were placed on care and maintenance effective late November 2021 while awaiting permits to extend the tailings facility or find other alternatives to maximize the value of the VMC (Great Panther Mining Ltd., 2022b).

**Table 6.6 Production Summary and Metal Produced, the VMC Operation and Great Panther's San Ignacio Operation (Off-Property)**

Year	Tonnes Mill/Mine VMC	Tonnes Mill/Mine San Ignacio	Tonnes (milled) <sup>(1)</sup>	Ag (oz)	Au (oz)
2006	86,111	-	86,111	105,480	988
2007	203,968	-	203,968	521,225	3,794
2008	155,079	-	155,079	848,083	5,488
2009	138,517	-	138,517	1,019,751	6,748
2010	144,112	-	144,112	1,019,856	6,619
2011	169,213	-	169,213	959,490	7,515
2012	174,022	-	174,022	1,004,331	10,350
2013	220,463	1,082	221,545	1,079,980	15,063
2014	213,658	54,154	267,812	1,239,009	15,906
2015	180,691	129,253	309,944	1,708,061	21,126
2016 <sup>(2)</sup>	136,349	183,694	320,043	1,473,229	21,626
2017	131,335	185,475	316,810	1,386,964	21,501
2018	88,364	212,650	301,014	1,096,757	19,073
2019	7,610	179,886	187,610	590,781	11,588
2020	33,248	119,560	151,001	520,903	6,779
2021	37,975	111,354	149,329	485,315	6,659
<b>Totals</b>	<b>1,685,834</b>	<b>1,177,108</b>	<b>3,296,130</b>	<b>15,059,215</b>	<b>180,823</b>

Source: Great Panther Annual reports for 2006 to 2021 inclusive

- 2006-2015 reported figures reflect tonnes milled; 2016-2021 reported figures reflect tonnes mined which has a small discrepancy to tonnes milled.
- Blending of the VMC and San Ignacio mineralized material began in July 2016, therefore, the 2016-2021 reported figures reflect total production from both operations.

The reader is cautioned that there are no current estimates of Mineral Resources or Reserves for the VMC. Mineral Reserves were estimated in the Cata, Los Pozos, and Santa Margarita zones of the VMC (Rennie and Bergen, 2011) but they have been depleted. Great Panther commenced production at the VMC without having completed final feasibility studies. Accordingly, the production decisions were not based on any feasibility studies of mineral reserves demonstrating economic and technical viability of the VMC. As a result, there may be increased uncertainty and risks of achieving any particular level of recovery of minerals from the VMC, or the costs of such recovery. As the VMC does not have established Mineral Reserves, the Company faces higher risks that anticipated rates of production and production costs. These risks could have a material impact on the ability to generate revenues and cash flows to fund operations from and achieve or maintain profitable operations at the VMC.

## 7 Geological Setting and Mineralization

Information on the regional and local geology and mineralization is sourced from previous technical reports on the Property by Rennie and Bergen (2011), Smith (2011), Brown (2012), Waldegger (2012), Brown and Sprigg (2013), Brown (2014), Waldegger and Brown (2014), Brown (2015; 2016; 2017), Wunder (2018) and Brown and Nourpour (2020; 2020b; 2020c; 2022), and references therein. The Author has reviewed these sources and considers them to contain all the relevant geological information regarding the VMC Property. Based on the Property visit and review of the available literature and data, the Author takes responsibility for the information herein.

### 7.1 Regional Geology

The VMC lies within the Guanajuato Mining District in the southern part of the Mesa Central physiographic province.

The Mesa Central is an elevated plateau of Cenozoic volcanic and volcanoclastic rocks in central Mexico. The Mesa Central is bound to the north and the east by the Sierra Madre Oriental, to the west by the Sierra Madre Occidental and to the south by the Trans-Mexican Volcanic Belt. The Mesa Central comprises a Paleocene to Pliocene sequence of dacite-rhyolite, andesite, and basalt, aged 66 Ma to present, with related intrusive bodies and intercalated local basin fill deposits of coarse sandstones and conglomerates. This Cenozoic volcanic-sedimentary sequence overlies a package of deformed and weakly metamorphosed Mesozoic submarine mafic volcanic and turbidite rocks.

Within the Mesa Central, the VMC is situated within the Sierra de Guanajuato, a northwest-trending anticlinal structure measuring approximately 100 km long and 20 km wide. The strata within the belt are transected by northwest, north, east, and northeast trending regional scale faults. The northwest trending structures predominantly control the position of mineralization. Normal fault movement along northeast trending faults resulted in the downward displacement of certain blocks and the preservation of strata that was eroded in other areas. The northwest faults and structural intersections along these faults are therefore important locators of mineral camps within the belt.

The Guanajuato Mining District represents the central zone of a polymetallic mineralized belt that runs from south-central Mexico, through Guanajuato, and onwards to north-central Mexico (Carrillo-Chávez et al., 2003). The mineralized belt is related to subduction processes occurring in the Middle Tertiary and by extensional stress defined by the northwest trend of the mineralized veins (Randall et al., 1994). The three main northwest trending precious metal-bearing vein systems in the Guanajuato Mining District are Sierra, Veta Madre and La Luz. The geology and mineralized systems of the region are illustrated in Figures 7.1 and 7.2.

The Guanajuato Mining District is underlain by Mesozoic marine sediments and predominantly mafic submarine lava flows, (252 Ma – 66 Ma) of the Luz and Esperanza

Formations, which are weakly metamorphosed and intensely deformed. This basal sequence is cut by a variety of intrusive bodies ranging in composition from pyroxenite to granite with tonalitic and dioritic intrusive being the most volumetrically significant.

## 7.2 Property Geology

At the VMC, Cenozoic volcanic and volcanogenic sediments unconformably overlie the Mesozoic basement rocks. In the area, the oldest Cenozoic unit is the Paleocene Comanja granite, (66 Ma – 56 Ma), followed by the Eocene extrusion of andesite (56 Ma – 33.9 Ma) which was sporadically deposited and contemporaneous with the deposition of the Guanajuato conglomerate in localized grabens. The Guanajuato conglomerate underlies an unconformity beneath a sequence of felsic to mafic volcanic rocks that consist of Oligocene ignimbrites, lava flows and domes (33.9 Ma – 23 Ma). The local geology of the Property is shown in Figure 7.3.

The country rocks are transected by numerous faults which host precious metal-bearing veins, stockworks and breccia. The veining and mineralization are early Oligocene in age and hence contemporaneous with the eruption of felsic – intermediate volcanic rocks. The primary strike direction of the faults which host the mineralized veins is northwest. Of lesser significance are north, east, and northeast trending faults. Principal fault systems in the Guanajuato camp are the La Luz, Sierra, and Veta Madre (Figure 7.2). The Veta Madre structure is traceable for 25 km through the district; it trends northwest and dips at ~45 degrees to the southwest. A longitudinal section along the plane of the main productive portion of the Veta Madre is shown in Figure 7.4.

Figure 7.1 Regional Geology of the Valenciana Mines Complex

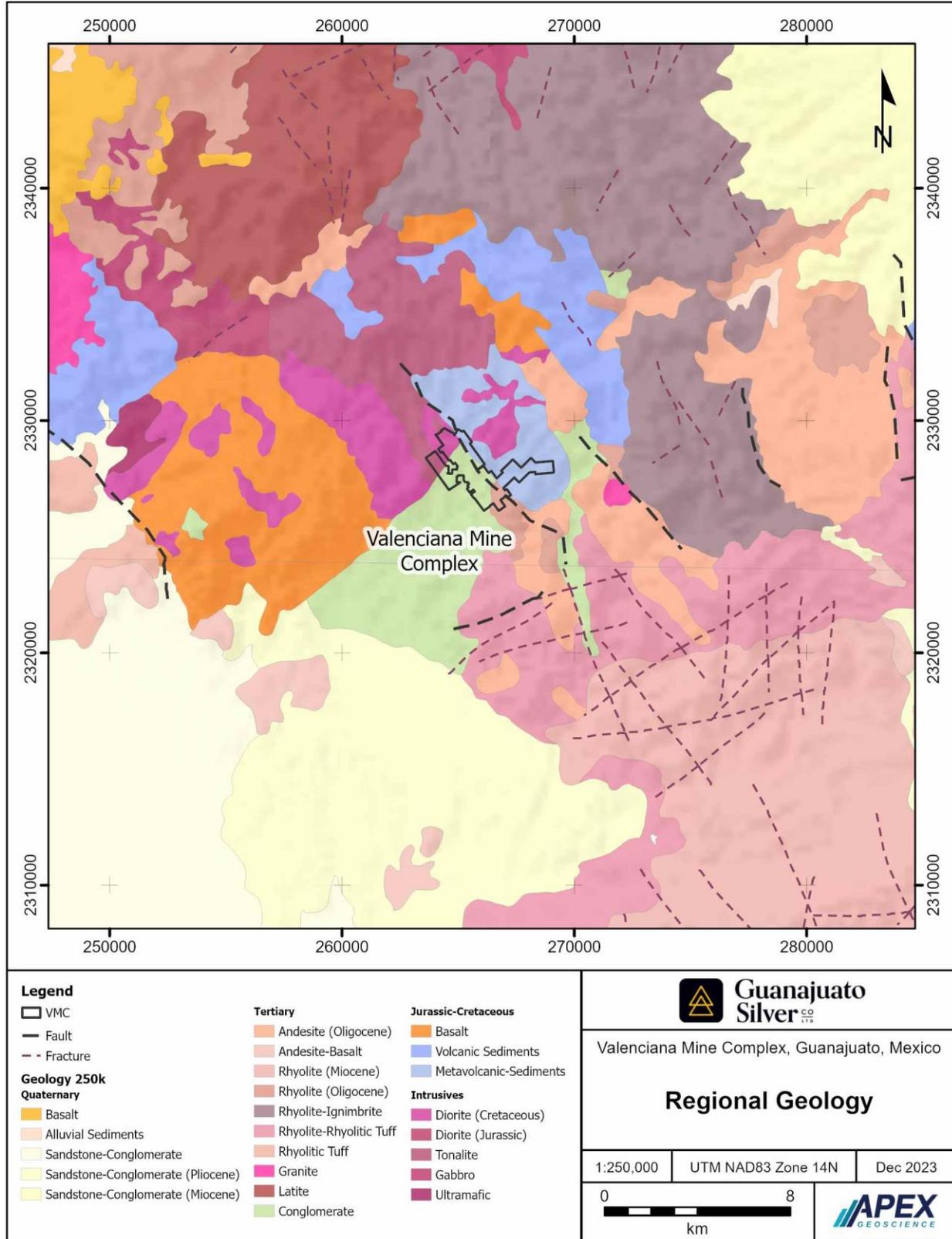


Figure 7.2 Mineralized Systems of the Guanajuato Mining District

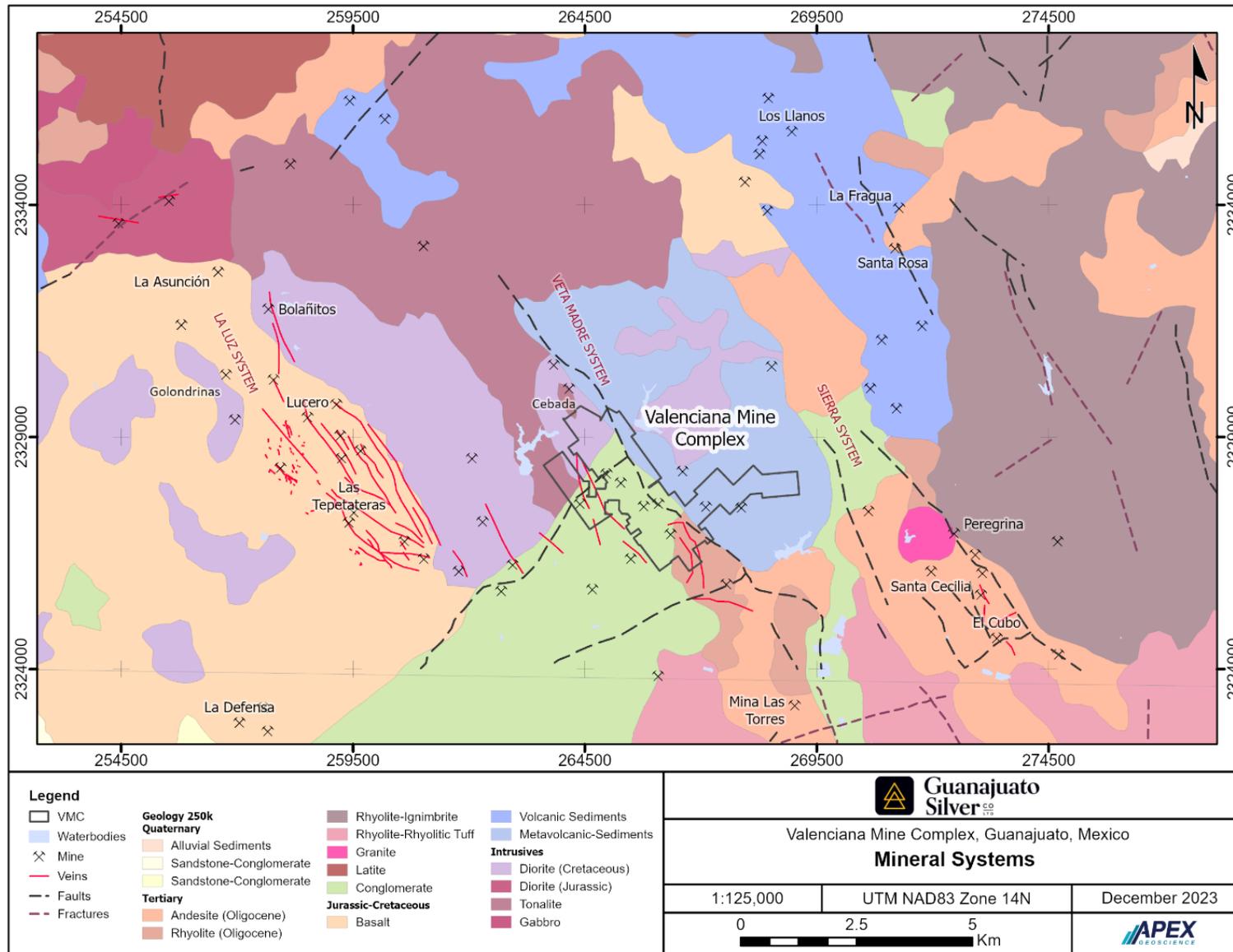
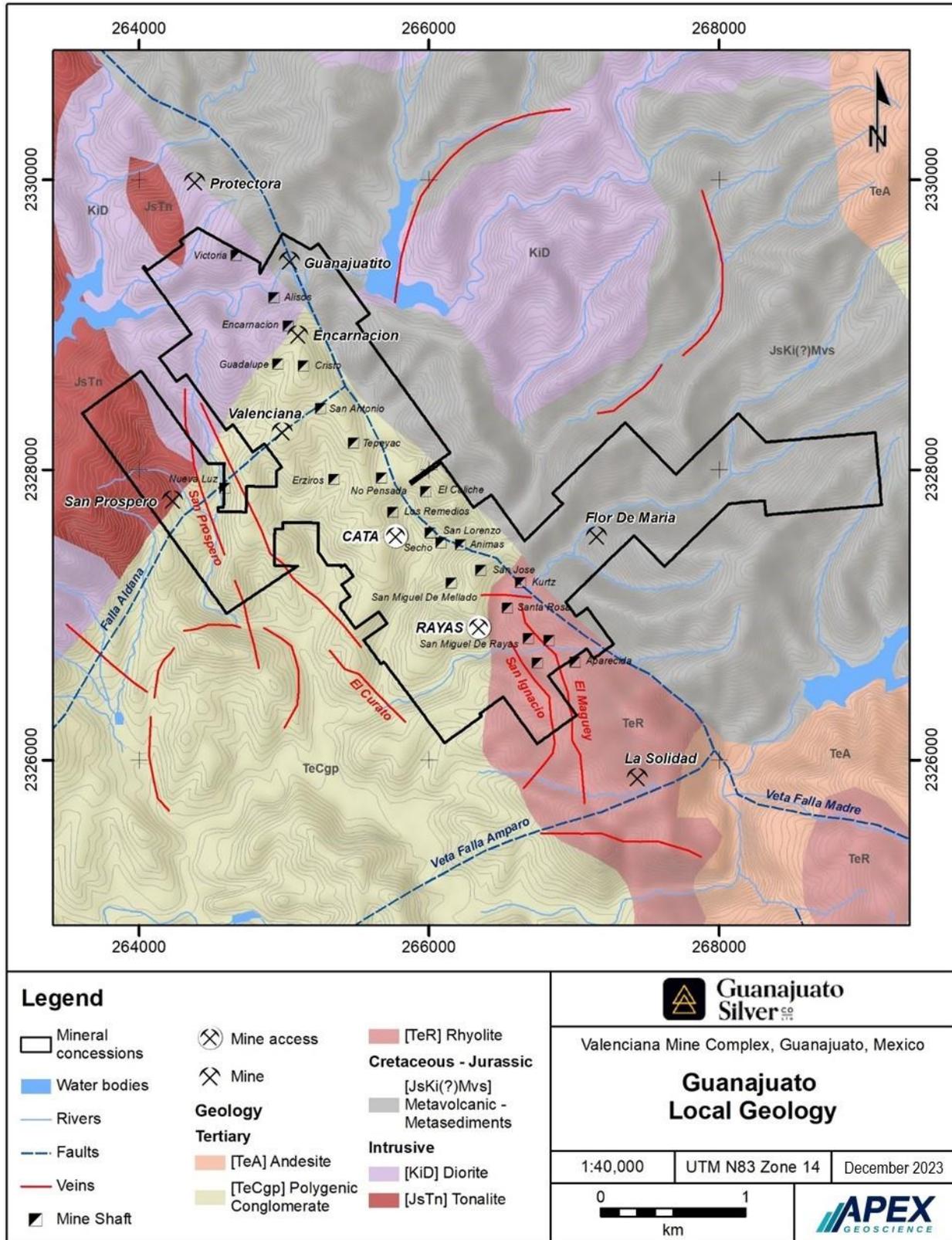
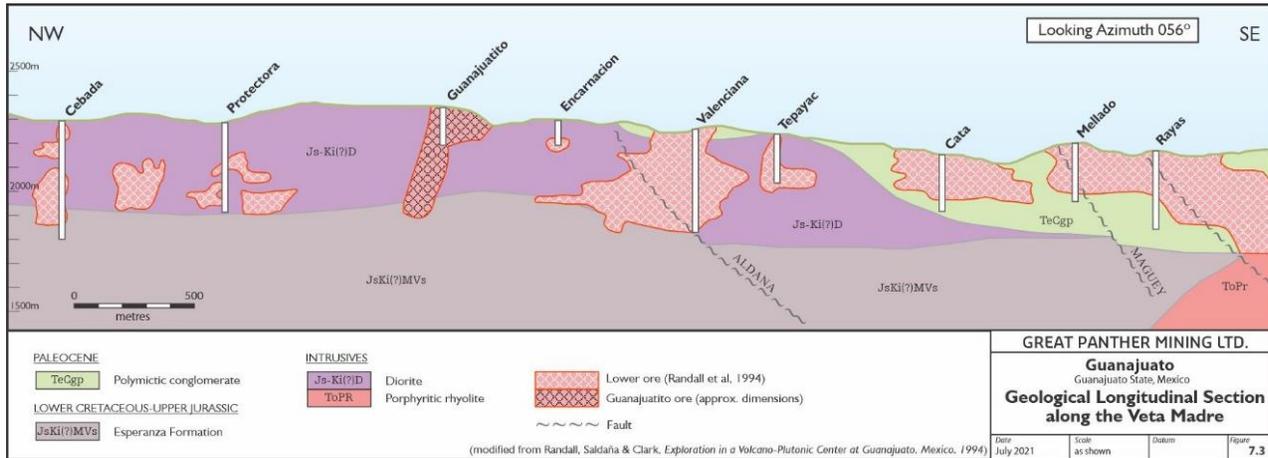


Figure 7.3 Local Geology of the VMC



**Figure 7.4 Northwest to Southeast Long Section of the Veta Madre (Brown and Nourpour, 2022)**



### 7.3 Mineralization

Mineralization at the VMC is closely associated with the structural history of the region.

The Veta Madre quartz-adularia vein/breccia system is closely associated with the Veta Madre fault and an associated diorite dyke (thickness varying from discontinuous lenses at Guanajuatito to a 50-100 m thick body in the Cata, Los Pozos and Santa Margarita areas), oriented 325-degrees with a 45-degree southwest dip. The Veta Madre forms along the dyke contacts, and in the footwall Esperanza Formation. Plan and longitudinal map depictions of the Guanajuato mineralized zones along the Veta Madre are shown in Figures 7.5 and 7.6.

The mineralizing event is thought to have taken place during the early Oligocene, a period of intense felsic volcanic activity in the area and comprised three stages. The three stages are summarized as follows: i) the first stage of mineralization consists of trace silver and gold with accessory quartz and adularia; ii) the second stage comprises an early silver-rich phase associated with adularia, as well as a later low-silver variant, which is typified by calcite and quartz; and iii) the final “post-mineralization” stage is precious metal poor, with accessory calcite, dolomite, and fluorite. Zone thickness ranges from centimeter-scale to tens of meters.

The vertical extent of the deposits at the VMC spans over 600 m. Mineralization occurring above the 2,100 m elevation (masl) was termed “upper ore”, between 2,100 m and 1,700 m “lower ore”, and below the 1,700 m elevation “deep ore” (Randall et al., 1994). The use of the term “ore” is presented based on the historical terminology used and does not suggest that there are Mineral Reserves at the VMC. Fluid inclusion data (Moncada et al., 2011) from over 850 samples gathered through the mine and in deep drilling from the Santa Margarita area, indicated boiling zones from the 2,100 m to 1,500 m (deepest drilling at the VMC) elevations. Moncada’s work, along with Barclay and Rhys’s structural observations suggest up to 8 stages of crosscutting brecciation. The

variable range of silver to gold ratios indicate that the mineralization along the Veta Madre is associated with multi-phase structural activity and fluid flow.

The best mineralization is often found related to bends in the Veta Madre orientation (Barclay, 2007; Rhys, 2013) such as at San Vicente in the Rayas area, as well as at Cata and Santa Margarita. These structural bends may be due to changes in rock type competencies, and varying thickness of the diorite dyke. There is potential to find further mineralization both laterally and in parallel breccia structures to known precious metal mineralization zones.

The primary commodities of significance are silver and gold, with silver the more important of the two. Base metals do not normally occur in significant concentrations. Average silver grades of the mineralized material are typically in the 100 to 500 g/t Ag range, but locally can be over 1,000 g/t Ag. Gold grades are generally in the 0.5 to 2 g/t Au range, except for Santa Margarita where average grades are in the range of 5 to 7 g/t Au. Relative gold and silver contents at Santa Margarita are quite different from Cata, Los Pozos and Guanajuatito. The average silver to gold ratio in Cata is roughly 225:1, at Pozos 250:1, at Guanajuatito 275:1, while at Santa Margarita 3.5:1. Within the mine, drill core and channel samples are not normally analysed for base metals therefore an average grade for Cu, Pb or Zn is not available.

Figure 7.5 Plan View of the VMC Mineralized Zones (Brown and Nourpour, 2022)

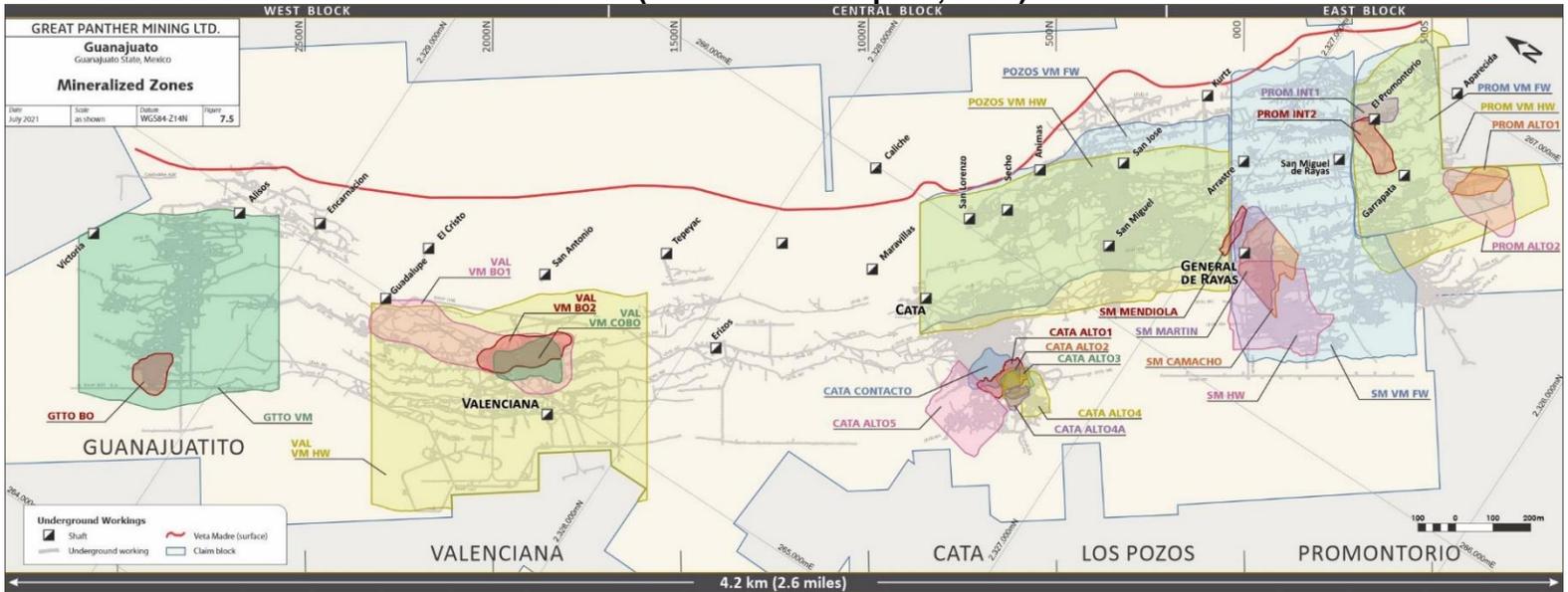
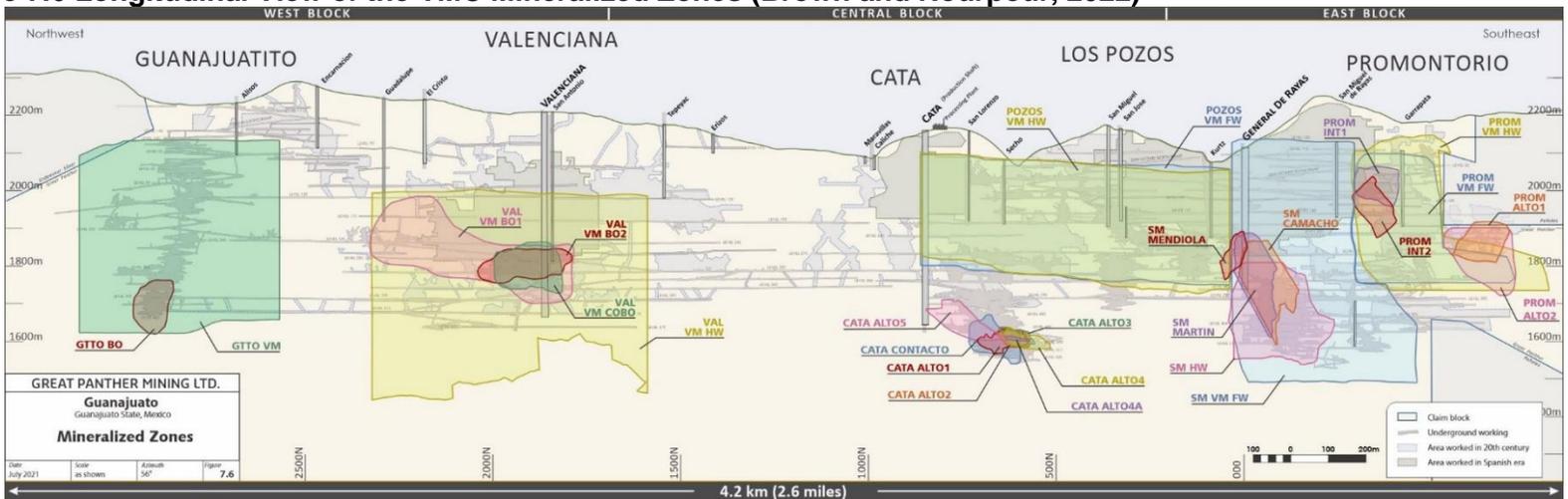


Figure 7.6 Longitudinal View of the VMC Mineralized Zones (Brown and Nourpour, 2022)

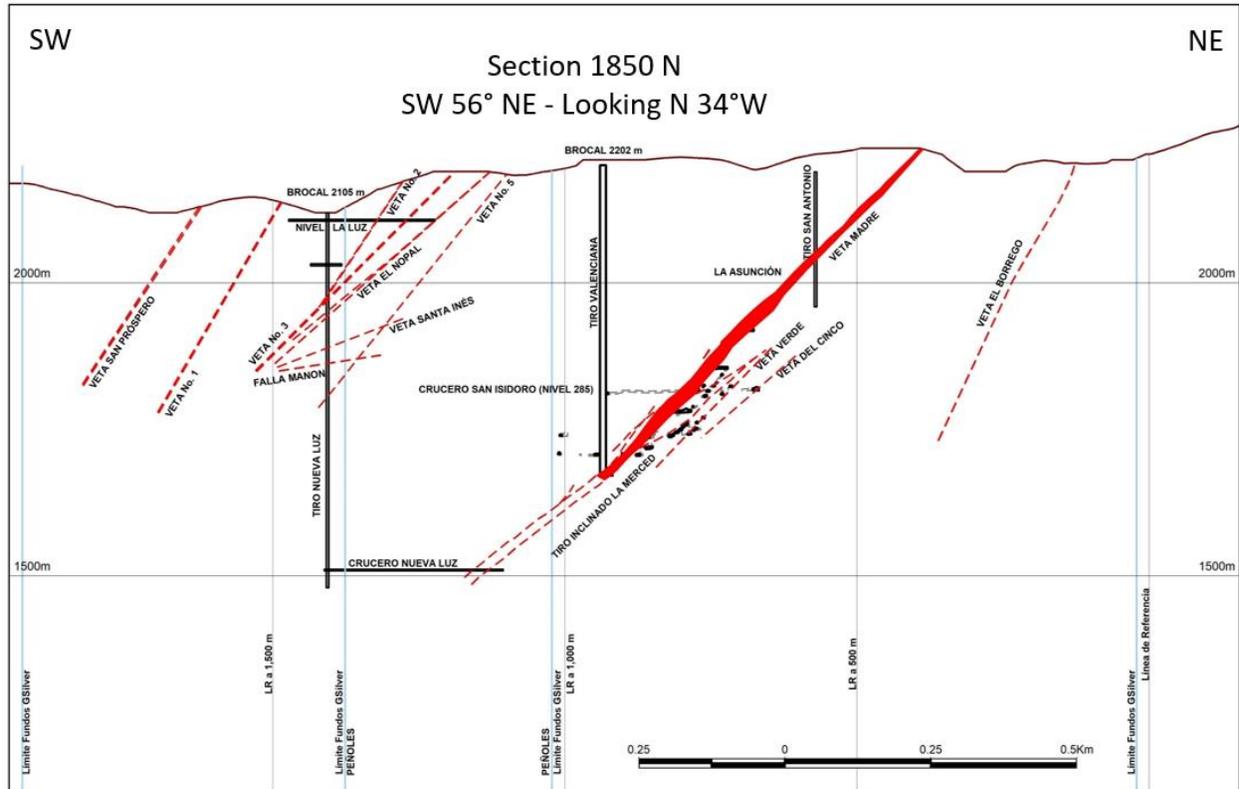


The mineralized areas of the VMC are summarized as follows:

- At Guanajuatito, the main mineralization occurs just into the footwall Esperanza Formation deformed siltstone and shale. Two main zones are present at Guanajuatito, with the Veta Madre and the closely associated footwall (FW) zone being dominant below the 80 level.
- In the Valenciana area there are parallel mineralized structures (Veta Madre) at the Esperanza Formation – diorite contact, and into the Esperanza Formation.
- In the Cata area, Veta Madre mineralization occurs along the base of the diorite dyke near the footwall contact with the Esperanza Formation, and as seven separate zones within the diorite. Several of these zones are shallow dipping structural splays.
- The Los Pozos area zones, between the Cata and Rayas shafts, are comprised of two vein stockwork to breccia systems (Veta Madre) at the base of the diorite dyke and into the Esperanza Formation, as well as on the upper diorite dyke contact with the Guanajuato Formation conglomerates.
- The Santa Margarita area zones form a complex structural set of five bodies within the diorite dyke and at its upper contact with the Guanajuato Formation conglomerates or basal andesite. These are above the Veta Madre breccia, which is at the diorite contact with the footwall Esperanza Formation.
- The six zones of the Promontorio area occur in the hanging-wall Guanajuato Formation conglomerates immediately above the Veta Madre structure at the contact of the Guanajuato Formation and the diorite dike, and as well in the diorite dyke.

The El Borrego vein represents a new target area for precious metal mineralization at the VMC and is situated in the hanging wall of the Veta Madre. The El Borrego vein is hosted within the Esperanza Formation and runs parallel to the Veta Madre, approximately 200 m to the east (Figure 7.7). The El Borrego structure is potentially syn-genetic with the event associated with the formation of Veta Madre, prior to the hydrothermal activity, and has the potential to host silver and gold mineralization. Surface geochemical sampling at El Borrego has returned silver anomalies, and the occurrence of crystalline quartz with pyrite is spatially associated with oxidation zones and argillic alteration, reflecting hydrothermal activity. However, El Borrego does not exhibit the thickness that is observed in the Veta Madre. Four small historical workings have been identified by GSilver at shallow depths at the VMC. Geochemical sampling from the historical workings has returned anomalous values of silver and gold, including 56 g/t Ag and 0.033 g/t Au from the intermediate adit, and 84 g/t Ag and 0.488 g/t Au from the southern adit (Guanajuato Silver, 2024)

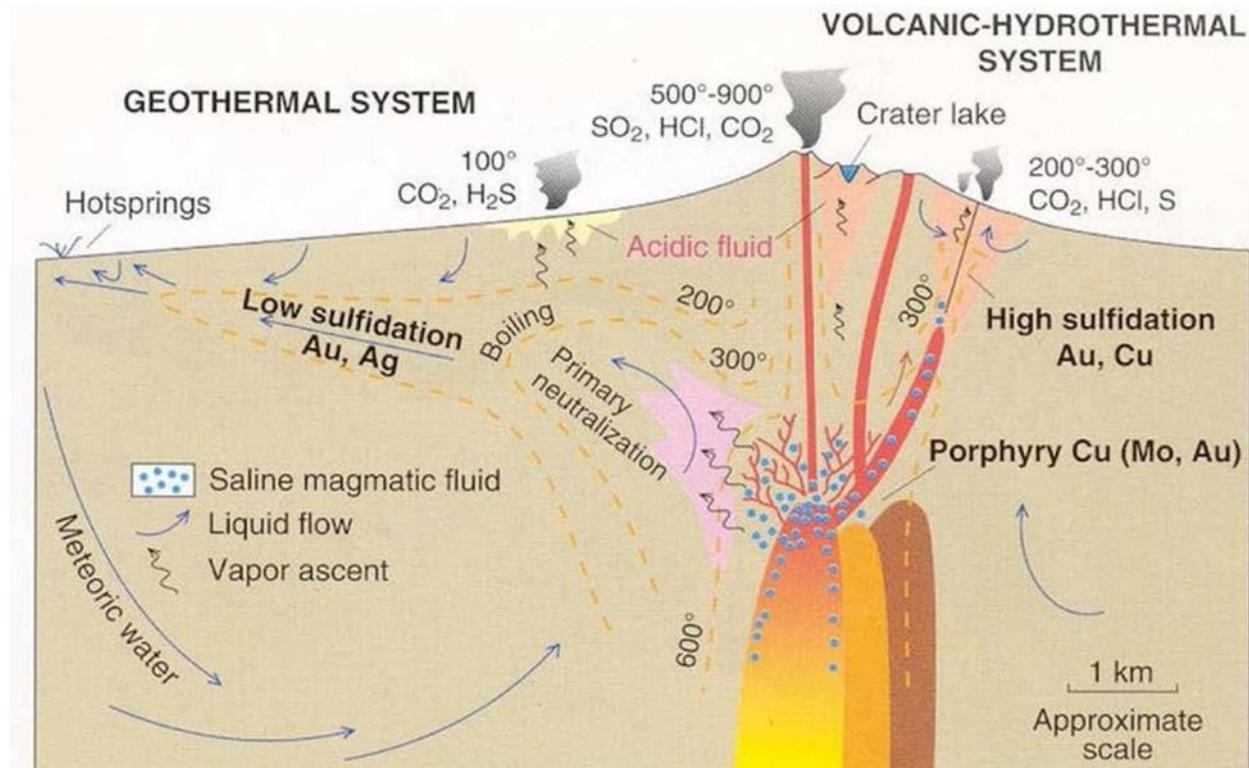
Figure 7.7 Nopal Mine Cross Section 1850 m Looking NW Showing the Location of the El Borrego Vein and the Veta Madre (provided by GSilver in February 2024)



## 8 Deposit Type

The primary deposit type of interest at the VMC is low sulphidation epithermal silver-gold mineralization. The epithermal deposit model is presented in Figure 8.1.

**Figure 8.1 Epithermal Deposit Model (Hedenquist and Lowenstern, 1994)**



Epithermal systems are hydrothermal deposits formed near surface (<1 km below the water table) from low temperature fluids (100-320°C) that originate from meteoric, magmatic, or a combination of these sources. Epithermal systems may form in association with hot springs, and at depths in the order of several hundreds meters below the paleosurface. Hydrothermal processes are driven by remnant heat from volcanic activity, which in the case of Guanajuato occurred in the middle to late Tertiary. Circulating thermal waters, rising through fissures, eventually reach the “boiling level” where the hydrostatic pressure is low enough to allow boiling to occur. This can impart a limit to the vertical extent of the mineralization as the boiling and deposition of minerals is confined to a relatively narrow band of thermal and hydrostatic conditions. However, in many cases repeated healing and reopening of host structures can occur, which causes cyclical vertical movement of the boiling zone, resulting in mineralization that spans a much broader range of elevations. This appears to have occurred at Guanajuato.

The mineral deposits in the Guanajuato area are classic fissure-hosted low sulphidation epithermal gold-silver-bearing quartz veins and stockwork. Low sulphidation epithermal

mineralization are vein type deposits that form at shallow depth from dominantly meteoric fluids with neutral to near neutral pH and low temperature. Banded veins, drusy veins, crustiform veins, and lattice textures are common. Low sulphidation deposits typically have gold-silver mineralization, occasionally with banded adularia, sericite, rhodonite and rhodochrosite. Alteration in these systems is often sericite-illite proximal to mineralization grading to illite-smectite and to chlorite  $\pm$  epidote  $\pm$  calcite alteration on the outer margins of the system. Mineralization in low sulphidation systems generally consists of Au  $\pm$  Ag with minor Zn, Pb, Cu, Mo, As, Ab and Hg (Sillitoe and Hedenquist, 2003; Cooke and Hollings, 2017).

Mineralization of significance at VMC consists of fine-grained disseminations of acanthite, electrum, aguilarite and naumannite with accessory pyrite, and relatively minor sphalerite, galena, and chalcopyrite. Gangue minerals include quartz, calcite, adularia, and sericite. The veins are accompanied by hydrothermal alteration consisting of argillic, phyllic, silicic and propylitic facies. Mineral textures in this zone are typically fracture-filling, drusy and coliform masses.

Epithermal type precious metal deposits in the Veta Madre vein system are strongly vertically controlled. The mineralization at the VMC is more related to fault filling silica breccias than specific veins. Historically, mineralization was between 2,100 and 1,800 masl, with specific steep plunging shoots going down to 1,600 masl. The Company is focusing exploration attention on the upper portion of the system, specifically on parallel structures both in the hanging and footwall of the Veta Madre.

The low sulphidation epithermal system deposit characteristics encountered in the Rayas, Cata, Valenciana, Guanajuatito, Pozos, Promontorio, and Santa Margarita zones in the Guanajuato operation include a quartz-adularia vein/breccia system; native silver; electrum; sulphides and silver-sulphides; sulphosalts; quartz and calcite; accessory pyrite, galena, sphalerite and chalcopyrite; shear controlled; and a vertical extension of over 700 m.

## 9 Exploration

As of the Effective Date of this Report, GSilver has collected 15,993 underground channel samples from 6,613 channels at the VMC. The underground sampling was completed between September 27, 2022, and December 30, 2023. Most of the samples were collected in the Los Pozos mineralized area (n=11,040), with additional samples collected from Santa Margarita (n=1,744), Cata (n=1,348), Rayas (n=1,081), Valenciana (n=631) and SVS (n=149) mineralized areas. The results of GSilver's underground sampling at the VMC are presented in Figures 9.1 and 9.2.

Exploration results in this section are reported as silver (Ag), gold (Au), and/or silver equivalent (AgEq\*), with AgEq\* calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a silver to gold ratio of 80:1. This remains consistent with the ratio that is utilized internally and in public disclosure of exploration results by GSilver and is maintained herein.

Greater than 100 g/t AgEq\* was returned from 27% of the samples (n=4,381), with assays ranging from 101 g/t AgEq\*, 7% of the samples (n=1,171) returned greater than 500 g/t AgEq\* ranging from 502 g/t AgEq\* to 42,478 g/t AgEq\*, and 3% of the samples (n=544) returned greater than 1,000 g/t AgEq\*, ranging from 1,002 g/t AgEq\* to a maximum of value of 42,478 g/t AgEq\*. Significant values from each vein returned in GSilver's 2022-2023 underground channel sampling include:

- 42,478 g/t AgEq\* (416 g/t Ag and 525.78 g/t Au) over a sample length of 0.5 m returned from sample 568682 collected from Santa Margarita on mine level 390, and 6,127 g/t AgEq\* (432 g/t Ag and 71.19 g/t Au) over a sample length of 0.5 m returned from sample 2029516 collected from Santa Margarita on mine level 345.
- 16,683 g/t AgEq\* (11,195 g/t Ag and 68.61 g/t Au) over a sample length of 0.8 m returned from sample 1168514 collected from Los Pozos on mine level 275, 16,387 g/t AgEq\* (13,343 g/t Ag and 38.06 g/t Au) over a sample length of 0.7 m returned from sample 534374 collected from Los Pozos on mine level 190, and 12,856 g/t AgEq\* (7,504 g/t Ag and 66.91 g/t Au) over a sample length of 0.6 m returned from sample 2029886 collected from Los Pozos on mine level 160.
- 6,657 g/t AgEq\* (273 g/t Ag and 79.80 g/t Au) over a sample length of 0.5 m returned from sample 2026640 collected from Rayas on mine level 160, and 5,610 g/t AgEq\* (3,587 g/t Ag and 25.30 g/t Au) over a sample length of 0.5 m returned from sample 2025366 collected from Rayas on mine level 120.
- 5,134 g/t AgEq\* (4,283 g/t Ag and 10.64 g/t Au) over a sample length of 0.9 m returned from sample 560016 and 4,530 g/t AgEq\* (3,879 g/t Ag and 8.14 g/t Au) over a sample length of 0.3 m returned from sample 566499 collected from Cata on mine level 390.

\* AgEq values are calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a Ag to Au ratio of 80:1

In addition, underground sampling at El Borrego vein returned anomalous silver and gold mineralization, including 56 g/t Ag and 0.033 g/t Au from the Intermediate adit and 84 g/t Ag and 0.488 g/t Au from the southern adit. The El Borrego vein represents a new target area for precious metal mineralization at the VMC.

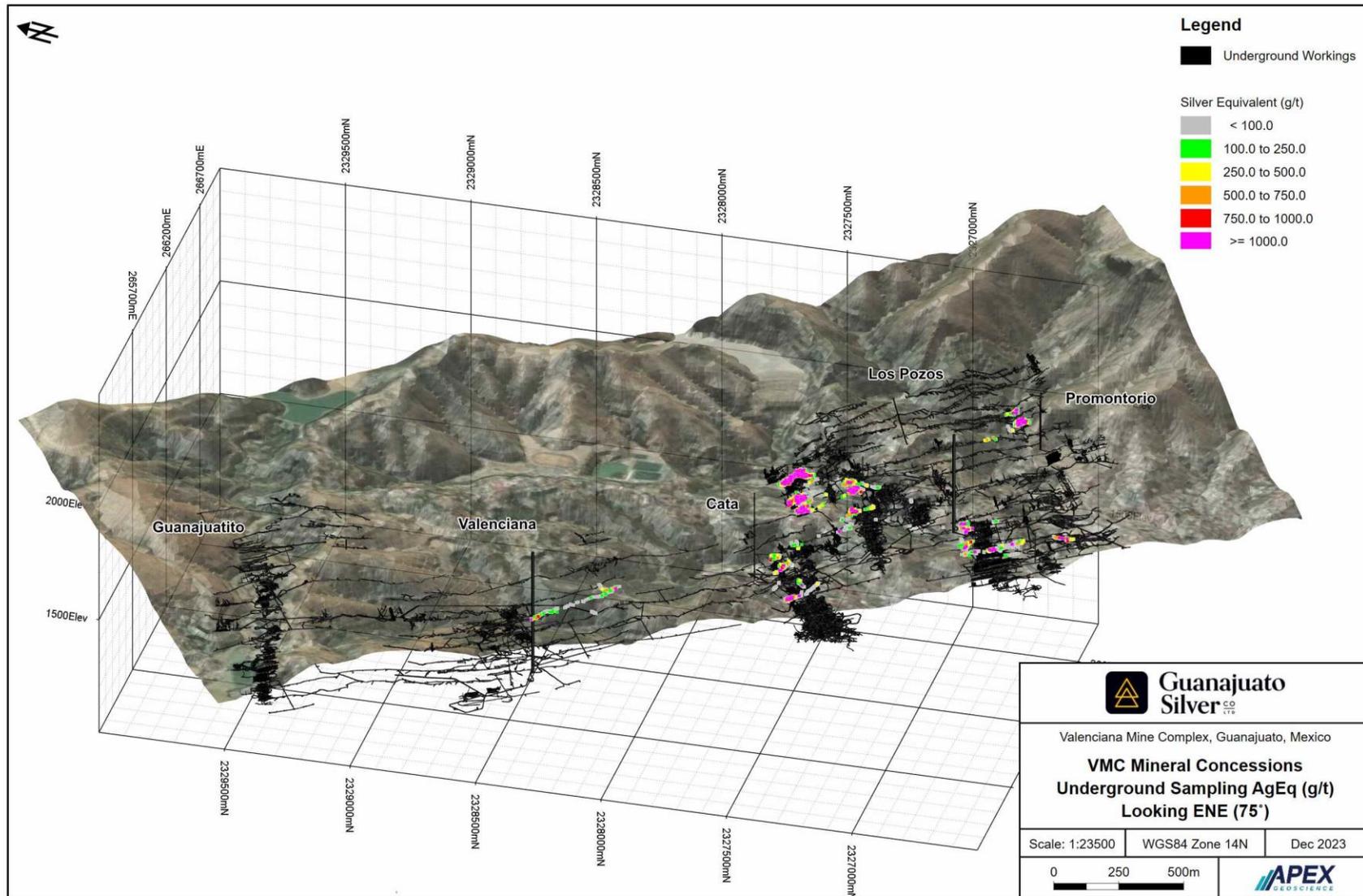
Channel samples were collected by GSilver sampling personnel in development drifts and production stopes. The lengths of the channels ranged from 0.3 to 14.8 m and averaged 1.5 m. Samples were collected using a hammer and chisel moving from the footwall to the hanging wall side of the structure. Sample lengths ranged from 0.05 to 7 m and averaged 0.64 m. Sample depths of 0.02 to 0.03 m were maintained. Sample weights generally ranged from 0.50 to 5.0 kg. The rock chips were captured on a 1.5 by 1.5 m canvas sheet. Each sample was crushed to approximately ¼ inch size fraction on a square steel plate and homogenized. The sample was then divided into four equal parts with two opposite parts selected for an individual sample.

The sample was placed in poly sample bags inscribed with the sample ID and labelled with the sample ID, date, mine, site (drift, stope, shaft, etc.), and the name of the sampler. The sample ID was marked in the field along the sample line using spray paint. The sample width was recorded in a field notebook.

Each sample was located using a topographic control point in the field and was marked on a topographic map along with the sample number. The samples were sequenced with standards and blanks inserted according to the Company's QA-QC procedure at a rate of 1 in every 20 for each QA-QC sample type, as summarized in Section 11.3.2. For duplicates, GSilver used 5% of rejects and pulps for duplicate analysis due to erratic mineralization in the core samples. The samples were delivered to the Cata laboratory for analysis via Aqua Regia with an atomic absorption spectroscopy (AAS) finish, and any sample that reported greater than 10 g/t Au or 300 g/t Ag were re-analysed by fire assay with a gravimetric finish. The Cata laboratory is independent of the Authors of this Technical Report; however, it remains under GSilver management and is not an independent laboratory.

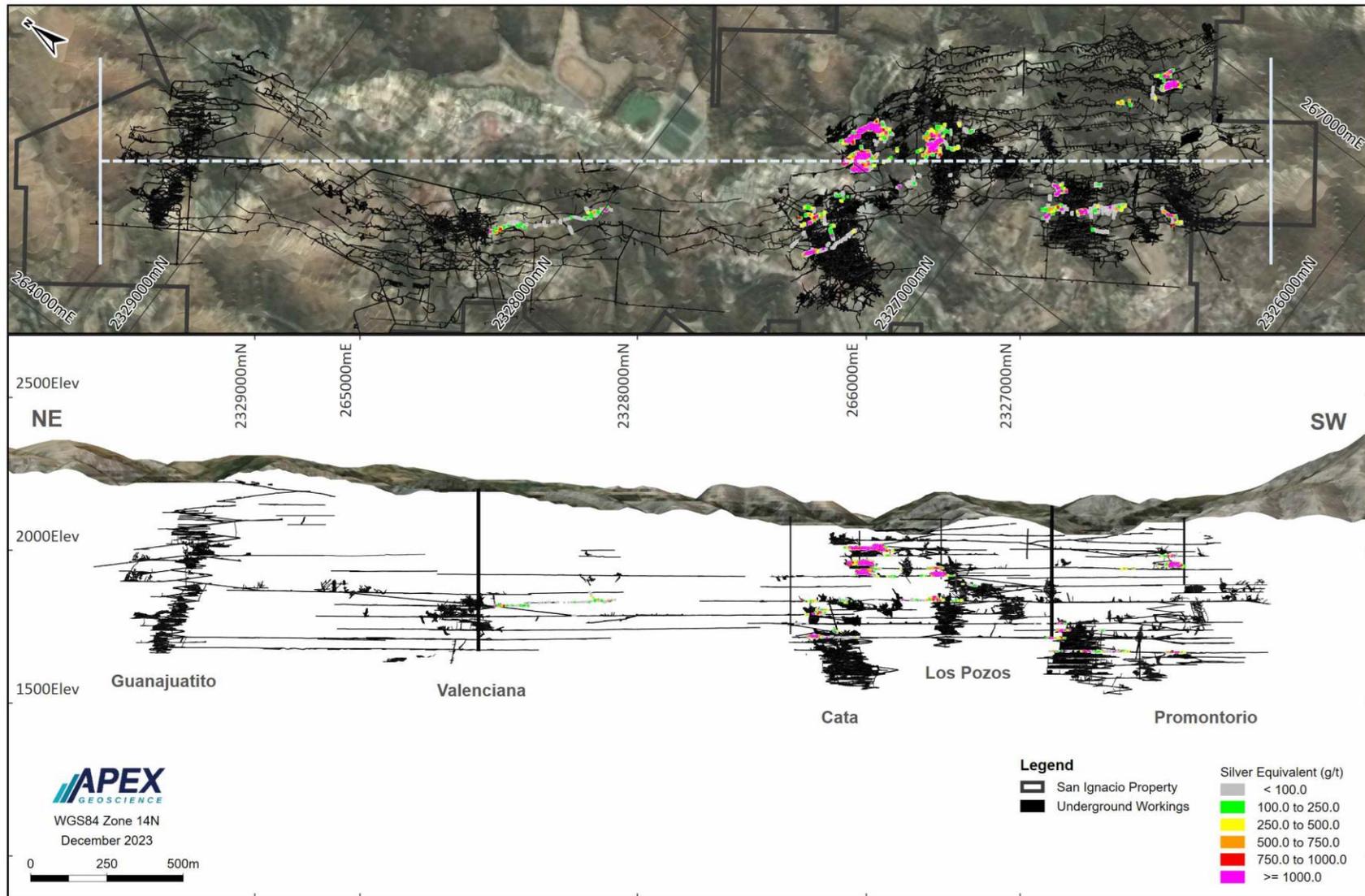
The underground sampling completed by GSilver provided high-resolution geochemical data along significant strike lengths of the primary vein structures at the VMC, aiding in the delineation of unmined material and confidence in the continuity of mineralization.

Figure 9.1 GSilver 2022-2023 Underground Sampling Results (AgEq\*), Looking East-Northeast



\* AgEq values are calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a Ag to Au ratio of 80:1

Figure 9.2 GSilver 2022-2023 Underground Sampling Results (AgEq\*)



\* AgEq values are calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a Ag to Au ratio of 80:1

## 10 Drilling

As of the Effective Date of this Report, the Company has completed 3 diamond drillholes (DDH), totalling 1,151.5 m, in the El Borrego area of the VMC. The drilling was completed in June to August 2023 in mine levels 75 and 320-1475. Collar information for GSilver’s 2023 drill program is presented in Table 10.1. Longitudinal and transverse sections showing the location, orientation and results of the drillholes are presented in Figures 10.1 to 10.5.

**Table 10.1 VMC Drillhole Collar Information (2023)**

Hole ID	Mine Level	Easting (m) Local	Northing (m) Local	Easting (m) UTM N83Z14	Northing (m) UTM N83Z14	RL (m) Local	Total Depth (m)	Azimuth	Inclination
UGBO23-001	320-1475	461.544	-1922.193	337411.335	2781919.973	1796.696	617.5	58.8	19.6
UGBO23-002	NIV_75	1319.376	-2548.743	338274.214	2781300.880	2032.061	253.5	46.7	-4
UGBO23-003	NV_75	1318.535	-2548.39	338273.371	2781301.226	2031.351	280.5	29.5	-30.7

The diamond drill program was designed to intersect and define the orientation of the El Borrego vein that runs parallel to the Veta Madre. The El Borrego vein represents a new target for potential gold and silver mineralization at the VMC. Results from the drill program are presented in Table 10.2.

**Table 10.2. GSilver 2023 Drilling Significant Intercepts**

Hole ID	Prospect	From (m)	To (m)	Width (m) <sup>1</sup>	Au (g/t)	Ag (g/t)	AgEq <sup>2</sup> (g/t)
UGBO23-001	El Borrego	144.80	145.45	0.65	5.435	<2	434.80
UGBO23-001	El Borrego	518.35	519.10	0.75	0.600	<2	48.00
UGBO23-002	El Borrego	1.20	2.00	0.80	0.214	75	92.12
UGBO23-002	El Borrego	13.75	15.35	1.60	0.206	78	94.15
including	El Borrego	14.70	15.35	0.65	0.492	181	220.36
UGBO23-002	El Borrego	17.00	17.75	0.75	3.430	1041	1,315.40
UGBO23-002	El Borrego	53.45	56.20	2.75	0.047	72	76.02
including	El Borrego	55.45	56.20	0.75	0.040	187	190.20
UGBO23-003	El Borrego	27.20	28.05	0.85	0.237	98	116.96
UGBO23-003	El Borrego	145.85	146.75	0.90	0.095	52	59.60

Notes:

1. True width is estimated to be approximately 80-100% of width of drill intercepts.
2. AgEq values are calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a Ag to Au ratio of 80:1.

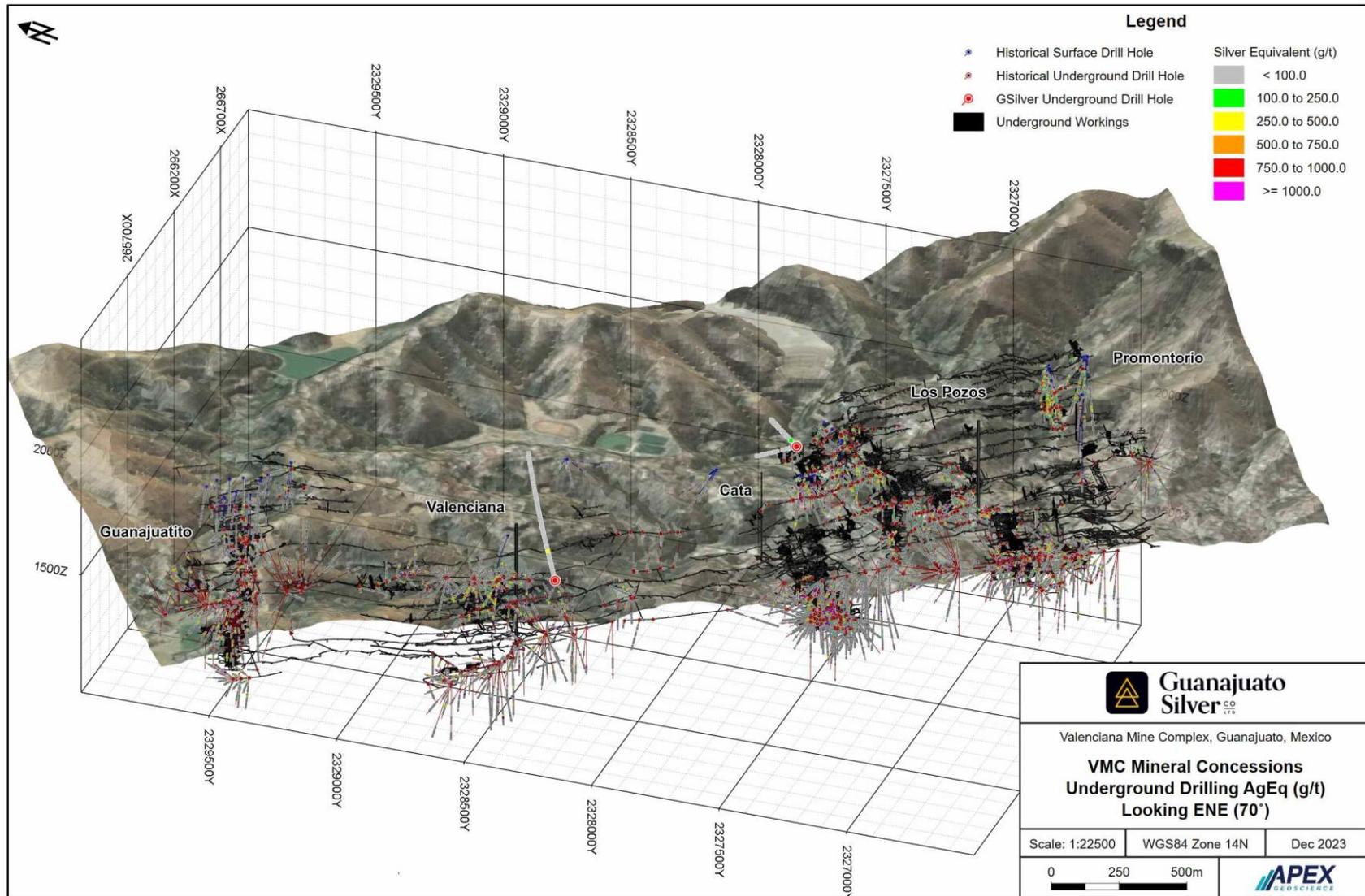
The drilling was conducted by KAV Drilling Mexico of Guanajuato, on behalf of GSilver. The core drilling was NQ in diameter. Drillhole collar surveys were completed using total station instruments and uploaded directly to a database for merging with the downhole logging data. Downhole surveys were generally performed at 10 m, 50 m and every 50

m thereafter using a Reflex survey instrument with the survey data manually input into the database.

Drill core logging was completed by GSilver geologists. For each drillhole, geological observations were made comprising lithology, mineralization, veining, and structural measurements. Geotechnical data were recorded, including core recovery, rock quality designation (RQD), and specific gravity measurements. GSilver geologists identified and marked intervals for sampling. The marked sample intervals were cut in half with a diamond saw. One half of the core was left in the core box, the other half was placed in plastic bags, sealed and labeled. Intervals and unique sample numbers were recorded on the drill logs and the samples were sequenced with standards and blanks inserted according to the Company's QA-QC procedure at a rate of 1 in every 20 for each QA-QC sample type, as summarized in Section 11.3.2. For duplicates, GSilver used 5% of rejects and pulps for duplicate analysis due to erratic mineralization in the core samples.

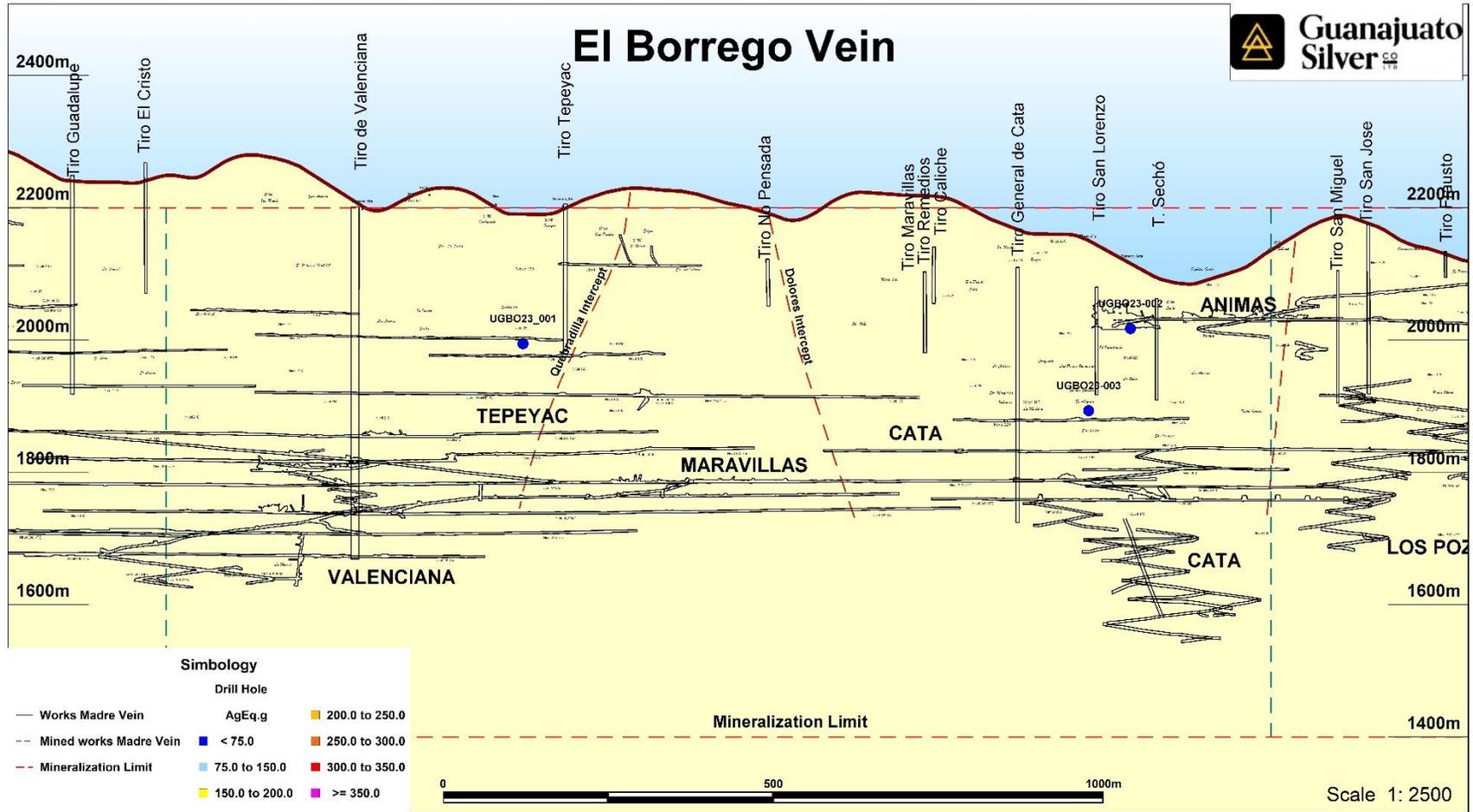
The drill samples were prepared and analysed at the Cata laboratory (MVS-GTO) in Guanajuato, Mexico, using aqua regia with an atomic absorption spectroscopy (AAS) finish. Samples that reported greater than 10 g/t Au or 300 g/t Ag were re-analysed by fire assay with a gravimetric finish. The Cata laboratory was an ISO accredited laboratory under the SGS Group until the end of 2018. The Cata laboratory is independent of the Authors of this Technical Report; however, it remains under GSilver management and is not independent of the Company.

Figure 10.1 VMC Drilling Overview (AgEq\*)



\* AgEq values are calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a Ag to Au ratio of 80:1

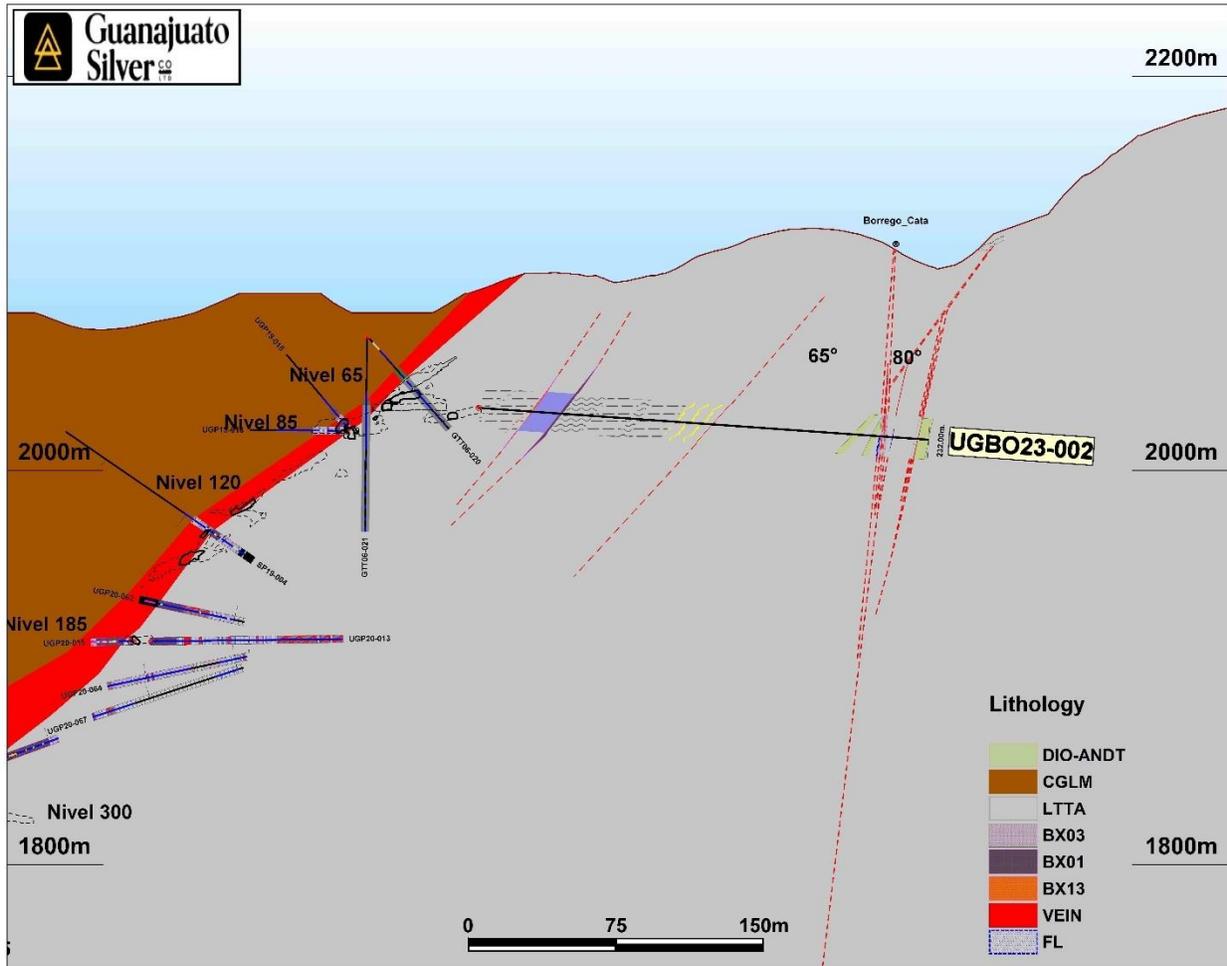
Figure 10.2 Longitudinal Section of the El Borrego Vein Showing Underground Workings and the Results (AgEq\*) of the 2023 Drill Program



\* AgEq values are calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a Ag to Au ratio of 80:1



Figure 10.4 Transverse Section Showing Underground Workings and Drillhole UGBO23-002





## 11 Sample Preparation, Analyses and Security

This section summarizes the sampling preparation, analyses, security, and quality control and quality assurance protocols and procedures employed by Great Panther between 2005 and August 2022, and by GSilver from September 2022 to December 2023, at the VMC Property. There is limited information available regarding exploration programs completed at the VMC prior to the Great Panther work.

### 11.1 Sample Collection, Preparation and Security

#### 11.1.1 Great Panther Historical Channel Sampling (2005-2022)

Channel sampling at the VMC was completed in accessible stopes and development headings. The geologist marked out the sample position and completed a detailed drawing of the face prior to sampling. The sampling was completed by Great Panther technicians using a rock hammer and chisel. The samples consisted of chips broken along a line across the structure.

The quality of the channel samples is reported to have been more variable than the drill samples. The rock was observed to be highly variable in hardness and competence, and it was therefore difficult to achieve volumetrically consistent representation along the entire sample length. Sample bias may result where higher grades happen to correlate with zones of hardness characteristics. The increased variance may also be due to the use of the mat rolling technique used to reduce the channel sample mass. The Author recommends an alternative method to mat rolling be used to reduce the sample size if possible.

Prior to mid-2016, all sampling and geological data was entered into a DataShed® database using LogChief software. More recently, Great Panther used an internal in-house software that loads data directly into a Microsoft SQL® database, and all data was stored digitally in this database. In 2012, Great Panther initiated the recording of continuous channel sampling in the form of a pseudo-drillhole to allow compositing of samples.

All phases of the sampling, transport, and analysis were carried out by authorized Great Panther personnel. Channel samples were sent for analysis to Great Panther's onsite Cata laboratory, located within the Cata facility in the city of Guanajuato. The Cata facility is fully fenced with 24-hour on-site security.

#### 11.1.2 Great Panther Historical Drilling (2005-2021)

From 2005 to 2021, Great Panther completed several extensive underground and surface drill programs at the Property. A total of 1,593 historical diamond drillholes, totalling 208,167.40 m, are reported to have been completed by Great Panther at the VMC.

The diamond drilling was completed by BD Drilling of Guadalajara, Mexico, MMR, Servicios Drilling of San Luis de Potosi, Mexico, Energold Drilling Corp., Canrock Drilling (HD Drilling), Landdrill International, Major Drilling, Diamec, Versa Perforaciones SA de CV, DR Drilling, OV Drilling and KAV Drilling (Table 6.3; Section 6.2.2). The management, monitoring, surveying and logging of the Great Panther 2010 to 2021 series of UGG prefix exploration holes and production holes were carried out under the supervision of the Great Panther mine geological staff. Pre-2010 Guanajuato drilling, on surface and underground, was completed under the supervision of the Great Panther Exploration staff.

Great Panther's exploration drill core was HQ and NQ in diameter. Production drillholes completed prior to July 2011 were generally AQ in size. During July 2011, a BQ diameter rig (Diamec) was added to the production drilling capacity.

Drill core was transported twice a day from the drill site via pick up truck to the core storage and logging facility located at the gated Great Panther Cata plant site. At the logging facility the core boxes were laid out by field technicians. The technicians fitted the core pieces together and cleaned the core surface in preparation for logging by the geologist. Depth markers were checked for proper labelling, and the boxes were labelled with the drill core intervals. The technicians completed measurements of core recovery and rock quality designation (RQD) and recorded the data onto paper logs.

Prior to mid-2016, all sampling and geological data was entered into a DataShed© database using LogChief software. More recently, Great Panther utilized an internal in-house software for data collection that loads data directly into a Microsoft SQL© database, and all data was stored digitally in this database.

The drill core samples were prepared by technicians working under the direction of Great Panther's Mine and Exploration Geologists. HQ and NQ diameter core were cut in half longitudinally using a diamond bladed saw. AQ and BQ diameter core was sampled whole. The sample lengths were determined using mineralogical or lithological characteristics and marked on the core boxes by the geologists. For exploration drilling, the minimum and maximum sample lengths were 0.5 and 1.5 m, respectively. For production drilling, in areas of little or no obvious mineralization, maximum sample lengths measured from 1.5 to 2.0 m. In mineralized or silicified zones, the maximum sample length was reduced to 0.6 m, while the minimum length was 0.3 m. There are several instances where drill samples with lengths greater than 2.0 m occur in the database, this is due to broken and/or small diameter core.

Once the sample length was determined, a technician recorded the sample intervals in a numbered and perforated ticket book. The numbered part of each ticket is stapled to the core tray at the appropriate sample interval and the butt portion of the ticket book is completed with drillhole number and sample interval information. For each sample interval, the core (or half core) was placed along with a numbered ticket inside a pre-numbered clear plastic sample bag. The bag was then tied with string and delivered

with other samples from the same hole to the onsite Cata laboratory. Sample numbers and intervals were written on the ticket books for future data capture.

Chain of custody was established upon sample collection with the use of unique sample IDs, documentation of samples per shipment to the lab, as well as sign-off forms for receipt of samples by the laboratory.

Bulk density determinations were conducted on samples measuring approximately 10 cm in length. The sample lengths were selected by a field technician from whole or half-core (NQ or HQ). The test work was completed on site by field technicians and followed the water submersion method on air-dried samples. Non-friable, non-porous core samples were weighed in air and then weighed while suspended from the scale in a basket, which was submerged in water. The raw information was recorded on paper logs. The samples were returned to the core box once the determinations were completed. No formal quality control – quality assurance (QA-QC) was completed during the bulk density determinations.

All phases of the sampling, transport, and analysis were carried out by authorized Great Panther personnel. The Cata laboratory and geology department and exploration core sheds are located within the Cata facility in the city of Guanajuato. The Cata facility is fully fenced with 24-hour on-site security.

### **11.1.3 GSilver Channel Sampling**

From September 2022 to December 2023, GSilver collected a total of 15,993 underground channel samples from 6,613 channels at the VMC. GSilver sampling personnel collected the channel samples from development drifts and production stopes and extracted the rock chip samples using a hammer and chisel, along a line across the structure.

Prior to sampling, each sample line was marked by a mine geologist and each individual sample was marked with purple spray paint, differentiating lithological changes, fault zones, mineralized structures, and other geological characteristics. Samples were collected using a hammer and chisel moving from the footwall to the hanging wall side of the structure. Sample lengths ranged from 0.05 to 7 m and averaged 0.64 m. Sample depths of 0.02 to 0.03 m were maintained. Sample weights generally ranged from 0.50 to 5.0 kg.

The rock chips were captured on a 1.5 by 1.5 m canvas sheet. The sheet was cleaned between samples to mitigate the risk of contamination. The sample was then crushed to approximately ¼ inch size fraction on a square steel plate and homogenized. The sample was divided into four equal parts by dividing the square plate into four equal triangles. The two opposite parts were selected, and the rest of the sample was discarded.

The selected sample parts were placed in 40 by 30 cm poly sample bags inscribed with the unique sample identification (ID) number. Each sample was labelled with the sample ID, date, mine, site (drift, stope, shaft, etc.), and the name of the sampler. The sample ID was marked in the field along the sample line using spray paint and the sample width was recorded in a field notebook.

Each sample was located using a topographic control point in the field and was marked on a topographic map along with the sample number. A sampling report was prepared and included the following data: mine, name of sampler, date, dispatch number, line ID, sample ID, sample width, sample type, vein code, location taken (roof, wall, etc.), underground level, site, topographic point reference, and distance to topographic point reference. GSilver personnel recorded this information in the VMC underground sample Microsoft SQL database, along with sample coordinates, azimuth, and inclination.

GSilver's QA-QC procedures for the 2022 and 2023 underground channel sampling programs included the insertion of certified reference materials (standards), blanks, and duplicates into the sample sequence. The rate of QA-QC material insertion was approximately 1 per 20 samples.

The samples were subsequently delivered to the Cata laboratory for analysis.

#### **11.1.4 GSilver Drilling**

As of the Effective Date of this Report, the Company has drilled 3 NQ sized diamond drillholes (DDH), totalling 1,151.5 m, in the el Borrego area of the VMC. The drilling was completed in June to August 2023 by Kav Drilling Mexico from the city of Guanajuato.

VMC drill core was logged and sampled at the Cata core storage and logging facility in Guanajuato. Upon receiving drill core, sampling personnel first cleaned the core and verified the sequence and hole depth in accordance with the block system used by the drill contractor, whereby a block labelled with the hole depth was inserted into the box after each drill run. The sampler marked the core boxes with depth ranges and recovery and rock quality designation (RQD) was measured for each core interval between blocks. Recovery and RQD measurements were captured manually and delivered to the geologist at the end of the shift, or upon completion of RQD for the drillhole.

GSilver drill log data were input directly to the project database by the logging geologist. Prior to describing the core, the geologist recorded the drillhole collar and survey information (coordinates, azimuth, inclination, date, drill rig, diameter, etc.). The core was then marked with yellow, red, and blue wax pencil to indicate contacts and/or lithological changes (rock type, faults, alterations, breccias, veins etc.). Yellow was used to mark rock type and alteration, blue was used for structures such as faults and fractures, and red was used for veins and hydrothermal breccias. Once the core was marked, the geologist logged observations comprising rock type, colour, hardness, alteration, mineralization, veining, weathering, and structural features, utilizing standardized codes. Descriptions and notes were also allowed in the database.

The geologist marked out samples based on the areas of interest identified during the core logging. Sample breaks generally corresponded to geological changes and were marked with red arrows indicating the beginning and end of each sample. Tags inscribed with the unique sample number and hole depth range were stapled to the box at the beginning of each sample. The maximum nominal sample length was 1.5 m, and the minimum nominal sample length was 0.3 m. Shoulder samples of 5 to 10 m were included above and below each mineralized structure.

Core segments with a length between 10 and 20 cm, and weighing at least 500 g, were selected for SG measurements. Non-porous samples representative of the geology and mineralization of the interval were selected. Measurements were collected for all vein and mineralized breccia samples, as well as wallrock at the top and bottom of the interval. SG values were determined using the water submersion method on air-dried samples. QA-QC measures included ensuring clean water was used for submerged measurements, re-measuring samples that returned values outside of the expected range and utilizing standard weights to calibrate the digital balance.

Prior to cutting, core was photographed, ensuring that sample numbers and ranges were visible. The core boxes were then moved to the cutting area in the Cata core facility. Marked sample intervals were cut in half with a diamond saw. One half of the core was left in the core box, the other half was placed in pre-labeled plastic bags along with a sample tag bearing the unique sample number. The sample bags were sealed for transport to the laboratory with the requisite report to be signed upon receipt by the laboratory. All logging and sampling information was recorded in the VMC drillhole Microsoft SQL database.

GSilver's QA-QC procedures for the 2022 and 2023 drill core sampling programs included the insertion of certified reference materials (standards), blanks, and field duplicates into the sample sequence. The rate of QA-QC material insertion was approximately 1 per 20 samples.

The samples were subsequently delivered to the Cata laboratory for analysis.

## **11.2 Analytical Procedures**

### **11.2.1 Great Panther Analytical (2005-2022)**

The underground channel and drill core samples collected by Great Panther were analysed at the Cata laboratory within the Cata facility. The Cata laboratory is equipped to perform analyses via aqua regia digest, fire assay, gravimetric, and atomic absorption spectroscopy (AAS).

The analytical process for the historical samples involved initial receipt of samples by Cata laboratory staff from the company personnel followed by oven-drying of samples. Dry samples were then run through a crusher (10 mesh) and subsequently a 200 g split

was run through a disc mill for pulverizing to 98% passing 200 mesh. Samples were analysed by aqua regia with an AAS finish, and any samples that reported greater than 10 g/t Au or 300 g/t Ag were re-analysed by fire assay with a gravimetric finish. The laboratory can also perform determinations for arsenic (As), copper (Cu), lead (Pb), zinc (Zn) and antimony (Sb) via AAS; however, these elements were not typically analysed for core samples. Assay certificates were sent directly from the laboratory to the Great Panther geology department via e-mail.

The Cata laboratory was constructed by SGS Group (SGS), under the supervision of Great Panther, and was managed and operated by the SGS from 2006 to 2018 (coded as SGS-GTO in the VMC database). During this period, the Cata laboratory was ISO accredited under the SGS Group. The Cata laboratory reverted to Great Panther management at the beginning of 2019, and therefore, lost its SGS accreditation (coded as MVS-GTO in the VMC database). However, the Cata laboratory staff and SGS procedures were maintained. The Cata laboratory is independent of the Authors of this Report; however, it is not independent of Great Panther or the Company.

### **11.2.2 GSilver Analytical (2022-2023)**

All of GSilver's channel and drill core samples were submitted to the Cata laboratory (MVS-GTO) for analysis. GSilver has managed the Cata laboratory as of the acquisition date of the Property, and the equipment and procedures remain unchanged.

The analytical process for the samples involved initial receipt of samples by Cata laboratory staff from the company personnel followed by oven-drying of samples. Dry samples were then run through a crusher (10 mesh) and subsequently a 200 g split was run through a disc mill for pulverizing to 98% passing 200 mesh. Samples were analysed by aqua regia with an AAS finish, and any samples that reported greater than 10 g/t Au or 300 g/t Ag were re-analysed by fire assay with a gravimetric finish. Gold and silver detection limits are 0.005 g/t Au and 5 g/t Ag. The Cata laboratory is also configured to perform determinations for As, Cu, Pb, Zn and Sb via AAS; however, these elements were not typically analysed for core samples. Assay certificates were sent directly from the laboratory to the GSilver geology department via e-mail.

The Cata laboratory was an ISO accredited laboratory under the SGS Group until the end of 2018. The Cata laboratory is independent of the Authors of this Technical Report; however, it remains under GSilver management and is not independent of the Company.

All pulps are stored in an on-site warehouse in a safe and well-organized manner, in sealed containers with proper labels, including the project name, lot number and sample IDs contained in each lot. The rejects are stored in closed containers and properly labelled with container number and the number of samples contained within the container. They are kept in storage for the necessary time indicated by industry standards.

### **11.3 Quality Assurance – Quality Control**

A routine QA-QC program, including instrument calibration and a database of results of the testing, was implemented by the SGS-GTO (Cata laboratory) until the end of 2018. Under Great Panther management, the Cata laboratory has continued the QA-QC program.

In addition to the internal laboratory QA-QC monitoring, the analytical portion of the QA-QC program employed by both Great Panther and GSilver aimed to provide a means by which the accuracy and precision of the assaying that is performed on its drilling samples can be measured to ensure the highest possible data quality. The QA-QC procedures included the insertion of certified standard reference material (standards), quarter-core duplicates or blanks into the sample sequence.

#### **11.3.1 Great Panther QA-QC (2005-2022)**

Great Panther's protocol for QA-QC sample insertion was one duplicate in every 19 samples and one blank and a standard for every 40 samples. The Great Panther database administrator flagged any suspicious QA-QC results and reported them to the relevant geologist. Re-assaying was performed in cases where data entry and sample collection issues such as sample swaps are ruled out by the geologist.

With the Cata laboratory reverting to Great Panther management, an enhanced umpire assay regime commenced in early 2019. Core sample pulps were submitted for re-assay to an independent, certified laboratory operated by SGS in Durango, Mexico (SGS-Durango). The umpire assay regime included re-assay of core samples and Great Panther inserted standard reference materials and duplicates. SGS Durango is ISO/IEC 17025 accredited and is independent of Great Panther, the Issuer and the Authors of this Report.

Great Panther's VMC QA-QC results from August 2020 to December 2021 are detailed in a previous report on the Property by Livingstone et al. (2022). No issues or significant issues were reported with respect to the sample collection methodology, sample security, sample preparation or sample analyses in the Great Panther exploration programs. The QA-QC results of previous programs completed at VMC by Great Panther are detailed in previous reports on the Property by Rennie and Bergen (2011), Smith (2011), Waldegger (2012), Brown and Sprigg (2013), Brown (2014), Waldegger and Brown (2014), Brown (2015; 2016; 2017), Wunder (2018), and Brown and Nourpour (2020; 2020b; 2020c; 2022). APEX personnel conducted verification of the Great Panther VMC historical database along with the QA-QC results as detailed in section 12 below.

#### **11.3.2 GSilver QA-QC (2022-2023)**

GSilver's QA-QC procedures for the 2022 and 2023 channel and drill core sampling programs included the insertion of certified reference materials (CRMs or standards),

blanks, and field duplicates into the sample sequence. The rate of QA-QC material insertion is presented in Table 11.1. All samples were analyzed at the Company’s Cata laboratory (MVS-GTO).

**Table 11.1 GSilver QA-QC Material Insertion Rates**

Sample Type	Frequency	Responsibility
Course blank	1/20	Logging Geologists /Material control
Fine blank (pulp)	1/20 only for Pulps	
Duplicate Reject	Random 5%	QA-QC Analyst
Duplicate Pulp		
Low-grade CRMs	Alternating 1/20	Logging Geologists /Material control
Medium-grade CRMs		
High- grade CRMs		

GSilver QA-QC personnel reviewed the channel and drill core sampling QA-QC results monthly. If more than 5% of the standards returned values outside of two standard deviations of the suggested value, the batch was considered a failure and was re-analyzed. If samples within the batch returned values outside of three standard deviations of the suggested value, the batch was considered a failure and the batch plus 15 samples on either side of the batch sequence were re-analyzed. For re-analysis, the pulps of the samples were re-labeled with new numbers and new QA-QC samples were inserted into the sample sequence for analysis.

For blanks, if more than 10% of the samples returned values greater than 2 times the detection limit, contamination was considered and the remaining diamond core was quartered, re-numbered and re-submitted to the laboratory with control samples. If samples returned values greater than 3, 5, 10 times the detection limit, depending on the type of sample, than contamination was considered and the remainder of the core plus 15 samples on either side was quartered, re-numbered, and re-submitted to the laboratory with control samples.

If the re-analysed results returned acceptable values, the new values were considered the correct values and entered into the database, replacing the previous values. Permission from the head of the GSilver geology department and a formal report outlining the reason for the database change were required for this action.

For duplicates, GSilver used 5% of rejects and pulps for duplicate analysis due to erratic mineralization in the core samples. The duplicate rejects and pulps were assigned a new sample number and were re-submitted to the laboratory for analysis. The results were plotted with the original results along the X-axis and the reject results along the Y-axis. The results of the coefficient of determination (R<sup>2</sup>) value and relative percentage difference were determined from the duplicate plots.

APEX personnel used applications developed with Streamlit software, in conjunction with customized Python scripts developed internally by APEX personnel, to evaluate QA-QC data collected during GSilver’s 2022 and 2023 underground drilling and channel sampling programs and to produce standard, blank, and duplicate plots.

The data plots were separated into two main groups, including underground exploration drillhole samples collected at El Borrego in June to August 2023, and underground channel samples collected from September 2022 to December 2023. Underground channel sampling was completed up to the Effective Date; however, use of blank and CRM samples was suspended after June 30, 2023, with a total of 8,101 underground channel samples collected between July 1 and December 31. The Company continued to analyze duplicate samples from the underground channels during this time. The Author recommends that the Company immediately recommence their full QA-QC protocols for underground channel samples to ensure the integrity of the data for use in any future MREs. The QA-QC sample type, quantity, and results for the different sampling programs are presented in Table 11.2.

**Table 11.2 Summary Statistics for VMC QA-QC Samples**

Datasets by sampling program	QA-QC sample type	# QA-QC samples	# failures of Ag	# failures of Au	% failures of Ag	% failures of Au
Exploration drilling samples	Blank	71	1	1	1.4%	1.4%
	Standard (GTS16)	33	3	5	9.1%	15.2%
	Standard (GTS17)	38	1	2	2.6%	5.3%
	Duplicate (coarse)	72	0	0	0.0%	0.0%
	Duplicate (pulp)	72	0	0	0.0%	0.0%
	Umpire (coarse)	-	-	-	-	-
	Umpire (pulp)	-	-	-	-	-
Underground channel samples	Blank	482	0	0	0.0%	0.0%
	Standard (GTS16)	290	13	18	4.5%	6.2%
	Standard (GTS17)	192	4	0	2.1%	0.0%
	Duplicate (coarse)	811	91	76	11.2%	9.4%
	Duplicate (pulp)	907	36	90	4.0%	9.9%
	Umpire (coarse)	-	-	-	-	-
	Umpire (pulp)	-	-	-	-	-

Overall, the data collection quality is reasonable, and the number of failures is not significant. Many of the errors are related to duplicates, which would be related to the nuggety feature of the deposit and its heterogeneity. A few failures have been observed in the blanks and CRMs.

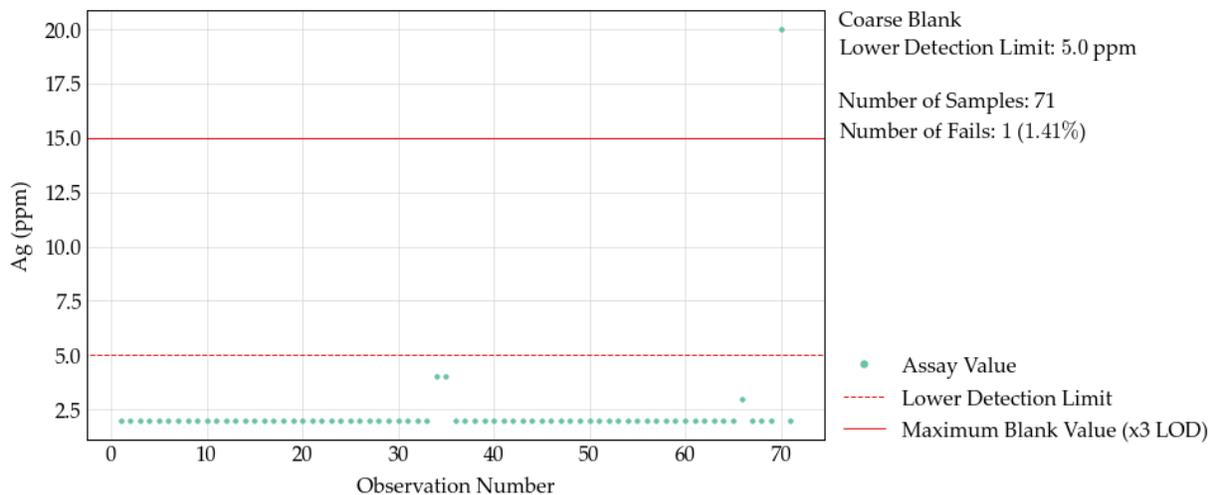
### 11.3.2.1 Blanks

Coarse blank samples provide a means by which the sample preparation procedures at laboratories can be tested for potential issues related to sample-to-sample contamination, usually due to poor procedures related to incomplete clearing/cleaning of crushing and pulverizing machines between samples. The blank material used in the drill program was prepared from a barren rhyolite tuff of the La Bufa Formation, from the south side of Guanajuato. The blank material was crushed, pulverized, and homogenized at the Cata laboratory.

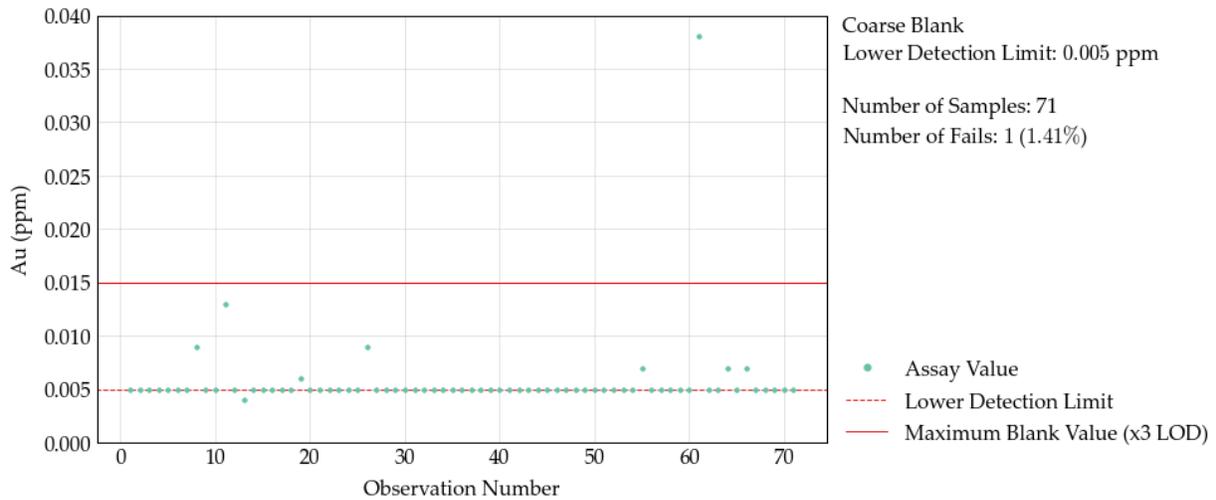
Blanks were analysed for Ag and Au by Aqua Regia digest with AAS finish at the Cata laboratory, with subsequent umpire checks completed at SGS-Durango. The lower detection limit for gold is 0.005 g/t Au and for silver it is 5 g/t Ag for analyses completed at the Cata laboratory and 2 g/t Ag for analyses completed at SGS-Durango.

Evaluation of 71 blank samples submitted to the laboratory for the el Borrego exploration drilling reveals a low incidence of contamination in the analytical programs. One instance of low-grade dilution failure was noted during the review of blank performance for gold analysis, slightly exceeding the tolerance limit. The results of the blank analyses from both laboratories are presented in Figures 11.1 to 11.2.

**Figure 11.1 Exploration Drilling Blank Sample Performance (Ag)**

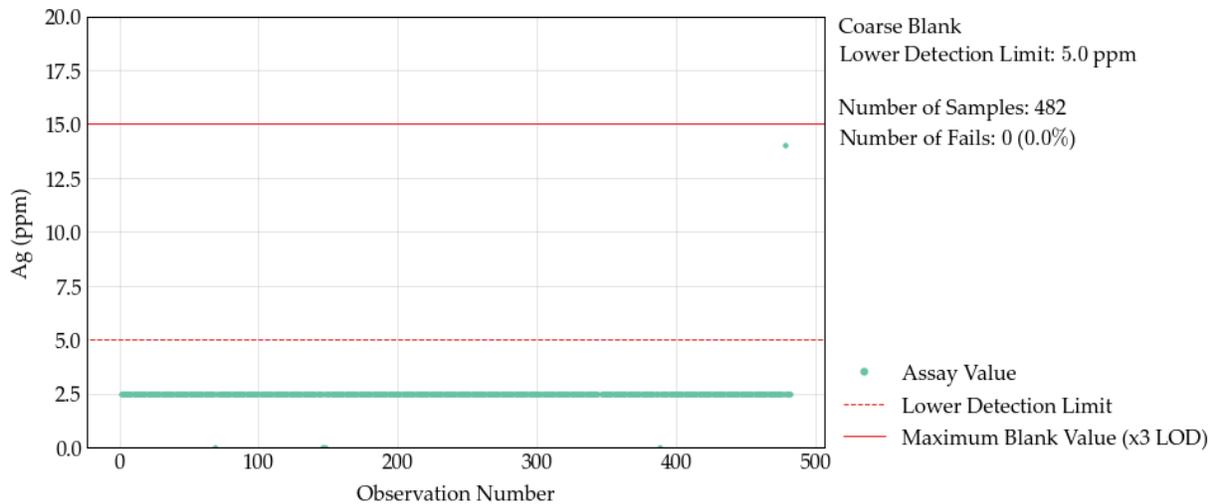


**Figure 11.2 Exploration Drilling Blank Sample Performance (Au)**

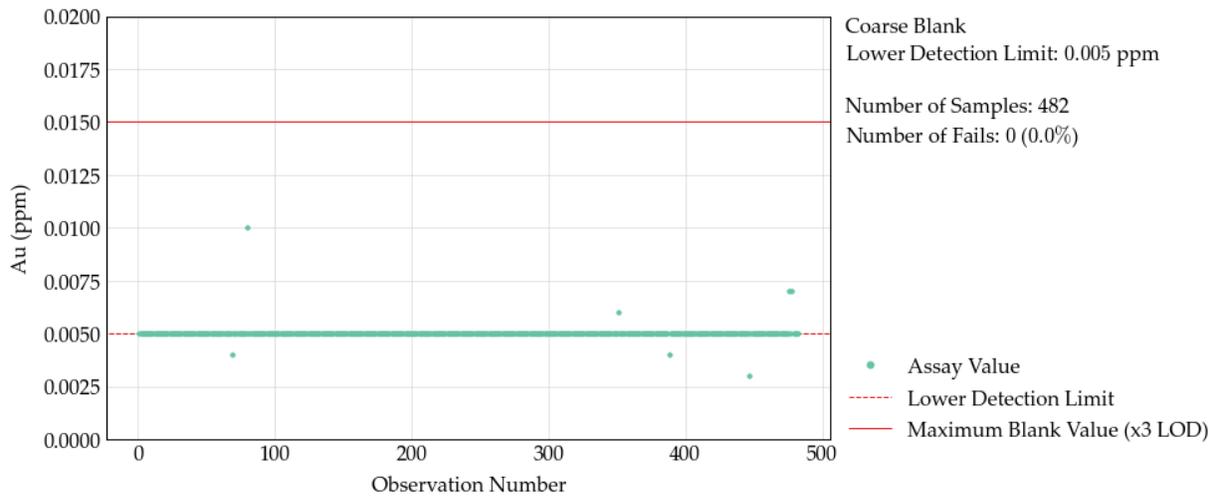


A total of 482 blank samples within the underground channel sampling dispatches, submitted to the laboratory from October 2022 to June 2023, show no contamination for both silver and gold analysis (Figures 11.3 and 11.4).

**Figure 11.3 Underground Channel Sampling Blank Sample Performance (Ag)**



**Figure 11.4 Underground Channel Sampling Blank Sample Performance (Au)**



The Author considers the results of the blank analyses for the GSilver underground sampling and drilling completed for VMC to be acceptable, with no significant issues to report.

### 11.3.2.2 Standards

Standards were inserted into the analytical sample stream in order to provide a means by which overall analytical precision and accuracy can be measured. Standard samples comprise pulverized and homogenized materials that have been suitably tested, normally by means of a multi-lab round-robin analysis to establish an accepted (certified) value for the standard and statistics to define and support the “acceptable range” (i.e., variance), by which subsequent analyses of the material may be judged. Generally, this involves the examination of assay results relative to inter-lab standard deviation (SD), resulting from each standard’s round-robin testing data, whereby individual assay results may be examined relative to 2SD and 3SD ranges.

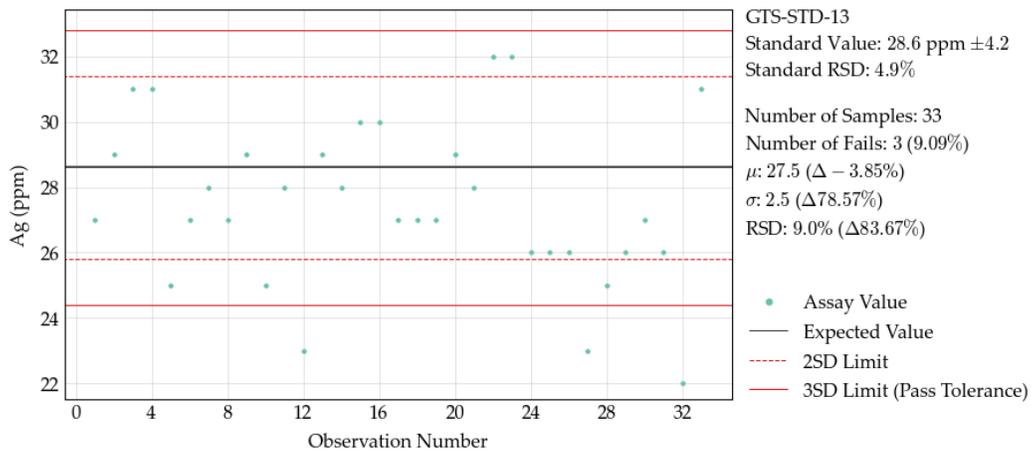
Two standards (GTS16 and GTS17) were utilized in GSilver's exploration drilling from June to August 2023 and the underground sampling program between October 2022 and June 2023 at VMC. These standards, supplied since 2020 from SGS-Durango, were commissioned using sample material collected by VMC. The certified value and tolerance intervals of each standard are presented in Table 11.3.

The results of the standard analyses for GTS16 and GTS17 are presented in Figures 11.5 to 11.12.

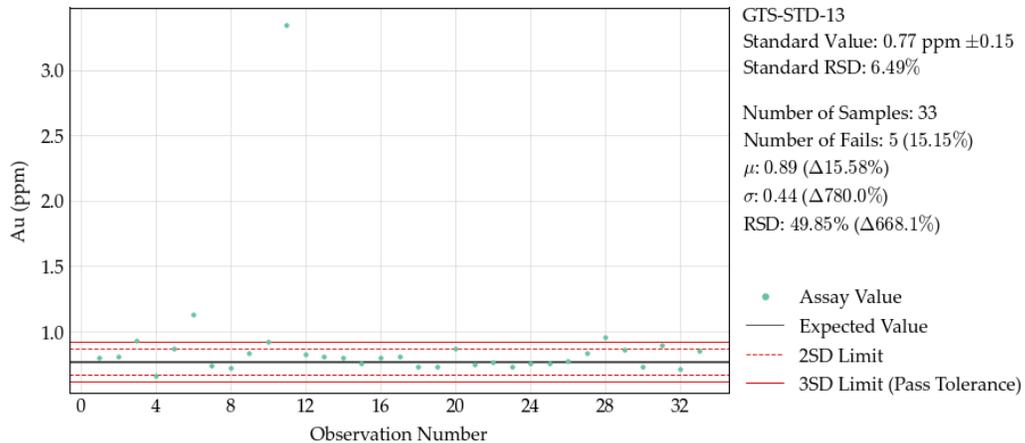
**Table 11.3 VMC Certified Standard Values and Tolerance Intervals**

GSilver STD ID	Manufacturer Certificate	Element	Method	Certified Value	Tolerance Interval		Date of Usage	
					High	Low	From	To
		Au	FAA313	137.63	123.56	151.7		
		Au	FAG_GC	1.95	1.75	2.15		
GTS16	SGS GTS-STD-13	Ag	FAG_GC	28.6	24.5	32.8	3/9/2020	Current
		Au	FAG_GCAA	0.77	0.62	0.91		
GTS17	SGS GTS-STD-14	Ag	FAG_GC	433	410	455	3/30/2020	Current
		Au	FAG_GCAA	2.74	2.31	3.17		
		Au	FA-Grav	1.354	1.205	1.503		
		Au	FAG313	18.34	18.22	18.46		
		Au	FA-Grav	1.319	0.96	1.68		

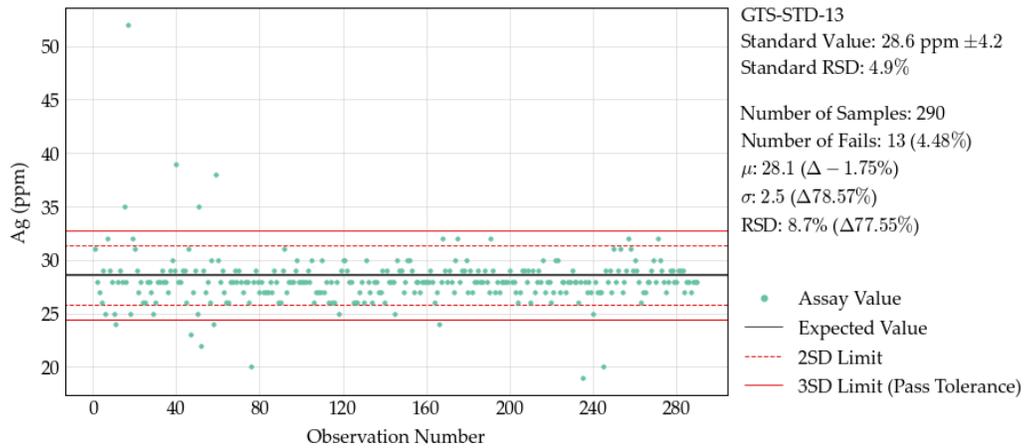
**Figure 11.5 GTS16 (GTS-STD-13) CRM of Ag Analysis for Drill Samples**



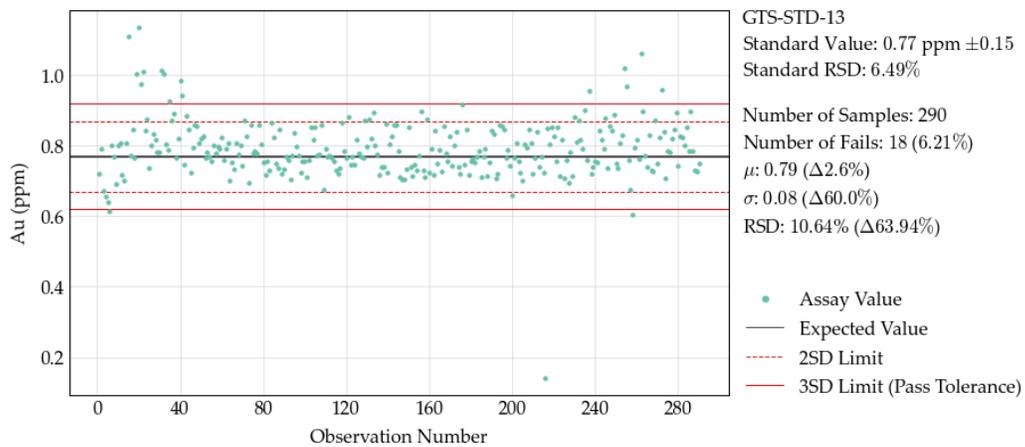
**Figure 11.6 GTS16 (GTS-STD-13) CRM of Au Analysis for Drill Samples**



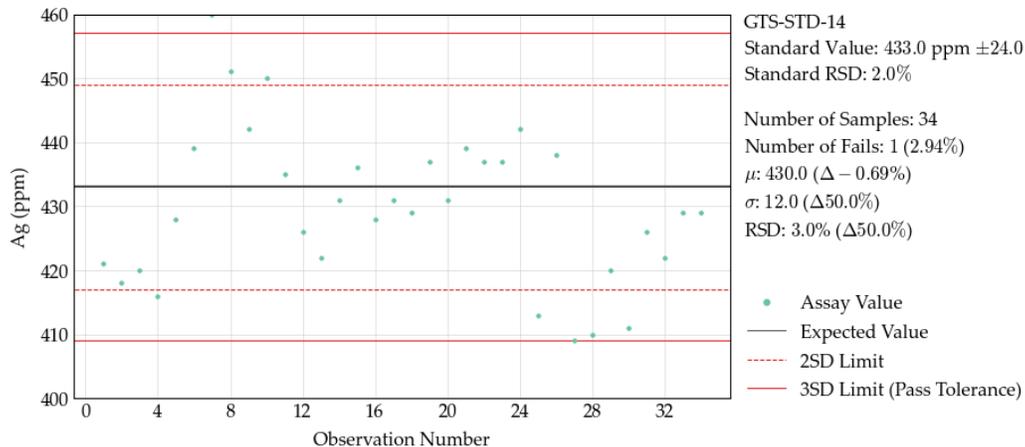
**Figure 11.7 GTS16 (GTS-STD-13) CRM of Ag Analysis for Underground Samples**



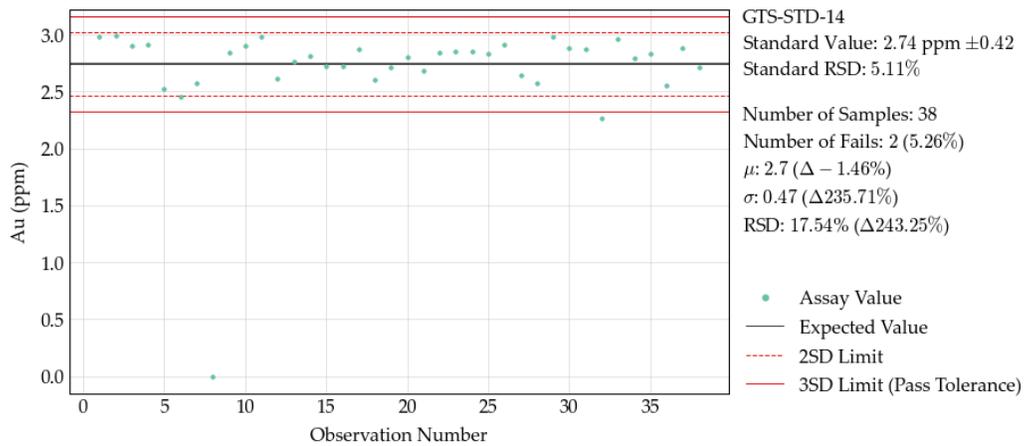
**Figure 11.8 GTS16 (GTS-STD-13) CRM of Au Analysis for Underground Samples**



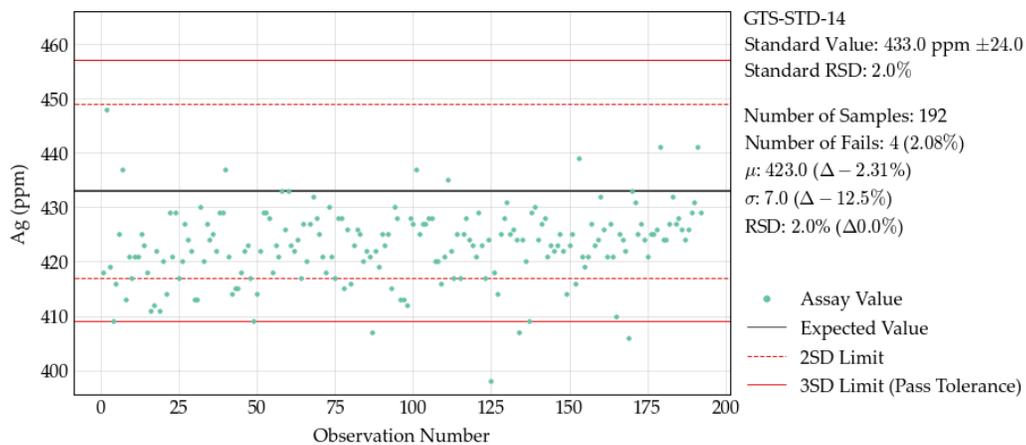
**Figure 11.9 GTS17 (GTS-STD-14) CRM of Ag Analysis for Drill Samples**



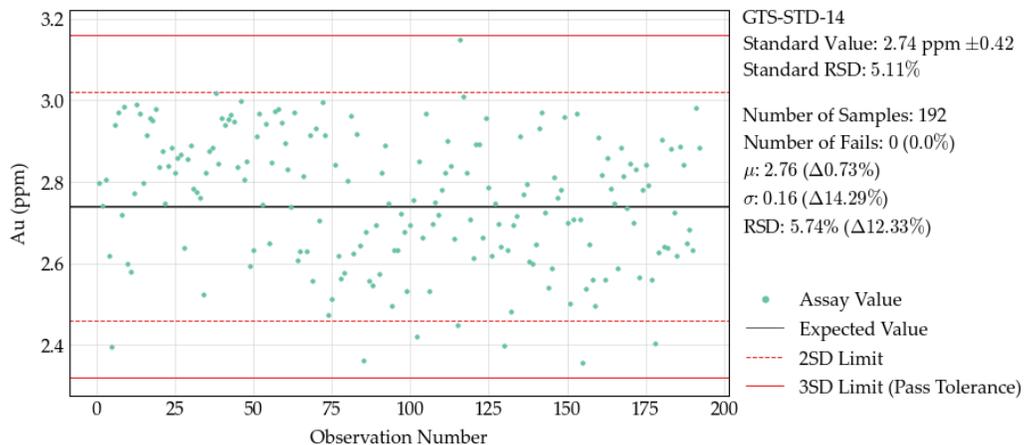
**Figure 11.10 GTS17 (GTS-STD-14) CRM of Au Analysis for Drill Samples**



**Figure 11.11 GTS17 (GTS-STD-14) CRM of Ag Analysis for Underground Samples**



**Figure 11.12 GTS17 (GTS-STD-14) CRM of Au Analysis for Underground Samples**



The results of the standard analyses are listed as follows:

- GTS16 returned an overall failure rate of 9.1% for Ag and 15.2% for Au in drill samples. A failure rate of 4.9% for Ag and 6.5% for Au was observed in underground samples.
- GTS17 returned an overall failure rate of 2.9% for Ag (excluding four standard results returning >150 ppm due to the insufficient material size) and 5.3% for Au in drill samples. A 2% failure rate was observed for underground samples, with a 0.0% failure rate for Au analysis. Additionally, a systematic negative bias was observed in Ag analysis in underground samples.

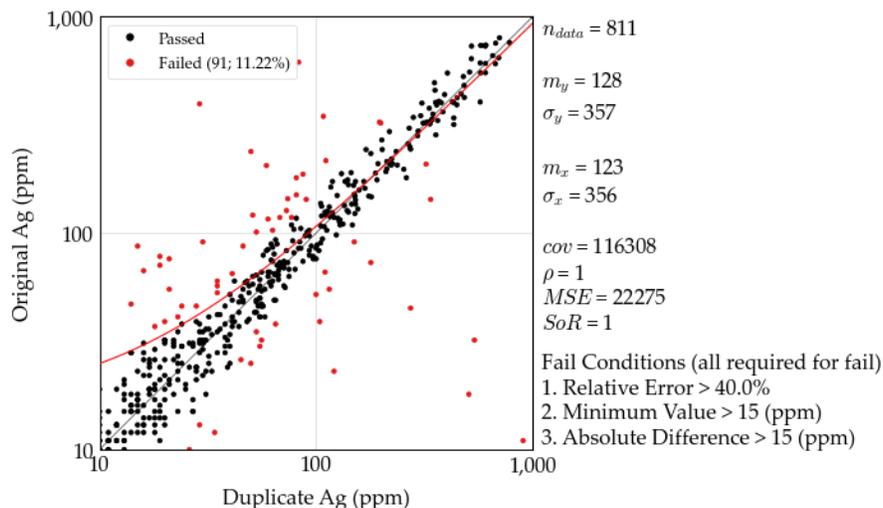
The analytical results for standard GTS16 had the greatest number of analytical failures and should be investigated further; however, in general, the results of the standard analyses for exploration drilling and underground sampling completed by GSilver from October 2022 to June 2023 at VMC are considered acceptable.

### 11.3.2.3 Duplicates

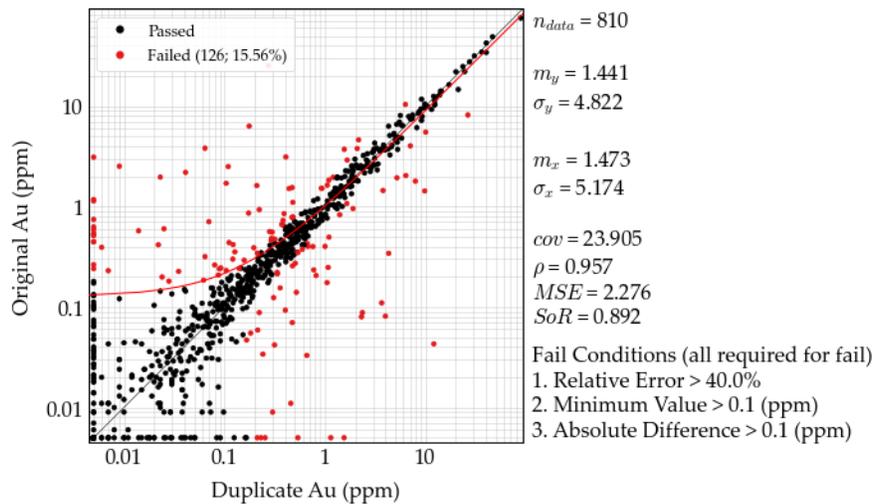
Two types of duplicates (coarse  $n = 72$ , and pulp  $n = 72$ ) were analyzed for the el Borrego exploration drilling from June to August 2023. The results of the duplicates from that generation do not meet the criteria to be considered mineralized material (>15 ppm Ag); therefore, the plots are not included in the Report.

Regarding the underground samples, the course duplicate failure rates were 11.2% ( $n=91$ ) for Ag and 15.56% ( $n=126$ ) for Au out of the total of  $n=811$  (Figures 11.13 and 11.14).

**Figure 11.13 Coarse Duplicates used for Ag Analysis of Underground Samples**

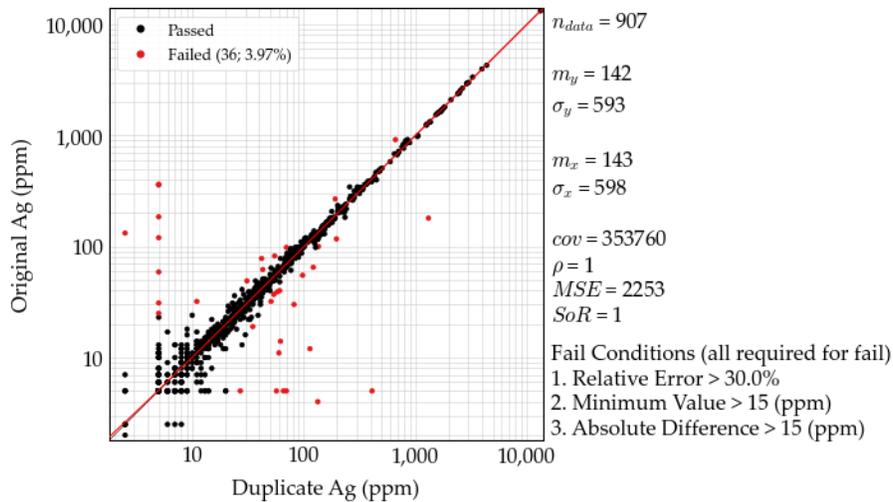


**Figure 11.14 Coarse Duplicates used for Au Analysis of Underground Samples**

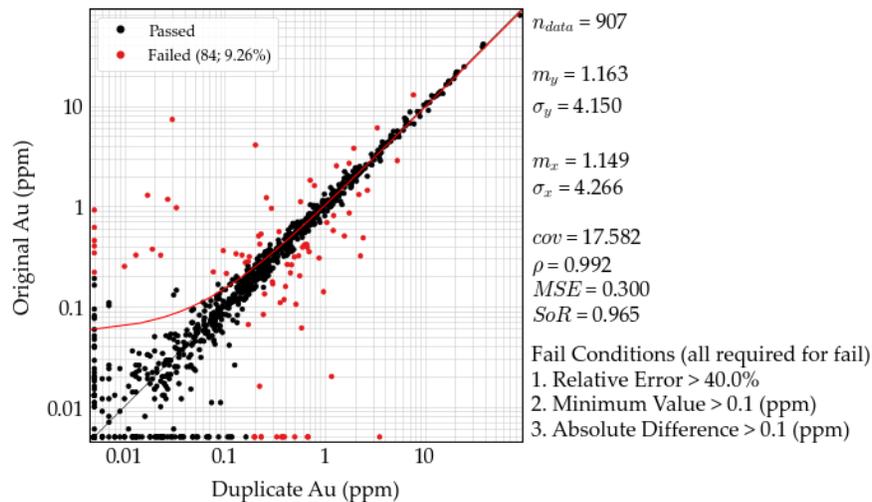


Analysis of the underground sample pulp duplicates ( $n=907$ ) yielded improved results compared to the coarse duplicates, with failure rates of 3.9% ( $n=36$ ) for Ag and 9.3% ( $n=90$ ) for Au (Figures 11.15 to 11.16).

**Figure 11.15 Pulp Duplicates used for Ag Analysis of Underground Samples**



**Figure 11.16 Pulp Duplicates used for Au Analysis of Underground Samples**



The duplicate analyses of underground samples returned higher failure rates for gold than for silver, which require further investigation. However, silver is the main element of interest at VMC, and the Author of this Report consider the duplicate analytical results for silver to be acceptable and sufficient for use in this Report.

#### 11.4 Adequacy of Sample Collection, Preparation, Security and Analytical Procedures

The QA-QC measures including the insertion rates and performance of blanks, standards, and duplicates for the GSilver indicate the following:

- No significant contamination issue was observed in the blank performances for the Au and Ag analysis of both the drill and underground samples.
- Duplicate results from the drill core samples showed a poor to fair correlation for gold. This is likely due, at least in part, to sample bias resulting from nuggety gold observed within various mineralized zones.
- Standard GTS16 returned an overall failure rate of 9.1% for Ag and 15.2% for Au in drill samples. A failure rate of 4.9% for Ag and 6.5% for Au was observed in underground samples.
- Standard GTS17 showed an overall failure rate of 2.9% for Ag (excluding four standard results returning >150 ppm due to insufficient material size) and 5.3% for Au in drill samples. A 2% failure rate was observed for underground samples, with a 5.1% failure rate for Au analysis. Additionally, a systematic negative bias was observed in Ag analysis in underground samples, which requires investigation.

GSilver should reconsider using standards GTS16 and GTS17 as these materials include the following disclaimer: *“reference material is characterized by limited*

*laboratory testing and is not certified according to best practice principles of ISO 17034. Caution should be used when applying this material to evaluate a laboratory performance.”*

The Author recommends that, in addition to commercially produced CRMs, the issuer should utilize custom-developed matrix-matched CRMs. These CRMs should be produced from specific styles of mineralization found in the deposits, with round-robin testing conducted by different laboratories. The custom CRMs should be inserted with similar grades of dispatch samples, based on the mineralization observed in the sample and recorded in the drill log or sample description. Furthermore, the CRMs should be inserted randomly in a dispatch using automatic dispatch creation tools in the database system, rather than fixed interval, manual insertion.

The use of blank and CRM samples for the underground channels was suspended after June 30, 2023, due to a shortage of CRMs. The Author recommends that the Company immediately recommence their QA-QC protocols for underground channel samples utilizing CRMs as recommended above, in addition to GSilver’s established protocols for duplicate analyses. The Author recommends that GSilver arrange for regular umpire checks to be conducted on the underground channel and drill samples using a reputable third-party laboratory. Without a suitable QA-QC program in place, the underground channel data may not be reliable for use in any future MREs.

Duplicate drill hole sample results exhibited a poor to fair correlation for gold. This is likely attributed, at least in part, to sample bias resulting from nuggety gold observed within various mineralized zones at the VMC. Additionally, the original analysis was conducted using half core, while the duplicate analysis was performed using quarter core.

In conclusion, the data within GSilver’s databases are deemed suitable for further evaluation of the Property and for its intended use in this Report, including Mineral Resource estimation. Continuous evaluation of the QA-QC data should be carried out to proactively identify opportunities for improvement in sampling, preparation, and analytical protocols.

## 12 Data Verification

### 12.1 Database Verification

Prior to mid-2016, all of the VMC channel and drillhole sampling and geological data was entered into a DataShed© database using LogChief software. Post 2016, Great Panther utilized an internal in-house software that loads data directly into a Microsoft SQL database, and all of the VMC data was stored digitally in this database. The total database encompasses diamond drilling data and underground sampling data. GSilver continues to use this in-house software for data collection and storage. The total database encompasses diamond drilling data and underground sampling data.

Underground sampling data were provided to the Authors in Microsoft Access databases, specific to the VMC, with separate tables for collar, survey and assay. Drillhole data were provided to the Authors in Microsoft Access databases, specific to the VMC, with separate tables for collar, assays, alteration, lithology, structural orientation and downhole survey data. The Authors were also provided with a three-dimensional (3D) topographic surface, as well as 3D wireframes representing the existing mine workings in Micromine (.tridb) and AutoCAD (.dxf) formats. Monthly VMC production and mineral processing data were provided to the Authors in Microsoft Excel spreadsheet format.

The Author imported the underground and drillhole data into Micromine 2021, along with the 3D topography and mine workings. A visual examination of the data in 3D did not demonstrate any obvious spatial issues. Mineralized underground samples and drill intercepts are spatially coincident with past and present mine production levels and/or vein models. Surface drillhole locations are consistent with areas of disturbance in satellite imagery.

Copies of 43 Great Panther and 34 GSilver underground channel sample assay certificates from the Cata laboratory were reviewed and compared against the VMC underground dataset. A total of 830 Great Panther underground samples and 1,229 GSilver underground samples were reviewed by the Author and found to have no errors.

Copies of 48 Great Panther drill core dispatches from the Cata laboratory and SGS Durango laboratory, and 2 GSilver drill core dispatches from the Cata laboratory were reviewed and compared against the VMC drillhole database. A total of 814 Great Panther drill samples and 151 GSilver drill samples were reviewed by the Author and found to have one error.

In the opinion of the Author, the VMC underground dataset and drillhole database are reasonably free of any material or systematic errors. However, the Author recommends completing additional database verification prior to undertaking any future Mineral Resource estimates.

GSilver monthly production and mineral processing data records were reviewed by the Author, and where possible, were compared against publicly available company listings. In the opinion of the Author, no significant discrepancies were identified.

## 12.2 Qualified Person Site Inspection

Mr. Christopher W. Livingstone, P.Geo., Senior Geologist of APEX and a Qualified Person, conducted a site inspection for verification purposes from August 13 to 14, 2023. Mr. Livingstone previously visited the Property from April 7 to 8, 2022. Mr. Dufresne, Ms. Clarke, and Mr. Pearson did not visit the VMC Property, as Mr. Livingstone’s visits were deemed sufficient by the QPs.

The August 2023 site inspection comprised a tour of the VMC Property, including entering several underground workings, collection of two underground verification samples, and a review of the VMC 3D data compilation. In addition, Mr. Livingstone observed active mining and verified the mining methods, equipment, and infrastructure utilized in the VMC production process.

The April 2022 site inspection comprised entering several underground workings, a review of drill core to verify reported geology and mineralization, and collection of verification samples. Mr. Livingstone also toured the Cata offices, core shack, processing plant, and analytical laboratory. A tour of the Cata processing plant was conducted by the plant manager. The plant was not operational at this time; however, Mr. Livingstone was able to observe all circuits and equipment used for processing mineralized material. The analytical laboratory was found to be clean, organized, professional, and appeared to be following industry standard practices. The core processing facility was similarly found to be in line with industry standards.

Mr. Livingstone was accompanied by Mr. Victor David Ávila Herrera, Mineral Resource Estimation Manager, and GSilver geologists Ms. Fernanda Espinoza and Mr. Luis Alberto Juarez Perales during the August 2023 site inspection. Two samples were collected underground in the Santa Margarita and La Patilla areas (Table 12.1). Maps, sections, drill logs, and analytical results were provided as necessary.

**Table 12.1 Author’s Independent Verification Sample Results**

Sample ID	Operation	Area/Vein	Sample Type	Au (g/t)	Ag (g/t)
E545459	VMC	Santa Margarita	Underground	66.9	134
E545460	VMC	La Patilla	Underground	5.16	465

The underground portion of the inspection comprised a tour of active workings in the Los Pozos, Santa Margarita, La Patilla, and Cata areas. Mr. Livingstone observed the geology, alteration, and mineralization in each area, and reviewed plan maps and sections for each area toured. The visual inspection was consistent with the reported geology and mineralization and confirmed the presence of significant mining infrastructure at the VMC. The mine is well ventilated, and the mining equipment

appears to be in good repair. Inspection of stopes in each area indicated the use of the Cut and Fill method for extraction of in situ mineralized material. Several underground stockpiles were also observed. The Author did not visit a number of mainly inactive areas of the VMC including the Promontorio, Valenciana, and Guanajuatito mines. However, the Valenciana area was visited during the 2022 site inspection.

The mine was accessed via the Rayas shaft to level 345 in the Los Pozos area. The Santa Margarita-Veta Madre transverse vein zone was observed and sampled (Figure 12.1). Sample E545459 was collected from milky white quartz vein material with silver sulphide (acanthite?) and minor pyrite. The zone comprises narrow, high-grade veins within a larger transverse structure with high grades in the hanging wall of the Veta Madre. The zone projection was later observed on level 365 in Los Pozos. It is drill confirmed to level 390 and mining is underway on the lower levels.

**Figure 12.1 Santa Margarita-Veta Madre Transverse Vein Zone Sample Site**



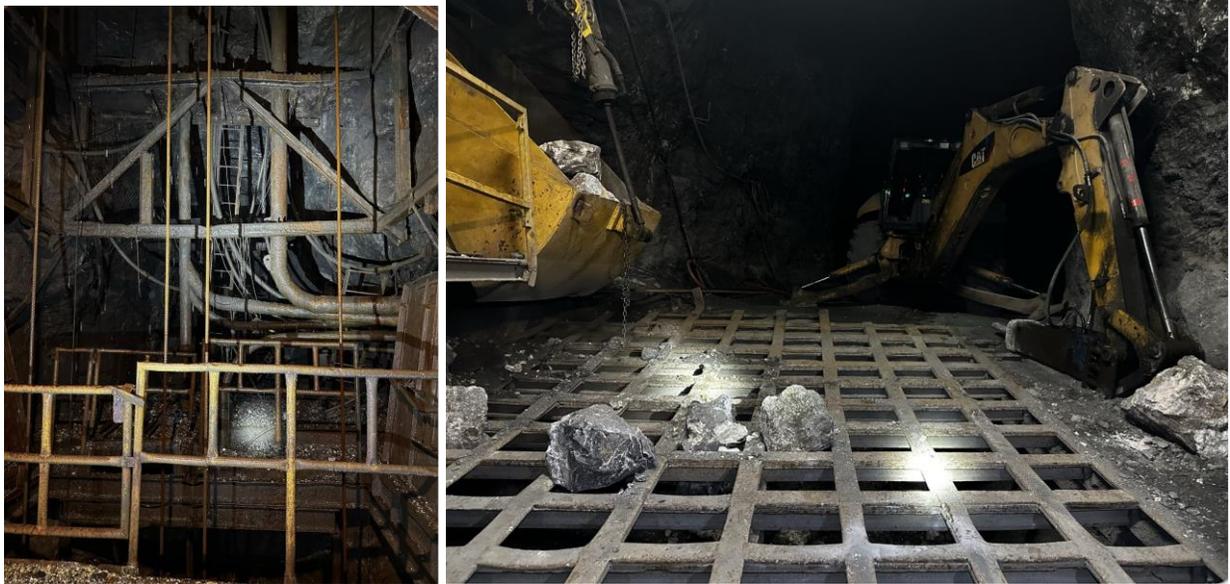
A low-grade zone of the Veta Madre was observed walking northwest from Santa Margarita. Minor galena and sphalerite mineralization was observed, along with abundant amethyst gangue.

The Cata shaft was observed en route to the La Patilla area. The Cata shaft is used exclusively for transport of mineralized material to the surface, and currently moves approximately 400 to 450 tonnes per day (Figure 12.2).

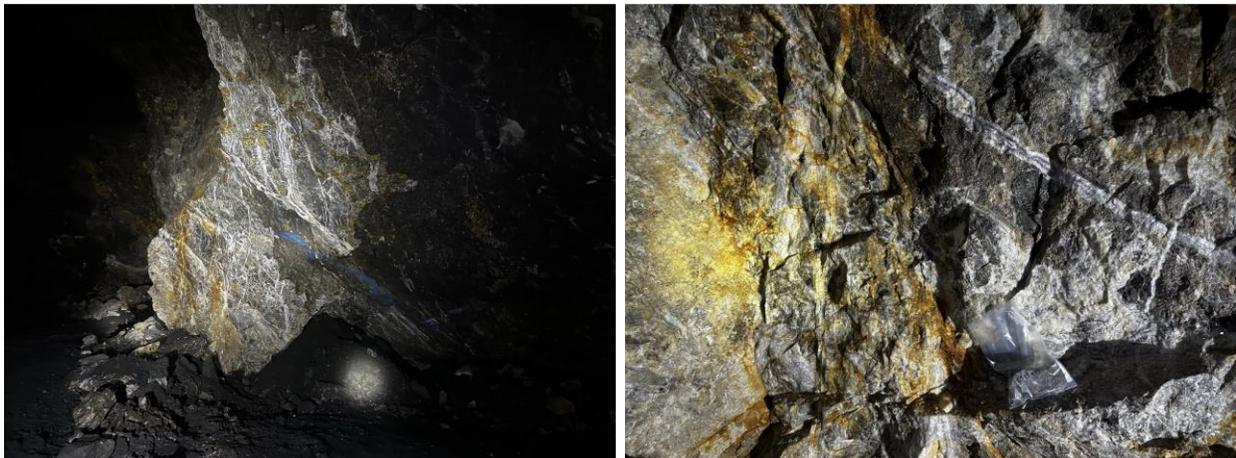
At La Patilla, the Author observed a large, open stope with pillars designated for recovery. The area is characterized by abundant stockwork and breccia zones. Sample E545460 was collected from a vein stockwork of grey and white quartz with silver sulphide (acanthite?) and pyrite, from a zone of approximately 410 g/t AgEq (Figure 12.3).

In addition to the site inspection, the Author discussed database improvements with Mr. Avila. GSilver geologists have completed re-interpreting, re-drawing, and rectifying in 3D all mine plans. The same is also complete for all sections. Mr. Avila noted many changes from the originals, which had been difficult to use in 3D interpretations due to non-standardized logging and lithologies. Standardization of logging is currently being rolled out Company-wide beginning with the VMC.

**Figure 12.2 Cata Shaft Facility**



**Figure 12.3 La Patilla Zone Pillar Sample Site**



Mr. Livingstone maintained custody of the samples and delivered them directly to the ALS North Vancouver laboratory upon his return to Canada. Each sample was subject to standard preparation, Au and Ag analysis by fire assay with AAS finish (ALS methods Au-AA23 and Ag-AA45), and multi-element analysis by four-acid digestion with ICP-

AES finish (ALS method ME-ICP61). Overlimit Au and Ag analyses were performed by fire assay with gravimetric finish (ALS methods Au-GRA21 and Ag-GRA21). Overlimit base metal analysis was performed by four-acid digestion with ICP finish. ALS North Vancouver received ISO/IEC 17025 accreditation in 2005 and is independent of the Authors, Great Panther and GSilver.

Observations and results from Mr. Livingstone's site visits and sampling verify the presence of significant silver-gold mineralization both in active mine areas and in exploration drilling at the VMC. Rock types, alteration, and mineralization observed underground, in drill core, and at surface while touring the Property are consistent with the reported geology and historical exploration results. In addition, Mr. Livingstone verified the mining methods and equipment utilized in the VMC production process. The mining infrastructure observed is consistent with reported historical production.

### **12.3 Validation Limitations**

Based on the Property inspection, verification sampling, and data review, the Author has no reason to doubt the reported geology, exploration, and production results.

### **12.4 Adequacy of Data**

The Author has reviewed the adequacy of the exploration and mining information and the Property's physical, visual, and geological characteristics. No significant issues or inconsistencies were discovered that would call into question the validity of the data. In the opinion of the Author, the VMC data is adequate and suitable for use in this Report.

### 13 Mineral Processing and Metallurgical Testing

The Author is not aware of any third-party laboratory-based mineral processing and metallurgical testing completed by GSilver or Great Panther.

#### 13.1 Historical Metallurgical Test Work (2011 to 2015)

Historically, Great Panther conducted metallurgical test work aimed at improving the operation of the Cata processing plant. In 2011, Great Panther added a new flotation section, with the installation of five new fully automated Outotec cells which replaced the old sections of rougher cells. In 2012, a small regrind mill was installed with improvements in metallurgical recoveries. In 2012 and 2013, the primary crushing units were upgraded with a new Metso HP300 crusher, and new vibrating twin screens. Lastly, in 2013, a new state of the art filter press was installed to reduce water content in the concentrate.

In 2015, Great Panther completed internal test work to optimize the consumption of reagents and the overall milling process to obtain maximum recovery and to comply with the concentration of required grades. The metallurgical samples were collected throughout active areas of the VMC and GSilver’s San Ignacio operation and were considered representative of the mineralization present at both operations. There are no deleterious elements or processing factors that significantly affect the extraction of silver and gold into the concentrate. The results of the metallurgical test work completed in November and December 2015 are summarized in Table 13.1.

**Table 13.1 Great Panther 2015 Metallurgical Testwork Summary (Brown and Nourpour, 2022)**

Metallurgical Balance 70%-30%										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	
			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
Concentrate	34	3.4	56.96	5,351	1.94	181.93	71.23	71.38	2.32	251
Scavenger	42	4.2	7.73	857	0.32	35.99	11.94	14.12	REC. Au	REC. Ag
Tails	924	92.4	0.5	40	0.46	36.96	16.82	14.5	83.18	85.5
Totals	1000	100	2.72	255			100	100		
Metallurgical Balance 60%-40%										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	
			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
Concentrate	41	4.1	44.66	3,861	1.83	158.3	65.53	71.74	4.57	278
Scavenger	28	2.8	19.43	930	0.54	26.04	19.47	11.8	REC. Au	REC. Ag
Tails	931	93.1	0.45	39	0.42	36.31	14.99	16.46	85.01	83.54
Totals	1000	100	2.79	221			100	100		
Metallurgical Balance 50%-50%										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	
			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
Concentrate	40	4	56.97	4,163	2.28	166.52	69.25	69.91	2.79	214
Scavenger	25	2.5	18.11	1,071	0.45	26.78	13.76	11.24	REC. Au	REC. Ag
Tails	935	93.5	0.6	48	0.56	44.88	16.99	18.84	83.01	81.16
Totals	1000	100	3.29	238			100	100		

<b>Metallurgical Balance 50%-50%</b>										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	
			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
CONC. 1L	107	2.14	141.86	5,827	3.04	124.72	81.09	74.22	3.22	171
Scavenger	115	2.29	3.99	142	0.09	3.26	2.44	1.94	REC. Au	REC. Ag
Tails 1 L	101	2.02	8.75	362	0.18	7.32	4.73	4.36	88.26	80.52
Tails	4677	93.54	0.47	35	0.44	32.74	11.74	19.48		
Totals	5000	100	3.74	168			100	100		
<b>Metallurgical Balance Test Xantato Isopropilico</b>										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	
			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
CONC. 2L	6	0.3	1341.93	37,912	4.03	113.74	74.69	61.59	4.44	146
Scavenger	37	1.85	17.05	703	0.32	13.01	5.85	7.04	REC. Au	REC. Ag
Tails 1 L	28	1.4	11.97	721	0.17	10.09	3.11	5.47	86.4	78.14
Tails 2 L	7	0.35	42.19	2,134	0.15	7.47	2.74	4.04		
Tails finales	1922	96.1	0.76	42	0.73	40.36	13.6	21.86		
Totals	2000	100	5.39	185			100	100		
<b>Metallurgical Balance San Ignacio Low Grade</b>										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	
			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
Concentrate	41	4.1	55.41	1,737	2.27	71.22	74.51	60.04	2.84	127
Scavenger	44	4.4	2.88	287	0.13	12.63	4.16	10.65	REC. Au	REC. Ag
Tails	915	91.5	0.71	38	0.65	34.77	21.34	29.31	70.69	78.66
Totals	1000	100	3.05	119			100	100		
<b>Metallurgical Balance Test Xantato Amilico</b>										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	
			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
Concentrate	29	2.9	89.44	2,881	2.59	83.55	72.33	67.38	3.05	126
Scavenger	25	2.5	15.7	445	0.39	11.13	10.95	8.97	REC. Au	REC. Ag
Tails	946	94.6	0.63	31	0.6	29.33	16.73	23.65	76.35	83.27
Totals	1000	100	3.59	124			100	100		
<b>Metallurgical Balance Test San Ignacio 100% 75% a -200</b>										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	
			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
Concentrate	40	4	57.16	1,903	2.29	76.12	68.53	60.46	3.1	132
Scavenger	34	3.4	13.92	429	0.47	14.59	14.18	11.59	REC. Au	REC. Ag
Tails	926	92.6	0.62	38	0.58	35.19	17.29	27.95	72.05	82.71
Totals	1000	100	3.34	126			100	100		
<b>Metallurgical Balance Test San Ignacio 100% 82 %-200</b>										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	
			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
Concentrate	41	4.1	72.01	2,301	2.95	94.34	80.04	73.76	3.21	135
Scavenger	49	4.9	4.77	165	0.23	8.09	6.34	6.32	REC. Au	REC. Ag
Tails	910	91	0.55	28	0.5	25.48	13.62	19.92	80.08	86.38
Totals	1000	100	3.69	128			100	100		
<b>Metallurgical Balance Test San Ignacio 70%</b>										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	
			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
Concentrate	60	6	45.39	1,495	2.72	89.7	76.37	71.27	2.9	124
Scavenger	52	5.2	7.67	200	0.4	10.4	11.18	8.26	REC. Au	REC. Ag
Tails	888	88.8	0.5	29	0.44	25.75	12.45	20.46	79.54	87.55
Totals	1000	100	3.57	126			100	100		
<b>Metallurgical Balance Test San Ignacio 75%</b>										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	

			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
Concentrate	30	3	102.75	3,017	3.08	90.51	78.03	68.96	3.67	141
Scavenger	31	3.1	14.25	345	0.44	10.7	11.18	8.15	REC. Au	REC. Ag
Tails	939	93.9	0.45	32	0.43	30.05	10.79	22.89	77.11	89.21
Totals	1000	100	3.95	131			100	100		
<b>Metallurgical Balance Test San Ignacio 75%</b>										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	
			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
Concentrate	63	6.3	34.09	1,004	2.15	63.25	78.37	65.91	3	130
Scavenger	51	5.1	2.99	155	0.15	7.91	5.56	8.24	REC. Au	REC. Ag
Tails	886	88.6	0.5	28	0.44	24.81	16.07	25.85	74.15	83.93
Totals	1000	100	2.74	96			100	100		
<b>Metallurgical Balance Test Santa Margarita</b>										
Description	Weight (g)	% Weight	Grade		Contained		Recoveries		Head Grade	
			Au (g/t)	Ag (g/t)	Au	Ag	Au	Ag	Au	Ag
Conc. Prim.	50	5	68.03	2,171	3.4	108.55	78.99	71.71	3.8	145
Conc. Scav.	28	2.8	12.58	443	0.35	12.4	8.18	8.19	REC. Au	REC. Ag
Tails	922	92.2	0.6	33	0.55	30.43	12.83	20.1	87.17	79.9
Totals	1000	100	4.31	151			100	100		

### 13.2 GSilver Mineral Processing and Metallurgical Recoveries

GSilver commenced production at the VMC in November 2022 using Cut and Fill mining of high-grade epithermal veins, with initial focus on the Los Pozos mine area. The mineralized material produced from the VMC has been processed at two GSilver subsidiary owned processing plants: the Cata processing plant located immediately adjacent to the Company’s administrative offices within the VMC Property, and the El Cubo plant, which is also referred to as the CMC processing plant, located at GSilver’s El Cubo Mines Complex approximately 20 km from the Property, by road.

Mineralized material from the VMC operation was blended with mineralized material from GSilver’s San Ignacio operation prior to processing at the Cata plant, and with mineralized material from GSilver’s El Cubo operation prior to processing at the El Cubo (CMC) plant. The total tonnage values for each operation were determined using haul truck tonnage weights compared against a control file. The silver and gold grades were estimated using monthly mine grade control data as the primary reference, with grades refined based on monthly plant production grades. Recoveries are based on total plant production from all operations. Metal production values are pro-rated for each operation using the tonnage and grade data.

From November 2022 to December 2023, a total of 118,952 dry metric tonnes (DMT) of material extracted from the VMC were processed at Cata and El Cubo plants: 116,064 DMT were processed at the Cata plant, and 2,888 DMT were processed at the El Cubo plant. The VMC mineralized material produced a total of 320,818 silver ounces and 3,952.9 gold ounces at Cata, and 5,786 silver ounces and 95.3 gold ounces at El Cubo. Average head grades and recoveries in 2023 averaged 105 g/t Ag with an 81.7% recovery for silver and 1.22 g/t Au with an 86.5% recovery for gold at the Cata plant (Table 13.3).

Additional information on the mineral processing methods utilized for material produced from the VMC is summarized below in Section 17.

**Table 13.2 Summary of VMC Production (November 2022 to December 2023)**

Year	Month	VMC to El Cubo			VMC to Cata			TOTALS		
		Tonnes <sup>1</sup>	Oz Au <sup>2</sup>	Oz Ag <sup>2</sup>	Tonnes <sup>1</sup>	Oz Au <sup>2</sup>	Oz Ag <sup>2</sup>	Tonnes <sup>1</sup>	Oz Au <sup>2</sup>	Oz Ag <sup>2</sup>
2022	November	2,286	75.7	4,343	0	0	0	2,286	75.7	4,343
	December	602	19.6	1,444	1,399	74.0	3,265	2,001	93.6	4,709
2023	January	0	0	0	6,046	190.5	21,439	6,046	190.5	21,439
	February	0	0	0	6,702	241.0	22,564	6,702	241.0	22,564
	March	0	0	0	9,908	351.6	24,771	9,908	351.6	24,771
	April	0	0	0	9,543	313.7	28,464	9,543	313.7	28,464
	May	0	0	0	9,350	383.6	30,415	9,350	383.6	30,415
	June	0	0	0	9,586	313.9	23,953	9,586	313.9	23,953
	July	0	0	0	10,944	342.4	34,047	10,944	342.4	34,047
	August	0	0	0	10,731	356.6	29,793	10,731	356.6	29,793
	September	0	0	0	12,483	367.9	28,732	12,483	367.9	28,732
	October	0	0	0	8,992	238.2	18,687	8,992	238.2	18,687
	November	0	0	0	10,217	369.6	26,169	10,217	369.6	26,169
	December	0	0	0	10,163	410.0	28,519	10,163	410.0	28,519
<b>Totals</b>		<b>2,888</b>	<b>95.3</b>	<b>5,786</b>	<b>116,064</b>	<b>3,952.9</b>	<b>320,818</b>	<b>118,952</b>	<b>4,048.2</b>	<b>326,604</b>

Notes:

1. Tonnage values for the VMC were determined using haul truck tonnage weights compared against a control file.
2. Metal production values are pro-rated for the VMC using tonnages with plant grade and recovery data. Silver and gold grades were estimated using monthly grade control data as the primary reference, with grades refined based on monthly plant production grades. Recoveries were based on total plant production from all operations.

**Table 13.3 Cata Processing Plant 2023 Head Grades and Recoveries**

Year	Month	Head Grade (Ag g/t)	Head Grade (Au g/t)	Ag Recovery (%)	Au Recovery (%)
2023	January	134	1.10	82.3	81.6
	February	125	1.32	82.2	80.7
	March	94	1.37	81.1	80.5
	April	114	1.21	81.2	85.1
	May	113	1.39	88.7	91.8
	June	94	1.21	82.9	83.8
	July	116	1.15	84.2	84.7
	August	103	1.20	83.8	86.6
	September	113	1.08	81.2	85.1
	October	81	0.98	80.7	84.6
	November	92	1.24	86.4	90.7
	December	99	1.36	87.9	92.5
Averages		105	1.22	81.7	86.5

## 14 Mineral Resource Estimates

GSilver has yet to conduct Mineral Resource modelling or estimations and there are no known current Mineral Resources outlined at the VMC Property. Historical Mineral Resource estimates are summarized in Section 6.3.

## 15 Mineral Reserve Estimates

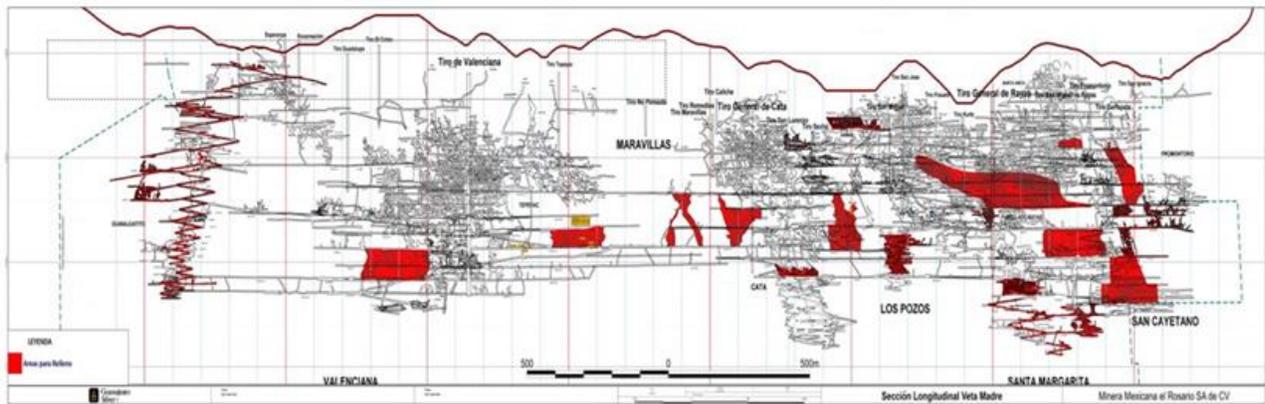
No Mineral Reserve estimates have been defined at the VMC Property.

The Author cautions that the Company decided to commence production at the VMC in 2022. The Company did not base this production decision on any feasibility study of Mineral Reserves demonstrating economic and technical viability of the mines. As a result, there may be increased uncertainty and risks of achieving any level of recovery of minerals from the mines at the VMC or the costs of such recovery. As the Property does not have established Mineral Reserves, the Company faces higher risks that anticipated rates of production and production costs will not be achieved, each of which risks could have a material adverse impact on the Company's ability to continue to generate anticipated revenues and cash flows to fund operations from the VMC Property and ultimately the profitability of the operation.

## 16 Mining Methods

Production was halted and the VMC was placed on care and maintenance by Great Panther in November 2021 due to a lack of tailings capacity; however, after acquiring the Property, GSilver engineering staff determined that the existing tailings facility had sufficient capacity to restart operations, in conjunction with the implementation of a hydraulic fill system utilizing select voids and open stopes in the historical workings to store tailings. It is estimated that 618,800 cubic metres of hydraulic tailing storage capacity has been identified underground, enough to store 990,100 tons of tailing over a 44 month production period. Details of the estimated underground locations, and the estimated capacity, are shown in the longitudinal section (Figure 16.1) and summary table (Table 16.1) below.

**Figure 16.1 Underground Areas Approved for VMC Tailings Hydraulic Backfill (effective date October 31, 2023)**



**Table 16.1 VMC Tailings Hydraulic Backfill Approved Areas (effective date October 31, 2023)**

Zone	Capacity (m <sup>3</sup> )	Capacity (t)	Useful Life (months)	Useful Life (years)
Guanajuatito	110,470.00	176,752.00	7.86	0.65
Cata	65,800.00	105,280.00	4.68	0.39
Pozos	213,315.51	341,304.81	15.17	1.26
Santa Margarita	94,123.00	150,596.80	6.69	0.56
Taller Antiguo	8,682.00	13,891.20	0.62	0.05
Level 275	8,922.00	14,275.20	0.63	0.05
Valenciana	96,182.82	153,892.52	6.84	0.57
Maravillas	12,200.00	19,520.00	0.87	0.07
Level 55	9,096.00	14,553.60	0.65	0.05
<b>Total<sup>1</sup></b>	<b>618,791.33</b>	<b>990,066.13</b>	<b>44.00</b>	<b>3.67</b>

Notes:

1. Totals may not sum due to rounding.

Based on the newly identified tailings capacity, production was restarted at the VMC in November 2022.

The VMC consists of previously independent, now interconnected, mines that include Rayas-Promontorio, Los Pozos, Cata, Valenciana, and Guanajuatito mines. The VMC is an underground mining operation, and the production process for mining insitu material consists of conventional non-captive Cut and Fill, and Resue mining methods. The Cut and Fill method allows for some degree of resuing to minimize the amount of waste rock and hydraulic backfill required to fill the stope.

### **16.1 Mining Methods and Equipment**

Cut and Fill mining is the preferred method used at the VMC for extracting insitu material. The mining sequence for insitu material at the VMC begins with the development of a crosscut off the access ramp into the mineralized zone. A drift, in mineralization, is then driven to the planned limit of the predefined mining block. Exploration definition drilling is completed to define the ultimate boundary limit of the block. This is the first, and bottom lift. Drifting, in mineralization, is excavated using jack-leg drills or 16ft jumbo drills, in opposite directions from the crosscut. Depending on the width of the vein, the drift will be 2.4 to 1.0 m wide, to minimize dilution. Drift ground support, including rock bolts and mesh, may be required. The back of the drift, in mineralization, is sampled to provide additional assay confirmation prior to mining the lift above. This first lift is then backfilled with waste rock utilizing a scoop tram, once all mineralization at this stope level has been excavated. Following this, the second new lift will be excavated above this first lift, from the crosscut, which has been back slashed, starting a new mining lift cycle.

Narrow mineralized zones measuring less than one meter in width are mined by the Resue method. Initially the mineralized zone is drilled, blasting and extracting, at the face, then the drift width is increased by blasting sufficient hanging-wall waste to partially fill the stope and allow the movement of men and equipment.

In addition, GSilver extracts mineralized waste and broken rock, left underground by previous owners of the VMC. The costs of extracting this rock is considerably lower than insitu mineralized material, due to the reduction of drilling and blasting expenses, among other costs. The VMC has more than 100 historical draw points in the Rayas, Promontorio, Cata, and Valenciana mines. The mining process begins by taking a representative muck sample from one of the '100 historical' draw points by the GSilver mine geologists and sent to the Cata laboratory for analysis. Within 36-hours, the assay results are available to GSilver and the Company decides whether to proceed with the extraction of material from this historical draw point. This decision is based on the analytical results of the sample, and the cut-off grade. If the Company decides to proceed, a total of 30 buckets are collected from the same historical draw point using a scoop tram.

Mineralized material extracted from the upper portions (above mine level 190) of the Pozos, Cata, and Rayas mines is hauled by 9-ton trucks using the main ramp to surface storage at the portal of the San Vicente Mine. In addition, the mineralized material is transported to surface using the 1,000 tpd capacity Cata shaft. Approximately 50% of mineralized material mined at the VMC is transported using the Cata shaft; which includes mineralized material extracted below mine level 190 in the Pozos, Cata, and Rayas mines, and all mineralized material extracted from the Valenciana Mine. All mineralized material extracted from mine levels 210 to 345 are transported via mineralized material passes connected to mine main extraction 345 Level.

Electricity is supplied to the mine through the Mexican national power grid. The Cata shaft is the main connection between surface and underground workings providing ventilation, and water services. Water recirculation and pumping occurs at the Cata shaft. The water used for hydraulic backfill is recirculated to the plant. At surface, the Company has two air compressors, including an Ingersoll Rand compressor operating at 1,200 cubic feet per minute and 120 psi. The compressors provide compressed air to an underground air receiver. In addition, there are over 5 shafts and openings at the surface of the VMC, which provide sufficient natural air ventilation for the main ventilation arteries of the mine. For the secondary ventilation arteries, 50HP and 75HP secondary fans are used to supply fresh air from the main artery. The Rayas shaft transports personnel and provides water pumping, air supply and ventilation. The shaft is larger than 10.5 m in diameter and functions as exhaust ventilation for the central and southern workings of the VMC.

A hydraulic back fill pipeline is located in the Cata shaft. One 6 inch diameter line transport hydraulic tailings pulp (35% solids) the processing plant to the underground stopes. A second 6 inch diameter line pumps ground and waste water up the shaft to the plant.

Mine and stope development is completed using either jack-leg drills, or a 16 foot boom Jumbo. Scoop trams, 10 ton and 18 ton trucks are used for mineralized material handling and haulage. The Company has established a central workshop on surface near the VMC to perform major maintenance on mining equipment. Minor maintenance is conducted in the GSilver maintenance shop located at the San Vicente Portal. A summary of the VMC equipment fleet is proved in Table 16.2. The current fleet should be sufficient to support a mining rate of up to 500 tonnes per day.

The VMC mine workforce operates on 8-hour shifts, three shifts per day, Monday to Saturday, with the majority of the workers from nearby areas.

Additional details regarding the mining method and mining equipment used at each of the mines are provided in the following sub-sections.

**Table 16.2 VMC Equipment Fleet Summary**

Type	Brand	Model	Capacity	ID Number
Scoop tram	Joy	4LD	2.5 yd <sup>3</sup>	VMC-ST 212
Scoop tram	Joy	LT-270	1.5 yd <sup>3</sup>	VMC-ST-213
Scoop tram	Joy	LT-271	1.5 yd <sup>3</sup>	VMC-ST-214
Scoop tram	Atlas Copco Wagner	Wagner	3.5 ton	VMC-ST-352
Scoop tram	Sandvik	LH307	3.5 yd <sup>3</sup>	VMC-ST-406
Haul truck	Komatsu	HX07-1	4 m <sup>3</sup>	VMC-CAM-01
Haul truck	Komatsu	HX07-1	4 m <sup>3</sup>	VMC-CAM-02
Haul truck	Prototype	Navistar	8 m <sup>3</sup>	VMC-TOR-09
Haul truck	Dina	1991	20 ton	VMC-CAM-14
Haul truck	Sterling	2007	20 ton	VMC-CAM-15
Locomotive	N/A	N/A	175 HP	VMC-AUX-LOC-01
Backhoe	Caterpillar	416E	1 person	VMC-AUX-RET-01
Telehandler	Caterpillar	TL 642C	N/A	VMC-AUX-TELH-02
Bulldozer	Caterpillar		N/A	VMC-AUX-BULL-03
Tractor	John Deere	6410	8 persons	VMC-AUX-TRA-05
Forklift	Caterpillar	P5000 G-LP	1TD	VMC-AUX-MON-01
Polaris	Ranger	1000	4 persons	VMC-AUX-POL-04

### 16.1.1 Guanajuatito Mine

The Guanajuatito Mine is located at the northern limit of the VMC footprint and is currently not operational. It is connected on mine level 390 to the Valenciana mine and has an access ramp from surface down to the 390 level, which is used mainly for ventilation purposes. GSilver is currently assessing the timing and strategy for extraction of mineralized material from the Guanajuatito Mine and is working toward accessing the Guanajuatito zone, where high-grade mineralized material has been identified.

### 16.1.2 Valenciana Mine

Approximately 15% of total daily production from the VMC comes from the Valenciana Mine. Most of the mineralized material extracted from above Valenciana mine level 345 is broken mineralized material remaining from previous operators. The Company has located over 20 historical draw points in the upper area of the Valenciana Mine. The broken mineralized material at Valenciana is extracted from the existing draw points by a 1.5 cubic yard underground scoop tram. The material is loaded into a nine-tonne haulage truck and transported from the upper levels to mine level 390, which connects to the Cata shaft mineralized material storage bin.

In situ mineralized material at Valenciana Mine is extracted using the Cut and Fill mining method as described above.

### **16.1.3 Cata Mine**

The Cata Mine is located at the centre of underground mining operations at the VMC.

In the first half of 2023, GSilver rehabilitated the existing Cata shaft and hoisting system. The 7-ton capacity Cata hoisting system measures 3.5 m in diameter and 400 m deep. GSilver established the Cata shaft as the primary connection between surface and underground. This led to the re-establishment of the water circulation pumping system and the preparation of the underground area for hydraulic fill infrastructure. The Cata shaft rehabilitation improved overall operational efficiency at the VMC and reduced extraction costs in certain areas of the VMC.

The existing locomotive system was re-established from the southern mines to the Cata shaft. The locomotive's 18" gage track and a 240HP diesel DEUTZ 914 engine system has a 20 tonne haulage capacity. The mineralized material is locomotive hauled on the 345 Level. The locomotive system reduced the consumables, equipment, and personnel haulage costs of material transported from the Rayas and Pozos mines.

The extraction of mineralized material in the upper levels of Cata Mine on the footwall and hanging wall of the Veta Madre vein is completed using the Mechanized Cut and Fill mining method. The dip of the vein ranges from 45 to 55°. The transportation of the mineralized material is completed by haul trucks to the 190 Level.

The intermediate levels of the Cata Mine (210L to 345L) are mined using the Cut and Fill mining method for insitu material. Broken mineralized material in this area is extracted using the procedure described in Section 16.1. All mineralized material is hauled to the internal mineralized material pass that connects to the Cata shaft loading pocket. The mineralized material is then hoisted to surface. The mineralized material is dumped into the headframe bin and then is hauled on surface using a surface front end loader to the crusher feeder, which is located 50 m from the shaft collar.

The mineralized material in the lower levels at Cata Mine below mine level 345 are uneconomic. GSilver is using the open stopes and workings in this area for tailings storage.

### **16.1.4 Los Pozos Zone**

At the Los Pozos southeast zone, GSilver is currently mining historic pillars and remnant mineralization above 310 Level. Mineralization in this area is related to both the Veta Madre and Santa Margarita hanging wall and transverse vein structures. At the upper areas of the Los Pozos Mine, the insitu and broken mineralized material is extracted using the mining methods described in Section 16.1. Transportation to surface is via haul trucks down to the mine level 190. From 190L to 320L, the mineralized material is hauled internally to the Cata shaft mineralized material pass and loading pocket system at 345 Level.

### **16.1.5 Santa Margarita Zone**

The Santa Margarita vein is a parallel vein, which is interpreted by GSilver as a potential loop of the hanging wall of the mother vein, which has been mined out by previous owners from 390L to 500L. The insitu and broken mineralized material in the intermediate level of the Santa Margarita vein is mined using the mining methods described in Section 16.1 and is transported to the Cata shaft loading pocket system for hoisting to surface.

### **16.1.6 Rayas-Promontorio**

The Rayas Mine is located at the southern extension of the limit of the VMC. The Promontorio area is situated between the Rayas shaft and the limit of the Property. GSilver is currently mining historic pillars and remnant mineralization at Rayas-Promontorio using the mining methods described in Section 16.1. The mineralized material is hauled internally to the mineralized material passes that connect to the 345 Level locomotive haulage system. The 345 Level locomotive haulage system connects the southern limit of the Property (the Rayas and Promontorio mines) to the Cata shaft.

## **16.2 Mine Production**

Production was halted and the VMC was placed on care and maintenance by Great Panther in November 2021 due to a lack of tailings capacity; however, after acquiring the Property, GSilver engineering staff determined that the existing tailings facility had sufficient capacity to restart operations, in conjunction with the implementation of a hydraulic fill system utilizing select voids and open stopes in the historical workings to store tailings, which is expected to provide a minimum of 44 months of interim tailings capacity while the Company pursues a permit for dry stacking. Minor surplus capacity identified at the existing Jolula facility allowed the Company to restart operations three months earlier while the hydraulic fill system was installed. Company engineering staff have assessed and approved a total of approximately 618,8000 cubic metres of underground void space for use in the tailings fill operation, corresponding to approximately 990,100 t or 44 months of capacity. Assessment of additional areas is ongoing. Based on the newly identified tailings capacity, production was restarted at the VMC in November 2022, with processing initially completed at El Cubo during recommissioning of the Cata plant. VMC processing was fully transitioned to the Cata plant by January 2023.

From November 2022 to December 2023, a total of 118,952 dry metric tonnes (DMT) of material extracted from the VMC were processed at the Cata and El Cubo plants: 116,064 DMT were processed at the Cata plant, and 2,888 DMT were processed at the El Cubo plant. The VMC mineralized material processed resulted in a total of 320,818 silver ounces and 3,952.9 gold ounces produced at Cata, and 5,786 silver ounces and 95.3 gold ounces produced at El Cubo. Average head grades and recoveries in 2023

averaged 105 g/t Ag @ 81.7% recovery for silver and 1.22 g/t Au @ 86.5% recovery for gold at the Cata plant.

Tonnage amounts for the VMC were determined using haul truck tonnage weights compared against a control file. Metal production values are pro-rated for the VMC operation using tonnages with plant grade and recovery data. Silver and gold grades were estimated using monthly grade control data as the primary reference, with grades refined based on monthly plant production grades. Recoveries were based on total plant production from all operations.

A summary of production at the VMC since November 2022 is presented in Table 16.3. The existing VMC underground workings and areas mined in 2023 are shown in longitudinal view in Figure 16.2. GSilver production is based on assessment of mineralized material via existing and ongoing underground channel sampling and drilling. Data from channel sampling and drilling ahead of mining provide the impetus for a production decision in any given area.

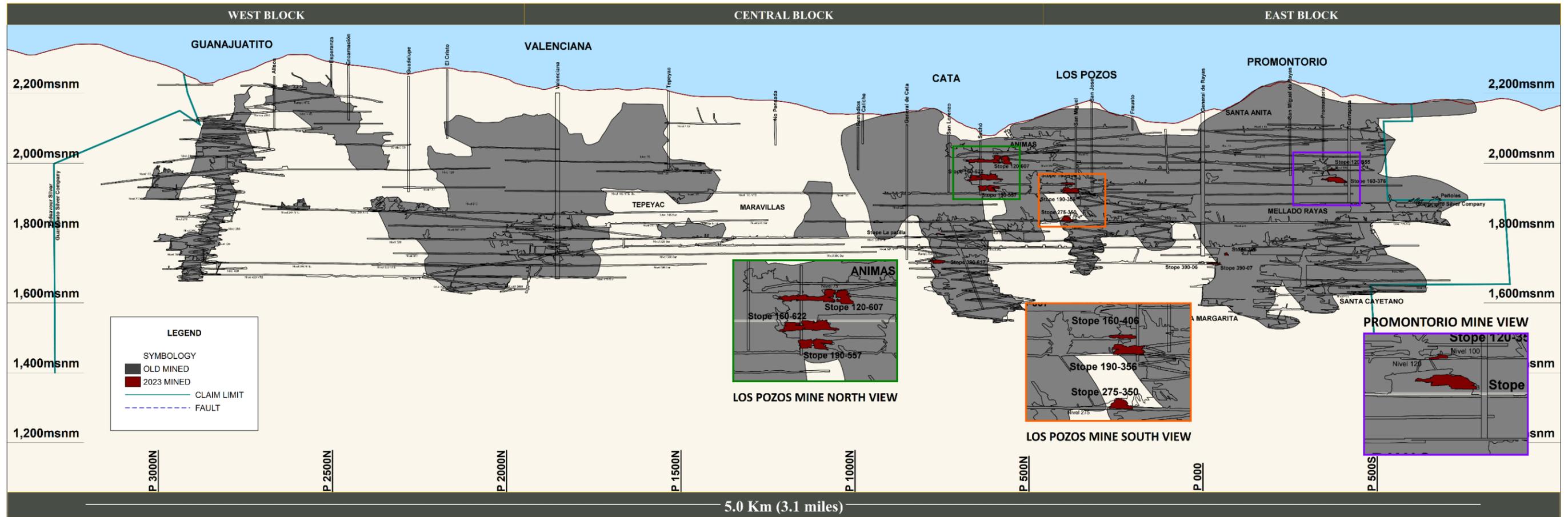
**Table 16.3 Summary of VMC Production (November 2022 to December 2023)**

Year	Month	VMC to El Cubo			VMC to Cata			TOTALS		
		Tonnes <sup>1</sup>	Oz Au <sup>2</sup>	Oz Ag <sup>2</sup>	Tonnes <sup>1</sup>	Oz Au <sup>2</sup>	Oz Ag <sup>2</sup>	Tonnes <sup>1</sup>	Oz Au <sup>2</sup>	Oz Ag <sup>2</sup>
2022	November	2,286	75.7	4,343	0	0	0	2,286	75.7	4,343
	December	602	19.6	1,444	1,399	74.0	3,265	2,001	93.6	4,709
2023	January	0	0	0	6,046	190.5	21,439	6,046	190.5	21,439
	February	0	0	0	6,702	241.0	22,564	6,702	241.0	22,564
	March	0	0	0	9,908	351.6	24,771	9,908	351.6	24,771
	April	0	0	0	9,543	313.7	28,464	9,543	313.7	28,464
	May	0	0	0	9,350	383.6	30,415	9,350	383.6	30,415
	June	0	0	0	9,586	313.9	23,953	9,586	313.9	23,953
	July	0	0	0	10,944	342.4	34,047	10,944	342.4	34,047
	August	0	0	0	10,731	356.6	29,793	10,731	356.6	29,793
	September	0	0	0	12,483	367.9	28,732	12,483	367.9	28,732
	October	0	0	0	8,992	238.2	18,687	8,992	238.2	18,687
	November	0	0	0	10,217	369.6	26,169	10,217	369.6	26,169
	December	0	0	0	10,163	410.0	28,519	10,163	410.0	28,519
<b>Totals</b>		<b>2,888</b>	<b>95.3</b>	<b>5,786</b>	<b>116,064</b>	<b>3,952.9</b>	<b>320,818</b>	<b>118,952</b>	<b>4,048.2</b>	<b>326,604</b>

Notes:

1. Tonnage values for the VMC were determined using haul truck tonnage weights compared against a control file.
2. Metal production values are pro-rated for the VMC using tonnages with plant grade and recovery data. Silver and gold grades were estimated using monthly grade control data as the primary reference, with grades refined based on monthly plant production grades. Recoveries were based on total plant production from all operations.

Figure 16.2 Longitudinal View of the VMC Showing Underground Workings (figured provided by GSilver in February 2024)



## 17 Recovery Methods

The mineralized material produced from the VMC has been processed at two GSilver subsidiary owned processing plants: the Cata processing plant located immediately adjacent to the Company's administrative offices within the VMC Property, and the El Cubo plant, which is also referred to as the CMC processing plant, located at GSilver's El Cubo Mines Complex approximately 20 km from the Property, by road.

Prior to the full re-opening of the Cata processing plant in December 2022, mineralized material extracted from VMC was sent to the El Cubo plant for processing. The Cata processing plant is considered the primary processing plant for mineralized material extracted from the VMC. The processing methods utilized at the Cata and El Cubo processing plants are summarized in the following sub-sections.

### 17.1 Cata Processing Summary

The Cata processing plant utilizes five stages, including: crushing, milling, flotation, thickening, and filtering, as well as concentrate dewatering circuits to generate sulphide concentrates containing silver and gold, which are sent off site for smelting and refining. The full capacity of the plant is 36,000 tonnes per month (1,200 tonnes per day). The processing flow sheet of the Cata plant is illustrated in Figure 17.1.

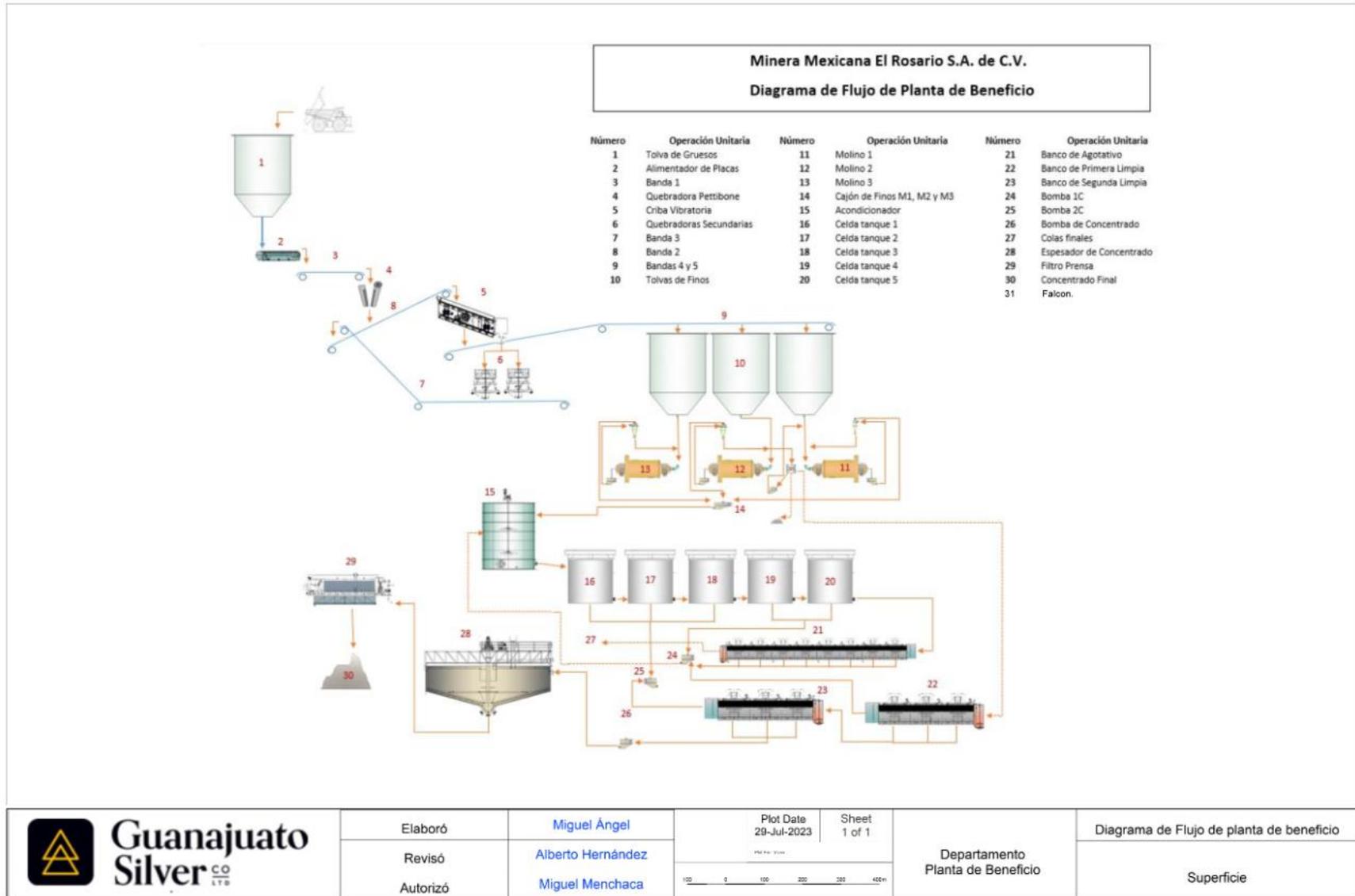
Electricity for the processing plant comes from the Guanajuato State electrical grid, water from underground storage facilities at the lowest levels in the VMC operation, and process material from multiple international and Mexican mine equipment and supplies suppliers. On average, the Cata processing plant uses approximately 834,000 kilowatt-hours of electricity per month. Water supply for the processing plant is 75% recirculated and 25% artisanal water. As of the effective date of this Report, there is sufficient water for the Cata processing plant, as well as other requirements.

#### 17.1.1 Crushing and Grinding Circuits

The mineralized material delivered from the underground mines and outside sources is stored in the surface storage area, which has a capacity of 3,000 tonnes. This storage area is located at the top of the plant using gravity as part of the flow.

Mineralized material from the 1,000-tonne capacity hopper is transferred along a 48-inch-wide belt to a 24 inch by 36-inch PettiBone jaw crusher where the 12-inch feed is reduced to less than 3-inch diameter. The feed from the jaw crusher is transported along a 36-inch-wide belt and feeds a 6 ft wide by 20 ft long double bed vibrating Ludowici screen.

Figure 17.1 Cata Processing Plant Flow Schematic



Elaboró Miguel Ángel  
 Revisó Alberto Hernández  
 Autorizó Miguel Menchaca

Plot Date 29-Jul-2023  
 Sheet 1 of 1

Departamento  
 Planta de Beneficio

Diagrama de Flujo de planta de beneficio

Superficie

The Ludowici screen separates the feed by size with the upper bed separating material greater than 1 inch and the lower bed separating material less than ¼ inch. This ¼ inch "fine" material is then fed along a 24 inch belt to a hopper prior to grinding (currently feed on average of 88% less than ¼ to the mill). The oversize from the Ludowici screen is fed to a Metso (300HP) secondary cone crusher for further size reduction, which is then fed back to the Ludowici screen along a 24 inch belt to ensure the material is the appropriate size for the mill. The crushing circuit has a backup Simmons 5½ short head cone crusher that is utilized as needed.

### ***17.1.2 Milling and Falcon Gravity Concentrator***

Immediately after the crushing, the mineralized material is stored in a series of "fines hoppers", with capacity of 1,800 tonnes. This material passes through chutes at the bottom of the hopper to feed three 24-inch-wide belts where the material is weighed (continuous weighing scale) and fed into three twin Denver 7 ft by 14 ft ball-mills which are coated inside by a chromium-molybdenum alloy shield on the surface of the cylinder and natural rubber on the "heads". The grinding material used in these mills are 2.5 inch diameter high chrome alloy cast balls. The ¼ inch crushed material enters the ball mill where the movement, impacts, and attrition from the balls promotes the wet pulverization of the mineral, which is discharged by the mill as a "thick mineral pulp" where approximately 70% of the material by weight is solid and the remaining 30% is water. This thick mineral pulp is then diluted by adding water and feeds into 4 by 3-inch Krebs pumps where the material then feeds a series of Gmax G10 hydro-cyclone classifiers (two cyclones per mill), which carry out the classification of fines before entering the flotation circuit (75% of the material passing minus 200 meshes with automatic sampling). The average content of this material is 28% solid by weight and 72% water. The oversize material is returned to the mill for re-grinding in the closed circuit, which has a "circulating load" of 350% thus ensuring the best release of the particles of interest. At this stage of grinding, reagents are added as the mineralized material enters the mills. This includes the addition of two specific reagents (Cyteg promoter MaxGold 900 and Cyteg promoter 7310) which promote the recovery of gold and silver.

The flow of the ball mills reports to a hydro cyclone and then to the Falcon concentrator model SB2500B. This equipment has: a two-stage ductile iron rotor with ceramic lined stratification zone and a replaceable rubber lined stainless steel concentrate basket retention zone, a heavy duty structural steel frame with oversized shaft, sealed bearing cartridge, stainless steel rotating union, and steel guarded synchronous belt drive, mounted on vibration isolators, a rubber lined tailings launder, removable flat lid, Ni-Hard impeller, feed pipe, rinse manifold and inspection hatches on lid, detached water manifold including dual basket filter, magnetic flow meter, flow control valve, pressure transmitter, and pressure gauges, vibration monitor, and 24vdc solenoid valves all plumbed and wired to stand mounted terminal box, as well as a 45 kW (60 HP) IE3 (NEMA premium) WEG TEFC electric motor and vibration isolators.

The coarse material separated by the hydro cyclone is fed to the Falcon gravity concentrator. The Falcon concentrator rinses the material in batches for 10 or 15 minutes, depending on the source of the mineralized material, and produces a concentrate with high contents of gold and silver, which is marketed as a separate type of concentrate. The tailings produced by this concentrator go back into the processing plant. The fine mineralized material separated by the hydro cyclone goes directly to the flotation circuit.

### **17.1.3 Flotation Circuits**

After grinding and conditioning by the initial reagents, the material enters a 20 cubic meter capacity tank where additional reagents are added (promoter, collector and surfactant, Promoter 7310, Aerophine 3416 both Cyteg and cc-1065 SF surfactant brand PQM) and agitation incorporates these reagents into the mineral pulp. This material then enters the primary rougher flotation cells, consisting of two stirred cell tanks that are 5 cubic metres each (made by Outotec) where a primary concentrate is obtained (paddled and spills over the edge of both cells where it is collected). Two stages of clean-up are required for this material prior to feeding the next stage of thickening which occurs in the primary and secondary cleaner flotation cells.

The secondary cleaner flotation cells consist of two banks of Wemco-type cells (6 cubic metres each and three cells per bank). Cell discharge continues as the material cascades toward the secondary rougher flotation cells, comprising 3 Outotec No. 5 cells which are each 5 cubic metres capacity. The spills from these cells are fed to a medium grained material tank that partially return to flotation after a regrind stage.

The discharge from the Outotec No.5 cells feed a bank of 8 Wemco type scavenger cells, with a total capacity of 20 cubic metres. At this stage, the spills of the bank of 8 cells join the spills from the previous 3 Outotec No. 5 cells, and they are sent to a 4 ft by 5 ft regrind mill. This passes to a hydro-cyclone classifier, with the spill then entering the 20-meter conditioning tank along with the grinding product. The discharge enters the closed circuit to the 4 ft by 5 ft mill.

The material then enters an automatic filter press with 30 plates. The final concentrate has an average water content of 8% by weight.

The rest of the reagents necessary for the flotation process are introduced at the beginning of the bank of scavenger cells, and the current "modular" system of cells allows GSilver to adjust flows as necessary for efficiency, depending on the head grades feeding the mill. The discharge of the scavenger bank, containing on average 28% solid, is sent through a series of pumps to the tailings dam (after automatic sampling), which is situated 984 meters away. The pumps used for this discharge range from 2 to 6 inches by 4-inch Warman 100 hp pumps.

#### **17.1.4 Thickening and Filtration**

The product from the secondary cleaner flotation cells is sent via a 15HP Gallagher pump through an automatic sampler to a 230 cubic meter settling tank. Thickening results in material containing 50% to 70% solids by weight, which is then sent to the filtering stage. During this stage water is recovered, recirculated, and utilized at the beginning of the milling stage.

For the filtration stage, a Clever filter press with 30 plates is utilized (63 by 63 cm each plate). Material from the thickener is fed into the filter pack through an Abel piston pump where the maximum possible amount of water is removed by means of compressive pressure. The resulting filtered concentrate contains on average 12% humidity. The concentrate is then sampled, weighed, and stored in the concentrate yard prior to sale and shipment.

#### **17.2 El Cubo Processing Summary**

Prior to the full re-opening of the Cata processing plant, mineralized material extracted from VMC was sent to the El Cubo plant for processing from October to December 2022. The El Cubo, or CMC, plant consists of a two-stage crushing circuit, ball mill grinding, reagent storage, flotation, gravity treatment, and concentrate filtration for product shipment. A recent upgrade to the El Cubo plant is the addition of a gravity circuit for the recovery of native silver, gold, and electrum from the hydrocyclone underflow stream. The El Cubo plant processes approximately 1,500 tonnes per day (Jorgensen et al., 2023). The processing flow sheet of the El Cubo plant is illustrated in Figure 17.2. Additional information regarding the processing and recovery operations of the El Cubo processing plant is provided in Jorgensen et al. (2023).

Electricity for the processing plant comes from the Guanajuato State electrical grid. On average, the El Cubo processing plant uses approximately 1,420,000 kilowatt-hours per month of electricity. Water supply for the El Cubo processing plant is sourced from existing underground workings and recirculated water from the tailings basins. As of the effective date of this Report, there is sufficient water for the El Cubo processing plant and other requirements.



### 17.3 Plant Throughput Summary

Mineralized material from the VMC operation was blended with mineralized material from GSilver’s San Ignacio operation prior to processing at the Cata plant, and with mineralized material from GSilver’s El Cubo operation prior to processing at the El Cubo plant. The total tonnage values for each operation were determined using haul truck tonnage weights compared against a control file. The silver and gold grades were estimated using monthly mine grade control data as the primary reference, with grades refined based on monthly plant production grades. Recoveries were based on total plant production from all operations. Metal production values are pro-rated for each operation using the tonnage and grade data.

The Cata processing plant is located within the Property; therefore, the majority of the mineralized material was processed at Cata, with any overflow of mineralized material hauled to the El Cubo plant. From November 2022 to December 2023, a total of 118,952 dry metric tonnes (DMT) of material extracted from the VMC were processed at Cata and El Cubo plants: 116,064 DMT were processed at the Cata plant, and 2,888 DMT were processed at the El Cubo plant. The VMC mineralized material produced a total of 320,818 silver ounces and 3,952.9 gold ounces at Cata, and 5,786 silver ounces and 95.3 gold ounces at El Cubo. Average head grades and recoveries over this period averaged 105 g/t Ag with an 81.7% recovery for silver and 1.22 g/t Au with an 86.5% recovery for gold at the Cata plant, and 86.62 g/t Ag with an 83.8% recovery for silver and 1.92 g/t Au with an 85.5% recovery for gold at the El Cubo plant. Table 17.1 summarizes the 2023 throughput for the VMC mineralized material.

**Table 17.1 VMC Mineralized Material Throughput Summary**

	2023 (actual)
Tonnes mined	114,664
Tonnes milled	114,664
Ag grade (g/t)	105
Au grade (g/t)	1.22
Ag recovery (%)	81.7%
Au recovery (%)	86.5%
Silver ounces produced	317,553
Gold ounces produced	3,879

## 18 Project Infrastructure

The VMC is situated within and to the north and northeast of the city of Guanajuato in Guanajuato State, Mexico, approximately 380 km to the northwest of Mexico City. The Property is accessible via Guanajuato city streets in the northern and northeast portion of the city. Panorámica street leads to the Guanajuato operation. An overview of the main project infrastructure is shown in Figure 18.1.

The surface and underground infrastructure at the VMC includes the following:

- Extensive underground workings from surface to approximately 600 m below surface, including multiple shafts and adits from surface, as well as internal shafts, ramps, and drives within and linking to adjacent mines.
- Two main shafts: the Rayas, for personnel and materials, and the Cata shaft, for rock hoisting.
- Conventional and mechanized underground mining equipment.
- Access roads to the mines.
- Cata processing plant: nominal 1,200 tpd flotation concentrator with surface bins, crushing facilities, grinding mills, flotation cells, and concentrate dewatering circuit.
- Tailings storage facility.
- Historical tailings storage facility.
- Cata analytical laboratory.
- Mine, geology, processing, and administrative offices in several locations. Primary location is adjacent to the Cata processing plant and laboratory.
- Connection to the national electrical power grid and substation facilities.
- Water and compressed air reticulation systems.
- Utility water is available for the mine and plant.
- Communications systems (internet based).

Energy, water, and waste disposal services are well established at the VMC. As listed above, the infrastructure at the VMC includes ancillary infrastructure for senior management, technical services, assay laboratory, warehousing, finance and other administrative services, and are located adjacent to the Cata processing plant. There are other smaller mine buildings located at San Vicente.

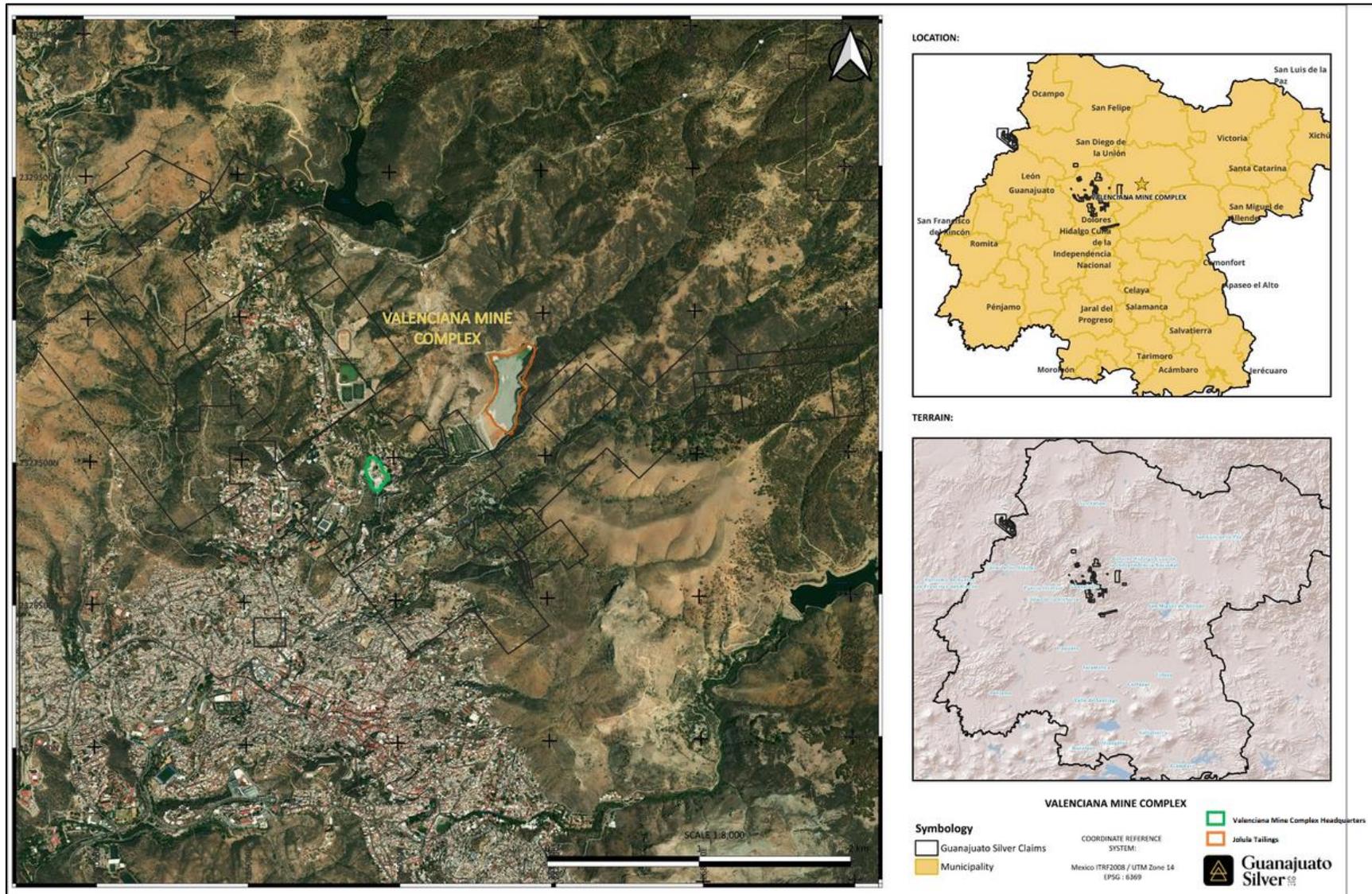
Electrical Power for the VMC is provided by the Federal Electricity Commission (CFE Comision Federal de Electricidad) which is owned by the Mexican Government. There is one power transmission line (13,200 V) that provides the electrical power supply for the plant and mine. At the VMC, there are eight electrical substations of different capacities, including two compact substations, one for the Cata shaft hoist and Cata compressors. There are seven transformers with different capacities, two of 1500 KVA, one of 600 KVA, three of 500 KVA and one of 225 KVA.

Water for the operations comes from storage in historic underground workings.

The Cata processing plant has a nominal capacity of approximately 1,200 tonnes per day. Tailings from the Cata plant are stored at the VMC Jolula tailings storage facility (Tailing Dam No. 9), where the Company holds surface rights. GSilver's engineering staff calculates that the existing tailings dam has a remaining capacity of approximately 47,000 cubic metres, which is equivalent to over 4 months of capacity at full usage. The Company is currently evaluating plans to prepare a new submission to SEMARNAT to extend the Jolula facility, and potentially implement dry stacking to expand tailings capacity. Meanwhile, operations will continue by backfilling tailings underground at the VMC using a hydraulic fill system, making use of select voids and open stopes that have been created over the past 450 years of underground mining. These areas are expected to provide a minimum interim tailings capacity until 2028 while the Company pursues a permit for dry stack tailings. Additional information regarding processing of mineralized material is included in Section 17 of this Report.

Additional information on local resources and infrastructure available in the VMC area is included in Section 5 of this Report.

Figure 18.1 Plan View of the VMC Project Infrastructure (provided by GSilver in February 2024)



## 19 Market Studies and Contracts

### 19.1 Market Studies

As of the Effective Date of this Report, the VMC is an active mining operation with an established market for concentrates produced using mineralized material from the Property. Mineralized material from the VMC is processed at the Cata processing plant and blended with mineralized material from the Company's San Ignacio mine.

The principal commodity produced at Cata is iron sulphide (pyrite) concentrates containing silver and gold. Penalty elements are negligible. These products are freely traded at prices that are widely known, so prospects for sale of any production are virtually assured. There are smelters in Mexico and around the world that accept these types of concentrates, as well as metals traders who purchase such concentrates. The Company regularly contracts for the sale of its concentrates derived from mineralized material produced at VMC and its other projects. GSilver's current concentrate offtake (sales) agreement is summarized in Section 19.2.2.

### 19.2 Contracts

#### 19.2.1 Mine Development and Operations Contracts

The Company has contracts in place for certain mine development and operational activities at the VMC, including underground mining, surface haulage to processing plants, and surface security. Several of the mining contracts include labour rates for the use of Company-owned equipment (scoop tram, trucks, jumbos, etc.). In the Author's opinion, the terms, rates, and charges associated with the contracts are within industry norms. Mining, haulage, and general and administrative ("G&A") costs are summarized below in Section 21.

As of the Effective Date, underground mining development is undertaken utilizing both in-house and contracted labour. Approximately 90% of the workforce are Company employees and 10% are contractors. The contractors include 6 haul truck drivers, working in 3 shifts. Only 1 scoop tram and 2 underground haul trucks are under contract at VMC. Rental equipment is acquired when necessary.

Security personnel are contracted on an individual basis based on a daily rate per person.

#### 19.2.2 Concentrate Offtake Agreement

Silver and gold concentrates produced at the Company's Cata and El Cubo processing plants using mineralized material derived from the VMC, the San Ignacio mine, the CMC, and the Company's El Pinguico project is currently sold to MK Metal Trading Mexico, S.A. de C.V. ("MK Metal"), a Mexican subsidiary of Ocean Partners UK Limited ("Ocean Partners"), pursuant to an existing offtake agreement for a term that extends to

December 31, 2028. Under the terms of the agreement, the Company agreed to sell 100% of the silver and gold concentrates produced subject to minimum monthly deliveries of 250 wet metric tonnes and a total minimum delivery requirement of 12,500 wet metric tonnes. Delivery of the concentrate is to the buyer's warehouse in Manzanillo, Colima, Mexico.

The terms of the offtake agreement are as follows:

- Payable Silver is based on the lower of:
  - 97.5% of the silver content, and
  - a deduction of 100 grams silver per dry tonne concentrate.
- Payable Gold is based on the lower of:
  - 97.5% of the gold content, and
  - a deduction of 2.0 grams gold per dry tonne concentrate.
- Treatment charge of USD\$350 per dry tonne DAP. Effective June 1, 2025, a treatment charge of USD\$310 per dry tonne FOB Manzanillo, Mexico.
- Silver refining charge of USD\$1.00 per ounce of Payable Silver in each dry tonne of concentrate.
- Gold refining charge of USD\$8.00 per ounce of Payable Gold in each dry tonne of concentrate.
- Penalties apply for deleterious elements that exceed the buyer's specifications.

Freight charges are based on 30,000 pesos per truck carrying 33 wet tonnes of concentrate carrying 12% moisture.

In the Author's opinion, the terms, rates, and charges associated with the Ocean Partners offtake agreement are within industry norms.

## 20 Environmental Studies, Permitting and Social or Community Impact

The sections below summarize the environmental, permitting, and social or community impacts related to the VMC.

### 20.1 Environmental Studies & Permits

An overview of the environmental regulatory framework in Mexico is presented in Section 4.4.1 of this Report. All necessary permits are in place for mining at VMC. The main permits applicable to the VMC operation are presented in Table 20.1.

**Table 20.1 VMC Permit Summary**

Level	Authority	Environmental Permit	Status	Register Number	Authorization Number	Authorization Date
FEDERAL	SEMARINAT	ENVIRONMENTAL IMPACT ASSESSMENT OPERATION OF TAILING DAM No.9	VALID	11/MP-0216/06/12	GTO.131.1.1/0642/2012.	2012-11-23
		CHANGE OF LAND USE FOR EXPANSION OF TAILING DAM No. 9	VALID	11/DS-0005/05/14	GTO.131.1.2/0658/2015.	2015-09-02
		ENVIRONMENTAL IMPACT ASSESSMENT SECOND EXTENSION OF TAILING DAM No. 9	VALID	11/MP-0099/06/18	GTO.131.1.1/0859/2018	2018-11-09
		MODIFICATION OF ENVIRONMENTAL IMPACT ASSESSMENT SECOND EXTENSION OF TAILING DAM No. 9	VALID	11/MP-0099/06/18	GTO.131.1/123/2022	2022-02-24
		CHANGE OF LAND USE FOR SECOND EXTENSION OF TAILING DAM No.9 "COMPLEMENTARY POLYGON"	VALID	11/DS-0004/06/19	GTO.131.2/156/2021	2021-04-23
		UPDATING OF THE REGISTRY AS A GENERATOR OF HAZARDOUS WASTE "MILL PLANT"	VALID	11/HR-0098/03/17	NRA: MMRSP1101511	2017-03-22
		REGISTRY AS A GENERATOR OF HAZARDOUS WASTE "SAN VICENTE MINE"	VALID	11/EV-0096/03/17	NRA: MMR1101500027	2017-03-22
		UPDATING OF THE REGISTRY AS A GENERATOR OF HAZARDOUS WASTE	VALID	09/HP-0840/08/17	NRA: MMRSP1101511 RPMRMM: 11-PMM-I-0042-2010	2017-09-07
		UNIQUE ENVIRONMENTAL LICENSE (LAU, BY ITS ACRONYM IN SPANISH)	VALID	11/LU-0010/02/06	NRA: MMRSP1101511	2006-08-30
		MODIFICATION OF THE UNIQUE ENVIRONMENTAL LICENSE (LAU, BY ITS ACRONYM IN SPANISH)	VALID	11/LU-0173/08/18	NRA: MMRSP1101511 LAU: before LAU-11-47/01501/2006, after LAU: LAU-11/0047-2006 (GTO.131.1/501/2019)	Concession: 30/08/2006 1st. Update: 18/02/2013 2nd. Update: 29/07/2019
		MINING WASTE MANAGEMENT PLAN	VALID	09/GC-0398/05/18	NRA: MMRSP1101511 RPMRMM: 11-PMM-1-0190-2019	2019-02-01
	UPDATE OF ANNUAL OPERATING CERTIFICATE (COA, BY ITS ACRONYM IN SPANISH) MILL PLANT 2022	VALID	11/COW0376/06/23	BITÁCORA: 11/COW0376/06/23.	2023-06-26	
	UPDATE OF ANNUAL OPERATING CERTIFICATE 2021 SAN VICENTE MINE	VALID	11/COW0378/06/23	BITÁCORA: 11/COW0378/06/23	2023-06-26	
CONAGUA	WATER CONCESSION TITLE (EXTENSION)	VALID	GUA-L-2531-19-11-15	08GUA107052/12FMDL11	2016-10-24	
	FEDERAL ZONE OCCUPANCY CONCESSION TITLE "ARROYO LOS MEXICANOS".	VALID	B00.910.01.1/001982(DIC)	Título No. 834164 (GUA-L-2797-20-12-17)	2020-12-09	
	FEDERAL ZONE OCCUPANCY TITLE "ARROYO SANTA ROSA".	VALID	B00.910.01.1/001981(DIC)	Título No. 834171 (GUA-L-2800-20-12-17)	2020-12-09	

Level	Authority	Environmental Permit	Status	Register Number	Authorization Number	Authorization Date
		HYDROLOGIC STUDY	VALID		B00.7/02-0190	2023-09-21
STATE	SMOAT	REGISTER AS A GENERATOR OF SPECIAL MANAGEMENT WASTE	VALID	GUA-GRME-221/2011	GUA-GRME-221/2011	2022-08-01
		SPECIAL WASTE AND URBAN SOLIDS MANAGEMENT PLAN	VALID	PM-000200/2017	IEE-DIAMIR-3115/2017	2017-09-20
MUNICIPAL	DGEIMA	LAND USE LICENSE: (HACIENDA DE BUSTOS)	VALID	OF. No. DAU/V/25782/2022	EXP. DPUPA/2352/2013	2022-10-11
		LAND USE LICENSE: TAILINGS DAM	VALID	OF. No. DAU/V/25855/2022	EXP. DPUPA/3155/2016	2022-10-11
		LAND USE LICENSE RAYAS MINE.	VALID	DPUPA/3401/2016	DAU/V/36023/2023	2023-10-23
		LAND USE LICENSE TIRO KURTS (SAN VICENTE)	VALID	DPUPA/2899/2017	DAU/V/36028/2023	2023-10-23
		LAND USE LICENSE TIRO CATA	VALID	DPUPA/3783/2016	DAU/V/36092/2023	2023-10-23
		LAND USE LICENSE ENCARNACIÓN I	VALID	DPUPA/3782/2016	DAU/V/36096/2023	2023-10-23
		LAND USE LICENSE ENCARNACIÓN II	VALID	DPUPA/3781/2016	DAU/V/36126/2023	2023-10-23
		LAND USE LICENSE TIRO GENERAL VALENCIANA "MUSEO".	VALID	DAU/V/0357/2020	DAU/V/33333/2023	2023-07-26

### 20.1.1 Exploration

To commence exploration at a property, a company may be required to complete necessary studies in accordance with SEMARNAT, including an environmental impact evaluation, an environmental impact assessment, a preventive report, or a technical justification study.

An environmental impact assessment (Manifestacion de Impacto Ambiental, "MIA") is a comprehensive report based on extensive studies and surveys that outlines real and potential environmental impacts any work or activity could generate and provides mitigation strategies for such impacts.

A preventative report (Informe Preventivo, "IP") is required if a project operates under the assumptions outlined in the Norma Oficial NOM-120-SEMARNAT-2011, which establishes environmental protection specifications for direct mining exploration activities in agricultural, livestock, or inactive agricultural areas and in areas with dry and temperate climates where vegetation of xerophilous scrub, deciduous forest, coniferous forest, or oak forest. This type of approval is not required for underground exploration drilling.

A technical justification study (Estudio Técnico Justificativo, "ETJ") is required to authorize a change in the use of land when the volume of total or partial removal of vegetation from forest lands intended to be used for non-forestry activities exceeds the parameters specified in the Norma Oficial NOM-120-SEMARNAT-2011.

### 20.1.2 Mining & Mineral Processing

Due to the inherent complexity and diversity of possible environmental impacts at this stage of development, there are several permits and licenses that are required for mining and mineral processing.

Both mining and processing of minerals requires regulatory instruments that regulate the environmental impacts of the project described in the MIA and, where appropriate, the need to convert lands with forest vocation to industrial use based on the ETJ. The VMC started operations prior to implementation of the LGEEPA, meaning that no MIA was required for the mine and processing plant.

Management of mining and processing waste is determined by the Norma Oficial NOM-157-SEMARNAT-2009, which establishes mechanisms and procedures for implementing mine waste management plans. The Norma Oficial NOM-141-SEMARNAT-2011 establishes mechanisms and procedures to characterize tailings, as well as the specifications and criteria for the characterization and preparation of tailings ponds sites, construction, operation, and post-operation of tailings dams. The VMC has several permits and licenses in place at the federal and state level related to generation and management of waste on site.

An Environmental License (Licencia Ambiental Única, “LAU”) is required to regulate atmospheric emissions produced by the operation. SEMARNAT establishes mechanisms and procedures to obtain a LAU, and monitors updates on polluting emissions through an Annual Operation Certificate (Cédula de Operación Anual, “COA”). The VMC LAU is valid and COA submissions are up to date.

For use of water other than for mining, a Concession Certificate must be processed by CONAGUA. The discharge of wastewater must be done in compliance with the Norma Oficial NOM-001-SEMARNAT-1996 if it is discharged into national waters and/or when it is discharged to the municipal sewer system.

### **20.1.3 Mine Tailings Disposal**

Tailings from the Cata plant are stored at the VMC Jolula tailings storage facility (Tailing Dam No. 9), where the Company holds surface rights. In 2013, approval was granted for construction of lifts 13 to 17 of the Jolula facility. Lift 17 is currently in use, and GSilver’s engineering staff calculates that the facility has a remaining capacity of approximately 47,000 cubic metres, which is equivalent to over 4 months of capacity at full usage. An application to expand by adding lifts 18 and 19 was prepared by the previous operator, Great Panther, in 2021. However, the expansion was ultimately rejected due to a lack of approval from CONAGUA.

The Company is currently evaluating plans to prepare a new submission to SEMARNAT to extend the Jolula facility, and potentially implement dry stacking to expand tailings capacity. Meanwhile, operations will continue by backfilling tailings underground at the VMC using a hydraulic fill system, making use of select voids and open stopes that have been created over the past 450 years of underground mining. These areas are expected to provide a minimum of 5 years of interim tailings capacity while the Company pursues a permit for dry stacking. Minor surplus capacity identified at the existing Jolula facility allowed the Company to restart operations three months earlier while the hydraulic fill system was installed. Company engineering staff have assessed

and approved a total of approximately 6188,800 cubic metres of underground void space for use in the tailings fill operation, corresponding to approximately 990,100 t or 3.7 years of capacity (Table 20.2). Assessment of additional areas is ongoing.

**Table 20.2 VMC Tailings Hydraulic Backfill Approved Areas (effective date October 31, 2023)**

Zone	Capacity (m <sup>3</sup> )	Capacity (t)	Useful Life (months)	Useful Life (years)
Guanajuatito	110,470.00	176,752.00	7.86	0.65
Cata	65,800.00	105,280.00	4.68	0.39
Pozos	213,315.51	341,304.81	15.17	1.26
Santa Margarita	94,123.00	150,596.80	6.69	0.56
Taller Antiguo	8,682.00	13,891.20	0.62	0.05
Level 275	8,922.00	14,275.20	0.63	0.05
Valenciana	96,182.82	153,892.52	6.84	0.57
Maravillas	12,200.00	19,520.00	0.87	0.07
Level 55	9,096.00	14,553.60	0.65	0.05
<b>Total<sup>1</sup></b>	<b>618,791.33</b>	<b>990,066.13</b>	<b>44.00</b>	<b>3.67</b>

Notes:

1. Totals may not sum due to rounding.

In support of the interim tailings management plan, the Company reviewed Article 5 of LGEEPA, which establishes that hydraulic fill does not require an evaluation on environmental impact. In addition, the VMC waste management plan (Plan de Manejo de Residuos) was updated in accordance with the Norma Oficial NOM-157-SEMARNAT-2009 and submitted to the regulators in August 2023.

## 20.2 Mine Closure

A site restoration and abandonment program (Programa de Restauración y Abandono del Sitio) is required for the commencement of operations and prepared in compliance with the provisions of the MIA, ETJ, and/or in the Norma Oficial NOM-141-SEMARNAT-2003, as applicable.

The VMC site restoration and abandonment plan includes securing mine openings and remaining buildings, proper disposal of buildings, equipment and petroleum products, reclamation and recontouring of transportation corridors, ponds, waste rock and stockpiles, treatment and removal of any contaminated soils, hazardous waste storage reclamation, removal of drainage works, and post-closure monitoring. It also includes provisions for the closure of the Jolula tailings storage facility.

The estimated present value of future reclamation, rehabilitation, and monitoring of the VMC comprises the costs associated with mining infrastructure and waste stockpile at the VMC Guanajuato operation. As of December 31, 2022, the cost for closure of the VMC is estimated to be USD\$9,920,559.

### 20.3 Social and Community Impact

GSilver employs a community relations team at the VMC to implement stakeholder engagement and social investment programs, focused on three main areas: socio-economic development, public health and safety, and natural and cultural heritage.

The Company works in cooperation with local communities and government on the creation and promotion of jobs, including promoting and participating in a job fair with over 2,000 people in attendance and 13 companies offering various employment opportunities.

Company employees and local residents participate in a monthly public cleaning campaign sponsored by the Company, to incentivize the culture of clean neighbourhoods. The Company also participates in programs aimed at creating awareness and promoting prevention of addiction and domestic violence, working in conjunction with the Sistema para el Desarrollo Integral de la Familia (“DIF”). GSilver was awarded the Planet Youth Badge by the Ministry of Health, Guanajuato, for work on these issues.

The Company owns surface rights on the Property that provide sufficient access to the mining operations, waste storage areas, and other facilities. In addition, the Company owns surface rights at several UNESCO heritage sites, which are maintained and enhanced by the Company to illustrate the importance of the past and present mining industry in the region.

## 21 Capital and Operating Costs

### 21.1 Capital Cost Estimate

Capital costs for 2023 are presented in Table 21.1.

**Table 21.1 Sustaining Capital Cost Summary**

Description	Actual 2023 <sup>1</sup> (USD\$)
Accretion of ARO	\$606,260
Development & Exploration	\$828,758
Property, Plant & Equipment	\$1,129,778
Lease Payments	\$950,250

Notes:

1. Costs estimated for Q4 2023. Year End Financial Statements are pending.

Major capital expenditures in 2023 included costs involved in re-initiating the mining and processing operation of the VMC from care and maintenance status. Other major expenditures included the rehabilitation of the Cata shaft, hoisting system, and associated infrastructure, the refurbishment of the locomotive system at mine level 345, and the addition of the underground hydraulic fill. The Cata shaft rehabilitation included works on the mineral reception grizzly, the skip loading station, the headframe mineral receiving bin, and headframe truck loading chute. The Cata shaft rehabilitation was completed in May 2023 and improved overall operational efficiency, increased production, and reduced hauling costs.

GSilver purchased a Falcon concentrator and incorporated it into the Cata process plant circuit in the first quarter of 2023. The Falcon concentrator arrived in May 2023, is currently in operation, and is expected to improve recoveries by approximately 3%.

Development and exploration costs, and equipment lease payments represented other significant expenses incurred by GSilver in 2023. A total of 1,151.5 m of exploration drilling were completed targeting the El Borrego vein which runs parallel to the Veta Madre vein.

### 21.2 Operating Costs

Operating costs for 2023 are summarized in Table 21.2.

The mining cost at the VMC is the weighted average of the cost of mining insitu mineralized material or broken mineralized material. The broken mineralized material is extracted using a more cost-effective mining method in comparison to the Cut and Fill method utilised to extract the insitu mineralized material, as summarized in Section 16.1. Table 21.3 summarizes the production costs for the two types of mineralized material mined at the VMC.

**Table 21.2 Operating Costs Summary**

Cost Item	Actual 2023 <sup>1</sup> (USD\$/t)
Mining	\$62.55
Processing	\$17.47
Indirect	\$16.91
Mexico G&A	\$5.82
Canada G&A	\$3.81
<b>Total</b>	<b>\$106.56</b>

Notes:

1. Costs estimated for Q4 2023. Year End Financial Statements are pending.

**Table 21.3 Cost Summary for Mining Insitu Mineralized Material and Broken Mineralized Material**

Cost Item	Insitu Mineralized Material Costs 2023 (USD\$/t)	Broken Mineralized Material Costs 2023 (USD\$/t)	Total (USD\$/t) <sup>1</sup>
Mining	\$75.90	\$49.20	\$62.55
Processing	\$17.47	\$17.47	\$17.47
Indirect	\$16.91	\$16.91	\$16.91
Mexico G&A	\$5.82	\$5.82	\$5.82
Canada G&A	\$3.81	\$3.81	\$3.81
<b>Total</b>	<b>\$119.91</b>	<b>\$93.21</b>	<b>\$106.56</b>

Notes:

1. Costs estimated for Q4 2023. Year End Financial Statements are pending.

GSilver has implemented actions to reduce mining costs at the VMC, including the use of the Cata shaft hoisting system and the locomotive system for transportation of mineralized material internally and to surface. GSilver is working to access the northern areas of the mine, such as Guanajuatito, where higher-grade material has been identified by exploration results.

## 22 Economic Analysis

### 22.1 Introduction

The VMC Property has been in operation since the Company took control in 2022. The VMC Property consists of both current and former producing mines, as well as a number of exploration targets. The Property has continued to improve its operational parameters and production output under the Company's direction.

There are no current estimates of Mineral Reserves on the Property. In addition, GSilver has yet to conduct Mineral Resource modelling or estimations and there are no known current Mineral Resources outlined at the VMC Property. The Company made decisions to enter production at the Property without having completed final feasibility studies. Accordingly, the Company did not base its production decisions on any feasibility studies of Mineral Reserves demonstrating economic and technical viability of the Property. As a result, there is increased uncertainty and risks of achieving any level of recovery of minerals from the Property, with positive cash flow. As the Property does not have established Mineral Reserves, the Company faces higher risks that anticipated rates of production and production costs, such as those provided in this technical report, will not be achieved. These risks could have a material adverse impact on the Company's ability to continue to generate anticipated revenues and cash flows to fund operations from and ultimately achieve or maintain profitable operations at the Property.

The Author has determined that it is not permitted to provide an economic analysis of the VMC Property, as there are no current estimates of Mineral Reserves on the Property.

Information regarding taxation and historical production has been provided in this Section 22.

### 22.2 Taxes

Taxation in Canada and Mexico is often complex and varies from one jurisdiction to the other. There are numerous calculations and allowances, all of which are outside the scope of this report. However, taxes are all levied in the normal course of business. The Company is subject to the taxing jurisdictions of Guanajuato, Mexico, and Canada. The Company states that all taxes assessed have been paid or will be paid when due, aside from any protests or other tax relief available under law.

## 22.3 Production

Table 22.1 provides a summary of the production for the 12 month period ended December 31, 2023.

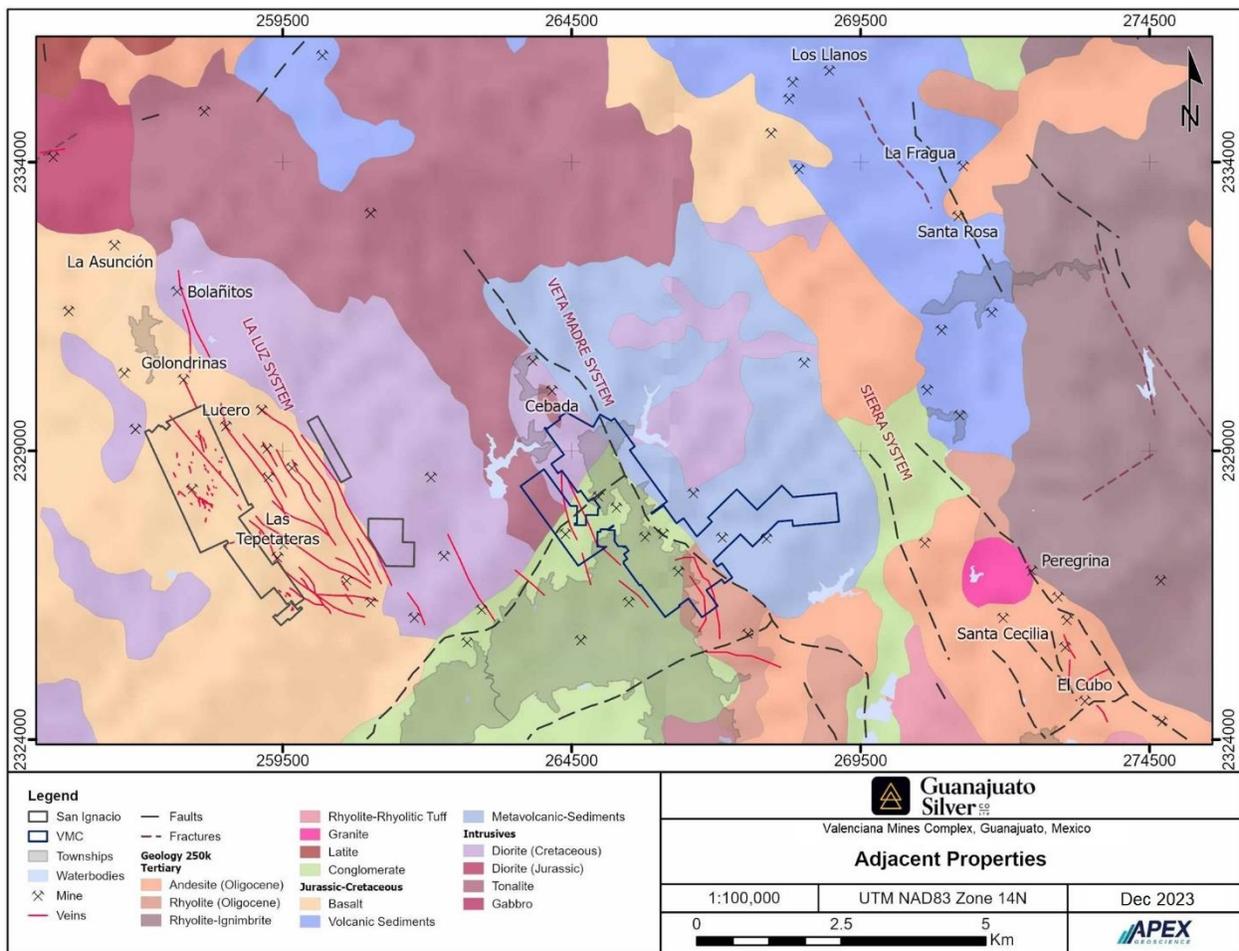
**Table 22.1 VMC Production Summary (2023)**

<b>Production Summary</b>	<b>2023 (actual)</b>
Tonnes mined	114,664
Tonnes milled	114,664
Silver ounces produced	317,553
Gold ounces produced	3,879

## 23 Adjacent Properties

This section discusses mineral properties that occur outside of the VMC. The QPs have not visited any of these projects and are unable to verify information pertaining to mineralization on the competitor properties, and therefore, the information in the following section is not necessarily indicative of the mineralization on the Property that is the subject of this Report. The information provided in this section is simply intended to describe examples of the type and tenor of mineralization that exists in the region and is being explored for at VMC. Relevant past and present producers located adjacent to the VMC are presented in Figure 23.1.

**Figure 23.1 Relevant Properties Adjacent to the VMC**



Endeavour Silver Corp. (“Endeavour”) operates the Bolañitos Project in Guanajuato State. It is located approximately 8 km northwest of the city of Guanajuato. The Bolañitos Project consists of four operating mines: the Bolañitos, Lucero, San Miguel, and Asuncion underground silver-gold mines, as well as several past producing mines and a 1,600 tonne per day concentrator (Mah et al., 2022). The mines are hosted within the La Luz vein system.

The Bolañitos Mine is situated in the eastern part of the Guanajuato Mining District within the La Luz camp, on the northeast side of the Sierra de Guanajuato. The geology of the area is dominated by the Esperanza and La Luz formations, with mineralization occurring primarily within the La Luz Formation. Mineralization at the Bolañitos Mine dissipates at the contact with the Esperanza Formation. Silver and gold mineralization occurs as open-space fillings in fracture zones, or as impregnations in locally porous wall rock, and is directly related to faulting. Mineralization in the veins at Bolañitos comprise classic banded and brecciated epithermal type. Typically, silver mineralization occurs in dark sulphide rich bands within the veins. Major metallic minerals include pyrite, argentite, electrum, ruby silver, galena, and sphalerite. Alteration types observed include phyllic (sericite) and silicification, which forms haloes around the mineralizing structures (Mah et al., 2022).

The Mineral Resource estimate and mineral reserve estimate for Bolañitos, as of May 31, 2022, are presented in Tables 23.1 and 23.2, respectively. The cut-off grades are based on a 151 g/t AgEq for Lucero, a 149 g/t AgEq for La Luz and San Miguel production areas, and 157 g/t AgEq for Belen. The price assumptions are \$21.80/oz for Ag and \$1,735/oz for Au for resource cut-off calculations. The metallurgical recoveries are 85.7% Ag and 90.1% Au. Minimum mining widths of 0.8 m were applied to the mineral reserve calculations. The Mineral Resources for Bolañitos are estimated exclusive of, and in addition to, mineral reserves (Endeavour Silver Corp., 2023).

**Table 23.1 Mineral Resource Estimate for the Bolañitos Project (after Endeavour Silver Corp., 2023)**

Classification	AqEq Cut-off	Mass	Average Value			Material Content		
			AgEq	Silver	Gold	AgEq	Silver	Gold
			g/t	g/t	g/t	koz	koz	koz
Measured	Variable	42.0	322	97	3.0	435	131	4.0
Indicated	Variable	411.5	279	111	2.3	3697	1470	30.0
Measured + Indicated	Variable	453.5	283	110	2.3	4132	1601	34.0
Inferred	Variable	1656.6	331	141	2.5	17608	7494	132.2

**Table 23.2 Mineral Reserve Estimate for the Bolañitos Project (after Endeavour Silver Corp., 2023)**

Classification	AqEq Cut-off	Mass	Average Value			Material Content		
			AgEq	Silver	Gold	AgEq	Silver	Gold
	g/t	kt	g/t	g/t	g/t	koz	koz	koz
Proven	Variable	158	266	57	2.63	1357	290	13.4
Probable	Variable	376	265	73	2.41	3199	878	29.2
Proven + Probable	Variable	534	326	101	2.8	4556	1168	42.6

Endeavour operates the Bolañitos Mine concentrator, which is a 1,600 tpd capacity flotation plant that is currently processing at approximately 1,200 tpd. Part of Endeavour’s mining at the Bolañitos Mine is also development and mining from the Lucero Adit, which consists of numerous veins parallel to the structures at GSilver’s San Ignacio Property (Endeavour Silver Corp., 2020). Production from the Bolañitos operation in 2022 is reported to have been at 422,239 tonnes throughput producing 622,892 ounces of Ag, and 21,813 ounces of Au (Mah, Schwering and Gray, 2022).

In addition to the Bolañitos Mine, Endeavour owns the inactive Cebada mine, located immediately northwest of the Company’s VMC property along the Veta Madre system. Cebada is approximately 4.2 km north of the city of Guanajuato.

## 24 Other Relevant Data and Information

As of the Effective Date of this Report, the Authors are not aware of any other relevant data and/or information, with respect to the VMC.

## 25 Interpretation and Conclusions

The Valenciana Mines Complex (VMC) is situated within the central portion of the Guanajuato Mining District in Guanajuato State, Mexico. The Guanajuato Mining District represents a zone of polymetallic mineralized projects and properties in a belt that runs from south-central Mexico, through Guanajuato, and onwards to north-central Mexico (Carrillo-Chávez et al., 2003). Globally, the Guanajuato Mining District represents one of the largest silver producing districts in Mexico and globally with continuous mining activity occurring for nearly 500 years (Moncada and Bodnar, 2012).

The Guanajuato Mining District is underlain by Mesozoic marine sediments and predominantly mafic submarine lava flows of the Luz and Esperanza Formations, which are weakly metamorphosed and intensely deformed. This basal sequence is cut by a variety of intrusive bodies ranging in composition from pyroxenite to granite with tonalitic and dioritic intrusive being the most volumetrically significant. The three main northwest trending precious metal-bearing vein systems in the district include the Veta Madre, La Luz and Sierra systems.

The primary deposit type of interest at the VMC is low sulphidation epithermal silver-gold mineralization. Mineralization at the VMC occurs in structurally complex multi-generational vein quartz dominated stockwork and breccia zones along the Veta Madre.

### 25.1 Historical Exploration

The Guanajuato Mining District has a lengthy history of mining and exploration dating back to 1548, when silver mineralization was discovered in the La Luz area by Spanish colonists. Since then, greater than 1 billion ounces of silver have been mined in the district (Brown and Nourpour, 2022).

The Sociedad Cooperativa Minera Metalurgica Santa Fe de Guanajuato (“the Cooperative”) operated several mines in the district throughout the latter half of the 20th century into the 2000s, including Guanajuato. The Cooperative conducted limited surface and underground diamond drilling at Guanajuato, with the last drill program completed in 2000. The historical drilling intersected silver-gold mineralization at depth under the existing workings at Guanajuato.

Exploration at the VMC by Great Panther from 2005 to 2021 comprised geological mapping, underground channel sampling and diamond drilling, as well as underground development including geological mapping, sampling, and mining. From 2005 to 2021, Great Panther completed 1,593 drillholes, totalling 208,167.40 m, at the VMC. The drilling intersected significant precious metal mineralization and led to the calculation of several historical MREs at the VMC.

In the opinion of the Author, the sample collection, sample preparation, security and analytical procedures used by Great Panther at the VMC Property from 2005 to 2022 are appropriate for the stage of the project and for the deposit style and type of

mineralization that is being evaluated. The Author notes that although the Cata laboratory is non-independent, and managed by Great Panther, the umpire checks at the independent and certified SGS-Durango laboratory verify the performance of the Cata laboratory and the reproducibility of the silver-gold analyses. To conclude, in the opinion of the Author, the Great Panther data are appropriate for use in this Report.

## 25.2 Production History

Mining of the Veta Madre trend, the principal host structure of the VMC, has occurred since the 16<sup>th</sup> century. Limited information is available regarding production at Guanajuato prior to Great Panther's ownership.

Great Panther commenced production at the VMC operation in 2006. The VMC is an underground operation, and the production process consists of conventional mining incorporating Cut and Fill and Resue methods. Mineralized material from the VMC was treated at the Cata processing plant. The Cata processing plant utilized five stages, including: crushing, milling, flotation, thickening and filtering, as well as concentrate dewatering circuits to generate sulphide concentrates containing silver and gold, which are sent offsite for smelting and refining. Blending of the VMC and San Ignacio material began in July 2016 and the processing (milling) of the blended material continued until Guanajuato was placed on care and maintenance in November 2021. The San Ignacio operation was placed on care and maintenance effective early January 2022 while awaiting permits to extend the tailings facility or find other alternatives to maximize the value of the VMC.

A summary of Great Panther's production of the VMC from 2006 to 2021 is presented in Table 25.2.

**Table 25.1 Production Summary of the VMC**

Year	Tonnes Mill/Mine VMC	Tonnes Mill/Mine San Ignacio	Tonnes (milled) <sup>(1)</sup>	Ag (oz)	Au (oz)
2006	86,111	-	86,111	105,480	988
2007	203,968	-	203,968	521,225	3,794
2008	155,079	-	155,079	848,083	5,488
2009	138,517	-	138,517	1,019,751	6,748
2010	144,112	-	144,112	1,019,856	6,619
2011	169,213	-	169,213	959,490	7,515
2012	174,022	-	174,022	1,004,331	10,350
2013	220,463	1,082	221,545	1,079,980	15,063
2014	213,658	54,154	267,812	1,239,009	15,906
2015	180,691	129,253	309,944	1,708,061	21,126
2016 <sup>(2)</sup>	136,349	183,694	320,043	1,473,229	21,626
2017	131,335	185,475	316,810	1,386,964	21,501
2018	88,364	212,650	301,014	1,096,757	19,073

Year	Tonnes Mill/Mine VMC	Tonnes Mill/Mine San Ignacio	Tonnes (milled) <sup>(1)</sup>	Ag (oz)	Au (oz)
2019	7,610	179,886	187,610	590,781	11,588
2020	33,248	119,560	151,001	520,903	6,779
2021	37,975	111,354	149,329	485,315	6,659
<b>Totals</b>	<b>1,685,834</b>	<b>1,177,108</b>	<b>3,296,130</b>	<b>15,059,215</b>	<b>180,823</b>

Source: Great Panther Annual reports for 2006 to 2021 inclusive

1. 2006-2015 reported figures reflect tonnes milled; 2016-2021 reported figures reflect tonnes mined which has a small discrepancy to tonnes milled.
2. Blending of the VMC and San Ignacio mineralized material began in July 2016, therefore, the 2016-2021 reported figures reflect total production from both operations.

### 25.3 GSilver Exploration

Exploration completed by GSilver at the VMC from September 2022 to the Effective Date of this Report has included underground sampling, diamond drilling, surface and underground development, and mining.

Exploration and drilling results were reported as silver (Ag), gold (Au), or silver equivalent (AgEq\*), with AgEq\* calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a Ag to Au ratio of 80:1. This remains consistent with the ratio that was utilized internally and in public disclosure of exploration results by GSilver and is maintained herein.

From September 2022 to December 2023, GSilver collected a total of 15,993 underground channel samples from 6,613 channels at the VMC. Channel sampling, of variable lengths ranging from 0.3 to 14.8 m and averaging 1.5 m in length, was completed in accessible stopes and development headings. Most of the samples were collected in the Los Pozos mineralized area (n=11,040), with additional samples collected from Santa Margarita (n=1,744), Cata (n=1,348), Rayas (n=1,081), Valenciana (n=631), and SVS (n=149) mineralized areas.

Greater than 100 g/t AgEq\* was returned from 27% of the samples (n=4,381), with assays ranging from 101 g/t AgEq\* up to a maximum value of 42,478 g/t AgEq\*, 7% of the samples (n=1,171) returned greater than 500 g/t AgEq\* ranging from 502 g/t AgEq\* to 42,478 g/t AgEq\*, and 3% of the samples (n=544) returned greater than 1,000 g/t AgEq\*, ranging from 1,002 g/t AgEq\* to 42,478 g/t AgEq\*. Maximum values include 42,478 g/t AgEq\* (416 g/t Ag and 525.78 g/t Au) over a sample length of 0.5 m returned from sample 568682 collected from Santa Margarita on mine level 390, and 16,683 g/t AgEq\* (11,195 g/t Ag and 68.61 g/t Au) over a sample length of 0.8 m returned from sample 1168514 collected from Los Pozos on mine level 275.

\* AgEq values are calculated using metal prices set at US\$1,800/oz Au and US\$22.50/oz Ag, with 87% recovery for both, yielding a Ag to Au ratio of 80:1

The underground channel sampling at the VMC aided in the delineation of un-mined mineralized material and provided confidence in the continuity of mineralization in several underground areas. In addition, underground sampling at El Borrego vein returned anomalous silver and gold mineralization, including 56 g/t Ag and 0.033 g/t Au from the intermediate adit and 84 g/t Ag and 0.488 g/t Au from the southern adit.

GSilver completed 3 diamond drillholes (DDH) totalling 1,151.5 m at the VMC in June to August 2023. The diamond drill program was designed to intersect and define the orientation of the El Borrego vein that runs parallel to the Veta Madre. The El Borrego vein represents a new target for potential gold and silver mineralization at the VMC. Results from the drill program include:

- 5.44 g/t Au over 0.65 m core length in hole UGBO23-001
- 3.43 g/t Au with 1,041 g/t Ag over 0.75 m core length in hole UGBO23-002
- 0.24 g/t Au with 98 g/t Ag over 0.85 m core length in hole UGBO23-003

#### **25.4 Mining, Mineral Processing and Infrastructure**

Production was halted and the VMC was placed on care and maintenance by Great Panther in November 2021 due to a lack of tailings capacity; however, after acquiring the Property, GSilver engineering staff determined that the existing tailings facility had sufficient capacity to restart operations, in conjunction with the implementation of a hydraulic fill system utilizing select voids and open stopes in the historical workings to store tailings. Based on the newly identified tailings capacity, production was restarted at the VMC in November 2022.

The VMC is an underground mining operation, and the production process consists of conventional mining incorporating Cut and Fill and Resue methods for extracting insitu mineralized material, and production of broken mineralized material from historical draw points using a scoop tram.

The mineralized material produced from the VMC has been processed at two GSilver subsidiary owned processing plants: the Cata processing plant located immediately adjacent to the Company's administrative offices within the VMC Property, and the El Cubo plant, which is also referred to as the CMC processing plant, located at GSilver's El Cubo Mines Complex.

From November 2022 to December 2023, a total of 118,952 dry metric tonnes (DMT) of material extracted from the VMC were processed at Cata and El Cubo plants: 116,064 DMT were processed at the Cata plant, and 2,888 DMT were processed at the El Cubo plant. The VMC mineralized material processed resulted in a total of 320,818 silver ounces and 3,952.9 gold ounces at Cata, and 5,786 silver ounces and 95.3 gold ounces at El Cubo. Average head grades and recoveries at the Cata processing plant in 2023

averaged 105 g/t Ag at 81.7% recovery for silver and 1.22 g/t Au at 86.5% recovery for gold at the Cata plant.

Mineralized material from the VMC operation was blended with mineralized material from GSilver's San Ignacio operation prior to processing at the Cata plant, and with mineralized material from GSilver's El Cubo operation prior to processing at the El Cubo plant. The total tonnage values for each operation were determined using haul truck tonnage weights compared against a control file. The silver and gold grades were estimated using monthly mine grade control data as the primary reference, with grades refined based on monthly plant production grades. Recoveries are based on total plant production from all operations. Metal production values are pro-rated for each operation using the tonnage and grade data.

Infrastructure, such as power supply, water supply, and roads, are established and operational.

### **25.5 Environmental and Permitting**

All necessary permits and authorizations are in place for mining at the VMC, as well as operation of the Cata and El Cubo processing plants and associated tailings storage facilities.

In the opinion of the Author, there does not appear to be any apparent significant legal, environmental, or political considerations that would have an adverse effect on the extraction and processing of the VMC mineralized material. Environmental and social issues at the VMC appear to be conducted to adequate standards with cooperation from local communities.

### **25.6 Economic Analysis**

There are no current estimates of Mineral Reserves on the Property. In addition, GSilver has yet to conduct Mineral Resource modelling or estimations and there are no known current Mineral Resources outlined at the VMC Property. The Company made decisions to enter production at the Property without having completed final feasibility studies. Accordingly, the Company did not base its production decisions on any feasibility studies of Mineral Reserves demonstrating economic and technical viability of the Property. As a result, there may be increased uncertainty and risks of achieving any level of recovery of minerals from the Property or the costs of such recovery. As the Property does not have established Mineral Reserves, the Company faces higher risks that anticipated rates of production and production costs, such as those provided in this technical report, will not be achieved. These risks could have a material adverse impact on the Company's ability to continue to generate anticipated revenues and cash flows to fund operations from and ultimately achieve or maintain profitable operations at the Property. As a result, the Author has determined that it is not permitted to provide an economic analysis of the VMC.

## 25.7 Conclusions

Based upon a review of available information, historical exploration and production data, and Mr. Livingstone's recent site inspection, the Authors outline the Valenciana Mines Complex as a property of merit prospective for the discovery of additional silver-gold low sulphidation epithermal deposits. This contention is supported by knowledge of:

- The favourable geological setting of the VMC Property and its central position within the Guanajuato Mining District. Key northwest trending precious metal-bearing vein systems in the district include the Veta Madre, La Luz and Sierra systems.
- Historical surface and drilling by Great Panther that intersected significant precious metal mineralization at the VMC.
- Significant results of silver and gold mineralization returned from recent channel sampling and drilling programs conducted by GSilver.
- VMC historical and recent production, head grade and metal recovery records from the Cata and El Cubo processing plants from 2006 to 2021 and 2022 to 2023.

## 25.8 Risks and Uncertainties

The success of the Property beyond the ongoing 2023-2024 mining is dependent upon the discovery and delineation of Mineral Resources and their conversion to Mineral Reserves. The VMC is subject to the same types of risks and uncertainties as other similar precious and base metal mining projects. GSilver will attempt to reduce risk/uncertainty through effective project management, engaging technical experts, and developing contingency plans. Potential risk factors include changes in metal prices, increases in operating costs, fluctuations in labour costs and availability, availability of investment capital, infrastructure failures, changes in government regulations, community engagement and socio-economic community relations, civil disobedience and protest, permitting and legal challenges, and general environmental concerns. The mining industry in Mexico is also prone to incursions by illegal miners, or "lupios", who gain access to mines or exploration areas to steal mineralized material. These incursions pose a safety, security and financial risk and can potentially compromise underground structures, equipment, and operations.

There is no guarantee that further exploration at the VMC will result in the discovery of additional mineralization or an economic mineral deposit. Nevertheless, in the QPs' opinion there are no significant risks or uncertainties, other than mentioned above, that could reasonably be expected to affect the reliability or confidence in the currently available exploration information with respect to the Property.

## 26 Recommendations

As a property of merit, a 2-phase work program is recommended to increase the confidence level of the precious metal mineralization at the VMC and to advance the Property toward potential Mineral Resource estimation and support ongoing production.

Phase 1 should focus on step out and infill surface drilling, underground exploration drilling, and development at the VMC. The Author recommends a diamond drill program of approximately 2,800 metres intended to a) drill test targets along strike and down dip for additional zones of mineralization, as well as extensions to existing zones of mineralization, with focus on the Valenciana, Los Pozos, Promontorio and Guanajuatito mineralized zones; and b) to define the orientation and test the mineralization potential of the El Borrego vein. The estimated cost of the Phase 1 work program for the VMC Property totals USD\$1,190,000, not including contingency funds or taxes.

Phase 2 exploration is dependent on the results of Phase 1 and should comprise additional drilling and development at the VMC. The Phase 2 drilling should follow up on the results of the Phase 1 exploration program at the Valenciana, Los Pozos, Promontorio, Guanajuatito, and El Borrego mineralized zones. Furthermore, the Author recommends completing a new Mineral Resource estimate and NI 43-101 technical report incorporating GSilver production, drilling and underground sampling. The estimated cost of the Phase 2 work program for the VMC Property totals USD\$1,175,000, not including contingency funds or taxes.

Collectively, the estimated cost of the recommended work programs for the VMC totals USD\$2,940,000, not including contingency funds or taxes (Table 26.1).

**Table 26.1 2024 Budget for Proposed Exploration**

Phase	Item	Amount (USD\$)
Phase 1	All in cost for drilling (2,800 m @ \$125/m)	\$350,000
	All in cost for underground mine development (2,400 m @ \$350/m)	\$840,000
	<b>Sub-total:</b>	<b>\$1,190,000</b>
Phase 2	All in cost for drilling (10,000 m @ \$125/m)	\$1,250,000
	All in cost for underground mine development (1,000 m @ \$350/m)	\$350,000
	Mineral Resource Estimate and Technical Report	\$150,000
	<b>Sub-total:</b>	<b>\$1,750,000</b>
Phase 1 & 2	<b>Total:</b>	<b>\$2,940,000</b>

## **APEX Geoscience Ltd.**

*“Signed and Sealed”*

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Christopher W. Livingstone, B.Sc., P.Geo.  
Vancouver, British Columbia, Canada  
March 7, 2024

*“Signed and Sealed”*

\_\_\_\_\_  
Fallon T. Clarke, B.Sc., P.Geo.  
Victoria, British Columbia, Canada  
March 7, 2024

*“Signed and Sealed”*

\_\_\_\_\_  
Michael B. Dufresne, M.Sc., P.Geol.,  
P.Geo.  
Edmonton, Alberta, Canada  
March 7, 2024

EGBC Permit to Practice #1003016  
APEX Geoscience Ltd.

APEGA Permit to Practice #48439  
APEX Geoscience Ltd.

## **P&E Mining Consultants Inc.**

*“Signed and Sealed”*

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James L. Pearson, P.Eng.  
Brampton, Ontario, Canada  
March 7, 2024

EGBC Permit to Practice #1000275  
P&E Mining Consultants Inc.

PEO Permit to Practice #100078720  
P&E Mining Consultants Inc.

## 27 References

- Barclay, W.A. (2007): Continued Structural Geology at Mina San Vicente, Level 100 NTE; Guanajuato, GTO, Mexico; Independent report for Minera Mexicana el Rosario and for Great Panther Resources, dated January 9, 2007, 7 p.
- Brown, R.F. (2012): NI 43-101 report on the Guanajuato Mine Complex Mineral Resource Estimation for the Guanajuatito, Cata, Los Pozos, and Santa Margarita zones, as of January 31st, 2012. Technical report prepared for Great Panther Mining Corp. dated June 26, 2012, 98 p.
- Brown, R.F. and Sprigg, L. (2013): NI 43-101 Report on the Guanajuato Mine Complex Resource Estimation for the Guanajuatito, Valenciana, Cata, Los Pozos, Santa Margarita, San Cayetano, and Promontorio zones as of July 31st, 2013. Technical report prepared for Great Panther Mining Corp. dated November 26, 2013, 122 p.
- Brown, R.F. (2014): NI 43-101 Technical Report on the Guanajuato Mine Complex claims and Mineral Resource Estimations for the Guanajuato Mine, San Ignacio Mine, and El Horcón Project, as of July 31, 2014. Technical report prepared for Great Panther Mining Corp. dated August 16, 2014, 213 p.
- Brown, R.F. (2015): NI 43-101 Technical Report on the Guanajuato Mine Complex claims and Mineral Resource Estimations for the Guanajuato Mine, San Ignacio Mine, and El Horcón Project, as of July 31, 2014. Technical report prepared for Great Panther Mining Corp. dated February 25, 2015, 207 p.
- Brown, R.F. (2016): NI 43-101 Technical Report on the Guanajuato Mine Complex claims and Mineral Resource Estimations for the Guanajuato Mine, San Ignacio Mine, and El Horcón Project, as of July 31, 2015. Technical report prepared for Great Panther Mining Corp. dated February 25, 2016 and Amended October 27, 2016, 217 p.
- Brown, R.F. (2017): NI 43-101 Technical Report on the Guanajuato Mine Complex claims and Mineral Resource Estimations for the Guanajuato Mine, San Ignacio Mine, and El Horcón and Santa Rosa Projects, as of August 31, 2016. Technical report prepared for Great Panther Mining Corp. dated February 20, 2017, 221 p.
- Brown, R.F. and Nourpour, M. (2020): NI 43-101 Mineral Resource Update Technical Report on the Guanajuato Mine Complex, San Ignacio Mine, Guanajuato State, Mexico. Technical report prepared for Great Panther Mining Corp. dated March 17, 2020, 90 p.
- Brown, R.F. and Nourpour, M. (2020b): NI 43-101 Mineral Resource Update Technical Report on the Guanajuato Mine Complex, Guanajuato Mine, Guanajuato State, Mexico. Technical report prepared for Great Panther Mining Corp. dated March 27, 2020, 101 p.
- Brown, R.F. and Nourpour, M. (2020c): NI 43-101 Mineral Resource Update Technical Report on the Guanajuato Mine Complex, Guanajuato and San Ignacio Operations, Guanajuato State, Mexico, prepared for Great Panther Mining Limited, dated December 22, 2020: 168 p.

Brown, R.F. and Nourpour, M. (2022): NI 43-101 Mineral Resource update technical report on the Guanajuato Mine Complex, Guanajuato and San Ignacio operations, Guanajuato State, Mexico. Technical report prepared for Great Panther Mining Corp. dated February 28, 2022, 177 p.

Canadian Institute of Mining, Metallurgy and Petroleum (2019): CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines, 75 p.

Canadian Institute of Mining, Metallurgy and Petroleum (2014): CIM Definition Standards - for Mineral Resources and Mineral Reserves. CIM Standing Committee on Reserve Definitions, 10 p.

Canadian Institute of Mining, Metallurgy and Petroleum (2000): Exploration Best Practices Guidelines, 3 p.

Carrillo-Chávez, A., Morton-Bermea, O., González-Partida, E., Rivas-Solorzano, H., Oesler, G., García-Meza, V., ... & Cienfuegos, E. (2003): Environmental geochemistry of the Guanajuato mining district, Mexico. Ore Geology Reviews v. 23, no. 3-4, pp. 277-297.

Cooke, D. R. and Hollings, P. (2017). Porphyry Copper, Gold, and Molybdenum Deposits. SEG 2017 conference, September 16-17, 2017.

Endeavour Silver Corp. (2020): Endeavour Silver produces 4,018,735 oz silver and 38,907 oz gold (7.1 million oz silver equivalents) in 2019. Company news release dated January 10, 2020. Available at URL < <https://edrsilver.com/news-media/news/endeavour-silver-produces-4-018-735-oz-silver-and-38-907-oz-gold-7.1-million-oz-silver-equivalents-in-2019/#2020> >

Endeavour Silver Corp. (2022): Annual information form of Endeavour Silver Corp. Company news release dated March 8, 2022, 87 p.

Endeavour Silver Corp. (2022b): Operations – Bolanitos. Endeavour Silver Corp. website. Available on April 26, 2022, at URL < <https://edrsilver.com/portfolio/operations/bolanitos/> >

Great Panther Mining Ltd. (2005): Great Panther commences drilling at Guanajuato. Company news release dated September 28, 2005, 2 p.

Great Panther Mining Ltd. (2005b): Great Panther drills high grade silver at Guanajuato Mine. Company news release dated December 1, 2005, 2 p.

Great Panther Mining Ltd. (2013): Great Panther Silver reports second quarter 2013 financial results. Company news release dated August 7, 2013, 10 p.

Great Panther Mining Ltd. (2021): Great Panther announces mineral resource estimates for the Topia Mine and Guanajuato Mine Complex in Mexico. Company news release dated February 11, 2021.

Great Panther Mining Ltd. (2022): Annual information form for the year ended December 31, 2021. Company news release dated March 2, 2022, 150 p.

- Great Panther Mining Ltd. (2022b): Consolidated financial statements for the years ended December 31, 2021, and 2020. Company news release dated March 2, 2022, 50 p.
- Great Panther Mining Ltd. (2022c): Management's discussion and analysis for the year ended December 31, 2021. Company news release dated March 2, 2022, 36 p.
- Guanajuato Silver Company Ltd. (2023): Annual information form for the year ended December 31, 2022. Company news release dated November 20, 2023, 140 p.
- Guanajuato Silver Company Ltd. (2024): El Borrego vein sampling and work proposal. Internal company memorandum dated February 2024.
- Hedenquist, J.W. and Lowenstern, J.B. (1994): The Role of Magmas in the Formation of Hydrothermal Ore Deposits. *Nature*, v. 370, p. 519-527.
- Johnson, W.M. (2013): Quality Analysis Consultants, Report of January 7th to 11th, 2013 Visit, Internal Company Report, 17 p.
- Jorgenson, M., Guarnera, B., Kantor, J., and Cameron, R. (2023): Preliminary Economic Analysis – El Cubo/El Pingüico Silver Gold Complex Project. Technical report prepared for Guanajuato Silver Company by Behre Dolbear dated June 22, 2023, 270 p.
- Livingstone, C.W., Dufresne, M.B. and Clarke, F.T. (2022): Technical report on the Valenciana mines complex, Guanajuato, Mexico. Technical report prepared for Guanajuato Silver Company Ltd. dated July 8, 2022, 125 p.
- Mah, D. (2022): NI 43-101 technical report: updated Mineral Resource and Reserve Estimates for the Bolañitos Project, Guanajuato State, Mexico. Technical report prepared for Endeavour Silver Corp. dated January 2, 2022, 179 p.
- Moncada, D., Mutchler, S., Nieto, A., Reynolds, T.J., Rimstidt, J.D. and Bodnar, R.J. (2011): Mineral textures and fluid inclusion petrography of the epithermal Ag–Au deposits at Guanajuato, Mexico: Application to exploration; *Journal of Geochemical Exploration* 114 (2012) 20–35 pp.
- Moncada, D. and Bodnar, R. J. (2012): Gangue mineral textures and fluid inclusion characteristics of the Santa Margarita Vein in the Guanajuato Mining District, Mexico. *Central European Journal of Geosciences*, 4 (no. 2), pp. 300-309.
- National Oceanic and Atmospheric Administration (2022): Weather records for Guanajuato, Mexico. National Centers for Environmental Information website. Available on May 5, 2022 at URL < <https://www.ncei.noaa.gov/access/past-weather/Guanajuato> >
- Randall, R.J.A., Saldana, E. and Clark, K.F. (1994): Exploration in a volcano-plutonic center at Guanajuato, Mexico. *Economic Geology* v. 89, pp. 1722 – 1751.
- Rennie, D.W. and Bergen, R.D. (2011): Technical report on the Guanajuato Mine, Guanajuato State, Mexico. Technical report prepared for Great Panther Mining Corp. dated January 31, 2011, 157 p.

- Rhys, D. (2013): Structural settings and style of vein systems in the Central Guanajuato District. Internal report for Great Panther Resources Limited, dated May 2013, 100 p.
- Rodríguez del Bosque, J.E. (2021): Minera Mexicana el Rosario, S.A. de C.V. Mining Concessions Legal Title Report; prepared for Great Panther Mining Limited, 135 p.
- Ross, K. (2013): Petrographic Report on samples from the Veta Madre and San Ignacio vein systems, Guanajuato District. Prepared for Great Panther Silver by Panterra Geoservices Inc., 126 p.
- Servicio Geologico Mexicano (1999): Carta Geologico-Minera, Guanajuato F14-C42, 1: 50,000 regional geology map.
- Servicio Geologico Mexicano (1998): Carta Geologico-Minera, Guanajuato F14-C43, 1: 50,000 regional geology map.
- Sillitoe, R.H. and Hedenquist, J.W. (2003). Linkages between Volcanotectonic Settings, Ore-Fluid Compositions, and Epithermal Precious Metal Deposit, SEG Special Publication 10, pp. 315-343.
- Stewart, M. (2006): 2006 report on surface mapping – lithostratigraphy, geology and structure of the Guanajuato area: results of mapping and analysis. Internal report for Great Panther Resources Limited dated March 2006, 26 p.
- Vázquez Sánchez, A.M. (2023): August 10, 2023, Title Opinion Minera Mexicana el Rosario, S.A. de C.V.; prepared by Tête À Tête Consultores, S.C. for Guanajuato Silver Company Ltd., 103 p.
- Wunder, M.C. (2018): NI 43-101 Mineral Resource Update Technical Report on the Guanajuato Mine Complex, Guanajuato Mine, Guanajuato State, Mexico. Technical report prepared for Great Panther Mining Corp. dated February 28, 2018, 191 p.

## 28 Certificate of Author

### 28.1 Christopher W. Livingstone Certificate of Author

I, Christopher W. Livingstone, B.Sc., P.Geo., of Vancouver, British Columbia, do hereby certify that:

1. I am a Senior Geologist of APEX Geoscience Ltd. (“APEX”), with a business address of 100, 11450 – 160 St. NW, Edmonton, Alberta, Canada.
2. I am the Author and am responsible for Sections 1 to 5, 7, 8, 12, 25 to 27 of this Technical Report entitled: “**Technical Report on the Valenciana Mines Complex, Guanajuato, Mexico**”, with an Effective Date of December 31, 2023 (the “Technical Report”).
3. I am a graduate of UBC, Vancouver, BC with a B.Sc. in Earth and Ocean Sciences (specialization Geology) and have practiced my profession continuously since 2011. I have over 13 years of experience in the mineral exploration and mining industry, including over 8 years in a position of senior responsibility as a project manager and decision-maker. I have supervised multiple projects with relevant deposit types including epithermal gold-silver, polymetallic veins, and sediment-hosted precious and base metals.
4. I am a Professional Geologist (P.Geo.) registered with the Association of Professional Engineers and Geoscientists of B.C. (No. 44970) and I am a ‘Qualified Person’ in relation to the subject matter of this Technical Report.
5. I visited the Property that is the subject of this Technical Report on April 7-8, 2022, and August 13-14, 2023. I have conducted a review of the Valenciana Mines Complex data.
6. I am independent of Guanajuato Silver Company Ltd., as defined by Section 1.5 of National Instrument 43-101. I have not received, nor do I expect to receive, any interest, directly or indirectly, in Guanajuato Silver Company Ltd. I am not aware of any other information or circumstance that could interfere with my judgment regarding the preparation of the Technical Report.
7. I have had previous involvement with the Valenciana Mines Complex, that is the subject of this Technical Report. In 2022, I was the lead author of an NI 43-101 technical report written on behalf of GSilver for the Valenciana Mines Complex. The published reference related to this work is included in Section 27, References (see Livingstone et al., 2022).
8. I have read and understand National Instrument 43-101 and Form 43-101 F1 and the Report has been prepared in compliance with the instrument.
9. 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.

Dated and Signed this 7 day of March 2024 in Vancouver, British Columbia, Canada

*“Signed and Sealed”*

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Signature of Qualified Person  
Christopher W. Livingstone, B.Sc., P.Geo. (EGBC #44970)

## 28.2 Michael B. Dufresne Certificate of Author

I, Michael B. Dufresne, M.Sc., P.Geo., P.Geol., of Edmonton, Alberta, do hereby certify that:

1. I am President and a Principal of APEX Geoscience Ltd. (“APEX”), with a business address of 100, 11450 – 160 St. NW, Edmonton, Alberta, Canada.
2. I am the Author and am responsible for Sections 6.3, 6.4, 13 and 14 and contributed to Sections 1, 25 and 26 of this Technical Report entitled: “**Technical Report on the Valenciana Mines Complex, Guanajuato, Mexico**”, with an Effective Date of December 31, 2023 (the “Technical Report”).
3. I graduated with a B.Sc. Degree in Geology from the University of North Carolina at Wilmington in 1983 and a M.Sc. Degree in Economic Geology from the University of Alberta in 1987. I have worked as a geologist for more than 40 years since my graduation from university and have been involved in all aspects of mineral exploration and mineral resource estimations for precious and base metal mineral projects and deposits in Canada and internationally.
4. I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists (“APEGA”) of Alberta since 1989 and a Professional Geoscientist with the Association of Professional Engineers and Geoscientists (“EGBC”) of British Columbia since 2012. I am a ‘Qualified Person’ in relation to the subject matter of this Technical Report.
5. I have not visited the Property that is the subject of this Technical Report. I have conducted a review of the Valenciana Mines Complex data.
6. I am independent of Guanajuato Silver Company Ltd., as defined by Section 1.5 of National Instrument 43-101. I have not received, nor do I expect to receive, any interest, directly or indirectly, in Guanajuato Silver Company Ltd. I am not aware of any other information or circumstance that could interfere with my judgment regarding the preparation of the Technical Report.
7. I have had previous involvement with the Valenciana Mines Complex, that is the subject of this Technical Report. In 2022, I co-authored an NI 43-101 technical report written on behalf of GSilver for the Valenciana Mines Complex. The published reference related to this work is included in Section 27, References (see Livingstone et al., 2022).
8. I have read and understand National Instrument 43-101 and Form 43-101 F1 and the Report has been prepared in compliance with the instrument.
9. 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.

Dated and Signed this 7 day of March 2024 in Edmonton, Alberta, Canada

*“Signed and Sealed”*

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Signature of Qualified Person  
Michael B. Dufresne, M.Sc., P.Geo., P.Geol. (APEGA #48439; EGBC #37074)

### 28.3 Fallon T. Clarke Certificate of Author

I, Fallon T. Clarke, B. Sc., P.Geo., of Victoria, British Columbia, do hereby certify that:

1. I am a Senior Geologist of APEX Geoscience Ltd. (“APEX”), with a business address of 9/18 Parry Street, Fremantle, Western Australia, Australia.
2. I am the Author and am responsible for Sections 6.1, 6.2, 9 to 11, 23 to 24 and contributed to Sections 1, 25 and 26 of this Technical Report entitled: “**Technical Report on the Valenciana Mines Complex, Guanajuato, Mexico**”, with an Effective Date of December 31, 2023 (the “Technical Report”).
3. I graduated with a B.Sc. Degree in Geology from the University of Saskatchewan in 2010. I have worked as a geologist for more than 12 years since my graduation from university and have experience with exploration for precious and base metal deposits of various types through North America and Australia, including epithermal silver-gold deposits.
4. I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists (“APEGS”) of Saskatchewan since 2015. I am a ‘Qualified Person’ in relation to the subject matter of this Technical Report.
5. I have not visited the Property that is the subject of this Technical Report. I have conducted a review of the Valenciana Mines Complex data.
6. I am independent of Guanajuato Silver Company Ltd., as defined by Section 1.5 of National Instrument 43-101. I have not received, nor do I expect to receive, any interest, directly or indirectly, in Guanajuato Silver Company Ltd. I am not aware of any other information or circumstance that could interfere with my judgment regarding the preparation of the Technical Report.
7. I have had previous involvement with the Valenciana Mines Complex, that is the subject of this Technical Report. In 2022, I co-authored an NI 43-101 technical report written on behalf of GSilver for the Valenciana Mines Complex. The published reference related to this work is included in Section 27, References (see Livingstone et al., 2022).
8. I have read and understand National Instrument 43-101 and Form 43-101 F1 and the Report has been prepared in compliance with the instrument.
9. 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.

Dated and Signed this 7 day of March 2024 in Victoria, British Columbia, Canada

*“Signed and Sealed”*

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Signature of Qualified Person  
Fallon T. Clarke, B.Sc., P.Geo (APEGS #27238)

## 28.4 James L. Pearson Certificate of Author

I, James L. Pearson, P.Eng., residing at 105 Stornwood Court, Brampton, Ontario, Canada, L6W 4H6, do hereby certify that:

1. I am a Mining Engineering Consultant, contracted by P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled "**Technical Report on the Valenciana Mines Complex, Guanajuato, Mexico**", (The "Technical Report") with an effective date of December 31, 2023.
3. I am a graduate of Queen's University, Kingston, Ontario, Canada, in 1973 with an Honours Bachelor of Science degree in Mining Engineering. I am registered as a Professional Engineer in the Province of Ontario (Reg. No. 36043016). I have worked as a mining engineer for more than 50 years since my graduation.

I have read the definition of "Qualified Person" set out in National Instrument ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101. My relevant experience for the purpose of the Technical Report has been acquired by the following activities:

- Review and report as a consultant on numerous exploration and mining projects around the world for due diligence and regulatory requirements;
  - Project Manager and Superintendent of Engineering and Projects at several underground operations in South America;
  - Senior Mining Engineer with a large Canadian mining company responsible for development of engineering concepts, mine design and maintenance;
  - Mining analyst at several Canadian brokerage firms.
4. I have not visited the Property that is the subject of this Technical Report.
  5. I am responsible for Sections 15 to 22 and contributed to Sections 1 and 25 of this Technical Report.
  6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
  7. I have had no prior involvement with the Property that is the subject of this Technical Report.
  8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
  9. As of the effective date of this 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.

Effective Date: December 31, 2023

Signed Date: March 7, 2024

**{SIGNED AND SEALED}**

**[James Pearson]**

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James L. Pearson, P.Eng.