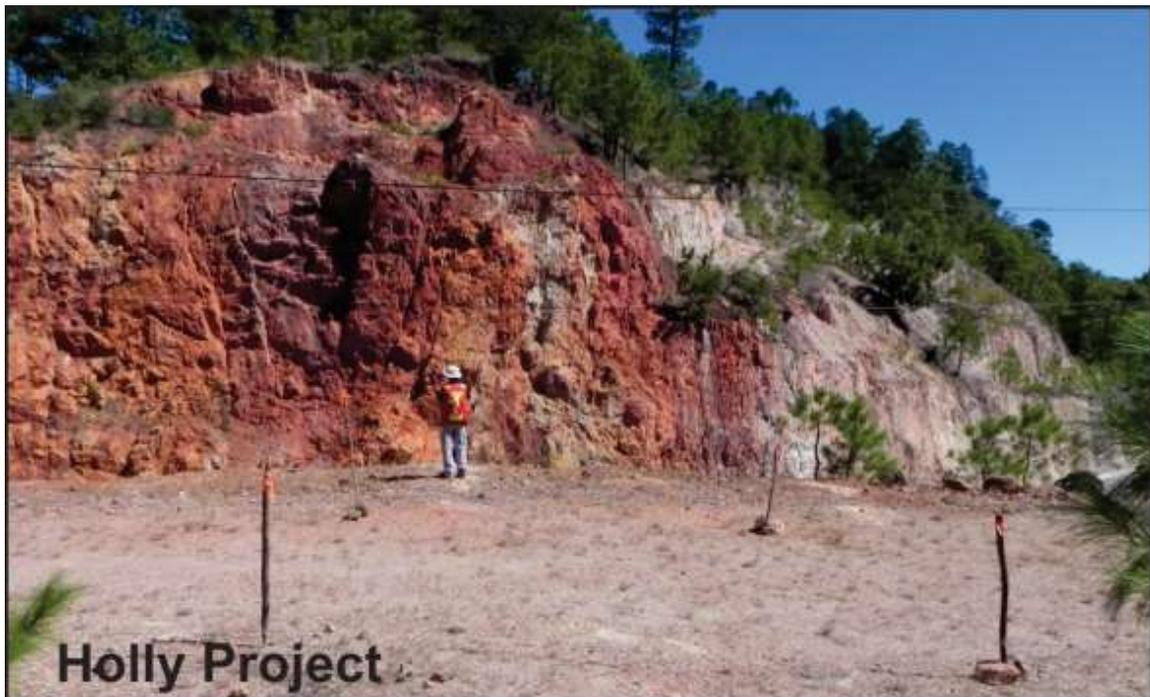


AMENDED NI 43-101 TECHNICAL REPORT
ON THE
HOLLY-BANDERAS GOLD-SILVER PROJECT,
SOUTHEASTERN GUATEMALA

For
Volcanic Gold Mines Inc.



AUTHORS: Greg F. Smith P.Geo.
Bruce A. Smith MAIG

EFFECTIVE DATE: August 21, 2020
Original Report Date: August 21, 2020
Amended Report Date: October 9, 2020

CERTIFICATE OF QUALIFIED PERSON & DATE AND SIGNATURE PAGE

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I, Greg F. Smith, with business address as listed above, do hereby certify that:

- I have read National Instrument 43-101 (“NI 43-101”), its Companion Policy 43-101CP, and Form 43-101F1; this report titled “Amended NI 43-101 Technical Report on the Holly-Banderas gold-silver project, Southeastern Guatemala” dated effective August 21, 2020 (the “Technical Report”) has been prepared in compliance with these documents;
- I have read the definition of “qualified person” set out in NI 43-101. By reasons of my education, membership in a recognized professional association, and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101:
 1. I graduated from St. Francis Xavier University, Antigonish, Nova Scotia, Canada, in 1987 with a B.Sc. (Major) in Geology;
 2. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (member # 21007);
 3. I have worked in the fields of geology and mineral exploration since 1987 including consulting and work for both major and junior mining and exploration companies. I have experience in Orogenic Gold Deposits, Greenstone-hosted gold deposits, Au - Cu porphyry deposits, Au-Cu skarns, VMS Deposits, and Ag-Au- (Pb-Zn) epithermal deposits, spanning Canada, Mexico, Central America, South America, Europe, and Africa;
 4. I have more than 30 years of experience in mineral exploration that is relevant to my area of practice, and I have relevant experience to the subject matter of the Technical Report;
- I am independent of the Property, Volcanic Gold Mines Inc. and the vendor Radius Gold Inc. as the term is set out in section 1.5 of NI 43- 101;
- I have been directly involved with the exploration of Property that is the subject of this Technical Report during the period 1999 - 2003, and I have visited the Property area numerous times, most recently between June 6th and June 12th , 2002;
- I am the principal author of the Technical Report and I am responsible for all sections of the Technical Report;
- 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 it not misleading.

[signed]

Greg F. Smith, P.Geo.

The effective date of this report is August 21, 2020. The date of signing is October 9, 2020.

CERTIFICATE OF QUALIFIED PERSON & DATE AND SIGNATURE PAGE

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I, Bruce A. Smith, with business address as listed above, do hereby certify that:

- I have read National Instrument 43-101 (“NI 43-101”), its Companion Policy 43-101CP, and Form 43-101F1; this report titled “Amended NI 43-101 Technical Report on the Holly-Banderas gold-silver project, Southeastern Guatemala” dated effective August 21, 2020 (the “Technical Report”) has been prepared in compliance with these documents;
- I have read the definition of “qualified person” set out in NI 43-101. By reasons of my education, membership in a recognized professional association, and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101:
 1. I graduated from Otago University, New Zealand with aB.Sc. and MSc Honors (Major) in Geology (1993);
 2. I am a member in good standing of the Australian Institute of Geoscientists (member # 6848);
 3. I have worked in the fields of geology and mineral exploration since 1993 including consulting and work for both major and junior mining and exploration companies. I have experience in epithermal Ag-Au- (Pb-Zn) deposits, Cu-Au-Mo porphyry deposits, orogenic gold deposits, archean hosted deposits, skarns, VMS deposits, spanning Canada, Mexico, Central America, South America, Europe, Asia, Australasia and Africa;
 4. I have more than 25 years of experience in mineral exploration that is relevant to my area of practice, and I have relevant experience to the subject matter of the Technical Report;
- I am not independent of the Property, Volcanic Gold Mines Inc. and the vendor Radius Gold Inc. as the term is set out in section 1.5 of NI 43- 101; in that I am a consultant to Radius Gold Inc, and technical advisor to Volcanic Gold Mines Inc.
- I have been involved with the exploration of Property that is the subject of this Technical Report during the period 2017 - 2020, and I have visited the Property area several times, most recently between March 12th and March 16th , 2019;
- I am responsible for section 12 of the Technical Report;
- 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 it not misleading.

[signed]

Bruce A Smith MAIG no6848.

The effective date of this report is August 21, 2020. The date of signing is October 9, 2020.

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1 SUMMARY

This geological report was prepared for Volcanic Gold Mines Inc. and describes the Holly-Banderas mineral property ("the Property") located in Guatemala, Central America. The Property consists of one 94.73 km² exploration licence named "El Dorado".

Applications have been filed to convert the El Dorado licence into a three smaller exploitation licences. These applications are pending approval by the Guatemalan government; however the existing licence remains valid until the exploitation licences are processed.

The Property is located in the volcanic highland terrane of southeastern Guatemala, a region of sharply contrasting valleys and rolling to rugged topography. The climate is sub-tropical, with a dry and wet season. The closest major population centre is the town of Chiquimula, population approximately 110,000, located 15 kilometres north of the Property.

The first modern mineral exploration reconnaissance on the Property took place in the early 2000s, with stream sediment sampling and follow-up soil geochemistry surveys and rock prospecting programs being completed by Radius Explorations. Mineralized zones were identified on the Property most notably the Banderas project in the southern portion of the Property (which includes the Pyramid Hill, M28, and El Zapote zones), and the Holly project in the northern portion of the Property. Several drill programs, undertaken by Radius Gold Inc. and previous operators, have drilled over 9100 m in 63 drill holes on the Property between 2002 and 2011.

The Property is located at the suture zone between the North American and Caribbean tectonic plates, a complex zone of wrench fault deformation that presents various styles of brittle faulting and extension. The Property is underlain primarily by Cenozoic to Quaternary volcanic and sedimentary rocks. NNW trending brittle faults cross cut all lithologic units and host known zones of mineralization.

Mineralization at the Holly prospect consists of silver (Ag) and gold (Au) bearing epithermal quartz veinlets and vein breccias, generally striking NNW and steeply dipping, found within the conglomerates of the EW trending Holly Ridge. Drilling at the Holly Zone includes 11 mineralized intercepts which average 4.9 metres in length (unknown true width) and with average grades of 9.4 g/t Au and 315 g/t Ag. A wide alteration zone associated with the east-west trending Jocotan Fault Zone which crosses the Holly Zone has not been tested by previous drilling. North of the ridge, in the Santa Rosa Group phyllites, two quartz veins (El Pino and La Pena) ~0.5 m in thickness, with a total of 49 samples averaging 2.1 g/t Au and 11.9 g/t Ag and including at El Pino 5.1 m of 58.26 g/t Au and 1937 g/t Ag. Mineralization is also present in the sedimentary rocks to the south of the Holly Ridge.

At Banderas, mineralization is characterised by epithermal quartz veins, stockwork, and jigsaw breccia along over a strike length of two kilometres of NNW trending brittle fault

structures, with subvertical and moderately westward dips. Textures include bladed, drusy, and colloform banded quartz veins and breccias. The zone is well delineated by soil geochemistry as well as prospecting and mapping.

The relationship between the sample length and the true thickness of the mineralization, is not known. Insufficient drilling has been completed to precisely define the orientation of the mineralization. In general drill holes were oriented at steep angles to the interpreted orientation of the mineralization and the true thickness is estimated to be in a range between 60% and 85% of the sample lengths.

Exploration on the Property has included: stream sediment prospecting that initially located the zones of interest, follow up soil sampling grids, prospecting and geological mapping, induced polarization geophysics surveys over the Holly prospect, and reverse circulation and diamond drilling. A total of 63 drill holes have been drilled on the property, with 15 on the Holly Prospect and 48 on Banderas. Drilling on the Holly-Banderas Project includes 45 mineralized intercepts which average 2.7 metres in length (unknown true width) and with average grades of 7.1 g/t Au and 135 g/t Ag. Drilling at the Holly Zone includes 11 mineralized intercepts which average 4.9 metres in length (unknown true width) and with average grades of 9.4 g/t Au and 315 g/t Ag. Drilling at the Banderas Zone includes 34 mineralized intercepts which average 2.0 metres in length (unknown true width) and with average grades of 6.4 g/t Au and 77 g/t Ag.

The drilling on the Holly-Banderas property has been restricted to depths generally shallower than 150 m below surface. Holly-Banderas presents a favourable exploration target, with defined structural controls on mineralization, and high grade gold and silver near-surface.

The Holly-Banderas Project warrants additional exploration and drill testing. A two-phase program consisting of Phase 1 with 3,000 metres of diamond drilling and additional exploration with a total cost of \$1,500,000 and results dependent, Phase 2 will be comprised of an additional 7,000 metres of drilling with a total cost of \$2,500,000.

Principal targets for the Phase 1 drilling program are; Holly – testing intersections of E-W trending Jocotan structure with previously identified cross structures and Banderas; deeper drilling below the previous gold-silver mineralization intersected in past drilling and below the projected depth of oxidation.

During Phase 1 additional work on the El Zapote prospect, should include additional surface geochemistry, geophysical surveys, and trenching.

2 INTRODUCTION

Volcanic Gold Mines Inc. (hereafter referred to as “Volcanic” or “Volcanic Gold”) is a junior exploration company based in Vancouver, Canada, and publicly listed on the TSX Venture Exchange (TSX.V:VG).

Volcanic Gold Mines Inc.’s registered office is located at Suite 650, 200 Burrard Street, Vancouver, BC, Canada, V6C 3L6, its telephone number is +1 604 801 5432, fax number is +1 604 662 8829, and Email: info@volgold.com.

2.1 PURPOSE OF TECHNICAL REPORT AND TERMS OF REFERENCE

This geological report has been prepared for Volcanic as part of the transaction with Radius Gold Inc. (“Radius”). The “Holly-Banderas” property in southeastern Guatemala is 100% owned by Minerale Sierra Pacifico, S.A., Radius’ Guatemalan-registered wholly owned subsidiary company. This report has been prepared in accordance with NI 43-101, Form 43-101F1 and Companion Policy 43-101CP.

The principal author of this report and Qualified Person (“QP”) responsible for all sections of this report is Greg F. Smith, P.Geo., consulting exploration geologist. He has visited the property on numerous occasions starting in 1999 and continuing through 2002. He has visited all pertinent locations and prospects described in this report.

A recent site visit by Greg Smith P.Geo has not been completed due to the restrictions on international travel related to the Covid-19 pandemic.

The principal author Greg Smith P.Geo is a Qualified Person “QP” and is independent as these terms are defined by National Instrument 43-101.

The co-author of this report Bruce A Smith MAIG is a Qualified Person (“QP”) and is not independent as defined by National Instrument 43-101, in that he is a consultant to Radius Gold Inc and technical advisor to Volcanic Gold Mines Inc. Bruce A. Smith is responsible for a site visit of the Property conducted between 12th and 16th of March 2019.

Bruce A. Smith has worked extensively in Guatemala from 1998 until 2002, speaks Spanish and knows and has worked repeatedly since 1998 until the present with the majority of the geological team that conducted the exploration of the Property and has followed the Property closely since its initial discovery. He has visited all the main locations and prospects described in this report.

2.2 SOURCES OF INFORMATION

Information presented in this technical report is from Radius databases, historic archives, and issued news releases, and from referenced sources cited in Section 27. Current company datasets are maintained in a CAE Mining “Century Systems” SQL

database and historic data and reports are stored on a company server in a variety of formats (e.g. Excel, Access, pdf, and Esri shapefile).

2.3 UNITS OF MEASURE, ABBREVIATIONS AND SYMBOLS

Location coordinates are given throughout this report using the WGS84 datum, and reported in UTM projection, zone 16N. Measurements given in the report use the metric system. Element concentrations for silver and gold are given in grams / tonne (g/t), which is exactly equivalent to parts per million (i.e. 1 ppm = 1 g/t). The attitudes of planes are given in the form “xxx°/yy°”, where “xxx” is the strike (using the right hand rule convention), and “yy” is the dip.

Abbreviations used in the report are given in Table 1, and are also defined in the text the first time they are used.

Table 1: Abbreviations and Symbols

Name	Abbreviation	Name	Abbreviation
Silver	Ag	Kilogram(s)	kg
Gold	Au	Kilometre(s)	km
Copper	Cu	Metre(s)	m
Iron	Fe	Centimetre(s)	cm
Zinc	Zn	Percent	%
Mercury	Hg	Thousand(s)	k
Lead	Pb	Million(s)	M
Molybdenum	Mo	Billion(s)	B
Silver Equivalent	Ag Eqv.	Million years ago	Ma
Gold Equivalent	Au Eqv.	Parts per billion	ppb
Troy ounce(s)	oz	Parts per million	ppm
Gram(s)	G	Quality assurance / quality control	QA/QC
Ton(s) (1 ton = 907.185 kg)	ton	Qualified Person	QP
Tonne(s) (1 tonne = 1000 kg)	t	Reverse circulation	RC
Gram(s) per tonne	g/t	Diamond drill	DD
Ounce(s) per tonne	oz/t	Universal Transverse Mercator	UTM
Degree	°	National Instrument 43-101	NI 43-101
Metres above sea level	masl	Ministerio de Energía y Minas	MEM
		Ministerio de Ambiente y Recursos Naturales	MARN
Volcanic Gold Mines Inc	Volcanic	Radius Gold Inc.	Radius
		Minerales Sierra Pacífico S.A.	MSP

3 RELIANCE ON OTHER EXPERTS

The authors are relying on reports, opinions, and statements from experts who are not QPs for matters relating to legal, environmental, political and social issues.

3.1 MINERAL TENURE

The authors have not independently verified the legal status of Radius's mineral tenure, and has fully relied on the following independent legal opinion for this information:

- Central Law. "Minerales Sierra Pacifico, Sociedad Anónima - Mining License Information". Legal opinion on Radius's mineral tenure status, prepared by Juan Pablo Carrasco de Groote – Partner with Central Law, a Central American-based legal firm, for Radius Gold Inc., May 22nd, 2020 and
- Central Law. "Minerales Sierra Pacifico, Corporate and Title Opinion". Legal opinion on El Dorado Exploration Tenement and derived exploitation applications La Luz, Aurora and El Dorado II, which comprise the Holly – Banderas Gold – Silver Deposits for Radius Gold Inc., July 20th, 2020

3.2 ENVIRONMENTAL BASELINE STUDIES

- Everlife Sustainable Development. "Plan de Gestión Ambiental. Proyecto de exploración minera El Dorado LEXR-813, área El Dorado Sur". Report prepared for Minerales Sierra Pacifico, 2012.
- Everlife Sustainable Development. "Plan de Gestión Ambiental. Proyecto minero El Dorado LEXR-813". Report prepared for Minerales Sierra Pacifico, 2012.
- Everlife Sustainable Development. "Línea Base Ambiental y de Biología. Proyecto La Luz". Study commissioned by Minerales Sierra Pacifico, 2012.
- Everlife Sustainable Development. "Línea Base Ambiental y Biología. Proyecto El Dorado II". Study commissioned by Minerales Sierra Pacifico, 2012.
- On December 04, 2019, the Environmental Impact Study was presented to the Ministry of Environment and Natural Resources (MARNR), completing the application for the La Luz Exploitation License, for the Holly project. The study was completed by the environmental consulting company Geoambiente.

4 PROPERTY DESCRIPTION AND LOCATION

Volcanic Gold Mines Inc. (TSXV:VG) has signed an exclusive option with Radius Gold Inc. (TSX-V: RDU) to earn a 60% interest in Radius's Holly-Banderas gold/silver properties located in southeastern Guatemala.

Under the terms of the option, which are subject to TSX Venture Exchange approval, Volcanic can earn a 60% interest in the Holly and Banderas Properties by spending US\$7.0 million on exploration of the Properties within 48 months from the date drilling permits are granted. An initial US\$1.0 million must be spent on exploration within 12 months of receiving the required drill permits, including a minimum 3,000m of drilling. Following the successful completion of a minimum C\$3 million financing, Volcanic will make a cash payment to Radius of C\$100,000 to initiate the option.

Upon completion of the exercise of the option, Volcanic will enter into a standard 60/40 joint venture with Radius in order to further develop the Properties. Volcanic will also have the exclusive right for 24 months following the execution of the option to evaluate the other property interests of Radius in eastern Guatemala and to enter into an agreement to acquire an interest in any of such other properties on reasonable mutually agreed upon terms.

4.1 TYPES OF MINERAL TENURE

The Guatemalan Mining Law (Decree number 48-97) establishes three types of mineral tenure granted by the Ministry of Energy and Mines (Ministerio de Energía y Minas; "MEM"): reconnaissance, exploration, and exploitation. Reconnaissance licences are granted for areas of between 500 and 3000 km² and are valid for up to six months. Exploration licences are granted for areas no greater than 100 km², and are valid for an initial period of three years which can then be twice extended for additional two year periods, for a total of seven years, with each time extension accompanied by a 50% reduction in the area covered by the licence. Once the allowed extensions have been used, to maintain the subsurface rights an application must be filed for an exploitation licence. These are granted for areal extents of no greater than 20 km² and are valid for a period of 25 years.

There are no defined work requirements to keep licences in good standing, although exploration activities are expected, and reports must be filed with MEM annually.

4.2 RECENT STATUS OF MINERAL LICENCES AND CHANGES TO MINING LAW

Since 2008, as per an internal policy by then President Alvaro Colom, a moratorium on the granting of mining licences has been in place, until a new Mining Law is passed. This resulted in a delay in the process of granting new mining licenses. This policy of moratorium was maintained by Presidents Otto Perez Molina and Jimmy Morales, in their respective presidential terms. During this time frame the Guatemalan Congress has analyzed different projects for a New Mining Law, but none have been passed.

Currently, with the new president for the period 2020 - 2024 Alejandro Giammattei, is not continuing with the moratorium policy for the granting of mining licences, subject to the orders of the Constitutional Court, which state that prior to the granting of new mining licences, a Public Consultation must be conducted in accordance with ILO Convention 169.

It is planned that during the current presidential period, Congress will present a new Mining Law bill to be analyzed and approved by Congress. Existing licensee holders are free to continue exploration activities under the current law.

4.3 PROJECT LOCATION

The Project is located in southeastern Guatemala, centred approximately 15 km south of the town of Chiquimula at UTM coordinates 226,000E, 1,623,000N (WGS84, zone 16). The location of the Project is shown on in Figure 1.

Figure 1: Project location map



4.4 MINERAL RIGHTS

The Project consists of the Banderas, Holly and El Zapote mineralized zones. These zones are covered by one active exploration licence named "El Dorado" and assigned file number LEXR-813. The licence covers an area of 94.73 km².

Table 2: Granted El Dorado Licence.

Licence	Type	Area (km2)	Status	MEM file #	Grant date
El Dorado	Exploration	94.73	Active	LEXR 813	2004-02-13

The El Dorado licence was originally granted to Exploraciones Mineras de Guatemala, S.A. ("Exmingua"), as established in MEM resolution #64, February 13, 2004. At that time Exmingua was a wholly owned subsidiary of Radius Explorations Ltd. (now Radius Gold Inc.)

The first two year extension was requested May 15, 2007, and was granted on December 4, 2007, as established in MEM resolution #262. The licence was formally transferred to Minerales Sierra Pacifico, S.A. ("MSP"), a wholly owned subsidiary of Radius, on July 24, 2009, as established in MEM resolution #161. A second two-year extension was granted by MEM resolution #244 on October 29, 2009, with validity until on July 5, 2011. An application to extend the area of the licence was requested on October 8, 2009 and was granted by MEM resolution #76 on March 8, 2010.

Applications were filed with MEM on June 21, 2011 to convert a subset of the existing El Dorado exploration concession into three exploitation concessions: El Dorado II (MEM file number SEXT-013-11), Aurora (MEM file number SEXT-014-11), and La Luz (MEM file number SEXT-012-11). Together, these represent 59.5 km², or ~63% of the existing El Dorado concession area and include all zones of known mineralization. The applications are pending resolution. Figure 3 shows the portion of the El Dorado licence that is currently under application to convert to three separate exploitation licences.

Article 25 of the Guatemalan Mining Law provides for the automatic extension of the validity of an exploration licence when applications to convert the same into an exploitation licence are made while the exploration licence is in good standing. As such, the El Dorado exploration licence remains in good standing until the exploitation applications are granted.

Throughout this report, the term "Property" shall refer to the granted El Dorado licence only and shall not include the pending exploitation license applications.

Figure 2: Exploration and reconnaissance mineral licence grant and applications.

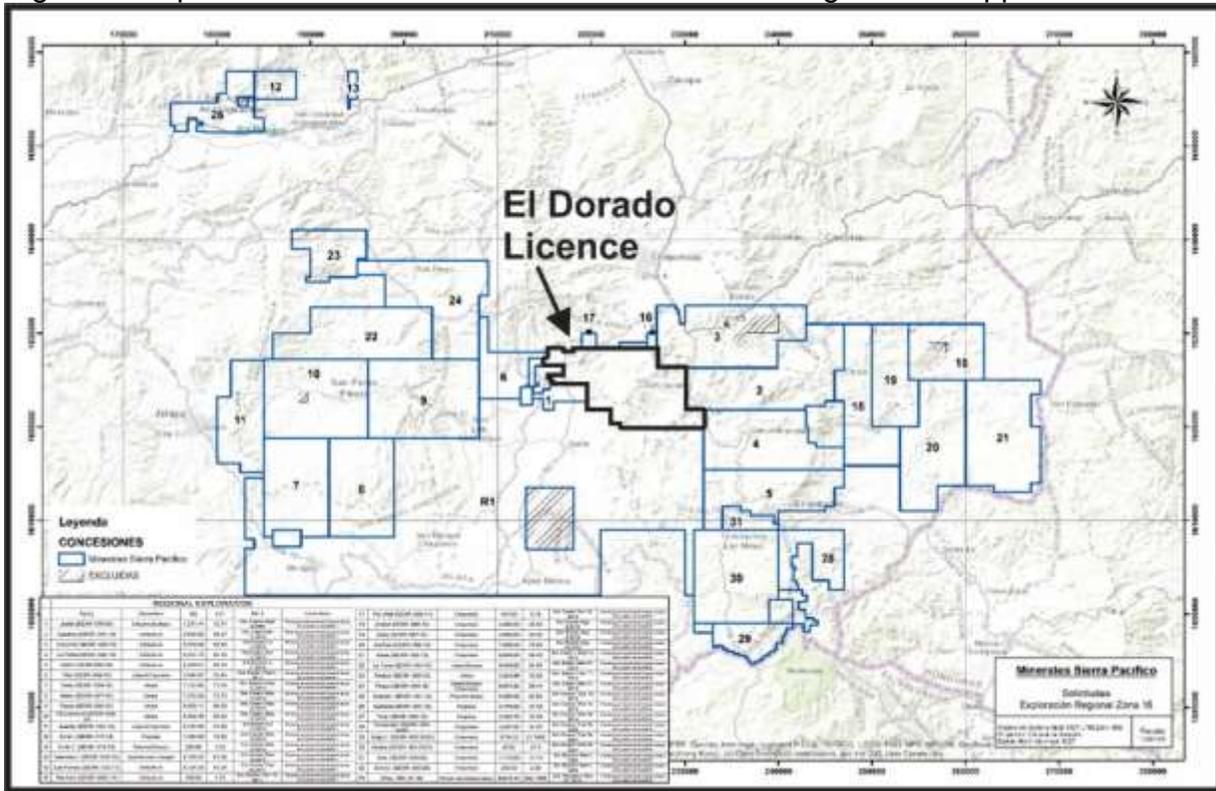
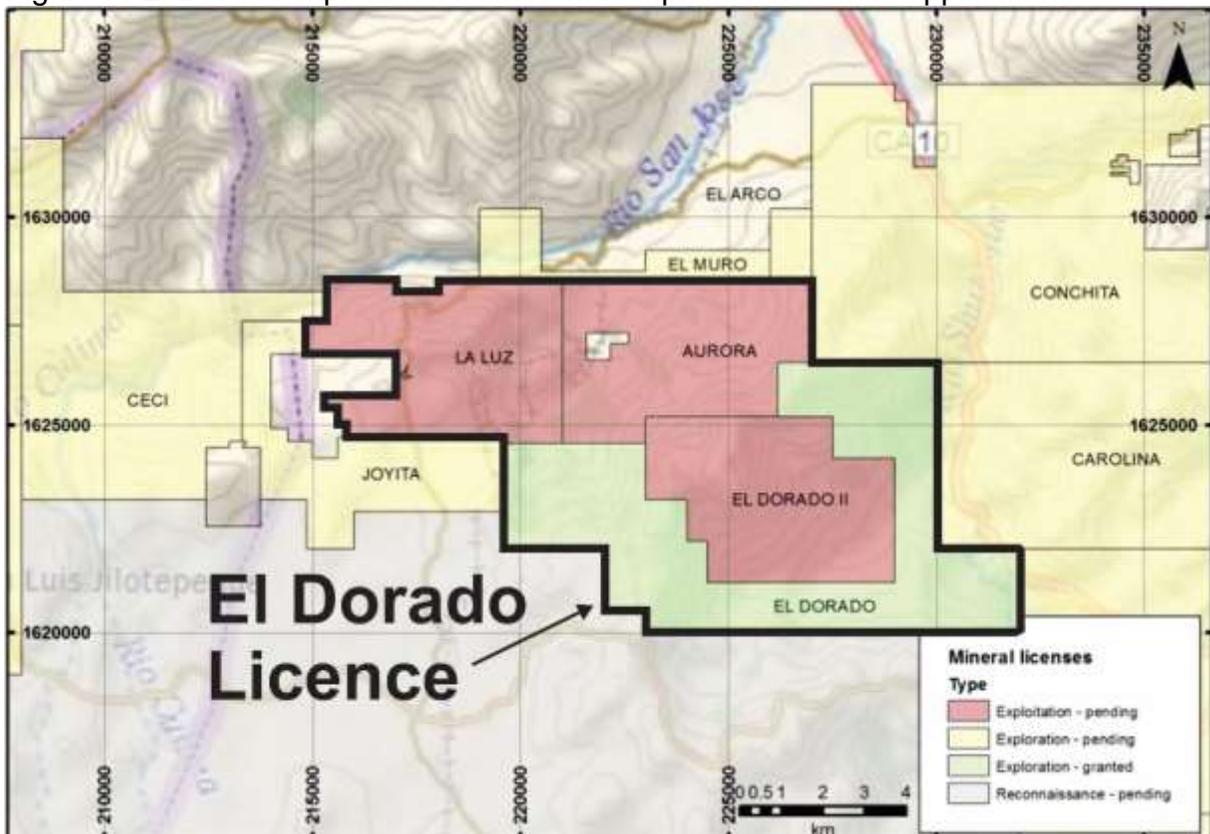


Figure 3: El Dorado exploration licence with exploitation licence applications



4.5 SURFACE RIGHTS

Exploration and mining licenses in Guatemala are separate from surface rights. Access to the Property must be negotiated directly with the relevant surface rights owners. The surface rights on the El Dorado exploration licence are owned by both private owners and by local municipalities. Permission to enter private land is negotiated on an *ad hoc* basis with local land owners prior to exploration activities, and obtaining permission typically involves land rental fees, local hiring commitments, reclamation and improvement of land after exploration activities cease, and financial participation in local projects and initiatives, depending on the level of exploration required.

Radius has been actively exploring the Project area since 2002 and has generally enjoyed positive working relationships with the various municipalities and land owners. While Radius has been successful in the past, renewed negotiations for surface access with the relevant surface rights owners are required and will need to be negotiated in advance of the recommended program. Radius has been successful in the past in obtaining surface access, most notably for drilling programs in 2002, 2003, 2004, 2005, 2010 and 2011, and it is reasonable to conclude access can be negotiated again.

4.6 BASELINE STUDIES AND PERMITS

4.6.1 BASELINE ENVIRONMENTAL AND SOCIAL ASSESSMENTS

On December 4, 2019, the Environmental Impact Assessment Study, Category A (EIA-0199-2019) for the operation phase of the La Luz Project (SEXT-012-11) of the Holly project, completed by the environmental consulting company Geoambiente,, was presented to the Ministry of Environment and Natural Resources (MARN). This study includes documenting of key metrics on both the environmental and social aspects of mineral exploration projects.

4.6.2 DIAMOND DRILLING PERMITS

Diamond drilling permits were applied for in early 2012, and delivered in October 2012. A diamond drilling permit for 10 drill holes covering the El Zapote area is in force until December 05, 2021. Drilling planned in other areas of the Property will require new permits. To date no new applications for drilling permits have been submitted. Drilling permits must be acquired to conduct the work proposed for the property, and as of the writing of this report such permits have not been obtained.

4.7 SOCIAL AND POLITICAL ISSUES

4.7.1 CURRENT GEOPOLITICAL RISKS FOR MINERAL EXPLORATION IN GUATEMALA

Radius's social policy has allowed the Company to maintain at present (without current exploration activity), good relations with local communities in the project area, maintaining communication with the community authorities "Cocodes" and with the mayors of the municipalities that correspond to the project area.

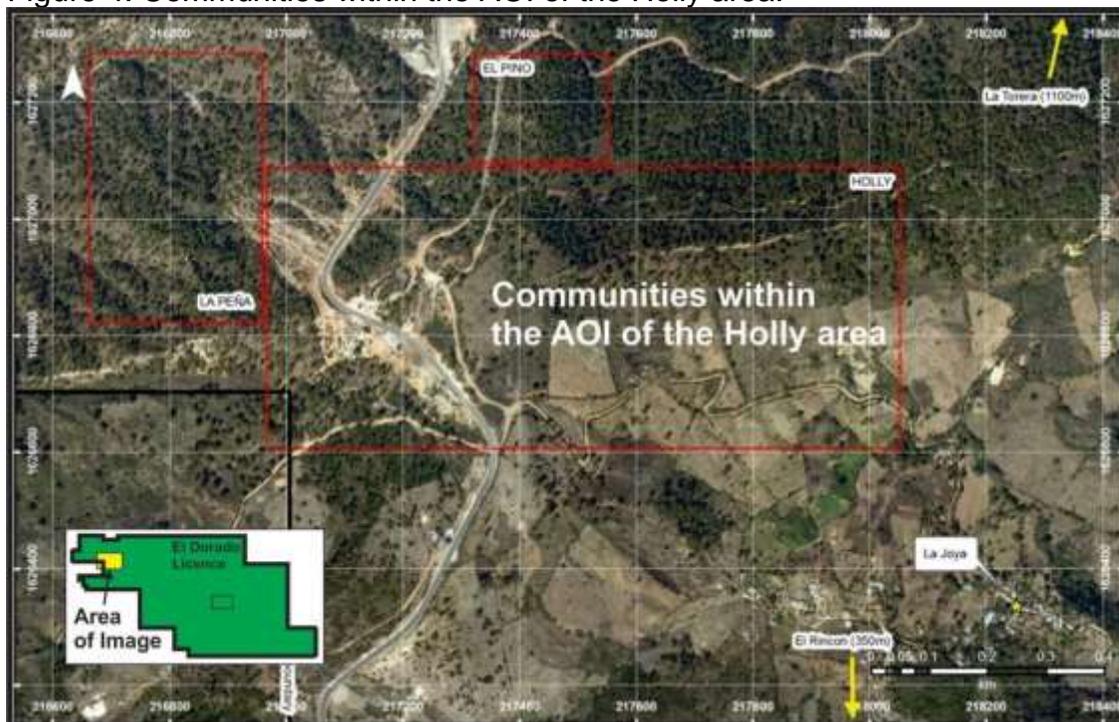
The political and social landscape in Guatemala regarding mining has been influenced by environmentalist and NGO's generating protests, often taken to the legal level. In this

regard, petition for injunctions have been introduced before the Court, requesting the stoppage of activities at mines in operation. The result has been court rulings, in favor of temporarily stoppage of mining activities, until the respective Public Consultation is made in accordance with ILO Convention 169. Among those affected are, Minera San Rafael at the Escobal Project; Tambor Project of Kappes & Associates and recently, the Constitutional Court ordered the stoppage of activities at the Fenix Mine, which is operated by the Guatemalan Nickel Company (CGN), until the Public Consultation is held. The current President Alejandro Giamanttei, within his general policy of government 2020 - 2024, plans to advance the economic and social development of Guatemala, giving impetus to all economic activities, including mining. A new draft Mines Law which will be submitted to Congress for its respective approval is currently being prepared by the executive.

4.7.2 HOLLY

The Area of Influence (“AOI”) of the Holly project was determined by Everlife, S.A. (2012), a third party social & environmental consultant, to consist of the municipality of San José la Arada, population approximately 1180. The municipality is divided into the communities of El Rincón, La Torera, and La Joya. A 2002 survey by the National Statistics Institute (“Instituto Nacional de Estadística”, “INE”) found the population of San José La Arada to be 100% “non-indigenous” in ethnic makeup (Everlife, S.A., 2012). The Everlife survey of the local population found that 72% of those surveyed had a favourable opinion of mineral exploration projects near their local communities, while 8% had a negative opinion and 20% had no opinion. The population surveyed had a realistic understanding about the positive and negative aspects of mineral exploration on their communities. Figure 4 shows the location of communities in the AOI determined by the study in relation to the mineralized zones in the Holly area.

Figure 4: Communities within the AOI of the Holly area.



4.7.3 BANDERAS

The AOI of the Banderas Project (which for these purposes includes Pyramid Hill, M28, and El Zapote zones) was determined by Everlife, S.A. (2012) to be within the municipality of San Jacinto, population 11842 (2008 estimate), and includes the communities of Lomas Arriba, Lomas Abajo, Los Lazaros, and El Zapote (total population 2237). According to INE records, the entire population of the communities in the AOI is part of the “non-indigenous or ladino” ethnic group (Everlife, S.A., 2012). The Everlife survey of the local population determined that 94% of the population surveyed had a favourable opinion of a mineral exploration project near their local communities, reflective of the longstanding presence of Radius in the area. Figure 5 shows the location of communities in the AOI determined by the study in relation to the mineralized zones in the Banderas (Pyramid Hill & M28) and El Zapote areas.

Figure 5: Communities within the AOI of the Banderas/El Zapote areas.



4.8 ROYALTIES AND ENCUMBRANCES

Guatemala's current Mining Law stipulates that mining royalties for metals are 1% on sales (0.5% to be paid to the state and 0.5% to be paid proportionately to the municipalities in which a project is located). In addition, while a new Mining Law is being passed, there is a policy of making a "Voluntary Contribution Convention" which is a (voluntary) royalty that is agreed between the company and the State and goes from 2 to 4% on sale.

The Property of Volcanic as of the date of preparation of this report, is otherwise free of royalties, payments, other agreements or levies, and is 100% owned by Radius Gold Inc. through its subsidiary Minerale Sierra Pacifico S.A.

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

5.1 ACCESSIBILITY

The Project is located in the municipality of San Jacinto, department of Chiquimula, in southeastern Guatemala, approximately 107 km east of Guatemala City. Access is gained via national paved highway either via the towns of El Progreso and Zacapa, or via the towns of Jalapa and San Luis Jilotepeque, to the town of Chiquimula (Figure 6). The journey takes approximately 3 hours. The Project is accessed from Chiquimula via variably maintained secondary paved and unpaved roads by 4WD vehicles. Some parts of the Project are directly road accessible, and others are accessed on foot through local footpaths or narrow tracks.

The international airport in Guatemala City serves daily flights to such convenient transit hub cities as Mexico City, Houston, Miami, and Los Angeles, as well as other locations in Central America.

Figure 6: Property accessibility in relation to Guatemala City. El Dorado exploration licence in yellow, package of pending licences in black.



5.2 PHYSIOGRAPHY AND CLIMATE

The Project is located in the volcanic highland terrane of southeastern Guatemala. This is a region of sharply contrasting valleys and rolling to rugged topography, with elevations in the project area ranging from ~450 metres above sea level (masl) to ~1425 masl. The project area is located in the Rio Shutaque drainage basin, which drains into the Rio Grande Zacapa basin.

The climate in the Project area is characterized as sub-tropical, with a dry season from November to April, and a wet season from May to October. Average annual temperature in Esquipulas, the closest meteorological station to the Project area, is 23.8 °C, with an average daily range from 17.5 °C to 32.7°C. The Project area is generally hotter than Esquipulas.

Temperatures vary primarily as a function of altitude, with higher locations in the Project area enjoying cooler temperatures and lower areas being hotter. Precipitation as measured in Esquipulas ranges between 840 mm/yr and 2100 mm/yr, with an average of 141 rainy days per year.

Exploration can be completed on the Holly-Banderas Project on a year-round basis.

5.3 VEGETATION

Lower altitude areas largely consist of cleared land for farming of beans and corn, with scrub- brush and shrubs, and both wild and cultivated lime, mango, cashew, avocado and nance trees, among others. Higher elevations which are not actively farmed tend to be dominated by pine and red oak trees.

5.4 INFRASTRUCTURE

The Project is located ~15 km south of the town of Chiquimula, population, according to the 2018 Population Census, of 111,505. Logistics can easily be carried out from this regional hub, capital of the same-named department. Local labour in the Project area is easily sourced, most commonly from the closest village or town to particular Project activities. Radius' subsidiary company MSP maintains an exploration office near Chiquimula, as well as a corporate office in Guatemala City.

The Holly-Banderas Project is an exploration stage project and to the extent relevant there has been sufficient surface rights for exploration activities, as well as sufficient availability and sources of power, water, and personnel, needed to support exploration and drilling activities.

6 HISTORY

6.1 PROPERTY HISTORY

The earliest known scientific descriptions of the geology of Guatemala were those of Dollfus & de Montserrat (1868). Later work included that of Sapper (1899) and Roberts & Irving (1957). Burke (1965) completed a doctoral thesis on the geology of southeastern Guatemala. This and other work contributed to a series of 1:50,000 and 1:250,000 maps published by the Instituto Geografico Nacional (IGN). The geology and tectonics of Central America is a controversial subject to this day (see references within Ratschbacher et al., 2009) and much remains to be resolved.

There is no known history of commercial or artisanal mining for metals in the Project area, although there are local quarries for non-metallic minerals. Radius Explorations Ltd., a precursor company to Radius Gold, first undertook reconnaissance rock and stream sediment sampling programs in eastern Guatemala in 2001, discovering the prospects in the Project area in 2002 (Radius Explorations Ltd. news releases 2002-03, Apr 2, and 2002-05, Jun 6). Follow-up surface prospecting and trench sampling confirmed the presence of gold-silver mineralization at two prospects called the Holly and Banderas zones.

An IP geophysical survey and 7 hole drill program over the Holly zone was carried out in mid- 2002, during which time the concession was briefly optioned to Lalo Ventures Ltd. (Radius Explorations Ltd. news releases 2002-06, Aug 8; 2002-11, Oct 15). Results of this initial drill program included highlights of 6.0 m assaying 43.56 g/t Au and 1617 g/t Ag in HDD-004 (Radius Explorations Ltd. news release 2002-15, Dec 17).

The Holly & Banderas zones were subsequently optioned to Pillar Resources Inc. (Pillar Resources news release 2003-07, Mar 31), and a second phase of drilling (RC) began at Holly in May 2003. Pillar changed its name to Pilagold Inc. in September 2003. Trenching and a follow- up 10 hole diamond drilling program at Banderas was completed by December 2003 (see Radius Explorations news release 2003-20, Dec 3). Results at Banderas included highlights of 3.6 m assaying 9.3 g/t Au and 41 g/t Ag in BDD-008.

Radius and Pilagold announced their intentions to merge in March 2004, to form the current Radius Gold Inc. (see Radius Explorations Ltd. news release March 3, 2004). A second phase of drilling by Pilagold/Radius was completed in April 2004, with an additional 12 diamond drill holes over the Banderas prospect.

The Project, which now consisted of 2545 m of drilling in 22 holes, was optioned to Glamis Gold Ltd. ("Glamis") in November 2004 (see Radius Gold Inc. news release RGI 8; November 3, 2004). Glamis conducted a six-hole reverse-circulation drill program in November and December of 2004, with a best result of 36.4 g/t Au and 274 g/t Au over 3.0 m in hole BRC04-24 (see Radius Gold Inc. news release RGI 4, June 1, 2005), and a follow up 7 diamond drill hole program in early 2005 that was without significant results (see Radius Gold Inc. news release RGI 1, January 12, 2006). Glamis dropped its option the Property on May 24, 2006.

Between 2006 and 2010 little work was completed on the Project largely due to poor market conditions. In 2010 the first resource estimate of the nearby Escobal epithermal Ag-Au-Pb-Zn deposit and high precious metal prices prompted its reactivation.

Radius began a new phase of drilling at Banderas in late 2010 and early 2011, drilling 14 holes on the prospect, with best results of 1m assaying 38.35 g/t Au and 159.9 g/t Ag in hole BDD11-013 (see Radius Gold Inc. news release of May 5, 2011).

Overall between 2002 and 2011 drilling on the Holly-Banderas Project totals 63 drill holes, with 15 on the Holly Prospect and 48 on Banderas 45. Drilling on the Holly-Banderas Project resulted in 45 mineralized intercepts which average 2.7 metres in length (unknown true width) and with average grades of 7.1 g/t Au and 135 g/t Ag. Drilling at the Holly Zone includes 11 mineralized intercepts which average 4.9 metres in length (unknown true width) and with average grades of 9.4 g/t Au and 315 g/t Ag. Drilling at the Banderas Zone includes 34 mineralized intercepts which average 2.0 metres in length (unknown true width) and with average grades of 6.4 g/t Au and 77 g/t Ag.

The relationship between the sample length and the true thickness of the mineralization, is not known. Insufficient drilling has been completed to precisely define the orientation of the mineralization. In general drill holes were oriented at steep angles to the interpreted orientation of the mineralization and the true thickness is estimated to be in a range between 60% and 85% of the sample lengths.

The most recent work on the Property consists of surface sampling of the El Zapote zone, La Peña zone, and El Pino zone, a new IP survey over the Holly zone, as well as data reviews and interpretations of historic work.



7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

The geology of Guatemala consists of two major crustal blocks, the Maya and the Chortís Blocks, part of the North American and Caribbean tectonic plates, respectively, separated by the Motagua Suture Zone (“MSZ”) a composite suture zone some 400 km long and up to 80 km wide that links the Cayman trough pull-apart basin in the Caribbean Sea to the subduction zone of the Cocos plate (Ratschbacher et al., 2009). Figure 7 shows the geometry the Caribbean, and Cocos plates in relation to Guatemala and the Project.

The Chortís block, which encompasses much of northern Central America, including all of Guatemala south of the MSZ, consists of a basement of Precambrian to Paleozoic continental metamorphic rocks. The Maya block to the north of the MSZ similarly consists of basement metamorphic rocks of continental origin. The two blocks contain different suites of high-pressure assemblage rocks of different ages (Harlow et al., 2004), and are generally interpreted as representing the collision of the North American and proto-Caribbean plates along a subduction zone during the Cretaceous (Ratschbacher et al., 2009). The generalized geology of the southeastern part of Guatemala is shown in Figure 8.

The MSZ developed as a sinistral wrench fault zone from the Late Cretaceous – Early Cenozoic due to differing velocities of the Caribbean and North American plates, and movement on the suture is ongoing to the present. The MSZ encompasses three major faults systems representing the time-evolution of the suture (from north to south the Polochic, Motagua, and Jocotán–Chamelecón faults), as well as ophiolitic serpentinite, jadeite, and eclogite representing relics of Cenozoic ocean crust preserved in the collision zone. In Guatemala the Chortís block metamorphic rocks are largely covered by Cenozoic volcanic and volcano-sedimentary rocks and Quaternary bimodal volcanic rocks.

Recent plate tectonic reconstructions (Rogers & Mann, 2007) suggest that the Jocotán – Chamelecón fault was active from the Early Miocene (20 Ma) to the Late Miocene (8 Ma), at which point the plate boundary shifted northwards to the Polochic fault. The Polochic was the main plate boundary until the early Pliocene (4 Ma), after which movement began on the Motagua fault. Recent work suggests the possibility that the plate boundary today encompasses more than simply the MSZ, as evidence suggests that neither the Polochic nor the Motagua fault extend all the way to the Cocos plate subduction zone (Guzmán-Speziale, 2010). Instead, it is proposed that the Ixcán fault, located in Guatemala north of the Polochic, and the Concordia fault located in southeast Mexico, are both also part of the plate boundary deformation zone, indicating that it is probably more complex than previously imagined. The Motagua, Polochic, Ixcán and Concordia faults are all historically and recently active (Lyon-Caen et al., 2006, Guzmán-Speziale, 2010). Estimates from the Cayman trough indicate total Cenozoic displacements of the plate boundary zone of over 1000 km (Rosencrantz et al., 1988), but there is controversy as to how much displacement was accommodated by the faults of the MSZ (e.g. Donnelly et al., 1990).

Figure 7: Tectonic map; Caribbean and Central America (Giuseppe Giunta and Silvia Orioli)

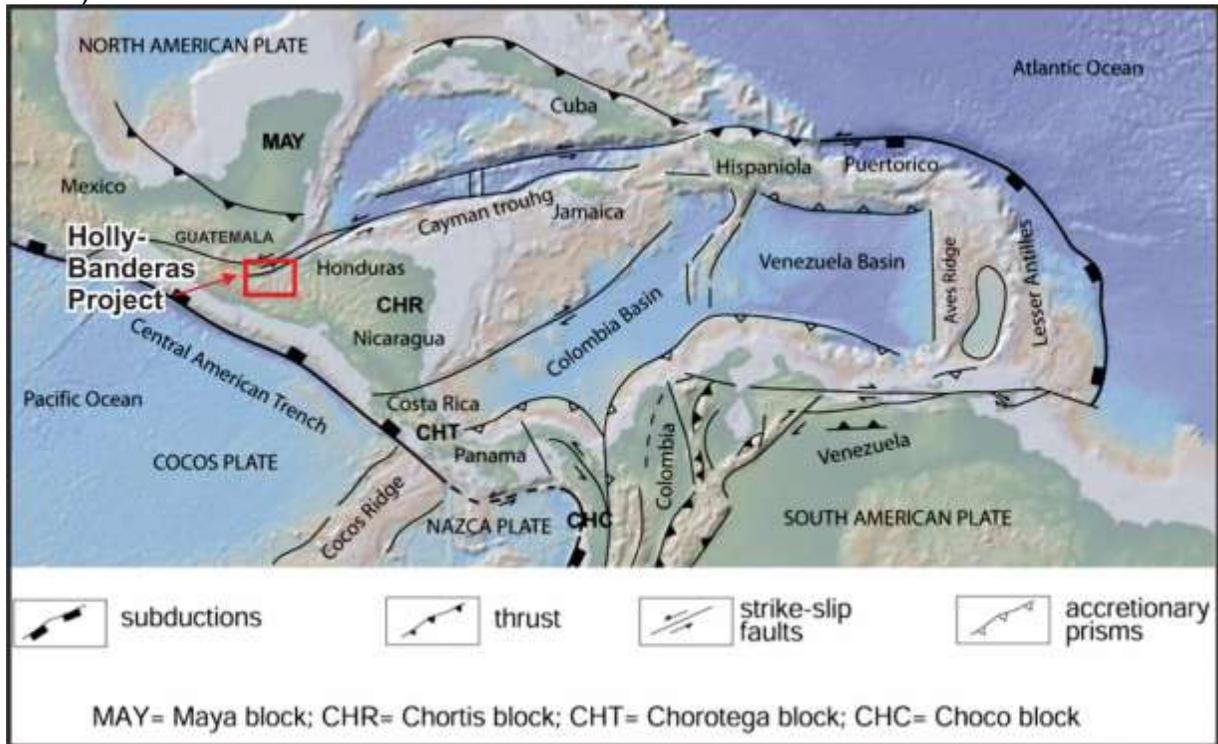
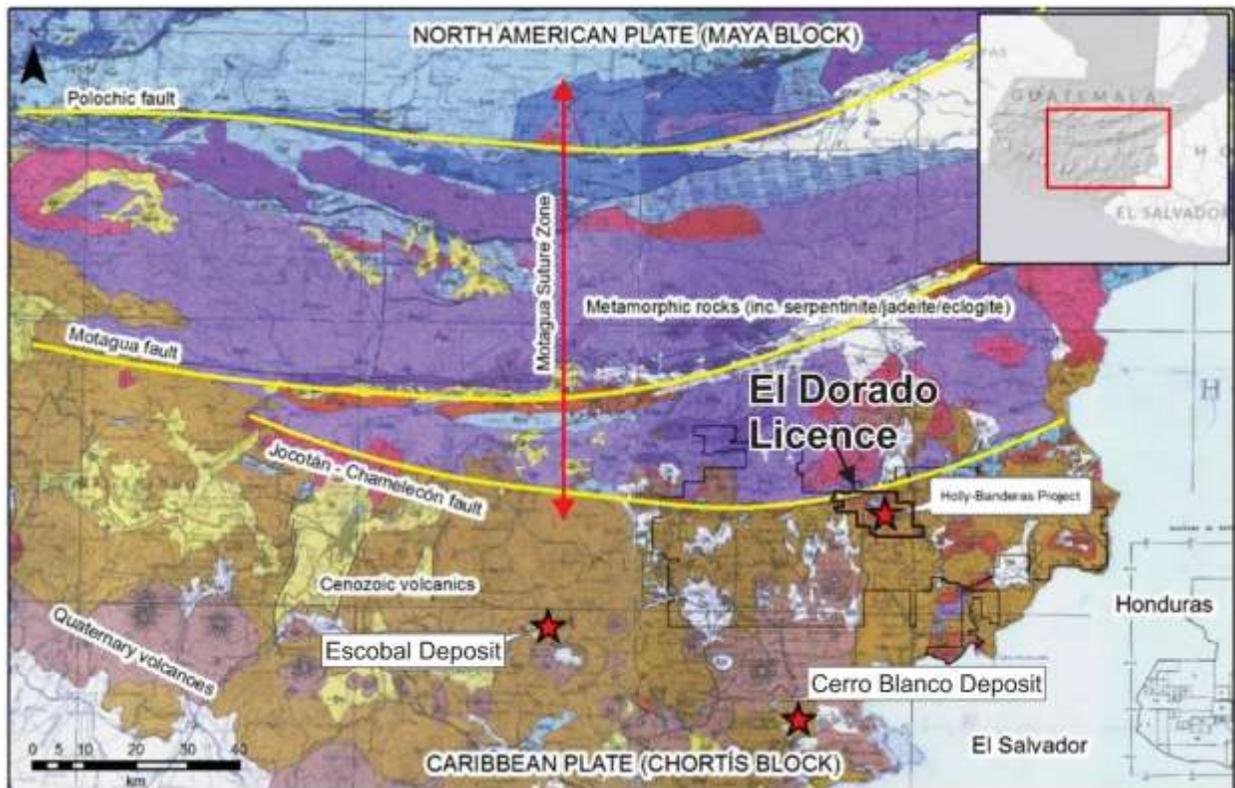


Figure 8: Generalized geology of SE Guatemala showing simplified traces of the faults in the MSZ. Geological map from the Instituto Geográfico Nacional de Guatemala, 1970.



South of the MSZ, extensional deformation presents a variety of orientations and types: both fault-perpendicular and -parallel grabens and normal faults have been described. The crustal domains separated by fault-perpendicular normal faults had been previously interpreted as crustal blocks rotating around the bend formed by the MSZ at the southern edge of the North American plate (Burkart & Self, 1985). More recently, the styles of extension seen south of the MSZ have been interpreted to be functions of the divergence angle between plate movement vectors and azimuth of the plate margin fault (Rogers & Mann, 2007). As these vary spatially and temporally due to fault geometry and shifting of the principle plate boundary fault from the Jocotán to the Motagua, multiple and overlapping expressions of extension are to be expected.

7.2 PROPERTY GEOLOGY

The Property, near its northern boundary, straddles the Jocotán fault, and extends southwards into the Cenozoic and Quaternary volcanic and volcano-sedimentary rocks of the Chortís block, Caribbean plate (Figure 9). Nomenclature interpretation of lithologies encountered on the Property and their geological context has varied between workers and companies over the time period the property has been explored.

7.2.1 LITHOLOGIES

The Project area lithologies are well-described in regional context by Donnelly et al. (1990), and the generic descriptions given below are largely taken from this work. As encountered in the Project area roughly from north to south (see Figure 9), they are summarily described as follows:

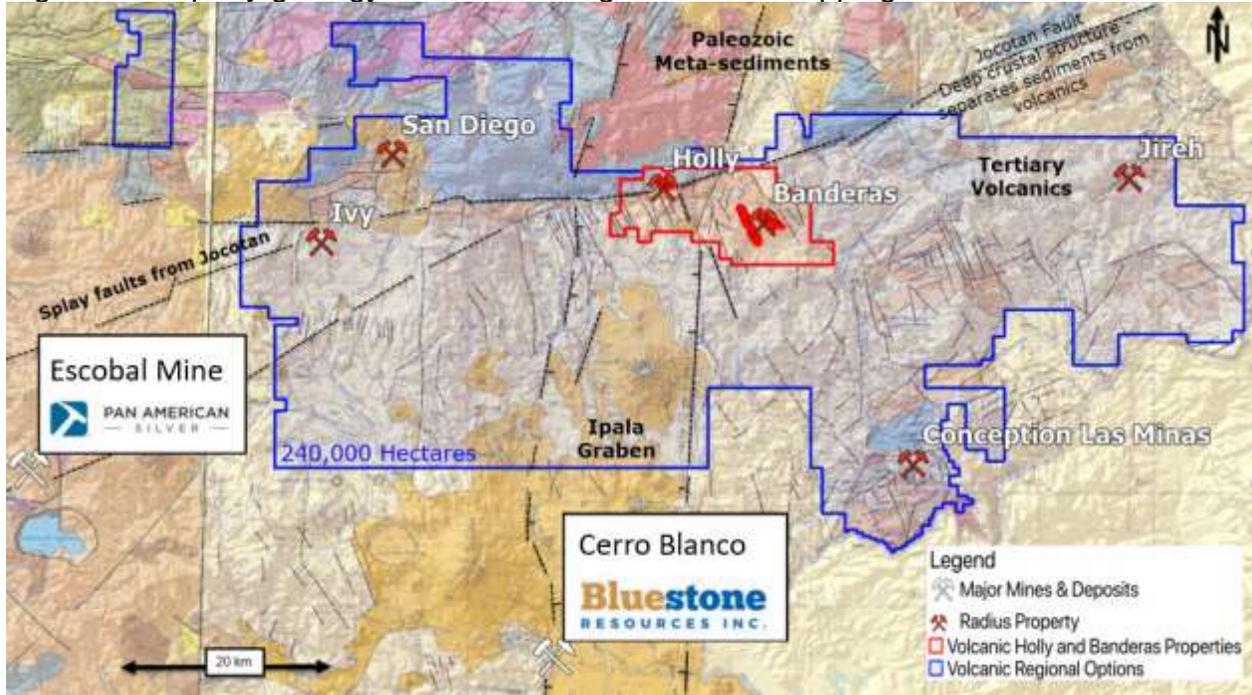
Santa Rosa Group phyllites:

The rocks exposed to the north of the Jocotán fault in the Project area consist of quartz-mica phyllites probably belonging to the San Diego phyllites. These were originally correlated with the Santa Rosa Group, which is generally defined as encompassing all the late Paleozoic clastic sedimentary rocks of the Maya Block. The Group comprises sandstones and conglomerates in its lower part, and gradetoshales in the upper. Santa Rosa Group rocks are extensive in outcrop in western Guatemala and Chiapas, Mexico and thin eastwards.

Subinal formation conglomerates:

Widespread in southeastern Guatemala, the Cenozoic-aged Subinal formation consists of fluvial red sandstones and conglomerates, with frequent scattered tuff beds throughout and minor evaporite beds. Age dating of an andesite clast in a conglomerate yielded a K-Ar age of 42 Ma (Deaton & Burkart, 1984). The thickness of this unit varies regionally in southeastern Guatemala from 100 m to 1000 m (Burkart, 1965). On company maps these are frequently referred to as La Joya sequence sediments.

Figure 9: Property geology from available government mapping.



Padre Miguel Group volcanics:

These Miocene-aged ignimbrites, lahars, air-fall ash, sandstones, conglomerates, and basalts overlie the Subinal formation conglomerates. They are widespread across most of southern Guatemala, western Honduras, northern El Salvador and Central Nicaragua. The ignimbrites of the Padre Miguel formation have been dated as erupting between 19 Ma until 14 Ma, but the age of the volcanic rocks on the Property is unknown. The most recent Padre Miguel group volcanic rocks in southeastern Guatemala have been assigned the name San Jacinto formation (Reynolds ,1980), and most workers on the Property have assigned to it the volcanic rocks.

Quaternary volcanics:

Basalt flows cap the Cenozoic volcanic rocks. On government maps, these are all interpreted as Quaternary, although there is some evidence that some of these are as old as 13 Ma, while others are as recent as Holocene. Volcanic morphology is generally well preserved in all cases, and it is difficult to distinguish on the basis of morphology alone.

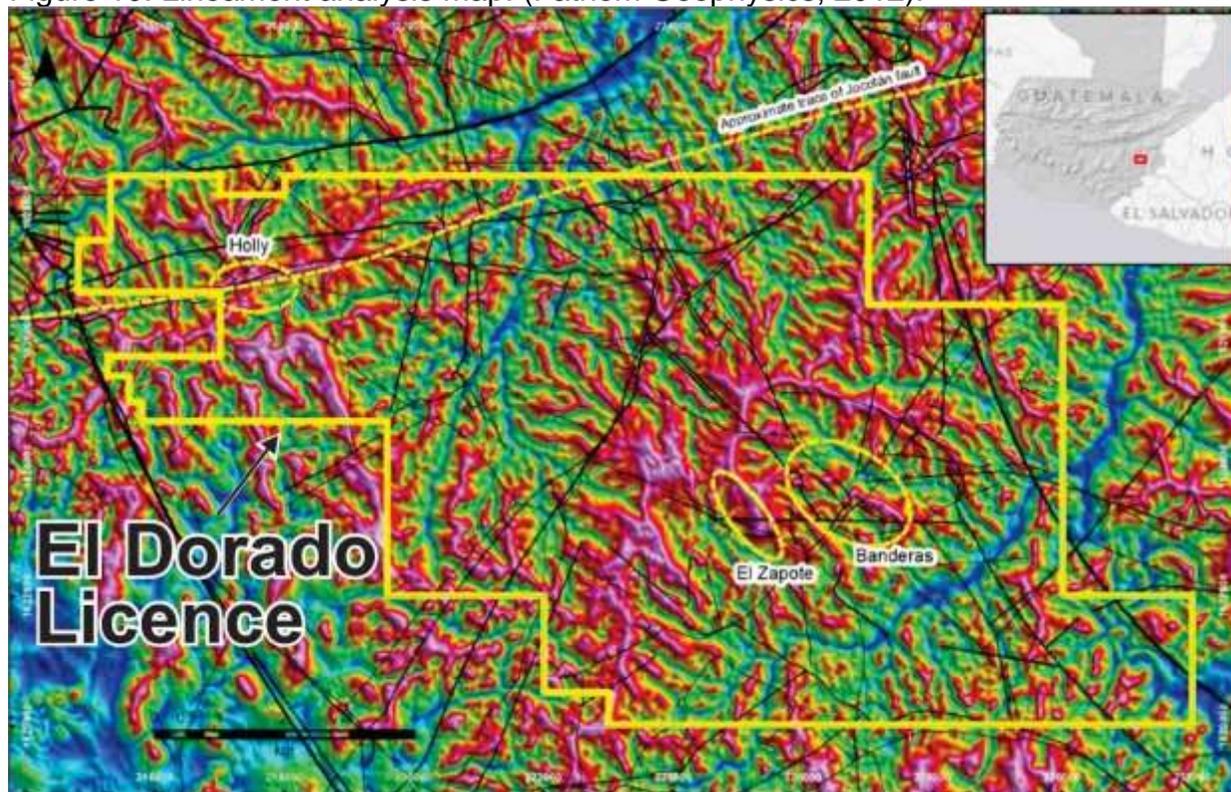
7.2.2 STRUCTURES

The dominant mapped orientation of geological structures on the Property is NNW (Figure 9), and these correspond to normal extensional brittle faults that cross-cut all lithologic units. Mineralization appears to be associated with NNW trending faults and is itself cross-cut by post-mineral faults in the same general orientations.

A topographic lineament analysis map of the Property is shown in Figure 10. It includes a gradient map of the tilt angle of the digital elevation model and the results of a structure detection algorithm applied to the same data. Tilt angles are frequently used to highlight structural features in magnetic data. However, when faults have a topographic expression, the

same technique can be used to interpret topographic data. The Jocotan Fault which crosses the northern portion of the area WSW to ENE is evident most notably in the segment near the Holly Zone. The general NW grain of the gradient image is reflective of the dominant fault pattern on the Property, but the structure detection algorithm interprets several NE trending structures on the Property, whose meaning is less clear, but possibly indicative of less obvious structural features or volcanic edifices.

Figure 10: Lineament analysis map. (Fathom Geophysics, 2012).



7.3 GEOLOGY OF MINERALIZED ZONES

The significant mineralized zones encountered on the property to date include; Holly Zone, Banderas Zone, and El Zapote Zone.

7.3.1 HOLLY

The Holly zone straddles the trace of the Jocotán fault, and consists of the Paleozoic-aged Santa Rosa Group phyllites in its northern part, a foliated east-west trending polymictic conglomerate (Holly Ridge Sequence) masking the expression of the Jocotán fault in its central part, and Subinal formation sediments and Cenozoic volcanic units in the southern part.

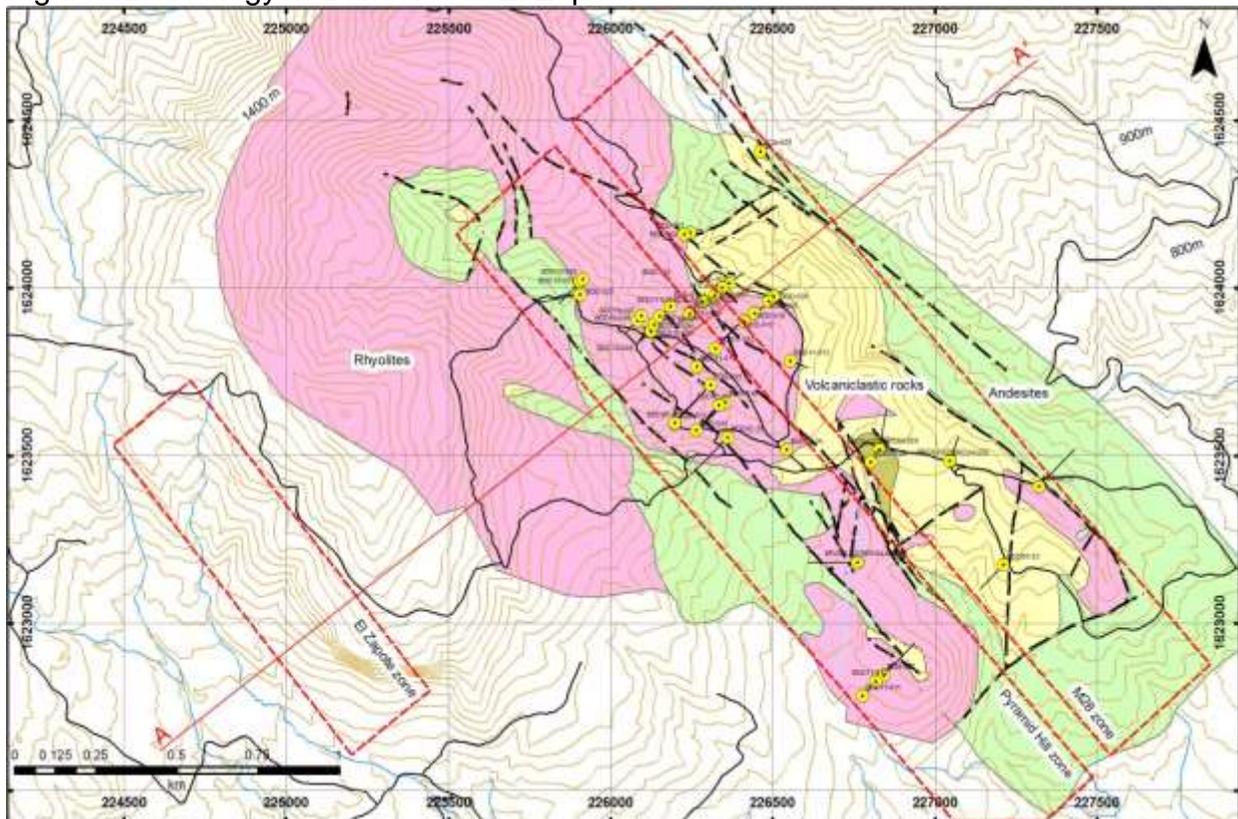
The conglomerate has been variously interpreted by different workers on the property, from a sequence of tilted welded tuffs (Redwood, 2010) to a polymictic conglomerate deposited along a paleo-escarpment related to the Jocotán fault with a minor sandy tuff component (SRK, 2012). The generalized geology of the Holly prospect, from company archives, is shown in Figure 11., and is in the author's opinion a generally correct representation of the local geology. The NW trending faults are interpreted based on outcrop geometry but are generally not

7.3.2 BANDERAS

The Banderas zone is hosted in Cenozoic volcanic rocks of the Padre Miguel group. Andesite flow sequences, which include amygdaloidal massive flows and flow top breccias as well as fine grained tuffs and lapilli tuffs, are locally overlain by a distinctive volcanoclastic unit (known as the red altered tuff, or “RAT” unit in some company reports) and a series of felsic volcanic flows or domes commonly exhibiting flow-banding. Numerous mafic dykes cross-cut the volcanic stratigraphy.

The generalized geology of the Banderas zone, is shown in Figure 12.

Figure 12: Geology of Banderas & El Zapote



The Banderas Zone has been traced for 2 kilometres in length, averaging between one and three metres in width, and is currently drill tested to 175 metres depth. The zone remains open along strike and to depth.

7.3.3 EL ZAPOTE

The El Zapote prospect is hosted in felsic volcanic and volcanoclastic rocks similar to those exposed at Banderas, 1.5 km to the east. A volcanoclastic unit similar to the “RAT” unit at Banderas appears exposed between intermediate volcanic rocks and overlying felsic volcanic rocks, as at Banderas. The El Zapote Zone has been traced for 1.5 kilometres in length, with an unknown width estimated to be between 2 and 10 metres and is untested at depth. The zone remains open along strike and to depth.

7.4 MINERALIZATION

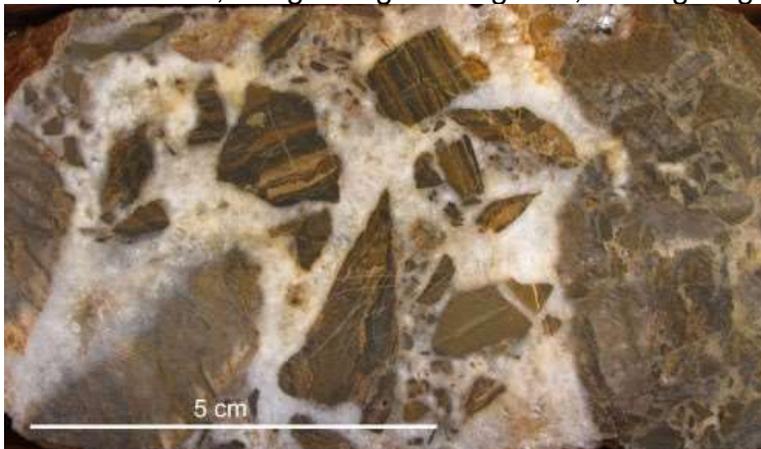
7.4.1 HOLLY

Au-Ag mineralization at the Holly zone is associated with epithermal quartz veins, quartz-hematite veinlets, and vein breccias. Within the Holly Ridge conglomerate, the veins occur as swarms striking NNW and steeply dipping (average vein orientation was measured at $347^{\circ}/84^{\circ}$, $n = 10$), and are colloform and locally drusy, up to 0.5 cm in thickness. These quartz veinlets can carry significant grades of Au and Ag (e.g. Figure 13).

Figure 13: Au-Ag quartz-hematite veinlet in an argillic conglomerate. HDD-005, 19.1-19.2 m. 343 g/t Au, 10,300 g/t Ag.



Figure 14: Au-Ag cataclastic breccia vein with angular fragments of laminated mudstone host. HDD-004, 6m grading 43.56 g/t Au, 1618 g/t Ag.



South of the Holly Ridge, a sequence of laminated calcareous and carbonaceous mudstones, steeply dipping to the south, is mineralized with veins and cataclastic vein breccias (e.g. Figure 14).

Located north of the Holly Ridge conglomerate, the El Pino and La Peña showings (Figure 11) both consist of epithermal quartz veins hosted in the Santa Rosa group phyllites. La Peña is the

northwestward extension of the principal explored vein swarm in the Holly Ridge conglomerate. Gold and silver mineralization is associated with a 0.5 m thick quartz vein with drusy and colloform quartz textures hosted in the phyllites (Figure 15), as well as adjacently in the conglomerate as cm-scale quartz-hematite veins and veinlets. At the La Peña Showing the zone has been defined by the collection of 15 rock surface samples. Results for gold average 0.89 g/t Au within a range of 5 ppb to 12.2 g/t Au and with a total of 4 samples considered anomalous with greater than 100 ppb Au. Results for silver average 8.5 g/t Ag within a range of 0.1 ppm to 100 g/t Ag and with a total of 4 samples considered anomalous with greater than 5 g/t Ag. The quartz vein's orientation was measured at 308°/84°, and chip samples from the quartz vein returned 1 m assaying 8.79 g/t Au and 70.5 g/t Ag.

At El Pino, a drusy and bladed quartz vein measuring ~0.6 m in thickness is hosted in phyllites and oriented 120°/90° (Figure 16). At the El Pino Showing the zone has been defined by the collection of 34 rock surface samples. Results for gold average 3.4 g/t Au within a range of 5 ppb to 91.3 g/t Au and with a total of 16 samples considered anomalous with greater than 100 ppb Au. Results for silver average 15.2 g/t Ag within a range of 0.1 ppm to 100 g/t Ag and with a total of 16 samples considered anomalous with greater than 5 g/t Ag. Additionally a chip sample of the exposed portion of the vein yielded 58.26 g/t Au and 1937 g/t Ag over 5.1 m.

Figure 15: Surface expression of the La Peña vein, in Santa Rosa Group phyllites.

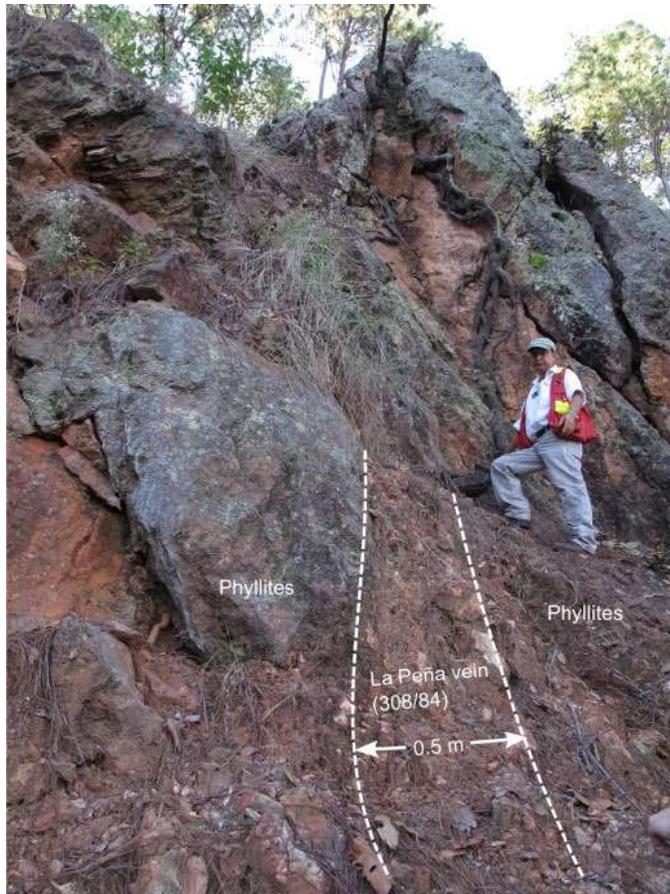
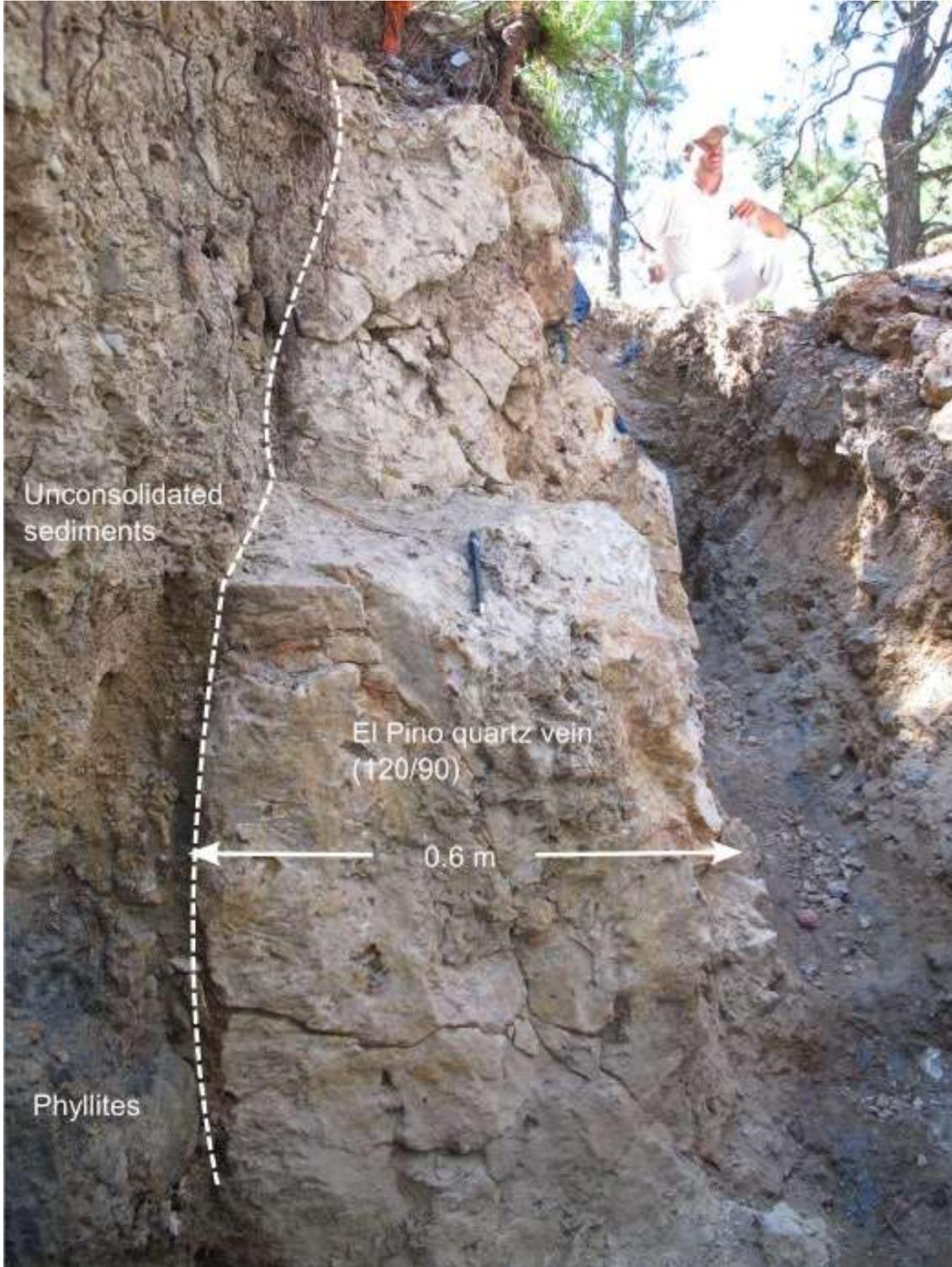


Figure 16: Surface expression of the El Pino vein, hosted in Santa Rosa Group phyllites. Looking SE along strike of the vein.



7.4.2 BANDERAS

The mineralized zones at Banderas include the Pyramid Hill zone, and the M28 zone. The former is a NNW-trending and sub-vertical to steeply east-dipping brittle fault hosting mineralized veins that can be traced over 2500m along strike. It juxtaposes two altered rock panels with different alteration assemblages: chlorite alteration to the west of the fault zone, and silica-adularia (buddingtonite)-jarosite to the east. At M28, parallel to and east of Pyramid Hill, moderately west-dipping mineralized veins are hosted in cataclastic fault breccias. Late brittle faults and cataclasites offset the mineralized zones on both prospects.

The mineralization at Banderas is characterised by a Ag-rich jigsaw breccia and a network of Au-Ag-bearing sulphide-poor epithermal quartz veins displaying colloform, bladed, and drusy textures, as both individual veins and stockwork zones, Figure 17.

Figure 17: Banderas Au-Ag bearing hydrothermal breccia and banded quartz veining



An analysis of drill core from the project (SRK, 2011) suggests the following relative timing relationships:

1. Early chlorite (propylitic); traces of pyrite
2. Early quartz-pyrite-mica; filling vesicles, associated with a stockwork of pyrite-rich veins
3. Emplacement of the volcanoclastic unit ("RAT" unit); this unit contains quartz-pyrite amygdule-bearing andesite pebbles

4. Pervasive silica-adularia (buddingtonite) alteration, replaces earlier quartz-pyrite-mica alteration, affects all lithologies with the exception of some mafic dykes, spatially associated with zones of Au-Ag mineralization
5. Epithermal “jigsaw” breccia and quartz veins; main mineralizing event
6. Locally pervasive jarosite alteration; cut by minor colloform quartz veinlets

Two vein orientations dominate: sub-vertical to steep east dips, and moderate west dips, consistent with the macro-scale fault orientations.

The paragenetic sequence at Banderas was studied in thin section by Ebert (2003), and is described as progressing from quartz pseudomorphs after calcite, to creamy chalcedony, white chalcedony with Au-Ag mineralization, and finally massive or vuggy quartz. Au-Ag mineralization is dominated by argentite-acanthite (Ag_2S), miargyrite (AgSbS_2), aguilarite (Ag_4SeS) and naumannite (Ag_2Se), and electrum (Au, Ag) with 25-40% Ag. Some of the electrum is secondary (supergene) in origin, present as small inclusions in jarosite. Of the four samples selected for the study, three were hand samples from surface showings, and all showed significant oxidation and sulphide loss, so a secondary origin for some of the mineralization present is not unusual; the study draws no conclusions as to the origin of less oxidized mineralized rocks.

7.4.3 EL ZAPOTE

Mineralization at El Zapote consists of a northwest trending vein stockwork zone exposed discontinuously along a southwest-facing steep hillside, possibly associated with a volcaniclastic unit that underlies a felsic volcanic cover unit. Surface grab and chip samples have returned anomalous (> 100 ppb) Au values discontinuously over a strike length of 3.5 km, parallel to and 1.3 km SW of the Pyramid Hill zone and include a ~500 m long zone of stockwork consistently assaying >500 ppb Au in grab and chip samples.

Figure 18: Au-Ag bearing hydrothermal breccia and banded quartz veining from El Zapote



8 DEPOSIT TYPES

The Banderas, El Zapote, and Holly zones display compositional, textural, alteration, and rock association characteristics consistent with a low sulphidation epithermal Au-Ag mineralized environment, and some characteristics consistent with a intermediate sulphidation epithermal environment. Low and intermediate sulphidation epithermal deposits can be summarized as follows:

8.1 LOW SULPHIDATION EPITHERMAL DEPOSITS

Low sulphidation epithermal deposit types are typically associated with subaerial bi-modal volcanic suites in extensional settings, and result from the boiling of hydrothermal waters and metal deposition in veins along fluid conduits, typically brittle faults and permeable lithologies. They are not usually proximal to intrusive magmatism, although a distal heat source is usually posited. Deposits present vein-filling crustiform and colloform quartz and chalcedony, and carbonate- replacement textures (bladed quartz after calcite). Open-space veins, banded veins, and vein breccias dominate, but stockwork ore is common. Most deposits show complex histories as fluid conduits open, deposit quartz and metals, seal, brecciate and re-open, re-deposit, etc.

Sulphides are typically on the order of < 1-2 vol%, with Au ± Ag as the main metals, with minor Zn, Pb, Cu, Mo, As, Sb, and Hg. Mineralogy of sulphides is pyrite ± arsenopyrite plus minor base metals minerals. The Ag: Au ratio in low sulphidation deposits is typically < 15.

Alteration assemblages associated with the fluid conduits are typically zoned outwards, with quartz-adularia associated with mineralization, an alteration halo in the host rock that includes smectite and illite-smectite at shallow levels and illite-adularia at deeper, more metal-favourable levels. More distal propylitic alteration assemblages are common. Nearer to paleo-surfaces, more acidic phases such as alunite, kaolinite, and opaline silica are often present at the sinter level. The fluids which give rise to these types of deposits are of near-neutral pH and meteoric or mixed meteoric-magmatic in origin, at fairly low temperatures (< 250°C).

The metal productive zone is generally considered to be from > 200 m to up to 700 m below the paleo-water table, depths that correlate with illite alteration in the wall rock and banded quartz to quartz vein textures. Most known low-sulphidation epithermal deposits are Cretaceous in age or younger, although examples as old as Archean are known. This is most likely due to preservation, as due to their high levels of emplacement relative to paleo-topography, older epithermal deposits are more likely to be eroded away than younger.

8.2 INTERMEDIATE SULPHIDATION EPITHERMAL DEPOSITS

Intermediate sulphidation epithermal deposits are texturally very similar to low sulphidation deposits, with many of the same characteristics: crustiform and colloform quartz, vein breccias and stockworks, etc. Typically, these deposits have Ag: Au ratios in the hundreds to thousands, sulphides on the order of 5 to 20 vol%, and contain between 0 and 5% lead and zinc. The hydrothermal systems giving rise to these types of epithermal deposits are frequently interpreted as having a more important magmatic component than in the case of low sulphidation deposits.

9 EXPLORATION

The Property has seen various phases of exploration during its history. It was originally discovered by Radius Explorations Inc. as a result of regional stream sediment surveys and prospecting. Follow-up prospecting, rock sampling and soil sample surveys identified the main mineralized vein systems on both Banderas and Holly, Figures 19a and 19b.

Stream sediment samples were collected from active drainages, sieving the available material with plastic sieves to collect the finer fractions. The total volume of material used for individual samples varied depending on the general size characteristics and distribution of the sample material. Samples were placed in sealed and labeled individual bags for transport to the lab. The sampling methods and sample quality for the stream sediment samples met industry standards and the samples are considered to be representative. There are no factors identified that may have resulted in sample biases within the stream sediment samples.

Figure 19a Regional Geochemistry - Gold

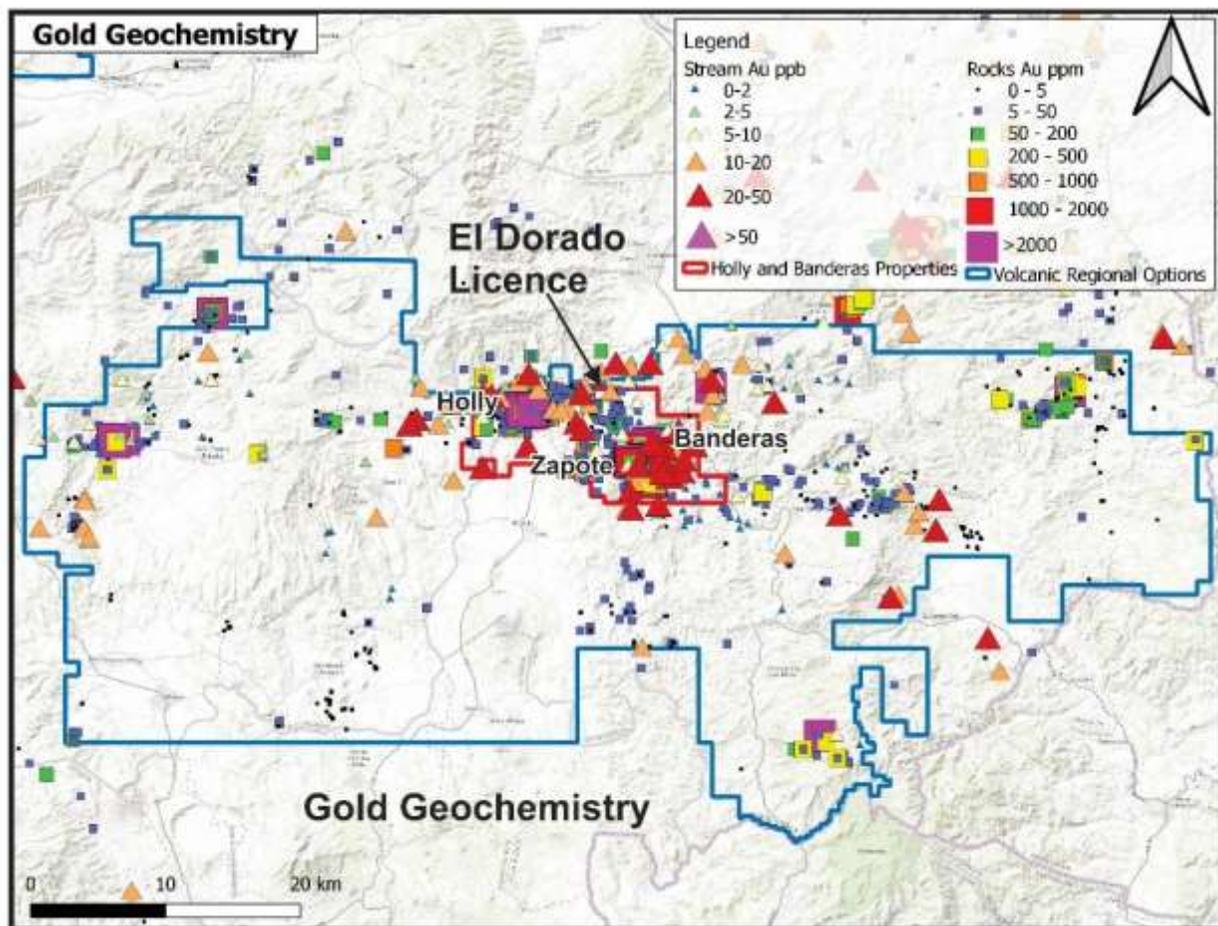
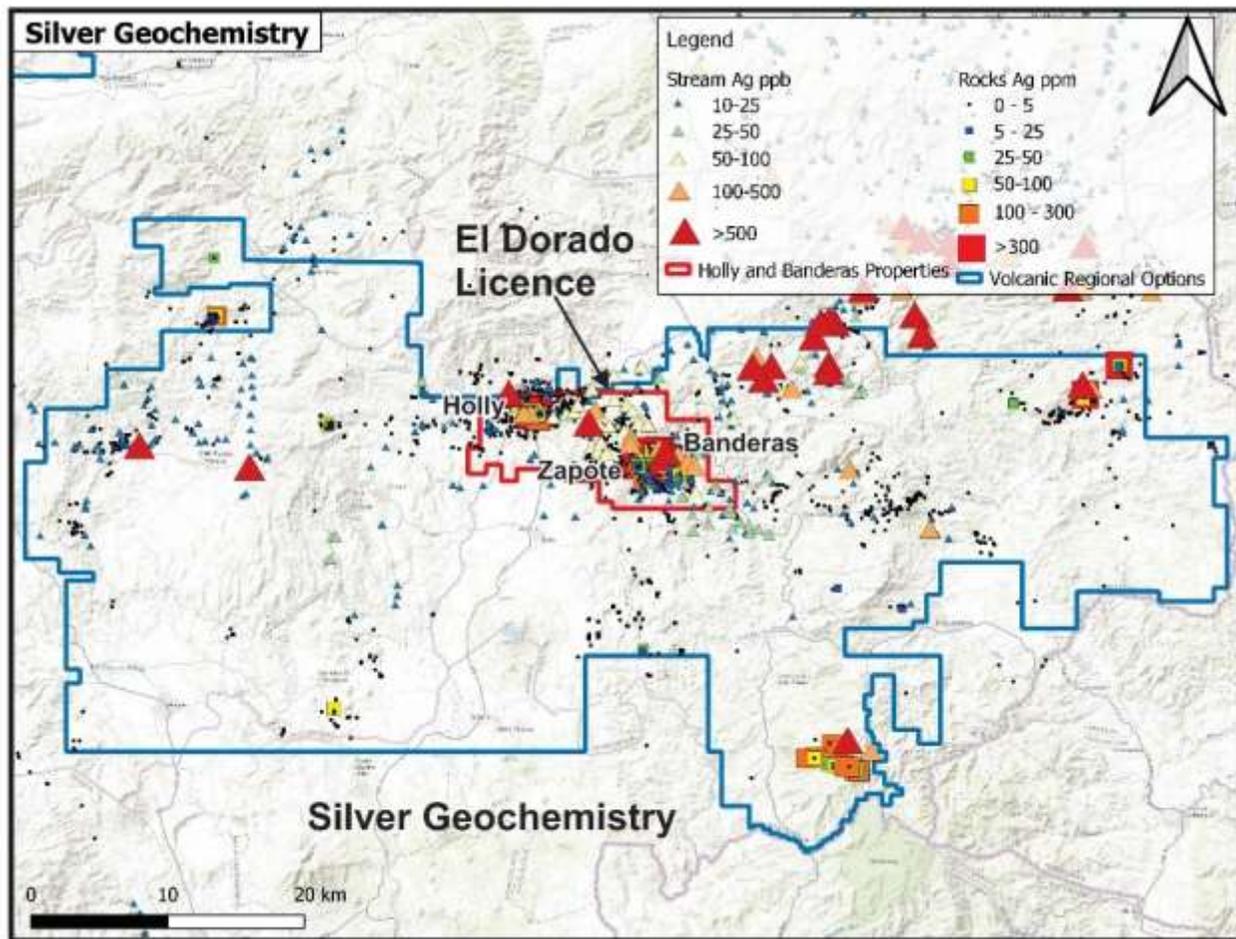


Figure 19b Regional Geochemistry - Silver



9.1 SOIL SAMPLING

The Banderas (Pyramid Hill & M28 zones), El Zapote, and Holly prospects were grid-sampled for soil geochemistry by Radius Explorations Ltd. workers in 2002 and 2003. A total of 2080 soil samples were taken on the El Zapote and Banderas grid, and 1119 soil samples taken over the Holly grid. Representative soil sample maps for Au geochemistry are given in Figure 20 and Figure 21. Follow-up prospecting and trenching work delineated the vein systems at El Zapote, Pyramid Hill, and M28.

Soil samples were generally collected from the B horizon using hand dug pits and/or hand held augers. The total volume of material used for individual samples varied depending on the general size characteristics and distribution of the sample material. Samples were placed in sealed and labeled individual bags for transport to the lab. The sampling methods and sample quality for the soil samples met industry standards and the samples are considered to be representative. There are no factors identified that may have resulted in sample biases within the soil samples.

Figure 20: Au soil geochemistry over the Banderas & El Zapote prospects.

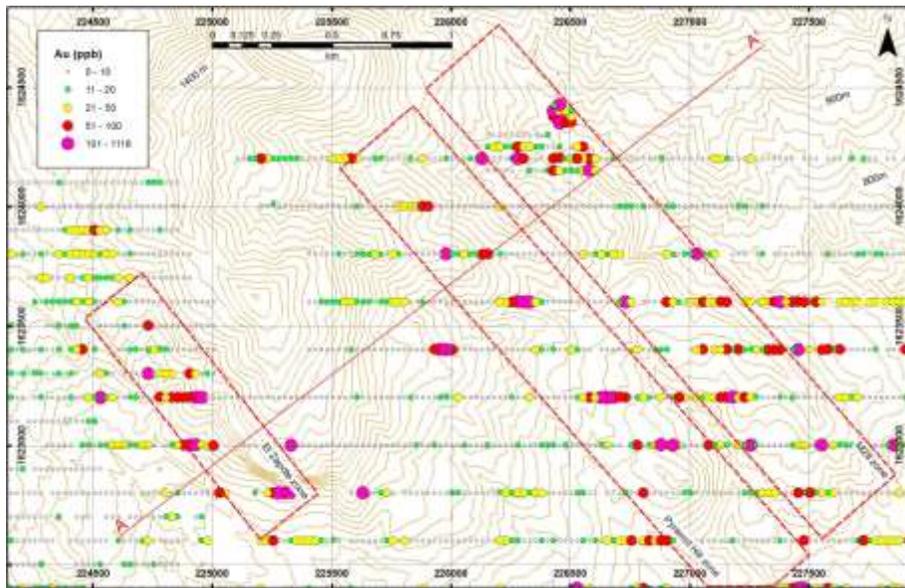


Figure 21: Au soil geochemistry over Holly prospect.



9.2 SURFACE ROCK SAMPLING

Surface prospecting and sampling of both outcrop and float (as grab samples, chip samples, and trench chip samples) have been ongoing on the Property since 2002. At Banderas, over 1600 surface rock samples have been collected and assayed. Of these, over 260 assayed > 1 g/t Au, and 145 assayed > 50 g/t Ag. At Holly, over 800 surface samples have been collected and assayed. Of these, 149 assayed > 1 g/t Au, and 59 assayed > 50 g/t Ag. Representative Au rock geochemistry for the Banderas and Holly zones are shown graphically in Figure 22 and Figure 23, respectively.

Follow-up prospecting and rock sampling were completed targeting areas highlighted by the stream sediment and soil sampling. The filed work was completed by qualified personnel following industry standard practises. Samples were collected from float, subcrop, and outcrop as grab samples or channel samples and in each case a geological description was completed in the field. Samples were placed in sealed and labeled individual bags for transport to the lab. The sampling methods and sample quality for the rock samples met industry standards and the samples are considered to be representative for those individual locations. There are no factors identified that may have resulted in sample biases within the rock samples.

Figure 22: Surface rock samples at Banderas.

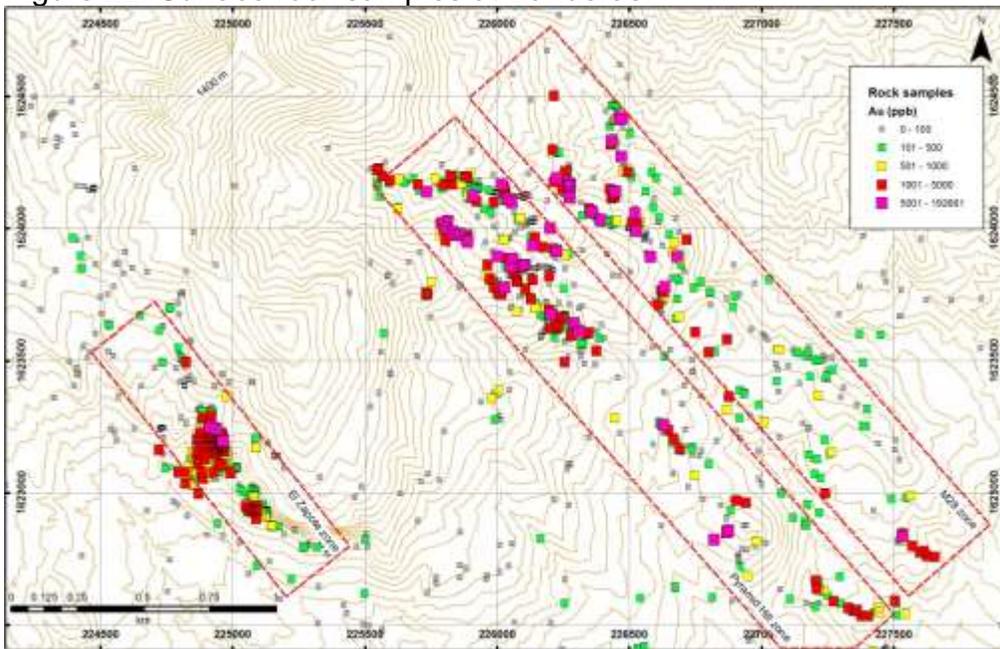
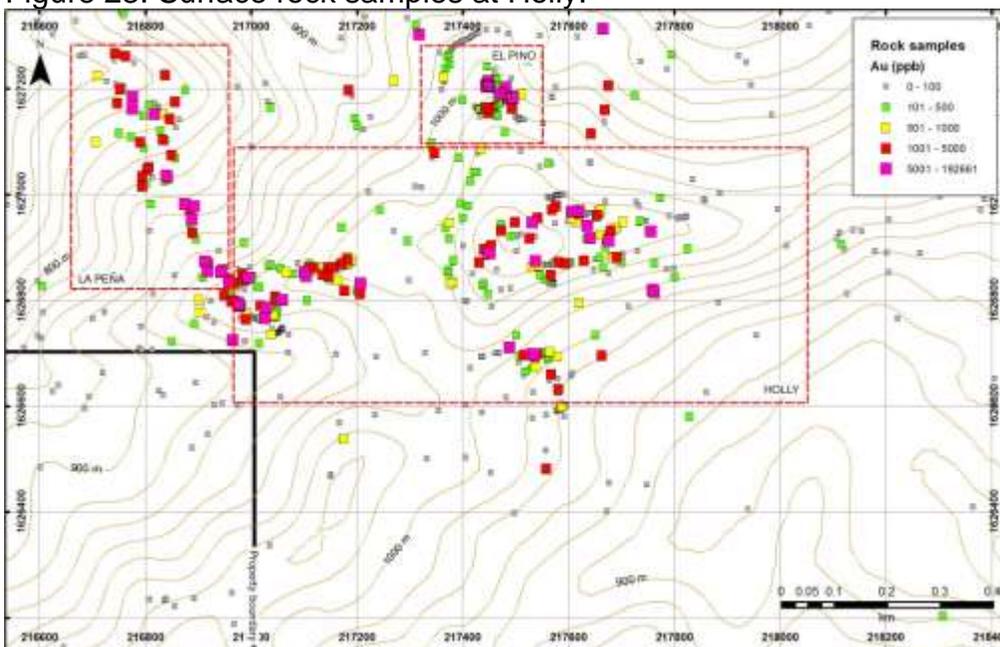


Figure 23: Surface rock samples at Holly.



9.3 GEOPHYSICAL SURVEYS

Two induced polarization surveys have been commissioned over the Holly prospect over the Project lifetime. The first, commissioned by Radius Explorations Ltd., was a gradient and “Realsection” IP/Resistivity survey performed by Quantec Geoscience Inc. in August and September of 2002, just prior to the first drill program on the prospect. Its primary objectives were to map lithology, alteration, and structure, and locate and delineate potential extensions to the quartz veins known from surface. Chargeability and resistivity plan maps are given in Figure 24 and Figure 25, respectively.

The Quantec IP Survey consisted of a Multiple Gradient Array Time Domain. A total of 11 lines, each with a overall length of 2000 metres and with stations spaced at 25 metre intervals were surveyed. Measurements for apparent chargeability (Ma) and apparent resistivity (Ra) were collected for each station. Instrumentation consisted of an IRIS IP-6 operating with 6 channels and a transmitter with a current of 2.0 to 5.0 Amps.

The survey did not identify any factors that may have resulted in sample biases; cultural features including roads, power lines, and fences were factored into the processing and interpretation. Results and interpretation for the Quantec survey defined two broad domains in the Chargeability with a northern generally high and variable area separated from a southern low and subdued area. The east-west oriented break between these two areas of differing response is interpreted to be related to the Jocotan Fault Structural Zone. In the Resistivity data the response is generally differentiated in an eastern low area and western high area with the western area also containing a series of north-south resistivity highs interpreted to be related to silicified zones.

Figure 24: Quantec IP chargeability.

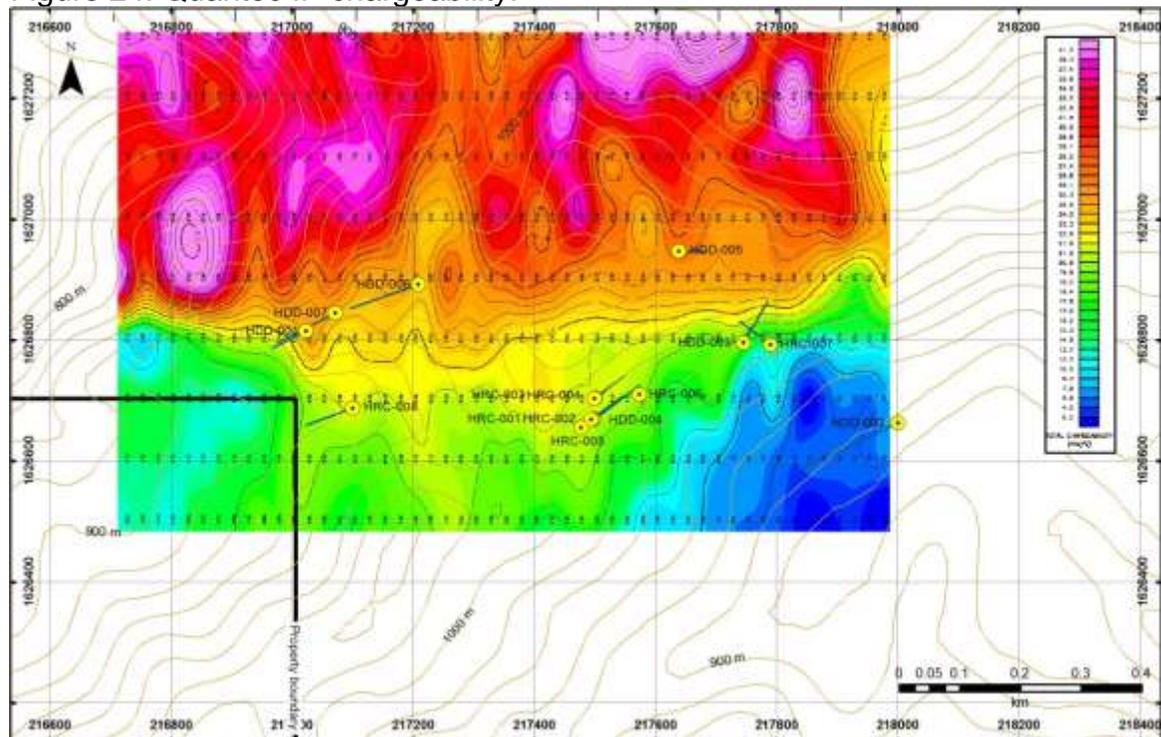
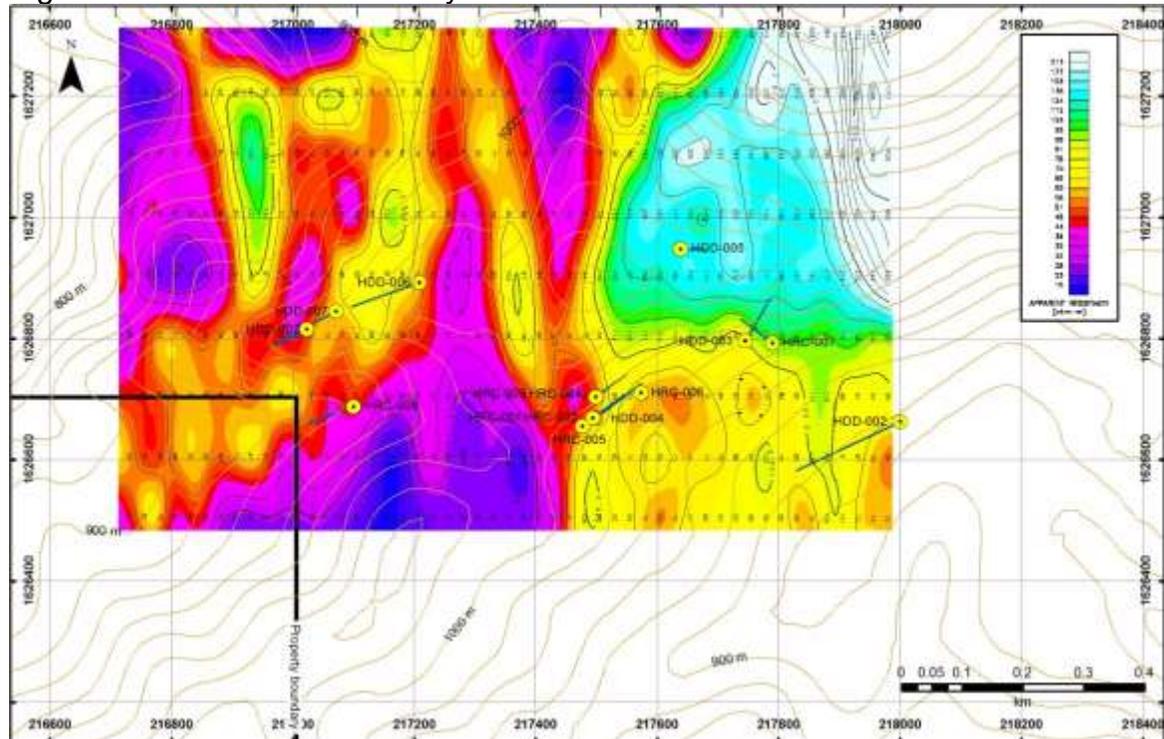


Figure 25: Quantec IP resistivity.



The second was commissioned by Radius in 2011, with work done by Arce Geofisicos. This survey consisted of 3D IP/resistivity in a pole-pole electrode configuration, and covered the Holly prospect and two test lines over the Banderas prospect. Plan maps of the 3D model are given at the 100 m depth level in Figure 26 and Figure 27.

The Arce Geophysical Survey consists of a total of 44400 meters of 30 Induced Polarization profiles with constant-spacing measurements taken at 50m interval along lines, employing the Pole-Pole (2-Array) electrode configuration, with a plotting point at mid-distance between the moving electrodes A (Current Electrode) and M (Potential Electrode). Measurements for apparent chargeability (Ma) and apparent resistivity (Ra) were collected for each station. Self-Potentials were also measured, taking advantage of the reference electrode (N) that is used with Pole-Pole. The Receiver was an IRIS ELREC PRO with 1 microvolt resolution and 20 partial chargeability windows.

The survey did not identify any factors that may have resulted in sample biases; cultural features including roads, power lines, and fences were factored into the processing and interpretation. Results and interpretation for the Arce survey defined two broad domains in the Chargeability with a northern generally high and variable area separated from a southern low and subdued area. The east-west oriented break between these two areas of differing response is interpreted to be related to the Jocotan Fault Structural Zone. In the Resistivity data the response is generally differentiated with low values in the northern portion and higher values in the south and with a prominent north-south resistivity high on the eastern edge of the survey areas interpreted to be related to a silicified zone.

Figure 26: Arce Geophysics 3D IP chargeability plan map at 100 m depth.

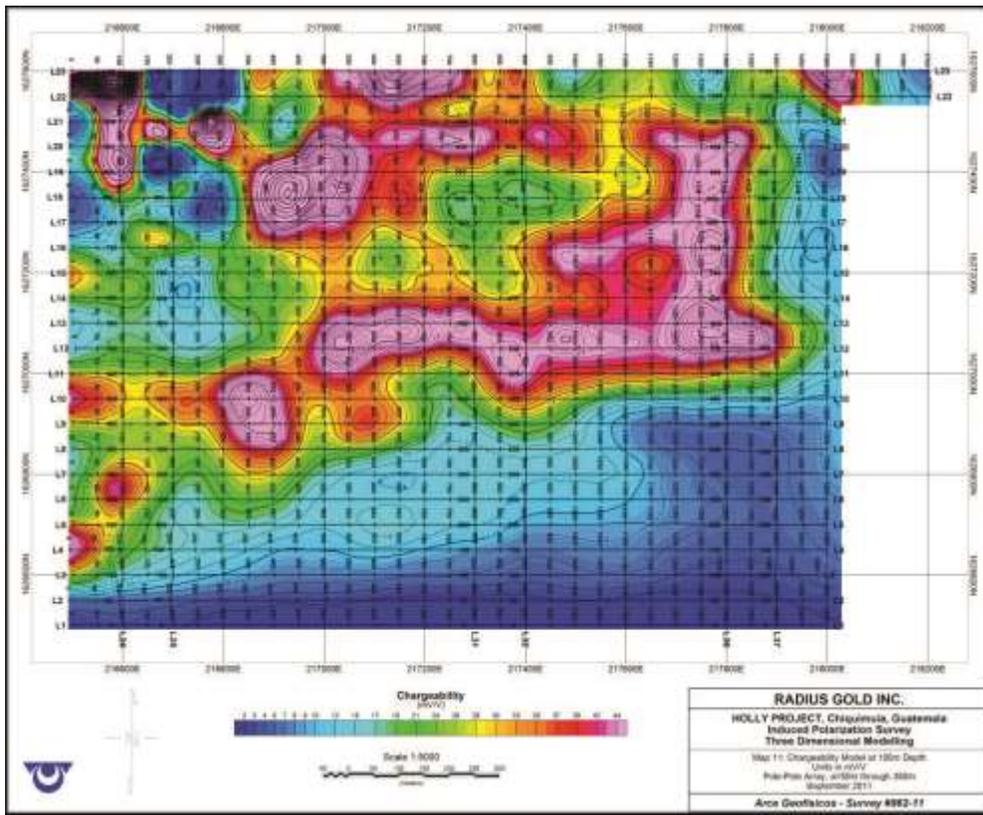
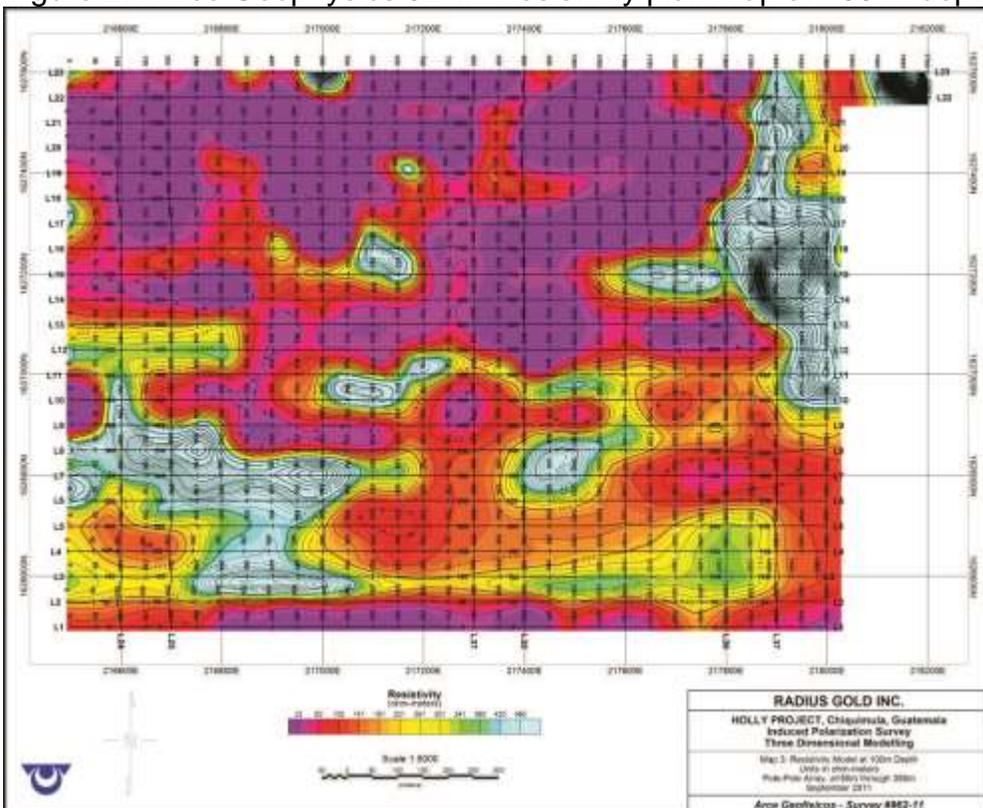


Figure 27: Arce Geophysics 3D IP Resistivity plan map at 100 m depth.



10 DRILLING

Drilling on the Holly-Banderas Project has included both Reverse Circulation (RC) and Diamond (DDH) drilling. Between 2002 and 2011, 14 RC holes totalling 2,153 metres and 49 DDH holes totalling 9,139 metres were completed. Procedures for both the RC and DDH drilling followed industry standard procedures. Drilling in all cases was performed by independent contractors under the supervision of qualified professional geologists. Drill collars were surveyed upon completion of the drill hole and a marker left to note the location of each drill hole.

Diamond drilling was completed in 2002 (7 holes), 2003 (10 holes), 2004 (12 holes), 2005 (6 holes), 2010 (7 holes), and 2011 (7 holes) with drilling using a man portable and small track mounted diamond drills in order to reduce the need for road building and disturbances caused in the construction of drill pads. Reverse Circulation drilling was completed in 2003 (8 holes) and 2004 (6 holes) with drilling using a track mounted RC rig. All drill sites were rehabilitated following completion of the drill hole including leveling and revegetation. Qualified personnel monitored the drill rig operations throughout both the RC and DDH drilling programs.

During diamond drilling programs forms are filled out during each shift recording the type of work completed and time taken such as rig shifts, pulling rods, changing the bit, drilling, breakdowns and downhole survey. The technicians are also responsible for receipt of the core from the drillers. Core is taken from the core tube or splits and placed directly into labeled core trays/boxes. Core blocks are placed in the core trays at the end of each run. The hole depth and amount of core loss (if any) is written on each core block. Each box is numbered on site with the hole number and box number. At the end of each shift personnel transport all full core trays back for core logging and sampling is conducted within the secure facility. Reverse circulation drill hole samples were collected in a bag from the base of a cyclone every 1.5 metres. Each 1.5 metre sample was weighed then a split taken for analysis. Care was taken to ensure accurate splits. Samples were examined and logged on site and washed chips collected for future reference.

There were no drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results. Both RC and DDH drilling resulted in the collection of material sufficient for sampling to accurately reflect the true characteristic of the mineralization. For both RC and DDH the entire length of the drill holes was logged and sampled.

The relationship between the sample length and the true thickness of the mineralization, is not known. Insufficient drilling has been completed to precisely define the orientation of the mineralization. In general drill holes were oriented at steep angles to the interpreted orientation of the mineralization and the true thickness is estimated to be in a range between 60% and 85% of the sample lengths.

10.1 DRILLING SUMMARY

As of the effective date of this report, a total of 63 holes have been drilled on the Property, totalling over 9100 m of drilling, and giving an average drill hole depth of 145 m. The bulk of the drilling has been on the Banderas prospect (48 drill holes), and the remainder at Holly (15 drill holes). A summary of historic and recent drill holes and total drilled lengths is given in Table 3.

Table 3: Drilling summary (D: Diamond drill hole; RC: Reverse circulation drill hole)

Year	Zone	Type	# holes	Hole range	Company	Total (m)
2002	Holly	D	7	HDD-001 to HDD-007	Radius Explorations Inc.	978
2003	Holly	RC	8	HRC-001 to HRC-008	Pillar Resources Inc.	1013
2003	Banderas	D	10	BDD-001 to BDD-010	PilaGold Inc.	903
2004	Banderas	D	12	BDD-011 to BDD-022	PilaGold Inc.	1644
2004	Banderas	RC	6	BRC04-023 to BRC04-028	Glamis Gold Ltd.	1140
2005	Banderas	D	6	BDD05-29 to BDD05-34	Glamis Gold Ltd.	1418
2010	Banderas	D	7	BDD10-001 to BDD10-007	Radius Gold Inc.	747
2011	Banderas	D	7	BDD11-008 to BDD11-014	Radius Gold Inc.	1296
			Total:	63	Total:	9,138

10.2 DRILL HOLE LOCATIONS

Drill hole collar data are given for both diamond and reverse-circulation holes in Table 4. At Holly, the majority of drilling took place in the Subinal formation sediments to the south of the Holly Ridge, with some drilling focusing on the mineralized vein swarms in the Holly Ridge conglomerate. At Banderas, drilling focused largely on the Pyramid Hill and M28 zones.

Table 4: Drill hole collar locations (Datum: WGS84; Projection: UTM zone 16).

Hole ID	Zone	Easting	Northing	Elevation	Length	Plunge	Azimuth
Holly							
HDD-001	Holly Ridge	217024	1626816	997	90.5	-45	243
HDD-002	Holly South	218001	1626663	893	267.6	-45	245
HDD-003	Holly Ridge	217746	1626796	988	112.6	-45	30
HDD-004	Holly South	217499	1626669	990	133.6	-45	53
HDD-005	Holly Ridge	217639	1626948	1074	61.5	-45	90
HDD-006	Holly Ridge	217208	1626893	1031	166.5	-45	250
HDD-007	Holly Ridge	217072	1626845	1003	145.5	-45	243
HRC-001	Holly South	217496	1626669	990	91.4	-45	53
HRC-002	Holly South	217495	1626669	990	128	-60	53
HRC-003	Holly South	217501	1626705	995	85.3	-45	53
HRC-004	Holly South	217500	1626704	995	88.4	-60	53
HRC-005	Holly South	217478	1626656	994	169.2	-60	53
HRC-006	Holly South	217574	1626711	985	243.8	-90	0
HRC-007	Holly Ridge	217791	1626793	978	91.4	-45	307
HRC-008	Holly South	217101	1626688	948	115.8	-45	250

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Banderas							
Hole ID	Zone	Easting	Northing	Elevation	Length	Plunge	Azimuth
BDD-001	M28	226245	1624165	920	67.1	-55	75
BDD-002	M28	226227	1624160	924	59.4	-70	75
BDD-003	M28	226365	1624014	949	100.6	-55	55
BDD-004	M28	226343	1624001	961	120.4	-70	55
BDD-005	M28	226503	1623976	931	106.7	-55	60
BDD-006	M28	226487	1623960	943	82.3	-55	55
BDD-007	M28	226320	1623978	953	94.5	-60	55
BDD-008	M28	226285	1623960	940	118	-60	55
BDD-009	Pyramid Hill	226244	1623926	960	65.5	-45	227
BDD-010	Pyramid Hill	226245	1623926	960	88.4	-60	227
BDD-011	M28	226287	1623962	941	156.9	-80	55
BDD-012	M28	226285	1623960	940	136.2	-80	235
BDD-013	Pyramid Hill	226243	1623923	962	182.8	-90	0
BDD-014	Pyramid Hill	226264	1623577	953	138.7	-45	45
BDD-015	Pyramid Hill	226355	1623659	945	156.3	-45	225
BDD-016	Pyramid Hill	226308	1623712	964	196.5	-45	225
BDD-017	Pyramid Hill	226199	1623594	983	7.6	-45	45
BDD-018	M28	226444	1623926	972	104.2	-60	55
BDD-019	M28	226412	1623902	989	108.2	-60	55
BDD-020	Pyramid Hill	226841	1622845	844	193.55	-45	45
BDD-021	East of M28	226462	1624408	884	77.42	-60	60
BDD-022	Pyramid Hill	225905	1623981	1086	185.32	-45	260
BRC04-023	M28	226828	1623518	876	193.5	-50	10
BRC04-024	M28	226829	1623519	876	197	-70	10
BRC04-025	M28	227046	1623486	864	150	-60	20
BRC04-026	M28	227045	1623484	864	210.5	-90	0
BRC04-027	Pyramid Hill	226761	1623183	844	238.5	-50	270
BRC04-028	Pyramid Hill	226761	1623182	843	150	-70	225
BDD05-29	M28	226801	1623482	860	230.27	-70	45
BDD05-30	Pyramid Hill	226361	1623555	947	238.05	-50	225
BDD05-31	Pyramid Hill	226199	1623598	984	301.32	-70	45
BDD05-32	East of M28	227321	1623408	847	225.09	-45	45
BDD05-33	M28	227211	1623175	810	173.24	-55	225
BDD05-34	Pyramid Hill	226544	1623518	906	250	-90	0
BDD10-001	Pyramid Hill	225906	1624019	1075	141.73	-48	225
BDD10-002	Pyramid Hill	225914	1624027	1068	135.63	-49	225
BDD10-003	Pyramid Hill	226124	1623870	1033	97.54	-50	230
BDD10-004	Pyramid Hill	226134	1623891	1021	102.1	-48	225
BDD10-005	Pyramid Hill	226134	1623891	1021	112.77	-62	225
BDD10-006	Pyramid Hill	226083	1623904	1037	76	-50	225
BDD10-007	Pyramid Hill	226095	1623919	1026	80.77	-60	225
BDD11-008	Pyramid Hill	226151	1623916	1003	153.92	-60	225
BDD11-009	Pyramid Hill	226185	1623945	972	251.46	-60	225
BDD11-010	Pyramid Hill	226817	1622827	833	129.54	-51	45
BDD11-011	Pyramid Hill	226775	1622783	815	131.06	-51	45
BDD11-012	M28	226324	1623820	1019	224.02	-60	45
BDD11-013	M28	226554	1623783	935	99.06	-53	110
BDD11-014	M28	226266	1623765	987	307.24	-51	45

10.3 SIGNIFICANT MINERALIZED INTERCEPTS

Significant mineralized intercepts for Au are given in Table 5. The intercepts selected for inclusion in this table are all those intervals with a minimum composite grade of 2.0 g/t Au, a minimum interval length of 0.5 m, and use a cut-off grade of 0.5 g/t Au.

Table 5: Summary of significant drill intercepts on the Property

Hole ID	Zone	Area	From	To	Length	Au (g/t)	Ag (g/t)
BDD-001	Banderas	M28	13.8	14.3	0.5	5.92	68
BDD-002	Banderas	M28	28.5	30.3	1.8	2.92	40
BDD-003	Banderas	M28	28.9	30.7	1.8	7.03	111
BDD-004	Banderas	M28	53.9	58.2	4.3	5.90	131
BDD-005	Banderas	M28	27.0	30.5	3.5	3.60	46
BDD-006	Banderas	M28	48.2	50.5	2.3	4.54	53
BDD-007	Banderas	M28	70.1	71.9	1.8	2.78	68
BDD-007	Banderas	M28	77.7	79.3	1.6	7.50	24
BDD-008	Banderas	M28	86.9	90.5	3.6	8.72	38
BDD-009	Banderas	Pyramid Hill	44.2	45.7	1.5	3.10	23
BDD-012	Banderas	M28	91.1	94.4	3.3	2.86	21
BDD-014	Banderas	Pyramid Hill	56.3	58.5	2.2	6.86	262
BDD-014	Banderas	Pyramid Hill	70.1	71.6	1.5	4.20	232
BDD-015	Banderas	Pyramid Hill	65.5	68.5	3.0	2.15	8
BDD-016	Banderas	Pyramid Hill	147.8	148.7	0.9	2.69	3
BDD-016	Banderas	Pyramid Hill	154.5	156.1	1.6	4.87	4
BDD-018	Banderas	M28	67.9	70.1	2.2	4.46	134
BDD-018	Banderas	M28	70.7	71.6	0.9	4.73	52
BDD-019	Banderas	M28	86.9	89.6	2.6	6.82	95
BDD-022	Banderas	Pyramid Hill	62.5	69.2	6.7	3.89	70
BRC04-024	Banderas	M28	167.0	170.0	3.0	36.40	274
BRC04-028	Banderas	Pyramid Hill	85.5	87.0	1.5	2.70	9
BDD05-31	Banderas	Pyramid Hill	152.5	154.1	1.6	2.99	5
BDD05-31	Banderas	Pyramid Hill	166.6	167.1	0.5	3.28	5
BDD05-31	Banderas	Pyramid Hill	186.4	188.8	2.5	7.86	10
BDD10-001	Banderas	Pyramid Hill	82.9	83.9	1.0	11.66	197
BDD10-001	Banderas	Pyramid Hill	85.7	86.7	1.0	2.02	52
BDD10-003	Banderas	Pyramid Hill	41.2	42.0	0.9	3.00	78
BDD10-003	Banderas	Pyramid Hill	44.2	45.7	1.5	2.19	175
BDD10-004	Banderas	Pyramid Hill	73.5	74.5	1.0	2.00	28
BDD10-005	Banderas	Pyramid Hill	95.0	97.0	2.0	3.56	19
BDD10-007	Banderas	Pyramid Hill	56.3	57.6	1.3	2.20	91
BDD11-012	Banderas	M28	192.3	193.6	1.3	3.50	37
BDD11-013	Banderas	M28	61.5	62.5	1.0	38.35	160

HDD-001	Holly	Holly Ridge	34.8	49.0	14.2	4.14	150
HDD-004	Holly	Holly South	39.1	46.6	7.5	3.47	220
HDD-004	Holly	Holly South	54.1	60.1	6.0	43.56	1618
HDD-005	Holly	Holly Ridge	19.1	22.7	3.6	22.03	697
HDD-007	Holly	Holly Ridge	43.0	44.0	1.0	6.10	88
HDD-007	Holly	Holly Ridge	88.5	90.0	1.5	7.19	123
HRC-001	Holly	Holly South	50.3	61.0	10.7	4.83	265
HRC-001	Holly	Holly South	76.2	79.3	3.1	2.30	125
HRC-003	Holly	Holly South	18.3	19.8	1.5	2.33	10
HRC-003	Holly	Holly South	38.1	41.1	3.0	2.86	78
HRC-004	Holly	Holly South	48.8	50.3	1.5	4.38	96



The relationship between the sample length and the true thickness of the mineralization, is not known. Insufficient drilling has been completed to precisely define the orientation of the mineralization. In general drill holes were oriented at steep angles to the interpreted orientation of the mineralization and the true thickness is estimated to be in a range between 60% and 85% of the sample lengths.

10.4 DRILL SECTIONS

10.4.1 BANDERAS

The locations of representative drill section for Banderas (Pyramid Hill and M28) is illustrated in Figure 28, and the vertical section is shown with Ag-equivalent sample grade-widths in

Figure 29 (with Ag-equivalent grades calculated as given in Section 10.3).

Figure 28: Banderas drill collars and representative vertical section location.

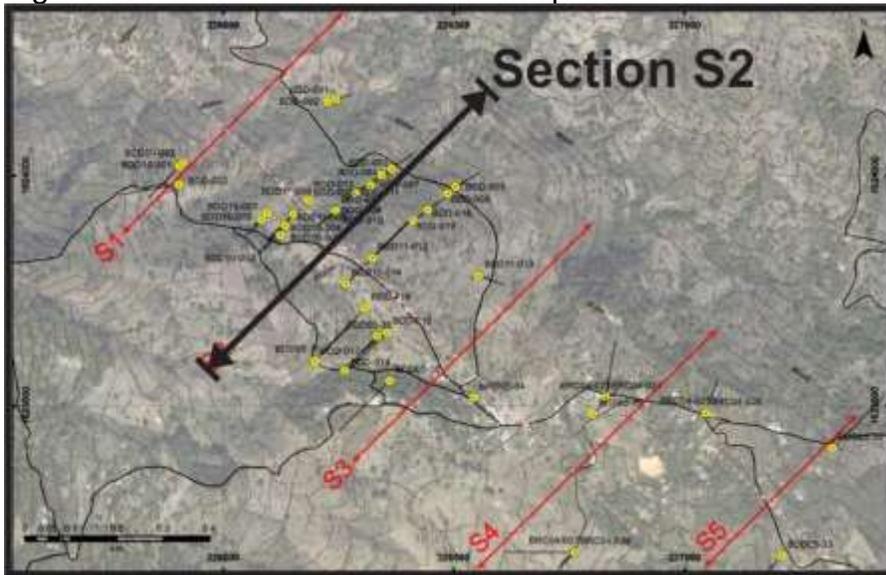
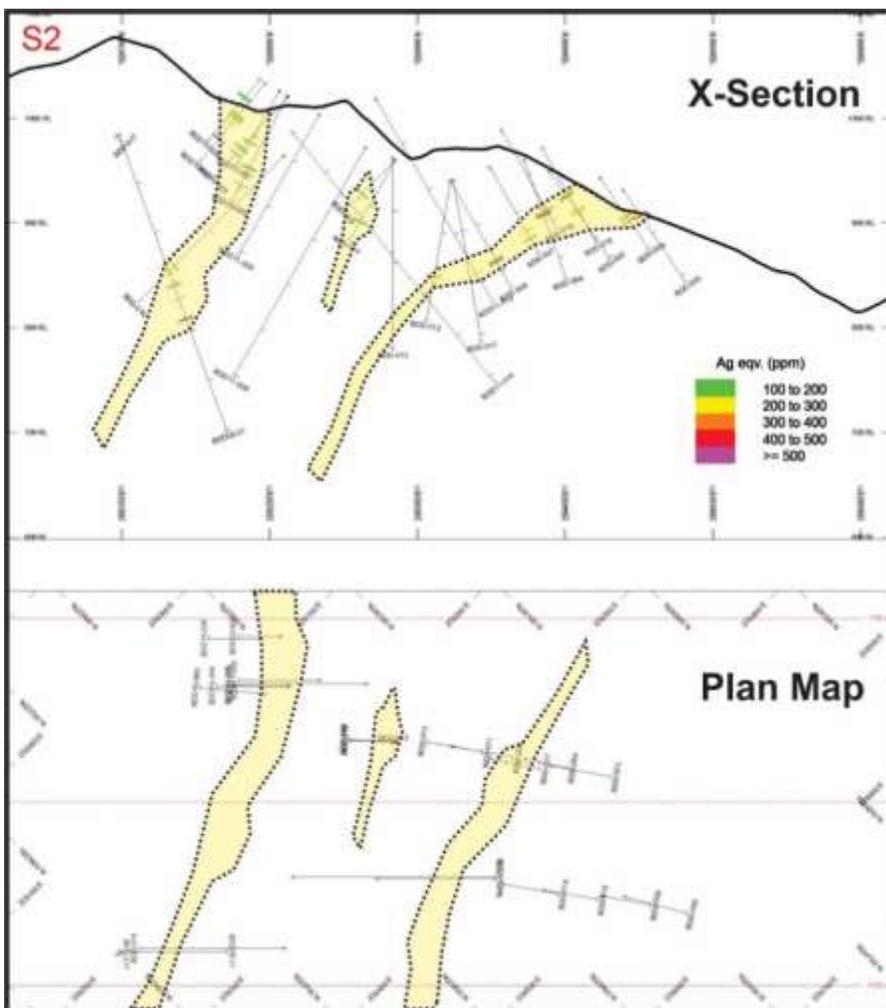


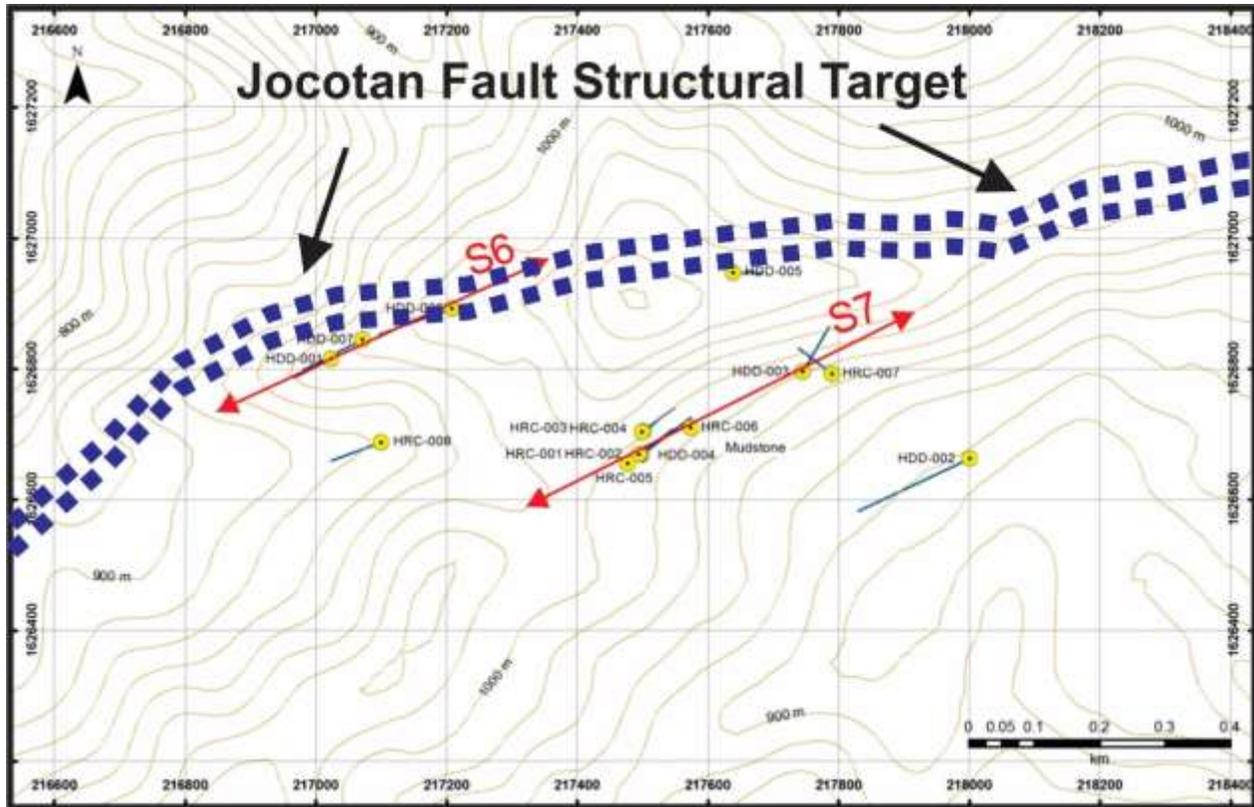
Figure 29: Banderas Vertical section S2, azimuth 045°



10.4.2 HOLLY

The locations of representative drill sections for Holly are illustrated in Figure 30, and the vertical sections are shown with Ag-equivalent sample grade-widths in Figure 31 (with Ag-equivalent grades calculated as given in Section 10.3).

Figure 30: Holly drill collars and representative vertical section locations



11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 QUALITY ASSURANCE & QUALITY CONTROL

Preparation and analyses for stream sediment, soil, and rock samples has been completed by independent commercial laboratories using industry standard fire assay and/or wet geochemical procedures. Samples have been analysed for gold with most samples also analysed for various elements by Induced Coupled Plasma (“ICP”). Samples have been collected by Radius personnel. Samples were organized into shipments at Radius’ secure facilities and driven by Radius personnel to the laboratory facilities in Guatemala City, Guatemala. Samples were prepared (dried, crushed, ground, pulp preparation) at the preparation facility in Guatemala City and pulps are flown to North America for all analytical work. Pulps and rejects are returned and stored at their Chiquimula facility.

Drilling and sampling reported covers eight different programs between 2002 and 2011 with drill program analytical methods and QA/QC summarised in Table #6. Drilling samples and almost all rock chip and soil samples and were analysed by either Acme Analytical or Inspectorate American Corporation both internationally recognised and certified geochemical laboratories. During the period of analysis, the certification programs at each laboratory changed over time, but both laboratories held at minimum ISO2001 certification and subsequent updates.

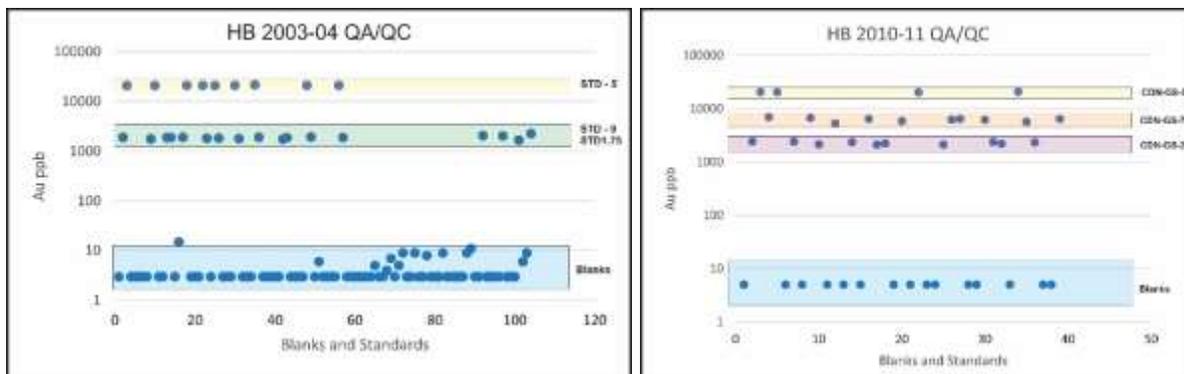
Table 6: Drill program analytical methods and QA summary

Year	Hole range	Lab	Methods	QA
2002	HDD-001 to HDD-007	Rocky Mountain Geochemical (Inspectorate)	FA-AA (Au) AQR-ICP (multi)	Unknown
2003	HRC-001 to HRC-008	BSi Inspectorate Sparks, Nevada	FA-AA (Au) AQR-ICP (multi)	1 blank per batch
2003	BDD-001 to BDD-010	CAS de Honduras Acme Analytical (Vancouver)	FA-AA (Au) Acme 1D (multi)	Regular insertion of blank, standard, and lab or field duplicate
2004	BDD-011 to BDD-022	CAS de Honduras Acme Analytical (Vancouver)	FA-AA (Au) Acme 1D (multi)	Regular insertion of blank, standard, and lab or field duplicate
2004	BRC04-023 to BRC04-028	CAS de Honduras Acme Analytical (Vancouver)	FA-AA (Au) Acme 1D (multi)	Regular insertion of blank, standard, and lab or field duplicate
2005	BDD05-29 to BDD05-34	CAS de Honduras	FA-AA (Au, Ag)	Unknown
2010	BDD10-001 to BDD10-007	Inspectorate (Guatemala & Reno)	FA-AA (Au) AQR-ICP (multi)	Regular insertion of blank, standard, and lab or field duplicate
2011	BDD10-008 to BDD10-014	Inspectorate (Guatemala & Reno)	FA-AA (Au) AQR-ICP (multi)	Regular insertion of blank, standard, and lab or field duplicate

Core drill samples were typically 1 or 2m length, marked by a geologist on geological contacts, cut in half with a diamond saw and ½ core sampled under supervision of the company geologists. In the case of Reverse Circulation (RC) drilling in 2003, the RC chips were collected into large sacks each representing 1.5 m of drill advance. The entire RC 1.5m sample was passed through a multistage riffle splitter to separate a representative sample between 2 and 5 kg that could be bagged and sent to the laboratory. Company geologists transported the collected samples to the Inspectorate or Acme preparation laboratory in Guatemala or Honduras maintaining a chain of control.

Sample pulps were then forwarded to the Inspectorate laboratory in Sparks Nevada or Acme Vancouver. Both Acme and Inspectorate were acquired and merged into Bureau Veritas in 2015. Bureau Veritas currently holds global certifications for Quality ISO9001:2008, Environmental Management: ISO14001 and Safety Management OH SAS 18001 and AS4801.

During the programs in 2003-2004, 2010 and 2011 between 10 and 12% of samples submitted to the laboratory were standards, blanks, or field duplicates. Certified reference standards from CDN Labs were used as standards for the drilling program. Blanks were prepared by Radius from barren volcanic material in country. Review of the results for the standards and blanks show that the results for the standards and blanks were within the allowable ranges. No preparation or analytical issues were evident and there was no bias in the results during any of the drilling programs.



Neither Acme or Inspectorate Laboratories have or had any relationship to the issuer.

For drilling completed on the Holly-Banderas Project here been industry standard QA/QC procedures followed for drilling and sampling programs published in this report. During each phase of drilling a qualified person supervised the program and appropriate QA/QC procedures. No QA/QC issues were reported during the drill programs nor during review of the data by the authors. Currently the data is well managed and stored in a purpose-built access geochemical database.

It is the authors' opinion that during the eight drill programs reported during the period 2002 to 2011 the sample preparation, security, and analytical procedures were industry standard and adequate. The core has been stored in a secure and covered warehouse in Guatemala.

12 DATA VERIFICATION

All data presented in this report are considered historic by the authors. Datasets in company archives were verified by the authors to ensure that drill intercepts or surface showings reported in press releases corresponded with data in the company databases. The integrity of the databases was verified for completeness and errors. The databases were periodically spot-checked against original paper assay certificates to verify accuracy. The principal author, Greg F. Smith, found no serious errors in the databases.

A recent site visit was completed by co-author Bruce Smith MAIG and Qualified Person between and 12th and 16th of March 2019. Bruce Smith visited the main outcrops, trenches and drill pads at both the Holly and Banderas projects. All descriptions within this report match geologically with the field occurrences. Bruce Smith met with several land owners and community members during the project visit and found the community favorable to exploration work to advance the projects. There is no obvious reason observed why the projects could not advance.

The drill collars in most locations were found to be well marked and still cemented in place. Co-coordinates matched the co-ordinates given in the data bases. The integrity of the databases was verified by Bruce Smith for completeness and errors. The databases were periodically spot-checked against original paper assay certificates to verify accuracy. Bruce Smith found no serious errors in the databases.

The geochemical analysis presented in this report for both surface sampling and drilling are deemed by the co-author Bruce Smith to be reliable given the historic nature. Bruce Smith has worked with the key personnel responsible for the majority of drilling, sampling and geological work at Holly and Banderas at many other projects over 20 years and continues to work with the same team today. The team are a mixture of well trained professional Guatemalan and international geologists who follow best current practice in mineral exploration. The sampling procedures and certified analyzing laboratories are well known to the authors. The authors checked for routinely inserted multi-element geochemical standards, duplicates and blanks into the sample database monitoring laboratories performance. Quality control samples submitted were returned within acceptable limits.

12.1 DRILLING AND SAMPLING

The locations of the majority of historic drill collars were resurveyed in 2011, and the author has personally verified the existence and location of many of these. All historic drill core is stored in Guatemala at a secure facility and the author has verified and the majority of the major mineralized intercepts and correlated these with historic drill logs (when available) and assays. The limited RC drill program chip samples are also stored at this site, and some of these

have been reviewed by the author as well.

In some cases, data on QA/QC programs is incomplete or no longer exist within the datasets or in the company archives and the author could not independently verify these programs or the effectiveness thereof. It is clear, however, that QA/QC procedures have been in place on the Project since its beginnings, and the author has verified with past project QPs that effective QA/QC procedures were maintained, including the regular insertion of reference materials, blanks, and field duplicates. In addition, continuity has been maintained with Radius' Guatemalan staff since the Project's inception, ensuring consistency of drilling, sampling, and logging procedures on site.

The most recent drilling program on the Property was undertaken in 2010–2011 by Radius (see Table 3). For this program, reference materials, blanks, and duplicate samples accounted for 12% of the total number of samples submitted.

The author is satisfied that sampling and drilling undertaken by Radius's local staff, Project optionees, and under the supervision of various QPs over have been performed to industry- accepted professional standards and, the author considers the data presented in this report to be reliable.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

No mineral processing or metallurgical studies have been carried out on the Property.

14 MINERAL RESOURCES ESTIMATES

There exist no current mineral resource estimates for the Property.

ITEMS 15 – 22 of form 43-101F1 are required for advanced exploration projects only.

23 ADJACENT PROPERTIES

Information included here on Adjacent Properties has been publicly disclosed by the owner or operator of the adjacent property. The source of the information is identified in each case. The author has been unable to verify the information and the information on Adjacent Properties is not necessarily indicative of the mineralization on the Holly-Banderas Property that is the subject of the technical report.

23.1 ESCOBAL (PAN AMERICAN SILVER)

The Escobal deposit is an intermediate sulphidation Ag-Au-Pb-Zn system discovered in 1997 by Mar-West Resources Ltd., and was owned by Tahoe Resources Inc. who was acquired by Pan American Silver the current owner. Escobal is located approximately 69 km to the west-southwest of the Holly-Banderas Property (see [Figure 8](#)), and the Property concession application package on its western boundary abuts onto Pan American's concessions.

Outcrops of gold-bearing quartz veins were discovered by Mar-West during a regional prospecting and sampling program, delineating a mineralized vein with significant strike length. The width of the mineralized vein being limited, size potential was deemed too small at the time to warrant further interest. Mar-West was subsequently purchased by Glamis Gold Ltd., in 1998, which was in turn purchased by Goldcorp Inc. in 2006. Exploration resumed on the prospect in 2006 by Goldcorp Inc., who undertook the first drilling campaign in 2007. Goldcorp sold the project to Tahoe Resources Inc. in 2010, and Tahoe was acquired by Pan American in February 2019.

The first mineral resource estimate was announced in 2010, and this was most recently updated in June 30, 2019. The current mineral resource at Escobal is:

Table 7: Escobal mineral resource summary from Pan American, 2019

Escobal	Tonnes	Ag g/t	Ag (Moz)	Au g/t	Au (koz)	Pb (%)	Zn (%)
Measured	2.3	251	18.6	0.23	16.7	0.31	0.59
Indicated	14.2	201	91.6	0.20	93.0	0.38	0.66
Inferred	1.9	180	10.7	0.90	53.7	0.22	0.42

Escobal mineral resource estimates were prepared by Pan American Silver under the supervision of, or were reviewed by, Christopher Emerson, FAusIMM, Vice President Business Development and Geology and Martin G. Wafforn, P.Eng., Senior Vice President Technical Services and Process Optimization, each of whom are Qualified Persons as that term is defined in National Instrument 43-101 ("NI 43-101). The mineral resource is supported by a report relating to the Escobal mine entitled "Escobal Mine Guatemala: NI 43-101 Feasibility Study, Southeastern Guatemala" dated effective November 5, 2014 (the "Escobal Report") by M3 Engineering & Technology Corporation, with authors C. Huss, T. Drielick, D. Roth, P. Tietz, M. Blattman, and J. Caldwell.

Escobal is located south of the Jocotán fault and hosted in veins 10 to 30 m wide that cut Subinal formation sediments as well as overlying Cenozoic intermediate volcanic rocks, and are present over a strike length of 1700 m and 800 m vertically. Mineralization is still open both at depth and to the east and west of the current known resource.

The dominant structures at Escobal are east to northeast trending normal faults that dip steeply to the south. Mineralization is hosted in by these structures, but the more important mineralized zones are hosted by north-dipping dilation jogs that link parallel south-dipping faults. The entire mineralized system has been offset by later northwest trending normal faults.



There are some similarities between the geology at Escobal and the Holly-Banderas Property: they are both hosted in the same volcanic-sedimentary stratigraphy to the south of the Jocotán fault, and both associated with extensional structures related to movement on the Motagua Suture Zone. A notable feature is the association at Escobal of mineralization with east trending faults and dilation jogs, a structural setting and mineralization style which also exists at the Holly-Banderas Property but which has not been significantly drill tested during previous programs.

23.2 CERRO BLANCO (BLUESTONE RESOURCES INC.)

Cerro Blanco is a hot spring type gold deposit. Located approximately 36 km SSW of the Project area, Cerro Blanco was discovered by Mar-West Resources Ltd. in the late 1990s, was acquired by Glamis Gold Ltd. in 1998, and is currently owned by Bluestone Resources Inc. who purchased the property from Goldcorp Inc. subsequent to their acquisition of Glamis. Current mineral resources at Cerro Blanco were given by Bluestone Resources as:

Table 8: Cerro Blanco mineral resource. Data from Bluestone Resources' website.

Resource Category	Tonnes	Au Grade g/t	Ag Grade g/t	Contained Gold (Oz)	Contained Silver (Oz)
Measured	607,714	11.5	44.2	225,118	864,281
Indicated	3,661,507	10.1	35.6	1,188,194	4,193,343
M & I	4,269,221	10.3	36.8	1,413,312	5,057,624
Inferred	466,218	7.1	16.6	107,215	248,488

Cerro Blanco mineral resource estimates have an effective date of November 1, 2019. All Mineral Resources have been estimated in accordance with Canadian Institute of Mining and Metallurgy and Petroleum (“CIM”) definitions, as required under NI 43-101. Mineral Resource Statement prepared by Garth Kirkham (Kirkham Geosystems Ltd.) in

accordance with NI 43-101. The mineral resource is supported by a report relating to the Cerro Blanco Project entitled “Feasibility Study NI 43-101 Technical Report Cerro Blanco Project Guatemala” effective January 29, 2019 and a revised report date of September 26, 2019, prepared by Maz Mohaseb, P.Eng., Michael Makarenko, P.Eng., Kelly McLeod, P.Eng., Richard Boehnke, P.Eng., and Mike Levy, P.E. of JDS Energy & Mining Inc., with assistance from Garth Kirkham, P.Geo. of Kirkham Geosystems Ltd., and Hhan Olsen, P.G., CPG, and Bryan Ulrich, P.E. of Stantec Consulting Inc.

Of note initial drilling at Cerro Blanco intersected wide zones of anomalous to low grade gold and silver values with deeper drilling required to encounter the ore grade gold and silver values.

23.3 EL PATO (GOLDEX RESOURCES CORPORATION)

El Pato is located 5 km west of the town of Chiquimula, north of the Holly zone. Goldex report Au-Ag mineralization in quartz-sulphide veins within the Cretaceous-aged granitic to dioritic Chiquimula pluton, which is emplaced in the Santa Rosa Group rocks north of the Jocotán fault. Diamond drilling on the property has yielded highlights of 5.04 g/t Au over 30.48 m, and high-grade surface samples have been assayed.

El Pato drilling was detailed in a news release on August 17th 2011 with the title Goldex drill an average grade of 5 g/t Au over 30m in GDXP hole-10 at El Pato. The news release was reviewed by Larry Kornze, a qualified person consistent with NI 43-101.

The information in this section relates to adjacent properties and not the Holly-Banderas Project and should not be considered indicative of the mineralization or potential of the property that is the subject of the technical report.

24 OTHER RELEVANT DATA AND INFORMATION

All relevant technical data and information to the Project has, to the best of the authors’ knowledge, been disclosed in this report.

25 INTERPRETATIONS AND CONCLUSIONS

25.1 RISKS AND UNCERTAINTIES

There are no known risks or uncertainties that could reasonably be expected to affect the reliability of or confidence in the exploration information presented in this report.

The work program recommended in this report is partly dependent on receiving permits from the Guatemalan government for drilling on the Banderas and Holly zones. Permits for the El Zapote zone have already been received. Uncertainties in this regard are therefore limited to Banderas and Holly zones. Drilling permits for the Holly-Banderas Project have been received on multiple occasions in the past resulting in drilling programs in 2002, 2003, 2004, 2005, 2010, and 2011. It is the author's opinion that it is very likely an updated permit for drilling will be obtained and the estimated timeline for the permit is four to six months.

25.2 INTERPRETATIONS & CONCLUSIONS

Banderas, El Zapote, and Holly consist of low-sulphide Au-Ag mineralization deposited as hydrothermal veins and vein breccias along parallel brittle NW trending structures. They are interpreted as being part of a low-sulphidation epithermal Au-Ag system related to Miocene extensional tectonics and volcanism.

Exploration on the Holly-Banderas Project has advanced through a series of successively more detailed work programs including stream sediment sampling, soil sampling, geological mapping, geophysical surveys, and follow-up prospecting and rock sampling. Results from this work defined variably gold and silver anomalous samples and targets. Interpretation of the geology, rock samples, mineralization, as well as thin sections and detailed mineralogical descriptions (SRK, 2011 and Ebert, 2003) have determined the mineralization at Holly-Banderas is best characterized as a series of Low Sulphidation Epithermal Gold – Silver zones.

To date three defined mineralized zones have been encountered on the property; Holly Zone, Banderas Zone, and El Zapote Zone. The Holly Zone has been traced for 1.2 kilometres in length, averaging between two and six metres in width, is currently drill tested to 125 metres depth, and the zone remains open along strike and to depth. The Banderas Zone has been traced for 2 kilometres in length, averaging between one and three metres in width, is currently drill tested to 175 metres depth, and the zone remains open along strike and to depth. The El Zapote Zone has been traced for 1.5 kilometres in length, with an unknown width estimated to be between 2 and 10 metres, is untested at depth and the zone remains open along strike and to depth.

Drilling on the Holly-Banderas Project has included both Reverse Circulation (RC) and Diamond (DDH) drilling. Between 2002 and 2011, 14 RC holes totalling 2,153 metres and 49 DDH holes totalling 9,139 metres were completed. Overall, between 2002 and 2011 drilling on the Holly-Banderas Project totals 63 drill holes, with 15 on the Holly Prospect and 48 on Banderas. Drilling on the Holly-Banderas Project resulted in 45

mineralized intercepts which average 2.7 metres in length (unknown true width) and with average grades of 7.1 g/t Au and 135 g/t Ag. Drilling at the Holly Zone includes 11 mineralized intercepts which average 4.9 metres in length (unknown true width) and with average grades of 9.4 g/t Au and 315 g/t Ag. Drilling at the Banderas Zone includes 34 mineralized intercepts which average 2.0 metres in length (unknown true width) and with average grades of 6.4 g/t Au and 77 g/t Ag.

The average drill hole length is approximately 145 m, with the majority of these at a plunge of -45 to -60 degrees. Consequently, the mineralized systems have rarely been tested to depths greater than 150 m, on any of the prospects, and the Holly and Banderas projects warrant significant further drill testing.

26 RECOMMENDATIONS

The Holly-Banderas Project warrants additional exploration and drill testing. A two-phase program consisting of Phase 1 with 3,000 metres of diamond drilling and additional exploration with a total cost of \$1,500,000 and results dependent, Phase 2 will be comprised of an additional 7,000 metres of drilling with a total cost of \$2,500,000.

Principal targets for the Phase 1 drilling program are; Holly – testing intersections of E-W trending Jocotan structure with previously identified cross structures and Banderas; deeper drilling below the previous gold-silver mineralization intersected in past drilling and below the projected depth of oxidation.

During Phase 1 additional work on the El Zapote prospect, should include additional surface geochemistry, geophysical surveys, and trenching.

26.1 DRILLING

Additional drilling is warranted to test the subsurface below the level of oxidation and potential secondary remobilization. As of the effective date of this report, drill permits have been applied for and received for drilling on the El Zapote only. Drill programs on Banderas and Holly will require new permit applications and possible additional environmental studies and baseline assessments. Drilling permits for the Holly-Banderas Project have been received on multiple occasions in the past resulting in drilling programs in 2002, 2003, 2004, 2005, 2010, and 2011. It is the authors' opinion that it is very likely an updated permit for drilling will be obtained and the estimated timeline for the permit is four to six months.

26.1.1 HOLLY

At Holly further drill testing should target intersections of E-W trending Jocotan structure with previously identified cross structures. Two high grade discrete vein prospects remain untested by drilling at Holly: El Pino, and La Peña (see Section 7.4.1). Both of these should be drill tested by shallow drill holes to test their continuity in the subsurface. For both El Pino, and La Peña, the authors recommend modest step-outs from the mineralized vein (e.g. 50m), targeting the veins at shallow depth to test for continuity, and to determine vein geometry, thickness, and grade.

Additionally, the La Peña structure, as tested in the Holly Ridge conglomerate, is open to depth. A twin of HDD-006, but proceeding to 400 m depth, and a steeper hole from the same location drilled to 500 m depth would adequately test the La Peña mineralization at depth in the Holly Ridge conglomerate. The mineralization does not appear to be open to the south, but its depth and northward extent both warrant testing.

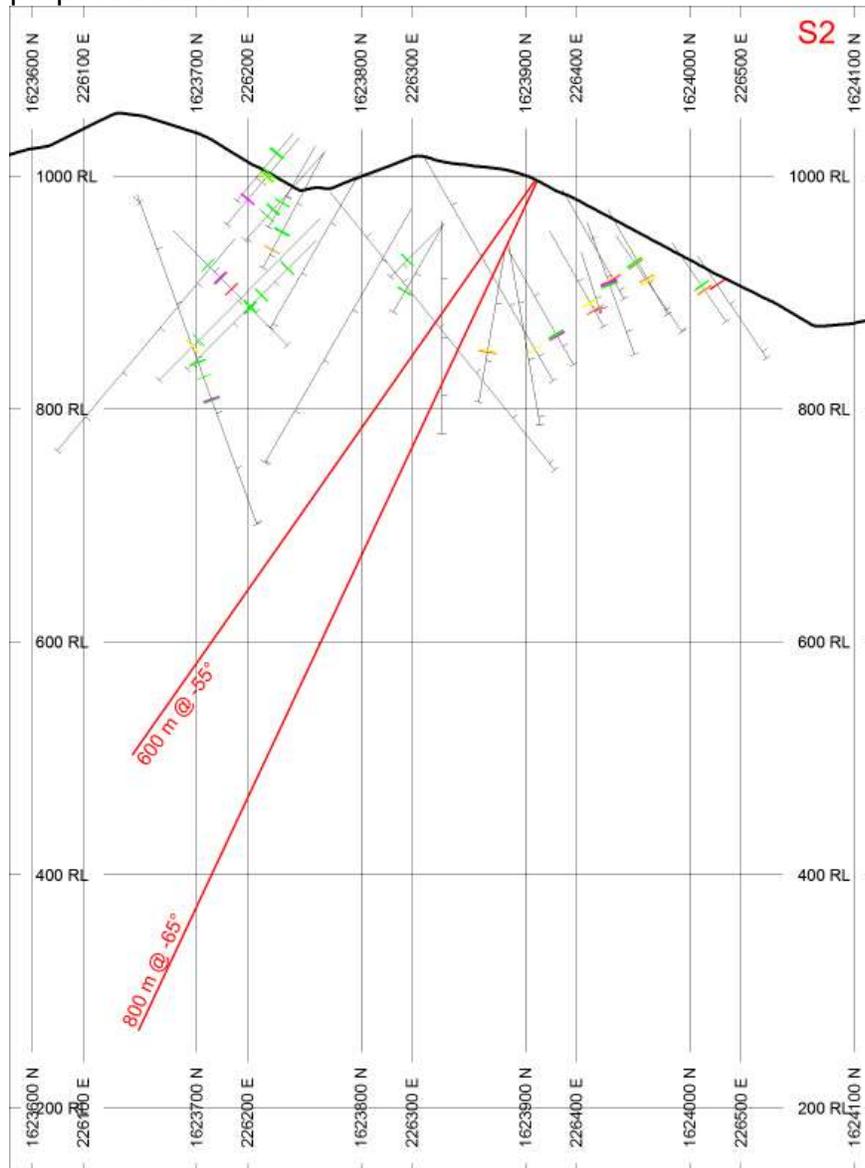
26.1.2 BANDERAS

The Pyramid Hill and M28 vein system should be systematically drill-tested at depths below the oxidation level to test for Escobal-type mineralization. Fans of two drill holes, with SW azimuth,

and plunging at 55° and 65°, should be drilled on 250 m centres, spanning a strike length of 2 km along the Pyramid Hill and M28 structures.

Drill hole lengths should be 600 m, and 800 m, respectively. A representative section showing the proposed drill fan configuration is given in Figure 32. This configuration of drill hole collars will test not only the Pyramid Hill structure at depth, but test the prospective area where the M28 veins would intersect the Pyramid Hill structure.

Figure 32: Representative vertical section (azimuth 045°) through Banderas showing proposed drill fan.



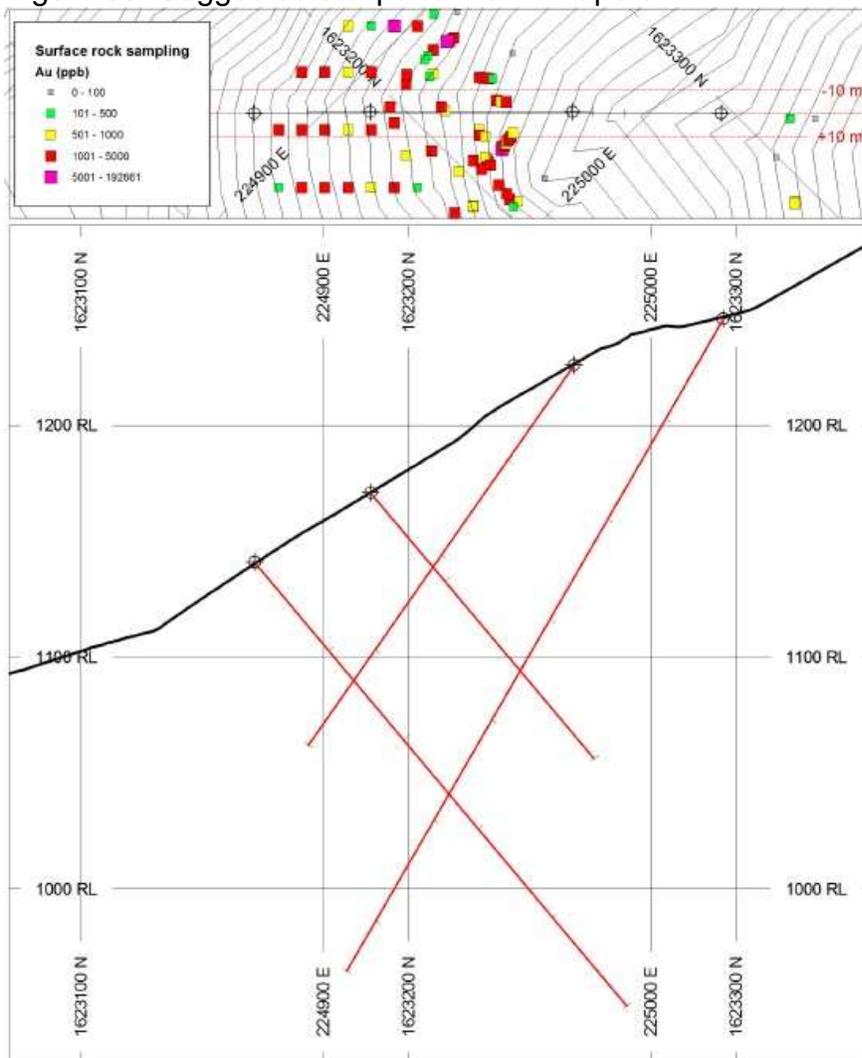
26.1.3 EL ZAPOTE

The El Zapote system likely forms part of the same greater hydrothermal system as Banderas. It has been sampled extensively at surface but has not yet been drill tested. Its orientation, grade,

and geometry should be tested at depth below the surface sampling with sets of drill holes that drill towards one another at 180° opposite azimuths (“scissor holes”). Possible drill hole configurations are given in Figure 33.

As there currently exists no drilling on the El Zapote prospect, the subsurface geometry and grade are unknown, and scissor holes under the best surficial results will allow a determination of the geometry of the vein system. Once the geometry and grade are constrained, follow up drilling can target the mineralized system at depth. As an initial drill plan for El Zapote, the author recommends drilling pairs of scissor holes (150 m and 200 m) and one follow up deeper drill hole (330 m), on three sections 100 m apart across the zone of surface mineralization

Figure 33: Suggested drill pattern at El Zapote.



26.2 PROPOSED BUDGET

A two-phase budget of the proposed drill program is given in Table 9.

All government-required studies have been completed and drill permits issued for the El Zapote prospect. Banderas and Holly prospects will both require the completion of additional studies and permitting before they can be drilled. Drilling on the Banderas and Holly zones is dependent on receiving a permit from the Guatemalan government for drilling. Drilling permits for the Holly-Banderas Project have been received on multiple occasions in the past resulting in drilling programs in 2002, 2003, 2004, 2005, 2010, and 2011. It is the authors' opinion that it is very likely an updated permit for drilling will be obtained and the estimated timeline for the permit is four to six months.

A two-phase program consisting of Phase 1 with 3,000 metres of diamond drilling and additional exploration with a total cost of \$1,500,000 and results dependent, Phase 2 will be comprised of an additional 7,000 metres of drilling with a total cost of \$2,500,000.

Table 9: Proposed expenditures for next phase of Holly-Banderas project exploration

Phase 1			
Description	Units	Unit Cost	Cost
Community Consultation			\$100,000
EIS / Drill Permits			\$100,000
Access and Site Prep			\$100,000
Drilling Banderas	1800m	\$200/m	\$360,000
Drilling Holly	1200m	\$200/m	\$240,000
Assays	2000 smpl	\$35/smpl	\$70,000
Geology			\$100,000
Geophysics			\$80,000
Supervision			\$100,000
Consumables			\$85,000
Rehabilitation			\$165,000
			\$1,500,000
Phase 2			
Description	Units	Unit Cost	Cost
Community Consultation			\$100,000
EIS / Drill Permits			\$50,000
Access and Site Prep			\$150,000
Additional Drilling	7000m	\$200/m	\$1,400,000
Assays	4000 smpl	\$35/smpl	\$140,000
Geology			\$100,000
Metallurgical Testing			\$110,000
Supervision			\$200,000
Consumables			\$150,000
Rehabilitation			\$100,000
			\$2,500,000

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