# **ASX Announcement**



29 April 2022

## ANTILLES GOLD SECURES ACCESS TO THIRD MAJOR DEVELOPMENT PROSPECT IN CUBA

ENTIRE 40KM LONG PREVIOUSLY EXPLORED VMS STYLE POLYMETALLIC MINERAL BELT WITH PAST PRODUCTION OF Cu, Zn, Au & Ag FROM FOUR MINES

Antilles Gold Limited (ASX Code: AAU, OTCQB: ANTMF) ("Antilles Gold" or the "Company") is pleased to advise that its partner in Cuba, the Government's mining company, GeoMinera SA, has added two Concessions covering the extensive New Horizons VMS style polymetallic mineral belt in central Cuba to the Los Llanos Exploration Agreement, which is the first step in a potential future mine development.

The Agreement permits the Company to exclusively evaluate the potential of previously explored mineral deposits prior to recommending their transfer to the existing joint venture mining company, Minera La Victoria SA, for potential development.

The two Concessions total 31,700 ha and cover an entire 40km long polymetallic mineral belt that includes 4 mines, Antonio, San Fernando, Santa Rosa, and Los Cerros with previous production of Cu-Zn-Au-Ag concentrates, and 16 additional mineralized exploration targets, some of which are gold and silver rich.

Geological data from the New Horizons Concessions that has been made available for Antilles Gold to review includes maps, soil and stream sampling (27,000), rock samples, ground and airborne geophysical surveys, 766 cored drill holes (68,400m), 5392 assays, and historic mine plans.

In addition, a Canadian NI 43-101 Technical Report on the New Horizons Project, previously named the Los Pasos Project, published by Toronto based consultants, Roscoe Postle Associates Inc ("RPA") on 15 June 2018 noted the following small but encouraging **Inferred Mineral Estimate for the Antonio deposit**;

Deposit Name	Resource Classification	Mining Potential	NSR Cut- Off	Tonnage (Mt)	Copper Grade (%)	Contained Copper (Mlb Cu)	Zinc Grade (%)	Contained Zinc (Mlb Zn)	Silver Grade (g/t Ag)	Contained Silver (Moz Ag)
Antonio	Inferred	Open Pit	US\$25/t	2.25	1.58	78.38	2.51	124.49	16.5	1.19
		Underground	US\$70/t	0.91	1.49	29.77	2.30	45.99	9.7	0.28
		Antonio Total		3.16	1.55	108.14	2.45	170.48	14.5	1.48

The ASX's requirements for supporting information for reporting on Foreign Estimates of Mineralisation are set out in the attached Memorandum from SLR Consulting (Canada) Limited dated 26 April 2022. SLR acquired RPA in 2019.

RPA reported "the Project is at the advanced exploration stage and the considerable historical drilling and past production demonstrate that significant copper-zinc-silvergold mineralisation is present on the property".

RPA also concluded "there is excellent potential for discovering extensions of the known deposits, and new deposits on the property"; and

"A long term project is envisaged where one central milling facility could be used to process feed from several deposits on the concession".

The Antonio deposit is similar to classic Abitibi type mineralisation in Eastern Canada. The mineralisation has a low content of Pb, As, and Sb, and has been traced by drilling to 190m vertically, and is open at depth.

The New Horizons polymetallic deposits together with the Ciego de Avila major porphyry Cu-Au system, and the large, shallow Golden Hills VMS Cu-Au deposit which are included in the Los Llanos Exploration Agreement, provides Antilles Gold with access to three significant projects, all of which have the potential for substantial open pit mining operations.

Antilles Gold will focus initially on the El Pilar copper-gold porphyry deposit within the Ciego de Avila concession followed by the Antonio and other polymetallic deposits in the New Horizons concession. The various deposits are located approximately 150km apart in central Cuba, and within 100km of ports suitable for concentrate export.

A Report by the Company's Exploration Director, Dr Christian Grainger, on the New Horizons polymetallic mineral belt, and the Antonio deposit, is attached.

Both the New Horizons and El Pilar deposits appear to have the potential to produce concentrates from open pit operations that could be developed initially as mid-sized projects, and subsequently expanded by developing additional satellite pits within the respective concessions.

Antilles Gold and GeoMinera are currently establishing a technical group in the regional capital of Camaguey in south east Cuba to advance preliminary exploration and studies on the various deposits.

The Company will provide the General Manager for this group as well as the oversight of its Exploration Director, who has been a highly successful explorer in Latin America and has particular expertise in the genesis of mineral deposits.

A wide-spread 2000m cored drilling program to a vertical depth of 250m will be conducted at El Pilar in June-July 2022, and be followed by a similar program at Antonio. A further 12,000m of drilling on the El Pilar deposit, and associated metallurgical test work will commence in Q4 2022 with the aim of establishing Initial JORC Resources and a Scoping Study for El Pilar by mid 2023.

Subject to the results of the Study, the Ciego de Avila Concession, incorporating El Pilar, will be transferred to Minera La Victoria SA, which is developing the La Demajagua gold-silver mine on the Isle of Youth in south west Cuba. Minera La Victoria would then become responsible for further exploration and Definitive Feasibility Studies prior to a possible open pit mine development.

To fund the initial exploration and studies on the various deposits encompassed by the Los Llanos Project, Antilles Gold is considering issuing a Redeemable Convertible Note for US\$5.0 million that would be drawn down progressively over the next two years, which should minimize shareholder dilution, if, as expected, the Company's share price increases with progress on the La Demajagua mine development, and the potential of the El Pilar, Antonio, and other deposits is confirmed.

Under the Los Llanos Exploration Agreement, Antilles Gold will be reimbursed for the initial evaluation of any of these prospects if they are ultimately developed.

Mr. Brian Johnson, Executive Chairman of Antilles Gold, commented that the Company was now in a great position to pursue growth in the value of its investment in the joint venture mining company in Cuba through the intended application of part of the surplus cash expected to be generated by the open pit mine at La Demajagua, to fund development of projects that could follow, which would minimize or eliminate additional equity contributions by the Company in the foreseeable future.

**END** 

#### **ABOUT ANTILLES GOLD LIMITED:**

- Antilles Gold's strategy is to participate in the successive development of previously explored gold and copper/gold deposits in mineral rich Cuba, and on realising the value of assets it holds in the Dominican Republic.
- The Company is at the forefront of the emerging gold mining sector in Cuba and expects to be involved in the development of a number of projects through its 49:51 joint venture with the Cuban Government's mining company, GeoMinera SA.
- Antilles Gold is comfortable operating under the applicable law on Foreign Investment, and Mining and Environmental regulations in Cuba, and has been granted a generous fiscal regime by the Government which is supportive of its objectives.
- The near-term project of the joint venture company, Minera La Victoria SA, is the proposed development of the La Demajagua gold/silver open pit mine on the Isle of Youth in southwest Cuba to produce approximately 100,000 oz Au equivalent per year in concentrate for sale to an international trading company, or foreign smelters for 6 to 7 years.
- Underground operations are planned to follow at La Demajagua for +10 years.
- The current pipeline of additional projects with development potential include three highly prospective porphyry copper-gold deposits, an extensive VMS style polymetallic mineral belt with a history of mining Cu, Zn, Au and Ag, and a large VMS copper-gold deposit at Golden Hills. These properties will be explored initially by Antilles Gold prior to their transfer to Minera La Victoria for additional exploration and studies, and possible development.
- The objective of the joint venture is to invest part of the surplus cash expected to be generated by the La Demajagua mine to fund projects that follow, in order to achieve organic growth with minimal additional equity contributions, and with the aim of ultimately establishing Minera La Victoria as a substantial mining company in Cuba.

This announcement has been authorised by the Chairman of Antilles Gold Limited.

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#### Memorandum

To: Antilles Gold Limited

From: Jason Cox

Date: April 26, 2022

Subject: Antonio Deposit Disclosure

This memorandum has been prepared by SLR Consulting (Canada) Ltd. (SLR) for Antilles Gold Limited's (Antilles) New Horizons Project (the Project), located in Central Cuba, to meet the requirements applicable to reports of historical estimates and foreign estimates of mineralisation for material mining projects as outlined in ASX Listing Rules Chapter 5, subsection 5.12.

The most recent historical Mineral Resource estimate for the Project, previously named the Los Pasos Project, was completed by Roscoe Postle Associates Inc. (RPA) for Millbrook Minerals Inc. (Millbrook) and reported in a Technical Report prepared in compliance with National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) with an effective date of June 15, 2018 (RPA, 2018). RPA was a Canadian geological and mining consultancy based in Toronto, Ontario, Canada, which in 2019 was acquired by SLR.

The RPA June 15 2018 Mineral Resource estimate conforms to Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves adopted by CIM Council on May 10, 2014 (CIM (2014) definitions). The CIM (2014) definitions are consistent with the categories defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, Edition 2012 (the JORC Code).

The Project consists of three past producing deposits: Antonio, San Fernando, and Los Cerros, with the Antonio deposit containing the bulk of mineralization. As of the effective date of the RPA Mineral Resource estimate, the Antonio database comprises 127 drill holes for a total of 13,108 m and 759 assays. The historical analytical data spans more than 100 years and, in many cases, assay certificates were unavailable and documentation of the analytical methods was incomplete. There were no data available for RPA's review concerning chain of custody, sampling methods, or security protocols. There was no record and/or documentation available for RPA's review on the existence of quality assurance and quality control (QA/QC) protocols implemented in the historical work for the Project samples. Metallurgical testing was limited to San Fernando and indicated that separate copper and zinc concentrates were achievable.

The Antonio Inferred Mineral Resources were estimated at a US\$25/t net smelter return (NSR) cut-off value within a preliminary Whittle pit shell for the open pit and a US\$70/t NSR cut-off value for the underground. The cut-off values were based on:

- Metal prices of US\$3.50/lb Cu, US\$1.15/lb Zn, and US\$21/oz Ag
- Metallurgical recovery assumptions of 91% for copper, 73% for zinc, and 68% for silver
- Common industry smelter terms for payability and off-site costs



GEOVIA GEMS (GEMS) software was used for resource estimation work. Grades were capped at 8% Cu, 20% Zn, and 100 g/t Ag. Capped assays were composited to two metre lengths within the mineralization wireframes. Due to the insufficient number of historical density determinations, a density value of 2.8 t/m³ was applied to all material based on experience with similar VMS deposits. A 10 m by 10 m by 10 m block model was generated using GEMS. Grades for Cu, Zn, and Ag were interpolated using inverse distance cubed weighting (ID³) within those blocks that occurred wholly or partially within the mineralization wireframes.

The Antonio Mineral Resources were reported within a preliminary pit shell based on the following economic assumptions: ore mining cost of US\$5.00/t, waste mining cost of US\$3.00/t, processing cost of US\$18.00/t, general and administrative (G&A) cost of US\$7.00/t, and a pit wall slope of 45°. After confirming continuity and removing isolated blocks, classified resource blocks located within the mineralized wireframe domains and outside of the preliminary Whittle pit shell with NSR values greater than \$70/t were included in the underground resource estimate. All Mineral Resources were classified as Inferred because of uncertainty around unsampled and unassayed intervals of drill core and lack of QA/QC on the assays.

The RPA Antonio Mineral Resource estimate is considered to be a foreign estimate of mineralization under ASX rules, and should not be relied upon as a current JORC-compliant estimate. A Competent Person (CP) has not completed sufficient work to classify the foreign estimate as a current Mineral Resource in accordance with the JORC Code (2012). Antilles is not treating the foreign estimates as current Mineral Resources. The estimate is relevant as it indicates the presence of potentially economic mineralization at the Project. It is uncertain that following evaluation and/or further exploration work that the foreign estimate will be able to be reported as Mineral Resources in accordance with the JORC Code (2012).

There has been no more recent Mineral Resource estimate completed for the Project.

Additional work is required to upgrade and verify the RPA 18 June 2018 foreign estimate prior to considering it as a current Mineral Resource estimate in accordance with the JORC Code (2012). Additional activities can include such items as:

Review drill logging and field practices of historical information including adding simplified grouped coding systems and implementing a geological re-logging and interpretation process on

- any available and future data.
- Implement a QA/QC program that monitors various essential elements of the sampling preparation and assaying sequence in an effort to minimize the total possible measurement error,
- detect and prevent contamination, and allow analytical precision and accuracy to be quantified.
- Analyze all historical core for all metals and samples not previously analyzed for Ag and Au to build a complete dataset for the deposit.
- Obtain all the assay certificates for the historical assays if possible and perform verification and
- validation of the historical data. If the retrieval of the historical certificates is not possible, carry out a re-analysis program in selected zones of the deposits in order to confirm the historical results and identify potential problems with the historical datasets such as presence of bias, differences in detection limits, etc.
- Carry out infill drilling to better delimit the deposits and confirm grade values and continuity, and to move the Mineral Resources to higher categories.
- Carry out density test work in different lithologies to better define the deposit mineralization and
- waste tonnage factors.

Build a lithological model.



Build an alteration model.

Build a structural model. Re-assess the post mineralization dykes at San Fernando after the drill

- logging review is carried out.
- Update the Mineral Resource estimate as more information becomes available.

Review the Mineral Resource classification approach after more data become available.

Katharine M. Masun, M.Sc., MSA, P.Geo., SLR Consultant Geologist and a CP for the RPA June 15, 2018 Mineral Resource estimate, states that the above information is an accurate representation of the available data and studies for the New Horizon Project.

#### **REFERENCES**

RPA, 2018: Technical report on the Los Pasis Cu-Zn-Ag-Au Project, Villa Clara Province, Central Cuba, prepared by Franklin, J., Masun, K.M., and Roscoe, W.E., June 15, 2018.

#### **DISCLAIMER**

This memorandum has been prepared by SLR at the request of Antilles Gold Limited (the "Client"). Any use of this memorandum is subject to the agreed terms, conditions and limitations (the "Terms of Business") contained in the SLR proposal accepted by the Client on April 26, 2022, which Terms of Business are incorporated into this Disclaimer by reference. The memorandum may only be used by the Client in connection with its review of the New Horizons Project and shall not be used or relied upon for any other purpose or by any other party, without the written consent of SLR. SLR accepts no responsibility for damages, if any, suffered by any third party as a result of reliance on, decisions made, or actions taken based on this report. If SLR specifically consents in writing to the use of and reliance on this memorandum by any party other than the Client, such use and reliance shall be in all respects subject to the Terms of Business, including the limitations of liability set forth therein. In no event will SLR have aggregate liability to the Client or any third parties in excess of the limitations set forth in the Terms of Business.

The information, conclusions, opinions, and estimates contained herein are based on:

- 1. information available to SLR at the time of preparation of this memorandum,
- 2. assumptions, conditions, and qualifications as set forth in this memorandum, and
- 3. data, reports, and opinions supplied by the Client and other third party sources.

While it is believed that the information contained herein is reliable under the conditions and subject to the limitations set forth herein, this memorandum is based in part on information not within the control of SLR and SLR does not guarantee the validity or accuracy of conclusions or recommendations based upon that information. While SLR has taken all reasonable care in producing this report, it may still contain inaccuracies, omissions, or typographical errors.

The memorandum is intended to be read as a whole, and sections should not be read or relied upon out of context.

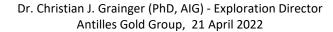
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# New Horizons PolyMetalic VMS Project Antonio, San Fernando, Santa Rosa & Los Cerros VMS Deposits Republic of Cuba











#### New Horizons – An Entire Volcanic Massive Sulphide (VMS) District

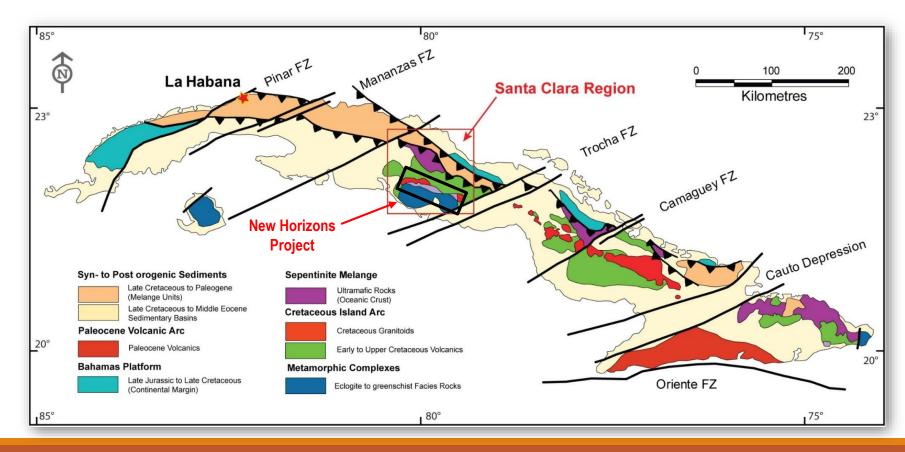
Entire fertile VMS district with no exploration since Soviet-era shallow mining

- The Los Pasos formation hosts four past producing VMS deposits and numerous base-metal occurences, some of which are enriched in gold and silver
- +40 km long belt never explored using modern airborne geophysical techniques, the standard tool for this style of VMS exploration
- Geologically similar to the Abitibi VMS Province of Canada that hosts a number of world-class VMS discoveries



## Location of the New Horizons VMS Project

- Central Cuba location with excellent access and infrastructure
- Entire endowed VMS belt including Soviet-era mines (open at depth) and numerous untested VMS surficial gossans over 40km strike length
  - Both gold-rich and base-metal (copper-zinc-lead) VMS systems noted to date
  - Major upside for open-pit discoveries

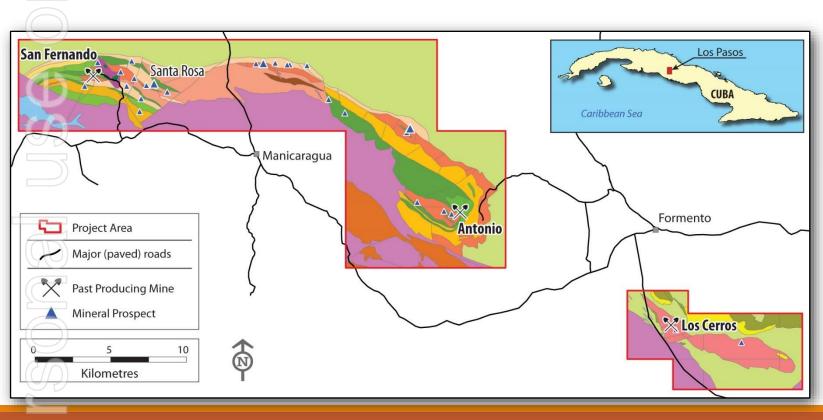


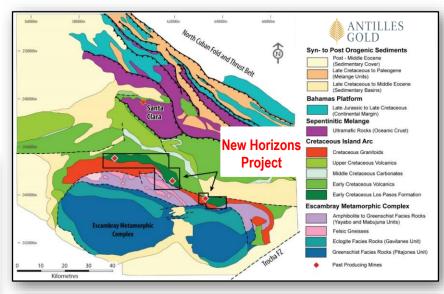




#### **New Horizons VMS Project**

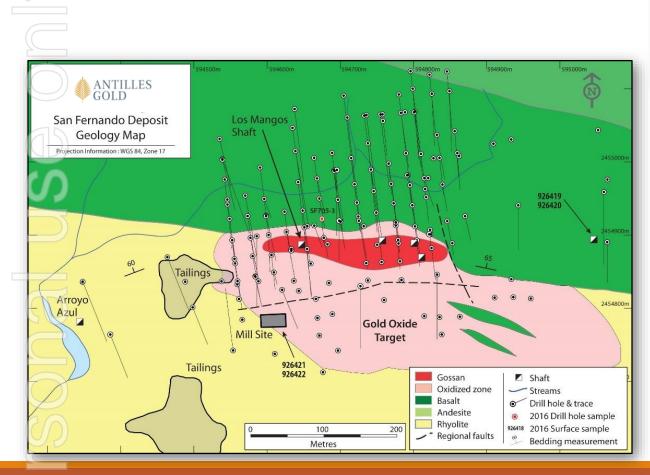
- VMS deposits occur in clusters and each belt has one large system (+100 Mt size)
- These districts always demonstrate a 4-5km periodicity to VMS deposit formation
- The Los Pasos Formation hostrocks are analogous, both in terms of geology and scale, to the Abitibi Province between Noranda and Val d'Or with an exploration status to that of the 1950's
- Discovery potential based on analogous belts globally

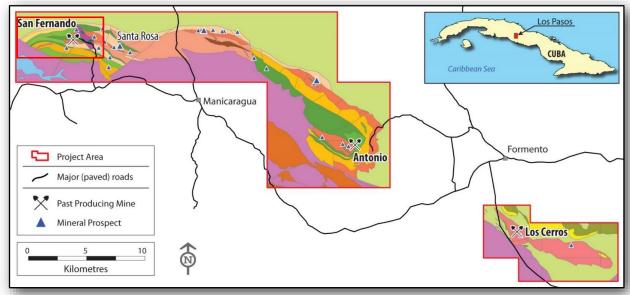






## San Fernando VMS Deposit

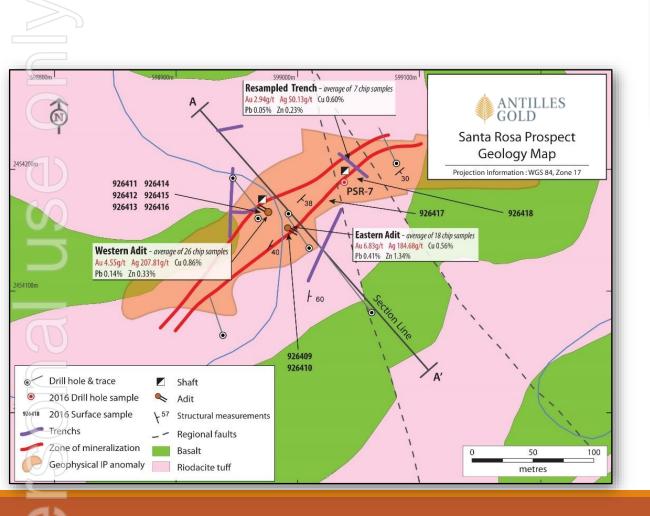


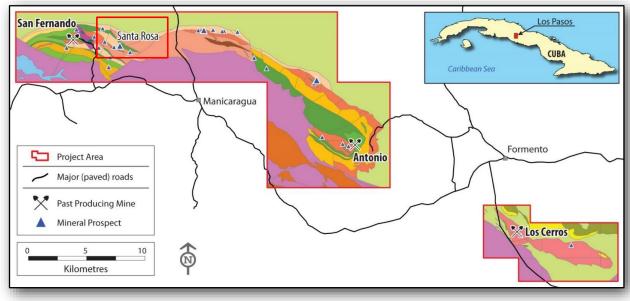


- Cu-Zn-Pb-Au-Ag VMS system
- Approximately 200 Kt of copper-zinc ore were mined from 10 levels in the 1950's
- VMS mineralization occurs as lenses at the contact of felsic and mafic volcanic rocks
- Mineralized samples collected at surface averaged 6.6 gt Au and 298 gt Ag
- No modern geophysical exploration or deeper drilling for extensions



## Santa Rosa VMS Deposit

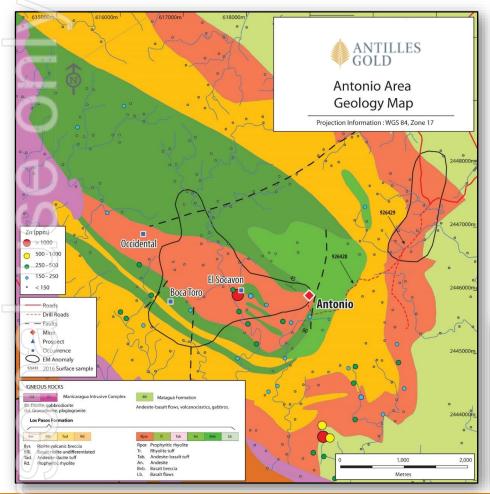


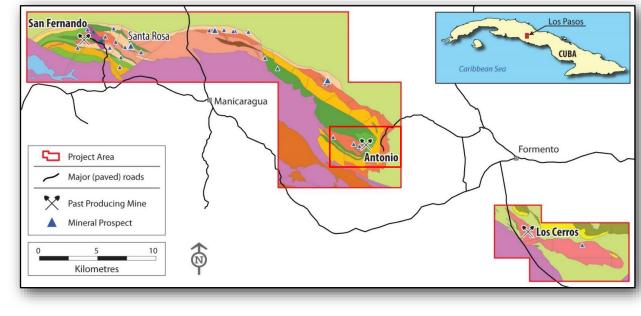


- Au-Ag (Cu-Zn-Pb) VMS system
- Never explored systematically (only 4 drillholes and tested to 80m vertical depth)
- No modern exploration since the 1950's
- High gold-silver grades with copper-zinc shows similarities with the historic Eskay Creek VMS (+3 MOz Au & 160 Moz Ag production)
- Only part of a much larger system exposed, similar to Eskay Creek style



## **Antonio VMS Deposit**



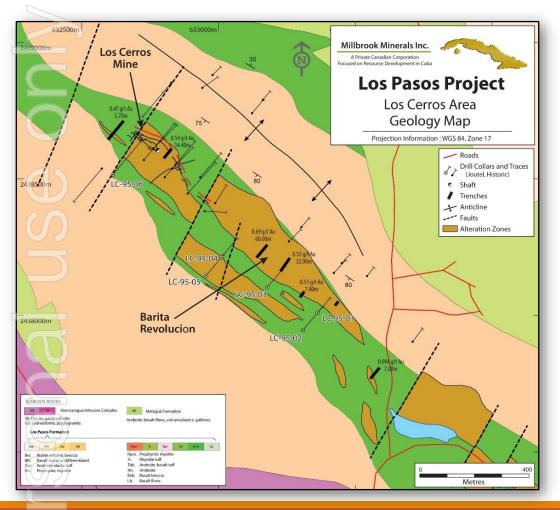


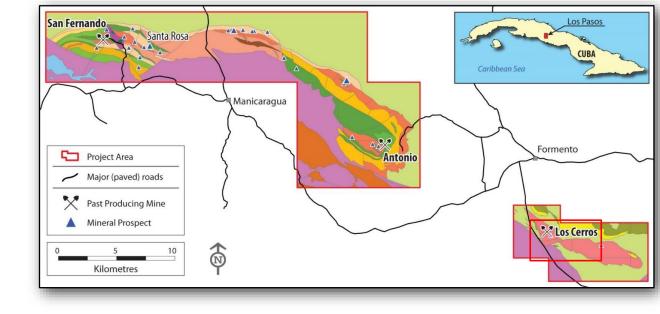
- Cu-Zn (Au-Ag) VMS system
- Large gossan overlying a massive sulphide zone over large area outcropping área
- Several gosanous outcrops have also been identified along strike
- A copper-rich stringer zone identified in footwall rocks (copper fluid feeder zone)
- Similar to classic Abitibi style VMS mineralization
- No modern exploration





## **Los Cerros VMS Deposit**





- Cu-Zn (Au-Ag) VMS system
- 25,000 t grading 11% Zn and 3% Cu were mined in the 1950's in a trial mining open-pit
- Large zones of mineralization (60m @ 0.69 g/t Au) in trenches located along strike
- No modern exploration since the 1950's



#### Summary – New Horizons

- The New Horizons Project encompasses an entire VMS district that hosts four known Cu-Zn (Au-Ag-Pb) deposits with numeorus surficial expressions of gossans that have not been explored since the Soviet-era
- Numerous gossans remain untested over +40 km strike length
- Shows many similarities to the Abitibi VMS Province that hosts the giant xxxxxx
- No modern exploration and possibility to explore rapidly with high-resolution helicopter supported airborne EM survey
- A LIDAR survey will be able to map the mineralized geological contacts a show additional gossanous outcrops