



AntaKori Project Cajamarca Province, Peru NI 43-101 Technical Report



Prepared for: Regulus Resources

Prepared by: Dr Ted Eggleston, RM SME, Wood Associate Mr Doug Reid, P.Eng., Wood Mr William Colquhoun, FSAIMM, Wood **Effective Date:** 22 February 2019

Project Number: 195450



CERTIFICATE OF QUALIFIED PERSON

I, Dr Ted Eggleston, RM SME, am employed as a Principal Geologist Associate with Amec Foster Wheeler E&C Services, Inc., a Wood company (Wood), with an address at 10615 Professional Circle, Suite 100, Reno, NV 89521.

This certificate applies to the technical report entitled "AntaKori Project, Cajamarca Province, Peru, NI 43-101 Technical Report", that has an effective date of 22 February 2019 (the "technical report").

I am a Registered Member of the Society for Mining, Metallurgy and Exploration (#4115851RM) and licensed as a Professional Geologist in the States of Wyoming (PG-1830) and Georgia (PG002016). I graduated from Western State University of Colorado with a BA degree in 1976 and from the New Mexico Institute of Mining and Technology with MSc and PhD degrees in Geology in 1982 and 1987 respectively.

I have practiced my profession for 40 years during which time I have been involved in the exploration for, and estimation of, mineral resources and mineral reserves, for various mineral exploration projects and operating mines. I have explored for, provided technical assistance for, or audited copper, gold, silver and molybdenum deposits including Antamina (Peru), Cerro Casale (Chile), Fort Knox (Alaska), Phoenix (Nevada) and Las Bambas (Peru). I conducted regional exploration in Alaska, Arizona, Utah, Colorado, Wyoming, Canada, Chile, and Peru.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* ("NI 43–101").

I visited the AntaKori Project between the following dates: 10–13 July 2017, and 4–7 December 2018.

I am responsible for Sections 1.1 to 1.10, 1.14, 1.15; Section 2; Section 3; Section 4; Section 5; Section 6; Section 7; Section 8; Section 9; Section 10; Section 11; Section 12; Section 15; Section 16; Section 17; Section 18; Section 19; Section 20; Section 21; Section 22; Section 23; Section 24; Sections 25.1 to 25.4, 25.7; Sections 26.1, 26.2; and Section 27 of the technical report.

I am independent of Regulus Resources Inc. as independence is described by Section 1.5 of NI 43–101.

I have no previous involvement with the AntaKori Project.

I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the technical report not misleading.

Dated: 15 April, 2019

"Signed and stamped"

Dr Ted Eggleston, RM SME.



CERTIFICATE OF QUALIFIED PERSON

I, Douglas Reid, P.Eng., am employed as a Principal Geologist with Amec Foster Wheeler E&C Services, Inc., a Wood company (Wood), with an address at 10615 Professional Circle, Suite 100, Reno, NV 89521.

This certificate applies to the technical report entitled "AntaKori Project, Cajamarca Province, Peru, NI 43-101 Technical Report", that has an effective date of 22 February 2019 (the "technical report").

I am a P.Eng. registered with the Association of Professional Engineers and Geoscientists of British Columbia (23347). I graduated with a Bachelor of Science in Geological (Geophysics) Engineering from the University of Saskatchewan in 1986.

I have practiced my profession for 30 years. I have been directly involved in the development and reviewing resource models and mineral resource estimation for mineral projects in North America and Africa since 1994.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* ("NI 43–101").

I visited the AntaKori Project from 3 to 7 December 2018.

I am responsible for Sections 1.1, 1.2, 1.10, 1.12, 1.13, 1.14; Section 2; Section 3; Section 14; Sections 25.1, 25.6, 25.7; and Section 27 of the technical report.

I am independent of Regulus Resources Inc. as independence is described by Section 1.5 of NI 43–101.

I have no previous involvement with the AntaKori Project.

I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the technical report not misleading.

Dated: 15 April, 2019

"Signed and sealed"

Douglas Reid, P.Eng.



CERTIFICATE OF QUALIFIED PERSON

I, William Colquhoun, FSAIMM, am employed as a Principal Metallurgical Consultant with Amec Foster Wheeler (Perú) S.A., a Wood company (Wood), with an address at Calle Las Begonias 441, Piso 8 San Isidro, Lima 27, Perú.

This certificate applies to the technical report entitled "AntaKori Project, Cajamarca Province, Peru, NI 43-101 Technical Report", that has an effective date of 22 February 2019 (the "technical report").

I am a Fellow of the South African Institute of Metallurgy and a registered Professional Engineer of the Engineering Council of South Africa. I graduated from Strathclyde University with a Bachelor of Science Degree in Chemical and Process Engineering in 1982.

I have practiced my profession for 32 years. I have been directly involved in mining and gold processing operations, metallurgical consulting and engineering studies in Africa, Europe, Australia, Far East and North and South America including Peru.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* ("NI 43–101").

I visited the AntaKori Project between 21 to 23 June 2017.

I am responsible for Sections 1.1, 1.2, 1.11, 1.15; Section 2; Section 3; Section 13; Sections 25.1, 25.5; Sections 26.1, 26.3; and Section 27 of the technical report.

I am independent of Regulus Resources Inc. as independence is described by Section 1.5 of NI 43–101.

I have no previous involvement with the AntaKori Project.

I have read NI 43–101 and the sections of the technical report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the technical report not misleading.

Dated: 15 April, 2019

"Signed"

William Colquhoun, FSAIMM.

IMPORTANT NOTICE

This report was prepared as a National Instrument 43-101 Technical Report for Regulus Resources Inc. (Regulus) by Amec Foster Wheeler (Perú) S. A., a Wood company (Wood). The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in Wood's services, based on i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Regulus subject to terms and conditions of its contract with Wood. Except for the purposed legislated under Canadian provincial and territorial securities law, any other uses of this report by any third party is at that party's sole risk.



CONTENTS

1.0	SUM	MARY	1-1
	1.1	Introduction	1-1
	1.2	Terms of Reference	1-1
	1.3	Project Setting	1-1
	1.4	Ownership, Mineral Tenure, Surface Rights, Water Rights, Royalties ar	nd
		Agreements	
		1.4.1 Ownership	1-2
		1.4.2 Agreements	1-3
		1.4.3 Mineral Tenure	
		1.4.4 Surface Rights	1-5
		1.4.5 Water Rights	1-5
		1.4.6 Mining Taxes and Royalties	1-5
	1.5	Environmental, Permitting and Social Considerations	1-6
	1.6	Geology and Mineralization	1-6
	1.7	History	1-8
	1.8	Drilling	1-9
	1.9	Sampling	1-10
	1.10	Data Verification	1-11
	1.11	Metallurgical Testwork	1-12
	1.12	Mineral Resource Estimation	1-13
	1.13	Mineral Resource Statement	1-18
	1.14	Interpretation and Conclusions	1-22
	1.15	Recommendations	1-22
2.0	INTRO	DDUCTION	2-1
	2.1	Introduction	2-1
	2.2	Terms of Reference	2-1
	2.3	Qualified Persons	2-1
	2.4	Site Visits and Scope of Personal Inspection	2-2
	2.5	Effective Dates	2-3
	2.6	Information Sources and References	2-3
	2.7	Previous Technical Reports	2-4
3.0	RELIA	NCE ON OTHER EXPERTS	3-1
	3.1	Introduction	3-1
	3.2	Project Ownership, Mineral Tenure, Surface Rights, Royalties and	
		Encumbrances	3-1





4.0	PROP	ERTY DESCRIPTION AND LOCATION	4-1						
	4.1	Introduction	4-1						
	4.2	Property and Title in Peru	4-1						
		4.2.1 Regulatory Oversight	4-1						
		4.2.2 Mineral Tenure	4-2						
		4.2.3 Surface Rights	4-3						
		4.2.4 Water Rights							
		4.2.5 Environmental Considerations	4-4						
		4.2.6 Permits	4-5						
		4.2.7 Other Considerations	4-5						
		4.2.8 Mining Taxes	4-5						
		4.2.9 Tax Stability Agreements							
		4.2.10 Corporate Income Tax							
		4.2.11 Fraser Institute Survey							
	4.3	Project Ownership	4-7						
		4.3.1 Ownership History							
		4.3.2 Current Ownership							
	4.4	Property Agreements	4-8						
		4.4.1 Overview	4-8						
		4.4.2 Coimolache Collaborative Agreement	4-10						
		4.4.3 Colquirrumi Earn-In Agreement							
	4.5	Mineral Tenure							
		4.5.1 AntaKori Concessions							
		4.5.2 Colquirrumi Concessions							
	4.6	Surface Rights							
	4.7	Water Rights							
	4.8	Royalties and Encumbrances							
	4.9	Permitting Considerations							
	4.10	Environmental Considerations							
		4.10.1 Environmental Permitting	4-24						
		4.10.2 Environmental Liabilities							
	4.11	Social License Considerations							
	4.12	Comments on Section 4							
5.0	ACCE	SSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND							
		IOGRAPHY	5-1						
	5.1	Accessibility							
	5.2	Climate							
	5.3	Local Resources and Infrastructure							
	5.4								



	5.5 5.6	Seismicity Comments on Section 5	
6.0		ORY	
	6.1	Exploration History	
	6.2	Production	6-1
7.0	GEOL	OGICAL SETTING AND MINERALIZATION	7-1
	7.1	Regional Geology	7-1
	7.2	Local Geology	7-4
	7.3	Property and Deposit Geology	7-7
		7.3.1 Introduction	7-7
		7.3.2 Lithology	7-7
		7.3.3 Structure	7-14
		7.3.4 Alteration	
		7.3.5 Mineralization	
		7.3.6 Oxidation	
	7.4	Prospects/Exploration Targets	
	7.5	Comments on Section 7	7-18
8.0	DEPC	OSIT TYPES	8-1
	8.1	Deposit Model	8-1
	8.2	Comments on Section 8	8-2
9.0	EXPL	ORATION	9-1
	9.1	Grids and Surveys	9-1
	9.2	Geological Mapping	9-1
	9.3	Geochemical Sampling	9-1
	9.4	Geophysics	9-2
	9.5	Pits and Trenches	9-2
	9.6	Petrology, Mineralogy, and Research Studies	9-3
		9.6.1 Petrography and Mineralogy	9-3
		9.6.2 Age Dating	9-3
		9.6.3 Hyperspectral Studies	9-3
	9.7	Exploration Potential	
	9.8	Comments on Section 9	9-1
10.0	DRILI	_ING	
	10.1	Introduction	
	10.2	Drill Methods	
		10.2.1 Legacy	
		10.2.2 Regulus	
	10.3	Logging Procedures	





		10.3.1 Legacy	
		10.3.2 Regulus	
	10.4	Recovery	
		10.4.1 Legacy	
		10.4.2 Regulus	10-7
	10.5	Collar Surveys	10-7
		10.5.1 Legacy	10-7
		10.5.2 Regulus	10-8
	10.6	Downhole Surveys	
		10.6.1 Legacy	
		10.6.2 Regulus	
	10.7	Sample Length/True Thickness	
	10.8	Summary of Drill Intercepts	
	10.9	Drilling Since Database Close-Out Date	
	10.10	Comments on Section 10	
11.0	SAMPI	LE PREPARATION, ANALYSES, AND SECURITY	
	11.1	Sampling Methods	
		11.1.1 Legacy	
		11.1.2 Regulus	
	11.2	Metallurgical Sampling	
	11.3	Density Determinations	
		11.3.1 Legacy	
		11.3.2 Regulus	
	11.4	Analytical and Test Laboratories	
		11.4.1 Legacy	
		11.4.2 Regulus	
	11.5	Sample Preparation and Analysis	
		11.5.1 Legacy	
		11.5.2 Regulus	11-8
	11.6	Quality Assurance and Quality Control	
		11.6.1 Legacy	11-8
		11.6.2 Regulus	11-8
		11.6.3 Conclusions	11-19
	11.7	Databases	11-20
		11.7.1 Database Description	11-20
		11.7.2 Reconstruction of Legacy Assay Database	11-20
	11.8	Sample Security	
	11.9	Comments on Section 11	11-21
12.0	DATA	VERIFICATION	



	12.1	Internal Data Verification	12-1
	12.2	External Verification	12-1
	12.3	Comments on Section 12	12-3
13.0	MINE	AL PROCESSING AND METALLURGICAL TESTING	13-1
	13.1	Introduction	13-1
	13.2	Metallurgical Testwork	13-1
	13.3	Recovery Estimates	13-3
	13.4	Metallurgical Variability	
	13.5	Deleterious Elements	
	13.6	Comments on Section 13	13-4
14.0		AL RESOURCE ESTIMATES	
	14.1	Introduction	
	14.2	Geological Models	
	14.3	Exploratory Data Analysis	
	14.4	Density Assignment	
	14.5	Grade Capping/Outlier Restrictions	
	14.6	Composites	
	14.7	Variography	
	14.8	Estimation/Interpolation Methods	
	14.9	Block Model Validation	
	14.10	Classification of Mineral Resources	
	14.11	Reasonable Prospects of Eventual Economic Extraction	
	14.12	Mineral Resource Statement	
	14.13 14.14	Factors That May Affect the Mineral Resource Estimate	
15.0	MINEF	AL RESERVE ESTIMATES	15-1
16.0	MININ	G METHODS	16-1
17.0	RECO	/ERY METHODS	17-1
18.0	PROJE	CT INFRASTRUCTURE	18-1
19.0	MARK	ET STUDIES AND CONTRACTS	19-1
20.0	ENVIR 1	ONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY	IMPACT 20-
21.0	CAPIT	AL AND OPERATING COSTS	21-1
22.0	ECON	OMIC ANALYSIS	22-1
23.0	ADJAC	ENT PROPERTIES	23-1



24.0	OTHE	R RELEVANT DATA AND INFORMATION	24-1				
25.0	INTERPRETATION AND CONCLUSIONS						
	25.1	Introduction	25-1				
	25.2	Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements	25-1				
	25.3	Geology and Mineralization	25-2				
	25.4	Exploration, Drilling and Analytical Data Collection in Support of Mineral	I				
		Resource Estimation	25-2				
	25.5	Metallurgical Testwork	25-3				
	25.6	Mineral Resource Estimates	25-4				
	25.7	Conclusions	25-5				
26.0	RECO	MMENDATIONS	26-1				
	26.1	Introduction	26-1				
	26.2	Phase 1 Recommendations	26-1				
	26.3	Phase 2 Recommendations	26-1				
27.0	REFEF	RENCES	27-1				

TABLES

Table 1-1:	Conceptual Pit Input Parameters	1-17
Table 1-2:	Indicated Mineral Resource Statement	1-19
Table 1-3:	Inferred Mineral Resource Statement	1-20
Table 4-1:	Mineral Tenure AntaKori Concessions	
Table 4-2:	Colquirrumi Concessions	4-21
Table 4-3:	Regulus Surface Rights	4-23
Table 4-4:	NSR Royalties on AntaKori Concessions	
Table 6-1:	Exploration History	6-2
Table 6-2:	Exploration Activities	6-3
Table 6-3:	Production History	
Table 7-1:	Stratigraphic Units	7-10
Table 7-2:	Alteration Paragenesis	7-15
Table 7-3:	Mineralization Paragenesis	7-17
Table 7-4:	Hypogene Alteration and Mineralization Phases	7-19
Table 7-5:	Oxidation Events	7-20
Table 10-1:	Drill Summary Table	
	Example Drill Intercept Table	
Table 11-1:	Density Data Summary	11-4
	Regulus Density Determinations by Lithology (in g/cm ³)	
Table 11-3:	Legacy Sample Preparation and Analytical Methods	11-7





Table 11-4:	Sample Preparation and Analytical Methods, 2017–2018	11-9
Table 11-5:	Detection Limits	11-10
Table 11-6:	1997–1998 QA/QC Program	11-12
Table 11-7:	2007–2008 QA/QC Program	11-12
Table 11-8:	2017–2018 QA/QC Program	11-13
	Locked Cycle Test Results	
Table 14-1:	Lithology Domains	14-2
Table 14-2:	Summary of Capped Grades	14-6
Table 14-3:	Estimation Parameters – Copper – CV1t Unit	14-9
Table 14-4:	Conceptual Pit Input Parameters	14-13
Table 14-5:	Indicated Mineral Resource Statement	14-17
Table 14-6:	Inferred Mineral Resource Statement	14-18

FIGURES

Figure 2-1:	Project Location Plan	2-2
	Project Ownership	
Figure 4-2:	Overall Concession Plan	4-17
Figure 4-3:	AntaKori Area Concessions	4-18
Figure 4-4:	AntaKori Area Concessions Inset Plan	4-19
Figure 5-1:	Physiographic Plan Showing Major Roads	5-2
Figure 7-1:	Location Map	7-2
	Regional Geological Map	
Figure 7-3:	Geology of the Hualgayoc-Tantahuatay District, Cajamarca	7-5
Figure 7-4:	Cretaceous Stratigraphic Column for the Cajamarca Region	7-6
Figure 7-5:	Simplified Geology Section L950NW (section looks northwest)	7-8
Figure 7-6:	Simplified Geology Section L800NW (section looks northwest)	7-9
Figure 8-1:	Porphyry Copper System Schematic Model	8-3
Figure 9-1:	TMI Image Showing Exploration Potential of Interpreted Possible Porphyry-Skarn	
	Targets 1 to 4	9-1
Figure 10-1:	Drill Collar Location Plan	10-3
Figure 10-2:	Regulus Drilling, Logging, and Sampling Protocol Flowsheet	10-5
Figure 14-1:	Lithology Block Codes – Representative Section (looking northwest)	14-3
Figure 14-2:	Density (Trimmed) by Domain	14-6
Figure 14-3:	Example Mineral Resource Classification Plan (3655 Elevation)	.14-12
Figure 14-4:	Conceptual Pit Plan View	.14-15



1.0 SUMMARY

1.1 Introduction

Regulus Resources Inc. (Regulus) requested Amec Foster Wheeler (Perú) S. A., a Wood company (Wood), prepare a technical report (the Report) on the AntaKori Project (the Project), in Cajamarca Province, Peru.

Regulus has four indirectly-owned subsidiaries that hold interests in the Project, including Southern Legacy Peru S.A.C., Anta Norte S.A.C., Kori Anta S.A.C., and SMRL El Sinchao de Cajamarca. Unless directly identified, for the purposes of this Report, the name Regulus is used interchangeably for the subsidiaries and parent company.

1.2 Terms of Reference

This Report supports the disclosure of Mineral Resources for the Project in the Regulus news release of 1 March, 2019, entitled "Regulus Reports Substantial Increase in Resource Estimate at AntaKori Copper-Gold Project, Peru".

All measurement units used in this Report are metric unless otherwise noted. Currency is expressed in United States (US) dollars (US\$). The Peruvian currency is the nuevo sol. The Report uses US English.

Mineral Resources and Mineral Reserves are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (May 2014; the 2014 CIM Definition Standards) and the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 2003; 2003 CIM Best Practice Guidelines).

1.3 **Project Setting**

The Project is situated 620 km north–northwest of Lima, the capital of the Republic of Peru, and 53 km north–northwest of the city of Cajamarca. Access to the Project from Cajamarca is by National Route PE-3N which is a paved road with some short unsurfaced segments, a trip of about 90 km that takes approximately two hours. Cajamarca has a commercial airport and is served by several flights a day from Lima. The nearest port is Salaverry, close to the city of Trujillo, 316 km by paved road from Cajamarca. This port is used to ship concentrates from the Cerro Corona copper–gold mine located 6 km southeast of the AntaKori Project.





The main precipitation is between October and May, with March being the wettest month with an average of 190 mm. Average annual precipitation is 1,130 mm and varies from 765 mm to 1,400 mm. The average annual maximum temperature is 8.9°C and the minimum is 3.6°C, with little monthly variation. Adjacent mining operations are conducted year-round, and it is expected that any operation conducted by Regulus would also be year-round.

The AntaKori Project is located in the mountains of the Western Cordillera at an altitude of 3,725–4,000 m above mean sea level. The geomorphology of the AntaKori Project is dominated by glacial landforms. It lies on the continental divide which forms the ridge between the valley of the Colorado River, a tributary of the Chancay River that drains west to the Pacific, and the Tingo River, a tributary of the Amazon River that drains east to the Atlantic.

The vegetation belongs to the high altitude (Puna) grassland zone.

1.4 Ownership, Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

1.4.1 Ownership

Regulus has four subsidiary companies in Peru:

- Southern Legacy Peru S.A.C. (SLP) which is the operating company of the AntaKori Project and a concession owner. Some of the AntaKori concessions owned by SLP have been assigned to CMC by means of the Coimolache Collaborative Agreement
- Anta Norte S.A.C. (Anta Norte) which is owned by SLP. It is the title holder of several concessions assigned by SLP, and is the title holder of the Colquirrumi concessions which were assigned by Colquirrumi by means of the Colquirrumi Earn-In Agreement
- Kori Anta S.A.C. (Kori Anta); holder of the Tres Mosqueteros concession
- SMRL El Sinchao de Cajamarca (SMRL El Sinchao) which is a concession holder and is in the process of being converted to a Sociedad Anónima (S.A.). SLP, by means of arbitral resolution, controls 68.259% of SMRL El Sinchao, which was obtained by the exercise of usufruct and purchase option agreements, and is in the process of formalising the definitive ownership title. SLP has also made usufruct and option agreements for an additional 14.87% of SMRL El Sinchao, which is in the process of





being formalised, giving SLP ownership of a total of 83.13% of SMRL El Sinchao. The balance of SMRL El Sinchao is owned by members of the Santolalla family.

1.4.2 Agreements

Regulus has two agreements in place with two subsidiaries of Compañía de Minas Buenaventura S.A.A. (Buenaventura), Compañía Minera Coimolache S.A. (CMC) and Compañía Minera Colquirrumi S.A. (Colquirrumi). The Coimolache Agreement is with CMC, the owner and operator of the adjoining Tantahuatay Mine, and the Colquirrumi Earn-In Agreement is with Colquirrumi, which is a 100% Buenaventura subsidiary.

The intent of the Coimolache Agreement is to share access and enable coordinated exploration and mining of the mining concessions of Regulus and CMC around the AntaKori project, while each company maintains ownership of its own mining concessions. It is a collaboration agreement rather than a joint venture or option. This was done by creating an area of interest (AOI) consisting of Regulus mining concessions and adjoining CMC mining concessions within a distance of 500 m of the Regulus mining concessions. Within the AOI both parties benefit from mutual access, mutual rights of expansion, collaborative exploration and data sharing.

The principal objective of the Coimolache Agreement is to enable Regulus to determine the full size and nature of the AntaKori deposit, and to be able to construct a conceptual open pit shell over the entire deposit, while reporting only that portion of the Mineral Resource estimate that lies within Regulus' own mining concessions.

The agreement defines two areas for the purposes of permitting, exploration and development. Sub-Area 1 includes seven Regulus mining concessions close to the Tantahuatay Mine and the CMC portion of the AOI. The Regulus mining concessions were assigned to CMC for five years to enable drilling to be performed under existing CMC permits. CMC is the operator for exploration within Sub-Area 1, with input and guidance from Regulus for the exploration on Regulus concessions. Sub-Area 2 consists of nine other Regulus mining concessions at AntaKori in which Regulus will manage exploration.

The Coimolache Agreement and related assignments may be extended by mutual agreement. The agreement contemplates an exploration phase and two mining phases for oxides and sulphides. CMC is the operator of the oxide mining operation and has extended the Tantahuatay open pit onto the Regulus mining concession, subject to a 5% net smelter return (NSR) royalty payable to Regulus. Either company can elect to





develop and mine the sulphides by assuming all costs for development, mining and closure as well as paying a 5% NSR royalty to the non-operating party. The parties may also elect to form a joint venture or to simply allow the Coimolache Agreement to terminate after five years.

The Colquirrumi Earn-In Agreement is an option whereby Regulus can earn a 70% interest in a large block of mining concessions on the north side of AntaKori from a subsidiary of Buenaventura by drilling 7,500 m. The agreement is for three years and may be extended for up to three years. The Colquirrumi mining concessions have been assigned to Anta Norte, which is owned by Regulus, for the duration of the option agreement. Once Regulus has earned its interest, the ownership of Anta Norte will become 70% Regulus and 30% Colquirrumi. Anta Norte will function as a joint venture with each party responsible for its corresponding percentage of future investment and the party with majority interest acting as operator. Colquirrumi then has a one-time option to buy back 40% by paying \$9 million to Regulus. If Colquirrumi exercises this option the ownership of Anta Norte would become 30% Regulus, and 70% Colquirrumi.

1.4.3 Mineral Tenure

The tenure holdings are split, for ease of discussion, into the AntaKori concessions and the Colquirrumi concessions:

- AntaKori concessions: 20 metallic mining concessions granted between 1907 and 2008. The effective area of the 20 concessions is about 438 ha (total area around 1,460 ha). The effective area of the 18 concessions which constitute the AntaKori Project is approximately 219 ha. The remaining two concessions are located on the east side of the Colquirrumi concessions. Seven of the Regulus concessions with an effective area of about 52 ha were assigned by SLP to CMC by means of the subscription of the Coimolache Collaborative Agreement. These are defined as Sub-Area 1, together with the Coimolache AOI. Another nine Regulus concessions (effective area approximately 159 ha) are defined as Sub-Area 2. Four Regulus concessions are not in either sub-area. The Coimolache AOI is part of the Acumulación Tantahuatay concession owned by CMC, and is an area surrounding the Regulus concessions in which the two companies have agreed to collaborate for exploration and mining
- Colquirrumi concessions: 23 metallic mining concessions granted between 1937 and 2000. Regulus acquired rights to those concessions through an Assignment





Agreement between Colquirrumi and Anta Norte that is part of the Colquirrumi Earn-In Agreement. These concessions comprise the Colquirrumi concession area.

All of the concessions are currently in good standing. The mining concessions will remain valid as long as the companies pay the annual concession tax and, if applicable, the penalty or make the minimum annual investment for each concession but must achieve minimum annual production by Year 30 (counted from 2008 for concessions granted before 2008) or the concessions will expire.

1.4.4 Surface Rights

Most of the surface rights in Sub-Area 1 in the southern part of the AntaKori concessions area are owned by CMC which permitted access for the 2017–2018 drill program as part of the Coimolache Collaboration Agreement. Regulus purchased surface rights for two properties in the northern part of the AntaKori Project and is negotiating purchase of other properties.

1.4.5 Water Rights

Regulus currently has no water rights in the AntaKori Project area. Water for the 2017–2018 drill program was supplied by CMC as part of the Coimolache Collaboration Agreement.

1.4.6 Mining Taxes and Royalties

Three types of mining taxes will be levied by the Peruvian government on production:

- Mining royalties (*regalía minera*): calculated on the value of concentrates or their equivalent on the following scale:
 - Up to US\$60 million annually: 1.0%
 - Between US\$60 million and US\$120 million annually: 2.0%
 - Above US\$120 million annually: 3.0%
- Special mining tax on windfall profits. Has 17 operational margin brackets with payments ranging from 2.00–8.40%
- Special mining contribution or levy (GEM): applicable to companies that have stability contracts with the State. The levy is applied to operating margins on a scale of 4.0–13.1%.





Certain of the Regulus mining concessions within the AntaKori concessions area are subject to net smelter return (NSR) royalties payable to the previous owners of the concessions. In addition, a 5% NSR is payable by CMC to SLP under the Coimolache Collaborative Agreement. This NSR includes any underlying NSR royalties, so that the maximum NSR payable is 5%. There are no underlying NSR royalties on the Colquirrumi concessions.

1.5 Environmental, Permitting and Social Considerations

There is an expectation of environmental liabilities associated with historical mining and exploration activity. According to Resolution N° 010-2019-MEM/DM, the Ministry of Energy and Mines has approved an Inventory of Mining Environmental Liabilities, in which environmental liabilities have been identified in certain mining concessions held by Regulus. According to Law No. 28271, responsibility for the remediation of environmental liabilities lies with the person or company that generated the liability. In the case of historical liabilities where the generator is not known, the Government of Peru assumes responsibility.

The 2017–2018 Regulus drilling program was performed in the southern part of the AntaKori Project under CMC's permits.

An Environmental Impact Declaration (DIA, Declaración de Impacto Ambiental) must be presented for Category 1 exploration activities which have a maximum of 40 drilling platforms or disturbance of surface areas as large as 10 ha.

The drill program outlined in Section 1.15 is planned to be conducted under a combination of existing CMC–Tantahuatay drill permits, and a DIA permit submitted to the regulatory authorities by Regulus to allow drilling to extend to the north on both the AntaKori and Colquirrumi concessions. The DIA approval is anticipated by about Q3 2019.

Regulus has a full-time community relations group of four persons based in Cajamarca and dedicated to community outreach programs for the AntaKori and Colquirrumi concessions.

1.6 Geology and Mineralization

AntaKori is considered to be primarily an example of a copper skarn deposit.







The AntaKori Project is located in the copper-gold porphyry and epithermal belt of Miocene age in the Western Cordillera of northern Peru, within the Hualgayoc mining district. The Cretaceous Chulec, Inca and Farrat Formations are the basal units, and consist of marls, limestones, arkoses, sandstones, and siltstones. The Cretaceous-aged rocks are unconformably overlain and cross-cut by Middle Miocene-aged intermediate to felsic volcanic and subvolcanic rocks of the Calipuy Formation in the Tantahuatay volcanic center.

The district-scale structural controls of the Hualgayoc district are west–northwesttrending, left-lateral, Riedel shear systems in the Cajamarca Deflection, and the northeast-trending, trans-arc, Chicama–Yanacocha structural corridor. The regional 1:100,000 scale Geological Map of Peru shows the AntaKori Project to be located on the southern limb of a northwest-trending open anticline.

Alteration types recognized in the district include sericite-chlorite, potassic, propylitic, advanced argillic, silicification, vuggy silica, hydrothermal metasomatism (skarn), and thermal metamorphism.

Mineralization events are superimposed on the alteration systems. Mineralization in the district includes:

- A copper–gold–silver calcic skarn developed in Cretaceous sedimentary rocks associated with massive replacement sulphide bodies (AntaKori mineralization)
- A weakly-mineralized porphyry copper–gold–silver–(molybdenum) system associated with several feldspar-biotite porphyry dykes and breccias (AntaKori mineralization)
- A second porphyry system associated with sericite–chlorite–anhydrite alteration with significant mineralization of copper–gold–silver–(molybdenum); (AntaKori mineralization)
- A high-sulphidation epithermal system with copper–gold–silver–arsenic–antimony developed in Miocene volcanic rocks and subvolcanic intrusions with enargite-pyrite structures (responsible for the Tantahuatay mineralization)
- An epithermal intermediate sulphidation, "base metal carbonate" system with goldsilver-lead-zinc-copper mineralization associated with late stage hornblende porphyry dykes of Upper Miocene age (cross-cuts earlier mineralization).





The skarn and second porphyry processes are responsible for most of the AntaKori mineralization. Mineralization in prograde skarns is weakly-developed, disseminated pyrite, chalcopyrite and magnetite. There is strong retrograde exoskarn alteration that formed epidote, chlorite and calcite. Mineralization in retrograde skarns consists of pyrite, magnetite and chalcopyrite in disseminations, veinlets and massive sulphide-magnetite bodies. Copper–gold–silver ± Mo mineralization in the second porphyry intrusive phase occurs as pyrite, chalcopyrite, bornite and molybdenite as disseminations, veinlets and breccia cement.

Two separate oxidation events are recognized. No significant supergene enrichment is associated with either event.

The 2017–2018 drill program demonstrated that the copper–gold mineralization is open on the north and northeast sides of the AntaKori concessions and into the Colquirrumi concessions. These areas are coincident with circular highs with low centers on a plot of the total field magnetic intensity (TMI) analytical signal of the vertical integration (ASVI). These magnetic anomalies are interpreted as possibly representing multiple porphyry– skarn centers with magnetite-destructive phyllic alteration of porphyry stocks surrounded by magnetite-bearing skarn, thus demonstrating considerable exploration potential.

1.7 History

Companies that conducted exploration in the Project area prior to Regulus obtaining an interest include Kennecott Copper Co. (Kennecott), Cerro de Pasco Corporation (Cerro de Pasco), Servicio de Geologia y Mineria (now Ingemmet), Granges, El Misti Gold Limited, Canada (El Misti), Andean American Mining Corp., Canada (Andean), Sinchao Metals Corp., Canada (Sinchao Metals) and Southern Legacy Minerals Inc., Canada (Southern Legacy). The companies completed helicopter reconnaissance, geological and alteration mapping, soil and rock geochemical sampling, induced polarization (IP) and ground magnetic geophysical surveys, trenching, reverse circulation (RC) and core drilling.

Regulus re-logged drill core collected between 1997–2008, commissioned hyperspectral scanning of core, commissioned petrographic and mineralogical studies, and completed a core drilling program.





1.8 Drilling

A total of 109 drill holes (41,485.90 m) were completed in the period 1964–2018. Of these drill holes, 29 core holes (22,140.89 m) were completed by Regulus in 2017–2018. Pre-1997 drill holes are not used in Mineral Resource estimation. The remaining drill holes, consisting of 22 RC holes (3,274.5 m) and 48 core holes (14,679.7 m) were drilled by El Misti and Sinchao Metals in the period 1997–2008. These are referred to as legacy drilling and are used in Mineral Resource estimation.

Drill sizes completed include HQ (63.5 mm core diameter), NQ (47.6 mm), and PQ (85.0 mm).

Regulus relogged all core from the 1997–2008 programs. Regulus' 2017–2018 logging program included recording of lithology, alteration, and mineralization, using a standard logging spreadsheet.

No recovery data exist for the legacy drill programs. The 2017–2018 Regulus program recovery averaged 95.3% and recovery was similar for all core sizes.

There is low confidence in the coordinates of the legacy drill holes. The legacy drill collars that could be located were re-surveyed in 2015. The original coordinates were used for the collars which could not be found. A plot of the legacy drill collar coordinates on recent, high-resolution satellite images shows that some collars do not lie on areas of disturbance of drill pads or roads, suggesting that there are errors in some of the coordinates.

Regulus drill collars were surveyed by CMC mine surveyors at the set-up and finish of drilling using a Trimble Total Station instrument to measure the coordinates, azimuth and inclination of the drill collar, and a survey certificate was given to Regulus.

Legacy RC and core holes do not have any downhole survey data for azimuth and inclination. To address uncertainty in hole deviation, Regulus compared traces from 2017–2018 program with the legacy drill hole traces, and concluded that Regulus drill holes between 0–500 m depth experienced limited downhole deviation; hence most of the legacy drill holes, being less than 500 m deep, were interpreted to likely also have limited downhole deviation.

Regulus completed downhole surveys of all 2017–2018 holes using a wireline GyroTracer Directional[™] 45 mm north-seeking gyro tool. Readings were taken every 5 m both going down into the hole and coming back up out of the hole.





1.9 Sampling

No information is available on legacy sampling methodology. Based on chip trays and assay sheets, it appears that RC chip samples were collected on 2 m intervals. Core from the 1997-1998 drill program was split with a diamond core saw and sampled on 2 m intervals with one half bagged and the other half returned to the core box. Core from the 2007–2008 drill program was sampled at variable intervals up to 2.00 m long and priority appears to have been given to geology. The 2017–2018 Regulus drill program core sample intervals were based on geology with sample limits placed at significant contacts of lithology, alteration and mineralization. The maximum sample length is 2 m and the minimum is 0.5 m.

Regulus completed 2,233 density measurements, using the water displacement method. These are supported by 5,831 legacy density measurements, also determined using the water displacement method. There is adequate coverage of the principal lithologies.

RC chip samples and core samples from the 1997–1998 drill program were prepared by Bondar Clegg (part of ALS Minerals since 2001), Lima and the pulps were shipped to Vancouver for analysis. It is not known if Bondar Clegg had any ISO or other accreditations in 1997–1998. Core samples from the 2007–2008 drill program were prepared and analyzed at CIMM Peru S.A. (now part of Certimin). Certimin was ISO9001 certified in 2000.

Legacy preparation and analytical methods included:

- Bondar Clegg: crushing to 70% <2 mm, grinding to 85% <75 µm, gold analysis using 30 g fire assay with atomic absorption spectroscopy (AAS) finish; 50 g fire assay with AAS finish, multi-element analysis of 34 elements by inductively-coupled plasma atomic emission spectroscopy (ICP-AES)
- CIMM: crushing to 1/4 inch, grinding to 95% <150 mesh, gold analysis using 30 g fire assay with AAS finish, multi-element analysis of 35 elements by ICP.

Legacy quality assurance and quality control (QA/QC procedures) included insertion of standards, duplicate and blank materials. However, there is no documentation of original QA/QC data from those programs in Regulus' possession; thus, the legacy results cannot be verified.

The primary laboratory for the 2017–2018 Regulus program was ALS Minerals in El Callao, Lima and the secondary laboratory was SGS Peru, in El Callao, Lima. ALS Minerals





is ISO 9001:2008 certified and ISO 17025:2005 (exp. 2022_02_28) accredited by the Standards Council of Canada for the procedures used for this work. SGS Peru is ISO 9001 and ISO 17025 accredited.

Preparation and analytical methods included:

- ALS Minerals: crushing to >70% <2 mm, pulverizing to >85% <75 μ m, gold analysis using 30 g fire assay with AAS finish, multi-element analysis of 34 elements by ICP-AES
- SGS Peru: crushing to >90% <10 mesh, pulverizing to >95% <140 mesh, gold analysis using 30 g fire assay with AAS finish, multi-element analysis of 35 elements by ICP-AES.

Regulus used standards, coarse blanks, field duplicates, coarse (preparation) duplicates, fine (pulp) duplicates, check samples (reject) and replicate samples (pulp) in their QA/QC program.

Standard results indicate that accuracy for the metals of economic interest is within the industry-standard of ±5% for gold, silver, copper, molybdenum, lead, and zinc. There is a slight high bias for arsenic and antimony, and a slight low bias for molybdenum. The coarse blank shows no evidence of contamination for gold, silver, molybdenum, antimony, arsenic, and lead. Data for copper and zinc are equivocal because both of those elements are present in detectable concentrations in the supposedly blank sample. The field (core) duplicates show significant failures due to the sampling method. The coarse and fine duplicates show acceptable precision. The check and replicate samples show generally low bias between the primary and secondary laboratories.

The protocols for legacy sample security are not known. Regulus has a rigorous sample security protocol that depends on chain of custody procedures, locked facilities with controlled access, and secure sample transport to the analytical laboratory.

1.10 Data Verification

Between 2015 and 2018, Regulus re-logged all of the legacy core rather than rely on legacy logging. Lithology, alteration, mineralization, veining and structures were logged. The condition of the core was also logged. All of the core that is within the Regulus concessions was also logged with the Corescan[™] system. To the extent possible, analytical methods for legacy data were verified and legacy data were compared to original documents; however, for holes drilled prior to 2017, no documentation of





original data was available for collar or downhole surveys. Assay data for legacy drilling were compared to original documents by Regulus and Wood and no significant discrepancies were identified.

Wood verified, to the extent possible, the Regulus, CMC, and legacy data by comparing data in the database to original documents. As a result of these evaluations, Wood considers the data to be reliable as follows:

- 1997–1998 data are not supported by documented QA/QC and are thus able to support only Inferred Mineral Resources
- 2007–2008 data are supported by documented QA/QC data from the laboratory only. Wood considers these data adequate to support Indicated Mineral Resources and preliminary mine planning
- 2017–2018 data are supported by documented QA/QC data and are adequate to support Measured Mineral Resources and mine planning.

The QP personally verified the documented QA/QC results for the 1997–1998, 2007– 2008, and 2017–2018 drill programs and reviewed the results of audits performed by Wood personnel under the supervision of the QP. The QP also verified all aspects of data collection by Regulus by observing data collection procedures in the field and core logging facility. The QP also performed detailed reviews and verifications of the geological models used to support Mineral Resource estimation.

1.11 Metallurgical Testwork

Preliminary metallurgical testwork was commissioned by SLP in 2013, and undertaken at Plenge Laboratory in Lima. Work completed consisted of X-ray mineralogical characterization, mineral liberation analysis and batch and locked cycle flotation scoping testwork. Two composites were tested, labelled as "skarn" and "porphyry". There is no information as to how representative the samples used in test work are of the overall metallurgical variability of the deposit.

Mineralogy indicated the dominant mineral in both concentrate products to be chalcopyrite (about 70 wt%), but the sample labelled as porphyry contained relatively more (10.2 wt%) combined copper arsenides (enargite, tennantite) than the sample labelled as skarn (2.4 wt%). The concentrate sample from skarn, contained more (8.8 wt%) combined sphalerite and galena mineral relative to the porphyry sample (2.4 wt%). The concentrate mineralogy reported is consistent with the arsenic, zinc and

April 2019







lead grades reported in the relevant concentrates. In the sample labelled as skarn, arsenic recovery to the concentrate was also notably lower than the porphyry sample. This suggests the presence of other arsenic mineralization in the skarn sample, not directly associated with copper, and with a lower flotation response. Arsenopyrite could be expected to be behave in this way.

An average copper recovery of 85% and copper concentrate grade of 28% Cu was selected as the basis of the cut-off assumptions used in Mineral Resource estimation. A recovery of 80% As was assumed to the concentrate. The resulting concentrate product would be arsenic-bearing and contain an average of about 3.5% As. This level of arsenic in a concentrate generally requires marketing through specialist base metal concentrate traders for blending, third-party refineries and/or treatment by secondary downstream processing on-site.

Additional metallurgical testwork has been recommended to identify the preferred baseline concentrator flowsheet configuration and design parameters for the project, assess mineralization and geometallurgical variability especially regarding arsenic mineralogy, and to support concentrate marketing and/or secondary processing scenarios.

1.12 Mineral Resource Estimation

The Mineral Resource block model was constructed over the entire Project area. A parent block size of $10 \text{ m} \times 10 \text{ m} \times 10 \text{ m}$ and a sub-cell block size of $5 \text{ m} \times 5 \text{ m} \times 5 \text{ m}$ were chosen to appropriately model the volumes of the lithological domains. Blocks were not created above the surface topography.

Leapfrog[™] was used to construct geological, alteration, mineralization and weathering three dimensional (3D) models.

Regulus supplied density determinations for 7,278 samples. These samples intervals were tagged by the same lithology wireframes as used for grade estimation. Wood noted that portions of the core were extremely broken up. The intervals sampled for density tended to be in more competent rock, thus there is some risk of overstating the tonnage. Wood recommends mitigating this risk by obtaining more density samples in the less competent intervals of core.

The influence of high-grade samples was controlled by a combination of outlier restriction and capping applied to composites rather than capping of individual assays. Uncapped composites were allowed to estimate blocks within 20 m, beyond this distance





the outlier composites were capped to the outlier threshold. Wood reviewed the amount of metal removed by capping and feels it is reasonable based on the current drill spacing.

Assay sample intervals are variable, with the majority being 2 m in length, but lengths are adjusted at lithology contacts such that sample lengths can range from 0.5–3 m.

Drill hole data were loaded into Vulcan[™] and composited to 5 m lengths to standardize data support for estimation. Composites were broken based on intersection with the geological wireframes and back-coded based on these wireframes. Edge composites shorter than 2.5 m in length were added to the previous composite to eliminate short composites.

Sage[™] software was used to create experimental correlograms for all elements using 5 m capped composites in domains with sufficient data to product reasonable correlograms.

Grade estimation was accomplished using a combination of ordinary kriging (OK) for domains with adequate data (CV1t, CF, IF, FF, BXag, BXb, CV1m and CV2h units) and inverse distance weighting to the second power (ID2) for domains which had limited data (CV2m, CVep and OB units). Weathering codes were applied within the CV1t and BXag units to identify a small, near-surface oxide domain which was estimated separately. Skarn-based wireframes were used to constrain estimates within the CF and IF units. Due to high CVs (over 2) observed in the composites, indicator models were also applied in the estimation of copper grades in the CV1t unit and to the estimation of arsenic grades in the CF unit. Parameters estimated included copper, gold, silver, arsenic, lead, zinc, and molybdenum. Elements other than copper, gold and silver were estimated for potential future use in exploration, metallurgical and environmental studies, but are not included in the resource statement.

Density values were estimated into the block model using ID2 method with two passes based on the lithology domain. Blocks that were not estimated in the second pass were assigned the mean density value for the particular lithology.

The estimation plan incorporated six passes with expanding search ellipses, outlier restriction, minimum and maximum number of composites, minimum and maximum number of holes, and maximum number of composites for a single drill hole. The large number of passes was due to the spacing of drill holes and geometry of some of the units. Most of the Indicated and Inferred blocks were estimated in the first three passes.

This approach should result in a grade interpolation that honors the composite grades locally and globally. The orientations and ranges of the search ellipsoids were based on the correlograms. Any block that was un-estimated was assigned a mean grade based on the lithological domain.

Model validation included:

- Visual inspection: locally, the estimated grades of the blocks show reasonable agreement with the supporting grades
- Global bias checks using a nearest-neighbor (NN) model. The overall global bias restricted to Indicated blocks is within ±2%
- Local bias checks using swath plots. The swath plots do not show areas of significant local bias in areas that are supported by a large number of blocks.

Metal removed as a result of capping to control the over-projection of high-grades was evaluated by comparing the NN cap and NN uncapped models restricted to Indicated blocks. Overall copper removed by capping was 4.6%, gold was 3.4%, silver and arsenic were 4.8%.

To incorporate the drill spacing criteria to outline confidence categories, Wood calculated the drill spacing for each block based on the average distance to the closest three drill holes. Using the current geological model and available drill hole data, it appears that a drill spacing of 110 m is required for Indicated Mineral Resources, and it is reasonable to assume a 200 m drill grid would be sufficient for Inferred Mineral Resources. Wood assessed the quality of legacy and current data. Blocks dominantly estimated based on legacy holes lacking sufficient confidence were downgraded from Indicated to Inferred. The classification was then smoothed to reduce or remove isolated islands of Indicated or Inferred blocks.

To demonstrate reasonable prospects for eventual economic extraction (Wood constructed a conceptual constraining pit shell for the AntaKori Project using Whittle[™] software and based on Indicated and Inferred mineralized material. The mineralization considered in the conceptual pit shell was limited to sulphide material; the minor amount of oxide material was treated as waste for this exercise.

Parameters for the conceptual pit shell assumed the deposit would be developed as a long-life operation consisting of a conventional truck and shovel open pit mine feeding a 60,000 t/d concentrator, producing a copper–gold–silver concentrate containing arsenic on-site for sale to third-party refineries. Processing costs assumed a sulphide





concentrate would be produced using flotation methods to recover copper, gold, and silver.

Input parameter assumptions are provided in Table 1-1.

The input parameters were based on:

- Metal prices net selling cost including concentrate refining
- Bench-marked mining, processing and general and administrative (G&A) costs based on estimates and current costs for similar sized and similar types of operations in the region
- Metallurgical recoveries are based on preliminary test results and benchmarks. To date, only preliminary metallurgical studies have been completed at AntaKori
- A 5% NSR royalty was applied to mineralized material from the Coimolache AOI as per the Coimolache Collaborative Agreement.

The pit shell was determined by evaluation of an NSR with NSR block cut-off = 10.03/t. The NSR of each block was calculated using the following formula:

• NSR= 45.07* Cu + 24.10 * Au + 0.30 * Ag.

The conceptual constraining pit shell was restricted to copper–gold–silver mineralization that occurs on AntaKori concessions, the Coimolache AOI and the CMC permits outside and south of the Coimolache AOI.

CMC data were not accessible to Regulus for the CMC concessions outside the Coimolache AOI so this area was assumed to be waste material. Based upon precedent agreements and a demonstrated working relationship between Regulus and CMC, an assumption is made that Regulus will be able to reach a mutually-beneficial agreement with respect to CMC concessions to the south of the Coimolache AOI similar to the existing agreement. It is anticipated that a new agreement would provide for the mining and processing of CMC-owned material under the same terms of the current Coimolache Collaborative Agreement. The impact of not reaching such an agreement would be to reduce the stated Regulus-owned resources by approximately 10% in tonnage with the grade remaining essentially the same.



Parameter	Value	Units
Copper price	6,614	US\$/t
Gold price	1,400	US\$/oz
Silver price	18.00	US\$/oz
Average treatment charge Cu	300	\$/dmt conc
Copper refining charge (US\$0.25/lb)	148.81	\$/dmt conc
Gold refining charge (US\$5/oz)	1.52	\$/dmt conc
Silver refining charge (US\$0.3/oz)	2.43	\$/dmt conc
Freight and shipping	120	\$/dmt conc
Copper recovery (Rec _{Cu})	85	%
Gold recovery (Rec _{Au})	55	%
Silver recovery (Rec _{Ag})	50	%
Arsenic recovery (Rec _{As})	80	%
Overall pit slope	45	0
Mining cost	1.85	US\$/t material moved
Processing cost	7.18	US\$/t material treated
General and administrative (G&A) cost	1.00	US\$/t material treated

Table 1-1: Conceptual Pit Input Parameters

Note: For treatment charges depending on the arsenic content the following rule was used: US\$500/dmt, if As conc >5%; US\$300/dmt, if As conc >3%; US\$ 250/dmt, if As conc >0.5% and As conc <=3%; US\$100/dmt, if As conc <0.5%. In the latter case, an arsenic penalty was assumed, and included, based on: if As conc <0.5% and As conc >0.3%, US\$5/dmt each 0.1%. Dmt = dry metric tonne.

The conceptual constraining pit shell reaches a depth of approximately 600 m at the deepest point. The ratio of waste to total in-pit resource (Regulus and CMC) at a cut-off of 0.3% CuEq is approximately 0.85. Although the conceptual pit shell captures much of the material classified with an Inferred or Indicated level of confidence, there is significant mineralized material that falls outside of the conceptual pit shell and additional drilling will be required to support estimation of Mineral Resources from this material.





Equivalency equations were generated for copper and gold as follows:

- Copper equivalent formula: CuEq = Cu + 0.6805561*Au + 0.008750*Ag (no use of Pb, Zn, or Mo, and equal metallurgical recoveries were assumed for all three metals in the copper equivalent formula)
- Gold equivalent formula: AuEq = Au + 1.469387*Cu + 0.012857*Ag (no use of Pb, Zn, or Mo, and equal metallurgical recoveries were assumed in the gold equivalent formula).

A reasonable cut-off grade was determined to be 0.30% CuEq, using a combination of benchmarking of copper–arsenical concentrate, and the parameters in Table 1-1. This cut-off grade was based on a range of arsenic concentrate grades and associated penalties. At the metal prices used the break-even cut-off varied between 0.25% CuEq and 0.32% CuEq, thus a 0.3% CuEq cut-off grade was considered reasonable.

1.13 Mineral Resource Statement

The Mineral Resources were classified using the 2014 CIM Definition Standards and have an effective date of 22 February 2019. The Qualified Person for the estimated is Mr. Doug Reid, P.Eng., a Wood employee.

A sensitivity of the Indicated and Inferred Mineral Resources is shown at various CuEq cut-off grades in Table 1-2 and Table 1-3 respectively. The base case for the estimate is highlighted.

Areas of uncertainty that may materially impact the Mineral Resource estimates include:

- Changes to long-term metal price assumptions
- Changes in local interpretations of mineralization geometry and continuity of mineralized zones
- Changes to the density values applied to the mineralized zones
- Changes to geological shape and continuity assumptions
- Potential for unrecognized bias in the assay results from legacy drilling where there was limited documentation of the QA/QC procedures



AntaKori Project Cajamarca Province, Peru

NI 43-101 Technical Report

wood

CuEq Cutoff (%)	Tonnes (Mt)	CuEq (%)	AuEq (g/t)	Cu (%)	Au (g/t)	Ag (g/t)	As (ppm)	Contained CuEq (Blb)	Contained AuEq (Moz)	Contained CuEq (Blb)	Contained Au (Moz)	Contained Ag (Moz)
0.2	296	0.66	0.98	0.42	0.26	6.9	793	4.3	9.3	2.7	2.5	66
0.3	250	0.74	1.09	0.48	0.29	7.5	857	4.1	8.8	2.6	2.3	61
0.4	201	0.84	1.23	0.54	0.32	8.3	969	3.7	7.9	2.4	2.1	54
0.5	152	0.96	1.41	0.63	0.37	9.2	1,137	3.2	6.9	2.1	1.8	45
0.6	118	1.08	1.59	0.71	0.42	10.1	1,304	2.8	6.0	1.9	1.6	38
0.7	93	1.20	1.76	0.79	0.46	10.9	1,480	2.5	5.3	1.6	1.4	33
0.8	73	1.32	1.94	0.87	0.51	11.7	1,669	2.1	4.6	1.4	1.2	28
0.9	57	1.45	2.13	0.96	0.56	12.5	1,874	1.8	3.9	1.2	1.0	23
1.0	45	1.59	2.33	1.05	0.62	13.2	2,086	1.6	3.4	1.0	0.9	19

Table 1-2: Indicated Mineral Resource Statement





AntaKori Project Cajamarca Province, Peru

NI 43-101 Technical Report

CuEq Cutoff (%)	Tonnes (Mt)	CuEq (%)	AuEq (g/t)	Cu (%)	Au (g/t)	Ag (g/t)	As (ppm)	Contained CuEq (Blb)	Contained AuEq (Moz)	Contained CuEq (Blb)	Contained Au (Moz)	Contained Ag (Moz)
0.2	320	0.59	0.86	0.36	0.24	7.2	484	4.2	8.9	2.6	2.5	74
0.3	267	0.66	0.96	0.41	0.26	7.8	518	3.9	8.2	2.4	2.2	67
0.4	199	0.76	1.12	0.48	0.30	8.7	597	3.3	7.2	2.1	1.9	56
0.5	146	0.87	1.28	0.56	0.34	9.6	702	2.8	6.0	1.8	1.6	45
0.6	112	0.98	1.43	0.63	0.38	10.3	808	2.4	5.1	1.6	1.4	37
0.7	89	1.06	1.56	0.69	0.41	10.8	910	2.1	4.4	1.3	1.2	31
0.8	69	1.15	1.69	0.75	0.45	11.4	1,005	1.8	3.8	1.1	1.0	25
0.9	53	1.24	1.82	0.80	0.48	12.0	1,096	1.5	3.1	0.9	0.8	21
1.0	40	1.34	1.96	0.87	0.53	12.5	1,169	1.2	2.5	0.8	0.7	16

Table 1-3: Inferred Mineral Resource Statement

Notes to accompany Mineral Resource tables assuming open pit mining methods for AntaKori Project:

- 1. Mineral Resources have an effective date of 22 February 2019; Douglas Reid, P.Eng., a Wood employee, is the Qualified Person responsible for the Mineral Resource estimate.
- 2. Inputs to costs for cut-off grade assumes a conventional truck and shovel open pit mine handling and feeding a 60,000 t/d concentrator and producing a copper-gold concentrate with arsenic for sale to specialists in concentrate trading, third-party smelters and refineries.
- 3. Mineral Resources are reported based on a CuEq cut-off of 0.30% constrained within a pit shell.
- 4. Mineral Resources are only reported within Regulus concessions.
- 5. CuEq and AuEq grades and metal contents in this table are mutually exclusive and are not additive.
- 6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
- 7. Copper price used is US\$6,614/t (US\$3.00/lb), gold price is US\$1,400/oz, silver price is US\$18.00/oz.
- 8. Assumed metallurgical recoveries: copper 85%, gold 55%, silver 50%.
- 9. Assumed pit slope of 45°.
- 10. Assumed open pit mining cost of US\$1.85/t plus lift charge to average US\$2.00/t, processing cost of US\$7.18/t, G&A cost US\$1.00/t.





AntaKori Project Cajamarca Province, Peru

- 11. Copper equivalent formula: CuEq = Cu + 0.6805561*Au + 0.008750*Ag (no use of Pb, Zn or Mo and no metallurgical recovery was applied to the copper equivalent formula.
- 12. Gold equivalent formula: AuEq = Au + 1.469387*Cu + 0.012857*Ag (no use of Pb, Zn or Mo and no metallurgical recovery was applied to the gold equivalent formula).
- 13. Mineral Resources are reported on a 100% basis.
- 14. Tonnages are reported as metric tonnes rounded to million tonnes; copper, gold grades and equivalent grades are rounded to two decimal places, silver is rounded to one decimal place.
- 15. Rounding as required by reporting guidelines may result in apparent summation differences.



- Changes to metallurgical recovery assumptions
- Changes in assumptions of marketability of final product
- Changes to the conceptual input assumptions for assumed open pit operation
- Changes to the input values for the CuEq grade used to constrain the estimate
- Variations in geotechnical, hydrogeological and mining assumptions
- Changes as to assumptions as to ability to continue with existing agreements, or renew or renegotiate those agreements
- Changes to environmental, permitting and social license assumptions.

Arsenic (and potentially zinc) contents in concentrate may require consideration in either marketing the concentrate product or assessing further downstream secondary processing requirements. There is limited information on how representative the few samples used in test work are of the metallurgical variability of the deposit. Various concentrate marketing and/or secondary processing options should be evaluated once the recommended metallurgical testwork is available to assess metallurgical characteristics.

While Antakori as an exploration target is considered a skarn deposit, the current Mineral Resource estimate contains a relatively high proportion of volcanic-hosted mineralization with elevated arsenic content (high sulphide epithermal). As exploration continues, there is potential that additional mineralization will be identified in skarns, which based on data available to date, tend to have lower arsenic values.

1.14 Interpretation and Conclusions

Under the assumptions presented in this Report, and based on the available data, Mineral Resources meet 2014 CIM Definition Standards and show reasonable prospects of eventual economic extraction.

Exploration activities have shown the Project to have significant upside potential to expand the Mineral Resources and additional exploration is warranted.

1.15 Recommendations

Recommendations are divided into two phases. Phase 1 recommendations are made in relation to exploration activities. Recommendations proposed in Phase 2 are related to metallurgical testwork.





The Phase 1 work recommendations consists of about 25,000 m of core drilling, which is estimated at US\$10 million, assuming all-in drilling costs of approximately US\$400/m. This program is envisaged to test the open extents of the AntaKori mineralization to the north and northeast sides of the AntaKori concessions and into the Colquirrumi concessions. The program should also be used to fill in minor gaps within the existing drill pattern.

The main objective of metallurgical testing recommended as a second work phase will be to define preliminary flowsheet requirements, recoveries, and costs, as well as likely product characteristics, particularly arsenic content, to support mineralization routing, concentrate strategies and economic analysis. The program is envisaged to use core generated during the Phase 1 recommendations program, and if additional core is needed, core from the 2017–2018 drill program.

The metallurgical testwork program should include: sample preparation and characterization using core samples; metallurgical flotation flowsheet development batch testing; metallurgical geometallurgical testing (batch testing, mineralization and product characterization, locked cycle tests and product characterization); metallurgical comminution testing, consisting of Bond work, Bond rod, crushing and abrasion index tests, and semi-autogenous grind mill comminution tests; and tailings geotechnical and environmental characterization (static tests). The budget for this program is envisaged at about \$300,000.





2.0 INTRODUCTION

2.1 Introduction

Regulus Resources Inc. (Regulus) requested Amec Foster Wheeler (Perú) S. A., a Wood company (Wood), prepare a technical report (the Report) on the AntaKori Project (the Project), in Cajamarca Province, Peru (Figure 2-1).

Regulus has four indirectly-owned subsidiaries that hold interests in the Project, including Southern Legacy Peru S.A.C., Anta Norte S.A.C., Kori Anta S.A.C., and SMRL El Sinchao de Cajamarca. Unless directly identified, for the purposes of this Report, the name Regulus is used interchangeably for the subsidiaries and parent company.

2.2 Terms of Reference

This Report supports the disclosure of Mineral Resources for the Project in the Regulus news release of 1 March, 2019, entitled "Regulus Reports Substantial Increase in Resource Estimate at AntaKori Copper-Gold Project, Peru".

All measurement units used in this Report are metric unless otherwise noted. Currency is expressed in United States (US) dollars (US\$). The Peruvian currency is the nuevo sol. The Report uses US English.

Mineral Resources and Mineral Reserves are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (May 2014; the 2014 CIM Definition Standards) and the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 2003; 2003 CIM Best Practice Guidelines).

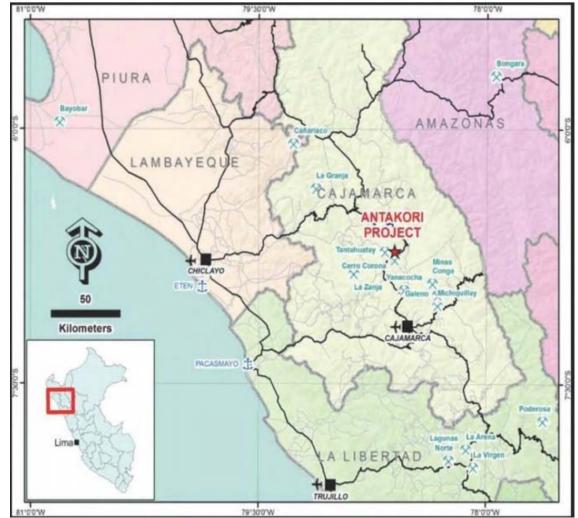
2.3 Qualified Persons

This Report was prepared by the following Qualified Persons (QPs):

- Dr. Ted Eggleston, RM SME, Principal Geologist Associate, Wood
- Mr. Doug Reid, P.Eng., Principal Geologist, Wood
- Mr. William Colquhoun, FSAIMM, Principal Metallurgical Consultant, Wood.







Note: Figure courtesy Regulus, 2018.

2.4 Site Visits and Scope of Personal Inspection

Dr. Eggleston visited the Regulus offices and facilities in Cajamarca from 10–13 July 2017 and on 12 July 2017, visited the AntaKori site. He visited the Regulus offices and AntaKori site again between 4–7 December 2018. During both visits, he reviewed data collection, data and database integrity, data storage (database), analytical quality control and geological model construction. Discussions on geology and mineralization were held with Regulus personnel, and field site inspections were performed. Dr. Eggleston visited





active exploration operations to review the geology of the deposits and visit operating drill machines where he reviewed core handling procedures. He reviewed core logging and sampling procedures at the Regulus core storage facility in Cajamarca.

Mr. Reid visited the Regulus offices and facilities in Cajamarca from 3–7 December 2018, and visited the AntaKori site on 6 December 2018. During the visit, he observed active drill sites, and undertook field verification of drill collar locations. He reviewed core logging and sampling procedures at the Regulus core storage facility in Cajamarca. Mr. Reid also reviewed data collection, data and database integrity, and geological model construction with Regulus staff.

Mr. Colquhoun performed a site visit from 21–23 June 2017, during which time he inspected drill core at the Regulus core storage facility in Cajamarca, toured the Project site to view potential locations for future mine infrastructure, and viewed the location where any future open pit would be excavated.

2.5 Effective Dates

The Report has a number of effective dates as follows:

- Close-out date for the database used in Mineral Resource estimation: 21 December 2018
- Review of latest drill information: 2 April 2019
- Mineral Resource estimate: 22 February 2019
- Date of supply of last information on mineral tenure, surface rights and agreements: 8 April 2019.

The overall effective date of this Report is the effective date of the Mineral Resource estimate and is 22 February 2019.

2.6 Information Sources and References

This Report is based in part on internal company reports, maps, published government reports, and public information, as listed in Section 27 of this Report. It is also based on the information cited in Section 3.

Additional information was sought from Regulus employees in their areas of expertise.





2.7 Previous Technical Reports

Regulus has not previously filed a technical report on the Project.

A predecessor company, Southern Legacy Minerals Inc. SEDAR-filed the following report:

- Wilson, S.E., 2012a: Technical Report Southern Legacy Minerals Inc. Antakori Property Yanacocha-Hualgayoc Mining District Department of Cajamarca, Peru: report prepared by Scott E. Wilson Consulting, Inc. for Southern Legacy, effective date 14 April 2012.
- Wilson, S.E., 2012b: Technical Report Southern Legacy Minerals Inc. Sinchao Property Yanacocha-Hualgayoc Mining District Department of Cajamarca, Peru: report prepared by Scott E. Wilson Consulting, Inc. for Southern Legacy, effective date 1 May 2012.
- Wilson, S.E., 2012c: Technical Report Southern Legacy Minerals Inc. Antakori Property Yanacocha-Hualgayoc Mining District Department of Cajamarca, Peru: report prepared by Scott E. Wilson Consulting, Inc. for Southern Legacy, effective date 2 July 2012.

A predecessor company, Sinchao Metals Corp, filed the following report:

 Jaramillo, V.A., 2008: The Sinchao Property Technical Report, Yanacocha-Hualgayoc Mining District, Department of Cajamarca, Peru: amended and restated report prepared by Discover Geological Consultants Inc. for Sinchao Metals Corp., effective date 30 October 2008.

A predecessor company, Andean American Mining Corp., filed the following reports:

- Jaramillo, V. A., 2006a: The Sinchao Property Technical Report, Yanacocha-Hualgayoc Mining District, Department of Cajamarca, Peru: report prepared by Discover Geological Consultants Inc., for Andean American Mining Corp., effective date 7 March 2006.
- Jaramillo, V. A., 2006b: The Sinchao Property Technical Report, Yanacocha-Hualgayoc Mining District, Department of Cajamarca, Peru: updated and revised report prepared by Discover Geological Consultants Inc., for Andean American Mining Corp., effective date 21 September 2006.



3.0 **RELIANCE ON OTHER EXPERTS**

3.1 Introduction

The QPs have relied upon the following other expert report, which provided information on mineral rights, surface rights, royalties, encumbrances, and property agreements, of this Report as noted below.

3.2 Project Ownership, Mineral Tenure, Surface Rights, Royalties and Encumbrances

The QPs have not reviewed the mineral tenure, surface rights, property ownership, royalties or encumbrances, nor independently verified the legal status of the Project area underlying property agreements or permits. The QPs have fully relied upon, and disclaim responsibility for, information derived from experts retained by Regulus through the following document:

 Dentons Gallo Barrios Pickmann SCRL, 2019: Legal Opinion of Antakori Mining Project: report prepared by Dentons Gallo Barrios Pickmann SCRL for Regulus, 8 April, 2019.

This information is used in Section 4 of the Report. It is also used in support of the Mineral Resource statement in Section 14.





4.0 **PROPERTY DESCRIPTION AND LOCATION**

4.1 Introduction

The AntaKori Project is located at 6°44' south latitude and 78°40' west longitude in the Districts of Chugur and Hualgayoc, Province of Hualgayoc, Department of Cajamarca, northern Peru.

The Project is situated 620 km north–northwest of Lima, the capital of the Republic of Peru, and 53 km north–northwest of the city of Cajamarca.

4.2 **Property and Title in Peru**

The QPs have not independently verified the following information which is in the public domain and have sourced the data from Elias (2019), Ernst and Young (2017), and KPMG (2016) as well as from official Peruvian Government websites.

4.2.1 Regulatory Oversight

The right to explore, extract, process and/or produce minerals in Peru is primarily regulated by mining laws and regulations enacted by Peruvian Congress and the executive branch of government, under the 1992 Mining Law. The law regulates nine different mining activities: reconnaissance; prospecting; exploration; exploitation (mining); general labor; beneficiation; commercialization; mineral transport; and mineral storage outside a mining facility.

The Ministry of Energy and Mines (MINEM) is the authority that regulates mining activities. MINEM also grants mining concessions to local or foreign individuals or legal entities, through a specialized body called The Institute of Geology, Mining and Metallurgy (Ingemmet).

Other relevant regulatory authorities include the Ministry of Environment (MINAM), the National Environmental Certification Authority (SENACE), and the Supervisory Agency for Investment in Energy and Mining (Osinergmin). The Environmental Evaluation and Oversight Agency (OEFA) monitors environmental compliance.



4.2.2 Mineral Tenure

Ingemmet can currently grant four different concession types:

- Mining concession (allows exploration and mining activities). Concessions are termed mining claims (Petitorio Minero) when in the application phase, and mining concessions (Concesión Minera) after grant. No exploration or mining activities can be conducted on a mining claim
- Production or beneficiation concession (allows processing, refining and concentrating activities)
- General labor concession (allows the title-holder to provide ancillary services to mining concession title-holder)
- Mining transport concession.

Mining concessions can be granted separately for metallic and non-metallic minerals. Concessions can range in size from a minimum of 100 ha to a maximum of 1,000 ha.

A granted mining concession has an indefinite term, providing that:

- Annual concession validity fees (Derecho de Vigencia), currently US\$3/ha, are paid by 30 June each year. Failure to pay the applicable license fees for two consecutive years will result in the cancellation of the mining concession
- Minimum expenditure commitments or production levels are met. The minima are divided into two classes:
 - Achieve Minimum Annual Production or Minimum Annual Investment by the first semester of Year 11 counted from the year after the concession was granted, or pay a penalty for non-production on a sliding scale as listed in Table 4.1, as defined by the new Legislative Decree N° 1320 which became effective on January 1, 2019. Minimum Annual Production is defined as one UIT per hectare per year, which is S/.4,200 in 2019 (about US\$1,220)
 - Alternatively, no penalty is payable if a Minimum Annual Investment is made of at least 10 times the amount of the penalty.

The new legislation means that title-holders of mining concessions which were granted before December 2008 will be obligated to pay the penalty from 2019 if the title-holder did not reach either the Minimum Annual Production or make the Minimum Annual





Investment in 2018. In other words, for all concessions granted before 2008, the clock started in 2008 regardless of the year in which they were granted.

Mining concessions will lapse automatically if any of the following events take place:

- The annual fee is not paid for two years (whether consecutive or not)
- The applicable penalty is not paid for two years (whether consecutive or not)
- The Minimum Annual Production Target is not met within 30 years following the year after the concession was granted.

Beneficiation concessions follow the same rules as for mining concessions. A fee must be paid that reflects the nominal capacity of the processing plant or level of production. Failure to pay such processing fees or fines for two years would result in the loss of the beneficiation concession.

4.2.3 Surface Rights

Mining companies must negotiate agreements with surface landholders or establish easements. In the case of surface lands owned by native communities, it is necessary to obtain approval of a qualified majority of the community. For the purchase of surface lands owned by the government, an acquisition process with the Peruvian state must be followed through the Superintendency of National Properties.

Expropriation procedures have been considered for cases in which landowners are reluctant to allow mining companies to have access to a mineral deposit. Once a decision has been made by the Government, the administrative decision can only be judicially appealed by the original landowner as to the amount of compensation to be paid.

4.2.4 Water Rights

Water rights are governed by Law 29338, the Law on Water Resources, and are administered by the National Water Authority (ANA) which is part of the Ministry of Agriculture. There are three types of water rights:

• License: this right is granted in order to use the water for a specific purpose in a specific place. The license is valid until the activity for which it was granted terminates, for example, a beneficiary concession





- Permission: this temporary right is granted during periods of surplus water availability
- Authorization: this right is granted for a specified quantity of water and for a specific purpose. The grant period is two years, which may be extended for an additional year, for example for drilling.

In order to maintain valid water rights valid, the grantee must:

- Make all required payments including water tariffs
- Abide by the conditions of the water right in that water is only used for the purpose granted.

Water rights cannot be transferred or mortgaged. However, in the case of the change of the title holder of a mining concession or the owner of the surface land who is also the beneficiary of a water right, the new title holder or owner can obtain the corresponding water right.

4.2.5 Environmental Considerations

The environmental authority is Ministry of the Environment (MINAM, Ministerio del Medio Ambiente), and the administrative authority for mining is the Directorate of Mining Environmental Affairs (DGAAM, Dirección General de Asuntos Ambientales Mineros) of the Ministry of Energy and Mines. The environmental regulations for mineral exploration activities were defined by Supreme Decree No. 020-2008-EM of 2008. New regulations for exploration were defined in 2017 by Supreme Decree No. 042-2017-EM.

An Environmental Impact Declaration (DIA, Declaración de Impacto Ambiental) has to be presented for Category 1 exploration activities which have a maximum of 40 drilling platforms or disturbance of surface areas of up to 10 ha. The environmental authority has five working days to make observations, and if none are made the study is automatically approved by positive administrative silence.

A semi-detailed Environmental Impact Study (EIAsd, Estudio de Impacto Ambiental Semi-Detallada) is required for Category II exploration programs which have between 40–700 drilling platforms or a surface disturbance of more than 10 ha. The environmental authority has 45 working days to make observations, and if there are none the study is automatically approved by positive administrative silence. The total process including preparation of the study by a registered environmental consulting company can take 6–8 months.





A full detailed Environmental Impact Study (EIAd, Estudio de Impacto Ambiental Detallada) must be presented for mine construction projects. The time needed for preparation and authorization of such a study can be as long as one year.

4.2.6 Permits

In order to start mineral exploration activities, a company is required to comply with the following requirements and obtain a resolution of approval from the General Directorate of Mining of the Ministry of Energy and Mines, as defined by Supreme Decree No. 020-2012-EM of 6 June 2012:

- Resolution of approval of the Environmental Impact Declaration
- Work program
- A statement from the concession holder indicating that it is owner of the surface land, or if not, that it has authorization from the owners of the surface land to perform exploration activities
- Water License, Permission or Authorization to use water
- Mining concessions titles.

4.2.7 Other Considerations

Mining companies must submit, and receive approval for, an environmental impact study that includes a social relations plan, certification that there are no archaeological remains in the area, and a draft mine closure plan. Closure plans must be accompanied by payment of a monetary guarantee.

In April 2012, Peru's Government approved the "Prior Consultation Law" that requires prior consultation with indigenous communities before any infrastructure or projects, in particular mining and energy projects, are developed in their areas.

Mining companies also have to separately obtain water rights from the National Water Authority and surface lands rights from individual landowners.

4.2.8 Mining Taxes

Mining royalties (regalía minera) are defined by Law No. 28258 of 2004 (3 June 2004), which was modified by Law No. 28323 (10 August 2004) and Law No. 29788 (28 September 2011) and their respective regulations. The mining royalty is calculated on the value of concentrates or their equivalent on the following scale:





- <US\$60 million annually: 1.0%
- US\$60–US\$120 million annually: 2.0%
- >US\$120 million annually: 3.0%.

A special mining tax on windfall profits (IEM - Impuesto Especial a la Minería) was introduced in 2011 (Law 29789, 23 September 2011). It has 17 operational margin brackets with payments ranging from 2.00–8.40%. Miners with a 0–10% operational margin will pay the least while those with an operational margin of 85% and more will be at the top end of the scale.

A special mining contribution or levy (GEM) was also introduced in 2011 (Law 29789, 23 September 2011) for companies that have stability contracts with the State. The levy is applied to operating margins on a scale of 4.0–13.1%.

4.2.9 Tax Stability Agreements

Companies that have a Tax Stability Agreement in force do not pay levies for the duration of the agreement. Once such an agreement expires, however, levies are payable to the government.

4.2.10 Corporate Income Tax

Corporate income tax is 30% on net profits. Fifty percent of this is distributed by the National Government to the regional and local governments in the area of direct and indirect influence of the mine. This distribution of taxes is termed the Mining Canon (*Canon Minero*) and is defined by Law No. 27506 (9 June 2000) and subsequent modifications.

4.2.11 Fraser Institute Survey

Wood used the Investment Attractiveness Index from the 2018 Fraser Institute Annual Survey of Mining Companies report (the Fraser Institute survey) as a credible source for the assessment of the overall political risk facing an exploration or mining project in Peru.

Wood relied on the Fraser Institute survey because it is globally regarded as an independent report-card style assessment to governments on how attractive their policies are from the point of view of an exploration manager or mining company, and





forms a proxy for the assessment by industry of political risk in Peru from the mining perspective.

The Fraser Institute annual survey is an attempt to assess how mineral endowments and public policy factors such as taxation and regulatory uncertainty affect exploration investment.

Overall, Peru ranked 14 out of 83 jurisdictions in the survey (where 1 is the most attractive jurisdiction and 83 is the least attractive) in 2018 on the investment attractiveness index, 37th on the policy perception index, and eighth on the best practices mineral potential index.

4.3 **Project Ownership**

4.3.1 **Ownership History**

Regulus acquired the AntaKori Project in 2014 by way of a merger between Regulus Resources Inc. (Old Regulus) with Southern Legacy Minerals Inc (Southern Legacy). The shares were amalgamated to form a new company which took the name of Regulus Resources Inc. (New Regulus) in order to maintain the public listings of Southern Legacy on both the Toronto Venture Exchange (TSX-V) and the Bolsa de Valores de Lima. Old Regulus was delisted from the TSX-V on October 2, 2014.

On May 18, 2016, Regulus announced that one of its subsidiaries had entered into binding memoranda of understanding (MOUs) with two third parties, Compañía Minera Coimolache S.A. (CMC) and Compañía Minera Colquirrumi S.A. (Colquirrumi). Both CMC and Colquirrumi hold mineral concessions immediately adjoining the AntaKori Project.

The shareholders of CMC are Compañía de Minas Buenaventura S.A.A. (Buenaventura, 40.1%), the operator, Southern Peru Copper S.A.A. (a subsidiary of Southern Peru Ltd, 44.2%) and Espro S.A.C. (15.7%). Colquirrumi is a wholly-owned subsidiary of Buenaventura.

The MOUs allowed for mutual access, mutual rights of expansion and collaborative exploration of the project area, providing benefit to all three parties. They have been superseded by the agreements discussed in Section 4.4.







4.3.2 Current Ownership

Regulus has four subsidiary companies in Peru:

- Southern Legacy Peru S.A.C. (SLP) which is the operating company of the AntaKori Project and a concession owner. Some of the AntaKori concessions owned by SLP have been assigned to CMC by means of the Coimolache Collaborative Agreement (see Section 4.4)
- Anta Norte S.A.C. (Anta Norte) which is owned by SLP. It is the title holder of several concessions assigned by SLP, and is the title holder of the Colquirrumi concessions which were assigned by Colquirrumi by means of the Colquirrumi Earn-In Agreement (see Section 4.4)
- Kori Anta S.A.C. (Kori Anta); holder of the Tres Mosqueteros concession
- SMRL El Sinchao de Cajamarca (SMRL El Sinchao) which is a concession holder and is in the process of being converted to a Sociedad Anónima (S.A.). SLP, by means of arbitral resolution, controls 68.259% of SMRL El Sinchao, which was obtained by the exercise of usufruct and purchase option agreements, and is in the process of formalising the definitive ownership title. SLP has also made usufruct and option agreements for an additional 14.87% of SMRL El Sinchao, which is in the process of being formalised, giving SLP ownership of a total of 83.13% of SMRL El Sinchao. The balance of SMRL El Sinchao is owned by members of the Santolalla family.

Figure 4-1 is a schematic showing the current Project ownership interest.

4.4 **Property Agreements**

4.4.1 Overview

Regulus signed two agreements with adjoining concession holders in 2017:

- The Coimolache Agreement with CMC, the joint venture company that owns and operates the adjoining Tantahuatay Mine
- The Colquirrumi Earn-In Agreement with Colquirrumi, which is a 100% Buenaventura subsidiary.





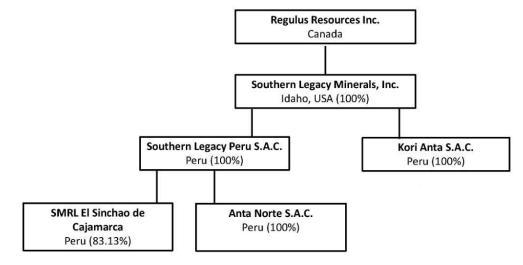


Figure 4-1: Project Ownership

Note: Figure courtesy Regulus, 2019.

The intent of the Coimolache Agreement is to share access and enable coordinated exploration and mining of the mining concessions of Regulus and CMC around the AntaKori project, while each company maintains ownership of its own mining concessions. It is a collaboration agreement rather than a joint venture or option. This was done by creating an area of interest (AOI) consisting of Regulus mining concessions and adjoining CMC mining concessions within a distance of 500 m of the Regulus mining concessions. Within the AOI both parties benefit from mutual access, mutual rights of expansion, collaborative exploration and data sharing.

The principal objective of the Coimolache Agreement is to enable Regulus to determine the full size and nature of the AntaKori deposit, and to be able to construct a conceptual open pit shell over the entire deposit, while reporting only that portion of the Mineral Resource estimate that lies within Regulus' own mining concessions.

The agreement defines two areas for the purposes of permitting, exploration and development (the areas are further discussed in Section 4.5). Sub-Area 1 includes seven Regulus mining concessions close to the Tantahuatay Mine and the CMC portion of the AOI. The Regulus mining concessions were assigned to CMC for five years to enable drilling to be performed under existing CMC permits. CMC is the operator for exploration within Sub-Area 1, with input and guidance from Regulus for the exploration on Regulus concessions. Sub-Area 2 consists of nine other Regulus mining concessions



Cajamarca Province, Peru

AntaKori Project



at AntaKori within which Regulus will manage exploration. Regulus has submitted an application for a DIA exploration permit to drill within Sub-Area 2.

The Coimolache Agreement and related assignments may be extended by mutual agreement. The agreement contemplates an exploration phase and two mining phases for oxides and sulphides. CMC is the operator of the oxide mining operation and has extended the Tantahuatay open pit onto the Regulus mining concession, subject to a 5% net smelter return (NSR) royalty payable to Regulus. Either company can elect to develop and mine the sulphides by assuming all costs for development, mining and closure as well as paying a 5% NSR royalty to the non-operating party. The parties may also elect to form a joint venture or to simply allow the Coimolache Agreement to terminate after five years.

The Colquirrumi Earn-In Agreement is an option whereby Regulus can earn a 70% interest in a large block of mining concessions on the north side of AntaKori from a subsidiary of Buenaventura by drilling 7,500 m. The agreement is for three years and may be extended for as long as three years. The Buenaventura mining concessions have been assigned to Anta Norte, which is owned by Regulus, for the duration of the option agreement. Once Regulus has earned its interest, ownership of Anta Norte will become 70% Regulus and 30% Buenaventura. Buenaventura then has a one-time option to buy back 40% by paying \$9 million to Regulus. If Buenaventura exercises this option the ownership of Anta Norte would become 30% Regulus, and 70% Buenaventura.

4.4.2 Coimolache Collaborative Agreement

On 19 January 2017, Regulus and CMC signed the Coimolache Collaborative Agreement, following an MOU dated 11 May 2016, which defined the terms of collaboration to explore and mine within an AOI consisting of 16 Regulus mining concessions and an area of adjoining CMC mining concessions within a distance of 500 m of the Regulus mining concessions. The AntaKori mining concessions are sub-divided into two sub-areas (refer to Section 4.5 for a description of those areas):

• Sub-Area 1: seven mining concessions owned by Regulus that are closer to the Tantahuatay Mine. The Regulus mining concessions have been assigned to CMC for five years to enable drilling to be performed under existing CMC permits. CMC is the operator for exploration within Sub-Area 1, with input and guidance from Regulus for the exploration on Regulus concessions



• Sub-Area 2: Nine mining concessions owned by SLP and SMRL El Sinchao that are farther to the north from the Tantahuatay Mine. Regulus will manage exploration within Sub-Area 2 and has submitted an application for a DIA exploration permit to drill in this area.

On 15 March 2017, Regulus granted a Mining Assignment Agreement in favor of CMC for a period of five years (to 2022) over the seven Regulus mining concessions in Sub-Area 1 (the Coimolache Assigned Mining Concessions). The time period may be extended by mutual agreement.

The main terms of the Coimolache Collaborative Agreement are the following:

- The creation of an AOI consisting of mining rights from both companies centered on the known AntaKori copper–gold sulphide mineralization
- Each company remains autonomous and retains its current mining rights
- Collaborative exploration within the AOI, overseen by a joint technical committee and with each party assuming costs for work done on its own mining rights
- Both parties have access to all exploration data generated by either party within the AOI
- Both parties have access to all surface rights owned or controlled by either party
- Either party may elect to proceed with exploration activity on its own mining concessions, at its sole cost, in the event that the other party elects to not complete exploration activity at that time
- For the purposes of permitting and management of exploration and development activities, the AOI is divided into two sub-areas:
 - Sub-Area 1 consists of all CMC mining concessions within the AOI and seven SLP-Regulus mining concessions that are closest to CMC's active Tantahuatay Mine
 - Exploration within Sub-Area 1 is managed by CMC and uses existing and future CMC exploration and mining permits
 - Regulus assigned the seven mining concessions to CMC for the purposes of exploration and the development and mining of near-surface oxide precious metals mineralization





- CMC may extend the current Tantahuatay oxide precious metals mining operation onto the assigned Regulus mining concessions for the purpose of exploiting oxide precious metals mineralization down to an elevation of 3800 m by meeting the following requirements:
 - Presentation of an approved mine plan to Regulus
 - Assuming all development and operating costs
 - Assuming all responsibility for permitting costs and procedures
 - Payment of a 5% NSR to Regulus for any mineralization processed from the Regulus mining concessions; the 5% NSR includes any royalties previously recorded for any mining concession in favor of third parties
 - Assuming all responsibility for environmental and mine closure costs.
- CMC met the requirements to extend the Tantahuatay oxide operation onto Regulus concessions and has initiated this activity with corresponding NSR payments made to Regulus
- Sub-Area 2 consists of nine Regulus mining concessions that are located farther from the Tantahuatay Mine. Exploration in Sub-Area 2 is managed by Regulus. The mining concessions of Sub-Area 2 may be assigned by Regulus to CMC at a later date by mutual agreement under the same terms as the Sub-Area 1 assigned concessions.
- Within the first five years from the execution of the Definitive Agreement, either party may elect to become the Developing Party and thereby have the right to develop and mine sulphide mineralization within the AOI by meeting the following requirements:
 - Presenting a mining plan, scoping study, preliminary economic assessment (PEA) or similar development plan
 - Presenting a Preliminary Feasibility Study (PFS) within two years of presenting a scoping study or PEA
 - Presenting a Feasibility Study (FS) within three years of presenting a PFS
 - Starting construction within three years of presenting the FS
 - Assuming all development and operating costs
 - Assuming all responsibility for permitting costs and procedures
 - Stockpiling mined material, if requested by the other party, that is moved from the other party's mining concessions within the AOI



- Paying a 5% NSR to the other party for mineralization processed from the other Party's mining concessions within the AOI, the 5% NSR includes any royalties previously recorded for any mining concession in favor of third parties; and
- Assuming all responsibility for environmental and closure costs
- In the event that Regulus elects to become the Developing Party, CMC will have a period of 360 calendar days to choose one of the following options:
 - Allow Regulus to become the Developing Party
 - Elect to become the Developing Party
 - Elect to proceed jointly with SLP to complete a PFS and FS on the timeline indicated above for the Developing Party or
 - Terminate the Definitive Agreement.
- If Regulus elects to become the developing party of the Sulfide Project, CMC will assign the Coimolache AOI mining concessions to Regulus
- If CMC becomes the developing party of the Sulphide Project, the Regulus subsidiaries SLP and/or SMRL El Sinchao will assign any non-assigned concessions required to CMC
- Regulus has not granted Buenaventura or CMC any first right of refusal over acquisition of its shares nor over acquisition of its mining concessions.

4.4.3 Colquirrumi Earn-In Agreement

On 30 March 2017, Regulus subsidiaries Anta Norte and SLP signed an Earn-In Agreement with CMC and Colquirrumi, following a MOU dated 11 May 2016, which defined the main clauses and terms by which Regulus subsidiary Anta Norte will have access to explore and earn an interest in the Colquirrumi concessions.

On 11 April 2017, Colquirrumi granted a mining assignment (the Mining Assignment Agreement) in favor of Anta Norte for an initial period of three years (up to 2020) over the Colquirrumi concessions, which can be extended by three years from the date of award of the permit allowing completion of a drill program. This extension must be obtained within two years of the date of the mining assignment, or three years if Anta Norte can demonstrate that it has used its best efforts to obtain the required permit and the permit is received within the third year.



The main terms of the Colquirrumi Earn-In Agreement are as follows:

- Incorporation of Anta Norte by Regulus, a new company that shall be the operator of the mining exploration activities over the mining concessions
- The area of interest is the Colquirrumi concessions to the north and east of the main Regulus-owned AntaKori concessions
- Colquirrumi to assign the Colquirrumi concessions to Anta Norte to allow Anta Norte to complete exploration activities on the concessions.
- Regulus can earn a 70% interest in the Colquirrumi concessions by drilling 7,500 m within three years of obtaining the necessary permits, with a minimum of 2,500 m in the first two years. On completion of the earn-in, the concessions will be fully transferred by Colquirrumi to Anta Norte for which Colquirrumi will receive 30% of the shares of Anta Norte. The ownership of Anta Norte will then be Regulus (SLP) 70%, Colquirrumi 30%
- Colquirrumi can claw-back to a 70% interest in Anta Norte (30% Regulus) by paying US\$9 million to Regulus. Colquirrumi has a 60-day option period from its approval of the fulfilment of the drilling commitment to exercise the claw-back
- Once Colquirrumi becomes a shareholder, Anta Norte will be financed pro-rata by the parties according to their shareholdings, with dilution by non-contribution
- If either party's shareholding of Anta Norte falls below 10% by dilution, its interest will be converted to a 1.5% NSR royalty
- The Mining Assignment Agreement can be extended for an additional three years, calculated from the date on which the mining authority approved the authorization to initiate mining exploration activities
- CMC has the right to expand its Tantahuatay mine to exploit oxides on certain mining concessions (Proveedora No. 2-E, Proveedora No. 2-F, Tantahuatay No. 20, Tantahuatay No. 20-A3 and Futuro No. 3) in the Colquirrumi concessions under the same terms as the Coimolache Collaboration Agreement. These concessions will be assigned to CMC if economically-viable oxide mineralization is identified, and CMC submits a mine plan to exploit the oxide mineralization. Anta Norte maintains the right to mine sulphides on these concessions.





4.5 Mineral Tenure

The tenure holdings are split for ease of discussion into the AntaKori concessions and the Colquirrumi concessions. Both concession areas are included in the AntaKori Project area.

All of the concessions are currently in good standing. The mining concessions will remain valid as long as the companies pay the annual concession tax and, if applicable, the penalty or make the minimum annual investment for each concession but must achieve minimum annual production by Year 30, counted from 2008 for concessions granted before 2008, or the concessions will expire.

4.5.1 AntaKori Concessions

Regulus is the concession owner and title holder of 20 metallic mining concessions granted between 1907 and 2008 (Table 4-1; Figure 4-2 to Figure 4-4). The effective area of the 20 concessions is about 438 ha (total area around 1,460 ha). The effective area of the 18 concessions which constitute the AntaKori Project is approximately 219 ha. The remaining two concessions are located on the east side of the Colquirrumi concessions.

There are two columns showing concession sizes in Table 4-1. The "Area" column is the total area approved by Ingemmet. The column entitled "effective area" is the actual area within the concession, when overlapping pre-existing mining rights are accounted for. Regulus can only mine within the effective area of each concession. The concession effective area is shown in Figure 4-2 to Figure 4-4.

Seven of the Regulus concessions with an effective area of about 52 ha were assigned by SLP to CMC by means of the subscription of the Coimolache Collaborative Agreement. These are defined as Sub-Area 1, together with the Coimolache AOI (refer to Figure 4-2 to Figure 4-4). Another nine Regulus concessions (effective area approximately 159 ha) are defined as Sub-Area 2 (refer to Figure 4-2 to Figure 4-4). Four Regulus concessions are not in either sub-area.

The Coimolache AOI is part of the Acumulación Tantahuatay concession owned by CMC, and is an area surrounding the Regulus concessions in which the two companies have agreed to collaborate for exploration and mining.





NI 43-101 Technical Report

No.	Name	Code	Concession Owner	Title Holder	Area (ha)	Effective Area (ha)	Date Granted	Sub-Area
1	Valle Sinchao 2	010202806	SLP	SLP	300.00	31.1526	5 May 2008	
2	Valle Sinchao 4	010203406	SLP	SLP	200.00	187.4240	15 August 2006	
3	El Sinchao	03000308Y01	SMRL El Sinchao	SMRL El Sinchao	6.00	5.9978	8 August 1907	2
4	La Incognita	03000417X01	SMRL El Sinchao	SMRL El Sinchao	120.00	3.9988	22 August 1914	2
5	La Inquisición	03000372X01	SMRL El Sinchao	SMRL El Sinchao	120.00	3.9988	6 April 1914	2
6	Tres Mosqueteros	03000834X01	Kori Anta	Kori Anta	8.00	7.9973	4 June 1947	
7	Sinchao No. 2	03000056X01	SLP	Anta Norte	18.00	17.9936	26 April 1956	2
8	Valle Sinchao 1	010048098	SLP	Anta Norte	400.00	0.2077	14 June 1999	
9	El Clavel	03000380X01	SLP	Anta Norte	30.00	29.9987	7 July 1966	2
10	Demasia Inquisición	03001797X01	SLP	Anta Norte	3.23	3.2269	10 October 1980	2
11	Mina Verdecita	03000382X01	SLP	Anta Norte	30.00	29.9900	28 September 1964	2
12	Maria Eugenia	06006107X01	SLP	Anta Norte	24.00	23.9919	21 January 2000	2
13	Maria Eugenia No. 1	03000375X01	SLP	Anta Norte	40.00	39.9859	23 May 1967	2
14	Sinchao No. 1	03000055X01	SLP	СМС	1.00	0.9997	28 June 1955	1
15	Sinchao No. 3	03000057X01	SLP	СМС	2.00	1.9992	26 April 1956	1
16	Valle Sinchao 3	010048298	SLP	СМС	100.00	2.5738	29 December 2000	1
17	Napoleon	03001219X01	SLP	СМС	10.00	9.9965	12 June 1956	1
18	Mina Volare	03000352X01	SLP	СМС	24.00	23.9912	30 June 1966	1
19	Rita Margot	03000134X01	SLP	СМС	12.00	7.9970	30 June 1966	1
20	Maria Eugenia No. 2	03000474X01	SLP	СМС	12.00	4.1358	10 November 1967	1

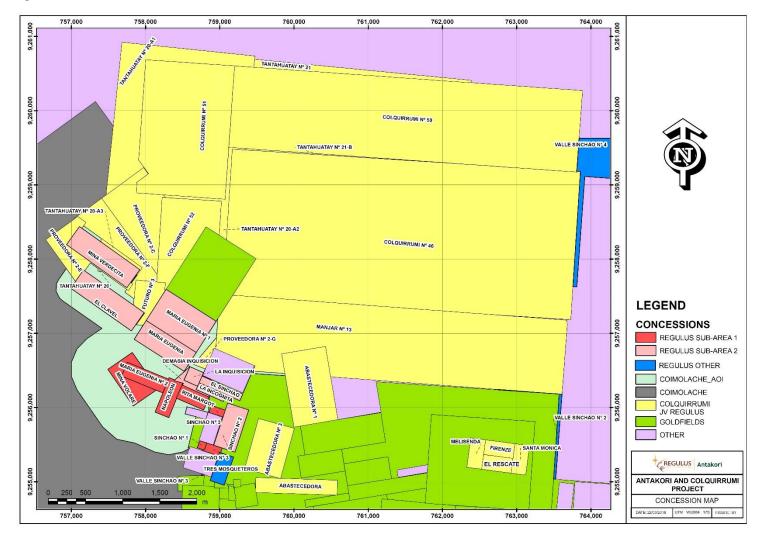
Table 4-1: Mineral Tenure AntaKori Concessions





NI 43-101 Technical Report

Figure 4-2: Overall Concession Plan

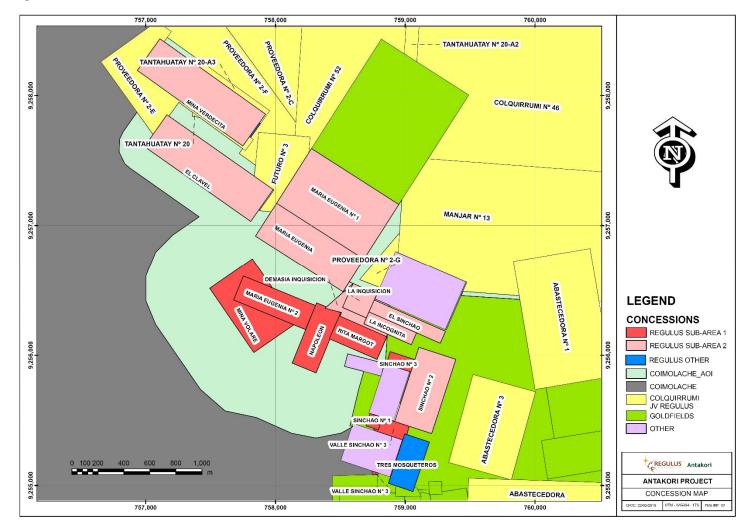






NI 43-101 Technical Report









NI 43-101 Technical Report

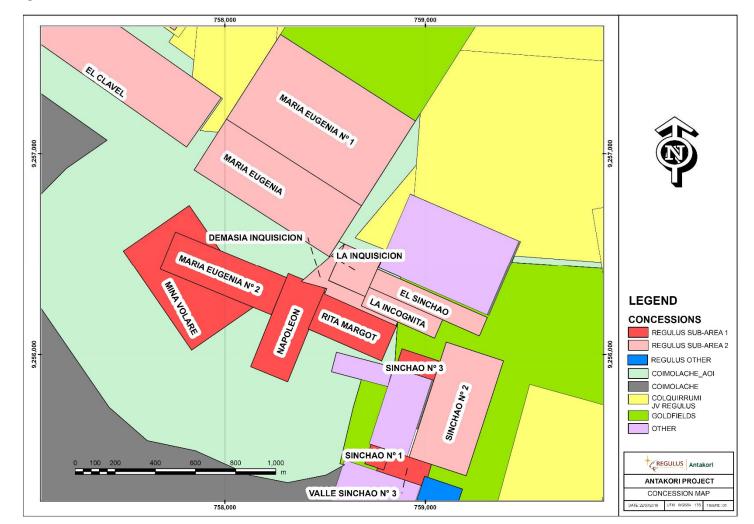


Figure 4-4: AntaKori Area Concessions Inset Plan





4.5.2 Colquirrumi Concessions

Regulus holds 23 metallic mining concessions as assignee granted between 1937 and 2000 with an effective area of approximately 2,571 ha. Regulus acquired rights to those concessions through an Assignment Agreement between Colquirrumi and Anta Norte that is part of the Earn-In Agreement discussed in Section 4.4.2. These concessions comprise the Colquirrumi concession area. These are listed in Table 4-2 and shown in Figure 4-2.

4.6 Surface Rights

Most of the surface rights in Sub-Area 1 in the southern part of the AntaKori concessions area are owned by CMC which permitted access for the 2017–2018 drill program as part of the Coimolache Collaboration Agreement.

Regulus has purchased surface rights for two properties in the northern part of the AntaKori Project, as listed in Table 4-3, and is negotiating purchase of other properties.

4.7 Water Rights

Regulus currently has no water rights in the AntaKori Project area. Water for the 2017–2018 drill program was supplied by CMC as part of the Coimolache Collaboration Agreement.

4.8 Royalties and Encumbrances

Mining taxes levied by the Peruvian Government are discussed in Section 4.2.6.

Certain of the Regulus mining concessions within the AntaKori concessions area are subject to NSR royalties payable to the previous owners of the concessions. In addition, a 5% NSR is payable by CMC to SLP for the seven mining concessions in Sub-Area 1 assigned to CMC under the Coimolache Collaborative Agreement (refer to Section 4.4.2). This NSR includes any underlying NSR royalties, so that the maximum NSR payable is 5%. Royalty considerations for the AntaKori concessions are summarized in Table 4-4. Three of the concessions in Table 4-4 (Maria Eugenia, Maria Eugenia No. 1 and Rita Margot) have three separate royalties payable.





NI 43-101 Technical Report

No.	Name	Code No.	Concession Owner	Title Holder	Area (ha)	Effective Area (ha)	Date Granted
1	Abastecedora	03001136X01	Colquirrumi	Anta Norte	22.0000	21.9935	31 March 1943
2	Abastecedora N° 1	03000370X02	Colquirrumi	Anta Norte	60.0000	59.9808	4 July 1966
3	Abastecedora N° 3	03000372X02	Colquirrumi	Anta Norte	35.0000	34.9901	31 December 1965
4	Colquirrumi N° 46	03002454X01	Colquirrumi	Anta Norte	913.1000	913.0975	1 October 1999
5	Colquirrumi N° 50	03002484X01	Colquirrumi	Anta Norte	517.0000	516.8604	22 November 1995
6	Colquirrumi N° 51	03002485X01	Colquirrumi	Anta Norte	213.7413	213.7413	21 December 1998
7	Colquirrumi N° 52	03002486X01	Colquirrumi	Anta Norte	61.2288	61.2288	21 March 2000
8	Firenze	03001076X01	Colquirrumi	Anta Norte	8.0000	7.9982	22 October 1937
9	Futuro N° 3	03002124X01	Colquirrumi	Anta Norte	15.4700	15.4746	28 September 1999
10	Manjar N° 13	03002090X01	Colquirrumi	Anta Norte	437.3000	437.2986	19 October 1999
11	Proveedora N° 2-C	03002956X01	Colquirrumi	Anta Norte	53.6572	53.6572	2 June 2000
12	Proveedora N° 2-E	0302963AX01	Colquirrumi	Anta Norte	22.5395	22.5395	17 September 1999
13	Proveedora N° 2-F	03002952X01	Colquirrumi	Anta Norte	36.3140	36.6311	2 June 2000
14	Proveedora N° 2-G	03002953X01	Colquirrumi	Anta Norte	4.3288	4.3287	19 October 1999
15	Tantahuatay N° 20	03003754X01	Colquirrumi	Anta Norte	0.0841	0.0841	2 June 2000
16	Tantahuatay N° 20-A1	0303754AX01	Colquirrumi	Anta Norte	95.9985	95.9985	26 June 2000
17	Tantahuatay N° 20-A2	0303754BX01	Colquirrumi	Anta Norte	11.6186	11.6187	26 June 2000
18	Tantahuatay N° 20-A3	0303754CX01	Colquirrumi	Anta Norte	2.8229	2.8230	26 June 2000
19	Tantahuatay N° 21	03003755X01	Colquirrumi	Anta Norte	20.8199	20.8195	13 December 1999
20	El Rescate	03001138X01	Colquirrumi	Anta Norte	8.0000	7.9970	27 June 1941

Table 4-2: Colquirrumi Concessions





NI 43-101 Technical Report

No.	Name	Code No.	Concession Owner	Title Holder	Area (ha)	Effective Area (ha)	Date Granted
21	Futuro N° 2	03002076X01	Colquirrumi	Anta Norte	15.9620	15.9947	20 August 1999
22	Melisenda	03001141X01	Colquirrumi	Anta Norte	8.0000	7.9981	25 November 1941
23	Santa Monica	03001142X01	Colquirrumi	Anta Norte	8.0000	7.9980	28 May 1941

Page 4-22

April 2019





Table 4-3:Regulus Surface Rights

Land Parcel Area (ha)		Date	Vendor	Regulus Company	
No. 1	4.9610	1 January 2018	Napoleon Davila Zamora	SLP	
No. 2	2.1398	12 December 2018	Rosa Julia Cubas Perez	SLP	

 Table 4-4:
 NSR Royalties on AntaKori Concessions

Mining Concession	Royalty (NSR %)	Royalty Holder
Sinchao No. 2	2.0	Minas de Hualgayoc S.A.
	0.1875	Ms. Soledad Angélica Montoya del Valle
Maria Eugenia	0.1875	Ms. Lilia Montoya del Valle
	1.0	Msgrs. Santolalla
	0.1875	Ms. Soledad Angelica Montoya del Valle
Maria Eugenia No. 1	0.1875	Ms. Lilia Montoya del Valle
	1.0	Msgrs. Santolalla
	0.1875	Ms. Soledad Angelica Montoya del Valle
Rita Margot	0.1875	Ms. Lilia Montoya del Valle
	1.0	Msgrs. Santolalla
Sinchao No. 1	2.0	Minas de Hualgayoc S.A.
Sinchao No. 3	2.0	Minas de Hualgayoc S.A.
Napoleon	1.5	SMRL Napoleon de Cajamarca
Mina Volare	3.0	Mr. Carlos Pedro Antonio Santolalla Fernández

In the future, the developing party of the Sulphide Project will pay a 5% NSR royalty for mineralization mined from the other party's mining rights (refer to Section 4.4.1 and Section 4.4.2).

There are no underlying NSR royalties on the Colquirrumi concessions.

4.9 **Permitting Considerations**

The 2017–2018 Regulus drilling program was performed in Sub-Area 1 in the southern part of the AntaKori Project under CMC's permits. Requirements for permitting drilling operations in Peru are summarized in Section 4.2.6.





The drill program outlined in Section 26.2 is planned to be conducted under a combination of existing CMC–Tantahuatay drill permits, as well as a new DIA permit that has been submitted by Regulus to the relevant regulatory authorities to allow drilling to extend to the north on both the AntaKori and Colquirrumi concessions. Approval for the DIA permit is anticipated by about Q3 2019.

4.10 Environmental Considerations

4.10.1 Environmental Permitting

A DIA has been submitted to permit planned exploration and drilling programs in the northern part of the AntaKori concessions and in the Colquirrumi concessions.

4.10.2 Environmental Liabilities

There is an expectation of environmental liabilities associated with historical mining and exploration activity.

MINEM published an Inventory of Mining Environmental Liabilities by Resolution N° 010-2019-MEM/DM in 2019. This lists 106 mining environmental liabilities on 17 of the Regulus mining concessions and 18 liabilities on three of the Colquirrumi mining concessions. Identified liabilities include mine adits, prospecting pits, waste dumps, shafts, open pits, trenches, old mine camps, old drill pads and non-mineralized pre-strip material.

Sociedad Minera Corona S. A. and Colquirrumi are responsible for all or some of the liabilities on the Valle Sinchao 2, Tres Mosqueteros, Valle Sinchao 3, Abastecedora, Abastecedora No. 1 and Firenze mining concessions. These companies have no relationship to Regulus.

According to Law No. 28271, the responsibility for the remediation of environmental liabilities lies with the person or company that generated the liability. In the case of historical liabilities where the generator is not known, the Government of Peru assumes responsibility. The state-owned company Activos Mineros S. A. C. is charged with remediation on behalf of the government. It is listed in the inventory as responsible for the remediation of liabilities on the Sinchao No. 2, Maria Eugenia, La Incógnita, La Inquisición, Tres Mosqueteros, Sinchao No. 1, Sinchao No. 3 and Valle Sinchao 3 mining concessions.





The responsible company has not yet been identified for certain of the liabilities. The identification of responsibility is done by MINEM and the Peruvian Environmental Evaluation and Oversight Agency (OEFA, Organismo de Evaluación y Fiscalización Ambiental).

Before initiating exploration activities, Regulus' subsidiaries SLP and/or Anta Norte must report the existence of these liabilities over the mining rights in an environmental baseline study in order to be excluded from having reclamation responsibility. Regulus has submitted a DIA for Sub-Area 2 of the AntaKori concessions and the Colquirrumi concessions, for which an environmental baseline study has been completed.

Regulus's subsidiary Kori Anta voluntarily undertook remediation of the Tres Mosqueteros mining concession in 2016–2017 as an act of support and collaboration with the Tingo Campesino Community.

4.11 Social License Considerations

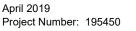
The protection of rights of indigenous and tribal people does not affect the acquisition or exercise of mining rights. However, the Peruvian Government adopted the Indigenous and Tribal Peoples Convention (ILO Convention 169) by which title holders shall consult indigenous communities domiciled in areas located in projects prior to starting activities. The government controls the process of prior consultation (consulta previa). The principal regulatory entities are MINEM and the Ministry of Culture. MINEM issued a resolution stating that the Antakori and Colquirrumi concessions are not located over an area occupied by an indigenous community that qualifies as protected, and as a result a prior community consultation is not applicable.

Regulus has a full-time community relations group of four persons based in Cajamarca and dedicated to community outreach programs for the AntaKori and Colquirrumi concessions. One of the outreach projects was the voluntary remediation of the Tres Mosqueteros mining concession (refer to Section 4.10.2).

4.12 Comments on Section 4

The legal opinion and additional information provided by Regulus experts supports the following:

• Regulus has four subsidiary companies in Peru that hold ownership interests in the Project

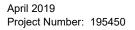






- The Project consists of two major areas of mining concession holdings, termed the AntaKori and Colquirrumi concession areas
- Mining concessions are valid and in good standing
- The Coimolache Collaborative Agreement covers seven mining concessions owned by SLP and the Coimolache AOI owned by CMC; and nine mining concessions owned by SLP and SMRL El Sinchao
- SLP granted CMC a Mining Assignment Agreement for a period of five years (to 2022) over the seven SLP mining concessions; this can be extended by agreement
- Under the Colquirrumi Earn-In Agreement, Colquirrumi granted a mining assignment in favor of Anta Norte for an initial period of three years (to 2020) over the Colquirrumi concessions. This can be extended by three years from the date of award of the authorisation to start exploration
- Most of the surface rights in Sub-Area 1 in the southern part of the AntaKori Project are owned by CMC
- Regulus purchased 6 ha of surface rights for two properties in the northern part of the AntaKori Project and is negotiating purchase of other properties. Additional surface rights need to be obtained to support future mining operations
- No water rights are currently held by Regulus. Water for drilling programs has previously been sourced from CMC under the Coimolache Collaborative Agreement
- The initial Regulus drill program was conducted under permits granted to CMC
- A DIA has been submitted to allow exploration and drilling on the northern part of the AntaKori Project and in the Colquirrumi concessions; approval of the DIA is expected in about Q3, 2019
- There is an expectation of environmental liabilities associated with historical mining and exploration activity. The Ministry of Energy and Mines has identified a number of existing liabilities within the AntaKori concessions. According to Law No. 28271, the responsibility for the remediation of environmental liabilities lies with the person or company that generated the liability. In the case of historical liabilities where the generator is not known, the Government of Peru assumes responsibility.

Regulus advised that to the extent known, there are no other significant factors and risks that may affect access, title or right or ability to perform work on the Project.







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

5.1 Accessibility

Access to the Project from Cajamarca is by National Route PE-3N which is a paved road with some short unsurfaced segments, a trip of about 90 km that takes approximately two hours. The Project can be accessed from the south via the Tantahuatay mine, which requires a permit to enter, from the east via the community of Tingo, or from the west via the community of Chugur. There is a network of unpaved public roads in and around the Project. The major roads and accesses are indicated in Figure 5-1.

Cajamarca is located 560 km by air north of Lima and 857 km north by paved road. Cajamarca has a commercial airport at an altitude of 2,676 m with a 2,500 m-long asphalt runway and is served by several flights a day from Lima.

The nearest port is Salaverry, close to the city of Trujillo, 316 km by paved road from Cajamarca. This port is used to ship concentrates from the Cerro Corona copper–gold mine located 6 km southeast of the AntaKori Project.

5.2 Climate

Weather data for the Project is based on data from the adjacent Tantahuatay mine, collected over a 13-year period.

Average annual precipitation over the Tantahuatay record is 1,130 mm and varies from 765 mm to 1,400 mm. The main precipitation is between October and May, with March being the wettest month with an average of 190 mm.

Fog is frequent and lightning storms are a common hazard. June to September have low precipitation with clear skies, and July being driest month with an average of 19 mm. Hail is not uncommon but snow is rare.

Evapotranspiration averages 760 mm per year and varies from 45 mm in March to 105 mm in November.



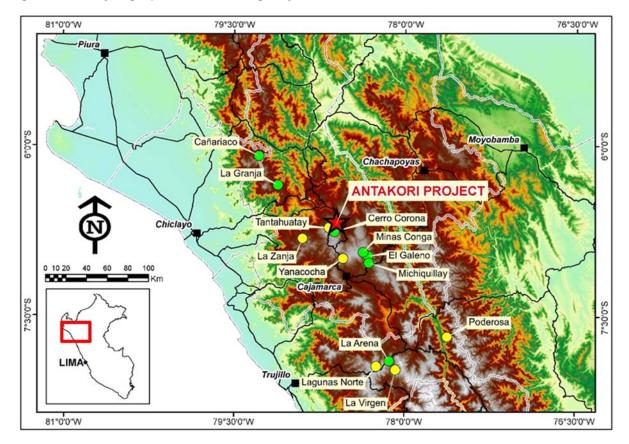


Figure 5-1: Physiographic Plan Showing Major Roads

Note: Figure courtesy Regulus, 2019. Copper mines and projects shown as yellow and green circles on the figure are not held by Regulus.

The average annual maximum temperature is 8.9°C and the minimum is 3.6°C, with little monthly variation, giving an average of 6.3°C. The highest and lowest temperatures recorded in the period are 14.3°C and -1.5°C.

Limited wind data shows an annual average of 13 km/h with the windiest months in the dry season in June to September, when there can be very strong gusts up to 105 km/h.

Adjacent mining operations are conducted year-round, and it is expected that any operation conducted by Regulus would also be year-round.





5.3 Local Resources and Infrastructure

The towns of Hualgayoc and Chugur are located 8 km southeast and 10 km northwest of the AntaKori Project, respectively, and the road between the two passes through the River Colorado valley that is within the Project area. There is a network of unpaved roads in and around the project to villages and campesino (peasant) communities.

The lands at the AntaKori Project are administratively part of the communities of Chugur (Chugur District) and Tingo (Hualgayoc District), with the boundary along the continental divide.

Some land has been bought by CMC and Regulus.

Land use at AntaKori is high-altitude grazing for llamas. At lower elevations in the valleys the land use is grazing for dairy cattle and the production of dairy products such as milk, cheese and condensed milk, for which the Chugur District is locally well-known.

The Hualgayoc district including the AntaKori area was the focus of extensive small- to medium-scale historical mining. Two modern, open pit mine operations are close to AntaKori. The Tantahuatay gold mine adjoins the southern side of AntaKori, while the Cerro Corona copper–gold mine lies 7 km southeast of AntaKori. The Yanacocha gold mine, one of the largest in Peru, is about 33 km southeast of AntaKori. Labor is provided by the local communities that are thus familiar with mining.

High-tension power lines supply the Tantahuatay and Cerro Corona mines with electricity. These lines terminate at Tantahuatay (approximately 2 km from AntaKori) and Cerro Corona (approximately 6 km from AntaKori).

Currently, water for drilling operations is supplied by the Tantahuatay mine. Water resources for a potential mining operation have not been specifically identified and Regulus has not performed a regional hydrological study to determine what water resources may be available.

5.4 Physiography

The AntaKori Project is located in the mountains of the Western Cordillera at an altitude of 3,725–4,000 m above mean sea level. Tantahuatay and the southern part of AntaKori form a topographic high on a district scale due to the volcanic center of the Calipuy Formation, with elevations to 4,084 m.





The geomorphology of the AntaKori Project is dominated by glacial landforms from the last glaciation such as the U-shaped glacial valley of the River Colorado, down to an altitude of about 3,700 m, below which the landforms change to V-shaped, fluvial valleys. The highest ground at southern AntaKori and Tantahuatay is characterized by rocky peaks with cliffs and talus slopes and was probably an ice-free nunatak during the last glaciation.

The AntaKori Project is located in the mountains of the Western Cordillera at an altitude of 3,725–4,000 m above mean sea level. The Project area is glacial landforms. It lies on the continental divide which forms the ridge between the valley of the Colorado River, a tributary of the Chancay River that drains west to the Pacific, and the TingoRiver, a tributary of the Amazon River that drains east to the Atlantic.

The Köppen climate zone is ETw meaning a tundra climate with an average temperature <10°C and dry winters. This occurs in the tropics at high altitude above the tree line. The climate becomes warmer at lower altitudes in the valleys and changes to Köppen climate zones Cwc and Cwb, reflecting a temperate highland tropical climate with dry winters.

The vegetation belongs to the high altitude (Puna) grassland zone. The only trees are a few stunted Queñual trees (*Polylepis* genus), which are usually planted along roads and property boundaries. These trees are indigenous to the tropical Andes and only grow at high altitude. There are also some small plantations of stunted, non-native, pine trees.

5.5 Seismicity

The seismic map of Peru, published by the Peruvian Geophysical Institute (Tavera, 2018) shows a low density of shallow (<60 km) and intermediate (61–300 km) earthquakes of magnitude 4–6 M_w in the AntaKori and surrounding areas, and no major earthquakes in the period 1960–2017.

5.6 Comments on Section 5

The Project is at an exploration stage. The existing local infrastructure, availability of staff, and methods whereby goods could be transported to the Project area to support exploration activities are well understood by Regulus, and can support the declaration of Mineral Resources.

The Project covers an area that is sufficient for infrastructure requirements to support a mining operation.





Surface rights are discussed in Section 4.6.

Adjacent mining operations are conducted year-round, and it is expected that any operation conducted by Regulus would also be year-round.





6.0 HISTORY

6.1 **Exploration History**

The mining district covered by the AntaKori project was originally called Sinchao, and the name is still used for a group of small mines and concessions.

Mining at AntaKori is reported to date to the Inca period at the hill at Chupicayacu "a few kilometers west of Hualgayoc". The Spanish discovered the Hualgayoc silver mines in the late 1700s and various small mines operated in the area until the late 20th century (del Solar et al., 1946, Ericksen et al., 1956; Simons, 1957; Ericksen et al., 1980).

Northern Peru Mining & Smelting Corporation drilled the Tantahuatay and Sinchao (AntaKori) areas and identified a moderately large, low-grade copper body (Simons, 1957).

The modern exploration and mining history of the AntaKori Project and the Hualgayoc district from 1960 to date is summarized in Table 6-1. A summary of completed exploration activities from 1996–2007 is provided in Table 6-2.

6.2 **Production**

There is no reliable record of early and artisanal production. Regulus has compiled the production history provided in Table 6-3 from available information.

There has been no formal production by Regulus from the AntaKori Project.



Dates	Company	Mining and Exploration Carried Out		
1923	Northern Peru Mining & Smelting Corp	Conducted a drill program, holes and metreage unknown		
1960	Kennecott Copper Co. (Kennecott)	Grass-roots exploration program		
1961– 1964	Cerro de Pasco	Staked 17,000 ha at Tantahuatay (Azufre). Completed helicopter reconnaissance, geological and alteration mapping, soil and rock geochemistry, induced polarization (IP) survey		
1967	Servicio de Geologia y Minería (now Ingemmet)	Soil sampling program for porphyry copper deposits over 10 km ² on a 200 m grid at Tantahuatay and Sinchao. Found 7 anomalies with the largest at Quebrada Tantahuatay		
1970	Kennecott	Drilled 2 vertical holes 100 m south of the Inquisición pit		
1987	Granges	Exploration for massive sulphide bodies		
1996– 1999	El Misti Gold Limited, Canada (El Misti)	Explored Sinchao. Soil grid 50 m x 50 m, geological mapping, 22.1-line km of IP-resistivity survey, 23.3-line km of ground magnetics. Drilled 22 reverse circulation (RC) holes for 3,274.50 m in two phases in 1997–1998, and 10 core holes for 8,450.75 m in 1998		
1999- 2006.	Andean American Mining Corp., Canada (Andean)	Change of company name following share consolidation		
2006- 2012	Sinchao Metals Corp., Canada (Sinchao Metals)	Andean American acquired by Sinchao Metals. 3D IP and ground magnetic surveys, geological mapping, geochemical sampling, trenching. Drilled 38 core holes for 9,503.41 m in 2007–2008.		
2012– 2014	Southern Legacy Minerals Inc., Canada (Southern Legacy)	Southern Legacy acquired Sinchao Metals and renamed the project AntaKori in 2012		
2014	Regulus Resources Inc., Canada (Regulus)	The AntaKori project acquired by Regulus when it merged with Southern Legacy		
2016– 2017	Regulus	Agreements signed with Compañía Minera Coimolache S.A. and Compañía Minera Colquirrumi S.A. for mutual rights of access, expansion and collaborative exploration around AntaKori		
2017– 2018	Regulus	Core drill program of 29 holes for 22,141 m		

Table 6-1: Exploration History





Year	Company	Survey	Contractor	Number	Units	Notes
1996		Soil geochemistry	None	354	Samples	Rock and soil samples on 50 m x 50 m grid.
1996		Geological mapping	None			
1996		Induced polarization	Not known	22.1	line km	IP & resistivity
1996	El Misti	Ground magnetic	Not known	23.3	line km	
1998		Topography	Geomecanica S.A.			Topographic maps at 1:5,000 and 1:2,500 scale made from air photos.
2006		Induced polarization	Arce Geofisicos	33.43	line km	20 lines plus four infill lines trending northeast–southwest. Pole-pole (2-Array) electrode configuration, with 7 "a" spacings between 50 m and 350 m.
2006	Sinchao Metals	Ground magnetic	Arce Geofisicos	32.8	line km	25 lines trending northeast-southwest. Readings at 10 m intervals.
2006		Geological mapping	None			
2006		Rock geochemistry	None	64	Samples	Rock sampling of massive sulphides.
2007		Soil geochemistry	None	76	Samples	Soil samples orientation for trenching near DDH- 026.
2007		Trenching	None	100	Samples	11 trenches dug by hand to test oxidized massive sulphides near DDH-026.

Table 6-2:	Exploration	Activities
------------	-------------	------------



Table 6-3: Production History

Area	Dates	Au (oz)	Ag (oz)	Cu (t)	Pb (t)	
Sinchao district	1925–1949	570.6	34,755	345	355	
Area	Dates	Tonnes (t)	Cu (%)	Ag (g/t)	Cu (t)	Ag (oz)





7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The AntaKori Project is located in in the copper-gold porphyry and epithermal belt of Miocene age in the Western Cordillera of northern Peru (Figure 7-1; Noble and McKee, 1999; Petersen, 1999). The regional geology is described by Wilson (1984), Cobbing (1985), Jaillard and Soler (1996), Benavides-Cáceres (1999) and Navarro-Ramirez et al. (2015).

The Western Cordillera is Mesozoic to Cenozoic in age and constitutes the Andean orogenic belt (Figure 7-2). It is bounded to the east by the Eastern Cordillera which comprises late Precambrian schists of the Marañon Complex. The Western Cordillera comprises Mesozoic volcanic and sedimentary rocks deposited in ensialic, extensional, marginal basins related to eastward subduction, and extends for the length of the Andes. A western sub-basin, the Huarmey Basin, contains as much as 9,000 m of Triassic to Albian age Casma Group submarine volcanic rocks of basaltic and andesitic composition with no observed base. It was bounded on the west side by a basement massif, the Paracas Massif, with an Albian volcanic arc. This sub-basin was closed in the mid-Cretaceous Mochica tectonic phase and was intruded along its axis by the Late Cretaceous Coastal Batholith.

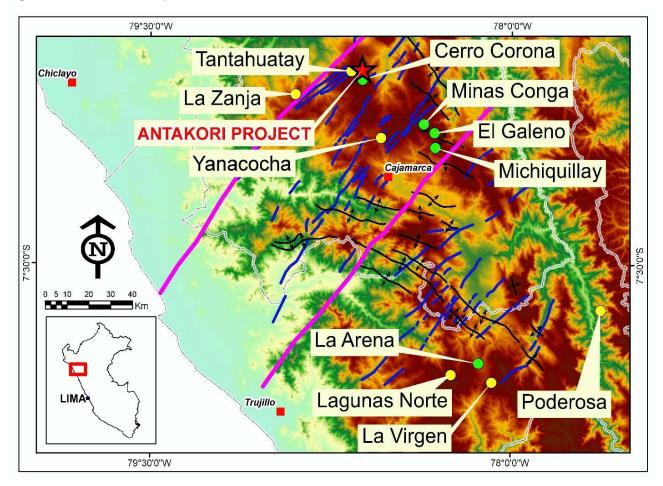
Sedimentation in the eastern sub-basin or Western Platform took place between the Late Jurassic and Late Cretaceous and comprises basal deltaic sandstones of the Goyllarisquisga Group), followed by a thick, marine transgressive sequence of limestones and marls of Early to Late Cretaceous age. The sub-basin was not affected by the closure of the Huarmey Basin in the mid Cretaceous.

The basin was deformed by the Incaic II folding phase in the middle Eocene (43–42 Ma) which caused extensive folding and reverse faulting. A foreland fold–thrust belt called the Marañon fold–thrust belt (MFTB; Wilson, 1984; Mégard, 1984) remains as evidence of the event. The strike of the fold–thrust belt is generally northwest–southeast, parallel to the Andean trend, with a major east–west deflection at the Cajamarca Deflection where the AntaKori Project is located.



NI 43-101 Technical Report

Figure 7-1: Location Map



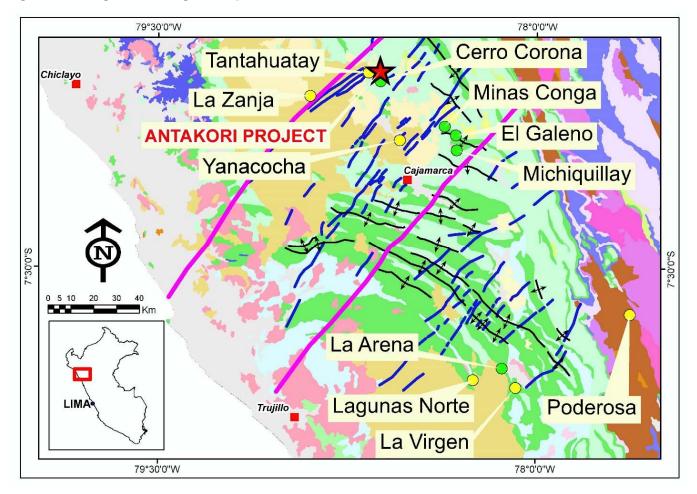
Note: Figure courtesy Regulus, 2019. Figure uses a digital topographic model base. Black lines = fold axes; blue lines = lineaments; purple line = Chicama–Yanacocha structural corridor; green circles = principal copper-gold porphyry deposits; yellow circles = high-sulphidation gold deposits. Other projects shown are not held by Regulus.





NI 43-101 Technical Report

Figure 7-2: Regional Geological Map



Note: Figure courtesy Regulus, 2019. Black lines = fold axes; blue lines = lineaments; purple line = Chicama–Yanacocha structural corridor; green circles = principal copper-gold porphyry deposits; yellow circles = high-sulphidation gold deposits. Other projects shown are not held by Regulus. Colors: brown, purple, blue – Precambrian Marañon Complex; dark blue – Jurassic volcanic rocks; greens – Cretaceous sedimentary rocks; pink – granitoids of the Late Cretaceous Coastal Batholith; light brown – Oligocene-Miocene volcanic rocks of the Calipuy Formation; light grey – Quaternary sediments.





Following the deformation, an erosional surface developed. As much as 3,000 m of subaerial volcanic rocks of the Calipuy Formation accumulated on that erosion surface in multiple volcanic centres such as Tantahuatay, El Zancudo and Yanacocha during the Oligocene–Miocene. During the Miocene there were four short compressive pulses (Quechua I, II, III, and IV) at ca. 17 Ma, 10–9 Ma, 7–5 Ma and 2 Ma, separated by tectonically neutral or extensional periods (McKee & Noble, 1982; Sébrier & Soler, 1991).

7.2 Local Geology

The AntaKori Project is in the Hualgayoc mining district with dimensions of about 13 km long in a west–northwest–east–southeast (110°) direction by 5 km wide (Figure 7-3). This is underlain by folded and thrusted Cretaceous carbonates with numerous Middle Miocene porphyry intrusions, and the Tantahuatay volcanic centre in the northwestern part of the district.

The stratigraphy of the district was defined by Benavides (1956; Figure 7-4). The oldest sedimentary rocks are shales of the Early Cretaceous Carhuaz Formation and deltaic quartz arenites, shale, coal and a thin marine limestone of the Early Cretaceous Goyllarisquisga Group, followed by a thick, marine transgressive sequence of shallow marine platform limestones and marls of the Early to Late Cretaceous Inca, Chulec, Pariatambo, Yumagual, Mujarrun, Romiron, Coñor, Cajamarca and Celendin Formations. The AntaKori mineralisation is hosted by the Farrat Formation (Goyllarisquisga Group), Inca Formation and Chulec Formation.

District-scale structural controls of the Hualgayoc district are west–northwest-trending, left-lateral, Riedel shear systems in the Cajamarca Deflection, and the northeast-trending, trans-arc, Chicama-Yanacocha structural corridor (refer to Figure 7-1 and Figure 7-2; Quiroz, 1997; Gustafson et al., 2004).

The principal mineralization styles in the district are:

- Silver veins and stratiform carbonate-replacement silver bodies (mantos) at Hualgayoc (Málaga Santolalla, 1904; Eriksen et al., 1956, 1980; Macfarlane & Peterson, 1990; Macfarlane et al., 1994)
- Porphyry copper–gold at Cerro Corona (James, 1998)
- Skarn copper–gold–silver at AntaKori
- High sulphidation epithermal gold–copper–silver at Tantahuatay (Gustafson et al., 2004).





NI 43-101 Technical Report

wood

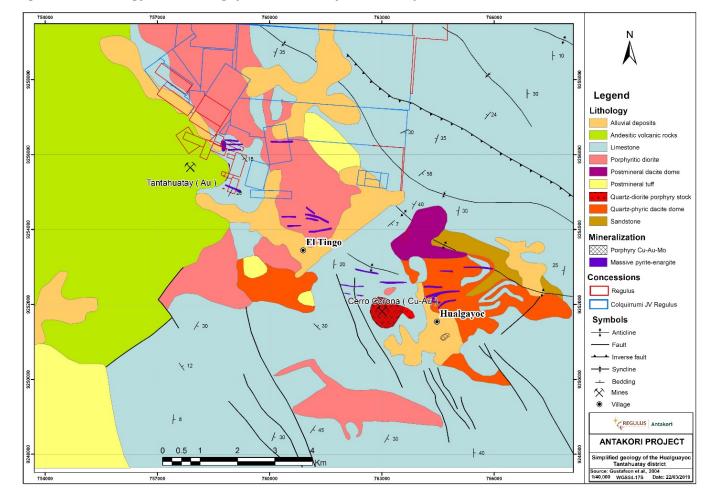


Figure 7-3: Geology of the Hualgayoc–Tantahuatay District, Cajamarca

Note: Figure after from Gustafson et al. (2004). Mines shown in the figure are not held by Regulus.



	CELENDIN FM (120m)
TURONIAN	CAJAMARCA FM (526m)
	COÑOR FM (90m)
	 ROMIRON FM (20m)
CENOMANIAN	MUJARRUN FM (370m)
	YUMAGUAL FM (496m)
	PARIATAMBO FM (135m)
ALBIAN	CHULEC FM (525m)
	INCA FM (90m)
ΑΡΤΙΑΝ	GOYLLARISQUISGA GROUP (FARRAT FM 758m)
NEOCONIAN	CHARHUAZ FM (550m)

Figure 7-4: Cretaceous Stratigraphic Column for the Cajamarca Region

Note: Figure after Benavides (1956), Cajamarca section.



Dates for the intrusions and alteration range from 16.8 to 7.2 Ma (Macfarlane et al., 1984; James, 1998, Macfarlane et al., 1989; Monge & Navarro, 2008, Tosdal, 1996; James, 1998; Noble & McKee, 1999; Monge & Navarro, 2008, Viala et al., 2018).

7.3 **Property and Deposit Geology**

7.3.1 Introduction

Copper–gold–silver mineralisation in the AntaKori Project is hosted in prograde and retrograde exoskarn in the Cretaceous Chulec and Inca Formations, as well as in quartzites and arkosic sandstones/siltstones of the underlying Farrat Formation. Additional mineralization is hosted by early porphyry intrusions, which are weakly mineralized, and by locally well-mineralized breccia. The porphyry system responsible for skarn-style mineralization has not been discovered yet.

The Cretaceous rocks are unconformably overlain and cross-cut by middle Miocene intermediate to felsic volcanic and subvolcanic rocks of the Calipuy Formation in Tantahuatay volcanic centre. The volcanic rocks host high-sulphidation epithermal gold–copper–silver mineralization related to the Tantahuatay centre and younger intermediate sulphidation epithermal carbonate-base metal gold–silver–lead–zinc–copper mineralization related to late-stage hornblende porphyry stocks and dykes. The epithermal mineralization partly overprints the skarn–porphyry system. There is a final, post-mineral magmatic phase of barren, rhyodacitic dykes and domes.

The regional 1:100,000 scale Geological Map of Peru shows the AntaKori Project to be located on the southern limb of a NW-trending open anticline in Cretaceous sedimentary rocks (Wilson, 1996, INGEMMET Sheet 14-f, Chota Quadrangle).

Representative cross sections showing lithology and drill hole results are shown in Figure 7-5 and Figure 7-6.

7.3.2 Lithology

The lithological units logged in the AntaKori deposit are described in Table 7-1. These logging codes were grouped into 14 units for geological and resource modelling.

Four major formations are present at AntaKori: the Miocene Calipuy Formation and the Cretaceous Chulec, Inca, and Farrat Formations. The Cretaceous sequence is cut by subvolcanic equivalents of the Calipuy Formation and by older porphyry intrusions.

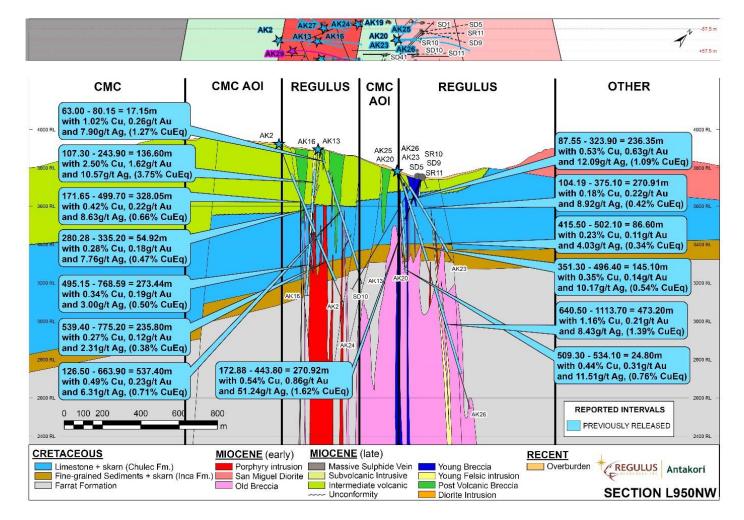




NI 43-101 Technical Report

wood





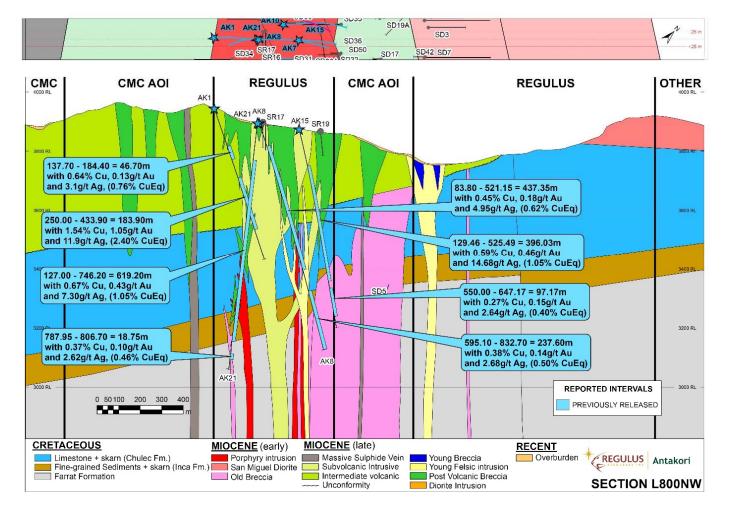
Note: Figure courtesy Regulus, 2019.



NI 43-101 Technical Report

wood

Figure 7-6: Simplified Geology Section L800NW (section looks northwest)



Note: Figure courtesy Regulus, 2019.



Table 7-1:	Stratigraphic Units
------------	---------------------

Unit	Description
Overburden (OB)	Forms a thin, 5–10 m thick capping below and on the west side of the valley. Absent elsewhere. Consists of soil or glacial boulder clay with pebbles, cobbles and boulders. Ferricrete (OBfc), occurs within or at the base of overburden in several holes. Logging codes were also given to artificial, man-made deposits of pad-fill or dumps of mine waste rock (DME) and dumps of top soil (DMO) for Tantahuatay mine rehabilitation
Fault breccia (FLT)	
Mud matrix, milled breccia (BXd)	Mud matrix, milled breccia, cuts CV2m. Matrix >> clasts, heterolithic
Milled matrix breccia (BXe)	Milled matrix breccia cuts CV2m, clast supported to locally matrix supported
Calipuy Formation (CV2)	Felsic subvolcanic intrusions. Includes post-mineral, massive rhyodacite porphyry dykes, domes (CV2m), flow banded and autobrecciated hornblende porphyry, contact facies (CV2b), hornblende porphyry dykes, stocks (CV2h)
Milled matrix breccia (BXa)	Milled matrix of advanced argillic minerals without cement; often contains quartzite and massive sulphide clasts (matrix>>clasts, mud- to sand-sized rock flour). Forms narrow dykes which often widen near surface and pinch out at depth. Restricted to western side of deposit. Cross cuts tuffs and subvolcanic stocks
Crackle breccia to milled matrix breccia (BXg)	Crackle breccia to milled matrix breccia with the matrix cemented by advanced argillic minerals. Forms narrow dykes which often widen near surface and pinch out at depth. Restricted to western side of deposit. Cross cuts tuffs and subvolcanic stocks. Cuts CV1.
Massive enargite ± pyrite veins (CVep)	High sulphidation massive sulphide veins (CVep) and vein breccias (CVepb) of pyrite–enargite ± advanced argillic minerals cross cut the Calipuy Formation tuffs, subvolcanic intrusions and older rocks. They are modelled as vertical to subvertical veins with continuity to surface and to depth and a strike of about 110°. The majority of the CVep occurs as narrow individual intercepts and in a lot of cases cannot be traced between drill holes. Cuts CV1 but not CV2.
Silica ledges (CVsi)	Vuggy silica ledges formed of residual silica or massive, fine grained granular silica are considered to have the same 110° trend age as the massive sulphide veins. They have only been intersected at high levels (3,866–3,752 m) in the western part of the deposit.





Unit	Description
San Miguel diorite (Dio (San Miguel))	Defined by topography and satellite imagery; has not been intersected by drilling nor defined by surface geological mapping. Forms the ridge on the northeastern side of the River Colorado valley. Interpreted to form a sill capping the ridge with a scarp on the valley side and a low angle dip slope on the northeast side, and to cap skarn and possible porphyry. The diorite is not currently known to be altered or mineralized. Age relative to the volcanic and subvolcanic rocks (CV1t, CV1m, CV2h, CV2m) is unknown due to a lack of cross-cutting relationships.
Calipuy Formation intermediate to felsic volcanic/subvolcanic rock (CV1)	Calipuy Formation tuffs (CV1t) unconformably overlie Chulec Formation skarn in the west and southwest part of the deposit, with a thickness of up to 320 m. They thicken to the southwest towards the Tantahuatay volcanic center, and thin and pinch out to the northeast on the side of the River Colorado valley. A feldspar ± quartz porphyry rock (CV1m) is modelled as a number of vertical subvolcanic wide dykes that narrow at depth cutting the Calipuy Formation volcanic rocks and older rocks in the western half of the deposit. They generally trend northwest–southeast. Other units are undifferentiated tuff (CV1t), crystal ash tuff (CV1tac), lithic ash tuff (CV1tal), vitric ash tuff (CV1tav), lapilli tuff (CV1t), volcanic breccia (CV1tvb) and agglomerate (CV1tag)
Old high sulphidation massive sulphide vein (Ohs)	Formed of massive sulphides with an intermediate sulphidation mineralogy of pyrite, chalcopyrite, tennantite, ± bornite, ± sphalerite, with advanced argillic wall rock alteration. They are interpreted to be older than CVep although no cross-cutting age relationships were seen. They are modelled as vertical veins with a strike of ~110°. They may actually be the same age as CVep. Defined by cross cutting skarn, hornfels, marble and limestone in the eastern part of the drilled area, but not the Calipuy Formation.
Anhydrite-gypsum vein (AGV)	
Milled matrix, heterolithic breccia (BXc)	Cross-cuts BXb and the Cretaceous sediments. Occurs as numerous, narrow dyke-like units which are difficult to correlate
Clast-supported breccia (BXb)	Matrix cemented by milled rock or hydrothermal minerals, often vuggy. Forms a large pipe trending north– south, which narrows upwards. Cuts CF, IF, FF, skarn and porphyry dykes, and extends to the unconformity. Has subunits: clast-supported breccia with monomict clasts (BXbm); crackle breccia to clast supported, angular breccia (BXbc) developed in quartzite.





Unit	Description				
Plagioclase-quartz- biotite porphyry (Pf)	Forms a series of narrow dykes oriented at about 135° which are cut by breccia BXb. Includes sub-unit of igneous breccia (Pfbx)				
Plagioclase-minor quartz porphyry (Pk)	Forms remnants surrounded by breccia BXb, however there are very few intervals				
Plagioclase-quartz porphyry (Ph)	Very crowded; clasts in breccia.				
Clast-supported breccia (BXf)	Matrix of retrograde skarn minerals (epidote, chlorite, calcite).				
Calcite-cemented breccia (BXh)	In marble				
Chulec Formation (CF)	Medium to dark grey, poorly fossiliferous micritic limestones and marls with intercalated thin shale beds. It is 250–300 m thick, and interpreted to be up to 500–600 m thick. Includes a number of sub-units: limestone (CFL); massive, medium grey, micritic limestone (CFLm); dark grey to black, massive, micritic limestone (CFLm); finely bedded, medium grey, micritic limestone (CFLb); dark grey to black, finely bedded, micritic limestone (CFLb); shelly limestone (CFLs); shale (CFsh); marble (CFM); massive marble (CFMm); bedded/banded marble (CFMb); massive hornfels (CFHm); finely-bedded hornfels (CFHf); massive skarn (CFSm); banded/bedded skarn (CFSb); Massive magnetite ± sulphide (pyrite, chalcopyrite, pyrrhotite, sphalerite, galena) skarn (CFSms).				
Inca Formation (IF)	Intercalated sandstones, shales, calcareous siltstones and silty limestones. It is 90–110 m thick and forms a stratigraphic marker horizon. Includes a number of subunits: massive hornfels (IFHm); thickly-bedded hornfels (IFHt); finely-bedded hornfels (IFHf); very finely-bedded hornfels (IFHv); massive skarn (IFSm); thickly-bedded skarn (IFSt); finely bedded skarn (IFSt); finely bedded skarn (IFSt); nassive quartzite (IFQ); massive arkose(?) altered to brown pyrophyllite (IFA); massive magnetite ± sulphide (pyrite, chalcopyrite, pyrrhotite, sphalerite, galena) skarn (IFSm).				
Farrat Formation (FF)	Quartzite, siltstone and shale. It is >800 m thick. Includes a number of subunits: quartzite (FFQ); arkosic sandstone/siltstone altered to brown pyrophyllite (FFA); shale (FFS); massive magnetite ± sulphide (pyrite, chalcopyrite, pyrrhotite, sphalerite, galena).				





The Calipuy Formation comprises tuffs that unconformably overlie Chulec Formation in the west and southwest part of the deposit. The Calipuy Formation is as thick as 320 m and thickens to the southwest towards the Tantahuatay volcanic centre and thins and pinches out to the northeast on the side of the Colorado River valley. These tuffs host the high-sulphidation mineralization at Tantahuatay. A feldspar ± quartz porphyry modelled as a number of vertical, subvolcanic dykes that narrow at depth cuts the Calipuy Formation volcanic rocks and older rocks in the western half of the deposit and is considered to be a subvolcanic equivalent of the Calipuy tuffs. The dykes generally trend northwest–southeast. Also included in the Calipuy Formation are a number of felsic subvolcanic intrusions. These include obviously post-mineral, massive rhyodacite porphyry dykes and domes, and flow banded and auto-brecciated hornblende porphyry dykes.

The Chulec Formation is a medium to dark grey, poorly fossiliferous micritic limestone and marl with intercalated thin shale beds. It is 250-300 m thick and interpreted to be as thick as 500-600 m. It is altered to marble and hornfels by contact metamorphism, and skarn formed by metasomatism which hosts much of the mineralization at AntaKori. Massive magnetite ± sulphide (pyrite, chalcopyrite, pyrrhotite, sphalerite, galena) skarn form in the Chulec Formation.

Inca Formation sandstones, shales, calcareous siltstones and silty limestones are 90–110 m thick and form a distinct stratigraphic marker horizon. Massive quartzite and arkose(?) are locally more or less completely altered to a very distinctive brown pyrophyllite. Massive hornfels, bedded hornfels, massive skarn, and bedded skarn occur within the contact metamorphic and metasomatic zone. Massive magnetite \pm sulphide (pyrite, chalcopyrite, pyrrhotite, sphalerite, galena) skarn occurs locally within the Inca Formation.

The Farrat Formation comprises quartzite, siltstone and shale. It is at least 800 m thick and includes a number of subunits of quartzite, arkosic sandstone/siltstone altered to brown pyrophyllite; and shale. Massive magnetite ± sulphide (pyrite, chalcopyrite, pyrrhotite, sphalerite, galena) bodies occur locally within this unit, but mineralization is typically sparse in the Farrat Formation.

Several porphyry intrusive units cut the Cretaceous rocks. Those include:

• Plagioclase-quartz-biotite porphyry which forms a series of narrow dykes oriented at about 135°





- Plagioclase-minor quartz porphyry which forms remnants surrounded by breccia; however, there are very few intervals so this intrusive is not currently well understood
- Plagioclase-quartz porphyry is distinct in that it is very crowded with phenocrysts. It occurs as clasts in breccia so its relationship to other intrusive units is not known.

All of the pre-Miocene rocks are cut by numerous and diverse breccias. Many of these bodies are mineralized, some are not mineralized but contain mineralized clasts, and some are not mineralized. They are described briefly in Table 7-1.

The San Miguel diorite is one of the younger intrusive units in the area and forms the rugged outcrops to the northeast of AntaKori. Its extent has been defined by topography and satellite imagery. It has not been intersected by drilling nor defined by surface geological mapping. It forms the ridge on the northeastern side of the River Colorado valley. It is interpreted to form a sill capping the ridge with a scarp on the valley side and a low angle dip slope on the northeast side, and to cap skarn and possible porphyry. The diorite is not currently known to be altered or mineralised. Its age relative to the Calipuy Formation is unknown due to a lack of cross-cutting relationships.

7.3.3 Structure

The sedimentary rocks dip at about 12° to the southwest under the western part of AntaKori and flatten out to form an open anticline with the axis below the River Colorado valley. The northeastern limb is interpreted to be down-faulted based on one drill hole, where the Chulec Formation unit appears to thicken, and the Inca Formation appears to be downthrown with respect to the southern block, but more work is required to better define the existence, location and orientation of this fault.

7.3.4 Alteration

The alteration paragenesis for the AntaKori deposit is summarized in Table 7-2. Alteration types recognized are typical of skarns associated with porphyry systems and include sericite–chlorite, potassic, propylitic, advanced argillic, silicification, vuggy silica alteration, hydrothermal metasomatism (skarn), and thermal metamorphism (marble, hornfels, quartzite).





NI 43-101 Technical Report

Table 7-2: Alteration Paragenesis

Code	Description
ANK-05	Epithermal carbonate-base metal mineralization associated with intermediate argillic (illite, kaolinite, montmorillonite) and chlorite alteration of hornblende porphyry dykes.
ANK-04	A high-sulphidation epithermal system associated with advanced argillic alteration and structurally-controlled silicification and vuggy silica alteration, developed in the Calipuy Formation volcanic and subvolcanic rocks and partially overprints underlying skarn and porphyry mineralization in structural zone.
ANK-03	A second porphyry system with strong sericite-chlorite alteration and abundant anhydrite overprints the early skarn, porphyry and breccias. No relics of potassic or propylitic alteration have been found.
ANK-02	Weakly mineralized porphyry system that shows relics of potassic and propylitic alteration.
ANK-01	Hydrothermal metasomatism formed a calcic exoskarn. The prograde skarn phase is mainly garnet which is zoned from red-brown in the proximal zones to pale green-yellow in the distal zones, with dark green pyroxene, and with lesser light green vesuvianite in the peripheral zones. There is strong retrograde exoskarn alteration to epidote, chlorite and calcite.
ANK-00	Thermal metamorphism produced marble in the limestones of the Chulec Formation, and hornfels in the calcareous siltstones and mudstones of the Inca Formation, as a precursor to skarn formation. Occurs as relics within the skarn and on the edge of the skarn on the southeastern side, the only place where the edge of the system is exposed. It is not possible to distinguish whether the quartzites of the Farrat Formation were formed from quartz arenites by an older, regional event or by thermal metamorphism.





7.3.5 Mineralization

Mineralization events are superimposed on the alteration, and the mineralization paragenesis is summarized in Table 7-3. Most of the mineralization is hosted by the skarn (ANK-01), porphyry 2 (ANK-03) and high sulphidation epithermal (ANK-04) stages. Skarn (ANK-01) and porphyry 2 (ANK-03) are responsible for most of the AntaKori mineralization. The high sulphidation epithermal (ANK-04) event is responsible for the Tantahuatay mineralization.

Skarn (ANK-01) resulted from hydrothermal metasomatism that formed a calcic exoskarn with copper-gold-silver mineralization replacing marble and hornfels in the Chulec and Inca Formations. The prograde skarn phase is mainly garnet zoned from red–brown in the proximal zones to pale green-yellow in the distal zones, with dark green pyroxene, and with lesser light green vesuvianite in the peripheral zones. Mineralization in prograde skarns is weakly-developed, disseminated pyrite, chalcopyrite and magnetite. There is strong retrograde exoskarn alteration that formed epidote, chlorite and calcite. Mineralization in retrograde skarns consists of pyrite, magnetite and chalcopyrite in disseminations, veinlets and massive sulphide-magnetite bodies.

Porphyry 2 (ANK-03) is a second porphyry system with strong sericite–chlorite alteration and abundant anhydrite that clearly overprints the early skarn, porphyry and breccia mineralisation. No relics of potassic or propylitic alteration associated with this mineralizing event have been found. Copper–gold–silver ± Mo mineralization occurs as pyrite, chalcopyrite, bornite and molybdenite as disseminations, veinlets and breccia cement.

The high sulphidation epithermal (ANK-04) mineralizing event is associated with advanced argillic alteration and structurally-controlled silicification and vuggy silica alteration. The argillic alteration mineral assemblage consists of pyrophyllite, dickite, kaolinite, alunite, minor topaz, zunyite, diaspore, dumortierite. It is well developed in the Calipuy Formation volcanic and subvolcanic rocks and partially overprints underlying skarn and porphyry mineralisation along structural zones such as faults. Mineralization is a high-sulphidation assemblage of copper–gold–silver mineralisation with significant arsenic and antimony that occurs as enargite–pyrite disseminations, veinlets and veins. Late tennantite, chalcocite, covellite partially replaces the earlier enargite-pyrite mineralization. Chalcopyrite, tennantite, and galena with minor late low-iron sphalerite and orpiment occurs locally.



NI 43-101 Technical Report

Table 7-3: Mineralization Paragenesis

Code	Description
ANK-05	Intermediate sulphidation epithermal carbonate-base metal mineralization of Au–Ag–Cu–Pb–Zn associated with late stage hornblende porphyry dykes. These cross-cut the advanced argillic alteration.
ANK-04	High sulphidation epithermal system with Cu–Au–Ag mineralization and a significant As–Sb content. The epithermal mineralization occurs as disseminations, veinlets and as enargite–pyrite veins.
ANK-03	Porphyry system hosting Cu–Au–Ag ± Mo mineralization. Sulphides include pyrite, chalcopyrite, bornite and molybdenite as disseminations, veinlets and breccia cement.
ANK-02	Weakly mineralized porphyry Cu–Au–Ag ± Mo system. Sulphides include pyrite, chalcopyrite, magnetite and molybdenite. D veins show phyllic wall-rock to pervasive alteration and weak pyrite and chalcopyrite mineralization.
ANK-01	Cu–Au–Ag mineralization replacing marble and hornfels in the Chulec and Inca Formations. Sulphide mineralization in prograde skarns is weakly-developed, and consists of pyrite, chalcopyrite and magnetite. Sulphide mineralization in retrograde skarns consists of pyrite, magnetite and chalcopyrite in disseminations, veinlets and massive sulphide-magnetite bodies.
ANK-00	There is no mineralization associated with this phase





Table 7-4 summarizes the alteration and mineralization paragenesis, and gangue and mineralization associations.

7.3.6 Oxidation

Two separate oxidation events are recognized (Table 7-5). No significant supergene enrichment is associated with either event.

7.4 **Prospects/Exploration Targets**

Exploration potential is discussed in Section 9.

7.5 Comments on Section 7

In the opinion of the QP, the understanding of the AntaKori deposit setting, lithologies, and geological, structural, and alteration controls on mineralization is sufficient to support estimation of Mineral Resources.





Code	Event	Metals	Alteration Mineralogy	Mineralization Mineralogy
ANK-05	Intermediate sulphidation epithermal (carbonate-base metal)	Au, Ag, Cu, Pb, Zn	Intermediate argillic: illite, kaolinite, montmorillonite. Propylitic: chlorite.	Pyrite, sphalerite, galena, chalcopyrite with calcite. Minor ankerite, quartz, amethyst.
ANK-04	High sulphidation epithermal	Cu, Au, Ag, As, Sb	Advanced argillic: pyrophyllite, dickite, kaolinite, alunite, minor topaz, zunyite, diaspore, dumortierite. Minor silicification and residual (vuggy) silica.	Enargite, pyrite. Partial replacement by late tennantite, chalcocite, covellite. Some zones with chalcopyrite, tennantite, galena. Minor late low-Fe sphalerite, orpiment.
ANK-03	Porphyry 2	Cu, Au, Ag, Mo	Sericite, chlorite, anhydrite	Pyrite, chalcopyrite, bornite, molybdenite
ANK-02	Porphyry 1	Cu, Au, Ag, Mo	Potassic: relict biotite, purple anhydrite, propylitic relict; Phyllic: sericite, quartz, tourmaline.	Minor pyrite, chalcopyrite, magnetite, molybdenite in B and D veinlets and disseminated.
ANK-01	Skarn	Cu, Au, Ag	Prograde: garnet, pyroxene, vesuvianite. Retrograde: epidote, chlorite, calcite.	Prograde: weak pyrite, chalcopyrite, magnetite. Retrograde: strong pyrite, chalcopyrite, magnetite, specularite.
ANK-00	Hornfels-marble	None	Thermal metamorphism to different hornfels facies (pyroxene, garnet and biotite), and marble.	None

Table 7-4: Hypogene Alteration and Mineralization Phases



Table 7-5: Oxidation Events

Oxidation Event	Note
FX-1	Paleo-regolith; affects the skarn and porphyry mineralization and predates the deposition of the volcanic rocks and advanced argillic alteration. The depth of partial oxidation is commonly 100–200 m thick, and exceptionally up to 300-450 m thick below the unconformity or present surface, where volcanic rocks absent, with an irregular geometry believed to be due to fracture control.
FX-2	Recent oxidation at surface, with depths from 5–20 m, and deeper on structures. However, pervasive oxidation can be 100–170 m deep in the southwest part near the Tantahuatay oxide gold deposit. Affects the high sulphidation and intermediate sulphidation epithermal mineralization





8.0 **DEPOSIT TYPES**

8.1 Deposit Model

AntaKori is considered to be primarily an example of a copper skarn deposit.

Copper skarn deposits typically form in carbonate wall rocks adjacent to porphyry copper deposits (Sillitoe, 2010) that may or may not contain economic grades of copper and other metals. If the porphyry deposits contain economic copper grades, they may contain by-product molybdenum, gold or silver. These deposits range in size from a few million tonnes to several billion tonnes. Typical, primary porphyry copper deposits have average grades of 0.5–1.5% Cu, <0.01–0.04% Mo, and 0.01–1.5 g/t Au, and a few gold-only deposits have grades of 0.9–1.5 g/t gold but little Cu (<0.1 %) (Sillitoe, 2010).

The geology of skarn deposits was reviewed by Einaudi et al. (1981), Einaudi (1982) and Meinert et al. (2005). Skarns are a rock type defined by a relatively simple mineralogy, usually dominated by calc-silicate minerals such as garnet and pyroxene. Endoskarn refers to calc-silicate alteration of intrusive rock, presumed to be the fluid source, while exoskarn is calc-silicate replacement of limestone or carbonate-rich wall rock. Copper skarn deposits are usually zoned with proximal garnet and distal pyroxene, followed by wollastonite, vesuvianite, or massive sulphides and/or oxides near the contact between skarn and marble, called the marble front. This is followed by a zone of metamorphic recrystallization and bleaching of limestone to form marble. These zones propagate outwards from the magmatic fluid source.

Sulphide mineralogy and metal ratios are commonly zoned relative to the causativepluton from proximal pyrite and chalcopyrite, followed by an outwards increase in chalcopyrite, and finally by bornite in the wollastonite zone.

Most large skarn deposits record a transition from early and distal thermal metamorphism which formed marble and hornfels, to later and proximal metasomatism resulting in relatively coarse-grained ore-bearing skarn. Metasomatism is caused by high-temperature (>500°C), high-salinity (>50 wt% total salts) fluids of magmatic origin. With time, skarn metasomatic alteration evolves to lower temperature (<400°C), hydrous, sulphide-rich assemblages with epidote, actinolite, chlorite, sericite, quartz, calcite and clay minerals, termed retrograde alteration. This is often accompanied by brecciation and is caused by an influx of cooler, lower salinity (<20 weight percent total salts) fluids that are still magmatic in origin.





Alteration and mineralization associated with porphyry copper systems can have a volume of many cubic kilometers of rock and are typically zoned outward from stocks or dyke swarms that typically comprise several generations of intermediate to felsic porphyry intrusions (Figure 8-1). Porphyry copper \pm gold \pm molybdenum deposits are centered on the intrusions. Carbonate wall rocks can host proximal copper–gold skarns, distal lead–zinc and/or gold skarns, and, beyond the skarn front, carbonate-replacement copper and/or lead–zinc–silver \pm gold deposits, and/or sediment-hosted, distal disseminated gold deposits. High-sulphidation epithermal deposits may occur above porphyry copper deposits, where massive sulphide lodes tend to develop in deeper feeder structures and gold \pm silver-rich, disseminated deposits within the uppermost 500 m or so. Less commonly, intermediate sulphidation epithermal mineralization, chiefly veins, may develop on the periphery of the porphyry intrusions.

Alteration and mineralization in porphyry copper deposits is typically zoned upward from barren, early sodic–calcic through potassic, chlorite-sericite, and sericitic, to advanced argillic alteration. Chalcopyrite \pm bornite assemblages are characteristic of potassic alteration zones, whereas pyrite \pm enargite \pm covellite are generated progressively upward. Porphyry copper mineralization occurs in a distinctive sequence of quartz-bearing veinlets as well as in disseminated form in the altered rock between them. Magmatic–hydrothermal breccias may form during porphyry intrusion, with some breccias containing high-grade mineralization because of their intrinsic permeability.

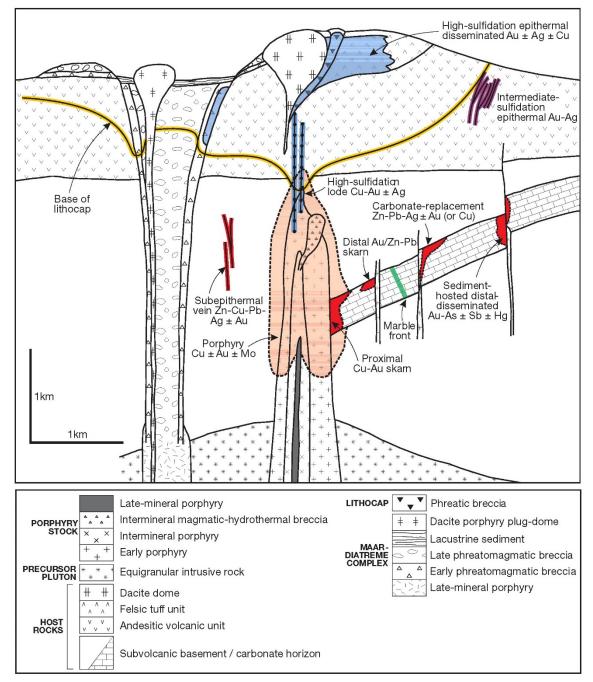
8.2 Comments on Section 8

The AntaKori deposit is primarily a copper–gold–silver skarn deposit characterized by multiple overprinting hydrothermal systems of skarn, porphyry and epithermal style.

The calcic copper–gold–silver skarn deposit and related porphyry copper–gold mineralization are overprinted by a second porphyry copper–gold system, the center of which is indicated to be north of the Phase 1 drilling. The skarn–porphyry mineralization is older than the epithermal mineralization and is related to a different magmatic-hydrothermal center or centers, rather than being a single, genetically-related, telescoped system.









Note: Figure from Sillitoe, 2010.





The skarn–porphyry system is thought to have been uplifted, eroded and then overlain by Middle Miocene volcanic rocks and partially overprinted by two younger epithermal systems of Middle Miocene age: high sulphidation epithermal copper–gold–silver mineralization hosted by volcanic and sub-volcanic rocks on the northern edge of the Tantahuatay system; and intermediate-sulphidation epithermal, carbonate–base metal gold–silver–lead–zinc-copper mineralization related to late-stage felsic dykes.

AntaKori lies in the northern part of the Peruvian skarn belt that is notable for large copper skarn deposits including the Bambas, Tintaya–Coroccohuayco, Antamina and Magistral.

Exploration programs that use a skarn–porphyry system model are considered to be applicable to the Project area.



9.0 EXPLORATION

9.1 Grids and Surveys

In 1998, Geomecanica S.A. prepared a topographic base map at 1:5,000 and 1:2,500 scales from air photos. Southern Legacy contracted Horizons South America to make a new topographic base map from air photographs in 2012–2013.

Regulus uses the 2013 topographic survey with 5 m contours for base maps. This has been merged with a more up to date CMC topographic survey with 2 m contours near the Tantahuatay pit.

Regulus has not commissioned any grids or topographic surveys. For drill planning, location and sections, Regulus uses an extension of the CMC section lines that are oriented northeast–southwest. These sections are defined on maps, but are not marked in the field.

CMC used the UTM datum PSAD56 for all collar surveying and Regulus uses the official Peruvian UTM datum of WGS84. All survey data received by Regulus from CMC were converted from PSAD56 to WGS84.

9.2 Geological Mapping

Regulus is aware of geological mapping performed by El Misti Gold in 1996 and by Sinchao Metals in 2006 (refer to Table 6-2); however, a report by Noone (1997; referred to in Jaramillo, 2008) that may describe the mapping procedures and include physical maps has not been located. Thus, the results of that mapping have not been located and are believed lost.

9.3 Geochemical Sampling

In July 1996, El Misti collected a total of 354 rock and soil samples on a 50 m by 50 m grid. The samples were analyzed by Bondar Clegg Laboratories in Vancouver for gold and 32 elements by inductively-coupled plasma (ICP; Jaramillo, 2008).

Sinchao Metals selectively sampled over massive sulphides in July 2006, collecting 64 samples, some of were reported to show anomalous base metal values and precious metal values (Jaramillo, 2008).







Sinchao Metals collected 76 soil samples in 2007 as part of an orientation survey for a trenching program focused on massive sulphides around hole DDH-026. The soils returned base metal and precious metal values (Jaramillo, 2008).

The results of these surveys have not been located and are deemed lost.

9.4 Geophysics

El Misti undertook ground geophysical surveys in 1996 which consisted of 22.10-line km of IP and resistivity and 23.30 km of magnetometer surveys (Jaramillo, 2008). Regulus has not been able to recover these data and the data are assumed to be lost.

Sinchao contracted Arce Geofisicos of Lima, Peru to complete 32.80-line km of 3D IP surveys and 33.43-line km of ground total field magnetometer surveys on northeast–southwest-oriented lines in August 2006. Regulus contracted Arce to re-process and re-interpret the data in April 2015 (Arce & Arce, 2015).

The re-interpretation included definition of magnetic bodies at surface by the analytical signal, and 3D modelling of the magnetic masses at depth, which Regulus interprets to be bodies of skarn mineralization. Strong negative self-potential (SP) anomalies over highly resistive rocks were interpreted as possible evidence for silicified masses in high sulphidation mineralization, while correlation of negative SP with high chargeability anomalies, interpreted as massive sulphides, is limited to small zones. 3D modelling of resistivity and chargeability was also completed. Lower resistivities indicate a regional northwest–southeast structural trend. Chargeability anomalies, which may be caused by sulphides, are seen on all sections with the highest responses located deeper in the central area.

9.5 Pits and Trenches

Sinchao Metals completed 11 trenches in 2007 and collected 100 channel samples. The trenches were excavated by hand in the eastern part of the AntaKori concessions, in the vicinity of hole DDH-026, where at least four mineralized structures similar to the one intersected in DDH-026 were identified.

Channel samples were collected using a hammer and rock chisel over widths of 1–2 m. The samples were from oxidized sulphides collected at surface, beneath a soil cover approximately 50 cm deep. The samples returned anomalous base and precious metals values (Jaramillo, 2008). These data are supposed lost.





9.6 Petrology, Mineralogy, and Research Studies

9.6.1 Petrography and Mineralogy

Petrographic reports on core samples from the 1997–1998 drilling completed for El Misti by Harris Exploration Services in 1998 (Harris, 1998), and by PetraScience Consultants, Inc. in 1999 (Robitaille and Thompson, 1999), and reported in Jaramillo (2008), have not been located. Harris (1998) reportedly described porphyry textures and skarn alteration assemblages. Robitaille and Thompson (1999) described the assemblages as being advanced argillic alteration, skarn alteration, phyllic alteration and high sulphidation mineralization.

Sinchao Metals contracted Dr. Craig Leach in British Columbia to carry out transmitted and reflected light petrology and mineralogy of 144 core samples from 2006–2008 drill programs (Leitch, 2006, 2007, 2008a-2008e). The samples are of core from hole SDH-010 and core from the 2007–2008 drilling program. The results describe skarn, phyllic and advanced argillic alteration and related mineralization.

Regulus completed petrology and mineralogy of 123 samples from legacy and 2017–2018 drill core. Dr. Rainer Lehne of Lehne & Associates, Mannheim, Germany made polished section studies of opaque minerals of 96 core samples during 2016–2018, with an emphasis on metallurgically relevant sulphide textures including grain size, contacts, replacement and encapsulation (Lehne, 2016, 2018a to 2018d).

Dr. James R. Shannon of Colorado made petrographic studies of polished thin sections of 27 samples of legacy core samples in 2018 and 2019 as part of an on-going study to define porphyry phases and skarn paragenesis (Shannon, 2018, 2019).

9.6.2 Age Dating

Uranium–lead dating of zircon from four core samples at AntaKori was completed at the University of Ottawa, Ontario in 2017–2018 as part of a larger study of the Hualgayoc district. Preliminary results were described by Viala et al. (2018), and gave ages of 14.44 to 11.49 Ma.

9.6.3 Hyperspectral Studies

Portable infrared mineral analyzer (PIMA[™]) analyses of core samples was undertaken by PetraScience Consultants, Inc. in 1999 (Robitaille and Thompson, 1999) and is referred to in Jaramillo (2008). They identified advanced argillic alteration. PIMA[™] analyses of





43 samples of core were completed by Genex, Peru in 2013 (Zambrano, 2013) and identified advanced argillic, intermediate argillic and phyllic alteration. Regulus has these latter data.

Regulus conducted hyperspectral scanning of legacy and 2017-2018 drill core using Corescan[™] technology provided by Corescan Pty Ltd. of Perth, Western Australia. Corescan installed a mobile scanning laboratory at Regulus' Cajamarca core warehouse. Hyperspectral scanning provides mineral identification, composition and abundance. The boxes of cut core were scanned after geological logging was completed.

Data were couriered to Perth for processing and interpretation. Results were posted by Corescan on their secure website. The following products were provided:

- High resolution core photography
- Mineral abundance maps (images) showing mineral occurrence and assemblage
- Mineral composition maps (images) for certain minerals such as chlorite and white mica, showing variations in mineral chemistry
- Semi-quantitative numerical abundance and mineral composition logs in CSV • format. These data were imported into the Regulus database for use in plotting and modelling software
- Integration of the mineral abundance maps with the core logs and assays.

A total of 36,255 m of core in 75 holes has been scanned, consisting of all of the legacy core within the Regulus concessions and all of the 2017-2018 core including parts of some CMC core holes. Legacy RC chips were scanned in their chip trays for an additional 3.722 m in 28 holes.

Regulus completed 1,000 TerraSpec[™] analyses of legacy core in 2016 to compare with the preliminary Corescan[™] data.

9.7 **Exploration Potential**

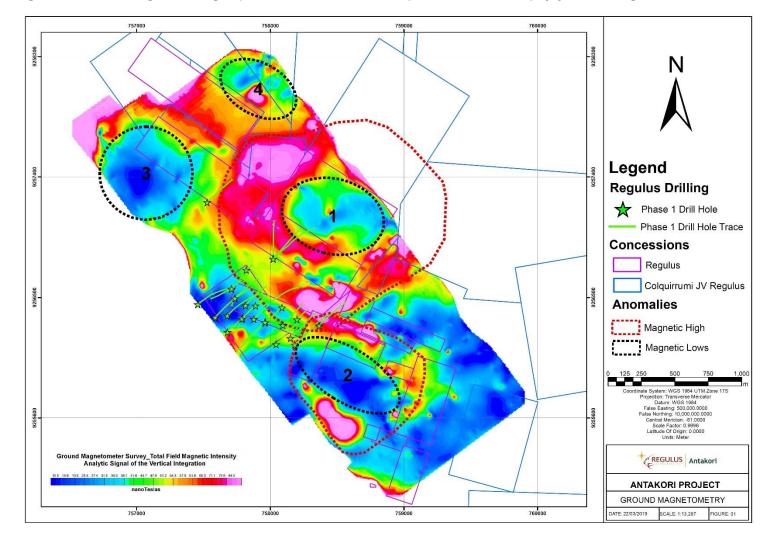
The 2017–2018 drill program has demonstrated that the copper–gold mineralization is open on the north and northeast sides of the AntaKori concessions and into the Colquirrumi concessions. These areas are coincident with circular highs with low centers on a plot of the total field magnetic intensity (TMI) analytical signal of the vertical integration (ASVI) (Figure 9-1).







NI 43-101 Technical Report





Note: Phase 1 drilling = 2017–2018 drilling.





These magnetic anomalies are interpreted as possibly representing multiple porphyryskarn centers with magnetic-destructive phyllic alteration of porphyry stocks surrounded by magnetite-bearing skarn, thus demonstrating considerable exploration potential.

9.8 Comments on Section 9

In the QP's opinion:

- The exploration programs completed to date are appropriate to the style of the deposit
- Geophysical interpretations indicate the potential for additional porphyry–skarn targets, and these target areas warrant investigation.





10.0 DRILLING

10.1 Introduction

Legacy diamond drilling (core) was performed by Northern Peru Mining & Smelting Corporation, Cerro de Pasco and Kennecott. There are no assays, assay certificates, drill core or other information for the pre-1997 holes, and they are not included in the database.

Between 1997 and 2008 El Misti and Sinchao Metals drilled 22 RC holes (3,274.5 m) and 48 core holes (14,679.7 m). These are referred to in this Report as legacy drill programs and the data generated as legacy data.

Regulus completed a core program in 2017–2018. The program consisted of 29 holes (AK-17-001 to AK-18-027), including two holes that were lost during drilling and redrilled, for a total of 22,140.89 m. The hole lengths varied from 433.75 m to 1,421.40 m, with an average length of 801.76 m (excluding the two lost holes).

A summary of drilling known to have been performed at the AntaKori Project is shown in Table 10-1. The table also includes parts of four holes (1,031.02 m) drilled by CMC on Regulus concessions.

A plan showing all holes is given in Figure 10-1.

10.2 Drill Methods

10.2.1 Legacy

The 1997–1998 drill program used RC and conventional wireline core drilling. The 2007–2008 drill program was conventional wireline core drilling. Core diameters for the 1998 core program were HQ (63.5 mm core diameter) and NQ (47.6 mm). An HQ3 (61.1 mm) split-tube sampling system was used for six drill holes. Core diameters used for the 2007–2008 program were PQ (85.0 mm), HQ and NQ.

Drill contractors, where known, included Andes Drilling, Major Drilling, and Bradley Brothers. Rig types included Foremost Prospector 750 (buggy), Maxidrill, and Boyles BBS 56 (skid-mounted).





Year	Company		No. of Holes	Total Length (m)
1923	Northern Peru Mining & Smelting Corp.		unknown	unknown
1964	Cerro de Pasco		4	359.70
1970	Kennecott		2	unknown
1997	El Misti	RC	15	2,098.00
1998	El Misti	RC	7	1,176.50
1998	El Misti	Core	10	5,176.25
2007–2008	Sinchao Metals		38	9,503.41
2017–2018	2018 Regulus		29	22,140.89
2017–2018	СМС		4	1,031.15
Total			109	41,485.90

Table	10-1:	Drill	Summary	Table
-------	-------	-------	---------	-------

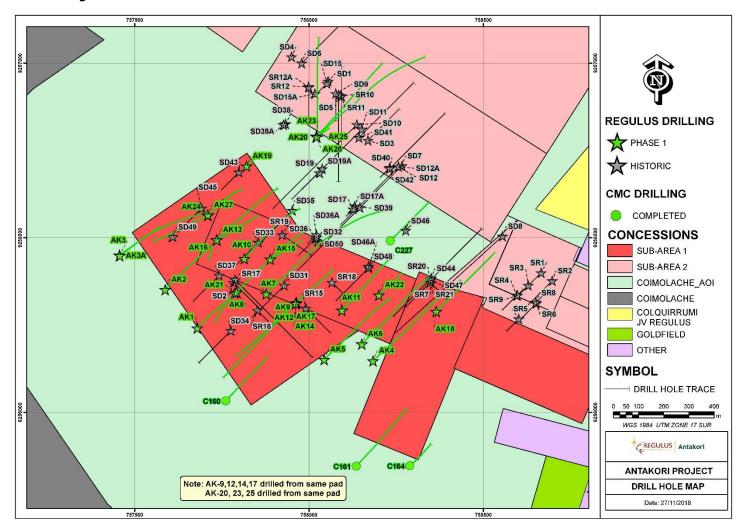
Note: CMC drilling is that portion of those drill holes that passed through Regulus' concessions.





NI 43-101 Technical Report

Figure 10-1: Drill Collar Location Plan







10.2.2 Regulus

Regulus drilling in 2017–2018 was conventional wireline core drilling at PQ, HQ and NQ sizes. Drill contractors and rig types included:

- Explomin: Sandvik DE 710 (truck)
- Geotec: Christensen CS 3001 (truck)
- Intercore SAC: Cortech CSD 1800 (tracked)
- Geodrill: GEO 3000 (truck).

10.3 Logging Procedures

10.3.1 Legacy

In the 1998 RC drill program, the chips were logged in a field office using a binocular microscope. The same procedure is assumed to have been used for the 1997 program. The drill logs were not preserved in either paper or digital format. The drill chip trays are archived at the Regulus warehouse in Cajamarca.

Core was logged on site at a logging facility during the 1998 program, and in a warehouse in Cajamarca during the 2007–2008 drill program. The drill logs were not preserved in either paper or digital format, except for scanned copies of the hand-written logs of four drill holes (SDH-003, 005, 006, 010) in earlier reports. The core is archived at the Regulus warehouse in Cajamarca.

Regulus relogged all of the legacy core at a warehouse in Cajamarca in 2015–2016. Logs were recorded on paper log sheets and were subsequently scanned and digitized in Excel[™]. A new lithological model was interpreted by hand on cross-sections, long-sections and level plans, and was subsequently digitized and imported into Leapfrog[™] modelling software.

10.3.2 Regulus

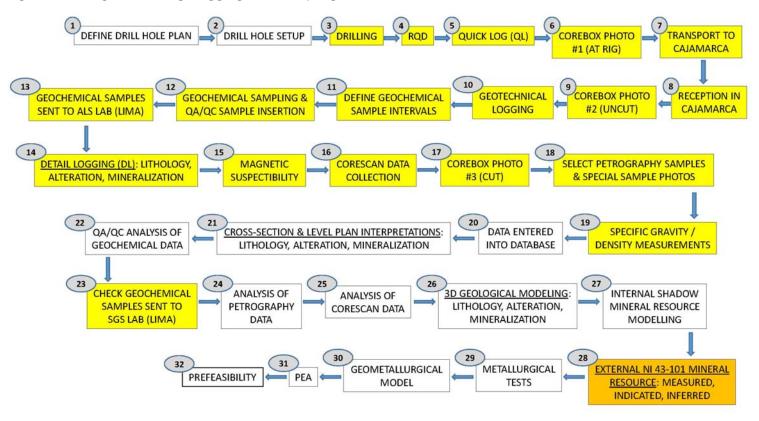
The Regulus protocol flow sheet for drilling, logging and sampling is shown in Figure 10-2. There are written protocols for each of the steps highlighted in yellow.





NI 43-101 Technical Report

Figure 10-2: Regulus Drilling, Logging, and Sampling Protocol Flowsheet



Note: Figure courtesy Regulus, 2019. Orange box shows the current Project status. Boxes to the left of the orange box are potential work programs and have not been undertaken. Steps 1 through 30 are iterative as the results of each drill campaign are processed and interpreted.



Drilling is monitored by a Regulus controller at each rig who is contracted from a local service company. There is one controller per shift per rig. They also measure core recovery and rock quality designation (RQD, using the method of Deere, 1967) on the core trough before the core is boxed, and then puts the core in corrugated plastic core boxes, and marks up the boxes. A Regulus geologist also measures RQD in the boxes and makes a quick log by hand every morning which is scanned and emailed to management and the database manager.

Photographs are taken of each box and are sent on a camera memory card daily to the database manager, as the files are too big to send by email. Core boxes are kept at the drill platform and transported daily with a shipping list by a Regulus vehicle and driver to the Regulus core shack in Cajamarca.

On arrival of the core boxes in Cajamarca, the boxes are checked against the shipping list, then cleaned and the labelling revised if necessary. Boxes of whole core are then photographed. A geotechnical log is made next and the following parameters are recorded, in addition to recovery and RQD recorded at the drill rig: degree of weathering, hardness, number of fractures (joint frequency), degree of breakage, and joint condition. From these, the rock mass rating (RMR, 1976) and rock quality are calculated using the classification of Bieniawski (1976). The geotechnical logging is performed on tablet computers using spreadsheets designed by Regulus. The tablets are connected directly by Wi-Fi internet to the database on the server.

Sample intervals are then defined, and the core is cut and sampled. The detailed geological log is made on cut core. Tablet computers connected by Wi-Fi internet to the database are used for geological logging. Logging spreadsheets designed by Regulus are used for data entry. The geological logs record lithology, contact, bedding and/or structures, detailed description of breccias (clasts, matrix, texture), up to five types of alteration (each with up to four minerals with intensity, texture and assemblage), up to five stages of mineralization (each with up to four minerals with intensity, texture and assemblage), and veins and veinlets (with type, angle, width, minerals and texture).

Magnetic susceptibility measurements are made by a technical assistant.

After logging, the entire cut core is scanned using a Corescan[™] short wave infra-red (SWIR) scanner. All of the legacy core that is within the Regulus concessions was scanned.





Core boxes with cut core are then photographed again. Following this, "special" core photographs are taken. These special photographs record specific examples of crosscutting relationships between lithologies, alteration, mineralization, and veins, and document specific textures. Petrographic samples are selected. Finally, samples are selected for density determination.

The core boxes are stored in racks under a roof at the Regulus warehouse in Cajamarca.

10.4 Recovery

10.4.1 Legacy

No recovery information exists for the legacy drill programs.

10.4.2 Regulus

All drill holes experienced bad ground due to broken and disaggregated rock, and a number of rods and casing were lost.

Regulus logged recovery at the drill rig when the core was discharged from the core barrel to the core trough, before being boxed. The average recovery for the program was 95.3% and the average RQD was 36.4%. Recovery was similar for all core sizes.

10.5 Collar Surveys

10.5.1 Legacy

There is low confidence in the coordinates of the legacy drill holes.

There is no documentation of the 1996–1997 drill collar surveys. The collars of the core holes drilled in the 2007–2008 program were surveyed after drilling by Geomecanica S.A., a Peruvian surveying company. The survey method is not recorded.

The historical drill platforms and roads were not restored. The collars were marked by drill steel but not by monuments, and some are still visible.

The legacy drill collars that could be located were re-surveyed by Kaolyn Ingenieros SAC (Kaolyn) in 2013. The original coordinates were used for the collars which could not be found. Unfortunately, the report does not specify which collars were surveyed.





A plot of the legacy drill collar coordinates on recent, high-resolution satellite images shows that some collars do not lie on areas of disturbance of drill pads or roads, suggesting that there are errors in some of the coordinates.

10.5.2 Regulus

Regulus drill collars were surveyed by CMC mine surveyors at the set-up and finish of drilling using a Trimble Total Station instrument to measure the coordinates, azimuth and inclination of the drill collar, and a survey certificate was given to Regulus. No monuments were erected to mark the drill collars as the platforms were restored by CMC shortly after completion of drilling by infill, re-contouring and re-vegetation.

10.6 Downhole Surveys

10.6.1 Legacy

Legacy RC and core holes do not have any downhole survey data for azimuth and inclination. Acid tests for inclination were performed in the 2007–2008 core program (holes DDH-011 to 050; Jaramillo, 2008), but the results no longer exist. Therefore, there is uncertainty in the location of the drill hole traces.

In order to partially address this issue, Regulus created an average downhole deviation template for each 50 m of depth, based on all of the 2017–2018 downhole survey data. This average deviation template was then applied to the legacy drill holes, in combination with geological features that are well controlled by nearby Regulus holes. Most of Regulus' 2017–2018 drill holes between 0–500 m depth experienced limited downhole deviation; hence most of the legacy drill holes, being less than 500 m deep, were interpreted to likely also have limited downhole deviation.

10.6.2 Regulus

Regulus completed downhole surveys of all 2017–2018 holes using a wireline GyroTracer Directional[™] 45 mm north-seeking gyro tool. Readings are taken every 5 m both going down into the hole and coming back up out of the hole. The latter readings are used for plotting. A gyro tool is required to avoid erroneous readings in zones with magnetite.

Plots were constructed of the deviation of the azimuth and inclination (dip). These showed that there is a general tendency for the azimuth to deviate to the right (positive deviation) due to the drill torque, with some exceptions, while the inclination shows a tendency to steepen.





10.7 Sample Length/True Thickness

Skarn deposits tend to be stratiform in that they preferentially follow favorable stratigraphic intervals, but they can be quite irregular in shape. For that reason, it is uncommon for a drill intercept to provide a true thickness and multiple drill holes are required to define the actual shape of the mineralized body.

Drill holes are designed to intersect the mineralization in as perpendicular a manner as possible; reported mineralized intercepts are typically longer than the true thickness of the mineralization. Drill holes that orthogonally intersect the mineralized skarn will tend to show true widths. Drill holes that obliquely intersect the mineralized skarn will show mineralized lengths that are slightly longer than true widths.

The term "true thickness" is not generally applicable to porphyry-style deposits as the entire rock mass is potentially mineralized and there is often no preferred orientation to the mineralization. In areas that display porphyry-style mineralization, in general, most drill holes intersect mineralized zones at an angle, and the drill hole intercept widths reported for those drill holes are typically greater than the true widths of the mineralization at the drill intercept point.

10.8 Summary of Drill Intercepts

Table 10-2 provides examples of drill intercepts in the various deposit areas. These examples include drill holes with low-grade intercepts, with high-grade intercepts and with higher-grade intercepts within lower-grade widths. Figure 7-5 and Figure 7-6 provide examples of drill sections showing the relationship of drill information to the interpreted geology.

10.9 Drilling Since Database Close-Out Date

Wood compared the results of the latest drilling (drill holes AK-18-28 and AK-18-29) available as at 2 April, 2019, to the block model. Although the newer drilling within the resource model will change the grades locally, overall the new drilling should have a minimal effect on the average grade of the model. AK-18-029 was a step out drill hole and was not within the current Indicated or Inferred Mineral Resource so was not reviewed.







Table 10-2:	Example	Drill	Intercept Table	
-------------	---------	-------	-----------------	--

Drill Hole ID	Easting	Northing	Elevation (m)	Total Depth (m)	Azimuth (°)	Inclination (°)	Intercept From (m)	Intercept To (m)	Drilled Width (m)	Cu (%)	Au (g/t)	Ag (g/t)
AK-17-001							137.7	184.4	46.7	0.64	0.13	3.1
including							177	184.4	7.4	1.52	0.24	7.3
and							250	433.9	183.9	1.54	1.05	11.9
including	757679.6	9256242	3945.9	540.9	44.7	-70.6	289.9	400.62	110.72	2.34	1.63	17.9
including							361.5	384.4	22.9	3.2	6.09	49.9
including							361.5	369.45	7.95	6.93	3.34	48.9
including							369.45	384.4	14.95	1.22	7.56	50.3
AK-18-008			3895.3	872.57	43.7 -70.9	-70.9	83.8	521.15	437.35	0.45	0.18	4.9
including							215.9	296.9	81	1.03	0.26	6.67
which includes	757702 4	0256245					256	286.4	30.4	1.87	0.36	12.8
	757792.4	9256345					595.1	832.7	237.6	0.38	0.14	2.7
							83.8	521.15	437.35	0.45	0.18	4.9
							215.9	296.9	81	1.03	0.26	6.7
AK-18-014							4.7	718.69	713.99	0.68	0.38	7.6
including							331	718.69	387.69	0.99	0.51	10.6
which includes	757964.3	9256315	3878.9	740.45	228.3	-70.8	391.5	417.7	26.2	0.62	1.75	21.9
and							481.9	612.75	130.85	1.74	0.65	15.7
and							684	708.3	24.3	1.61	0.23	6.1
AK-18-016	757725 4 000	0056404	2000.4				107.3	243.9	136.6	2.5	1.62	10.6
including	757735.1	9256494	3898.4	768.59	225.4	-85.1	160.4	234.85	74.45	4.22	2.81	15.6





Drill Hole ID	Easting	Northing	Elevation (m)	Total Depth (m)	Azimuth (°)	Inclination (°)	Intercept From (m)	Intercept To (m)	Drilled Width (m)	Cu (%)	Au (g/t)	Ag (g/t)
which includes							223.7	234.85	11.15	8.74	5.17	51.9
which includes							232.7	234.85	2.15	24.49	16.65	161.6
							280.28	335.2	54.92	0.28	0.18	7.8
							400.25	432.9	32.65	0.3	0.13	4.3
							495.15	768.59	273.44	0.34	0.19	3
AK-18-017							7	134.35	127.35	0.23	0.25	2.9
including							67	87.4	20.4	0.48	0.36	3.8
							199.2	482.7	283.5	0.26	0.16	3.1
including							352.8	386.37	33.57	0.59	0.32	6.4
	757962	9256314	3878.9	996.51	45.3	-85.8	535.96	646.25	110.29	0.28	0.13	1.9
	151902	9230314	5070.5	990.51	45.5	-03.0	665.5	697.95	32.45	0.25	0.1	2.5
							741.6	843.8	102.2	0.48	0.13	3.2
including							818	841.8	23.8	0.9	0.17	8.1
							868.2	940	71.8	0.41	0.1	1.6
							993.2	996.51	3.31	0.62	0.05	4.7
AK-18-018							39.85	53.49	13.64	0.48	0.32	24.1
							243.2	255.7	12.5	0.33	0.19	6.3
		0256200	2020 5	916 40	45.1	69.6	268	297.3	29.3	0.44	0.14	4.9
	- 758365.1 9256290 3830.5 816.49	9230290	5050.5	010.49	43.1	5.1 -68.6	339.9	359.4	19.5	0.47	0.19	11.4
					470.7	487.5	16.8	0.23	0.23	8.1		
							509.01	566.78	57.77	0.19	0.17	31.9





Drill Hole ID	Easting	Northing	Elevation (m)	Total Depth (m)	Azimuth (°)	Inclination (°)	Intercept From (m)	Intercept To (m)	Drilled Width (m)	Cu (%)	Au (g/t)	Ag (g/t)
including							547	561	14	0.46	0.29	39.3
							584.5	587.5	3	1.22	1.46	345.5
							662	674	12	0.29	0.24	18.2





10.10 Comments on Section 10

In the opinion of the QP, the quantity and quality of the lithological, collar and downhole survey data collected in the exploration program completed at the AntaKori deposit by Regulus are sufficient to support Mineral Resource estimation:

- Core and RC logging completed by Regulus meets industry standards for exploration on porphyry–skarn deposits
- Collar surveys were performed using industry-standard instrumentation
- Down-hole surveys performed were performed using industry-standard instrumentation
- Recovery data from core drill programs are acceptable.

Legacy data can be used in estimation with caution as to the confidence classification that can be assigned:

- Regulus has re-logged legacy core; the re-logging program has provided information that is acceptable to support estimation
- There is low confidence in the collar coordinates of the legacy drill holes
- There is uncertainty is the location of the drill hole traces. Regulus compared traces from 2017–2018 program with the legacy drill hole traces, and concluded that Regulus drill holes between 0–500 m depth experienced limited downhole deviation; hence most of the legacy drill holes, being less than 500 m deep, were interpreted to likely also have limited downhole deviation

Drill hole orientations are generally appropriate for the mineralization style. Drill trace orientations are shown in the example cross-sections included in Section 7, and can be seen to appropriately test the mineralization.

Drill hole intercepts included in Table 10-2 demonstrate that sampling is representative of the gold grades in the deposit area, reflecting areas of higher and lower grades;

No other factors were identified with the data collection from the drill programs that could significantly affect Mineral Resource estimation.





11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 Sampling Methods

11.1.1 Legacy

The methods for sampling legacy core and RC cuttings were not described by Jaramillo (2006a, 2006b, 2008) or Wilson (2012c). The following basic descriptions are based on assay sheets and core and chip observations.

RC chip samples were collected on 2 m intervals but the procedure is not described (Jaramillo, 2006a, 2006b, 2008). A sample was collected for geological logging and was stored in plastic chip trays.

Core from the 1997–1998 drill program was split with a diamond core saw and sampled on 2 m intervals with one half bagged and the other half returned to the core box.

Core from the 2007–2008 drill program was sampled at variable intervals to 2 m and priority appears to have been given to geology. The core was split with a diamond core saw; one half was bagged for analysis and the other half was returned to the core box. For PQ core, a quarter-core sample was cut for analysis.

11.1.2 Regulus

Core sample intervals are based on geology with sample limits placed at significant contacts of lithology, alteration and mineralization. The maximum sample length is 2 m and the minimum are 0.5 m. Sample intervals are selected and marked by a geologist, with a cut-line along the axis to ensure a representative distribution of mineralization. The samples are then cut by diamond core saw, the right half is placed in a plastic sample bag, and the left half is returned to the core box for reference. Where core recovery is low (<50%), the sample intervals are between the depth markers and may be >2 m, as it is not possible to estimate depths between depth markers in this case. Intervals with no recovery between depth markers are not included in the adjacent samples: a sample stops at the no recovery interval and a new sample starts after it.

11.2 Metallurgical Sampling

The criteria used to select the legacy metallurgical samples is not known. Sample 6469 is labelled as skarn and is a composite from two holes. Sample 6527 is labelled as porphyry but is actually breccia (BXb), and is from one drill hole. The samples were quarter-core. The documentation and representativity of these two samples were questioned by Regulus and therefore the results may not represent the metallurgical response of the deposit as a whole.





Regulus has not collected any metallurgical samples to date.

11.3 Density Determinations

11.3.1 Legacy

Density data were collected in the field for four core drill holes in the 1997–1998 program (SDH-001, 004, 006 and 007). The method is described by Jaramillo (2006a, 2006b; 2008). For drill holes SDH-001, 004 and 006 measurements were taken every 4 m whereas for drill hole SDH-007 they were taken every 2 m. A piece of split core about 10 cm long was taken from the core box and weighed on an electric balance. This piece of core was then placed in a graduated cylinder containing a pre-measured amount of water, and the volume of the core was measured. The density of the sample was calculated by dividing the original weight by the volume. Regulus does not have these data.

For the 2007–2008 Sinchao Metals core drill program, density was determined by the paraffin wax-coat method for all geochemical samples by CIMM Peru S.A. in Lima (method GE-GR01). The results are recorded on the assay certificates. Regulus rebuilt the legacy assay database in 2015, and recovered the Excel files for all of the job numbers (n=249) and 89 of the corresponding secure PDF certificates from the Certimin laboratory (ex-CIMM).

The laboratory selected a piece of core from the sample bag and the depths of the density samples are recorded by the sample interval rather than a specific depth. There are 5,831 density data in the database. There are also 37 samples coded as "-1" for no recovery, 31 samples coded "-2" for not sampled, and 759 samples coded "-3" for drill holes that were not sampled or were assayed but not analyzed for density (DDH-015A, 019, parts of 021, 022, parts of 023, 024, 025, 026, 038A, 046). In addition, there are nine spuriously low values (0.04–0.08) which were removed (DDH-026), and 20 blank values which should be code -3 (DDH-036A).

11.3.2 Regulus

Regulus selected samples for density after logging. A geologist selected one sample at about 10 m intervals and on either side of lithological contacts. The samples were of half core of 5–15 cm length. A sample form was completed and a ticket with consecutive numbers was stapled in the core box. The samples were stored in core boxes for shipping.

Samples were collected from the Regulus core shack by a representative of SGS Peru. The samples were analyzed for density by the paraffin was method (method GQ_GEP) at SGS Peru in their laboratory in Cajamarca. The sample was weighed dry, then covered in a paraffin wax-coat and weighed again. The sample was then weighed while suspended in water, and the density calculated using a formula. The results





were sent to Regulus in a CSV file and in a secure PDF certificate. A total of 2,233 density measurements were made. On completion, the waxed samples were returned to the Regulus warehouse in Cajamarca, and were returned to their core boxes.

Data quality control (QC) identified two samples in which the weight with paraffin was less than the weight without paraffin. Investigation by SGS found that the balance had not been zeroed before taking the dry weight. The error was corrected, and the laboratory implemented protocols to avoid this type of error.

For quality control, 120 samples (5.4%) were selected based on lithology. They were de-waxed by SGS and sent to the ALS Minerals laboratory in Lima for analysis by paraffin wax method (code OA-GRA8a). The sample was weighed dry, then covered in a paraffin wax coat and weighed again. The sample was then weighed while suspended in water, and the density calculated by formula. The results were sent to Regulus in a CSV file and in a secure PDF certificate. The results show a good correlation with an average density of 2.72 g/cm³ for SGS and 2.68 g/cm³ for ALS.

A comparison of the statistics for the complete Sinchao Metals and Regulus datasets is given in Table 11-1, and shows very similar statistics. This is a good check on density given that the two datasets were performed on different core at different laboratories in different years.

A statistical analysis of the Regulus density measurements by lithology is given in Table 11-2 and shows adequate coverage of the principal lithologies.

The paraffin-wax coated density method is suitable for core with low porosity and permeability. This method is not suitable for samples with high porosity and permeability such as vuggy silica, some oxide zone volcanic rocks with leached open space veins, and some vuggy breccias. These types of samples require measurement of density on whole core cylinders by the caliper method. Neither method is suitable for disaggregated core with higher porosity and permeability and lower density, such as the FX1 zones: in the sample selection for the paraffin-wax method, the most competent piece of core was selected in disaggregated zones.

11.4 Analytical and Test Laboratories

11.4.1 Legacy

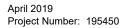
RC chip samples and core samples from the 1997–1998 drill program were prepared by Bondar Clegg (part of ALS Minerals since 2001), Lima, and the pulps were shipped to Vancouver for analysis. It is not known if Bondar Clegg had any ISO or other accreditations in 1997–1998.





Table 11-1: Density Data Summary

	Sinchao Metals	Regulus
	2007–2008	2017–2018
n	5,831	2,233
Min	1.44	1.71
Max	4.93	4.68
Average	2.69	2.67
Median	2.61	2.68
StDev	0.38	0.30
Laboratory	CIMM	SGS Peru





Lithology	n	Ave	Median	St Dev	Min	Max
All Data	2233	2.67	2.68	0.30	1.71	4.68
AGV	3	2.54	2.50	0.15	2.41	2.70
Вха	250	2.54	2.51	0.26	1.90	4.25
BXb, BXbc, BXbm	300	2.81	2.78	0.18	2.19	3.59
BXc	44	2.38	2.38	0.38	1.77	3.30
Вхе	28	2.58	2.52	0.35	2.18	3.05
BXf	6	2.25	2.25	0.11	2.08	2.39
BXg	65	2.73	2.68	0.31	2.19	3.94
CFHf, CFHm	21	2.74	2.69	0.24	2.36	3.24
CFMb, CFMm	16	2.79	2.85	0.28	2.23	3.17
CFSb, CFSm	310	2.63	2.58	0.37	1.71	3.86
CFSms	11	3.24	3.04	0.69	2.15	4.23
CV1m	208	2.60	2.58	0.21	1.72	4.43
CV1t (all)	318	2.64	2.62	0.19	2.11	3.44
CV2b, CV2h	114	2.65	2.68	0.11	2.26	2.81
CV2m	89	2.34	2.37	0.14	1.72	2.54
CVep, CVepb	20	3.79	3.95	0.52	2.75	4.68
CVsi	4	2.75	2.74	0.24	2.53	3.01
FFA, FFQ, FFSms	139	2.75	2.73	0.16	2.39	4.27
FLT	2	2.42	2.42	0.46	2.09	2.74
IFA, IFHf, IFHm, IFQ, IFSm, IFSms, IFSv	140	2.85	2.86	0.24	1.77	3.62
OB, Obfc	8	2.33	2.32	0.14	2.11	2.52
Ohs	2	3.86	3.86	0.01	3.85	3.86
Pf, Pfbx	135	2.75	2.76	0.22	2.24	4.28

Table 11-2: Regulus Density Determinations by Lithology (in g/cm³)





Core samples from the 2007–2008 drill program were prepared and analyzed at CIMM Peru S.A. (now part of Certimin). Certimin was ISO9001 certified in 2000.

Analyses of Unsampled Core

A number of legacy drill holes had intervals of core in non- or weakly mineralized zones that were not sampled. These intervals were sampled by Regulus in 2017 and prepared and analyzed using the Regulus protocols described in Section 11.4.2 in order to have complete analyses for all the legacy drill holes.

Portable XRF Analyses

Regulus used a portable Olympus X-ray fluorescence (PXRF) instrument for multielement analyses of core and RC chips from certain legacy drill holes from the 1997–1998 drill program at the Cajamarca warehouse in 2018. These drill holes were originally analyzed for gold, silver, copper, lead and zinc but no other elements by inductively-coupled plasma (ICP). In particular, they lack data for arsenic and antimony, which are important elements in the project for metallurgical reasons. No pulps or coarse sample rejects exist for the holes in question either so that it was not possible to perform new analyses by ICP.

For core, a geologist selected five evenly-spaced points per original sample interval for PXRF analysis in order to try and achieve sample homogeneity. A sample from each point was analyzed by the PXRF in its work stand. The data were recorded automatically on a laptop computer, and were later averaged to give a single analysis per original sample. For RC chips, three readings were taken of each sample in the chip-tray and the sample was mixed between each reading. The data were later averaged to give a single analysis for each sample. A total of 2,087 samples were analyzed by PXRF in four core holes and 15 RC holes.

11.4.2 Regulus

The primary laboratory is ALS Minerals in El Callao, Lima and the secondary laboratory is SGS Peru in El Callao, Lima. ALS Minerals is ISO 9001:2008 certified and ISO 17025:2005 (exp. 2022_02_28) accredited by the Standards Council of Canada for the procedures used for this work. SGS Peru is ISO 9001 and ISO 17025 accredited.

11.5 Sample Preparation and Analysis

11.5.1 Legacy

The methods used for sample preparation and analysis are listed in Table 11-3. The descriptions are incomplete. For the 1997–1998 drill programs, the methods listed are described for core: it is assumed, but not stated, that the same methods were used for RC samples.





Program	Laboratory	Method	Code	Procedure
	Bondar Clegg, Lima	Preparation	CRU-31, PUL-31	Entire sample crushed to 70% <2 mm. Riffle split 250 g and grind in a ring mill to 85% <75 μ m (200 Tyler mesh). Drill holes SDH-001 to 007.
	Bondar Clegg, Lima	Blaster preparation	Blaster 2	Entire sample crushed to -150 mesh, sieved, the coarse and fine fractions assayed separately and the result recombined. Holes SDH-002, 003, 005, 007 re-assayed by this method. Drill holes SDH-008, 009, 010 only assayed by this method.
El Misti Gold 1997–1998	Bondar Clegg, Vancouver	Au	Au30FA, Au50FA	30 g fire assay with atomic absorption spectroscopy (AAS) finish; 50 g fire assay with AAS finish.
	Bondar Clegg, Vancouver	Au	AuGrav	Overlimits by fire assay (size not stated) with gravimetric finish.
	Bondar Clegg, Vancouver	Multielement		Dissolution by hot aqua regia. Analysis of 34 elements by ICP-atomic emission spectroscopy (AES).
	Bondar Clegg, Vancouver	Ag, Cu, Pb, Zn		Overlimits. Acid (type not stated) digestion and analysis by AAS for ore grades.
	Bondar Clegg, Vancouver	In, Ge		Not known
	CIMM, Lima	Preparation		Crush to -1/4 inch. Split sample and grind to 95% <150 mesh.
	CIMM, Lima	Au	EFAA02	30 g fire assay with AAS finish.
Sinchao	CIMM, Lima	Au	EFGR02	Overlimits by fire assay (size not stated) with gravimetric finish.
Metals 2007-08	CIMM, Lima	Ag, Cu, Pb, Zn	AAMA01	Multi-acid digestion and analysis by AAS for geochemistry grades.
	CIMM, Lima	Ag, Cu, Pb, Zn	AAMA02	Overlimits. Multi-acid digestion and analysis by AAS for ore grades.
	CIMM, Lima	Multielement	ICP-AR02	Dissolution by aqua regia and analysis of 35 elements by ICP.





11.5.2 Regulus

The sample preparation and analytical methods used by Regulus for core samples are listed in Table 11-4. Detection limits are summarized in Table 11-5.

PXRF analyses used an Olympus XRF. For drill core, five readings were made at approximately 40 cm intervals per sample and were averaged to give the sample value. For RC chips, three readings were made of each sample in the chip tray, with the chips stirred with a plastic spatula between each reading. The three readings were averaged to give the sample value.

11.6 Quality Assurance and Quality Control

11.6.1 Legacy

Quality assurance and quality control (QA/QC) program for legacy drilling are described in the technical reports by Jaramillo (2006a, 2006b, 2008) and Wilson (2012). However, there are no original QA/QC data from those programs in Regulus' possession; thus, the legacy results cannot be verified.

The QA/QC program for the 1997–1998 drilling is described in the technical report by Jaramillo (2006a, 2006b, 2008) and is summarized in Table 11-6. The program was supervised by A.C.A. Howe Associates, Vancouver, who had a geologist on site and consisted of core duplicates, pulp duplicates and sludge samples from the drill and core saw. Standards and blanks were used for the final hole only. There is no discussion of the results in the report. QA/QC was not performed for the RC drill programs.

The QA/QC for the 2007–2008 core program is described in the technical report by Jaramillo (2008) and is summarized in Table 11-7. The types of blank and duplicate samples are not specified. The technical report by Wilson (2012c) reproduced the text and figures of Jaramillo (2008).

11.6.2 Regulus

Introduction

The 2017–2018 QA/QC program is summarized in Table 11-8. A total of 14 QA/QC samples per 100 samples were inserted (14%). There are 10% check and replicate samples.





NI 43-101 Technical Report

Table 11-4: Sample Preparation and Analytical Methods, 2017–2018

Program	Laboratory	Method	Code	Procedure	Lower Detection Limit	Upper Detection Limits
	ALS Minerals	Preparation	PREP-31	Crush entire sample to >70% <2 mm, riffle split 250 g and pulverize to >85% <75 μm in a ring mill.	N/A	N/A
	ALS Minerals	Au	Au-AA23	30 g fire assay with AAS finish.	Au 0.05 ppm	Au 10 ppm
Primary Laboratory	ALS Minerals	Au over-limit	Au-GRA21	30 g fire assay with gravimetric finish.	Au 0.05 ppm	Au 10,000 ppm
	ALS Minerals	Multielement	ME-ICP61	Four-acid digestion and analysis by ICP-AES for 33 elements.	See Table 11-5	See Table 11-5
	ALS Minerals	Ag, As, Cu, Mo, Pb, Zn over-limits	ME-OG62	Four-acid digestion and analysis by ICP-AES for ore grades.	See Table 11-5	See Table 11-5
	ALS Minerals	Sb over-limits	Sb-AA08	Digestion in hydrochloric acid, potassium chlorate and tartaric acid, and analysis by AAS.		
	SGS Peru	Preparation	PRP93	Crush entire sample to >90% <10 mesh (2.00 mm), riffle split 250 g and pulverize to >95% <140 mesh (105 μ m) in a ring mill.	N/A	N/A
	SGS Peru	Au	FAA313	30 g fire assay with AAS finish.	Au 5 ppb	Au 10,000 ppb
Secondary	SGS Peru	Au over-limit	FAG303	30 g fire assay with gravimetric finish.	Au 0.01 ppm	Au 100 ppm
Laboratory	SGS Peru	Multielement	ICP40B	Four-acid digestion with analysis by ICP-AES for 35 elements.	See Table 11-5	See Table 11-5
-	SGS Peru	Ag, As, Cu, Pb, Mo, Sb, Zn over- limits	AAS41B	Four-acid digestion with analysis by AAS for ore grades.	See Table 11-5	See Table 11-5

April 2019 Project Number: 195450







Element	Units	LDL	UDL	Element	Units	LDL	UDL
ALS ME-M	S61						
Ag	ppm	0.01	100	Na	%	0.01	10
Al	%	0.01	50	Nb	ppm	0.1	500
As	ppm	0.2	10000	Ni	ppm	0.2	10,000
Ва	ppm	10	1000	Р	ppm	10	10,000
Ве	ppm	0.05	1000	Pb	ppm	0.5	10,000
Bi	ppm	0.01	10000	Rb	ppm	0.1	10,000
Ca	%	0.01	50	Re	ppm	0.002	50
Cd	ppm	0.02	1000	S	%	0.01	10
Ce	ppm	0.01	500	Sb	ppm	0.05	10,000
Со	ppm	0.1	10000	Sc	ppm	0.1	10,000
Cr	ppm	1	10000	Se	ppm	1	1,000
Cs	ppm	0.05	500	Sn	ppm	0.2	500
Cu	ppm	0.2	10,000	Sr	ppm	0.2	10,000
Fe	%	0.01	50.00	Та	ppm	0.05	100
Ga	ppm	0.05	10,000	Te	ppm	0.05	500
Ge	ppm	0.05	500	Th	ppm	0.01	10,000
Hf	ppm	0.1	500	Ті	%	0.005	10
In	ppm	0.005	500	TI	ppm	0.02	10,000
К	%	0.01	10.00	U	ppm	0.1	10,000
La	ppm	0.5	10,000	V	ppm	1	10,000
Li	ppm	0.2	10,000	W	ppm	0.1	10,000
Mg	%	0.01	50.00	Υ	ppm	0.1	500
Mn	ppm	5	100,000	Zn	ppm	2	10,000
Мо	ppm	0.05	10,000	Zr	ppm	0.5	500
ALS OG62							
Ag	ppm	1	1,500	Mg	%	0.01	50
As	%	0.001	30	Mn	%	0.01	60
Bi	%	0.001	30	Мо	%	0.001	10

Table 11-5: Detection Limits





Element	Units	LDL	UDL	Element	Units	LDL	UDL
Со	%	0.0005	30	Pb	%	0.001	20
Cr	%	0.002	30	S	%	0.01	50
Cu	%	0.001	50	Zn	%	0.001	30
Fe	%	0.01	100				
SGS ICP40)B						
Ag	ppm	2	100	Мо	ppm	1	10,000
AI	%	0.01	15	Na	%	0.01	15
As	ppm	3	10,000	Ni	ppm	1	10,000
Ва	ppm	1	10000	Р	%	0.01	15
Ве	ppm	1	2500	Pb	ppm	2	10,000
Bi	ppm	5	10,000	S	%	0.01	5
Ca	%	0.01	15	Sb	ppm	5	10,000
Cd	ppm	1	10,000	Sc	ppm	1	10,000
Со	ppm	1	10,000	Sn	ppm	10	10,000
Cr	ppm	1	10,000	Sr	ppm	1	10,000
Cu	ppm	1	10,000	Ті	%	0.01	15
Fe	%	0.01	15	V	ppm	2	10,000
К	%	0.01	15	W	ppm	10	10,000
La	ppm	1	10,000	Y	ppm	1	10,000
Li	ppm	1	10,000	Zn	ppm	1	10,000
Mg	%	0.01	15	Zr	ppm	1	10,000
Mn	ppm	2	10,000				
SGS AAS4	1B						
Ag	g/t	10	4,000	Fe	%	0.01	20
As	%	0.01	20	Mn	%	0.01	20
Ві	%	0.01	20	Мо	%	0.01	20
Ca	%	0.01	20	Ni	%	0.01	20
Cd	%	0.01	20	Pb	%	0.01	20
Со	%	0.01	20	Sb	%	0.01	20
Cr	%	0.01	20	V	%	0.01	20





Element	Units	LDL	UDL	Element	Units	LDL	UDL
Cu	%	0.002	20	Zn	%	0.01	20

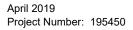
Note: LDL – lower detection limit; UDL – upper detection limit)

Table 11-6: 1997–1998 QA/QC Program

Sample type	Frequency	No.	Notes
Core duplicate	1 in 20 samples	126	
Core duplicate		20	Taken by an independent consultant for preparation and analysis at a different laboratory
Core duplicate		20	Taken by El Misti for preparation and analysis at an independent laboratory.
Sludge samples drill	Every 50 m	83	
Sludge samples core saw	Every 6 boxes	220	
Pulp duplicates	not specified	228	
Blanks (type not specified)	not specified	6	SDH-010 only
Standards (type not specified)	not specified	9	SDH-010 only

Table 11-7: 2007–2008 QA/QC Program

Sample type	Frequency	No.	Notes
Standards	not specified	315	6 standards from CDN Resource Laboratories, Vancouver
Blanks (type not specified)	not specified	310	
Duplicates (type not specified)	not specified	305	









Sample type	Frequency	No.	Notes		
Standards	5 per 100	808	8 standards from OREAS		
Coarse blank	3 per 100	488	Plus 1 at start of hole		
Field duplicates	2 per 100	331			
Coarse (preparation) duplicates	2 per 100	315			
Fine (pulp) duplicates	2 per 100	303			
Check samples (reject)	1 in 20	795			
Replicate samples (pulp)	1 in 20	820			

Table 11-8: 2017–2018 QA/QC Program

The position and type of QA/QC samples were selected by the geologist when the sample intervals were selected and marked on the core, and they were given sample numbers and entered on the sample sheet. Standard and blank samples were physically inserted into numbered sample bags in the sample storage and dispatch room when the core samples were ordered and collated, and all the samples bags were marked, ticketed, sealed, weighed and prepared for dispatch.

For the coarse and fine duplicates, an empty bag with the sample ticket was prepared and sampling instructions were sent to the laboratory.

Standards

Regulus used nine standards supplied by Ore Research & Exploration (OREAS) of Victoria, Australia with a range of gold and copper values. All except one standard have estimated best values (BVs) for multiple elements. QC data were evaluated for all elements, with particular attention paid to the elements of economic interest both of potentially paying metals (Au, Ag, Cu, Mo, Pb, Zn) and those liable for potential smelter penalties (As, Sb).

To evaluate laboratory control, standards data were plotted and evaluated relative to performance gates defined by the mean value of the data for a particular element in a particular standard and 1–3 standard deviations (SD) from that mean.

The gates were:

- Samples between ±2 SD pass
- A single sample between ±2SD and ±3SD is a warning





- Two or more consecutive samples between ±2SD and ±3SD are a fail
- Any sample above ±3SD is a fail.

The protocol for failures was firstly to investigate whether it was due to a Regulus sample error, which occurred a few times (wrong standard identifier on the sample sheet). If this was obviously not the cause of the failure, then the laboratory was asked to investigate and if necessary, re-analyze the block of samples on either side of the failure. The laboratory would send an incident report and a revised certificate.

An evaluation of bias was conducted. Bias of $\pm 5\%$ is generally acceptable to the mining industry. Bias of $\pm 10\%$ is considered marginal, but acceptable by some practitioners. Beyond $\pm 10\%$, bias is not acceptable and must be explained. Wood noted:

- Gold bias ranges from -3.8% to 1.5% which indicates very acceptable accuracy
- Two standards have Ag BVs at or near the silver LDL of 0.5 ppm and exhibit a bias of -9 to -10% which is not acceptable, but explainable because of the proximity to the LDL. The other standards biased between -4.5% and 2.6% indicating acceptable accuracy in the range of interest
- Copper bias ranges from -2.0% to 0.7% which is very acceptable accuracy
- Molybdenum accuracy estimates are hampered by four standards with molybdenum near the LLD of 1 ppm (2.20 to 6.05 ppm). Accuracy in this grade range is reasonable, but imprecise because of proximity to the LDL. The other five standards exhibit biases of -3.1% to 0.7% which is acceptable. Bias should be monitored because all but one of the useful standards exhibit a negative bias which may indicate a small negative bias at the laboratory
- Lead bias is acceptable (-4.8% to 3.7%) with the exception of one standard. That standard has a BV of 24.3 ppm. Two standards are in the same grade range and exhibit bias of -4.8 to -6% which calls the BV of the failing standard into question
- Zinc ranges from -1.1 to 1.3% and is thus acceptable
- Arsenic bias ranges from 2.6% to 7.0% which indicates reasonable accuracy, but the fact that all of the bias is positive is troublesome. Bias should be equally distributed positively and negatively, or the laboratory is biased. In this case, the laboratory is showing a positive bias of almost 5% which must be carefully monitored
- Four standards have antimony concentrations near the LDL which likely contributes to the very high bias estimates for those standards. Standards with >5 ppm Sb





exhibit bias between -1.1 and 8.9% which is generally acceptable; however, the mean bias is distinctly positive which is troublesome. The laboratory must be monitored carefully to ensure that the bias does not increase.

A review of the coefficient of variation in percent (CV (%)) was completed. An industry standard is for the CV (%) to be < \pm 5% for well-behaved standards. CVs > \pm 5% typically indicate that a standard is not adequately homogenous or that there is significant variation in the analytical procedure used for analysis. The results indicate:

- Gold is acceptable for all standards. OREAS 151b returned a CV of 5.1% which is barely outside the limit and all of the other results are well within the limit
- Silver shows that four of the eight standards exceed the limit. The other four are well within the limit. Two of the failures are <10% which some practitioners consider questionable but likely acceptable and in need of improvement. Two of the results are outside 10%. Silver is a particularly difficult element to analyze and these results are not atypical
- Copper results are all within the limits indicating that standards are well behaved, and that the analytical procedure was working properly
- Molybdenum shows four of eight failures. The four that did not fail are well within the limits. The failures are for standards containing <7x LDL molybdenum and the result is the result of proximity to LDL
- Lead has four passing standards and four failures. In all cases, the failures are due to proximity to LDL
- Zinc results are all within the limits
- Arsenic results are mixed. Three results are within the limits. Two are less than 10%, and three are significantly outside the limit. The three that are significantly outside the limit contain 4 x LDL or less arsenic which largely explains the precision problem.

Blank Samples

A coarse quartz blank was inserted at the start of each hole, and at the rate of three per 100 samples of which two are placed at fixed numbers and one at the discretion of the geologist after a high-grade sample. The blank was purchased from Inversiones Esdel E.I.R.L. of Lima (code HT-19) which sells it for use as a water filter, for construction and in the chemical industry.







Analyses of the blanks were plotted with reference lines at 3*LLD and 5*LLD. Copper and zinc have concentrations above their LLD of 1 ppm and 2 ppm respectively. For these, the mean and standard deviation of the data were calculated, after removing +3SD outliers, and reference lines defined at +2SD and +3SD. Wood notes that even with this treatment, copper and zinc have little value as a blank. Gold and silver are acceptable.

The protocol for failures was to investigate whether it was due to a Regulus data recordation error. If no error was discovered, the laboratory was then asked to investigate and if necessary, re-analyze the block of samples around the failing. The laboratory would send an incident report and a revised certificate.

The coarse blank shows the following:

- Gold has only two failures and three warnings, indicating that contamination is very unlikely
- Silver shows no failures or warnings indicating that there is no detectable silver contamination
- Copper results show a significant number of >2 SD results. It is not clear from the data whether the scatter is due to contamination or to the fact that the blank is known to contain measurable copper which precludes any conclusions from these data
- Most of the molybdenum data are at or <LLD (1 ppm) indicating that contamination is unlikely. There is a short period of time when a possibly significant number of samples fell in the warning area. Those should be investigated
- Lead data show five samples above the 5 x LDL limit. Those data are 0.0026 ppm or less which strongly suggests that lead contamination is not a problem
- Zinc results show significant variability with a number of results > 5 x LDL which is the result of the blank containing measurable concentrations of zinc. No conclusions can be drawn from these data
- Arsenic data are largely < 5 ppm with three results >5 x LDL and about 14 points >3 x LDL and <5 x LDL. These data suggest that contamination is not a problem for arsenic
- Antimony data show that most of the data contain <5 ppm Sb with no warnings or failures.





Duplicate Samples

Three types of duplicate samples were collected:

- Field duplicates were prepared at the rate of two per 100 samples by halving the half-core archive sample to give two quarter-core samples. One-quarter was then sent for assay. These samples are collected to quantify and monitor geological variance in the deposit. The smaller, quarter-core sample introduces significant additional variability when compared with normal half-core samples but were used so that some core was archived
- Coarse (preparation) duplicates were prepared at the rate of two each per 100 samples from the nominal 2 mm crusher product. Coarse duplicates are used to quantify and monitor the reduction in variance due to crushing. Coarse duplicates are second splits of crusher product with the sequential sample number
- Fine (pulp) duplicates were prepared at the rate of two each per 100 samples from the pulverized material. Fine duplicates are used to quantify and monitor variance reductions due to pulverization. Fine duplicates were prepared by taking a second sample pulp from the pulverized sample and attaching a sequential sample number.

Wood evaluated the analytical precision using a relative error (RE) analysis. Precision levels that are considered acceptable are:

- Field duplicates: 30% RE
- Coarse duplicates: 20% RE
- Pulp duplicates: 20% RE.

A failure occurs when precision is outside these limits. Wood considers results with <10% failures to be acceptable.

Field duplicates fail for copper, lead, zinc and arsenic, and nearly fail for gold. These results are likely due to the samples used, i.e., quarter versus half core which almost always produces ambiguous results. Coarse and pulp duplicate data are within the limits and exhibit acceptable precision.

Check and Replicate Analyses

Check samples were selected by Regulus personnel at the Cajamarca warehouse on return of the sample coarse rejects from ALS Minerals. The secondary laboratory was instructed to prepare a new pulp from the coarse reject. The number of check samples





taken is one in 20 (5%) of all samples, excluding standard and blank samples. New standard and blank samples were added as QA/QC for the secondary laboratory and were plotted separately.

The check sample analyses were plotted against the original analyses on a scatter plot. The check samples received to date show straight line plots equal to unity with low variability and, importantly, low bias for the elements of interest (Au, Ag, As, Cu, Mo, Pb, Sb, Zn). There is some scatter at high values for gold, silver and molybdenum and Mo. This indicates good reproducibility and adequate sample preparation, and good accuracy of the primary laboratory.

Wood used a reduced major axis (RMA) regression to estimate bias. In Wood's view, a bias of less than 5% is acceptable. Bias >5% \leq 10% is questionable but sometimes acceptable. The results indicate that bias between the primary laboratory (ALS Minerals) and the check laboratory (SGS Peru) is acceptable for all elements except molybdenum. Molybdenum is slightly outside the limit and is considered, for this work, to be acceptable.

Replicate samples are analyses made at the secondary laboratory on the same pulp as the original sample. The samples were selected and extracted by Regulus personnel at the Cajamarca warehouse on return of the sample pulps from ALS Minerals. The number of replicate samples taken is one in 20 (5%) of all samples, excluding standard and blank samples. New standard and blank samples were added as QA/QC for the secondary laboratory and were plotted separately.

The check sample analyses are plotted against the original analyses on a scatter plot. The check samples received to date show straight line plots equal to unity with no bias and low variability for the elements of interest (Au, Ag, As, Cu, Mo, Pb, Sb, Zn). This indicates good reproducibility and adequate sample preparation, and good accuracy of the primary laboratory.

Portable XRF

Regulus performed 94 PXRF analyses of core that had previously been analyzed by ICP or AAS. Those results showed high variability and strong bias to the ICP analyses for arsenic, antimony and copper. Copper data were plotted for all the PXRF core analyses and RC chip samples (n = 2,087) completed as part of the exploration program. AAS or ICP data are available for all of these samples. The data shows a poor correlation and a small bias of about 4%.





Two standards, OREAS 601 (307.0 ppm As) and OREAS 603 (1,801.0 ppm As), were sampled 50 times by PXRF to assess accuracy and precision relative to standard after the bias in the check samples was discovered. The analyses are single readings with no averaging and the sample was stirred between each reading.

OREAS 601 shows reasonable accuracy for As and Sb, with variation of -2.6% and -5.6% respectively compared to the recommended value, poor accuracy for copper, and very poor accuracy for silver. The precision as estimated by the CV, is good for arsenic and copper, poor for silver, and very poor for antimony.

OREAS 603 shows similar trends. It has reasonable accuracy for arsenic and moderate accuracy for silver, copper, and antimony, with good precision for arsenic, and lower precision for silver, copper, and antimony.

The PXRF analyses show poor to moderate accuracy and rather poor precision for arsenic, silver, copper, and antimony as evidenced by the very high scatter. The reason for the very strong bias relative to the ICP-AAS results of the check samples is not known, but largely precludes use of the PXRF until the reason is well understood.

11.6.3 Conclusions

April 2019

Standard results indicate that accuracy for the metals of economic interest is within the industry-standard of ±5% for gold, silver, copper, molybdenum, lead, and zinc. There is a slight high bias for arsenic and antimony, and a slight low bias for molybdenum.

The coarse blank shows no evidence of contamination for gold, silver, molybdenum, antimony, arsenic, and lead. Data for copper and zinc are equivocal because both of those elements are present in detectable concentrations in the supposedly blank sample.

The field (core) duplicates show significant failures due to the sampling method. The coarse and fine duplicates show acceptable precision.

The check and replicate samples show generally low bias between the primary and secondary laboratories.

PXRF data should be used with extreme caution until the sources of scatter in the data and bias relative to the much more precise ICP and AAS data are determined.





11.7 Databases

11.7.1 Database Description

The AntaKori database is set up on a SQL platform housed on a server in the Regulus office at the Cajamarca warehouse, which is synchronized with another server in the Regulus office in Lima. The database is under the responsibility of a Database Manager. There is a detailed written protocol for data entry and management.

11.7.2 Reconstruction of Legacy Assay Database

The legacy assay database was reconstructed by Regulus because the database received from SPL was disordered with inconsistent rules.

El Misti used the Bondar Clegg laboratory which no longer exists, so it was not possible to contact the laboratory to request signed certificates of analysis. The assay reports exist as CSV files but there are no signed Bondar Clegg certificates of analysis in the database.

Sinchao Metals used the CIMM laboratory in Lima which is now part of Certimin who were contacted to search their database for the results which were emailed directly to the Database Manager. They recovered the CSV files for all of the job numbers (n=249) and 89 of the corresponding secure PDF certificates. This enabled the analyses to be validated.

Sample lengths and samples with missing codes were revised.

The new database was built in SQL with:

- Consistent formats for number of decimal places
- Conversion of results <LDL to 0.5 LDL
- Consistent codes for no recovery, no sample and no analysis
- A consistent order of priority in the case of two or more analyses for the same element
- A certificate number for every analysis.

11.8 Sample Security

The protocols for legacy sample security are not known.





Regulus has a rigorous sample security protocol that depends on chain of custody procedures, locked facilities with controlled access, and secure sample transport to the analytical laboratory.

11.9 Comments on Section 11

The QP concludes that:

- Sampling methods are adequate
- Density determinations use appropriate methodology
- The analytical laboratories used for legacy assaying were well known in the industry and produced generally reliable data
- The analytical laboratories currently in use are properly accredited and widely used in the industry
- Sample preparation has utilized procedures and protocols that are/were standard in the industry and has been adequate throughout the history of the project
- Sample analysis uses procedures that are standard in the industry
- QA-QC is adequate and indicates that the analytical results are adequately accurate, precise, and contamination free to support Mineral Resource estimation and mine planning
- Database construction, maintenance, and security is adequate
- Sample security is exemplary.





12.0 DATA VERIFICATION

12.1 Internal Data Verification

Between 2015 and 2018, Regulus re-logged all of the legacy core rather than rely on legacy logging. Lithology, alteration, mineralization, veining and structures were logged. The condition of the core was also logged. Because the core has been handled several times and stored in less than ideal conditions, this is a somewhat artificial parameter that includes aspects of RQD, recovery, and core cutting and sampling and is intended to provide a measure of confidence in the logging. All of the core that is within the Regulus concessions was also logged with the Corescan[™] system.

To the extent possible, analytical methods for legacy data were verified and legacy data were compared to original documents; however, for holes drilled prior to 2017, no original data were available for collar or downhole surveys. Collars for 47 holes (67% of legacy collars) were re-surveyed by Kaolyn who located 47 drill holes and verified the location of those drill holes (Kaolyn, 2013). When compared to the database, a small number of minor discrepancies were discovered and corrected. Assay data for legacy drilling were compared to original documents by Regulus and Wood and no significant discrepancies were identified.

12.2 External Verification

Wood verified, to the extent possible, the Regulus, CMC, and legacy data by comparing data in the database to original documents.

Documentation of the QA/QC data for the 1997–1998 drilling program was not available. Documentation of the QA/QC data for 2007–2008 program was not available, but the QC data (duplicate samples, standard reference materials, and blank samples) from the laboratory were available and evaluated. QA/QC for 2017–2018 consisted of insertion of SRMs, duplicate samples, blank samples, and submission of check assays to an umpire laboratory. Those data were continuously evaluated during the drilling program and possible problems identified and evaluated. Insertion rates were consistent with industry best practices. As a result of these evaluations, Wood considers the data to be reliable as follows:

• 1997–1998 data are not supported by documented QA/QC and are thus able to support only Inferred Mineral Resources





- 2007–2008 data are supported by documented QA/QC data from the laboratory only. Wood considers these data adequate to support Indicated Mineral Resources and preliminary mine planning
- 2017–2018 data are supported by documented QA/QC data and are adequate to support Measured Mineral Resources and mine planning.

Collar surveys, downhole surveys, assays, and lithology data for Regulus holes drilled in 2017 to 2018 were validated in the database by comparison of the database values to original documents. No discrepancies were discovered. The PSAD56 to WGS84 datum conversion was reviewed and no discrepancies were noted. The downhole survey database was searched for deviations of 3° or more in 10 m of depth in; no anomalous records were detected.

Wood compared the 1997–1998 and 2007–2008 Bondar Clegg assay certificates and the 2007–2008 CIMM–Certimin assay certificates to the database and found no discrepancies.

Density data from 2007–2008 and 2017–2018 were compared to original documents, and a very small number of discrepancies in the 2007–2008 data were identified and corrected.

CMC data provided to Regulus were audited before they were used. Approximately 6% of the collar data were audited. Downhole survey reports for 35% of the 2016–2018 drill program were audited. Data from prior drill programs were not available. Assay certificates for 1% of the legacy (pre-2016) data were available and 75% of the 2016–2018 data. Density data (178 determinations) were compared to original documents. No discrepancies were identified in any of the audited data.

Regulus did not receive any raw QA/QC data from CMC. Wood reviewed QC reports for May, June, and July 2018 which indicate that the 2018 drill program was supported by adequate QC. Without documented QC data, any block that relies on these drill holes for more than 50% of the data used to estimate a block was limited to Inferred Mineral Resources.

This Report relies on information provided by CMC, not to be publicly disclosed, that has been reviewed by Wood and found to be valid and appropriate for use in the support of the resource estimate.





12.3 Comments on Section 12

The process of data verification for the Project has been performed by Regulus personnel and external consultancies contracted by Regulus.

Based on the laboratory inspections, internal data verification procedures and checks by independent third parties from 1997–2018, most data are considered acceptable to support Mineral Resource and Mineral Reserve estimation. Those data that are problematical are dealt with in the Mineral Resource classification.

The QP, who relies upon this work, has reviewed the reports and is of the opinion that the data verification programs completed on the data collected from the Project are consistent with industry best practices and that the database is sufficiently error-free to support the geological interpretations and Mineral Resource estimation.

The QP personally verified the QA/QC results for the 1997–1998, 2007–2008, and 2017–2018 drill programs and reviewed the results of audits performed by Wood personnel under the supervision of the QP. The QP also verified all aspects of Regulus' current data collection process by observing data collection procedures in the field and core logging facility. The QP also performed detailed reviews and verifications of the geological models used to support Mineral Resource estimation.



13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Introduction

The AntaKori deposit is considered to be primarily a copper–gold–silver skarn deposit characterised by multiple overprinting hydrothermal systems. Arsenic is reported in many of the geochemical assay intervals and visual logging suggests this is mainly associated with copper arsenide mineralization (enargite and tennantite). Chalcopyrite and chalcocite/covellite are also observed. It is noted that although Antakori as an exploration target is considered a skarn deposit, the Mineral Resource estimate contains a relatively high proportion of volcanic-hosted mineralization, which seems to predominantly contain copper arsenide mineralization.

As exploration continues, there is potential that additional mineralization will be identified in skarns, which based on data available to date, tend to have lower arsenic values.

13.2 Metallurgical Testwork

SLP contracted Plenge Laboratory in Lima during 2013 to conduct preliminary metallurgical testwork that included X-ray mineralogical characterization, mineral liberation analysis, and batch and locked cycle flotation scoping testwork on two composite samples of mineralization. The samples weighted 125 kg and 100 kg and were labelled as skarn and porphyry respectively. The representativeness of the material tested to the mineralization included in the Mineral Resource estimate is uncertain.

The samples contained arsenic concentrations of about 240 ppm in the sample identified as skarn and 300 ppm in the sample identified as porphyry, and the skarn sample contained higher zinc and lead concentrations.

Various batch flotation tests were conducted to establish collector and grind conditions for locked cycle flotation testing primary grind P80 of 74 μ m and regrinding rougher concentrate to 30 μ m for cleaning. The results of the locked cycle testing are shown in Table 13-1.





			Assays							Distribution		
Product	Percent	RC	Ag (g/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	As (%)	Ag (%)	Au (%)	Cu (%)
Concentrate Cu	1.56	64.06	445	7.26	24.5	2.36	6.52	24.2	0.32	49.9	34.8	82.2
Tailings	98.4		7	0.22	0.08	0.06	0.21	10.1		50.1	65.2	17.8
Calculated head	100		14	0.33	0.47	0.10	0.31	10.3		100	100	100
Concentrate Cu	1.26	79.32	128	5.66	27.6	0.34	1.06	24.4	1.50	53.6	51.8	90.7
Tailings	98.7		1	0.07	0.04	0.01	0.02	5.71		46.4	48.2	9.3
Calculated head	100		3	0.14	0.38	0.01	0.03	6.00		100	100	100

Table 13-1: Locked Cycle Test Results

Mineralogy indicated the dominant mineral in both concentrate products to be chalcopyrite (about 70 wt%), but the sample identified as porphyry contained relatively more (10.2 wt%) combined copper arsenides (enargite, tennantite) than the sample identified as skarn (2.4 wt%). The skarn concentrate sample contained more combined sphalerite and galena minerals (8.8 wt %) relative to the porphyry sample (2.4 wt%). The concentrate mineralogy reported is consistent with the arsenic, zinc and lead grades reported in the relevant concentrates.

The average Cu:As ratio based on the head assay of both samples was 12.7 and 19.6 indicating a relatively low copper arsenide content as confirmed by the concentrate mineralogy (pure enargite Cu:As ratio is 2.6). The average Cu:As ratios of the Indicated and Inferred Mineral Resources in Section 14 are about 5.6 and 7.9 respectively, indicating a relatively higher content of arsenic to copper than the Plenge test work material.

In the sample identified as skarn, arsenic recovery to the concentrate was also notably lower than the sample identified as porphyry. This suggests the presence of arsenic mineralization in the skarn sample that is not directly associated with copper, and that has a lower flotation response. Arsenopyrite could be expected to be behave in this way.





13.3 Recovery Estimates

Despite uncertainty in the representativeness of the mineralization used in the Mineral Resource estimate, the sample metallurgical responses are reasonably consistent with other similar copper skarn, porphyry-hosted operations in the industry.

An average copper recovery of 85% and copper concentrate grade of 28% Cu was selected as the basis of the cut-off grade used in Mineral Resource estimation. Due to the higher presence of arsenic primarily associated with copper arsenide in the mineralization, a recovery of 80% As was assumed to the concentrate. The resulting concentrate product would be arsenic-bearing and contain an average of about 3.5% As.

This could not generally be considered as directly saleable to most smelters. Most of the concentrate would have to be marketed through specialist base metal concentrate traders for blending, third-party refineries and/or treated by secondary downstream processing on-site. Concentrate treatment costs to determine the cut-off grade were selected to cover a range of potential copper-gold-silver arsenic bearing concentrate marketing or processing scenarios. Additional testwork has been recommended to identify a preferred baseline concentrator flowsheet configuration and design parameters for the Project, assess mineralization and geometallurgical variability especially associated with arsenic, and assess concentrate marketing and/or secondary processing scenarios.

13.4 Metallurgical Variability

There is no information as to how representative the two samples used in the preliminary metallurgical test work are of the metallurgical variability of the deposit as a whole.

As exploration continues, there is potential that additional mineralization will be identified in skarns, which based on information available to date, tend to have lower arsenic values. The main objective of geometallurgy in support of future studies will be to conduct an initial preliminary assessment of the main inferred geometallurgical units to assist in defining preliminary flowsheet requirements, recoveries and costs, as well as likely product characteristics, particularly arsenic content, to support ore routing, concentrate strategies and economic analysis. This will also provide the basis for a further development of the geometallurgical ore type matrix (units) and a preliminary evaluation of variability.





13.5 Deleterious Elements

Arsenic is identified as the principal deleterious element in the concentrate which will require consideration in either marketing the concentrate product or assessing further downstream secondary processing requirements. It is possible zinc reporting to concentrate associated with skarn mineralization could at times exceed penalty limits. Both these elements should be assessed in future geometallurgical programs recommended and general concentrate product mineralogical analysis and chemical characterization conducted to check for other deleterious elements.

13.6 Comments on Section 13

Exploration activities are likely to identify additional copper mineralization, and these efforts could result in changes to the style of copper mineralization to that currently identified, the scale of the Project, and the arsenic issues identified.

Additional geometallurgical testwork is required to provide a good understanding of the deposit and help identify a preferred processing configuration, concentrate marketing strategy or other conversion schemes.





14.0 MINERAL RESOURCE ESTIMATES

14.1 Introduction

The database supporting estimation was closed as of 21 December, 2018. The Mineral Resources were classified using the 2014 CIM Definition Standards and have an effective date of 22 February 2019.

The Mineral Resource block model was constructed over the entire Project area. A parent block size of $10 \text{ m} \times 10 \text{ m} \times 10 \text{ m}$ and a sub-cell block size of $5 \text{ m} \times 5 \text{ m} \times 5 \text{ m}$ were chosen to appropriately model the volumes of the lithological domains. Blocks were not created above the surface topography.

14.2 Geological Models

Leapfrog[™] was used to construct geological, alteration, mineralization and weathering 3D-models. As described in Section 7, this deposit hosts multiple overprinting mineralization and alteration events, each of which has been modelled separately respecting the controls and genesis of each event in chronological order according to field observations from drill core.

The lithology model forms the base for the creation of the subsequent alteration and mineralization models. All model surfaces were constructed based on drill data supported by both sectional and level plan interpretation reconciled in 3D by the core logging geologists in conjunction with the Leapfrog[™] modelling geologist. The final models were exported as wireframes and imported to Vulcan[™]. The exploratory data analysis (EDA) and grade estimation were primarily based on lithology. Sub-domains based on alteration and weathering were used in some units to help control the grade estimation.

Lithological domains and descriptions are shown in Table 14-1. The lithology wireframes imported from Leapfrog[™] were used to assign codes to blocks in the model "lith" field. A section showing the assigned codes is provided in Figure 14-1.

Alteration states as modeled in Leapfrog[™] were assigned to blocks. Similarly, weathering codes based on Leapfrog[™] models were assigned to blocks. These codes were used to help constrain grade estimation in some units.





Table 14-1: Lithology Domains

Unit	Description
ОВ	Overburden
DIO	San Miguel Diorite
CV2m	Massive felsic plagioclase + biotite ± quartz. Post-mineralization subvolcanic intrusion
CV2h	Homogeneous feldspar + hornblende + biotite ± quartz porphyry. Subvolcanic intrusion
BXag	Milled matrix breccia (matrix>>clasts, mud- to sand-sized rock flour)
CVep	Massive enargite ± pyrite (+ quartz, white minerals)
CV1t	Tuffaceous volcanic rock (undifferentiated)
CV1m	Homogenous, fine-grained plagioclase ± quartz phyric. Subvolcanic intrusion
BXb	Clast-supported breccia, matrix cemented by milled rock, hydrothermal minerals or is vuggy. Cuts Chulec Formation, Inca Formation, and Farrat Formation
CF	Chulec Formation (medium to dark grey, poorly fossiliferous micritic limestones and marls with intercalated thin shale beds)
IF	Inca Formation (intercalated sandstones, shales, calcareous siltstones and silty limestones)
FF	Farrat Formation (quartzites, siltstones and shales)





NI 43-101 Technical Report

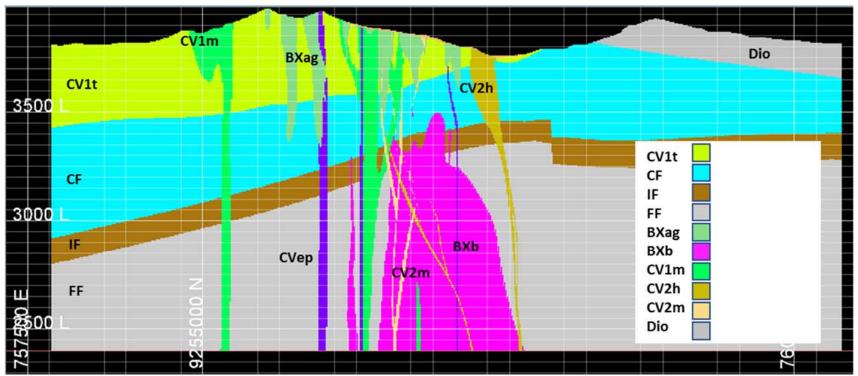


Figure 14-1: Lithology Block Codes – Representative Section (looking northwest)

Note: Figure prepared by Wood, 2019.



14.3 Exploratory Data Analysis

EDA was used to understand and summarize the data within the geological domains used to support the Mineral Resource estimate. The grades reported in the tabulations are copper, gold, and silver. Arsenic is included with these elements due to its impact as a deleterious element. Estimates were also completed for lead, zinc, and molybdenum for potential future use in exploration, metallurgical and environmental studies, but were not included as economic elements in the mineral resource statement.

The following techniques (mostly graphical) were used, not just as a collection of statistical techniques, but as a unified method to reveal the underlying structure of the data. Data investigated included assays, capped composites, and uncapped composites.

- Univariate histogram/probability and box plots for copper, gold, silver, arsenic, molybdenum, lead, and zinc by geological domain were used to graphically display the summary statistics
- Experimental correlograms were calculated to visualize and model spatial continuity
- Bivariate scatter plots were generated to show the relationships between different variables.

In general, the coefficients of variation (CVs) for all domains are relatively high (>1.0). For copper, the CVs range from approximately 1–3.6, for gold, silver, and arsenic, CVs range from 1.5–7. The higher copper and gold grades are typically observed in the BXag, BXb, CF and CVep units, although the CVep is a small domain in terms of tonnage. It appears multiple populations exist within some domains. Wood attempted to differentiate between these populations using indicator models.

Contact plots were constructed to assess the nature of the mineralization at the contacts between the geological units (domains). If the contact is soft, then it would be reasonable to share composites between the adjacent units during resource estimation. If the contact is hard, then no composite data would be shared between the units during resource estimation. In general, hard contacts were applied between most units. A limited sharing of composites between the CV1t and CF units was permitted as were between the CF and IF units due to the transitional nature of mineralization along these contacts. Wood recommends that the contact analysis be updated as additional drilling is completed and the geological model is refined.





14.4 Density Assignment

Regulus supplied density determinations for 7,278 samples. These samples intervals were tagged by the same lithology wireframes as used for grade estimation. The density data ranged from 1.07–4.93 g/cm³, and were trimmed to remove anomalous values below 1.50 g/cm³.

Figure 14-2 shows a boxplot of trimmed density data categorized by lithology unit.

The higher SG within the CVep unit is due to the presence of massive to semi-massive enargite and pyrite in structures/veins. The estimation of density values to the block model is discussed in Section 14.8.

Wood noted that portions of the core were extremely broken. The intervals sampled for density tended to be in more competent rock, thus there is some risk of overstating the tonnage. Wood recommends obtaining more density samples in the less competent intervals of core.

14.5 Grade Capping/Outlier Restrictions

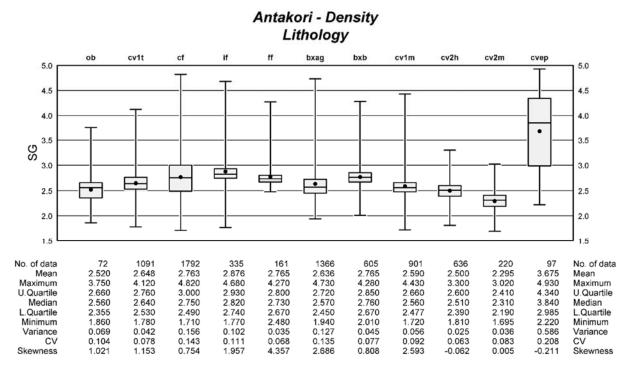
Top-cutting is required to control the influence of isolated high-grade samples in individual domains. Wood evaluated capping thresholds by reviewing the histogram and probability plots and by using a decile (Parrish) analysis. This method tabulates the amount of metal in the top decile and top percentiles of the distribution to determine if the top percentiles contain a disproportionate amount of metal. A summary of the results from these methods and the selected top-cut values in shown in Table 14-2.

The influence of high-grade samples was controlled by a combination of outlier restriction and capping applied to composites rather than capping of individual assays. Uncapped composites were allowed to estimate blocks within 20 m, beyond this distance the outlier composites were capped to the outlier threshold. Wood reviewed the amount of metal removed by capping and feels it is reasonable based on the current drill spacing. This is discussed in greater detail in Section 14.9.

The top-cutting limits should be reviewed as additional drilling is conducted and the geological units are refined or updated.



Figure 14-2: Density (Trimmed) by Domain



Note: Figure prepared by Wood, 2019.

 Table 14-2:
 Summary of Capped Grades

Domains	Cu (%)	Au (ppm)	Ag (ppm)	As (ppm)
BXag	3.25	5	75	14,000
BXb	2.8	1.75	70	3,000
CF	2.8	3	60	7,500
CV1m	2.3	1.5	55	8,000
CV1t	3.5	2	70	10,000
CV2h	1.0	1.5	65	600
CV2m	1.25	1.5	30	500
CVep	-	5	15	9,500
FF	1.25	1	35	1,250
IF	-	2	70	1,600



14.6 Composites

Assay sampling intervals are variable, with the majority being 2.0 m in length, but lengths are adjusted at lithology contacts such that sample lengths can range from 0.5–3 m.

Drill hole data were loaded into Vulcan[™] and composited to 5 m lengths to standardize data support for estimation. Composites were broken based on intersection with the geological wireframes and back-coded based on these wireframes. Edge composites shorter than 2.5 m in length were added to the previous composite to eliminate short composites.

14.7 Variography

Sage[™] software was used to create experimental correlograms for all elements using 5 m capped composites in domains with sufficient data to product reasonable correlograms.

Down-hole correlograms were used to define the nugget effect, and directional correlograms were created in multiple directions using an azimuth increment of 30° and a dip increment of 15°.

Correlograms were then modeled in the three primary directions. These directions were determined based on discussions with Regulus geologists.

14.8 Estimation/Interpolation Methods

Grade estimation was accomplished using a combination of ordinary kriging (OK) and inverse distance weighting to the second power (ID2). OK was used to estimate grades in the CV1t, CF, IF, FF, BXag, BXb, CV1m and CV2h units. Due to a lack of data, ID2 was used to estimate grades in the CV2m, CVep and OB units. Weathering codes were applied within the CV1t and BXag units to identify a small near-surface oxide domain which was estimated separately. Skarn-based wireframes were used to constrain estimates within the CF and IF units. Due to high CVs (over 2) observed in the composites, indicator models were also applied in the estimation of copper grades in the CV1t unit and to the estimation of arsenic grades in the CF unit.

Within the CV1t unit, copper composites greater than or equal to 0.23% were assigned a value of 1, and composites less than 0.23% Cu were assigned a value of 0. ID2 was used to estimate these indicators into blocks. A nearest-neighbor model (NN) was also created. Based on volumetric calibration to the NN model, an indicator threshold of 0.44



was selected as the threshold to separate the populations and bring the CV to a value closer to 1. The estimated indicator was back-tagged to composites. Copper grades in blocks below the threshold of 0.44 were estimated using composites tagged with estimated indicators below 0.44. Copper grades in blocks with estimated indicators ≥ 0.44 were estimated with composites tagged with estimated indicators greater ≥ 0.44 .

Similarly, within the CF unit, arsenic composites \geq 650 ppm were assigned a value of 1, composites <650 ppm As were assigned a value of 0. ID2 was used to estimate these indicators into blocks. A NN model was also created. Based on volumetric calibration to the NN model, an indicator threshold of 0.32 was selected as the threshold to separate the populations and bring the CV to a value closer to 1. Estimation of arsenic was accomplished using the same method described for copper.

Density values were estimated into the block model using ID2 method with two passes based on the lithology domain. Blocks that were not estimated in the second pass were assigned the mean density value for the particular lithology.

The estimation plan incorporated six passes with expanding search ellipses, outlier restriction, minimum and maximum number of composites, minimum and maximum number of holes, and maximum number of composites for a single drill hole. The large number of passes was due to the spacing of drill holes and geometry of some of the units. Most of the Indicated and Inferred blocks were estimated in the first three passes. This approach should result in a grade interpolation that honors the composite grades locally and globally. The orientations and ranges of the search ellipsoids were based on the correlograms. Any block that was un-estimated was assigned a mean grade based on the lithological domain.

An example of the copper estimation parameters for the CV1t unit is shown in Table 14-3, the other units were estimated using similar strategy.





NI 43-101 Technical Report

	Description	Pass	Estimation	Search El	lipse		Number of Samples					
Unit				Bearing	Plunge	Dip	Major Axis (m)	Semi Major Axis (m)	Minor Axis (m)	Min	Мах	Max per DH
CV1t	Oxide	1	ОК	120	0	0	20	20	20	2	20	-
CV1t	Oxide	2	ОК	120	0	0	55	100	20	5	20	3
CV1t	Oxide	3	ОК	120	0	0	110	200	40	5	20	3
CV1t	Oxide	4	ОК	120	0	0	220	400	80	5	20	3
CV1t	Oxide	5	ОК	120	0	0	440	800	160	4	20	2
CV1t	Oxide	6	ОК	120	0	0	660	1200	240	5	20	5
CV1t	Sulphide	1	ОК	120	0	0	20	20	20	2	20	-
CV1t	Sulphide	2	ОК	120	0	0	55	100	20	5	20	3
CV1t	Sulphide	3	ОК	120	0	0	110	200	40	5	20	3
CV1t	Sulphide	4	ОК	120	0	0	220	400	80	5	20	3
CV1t	Sulphide	5	ОК	120	0	0	440	800	160	4	20	2
CV1t	Sulphide	6	ОК	120	0	0	660	1200	240	5	20	5

Table 14-3: Estimation Parameters – Copper – CV1t Unit





14.9 Block Model Validation

Model validation included:

- Visual inspection: The grade estimations were reviewed in section and plan orientation, visually comparing the estimated grade with the composite grades. Locally, the estimated grades of the blocks show reasonable agreement with the supporting grades
- Global bias: Wood constructed a nearest neighbor model to assist with the resource model validation. Wood considers a model to be unbiased if the grade estimate is within ±5% (relative) of the NN grades. The biases are ±5% for Indicated blocks in primary domains. The overall global bias restricted to Indicated blocks is within ±2%.
- Swath plots: Checks for local biases were performed within the combined and individual domains by creating and reviewing swath plots. comparing grade profiles for the capped NN model, the capped OK and capped ID grade estimates restricted to Indicated blocks. The swath plots do not show areas of significant local bias in areas supported by a large number of blocks.

Metal removed as a result of capping to control the over-projection of high-grades was evaluated by comparing the NN cap and NN uncapped models restricted to Indicated blocks. Overall copper removed by capping was 4.6%, gold was 3.4%, silver and arsenic were 4.8%.

14.10 Classification of Mineral Resources

Wood has internal guidelines for the classification of Mineral Resources, such that Indicated Resources should be known within \pm 15% with 90% confidence on an annual basis, and Measured Resources should be known within \pm 15% with a 90% confidence on a quarterly basis. At this level, the drill spacing is usually close enough to permit the assumption of grade and volume (tonnes) continuity between drill holes over the production increments.

Wood bases a drill hole spacing study on geostatistical analysis incorporating the CV of the data, correlogram modeling, kriging variances and confidence intervals. To incorporate the drill spacing criteria to outline confidence categories, Wood calculated the drill spacing for each block based on the average distance to the closest three drill holes. Using the current geological model and available drill hole data, it appears that







a drill spacing of 110 m is required for Indicated Mineral Resources, and it is reasonable to assume a 200 m drill grid would be sufficient for Inferred Mineral Resources.

Wood assessed the quality of legacy and current data; blocks dominantly estimated based on legacy holes lacking sufficient confidence were downgraded from Indicated to Inferred. The classification was then smoothed to reduce or remove isolated islands of Indicated or Inferred blocks.

A plan view showing the final classification and drill hole location is shown in Figure 14-3. Only drill holes on Regulus ground are shown; however, both Regulus and CMC drill holes were used in the drill spacing and classification study. The magenta lines represent Sub-Area 1, the blue lines represent Sub-Area 2 and the yellow lines represent the Colquirrumi Earn-In Agreement area (refer to Section 4.4 and 4.5).

14.11 Reasonable Prospects of Eventual Economic Extraction

To demonstrate reasonable prospects for eventual economic extraction (Wood constructed a conceptual constraining pit shell for the AntaKori Project using Whittle[™] software, based on Indicated and Inferred mineralized material. The mineralization considered in the conceptual pit shell was limited to sulphide material; the minor amount of oxide material was treated as waste for this exercise.

The deposit was assumed to be developed as a long-life operation consisting of a conventional truck and shovel open pit mine feeding a 60,000 t/d concentrator, producing a copper-gold concentrate. Concentrate produced could be treated on-site, or sold to a third-party. The assumed processing costs are based on a sulphide concentrate being produced using flotation methods to recover copper, gold, and silver.

Input parameter assumptions are provided in Table 14-4.

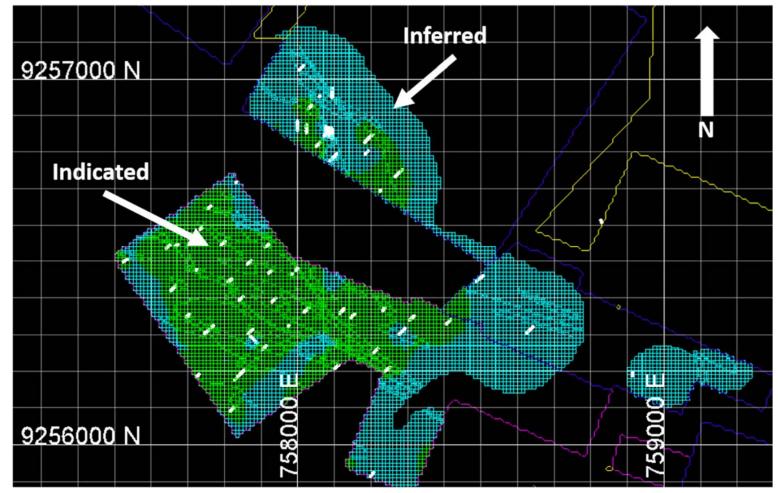




NI 43-101 Technical Report

wood.





Note: Figure prepared by Wood, 2019.



Parameter	Value	Units
Parameter	value	Units
Copper price	6,614	US\$/t
Gold price	1,400	US\$/oz
Silver price	18.00	US\$/oz
Average treatment charge Cu	300	\$/dmt conc
Copper refining charge (US\$0.25/lb)	148.81	\$/dmt conc
Gold refining charge (US\$5/oz)	1.52	\$/dmt conc
Silver refining charge (US\$0.3/oz)	2.43	\$/dmt conc
Freight and shipping	120	\$/dmt conc
Copper recovery (Rec _{Cu})	85	%
Gold recovery (Rec _{Au})	55	%
Silver recovery (Rec _{Ag})	50	%
Arsenic recovery (Rec _{As})	80	%
Overall pit slope	45	0
Mining cost	1.85	US\$/t material moved
Processing cost	7.18	US\$/t material treated
General and administrative (G&A) cost	1.00	US\$/t material treated

Table 14-4: Conceptual Pit Input Parameters

Note: For treatment charges depending on the arsenic content the following rule was used: US\$500/dmt, if As conc >5%; US\$300/dmt, if As conc >3%; US\$ 250/dmt, if As conc >0.5% and As conc <=3%; US\$100/dmt, if As conc <0.5%. In the latter case, an arsenic penalty was assumed, and included, based on: if As conc <0.5% and As conc >0.3%, US\$5/dmt each 0.1%. Dmt = dry metric tonne.





The input parameters were based on:

- Metal prices net selling cost including concentrate refining
- Bench-marked mining, processing and general and administrative (G&A) costs based on estimates and current costs for similar sized and similar types of operations in the region
- Metallurgical recoveries are based on testing benchmarks. To date, only preliminary metallurgical studies have been completed at AntaKori
- A 5% NSR royalty was applied to mineralized material from the Coimolache AOI as per the Coimolache Collaborative Agreement.

The pit shell was determined by evaluation of an NSR with NSR block cut-off = 10.03/t. The NSR of each block was calculated using the following formula:

• NSR= 45.07* Cu + 24.10 * Au + 0.30 * Ag.

The conceptual constraining pit shell was restricted to copper–gold–silver mineralization that occurs on AntaKori concessions, the Coimolache AOI and the CMC permits outside and south of the Coimolache AOI as shown in Figure 14-4.

CMC data for the CMC concessions outside the Coimolache AOI were not made available to Wood so this area was assumed to be waste material. Based upon precedent agreements and a demonstrated working relation between Regulus and CMC, an assumption is made that Regulus will be able to reach a mutually-beneficial agreement with respect to CMC concessions to the south of the Coimolache AOI similar to the existing agreement. It is anticipated that a new agreement would provide for the removal of CMC-owned material under the same terms of the current Coimolache Collaborative Agreement. The impact of not reaching such an agreement would be to reduce the stated Regulus owned resources by approximately 10% in tonnage with the grade remaining essentially the same.

The conceptual constraining pit shell reaches a depth of approximately 600 m at the deepest point. The ratio of waste to total in-pit mineralization (Regulus and CMC) at a cut-off of 0.3% CuEq is approximately 0.85. Although the conceptual pit shell captures much of the material classified with an Inferred or Indicated level of confidence, there is significant mineralized material that falls outside of the conceptual pit shell. Additional drilling will be required to potentially support estimation of Mineral Resources from this material.



NI 43-101 Technical Report

Figure 14-4: Conceptual Pit Plan View







Equivalency equations were generated for copper and gold as follows:

- Copper equivalent formula: CuEq = Cu + 0.6805561*Au + 0.008750*Ag (no use of Pb, Zn, or Mo, and no metallurgical recovery was applied to the copper equivalent formula)
- Gold equivalent formula: AuEq = Au + 1.469387*Cu + 0.012857*Ag (no use of Pb, Zn, or Mo, and no metallurgical recovery was applied to the gold equivalent formula).

A reasonable cut-off grade was determined to be 0.30% CuEq, using a combination of benchmarking of copper–arsenical concentrate, and the parameters in Table 14-4. This cut-off grade was based on a range of arsenic concentrate grades and associated penalties. At the metal prices used the break-even cut-off varied between 0.25% CuEq and 0.32% CuEq, thus a 0.3% CuEq cut-off grade was considered reasonable.

14.12 Mineral Resource Statement

The Mineral Resources were classified using the 2014 CIM Definition Standards and have an effective date of 22 February 2019. The Qualified Person for the estimated is Mr. Doug Reid, P.Eng., a Wood employee.

Sensitivity of the Indicated and Inferred Mineral Resources to various CuEq cut-off grades is shown in Table 14-5 and Table 14-6 respectively. The base case estimate is highlighted.



NI 43-101 Technical Report

CuEq Cutoff (%)	Tonnes (Mt)	CuEq (%)	AuEq (g/t)	Cu (%)	Au (g/t)	Ag (g/t)	As (ppm)	Contained CuEq (Blb)	Contained AuEq (Moz)	Contained CuEq (Blb)	Contained Au (Moz)	Contained Ag (Moz)
0.2	296	0.66	0.98	0.42	0.26	6.9	793	4.3	9.3	2.7	2.5	66
0.3	250	0.74	1.09	0.48	0.29	7.5	857	4.1	8.8	2.6	2.3	61
0.4	201	0.84	1.23	0.54	0.32	8.3	969	3.7	7.9	2.4	2.1	54
0.5	152	0.96	1.41	0.63	0.37	9.2	1,137	3.2	6.9	2.1	1.8	45
0.6	118	1.08	1.59	0.71	0.42	10.1	1,304	2.8	6.0	1.9	1.6	38
0.7	93	1.20	1.76	0.79	0.46	10.9	1,480	2.5	5.3	1.6	1.4	33
0.8	73	1.32	1.94	0.87	0.51	11.7	1,669	2.1	4.6	1.4	1.2	28
0.9	57	1.45	2.13	0.96	0.56	12.5	1,874	1.8	3.9	1.2	1.0	23
1.0	45	1.59	2.33	1.05	0.62	13.2	2,086	1.6	3.4	1.0	0.9	19

Table 14-5: Indicated Mineral Resource Statement





NI 43-101 Technical Report

CuEq Cutoff (%)	Tonnes (Mt)	CuEq (%)	AuEq (g/t)	Cu (%)	Au (g/t)	Ag (g/t)	As (ppm)	Contained CuEq (Blb)	Contained AuEq (Moz)	Contained CuEq (Blb)	Contained Au (Moz)	Contained Ag (Moz)
0.2	320	0.59	0.86	0.36	0.24	7.2	484	4.2	8.9	2.6	2.5	74
0.3	267	0.66	0.96	0.41	0.26	7.8	518	3.9	8.2	2.4	2.2	67
0.4	199	0.76	1.12	0.48	0.30	8.7	597	3.3	7.2	2.1	1.9	56
0.5	146	0.87	1.28	0.56	0.34	9.6	702	2.8	6.0	1.8	1.6	45
0.6	112	0.98	1.43	0.63	0.38	10.3	808	2.4	5.1	1.6	1.4	37
0.7	89	1.06	1.56	0.69	0.41	10.8	910	2.1	4.4	1.3	1.2	31
0.8	69	1.15	1.69	0.75	0.45	11.4	1,005	1.8	3.8	1.1	1.0	25
0.9	53	1.24	1.82	0.80	0.48	12.0	1,096	1.5	3.1	0.9	0.8	21
1.0	40	1.34	1.96	0.87	0.53	12.5	1,169	1.2	2.5	0.8	0.7	16

Table 14-6: Inferred Mineral Resource Statement

Notes to accompany Mineral Resource tables assuming open pit mining methods for AntaKori Project:

- 1. Mineral Resources have an effective date of 22 February 2019; Douglas Reid, P.Eng., a Wood employee, is the Qualified Person responsible for the Mineral Resource estimate.
- 2. Inputs to costs for cut-off grade assumes a conventional truck and shovel open pit mine handling and feeding a 60,000 t/d concentrator and producing a copper-gold concentrate with arsenic for sale to specialists in concentrate trading, third-party smelters and refineries.
- 3. Mineral Resources are reported based on a CuEq cut-off of 0.30% constrained within a pit shell.
- 4. Mineral Resources are only reported within Regulus concessions.
- 5. CuEq and AuEq grades and metal contents in this table are mutually exclusive and are not additive.
- 6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
- 7. Copper price used is US\$6,614/t (US\$3.00/lb), gold price is US\$1,400/oz, silver price is US\$18.00/oz.
- 8. Assumed metallurgical recoveries: copper 85%, gold 55%, silver 50%.
- 9. Assumed pit slope of 45°.
- 10. Assumed open pit mining cost of US\$1.85/t plus lift charge to average US\$2.00/t, processing cost of US\$7.18/t, G&A cost US\$1.00/t.



NI 43-101 Technical Report

- 11. Copper equivalent formula: CuEq = Cu + 0.6805561*Au + 0.008750*Ag (no use of Pb, Zn or Mo and no metallurgical recovery was applied to the copper equivalent formula.
- 12. Gold equivalent formula: AuEq = Au + 1.469387*Cu + 0.012857*Ag (no use of Pb, Zn or Mo and no metallurgical recovery was applied to the gold equivalent formula).
- 13. Mineral Resources are reported on a 100% basis.
- 14. Tonnages are reported as metric tonnes rounded to million tonnes; copper, gold grades and equivalent grades are rounded to two decimal places, silver is rounded to one decimal place.
- 15. Rounding as required by reporting guidelines may result in apparent summation differences.



14.13 Factors That May Affect the Mineral Resource Estimate

Areas of uncertainty that may materially impact the Mineral Resource estimates include:

- Changes to long-term metal price assumptions
- Changes in local interpretations of mineralization geometry and continuity of mineralized zones
- Changes to the density values applied to the mineralized zones
- Changes to geological shape and continuity assumptions
- Potential for unrecognized bias in the assay results from legacy drilling where there was limited documentation of the QA/QC procedures
- Changes to metallurgical recovery assumptions
- Changes in assumptions of marketability of final product
- Changes to the conceptual input assumptions for assumed open pit operation
- Changes to the input values for the CuEq grade used to constrain the estimate
- Variations in geotechnical, hydrogeological and mining assumptions
- Changes as to assumptions as to ability to continue with existing agreements, or renew or renegotiate those agreements
- Changes to environmental, permitting and social license assumptions.

14.14 Comment on Section 14

The QP is not aware of any environmental, legal, title, taxation, socioeconomic, marketing, political or other relevant factors that would materially affect the estimation of Mineral Resources that are not discussed in this Report.

The QP is of the opinion that Mineral Resources were estimated using industry-accepted practices, and conform to the 2014 CIM Definition Standards. Technical and economic parameters and assumptions applied to the Mineral Resource estimates are based on an open pit mining method and milling and flotation concentration processing method.

As noted in Section 13, arsenic (and potentially zinc) contents in concentrate may require consideration in either marketing the concentrate product or assessing further downstream secondary processing requirements. There is limited information on how





representative the samples used in test work are of the metallurgical variability of the deposit. Various concentrate marketing and/or secondary processing options should be evaluated once the recommended metallurgical testwork is available to assess metallurgical characteristics.

While Antakori as an exploration target is considered a skarn deposit, the current Mineral Resource estimate contains a relatively high proportion of volcanic-hosted mineralization with elevated arsenic content (high sulphide epithermal). As exploration continues, there is potential that additional mineralization will be identified in skarns, which based on data available to date, tend to have lower arsenic values. This is supported by early-stage results reported in the Regulus news release of 2 April, 2019, in which drill hole AK-18-030, located approximately 500 m to the northwest of any previous drilling reported by Regulus, encountered low-grade skarn and porphyryhosted mineralization with low arsenic contents in the lower portion of the drill hole.





15.0 MINERAL RESERVE ESTIMATES





16.0 **MINING METHODS**







17.0 RECOVERY METHODS





18.0 PROJECT INFRASTRUCTURE





19.0 MARKET STUDIES AND CONTRACTS





20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT





21.0 CAPITAL AND OPERATING COSTS





22.0 ECONOMIC ANALYSIS





23.0 ADJACENT PROPERTIES





24.0 OTHER RELEVANT DATA AND INFORMATION





25.0 INTERPRETATION AND CONCLUSIONS

25.1 Introduction

The QPs note the following interpretations and conclusions within their areas of expertise, based on the review of data available for this Report.

25.2 Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

The legal opinion and additional information provided by Regulus experts supports the following:

- Regulus has four subsidiary companies in Peru that hold ownership interests in the Project
- The Project consists of two major areas of mineral concession holdings, termed the AntaKori and Colquirrumi concession areas
- Mineral concessions are valid and in good standing
- The Coimolache Collaborative Agreement covers seven mining concessions owned by SLP and the Coimolache AOI owned by CMC; and nine mining concessions owned by SLP and SMRL El Sinchao
- SLP granted CMC a Mining Assignment Agreement for a period of five years (to 2022) over the seven SLP mining concessions; this can be extended by agreement
- Under the Colquirrumi Earn-In Agreement, Colquirrumi granted a mining assignment in favor of Anta Norte for an initial period of three years (to 2020) over the Colquirrumi concessions
- Regulus purchased 6 ha of surface rights for two properties in the northern part of the AntaKori Project and is negotiating purchase of other properties. Additional surface rights need to be obtained to support future mining operations
- No water rights are currently held. Water for drilling programs has previously been sourced from CMC under the Coimolache Collaborative Agreement
- The initial Regulus drill program was conducted under permits granted to CMC.
- A DIA application has been submitted to allow exploration and drilling on the northern part of the AntaKori Project and in the Colquirrumi Project; approval is expected in about Q3, 2019







- There is an expectation of environmental liabilities associated with historical mining and exploration activity. According to Resolution N° 010-2019-MEM/DM, MINEM has approved an Inventory of Mining Environmental Liabilities, in which environmental liabilities have been identified in certain mining concessions held by Regulus. According to Law No. 28271, the responsibility for the remediation of environmental liabilities lies with the person or company that generated the liability. In the case of historical liabilities where the generator is not known, the Government of Peru assumes responsibility
- Regulus advised that to the extent known, there are no other significant factors and risks that may affect access, title or right or ability to perform work on the Project
- The Project is at an exploration stage. The existing local infrastructure, availability of staff, and methods whereby goods could be transported to the Project area to support exploration activities are well understood by Regulus, and can support the declaration of Mineral Resources
- The Project covers an area that is sufficient for infrastructure requirements to support a mining operation
- Near-by mining operations are conducted year-round, and it is expected that any operation conducted by Regulus would also be year-round.

25.3 Geology and Mineralization

- AntaKori is considered to be primarily an example of a copper skarn deposit
- The geological understanding of the settings, lithologies, and structural and alteration controls on mineralization is sufficient to support estimation of Mineral Resources

25.4 Exploration, Drilling and Analytical Data Collection in Support of Mineral Resource Estimation

- The exploration programs completed by Regulus to date are appropriate for the deposit style
- Geophysical interpretations indicate the potential for additional porphyry–skarn targets, and these target areas warrant investigation



- The quantity and quality of the lithological, collar and down-hole survey data collected in the exploration program completed at the AntaKori deposit by Regulus are sufficient to support Mineral Resource estimation
- Legacy data can be used in estimation with caution as to the confidence classification that can be assigned
- The collected sample data adequately reflect deposit dimensions, true widths of mineralization, and the deposit style
- Sampling is representative of the copper, gold, and silver grades in the deposit, reflecting areas of higher and lower grades
- The analytical laboratories used for legacy assaying were well known in the industry and produced generally reliable data. The analytical laboratories currently in use are properly accredited and widely used in the industry
- Sample preparation has used procedures and protocols that are/were standard in the industry and has been adequate throughout the history of the Project. Sample analysis uses procedures that are standard in the industry
- The QA/QC programs adequately address issues of precision, accuracy and contamination, and indicate that the analytical results are adequately accurate, precise, and contamination free to support Mineral Resource estimation
- The data verification programs concluded that the data collected from the Project adequately support the geological interpretations and constitute a database of sufficient quality to support the use of the data in Mineral Resource estimation.

25.5 Metallurgical Testwork

- Preliminary metallurgical testwork included X-ray mineralogical characterization, mineral liberation analysis and batch and locked cycle flotation scoping testwork has been conducted. The representativeness of the material tested to the mineralization supporting the Mineral Resource estimate is uncertain. The metallurgical responses are reasonably consistent with other similar copper skarn, porphyry-hosted operations in the industry
- The concentrate mineralogy reported is consistent with the arsenic, zinc and lead grades reported in the relevant concentrates







- An average copper recovery of 85% and copper concentrate grade of 28% Cu was selected as the basis of the cut-off grade used in estimation
- Arsenic is identified as the principal deleterious element in the concentrate which will require consideration in either marketing the concentrate product or assessing further downstream secondary processing requirements. It is possible zinc reporting to concentrate associated with skarn mineralization could at times exceed penalty limits
- Future testwork has been recommended to identify the preferred baseline concentrator flowsheet configuration and design parameters for the project, assess mineralization and geometallurgical variability especially associated with arsenic, and assess concentrate marketing and/or secondary processing scenarios.

25.6 Mineral Resource Estimates

- The Mineral Resource estimation for the Project conforms to industry best practices and is reported using the 2014 CIM Definition Standards
- Technical and economic parameters and assumptions applied to the Mineral Resource estimates are based on an open pit mining method and milling and flotation concentration processing method
- Factors that may affect the Mineral Resource estimate include:
 - Changes to long-term metal price assumptions
 - Changes in local interpretations of mineralization geometry and continuity of mineralized zones
 - Changes to the density values applied to the mineralized zones
 - Changes to geological shape and continuity assumptions
 - Potential for unrecognized bias in the assay results from legacy drilling where there was limited documentation of the QA/QC procedures
 - Changes to metallurgical recovery assumptions
 - Changes in assumptions of marketability of final product
 - Changes to the conceptual input assumptions for assumed open pit operation
 - Changes to the input values for the CuEq grade used to constrain the estimate
 - Variations in geotechnical, hydrogeological and mining assumptions



- Changes as to assumptions as to ability to continue with existing agreements, or renew or renegotiate those agreements
- Changes to environmental, permitting and social license assumptions
- Arsenic (and potentially zinc) contents in concentrate may require consideration in either marketing the concentrate product or assessing further downstream secondary processing requirements. There is limited information on how representative the few samples used in test work are of the metallurgical variability of the deposit. Various concentrate marketing and/or secondary processing options should be evaluated once the recommended metallurgical testwork is available to assess metallurgical characteristics
- There is upside potential for the estimates if mineralization that is currently classified as Inferred can be upgraded to higher-confidence Mineral Resource categories.

25.7 Conclusions

- Under the assumptions presented in this Report, and based on the available data, Mineral Resources show reasonable prospects of eventual economic extraction
- Exploration activities have shown the Project to retain significant upside potential and additional exploration is warranted
- Various concentrate marketing and/or secondary processing options should be evaluated once the recommended metallurgical testwork is available to assess mineralization and geometallurgical variability.



26.0 **RECOMMENDATIONS**

26.1 Introduction

Recommendations are divided into two phases. Phase 1 recommendations are made in relation to exploration activities. Recommendations proposed in Phase 2 are related to metallurgical testwork.

The first phase recommendations are estimated to require a budget of US\$10 million; the second recommendations phase is estimated at US\$300,000.

26.2 Phase 1 Recommendations

A drill program of about 25,000 m is recommended to test the open extents of the AntaKori mineralization to the north and northeast sides of the AntaKori concessions and into the Colquirrumi concessions. The program could also be used to fill in minor gaps within the existing drill pattern. The recommended metreage split is about 17,500 m of step-out and exploratory drilling, and approximately 7,500 m of infill drilling.

Specific collar locations should be determined when Regulus has the applicable DIA permit in hand (refer to discussion in Section 4.9). There is potential, if the DIA is received early, for the drill program to completely focus on step-out and exploratory drilling. In that instance, drill collar locations will be dependent on the results of each drilled hole. If the DIA grant is later than currently envisaged, Regulus may choose to focus more metres on infill. Collar locations will also depend on the outcomes of the ongoing drill program, and evaluation of new results in relation to existing drill results and geophysical data interpretations.

The cost for the drill program is estimated at US\$10 million, assuming an all-in drilling cost of US\$400/m. All-in costs include provision for items such as direct drilling, assays, core boxes, Corescan[™], site preparation and remediation, and labour costs.

26.3 Phase 2 Recommendations

The main objective of metallurgical testing will be to define preliminary flowsheet requirements, recoveries, and costs, as well as likely product characteristics, particularly arsenic content, to support mineralization routing, concentrate strategies and economic analysis. The program is envisaged to use core generated during the Phase 1



recommendations program, and if additional core is needed, core from the 2017–2018 drill program.

The metallurgical testwork program should include:

- Sample preparation and characterization using core samples
- Metallurgical flotation flowsheet development batch testing
- Metallurgical geometallurgical testing:
 - Batch testing, mineralization and product characterization
 - Locked cycle tests and product characterization
- Metallurgical comminution testing, consisting of Bond work, Bond rod, crushing and abrasion index tests, semi-autogenous grind mill comminution tests
- Tailings geotechnical and environmental characterization (static tests).

The budget for this program is envisaged at about US\$300,000.





27.0 REFERENCES

Arce, J.R. and Arce, J.E., 2015: AntaKori, Cajamarca, Perú. Geophysical Survey: Ground Magnetometry, Induced Polarization, August 2006, January 2013, April 2015: report by Arce Geofísicos, Lima, Peru for Southern Legacy Peru S.A.C., 8 April 2015, 11 p.

Benavides, V.E., 1956: The Cretaceous System in Northern Peru: Bulletin of the American Museum of Natural History, v. 108, pp. 353–494.

Benavides-Cáceres, V., 1999: Orogenic Evolution of the Peruvian Andes: The Andean Cycle: *in* Skinner, B. J. (ed.), Geology and Ore Deposits of the Central Andes: Society of Economic Geologists Special Publication No. 7, pp. 61–107.

Bieniawski, Z.T., 1976: Rock Mass Classifications in Rock Engineering: *in* Bieniawski, Z. T. (ed.), Proceedings of the Symposium on Exploration for Rock Engineering, Johannesburg, 1–5 November 1976, pp. 97–106.

Canadian Institute of Mining, Metallurgy and Petroleum (CIM), 2003: Estimation of Mineral Resources and Mineral Reserves, Best Practice Guidelines: Canadian Institute of Mining, Metallurgy and Petroleum, November 23, 2003.

Canadian Institute of Mining, Metallurgy and Petroleum (CIM), 2014: CIM Standards for Mineral Resources and Mineral Reserves, Definitions and Guidelines: Canadian Institute of Mining, Metallurgy and Petroleum, May, 2014.

Canadian Securities Administrators (CSA), 2011: National Instrument 43-101, Standards of Disclosure for Mineral Projects, Canadian Securities Administrators.

Castro, M.E., 1996: Informe Geológico Preliminar Proyecto Sinchao: internal report for El Misti Gold S.A. (quoted by Jaramillo, 2006a, 2006b, 2008).

Cobbing, E.J., 1985: The tectonic setting of the Peruvian Andes: *in* Pitcher, W. S., Atherton, M. P., Cobbing, E. J., and Beckinsdale, R. D. (eds.), Magmatism at a Plate Edge: The Peruvian Andes: Glasgow, Blackie and Son, pp. 3–12.

Deere, D.U., Hendron, A.J., Jr., Patton, F.D. and Cording, E.J., 1967: Design of Surface and Near-Surface Construction in Rock: *in* Fairhurst, C., Failure and Breakage of Rock, Society of Mining Engineers, AIME, New York, pp. 237–302.

del Solar, C., Zúñiga, E. and Bardález, H., 1946: Informe Geologico Economico de la Zona Minera de Hualgayoc: report for Banco Minero del Peru, 29 October 1946, 49 p.





Einaudi, M.T., 1982: Descriptions of Skarn Associated with Porphyry Copper Plutons, Southwestern North America: *in* Titley, S.R., ed., Advances in Geology of Porphyry Copper Deposits, Southwestern North America; Tucson, University of Arizona Press, pp. 189–210.

Einaudi, M.T., Meinert, L.D., and Newberry, R.J., 1981: Skarn Deposits: Economic Geology 75th Anniversary Volume, pp. 317–391.

Elias, L., 2019: Peru Mining Law, 2019: article prepared by Rebaza, Alcazar, and De Las Casas Abogados Financieros, https://iclg.com/practice-areas/mining-laws-and-regulations/peru.

Ericksen, G., Iberico, M. and Petersen, U., 1956: Geología del Distrito Minero de Hualgayoc, Departamento de Cajamarca: Ministerio de Fomento y Obras Publicas. Instituto Nacional de Investigación y Fomento Mineros, Boletín No. 16, 99 p.

Ericksen, G., Iberico, M. and Petersen, U., 1980: Geología del Distrito Minero de Hualgayoc, Departamento de Cajamarca: *in* Samamé Boggio, M., El Perú Minero, Vol. 4, Part 2, Yacimientos, INGEMMET, Lima, pp. 626–706.

Ernst and Young, 2017: Peru Mining and Metals Tax Guide, May 2017: report prepared by Ernst and Young, 10 p. https://www.ey.com/Publication/VwLUAssets/Tax-Guide-Peru-May-2017/%24FILE/Ey-Peru-Mining-and-Metals-Tax-Guide-2017.Pdf.

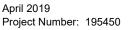
Gustafson, L.B., Vidal, C.E., Pinto, R. and Noble, D.C., 2004: Porphyry-Epithermal Transition, Cajamarca Region, Northern Peru: Society of Economic Geologists, Special Publication 11, pp. 279–299.

Harris, J. F., 1998: Petrographic Examination of Core Samples: report prepared by Harris Exploration Services for El Misti Gold Ltd.

Jaillard, E. and Soler, P., 1996: Cretaceous to Early Paleogene Tectonic Evolution of the Northern Central Andes (0-18°S) and its Relations to Geodynamics: Tectonophysics, v. 259, pp. 41–53.

James, J., 1998: Geology, Alteration and Mineralization of the Cerro Corona Porphyry Copper-Gold Deposit, Cajamarca Province, Peru: unpublished Master of Science thesis, University of British Columbia, xvi + 249 p.

Jaramillo, V. A., 2006a: The Sinchao Property Technical Report, Yanacocha-Hualgayoc Mining District, Department of Cajamarca, Peru: NI 43-101 Technical Report prepared







by Discover Geological Consultants Inc. for Andean America Mining Corp., effective date 7 March 2006, 456 p.

Jaramillo, V. A., 2006b: The Sinchao Property Technical Report, Yanacocha-Hualgayoc Mining District, Department of Cajamarca, Peru: Updated and revised NI 43-101 Technical Report prepared by Discover Geological Consultants Inc. for Andean American Mining Corp., effective date 21 September 2006, 78 p.

Jaramillo, V.A., 2008: The Sinchao Property Technical Report, Yanacocha-Hualgayok Mining District, Department of Cajamarca, Peru: amended and restated report prepared by Discover Geological Consultants Inc. for Sinchao Metals Corp., effective date 30 October 2008.

KPMG Global Mining Institute, 2016: Peru country mining guide: report prepared by KPMG, 32 p. https://assets.kpmg/content/dam/kpmg/pdf/2016/03/peru-mining-country-guide.pdf.

Lehne, R.W., 2016: Microscopic Investigation of Drill Core Sections from the Antakori Copper-Gold Project, Cajamarca, Peru: report by Lehne & Associates for Regulus Resources Inc., 15 July 2016, 45 p.

Lehne, R.W., 2018a: Microscopic Investigation of Drill Core Sections from the Antakori Copper-Gold Project, Cajamarca, Peru: report by Lehne & Associates for Regulus Resources Inc., 25 February 2018, 22 p.

Lehne, R.W., 2018b: Microscopic Investigation of Drill Core Sections from the Antakori Copper-Gold Project, Cajamarca, Peru (3): report by Lehne & Associates for Regulus Resources Inc., 10 April 2018, 23 p.

Lehne, R.W., 2018c: Microscopic Investigation of Drill Core Sections from the Antakori Copper-Gold Project, Cajamarca, Peru (4): report by Lehne & Associates for Regulus Resources Inc., 29 October 2018, 37 p.

Lehne, R.W., 2018d: Microscopic Investigation of Drill Core Sections from the Antakori Copper-Gold Project, Cajamarca, Peru (5): report by Lehne & Associates for Regulus Resources Inc., 11 December 2018, 13 p.

Leitch, C.H.B., 2006: Petrographic Report on 6 Polished Sections for Sinchao Metals: report by Craig H. B. Leitch for Sinchao Metals Corp., 5 December 2006, 14 p.

Leitch, C.H.B., 2007: Petrographic Report on 15 Samples from Sinchao Property, Peru: report by Craig H. B. Leitch for Sinchao Metals Corp., 1 July 2007, 26 p.





Leitch, C.H.B., 2008a: Petrographic Report on 29 Samples from Sinchao Metals Property Near Cajamarca, Peru: report by Craig H. B. Leitch for Sinchao Metals Corp., 31 March 2008, 50 p.

Leitch, C.H.B., 2008b: Petrographic Report on 10 Samples from Sinchao Metals Property Near Cajamarca, Peru: report by Craig H. B. Leitch for Sinchao Metals Corp., 8 April 2008, 18 p.

Leitch, C.H.B., 2008c: Petrographic report on 38 Samples from Sinchao Metals Property Near Cajamarca, Peru: report by Craig H. B. Leitch for Sinchao Metals Corp., 10 July 2008, 65 p.

Leitch, C.H.B., 2008d: Petrographic Report on 16 Samples from Sinchao Metals Property Near Cajamarca, Peru: report by Craig H. B. Leitch for Sinchao Metals Corp., 15 September 2008, 27 p.

Leitch, C.H.B., 2008e: Petrographic Report on 30 Samples from Sinchao Metals Property Near Cajamarca, Peru: report by Craig H. B. Leitch for Sinchao Metals Corp., 16 October 2008, 51 p.

Macfarlane, A.W. and Petersen, U., 1990: Pb Isotopes of the Hualgayoc Area, Northern Peru: Implications for Metal Provenance and Genesis of a Cordilleran Polymetallic Mining District: Economic Geology, v. 85, p. 1303–1327.

Málaga Santolalla, F., 1904: El Asiento Minero de Hualgáyoc: Boletín del Cuerpo de Ingenieros de Minas del Perú, No. 6, 109 p.

McKee, E.H. & Noble, D.C., 1982: Miocene Volcanism and Deformation in the Western Cordillera and High Plateaus of South-Central Peru: Geological Society of America Bulletin, v. 93, pp. 657–662.

Mégard, F., 1984: The Andean Orogenic Period and its Major Structures in Central and Northern Peru: Journal of the Geological Society [London], v. 141, pp. 893–900.

Meinert, L.D., Dipple, G.M., and Nicolescu, S., 2005: World Skarn Deposits: Economic Geology 100th Anniversary Volume, pp. 299–336.

Monge, R. and Navarro, P., 2008: Mapa Geológico del Cuadrángulo de Chota (14-f). Hoja 14-f-II. Carta Geológica del Perú: Lima, Instituto Geológico Minero y Metalúrgico (INGEMMET), Lima. Geological Map at 1:50,000 scale.





Navarro-Ramirez, J. P., Bodin, S. & Immenhauser, A., 2015. Ongoing Cenomanian-Turonian Heterozoan Carbonate Production in the Neritic Settings of Peru: Sedimentary Geology, v. 331, pp. 78–93.

Noble, D.C. and McKee, E.H., 1999: The Miocene Metallogenic Belt of Central and Northern Peru: Society of Economic Geologists Special Publication No. 7, pp. 155–194.

Noone, D., 1997: Economic Geology of the Hualguyoc District: internal report for El Misti Gold S.A.

Petersen, U., 1999: Magmatic and Metallogenic Evolution of the Central Andes: *in* Skinner, B.J. (ed.), Geology and Ore Deposits of the Central Andes: Society of Economic Geologists Special Publication No. 7, pp. 109–153.

Plenge, C.H.G., 2013: Investigacion Metalurgica No. 12499/12500: report prepared by Plenge Laboratory for Southern Legacy, July 15, 2013.

Quiroz, A., 1997: El Corredor Estructural Chicama-Yanacicha y Su Importancia en la Metalogenia del Norte del Perú: IX Congreso Peruano de la Geología, Resumenes Extendidos, Sociedad Geológica del Perú, Volumen Especial No. 1, pp. 149–154.

Redwood, S. D., 2004: Geology and Development History of the Antamina Copper–Zinc Skarn Deposit, Peru: *in* Sillitoe, R.H., Perelló, J. & Vidal, C. E. (eds), Andean Metallogeny: New Discoveries, Concepts, Updates: Society of Economic Geologists, Special Publication, No. 11, pp. 259–277.

Regulus Resources, 2019: Regulus Extends Mineralization 500 m to the Northwest at the Antakori Copper-Gold Project, Peru: news release 2 April, 2019, 11 p.

Robitaille, A. and Thompson, A.J.B., 1999: Alteration Characteristics: Sinchao Project, Northern Peru, PIMA Short-wave Infrared and Petrographic Analysis: report prepared for El Misti Gold by PetraScience Consultants Inc., April 1999.

Sébrier, M. and Soler, P., 1991: Tectonics and Magmatism in the Peruvian Andes from late Oligocene Time to the Present: *in* Harmon, R.S. & Rapela, C.W. (eds), Andean Magmatism and its Tectonic Setting: Geological Society of America Special Paper 265, pp. 259–278.

Shannon, J.R., 2018: Petrographic report, First Batch Polished Thin Sections, Antakori Project, Peru: report by James R. Shannon for Regulus Resources Inc., 12 December 2018, 210 p.





Shannon, J.R., 2019: Petrographic Report, Second Batch Polished Thin Sections – Skarn Details, Antakori Project, Peru: report by James R. Shannon for Regulus Resources Inc., 7 March 2018, 329 p.

Sillitoe, R.H., 2000: Role of Gold-Rich Porphyry Models in Exploration, in S.G. Hagerman and P.H. Brown, eds., Gold in 2000, Reviews in Economic Geology, v. 13, pp. 311–346.

Sillitoe, R.H., 2010: Porphyry Copper Systems: Economic Geology, v. 105, pp. 3–41.

Simons, F.S., 1957: The Mineral Deposits of Peru: unpublished report for the U.S. Geological Survey, xciv p. + 1715 p.

Sinclair, W.D., 2006: Consolidation and Synthesis of Mineral Deposits Knowledge -Porphyry Deposits: report posted to Natural Resources Canada website 30 January 2006, 14 p., <http://gsc.nrcan.gc.ca/mindep/synth_dep/porph/index_e.php>, accessed 28 August, 2010.

Singer, D.A., Berger, V.I., and Moring, B.C., 2008: Porphyry Copper Deposits of the World: Database and Grade and Tonnage Models: U.S. Geological Survey Open-File Report 2008-1155, version 1.0 (http://pubs.usgs.gov/of/2008/1155/).

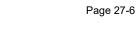
Tavera, H., 2018: Mapa Sismico del Peru, Periodo: 1960-2017: Ministerio del Ambiente, Instituto Geofisico del Peru – IGP, 1 map sheet.

Tello Burgos, M.E. and Castillo Justo, R., 1972: Concesiones: Predilecta y Porcia, Zona de Hualgayoc. Concesiones: Cleopatra, Rita Margot, Maria Eugenia, Maria Eugenia No. 1 y Maria Eugenia No. 2, Zona de Sinchao, Provincia de Hualgayoc, Departamento Cajamarca. Estudio de Posibilidades: report for Banco Minero de Peru, 1 September 1972, 18 p. Instituto Geológico Minero y Metalurgio del Perú (INGEMMET) digital archive document no. B7245.

Tosdal, R. M., 1996: Geological and Structural Setting of the Tantahuatay Volcanic Field and Associated High Sulfidation Cu-Au mineralization, Northern Peru: internal report, Compañía Minera Coimolache S.A., 25 p.

Viala, M., Hattori, K. and Gomez, P., 2018: Gold-Copper Fertile Intrusions in the Hualgayoc Mining District, Peru: poster, 86th Prospectors & Developers Association of Canada Congress, Toronto, March 4–7, 2018.

Wilson, J., 1984: Geología de los cuadrangulos de Jayanca (13-d), Incahuasi (13-e), Cutervo (13-f), Chiclayo (14-d), Chongoyape (14-e), Chota (14-f), Celendin (14-g),







Pacasmayo (15-d), Chepen (15-e): Lima, Instituto Geológico Minero y Metalurgio del Perú (INGEMMET), Boletín No. 38, 114 p.

Wilson, S.E., 2012a: Technical Report Southern Legacy Minerals Inc. Antakori Property Yanacocha-Hualgayoc Mining District Department of Cajamarca, Peru: report prepared by Scott E. Wilson Consulting, Inc. for Southern Legacy, effective date 14 April, 2012.

Wilson, S.E., 2012b: Technical Report Southern Legacy Minerals Inc. Sinchao Property Yanacocha-Hualgayoc Mining District Department of Cajamarca, Peru: report prepared by Scott E. Wilson Consulting, Inc. for Southern Legacy, effective date 1 May, 2012.

Wilson, S.E., 2012c: Technical Report Southern Legacy Minerals Inc. Antakori Property Yanacocha-Hualgayoc Mining District Department of Cajamarca, Peru: report prepared by Scott E. Wilson Consulting, Inc. for Southern Legacy, effective date 2 July, 2012.

Zambrano, M.D., 2013: Análisis de 43 Muestras de Testigo de Perforeción del Proyecto Antakori Utilizando el Espectrómetro PIMA SP: report by Genex Geology & Exploration for Southern Legacy Perú S.A.C., 6 August 2013, 7 p.

