



Cerro Verde Tourmaline Quartz Breccia, Chanape Project, Peru
(Aurora Copper Peru S.A.C., 2019)

National Instrument 43-101 Technical Report on the Chanape Gold-Silver-Copper Project

San Damian District
Huarochiri Province, Peru

Report Prepared for:

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Effective Date: 13 May 2022
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The Report, “National Instrument 43-101 Technical Report on the Chanape Gold-Silver-Copper Project, San Damian District, Huarochiri Province, Peru”, issued 20 June 2022 and with an Effective Date of 13 May 2022, was prepared for Turmalina Metals Corp. and authored by the following:

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Dated: 20 June 2022

CERTIFICATE OF QUALIFIED PERSON

Scott Jobin-Bevans (PhD., P.Geo.)

I, Scott Jobin-Bevans, P.Geo., do hereby certify that:

1. I am an independent consultant and Managing Director with Caracle Creek Chile SpA and Principal Geoscientist with Caracle Creek International Consulting Inc., and have an address at Avenida Hacienda Macul 6047, Peñalolen, Santiago, Chile.
2. I graduated from the University of Manitoba (Winnipeg, Manitoba) with a B.Sc. Geosciences (Hons) in 1995 and from the University of Western Ontario (London, Ontario) with a Ph.D. (Geology) in 2004.
3. I am a registered member, in good standing, of the Association of Professional Geoscientists of Ontario, License Number 0183 (since June 2002).
4. I have practiced my profession continuously for more than 25 years, having worked mainly in mineral exploration but also having experience in mine site geology, mineral resource and reserve estimations, preliminary economic assessments, pre-feasibility studies, due diligence, valuation and evaluation reporting. I have authored, co-authored or contributed to numerous NI-43-101 reports on a multitude of commodities including nickel-copper-platinum group elements, base metals, gold, silver, vanadium, and lithium projects in Canada, the United States, China, Central and South America, Europe, Africa, and Australia.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am Principal Author and responsible for the preparation of all sections in the technical report titled, “National Instrument 43-101 Technical Report on the Chanape Gold-Silver-Copper Project, San Damian District, Huarochiri Province, Peru” (the “Technical Report”), issued 20 June 2022 and with an Effective Date of 13 May 2022.
7. I have not visited the Chanape Gold-Silver-Copper Project, the subject of the Technical Report.
8. I am independent of Turmalina Metals Corp. and Aurora Copper Peru S.A.C., applying all of the tests in Section 1.5 of NI 43-101 and Companion Policy 43-101CP (June 2011).
9. I have had no prior involvement with the Project that is the subject of the Technical Report.
10. I have read NI 43-101 and Form 43-101F1 and confirm the Technical Report has been prepared in compliance with that instrument and form.
11. 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 the Technical Report not misleading.

Signed at Santiago, Chile this 20th day of June 2022.

/s/ Scott Jobin-Bevans

Scott Jobin-Bevans (Ph.D., PMP, P.Geo. #0183)

CERTIFICATE OF QUALIFIED PERSON

Simon James Atticus Mortimer (MSc., FAIG)

I, Simon James Atticus Mortimer, do hereby certify that:

1. I am a professional geologist with Atticus Geoscience Consulting S.A.C. with an address at Ramon Zavala 420, Miraflores, Lima, Peru.
2. I graduated from the University of St. Andrews, Scotland, with a B. Sc. in Geoscience in 1995 and from the Camborne School of Mines with a MSc. in Mining Geology in 1998.
3. I am a registered Professional Geoscientist, practicing as a member of the Australasian Institute of Mining and Metallurgy (#300947) and the Australian Institute of Geoscientists (FAIG #7795).
4. I have worked as a geoscientist in the minerals industry for over 20 years and I have been directly involved in the mining, exploration, and evaluation of mineral properties mainly in Peru, Chile, Argentina, Brazil, and Colombia for precious and base metals.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am a Co-Author and responsible for the preparation of sections 1, 2.5, 3, 12, 25, and 26 in the technical report titled, “National Instrument 43-101 Technical Report on the Chanape Gold-Silver-Copper Project, San Damian District, Huarochiri Province, Peru” (the “Technical Report”), issued 20 June 2022 and with an Effective Date of 13 May 2022.
7. I visited the Chanape Gold-Silver-Copper Project for one full day on 7 April 2022.
8. I am independent of Turmalina Metals Corp. and Aurora Copper Peru S.A.C., applying all of the tests in Section 1.5 of NI 43-101 and Companion Policy 43-101CP (June 2011).
9. I have had no prior involvement with the Project that is the subject of the Technical Report.
10. I have read NI 43-101 and Form 43-101F1 and confirm the Technical Report has been prepared in compliance with that instrument and form.
11. 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 the Technical Report not misleading.

Signed at Lima, Peru this 20th day of June 2022.

/s/ Simon Mortimer

Simon James Atticus Mortimer (MSc. ACSM, MAusIMM, FAIG #7795)

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1.0 SUMMARY

1.1 Introduction

Caracle Creek Chile SpA (“Caracle” or the “Consultant”) was engaged by Turmalina Metals Corp. (“Turmalina” or the “Issuer” or the “Company”), to prepare an independent National Instrument 43-101 (“NI 43-101”) Technical Report (the “Report”) for its Chanape Gold-Silver-Copper Project (“Chanape” or the “Project” or the “Property”), located in the San Damian District, Huarochiri Province, Peru. The Report has been prepared in accordance with the disclosure and reporting requirements set forth in the National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1.

1.2 Purpose of the Technical Report

The Report has been prepared in accordance with NI 43-101 at the request of Turmalina Metals Corp. The Report provides an independent review of Turmalina’s Chanape Project located in central Peru, examining the data and information related to historical and current mineral exploration on the Property, and reviewing and reporting on all data and information available from the Company and in the public domain, with respect to the Property.

1.3 Qualifications of Consultants

The Report has been completed by Dr. Scott Jobin-Bevans and Mr. Simon Mortimer (together the “Consultants” or the “Authors”). Dr. Jobin-Bevans (“Principal Author”) is the Managing Director at Caracle Creek Chile SpA (Chile) and Mr. Simon Mortimer is a Professional Geologist at Atticus Geoscience Consulting S.A.C. (Peru).

Dr. Jobin-Bevans is a professional geoscientist (APGO #0183, P.Geo.) with experience in geology, mineral exploration, Mineral Resource and Mineral Reserve estimation and classification, land tenure management, metallurgical testing, mineral processing, capital and operating cost estimation, and mineral economics. Mr. Mortimer is a professional geologist (FAIG #7795) with experience in geology, mineral exploration, Mineral Resource and Mineral Reserve estimation and classification, geological modelling, and mineral economics.

Dr. Scott Jobin-Bevans and Mr. Simon Mortimer, by virtue of their education, experience, and professional association, are each considered to be a Qualified Person (“QP”), as that term is defined in NI 43-101 and specifically sections 1.5 and 5.1 of NI 43-101CP (Companion Policy). Dr. Jobin-Bevans, Principal Author, is responsible for preparing all sections of the Report. Mr. Mortimer, Co-author, is responsible for preparing sections 1, 2.5, 3, 12, 25, and 26 of the Report.

1.4 Previous Technical Reports

No previous NI 43-101 technical reports have been prepared for Turmalina’s Chanape Gold-Silver-Copper Project and the Report is the current NI 43-101 Technical Report on the Project.

1.5 Effective Date

The Effective Date of the Report is 13 May 2022.

1.6 Details of Personal Inspection

A personal inspection (site visit) to the Project was completed by the Co-Author (Qualified Person), Mr. Simon Mortimer (MSc. ACSM, MAusIMM, FAIG #7795), travelling from Lima to the Project office in San Damian on the 6th of April, and to the project site on the 7th of April, returning to San Damian in the late afternoon and on to Lima on 8 April 2022. All information and data relating to the historical and current exploration work completed on the Project was made available to the QP before and during the personal inspection of the Property.

During the site visit, the Co-Author, confirmed access, verified the presence of historical exploration work (*i.e.*, drill setups), reviewed the channel sampling program procedures, visited outcrops and proposed drill sites, and took rock chip samples from three of the breccia pipes.

The Co-Author was accompanied by Ram Betancourt, Project Manager for Turmalina Metals Corp. The site visit incorporated a tour of the geology and administration offices in San Damian, the core storage and logging facilities, local accommodation, and a reconnaissance of the exploration property situated approximately 25 km and a further 1,000 m up the mountains. The time spent on the Property included a review of the geology, location and composition of the breccia bodies and mineralization, focusing on the breccia bodies that have been explored by previous companies and are the targets for exploration drilling by Turmalina.

The check samples were taken as rock chip grab samples, not necessarily taken from rock that exhibits strong mineralization, but as a composite sample from multiple points within the breccia body around the measured GPS location. The sample taken from the San Antonio breccia body has returned values (gold and silver) that are comparable with the mineralization from the channel samples taken by the Turmalina exploration team; the samples taken from Breccia 8 and the Breccia 10-11 bodies returned values at the lower end of the channel sample distribution values but did however show evidence of gold mineralization.

1.7 Reliance on Other Experts

The Report has been prepared by Caracle Creek Chile SpA for Turmalina Metals Corp. (the Issuer). The Authors have not relied on any report, opinion or statement of another expert who is not a qualified person, or on information provided by the Issuer concerning legal, political, environmental or tax matters relevant to the Report.

1.8 Property Description and Location

The Chanape Project is located in the western flank of the Western Occidental of Central Peru, about 87 direct kilometres east-northeast of the capital City of Lima, in the Department of Lima, Province of

Huarochiri, San Damián District. The Project is centred at about Latitude 11°55'23"S and Longitude 76°15'49"W (WGS84 UTM Zone 18L, 362400mE, 8681630mS), about 4,650 m AMSL. All known mineralization, economic or potentially economic that is the focus of the Report is located within the boundary of the Project mining concessions.

The Chanape Project consists of 20 contiguous mining concessions covering a total of 676.99 ha and registered in the name of Minera Altas Cumbres S.A.C. (the "Mining Concessions").

1.9 Annual Holding Cost

The 20 mining concessions that comprise the Property are subject to an annual fee of US\$3.00 per hectare, with fees totalling US\$2,030.97 per year and payable by the end of June.

1.10 Option Agreement

On 13 March 2020, the Company through its 100% owned Peruvian subsidiary Aurora Copper Peru S.A.C., entered into an option agreement (the "Option Agreement"), with Minera Altas Cumbres S.A.C., to acquire a 100% interest in the mining concessions that comprise the Chanape Project. The Company can acquire a 100% interest in the Property by making total cash payments of US\$3,410,000 and by incurring exploration expenditures of US\$2,000,000 (Turmalina MD&A, 30 September 2021). As of 30 December 2021, the Company has paid a total of USD\$210,000.

1.11 Royalties, Agreements and Encumbrances

With respect to the option agreement dated 13 March 2020, Minera Altas Cumbres retains a 2.0% Net Smelter Return royalty ("NSR"), of which the Company may purchase, at any time, 1.0% (50%) of the NSR for a payment of USD\$1,200,000 (Turmalina Metals, 2021b). The Principal Author is not aware of any other royalties, agreements or encumbrances which are associated with the Property which is the subject of the Report.

1.12 Environmental Liabilities

The Principal Author is not aware of any environmental liabilities associated with the Property. The Principal Author is unable to comment on any remediation which may have been undertaken by previous companies. On 12 May 2022, Turmalina was awarded a Ficha Técnica Ambiental ("FTA") environmental permit which allows for drilling from 20 drill platforms on the Property. Previous exploration work to date does not require an exploration permit. For exploration work in Peru, any disturbance to the land must be remediated.

1.13 Community Consultation and Agreements

Turmalina has developed and maintains good positive relationships with Comunidad Campesina de Checa, the only community affected by the Project. Turmalina has a "Contrato de Uso de Terreno Superficial y

Servidumbre”, a surface land use and easement agreement (“Formal Agreement”), with the Checa community for a period of 5 years (to 17 January 2026) and which the Principal Author has reviewed.

1.14 Property Access, Climate and Operating Season

Access to the project site from Lima is via National road PE-22, Carretera Central to Cocachacra, from there via LM118 until San Damian town and then via local roads to the project base camp. Total distance via road is around 140 kilometres.

In the Chanape region, the summers are short, wet, and overcast and the winters are short, cold, dry and partly cloudy. Over the course of the year, the temperature typically varies from 6°C to 8°C and is rarely below 0°C or above 14°C.

The Chanape Project is located at more than 4,200 m AMSL and as such exploration work is limited to the winter and dry season, generally from April through to late December.

1.15 Exploration Permits

Turmalina was granted a Ficha Tecnica Ambiental (FTA) on 12 May 2022, allowing the Company to drill from 20 drill pads within a 24 month period. At each platform, the number of holes, their length, azimuth and inclination, can be altered provided that the work is done within the 24 month period and that the number of platforms and their locations do not change.

On 12 May 2022, Turmalina was granted an FTA, which allows the Company to drill from 20 drill pads within a 24-month period. At each platform, the number of holes, their length, azimuth and inclination, can be altered provided that the work is done within the 24 month period and that the number of platforms and their locations do not change. The FTA identified three non-rehabilitated mining components (historical adits) in the perimeter to which the FTA applies.

With the granting of the FTA, Turmalina applied for a Water Permit and it is expected to be granted by mid-July 2022. With the FTA and Water Permit in place, Turmalina will have all the necessary permits to complete the Phase 1 recommended work program (see Section 26).

1.16 Water Availability

The Company has applied for the water permit since the granting of the FTA on 12 May 2022. The water application will cover accessing a water supply from the Quebrada Chanape, the creek in the large valley inside the Project area, for use in drilling and in the camp. The creek has plenty of water year-round as shown in the studies included in the FTA. Potable water will be bought to the camp in 20 litre containers.

1.17 History

The Chanape area is within an old and active mining district located southeast of San Mateo. This region has been explored and mined since the colonial period. The modern history of exploration in the area and Chanape can be traced back to 1920 and the work of engineer Foilan Guzman. More extensive exploration and small-scale mining development began in 1950, with the building of the access gravel road from the Central Highway to the Pacococha mining area.

In 1943, the American Embassy was briefly interested in Chanape and considered it to show very good mining and discovery potential (Middleton, 1943). In 1950, Banco Minero del Peru saw Chanape as the number one mining property in the area because of the wealth of available information, ready drifts and readily accessible ore (Engineering and Mining Journal, May 1950; High Ridge, 2007).

In December 2011, Australian company Condor Metals Ltd. announced that it had reached an agreement with private Australian company Inca Minerals Ltd. to make an off-market takeover bid for 100% shares in Inca Minerals. In order to reflect the new focus of the consolidated company, Condor made a name change in 2012 to Inca Minerals Limited.

The most recent historical work completed on the Property, prior to 2017 and Aurora Copper Peru/Turmalina Metals Corp.'s involvement, was that completed by Inca Minerals Limited ("Inca Minerals") who spent nearly five years exploring the Property from 2012 to 2015. Inca Minerals Limited subsequently withdrew from the Project and the Project reverted to ownership by Mineral Altas Cumbres S.A.

To date, historical drilling consists of 45 diamond drillholes totalling 12,099.4 metres. Of these, six drill holes tested for the potential of porphyry copper mineralization and 39 drill holes tested for shallower epithermal gold-silver mineralization (Hutton et al., 2015). There has been no drilling by Turmalina or its Peruvian subsidiary Aurora.

1.18 Geology and Mineralization

Peru's porphyry belt extends along the entire length of Peru, paralleling the Pacific coast and roughly coinciding with the Andes Mountains. The Andean Porphyry Belt hosts many mines and deposits and can be divided into northern, central and southern parts, comprising six informal metallogenic provinces. Chanape occurs within the Tertiary Volcanic Epithermal Gold Belt.

Chanape is recognised as a porphyry Cu-Mo-Ag-Au system with associated breccia pipes containing high-grade Au-Ag mineralization exposed at the surface. Mineralization zoning at Chanape indicates the presence of a large porphyry system (Inca Minerals, 2015), including:

- Low-level Cu-Ag-Mo+Au porphyry (Chanape and Summit porphyries).
- Mid-level Au-Ag+Cu+Mo epithermal / mesothermal breccia-hosted mineralization.

- Upper and outer level Zn+Pb+Ag+Au+Cu epithermal breccia-hosted mineralization.

Numerous breccia zones and mineralized veins mapped at surface and in near-surface drillhole intersections are interpreted to be derived from underlying porphyry intrusions.

1.19 Deposit Types

The principal target deposit type at the Chanape Project, located within the Miocene Epithermal Belt of Peru, is epithermal associated tourmaline Au-Ag-Cu breccia pipes. In many cases, tourmaline breccia pipes appear to be related to underlying or nearby porphyry Cu-Mo+/- Au deposits.

Well-known in central Chile (Sillitoe and Sawkins, 1971; Skewes et al., 2002; Frikken et al., 2005), northern Peru (Carlson and Sawkins, 1980), southern Perú (Clark, 1990), and elsewhere (Kirwin, 1985), tourmaline breccia pipes are recognized for their high-grade precious metal (Au-Ag) mineralization and unique geometry and breccia textures.

Tourmaline breccia pipes can extend over 2 or 3 km in depth. Mineralization within a breccia pipe is typically uniform throughout the top of the breccias (the 'roof') while at greater depths the breccia pipe widens with higher-grade mineralization becoming focused along the margins and ends ('lobes') in intrusion-related breccia pipes (Kirwin, 2018; 1985).

Unlike diatreme breccias which are formed by gaseous explosions, magmatic-hydrothermal (intrusion) tourmaline breccia pipes do not violently erupt at the surface and therefore lack the ring of ejecta that defines in part a Maar-Diatreme Complex. The result is much different breccia textures and geometry in a tourmaline breccia pipe. Whereas diatremes have an outward flaring geometry near surface that narrows with depth, tourmaline breccia pipes have a more conical shape that can increase in diameter with depth.

1.20 Exploration

Exploration work completed by the issuer is limited to rock chip grab sampling and channel sampling in 2019-2020 and in 2021. The 2019-2020 sampling generated results from rock chips that ranged from below detection to 10.95 g/t Au, from below detection to 365 g/t Ag, and from below detection to 30300 ppm Cu (3.03% Cu). Assay results from channel samples ranged from below detection to 3.95 g/t Au, from below detection to 54.6 g/t Ag, and from below detection to 2670 ppm Cu (0.27% Cu). The 2021 sampling generated results from rock chips that ranged from below detection to 34.7 g/t Au, from below detection to 1360 g/t Ag, and from below detection to 8600 ppm Cu (0.86% Cu). Assay results from channel samples ranged from below detection to 12.55 g/t Au, from below detection to 1555 g/t Ag, and from 20.2 to 15500 ppm Cu (1.55% Cu). The focus of channel sampling was on Breccia 10 & 11, Breccia Intrusiva 10 de Julio, Breccia 8, and Breccia San Antonio.

1.21 Sample Preparation, Analysis and Security

Through its Peruvian subsidiary Aurora Copper Peru S.A.C., the Issuer completed rock chip and channel sampling on the Project in 2019, 2020 and 2021. The Authors and the Issuer are independent of the laboratory used in the analyses of the rock samples.

It is the opinion of the Authors that for the 2019, 2020 and 2021 sampling programs, Turmalina/Aurora followed industry standards and protocols in the collection, sample preparation, analysis and security of the information and data collected during their exploration work that is the subject of the Report. Furthermore, the sample preparation, security and analytical procedures followed are adequate to support the reliability of the data and information presented herein and for the purposes of the Report.

1.22 Data Verification

The Authors have reviewed the historical data and information regarding past exploration work on the Project as provided by the Issuer. The Authors nor the Issuer have access to or are aware of any further information. The Authors have no reason to doubt the adequacy of historical sample preparation, security and analytical procedures for the exploration work completed by previous operators and have a high level of confidence in the historical information and data.

A personal inspection (site visit) of the Project was completed by Co-Author and Qualified Person Mr. Simon Mortimer (MSc. ACSM, MAusIMM, FAIG #7795), who visited the Project for one full day on 7 April 2022, accompanied by Ram Betancourt (Project Manager, Turmalina Metals Corp.).

The personal inspection (site visit) was completed for the purposes of verifying Project access, general inspection, ground truthing, information and data collection, as well as making observations with respect to the geology and exploration potential of the Project.

It is the Authors' opinion that the information and data that has been made available and reviewed by the Authors is adequate for the purposes of the Report.

1.23 Mineral Processing and Metallurgical Testing

No mineral processing or metallurgical test work has been completed on the Property by the Issuer.

1.24 Mineral Resource Estimates

The Project has no current NI 43-101 Mineral Resources.

1.25 Adjacent Properties

There are no adjacent properties which impact the Project which is the subject of the Report.

1.26 Other Relevant Data and Information

There is no other relevant data, information, or explanation necessary to make the Report understandable and not misleading.

1.27 Interpretation and Conclusions

The objective of the Report was to prepare an independent NI 43-101 Technical Report, capturing historical information and data available about the current Property that comprises the Chanape Gold-Silver-Copper Project, and making recommendations for future work. The Chanape Project is located in the western flank of the Western Occidental of Central Peru, about 85 direct kilometres east-northeast of the capital City of Lima, in the Department of Lima, Province of Huarochiri, San Damián District. The Project consists of 20 contiguous mining concessions covering a total of 676.99 ha, registered in the name of Minera Altas Cumbres S.A.C.

Peru's porphyry belt extends along the entire length of Peru, paralleling the Pacific coast and roughly coinciding with the Andes Mountains. The Andean Porphyry Belt can be divided into a northern, central and southern part, comprising six informal metallogenic provinces. The Chanape Project occurs within the Tertiary Volcanic Epithermal Gold Belt and is about 30 direct kilometres south-southwest from the Toromocho Mine, a historical and current mining area with a number of small to large-scale mines.

The principal target deposit type at the Chanape Project, located within the Miocene Epithermal Belt of Peru, is epithermal-associated tourmaline Au-Ag-Cu breccia pipes. In many cases, tourmaline breccia pipes appear to be related to underlying or nearby porphyry Cu-Mo+/- Au deposits. Chanape is recognised as a porphyry Cu-Mo-Ag-Au system (Inca Minerals, 2015a) with associated tourmaline breccia pipes containing high-grade Au-Ag mineralization exposed at the surface. Numerous breccia zones (30 to date) and mineralized veins mapped at surface and in near-surface drill hole intersections, are interpreted to be derived from underlying porphyry intrusions. Tourmaline breccia pipes can extend over 2 or 3 km in depth. Mineralization within a breccia pipe is typically uniform throughout the top of the breccias (the 'roof') while at greater depths the breccia pipe widens with higher-grade mineralization becoming focused along the margins and ends ('lobes') in intrusion-related breccia pipes (Kirwin, 2019).

The Authors conclude that Turmalina should continue to explore the Chanape Gold-Silver-Copper Project, targeting the tourmaline breccia features and related mineralization. In addition, Turmalina should continue to evaluate the porphyry potential of the Project, taking a measured approach to the costs related to this deeper exploration.

1.28 Recommendations

It is the opinion of the Authors that additional exploration expenditures are warranted on the Chanape Au-Ag-Cu Project. A recommended work program, arising through the preparation of the Report and consultation with the Company, is provided below.

A two-phase exploration program is recommended, with the details of the second phase contingent on the results of Phase I. Phase I considers a drilling program consisting of 2,000 m in 10 drill holes, is outlined in Table 1-1. The recommended program, which considers only direct exploration costs and does not include Company G&A, totals approximately US\$687,000 (approximately C\$894,000). Collar locations and objectives for each of the planned diamond drill holes are provided in Table 1-2 and a plan map showing planned diamond drill hole traces and collars for Phase I is shown in Figure 26-1 (see Section 26).

Table 1-1. Budget estimate, recommended single-phase exploration program, Chanape Au-Ag-Cu Project.

Phase	Comments	USD
Set-up	Mobilization, camp installations, land movement	\$70,000
Operations	Drilling: 2,000 m x USD\$150/metre drilled	\$300,000
	Camp operation	\$90,000
Laboratory	80% of 2,000 metres drilled (1,600 samples) at USD\$55/m (all-in cost)	\$88,000
Administrative costs	Car rental, house rental, food, office, material for sampling	\$30,000
	Local and skilled labours	\$60,000
	Others Administrative costs (accountant, lawyer, etc.)	\$9,000
Closure	Demobilization	\$40,000
TOTAL:		\$687,000

Table 1-2. Drill pads, hole parameters, and targets for proposed diamond drill holes, Chanape Project (WGS84).

Drill Pad	Target Breccia	UTMX (m)	UTMY (m)	Elev (m)	Az	Dip	EOH (m)
C3-P1	Breccia 11	362409	8681656	4696	110	-60	284
B2-P1	Breccia 11	362575	8681646	4726	250	-60	300
A1-P1	Breccia 11	362500	8681613	4714	60	-60	180
A1-P2	Breccia 11	362500	8681613	4714	260	-60	150
E5-P1	Breccia 8	362172	8681824	4621	85	-60	150
F6-P1	Breccia 8	362226	8681737	4630	345	-55	230
G7-P1	Breccia 8	362157	8681762	4607	50	-60	256
P16-P1	San Antonio	362395	8682294	4507	50	-60	150
S19-P1	San Antonio	362456	8682319	4532	260	-60	150
R18-P1	San Antonio	362438	8682290	4530	300	-60	150

A second Phase of work is proposed, contingent on the results of Phase I, as presented in Phase II (Table 1-3). Should Phase II go ahead, the location of the drill holes would be contingent on the results of Phase I.

Table 1-3. Recommended Phase II exploration budget (contingent on Phase I), Chanape Au-Ag-Cu Project.

Phase II	Comments	USD
Permits	Semi-Detailed Environmental Permit (50 drill pads)	\$180,000

Phase II	Comments	USD
Set-up	Mobilization, camp installations, land movement	\$140,000
Operations	Drilling: 15,000 m X US\$150 per metre drilled	\$2,250,000
	Camp operation	\$350,000
Laboratory	80% of 15,000 metres drilled (12,000 samples) at US\$55/m (all-in cost)	\$720,000
Administrative costs	Car rental, house rental, food, office, material for sampling	\$200,000
	Local and skilled labors	\$360,000
	Others Administrative costs (accountant, lawyer, etc.)	\$40,000
	Company Running Costs	\$400,000
	Option Agreement Payments*	\$780,000
Closure	Demobilization	\$80,000
	TOTAL:	\$5,500,000

2.0 INTRODUCTION

Caracle Creek Chile SpA (“Caracle” or the “Consultant”) was engaged by Turmalina Metals Corp. (“Turmalina” or the “Issuer” or the “Company”), to prepare an independent National Instrument 43-101 (“NI 43-101”) Technical Report (the “Report”) for its Chanape Gold-Silver-Copper Project (“Chanape” or the “Project” or the “Property”), located in the San Damian District, Huarochiri Province, Peru (Figure 2-1). The Report has been prepared in accordance with the disclosure and reporting requirements set forth in the National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1.

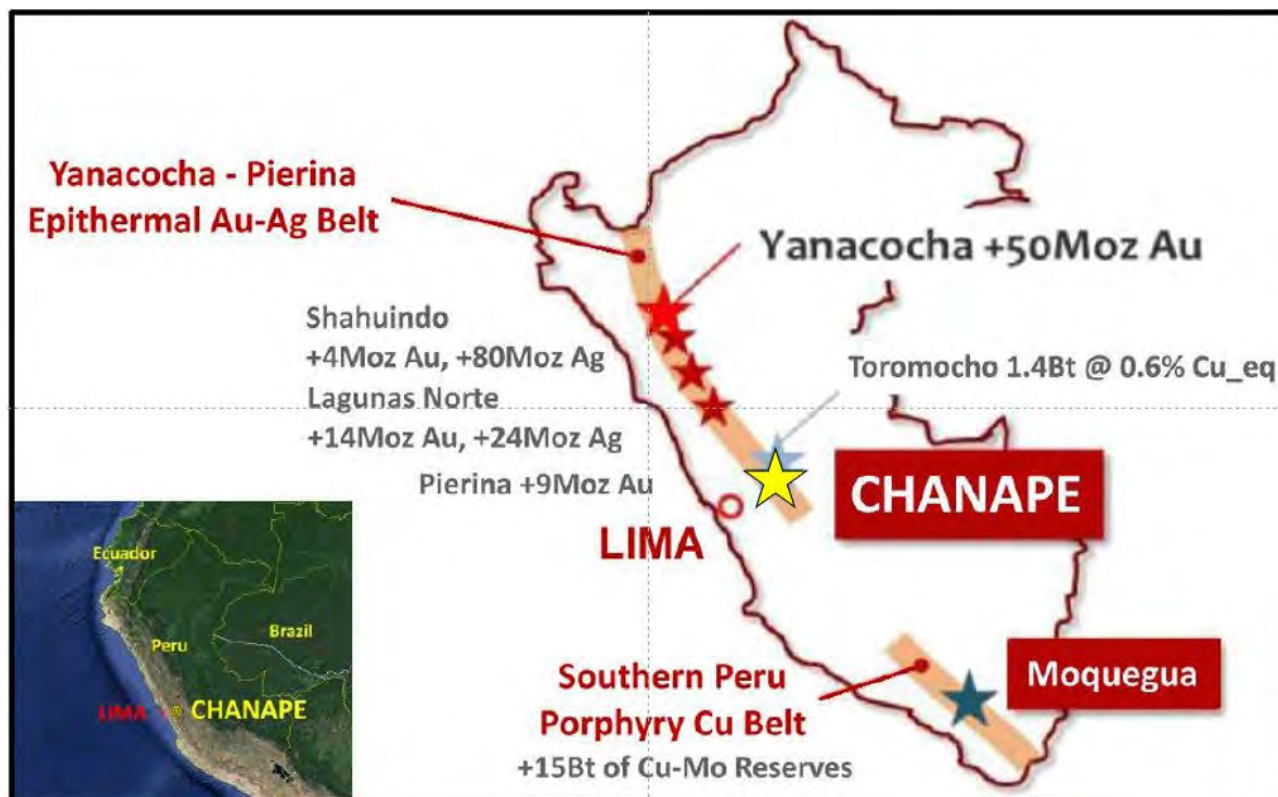


Figure 2-1. Country-scale map showing the location of Turmalina Metals’ Chanape Gold-Silver-Copper Project (yellow star) in central Peru (Hutton et al., 2015). The Authors and Qualified Persons have not independently confirmed the quantity and grade of mineralization reported from other properties, mines, or deposits shown on the map, which is provided for information purposes only, and is not necessarily indicative of the mineralisation to be found on the Chanape Property.

2.1 Purpose of the Technical Report

The Report has been prepared in accordance with NI 43-101 at the request of Turmalina Metals Corp. The Report provides an independent review of Turmalina’s Chanape Project located in central Peru, examining the data and information related to historical and current mineral exploration on the Property, and reviewing and reporting on all data and information available from the Company and in the public domain, with respect to the Property.

2.2 Qualifications of Consultants

The Report has been completed by Dr. Scott Jobin-Bevans and Mr. Simon Mortimer (together the “Consultants” or the “Authors”). Dr. Jobin-Bevans (“Principal Author”) is the Managing Director at Caracle Creek Chile SpA (Chile) and Mr. Simon Mortimer is a Professional Geologist at Atticus Geoscience Consulting S.A.C. (Peru).

Dr. Jobin-Bevans is a professional geoscientist (APGO #0183, P.Geo.) with experience in geology, mineral exploration, Mineral Resource and Mineral Reserve estimation and classification, land tenure management, metallurgical testing, mineral processing, capital and operating cost estimation, and mineral economics. Mr. Mortimer is a professional geologist (FAIG #7795) with experience in geology, mineral exploration, Mineral Resource and Mineral Reserve estimation and classification, geological modelling, and mineral economics.

The Authors and Qualified Persons have not independently reviewed and confirmed the following tonnages and grades as reported below, is provided for information purposes and is not necessarily indicative of the mineralization to be found on the Property.

Dr. Scott Jobin-Bevans and Mr. Simon Mortimer, by virtue of their education, experience, and professional association, are each considered to be a Qualified Person (“QP”), as that term is defined in NI 43-101 and specifically sections 1.5 and 5.1 of NI 43-101CP (Companion Policy). Dr. Jobin-Bevans, Principal Author, is responsible for preparing all sections of the Report. Mr. Mortimer, Co-author, is responsible for preparing sections 1, 2.5, 3, 12, 25, and 26 of the Report.

The Consultants employed in the preparation of the Report have no beneficial interest in Turmalina and are not insiders, associates, or affiliates of the Company. The results of the Report are not dependent upon any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings between Turmalina and the Consultants. The Consultants are being paid a fee for their work in accordance with normal professional consulting practices.

2.3 Previous Technical Reports

No previous NI 43-101 technical reports have been prepared for Turmalina’s Chanape Gold-Silver-Copper Project and the Report is the current NI 43-101 Technical Report on the Project.

2.4 Effective Date

The Effective Date of the Report is 13 May 2022.

2.5 Details of Personal Inspection

A personal inspection (site visit) to the Project was completed by the Co-Author (Qualified Person), Mr. Simon Mortimer (MSc. ACSM, MAusIMM, FAIG #7795), travelling from Lima to the Project office in San

Damian on the 6th of April, and to the project site on the 7th of April, returning to San Damian in the late afternoon and on to Lima on 8 April 2022. All information and data relating to the historical and current exploration work completed on the Project was made available to the QP before and during the personal inspection of the Property.

During the site visit, the Co-Author, confirmed access, verified the presence of historical exploration work (*i.e.*, drill setups), reviewed the channel sampling program procedures, visited outcrops and proposed drill sites, and took rock chip samples from three of the breccia pipes.

The Co-Author was accompanied by Ram Betancourt, Project Manager for Turmalina Metals Corp. The site visit incorporated a tour of the geology and administration offices in San Damian, the core storage and logging facilities, local accommodation, and a reconnaissance of the exploration property situated approximately 25 km and a further 1,000 m up the mountains. The time spent on the Property included a review of the geology, location and composition of the breccia bodies and mineralization, focusing on the breccia bodies that have been explored by previous companies and are the targets for exploration drilling by Turmalina.

Table 2-1. Summary of breccia bodies reviewed in detail during the personal inspection of the Property.

Breccia Body	Location*		Channel samples reviewed	Visible Sulphide Mineralization	Check Samples	Assay Results	
	Easting	Northing				Au (ppm)	Ag (ppm)
Breccia 24	362467	8682260	Yes	Yes	-	No results	No results
Breccia San Antonio	362403	8682300	Yes	Yes	BxSanAnt	4.041	>100
Breccia 10 Julio	362070	8681910	Yes	Yes	-	-	-
Breccia 8	362211	8681835	Yes	Yes	Bx8	0.115	3.3
Breccia 10-11	362490	8681620	Yes	Yes	Bx10811	0.364	2.4

*WGS84, collected by the Co-Author

The check samples were taken as rock chip grab samples, not necessarily taken from rock that exhibits strong mineralization, but as a composite sample from multiple points within the breccia body around the measured GPS location. The sample taken from the San Antonio breccia body has returned values (gold and silver) that are comparable with the mineralization from the channel samples taken by the Turmalina exploration team; the samples taken from Breccia 8 and the Breccia 10-11 bodies returned values at the lower end of the channel sample distribution values but did however show evidence of gold mineralization. Photos from the personal inspection of the Project are shown in Figure 2-2.

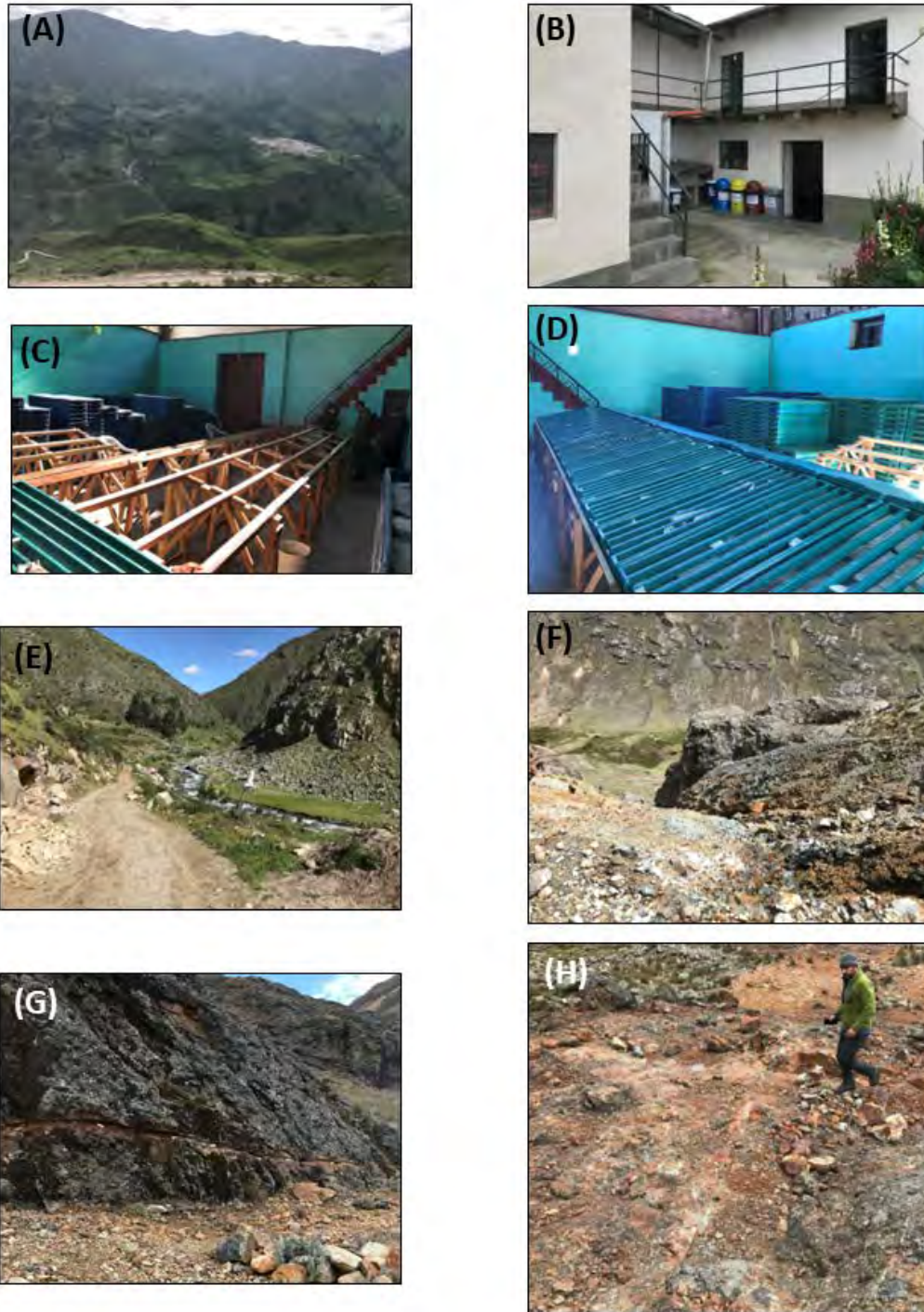


Figure 2-2. Photos from personal inspection completed by the Co-Author. A) Access to the town of San Damian, situated at 3,200 m above sea level, 4 hours drive from Lima. B) Interior courtyard of the administration and geology office, town of San Damian, 3,200 m above sea level. C) Core logging and storage facilities, where the Turmalina Metals geologists carry out the re-logging of historic drill cores and are expected to complete the process of the data collection for the future drilling program. D) Historical drill core, laid out for re-logging. E) En-route to the Property, a journey of 1.5 hours along a dirt track that follows and fords the river. The route is accessible by four-wheel drive vehicle for most of the year, as crossing the river becomes difficult in the rainy season. F) Breccia San Antonio, on the southern flank of the Chanape valley looking towards the north. G) Channel sample of Breccia 8. H) Channel sample across the Breccia 10-11 body.

2.6 Sources of Information and Data

Standard professional review procedures were used by the Authors in the preparation of the Report. The Authors consulted and utilized various sources of information and data, including historical files provided by the Issuer and government publications. In addition, Co-author and QP Simon Mortimer completed a site visit to confirm the Property, infrastructure, data, and mineralization as presented. A list of the various sources used to prepare the Report are provided in Section 27.

General information on Peru was accessed online through the Peruvian government website and digital data and information on the geology and mining in Peru is available online through INGEMMET (Instituto Geologico, Minero y Metalurgico). An interactive database, GEOPORTAL, is available online through GEOCATMIN. The cadastre system for Peru is accessed online through SIDEMCAT (Sistema de Derechos Mineros y Catastro) and GEOCATMIN.

Additional company information was reviewed and acquired through public online sources including SEDAR and various corporate websites.

Personnel and associates from Turmalina were actively consulted post and during report preparation and during the personal inspection of the Property. Personnel include Francisco ‘Chico’ Azevedo (VP Business Development) and Ram Betancourt (Project Manager, Turmalina Metals Corp.).

2.7 Commonly Used Terms and Units of Measure

All units in the Report are based on the International System of Units ("SI Units"), except for units that are industry standards, such as troy ounces for the mass of precious metals. Table 2-2 provides a list of commonly used terms and abbreviations. Unless specified otherwise, the currency used is United States Dollars ("US\$" or "USD") and coordinates are given in PSAD56, UTM Zone 18L (south) datum.

Table 2-2. Commonly used terms, abbreviations and initialisms in the Report.

Units of Measure		Initialisms	
above mean sea level ('msnm')	AMSL	APGO	Association Professional Geoscientists of Ontario
billion years ago	Ga	CRM	Certified Reference Material
centimetre	cm	DDH	Diamond Drill Hole
Canadian dollar	C\$ or CAD	EM	Electromagnetic
gram	g	EOH	End of Hole
gram per tonne	g/t	EPSG	European Petroleum Survey Group
greater than	>	FA	Fire Assay
hectare	ha	ICP	Inductively Coupled Plasma
hour	hr	Int.	Interval
inch	in	LDL	Lower Detection Limit
kilo (thousand)	K	LLD	Lower Limit of Detection
kilogram	kg	MAG	Magnetics or Magnetometer
kilometre	km	NI 43-101	National Instrument 43-101
less than	<	NSR	Net Smelter Return Royalty

Units of Measure		Initialisms	
litre	L	pop.	Population
megawatt	Mw	PSAD56	Provisional South American Datum of 1956
metre	m	QA/QC	Quality Assurance / Quality Control
millimetre	mm	QP	Qualified Person
million	M	RC	Reverse Circulation
million years ago	Ma	ROFR	Right of First Refusal
nanotesla	nT	SG	Specific Gravity
ounce	oz	SI	International System of Units
parts per million	ppm	TSX-V	Toronto Venture Stock Exchange
parts per billion	ppb	UTM	Universal Transverse Mercator
percent	%	WGS84	World Geodetic System 84
pound	lb	Elements	
short ton (2,000 lb)	st	antimony	Sb
specific gravity	SG	arsenic	As
square kilometre	km ²	copper	Cu
square metre	m ²	gold	Au
three-dimensional	3D	lead	Pb
tonne (1,000 kg) (metric tonne)	t	molybdenum	Mo
two-dimensional	2D	silver	Ag
United States dollar	US\$ or USD	zinc	Zn

3.0 RELIANCE ON OTHER EXPERTS

The Report has been prepared by Caracle Creek Chile SpA for Turmalina Metals Corp. (the Issuer). The Authors have not relied on any report, opinion or statement of another expert who is not a qualified person, or on information provided by the Issuer concerning legal, political, environmental or tax matters relevant to the Report.

4.0 PROPERTY DESCRIPTION AND LOCATION

The Chanape Project is located in the western flank of the Western Occidental of Central Peru, about 85 direct kilometres east of the capital City of Lima, in the Department of Lima, Province of Huarochiri, San Damián District (see Figure 2-1; Figure 4-1). The Project is centred at about Latitude 11°55'23"S and Longitude 76°15'49"W (WGS84 UTM Zone 18L, 362400mE, 8681630mN), about 4,650 m AMSL (Figure 4-1 and Figure 4-2). All known mineralization, economic or potentially economic that is the focus of the Report is located within the boundary of the Project mining concessions.



Figure 4-1. Provincial-scale location of the Chanape Au-Ag-Cu Project (blue star), Department of Lima, Huarochiri Province, San Damián District, Peru (Macharé et al., 2012).



Figure 4-2. Google Earth image showing the location of the Chanape Project and Base Camp. Access from Lima is via Route PE-22 to Cocachacra and then southeast on route LM-118 to San Damian town (red route) and on to the Base Camp and Chanape Project area (light green route). Turmalina’s field office is located in San Damian.

4.1 Property and Title

The Chanape Project consists of 20 contiguous mining concessions covering a total of 676.99 ha and registered in the name of Minera Altas Cumbres S.A.C. (the “Mining Concessions”) (Table 4-1; Figure 4-3).

Table 4-1. Summary of the 20 concessions that comprise the Chanape Gold-Silver-Copper Project, Peru.

Code	Name	Hectares	Status	Granted
10418206	10 DE JULIO DE CHANAPE	17.97	D.M. Titulado D.L. 708	02/10/2006
10215606	CHANAPE	400.00	D.M. Titulado D.L. 708	16/05/2006
10216806	CHANAPE I	6.00	D.M. Titulado D.L. 708	17/05/2006
10416806	SAN ANTONIO 1	3.00	D.M. Titulado D.L. 708	02/10/2006
10417306	SAN ANTONIO 10	23.95	D.M. Titulado D.L. 708	02/10/2006
10416906	SAN ANTONIO 2 DE CHANAPE	27.95	D.M. Titulado D.L. 708	02/10/2006
10417006	SAN ANTONIO 3 DE CHANAPE	23.96	D.M. Titulado D.L. 708	02/10/2006
10417106	SAN ANTONIO 4	100.00	D.M. Titulado D.L. 708	02/10/2006
10417906	SAN ANTONIO 5	5.99	D.M. Titulado D.L. 708	02/10/2006
10418006	SAN ANTONIO 6	5.99	D.M. Titulado D.L. 708	02/10/2006
10418406	SAN ANTONIO 7	4.69	D.M. Titulado D.L. 708	02/10/2006
10418106	SAN ANTONIO 8	17.97	D.M. Titulado D.L. 708	02/10/2006
10417206	SAN ANTONIO 9	19.91	D.M. Titulado D.L. 708	02/10/2006
10418306	SAN ANTONIO DE CHANAPE	8.86	D.M. Titulado D.L. 708	02/10/2006
10433806	VIOLETA 1 DE CHANAPE	5.95	D.M. Titulado D.L. 708	13/10/2006
10417506	VIOLETA 2	17.99	D.M. Titulado D.L. 708	02/10/2006
10417706	VIOLETA 3	17.92	D.M. Titulado D.L. 708	02/10/2006

Code	Name	Hectares	Status	Granted
10433906	VIOLETA 4	2.99	D.M. Titulado D.L. 708	13/10/2006
10417606	VIOLETA 5	69.82	D.M. Titulado D.L. 708	02/10/2006
10417406	VIOLETA DE CHANAPE	23.99	D.M. Titulado D.L. 708	02/10/2006

4.2 Annual Holding Cost

The 20 mining concessions that comprise the Property are subject to an annual fee of US\$3.00 per hectare, with fees totalling US\$2,030.97 per year and payable by the end of June.

4.3 Option Agreement

On 13 March 2020, the Company through its 100% owned Peruvian subsidiary Aurora Copper Peru S.A.C., entered into an option agreement (the “Option Agreement”), with Minera Altas Cumbres S.A.C., to acquire a 100% interest in the mining concessions that comprise the Chanape Project. The Company can acquire a 100% interest in the Property by making total cash payments of US\$3,410,000 and by incurring exploration expenditures of US\$2,000,000 (Table 4-2) (Turmalina MD&A, 30 September 2021). As of 30 December 2021, the Company has paid a total of USD\$210,000.

Table 4-2. Summary of terms of the option agreement for the Chanape Project.

Timing	Cash Payment (USD\$)	Mineral Exploration Expenditure (USD\$)
Upon Signing LOI (paid)	10,000	-
February 22, 2020 (paid)	18,727	-
Execution of Definitive Agreement (paid)	22,000	-
April 30, 2020 (paid)	9,273	-
December 2020 (paid)	40,000	-
June 30, 2021 (paid)	50,000	250,000
December 30, 2021 (paid)	60,000	-
June 30, 2022*	100,000	500,000
December 30, 2022*	120,000	-
June 30, 2023*	180,000	500,000
December 30, 2023*	250,000	-
June 30, 2024*	350,000	750,000
June 30, 2025*	2,200,000	-
Total (USD):	3,410,000	2,000,000

*The original payment terms were every 6 months from the date of signing (13 March 2020); however due to the COVID-19 global pandemic, the registration of the public deeds was delayed 108 days, shifting the payment due dates from September and March to December 30 and June 30.

4.4 Corporate Background

Founded in 2017, Turmalina Metals Corp. was formerly known as Turmalina Copper Corp. (name change June 2019), and formerly 1112002 B.C. Ltd. Turmalina controls two subsidiaries, Aurora Mining S.A. (Argentina) and Aurora Copper Peru S.A.C. (Peru). Minera Altas Cumbres S.A.C. holds title to the mining concessions that comprise the Chanape Project and which are being optioned to Aurora Copper Peru S.A.C. (“Aurora”).

4.5 Mineral Tenure in Peru

Under Peruvian law, the Peruvian State (federal government) is the owner of all natural resources which includes the mineral resources in the ground. The rights to explore for and develop these mineral resources are granted by means of the “Concessions System”. Mining concessions have the nature of immoveable goods.

In Peru, mineral concessions are granted following receipt of a paper application specifying the coordinates of the concession boundaries, based on UTM Zone 18 South (datum WGS 1984) coordinates. All pre-2016 concessions were established using the PSAD 1956 datum and pre-1994 concessions, based on the old system (“punto de partida” or *starting point system*), could be at any orientation. These older style of concessions have been surveyed by the government and the legal corners assigned UTM coordinates in the WGS 1984 system. All new concessions must use the new grid and must be at least 100 ha in area. Where new concessions overlap with older concessions converted to the new system, the older concessions have precedence.

Mining concessions are considered immovable assets and are therefore subject to being transferred, optioned, leased and/or granted as collateral (mortgaged) and, in general, may be subject to any transaction or contract not specifically forbidden by law. Mining concessions may be privately owned and the participation in the ownership of the Peruvian State is not required. Buildings and other permanent structures used in a mining operation are considered real property accessories to the concession on which they are situated.

4.5.1 Ownership of Mining Rights

According to General Mining Law mining concession is irrevocable as long as titleholder fulfils the legal obligations required to maintain it in force. However, the titleholder shall comply with the entire obligation in order to maintain the mining concession valid. General Mining Law provides that mining concessions can be extinguished only by: expiration as a consequence of a failure by a titleholder to pay the mining validity fee and/or penalties for two years (consecutive or not); abandonment as a consequence of the breach of the mining procedure rules applicable to a mining concession; nullity in the case that a mining concession was claimed by an individual or entities that have restrictions according to the mining law; resignation in the case that the titleholder requests the extinction of the mining right; and, cancellation in the case that a mining concession overlaps with priority rights, or when the right is unassailable.

Pursuant to the General Mining Law, mining rights may be forfeited only due to a number of circumstances defined by law (*i.e.*, non-payment of the maintenance fees and/or noncompliance with the Minimum Production Obligation). The right of concession holders to sell mine production freely in world markets is established. Peru has become party to agreements with the World Bank's Multilateral Investment Guarantee Agency and with the Overseas Private Investment Corporation.

4.5.2 Annual Fees and Obligations

The mining concession shall be maintained by paying validity fees and complying with the corresponding Minimum Production Obligation ("MPO"). Regarding the obligation to pay the validity fees, the price of these administrative fees depends on the condition of the title-holders (small, artisanal, or general regime). Validity fees shall be paid annually to maintain mining concessions in force. The non-compliance of validity fees payment for two consecutive years causes the mining concession to expire.

Pursuant to article 39 of the General Mining Law, title holders of mining concessions pay an Annual Maintenance Fee (Derecho de Vigencia). The Derecho de Vigencia is due on June 30 of each year and is paid once a year in advance and is calculated at US\$3.00 per hectare. Failure to pay Derecho de Vigencia for two consecutive years causes the expiration ('caducidad') of the mining concession. However, according to article 59 of the General Mining Law, payment for one year may be delayed with penalty and the mining concessions remain in good standing. The outstanding payment for the past year can be paid on or before the following June 30 along with the future year.

Concession owners must pay US\$3.00 per hectare to file each concession, plus an administrative fee. An annual holding fee of US\$3.00 per hectare is required to maintain the concessions, once granted, for the first six years, after which the owner is assessed at twice the annual rate, in addition to the annual holding fee if the property has not been put into production.

4.5.3 Surface Rights

Mining concessions constitute a different right from surface land over it. Owners of surface lands are not authorised to perform mining activities, unless they have a valid mining concession title granted by the INGEMMET. Surface rights are not included in mineral rights, and permission must be obtained in writing from owners and a two third majority of community members when surface rights are owned by local communities, before commencing drilling activities.

Aurora Copper Peru has signed a Mining Rights Agreement (Cesión de Derechos Mineros) with title holder Minera Altas Cumbres S.A.C. with respect to the Project's 20 concessions. Turmalina has a surface land use and easement agreement with Comunidad Campesina de Checa ("Checa") for 5 years (to 17 January 2026). There is no obligation to retain the surface rights, with Aurora having the right to renew every year until 2026 at a cost of approximately US\$15,000 per year. The contract can be extended if both parties agree to an extension and terms.

4.5.4 Small-Scale Production

Small title-holders are entities or individuals holding concessions in an area of less than 2,000 hectares with no more than 350 tonnes per day (“tpd”) of production and must pay a validity fee of US\$1.00 per hectare; artisanal title-holders are entities or persons holding concessions in an area of less than 1,000 hectares with no more than 25 tpd and must pay a validity fee of US\$0.50 per hectare; finally the general regime applicable for entities or persons who do not qualify as small or artisanal and the fees are US\$3.00 per hectare. Validity fees must be paid annually to maintain mining concessions in force. Non-compliance of validity fee payment for two consecutive years results in the extinction of the mining concession.

The Mining Law obligates mining concessions holders to move into production. Currently, two regimes of minimum annual production exist, depending on the date of the mining concession title. Holders of mining concessions that were granted before 2008 will be obliged to achieve minimum annual production from 2019. The two regimes are as follows:

1. Legislative Decree No. 1054 (granted in June 2008) this regime established that mining concessions holders – qualifying under the general regime - need to reach a minimum annual production, equivalent to one tax unit (approximately US\$1,160) per year per hectare. If the holder of mining concession cannot reach such minimum annual production in the first six months of the eleventh year since the year in which the concessions was granted, the holder will be required to pay a penalty equivalent to 10% of the applicable minimum production per year per hectare until the fifteenth year. After the period of 15 years, the mining concessions may remain in force for an additional period of up five additional years in the case of: (i) the holder paying the applicable penalty and securing investments in the mining concession of 10 times the applicable penalty that should be paid; or (ii) events of force majeure. If the minimum production is not reached after this period has lapsed, the mining concession will inevitably expire.
2. Legislative Decree No. 1320 – (granted in 2017 and in force in 2019) according to this new disposition, mining concessions holders shall reach the minimum annual production, equivalent to one tax unit (approximately US\$1,250) per year per hectare. If the holder of a mining concession cannot reach the minimum annual production in the first quarter of the eleventh year since the year in which the concession was granted, the holder will be required to pay a penalty equivalent to 2% of the applicable minimum production per year per hectare until the fifteenth year. If the holder cannot reach the minimum annual production in the first quarter of the sixteenth year since the year in which the concessions was granted, holder will be required to pay a penalty equivalent to 5% of the applicable minimum production per year per hectare until the twentieth year. If the holder cannot reach the minimum annual production in the first quarter of the twentieth year since the year in which the concessions was granted, the holder will be required to pay a penalty equivalent to 10% of the applicable minimum production per year per hectare until the thirtieth year. Finally, if the holder cannot reach the minimum annual production until during this period, the mining concession will be automatically expired.

Working under the General Mining Regime incorporates a higher level of scrutiny and compliance through central government entities such as the Ministry of Energy and Mines, the Environmental Evaluation and Regulator Regime, Mining Investments Regulatory Regime, and the National Environmental for Sustainable Investments Service, among others as opposed to the PPM which was supervised by local authorities.

4.6 Permitting and Regulatory

Exploration and mining activities on the Chanape Project are subject to various Peruvian mining laws, regulations and procedures guided by the Peruvian Political Constitution. Mining Activities in Peru are subject to the provisions of the Uniform Code of the General Mining Law (“General Mining Law”), which was approved by Supreme Decree No. 014-1992-EM (4 June 1992) and its subsequent amendments and regulations, along with other related supreme decrees, laws, directives, and ministerial resolutions.

The title of a mining concession does not constitute authorisation to conduct mining activities of exploration or exploitation. It is necessary to first obtain a series of qualifying titles and administrative decisions, including but not limited to:

- approval of the environmental management instrument;
- certificate of non-existence of archaeological sites;
- authorisation of use of the surface plot from the owner of the plot of land; and
- other licences, permits and authorisations that are required in the effective legislation in accordance with the nature and location of the activities to be conducted.

Once the title of the mining concession of exploration and exploitation is issued and the remaining qualifying titles are obtained, the titleholder of a mining concession may ask the General Mining Bureau of the Ministry of Energy and Mines for the following authorisations to start operations, which are evidence of it being a holder of legal mining activity as outlined in Table 4-3.

Table 4-3. Activities associated with the exploration and development of mineral properties.

Activity	Authorization
Exploration	Authorization for exploration mining activities
Exploitation	Authorization for exploitation mining activities
Beneficiation	Title of mining concession for beneficiation and authorization of operation
Transportation	Title of mining concession for mining transportation and authorization of operation
General Work	Title of mining concession for general work

4.6.1 Ground Disturbance (Drilling and Trenching)

Companies must obtain a government permit prior to commencing any drilling or major earth moving programs, such as road, drill pad construction or trenching. Depending on the scale of work intended, exploration programs must be presented to the Ministry of Mines, which then will grant an approval to

initiate activities provided the paperwork is in order. All major ground disturbances must be remediated and re-contoured following completion of the work activities.

4.6.2 Permitting Process

In Perú, no work can proceed on a mining concession without either a landowner or a community agreement. Any type of exploration involving ground disturbance, apart from mapping, taking samples at surface and geophysical surveys require a permit. Acquiring a permit is a process requiring preparation and this task is usually outsourced to consultants and specialists that are able to recognize local needs, are aware of the details of government regulations, and are familiar with the mining and exploration industry.

A summary of the permitting process is as follows (Arseneau, 2022):

1. There are two types of exploration permits in Perú: Category 1 is for drilling programs that involve less than 20 drill pads and less than 10 ha of ground disturbance, including road building. This permit requires either a Ficha Tecnica Ambiental (FTA) or a Declaración de Impacto Ambiental (DIA). A drill pad may be used for multiple drill-holes if this is detailed in the declaration. The FTA is a one-time option. If the applicant wishes to exceed the 20 drill pad limit, he must apply for a DIA.
2. DIAs, if they comply with all requirements, may be granted after 20 working days unless the initial review finds causes for concern.
3. Programmes over 20 drill pads or with more than 10 ha of disturbance need to file for an EIA-sd (Semi-detailed Environmental Impact Assessment - Category II) the General Bureau for Environmental Affairs for Mining (“DGAAM”) at the Ministry of Energy and Mines (the “Ministry”). There is a review process that includes requests for comments from the Water Authority, local governments, community and Ministry of Culture.
4. All reports are filed electronically, and all communication from the Ministry is now posted online.
5. Once the DIA and EIA-sd are granted, the title holder will need an “Autorización de Inicio de Actividades”. This second permit must include the following:
 - a legal agreement with the registered owner(s) of the land - in the case of communities it needs to have two thirds approval from a general assembly;
 - a CIRA (Archeological certificate) granted by the regional cultural authority certifying that the work area is free of archeological or cultural items of significance; and
 - a water permit from the regional water board. Once all these permits are in place, an “Autorización de Inicio de Actividades” is granted.
6. The Ministry will ask the Ministry of Culture for comments. This means that additional community outreach programs may be needed. If the area is considered to have a significant indigenous population it will need to go through Consulta Previa (Prior Consultation). Enacted in 2011, the Law on the Right of Indigenous or Native Peoples to Prior Consultation (‘Ley del

Derecho a la Consulta Previa de los Pueblos Indígenas u Originarios’) established the guidelines for dialogue between the Peruvian government and indigenous organizations to reach binding agreements on administrative or legal decisions that may affect the collective rights of indigenous peoples. Consulta Previa is a process between Peruvian Government agencies and the local communities and its representatives. The Government relies in part on information provided by the concession owner (Turmalina), however Turmalina can only observe, not participate directly in the discussions. Covid-19 has currently made it very difficult to predict the amount of time this will take. The Government does allow third-party consulting groups to assist with characterization of local communities and Consulta Previa if required.

7. Archeological monitoring during ground disturbance is also a requirement.
8. Planning requires drill pads to be specified with 50-metre accuracy. Drill sites can be modified using ITS applications, so long as the modified pads are within the work area (or polygon) specified in the original permit.

4.6.3 Turmalina Permits and Other Agreements

On 12 May 2022, Turmalina was granted an FTA, which allows the Company to drill from 20 drill pads within a 24-month period. At each platform, the number of holes, their length, azimuth and inclination, can be altered provided that the work is done within the 24 month period and that the number of platforms and their locations do not change. The FTA identified three non-rehabilitated mining components (historical adits) in the perimeter to which the FTA applies (Figure 4-4).

With the granting of the FTA, Turmalina applied for a Water Permit and it is expected to be granted by mid-July 2022.

With the FTA and Water Permit in place, Turmalina will have all the necessary permits to complete the Phase 1 recommended work program (*see* Section 26).

4.7 Water Rights

In March 2009, the Peruvian government passed the Water Resources Law (‘Ley de Recursos Hídricos 29338’) which regulates the use and management of water resources. It includes surface, groundwater, continental water and the goods associated with it and extends to maritime and atmospheric water, where applicable.

Access to water for use in exploration and mining (*e.g.*, drilling, production) requires a permit which can be applied for once an FTA or DIA is approved. Since the approval of the FTA, Turmalina has applied for a Water Permit.

4.8 Royalties, Agreements and Encumbrances

With respect to the option agreement dated 13 March 2020, Minera Altas Cumbres retains a 2.0% Net Smelter Return royalty (“NSR”), of which the Company may purchase, at any time, 1.0% (50%) of the NSR for a payment of USD\$1,200,000 (Turmalina Metals, 2021b).

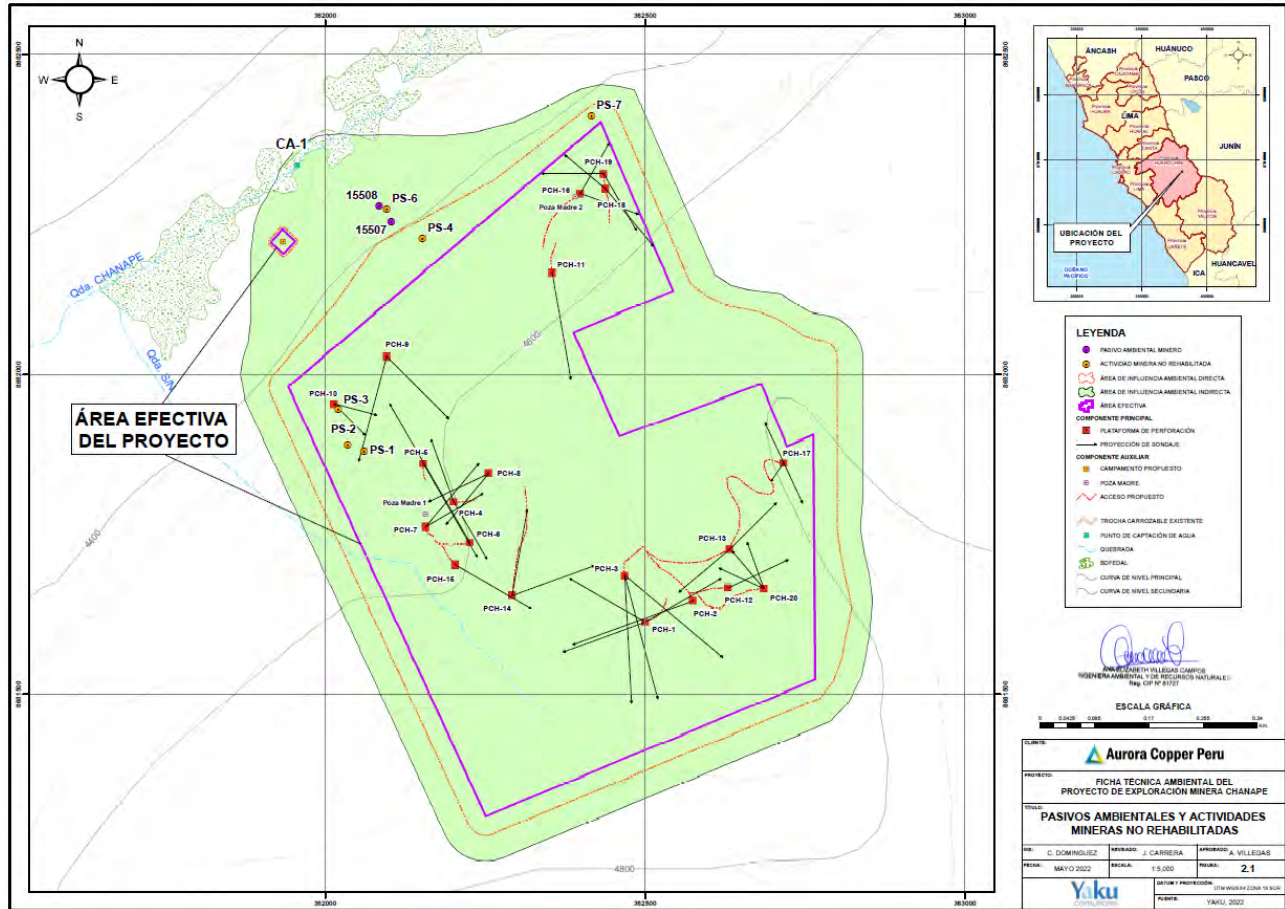
The Principal Author is not aware of any other royalties, agreements or encumbrances which are associated with the Property which is the subject of the Report.

4.9 Environmental Liabilities

The concept of “mining environmental liability” (‘pasivo ambiental minero’) in the Peruvian mining legal framework specifically refers to the facilities, runoffs, emissions, or remains of former mining operations that, by July 2004 (when the relevant law entered into force), had been abandoned or were inactive and entailed environmental or health hazards.

Peruvian environmental law sets out the general environmental liability rule that the one harming or potentially harming the environment is the one liable for such harm, and thus is the one obliged to prevent, mitigate, repair, or offset such damage. In the same manner, the legal framework on “mining environmental liabilities” sets out the general liability rule that whoever caused a “mining environmental liability” is responsible for its clean up.

Reported in the FTA, there are three non-rehabilitated mining components (historical adits) in the perimeter of the effective area (Figure 4-4). Other than the three non-rehabilitated mining components, the Principal Author is not aware of any environmental liabilities associated with the Property. The Principal Author is unable to comment on any remediation which may have been undertaken by previous companies. Turmalina has not applied for any environmental permits on the Property and has been advised that none of the exploration work completed to date requires an environmental permit. For exploration work in Peru, any disturbance to the land must be remediated.



4.10 Community Consultation and Agreements

Turmalina has developed and maintains good positive relationships with Comunidad Campesina de Checa, the only community affected by the Project. Turmalina has a “Contrato de Uso de Terreno Superficial y Servidumbre”, a surface land use and easement agreement (“Formal Agreement”), with the Checa community for a period of 5 years (to 17 January 2026) and which the Principal Author has reviewed.

The Formal Agreement with the Checa community requires Aurora to pay a yearly sum of approximately US\$13,000 (approx. 50,000 Peruvian Soles) for the land use and easement. Aurora also commits to giving preference to the hiring of its labour force from the Checa Community, when possible.

4.11 Other Significant Factors and Risks

Aside from the recent change of government and related changes in policy, Peru’s mining industry is highly regulated, and the permitting and reporting requirements for a mineral project, depending on the stage of the project, can be complex, with several government agencies involved at different stages of exploration and development. Turmalina’s Chanape Project is a relatively early-stage project and as such faces less of the complexities associated with an advanced stage project going into development or a mining operation.

The Company is awaiting the granting of its Water Permit which is expected to be completed by mid-July. Should that permit be denied, which is highly unlikely, this would limit the amount and type of exploration work the Company could perform and would therefore impact the scope of the recommended Phase 1 program (see Section 26).

The Authors are not aware of any significant factors and risks that may affect access, title, or the right or ability to perform the proposed exploration work program on the Chanape Project.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

Access to the Project offices in San Damian and the Chanape Project area from Lima is via National Road PE-22 to Cocachacra, then via LM-118 southeast to San Damian, and then on to the Project area and base camp via local gravel roads. Total driving distance from Lima is about 140 kilometres (see Figure 4-1 and Figure 4-2).

5.2 Climate and Operating Season

In the Chanape region, the summers are short, wet, and overcast and the winters are short, cold, dry, and partly cloudy. Over the course of the year, the temperature typically varies from 6°C to 8°C and is rarely below 0°C or above 14°C.

The Chanape Project is located at more than 4,200 m AMSL and as such, exploration work is limited to the winter dry season, generally from April through to December.

5.3 Local Resources and Infrastructure

General labour is available from San Damian village, located about 24 km drive from the Project area. Qualified labourers are sourced from Lima (140 km drive) or other cities where exploration and drilling crews/companies are located. The infrastructure available on the Project is limited to roads and access inherited from previous exploration companies and an area previously established for the exploration camp.

5.3.1 Water and Power Availability

The Company has applied for a Water Permit, as its FTA has been approved. The application covers accessing a water supply from the Quebrada Chanape, the creek in the large valley inside the Project area, for use in drilling and in the camp. The creek has plenty of water year-round as shown in the studies included in the FTA. Potable water will be bought to the camp in 20 litre containers.

Power for the Chanape camp is provided by way of diesel generators, adequate for the current stage of the Project. The closets power source on the national grid is located in San Damian village about 24 km from the Project.

5.4 Physiography

The area around the Project site is steep and rugged with altitudes varying from about 4,300 m AMSL in valleys to more than 4,900 m AMSL. The Project lies within cadastral map sheet Matucana 24-K. The Project

area occupies both flanks of the small Chanape River in the headwaters of the Lurín River that flows westward into the Pacific Ocean.

5.5 Flora and Fauna

The Project area is nearly devoid of vegetation with occasional desert cactus in valleys and along hill slopes with various grasses and shrubs occurring sporadically, concentrated within or proximal to stream valleys. Typically, there is very little animal life, generally restricted to small lizards, small mammals (*i.e.*, rodents), birds and insects.

6.0 HISTORY

Historical information and data that follows has not been independently verified by the Authors and Qualified Persons and it is the Principal Author’s opinion that the historical information and data, to the extent to which it is known and as it relates to sample collection, preparation, analysis and security is adequate for the purposes of the Report and for the planning of future exploration programs.

The Chanape area is within an old and active mining district located southeast of San Mateo. This region has been explored and mined since the colonial period and the modern history of exploration in the area and Chanape can be traced back to 1920 and the work of engineer Foilan Guzman. More extensive exploration and small-scale mining development began in 1950, with the building of the access gravel road from the Central Highway to the Pacococha mining area. Historical exploration activities at Chanape, from 1920 to 2015, are summarised in Table 6-1.

In 1943, the American Embassy was briefly interested in Chanape, delivering a positive report on the area and in 1950, Banco Minero del Peru reported on the Chanape project area (Engineering and Mining Journal, May 1950; High Ridge, 2007).

In December 2011, Condor Metals Ltd. announced that it had reached an agreement with private company Inca Minerals Ltd. to make an off-market takeover bid for 100% shares in Inca Minerals. In order to reflect the new focus of the consolidated company, Condor made a name change in 2012 to Inca Minerals Limited.

The most recent historical work completed on the Property, prior to 2017 and Aurora Copper Peru/Turmalina Metals Corp.’s involvement, was that completed by Inca Minerals Limited (“Inca Minerals”) who spent nearly five years exploring the Property from 2012 to 2015. Inca Minerals Limited subsequently withdrew from the Project and the Project reverted to ownership by Minera Altas Cumbres S.A.

To date, historical drilling consists of 45 diamond drillholes totalling 12,099.4 metres. Of these, six drill holes tested for the potential of porphyry copper mineralization and 39 drill holes tested for shallower epithermal gold-silver mineralization (Hutton et al., 2015). There has been no drilling by Turmalina or its Peruvian subsidiary Aurora.

Table 6-1. Summary of historical exploration work completed on the Chanape Project, Peru (modified after Hutton et al., 2015).

Year	Owner/Operator	Work Completed
1920-1942	Ing. Froilan Guzman / Sr. Anacleto Viani	held a group of claims in area of Chanape Project; started production on Breccia Intrusiva 10 de Julio and San Antonio veins; sold ore to Cerro de Pasco Copper Corporation (CCPC); CCPC explored the area
1943	Economic Welfare of the US Embassy	studied the Chanape zone

Year	Owner/Operator	Work Completed
		reaching positive conclusions
1978-1984	Compañía Minera Pacococha S.A./Compañía Minera Milpo S.A.	developed road access from the vicinity of the Pacococha mine to the Chanape zone; produced 64,000 tons of gold-silver ore from the Fulvia vein
2006	Gino Venturi (GV)	acquired Chanape property; mapping and geochemical surface sampling
2007-2009	High Ridge Resources Inc.	Farm-in joint venture with GV; ground geophysics (IP, magnetics); geological mapping; delineated at least 30 breccia pipes; alteration mapping; rock chip sampling (549 samples); access road construction (~12 km); diamond drilling: 12 holes for 2,352.50 m (CH-001 to CH-012); no porphyry-style mineralization recognized; JV terminated
2010-2016	Inca Minerals (Condor Metals Ltd.)	negotiations with GV began in 2010 and Chanape Mining Assignment agreed to in 2011; Condor Metals Ltd. takeover of Inca Minerals Ltd in late 2011; diamond drilling: 2 holes for 750 m (CH-DDH-001 and CH-DDH-002); purchased Arce Geofisicos geophysical data; drill core re-logging and re-sampling; geological mapping, rock chip sampling around Breccia 8; grid soil sampling program; grid ground magnetics (12 line-km) and IP survey (40.9 line-km); diamond drilling: 10 holes for 3,566.05 m (CH-DDH-003 to CH-DDH-012); preparation and submission of sdEIA (approved March 2015); diamond drilling: 21 holes for 5,430.85 m (CH-DDH-013 to CH-DDH-033)

6.1 1978-1984: Compañía Minera Pacococha/Compañía Minera Milpo

In 1978, the Sindicato Minero Pacococha S.A. built a road and started to develop Chanape: about 64,000 tons of ore were mined from the very northeastern tip of the Fulvia vein in the early 1980s (Ly and Arce, 1980). Approximately 2,000 m of drifts, cuts and other various work are present on the property; related works continued until 1984. In the late 1990s Compañía Minera Milpo S.A., owner of Pacococha, initiated

major work on Chanape that included detailed mapping, sampling and an environmental study. This work came to a halt and the property was dropped by Milpo in the early 2000s during a corporate reorganization. Subsequently the Chanape project did not enter any serious exploitation phase and the reserves remain nearly intact (Ly and Arce, 1980; High Ridge, 2007).

6.2 2007-2009: High Ridge Resources Inc.

On 8 February 2007, Canadian company High Ridge Resources Inc. (now Agra Ventures Ltd.) announced it had entered into an agreement to acquire a 100% interest in the Chanape concessions. High Ridge Resources Inc. (“High Ridge”) obtained numerous internal reports, plans and sections for Chanape prepared by geologists of the Banco Minero, Pacococha mine and Milpo, as well as several publications on the geology of the Chanape area by INGEMMET (High Ridge, 2007; Inche et al., 2008).

From late 2007 through 2008, through its wholly owned subsidiary Minera High Ridge del Peru S.A.C., Canadian company High Ridge completed surface sampling (rock grab samples and channel sampling), ground geophysical surveys, geological and alteration mapping, and diamond drilling.

6.2.1 Surface Work

Initial exploration work on the property began in late 2007 and included partial cleaning of adits and roads to facilitate the access to the property and veins.

6.2.2 Channel Sampling

Channel sampling was concluded by 31 December 2007, and as total of 261 rock channel samples were collected from existing drifts/adits and surface exposures (High Ridge Resources News Release, 8 January 2008).

6.2.3 Rock Chip Sampling

A total of 549 rock chip samples were collected with gold assays (fire assay) ranging from below detection to 13.30 g/t Au and averaging 0.30 g/t Au and silver ranging from below detection to 100 g/t Ag and averaging 7.54 g/t Ag. Copper assays ranged from 2 ppm to 10001 ppm Cu and averaged 155 ppm Cu.

6.2.4 Ground Geophysical Surveys

In late 2007, High Ridge had engaged Jose Arce Geofisicos S.R.L. (“Arce”) from Lima to complete geophysical surveys (High Ridge Resources News Release, 8 January 2008; High Ridge, 2008a). Survey results began to be reported in February 2008 and the two phases of surveys were completed by August 2008 (High Ridge Resources News Release 25 March 2008 and News Release 13 August 2022). In total, the two phases totalled 116 line-km of ground magnetics, self potential, and 104 line-km of 3D Induced Polarization (“IP”) surveys. The survey grid consisted of a total of 35 lines, oriented northwest-southeast and spaced at 200 metres. Modelling (3D) of the magnetics indicated a mag-high, roughly coincident with the valley system (Hedenquist, 2013).

For the initial phase of geophysical surveys, line preparation and gridding of 68.01 line-km was established topographically, controlled using DGPS/OMNISTAR system, with a TDS Ranger 300X data processor and a Trimble AGGPS114 receiver.

Twenty-one magnetic SE-NW profiles, total of 66.15 line-km, were surveyed on Chanape, employing two and three Scintrex ENVI proton precession magnetometers, and one base station, with readings every 10 metres.

Along the same 21 SE-NW lines, 56.75 line-km were measured with Induced Polarization, using the Pole-Pole (2-Array) electrode configuration, with constant-spacing measurements taken at 50 m intervals. Seven successive spacings of 50 m, 100 m, 150 m, 200 m, 250 m, 300 m and 350 m were used, with apparent chargeability and apparent resistivity readings for each station. Lithologies show resistivity ranges from less than 50 ohmmeters for strongly altered rocks through more than 8000 ohmmeters for compact or silicified units. Highly resistant and also conductive (altered) masses are sparsely distributed at shallow depths (20 m) and compact rocks are more common at 50 metres. However, starting at 100 m depth a central altered zone becomes evident and increases in conductivity (lower resistivities) at deeper levels. The IP data was used to generate a 3D model (Figure 6-1).

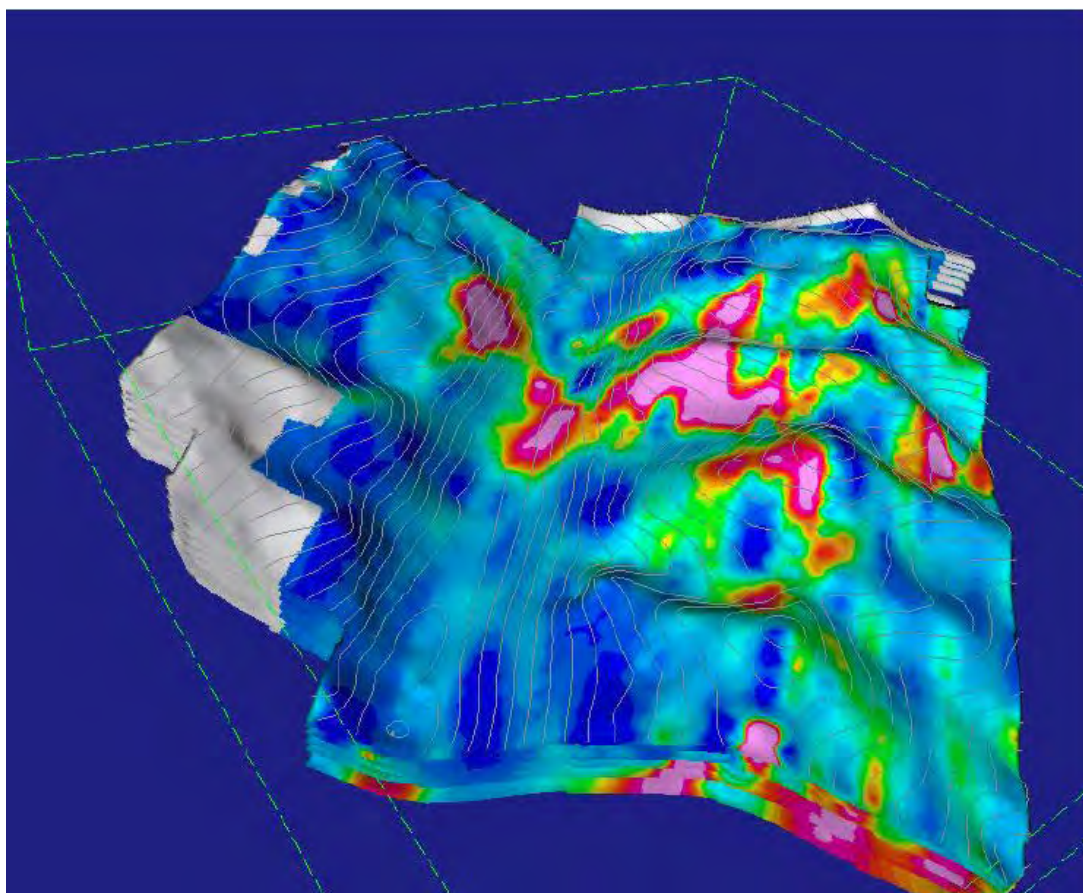


Figure 6-1. The 3D chargeability model for the Chanape grid at 20-50-100-150-200-300 metres depth, looking northeast. The strongest responses are identified by red and pink colours (High Ridge, 2008a).

Significant chargeability anomalies occur above 20mV/V. The strongest responses are present down to some 200 metres depth. Most evident anomalous features are located at the center of the survey area, but at deeper levels the most anomalous features are concentrated in the southern part of the grid (see Figure 6-1). These high responses are expected to be caused by metallic sulphides, but sericite, montmorillonite, and other clays also contribute to the measured chargeability.

The combined low resistivity/high chargeability anomalies on Chanape were regarded as having the opportunity for exploration targets with sulphides occurring in altered rock masses and drilling of the targets was recommended.

6.2.5 Historical Diamond Drilling

A drilling permit for a 3,000 to 5,000 metre campaign was obtained on 9 May 2008, which was quickly followed by access road and drill pad preparation (9 drill pads) ahead of drill rig mobilization. In addition, the Chanape base camp was prepared, and a temporary camp installed (High Ridge, 2008b).

On 29 May 2008, High Ridge announced the commencement of its first diamond drilling program, designed to test tourmaline breccia bodies, as well as polymetallic veins and larger targets identified from the 3D-IP survey. A total of 2,352.5 m in 12 holes (Table 6-2) were completed by 28 October 2008 (High Ridge, 2008c) (Figure 6-5; Figure 6-6), testing surface Au anomalies associated with fragmental and silicified rocks (Hedenquist, 2013). Hedenquist (2013), commented that it appeared that the drilling had been sited prior to the final geophysical results being delivered. The drilling contractor was Energold Drilling Corp. and drill hole collars were located using a hand-held GPS, with down-hole survey measurements taken at regular intervals (Hutton et al., 2015).

Table 6-2. Summary of historical drill holes completed in 2008 by High Ridge Resources.

Drill Hole	UTM_mE	UTM_mN	Elev_m	Length (m)	Az	Dip
CH-001	362327.00	8682332.00	4533.55	160.20	182.0	-60.0
CH-002	362445.89	8682183.57	4637.96	136.10	182.0	-65.0
CH-003	362445.10	8682183.99	4637.31	142.00	245.0	-75.0
CH-004	362449.04	8682181.57	4638.83	142.05	315.0	-85.0
CH-005	363182.00	8682206.00	4755.56	228.60	315.0	-85.0
CH-006	363180.00	8682205.00	4756.08	250.30	320.0	-48.0
CH-007	363179.00	8682200.00	4757.68	157.80	182.0	-45.0
CH-008	363179.00	8682200.50	4757.53	164.90	183.0	-60.0
CH-009	363205.00	8682461.00	4709.04	193.90	150.0	-45.0
CH-010	363205.00	8682462.00	4709.04	195.70	298.0	-60.0
CH-011	362906.00	8681469.00	4873.21	278.35	259.0	-90.0
CH-012	362698.00	8682002.00	4705.94	302.60	142.0	-73.0

PSAD56 Zone 18S; Az and Dip at collar

6.2.5.1 Results

The twelve diamond drill holes served to test auxiliary mineralized and geophysical anomalies in volcanic and intrusive rocks along the eastern side of the Chanape valley. Only the drill core showing visual evidence of the mineralization and/or alteration was assayed. A summary of the results from High Ridge’s 2008 drilling is provided in Table 6-3, applying a filter of concentrations >1.0 g/t Au and 20.0 g/t Ag.

Table 6-3. Summary of core assay results, 2008 High Ridge drilling program.

Drill Hole	From (m)	To (m)	Interval (m)*	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
CH-002	35.05	35.45	0.40	8.71	36.2	1130	62	60
CH-002	35.45	35.90	0.45	6.95	64.6	1295	61	26
CH-002	35.90	37.40	1.50	8.51	93	1060	47	62
CH-002	37.40	38.00	0.60	1.855	98.9	509	17	23
CH-002	72.75	74.00	1.25	1.19	26.5	1800	174	57
CH-002	75.75	76.70	0.95	3.22	61.4	1100	4050	83
CH-002	78.60	79.40	0.80	2.27	29.6	1940	309	40
CH-002	80.45	82.20	1.75	4.57	24.7	619	143	37
CH-002	90.45	91.00	0.55	11.25	44.5	4180	26	37
CH-003	36.50	37.70	1.20	7.86	29.2	1915	79	73
CH-003	39.50	41.30	1.80	3.5	81.1	547	47	31
CH-003	41.30	42.30	1.00	10	894	1980	25	28
CH-003	42.30	43.20	0.90	1.355	360	1005	24	31
CH-003	43.20	44.45	1.25	1.94	101	1805	67	69
CH-003	44.45	45.95	1.50	1.165	24	931	51	58
CH-003	47.10	48.25	1.15	2.33	46	1175	30	39
CH-003	48.25	48.75	0.50	3.22	100	4430	71	155
CH-003	70.75	72.45	1.70	1.105	45.2	349	521	67
CH-003	72.45	73.80	1.35	1.13	29.5	1705	444	69
CH-003	73.80	75.25	1.45	2.3	100	1425	2340	93
CH-003	76.05	77.35	1.30	5.19	100	2720	1300	132
CH-003	77.35	78.70	1.35	10.55	100	507	1550	91
CH-003	83.55	85.30	1.75	1.23	25.5	2330	45	42
CH-003	92.60	93.35	0.75	9.89	89.3	10000	250	139
CH-004	26.30	27.10	0.80	12.4	30.9	887	73	91
CH-004	34.20	35.60	1.40	4.92	116	3290	73	61
CH-004	35.60	37.40	1.80	2.9	89.3	372	38	27
CH-004	49.05	50.65	1.60	11.95	43.3	451	119	37
CH-004	50.65	52.25	1.60	8.57	98.6	967	341	31
CH-004	66.95	68.05	1.10	1.28	32.2	1505	1270	40
CH-004	74.10	75.70	1.60	1.75	26.3	1020	684	56
CH-004	75.70	77.55	1.85	4.63	58	501	934	84
CH-004	77.55	80.35	2.80	1.765	70.3	573	503	78
CH-004	86.05	87.00	0.95	2.52	49.3	2170	40	27
CH-004	87.00	88.15	1.15	3.2	22	1130	11	57
CH-004	88.15	89.85	1.70	3.01	25.3	1760	68	67
CH-004	102.50	103.80	1.30	1.55	60.9	1530	137	40
CH-004	103.80	105.70	1.90	4.19	177	758	692	90
CH-004	105.70	107.65	1.95	1.12	31.4	2760	96	43

Drill Hole	From (m)	To (m)	Interval (m)*	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
CH-004	107.65	109.00	1.35	12.3	31.3	2270	168	182
CH-004	109.00	110.35	1.35	1.165	38.9	2070	325	58
CH-006	27.90	29.15	1.25	1.03	20.5	95	6800	8670
CH-006	30.10	31.45	1.35	1.15	20.5	118	6240	9220
CH-009	18.30	18.95	0.65	1.4	57.3	516	16900	165000
CH-009	114.20	116.05	1.85	1.815	52.1	287	8810	11400
CH-009	126.20	126.70	0.50	9.46	80.5	868	10800	71700
CH-012	13.90	15.50	1.60	1.984	24	1278	751	1994
CH-012	24.90	26.50	1.60	1.84	30	2420	473	847
CH-012	33.95	35.45	1.50	3.024	39	2375	723	372
CH-012	36.95	38.45	1.50	3.59	32	1993	867	856
CH-012	41.55	43.05	1.50	4.684	46.5	2270	1193	5507

*drill hole intervals are core lengths and are not representative of true widths

The drill core revealed elevated gold and silver concentrations accompanied by high concentrations of arsenic (commonly >10,000 ppm As), bismuth (as high as 0.49% Bi), antimony (as high as 0.76% Sb), tungsten (as high as 0.89% W) and manganese (as high as 1.36% Mn), along with elevated gold (as high as 12.4 g/t Au) and silver (as high as 177 g/t Ag). Mineralization is associated with fine- to coarse-crystalline arsenopyrite in quartz veins and with tourmaline in matrix and clasts of hydrothermal breccias (High Ridge, 2008c).

The diamond drill hole intersects confirmed a mineralized system to at least 200 m depth and with a strike length in excess of 1,000 m, remaining open at depth, along strike, and width. The anomalous copper-gold and lead-zinc-silver mineralization appears to be consistent with the regional zoning pattern typically associated with larger porphyry systems (High Ridge, 2008c).

6.2.5.2 Sample Preparation, Analysis and Security

The logged drill core (size of core is not known) was split in half during the sampling process with the remaining half being retained for verification and reference in a secure facility on the project site. Core sampling was done on site by trained personnel. A total of 498 half core samples were collected at intervals ranging from 0.30 to 11.40 m but with most sampling between 0.50 and 2.00 metres. Sealed samples were transported to ALS Chemex's facilities in Lima, Peru by High Ridge geologists. Samples underwent 33 element ME-ICP(61) analysis and were assayed for gold by standard fire assay-AAS(23) finish. For quality control purposes duplicates, standards and blanks were inserted into the sample sequence (High Ridge, 2008c).

6.3 2010-2012: Inca Minerals

In 2011, Inca Minerals (Condor Metals Ltd.) entered into a 5-year Mining Option and Assignment Agreement (“MOAA”) with Gino Venturi. Initial drilling at Chanape resulted in the discovery of a high-sulphidation (“HS”) gold-silver-copper epithermal polyphase porphyry system (Inca Minerals, 2012; 2013). Inca Minerals undertook several orientation programs at Chanape to verify and confirm previous results,

including geophysical data acquisition and preliminary interpretation, regional spectral analysis, re-logging and re-sampling of previous diamond drill core (2008 drilling) and geological mapping.

Highlights of the 2011-2012 operations include:

- Identification of a large, pronounced “ring-shaped” magnetic anomaly at Chanape: This anomaly is most likely associated with deep propylitic or potassic alteration associated with a buried porphyry.
- Identification of a large, discrete Spontaneous Potential (SP) anomaly: This anomaly is most likely associated with phyllic alteration normally associated with late-stage alteration above “cooling” porphyry stocks.
- Confirmation of widespread phyllic alteration (quartz, sericite, pyrite), propylitic alteration (actinolite, epidote, chlorite) and potassic alteration (K-feldspar) throughout drill core and in outcrop at Chanape, alteration assemblages characteristic of porphyry deposits.
- Confirmation, via verification sampling, of pervasive Au-Ag-Cu mineralization in target Breccia 8 to >100 m depth.
- Identification of significant Au-Ag mineralization at target Breccia 10, from 6.4 m to 196.2 m, an interval of 189.8 m; within this 189.8 m interval, 23 samples were taken with a combined section of 65.55 metres.

Confirmation and recognition of key porphyry indicators coincident at Chanape include:

- Breccia cluster covering an area 2 km x 1 km, comprising numerous breccia bodies mapped at surface.
- Coincident porphyry intrusion, logged in drill core and outcropping.
- Large spontaneous potential or self potential (“SP”) anomaly generated from a 100 line-km IP survey.
- Multiple chargeability anomalies generated from a 100 line-km IP survey.
- A ring-shaped magnetic high anomaly generated from a 100 line-km magnetic survey.
- Widespread porphyry-style alteration, mapped at surface and logged through drill core.
- Widespread high sulphide epithermal gold, silver, copper mineralization, including pervasive disseminated and high-grade styles of mineralization, assayed in drill core rock-chip sampling.

6.3.1 Drill Core Re-Logging and Re-Sampling

A complete re-logging of drill hole cores (2,300 m) from the 2008 drilling program (renamed CHA series holes) was completed and a total of 251 core samples were submitted for analyses. Nearly one half of these samples served to verify previous results, and the other half served to fill segments without geochemical

information, including drill holes CH-011 and CH-012, where no previous sampling/assaying was reported (Macharé et al., 2012).

Resampling of the Chanape drill-cores was successful in that more than 80% of the former geochemical results were confirmed; most of the gaps without sampling/analysis were also filled.

Re-logging of the drill cores from the 2008 program allowed for characterizing lithology, alteration, and mineralization. Integration of the hydrothermal alteration pointed to a major mineralizing system at depth. The presence of potassic and sodic alterations indicates initial high temperatures for the magmatic-hydrothermal system. Multiple magmatic pulses as reflected in the different rock types led to a paragenetic sequence that includes rock emplacement, hydrothermal zonation and alteration, and veining as is typical of intrusive centre systems.

6.3.1.1 Sample Preparation, Analysis and Security

The 251 drill core samples and an additional 19 samples for quality control purposes were analyzed at the certified ASL Global laboratories in Lima and Canada. The analyses included 51 elements by ICP-MS spectrometry and gold by fire assay using 30 g nominal weight (Macharé et al., 2012).

A QA/QC process was set to assess and control the quality of the sampling and assaying, using Certified Standard samples for accuracy, Blank certified samples for cleanliness, and Duplicate samples for precision. Standard samples were provided by Shea Clark Smith (Reno, USA), and blank samples were provided by Acme Labs (Lima).

The 19 control samples were evenly inserted within the sample batches sent to the laboratory. This amount represents 1 control sample in 13.3 work samples, an industry acceptable ratio (Macharé et al., 2012):

- Blanks: results from all seven blanks were within the background values and without any anomalies.
- Standards: results from the seven gold and copper standards were analyzed and their results fit well with the certified values.
- Duplicates: five samples were split into one “original” and one duplicate sample, after size reduction and homogenization in the field. The duplicated results were considered satisfactory and the original assays therefore of good quality.

Data and information from the 2008 re-logging and re-sampling drill core program was processed using Oasis Geosoft® software to construct strip-logs and vertical cross sections for their interpretation (Macharé et al., 2012).

6.3.2 Hedenquist Consulting, Inc.

In 2013, at the request of Inca Minerals, Dr. Jeffrey W. Hedenquist, world-renowned epithermal and porphyry ore-deposit formation specialist, visited the Chanape property for one day. Hedenquist

recommended deeper drilling to target potential porphyry centre Cu-Ag mineralization at depth or lateral from the current deepest (approx. 600 m) drill holes.

6.4 2013-2014: Inca Minerals

Exploration conducted at Chanape from July 2013 to June 2014 included surface mapping and grid-sampling program (Phase 3) that covered the southern third of the project area. Phase 3 mapping and sampling included 1:5,000 to 1:1,000 scale geological mapping, surface channel sampling, and an extensive grid rock chip sampling program (Inca Minerals, 2014).

6.4.1 Channel Sampling

Between April 2013 and November 2014, Inca Minerals collected and assayed 577 channel samples using 20 cm sample lengths. Gold assays ranged from below detection to 14.05 g/t Au and averaged 0.267 g/t Au and silver ranged from below detection to 746 g/t Ag and averaged 7.25 g/t Ag. Copper assays ranged from 1 ppm to 17700 ppm Cu and averaged 105 ppm Cu.

6.4.2 Rock Chip Sampling

Between April 2013 and November 2014, Inca Minerals collected and assayed 1,468 rock chip samples (grab samples). Gold assays ranged from below detection to 31.60 g/t Au and averaged 0.216 g/t Au and silver ranged from below detection to 788 g/t Ag and averaged 6.10 g/t Ag. Copper ranged from below detection to 55100 ppm Cu and averaged 141 ppm Cu.

6.4.3 Historical Diamond Drilling

In 2013, Inca Minerals completed two diamond core drill holes (CH-DDH-001 and CH-DDH-002) totalling 750.00 metres (Table 6-4) (Figure 6-5; Figure 6-6). The purpose of the drilling program was to test for evidence of a deep-seated porphyry system and to test shallow epithermal gold targets within the drill permit area. Drill hole collars were located using a hand-held GPS and down-hole survey measurements were taken at regular intervals (Hutton et al., 2015).

Table 6-4. Summary of 2 historical drill holes completed in 2013 by Inca Minerals Limited.

Drill Hole	UTM_mE	UTM_mN	Elev_m	Length (m)	Az	Dip
CH-DDH-001	362445.00	8682184.00	4638.00	600.00	0.0	-90.0
CH-DDH-002	362759.00	8681994.00	4714.00	150.00	0.0	-90.0

PSAD56 Zone 18S; Az and Dip at collar

In 2014, Inca Minerals completed 10 diamond core drill holes (CH-DDH-003 to CH-DDH-012) totalling 3,566.05 metres (Table 6-5) (Figure 6-5; Figure 6-6). The purpose of the drilling program was to follow-up on the porphyry discovery and to drill-test epithermal gold targets within the drill permit area. Drill hole collars were located using a hand-held GPS and down-hole survey measurements were taken at regular intervals (Hutton et al., 2015).

Table 6-5. Summary of 10 historical drill holes completed in 2014 by Inca Minerals Limited.

Drill Hole	UTM_mE	UTM_mN	Elev_m	Length (m)	Az	Dip
CH-DDH-003	362712.00	8681985.00	4707.00	200.30	300.0	-63.0
CH-DDH-004	362683.00	8682139.00	4702.00	150.00	140.0	-70.0
CH-DDH-005	362302.00	8682230.00	4575.00	230.30	163.0	-63.0
CH-DDH-006	362408.00	8682120.00	4605.00	115.30	30.0	-40.0
CH-DDH-007	362408.00	8682120.00	4605.00	130.00	30.0	-55.0
CH-DDH-008	361903.00	8682207.00	4397.00	728.90	120.0	-55.0
CH-DDH-009	362598.00	8682718.00	4460.00	107.10	130.0	-40.0
CH-DDH-010	363027.00	8682882.00	4612.00	190.20	340.0	-50.0
CH-DDH-011	362596.00	8681906.00	4693.00	1047.15	332.0	-80.0
CH-DDH-012	362445.00	8682184.00	4638.00	666.80	45.0	-80.0

PSAD56 Zone 18S; Az and Dip at collar

6.4.3.1 Results

Of the 12 drill holes, three deep holes targeting porphyry mineralization were completed (CH-DDH-008, CH-DDH-011 and CH-DDH-012) and seven shallow holes targeting surface rock chip gold anomalies were completed (CH-DDH-003, CH-DDH-004, CH-DDH-005, CH-DDH-006, CH-DDH-007, CH-DDH-009 and CH-DDH-010). Only the drill core showing visual evidence of the mineralization and/or alteration was assayed. A summary of the results from Inca Minerals' 2013-2014 drilling is provided in Table 6-6, applying a filter of concentrations >1.0 g/t Au and 20.0 g/t Ag.

Table 6-6. Summary of core assay results, 2014 Inca Minerals drilling program.

Drill Hole	From (m)	To (m)	Interval (m)*	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
CH-DDH-001	16.00	17.00	1.00	1.370	75.6	810	301	96
CH-DDH-001	26.00	27.00	1.00	2.820	22.2	721	271	53
CH-DDH-001	33.00	34.00	1.00	5.730	37.4	586	286	65
CH-DDH-001	34.00	35.00	1.00	13.200	64.9	557	374	61
CH-DDH-001	38.00	39.00	1.00	3.730	56.6	923	93	65
CH-DDH-001	39.00	40.00	1.00	9.340	58.3	1290	104	97
CH-DDH-001	40.00	41.00	1.00	4.020	42.6	827	45	26
CH-DDH-001	41.00	42.00	1.00	3.070	184.0	453	54	40
CH-DDH-001	43.00	44.00	1.00	1.195	653.0	515	22	23
CH-DDH-001	50.00	51.00	1.00	3.390	35.2	1130	49	24
CH-DDH-001	52.00	53.00	1.00	2.750	245.0	346	284	33
CH-DDH-001	56.00	57.00	1.00	1.570	59.4	1050	561	21
CH-DDH-001	57.00	58.00	1.00	2.110	69.0	3110	206	38
CH-DDH-001	58.00	59.00	1.00	1.250	27.6	3420	89	29
CH-DDH-001	60.00	61.00	1.00	1.335	26.1	1570	204	27
CH-DDH-001	63.00	64.00	1.00	4.700	29.6	5800	563	59
CH-DDH-001	64.00	65.00	1.00	1.150	21.9	529	307	32

Drill Hole	From (m)	To (m)	Interval (m)*	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
CH-DDH-001	65.00	66.00	1.00	3.280	21.7	352	1130	45
CH-DDH-001	69.00	70.00	1.00	2.440	20.4	242	688	77
CH-DDH-001	70.00	71.00	1.00	1.900	35.4	958	482	56
CH-DDH-001	71.00	72.00	1.00	2.220	61.1	335	460	94
CH-DDH-001	75.00	76.00	1.00	1.105	22.7	430	95	102
CH-DDH-001	76.00	77.00	1.00	4.380	63.1	1000	79	69
CH-DDH-001	77.00	78.00	1.00	4.390	52.2	262	1710	60
CH-DDH-001	78.00	79.00	1.00	7.540	77.3	1110	262	31
CH-DDH-001	80.00	81.00	1.00	4.680	56.9	540	234	32
CH-DDH-001	81.00	82.00	1.00	7.650	107.0	1410	217	41
CH-DDH-001	82.00	83.00	1.00	3.520	123.0	2540	84	32
CH-DDH-001	83.00	84.00	1.00	2.660	49.0	368	144	28
CH-DDH-001	88.00	89.00	1.00	1.405	26.5	2330	95	38
CH-DDH-001	89.00	90.00	1.00	8.310	51.5	1210	287	45
CH-DDH-001	90.00	91.00	1.00	31.400	83.4	21800	333	77
CH-DDH-001	91.00	92.00	1.00	9.810	61.4	11250	82	39
CH-DDH-001	92.00	93.00	1.00	5.460	33.1	10900	47	42
CH-DDH-001	93.00	94.00	1.00	2.530	28.3	11250	65	62
CH-DDH-001	95.00	96.00	1.00	1.165	67.0	25300	97	262
CH-DDH-001	99.00	100.00	1.00	1.235	28.6	2890	157	55
CH-DDH-001	100.00	101.00	1.00	1.810	41.8	15200	45	88
CH-DDH-002	31.00	32.00	1.00	4.040	34.2	2350	1270	4550
CH-DDH-003	14.00	15.00	1.00	1.990	31.9	1205	4270	2710
CH-DDH-003	20.00	21.00	1.00	3.630	23.5	1970	283	269
CH-DDH-006	56.00	57.00	1.00	1.120	25.2	2450	62	83
CH-DDH-006	62.00	63.00	1.00	1.475	20.4	1000	677	54
CH-DDH-006	63.00	64.00	1.00	1.965	69.8	303	2440	60
CH-DDH-006	67.00	68.00	1.00	1.005	38.4	3140	398	85
CH-DDH-006	72.00	73.00	1.00	3.050	112.0	2350	415	72
CH-DDH-006	73.00	74.00	1.00	3.430	52.0	1280	121	36
CH-DDH-006	74.00	75.00	1.00	2.140	24.9	2450	63	33
CH-DDH-006	75.00	76.00	1.00	1.040	20.1	2950	39	52
CH-DDH-006	87.00	88.00	1.00	4.730	29.3	940	91	38
CH-DDH-007	38.00	39.00	1.00	1.855	52.4	747	1150	76
CH-DDH-007	39.00	40.00	1.00	1.245	20.6	385	484	77
CH-DDH-007	43.00	44.00	1.00	1.040	41.4	221	318	38
CH-DDH-007	54.00	55.00	1.00	3.770	43.5	975	70	37
CH-DDH-007	60.00	61.00	1.00	2.030	58.8	4630	93	38
CH-DDH-007	63.00	64.00	1.00	2.100	26.7	2380	61	37
CH-DDH-007	110.00	111.00	1.00	17.400	257.0	41000	15150	1885

Drill Hole	From (m)	To (m)	Interval (m)*	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
CH-DDH-012	24.00	25.00	1.00	1.120	24.3	396	95	37
CH-DDH-012	27.00	28.00	1.00	1.595	55.3	492	124	39
CH-DDH-012	34.00	35.00	1.00	4.550	23.4	430	89	49
CH-DDH-012	35.00	36.00	1.00	1.440	23.3	324	49	49
CH-DDH-012	36.00	37.00	1.00	3.370	63.7	341	65	46
CH-DDH-012	37.00	38.00	1.00	3.920	204.0	569	40	57
CH-DDH-012	38.00	39.00	1.00	1.075	100.0	679	26	35
CH-DDH-012	62.00	63.00	1.00	1.455	96.7	33600	132	1190
CH-DDH-012	63.00	64.00	1.00	1.015	31.2	16800	290	747
CH-DDH-012	170.00	171.00	1.00	1.105	79.5	30800	352	921
CH-DDH-012	186.00	187.00	1.00	2.310	56.1	32300	223	1090
CH-DDH-012	189.00	190.00	1.00	1.585	106.0	70900	120	829
CH-DDH-012	190.00	191.00	1.00	1.395	186.0	134500	117	2100
CH-DDH-012	203.00	204.00	1.00	2.170	84.1	47000	3440	3940

*drill hole intervals are core lengths and are not representative of true widths

Drill hole CH-DDH-012 intersected two tourmaline breccias between surface and approximately 205 m depth. The first of these was known (Breccia Pipe 8) but the second was a genuine discovery, intersecting a second breccia between 157.75 m and 205.2 metres. Mineralization includes a down-hole interval of 55 m at 2.3% Cu, 0.6 g/t Au, 42.9 g/t Ag, and 48.1 ppm Mo (Inca Minerals, 2014). Highlights from the second breccia include:

- 10.0 m @ 5.35% Cu, 0.015% Mo, 0.96 g/t Au, 83.68 g/t Ag from 186 m, including 4 m @ 8.9% Cu, 0.025% Mo, 1.14 g/t Au, 130.50 g/t Ag from 188 metres.

The upper breccia body (Breccia Pipe 8) intersected in CH-DDH-012 occurs between 18.6 m and 65.5 m and has a down-hole width of 46.9 metres. Mineralization associated with this breccia returned 67 m @ 0.97 g/t Au and 25.31 g/t Ag from surface and includes:

- 16.0 m @ 1.86 g/t Au, 58.96 g/t Ag from 24.0 metres.
- 8.0 m @ 2.30 g/t Au from 52.0 metres.
- 13.0 m @ 21.18 g/t Ag from 52.0 metres.
- 24.0 m @ 0.52% Cu from 50.0 m overlapping with gold and silver mineralization.

The higher concentrations of molybdenum were interpreted by Inca Minerals to represent proximity to a porphyry system. The discovery of economic grades of copper, molybdenum, gold, and silver close to the surface and at depth in association with porphyry and porphyry-related breccias at Chanape solidified Chanape as a discovery of genuine significance (Inca Minerals, 2015).

After receiving the initial assay results, Inca Minerals re-sampled the drill core from CH-DDH-012, located at Breccia 8, revealing strong tungsten (W) mineralization over an interval of 30.0 m, from 41.0 m down-hole

depth. Selected contiguous intervals of core from pertinent sections of CH-DDH0-12 were re-sampled (84 samples) and re-assayed using lithium-borate fusion ICP-MS analysis to obtain a more precise measure of WO₃ levels that was identified in initial testing (using four-acid ICP-MS). The new results indicate a zone of WO₃ mineralization from 41.0 m down-hole depth to 62.0 m down-hole depth, with high-grade mineralization of 1.22% WO₃ over 6.0 m from 54.0 metres. This 6 m zone occurs within a 9.0 m zone of 1.08% WO₃, which in turn occurs within a broader 21.0 m zone of 0.65% WO₃ (Inca Minerals, 2015).

Through their extensive resampling program Inca Minerals developed a schematic model as shown in Figure 6-2, reflecting the petrogenetic history and mineralizing events at Chanape.

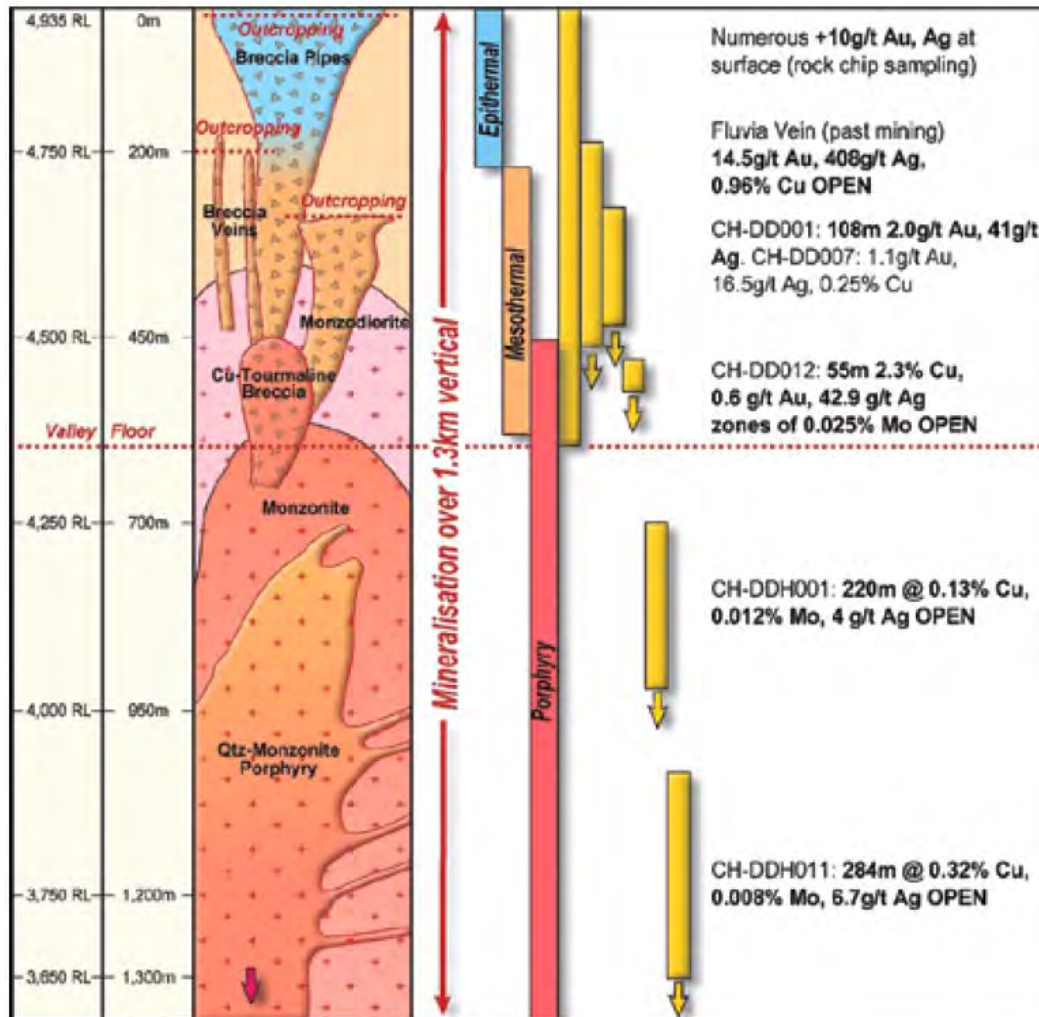


Figure 6-2. Schematic vertical section of Chanape, showing (LEFT TO RIGHT) relative height above sea level, relative project heights, solid geology interpretation of drilling/surface mapping, porphyry and porphyry-related mineralization zones (epithermal, mesothermal, porphyry) and exploration results (rock chip sampling and drilling). Key points to note: the extent of mineralization above the height of the valley floor, the open-ended nature of mineralization in drill core results and the broad vertical spread of mineralization (Inca Minerals, 2015).

6.4.3.2 Sample Preparation, Analysis and Security

Drill core (HQ-NQ size) was split in half during the sampling process with the remaining half being retained for verification and reference in a secure facility on the Project site. A total of 3,916 half core samples were collected at intervals ranging from 0.80 to 2.00 m but with most sampling at 1.0 metre. Core sampling was done on site by trained personnel. Sealed samples were transported to ALS Chemex's facilities in Lima, Peru by Inca Minerals personnel. Samples underwent 33 element ME-ICP(61) analysis and were assayed for gold by standard fire assay-AAS(23) finish. For quality control purposes duplicates, standards and blanks were inserted into the sample sequence.

6.5 2015: Inca Minerals

By 2015, strong gold, silver and lead mineralization had been identified at the summit area of Mount Chanape. Work programs included surface channel sampling, geophysical survey modelling and re-interpretation, and diamond drilling.

6.5.1 Channel Sampling

A follow-up channel-sample programme targeted previously sampled, but as yet undrilled, breccia occurrences in the summit and southern areas of Chanape. A number of high-grade breccia zones were identified (Figure 6-3). The very high values of Au-Ag-Pb are indicative of strong epithermal mineralization which is a style of mineralization that typically occurs above porphyry deposits. Elevated levels of Cu-Mo were also recorded in this part of the project and are an indication that hotter mineralising conditions, like that associated with porphyry mineralization, occur in proximity to the summit and southern areas (Inca Minerals, 2015). Peak values of channel sampling include:

- M183375: 12.65 g/t Au, 746 g/t Ag, 14.95% Pb.
- M183365: 9.11 g/t Au, 88.40 g/t Ag.
- M183356: 7.25 g/t Au, 94.10 g/t Ag.
- M183419: 4.17 g/t Au, 17.30 g/t Ag, 1.85% Pb.
- M183413: 3.96 g/t Au, 59.20 g/t Ag, 2.28% Pb.

A copper-rich breccia pipe was discovered at surface north of the gold-silver-copper-bearing Clint/Pipe 8 Breccia complex. The newly recognised breccia contains the highest Cu values of any outcropping breccia pipe at Chanape to date. Cu values range from 0.01% to 5.5%, Au values ranged from 0.034 g/t Au to 2.2 g/t Au (av. 0.5 g/t Au) and Ag values ranged from 1.7 g/t to 51.1 g/t Ag. The breccia was discovered 300 m north of CH-DDH-012 and is a hydrothermal tourmaline breccia with visible Cu-mineralization (chrysocolla and malachite). The high Cu levels and extent of tourmaline alteration makes it similar to the Clint Breccia, which was identified in CH-DDH-012.

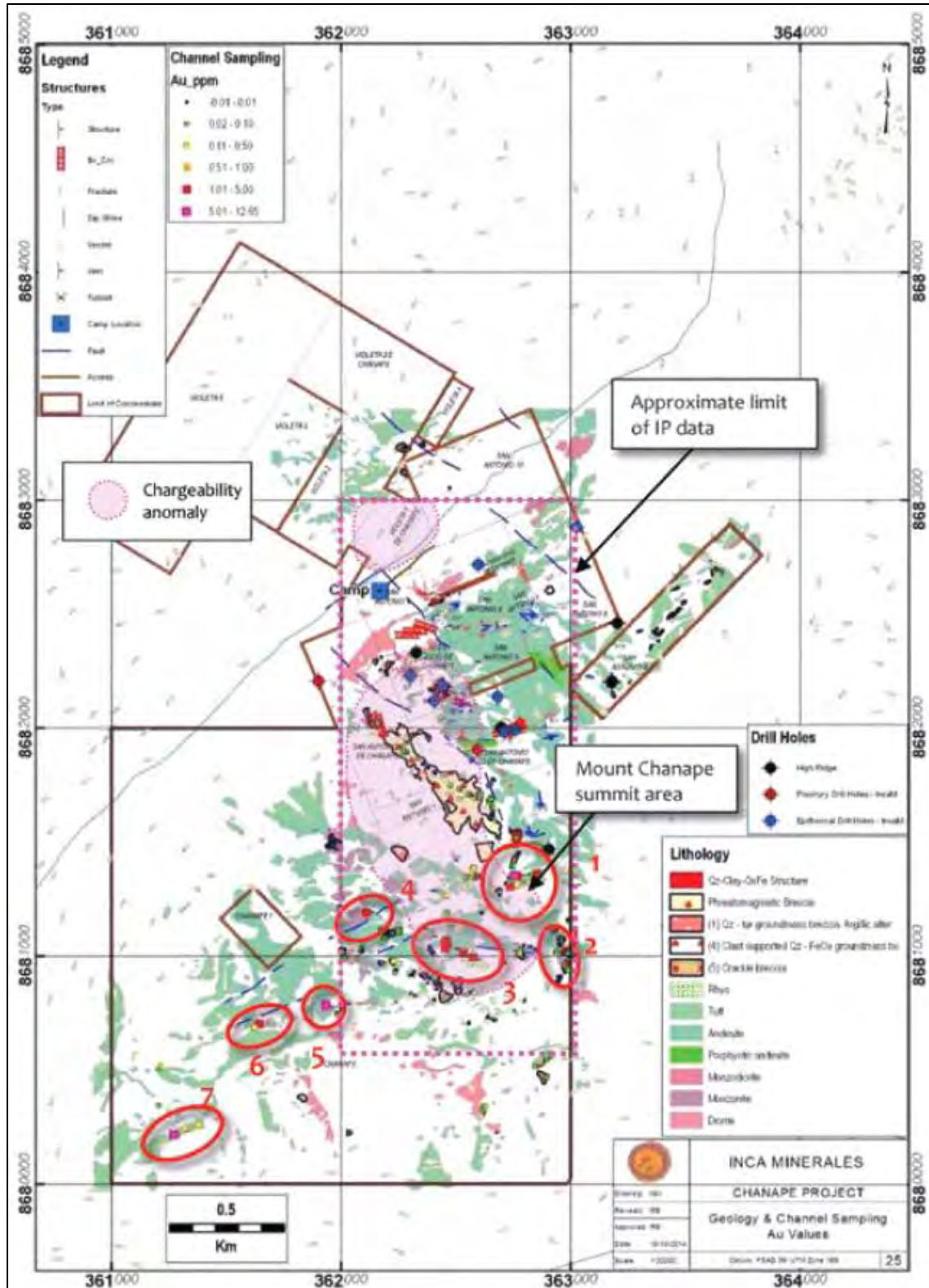


Figure 6-3. Channel-sample results (Au) with the highlighted breccia zones with strong Au mineralization. The seven breccias with >1.0 g/t Au are indicated by red circles. The very high Ag and Pb values largely coincide with the Au-bearing breccias. The polymetallic nature of the breccias at the summit reflect the relatively higher position this area has in relation to the porphyry system occurring below (Inca Minerals, 2016).

6.5.2 Geophysics

A large chargeability anomaly was identified in data remodelling. The Company also reviewed its IP geophysical data of the Chanape Project during the report period. The data of two IP surveys were remodelled and new 3D inversions were generated. Two discrete chargeability anomalies were identified at Chanape (Figure 6-4). The largest is a twin bell-shaped anomaly approximately 1,500 m x 750 m in area (surface projection). The second chargeability anomaly is smaller but is open to the north, occurring on the limit of the IP survey (Inca Minerals, 2015).

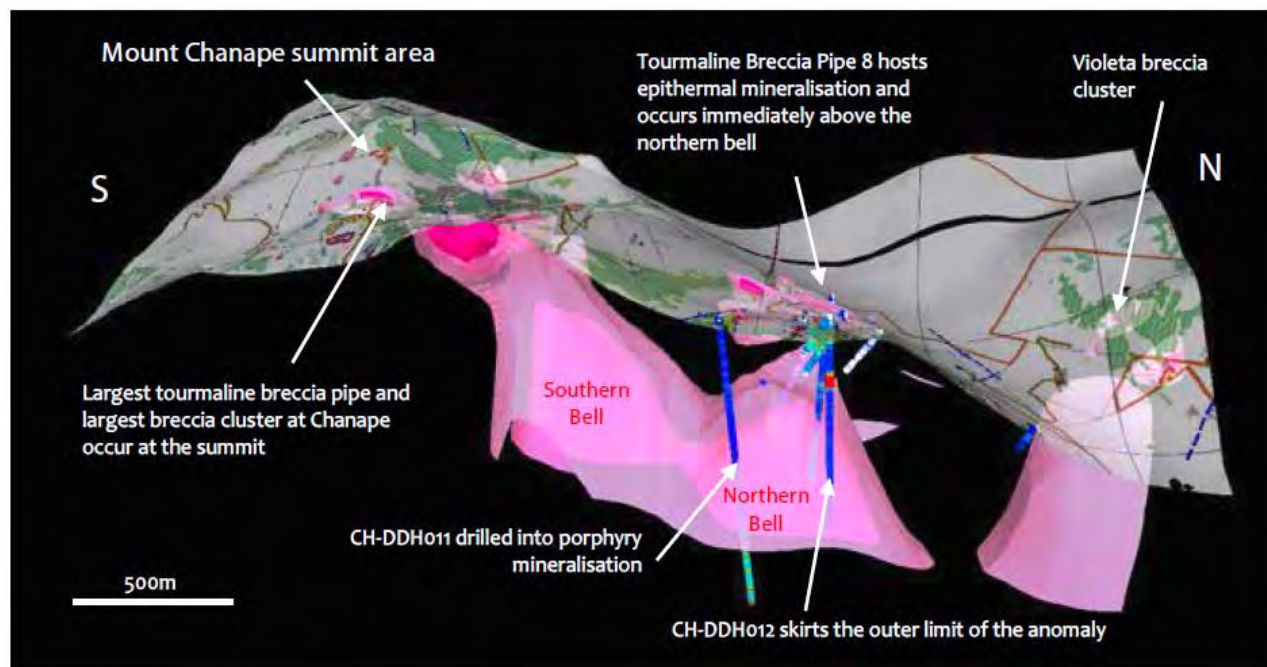


Figure 6-4. A 3D projection facing WSW showing chargeability anomalies (pink/red) and drill hole projections. The main chargeability anomaly closely coincides with the known porphyry and extends to and surfaces at the summit. The second chargeability anomaly, further north, occurs below the Violeta cluster of breccia pipes (Inca Minerals, 2016).

6.5.3 Topography (DTM)

Extensive surface geochemical data and a regional scale geology map were used to define the extents of the breccias at surface. Point data for topography was available and contoured to create a DTM surface (Hutton et al., 2015).

6.5.4 Talus Sampling

New zones of surface mineralization were indicated in talus sampling which identified several Cu, Au and Ag anomalies. The programme collected 103 talus samples, with approximately 50% of the samples being anomalous and indicative of mineralization upslope from the sample location. The lateral spread of anomalous talus samples indicates widespread mineralization in the northern, central and southern areas of Chanape and highlights the high levels of prospectivity of the breccias and intrusive rocks that were discovered in the summit and southern areas of Chanape (Inca Minerals, 2016).

The talus sample results indicate the occurrence of Cu, Au and Ag mineralization in close association with a large (1,000 m x 600 m) monzonite/monzodiorite intrusion in the southern part of Chanape. The monzonite/monzodiorite intrusion is the same rock type that forms part of the mineralized porphyry sequence encountered in Inca Mineral's drill holes CH-DDH-001, CH-DDH-011 and CH-DDH-012. The spread of talus sample anomalies in this area also indicates proximal mineralization associated with veins and breccias that occur beyond the outer limits of the intrusion (Inca Minerals, 2015).

The talus sample results indicate the occurrence of Cu, Au and Ag mineralization in close association with the largest individual tourmaline breccia and largest breccia cluster occurring at Chanape at the summit area. The summit area also hosts two intrusive stocks and widespread argillic and phyllic alteration (Inca Minerals. 2016).

6.5.5 Sillitoe Consulting

At the conclusion of hole CH-DDH-033 (the last hole drilled by the Company at Chanape), porphyry expert Dr. Richard Sillitoe was commissioned to undertake a review of all drill hole data and information. Sillitoe (2016), concluded that the potential Cu-zone of a porphyry system was below the deepest drilling (*i.e.*, no shallower than 1,000 m from surface).

6.5.6 Historical Diamond Drilling

In 2015, under their sdEIA drilling permit, Inca Minerals completed 21 drill holes (CH-DDH-013 to 033) totalling 5,430.85 m (Table 6-7; Figure 6-5; Figure 6-6).

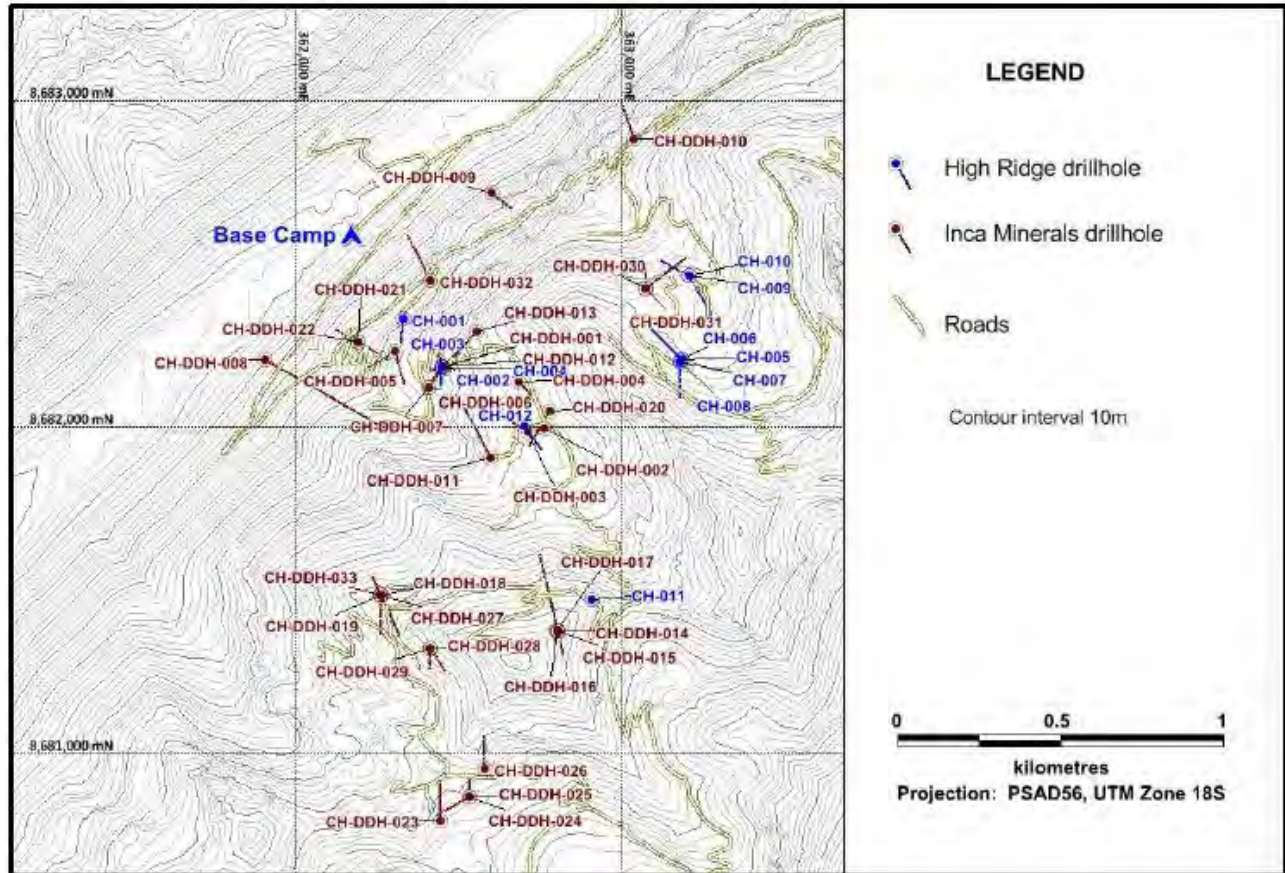


Figure 6-5. Chanape drilling, Inca Mineral Limited, with 2013-2014 drill holes in blue and 2015 drill holes in red (Hutton et al., 2015).

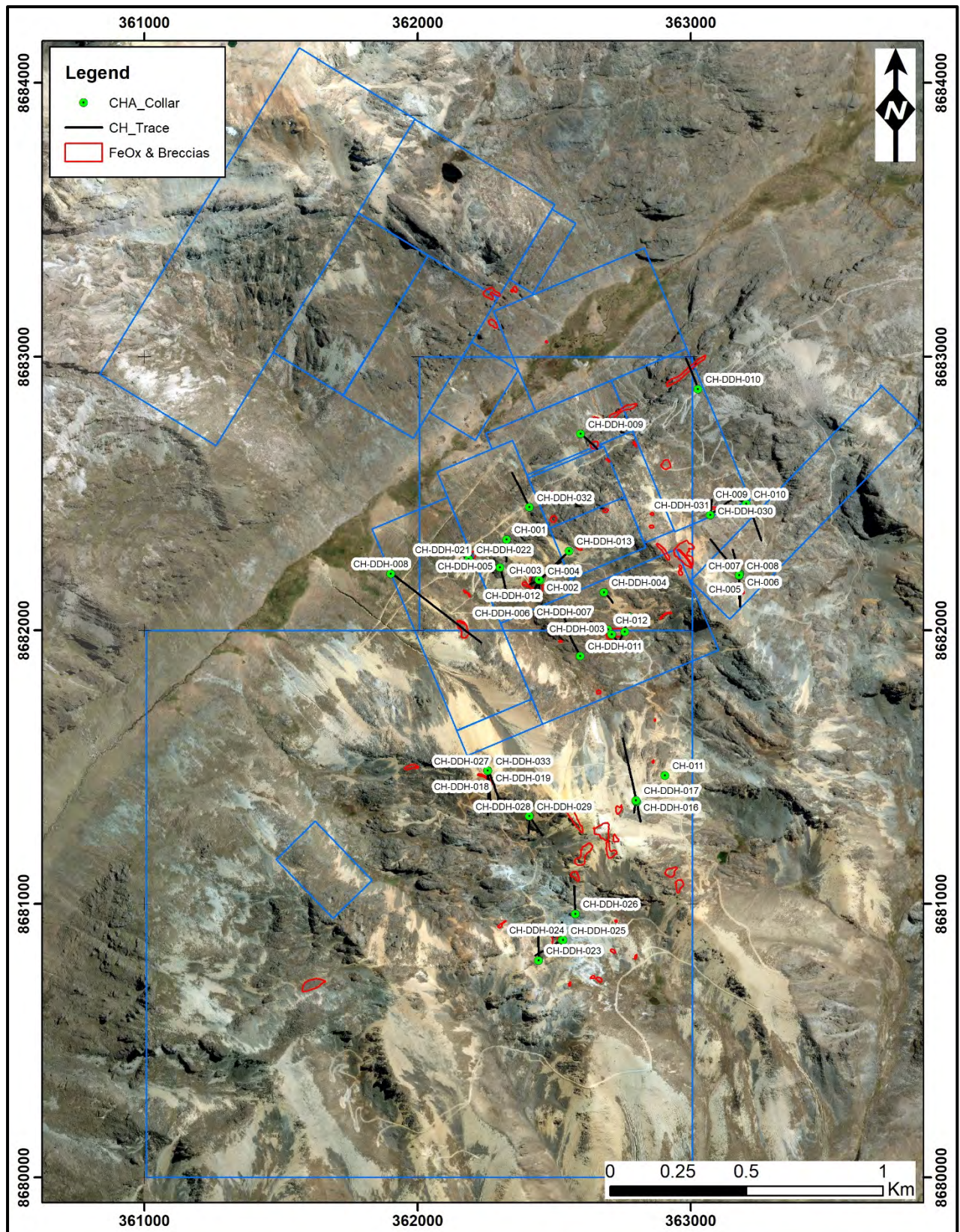


Figure 6-6. Location of CH series drill hole collars and traces, along with areas of FeOx and Breccia (Turmalina Metals, 2022).

The drilling program was successful in discovering a second porphyry sequence under the summit area of the project and identifying a number of high-grade gold, silver and copper breccias and veins in various parts of the project. Drill hole data (collar locations, downhole surveys, assays, lithology and alteration logs) were captured by Inca Minerals as Excel spreadsheets and imported into an Access database. The drilling contractor was Energold Drilling Corp. and drill hole collars were located using a hand-held GPS, with down-hole survey measurements taken at regular intervals (Hutton et al., 2015).

Topographic point surveys, geophysical surveys, surface geology mapping and surface geochemical sampling were also available and loaded to Leapfrog and Micromine where required. The spatial accuracy of the data was checked where possible and found satisfactory. Some drillhole collars had their elevations corrected by being pressed onto topography where required (Hutton et al., 2015).

Table 6-7. Summary of 21 historical drill holes completed in 2015 by Inca Minerals Limited.

Drill Hole	UTM_mE	UTM_mN	Elev_m	Length (m)	Az	Dip
CH-DDH-013	362555.00	8682290.00	4692.00	330.00	226.2	-59.9
CH-DDH-014	362803.00	8681373.00	4940.00	109.10	169.7	-46.3
CH-DDH-015	362803.00	8681373.00	4940.00	96.70	171.6	-60.5
CH-DDH-016	362800.00	8681375.00	4948.00	60.00	192.0	-45.0
CH-DDH-017	362801.00	8681378.00	4948.00	335.15	347.0	-45.0
CH-DDH-018	362258.00	8681486.00	4810.00	264.00	180.1	-50.2
CH-DDH-019	362258.00	8681486.00	4810.00	469.30	178.3	-74.6
CH-DDH-020	362778.00	8682048.00	4739.00	250.00	203.7	-60.2
CH-DDH-021	362189.00	8682259.00	4525.00	214.50	119.2	-60.1
CH-DDH-022	362188.00	8682259.00	4525.00	153.00	301.2	-60.7
CH-DDH-023	362444.00	8680793.00	4822.00	190.50	358.6	-49.7
CH-DDH-024	362530.00	8680868.00	4816.00	178.50	239.5	-48.7
CH-DDH-025	362534.00	8680867.00	4815.00	198.40	353.7	-70.2
CH-DDH-026	362578.00	8680963.00	4834.00	141.00	356.1	-44.8
CH-DDH-027	362258.00	8681486.00	4810.00	800.00	157.7	-80.7
CH-DDH-028	362410.00	8681320.00	4856.00	120.00	145.8	-45.6
CH-DDH-029	362410.00	8681320.00	4856.00	85.50	183.0	-44.9
CH-DDH-030	363072.00	8682422.00	4722.00	87.00	4.3	-50.3
CH-DDH-031	363072.00	8682422.00	4722.00	219.60	53.8	-45.5
CH-DDH-032	362410.00	8682450.00	4520.00	220.00	331.7	-50.7
CH-DDH-033	362258.00	8681486.00	4810.00	908.60	335.4	-86.1

PSAD56 Zone 18S; Az and Dip at collar

6.5.6.1 Results

Only the drill core showing visual evidence of the mineralization and/or alteration was assayed. A summary of the results from Inca Minerals’ 2015 drilling is provided in Table 6-8, applying a filter of concentrations >1.0 g/t Au and 20.0 g/t Ag.

Table 6-8. Summary of core assay results, 2015 Inca Minerals drilling program.

Drill Hole	From (m)	To (m)	Interval (m)*	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
CH-DDH-013	235.00	236.00	1.00	1.346	83.0	33200	827	1467
CH-DDH-013	239.00	240.00	1.00	1.192	32.5	14200	107	481
CH-DDH-013	240.00	241.00	1.00	1.893	25.5	11400	65	384
CH-DDH-013	241.00	242.00	1.00	1.782	34.9	15300	121	468
CH-DDH-013	242.00	243.00	1.00	1.854	38.1	18400	51	543
CH-DDH-013	243.00	244.00	1.00	2.160	43.6	22600	70	697
CH-DDH-013	246.00	247.00	1.00	1.497	71.6	42400	131	1071
CH-DDH-013	247.00	248.00	1.00	2.467	31.5	19100	262	510
CH-DDH-013	253.00	254.00	1.00	1.234	52.6	26500	635	1633
CH-DDH-013	275.00	276.00	1.00	1.025	36.5	19600	976	466
CH-DDH-013	278.00	279.00	1.00	1.225	51.1	18000	206	673
CH-DDH-013	283.00	284.00	1.00	1.203	69.5	28000	1200	5144
CH-DDH-013	292.00	293.00	1.00	1.649	61.4	22100	316	682
CH-DDH-013	293.00	294.00	1.00	1.614	77.8	29000	592	727
CH-DDH-013	297.00	298.00	1.00	1.017	85.7	31900	773	1579
CH-DDH-013	298.00	299.00	1.00	2.272	57.9	22400	561	1446
CH-DDH-013	299.00	300.00	1.00	2.012	45.4	14800	1181	865
CH-DDH-013	300.00	301.00	1.00	3.135	52.0	19600	344	853
CH-DDH-013	301.00	302.00	1.00	1.030	26.0	9258	130	641
CH-DDH-014	29.00	30.00	1.00	2.769	175.2	304	36320	319
CH-DDH-015	40.00	41.00	1.00	2.934	74.9	865	9073	2734
CH-DDH-017	239.00	240.00	1.00	1.332	34.3	3073	2792	265
CH-DDH-018	97.00	98.00	1.00	3.410	26.0	3156	838	614
CH-DDH-019	288.00	289.00	1.00	13.600	23.1	2372	2260	1466
CH-DDH-027	356.00	357.00	1.00	1.578	74.4	667	907	2170
CH-DDH-028	36.00	37.00	1.00	9.300	136.7	7384	8804	2569
CH-DDH-028	37.00	38.00	1.00	1.223	41.3	3236	6470	1313
CH-DDH-029	37.00	38.00	1.00	5.043	185.8	832	2688	231
CH-DDH-029	59.00	60.00	1.00	1.813	26.3	694	1616	1636
CH-DDH-030	29.00	30.00	1.00	3.567	123.4	1983	16310	997
CH-DDH-030	59.00	60.00	1.00	10.000	60.3	569	1733	1814
CH-DDH-031	27.00	28.00	1.00	1.839	98.6	432	4527	9428
CH-DDH-033	249.00	250.00	1.00	2.169	536.0	4404	14390	1375
CH-DDH-033	256.00	257.00	1.00	2.218	1995.0	8575	27300	792

Drill Hole	From (m)	To (m)	Interval (m)*	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
CH-DDH-033	257.00	258.00	1.00	1.050	473.0	1917	4578	270

*drill hole intervals are core lengths and are not representative of true widths

6.5.6.2 Sample Preparation, Analysis and Security

Drill core (HQ-NQ size) was split in half during the sampling process with the remaining half being retained for verification and reference in a secure facility on the Project site. A total of 3,732 half core samples were collected at intervals ranging from 0.70 to 3.00 m but with most sampling at 1.0 metre. Core sampling was done on site by trained personnel. Sealed samples were transported to ALS Chemex's facilities in Lima, Peru by the High Ridge geologists. Samples underwent 33 element ME-ICP(61) analysis and were assayed for gold by standard fire assay-AAS(23) finish. For quality control purposes duplicates, standards and blanks were inserted into the sample sequence.

6.6 2016: Inca Minerals

In 2016, the final year of Inca Minerals' the 5-year option, Inca Minerals sought to renegotiate the US\$4M exercise price that was due at the end of 2016 under the terms of the 2011 MOAA with Gino Venturi. Negotiations with the owner were unsuccessful and this coupled with Inca Minerals' determination that the porphyry target was too deep to commercially justify further exploration, made the decision to terminate the option (Inca Minerals, 2016).

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

Peru's porphyry belt extends along the entire length of Peru, paralleling the Pacific coast and roughly coinciding with the Andes Mountains (Figure 7-1). The Andean Porphyry Belt can be divided into a northern, central and southern part, comprising six informal metallogenic provinces. The Andean Porphyry Belt contains a number of mines and deposits and Hutton et al. (2015), provides a review of the mineralization within the three parts of the belt.

Chanape occurs within the Tertiary Volcanic Epithermal Gold Belt and is about 30 direct kilometres south-southwest from the Toromocho Mine, a historical and current mining area with a number of small to large-scale mines.

7.1.1 Regional Stratigraphy

The region lies on the high part of the Pacific flank of the Western Cordillera. The basement of the region is composed by Late Cretaceous marine sedimentary rocks. They crop out along the Carretera Central, near Tambo de Viso and Cacray, some kilometres southwest and northeast of San Mateo. These, mainly carbonate rocks, are moderately to tightly folded in anticlines and synclines associated to east-verging thrust faults. These rocks are unconformably overlain by a sequence of continental sedimentary, volcanic and volcano-derived deposits of very variable thickness, from hundred meters to more than 2,000 metres (Macharé et al., 2012). The sequence is composed by two main groups:

- Older Latest Cretaceous to Paleocene volcanics originally called the Casapalca volcanics (McLaughlin, 1924), which was divided into the San Francisco and Bellavista y Río Blanco Formations (McKinstry et al., 1965; Salazar, 1983).
- Younger Paleocene to Miocene lavas and pyroclastics: the Rímac, Castrovirreyna, and Millotingo Formations.

It should be stressed that despite its proximity to Lima and to several mining districts, the stratigraphy of the region is not well defined. This is due to a lack of detailed mapping and geochronological dating that is required to characterize the geology in this kind of continental volcanic terrain.

7.1.2 Regional Tectonics

The upper Pacific slope of the Andes in this Central Peru section shows a structural trend in NNW-SSE direction (azimuth = 150°), usually referred to as the “Andean trend”. Predominant structures are folds and faults extending from 2 to 20 kilometers in length. Folds are systems of anticlines and synclines presenting different styles that depend, in general, on the deformed rock. Cretaceous limestones show open to tight folds (Huachuga massif), chevron folds in thin layers and disharmonic accommodation of less competent layers (Mégard, 1978).

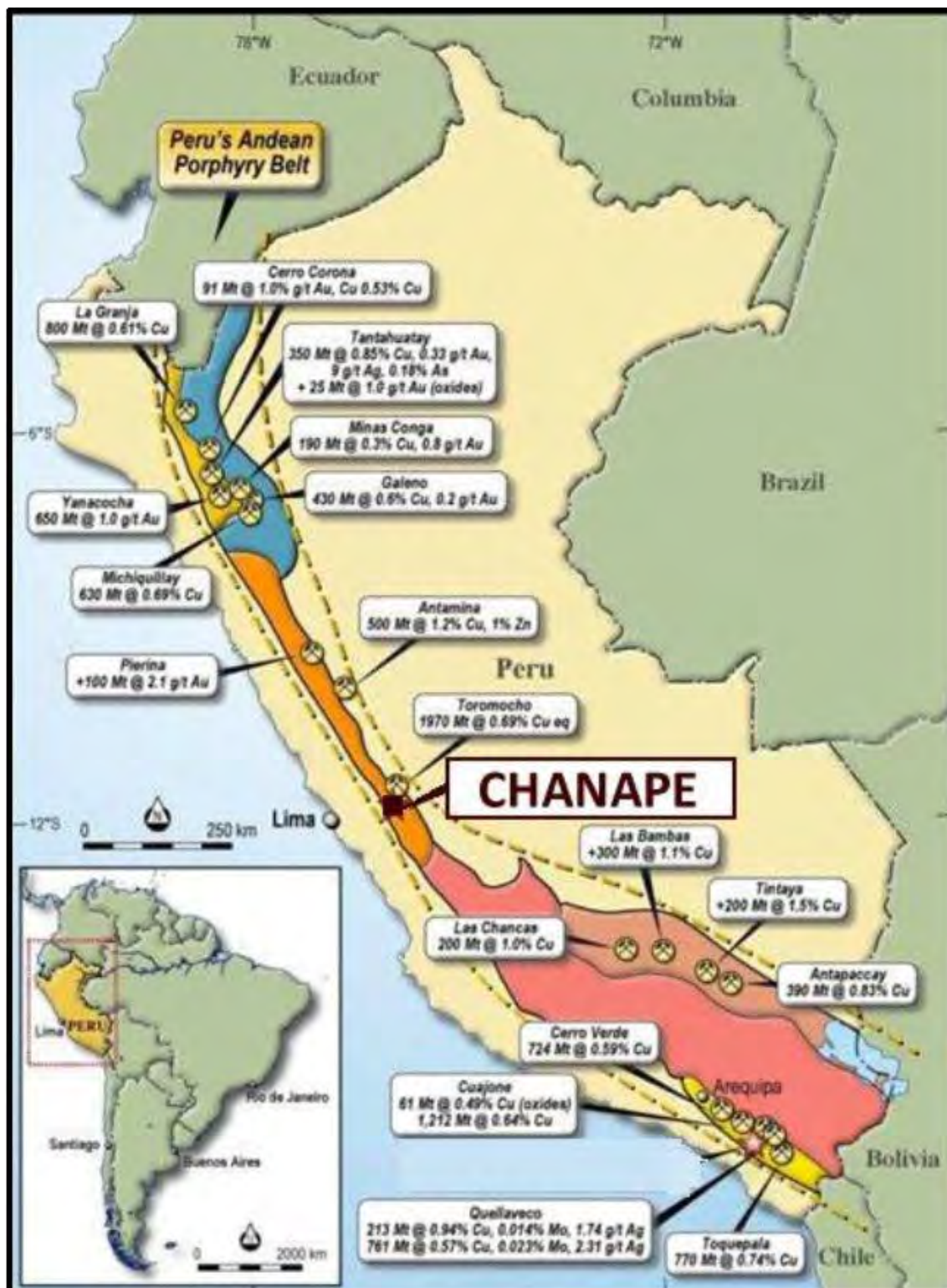


Figure 7-1. The Andean Porphyry Belt (Paleocene-Oligocene Epoch) and Miocene Epithermal Belt of Peru, location of major mines and deposits, and the location of the Chanape Au-Ag-Cu Project (Hutton et al., 2015). The Authors and Qualified Persons have not independently confirmed the quantity and grade of mineralization reported from other properties, mines, or deposits shown on the map, which is provided for information purposes only, and is not necessarily indicative of the mineralisation to be found on the Chanape Property.

The upper volcanic rocks show thick layers deformed in open folds with vertical axial planes. Several unconformities between layers of the later sequence indicate that compressive deformation occurred in discrete phases allowing the erosion to model flat surfaces between volcanic and tectonic events (Macharé et al., 2012).

The major NNW regional faults vary from almost vertical to low dipping structures. Most of them show reverse movements and are associated with the major folds. A family of second order fractures appears in NNE direction probably corresponding to a shear fractures group. A third group of structures, shorter and better appreciated on the field is composed by tension and shear fractures oriented in E-W direction. They are present in the project area and seen to play an important role in the mineralization processes.

7.1.3 Regional Alteration

Rock alteration is used as guide for exploration since it can often be interpreted as hydrothermal alteration. Hot (180 to 600°C) hydrothermal fluids that transport and deposit gold, copper, and other metallic ions will decompose the original rock-forming minerals when passing through the porosity of these rocks. The products are called alteration minerals and correspond to different families as hydrated phyllosilicates (clays), sulfates (alunite, jarosite), iron oxides, and silica. The presence and distribution of alteration minerals is controlled by the temperature, acidity, and salinity of the hot water. Around most ore deposits, hydrothermal alteration form halos that extend over large areas, calling the attention on them as exploration target areas (Macharé et al., 2012).

For Chanape, the regional-scale alteration pattern has been defined from the spectral analysis of the multi-band Aster image comprising the project area. Algorithms using ER Mapper software were applied for combining four spectral bands: three in the visible field and one in the thermal infrared.

One first observation is that Chanape is in the south end of a NNE-trending belt that comprises two major mineral districts: Morococha and Casapalca. It has been noted that in both (NW and SE) flanks of the Quebrada Chanape there are zones of alteration. Northeast of the Chanape district, there is a striking croissant-shaped zone with silicic alteration signal comprising Cerro Shaulata, Cerro Molle, Cerro Tragadero, and Nevado Otoshmicuanan mountains. While we think that it partly corresponds to real hydrothermal alteration, several of the local watersheds where some gelsols are likely to exist show the same signal; therefore, the mapped “silica alteration zones” may include a topography/soil component unrelated to hydrothermal activity. Instead, south of Quebrada Chanape, in Cerro Chajcula, there is a cluster of several small areas with hydrothermal clays signal (kaolinite-pyrophyllite and illite-smectite assemblages). Some of these areas coincide with known alteration around the Chanape mining district and with the zone of previous drilling. It seems convenient to recognize the areas where other signals are present (Macharé et al., 2012).

7.2 Local Geology and Mineralization

A geological map of the Property is provided in Figure 7-2. Major lithologies include andesite, monzonite, monzodiorite, quartz monzonite, tonalite, tourmaline breccia, diorite, rhyodacite, tuff and a variety of breccia types.

7.2.1 Lithology

The project area is characterized by several rock types of magmatic origin. They indicate different magmatic processes occurred at various crustal levels. They show bimodal chemical composition displayed by both basic (low silica) and acidic (high silica) compositions within a general calc-alkaline magmatic series (Macharé et al., 2012).

- Diorite: appears as one of the early rocks. It is dark grey in color, fine-grained holocrystalline composed by plagioclase, amphibole and maybe pyroxenes. While it crops out widely in mountains north of Quebrada Chanape, in the project area it occurs as a small outcrop associated with porphyritic monzonite, in a creek near the Chanape camp.
- Andesitic tuff sequences: most frequent rock in the Project area and surrounds. Under this name we have included different rock sub-types spatially and spatially related. Stratigraphically, it seems to be two similar sequences separated by the emplacement of the monzonite porphyry (*see* paragraph below). Lithologically, there are purple fine-grained tuffs interbedded with lapilli tuffs and flow breccias. In outcrop, their geometry and structures allow recognizing tuffisite dikes, ash-flow tuff bodies and well bedding derived volcanoclastic sediments transported and deposited in water ponds. One empirical guide to distinguish the sequence is the color, purple for the early sequence and pink-to-reddish for the late one. Near the contacts with the monzonite porphyry (*see* paragraph below) the finer andesitic tuffs appear metamorphosed into green to brown-colored hornfels.

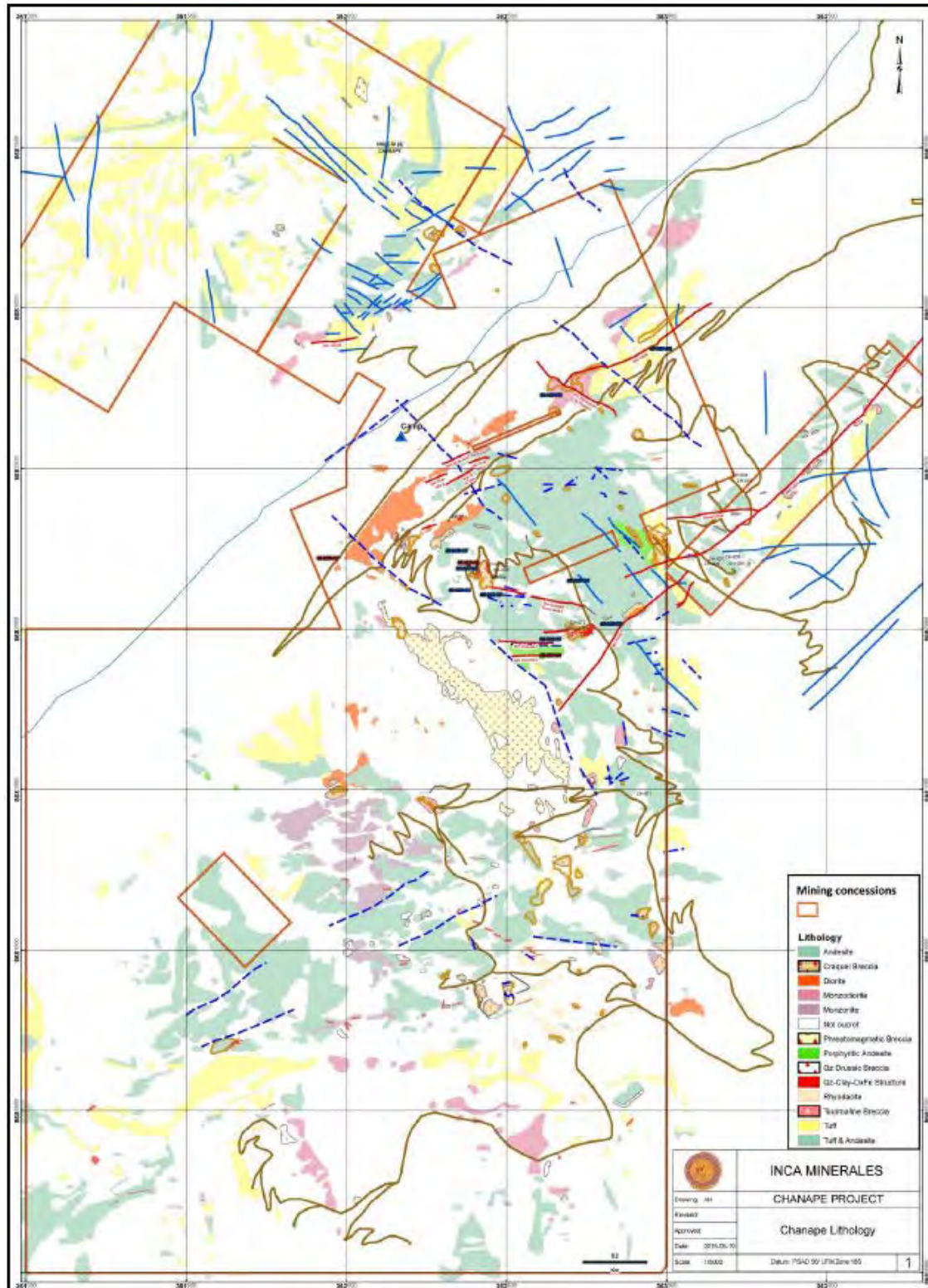


Figure 7-2. Local geology for the Chanape Au-Ag-Cu Property (Hutton et al., 2015).

- Porphyritic andesite flow: andesitic composition and fine porphyritic texture composed of 1 mm-sized plagioclase phenocrysts in a greenish grey colored microcrystalline groundmass. It

has been identified in outcrops interbedded in the early andesitic tuffs where it look fresh or has weak chloritic alteration. It appears also in drill hole DDH: CHA-07 (133.05 – 141.65 m) with K-feldspar and silica/albite alteration above the monzonite porphyry.

- **Monzonite porphyry:** has an aphanitic porphyritic texture with potassic feldspar (sanidine) and plagioclase phenocrysts (<1 cm length) in a green aphanitic matrix. No ferromagnesian phenocrysts have been observed. Xenoliths of an earlier fine-grained monzonite are included in the monzonite porphyry. It crops out in the project area as an important body mapped in the regional geology (Salazar, 1983) and has been interested in a large segment of the drill hole CH001. Its porphyritic texture combined with the flow banding structures observed in the field lead us to consider it as a flow-dome complex body. It appears always affected by hydrothermal alteration from silica-chlorite to propylitic.
- **Rhyodacitic porphyry:** observed in subsurface but not in outcrop. It appears in DDH CHA-06 from 81.0 to 99.5 metres. It is composed by fine (≤ 2 mm) phenocrysts of both plagioclase and potassic feldspar in aphanitic silica-rich groundmass. Flow banding structure is visible in the upper part to 85.3 metres. In this drill hole, it shows phyllic (quartz-sericite) and in minor amount albite-bearing alteration, and some quartz veins.

7.2.2 Alteration

Widespread propylitic, argillic and potassic alteration (hydrothermal) has been logged in drill core with the following alteration assemblages described by Macharé et al. (2012):

- **Silica-Chlorite and Propylitic:** the most widespread alteration assemblages affecting the pyroclastic sequences, the monzonite and the andesitic rocks. The silica-chlorite mineral association is composed by silica and chlorite with minor amount of actinolite. The propylitic assemblage includes chlorite, epidote, and calcite. The latter also forms geodes with calcite and crustiform quartz infill and epidote halos in the tuffs.
- **Silicification:** The introduction of hydrothermal or magmatic-hydrothermal silica seems to occur in three events. The early event is characterized by massive and pervasive dark-grey silica that moderately affects the early tuff sequence. It seems to be accompanied by the development of high temperature A and B quartz veinlets. The second event provides massive cream silica and is related to several other spatially distributed alteration assemblages: sodic, potassic, and intermediate argillic that affect the monzonite porphyry. The last silicification event is related to the emplacement of the breccia bodies (dikes and pipes) that crop out in surface; it includes the translucent quartz matrix of breccias, the finer silica deposited as wall rock alteration, and later large (up to 3 cm) quartz crystals in crustiform arrangements. Tourmaline is ubiquitous in most of the late stage breccias. It appears in 2-3 mm-thick veinlets and disseminated in porous rocks. Mineralization of gold and polymetallic veins appears to be related to this later event.

- Sodic alteration: associated with massive silica alteration, appears as large patches of albite-silica replacing previous minerals and invading high porosity zones. It has a characteristic white color and is exempted of sulphides included pyrite.
- Potassic alteration: almost exclusively composed of finely crystalized K-feldspar. It occurs as halos bordering veins and patches nearby. Biotite, a mineral normally present in this alteration has not been clearly identified in Chanape. Potassic alteration affects rocks older than the second andesitic tuff sequence.
- Phyllic alteration: formed by a fine-grained assemblage of quartz, sericite and pyrite. In general silica is dominant and serves as the supporting mineral, less frequently and in short intervals sericite takes this role. This alteration seems to appear in the last stage of hydrothermal alteration with the breccia bodies (in CHA-02, CHA-04 and less notably in CHA-03). Therefore, it is associated with zones of high gold, silver and copper grades.

7.2.3 Mineralization

The distribution of Chanape mineralization is controlled by primary and secondary porosity (Macharé et al., 2012). The former is the original – normally high - porosity of the pyroclastic tuffs, although welding of their components reduce the porosity in some sectors. The secondary porosity is associated with fracturing. Initial fractures are created by cooling of rocks. The regional tectonic stresses lead to the development of new shear and tensional fractures and define zones of dilation. Finally, the magmatic and hydrothermal activity uses this fracturing as pathways for fluid flow increasing the porosity and permeability by explosions related to phase change (hydro-fracturing).

Mineralization is mainly composed of sulphides: pyrite, arsenopyrite, chalcopyrite, bornite, galena, sphalerite, enargite, and jamesonite. In the district, gold is known to be associated with the arsenopyrite. Oxidation of these ores occurs controlled by vertical fractures rather than by water table fluctuations. This process has produced oxides as limonite and goethite, and sulfates as jarosite.

Most of the known mineralization occurs in association with the tourmaline breccia bodies (Macharé et al., 2012). These pipe-shaped to vein-shaped bodies are filled by breccias that show multiple brecciation events. In general, they are clast-supported, with angular to sub-angular clasts of the neighboring country rocks. Both monomictic and polymictic breccias have been recorded. The matrix is made by granular quartz, crustiform quartz, sulfides and their oxidation products. Several brecciation events are related to the several generations of quartz observed. Pyrite is the most widespread mineral appearing not only in the sulfide mineralization but within the alteration assemblages affecting the host rocks. In the chloritic alteration, it appears disseminated with chloritized mafic minerals and magnetite, as well as contained in veinlets.

7.2.3.1 Porphyry System

Chanape is recognised as a porphyry Cu-Mo-Ag-Au system (Inca Minerals, 2015) with associated tourmaline breccia pipes containing high-grade Au-Ag mineralization exposed at the surface (Figure 7-3).

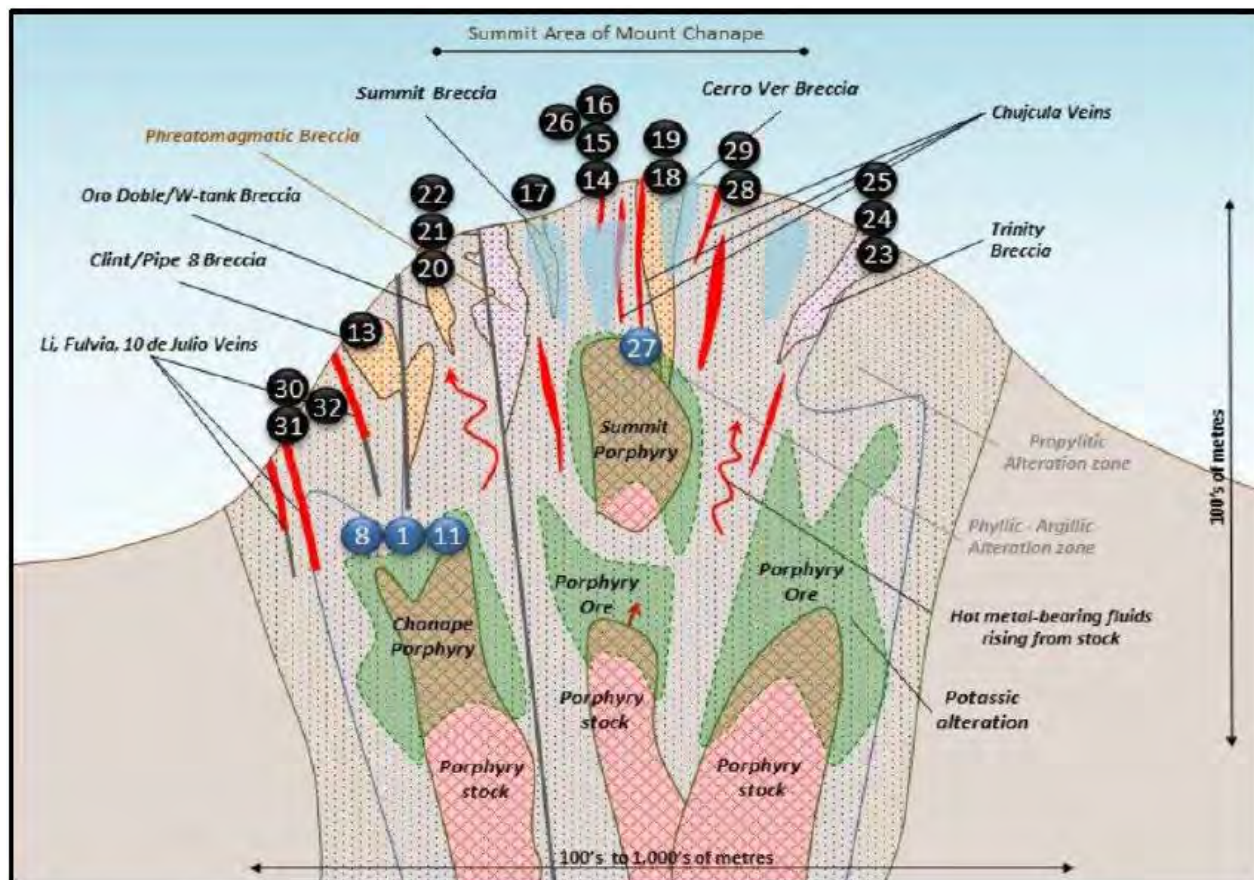


Figure 7-3. Schematic north-south cross-section through the area of mineralization on the Chanape Project (Hutton et al., 2015).

Zoned mineralization at Chanape, suggests the presence of a large porphyry system (Inca Minerals, 2015a):

- Low-level Cu-Ag-Mo+Au porphyry (Chanape and Summit porphyries).
- Mid-level Au-Ag+Cu+Mo epithermal / mesothermal breccia-hosted mineralization.
- Upper and outer level Zn+Pb+Ag+Au+Cu epithermal breccia-hosted mineralization.

Numerous breccia zones and mineralized veins mapped at surface (Figure 7-4) and in near-surface drill hole intersections are interpreted to be derived from underlying porphyry intrusions.

A large-scale map showing the locations of the three breccia pipes - Breccia 8, Breccia 11, and Breccia San Antonio - in the northern part of the Project is provided in Figure 7-5. A drilling program has been recommended for these three areas (see Section 26).

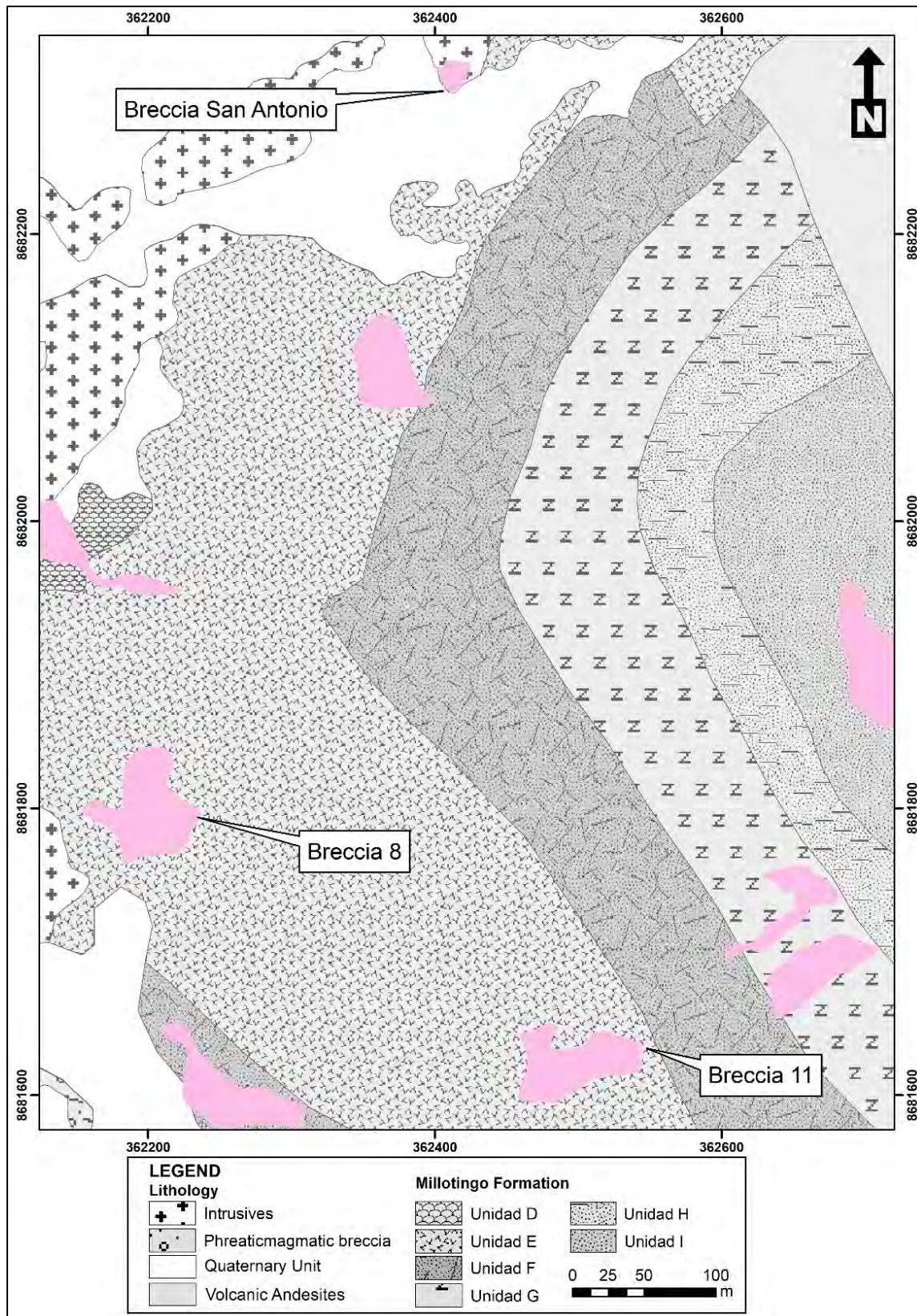


Figure 7-5. General geology within the area of the three breccia pipes recommended for initial diamond drilling (Turmalina Metals, 2022).

8.0 DEPOSIT TYPES

The principal target deposit type at the Chanape Project, located within the Miocene Epithermal Belt of Peru, is epithermal associated tourmaline Au-Ag-Cu breccia pipes. In many cases, tourmaline breccia pipes appear to be related to underlying or nearby porphyry Cu-Mo+/- Au deposits (see Figure 7-3; Figure 8-1) (e.g., Sillitoe and Perello, 2005; Sillitoe, 2010).

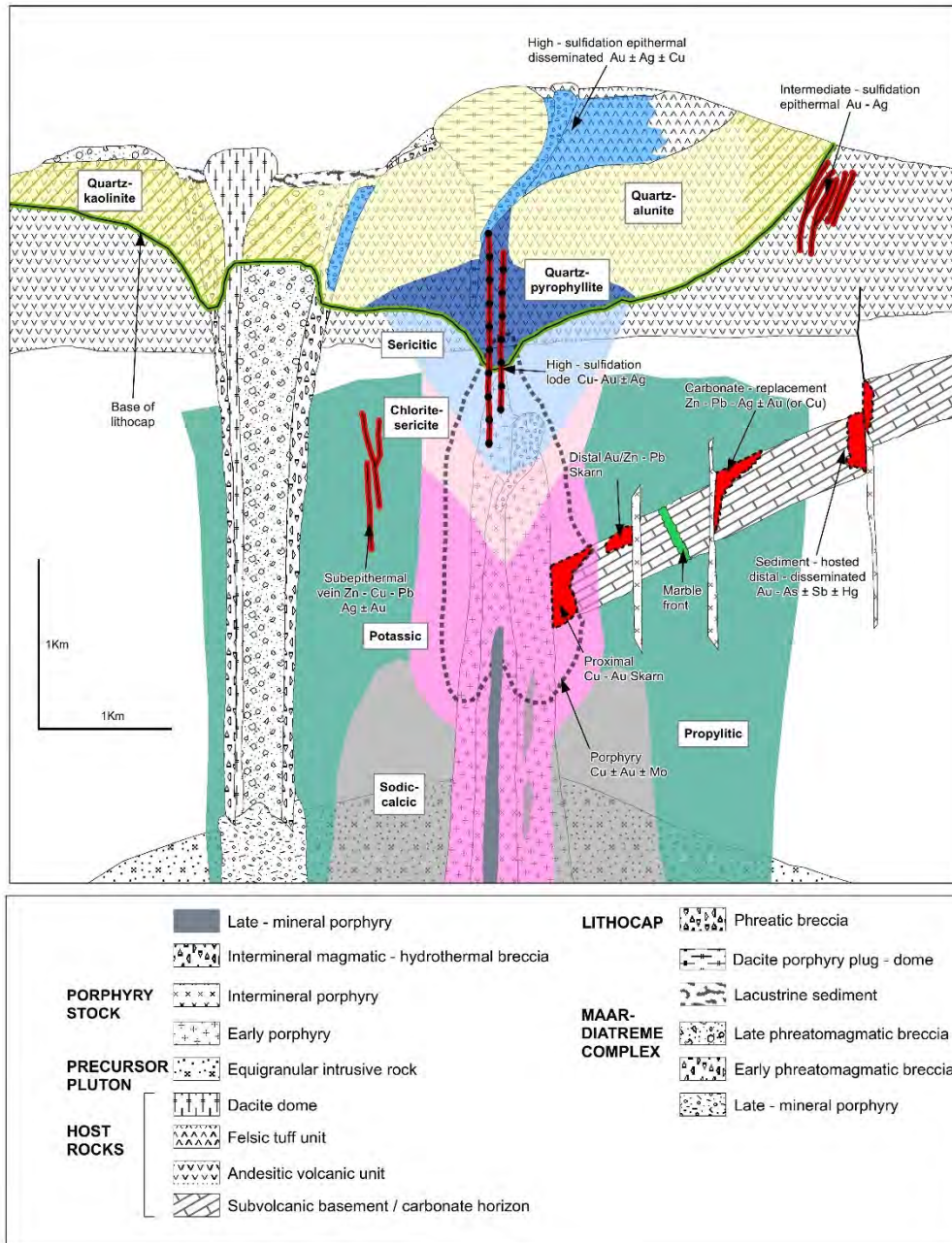


Figure 8-1. Schematic model showing the components of a porphyry copper-precious metal and polymetallic system with various deposit types and mineralization and alteration styles associated with the porphyry intrusive centre (after Sillitoe, 2010). Exploration at the Chanape Au-Ag-Cu Project is targeting tourmaline Au-Ag mineralization (c.f., Maar-Diatreme Complexes) and porphyry-style copper-gold mineralization (see also Figure 7-3).

8.1 Tourmaline Breccia Pipes

Well-known in central Chile (Sillitoe and Sawkins, 1971; Skewes et al., 2002; Frikken et al., 2005), northern Peru (Carlson and Sawkins, 1980), southern Perú (Clark, 1990), and elsewhere (Kirwin, 1985), tourmaline breccia pipes are recognized for their high-grade precious metal (Au-Ag) mineralization and unique geometry and breccia textures.

Tourmaline breccia pipes can extend over 2 or 3 km in depth. Mineralization within a breccia pipe is typically uniform throughout the top of the breccias (the ‘roof’) while at greater depths the breccia pipe widens with higher-grade mineralization becoming focused along the margins and ends (‘lobes’) in intrusion-related breccia pipes (Kirwin, 2018).

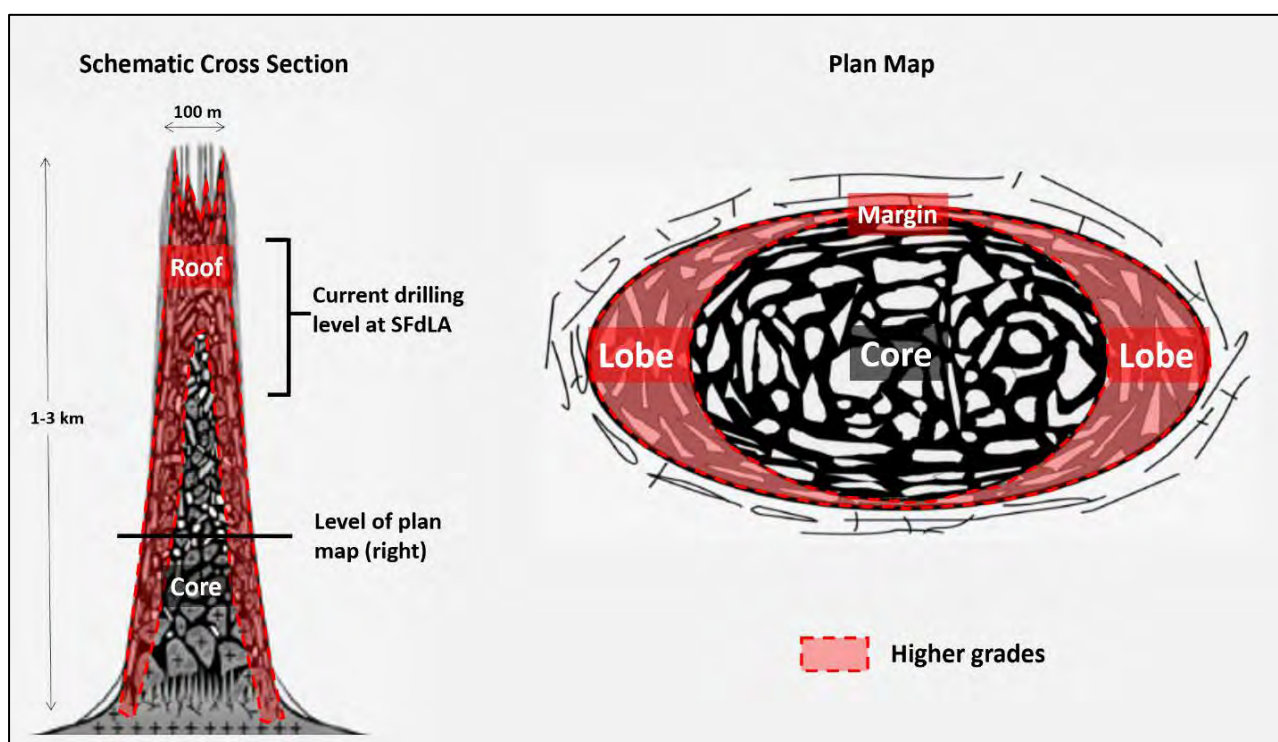


Figure 8-2. Schematic model of mineralization within a typical tourmaline breccia pipe (adapted from Kirwin et al., 2018). The black is tourmaline which hosts the disseminated sulphide and precious metals and the causative intrusion is light grey with “+” symbols.

Unlike diatreme breccias which are formed by gaseous explosions, magmatic-hydrothermal (intrusion) tourmaline breccia pipes do not violently erupt at the surface and therefore lack the ring of ejecta that defines in part a Maar-Diatreme Complex (see Figure 8-1). The result is much different breccia textures and geometry in a tourmaline breccia pipe. Whereas diatremes have an outward flaring geometry near surface that narrows with depth, tourmaline breccia pipes have a more conical shape that can increase in diameter with depth. Sillitoe and Sawkins (1971), provide excellent descriptions of the Chilean breccia deposits.

9.0 EXPLORATION

Exploration work is being carried out on the Property through Turmalina’s subsidiary Aurora Copper Peru S.A.C. Currently, the issuer is completing basic mineral exploration on the Project. Work completed or in process by the Issuer and/or its subsidiary Aurora (2019 to 2022) is summarized in Table 9-1.

Table 9-1. Summary of exploration work on the Property completed by the Issuer.

Year	Project Operator	Exploration Completed/Milestones
2019	Aurora/Turmalina	9 September 2019: Aurora Copper Peru S.A.C. (a Turmalina Metals subsidiary) signed Confidential Agreement with Minera Altas Cumbers/Gino Venturi (GV) for data evaluation and project visit
2019-2020	Aurora/Turmalina	13 March 2020: Aurora and GV sign the agreement for mining rights transfer
		Nov. 2019 to Dec. 2020: Aurora completes first field exploration program with rock chip and channel sampling
		collected 672 rock chip samples collected 288 rock channel samples
2021	Aurora/Turmalina	17 January 2021: Aurora and Comunidad Campesina Checa signed and agreement for use of easement of the land where Chanape project is located
		May 2021 to Dec. 2021: Aurora completes rock chip and rock channel sampling program
		collected 442 rock chip samples collected 231 rock channel samples
2022	Aurora/Turmalina	April 2022 Aurora filed the environmental studies for drilling permits
		12 May 2022 - Aurora drilling permit application (FTA) is approved
		Aurora filed for a Water Permit

9.1 Rock Chip and Channel Sampling (2019-2020)

In 2020, Aurora completed a program of rock chip and rock channel sampling that consisted of 672 rock chips and 288 rock channel samples. Coordinates for the sampling were provided in WGS84 Zone 18S.

9.1.1 Results

Assay results from rock chip samples ranged from below detection to 10.95 g/t Au, from below detection to 365 g/t Ag, and from below detection to 30300 ppm Cu (3.03% Cu). Assay results from channel samples ranged from below detection to 3.95 g/t Au, from below detection to 54.6 g/t Ag, and from below detection to 2670 ppm Cu (0.27% Cu).

9.2 Rock Chip and Channel Sampling (2021)

In 2021, Aurora completed a program of rock chip and channel sampling that consisted of 442 rock chip samples and 231 rock channel samples. Coordinates for the sampling were provided in WGS84 Zone 18S.

9.2.1 Results

Assay results from rock chip samples ranged from below detection to 34.7 g/t Au, from below detection to 1360 g/t Ag, and from below detection to 8600 ppm Cu (0.86% Cu). Assay results from channel samples ranged from below detection to 12.55 g/t Au, from below detection to 1555 g/t Ag, and from 20.2 to 15500 ppm Cu (1.55% Cu). Gold results from the channel sampling from Breccia 10 & 11, Breccia Intrusiva 10 de Julio, Breccia 8, and Breccia San Antonio are shown in Figure 9-1, Figure 9-2, Figure 9-3, and Figure 9-4, respectively.

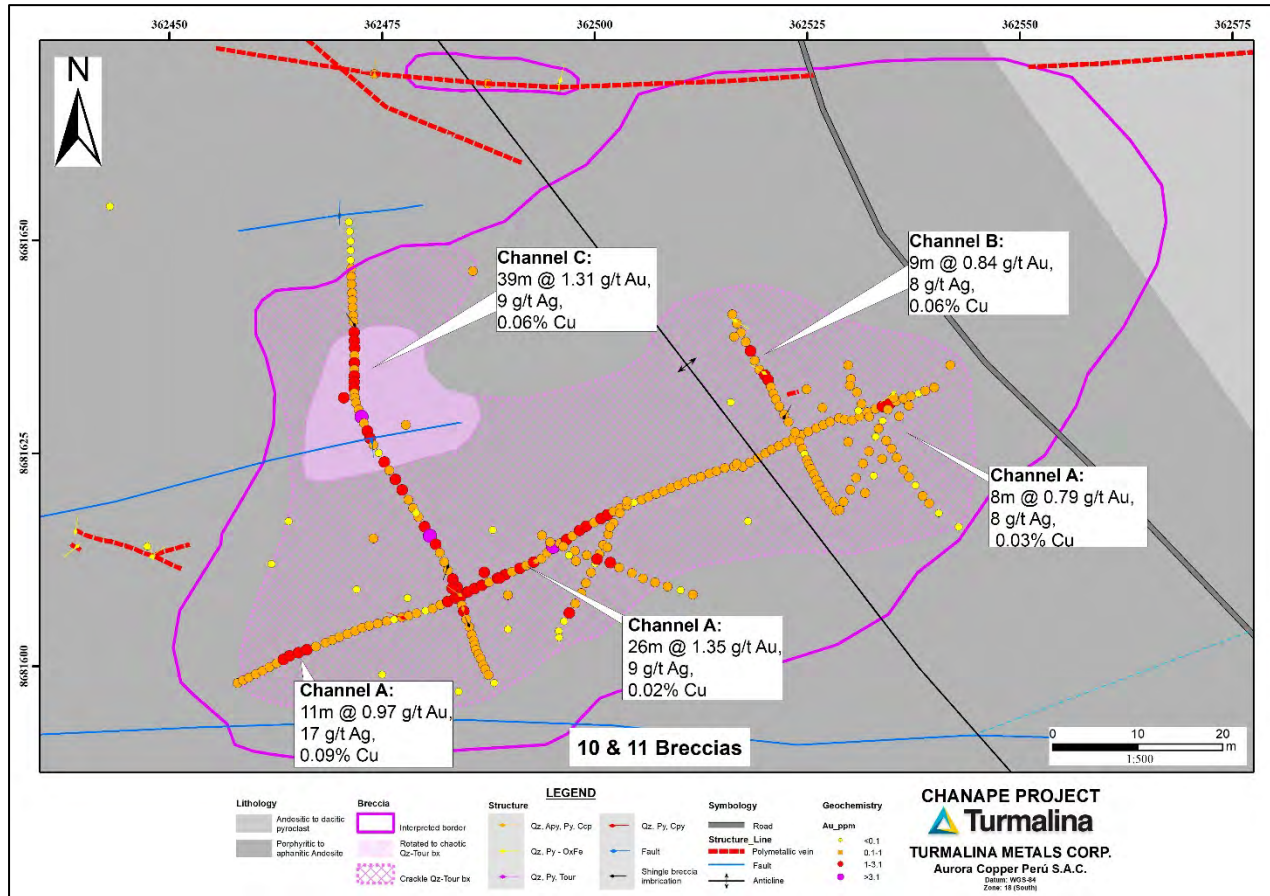


Figure 9-1. Gold results from channel sampling overlain on the general geology of Breccia 10 & 11 (Turmalina Metals, 2022).

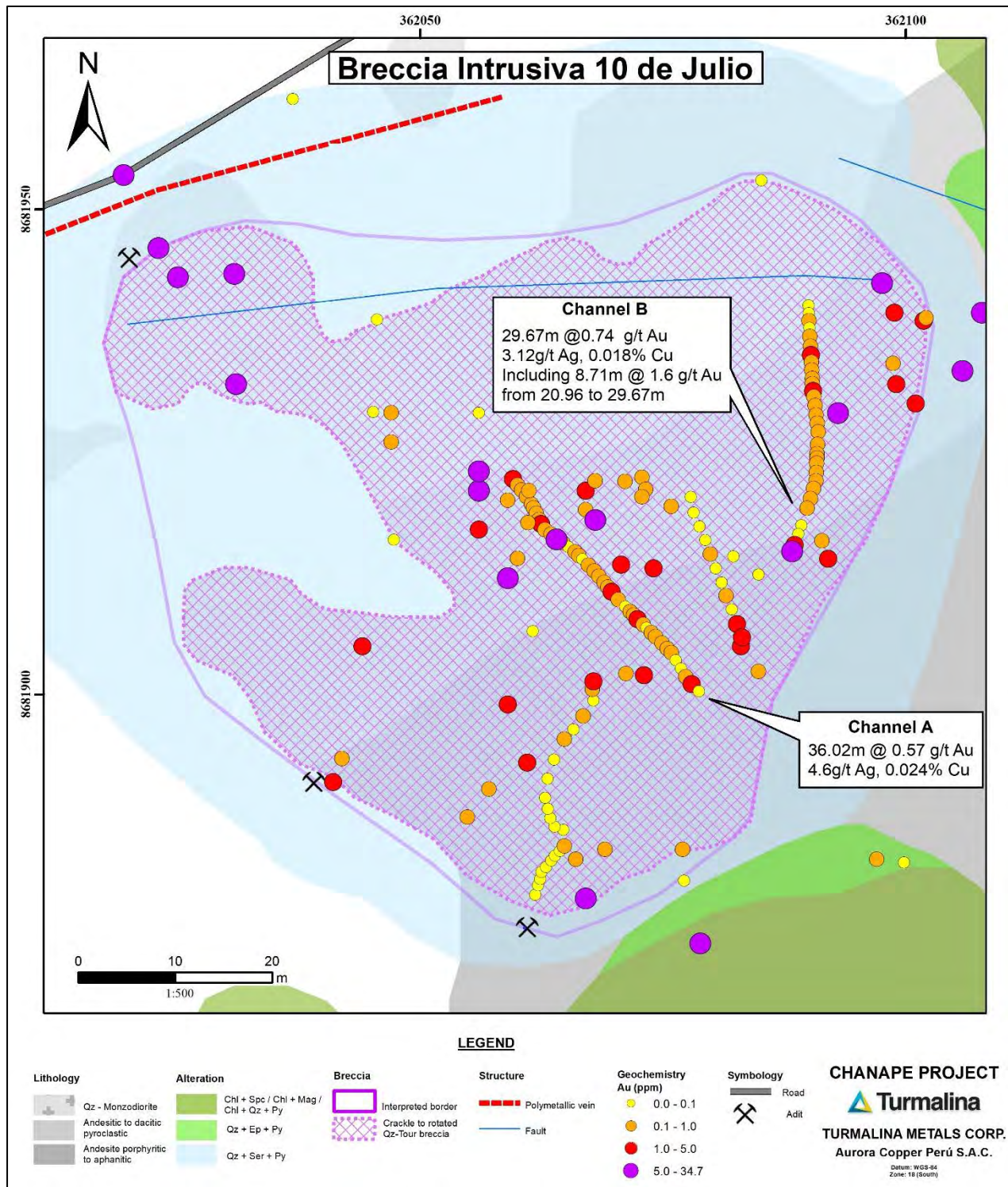


Figure 9-2. Gold results from channel sampling overlain on the general geology and alteration at Breccia 10 de Julio (Turmalina Metals, 2022).

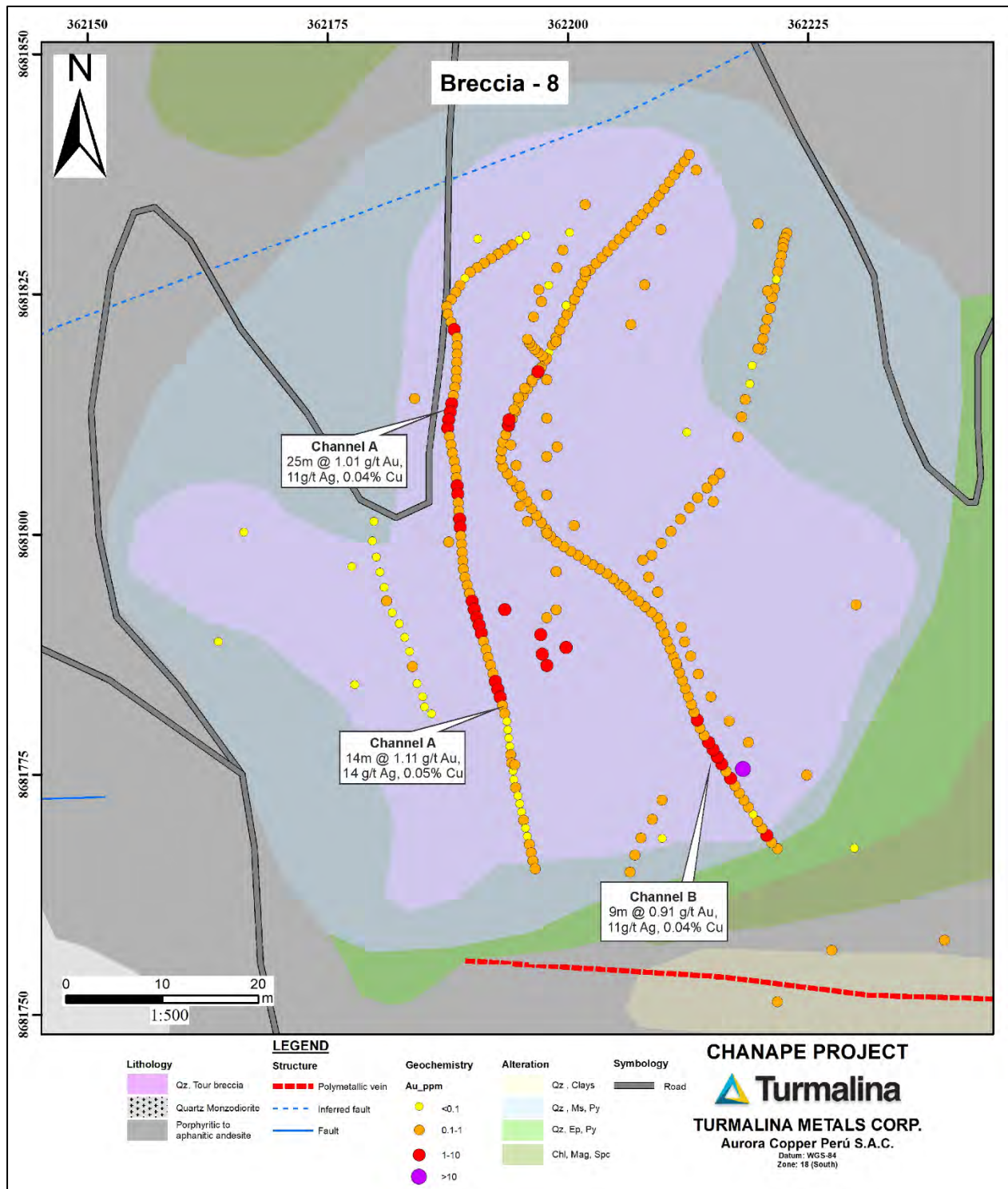


Figure 9-3. Gold results from channel sampling overlain on the general geology and alteration at Breccia 8 (Turmalina Metals, 2022).

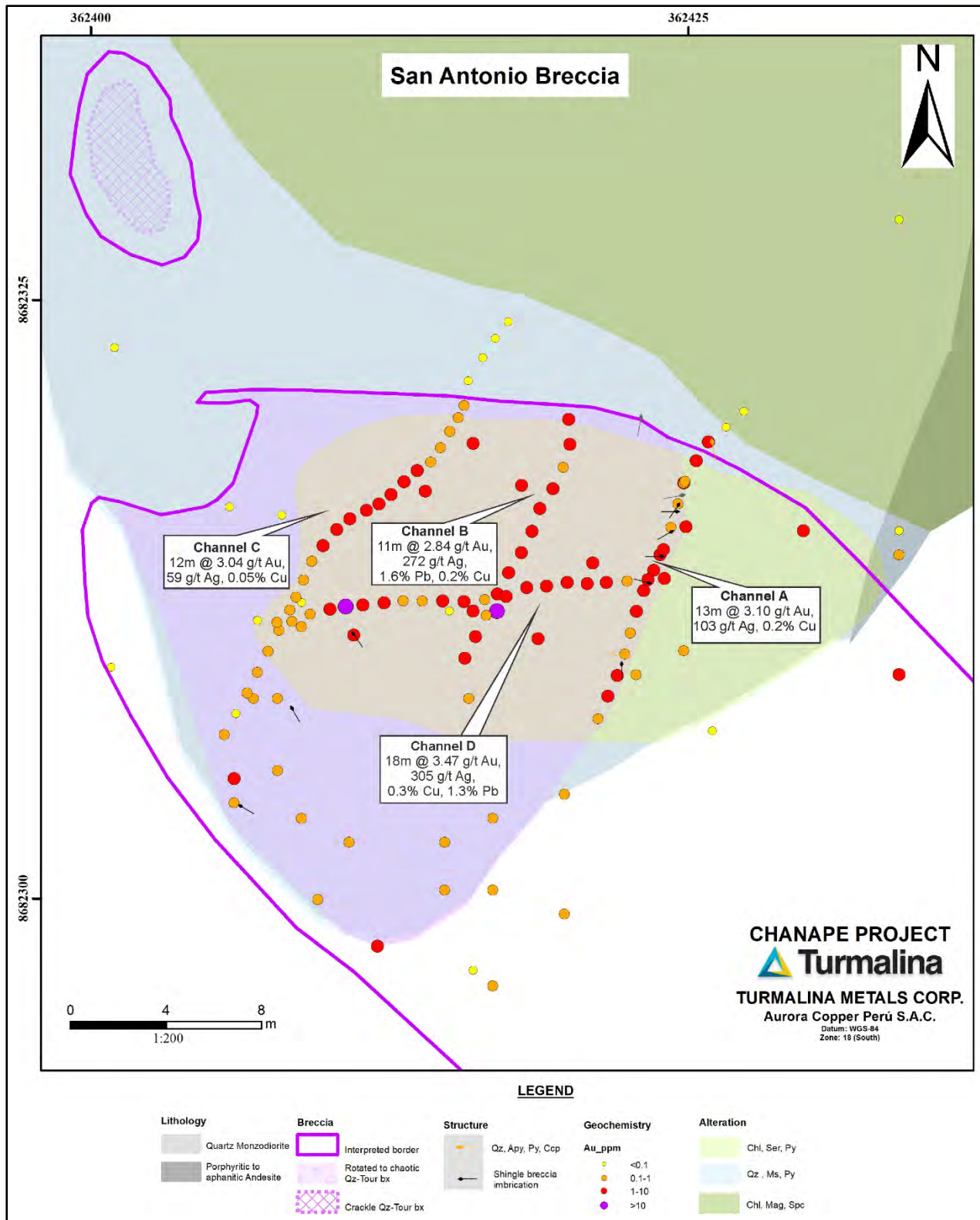


Figure 9-4. Gold results from channel sampling overlain on the general geology of Breccia San Antonio (Turmalina Metals, 2022).

10.0 DRILLING

No drilling has been completed by the Issuer on the Property. To the extent that is known, all historical drilling is reviewed in Section 6.

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

Through its Peruvian subsidiary Aurora Copper Peru S.A.C., the Issuer completed rock chip and channel sampling on the Project in 2019, 2020 and 2021 (see Section 9). To the extent to which it is known, information and data relating to sample preparation, analysis and security processes used by previous operators for historical exploration work on the Project is provided in Section 6.

The Authors and the Issuer are independent of the laboratory used in the analyses of rock samples as described below.

It is the Authors' opinion that for the 2019-2021 sampling programs, Turmalina/Aurora followed industry standards and protocols in the collection, sample preparation, analysis and security of the information and data collected during their exploration work that is the subject of the Report. Furthermore, the sample preparation, security and analytical procedures followed are adequate to support the reliability of the data and information presented herein and for the purposes of the Report.

11.1 Rock Chip and Channel Sampling (2019-2020)

Rock chip samples were collected as grab samples from various locations on the Property. Geologists choose the best place to collect a sample based on local geology, point of interest, oxidization on surface, and other discerning features. With the aid of geological hammer, samples were piked and cleaned of vegetation and/or organic material. Sample descriptions were recorded and the UTM coordinate taken with a hand-held GPS. Samples were placed in a thick plastic bag and a pre-numbered sample tag placed in the bag. The outside of the bag was marked with permanent marker for easy reference. An aluminium tag with the sample number was placed at the location from where the sample was collected.

Rock channel samples were collected at continuous 1.0 m intervals after a straight line was traced by a geologist over the linear area to be sampled. Where possible, perpendicular channel lines were made over the first channel. Once channels lines are traced, they are sawn with an electric saw connected to a portable generator and removed with the aid of an electric hammer, at approximately 1.0 m in length, 10 cm wide, and 5 cm depth. As samples were removed from the channel, they were placed in a sterilized plastic sheet until the 1.0 m of channel sample was removed. The sample was then placed in a thick plastic bag and sealed with a pre-numbered sample tag. The outside of the sample bag was marked with the sample code using a permanent marker. An aluminium tag with the sample number was placed at each of the measured channel sample locations. A description of the channel sample was recorded by the geologist and UTM coordinates of the sample positions was made with a hand-held GPS at each point the samples were collected. After this procedure was finished, all of the tools used for the sampling were cleaned to be used for the next sample, repeating the process.

11.2 Analysis

All samples were sent to ALS Laboratory in Lima, Peru for geochemical analysis. The ALS preparation code PREP-31B, specifies crushing the sample to 70% less than 2 mm, riffle splitting 1 kg, pulverizing the split to more than 85% passing 75 microns. Analytical methods included a multi-element, ultra-trace element package with Aqua Regia Digestion ICP-MS (ME-MS41), combined with ore-grade determination by Aqua Regia Digestion and ICP-AES (ME-OG46), and gold determination by absorption spectroscopy in combination with fire assay (Au-AA24). Aurora also requisitioned different overlimit methods for Au, Ag, Cu, Mo, Pb, Zn to ensure an accurate measurement of high-grades (above Upper Limit of Detection) found at the Chanape Project.

11.2.1 QA/QC

A total of 38 certified rock standards (CRMs OREAS 152b and OREAS 504c) and a blank (CRM OREAS 23b) and no duplicates were inserted into the rock chip sampling stream, a ratio of 1 standard per 17 primary samples. A total of 16 certified rock standards (CRMs OREAS 152b and OREAS 504c) and a blank (CRM OREAS 23b) and four duplicates were inserted into the channel sampling stream, a ratio of 1 standard per 14 primary samples. A review of the QA/QC data made available to the Principal Author showed good correlation between documented and reported CRM standards and acceptable repeatability in the limited duplicates submitted.

11.3 Security

All field samples collected were trucked to Aurora offices in San Damian under the supervision of an Aurora geologist. Samples were stored in Aurora offices without public access until the day of dispatch. On the day of dispatch, an Aurora geologist supervises the placement of samples into larger bulk bags to a maximum load of 25 kg per bag. The samples were then dispatched by an Aurora driver to ALS Laboratory in Lima. The driver was always an Aurora certificated employee with the appropriate risk health insurance, to be able to deliver the sample batches to ALS Lima.

11.4 Rock Chip and Channel Sampling (2021)

Rock chip samples were collected as grab samples from various locations on the Property. Geologists chose the best place to collect a sample based on local geology, point of interest, oxidization on surface, and other discerning features. With the aid of a geological hammer, samples were picked and cleaned of vegetation and/or organic material. Sample descriptions were recorded and the UTM coordinate taken with a hand-held GPS. Samples were placed in a thick plastic bag and a pre-numbered sample tag place in the bag. The outside of the bag was marked with permanent marker for easy reference. An aluminium tag with the sample number was placed at the location from where the sample was collected.

Rock channel samples were collected at continuous 1.0 m intervals after a straight line was traced by a geologist over the linear area to be sampled. Where possible, perpendicular channel lines were made over the first channel. Once channels lines are traced, they are sawn with an electric saw connected to a

portable generator and removed with the aid of an electric hammer, at approximately 1.0 m in length, 10 cm wide, and 5 cm depth. As samples were removed from the channel, they were placed in a sterilized plastic sheet until the 1.0 m of channel sample was removed. The sample was then placed in a thick plastic bag and sealed with a pre-numbered sample tag. The outside of the sample bag was marked with the sample code using a permanent marker. An aluminium tag with the sample number was placed at each of the measured channel sample locations. A description of the channel sample was recorded by the geologist and UTM coordinates of the sample positions was made with a hand-held GPS at each point the samples were collected. After this procedure was finished, all of the tools used for the sampling were cleaned to be used for the next sample, repeating the process.

11.5 Analysis

All samples were sent to ALS Laboratory in Lima, Peru for geochemical analysis. The ALS preparation code PREP-31B, specifies crushing the sample to 70% less than 2 mm, riffle splitting 1 kg, pulverizing the split to more than 85% passing 75 microns. Analytical methods included a multi-element, ultra-trace element package with Aqua Regia Digestion ICP-MS (ME-MS41), combined with ore-grade determination by Aqua Regia Digestion and ICP-AES (ME-OG46), and gold determination by absorption spectroscopy in combination with fire assay (Au-AA24). Aurora also requisitioned different overlimit methods for Au, Ag, Cu, Mo, Pb, Zn to ensure an accurate measurement of high-grades (above Upper Limit of Detection) found at the Chanape Project.

11.5.1 QA/QC

A total of 16 certified rock standards (CRMs OREAS 152b and OREAS 504c) and a blank (CRM OREAS 23b) and 1 rock sample duplicate were inserted into the rock chip sampling stream, a ratio of 1 standard per 26 primary samples. A total of 16 certified rock standards (CRMs OREAS 152b and OREAS 504c) and a blank (CRM OREAS 23b) and three duplicates were inserted into the channel sampling stream, a ratio of 1 standard per 12 primary samples. A review of the QA/QC data made available to the Principal Author showed good correlation between documented and reported CRM standards and acceptable repeatability in the limited duplicates submitted.

12.0 DATA VERIFICATION

The Authors have reviewed the historical data and information regarding past exploration work on the Project as provided by the Issuer. The Authors nor the Issuer have access to or are aware of any further material information. The Authors have no reason to doubt the adequacy of reported historical sample preparation, security and analytical procedures for the exploration work completed by previous operators/owners and are confident in the use of the historical information and data for the purposes of the Report.

The Authors have reviewed work completed by the Issuer and it is the Authors' opinion that the information and data that has been made available and reviewed by the Authors is adequate for the purposes of the Report as described in Section 2.1.

A personal inspection (site visit) of the Project was completed by Co-Author and Qualified Person Mr. Simon Mortimer (MSc. ACSM, MAusIMM, FAIG #7795), who visited the Project for one full day on 7 April 2022, accompanied by Ram Betancourt (Project Manager, Turmalina Metals Corp.).

The personal inspection (site visit) was completed for the purposes of verifying Project access, general inspection, ground truthing, information and data collection, as well as making observations with respect to the geology and exploration potential of the Project (see Section 2.5). During the site visit, the Co-Author, confirmed access, verified the presence of historical exploration work (*i.e.*, drill setups), reviewed the channel sampling program procedures, visited outcrops and proposed drill sites, and took rock chip samples from three of the breccia pipes.

The rock chip grab samples collected by the Co-Author confirmed the presence of gold and silver mineralization in quantities similar to those reported in channel samples taken by Turmalina (see Section 2.5).

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

No mineral processing or metallurgical test work has been completed on the Property by the Issuer.

14.0 MINERAL RESOURCE ESTIMATES

The Project has no current NI 43-101 Mineral Resources.

15.0 MINERAL RESERVES

This section is not applicable to the Project at its current stage.

16.0 MINING METHODS

This section is not applicable to the Project at its current stage.

17.0 RECOVERY METHODS

This section is not applicable to the Project at its current stage.

18.0 PROJECT INFRASTRUCTURE

This section is not applicable to the Project at its current stage.

19.0 MARKET STUDIES AND CONTRACTS

This section is not applicable to the Project at its current stage.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

This section is not applicable to the Project at its current stage.

21.0 CAPITAL AND OPERATING COSTS

This section is not applicable to the Project at its current stage.

22.0 ECONOMIC ANALYSIS

This section is not applicable to the Project at its current stage.

23.0 ADJACENT PROPERTIES

There are no adjacent properties which impact the Project which is the subject of the Report.

24.0 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data, information, or explanation necessary to make the Report understandable and not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

The objective of the Report was to prepare an independent NI 43-101 Technical Report, capturing historical information and data available about the current Property that comprises the Chanape Gold-Silver-Copper Project, and making recommendations for future work. The Chanape Project is located in the western flank of the Western Occidental of Central Peru, about 85 direct kilometres east-northeast of the capital City of Lima, in the Department of Lima, Province of Huarochiri, San Damián District. The Project consists of 20 contiguous mining concessions covering a total of 676.99 ha, registered in the name of Minera Altas Cumbres S.A.C.

Access to the Project offices in San Damian and the Chanape Project area from Lima is via National Road PE-22 to Cocachacra, from there via LM118 until San Damian town and then on to the Project area and base camp via local gravel roads. Total driving distance from Lima is about 140 kilometres. The Project is located at more than 4,200 m AMSL and as such, exploration work is limited to the winter and dry season, generally from April through to December.

The Chanape area is within an old and active mining district located southeast of San Mateo. This region has been explored and mined since the colonial period and the modern history of exploration in the area and Chanape can be traced back to 1920 and the work of engineer Foilan Guzman. More extensive exploration and small-scale mining development began in 1950, with the building of the access gravel road from the Central Highway to the Pacococha mining area.

In December 2011, Condor Metals Ltd. reached an agreement with private company Inca Minerals Ltd. to make an off-market takeover bid for 100% shares in Inca Minerals and underwent a name change in 2012 to Inca Minerals Limited. The most recent historical work completed on the Property, prior to 2017 and Aurora Copper Peru/Turmalina Metals Corp.'s involvement, was that completed by Inca Minerals Limited ("Inca Minerals") who spent nearly five years exploring the Property from 2012 to 2015. To date, historical drilling consists of 45 diamond drillholes totalling 12,099.4 metres. Of these, six drill holes tested for the potential of porphyry copper mineralization and 39 drill holes tested for shallower epithermal gold-silver mineralization (Hutton et al., 2015). There has been no drilling by Turmalina or its Peruvian subsidiary Aurora.

Peru's porphyry belt extends along the entire length of Peru, paralleling the Pacific coast and roughly coinciding with the Andes Mountains. The Andean Porphyry Belt can be divided into a northern, central and southern part, comprising six informal metallogenic provinces. The Chanape Project occurs within the Tertiary Volcanic Epithermal Gold Belt and is about 30 direct kilometres south-southwest from the Toromocho Mine, a historical and current mining area with a number of small to large-scale mines.

The principal target deposit type at the Chanape Project, located within the Miocene Epithermal Belt of Peru, is epithermal associated tourmaline Au-Ag-Cu breccia pipes. In many cases, tourmaline breccia pipes appear to be related to underlying or nearby porphyry Cu-Mo+/- Au deposits. Chanape is recognised as a

porphyry Cu-Mo-Ag-Au system (Inca Minerals, 2015) with associated tourmaline breccia pipes containing high-grade Au-Ag mineralization exposed at the surface. Numerous breccia zones (30 to date) and mineralized veins mapped at surface and in near-surface drill hole intersections, are interpreted to be derived from underlying porphyry intrusions. Tourmaline breccia pipes can extend over 2 or 3 km in depth. Mineralization within a breccia pipe is typically uniform throughout the top of the breccias (the ‘roof’) while at greater depths the breccia pipe widens with higher-grade mineralization becoming focused along the margins and ends (‘lobes’) in intrusion-related breccia pipes (Kirwin et al., 2018).

Major lithologies on the Property include andesite, monzonite, monzodiorite, quartz monzonite, tonalite, tourmaline breccia, diorite, rhyodacite, tuff and a variety of breccia types. The distribution of Chanape mineralization is controlled by primary and secondary porosity (Macharé et al., 2012). The former is the original – normally high - porosity of the pyroclastic tuffs, although welding of their components reduce the porosity in some sectors. The secondary porosity is associated with fracturing. Initial fractures are created by cooling of rocks. The regional tectonic stresses lead to the development of new shear and tensional fractures and define zones of dilation. Finally, the magmatic and hydrothermal activity uses this fracturing as pathways for fluid flow increasing the porosity and permeability by explosions related to phase change (hydro-fracturing). Most of the known mineralization occurs in association with the tourmaline breccia bodies (Macharé et al., 2012). These pipe-shaped to vein-shaped bodies are filled by breccias that show multiple brecciation events. In general, they are clast-supported, with angular to sub-angular clasts of the neighboring country rocks. Both monomictic and polymictic breccias have been recorded.

Exploration work completed by the issuer is limited to rock chip grab sampling and channel sampling in 2019-2020 and in 2021. The 2019-2020 sampling generated results from rock chips that ranged from below detection to 10.95 g/t Au, from below detection to 365 g/t Ag, and from below detection to 30300 ppm Cu (3.03% Cu). Assay results from channel samples ranged from below detection to 3.95 g/t Au, from below detection to 54.6 g/t Ag, and from below detection to 2670 ppm Cu (0.27% Cu). The 2021 sampling generated results from rock chips that ranged from below detection to 34.7 g/t Au, from below detection to 1360 g/t Ag, and from below detection to 8600 ppm Cu (0.86% Cu). Assay results from channel samples ranged from below detection to 12.55 g/t Au, from below detection to 1555 g/t Ag, and from 20.2 to 15500 ppm Cu (1.55% Cu). The focus of channel sampling was on Breccia 10 & 11, Breccia Intrusiva 10 de Julio, Breccia 8, and Breccia San Antonio.

The Authors conclude that Turmalina should continue to explore the Chanape Gold-Silver-Copper Project, targeting the tourmaline breccia features and related mineralization. In addition, Turmalina should continue to evaluate the porphyry potential of the Project, taking a measured approach to the costs related to this deeper exploration.

25.1 Risks and Uncertainties

Risks and uncertainties which may reasonably affect reliability or confidence in future work on the Project relate mainly to the reproducibility of exploration results (*i.e.*, exploration risk) in a future production

environment. Exploration risk is inherently high in mineral exploration but can be particularly high when exploring for deep-seated mineralization such as porphyry copper systems. Nonetheless, these risks can be mitigated by applying the latest geophysical techniques to develop high confidence targets for future drilling programs.

25.1.1 COVID-19 Pandemic

The COVID-19 (and variants) pandemic continues to affect daily activities throughout Peru with requirements for travel within the country set by and closely monitored by the government. Stricter conditions such as “lockdowns”, although less common currently, are generally announced with 2-3 days’ notice and can include restrictions on personnel movement and economic activities. Labour and health and safety regulations have legal provisions for preventing, reporting, monitoring, and responding to COVID-19 issues.

Mining and mineral exploration are classified as an essential activity in Peru; therefore, it is possible to conduct exploration during the various stages of lockdown providing the company and its employees and contractors have the appropriate permits. However, activities may be delayed due to restrictions and their consequences, such as night-time curfews, cancelation or rescheduling of flights and buses, document check points in towns and on highways, closure of certain shops and businesses, or isolation, evacuation, and quarantine of COVID-19 positive personnel and all their close contacts for up to 14 days. These delays may also extend to processing time for legal and regulatory permits, geochemical sample processing and other exploration activities.

The Authors are not aware of any other significant risks or uncertainties that would impact the Issuer’s ability to perform the recommended work program (see Section 26) and other future exploration work programs on the Property.

26.0 RECOMMENDATIONS

It is the opinion of the Authors that additional exploration expenditures are warranted on the Chanape Au-Ag-Cu Project. A recommended work program, arising through the preparation of the Report and consultation with the Company, is provided below.

A two-phase exploration program is recommended, with the details of the second phase contingent on the results of Phase 1. Phase 1 considers a drilling program consisting of 2,000 m in 10 drill holes, is outlined in Table 26-1. The recommended program, which considers only direct exploration costs and does not include Company G&A, totals approximately US\$687,000 (approximately C\$894,000). Collar locations and objectives for each of the planned diamond drill holes are provided in Table 26-2 and a plan map showing planned diamond drill hole traces and collars for Phase 1 is shown in Figure 26-1.

Table 26-1. Budget estimate, recommended single-phase exploration program, Chanape Au-Ag-Cu Project.

Phase	Comments	USD
Set-up	Mobilization, camp installations, land movement	\$70,000
Operations	Drilling: 2,000 m x USD\$150/metre drilled	\$300,000
	Camp operation	\$90,000
Laboratory	80% of 2,000 metres drilled (1,600 samples) at USD\$55/m (all-in cost)	\$88,000
Administrative costs	Car rental, house rental, food, office, material for sampling	\$30,000
	Local and skilled labours	\$60,000
	Others Administrative costs (accountant, lawyer, etc.)	\$9,000
Closure	Demobilization	\$40,000
TOTAL:		\$687,000

Table 26-2. Drill pads, hole parameters, and targets for proposed diamond drill holes, Chanape Project (WGS84).

Drill Pad	Target Breccia	UTMX (m)	UTMY (m)	Elev (m)	Az	Dip	EOH (m)
C3-P1	Breccia 11	362409	8681656	4696	110	-60	284
B2-P1	Breccia 11	362575	8681646	4726	250	-60	300
A1-P1	Breccia 11	362500	8681613	4714	60	-60	180
A1-P2	Breccia 11	362500	8681613	4714	260	-60	150
E5-P1	Breccia 8	362172	8681824	4621	85	-60	150
F6-P1	Breccia 8	362226	8681737	4630	345	-55	230
G7-P1	Breccia 8	362157	8681762	4607	50	-60	256
P16-P1	San Antonio	362395	8682294	4507	50	-60	150
S19-P1	San Antonio	362456	8682319	4532	260	-60	150
R18-P1	San Antonio	362438	8682290	4530	300	-60	150

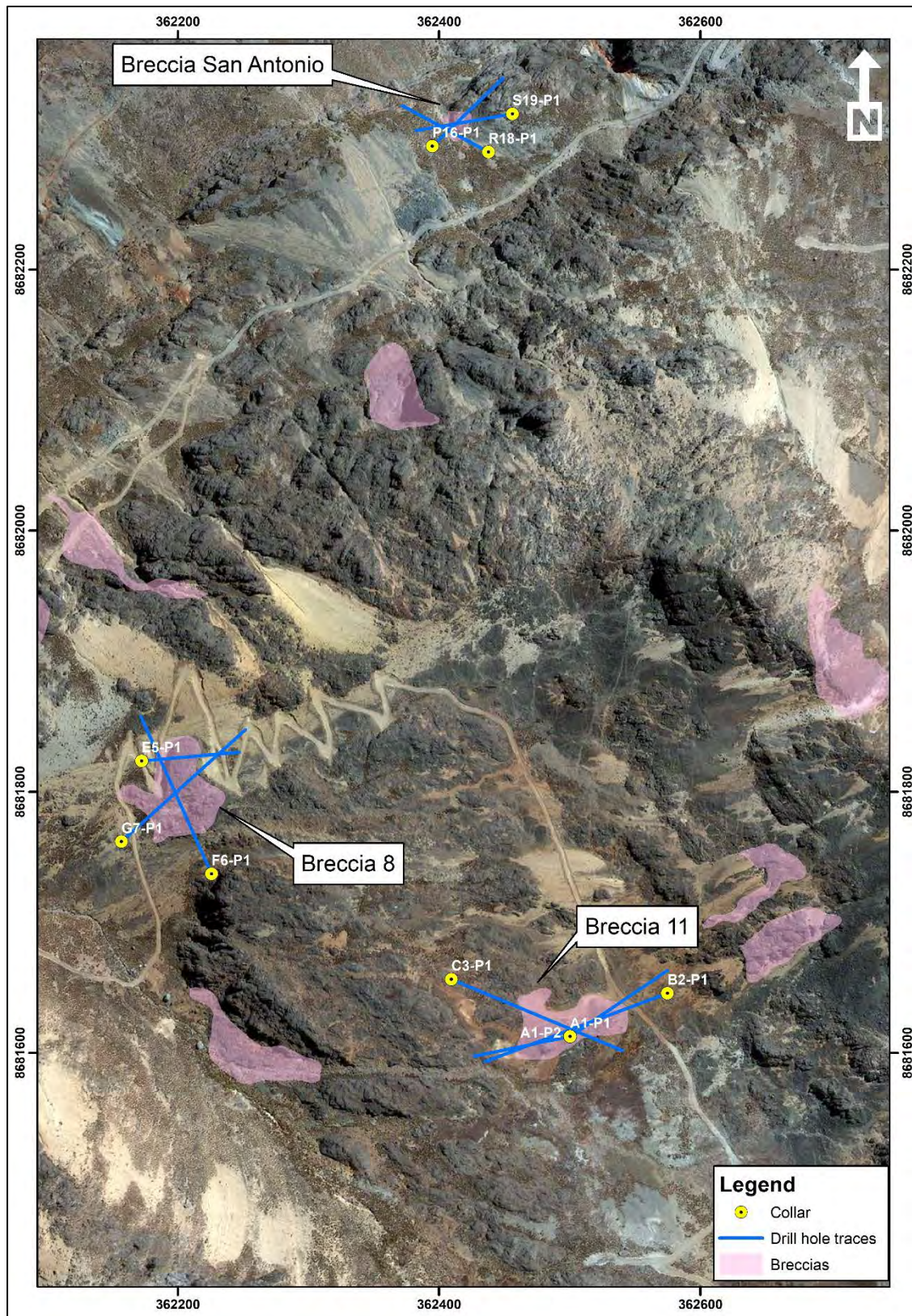


Figure 26-1. Location of the 10 planned diamond drill holes (collars and traces), targeting Breccia San Antonio, Breccia 8 and Breccia 11, overlain on a Google satellite image (Turmalina Metals, 2022).

A second Phase of work is proposed, contingent on the results of Phase I, as presented in Phase II (Table 26-3). Should Phase II go ahead, the location of the drill holes would be contingent on the results of Phase I.

Table 26-3. Recommended Phase II exploration budget (contingent on Phase I), Chanape Au-Ag-Cu Project.

Phase II	Comments	USD
Permits	Semi-Detailed Environmental Permit (50 drill pads)	\$180,000
Set-up	Mobilization, camp installations, land movement	\$140,000
Operations	Drilling: 15,000 m X US\$150 per metre drilled	\$2,250,000
	Camp operation	\$350,000
Laboratory	80% of 15,000 metres drilled (12,000 samples) at US\$55/m (all-in cost)	\$720,000
Administrative costs	Car rental, house rental, food, office, material for sampling	\$200,000
	Local and skilled labors	\$360,000
	Others Administrative costs (accountant, lawyer, etc.)	\$40,000
	Company Running Costs	\$400,000
	Option Agreement Payments*	\$780,000
Closure	Demobilization	\$80,000
TOTAL:		\$5,500,000

27.0 REFERENCES

- Arseneau, G. (2022). Independent technical report for the Soledad Copper Project, Ancash Department, Perú. Prepared for Chakana Copper Corp., 141p.
- Carlson, S.R., and Sawkins F.J. (1980). Mineralogic and Fluid Inclusion Studies of the Turmalina Cu-Mo-bearing Breccia Pipe, northern Peru. *Economic Geology* Vol. 75, pp. 1233-1238.
- Clark, A.H. (1990). The Slump Breccias of the Toquepala Porphyry Cu (-Mo) Deposit, Peru Implications for Fragment Rounding in Hydrothermal Breccias. *Economic Geology* Vol. 85, pp. 1677-1685.
- Frikken, P., Cooke, D., Walshe, J., Archibald, D., Skarmeta, J., Serrano, L., & Vargas, R. (2005). Mineralogical and Isotopic Zonation in the Sur-Sur Tourmaline Breccia, Rio Blanco-Los Bronces Cu-Mo Deposit, Chile: Implications for Ore Genesis. *Economic Geology*, v100, pp. 935-961.
- Hedenquist, J.W. (2013). Observations on the Chanape Au-Ag and Cu-Ag prospect, Peru, for Inca Minerals Ltd., 24p.
- High Ridge (2008c). High Ridge Resources Inc. news release “High Ridge Encounters Anomalous Copper, Lead, and Zinc Intersections in the Early Stage Drilling at the Chanape project”, 28 October 2008, 3p.
- High Ridge (2008b). High Ridge Resources Inc. news release “High Ridge initiates drilling program on the Chanape project in the San Mateo area, Peru”, 29 May 2008, 2p.
- High Ridge (2008a). High Ridge Resources Inc. news release “High Ridge announces completion of 3D Induced Polarization survey on the Chanape property, San Mateo Area, Peru”, 25 March 2008, 3p.
- High Ridge (2007). High Ridge Resources Inc. Management Discussion and Analysis for Year Ended December 31, 2006, 14p.
- Hutton, M., Biggs, D., and Border, S. (2015). Independent Geological review, Chanape, Peru, Inca Minerals Limited (16 December 2015), 37p.
- Inca Minerals (2016). 2016 Annual Report for Inca Minerals Limited, October 2016, 72p.
- Inca Minerals (2015). 2015 Annual Report for Inca Minerals Limited, October 2015, 68p.
- Inca Minerals (2014). 2014 Annual Report for Inca Minerals Limited, October 2014, 80p.
- Inca Minerals (2013). 2013 Annual Report for Inca Minerals Limited, October 2013, 72p.
- Inca Minerals (2012). 2012 Annual Report for Inca Minerals Limited, October 2012, 68p.
- Inche A., W., Guzmán M., G. y Venturi, G. (2008). Informe Proyecto Chanape. Reporte privado para Minera High Ridge del Perú S.A.C., 47p.
- Kirwin, D. J. (1985). Tourmaline breccia pipes: M. Sc. thesis, Townsville, James Cook University of North Queensland, 139p.
- Kirwin, D., Kelley, D., Azevedo, F., Wolfe, R. (2018). Characteristics of Intrusion-Related Copper-Bearing Tourmaline Breccia Pipes. Society of Economic Geologists (SEG) Metals, Minerals and Society.

- Ly, P. and Arce, S. (1980). In Samamé B., M., El Perú Minero, t. IV (2), INGEMMET, pp. 506-510.
- Macharé, J., Marquina, M., Choque, D., and Huaripata, N. (2012). Geological Report Chanape Project: Subprogram 1 for Condor Metals Ltd., prepared by ExploAndes, 24p.
- McKinstry, H.E., Noble, J.A., Kimball, R.H., Still, A.R., and Kobe, H.W. (1965). Generalized geologic map of the Casapalca District. Mapa suelto, escala 1: 50,000, Cerro de Pasco Copper Corporation.
- McLaughlin, D.H. (1924). Geology and physiography of the Peruvian Cordillera, departments of Junín and Lima. Bulletin of the Geological Society of America, 35, pp. 591-632.
- Mégard, F. (1978). Etude géologique des Andes du Pérou central. In Contribution à l'étude géologique des Andes n° 1. Memoir ORSTROM, no 86, 310p.
- Salazar D.H. (1983). Geología de los cuadrángulos de Matucana y Huarochirí. INGEMMET, Serie A: Carta Geológica Nacional, Boletín N° 36, 68p., 3 planos.
- Sillitoe, R.H. (2016). Porphyry Copper Potential of the Chanape Prospect, Central Peru, for Inca Minerals Ltd., 14p.
- Sillitoe, R.H. and Perello, J. (2005). Andean Copper Province Tectonomagmatic Settings, Deposit Types, Metallogeny, Exploration, and Discovery. Geology, pp. 845-890.
- Sillitoe, R.H. and Sawkins, F.J. (1971). Geologic, mineralogic, and fluid inclusion studies relating to the origin of copper-bearing tourmaline breccia pipes, Chile. Economic Geology, 66, pp. 1028-1041.
- Skewes M. A., Arevalo, A.G., Floody R., Zuniga P., Stern C.R. (2002). The giant El Teniente breccia deposit: hypogene copper distribution and emplacement. In: Goldfarb R, Nielsen R (eds) Integrated methods for discovery: global exploitation in the 21st Century. Soc Econ Geol Spec Publication 9, pp. 299–332.
- Turmalina Metals (2021). Turmalina Metals Corp. Management Discussion and Analysis document filed on SEDAR, 31 March 2021, 16p.