NI 43-101 Technical Report for the Mineral Resource Estimate of the Calico Silver Project, San Bernardino County California, USA

Submitted to:
Apollo Silver Corporation

Report Date: March 28, 2022
Effective Date: January 28, 2022

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Project No. 233001578

IMPORTANT NOTICE

This notice is an integral component of the Calico Silver Project Mineral Resource Estimate Technical Report (“Technical Report” or “Report”) and should be read in its entirety and must accompany every copy made of the Technical Report. The Technical Report has been prepared in accordance with the requirements of National Instrument 43-101 Standards of Disclosure for Mineral Projects.

The Technical Report has been prepared for Apollo Silver Corporation (“Apollo” or “Client”) by Stantec Consulting Ltd. (“Stantec”). The Technical Report is based on information and data supplied to Stantec by Apollo. The quality of information, conclusions, and estimates contained herein are consistent with the level of effort involved in the services of Stantec, based on: i) information available at the time of preparation of the Report, and ii) the assumptions, conditions, and qualifications set forth in this Report.

Each portion of the Technical Report is intended for use by Apollo subject to the terms and conditions of its contract (November 1, 2021) with Stantec. Except for the purposes legislated under Canadian provincial and territorial securities law, any other uses of the Technical Report, by any third party, is at that party’s sole risk.

The results of the Technical Report represent forward-looking information. The forward-looking information includes pricing assumptions, sales forecasts, projected capital and operating costs, mine life and production rates, and other assumptions. Readers are cautioned that actual results may vary from those presented. The factors and assumptions used to develop the forward-looking information, and the risks that could cause the actual results to differ materially are presented in the body of this Report.

Stantec has used their experience and industry expertise to produce the estimates in the Technical Report. Where Stantec has made these estimates, they are subject to qualifications and assumptions, and it should also be noted that all estimates contained in the Technical Report may be prone to fluctuations with time and changing industry circumstances.

CERTIFICATE OF QUALIFICATIONS

I, Derek J. Loveday, P.Geo., do hereby certify that:

1. I am currently employed as a Project Manager by Stantec Services Inc., 2890 East Cottonwood Parkway Suite 300, Salt Lake City UT 84121-7283.
2. I graduated with a Bachelor of Science Honors Degree in Geology from Rhodes University, Grahamstown, South Africa in 1992.
3. I am a licensed Professional Geoscientist in the Province of Alberta, Canada, #159394. I am registered with the South African Council for Natural Scientific Professions (SACNASP) as a Geological Scientist #400022/03.
4. I have worked as a geologist for a total of thirty years since my graduation from university, both for mining and exploration companies and as a consultant specializing in resource evaluation for precious metals and industrial minerals. I have many years of experience with exploring and modelling stratiform polymetallic precious and base metals deposits located in the United States and Mexico.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (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 meet the requirements to be a "Qualified Person" for the purposes of NI 43-101.
6. I am responsible for the preparation of all sections of the report titled "N.I. 43-101 Technical Report for the Mineral Resource Estimate of the Calico Silver Project, San Bernardino County California, USA" (the "Technical Report") dated March 28, 2022, Effective Date January 28, 2022.
7. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
8. I have had no prior involvement with the Property that is the subject of this Report.
9. I have personally visited the Property on December 13, 2021, through December 14, 2021.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
11. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Report, the omission to disclose which makes the Report misleading.
12. I am independent of the issuer applying all of the tests in Section 1.5 of NI 43-101.

PROFESSIONAL GEOSCIENTIST ALBERTA
DEREK LOVEDAY
LICENSED TO PRACTICE

Dated March 28, 2022

Derek J. Loveday, P.Geo.
Project Manager

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List of Abbreviations

Ag	Silver
°C	Celsius
°F	Fahrenheit
g	gram
kg	kilogram
lb	pound
oz	ounce (troy)
st	short ton
ton	imperial short ton
tonne	metric ton
ft	feet
in	inches
cm	centimeter
km	kilometers
m	meters
mm	millimeters
Mtpa	million short tons per annum
yd	yard
ac	acre
ha	hectare
ft^2	square feet
m^2	square meter
ft^3/st	cubic feet per short ton
m^3	cubic meter
ktons	thousand tons
koz	thousand troy ounces
Ma	million years ago
QA/QC	Quality assurance and quality control

1.0 SUMMARY

Stantec Consulting Service Inc. (“Stantec”) was engaged by Apollo Silver Corporation (“Apollo”) to prepare a Technical Report in accordance with the requirements of the Canadian Institute of Mining, Metallurgy and Petroleum’s (“CIM”) National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”). The purpose of this Technical Report is to report the resource estimates for the Calico Silver Project (the “Calico Project” or the “Project”) comprising the Waterloo and Langtry Properties (the “Properties” or “Calico Properties”).

Property Description and Location

The Calico Project is located approximately 9 miles (15 km) northeast of the city of Barstow within San Bernadino County, California, in a region known as the historic Calico Silver Mining District (the “District”). The Project comprises both the Waterloo and Langtry Properties that were historically explored separately for silver. The Project can be accessed year-round by paved and dirt roads, and within the Properties there is a network of dirt roads providing access to old drill pads and historical workings. Climatic conditions in the Project area allow for year-round operations.

The Waterloo Property is 1,768 ac (716 ha) which includes all claims comprising the property (i.e., Waterloo Main (1727 ac; 699 ha) and Waterloo Mill Sites (41 ac; 17 ha). The Langtry Property totals 1,178 ac (476.5 ha). The two properties together (Waterloo and Langtry) cover an area of 2,946 ac (1,192 ha).

Property Concessions

The Waterloo Property consists of 48 claims: 21 unpatented claims (19 lode mining claims, 2 mill site claims) and 27 fee simple land parcels for use and/or mineral rights. The Waterloo Property claims are shown on Figures 4-4 and Figure 4-5, and in Table 4.2. The Langtry Property comprises 38 unpatented lode mining claims and 20 patented mining claims.

In July 2021, Apollo acquired all of the issued and outstanding common shares of Stronghold Silver Corporation (“Stronghold”) (the “Stronghold Transaction”). Stronghold, through its wholly owned subsidiary, Stronghold Silver USA Corp. (“Stronghold USA”), held the rights to acquire the Waterloo Property through an asset purchase agreement with Pan American Minerals Inc. (“Pan American”; a wholly owned subsidiary of Pan American Silver Corp.) which was originally signed on January 22, 2021, and amended in June 2021 and June 2021 (collectively, the “Waterloo Purchase Agreement”). Per the terms of the Waterloo Purchase Agreement, Pan American retains a 2% Net Smelter Royalty (“NSR”) on any and all future production of minerals from the Waterloo Property.
Upon completion of the Stronghold Transaction, the 27 fee land parcels were vested to Stronghold USA, by grant Quitclaim Deed from Pan American on July 12, 2021. The transfer of claim ownership to Stronghold USA was recorded with the County of San

Bernardino on July 13, 2021. The unpatented lode claims are registered to Stronghold USA.

Stronghold, through its wholly owned subsidiary, Stronghold USA, holds the rights to acquire a 100% interest in the Langtry Property through two option agreements entered into in December 2020. One option agreement covers 36 unpatented lode mining claims held by Athena and (the “Athena Agreement”) and the second option agreement covers 20 patented mining claims owned by Bruce D. Strachan and Elizabeth K. Strachan (“Strachan” or “Strachan Trust”) and two unpatented lode mining claims (the “Strachan Agreement”). Each option agreement is subject to good standings, royalties, and encumbrances.

The surface rights of the private lands for the Waterloo and Langtry Properties are held by the claimants, whereas the surface rights for the unpatented lode mining claims are held by the BLM. To the knowledge of the Author and the QP there are no known encumbrances with surface rights on the Waterloo and Langtry Properties.

Historical Mining

There are more than 50 historical past producing mines in the District. Of these, five occur on the Calico Project: at Waterloo are the Voca, Union and Waterloo silver mines and the Burcham gold-lead mine; at Langtry is the Langtry silver mine. Historic metal mining in the District has primarily focused on veins zoned with high grade silver and barite. Historic mining is understood not to have targeted the disseminated silver mineralization that is commonly found in the surrounding vein country rock that forms the basis of the mineral resource estimate in this report. Since the early 1960’s there has been no mining activity within or immediately surrounding the Project area.

Historical Exploration

Exploration on the Calico Project using modern methods began in the 1960’s and consisted of drilling, surface and underground geochemical sampling, geologic mapping, and trench work. Most drilling was completed using rotary and reverse circulation (“RC”) drilling methods. At Waterloo a total of 267 drillholes were completed by two controlling companies, American Smelting and Refining Company (“ASARCO”) and Pan American Minerals Incorporated (“Pan American”). At Langtry a total of 186 drillholes were completed by two controlling companies, Superior Oil Corporation (“Superior”) and Athena Minerals Incorporated (“Athena”). Data from these drilling campaigns was identified to be adequate for the purposes of building separate geologic models for the Waterloo and Langtry Properties and defining a mineral resource estimate at an Inferred level of confidence for the Calico Project.

Historical Estimates

Historical estimates for the Calico Project have in the past been documented separately for the Waterloo and Langtry Properties. At Waterloo, historic mineral resource estimates were produced by ASARCO in 1966 and 1979, and Pan American in 2013. At Langtry, historical mineral resource estimates were produced by Superior in 1974, International Silver Inc., in 2008 and Athena in 2012. Neither the Author nor the issuer are treating these historical estimates as current mineral resources or reserves and they are disclosed in this technical report to provide a comprehensive view on the technical work completed at the Calico Project. The historic estimates have been superseded by the current Calico Project Inferred mineral resource estimates outlined in this summary and in Section 14 of this report.

Historical Metallurgical Testing

Metallurgical testing was undertaken at Waterloo by ASARCO and the U.S. Bureau of Mines; and at Langtry by Superior and Athena. The metallurgical test results indicated that recovery of silver at or above 80% is potentially possible from silver mineralization identified on the Calico Project properties. Metallurgical testing on the Calico Project was undertaken from samples taken from near-surface oxidized disseminated silver mineralized zones that are the target for the minerals resource estimate.

Historical Economic Studies

Two historical economic studies were conducted for the Waterloo Property by ASARCO in 1969 and by Fluor Mining and Metals Inc., on behalf of ASARCO, in 1980. Pan American (2008) concluded that both historical economic studies could not be used to give an accurate estimation of the profitability of the Waterloo Project in 2008 due to inflation, estimates considered only a 10-year operation, did not include extraction of secondary minerals, and that mining technology and price of metals had changed significantly from 1969 to 2008. At Langtry, only feasibility-level recommendations for mine development, primarily addressing slope stability and the use of overburden materials for concrete aggregate were addressed as part of a study evaluating geotechnical and engineering conditions (C.H.J. Incorporated, 2010). Although the historical mineral resource estimates and feasibility studies completed on the Project provide a wealth of background information, these studies cannot be used to give an accurate estimation of profitability in 2022.

Geology and Mineralization

The Calico Project resides on the western edge of the Calico Mountains where four lithostratigraphic units have been identified. These are: Quaternary Yermo Formation sediments and alluvium, Quaternary and Tertiary Upper Barstow Formation sediments, Tertiary (Miocene) Lower Barstow Formation sediments and Pickhandle Formation volcanics. Precious metal vein mineralization has been identified in the Pickhandle Formation and disseminated silver mineralization in the Lower Barstow Formation. That hosted in the Lower Barstow Formation comprises the mineralized zone of the silver mineral resource for the Project. Silver and gold mineralization is hosted in veins in the Pickhandle Formation volcanic flows and breccias, however there is insufficient information on the mineralization within the Pickhandle Formation to identify an exploration target or mineral resource on the Project.

At Waterloo the Lower Barstow mineralized zone is constrained by the northwest dipping Calico fault in the west and the Lower Barstow-Pickhandle contact in the east. At Langtry the Lower Barstow mineralized zone is contained within the main Calico fault and a Calico fault splay. The general dimensions of the mineralized zone at Waterloo covers an area approximately 1,500 ft (457 m) wide by 6,500 ft (1,981 m) long extending from outcrop and plunging towards the southwest to a maximum modelled depth of approximately 600 ft (183 m) below surface. The mineralization is continuous from surface and along strike for the area defined by drilling. The general dimensions of the mineralized zone at Langtry covers an area approximately 1,500 ft (457 m) wide by 5,000 ft (1,524 m) long extending from outcrop and plunging towards the southwest to a maximum modelled depth of approximately 600 ft (183 m) below surface. The mineralization is continuous from surface. The deposit type is an epithermal precious metal deposit.

Exploration

Exploration undertaken by Apollo on the Project in late 2021 and early 2022 (prior to the January 28, 2022, effective date of this report) includes surficial geologic mapping and grab sampling, petrography, assaying and whole rock geochemistry of surface grab samples, satellite elevation data acquisition and initiation of a ground rolling three-dimensional (“3D”) Direct Current Induced Polarization (“DCIP” or “IP”) geophysical survey. Results from these activities were still pending as of the effective date of the report however, preliminary interpretations of the fault locations by Pratt (2021) further supported by previous mapping (Pratt 2008 and 2012) were utilized for the resource modelling.

Assessment of Reasonable Prospects for Economic Extraction

For the purposes of determining Reasonable Prospects of Economic Extraction, a base case silver resource cut-off grade (“COG”) of 50 ppm has been determined based on the economics of a surface mining operation at approximately 4 Mtpa resource tons. Processing of the mineralized material would be onsite extracting silver using a cyanidation process that may or may not include a salt roast. The base-case COG was determined using the following assumptions: silver price of US$23 per troy oz, processing costs of US$29/st, Mining costs of US$2.50/st and silver recovery of 80%. Economic pit shell at a constant 45 degrees slope was developed for both Properties from 3D block models of the mineralized zones and waste rock. A US$23 per troy ounce revenue for a silver recovery of 80% and a mining cost of US$2.50/st were used in the derivation of separate economic pit shells for the Waterloo and Langtry Properties. A fixed density of 13.13 ft^3/st (2.44 kg/m^3) for both mineralized and waste zones, relatively minor surface weathering was assumed a density of 1.78 ft^3/st (1.80 kg/m^3).

Mineral Resource Estimates

The Inferred silver mineral resource estimates for the Calico Project are presented in Table 1.1, with an effective date of January 28, 2022. Table 1.1 includes a sensitivity analysis of the silver grade and tonnage relationships at varying pit-constrained cut-off grades for the Calico Project. Base case mineral resource estimates at a COG of 50 g/t are highlighted in bold text in Table 1.1. Drilling information utilized for resource estimation included exploration drilling records for a total of 438 drill holes: 255 holes, 61,108 ft (18,626 m) at Waterloo and 183 holes,76,986 ft (23,465 m) at Langtry.

Table 1.1
Silver Mineral Resource Estimates. Effective January 28, 2022.

Classification	Silver COG (g/t)	Imperial Units			Metric Units			Strip Ratio (t:t)	Contained Silver
		Volume Million (yd^3)	Tons Million (st)	Ag Grade (oz/st)	Volume Million (m^3)	Tonnes Million (t)	Ag Grade (g/t)		Million (oz)
Waterloo Pit Constrained Silver Mineral Resource Estimate									
Inferred	≥ 25.0	27.6	56.8	2.54	21.1	51.5	79	0.4	131
	≥ 50.0	**20.8**	**42.8**	**2.98**	15.9	**38.9**	**93**	**2.2**	**116**
	≥ 75.0	12.2	25.1	3.69	9.3	22.8	115	6.2	84
	≥ 100.0	6.7	13.8	4.43	5.1	12.5	138	13.8	56
Langtry Pit Constrained Silver Mineral Resource Estimate									
Inferred	≥ 25.0	18.5	38.0	1.97	14.1	34.4	61	1.9	68
	≥ 50.0	**10.3**	**21.3**	**2.59**	7.9	**19.3**	**81**	**6.0**	**50**
	≥ 75.0	4.3	8.9	3.47	3.3	8.1	108	18.0	28
	≥ 100.0	1.8	3.7	4.47	1.4	3.4	139	46.4	15
Calico Project Pit Constrained Silver Mineral Resource Estimate									
Inferred	≥ 25.0	46.1	94.8	2.31	35.2	86.0	72	1.0	199
	≥ 50.0	**31.2**	**64.1**	**2.85**	23.8	**58.1**	**89**	**3.4**	**166**
	≥ 75.0	16.5	34.0	3.63	12.6	30.8	113	9.2	112
	≥ 100.0	8.5	17.6	4.44	6.5	15.9	139	20.8	71

- Base-case resource estimates reported in Table 1. Ounces are reported as troy ounces.
- Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") definitions are followed for classification of the Mineral Resource.
- Prospects for eventual economic extraction determined using surface mining operating costs of US$2.50/st, processing costs of US$29.00/st and silver price of US$23.00/oz.
- Specific gravity for the mineralized zone is fixed at 2.44 kg/m^3 (13.13 ft^3/ton). Silver grade was capped at 400 g/t only for Waterloo estimation.
- Resources are constrained to within an economic pit shell targeting mineralized blocks with a minimum of 50 ppm (50 g/t) silver.
- Totals may not represent the sum of the parts due to rounding.
- The Mineral Resource estimate has been prepared by Derek Loveday, P. Geo. of Stantec Consulting Services Ltd. in conformance with CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines and are reported in accordance with the Canadian Securities Administrators NI 43-101. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that any mineral resource will be converted into a mineral reserve.

The silver mineral resources on the Calico Project are identified as Inferred-only for the following reasons:

- Historic drill hole records include mostly RC chip sample data that provided limited information in the existing logs with respect to structure and lithology.
- Extent of historical mining, though to date has shown to be insignificant, needs to be accurately surveyed to the extent possible to account for mining at a local level.
- The majority of the exploration drillhole data is generally old, with 76% of the drilling at Waterloo completed between 1965 and 1989. At Langtry 93% of the drilling was completed between 1967 and 1976.

Potential Risks

The following potential risks associated with the mineral resource estimates have been identified in order of relative importance:

- Historic metallurgical testing has reported a wide range in silver recoveries. Silver recoveries of greater that 80 % may not be realized from the resource.
- Historical underground workings pose a risk to mining if they are not accurately surveyed and accounted for in the mine plan.
- The Calico Project is located in an arid region with limited water supplies that may impact the ability to obtain sufficient makeup water to support an onsite processing plant.

According to the available information to the Author and QP, as of the effective date of the mineral resource estimates, there are no other known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that would materially impact the resource estimates.

Mitigating Factors

The private lands at both Waterloo and Langtry Properties have a history of silver mining activities. Additionally:

- The private lands at both the Waterloo and Langtry Properties have obtained a Certificate of Land Use Compliance (“CLUC”) from San Bernardino County recognizing surface mining as a legal use of the private lands and the existence of a “vested right” to conduct surface mining activities thereon.
- In 1981, ASARCO completed an Environmental Impact Report and a Reclamation Plan, both approved by the County of San Bernardino, giving ASARCO a permit to undertake mining operations on the Waterloo Property. This permit expired in May 2004.

Considering the Project area was historically mined, that Waterloo received a permit to mine in 1981 and both Waterloo and Langtry have received CLUC’s from the County of San Bernardino, the assumption that the future use of the private lands may be for mining activities is appropriate.

Conclusions and Recommendations

The Calico Project is an exploration project with an initial drill-defined Inferred mineral resource containing 166 Moz of silver contained in 58.1 Mt at an average grade of 89 g/t. The Project is composed of two properties: the Waterloo Property, hosting 116 Moz of silver contained in 38.9 Mt at an average grade of 93 g/t silver; and the Langtry Property, hosting 50 Moz of silver contained in 19.3 Mt at an average grade of 81 g/t silver. All resource estimates herein are at an Inferred level of confidence and use a silver cut-off grade of 50 g/t Ag. The Author and QP of this Technical Report calculated the mineral resources using validated past exploration data, recent geological mapping and modeling, and developed the geological and mineralization block models using current best practice. The Inferred mineral resources defined for the Project are of sufficient size to warrant additional work to increase the confidence in the current resource estimates and to determine the potential for commercially viable operations. The Author and QP recommends further work to proceed in two phases.

Recommendations for Phase I follow-up work include:

1) Infill drilling to increase the drill density and support upgrading the resource classification.
2) Twinning of select holes to provide additional confirmation of and robust lithological control for historic results and support the upgraded resource classification.
3) Expansion drilling targeting additional shallow silver mineralization along strike and down dip of current boundary of the resource.
4) RC drill holes should be downhole surveyed using borehole tools designed to provide additional geotechnical and lithological information.
5) Core drilling should be completed to support the geotechnical information derived from the downhole surveying of the RC holes.
6) Metallurgical test work should be completed on material that is currently available.
7) Re-sampling of available historic pulps using methods appropriate for major, minor and trace element characterization to determine the distribution of other elements not previously measured. This includes barium, in order to potentially add barite to any mineral resource update.
8) Environmental baseline studies should be initiated to support future project permitting.

Drilling within the bounds of the current resource area should be completed at a density to support conversion of the Inferred resource to a Measured plus Indicated level. Drilling outside of the current resource should be completed at a density to support categorization of any defined mineralization at an Inferred level of confidence.

Results from Phase I should be incorporated into Phase II. Recommendations for Phase II include:

1) Re-calculation and reclassification the silver mineral resource based on Phase I drilling and metallurgical results.

2) Completion of a Preliminary Economic Assessment ("PEA") to determine the potential project economics and feasibility for mining in advance of future studies.

Costs estimates for Phase I and Phase II recommended work programs are shown in Table 1.2 below in Canadian dollars (C$).

Table 1.2
Recommendations and Costs

Phase	Task	Item	Amount	Cost (C$)
Phase I	Infill Drilling and Metallurgical Testing	RC Drilling	12,000 m (39370 ft)	$2,700,000
		Core Drilling	3,000 m (9843 ft)	$2,100,000
		Drilling Labor		$200,000
		Borehole Geophysics	90 holes	$400,000
		Metallurgical Testing and Laboratory		$1,000,000
		Reporting		$300,000
		Total Phase I		**$6,700,000**
Phase II	Preliminary Economic Assessment	PEA		$300,000
		Total Phase I and II		**$7,000,000**

2.0 INTRODUCTION

Apollo secured the services of Stantec in a contract dated November 1, 2021, as announced via news release dated December 8, 2021, to complete mineral resource estimates for silver mineralization at the Calio Project, and to prepare a Technical Report in accordance with the requirements of Canadian Securities Administration National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects.

Apollo is a Vancouver-based mineral exploration company exploring for precious metals in the United States. Apollo's flagship project is the Calico Project, located in the historic Calico Mining District (the "District") of the Mojave Desert in San Bernardino County, Southern California. The Project comprises two adjacent mineral properties: the Waterloo Property ("Waterloo") and the Langtry Property ("Langtry"), also referred to as the Calico Project or Calico Properties, the subjects of this report.

The District is a historical mining district operating between 1881 and 1896 reporting 15-20 million troy ounces of silver ("Ag"), with minor barite, gold, lead, and copper (Harthrong, 1983). The metallic deposit types in the District have been described as an epithermal exhalative (i.e., hot spring) or replacement type disseminated (Fletcher, 1986 and Pratt, 2008 and 2012) and vein-style. The Calico Project hosts both types, however the silver mineralization that is the focus of this Technical Report is the hot spring/replacement disseminated type, hosted in sedimentary rocks.

The purpose of this Technical Report is to complete mineral resource estimates for the epithermal precious metals identified within Apollo's Calico Project. The "Effective Date" means, with reference to a Technical Report, the date of the most recent scientific or technical information included in the Technical Report. The Effective Date of this Technical Report is January 28, 2022.

2.1 Site Inspection and Author

Derek Loveday (P.Geo.) independent Stantec Qualified Person ("QP") and Author inspected the Project area from December 13, 2021, through December 14, 2021. The site inspection verified data descriptions provided by Apollo in the Project Area including lithology, alteration, site accessibility and drill hole collar locations. Additionally, drill rock chips and core samples, stored in nearby Barstow, were inspected for evidence of accurate lithologic logging. Checks were also undertaken on maps, log descriptions and sample interval records.

The Author and QP has worked as a geologist for more than thirty years since graduating from university, both for mining and exploration companies and as a consultant specializing in resource evaluation for precious metals and industrial minerals. The Author has many years of experience exploring and modelling stratiform polymetallic precious and base metals deposits located in the United States and Mexico. The Author is a licensed Professional Geoscientist ("P.Geo.") in the Province of Alberta, Canada, #159394 and is registered with the South African Council for Natural Scientific Professions ("SACNASP") as a Geological Scientist #400022/03.

2.2 Sources of Information

This Technical Report is a compilation of proprietary and publicly available information. Apollo provided the drillhole data, including assay information for this Technical Report's resource estimate. Previous reports and data either received by Apollo or found publicly were reviewed and referenced where applicable. Documents referenced in this report are listed under Section 27. Geographic Information System ("GIS") map data was either provided by Apollo or downloaded from a public domain source. GIS data provided by Apollo was verified against public domain sources. Maps are displayed in NAD 1983, 2011 State Plane US feet California V where possible.

Information regarding land tenure and option or purchase agreements has been provided by Apollo.

2.3 Units of Measure

This Technical Report is a compilation of proprietary and publicly available information. The information, opinions, conclusions, and estimates presented in this Technical Report are based on the following:

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

- Abbreviated shorthand consistent with the International System of Units (International Bureau of Weights and Measures, 2006).
- 'Bulk' weight is presented in both United States short tons (tons; 2,000 lbs or 907.2 kg) and metric tonnes (tonnes; 1,000 kg or 2,204.6 lbs.).
- Geographic coordinates are projected in the NAD 1983, 2011 State Plane US feet California V unless otherwise stated.
- Currency in United States dollars (US$), unless otherwise specified (e.g., Canadian dollars, CDN$; Euros, €).
- Assay and analytical results for precious metals are quoted in parts per million (ppm), parts per billion (ppb), ounces per short ton (opt or oz/st), where "ounces" refers to "troy ounces" and "ton" means "short ton", which is equivalent to 2,000 lbs. Where ppm (also commonly referred to as grams per metric tonne [g/t]) have been converted to opt (or oz/st), a conversion factor of 0.029166 (or 34.2857) was used.

3.0 RELIANCE ON OTHER EXPERTS

The QP did not rely on a report, opinion or statement of another expert who is not a qualified person, or on information provided by the issuer, concerning legal, political, or tax matters.

The Author is not qualified to provide an opinion or comment on issues related to legal agreements, royalties, permitting and environmental matters. The QP relied entirely on information regarding the nature and extent of Mineral and Land Titles (found in Section 4) provided by Apollo. The legal and survey validation of the claims are not the Authors' expertise, and the QP is relying on the asset purchase agreement between Stronghold Silver USA Corp., ("Stronghold USA") a private US corporation and wholly-owned subsidiary of Apollo, and Pan American, and on option agreements between Stronghold USA and Athena Corporation and Athena Minerals Inc., ("Athena") dated December 21, 2020 and between Stronghold Silver USA Corp., and Bruce D. Strachan and Elizabeth K. Strachan ("Strachan") dated December 23, 2020.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Description and Location

The Calico Project is located approximately 9 miles (15 km) northeast of the city of Barstow within San Bernadino County, California. The Project is located approximately 125 miles (201 km) northeast of Los Angeles, California and 154 miles (248 km) south-west of Las Vegas, Nevada in the Mojave Desert (Figures 4-1 and 4-2). The majority of the Project lies within San Bernadino Base and Meridian Township 10 North and Range 01 East (T10N R01E) with a minor portion in T10N R01W.

The Project comprises both the Waterloo and Langtry Properties that were historically explored separately (Figure 4-2 and 4-3). The Waterloo Property includes two areas, the larger Waterloo Main Property (hosting the mineral resource and historical workings) and a smaller detached Waterloo Mill Site area. The Langtry Property includes two general areas as well, a larger Langtry Main Property (Langtry Property or Langtry) hosting the mineral resource and historical workings and a smaller less explored parcel to the southeast that abuts the Waterloo tenure (see Figure 4-2).

The Waterloo Main Property is located within T10N R01E, Sections 8, 9, 16, 17, 20, 21 and 22; and the Waterloo Mill Site in Section 19. The Langtry Property is located within T10N R01E, Sections 6, 7, 8, 17, 18 and T10N R01W, Sections 1 and 12.

The approximate centers of the properties are located as shown in the Table 4.1 below and on Figure 4-3; in Lambert Conformal Conic Projection, NAD 1983 Datum, 2011 State Plane US feet California V and WGS84 Latitude (“Lat”) North (“N”) and Longitude (“Long”) West (“W”).

Table 4.1
Calico Project Location Coordinates

Project Area Centroids					
Property		**State Plane (feet)**		**Latitude/Longitude**	
		Y- North	X - East	Lat. (North)	Long. (West)
Waterloo	Main Property	2169367.064	6894256.328	34° 56.90’	116° 53.41’
	Mill Site	2166180.848	6884258.226	34° 56.40’	116° 55.42’
Langtry		2178850.704	6887417.695	34° 58.48’	116° 54.76’

The Waterloo Property is 1,768 ac (716 ha) which includes all claims comprising the property (i.e., Waterloo Main (1727 ac; 699 ha) and Waterloo Mill Sites (41 ac; 17 ha). The Langtry Property totals 1,178 ac (477 ha). The two properties together (Waterloo and Langtry) cover an area of 2,946 ac (1,192 ha).

Legend

- Calico Silver Project Area
- State Boundary
- San Bernardino County
- County Boundaries
- Mojave Desert Outline
- Interstate Highway

0 30 60
Kilometers

0 30 60
Miles

Scale 1:3,801,600
(At original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri

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Stantec
Apollo

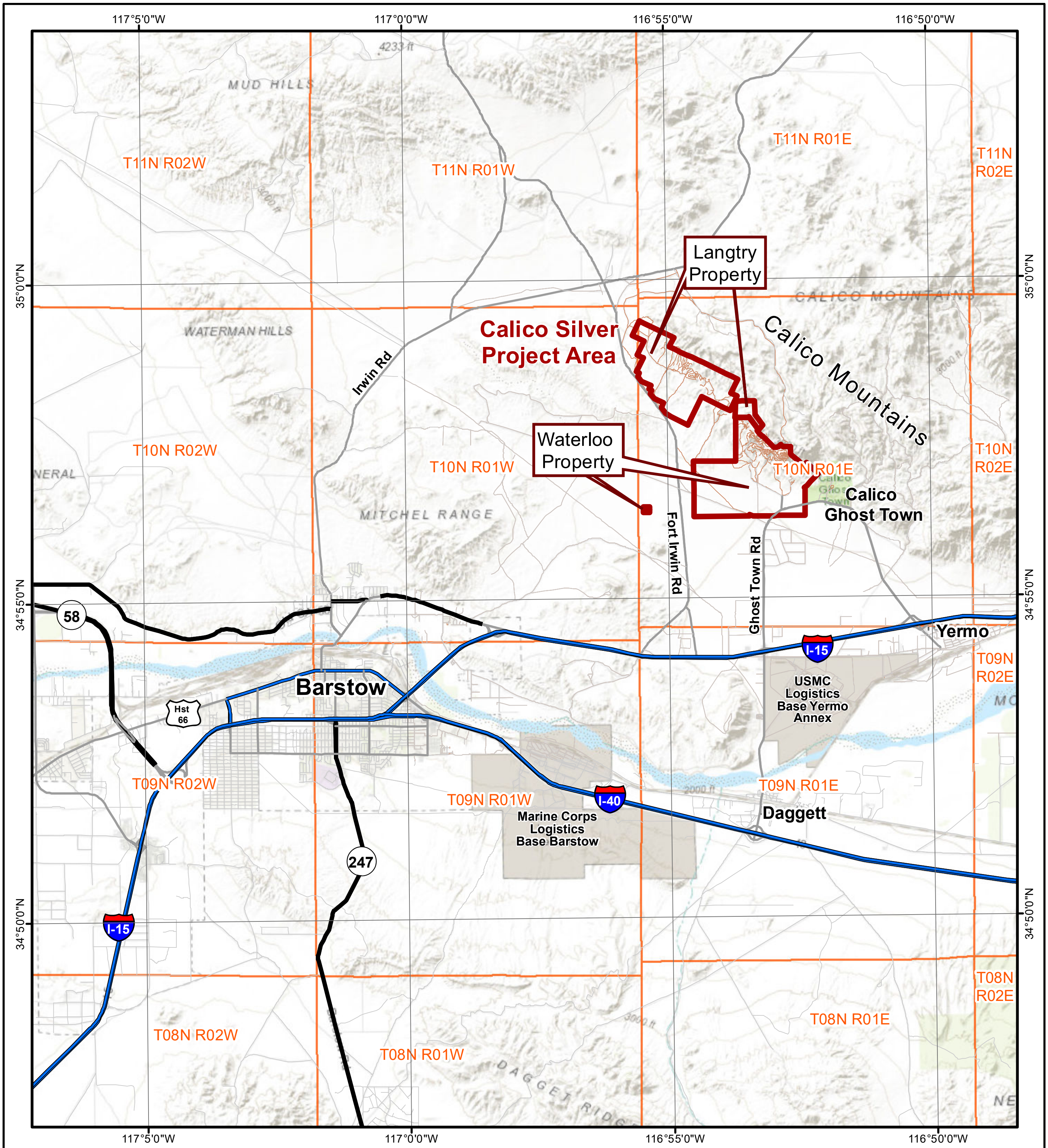
TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
General Location Map

Figure 4-1

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578



Legend

Roads

- Other Road
- Interstate Highway
- State Highway and Route
- Calico Dirt Roads
- Calico Silver Project Area
- Township and Range

N

0 2 4
Kilometers

0 2.5
Miles

Scale 1:158,400
(At original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri

Stantec
Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
Property Location Map

Figure 4-2

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578

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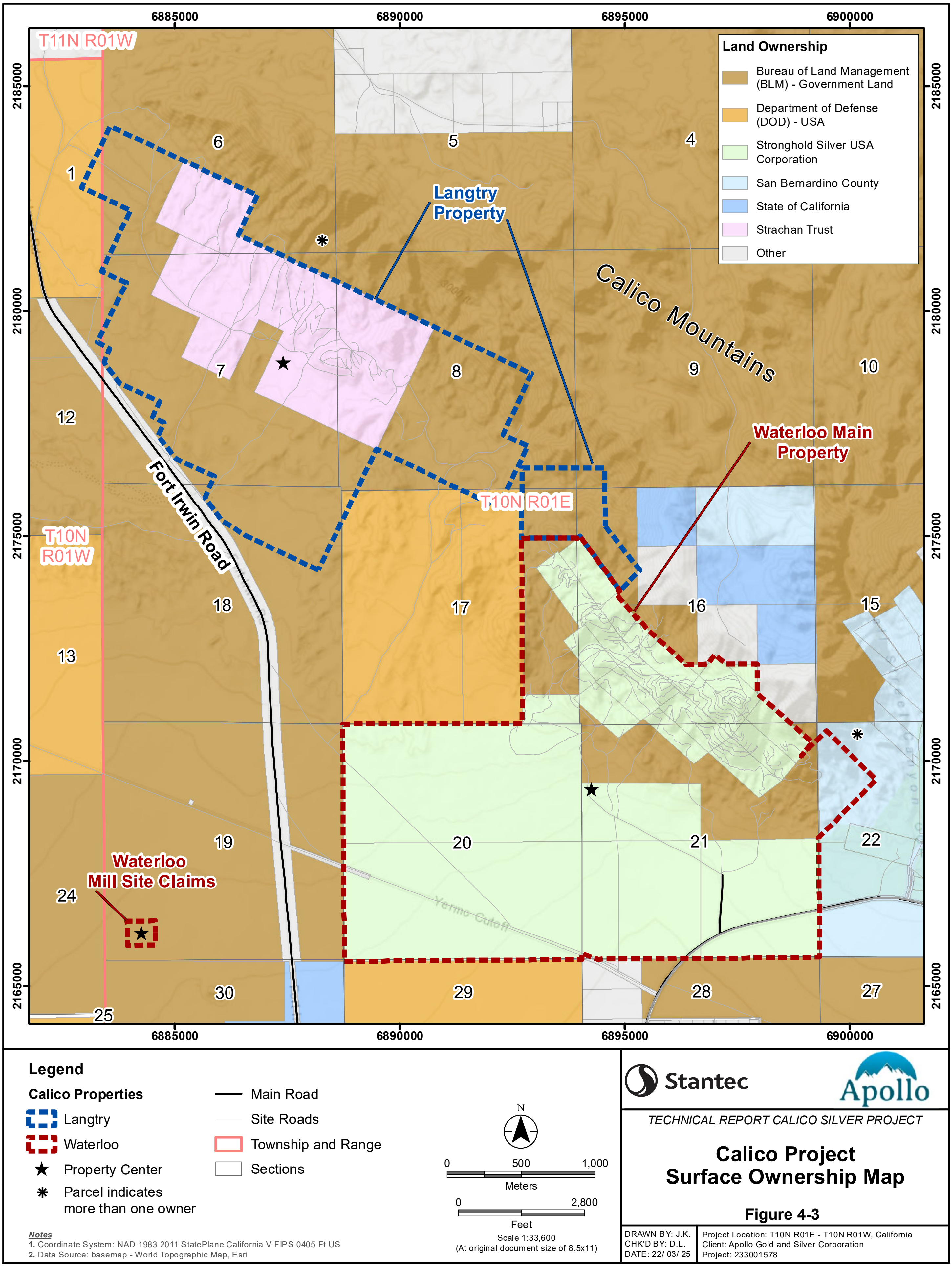


TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project Surface Ownership Map

Figure 4-3

4.2 Tenure, Agreements and Royalties

The Waterloo Property consists of 48 claims; 21 are unpatented (19 lode mining claims, 2 mill site claims) and 27 are fee simple land parcels for use and/or mineral rights. The Waterloo Property claims are shown on Figures 4-4 and 4-5 and in Table 4.2. The Langtry Property comprises 38 unpatented lode mining claims and 20 patented mining claims shown on Figures 4-4 and 4-6 and in Table 4.3. Tables 4.2 and 4.3 list the claims with ownership and other details. The information presented in this section has been provided by Apollo to Stantec, including the agreements related to acquisition of the Waterloo Property and option to earn into the Langtry Property, which have been reviewed by Stantec. Figures 4-3 through 4-6 show the land ownership and claim boundaries.

4.2.1 Waterloo Property

In July 2021, Apollo acquired all the issued and outstanding common shares of Stronghold Silver Corporation ("Stronghold") in exchange for 40,000,000 common shares of Apollo plus a one-time payment of US$500,000 to extend the closing date of the transaction (the "Stronghold Transaction"). Stronghold, through its wholly owned subsidiary, Stronghold Silver USA Corp. ("Stronghold USA"), held the rights to acquire the Waterloo Property through an asset purchase agreement with Pan American Minerals Inc. ("Pan American"; a wholly owned subsidiary of Pan American Silver Corp.) which was originally signed on January 22, 2021 and amended in April 2021 and June 2021 (collectively, the "Waterloo Purchase Agreement"). Shortly after completing the Stronghold Transaction, Apollo closed the Waterloo Purchase Agreement, acquiring 100% interest in the Waterloo Property for a base purchase price of US$25,000,000 less deposits that had already been paid of US$2,750,000, plus an additional payment of US$6,000,000 which was payable under the terms of the Waterloo Purchase Agreement as Stronghold USA had been acquired by Apollo, a public listed entity. Prior to Apollo acquiring Stronghold and Stronghold USA in the Stronghold Transaction, a one-time payment of US$500,000 (not creditable against the base purchase price) had been paid to Pan American by Stronghold USA in order to extend the closing date of the Waterloo Purchase Agreement. Per the terms of the Waterloo Purchase Agreement, Pan American retains a 2% Net Smelter Royalty ("NSR") on any and all future production of minerals from the Waterloo Property.

The Waterloo Property comprises 27 fee land parcels, 19 unpatented lode mining claims and two mill site claims). The fee land parcel titles were vested to Pan American, by grant Quitclaim Deed dated November 1, 1994. Upon completion of the Stronghold Transaction, the 27 fee land parcels were vested to Stronghold USA, by grant Quitclaim Deed from Pan American on July 12, 2021. The transfer of claim ownership to Stronghold USA was recorded with the County of San Bernardino on July 13, 2021.

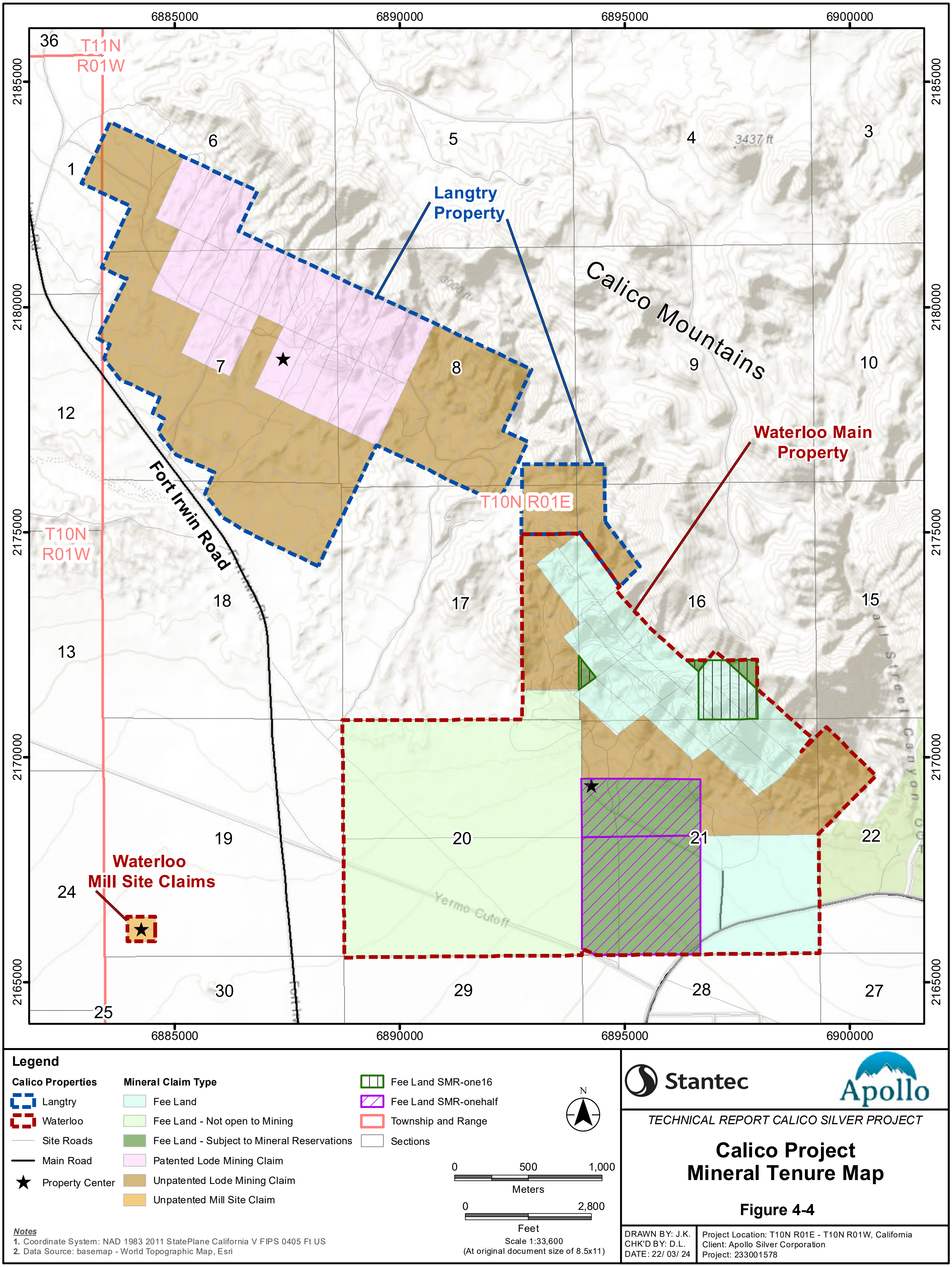
The unpatented lode claims are registered to Stronghold USA and are kept in good standing by paying an annual fee of $165 per claim to the Department of Interior, Bureau of Land Management ("BLM") due by the 1st of September. BLM fees also include taxes and filing fees. All unpatented claims are in good standing through August 31, 2022, granting exploration activities for insignificant new ground disturbance. Annual property taxes due on the fee simple land claims are payable in full by November 1, or in two installments: by November 1 and by February 1. Property taxes relating to the patented mining claims have been paid to the County of San Bernardino for the 2021-2022 period. The next annual tax payment is due November 1, 2022.

There is no requirement to file a notice of federal mining claims with San Bernardino County. However, Pan American had recorded all unpatented claims with the County. Once recorded, there is an ongoing obligation to annually file a Notice of Intent to Hold the mining claims with the County. This has been completed for the 2021-2022 period.

Mineral reservations apply to certain fee land parcels on the Waterloo Property as follows (LaBorico,2020): see referenced colors on Figures 4-4 and 4-5.

- Section 20 and Government Lot 11 (brown): mineral reservations are in favor of the United States, mineral extraction is prohibited – not open to mining.
- Shown on Figures 4-4 and 4-5, the black hatched areas are fee land parcels subject to a royalty agreement, dated August 26, 1970, with the State of California that lists a 1/16th royalty of net profits from ore mined on these lands (Henry and Sherman, 2012).
- Shown on Figures 4-4 and 4-5, the purple hatched areas (southwest quarter of Section 21 and the south half of the northwest quarter of Section 21): a one-half interest in all gas, oil, hydrocarbons and minerals is reserved in the deed from Catherine Yrissarri.

The surface rights of the Waterloo Property private lands are being held by Stronghold, whereas the surface rights for the unpatented lode mining claims are held by the BLM. To the knowledge of the Author and the QP, there are no known encumbrances with surface rights on the Waterloo Property.



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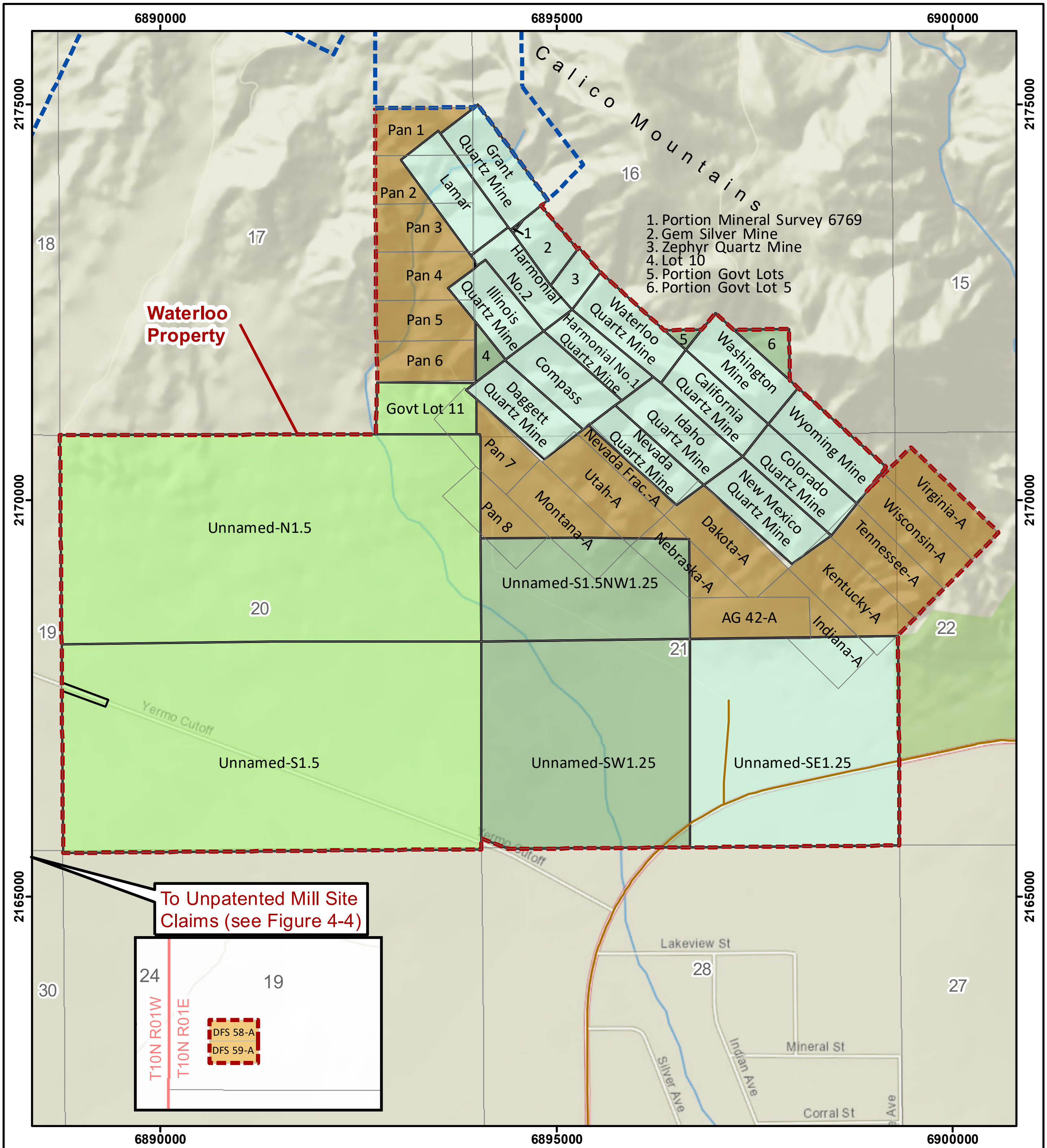

Legend

- Langtry Property
- Waterloo Property
- Waterloo Claim
- Main Road
- Township and Range
- Section

Claim Type

- Fee Land
- Fee Land NOM
- Fee Land SMR
- Unpatented Lode Mining Claim
- Unpatented Mill Site Claim

N

0 300 600
Meters

0 1,750
Feet

Scale 1:21,000
(At original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri

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Stantec
Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
Waterloo Claims Map

Figure 4-5

DRAWN BY: M.B.
CHK'D BY: J.K.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578

Table 4.2
Waterloo Claims

Claim Type	Claim Name	Parcel #	Claimant Name	Expiration/Tax Due Date
Fee Land	California Quartz Mine	517161230000	Stronghold Silver USA Corp.	11/1/2022
	Colorado Quartz Mine	517121120000		11/1/2022
	Compass	517161080000		11/1/2022
	Daggett Quartz Mine	517161090000		11/1/2022
	Gem Silver Mine	517161140000		11/1/2022
	Grant Quartz Mine	517171020000		11/1/2022
	Harmonial No.1 Quartz Mine	517161070000		11/1/2022
	Harmonial No.2	517161180000		11/1/2022
	Idaho Quartz Mine	517121100000		11/1/2022
	Illinois Quartz Mine	517161120000		11/1/2022
	Lamar	517151050000		11/1/2022
	Nevada Quartz Mine	517121080000		11/1/2022
	New Mexico Quartz Mine	517121110000		11/1/2022
	Portion Mineral Survey 6769	517161190000		11/1/2022
	Unnamed-SE1.25	517121040000		11/1/2022
	Washington Mine	517161220000		11/1/2022
	Waterloo Quartz Mine	517161060000		11/1/2022
	Wyoming Mine	517121130000		11/1/2022

Table 4.2 (Cont'd)

Claim Type	Claim Name	Parcel #	Claimant Name	Expiration/Tax Due Date
Fee Land	Zephyr Quartz Mine	517161150000	Stronghold Silver USA Corp.	11/1/2022
	Govt Lot 11	517151030000		11/1/2022
	Unnamed-N1.5	517121060000		11/1/2022
	Unnamed-S1.5	517121070000		11/1/2022
	Lot 10	517161110000		11/1/2022
	Portion Govt Lot 5	517161210000		11/1/2022
	Portion Govt Lots	517161200000		11/1/2022
	Unnamed-S1.5NW1.25	517121020000		11/1/2022
	Unnamed-SW1.25	517121050000		11/1/2022
Unpatented Lode Mining Claim	AG 42-A	517121140000	Stronghold Silver USA Corp.	8/31/2022
	Dakota-A	517121140000		8/31/2022
	Indiana-A	517121140000		8/31/2022
	Kentucky-A	517121140000		8/31/2022
	Montana-A	517121140000		8/31/2022
	Nebraska-A	517121140000		8/31/2022
	Nevada Frac.-A	517121140000		8/31/2022
	Pan 1	517151060000		8/31/2022
	Pan 2	517151060000		8/31/2022
	Pan 3	517151060000		8/31/2022
	Pan 4	517151060000		8/31/2022

Table 4.2 (Cont'd)

Claim Type	Claim Name	Parcel #	Claimant Name	Expiration/Tax Due Date
Unpatented Lode Mining Claim	Pan 5	517151060000	Stronghold Silver USA Corp.	8/31/2022
	Pan 6	517151060000		8/31/2022
	Pan 7	517121140000		8/31/2022
	Pan 8	517121140000		8/31/2022
	Tennessee-A	517121140000		8/31/2022
	Utah-A	517121140000		8/31/2022
	Virginia-A	517121140000		8/31/2022
	Wisconsin-A	517121140000		8/31/2022
	DFS 58-A	517131020000		8/31/2022
	DFS 59-A	517131020000		8/31/2022

In April 2017, Pan American obtained a Certificate of Land Use Compliance ("CLUC") from San Bernardino County recognizing surface mining as a legal use of the fee simple private lands and the existence of a "vested right" to conduct surface mining activities thereon. The vested right does not extend to the BLM-managed federal public lands upon which the unpatented claims are located.

4.2.2 Langtry Property

Stronghold, through its wholly owned subsidiary, Stronghold USA, holds the rights to acquire a 100% interest in the Langtry Property through two option agreements entered into in December 2020. One option agreement covers 36 unpatented lode mining claims held by Athena and (the "Athena Agreement") and the second option agreement covers 20 patented mining claims owned by Bruce D. Strachan and Elizabeth K. Strachan ("Strachan" or "Strachan Trust") and two unpatented lode mining claims (the "Strachan Agreement") (see Figure 4-6). Each option agreement is subject to good standings, royalties, and encumbrances.

The Athena Agreement with an aggregate purchase price of US$1,000,000 (the "Purchase Price") to be made on or before December 15, 2025, is subject to the following terms to remain in good standing: US$25,000 is due on or before each Athena Agreement anniversary date, and all annual governmental real-estate taxes and fees are to be reimbursed to Athena. The option payments made by the optionee (Stronghold USA) to the optionor (Athena) during the 24-month period prior to the full exercise of the option shall be credited against the Purchase Price. Royalties on the Athena Agreement include a 1% on all proceeds received from the sale of concentrates, precipitates or metals produced from ores mined, extracted, or taken from the claims.

The Strachan Agreement has an aggregate price of the greater of: (a) US$5,200,000 or (b) the Spot Price of 220,000 troy ounces of silver on or before December 24, 2025. To remain in good standing the following are required: US$100,000 is due on or before each Strachan Agreement anniversary date, and all annual governmental real-estate taxes and fees are to be reimbursed to Strachan. All option payments made during the term of the option shall be applied to the final purchase price. Royalties of the Strachan Agreement include: 1% net smelter return royalty on silver, 5% gross royalty on all other mineral production (for example: barite, volcanic ash, gravel, water, natural gas, etc.), and 10% gross royalty on all other non-mineral production income (for example: property use as a solar farm, windmill farm, landfill, residential, industrial, commercial use, cell phone tower site, etc.). The Strachan Agreement encumbrances include:

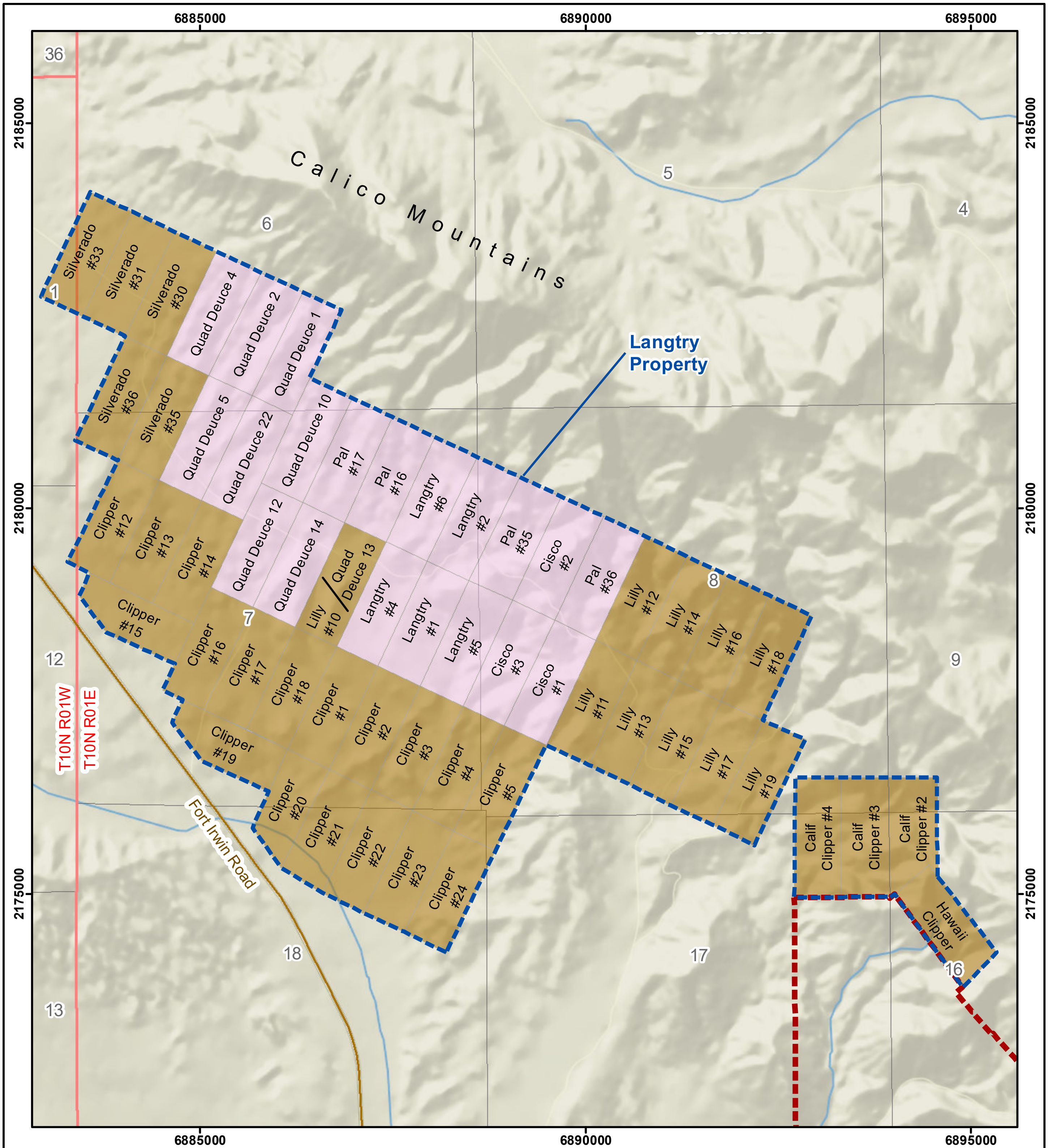
1) An existing royalty in favour of a subsidiary of Exxon-Mobil Corp. which is further described in a deed recorded as Document #88-076838 in the official records of San Bernardino County, California.
2) Said existing Exxon-Mobil Corp. royalty is the subject to an existing contract between Exxon-Mobil Corp. and Athena. which obligates Exxon-Mobil Corp. to reduce the royalty due on silver to a 2% NSR royalty on silver produced from the patented claims (Langtry Silver Mine) upon payment by Athena to Exxon-Mobil Corp. of US$150,000 payable in annual payments of US$10,000. The payments due on said contract are current.
3) An existing contract obligates the Strachan Trust to grant a 1% NSR royalty to Athena. contingent on the payment in full by Athena of the royalty reduction contract with Exxon-Mobil Corp. The current balance on the said contract is US$90,000 and the said contract is payable in full at any time.
4) A lien may exist on the unpatented claim described as CAMC#0290263.

For unpatented lode mining claims to remain in good standing, they must be maintained by paying an annual fee of $165 per claim to the BLM due by 1st September. BLM fees also include taxes and filing fees. All unpatented claims at Langtry are in good standing through August 31st, 2022, granting exploration activities for insignificant new ground disturbance. Property taxes are due annually on the patented claims, which can either be paid in full by November 1, or in two installments: by November 1 and by February 1. Both installments associated with the patented mining claims have been paid to the County of

San Bernardino for the 2021-2022 period. The next annual tax payment is due November 1, 2022.

There is no requirement to file a notice of federal mining claims with San Bernardino County. However, both Athena and Strachan have recorded all claims with San Bernardino County. Once recorded, owners have an ongoing obligation to annually file a Notice of Intent to Hold mining claims with the County. This has been completed for the 2021-2022 period.

The surface rights of the Langtry Property private lands are being held by Strachan, whereas the surface rights for the unpatented lode mining claims are held by the BLM. To the knowledge of the Author and the QP there are no known encumbrances with surface rights on the Langtry Property.



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Legend

- Langtry Property
- Waterloo Property
- Main Road
- Township and Range
- Section

Claim Type

- Patented Lode Mining Claim
- Unpatented Lode Mining Claim

N

0 300 600
Meters

0 1,800
Feet

Scale 1:21,600
(At original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri

Stantec
Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
Langtry Claims Map

Figure 4-6

DRAWN BY: M.B.
CHK'D BY: J.K.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578

Table 4.3 provides a list of the patented and unpatented claims that comprise the Langtry Property, respectively.

Table 4.3
Langtry Mining Claims

Claim Type	Claim Name	Parcel #	Claimant Name	Expiration/Tax Due Date
Patented Lode Mining Claim	Cisco #1	517251050000	Strachan Trust	11/1/2022
	Cisco #2	517251050000		11/1/2022
	Cisco #3	517251050000		11/1/2022
	Langtry #1	517251050000		11/1/2022
	Langtry #2	517251050000		11/1/2022
	Langtry #4	517251050000		11/1/2022
	Langtry #5	517251050000		11/1/2022
	Langtry #6	517251050000		11/1/2022
	Pal #16	517251050000		11/1/2022
	Pal #17	517251050000		11/1/2022
	Pal #35	517251050000		11/1/2022
	Pal #36	517251050000		11/1/2022
	Quad Deuce 1	517251050000		11/1/2022
	Quad Deuce 10	517251050000		11/1/2022
	Quad Deuce 12	517251050000		11/1/2022
	Quad Deuce 14	517251050000		11/1/2022
	Quad Deuce 2	517251050000		11/1/2022
	Quad Deuce 22	517251050000		11/1/2022
	Quad Deuce 4	517251050000		11/1/2022
	Quad Deuce 5	517251050000		11/1/2022

Table 4.3 (Cont'd)

Claim Type	Claim Name	Parcel #	Claimant Name	Expiration/Tax Due Date
Unpatented Lode Mining Claim	Calif Clipper #2	517171080000	Athena Minerals Inc.	8/31/2022
	Calif Clipper #3	517151060000		8/31/2022
	Calif Clipper #4	517151060000		8/31/2022
	Clipper #1	517251030000		8/31/2022
	Clipper #12	517251030000		8/31/2022
	Clipper #13	517251030000		8/31/2022
	Clipper #14	517251030000		8/31/2022
	Clipper #15	517251030000		8/31/2022
	Clipper #16	517251030000		8/31/2022
	Clipper #17	517251030000		8/31/2022
	Clipper #18	517251030000		8/31/2022
	Clipper #19	517251030000		8/31/2022
	Clipper #2	517251030000		8/31/2022
	Clipper #20	517131010000		8/31/2022
	Clipper #21	517131010000		8/31/2022
	Clipper #22	517131010000		8/31/2022
	Clipper #23	517131010000		8/31/2022
	Clipper #24	517131010000		8/31/2022
	Clipper #3	517251030000		8/31/2022
	Clipper #4	517251030000		8/31/2022
	Clipper #5	517251030000		8/31/2022
	Hawaii Clipper	517171080000		8/31/2022
	Lilly #10/Quad Deuce 13	517251030000	Strachan Trust	8/31/2022

Table 4.3 (Cont'd)

Claim Type	Claim Name	Parcel #	Claimant Name	Expiration/Tax Due Date
Unpatented Lode Mining Claim	Lilly #11	517251040000	Athena Minerals Inc.	8/31/2022
	Lilly #12	517251040000		8/31/2022
	Lilly #13	517251040000		8/31/2022
	Lilly #14	517251040000		8/31/2022
	Lilly #15	517251040000		8/31/2022
	Lilly #16	517251040000		8/31/2022
	Lilly #17	517251040000		8/31/2022
	Lilly #18	517251040000		8/31/2022
	Lilly #19	517251040000		8/31/2022
	Silverado #30	517261030000		8/31/2022
	Silverado #31	517261030000		8/31/2022
	Silverado #33	517261030000		8/31/2022
	Silverado #35	517261030000		8/31/2022
	Silverado #36	517261030000		8/31/2022

In 2015, Athena obtained a CLUC from San Bernardino County recognizing surface mining as a legal use of the Strachan patented claims and the existence of a "vested right" to conduct surface mining activities thereon. The vested right does not extend to the BLM-managed federal public lands upon which Athena's unpatented claims are located.

4.3 Environmental Liabilities, Permitting and Hazards

4.3.1 Environmental Liabilities

The Author and Apollo are unaware of any environmental liabilities associated with the Waterloo and Langtry Properties. The purchase and option agreements noted in Section 4.2 state that there are no known environmental liabilities associated with the Properties. The Author is not a Qualified Person with respect to environmental issues.

A recent and comprehensive environmental review has yet to be completed by Apollo. At both Properties the environmental and permitting rules and regulations will need to be assessed with the local, state, and federal regulators.

4.3.2 Permitting

As mentioned in Section 4.2, both the Waterloo and Langtry Properties have obtained a CLUC for private lands from the County of San Bernardino. These certificates are a form of vested or grandfathered mining right and exempts the holder from the need to obtain a surface mining permit that otherwise would be required under the Surface Mining and Reclamation Act of 1975 ("SMARA") (SMARA, Public Resources Code, Sections 2710-2796). SMARA provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized, and mined lands are reclaimed to a usable condition. SMARA is administered by the County of San Bernardino with respect to the Calico Project. The CLUC does not exempt the holder from other environmental permitting requirements, nor does it exempt the holder from the need to provide reclamation of financial assurances. The CLUC recognizes surface mining as a legal use of the fee simple and patented land parcels with the existence of a "vested right" to conduct surface mining activities thereon. The vested right does not extend to the BLM-managed federal public lands upon which the unpatented claims are located. Mining on federal land is subject to the Mining Law of 1872, State regulations (Section 3809), and the National Environmental Policy Act.

Permits to conduct exploration drilling on BLM managed lands may be required depending on the amount of proposed new disturbance activities may cause. Generally, a permit is not required if proposed exploration activities will cause new disturbance that is under 1 ac in size. If it may be more, a Notice of Intent or a Plan of Operations may be required, again depending upon the amount of proposed new surface disturbance. In the event that an operator does not have financial assurances in place with the County for reclamation, activities that may create less than 1.0 ac of new disturbance require a Temporary Use Permit ("TUP") to be obtained from the County of San Bernardino. A Notice of Intent is appropriate for planned surface activities that anticipate more than 1.0 and less than 5.0 ac of new surface disturbance and usually can be obtained within 30 to 60 days. A Plan of Operations is required if more than 5.0 ac of new surface disturbance are planned during the exploration program. Approvals for a Plan of Operations can take several months, depending on the nature of the intended work, the level of reclamation bonding required, the need for archeological surveys, and other factors as may be determined by the BLM. No other permits are required for exploration drilling.

For the Waterloo Property, Apollo has received a TUP from the County of San Bernardino for exploration activities related to drilling that may create less than 1.0 ac of new disturbance, effective February 1, 2022 and valid for one year. Apollo has also obtained confirmation from the BLM that accessing its Waterloo Property via BLM-managed roads is considered a "casual use activity" for the purposes of drilling on private lands. Permitting with the County and engagement with the BLM for exploration drilling activities at Langtry is underway.

4.3.3 Hazards

Hazards have been identified at both Calico Properties related to the historical mine workings, for example: open unsecured shafts, adits, drill holes and trenches, and subsidence caused by underground working collapse. Numerous shafts and adits have been secured with closures (fencing, secure steel covers, or berms), back fill and/or foam plugs) by Athena, Pan American and Apollo, but a more complete assessment of existing physical hazards is recommended on both properties. Apollo plans to continue operational work to secure further openings. Locked gates also limit access to some areas. Apollo has installed signs in several areas around both Waterloo and Langtry notifying people the dangers, and to not trespass on private lands. Safety mitigation activities at the Waterloo Property such as closure of mine openings would be covered under the TUP already received by Stronghold USA from the County of San Bernardino so long as new disturbance remains under 1 ac. The application for a TUP for exploration activities on the patented lands at Langtry is underway and would allow similar safety mitigation activities to be undertaken so long as new land disturbance remains under 1 ac.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The Calico Project is located within the historic Calico Silver Mining District (the "District") of San Bernardino County, California. The Project can be accessed year-round by paved and dirt roads. Located approximately 9 miles (15 km) northeast of Barstow, California, vehicular access is from Interstate I-15 onto either Ghost Town Rd-Calico Road to Waterloo or Fort Irwin Road to Langtry (Figure 5-1). From the closest town, Yermo, the Properties are approximately north-northwest 4 miles (6.4 km) to Waterloo and 7 miles (11.3 km) to Langtry. Approximately 1 mile (1.6 km) east of the Waterloo Property is the historical Calico Ghost Town Park, owned and operated by the San Bernardino County. Once within the Calico Project limits, a network of dirt roads provide access to the old drill pads and historical workings within both Properties (Figures 5-1 and 5-2).

5.2 Physiography

The Calico Project is located within the southeastern part of the Mojave Desert in Southern California. The Mojave Desert is part of the Basin and Range physiographic province dominated by low relief with broad alluvial valleys and playas separated by steep mountain ranges. The Mojave Desert is part of California's desert ecoregion and considered a high desert (above 2,000 ft; 610 m) compared to the more southwestern Sonoran Desert (Schaffner, 2020). Figure 4-1 in the previous section displays the footprint of the Mojave Desert.

The Calico Project is situated along the steeply to gently dipping southwestern pediment of the Calico Mountains. The Calico Mountains form a 9 mile (15 km) long, northwest-trending range composed primarily of early Miocene sedimentary and volcanic rocks in the upper plate of the central Mojave Desert Block metamorphic core complex (Singleton and Gans, 2008).

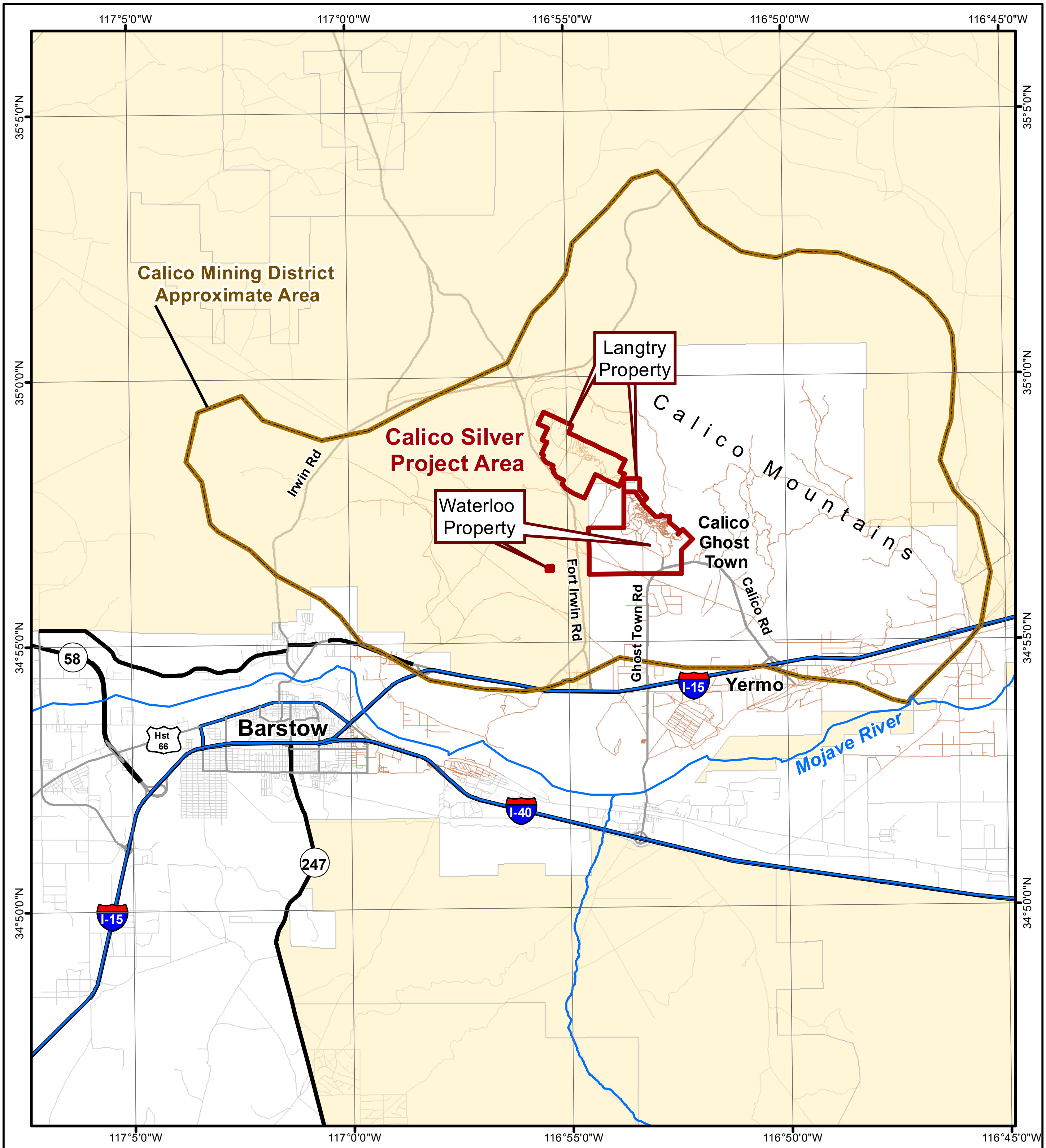
The elevation of the Calico Project ranges from 2,000 to 3,000 ft (610 to 914 m) above mean sea level. Dry alluvial channels that drain the mountain front create low-lying, flat-topped ridges separated by the narrow drainages. Surface topography within and surrounding the Property is shown on Figure 5-2.

5.3 Wildlife and Vegetation

The Calico Project has sparse vegetation that appears to be typical of the Mojave Desert region. Common flora on the Project includes the trees pinyon pine, mesquite, and California juniper; shrubs include the creosote bush, cacti, white bursage, allscale, saltbush, iodine bush, desert holly, desert trumpet, prickly pear, and black bush. Arrow weed black willow, Fremont cottonwood, narrowleaf willow and red willow are a few of the species restricted to riparian settings (Samari and Breckenridge, 2021b and ASARCO, 1981). Bedrock areas on the Project typically lack vegetation. Yucca species have not been observed and have never been recorded to occur in any historic documentation on the Project.

Wildlife reported to occur on the Project include bats, birds, lizards, coyote, fox, snakes, rabbits and insects (ASARCO, 1981). The San Bernadino County Regional Conservation Investment Strategy land designations highlights that the Project lies within the habitat for the Mojave Desert Tortoise (*Gopherus agassizii*). The Langtry Project lies within a BLM Area of Critical Environmental Concern ("ACEC") for the Mojave Desert Tortoise (see Figure 5-1). The ACEC is a dataset defining areas within the public lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards (Dudek, 2018).

No formal vegetation or wildlife survey has been completed on the Project by Apollo.



Legend

- Calico Silver Project
- Approximate Area of the Calico Mining District
- BLM ACEC Designations - CALIFORNIA DESERT DISTRICT ACEC - Areas of Critical Environmental Concern

Roads

- Other Road
- Interstate Highway
- State Highway and Route
- Calico Dirt Roads

N

0 2 4
Kilometers

0 3
Miles

Scale 1:190,080
(At original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri

Stantec Apollo

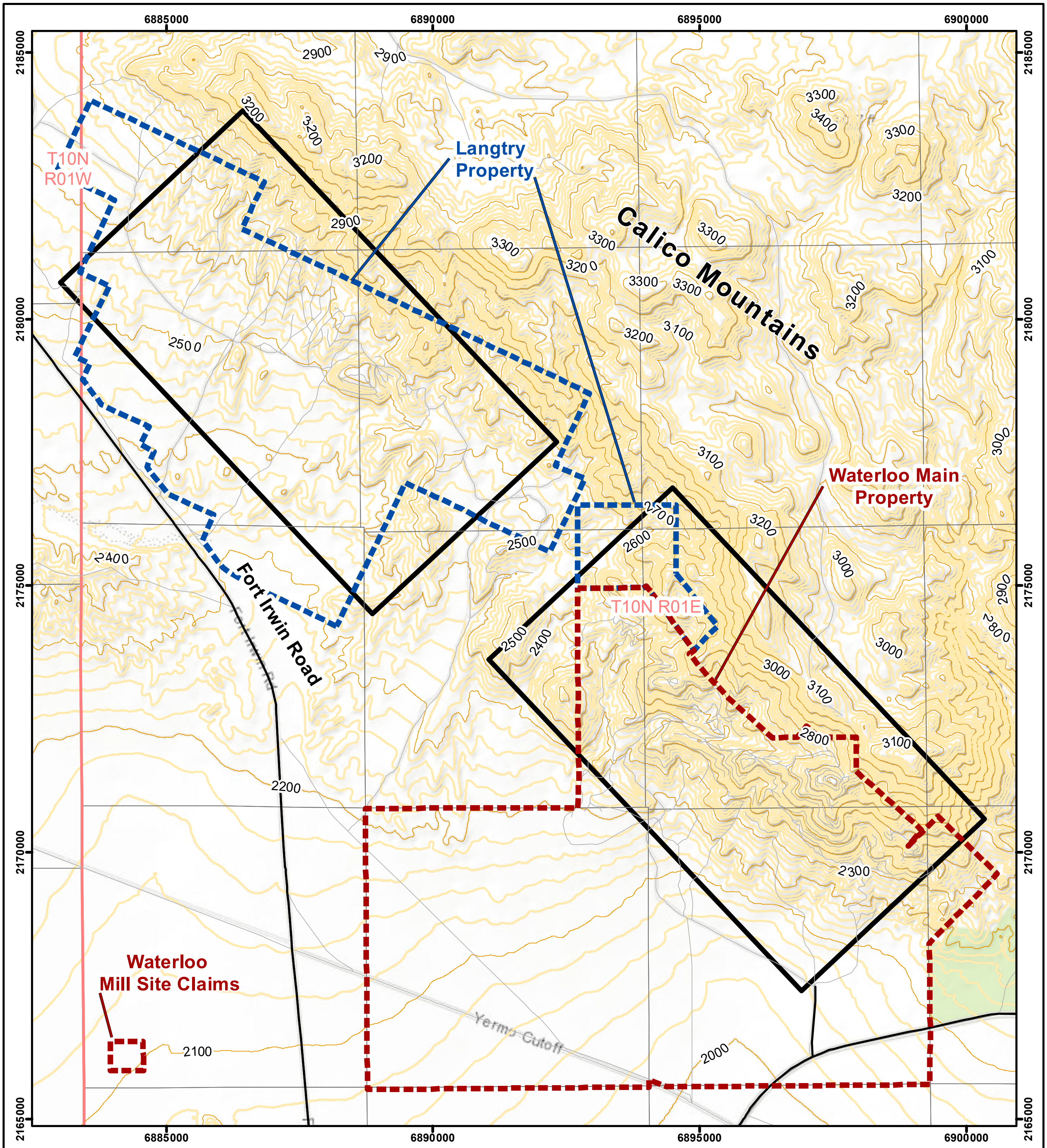
TECHNICAL REPORT CALICO SILVER PROJECT

Calico Mining District Infrastucture and BLM ACEC Designations Map

Figure 5-1

DRAWN BY: J.K. CHK'D BY: D.L. DATE: 22/ 03/ 24	Project Location: T10N R01E - T10N R01W, California Client: Apollo Silver Corporation Project: 233001578

U:\233001578\disc\gis_cad\MXD\Fig_5_1_Calico_MojaveInfra_March_2022.mxd



U:\233001578\disc\gis_cad\MXD\Fig_5_2_Calico_Topo_March2022.mxd

Legend

Calico Properties
- Langtry
- Waterloo

- Main Road
- Site Roads
- Township and Range
- Sections

Contour (20 foot)
from 10 meter National Elevation Dataset
- Contour
- Index Contour
- Extent of 1 meter Digital Elevation Models (DEMs)

N

0 400 800
Meters
0 2,600
Feet
Scale 1:31,200
(At original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri

Stantec
Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project Topographic Map

Figure 5-2

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 25

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Gold and Silver Corporation
Project: 233001578

5.4 Climate

The Calico Project climate is arid, typical of southern California deserts. Summers are relatively long and hot, whereas winters are mild. There is low annual precipitation. The nearby city of Barstow's thirty-year averages for high and low temperatures are 80°F (27 °C) and 45 °F (7 °C) respectively, with average annual precipitation of 5 in (127 mm) per year (City of Barstow). The Mojave Desert has an annual average precipitation of 2 to 6 in (51 to 152 mm), with higher altitudes receiving the higher precipitation and seeing lower temperatures (Encyclopedia Britannica, March 25, 2021). The Barstow-Daggett county airport weather station indicates February is the wettest month.

Due to the low precipitation in the vicinity and within the Calico Project there are no perennial rivers, streams, or springs. The Mojave River (see Figure 5-1) is the nearest watercourse and it is highly ephemeral, running on surface only during spring runoff or during storm events.

Climate on the Calico Project allows for year-round surface and/or underground mining.

5.5 Local Resources and Infrastructure

Barstow has a population of 22,899 according to 2019 US Census Bureau data and is a full-service community with modern utilities (electricity, gas, phone, sewer, potable water) within 3 to 6 miles (4.8 to 9.7 km). The Union Pacific Railroad main transcontinental line lies along interstate highway I-15. (Samari and Breckenridge, 2021a). The Waterloo Property generally has good cellular service whereas the Langtry Property has spotty coverage. Field personnel and resources for exploration and potential operations are expected to be available from Barstow and the surrounding communities and states.

No significant source of surface or groundwater for use in mining has yet been identified for the Project. Groundwater on the Project is poorly explored, but it is likely that the hard-rock formations in the District will produce little groundwater. The lower elevation areas of the Project lie within an adjudicated groundwater basin (Mojave Basin, Baja Subarea) in which groundwater rights have been apportioned amongst existing users and groundwater extractions are administered by the local water agency. Purchase of water rights for milling and mining dust control will need to be pursued which is not uncommon for operations within desert regions. (Samari and Breckenridge, 2021a and 2021b).

6.0 HISTORY

The Calico Project has been given its name from the mountains and the Mining District in which it occurs (Figure 6-1). The District is part of the northwest trending belt of precious metals districts associated with Tertiary volcanic centers in the Mojave Desert Block of Southern California. The Calico Mining District has a lengthy history of exploration and mining, with silver rich mineralization discovered in the Calico Mountains in 1881, borax in 1887 and barite in 1950.

The exploration history of the District and the Properties can be divided into three periods, historical (late 1800’s), 1950-1980’s and the 2000’s. Historical information is summarized from Samari and Breckenridge (2021a and 2021b), unless otherwise indicated.

6.1 Ownership History

6.1.1 Waterloo Property

ASARCO began exploring the Property in 1964, acquiring the Property at this time reportedly. Apollo does not have extensive documentation related to the acquisition of the Waterloo Property by ASARCO beyond what is in public records.

In 1994 Pan American entered into an agreement with ASARCO to acquire an interest in the Waterloo Property, later acquiring 100% of it in 1996. Title to the 27 fee land parcels was vested in Pan American by grant Quitclaim Deed dated November 1, 1994.

In January 2021, Stronghold USA and Pan American signed an Asset Purchase Agreement where Pan American retained a 2% NSR on any future production of minerals from the Waterloo Property. In July 2021, Apollo acquired Stronghold and its wholly owned subsidiary Stronghold USA, which is the name on record with the County of San Bernardino as owner of the fee simple lands. Title to the 27 fee land parcels was vested in Stronghold USA, a California corporation, by grant Quitclaim Deed dated July 12, 2021. Stronghold USA is the claimant for unpatented lode mining and mill site claims with the BLM for the Waterloo Property.

6.1.2 Langtry Property

In June 1966 Superior entered into a Lease of Mining Rights agreement with the Pacific Land Company for the parcel of land claims that form the patented lands at Langtry. In 1970 Superior applied to patent the land claims, which was approved and completed in 1974. In 1976, Superior transferred ownership of the lands to its subsidiary company, the Title Insurance and Trust Company.

In 1984 Exxon-Mobil Corp., purchased Superior and in 1987, then sold the claims to Buttes Gas and Oil Company (“Buttes”), retaining a 3% NSR, which continues to this day. Buttes put the Property into Humphreys Mineral Industries Inc., a wholly owned subsidiary, which later went bankrupt leaving tax obligations unmet (Moran et al., 2012). The Property was purchased in May 2004 via a tax sale by Strachan.

In 2007 International Silver Inc., entered into an option to purchase agreement with Strachan for the patented lands. In the following months, International Silver acquired additional unpatented lode mining claims adjacent to the patented claims. By 2010, International Silver abandoned exploration on the Property. In March 2010 Athena signed a 20-year lease option with Strachan and acquired the unpatented land claims from International Silver. On April 28, 2020, Athena entered into an agreement that terminate the lease agreement with Strachan. As a result, all scheduled lease option payments due in 2020 and beyond were considered terminated and void upon signing of the agreement.

In December 2020, Stronghold USA entered into two option agreements: the Athena Agreement and the Strachan Agreement (as discussed in Section 4) which gave it the rights to acquire the Langtry Property and in July 2021 Apollo acquired Stronghold USA, after acquiring Stronghold in the Stronghold Transaction (as discussed in Section 4).

6.2 Early Exploration and Development History

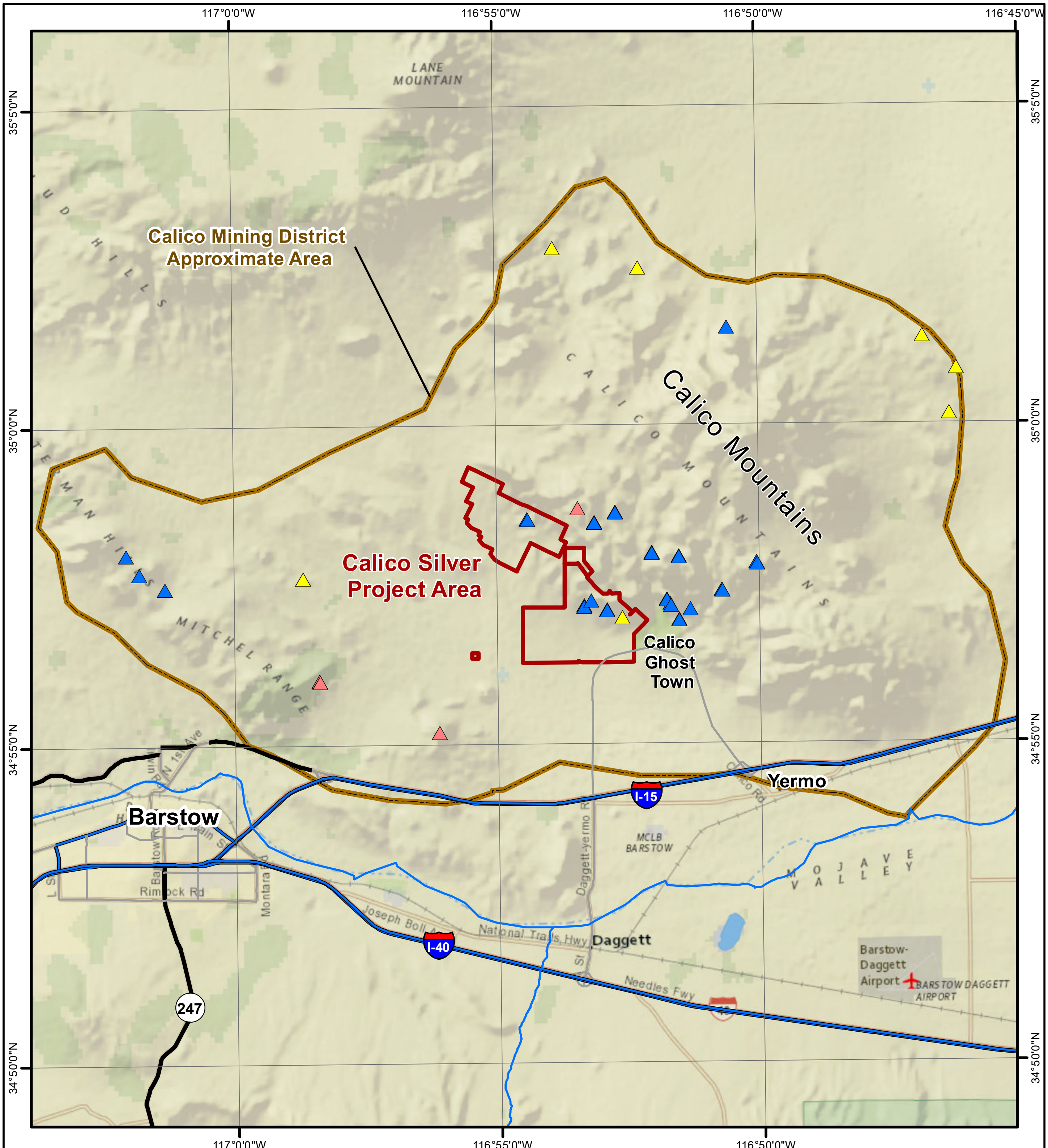
The District was explored starting in the late 1800's, later being abandoned around 1905, becoming a "ghost town" due to the termination of mining (Harthrong, 1983 and Weber, 1966). The cessation of silver mining operations in the District is attributed to 1896 sharp decline in the price of silver (likely related to the economic depression "Panic of 1896") and/or the result of accessible mineralization being mined out (Dibblee, 1970). The exploration was centered around high-grade oxidized deposits of vein related silver mineralization (Dibblee, 1970; Matson, 2008). Silver deposits were characterized as low tonnage, high-grade oxidized and possibly supergene enriched mineralization (Matson, 2008).

Between 15 and 20 million troy ounces of silver were reportedly recovered from the District over the period 1881 to 1896 in the eastern area of the Calico mountains that is dominated by Tertiary volcanic rocks (Harthrong, 1983). Average silver grades were reportedly 25 opt (857.1 g/t) but could range up to 100 opt (3,428 g/t). Mining primarily targeted two extensive northwest striking veins in this region: the Oriental and Silver King. These veins extended for 2 miles (3 km) on the surface and vary in width from 21 in to 2 ft (53 to 640 cm). Mine workings were extensive and included over 12,000 ft (367 m) of drifts. The most prolific producer in the area was the Silver King Mine, located east of the Calico Project. Between 1883 and 1886 the mine yielded 37,000 tons of silver mineralization (Wright et al., 1953).

There are more than 50 historical past producing mines in the District (Figure 6-1). Of these, five occur on the Calico Project: at Waterloo are the Voca, Union and Waterloo silver mines and the Burcham gold-lead mine (Figure 6-2); at Langtry is the Langtry silver mine (Figure 6-3). The historic Waterloo mine workings consisted of an estimated 12 square miles (19.3 km^2) of operations most developed by adits (600 ft (183 m) into hill and 1,200 ft (366 m) laterally). The length of the Burcham workings is estimated to be 4,135 ft (1,260 m), whereas the lengths of any possible workings at Voca and Union are unknown. At the historical Langtry Mine workings totalled approximately 250 ft (76 m) in length, including a 50 ft (15m) winze, from which approximately 200 tons of silver ore (averaging 6 to 22 opt (205 to 754 g/t)) has been mined (Wright et al., 1953).

Limited production from the District continued sporadically until the 1940's, with gold and lead from the Burcham mine being exploited between the 1930 and 1940. Additionally, during the 1930's tailings from the old mills were re-treated utilizing cyanidation. In the 1950's, the barite production in the District began, being of interest due to accelerated petroleum exploration in Southern California. The District area was known to have a series of persistent and thick (+50 ft wide) veins zoned with high grade barite and low-grade silver. Open pits were placed into production to supply barite to the oil-drilling industry from 1957 to 1961.

During the 1950's an economic boom and a renewed interest in silver resulted in the reopening of several of the mines in the District, but production remained low. In the late 1960's, exploration programs at the Waterloo and Langtry Properties by previous operators resulted in the discovery of the disseminated silver mineralization. The late 1960's was the beginning of downhole drilling and subsurface investigations that are described in the following sections.



U:\233001578\disc\gis_cad\MXD\Fig_6_1_HistoricalProducers_March2022.mxd

Legend

- Approximate Area of the Calico Mining District
- Calico Silver Project
- Other Road
- Interstate Highway
- State Highway and Route

Historic Metallic Mine or Mineral Occurrence

Commodity

- Barium
- Silver
- Silver-Gold

N

0 2 4
Kilometers

0 2.5
Miles

Scale 1:158,400
(At original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri

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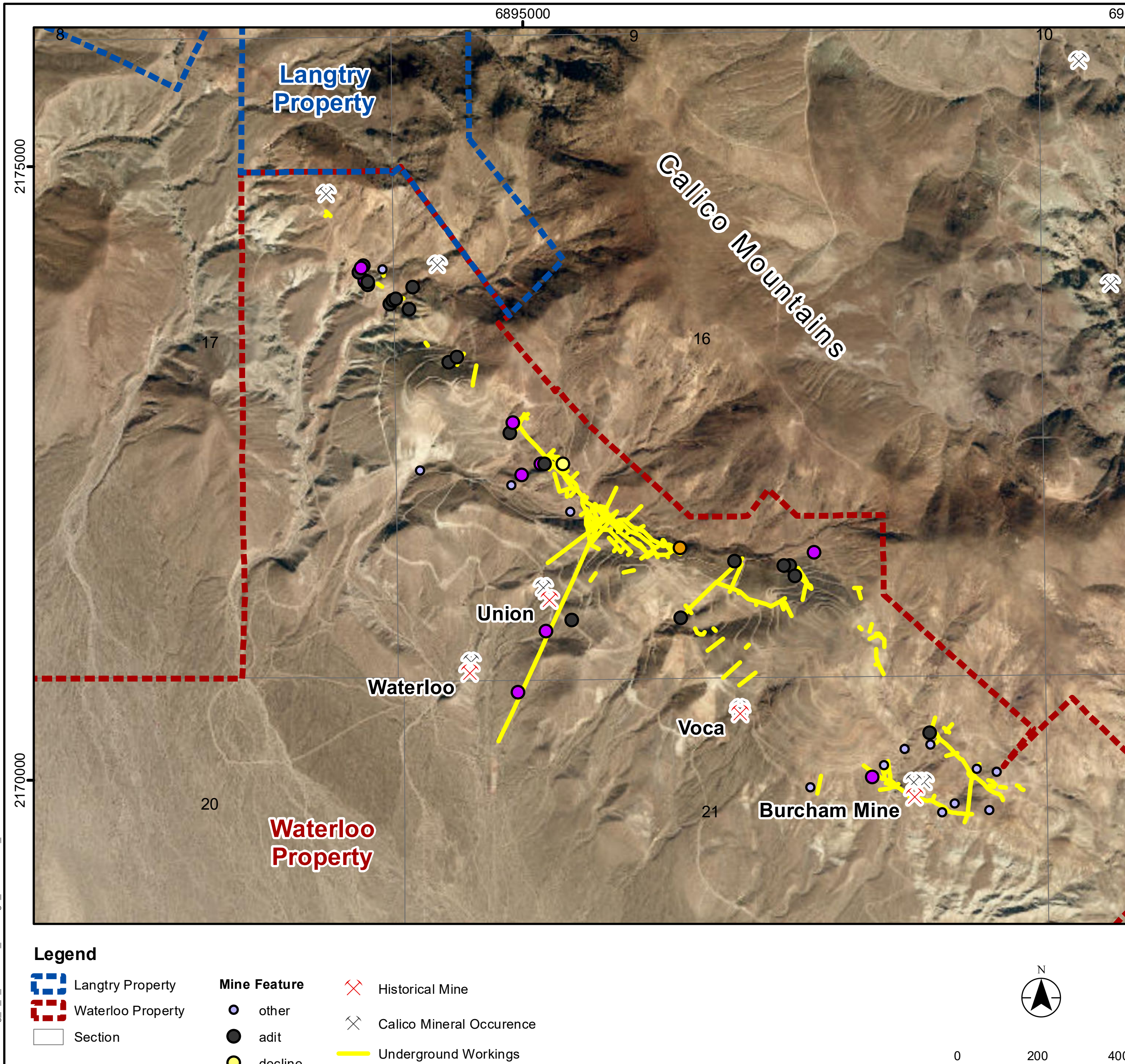
Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

Calico Mining District Historical Producers

Figure 6-1

DRAWN BY: J.K. CHK'D BY: D.L. DATE: 22/ 03/ 24	Project Location: T10N R01E - T10N R01W, California Client: Apollo Gold and Silver Corporation Project: 233001578



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TECHNICAL REPORT CALICO SILVER PROJECT

Waterloo Historical Mine Workings

Figure 6-2

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri

U:\233001578\discigis_cad\MXD\Fig_6_2_Waterloo_Workings_March2022_L.mxd

Legend

Langtry Property	
Waterloo Property	
Section	
Main Road	

Mine Feature
- adit
- shaft
- stope
- other

- Historical Mine
- Calico Mineral Occurence
- Underground Workings

0 300 600
Meters
0 1,700
Feet
Scale 1:20,400
(At original document size of 8.5x11)

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Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

Langtry Historical Mine Workings

Figure 6-3

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri

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6.3 Waterloo – Modern Era Exploration

Modern exploration began on the Waterloo Property in 1964 by ASARCO, continuing until 1989. ASARCO's surface and subsurface exploration initially comprised geological mapping and surface sampling resulting in the discovery of the disseminated silver mineralization. Further work comprised surface and underground geochemical sampling, trench channel sampling, surface bulk sampling, geophysical surveys and drilling. Surface geologic mapping was completed over several campaigns by ASARCO geologists (Kirkpatrick 1964, 1965 and 1975; and Smith, 1977) and by Ph.D. student D.I. Fletcher (Fletcher, 1986). Surface sampling included surface grab samples and later trenches, cut by bulldozer and focused on the northwest of the deposit to gather channel samples. A total of 640 channel samples were collected with an average grade of 2.5 opt Ag. In addition, samples were collected at the southeast of the deposit and within accessible underground workings. All surface and underground samples were sent to an independent laboratory in Tucson, Arizona, for silver analysis. Composites of the samples were assayed at the ASARCO El Paso Laboratory. Data from the surface and underground sampling programs completed by ASARCO were not used for the current mineral resource estimates and are currently being compiled and assessed by Apollo.

ASARCO completed extensive geophysical surveys in 1980. A focused ground gravity survey was completed over both the Waterloo and Langtry deposits, in cooperation with Superior. The results showed strong gravity "high" anomalies in the mineralized areas where barite was abundant. ASARCO additionally completed airborne gravity, electromagnetic and magnetic surveys across the entirety of the Waterloo Property with the primary aim being to define the structural features below alluvial cover in the flatter areas of the Project that were proposed to host future processing and tailings facilities.

ASARCO completed a total of 201 rotary drill holes and three diamond drill holes across the Waterloo deposit between 1965 and 1989 and are detailed further in Section 6.5. The holes completed between 1965 and 1970 formed the foundation of two historic estimates completed by ASARCO in 1969 and 1980, details of which are discussed further in Section 6.6.

Metallurgical and process testing was completed by ASARCO using a 100-ton surface bulk sample collected in 1967. Various testing on this material was carried out between 1967 into the early 1980's, details of which are described in Section 6.7. In 1980 ASARCO received a permit to mine for a large tonnage open-pit silver mine, but a decline in the silver price put the Waterloo Project on hold.

In 1994, Pan American acquired an interest in the Waterloo Project from ASARCO, later acquiring the Project outright in 1996. Exploration work was not undertaken by Pan American on the Property until 2008. Exploration comprised an internal feasibility study based on historical information, surface geological mapping and surface grab sampling

(2008-2012), as well as both RC and diamond drilling (2012-2013). Surface mapping was completed by Dr. Warren Pratt in 2008 and again in 2012 at Waterloo, to further understand the geology, alteration and controls on mineralization. The geological mapping refined the lithostratigraphy of the Property, recognized sub-divisions within the Barstow and Pickhandle Formations and mapped two major faults on the Property: the Calico and Cascabel faults (Pratt, 2008). Pratt summarized the principal control on the distribution of silver mineralization is the Calico Fault (Pratt, 2012).

Pan American completed a total of 55 RC drill holes and eight diamond drill holes across the Waterloo deposit in 2012, details of which are described in Section 6.5 These formed the foundation of an internal historic estimates completed by Pan American in 2016, details of which are discussed further in Section 6.6

6.4 Langtry – Modern Era Exploration

Modern exploration began on the Langtry Property in 1967 by Superior, with exploration work continuing until approximately 1984. Superior's surface exploration program resulted in the discovery of disseminated silver mineralization at Langtry, similar to that discovered by ASARCO at the nearby Waterloo in 1964. Superior's work consisted of surface geologic mapping and grab sampling (Kirkpatrick, 1975), trench sampling and rotary drilling. A focused ground gravity survey was completed on the mineralized area at Langtry in cooperation with ASARCO in 1980.

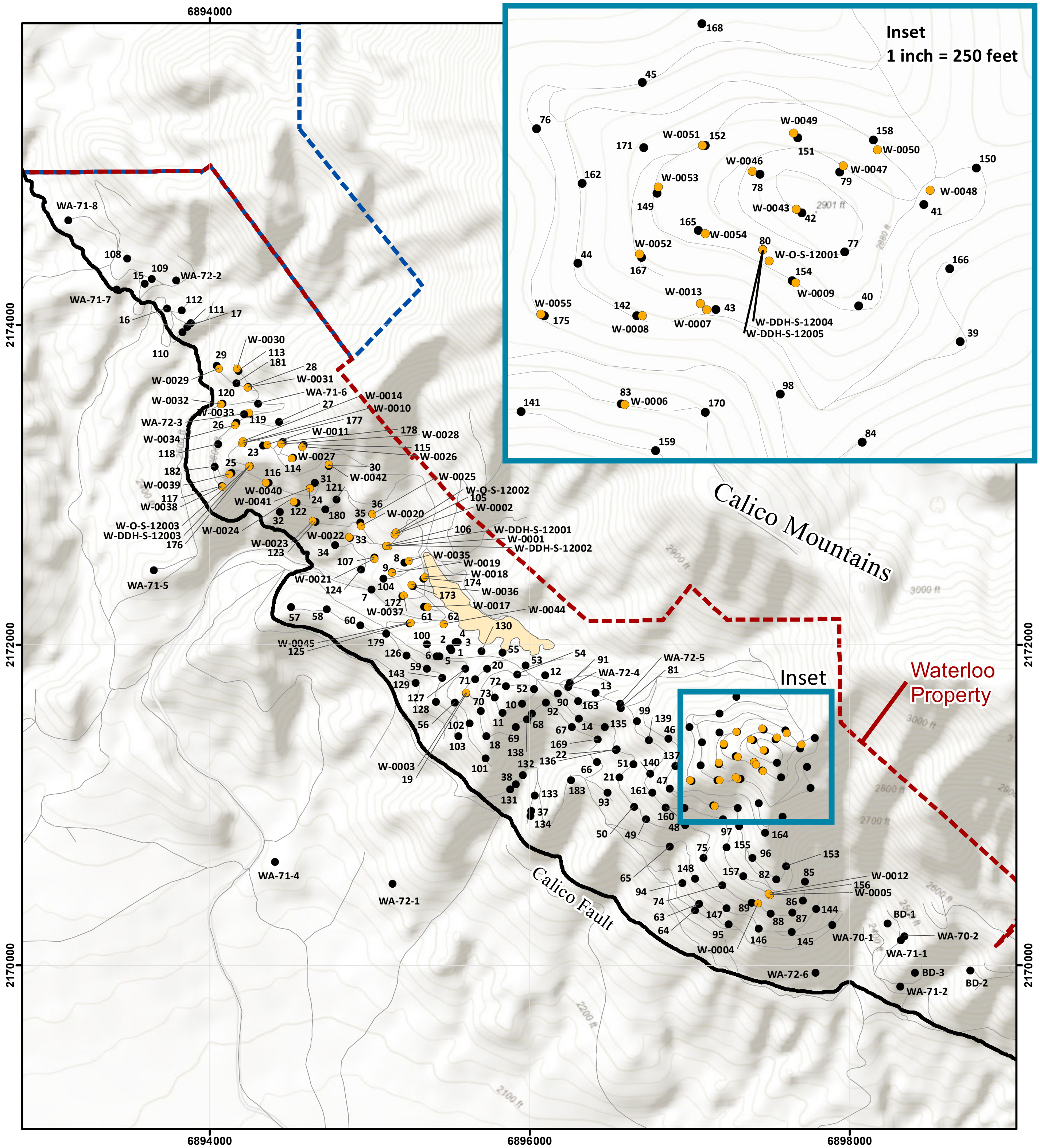
Modern exploration on the Langtry Property commenced in the late 1960's and has consisted of drilling, geochemical sampling, geologic mapping, trench work and the calculation of historical mineral resource estimates by three companies: Superior, International Silver and Athena. An overview of the historical exploration and ownership of the Langtry Property is summarized in the following paragraphs.

A total of 200 rotary drill holes were reportedly completed at Langtry by Superior prior to 1974, 173 of which Apollo has data for, which are detailed in Section 6.5. Exploration work by Athena began in 2011 and involved drilling of 13 RC drillholes (10 confirmation of historic Superior drilling and three exploration) and the excavation of three surface trenches (Moran et al., 2012). Approximately 20 tons of mineralized rock was collected from the trenches for the purpose of metallurgical testing (Moran et al., 2012).

6.5 Drilling

Exploration drilling on the Calico Project has been undertaken by various past operators at both the Waterloo and Langtry Properties. Apollo compiled the historic drilling data and assay certificates into an independently verified database, with compilation and verification work being largely complete as of December 3, 2021. The database provided by Apollo to Stantec on December 3, 2021, included 267 drill holes at Waterloo and 186 at Langtry. The number of holes, hole-type, years drilled, and total lengths drilled are listed in Tables 6.1 and 6.2. The drill hole collar locations are shown on Figures 6-4 and 6-5. All of the Calico Project drill holes were drilled vertically with the exception of one drill hole at Waterloo and three drill holes at Langtry.

A comprehensive review of the historical drill hole data by the Author and QP, as detailed in Section 12, indicated no significant difference in assays between historical and modern drilling.



Legend

- Waterloo Property
- Langtry Property
- Calico Collapse
- Site Roads
- Calico Fault

Drill Hole Collars

- ASARCO (1965-1989)
- Pan American (2012-2013)

N

0 150 300
Meters
0 875
Feet

Scale 1:10,500
(At original document size of 8.5x11)

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Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

Waterloo Drill Hole Collar Location Map

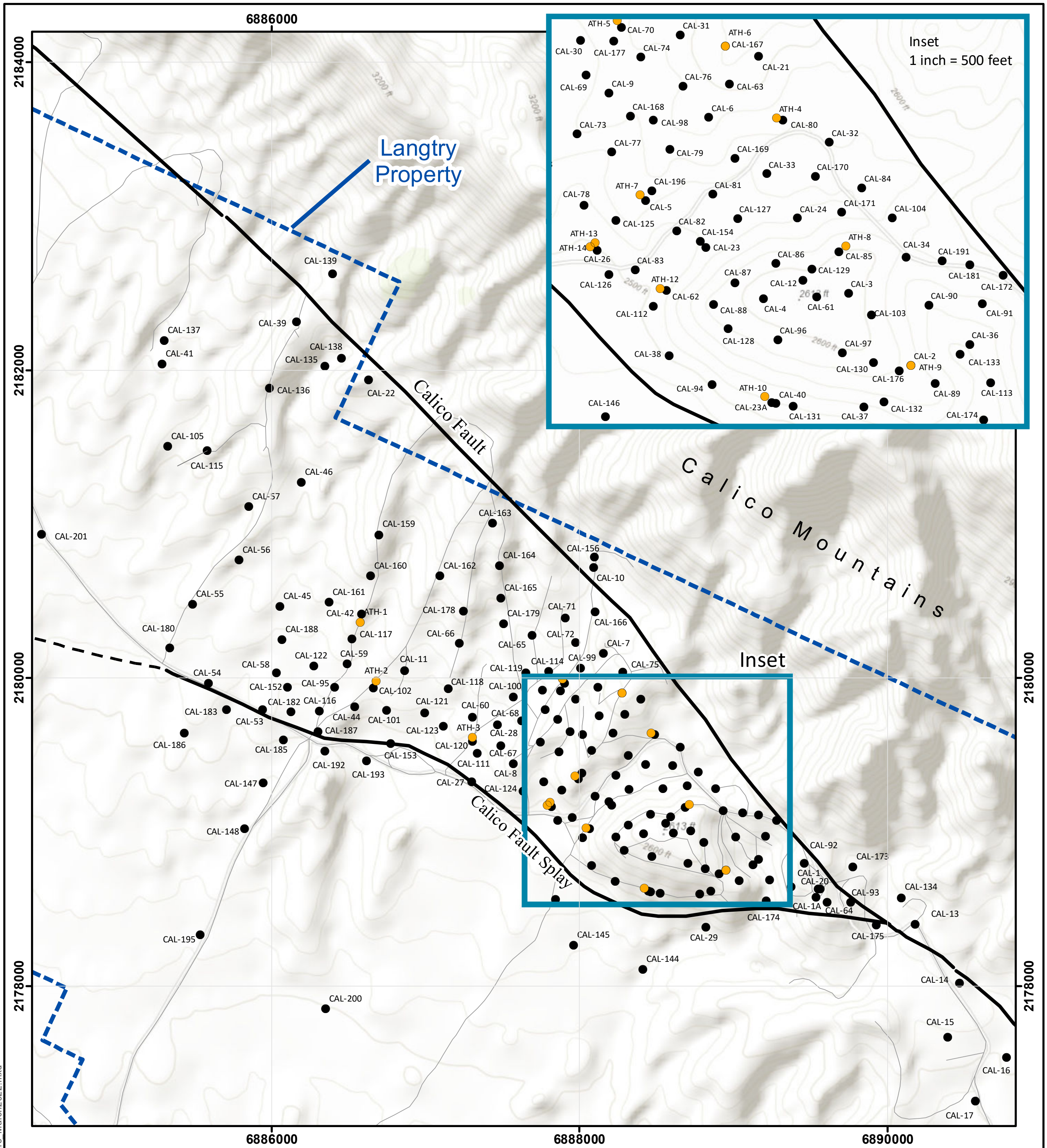
Figure 6-4

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN,

DRAWN BY: M.B.
CHK'D BY: J.K.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578

U:\233001578\disc\gis_cad\MXD\Fig_6_4_Waterloo_Collars_March2022.mxd; user: jkester



Legend

- Langtry Property
- Site Road
- Calico Fault and Splay
- Fault Inferred

Drill Hole Collars

- Athena Silver Inc. (2011)
- Superior Oil Company (1967-1976)

Stantec | Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

Langtry Drill Hole Collar Location Map

Figure 6-5

DRAWN BY: M.B. CHK'D BY: D.L. DATE: 22/ 03/ 24	Project Location: T10N R01E - T10N R01W, California Client: Apollo Silver Corporation Project: 233001578

Notes

1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN,

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6.5.1 Waterloo Drilling and Sampling

Table 6.1 lists the number and total lengths of the exploration drill holes compiled by Apollo for the Waterloo Property as identified by Stantec from digital records. Drilling at Waterloo was completed by ASARCO from 1965 to 1989 and by Pan American from 2012 to 2013. A total of 61,993 ft (18,895 m) of drilling from 267 holes were identified in the database records, however of the total, 255 holes representing 61,108 ft (18,626 m) were ultimately used in the geological model as described in Section 14 of the report. The omission of holes in the geological model were due to missing collar information (5) or holes with no depth records (7). Almost all drilling was vertically oriented except for one diamond drillhole oriented to the northeast at minus 45 degrees (W-DDH-S-12001). Waterloo hole locations are shown on Figure 6-4.

Table 6.1
Waterloo Property Drillhole Summary (1965-2013)

Owner	Years	Type	Numberof Holes	Drilled (ft)	Drilled (m)
ASARCO	1965-1982	RC	201	43,988	13,408
ASARCO	1989	Diamond	3	1,100	335
Pan American	2012-2013	RC	55	15,522	4,731
Pan American	2012	Diamond	8	1,382	421
Total			267	61,992	18,895

The Waterloo drill database included 11,643 assay records from 238 drill holes and QA/QC samples. Most of the samples were obtained from RC drilling. The collar information for ASARCO drill holes is located using various methods of photo interpretation, historic maps, and handheld Global Positioning System ("GPS") and for a subset, collars were located in 2013 by Pan American using a Trimble Global Navigational Satellite System ("GNSS") device with base station (completed by Ludwig Engineering Inc., of San Bernardino). Pan American drill hole collars were located using handheld GPS and/or the Trimble GNSS with base station. Collars in the Apollo database utilized the most accurate survey data available. Little downhole survey data is available.

The ASARCO drill holes were drilled 100 ft (31 m) apart along section lines across the deposit, with lines spaced at 200 ft (61 m) apart along the north-western portion of the deposit and at variable intervals between 100 ft and 200 ft in the south-eastern portion. Drillholes without downhole surveys were assumed to be vertical. Total hole depth ranged from 25 to 494 ft (8 to 207 m), and average 222 ft (68 m) in depth. Many of the holes stopped short of the lower limit of the deposit, particularly in the south-eastern portion, for unknown reasons. Drilling around the historical Waterloo mine was complicated due to the presence of historical stopes and caving and not all proposed drill holes were completed (Rodger, 1994). The ASARCO drilling samples were weighed and then split in a Jones-type splitter to obtain two 5 to 6 lb (2.3 to 2.7 kg) samples. One sample was sent for assay for silver while the other was retained as a duplicate. The QA/QC procedures, analysis methods and security from the ASARCO drilling were not available to the Author.

A detailed report prepared by Ahsan Chaudhary of Pan American on July 30, 2007, describes the ASARCO Waterloo Project drill samples as part of a cataloguing exercise of material acquired from ASARCO for the Project, which were stored in Tucson, Arizona (Samari and Breckenridge, 2021a). This work was performed over three weeks in the summer of 2007; the organized, sorted and relabelled sample boxes were stored at a facility in Tucson and then transported to a storage facility in Barstow near the Calico Project.

Drilling by Pan American was primarily designed to confirm historical assays from ASARCO drilling (twinning), to validate the thickness of the mineralization and grade across width and thickness of the ore zone, and test alternate geological models. The drilling was guided not only by historical mineralization models completed by ASARCO but also by geological mapping completed by Dr. Warren Pratt (Pratt, 2008, 2012), commissioned by Pan American. Drilling targeted five zones of higher mineralization identified by ASARCO drilling. The majority of Pan American drillholes were collared at historical drill sites to utilize existing roads and drill pads. RC holes ranged between 100 and 640 ft (30 to 195 m) and averaged 282 ft (86 m) depth. The RC holes were sampled continuously over standardized lengths of 5 ft (1.5 m) (Pan American, 2012). Pan American completed eight diamond drill holes, ranging from 69 to 354 ft (21 to 108 m) depth and recovered PQ sized core. Five core holes were completed for exploration/lithology verification purposes and three were completed for metallurgical testing, which was never completed. Assay records and density measurements are available for the three holes whereas geotechnical and lithological information was collected for all core holes.

The downhole lithologic data is available for the Pan American drillholes and a subset of the ASARCO drillholes that Pan American re-logged in 2012. Of the ASARCO drillholes relogged by Pan American, 44% of the drilled lengths appeared to be still available and were re-logged.

ASARCO drill samples were analysed for silver content, with historical reports noting the method used was fire assay. Pan American selected 33 historical ASARCO holes for re-assay of pulps and sampled twinned drillholes for multi element analyses (trace and in some cases whole rock analyses). Pan American submitted approximately 3,880 samples for assay to confirm historical assay results. These samples included ASARCO re-assayed pulps, twinned drillholes and QA/QC samples. The Pan American assay methods included inductively coupled plasma atomic emission spectrometry (ICP-AES; ALS procedure ME-ICP61 or ME-ICP41). All samples containing Ag >100 ppm were automatically re-analysed using either four acid dissolution or Aqua regia dissolution followed by ICP–AES or Atomic absorption spectroscopy ("AAS") (ALS procedure Ag-OG62 or Ag-OG46, respectively). Information about sample preparation and analytical procedures are available from the ALS assay certificates. No information has been provided on handling securities.

From Samari and Breckenridge (2021a) it is noted "results of the Pan American twin drilling and re-assays of the ASARCO holes compare very well with historical results and in some instances returned even higher grades." Further information on the Pan American samples can also be found in this report. Pan American samples were assayed for silver, copper, gold, and multi-element geochemistry. Whole rock X-ray fluorescence analyses was also completed on a portion of samples to ascertain if barite could provide additional value, however the sampling for this element was limited.

The QA/QC samples analysed with the Pan American samples were reviewed and plotted by Samari and Breckenridge (2021a). At the time, the Waterloo database included data for the insertion of 185 certified reference material ("CRM") samples, 177 blank samples, and 110 duplicates samples into the sampling stream for the 2012-2013 drilling samples and the 2012 re-sampling of historical pulps. From the 177 blanks, only one blank returned a maximum value of 2.5 ppm Ag, which is the Ag limit for blank samples. The majority of sample blanks returned assays below 0.25 ppm Ag. From the duplicates of 110 samples, the duplicate verses parent Q-Q plots effectively indicate no scatter in the data, with R2 value of 0.9935 for the RC drilling program.

A total of 185 CRMS were inserted into the sample stream using three unique certified assay value standards: PM1131 (112 ppm Ag), CDN-ME-19 (103 ppm Ag), and PANAM1 (50.5 ppm Ag). The laboratory's analytical results generally correlate well with the standard values with no outliers beyond two standard deviations. Additional discussion on QA/QC is included within Section 12.

6.5.2 Langtry Drilling and Sampling

Drilling at Langtry was completed by Superior between 1967 and 1976 and by Athena in 2011. A total of 76,986 ft (23,465 m) of drilling from 186 holes were identified in the database records, however of the total, 183 holes representing 76,986 ft (23,465 m) were ultimately used in the geological model as described in Section 14 of the report. Matson et al. (2008) indicated that approximately 200 holes were completed by Superior. Athena completed 13 holes (10 were confirmation holes, three were exploration). The omission of three holes in the geological model were due to missing hole depth records (3). Almost all drilling was vertically oriented except for three holes completed by Athena. The current historical drilling database records used for geologic modelling are shown in Table 6.2 and Figure 6-4.

Table 6.2
Langtry Property Drillhole Summary (1967-2011)

Owner	Years	Type	Number of Holes	Drilled (ft)	Drilled (m)
Superior	1967 - 1976	Rotary	173	70,961	21,629
Athena	2011	RC	13	6,025	1,836
Total			186	76,986	23,465

The Superior rotary holes are all assumed as vertical with depths ranging between 20 to 575 ft (6 to 175 m) and averaging 412 ft (126 m). Rotary cuttings were collected at 5 ft (1.5 m) intervals and assayed for silver consistently, and lead and barium occasionally. Two holes have gold data. Superior recorded assay results on graphical logs with silver in opt for every drill hole. Percent of barite ($BaSO_4$) and lead (Pb) results were shown for select drill holes (Moran et al., 2012).

Of the 13 Athena RC holes drilled in 2011, 10 were confirmation holes that twinned historical holes completed by Superior and three were exploratory. The depths of the drill holes ranged between 350 to 600 ft (107 to 183 m) and averaged 460 ft (140 m). The confirmation drill holes were drilled at a vertical orientation and the exploratory drill holes were inclined.

The Athena drilling was completed using an Atlas Copco RD-10 rig by drilling company WDC Exploration and Wells (now National Drilling) of Gilbert, Arizona. Down hole information, recorded on paper logs, included drill hole name, date, coordinates, bearing, inclination, total depth, geologist name, rock type, oxide occurrences, type and degree of alteration, type and percentage of mineralization and general comments.

Athena sent in 1,308 samples from drilled intervals (1,196) that included QA/QC samples (112) to be assayed by ALS Laboratories in Reno, Nevada for gold, silver, and multi-element geochemistry. Downhole geological data is available for the Athena holes. For both Superior and Athena data no detailed explanation or reports were found in the database about inhouse sample preparation, chain of custody, and data security measures.

Moran et al. (2012) in their internal technical report for the Langtry Property compared Athena twinned drill holes assays with Superior results at select depth intervals. Approximately 3 to 5 intervals were selected per twinned hole. The report concluded that most of the statistical testing on twin hole data indicated no significant difference between historical (Superior) and 2011 (Athena) data and results were reported at the 95% level of confidence. These positive results were used by Moran er al. (2012) as justifications for using historical exploration data in the historical estimates discussed later in the report.

Moran et al., (2012) also compared duplicate and standards assay results for gold and silver and concluded: "*duplicate assays are identical at the 95% confidence level. Standard assays show relatively little (<2 standard deviations) variability about the standard value in most cases. A handful of large deviations may warrant examination to determine the source of excess variability, particularly for Ag ICP analyses. The laboratory lower reporting limit was too high for the low-Ag standard 15Pa. While a plot of Ag vs. Ag ICP standard assays showed scatter around the 1:1 line, statistical testing did not find significant differences between results from the two methods.*"

It is the opinion of the Author and QP, following review of the historic drill hole records as described above, that these data could be used as the basis for building a geologic model and estimation of silver mineral resources for the Calico Project.

6.6 Historical Estimates

The historical estimates discussed in this section were calculated prior to the implementation of the standards set forth in NI 43-101 and current CIM standards for mineral resource and reserve estimation (2014). Therefore, the reader is cautioned not to treat them, or any part of them, as current mineral resources or reserves, they are provided here only as historical information. The Author nor the issuer are treating these historical estimates as current mineral resources or reserves. They have been superseded by the Calico Project resource estimates detailed in Section 14 of this report.

Historical estimates for the Calico Project have in the past been documented separately for the Waterloo and Langtry Properties. Historical estimates discussed here are reported as documented in original documents and use terminology as used in those documents.

6.6.1 Waterloo Historical Estimates

6.6.1.1 ASARCO Estimates

ASARCO completed an initial reserve estimate for the Waterloo deposit in 1966 by hand, followed by a computer reserve estimate in the 1979. The term "reserve" as described in these ASARCO estimates do not comply with current CIM definitions of reserve (CIM, 2014), and as such are defined as historic estimates only. Based on their drilling, the 1979 estimate outlined a historical silver- barite mineral reserve close to, or at surface of, 33.8 Mt at 93 g/t silver for a total of 100.9 Moz contained Ag at a cut-off grade of 25 g/t Ag (ASARCO, 1979). In September 1994, Robert J. Rodger, P.Eng., reviewed the ASARCO reports and prepared a Technical Evaluation Report on the Waterloo Property (Rodger, 1994) on behalf of Pan American. Rodger (1994) confirmed that the historical estimates utilized reverse circulation drilling and underground sampling and concluded that they were based on sound methodology. The following sub-sections summarize the ASARCO historical estimates as reviewed and summarized by Rodger (1994) with further information from ASARCO (1966 and 1979) of their mineral estimation processes and results.

"*The initial [pit] envelope was prepared manually with benches at 25 ft (7.6 m) intervals. The parameters utilized (were) as follows:*

1. *Cut-off silver grade of 1.5 opt.*
2. *Assays were NOT cut-off at high grades because relatively few of the assays were high. Of 8,160 assays, only nine were above 25 opt and none above 50 opt.*
3. *Specific gravity was defined as 2.61 with a 4% allowance for voids.*
4. *A minimum of 15 feet (4.6 m) was added at the mineralization-waste contacts to account for dilution. The dilution factor was therefore 6% at a grade of 1.2 opt.*

The initial historical estimate from 1966 was calculated by ASARCO using a standard polygon method. Polygons were constructed on bench plans around the drill holes by taking one half the distance to adjacent holes. The area of the polygon was measured with a planimeter, with suitable checks. The silver grade assigned to the polygon was the weighted average of the silver assays of the 5 ft (1.5 m) samples over the height of the bench. Quantities of mineralization and waste were then calculated for each bench. The tonnages were adjusted by 4% as an allowance for voids and increased by 6% at 1.2 opt for dilution. The total quantity of rock within the pit envelope was estimated at 45 million tons. Measured reserves were those reserves occurring within the polygons. Indicated reserves were those reserves which were outside the polygons but within the mineralized zone. Drill hole and geological information were utilized to assign a grade to the blocks (Rodger, 1994 and ASARCO, 1966)." The results of this calculation are shown in Table 6.3.

Table 6.3
ASARCO 1966 Historical Mineral Resource Estimate
(ASARCO, 1966)

	Quantity (M tons)	Silver Grade (opt)
Measured Reserves	27	3.06
Indicated Reserves	2	2.44
Total	**29**	**3.02**

Reference to the historic resource at the Waterloo Property prepared by ASARCO refer to an internal company document prepared by ASARCO, dated 1966 (unpublished). Historic resources are reported here as documented in original documents. The historic resources were calculated prior to the implementation of the current Canadian Institute of Mining's ("CIM") standards for mineral resource estimation (as defined by the CIM Definition Standard on Mineral Resources and Ore Reserves dated May 10, 2014) as required by NI 43-101 and has no comparable resource classification. The reader is cautioned not to treat them, or any part of them, as current mineral resources or reserves. An independent Qualified Person has not completed sufficient work to classify these *estimates as current mineral resources or reserves and therefore the Company is not treating the historical estimate as a current mineral resource. The reliability of the historical estimate is considered reasonable, reliable and relevant to be included here in that they demonstrated simply the mineral potential of the Waterloo Property prior to the completion and disclosure of the Calico current Mineral Resource estimate. This historic resource estimate has been superseded by the Calico Silver Project current mineral resource estimate, announced February 9, 2022, and discussed in Section 14 in this report.*

It is the opinion of the Author that the ASARCO (1966) estimates were not derived from modern-era computer assisted survey and estimation equipment and as such the historical estimates are not expected to be very accurate representations. Furthermore, there was not the same quantity of exploration data available at the time (1966) to make a reasonable comparison with current mineral resource estimates.

ASARCO completed a computer estimate in 1979 (ASARCO, 1979). For this exercise ASARCO entered all silver and barite assays from the drillholes into a computer database and established block grades for silver and barite using the “inverse of distance squared” interpolation. Where insufficient data was available for blocks on the boundaries, grades were assigned by the computer program. The pit envelope generated by the computer program was marginally different from the manual pit calculation; the total quantity of rock within the pit envelope calculated by the computer program was 47.34 million tons (ASARCO, 1979 and Rodger, 1994). The historical estimate calculated by ASARCO is shown below (Table 6.4):

Table 6.4
ASARCO 1979 Historical Reserves at 25 g/t Ag Cut off Grade
(ASARCO, 1979)

	Quantity (M tons)	Silver (opt)	Silver (%)
Reserves	26.64	3.11	14.7
Waste	20.7		

Reference to the historic reserve at the Waterloo Property prepared by ASARCO refer to an internal company document prepared by ASARCO, dated 1979 (unpublished). Historic reserves are reported here as documented in original documents. The historic reserves were calculated prior to the implementation of the current Canadian Institute of Mining’s (“CIM”) standards for mineral resource estimation (as defined by the CIM Definition Standard on Mineral Resources and Ore Reserves dated May 10, 2014) as required by NI 43-101 and has no comparable resource classification. The reader is cautioned not to treat them, or any part of them, as current mineral resources or reserves. An independent Qualified Person has not completed sufficient work to classify these estimates as current mineral resources or reserves and therefore the Company is not treating the historical estimate as current mineral resources or mineral reserves. The reliability of the historical estimate is considered reasonable, reliable, and relevant to be included here in that they demonstrated simply the mineral potential of the Waterloo Property prior to the completion and disclosure of the Calico current Mineral Resource estimate. This historic resource estimate has been superseded by the Calico Silver Project current mineral resource estimate, announced February 9, 2022, and discussed in Section 14 in this report.

ASARCO models showed that utilization of a lower cut-off grade within the same pit envelope would increase the quantity of reserves to 37.2 million tons (33.9 million tonnes) but lower the grade to 2.71 opt (92.9 g/t) silver and 13.4% barite (Table 6.5). This would additionally reduce the quantity of waste within the pit envelope by 10.5 million tons (9.5 million tonnes) (Rodger, 1994 and ASARCO, 1979).

Table 6.5
ASARCO Waterloo Historical Silver Mineral Reserve at 25 g/t Ag cut-off (ASARCO, 1979)

Tonnage		Average Grade				Contained	
Tons (M tons)	Tonnes (Mtonnes)	Grade (g/t Ag)	Grade (opt Ag)	Barite(%)	Barite (Mtonnes)	Silver (M oz Ag)	Silver (M oz AgEq)
37.2	33.9	92.9	2.71	13.4	4.5	100.9	146.5

Reference to the historic reserves at the Waterloo Property prepared by ASARCO refer to an internal company document prepared by ASARCO, dated 1979 (unpublished). Historic reserves are reported here as documented in original documents. The historic reserves were calculated prior to the implementation of the current Canadian Institute of Mining's ("CIM") standards for mineral resource estimation (as defined by the CIM Definition Standard on Mineral Resources and Ore Reserves dated May 10, 2014) as required by NI 43-101 and has no comparable resource classification. The reader is cautioned not to treat them, or any part of them, as current mineral resources or reserves. An independent Qualified Person has not completed sufficient work to classify these estimates as current mineral resources or reserves and therefore the Company is not treating the historical estimate as a current mineral resources or mineral reserves. The reliability of the historical estimate is considered reasonable, reliable, and relevant to be included here in that they demonstrated simply the mineral potential of the Waterloo Property prior to the completion and disclosure of the Calico current Mineral Resource estimate. This historic resource estimate has been superseded by the Calico Silver Project current mineral resource estimate, announced February 9, 2022, and discussed in Section 14 in this report.

It is It is the opinion of the Author that ASARCO (1979) historic resource estimates were not supported by the same quantity and quality of exploration data available as of effective date of this report to make a reasonable comparison with current mineral resource estimates.

6.6.1.2 Pan American Estimates

Pan American (2013) generated an internal resource estimate in 2013 that was based on the results of their 2012 drill program and their validation of historical ASARCO drilling data. The historical data was validated by Pan American by verifying collar location of ASARCO drill holes, twinning select ASARCO drill holes and evaluating old samples (re-logging ASARCO chips and re-assaying stored pulps). The historical internal resource yielded 37.1 million tonnes grading 86 g/t for a total of 103 M oz contained silver at a cur-off grade of 20 g/t silver (Table 6.6). The estimates were generated from a 25 m x 25 m x 5 m block model.

Table 6.6
Pan American Waterloo Historic Mineral Resource Estimate
(Pan American, 2013)

Resource Category	Grade	Tonnage (t)	Cut-off Grade	Total Ounces
Inferred	86 g/t Ag	37,079,349	20 g/t Ag	102,953,457

Reference to the historic resource at the Waterloo Property refer to an internal company document prepared by Pan American Minerals Corp., dated 2013, (unpublished). Historic resources are reported here as documented in original documents. The historic mineral resource was calculated using mining industry standard practices for estimating Mineral Resource and Mineral Reserves (2005) which was prior to the implementation of the current Canadian Institute of Mining's ("CIM") standards for mineral resource estimation (as defined by the CIM Definition Standard on Mineral Resources and Ore Reserves dated May 10, 2014) as required by NI 43-101 and has no comparable resource classification. The reader is cautioned not to treat them, or any part of them, as current mineral resources or reserves. An independent Qualified Person has not completed sufficient work to classify the estimates discussed as current mineral resources or reserves and therefore the Company is not treating the historical estimate as current mineral resources or mineral reserves. The reliability of the historical estimate is considered reasonable, reliable, and relevant to be included here in that they demonstrated simply the mineral potential of the Waterloo Property prior to the completion and disclosure of the Calico current Mineral Resource estimate. This historic resource estimate has been superseded by the Calico Silver Project current mineral resource estimate, announced February 9, 2022, and detailed in Section 14 of this report.

It is the opinion of the Author that Pan American (2013) historic resource estimates silver cut-off grade at 20 g/t is low when compared to the base case cut-off grade of 50 g/t silver used for the current mineral resource estimate that is calculated using current silver prices and mining-processing costs. The Author has not had access to the Pan American (2013) geologic model files for further comparison.

6.6.2 Langtry Historical Estimates

The following discussion of historical estimates for the Langtry Property is sourced from Matson et al. (2008) and Moran et al. (2012).

6.6.2.1 Superior Estimates

As part of processing Superior's mineral patent application in 1970, the BLM undertook an exercise to verify the mineralization at the Langtry Project and produced a Mineral Validity Report (Livesay and Woodward, 1974). This report documented an estimated 22 million tons at grades of 2.37 opt (81.3 g/t) silver using a 1.3 opt cut-off grade, for a total of 52 million ounces that had been completed by Superior. The estimate also reported 7.9% barite per ton for a total of 1.73 million tons barite. The estimate was based on the rotary drilling data collected by Superior. The validation exercise undertaken by the BLM involved visiting the Langtry Property and completing 62 check assays to verify the mineralization identified by Superior. The BLM concluded that the mineralization was present and transferred ownership of the now patented claims to Superior (Livesay and Woodward, 1974). The Superior Langtry estimates are summarised in Table 6.7.

Table 6.7
Superior Langtry Mineral Resource Estimate
(Livesay and Woodward, 1974)

Million Tons	Commodity	Grade	Cut-off Grade	Total Ounces Million	Barite tons
22	Silver	2.37 opt	1.3 opt	52	n/a
	Barite	1.79%	none	n/a	1.73

Reference to the historic resource completed by Superior at the Langtry Property refers to resource review completed by the U.S. Bureau of Mines (Livesay and Woodward, 1974). The historic resources were calculated prior to the implementation of the current Canadian Institute of Mining's ("CIM") standards for mineral resource estimation (as defined by the CIM Definition Standard on Mineral Resources and Ore Reserves dated May 10, 2014) as required by NI 43-101 and has no comparable resource classification. The reader is cautioned not to treat them, or any part of them, as current mineral resources or reserves. An independent Qualified Person has not completed sufficient work to classify these estimates as current mineral resources or reserves and therefore the Company is not treating the historical estimate as current mineral resources or mineral reserves. The reliability of the historical estimate is considered reasonable, reliable, and relevant to be included here in that they demonstrated simply the mineral potential of the Langtry Property prior to the completion and disclosure of the Calico current Mineral Resource estimate. This historic resource estimate has been superseded by the Calico Silver Project current mineral resource estimate, announced February 9, 2022, and discussed in Section 14 in this report.

It is the opinion of the Author that the Livesay and Woodward (1974) Langtry historic resource estimates were not supported by the same quantity and quality of exploration data available as of effective date of this report to make a reasonable comparison with current mineral resource estimates.

6.6.2.2 International Silver Estimates

Western Range Services Inc., on behalf of International Silver Inc., calculated a historical estimate using the Superior drill holes to generate a set of northwest cross sections. They estimated 76.8 M oz silver contained in 38.4 M tons averaging 2.0 opt (68.6 g/t) Ag, at a cut-off grade of 1.0 opt (34.3 g/t) Ag (Matson, 2008). Drill hole assays were composited into mineable thicknesses using a 1 opt (34.3 g/t) silver cut-off. Sections were used to check the continuity of the mineralized intercepts and project geologic structures displacing or limiting the mineralization. Interpolation of thickness was used to calculate tonnage, but grade was assigned in the uniform block conventional manner surrounding each drill hole. Areas of insufficient drilling were excluded from the reserve blocks. Reserve blocks were projected half-way to each adjoining section, or in the case of end sections, to the limiting structure or a maximum of 100 feet. Their estimation method using the sections has been considered not consistent with current state-of-the-practice work for geo-statistics (Samari, H. and Breckenridge, L., 2021b).

The modeled estimate was described as potentially open pit mineable, extending in a thick blanket-like form from near surface to a depth of 505 ft (154 m). The projected waste to mineralization ratio was only 2:1. A tonnage [density] factor of 11.5 ft^3/ton average specific gravity was used for calculations. It was noted that further laboratory data from specific gravity tests on both the mineralized and waste rock would be required to "improve the tonnage". The model considered barite as an economic resource in amounts ranging from about 4% to over 15% (compared to prior estimates of 7.9% by Superior). Lead content was noted as averaging 0.2% to 0.4%, but was not considered economic (Matson, 2008). The International Silver Inc. estimates are summarised in Table 6.8.

Table 6.8
International Silver Inc. Langtry Mineral Resource Estimate
(Matson, 2008)

Million Tons	Commodity	Grade	Cut-off Grade	Total Ounces Million	Strip Ratio (t:t)
38.4	Silver	2.0 opt	1.0 opt	76.8	2

Reference to the historic resource completed by International Silver at the Langtry Property refers to an internal company document prepared by Western Range Services (Matson, 2008) (unpublished). The historic resources were calculated prior to the implementation of the current Canadian Institute of Mining's ("CIM") standards for mineral resource estimation (as defined by the CIM Definition Standard on Mineral Resources and Ore Reserves dated May 10, 2014) as required by NI 43-101 and has no comparable resource classification. The reader is cautioned not to treat them, or any part of them, as current mineral resources or reserves. An independent Qualified Person has not completed sufficient work to classify these estimates as current mineral resources or reserves and therefore the Company is not treating the historical estimates as current mineral resources or mineral reserves. The reliability of the historical estimate is considered reasonable, reliable, and relevant to be included here in that they demonstrated simply the mineral potential of the Langtry Property prior to the completion and disclosure of the Calico current Mineral Resource estimate. This historic resource estimate has been superseded by the Calico Silver Project current mineral resource estimate, announced February 9, 2022, and discussed in Section 14 in this report.

It is the opinion of the Author that the International Silver Inc. historic estimates (Matson, 2008) relied on outdated cross-sectional polygonal methods that typically in the experience of the Author do not provide good 3D representation of the mineralized zone. A reasonable comparison with current mineral resource estimates is not possible.

6.6.2.3 Athena Estimates

In 2012 Independent Mining Consultants Inc., in association with SRK Consultants Inc., ("SRK") on behalf of Athena, estimated Indicated Mineral Resources of 12.7 M tons grading 1.48 opt (50.7 g/t) Ag and Inferred Mineral Resources of 30.4 M tons grading 1.40 opt (48.0 g/t) Ag, at a 0.76 opt (26.1 g/t) Ag cut-off grade (Moran et al., 2012). The resource estimate utilized Athena drill hole data plus any available Superior drill hole data and was calculated using a computer-based block model and geological interpretation of the Langtry Deposit. A bench height of 25 ft (7.6 m) and a horizontal block size of 50 ft (15.2 m) were selected for the calculation. The drill hole assays were capped at 15 opt (514.3 g/t) Ag prior to compositing. The deposit was deemed of sufficient size to warrant additional work to determine the potential for commercial operations, substantiated by confirmation drilling performed by Athena in 2011 (Moran et al., 2012). The Athena 2012 estimates are summarised in Table 6.9.

Table 6.9
Athena 2012 Mineral Resource Estimate, Langtry Deposit
(Moran et al., 2012)

Classification	Silver Cut-off Grade (opt)	Silver Cut-off Grade (g/t)	ktons (1000 short tons)	Silver Grade (opt)	Silver Grade (g/t)	Contained Silver (Koz)
Indicated	0.76	26.1	12,709	1.48	50.7	18,809
Inferred	0.76	26.1	30,445	1.4	48	42,632

Reference to the historic resource at the Langtry Property prepared by SRK on behalf of Athena refers to an internal company document prepared by Moran (2012) (unpublished). Historic resources are reported here as documented in original documents. The historic resources were calculated prior to the implementation of the current Canadian Institute of Mining's ("CIM") standards for mineral resource estimation (as defined by the CIM Definition Standard on Mineral Resources and Ore Reserves dated May 10, 2014) as required by NI 43-101 and has no comparable resource classification. The reader is cautioned not to treat them, or any part of them, as current mineral resources or reserves. An independent Qualified Person has not completed sufficient work to classify these estimates as current mineral resources or reserves and therefore the Company is not treating the historical estimates as current mineral resources or mineral reserves. The reliability of the historical estimate is considered reasonable, reliable, and relevant to be included here in that they demonstrated simply the mineral potential of the Langtry Property prior to the completion and disclosure of the Calico current Mineral Resource estimate. This historic resource estimate has been superseded by the Calico Silver Project current mineral resource estimate, announced February 9, 2022, and discussed in Section 14 in this report.

It is the opinion of the Author that current exploration data at Langtry does not support a resource estimate at an Indicated level of assurance as presented in Table 6.7. The Author did not have access to the Moran et al. (2012) geologic model files for further comparison.

6.7 Metallurgical Testing

Metallurgical testing has been completed for the Calico Project by various entities. The Author of this Technical Report has referred to these metallurgical studies as "historical metallurgical studies" and are not treating them, or any part of them, as a current assessment of metallurgical recovery. These historical studys should not be relied upon, and this discussion has only been included to demonstrate the metallurgical potential of the Calico Project.

6.7.1 Waterloo

6.7.1.1 ASARCO

ASARCO completed metallurgical test work on samples collected from the Waterloo Deposit in several testing campaigns from the mid-1960's to 1980. The samples sent for metallurgical test work included surface and underground grab samples, surface bulk trench samples, representative drillhole samples and samples collected from old mine dumps within the Property.

The chronological history of the metallurgical test work completed for Waterloo has been summarized from Rodger (1994) as follows:

- 1965-1967 - Preliminary lab testing was conducted on underground channel, surface grab and drill cuttings. The results of this test work were variable.
- 1968 - Testing was conducted on a representative composite sample taken from drillhole samples. Fine grinding (80% -325 mesh), followed by cyanidation resulted in 55-60% Ag recovery. Use of a salt roast, followed by cyanide leaching, resulted in 80% Ag recovery.
- 1969-1970 - A feasibility study was conducted based on fine grinding – cyanidation process using a 100-ton surface bulk trench sample (ASARCO, 1969).
- 1970-1974 - Process testing was conducted by several organizations using various processes, including vacuum distillation, sonic leaching and bromide leaching. These processes were not successful.
- 1974-1975 - Pilot plant tests were conducted on the fine grinding – cyanidation process. Semi-autogenous grinding and rod mill-pebble mill grinding were evaluated as options and both options were deemed to be feasible.
- 1975-1980 – Fine grinding followed by ammonium thiosulphate – ammonium bisulphate leaching was evaluated and provided favorable results. The "Duval Clear Process" gave similar results to the conventional process. Both processes were more expensive than the conventional process. A second pilot plant test was conducted using rod mill-pebble mill grinding and this test confirmed feasibility. A feasibility study was conducted based on the fine grinding – cyanidation process.

It was concluded by Rodger (1994) that although fine grinding followed by cyanidation returned a lower percent of silver recovery, at 55-60% Ag recovery in comparison to 80% Ag recovery utilizing a salt roast followed by a cyanide leach, this former option provided the best financial results at the time of the test work. It was also noted by ASARCO's mineral beneficiation department (1983) that the Waterloo samples used for metallurgical testing had a work index of 18.5.

ASARCO determined the Waterloo mineralization is characterized by very fine silver particles disseminated in silicified sandstones and siltstones in association with small veinlets of silver halide minerals (ASARCO, 1983).

6.7.1.2 US Bureau of Mines

In 1973 the US Bureau of Mines (Agey et al., 1973) completed preliminary research designed to determine the most effective methods of recovering silver and barite from the Calico district. Testing was conducted from four 300 to 400 pounds rotary drilling chip bulk samples however, it is unclear if samples were from one, or both of Waterloo and Langtry Properties. This preliminary research concluded that cyanidation of mineralization ground to virtually 100% minus 325 mesh (-0.053 mm) recovered about 47% of the silver in 3 samples and 62% in the fourth sample. Salt roasting minus 10 mesh (-1.7 mm) samples prior to cyanidation increased silver recoveries to between 75% and 85%. Flotation of the untreated mineralization recovered 85% to 93% barite in specification-grade barite concentrates (88% to 93% $BaSO_4$).

6.7.1.3 Pan American

Pan American (2013) indicates that exploration efforts in 2012 were focused on metallurgical test work, geological mapping and geophysical surveys; however, the Author has not seen any documentation regarding metallurgical test work completed by Pan American at the Waterloo Property. In 2021, Apollo became aware of 2.7 tonnes of material in storage at McClelland Laboratories, in Sparks Nevada, which comprised material from 11 RC and three diamond drill holes. This material was originally collected by Pan American in 2012 and in 2014, McClelland undertook some initial test work on the RC material and collected density data for the core holes. For unknown reasons this work was never completed, and no report was produced. Apollo is planning to test the material in 2022, focusing on the drill core (approximately 1.2 tonnes).

Pan American did complete a mineralogical study of Waterloo metallurgical samples (SGS, 2012). Mineralogy of the sample was quartz (62.6%) and feldspar (22.5%) with minor barite (8.5%), calcite (3.3%), Fe oxides (1.7%), and trace amounts (<1%) of other silicates, other oxides, jarosite, Ag sulphides and pyrite. Silver is very fine grained (<8 micrometers), half the grain size of other minerals. The Ag-minerals include mainly argentite (Ag_2S), iodargyrite (AgI) and chlorargyrite (AgCl). The SGS (2012) study noted that additional gravity tests might be warranted given the bulk mineralogy of the sample is made of light minerals (>80% of feldspars and quartz) although losses of Ag-minerals are expected due to their association with the silicates.

6.7.2 Langtry

6.7.2.1 Superior

Superior tested an initial recovery system comprising cyanidation for silver recovery and barite recovery by flotation. Silver recovery by direct cyanidation yielded a generally low recovery of 60 to 65% (Matson, 2008). Additional metallurgical test work conducted by Mountain States Research and Development International ("MSRDI"), on behalf of Superior, evaluated a silver leaching process using a temperature-controlled acid leach method with hydrochloric acid and ammonium hydrogen fluoride. Silver recovery by this method yielded a recovery of 80 to 85% (Matson, 2008). The leaching process was completed at a temperature of approximately 90° C (Moran et al., 2012).

In 1974, ASARCO in conjunction with Superior, completed a review of the mineralogy of Langtry mineralized samples (ASARCO, 1974). ASARCO (1974) described the silver at Langtry as arsenical silver associated principally with quartz as five-micron diameter locked particles. Minor amounts of silver are present as silver halites, argentite and proustite. There is no or minor association of silver with barite, iron and manganese minerals and little indication of the presence of argentojarosites. There was a correlation between silver distribution and screen size indicating uniform distribution of silver as finely distributed particles.

6.7.2.2 Athena - MSRDI

MSRDI, on behalf of Athena, conducted metallurgical test work on samples in 2011 to 2012. The aim of the metallurgical testing was to provide: 1) information on the mineralogy of the silver mineralization; 2) information on the amenability of the mineralization to leach recovery of silver; 3) a preliminary estimate of potential leach recoveries; 4) recommendations of potential processing methods; and 5) recommendations for additional work. MSRDI completed sample preparation and characterization tests, mineralogical studies, preliminary cyanidation tests, gravity separation, preliminary floatation tests, Bond Work Index and columns leach tests on RC drill cuttings. The preliminary metallurgical testing by MSRDI indicated that approximately 50% of the silver at Langtry is “free milling” and amenable to direct cyanidation and the remaining silver is tied up in silicates (Moran et al., 2012).

“…*cyanidation tests show recoveries of 30 to 33 per cent of total silver; 60 to 66 percent of the readily available silver in only five days of leaching of pulverized material, with recovery curves still climbing. An additional 50 per cent of the total silver appear to be “refractory,” or tied up in silicate minerals, not amenable to cyanidation even at a very fine grind size, and not amenable to either gravity or floatation concentration methods* (Moran et al., 2012)”.

According to Moran et al. (2012), mineralogical studies were completed for MSRDI by DCM Science Laboratory, Inc., and included standard polished thin section analyses for transmitted and reflected light microscopy, as well as scanning electron microscopy. Mineralogy tests show the presence of significant silica (+40 volume %) of the samples, with feldspar at about 40%, barite at 7 to 12% and 3 to 5% jarosite/plumbo-jarosite, sericite at 4 to 6%, hematite/goethite at 1%, and trace amounts of other minerals including galena, sphalerite, pyrite and several other trace minerals. Silver is difficult to identify but was found in association with some jarosite, possibly as argento-jarosite.

The metallurgical tests were run using composites of RC drill cuttings. The cuttings caused issues with percolation due to a high percentage of fine grain material and Moran et al. (2012) recommended further metallurgical testing to be conducted on properly staged core samples.

6.7.2.3 Athena - Metcon

Metcon Research (“Metcon”), on behalf of Athena, conducted a metallurgical column leach study at two crush sizes (P100 and P80) on two bulk composite samples in 2012-2013. The purpose of the study was to measure the silver recovery at various head grades and crush sizes (Metcon, 2012a). The two bulk samples, MET I and MET II, were collected from three surface trenches within the Langtry mineralized zone and weighed 8,307 kg and 10,254 kg, respectively (Metcon Research, 2012a).

Metcon Research (2012b) reported that the bulk samples collected for the test work assayed for low-grade mineralization (20.32 g/t Ag) and at less than 1.7mm (10 mesh), yielded a recovery of approximately 45% silver after 96 hours of agitated leach with low consumption of sodium cyanide and calcium oxide consumptions of approximately 0.36 kg/t and 1 kg/t respectively.

6.7.3 Metallurgical Testing Summary

Metallurgical testing of silver and barite metallurgical recoveries undertaken at the Calico Project is summarised in Table 6.8. Fine grinding to minus 325 mesh (-0.052 mm) is necessary to achieve the recoveries ranging from 30% to 65% silver. If salt roasting of minus 10 mesh (-1.7mm) feed is used, followed by cyanidation, silver recoveries were higher to a maximum of up to 85%. Temperature controlled acid leaching tests undertaken by Superior on the Langtry Property also yielded high silver recoveries of up to 85% however, these recoveries were extrapolated from after only 11 days of testing and not actual measured recoveries. Barite has been demonstrated to be recoverable as a by-product to silver from bulk samples taken at Waterloo. Recoveries of specification grade $BaSO_4$ are shown in Table 6.10, with barite being recovered by flotation, with a 90 to 93% purity) (Hazen Research Inc., 1980).

Table 6.10
Calico Project Metallurgical Testing Summaries

Property	Operator	Method	Total recovery Ag	Total recovery $BaSO_4$
Waterloo	ASARCO	Fine grinding + cyanidation	55-60%	66-69%
		Salt Roast + cyanidation	80%	-
	US Bureau of Mines	Fine grinding + cyanidation	47-62%	-
		Salt Roast + cyanidation	75-85%	85-93%
Langtry	Superior	Fine grinding + cyanidation	60-65%	-
		Temperature Controlled Acid Leach - HCl (or HNO_3)+NH_4HF^4	80-85%	-
	Athena	Fine grinding + cyanidation	50%	-

In general, for the Calico Project silver occurs as argentite (Ag_2S), chlorargyrite (AgCl), native silver, argentiferous jarosite, embolite (AgBr) and iodargyrite (AgI). Other rare silver minerals have been identified in petrographic studies unrelated to metallurgical test work.

It is the opinion of the Author and QP, following review of the historic metallurgical test results that recovery of silver at or above 80% is potentially possible from silver mineralization observed on the Calico Project. Current metallurgical testing is sufficient for reporting of silver mineral resources, however more metallurgical testing would be required before ore reserves can be reported for the Calico Project.

6.8 Mining Feasibility Studies

6.8.1 Waterloo

Two historical economic studies were conducted for the Waterloo Property by ASARCO in 1969 and by Fluor Mining and Metals Inc., on behalf of ASARCO, in 1980. An economic study summary (Pan American, 2008) was completed by Pan American in 2008 to update the capital costs and operational costs of the historical economic studies and to give an estimation of the profitability of the Waterloo Project in 2008. The following text has been reproduced from Pan American, 2008:

"ASARCO conducted a Feasibility Study of the Project in 1969. The Project was to be of an open pit, cyanidization plant design capable of accommodating 6,000 tons of ore per day. Production figures were based off of a report conducted by ASARCO, September 1967, showing an ore reserve of 30,067,000 tons and containing an average of 2.94 ounces of silver per ton. Mill capital and construction cost estimates were prepared by the Steams-Roger Corporation; operating costs and surface/ancillary plant costs estimated by ASARCO. A metallurgical *recovery of 54.4% was estimated using the cyanidization process with an 80% minus 325-mesh grind. The conclusion of the feasibility study of 1969 was that the Project was financially unprofitable at $1.75, $2.00 and $2.25 dollars per ounce (Pan American, 2008)"*

"The Feasibility Study conducted by Fluor was done on behalf of ASARCO in 1980. Technically it is not a feasibility study: the Scope of the Study consists solely of capital cost estimates of an updated silver and barite mill*. This capital cost estimation concerns the construction of the mill exclusively, and does not include earthworks, the mine or mining equipment, or tailings work. The production rate is estimated to be 6,000 dry short tons a day, or 230,000 tons a year (Pan American, 2008)"*

Pan American (2008) concluded that both historical economic studies cannot be used to give an accurate estimation of the profitability of the Project in 2008 due to several factors, including: 1) inflation from 1969 to 2008, 2) the financial estimation did not take into account discount or inflation rates, 3) the Project estimation was based solely on the first 10 years of operation and did not include cleanup and shutdown costs, 4) the Project estimation did not include the extraction of secondary minerals, such as barite or copper, and 5) the level of technology and the price of metals has changed significantly from 1969 to 2008.

6.8.2 Langtry

Geotechnical and engineering geologic conditions at the Langtry Property were evaluated in January 2010 to provide "feasibility-level recommendations for mine development, primarily addressing slope stability and the use of overburden materials for concrete aggregate" (C.H.J. Incorporated, 2010). The report concluded that "the proposed mine is feasible from a geotechnical engineering and engineering geologic standpoint, provided the recommendations contained in the report were implemented during slope stability investigation, during mining, and reclamation, but aggregate resources were unlikely." (Moran, et al., 2012).

7.0 GEOLOGIC SETTING AND MINERALIZATION

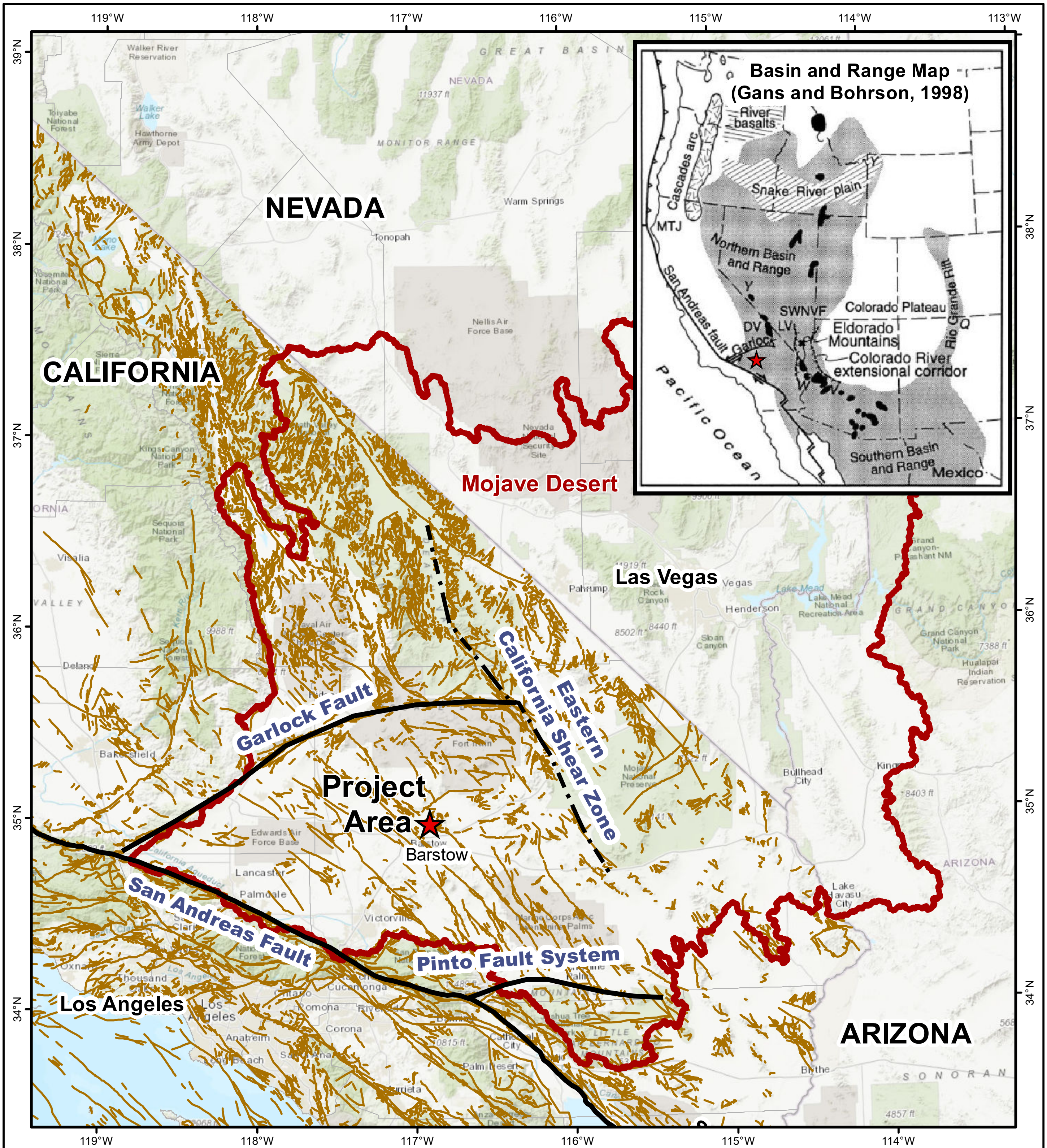
The following paragraphs are summaries and or modified from recent NI 43-101 reports by Samari and Breckenridge (2021a and 2021b) unless otherwise indicated.

7.1 Regional Geologic Setting

The Calico Project resides on the western edge of the Calico Mountains. The Calico Mountains are located within the southern California Mojave Desert region along the west edge of the central Basin and Range region (Figure 7-1). The Basin and Range Province consists of evenly spaced north-south trending mountain ranges with intermittent flat desert basins filled by lacustrine-gravel-volcaniclastic-volcanic deposits (Figure 7-1 insert). At the west-central edge of the Basin and Range the area is nearing the transition to the San Andreas fault and Coastal Ranges. In this area the geologic rock record indicates depositional sedimentary and volcanic deposits with a complex deformation history which includes Cenozoic extension, contraction, and strike-slip faulting.

The Calico Mountains are located on the Mojave Desert Block (Figure 7-1) (Dokka and Travis, 1990 and Gurney, 2008). The Mojave Desert Block lies between San Andreas Fault Zone (right-lateral) and Transverse Ranges on the West, the Garlock Fault Zone (left-lateral wrench) to the North, the Eastern California Shear Zone (includes Death Valley/Granite Mountain Fault Systems) (right lateral) to the East, and to the South by the Pinto Fault System (left-lateral wrench).

The regional geologic map of the District is shown in Figure 7-2. The stratigraphy in the district is summarised from Jessey and Tarman (1989), Pan American (1994) and Singleton and Gans (2008): The oldest rocks in the area are foliated metamorphic rocks, possibly Precambrian, underlying the Waterman mountains some 4 miles to the west of Calico. The dominant rock type in the Precambrian formation is a quartz diorite gneiss. Quartz monzonite and quartz diorite intrusions of Jurassic and Early Cretaceous age are found to the northeast. There are basement rocks of different varieties to the southwest, occurring as diatremes, volcanic necks and rhyolite tuffs. In the approximate center of the district (Figure 7-2) is the Calico Project, which lies on the western margin of the southwestern foothills of the Calico Mountains. Here predominately Tertiary rhyolitic rocks dominate the high ground and younger sedimentary rocks (predominately sandstone and siltstones) are found. The Calico fault is a major range-front fault generally located between these two end member units. This fault has a significant control on silver mineralization on the Project and is discussed below.



Legend

- Calico Silver Project Area
- Fault
- Eastern California Shear Zone
- Geologic Map of California Faults
- Mojave Desert Outline
- County Boundaries
- Basin and Range Area (Inset)

N

0 30 60
Kilometers

0 50
Miles

Scale 1:3,168,000
(At original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri

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TECHNICAL REPORT CALICO SILVER PROJECT

Regional Geology and Fault Map

Figure 7-1

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578

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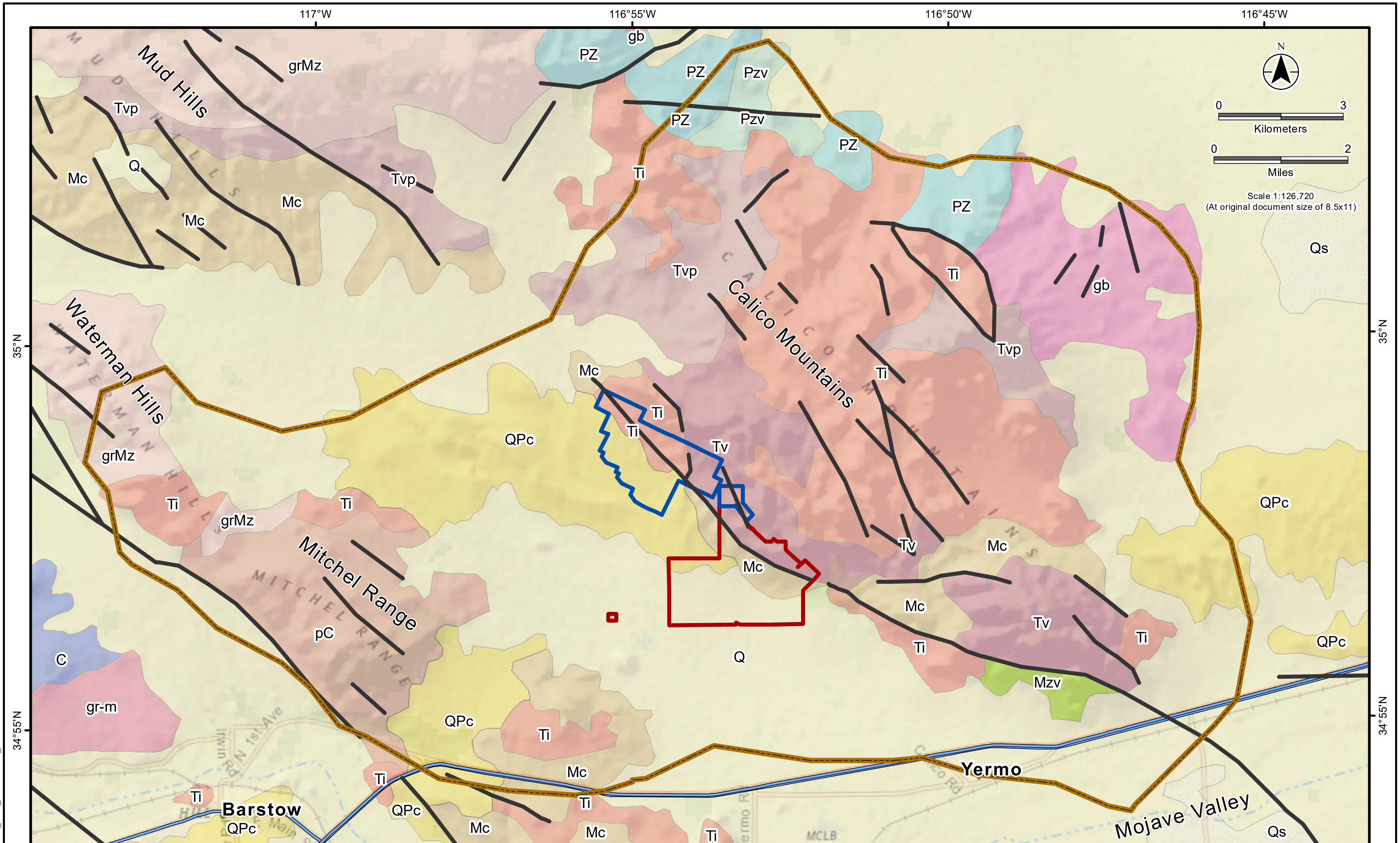

Legend

- Mapped California Faults
- Interstate Highway
- Langtry Property
- Waterloo Property
- Approximate Area of the Calico Mining District

Lithology

- Q, Pliocene to Holocene, alluvium
- Qs, Quaternary, dune sand
- QPc, Miocene to Pleistocene, sandstone
- Mc, Oligocene to Pleistocene, sandstone
- Ti, Tertiary, rhyolite
- Tv, Tertiary (4-22 Ma), rhyolite
- Tvp, Tertiary (4-22 Ma), rhyolite
- Mzv, Triassic to Cretaceous, felsic volcanic rock
- gb, Triassic to Cretaceous, gabbro
- Pzv, Devonian(?) and Permian, greenstone
- PZ, Cambrian to Jurassic, argillite
- C, Late Proterozoic to Pennsylvanian, marble
- grMz, Permian to Tertiary; most Mesozoic, granodiorite
- pC, Early Proterozoic to Miocene, gneiss
- gr-m, Early Proterozoic to Late Cretaceous, plutonic rock

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Sources: basemap - World Topographic Map, Esri
geology - 2010 Geologic Map of California, California Geological Survey, Depart of Conservation.

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TECHNICAL REPORT CALICO SILVER PROJECT

Calico Mining District Regional Geology Map

Figure 7-2

DRAWN BY: J.K. CHK'D BY: D.L. DATE: 22/ 03/ 24	Project Location: T10N R01E - T10N R01W, California Client: Apollo Gold and Silver Corporation Project: 233001578

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7.2 Local Geology

7.2.1 Calico Mountains and Calico Fault

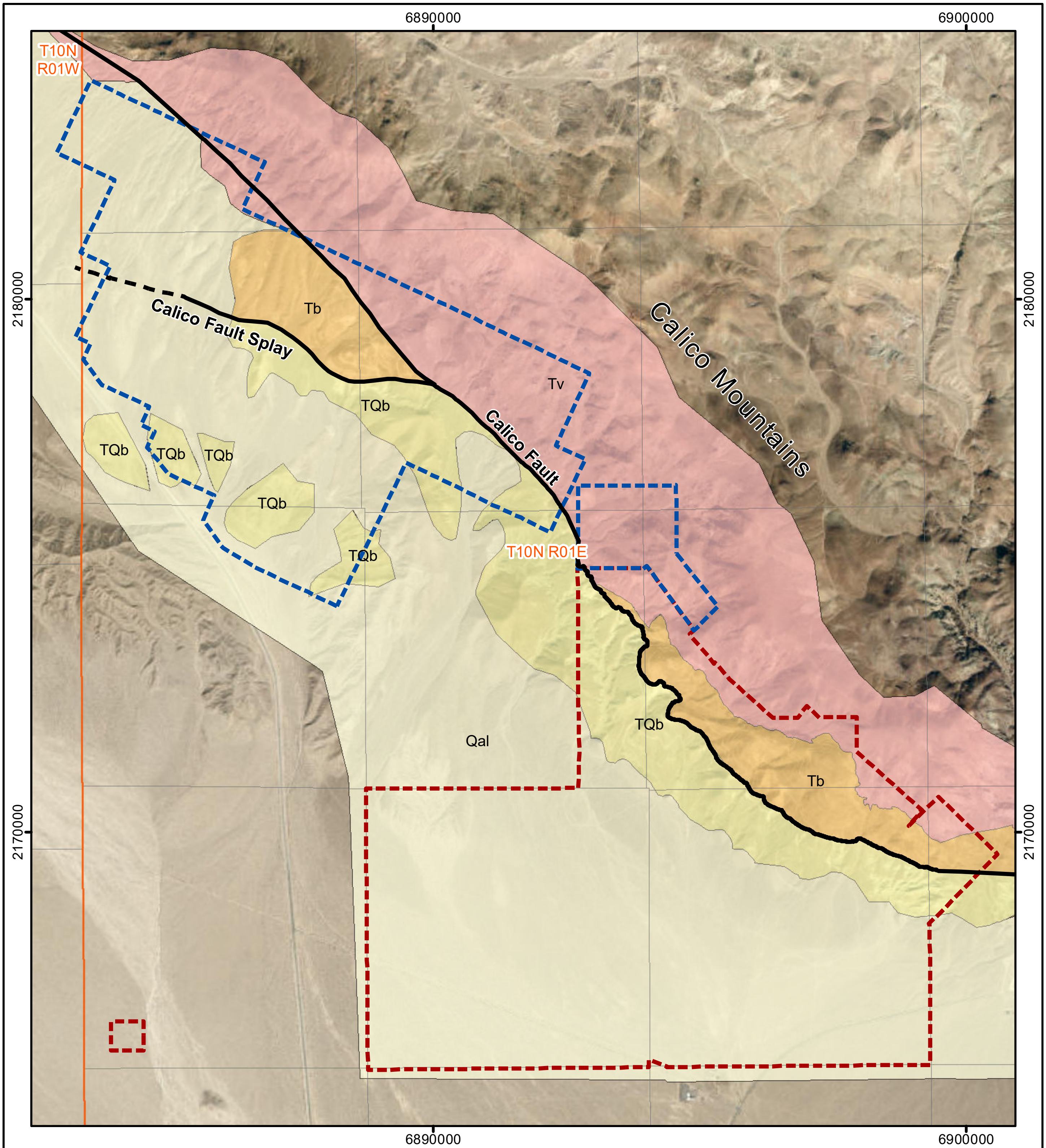
The Calico Mountains (range, hills) extend 9 miles (15 km) trending northwest-southeast and are predominantly composed of Tertiary (Miocene epoch) volcanics, volcaniclastics, sedimentary rocks, and dacitic/andesitic intrusions or otherwise stated a mixture of lake and stream sedimentary deposits, lava flows, and volcanic ash. (Singleton and Gans, 2008, DeCourten, 2010, Eaton, 1982).

Along the western margin of the Calico Mountains there is the major dextral (right-lateral) strike-slip Calico Fault with a northwest-southeast trend as shown in Figure 7-2 and Figure 7-3. In the area of mineralization on the Calico Project, the mineralized sandstones terminate to the west along the younger Calico fault. Silver mineralization appears to be associated with mid-Tertiary volcanic activity along northwest-southeast trending fracture zones common in the region (Singleton and Gans, 2008). Recent studies have identified two Tertiary-age, large-scale crustal deformation events. The terrain is associated with extensive detachment faulting dating to 23 million years before present, followed and displaced by the strike slip fault dominant regime beginning about 18 million years ago and continuing to the present.

7.2.2 Stratigraphy

Within the Calico Project four lithostratigraphic units that have been identified by the Author through review of various studies referenced here, the most recent being Pratt (2021). These units from youngest to oldest are: Quaternary Yermo Formation and alluvium, Quaternary and Tertiary Upper Barstow Formation, Tertiary (Miocene) Lower Barstow Formation and Pickhandle Formation. The Barstow Formation is divided into upper and lower units to separate zones of silver mineralization (Lower Barstow) from unmineralized zones (Upper Barstow). The Barstow Formation is 3,280 feet (1,000 m) thick at its type-locality in the Mud Hills (Dibblee, 1968; Woodburne et al., 1990).

The surface extents of these units described below are illustrated in Figure 7-3, Local Geology Map and Figure 7-4 Generalized Stratigraphic Column which is primarily derived from Pratt (2008, 2012 and 2021) and Singleton and Gans (2008).



Legend

- Langtry Property
- Waterloo Property
- Section
- Township and Range
- Calico Fault
- Fault Inferred

Local Simplified Geology

Qal	Quaternary Yermo Formation and Alluvium
TQb	Tertiary and Quaternary Upper Barstow
Tb	Tertiary (Miocene) Lower Barstow
Tv	Tertiary Pickhandle Volcanics

N

0 400 800
Meters

0 2,600
Feet

Scale 1:31,200
(At original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri
geology - Modified from Dibblee,1970 USGS Daggett Quad;
Pratt, 2012; and Kirkpatrick, 1974.

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Calico Project
Local Geology Map

Figure 7-3

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Gold and Silver Corporation
Project: 233001578

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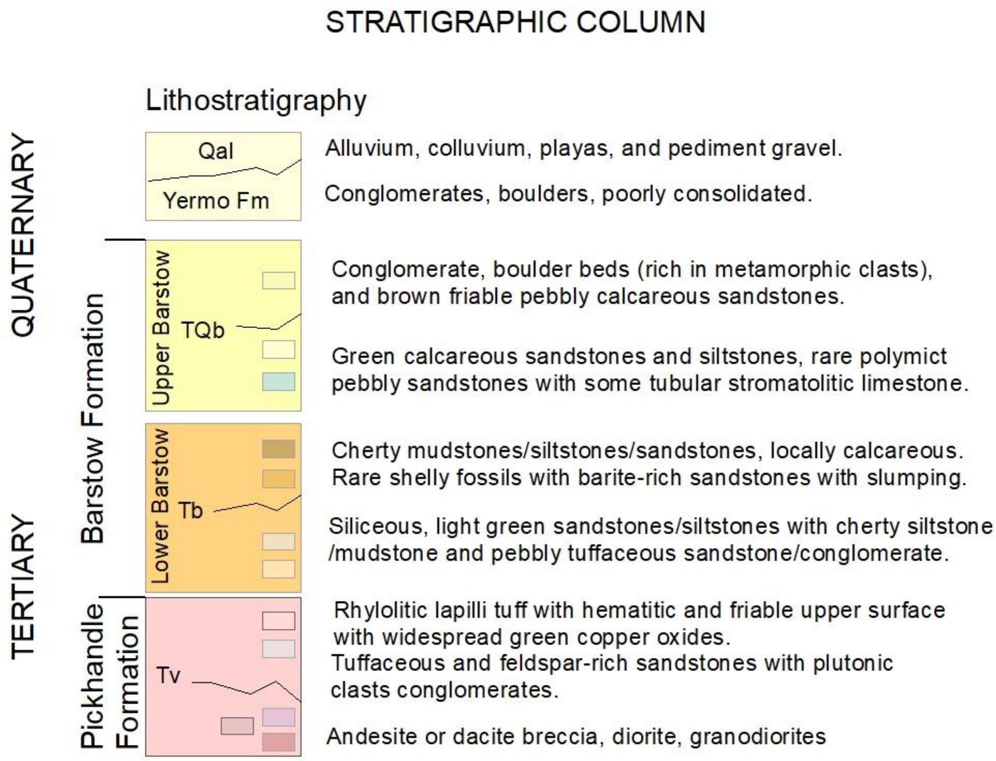
Figure 7-4 Calico Project Generalized Stratigraphic Column



7.2.2 1 Quaternary Yermo Formation and Alluvium

The Quaternary Yermo Formation comprises alluvium, colluvium, playas, pediment gravel, poorly consolidated conglomerate, and boulders.

7.2.2.2 Quaternary and Tertiary Upper Barstow Formation

The Upper Barstow Formation younger Quaternary subunit comprises conglomerate, boulder beds (rich in metamorphic clasts), and brown friable pebbly calcareous sandstones. Below are Tertiary green calcareous sandstones and siltstones, rare polymictic pebbly sandstones with some tubular stromatolitic limestone. These units are unmineralized with respect to silver in the area of the Waterloo and Langtry properties.

7.2.2.3 Tertiary (Miocene) Lower Barstow Formation

The Lower Barstow Formation comprises mixed assemblages that include cherty mudstones/siltstones/sandstones, locally calcareous at the top grading into siliceous, light green sandstones/siltstones with cherty siltstone/mudstone and pebbly tuffaceous sandstone/conglomerate towards the base of the formation. Rare shelly fossils with barite-rich sandstones with slumping are found in the upper subunits

The Lower Barstow formation in the Project area hosts disseminated silver mineralization that is the target resource.

7.2.2.4 Tertiary Pickhandle Formation

The Pickhandle Formation is up to 1,500 ft (457 m) thick and comprises rhyolitic lapilli tuff with hematitic and friable upper surface with widespread green copper oxides. Tuffaceous and feldspar-rich sandstones with plutonic clasts conglomerates are also present. Andesite or dacite breccia, diorite, granodiorites are found in the middle and lower part of the unit.

Silver and gold vein mineralization is hosted in the Pickhandle Formation volcanic flows and breccias. There is insufficient information on the precious metal mineralization with the Pickhandle Formation to identify an exploration target or mineral resource.

Figure 7-5 Waterloo Geology Map and Figure 7-6 Langtry Geology Map illustrate the surface extents of the lithostratigraphic units as described above and separated by specific rock types.

7.2.3 Calico Structural Setting

The structural history described below is interpreted information sourced from Pan American Minerals Corp., (1994), Matson (2008), and Moran et al., (2012).

The Calico Mountains are thought to be part of the upper plate of a regionally extensive detachment fault. The fault surface is not known to be exposed in the Calico district but is projected from exposures in nearby ranges. This detachment block consists of fractured block fault segments that have been displaced in varying directions by mainly normal faulting and vertical rotation.

The regional deformation has been displaced by movement along the N70°W to N40°W trending system of the Calico-Hildago fault zone, which is a major Holocene and locally, historically active zone. The fault zone is a 115-km-long right-lateral fault system that lies along the southwest flank of the Calico Mountains and roughly defines the western boundary of the range front. The Calico-Hidalgo fault zone is delineated by well-defined geomorphic evidence of Holocene right lateral strike-slip displacement and locally offset Holocene alluvium.

Numerous folds have been mapped in the Calico Mountains, and the general structure of the bedded rocks is that of an anticlinorium plunging northward. Beds of the Barstow Formation north of the Calico fault are intensely folded into numerous east-west – trending, upright anticlines and synclines that represent 25 to 33% (up to [0.3 mile] ~0.5

km) north-south shortening. Folds are detached along the base of the Barstow beds and thrust over the Pickhandle Formation, which dips homoclinally ~15–30° to the south-southeast. The geometry and distribution of folds are most compatible with localized transpression between the Barstow and Pickhandle Formations. The transpressional folding and faulting in the Calico Mountains postdate the ca. 17 Ma dacite intrusions and appear to be largely restricted to the area along the Calico fault restraining bend.

Deformation by faulting, with rotation and warping, is the major structural feature of the region. The most prominent are northwest trending faults, with right lateral movement. Extension faulting may have triggered volcanic activity during placement of the Pickhandle Formation, culminating in a major episode during the upper flows. Movement on faults is much larger in the Pickhandle Formation than the Barstow Formation. Some of the major faults are warped and branching. Blocks have been tilted by rotation on curved fault planes. Later movement occurred along the range-front faults in the south and southwest including the Calico fault. Rotation is demonstrated by the steep dip of the Barstow units. The Calico fault cuts through the Langtry Property with a right lateral movement. Complex crumpling of the beds within the Barstow resulted from compression.

Most recently, the Calico and West Calico sections exhibited triggered slip during 1992 as a result of the magnitude 7.3 Landers earthquake. Later, in 1997, a magnitude 5.3 aftershock occurred in the Calico Mountains near the Calico ghost town (shown in Figure 6-1). Total strike slip displacement on the Calico fault may be several miles, while vertical displacement is several hundred feet with large local variations.

Surface mapping of the Calico structural setting described above, and exploration drilling has been used by the Author to build structural models of the Calico Project to set the boundary limits to silver mineralization. Waterloo and Langtry are described separately below.

7.2.3.1 Waterloo Structure

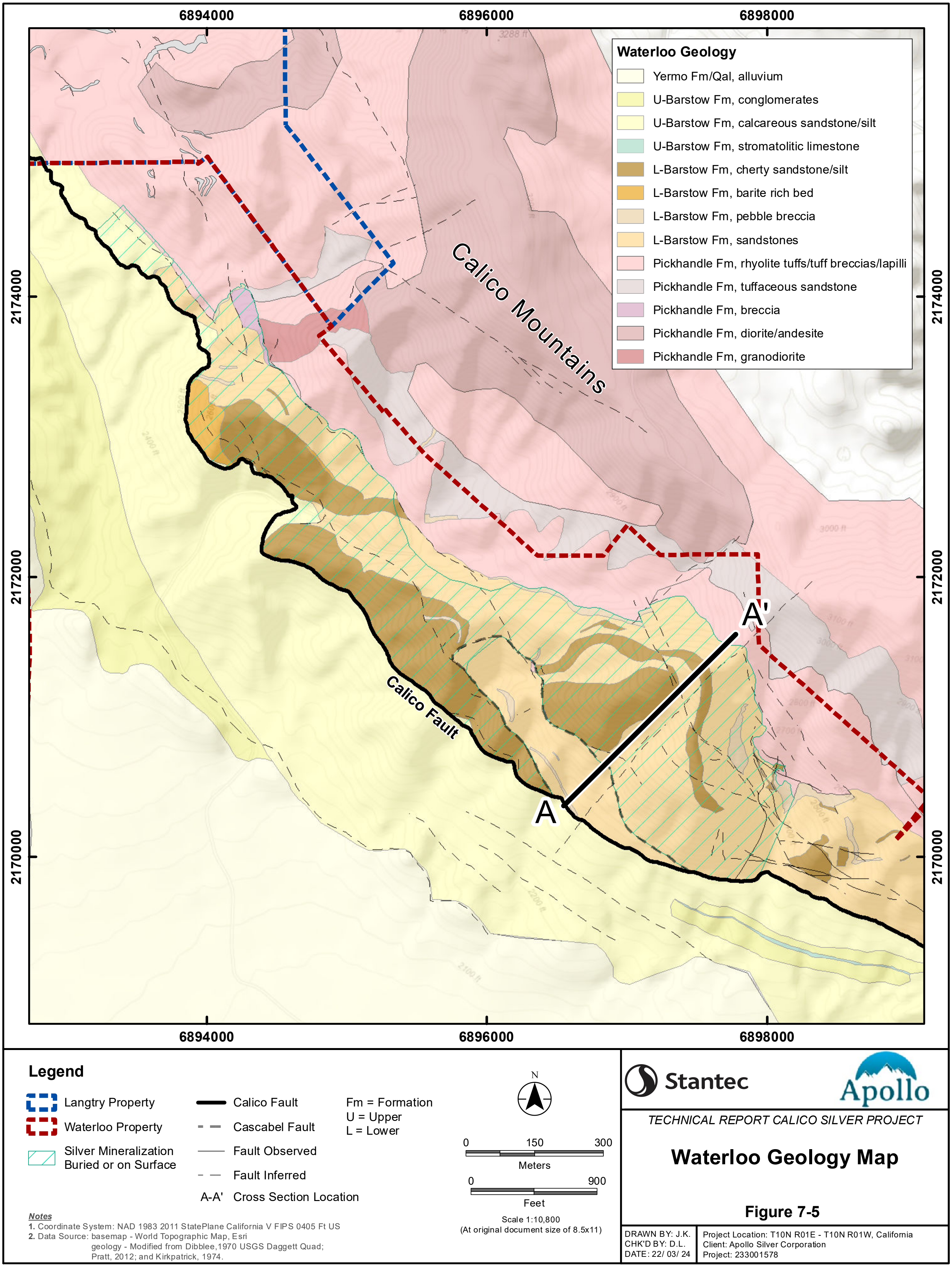
The Calico fault as shown in Figure 7-5 Waterloo Geology Map and Figure 7-7 Waterloo Cross-Section A-A’ is interpreted to be a reactivated thrust fault dipping towards the northeast. Though regionally the Calico fault is interpreted to have started as a normal-displacement fault with significant strike slip movement, the current juxtaposition of younger Upper Barstow with older Lower Barstow along the fault boundary indicates reverse-fault (thrust) displacement. As such, in Waterloo as well as Langtry, the Calico faults represents a resource limiting faults separating the unmineralized Upper Barstow from the mineralized Lower Barstow.

A fault splay from the Calico fault, referred to as the Cascabel fault, has been mapped on surface by Pratt (2008, 2012) and confirmed via limited exploration drilling and is shown in Figure 7-5 and Figure 7-7. The limited drilling within the Cascabel fault block area indicates the Barstow Formation to be poorly mineralized and suggests that it is a younger horizon of the Barstow thrust against older, mineralized Barstow. However more drilling needs to be completed in this area to both determine the nature of the Cascabel fault and the extent of the mineralization in this block.

Within the Barstow and Pickhandle formations localized folding and faulting has been noted from regional and local mapping (Pratt 2021, 2012 and 2008; Singelton and Gans, 2008 and Dibblee, 1970). However, historic drillhole records are mostly RC-type (rock chip) holes that do not provide the detailed lithostratigraphy and structural information to include accurate modelling of local folds and faults. Similarly, the contact between the Lower Barstow Formation and Pickhandle Formation cannot be easily determined visually at depth beyond the mapped surface contact. Exploration drilling is interpreted to be mostly confined to within the Lower Barstow formation where disseminated silver mineralization is found. The Barstow-Pickhandle formation contact is interpretated to be inferred. Hatched in green in Figure 7-5 is the projected extent of silver mineralization within the Lower Barstow Formation as determined from exploration drilling records.

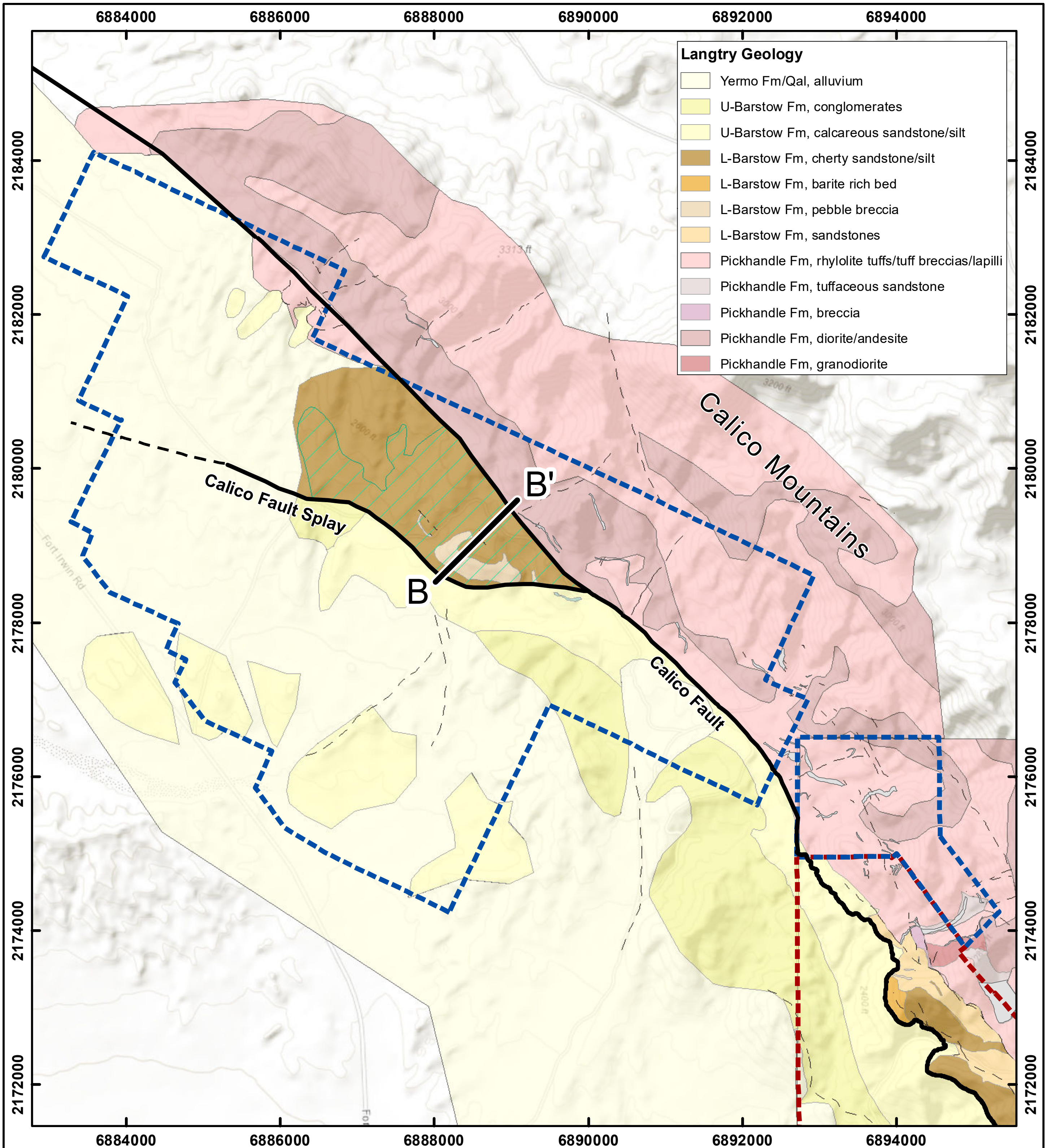
7.2.3.2 Langtry Structure

At Langtry the Calico fault is split as shown in Figure 7-6 Langtry Geology Map and Figure 7-8 Langtry Cross-Section B-B'. The Calico thrust fault envelopes the mineralized Lower Barstow formation such that in the southwest the Lower Barstow abuts the unmineralized Upper Barstow, and in the northeast the Lower Barstow abuts the Pickhandle Formation. Though precious metal vein mineralization in the Pickhandle formation has been identified in the Calico district, there is insufficient data at Langtry to support an exploration target and/or resource further northeast of the Calico fault at Langtry. Similar to Waterloo, there is insufficient data in the drillhole records to model localized folding and faulting at depth and exploration drilling is interpreted to be mostly confined to within the Lower Barstow Formation where disseminated silver mineralization is found. Examination of the mineralization data and surface mapping at Langtry (Pratt, 2021) do suggest that the Barstow formation beds are generally flat-lying. The upfaulted Barstow-Pickhandle formation contact below the drillholes as shown in Figure 7-8 cross section is inferred.



Waterloo Geology Map

Figure 7-5



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Legend

- Langtry Property
- Waterloo Property
- Silver Mineralization Buried or on Surface
- Calico Fault and Splay
- Fault Observed
- Fault Inferred
- B-B' Cross Section Location

Fm = Formation
U = Upper
L = Lower

N

0 300 600
Meters

0 1,800
Feet

Scale 1:21,600
(At original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri
geology - Modified from Dibblee,1970 USGS Daggett Quad; Pratt, 2012; and Kirkpatrick, 1974.

Stantec Apollo

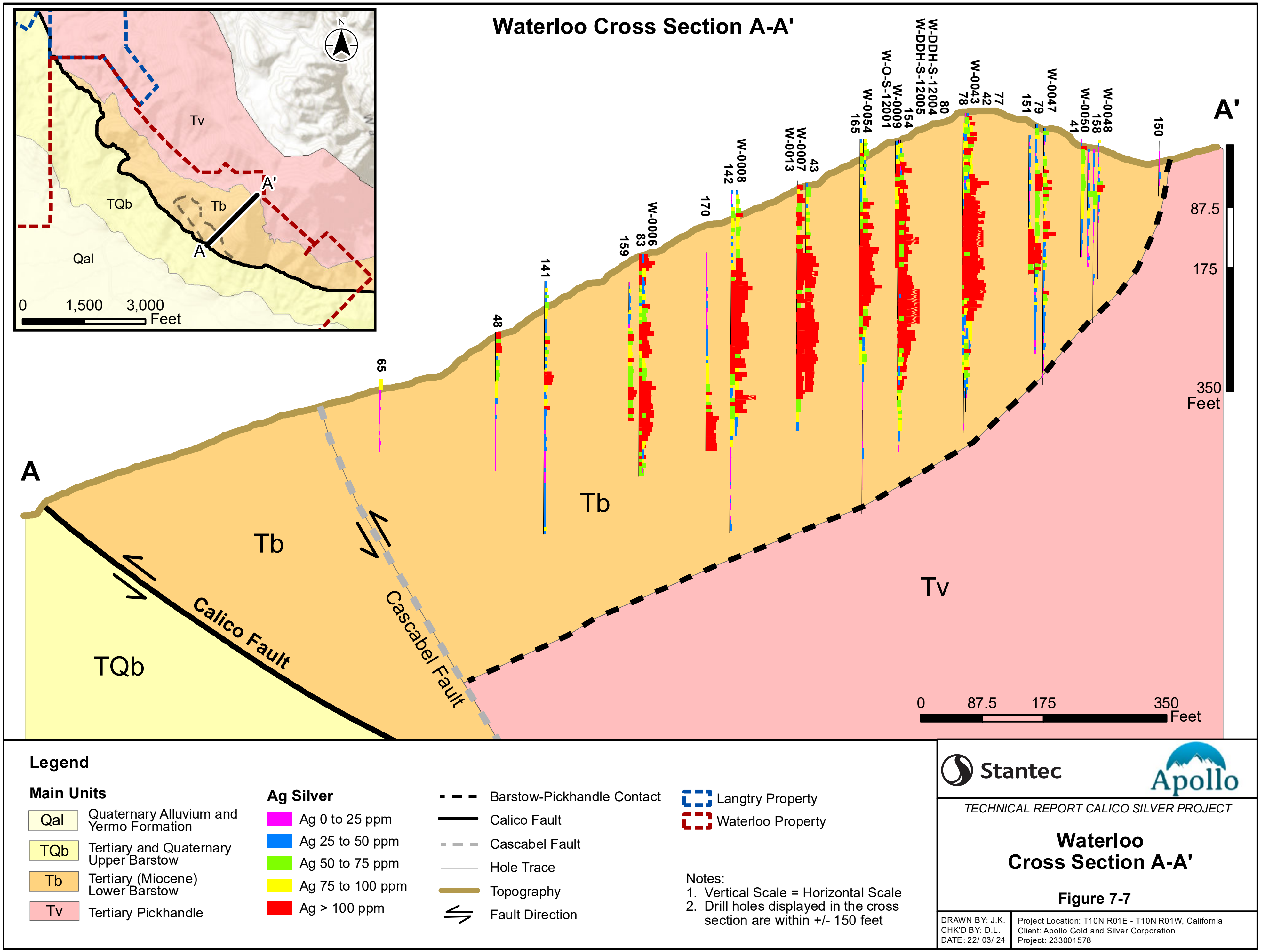
TECHNICAL REPORT CALICO SILVER PROJECT

Langtry Geology Map

Figure 7-6

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578



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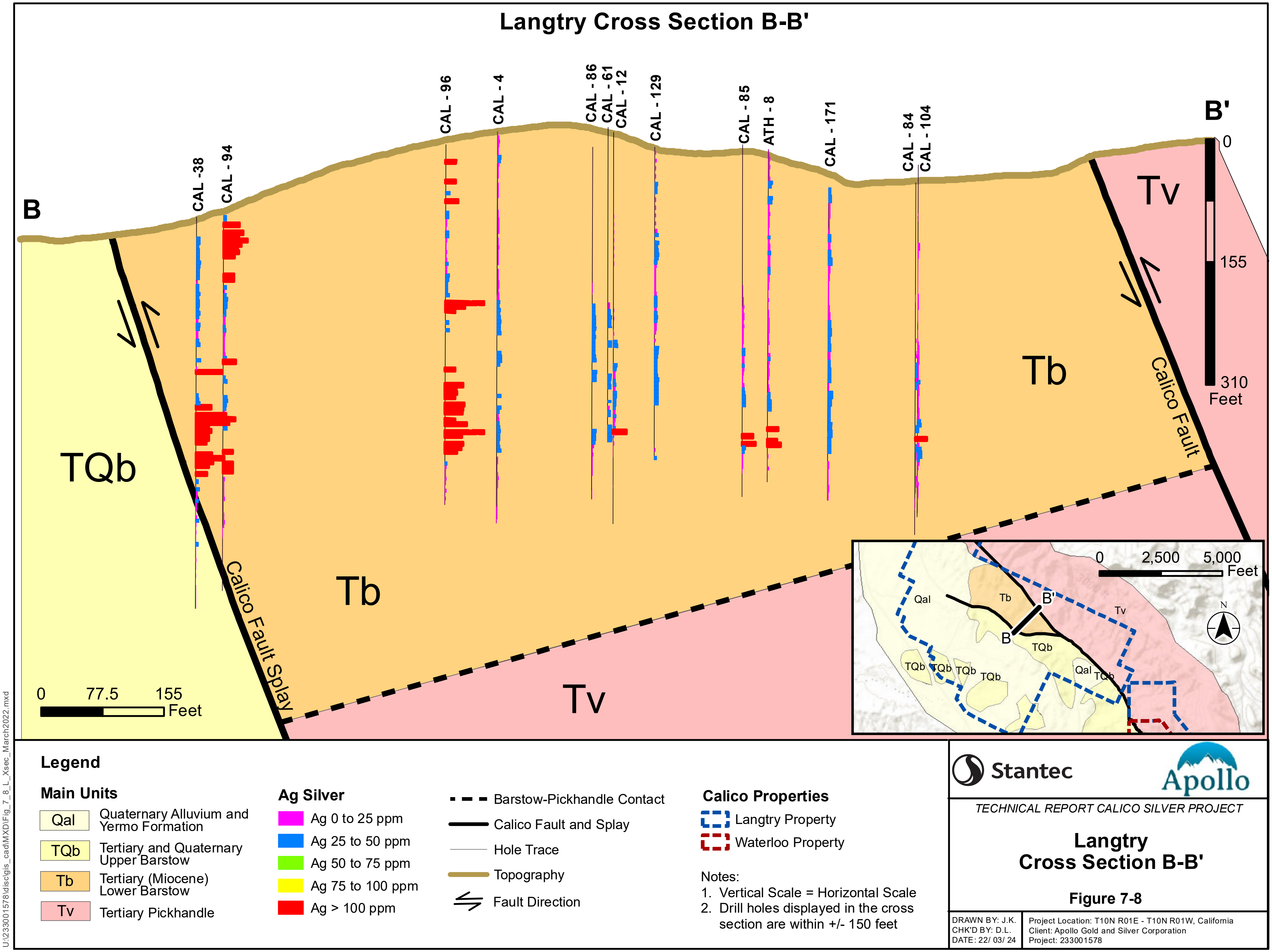
Langtry Cross Section B-B'
B
B'
CAL -38
CAL - 94
CAL - 96
CAL - 4
CAL - 86
CAL - 61
CAL - 12
CAL - 129
CAL - 85
ATH - 8
CAL - 171
CAL - 84
CAL - 104
TQb
Tb
Tv
Calico Fault Splay
Calico Fault
0
155
310
Feet
0 77.5 155 Feet
0 2,500 5,000 Feet
Qal
Tb
Tv
TQb
N
Legend
Main Units
Qal Quaternary Alluvium and Yermo Formation
TQb Tertiary and Quaternary Upper Barstow
Tb Tertiary (Miocene) Lower Barstow
Tv Tertiary Pickhandle
Ag Silver
Ag 0 to 25 ppm
Ag 25 to 50 ppm
Ag 50 to 75 ppm
Ag 75 to 100 ppm
Ag > 100 ppm
Barstow-Pickhandle Contact
Calico Fault and Splay
Hole Trace
Topography
Fault Direction
Calico Properties
Langtry Property
Waterloo Property
Notes:
1. Vertical Scale = Horizontal Scale
2. Drill holes displayed in the cross section are within +/- 150 feet
Stantec
Apollo
TECHNICAL REPORT CALICO SILVER PROJECT
Langtry Cross Section B-B'
Figure 7-8
DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24
Project Location: T10N R01E - T10N R01W, California
Client: Apollo Gold and Silver Corporation
Project: 233001578
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7.3 Mineralization

The silver mineralization at Waterloo and Langtry are similar and are associated with mid-Tertiary volcanic activity along the northwest trending fracture zones in metamorphosed sedimentary rocks of the Lower Barstow Formation and underlying Pickhandle Formation volcanics. Mineralization is interpreted to be epithermal type expressed as two styles: vein-type, apparently emplaced along listric faults within the Pickhandle Formation, and disseminated, within siliceous sedimentary rocks of the lower Barstow Formation (Pratt, 2021, 2012, 2008 and Fletcher, 1986).

Both types of mineralization have been identified on the Calico Project: large tonnage, moderate to low grade disseminated and veins, both with similar mineralization (silver-barite hosted in quartz). The disseminated silver-barite mineralization is hosted primarily by the Lower Barstow Formation cherty sandstones and siltstones. Vein mineralization is hosted in the underlying volcanic flows and breccias of primarily dacitic to andesitic composition of the Pickhandle Formation. Both types of mineralization are interpreted to have formed from a common event, with the host rock controlling the style of mineralization. Fletcher (1986) suggests an age of mineralization at about 17 Ma for the event. The vein network generally parallels a regional zone of northwestern-trending faults that has acted as possibly feeder for mineralization and has displaced it during periods of tectonic reactivation. The timing of mineralization (15-20 Ma) aligns with a period of subduction and extension in the region.

Paragenesis of mineralization is similar in both the disseminated and vein-style mineralization with early barite followed by a silver-silicification stage, and then a late calcite stage. This was followed by an even later stage of secondary oxides and jasperoid likely associated with fault reactivation (Fletcher, 1986). Subsequent oxidation of some veins by meteoric water resulted in the formation of supergene oxides, carbonates and silver chlorides. A late-stage magnetite-manganese oxide-native silver bearing event has also been noted in the district.

The dominant minerals Waterloo are reported to be native silver, with lesser amounts of argentiferous pyrite, argentite, cerargyrite, embolite and argentojarosite, associated with barite, quartz and later calcite, forming part of large, disseminated silver-barite deposit (Pan American, 1994).

The disseminated silver mineralization at Langtry is associated with silica and lesser barite along with hematite, calcite, silver-hosted sulphides (acanthite), very fine native silver, very fine sphalerite, very fine galena, and local occurrences of argentojarosite and cerargyrite.

The general dimensions of the mineralized zone at Waterloo covers an area approximately 1,500 ft (457 m) wide by 6,500 ft (1981 m) long extending from outcrop and plunging towards the southwest to a maximum modelled depth of approximately 600 ft (183 m) below surface. The mineralization is continuous from surface. The general dimensions of the mineralized zone at the Langtry covers an area approximately 1,500 ft (457 m) wide by 5,000 ft (1524 m) long extending from outcrop and plunging towards the southwest to a maximum modelled depth of approximately 600 ft (183 m) below surface. The mineralization is continuous from surface.

8.0 DEPOSIT TYPES

The deposit types in the Calico Mining District have been described as an epithermal exhalative or replacement type disseminated (Fletcher, 1986 and Pratt, 2008 and 2012) and vein-style. The Calico Project hosts both types however the silver mineralization that is the focus of this Technical Report is the hot-spring/replacement disseminated type, hosted in sedimentary rocks.

The Author has reviewed deposit type descriptions for both the Waterloo and Langtry properties and has identified the description from Samari and Breckenridge (2021a) who in reference Tarman and Jessey (1989), to be most appropriate. The following is an excerpt from the Samari and Breckenridge (2021a).

“Many researchers have considered the Calico District to be a classic example of the epithermal precious metal deposit. Certainly, the district has many characteristic features including:

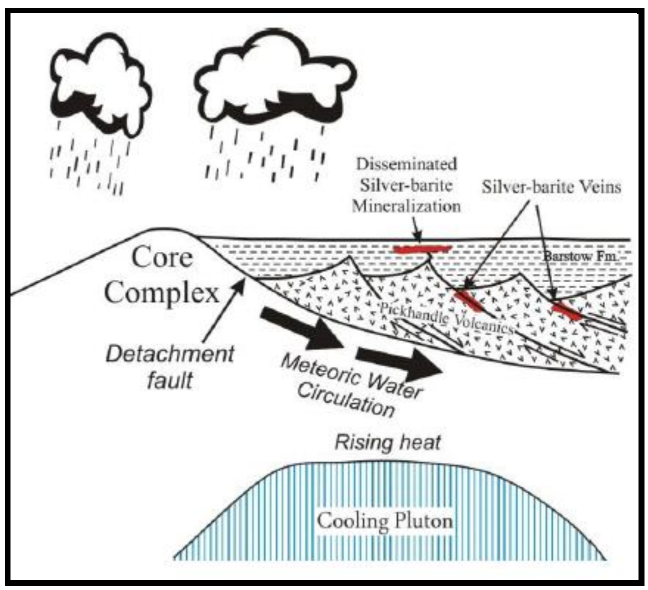
1. *Association with volcanic rocks*
2. *Tertiary age*
3. *Normal faulting suggestive of crustal extension*
4. *Low temperature mineralization*
5. *[Potassium feldspar] and propylitic alteration*

The most common epithermal model relates ore deposition to periods of extensional volcanism associated with plate subduction. The timing of mineralization in the Calico District (15-20 Ma) is inconsistent with a subduction-related extensional model. Recent attention has focused on the detachment model *to account for extension in many of the southern California precious metal districts. Detachment faults were originally described along the flanks of the Calico Mountains by Weber (1965) however, these detachment faults bear little similarity to classic detachment faults described by Davis and others (1980) in the eastern Mojave and Sonora Deserts. The Calico detachments are best termed gravity slides and are not related to deep crustal extension as are those in other districts. Moreover, even the gravity slide model has been challenged (Payne & Glass, 1987). In addition, the Barstow mineralization can be demonstrated to predate deformation associated with the "gravity slide" (Fletcher, 1986). More recently, Glazner et al. (1988) have documented detachment faulting in the Waterman Hills a few kilometers to the west of the Calico Mountains. Assuming the Calico Mountains represent the upper plate of a detachment block, the high angle northwest-trending barite-silver veins could represent mineralized listric faults described in most detachment terranes.*

The following model best explains the district's ore deposits. Extensional stresses during the early Miocene, related to detachment faulting, created a series of normal faults in the *upper plate Pickhandle volcanics. A small stock was emplaced in the vicinity of Wall Street Canyon which drove a hydrothermal convective system mineralizing the normal faults as well as the flat-lying sediments of the Lower Barstow Formation. During the late Miocene, strike-slip movement began along the Calico fault reactivating the dip-slip faults. The reactivated faults underwent additional extension in areas adjacent to bends in the main Calico fault causing further dilation and permitting the circulation of meteoric waters which oxidized the existing mineralization and deposited secondary oxides and silver chlorides."*

Samari and Breckenridge (2021a) believe that although evidence of mineralogy within the hydrothermal veins show they are likely a structure-hosted epithermal vein, more studies such as fluid inclusion petrography, micro-thermometry, and estimation of fluid salinity are still required to confirm their sources. Figure 8-1 below is a schematic diagram after Jessey (2010) that best illustrates the detachment faulting and mineralization hypothesis for the deposit type model encountered on the Property.

Figure 8-1 Schematic Deposit Type Model (Jessey, 2010)



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9.0 EXPLORATION

Historical exploration completed on the Project is discussed in Section 6.

Recent exploration on the Project in late 2021 and early 2022 (prior to the January 28, 2022, effective date of this report) by Apollo includes surficial geologic mapping and grab sampling, petrography, assaying and whole rock geochemistry of surface grab samples, satellite elevation data acquisition and initiation of a ground 3D Induced Polarization (IP) geophysical survey. Results from surface grab sample assaying and whole rock analysis, petrographic analysis and the geophysical survey are pending and as such, have not been reviewed or utilized by the QP for this report. Compilation of the surficial mapping was still in progress as of the effective date of this report however preliminary interpretations of the fault locations by Pratt (2021), further supported by previous mapping (Pratt 2008 and 2012) were utilized for the resource modelling.

10.0 DRILLING

Apollo has not completed any drilling to date on the Calico Project. A summary of the historical drilling is presented in Section 6. Apollo is currently in the process of planning a mineral resource upgrade (e.g., infill) and expansion drilling program based on the results of geologic modelling and mineral resource estimates described in Section 14 and recommendations provided in Section 26.

11.0 SAMPLE PREPARATION, ANALYSES & SECURITY

Apollo nor Stronghold have yet analysed any drill hole samples on the Calico Project. The historical preparation, analyses and security of historical drillhole samples are discussed in Section 6.

12.0 DATA VERIFICATION

Verification of the exploration data used in the estimation of mineral resources on the Calico Project has included an audit of the Waterloo and Langtry drill hole assay records, site inspection of the Properties and independent evaluation of assay QA/QC records. Only silver analyses were reviewed in detail for QA/QC.

12.1 Drill Hole Assay Database Audit

For the drillhole assay database audit, 10% of the digital database records used in the geological model described in Section 14 were compared against original hardcopy records. Original assay records for Waterloo included Pan American certificates (from analyses completed at ALS Laboratories ("ALS") and ASARCO scanned original assay data. Original assay records for Langtry included Athena ALS certificates and Superior scanned original assay data. Comparison between digital and original records did not find any discrepancies.

ALS was used for assaying for both Calico Properties and at the time of sampling, was an ISO 9001:2015 certified and ISO/IEC 17025:2005 accredited geo-analytical laboratory. Pan American samples (Waterloo) were assayed at various ALS locations: Reno, Nevada; Elko, Nevada; Winnemucca, Nevada; and Vancouver, Canada. Athena samples (Langtry) were assayed at Reno, Nevada. At both Properties the sample information did not include chain of custody and data security documentation. Details on the QA/QC samples are discussed in Section 12.3.

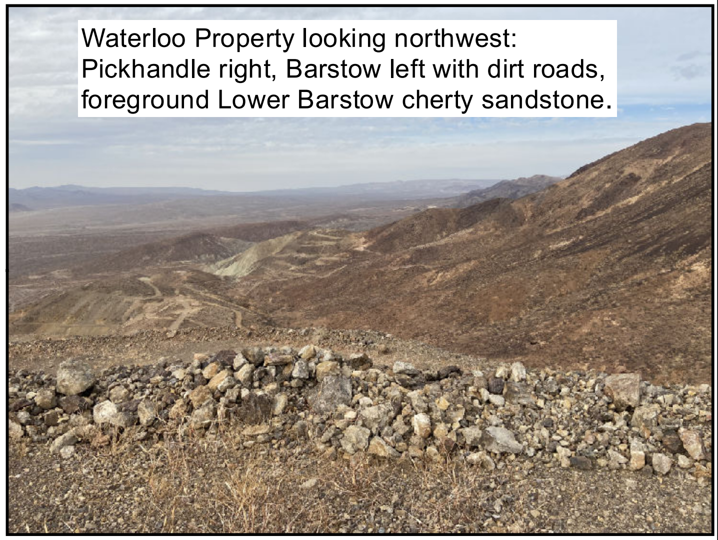
12.2 Site Inspection

Derek Loveday (QP) and Joan Kester, both full time employees of Stantec, conducted a site inspection of the Waterloo and Langtry Properties on December 13 to 14, 2021. While on-site, Stantec conducted general geological inspection of the Calico Properties, including review of the formations, lithologies, rock types, historical mine workings and drill collar locations (Figure 12-1) accompanied by Dr. Warren Pratt. Dr. Pratt was in the process at the time of completely geologic mapping at the Langtry Property and follow up mapping at the Waterloo Property.

The site inspection confirmed that drill hole collars uploaded to ArcGIS Field Maps software by Stantec corresponded with field drill hole collar locations as provided by Apollo, and their label tag in the field. During the site inspection, Stantec witnessed Apollo conducting surficial geological mapping of the Calico Properties and a 3D IP geophysical survey of the Project. The surface mapping and IP survey results were not complete as of the effective date of the report however their completion is not viewed to be a material impact on the geological model and resource estimate.

Stantec also inspected Apollo's storage facilities in Barstow where historical Waterloo RC chips samples and core samples were available for inspection. Langtry materials were not inspected during the site visit, as they are stored in Tucson, AZ. Apollo's internal QP, Cathy Fitzgerald, has inspected the Langtry drilling samples stored in Tucson in November 2021. The Waterloo core boxes and RC chip trays were well labeled and organized by footage/meters. The QP was able to photograph and review several available core and RC chips. Select holes from both Pan American and Asarco (W-0035, W-0048, W-0046, W-0053, 183, and 182) were selected from available RC chip trays for review of accurate lithologic reporting and completeness. Core samples W-DDH-S-12004 and W-DDH-S-12005 were additionally reviewed. Samples were chosen to represent a wide spatial location across the Waterloo Property. Chip observations against original geologists' descriptions and assay certificates indicated no material discrepancies or concerns.

Waterloo Collar W-0050



Waterloo Property looking northwest: Pickhandle right, Barstow left with dirt roads, foreground Lower Barstow cherty sandstone.

Waterloo Chip Trays - Drill Hole 183

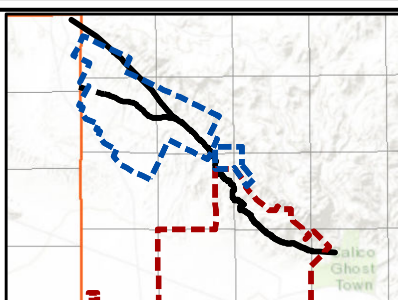
Langtry Collar CAL-104 looking northwest on Lower Barstow

Calico Fault at Langtry

Langtry Barite Trench

Legend

- Langtry Property
- Waterloo Property
- Calico Fault
- Fault Inferred



N

0 1.25 2.5 Miles

Stantec

Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
Site Visit Photographs

Figure 12-1

DRAWN BY: J.K. CHK'D BY: D.L. DATE: 22/ 03/ 24	Project Location: T10N R01E - T10N R01W, California Client: Apollo Gold and Silver Corporation Project: 233001578

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12.3 Assay QAQC

Stantec reviewed the silver assay QA/QC records and conducted independent QA/QC checks comparing duplicate samples with originals and sample standards test results. The QA/QC data has also been reviewed by others (Moran et al, 2012; Samari and Breckenridge, 2021a, 2012b) and found to be acceptable.

12.3.1 Waterloo QAQC

QA/QC assays were completed on Pan American analyses (3,480 parent samples) at 11.5% comprising 3.3% duplicates, 3.7% blanks and 4.5% standards. The Waterloo duplicates scatter plot shown in Figure 12-2 show good correlation with an R^2 of 0.9289. A few outliers are present, but overall duplicates comparisons are reasonably.

The Waterloo certified blank reference material (BL 116) was provide by WCM Minerals of Burnaby, BC, with Ag < 0.3 ppm. Waterloo blank assay results are shown on Figure 12-3. All samples were below 2 ppm with only 16% indicating anything other than 0.25 or less than 0.5 ppm. The blank analysis indicates negligible contamination in the sample stream. Pan American used blank material prepared from two types of landscaping rock purchased from Home Depot in Barstow, CA: a scoria lava and a marble.

The Waterloo certified silver standards included: PANAM1 (50.5 ppm) and CDN-ME-19 (103 ppm) both prepared by CDN Resource Laboratories Ltd., of Burnaby, BC; and PM1131 (112 ppm) that was prepared by WCM Minerals. The Waterloo standards silver assay results are shown in Figure 12-4. Most results plotted within 2 standard deviations.

12.3.2 Langtry QA/QC

QA/QC assays were completed on Athena analyses (1,194 total samples) at 9.3% comprising 4.0% duplicates, 2.8% blanks, and 2.5% standards. The Langtry duplicates scatter plot shown in Figure 12-2 show good correlation with an R^2 of 0.9895. Outliers were minor.

The Langtry blank reference material was prepared from two types of landscaping rock purchased from Home Depot in Barstow, California: a reddish-brown scoria and a clean white recrystallized marble. Langtry blank assay results are shown on Figure 12-3. All samples were below 1 ppm as shown in Figure 12-3. The blank analysis indicates negligible contamination in the sample stream.

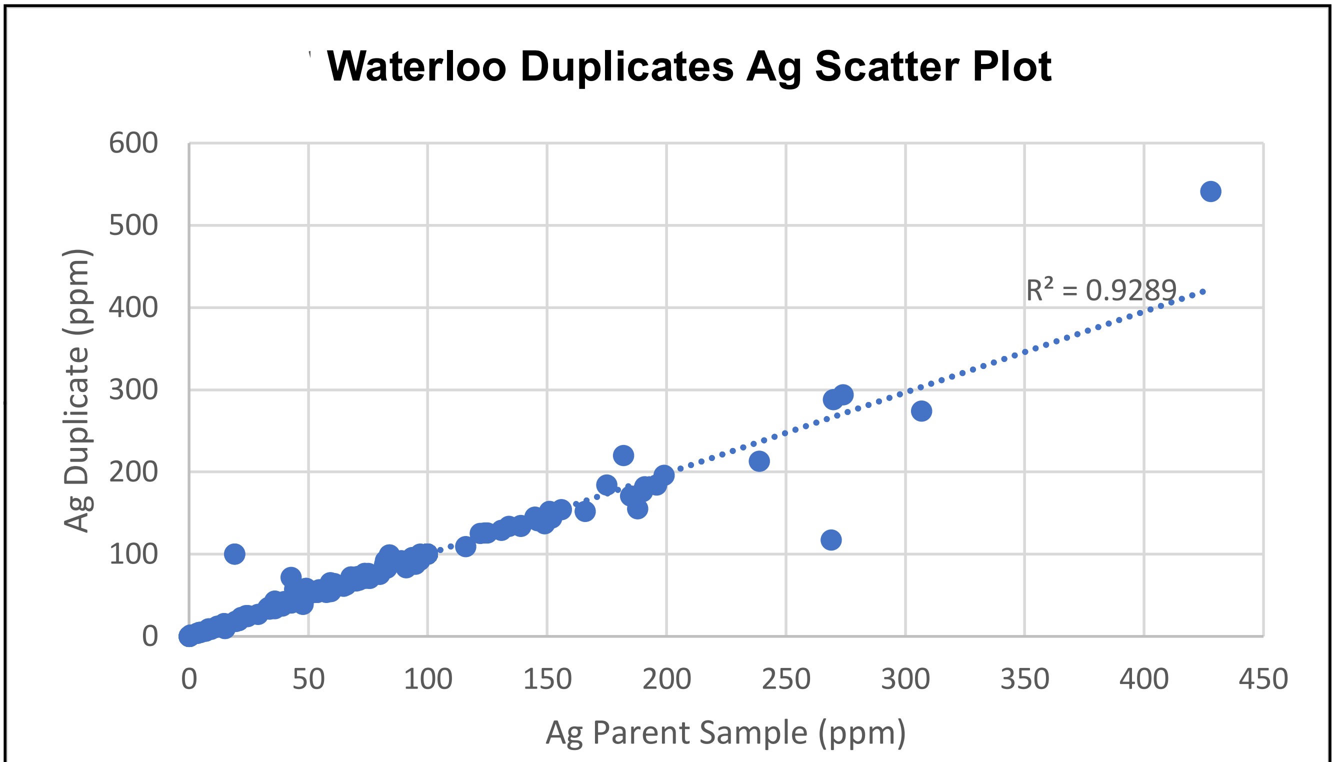
The Langtry silver standards were prepared by Analytical Solutions, Ltd., of Toronto, ON. Three silver standards were used: 65a (7.8 ppm), 67a (33.6 ppm) and 68a (42.9 ppm).

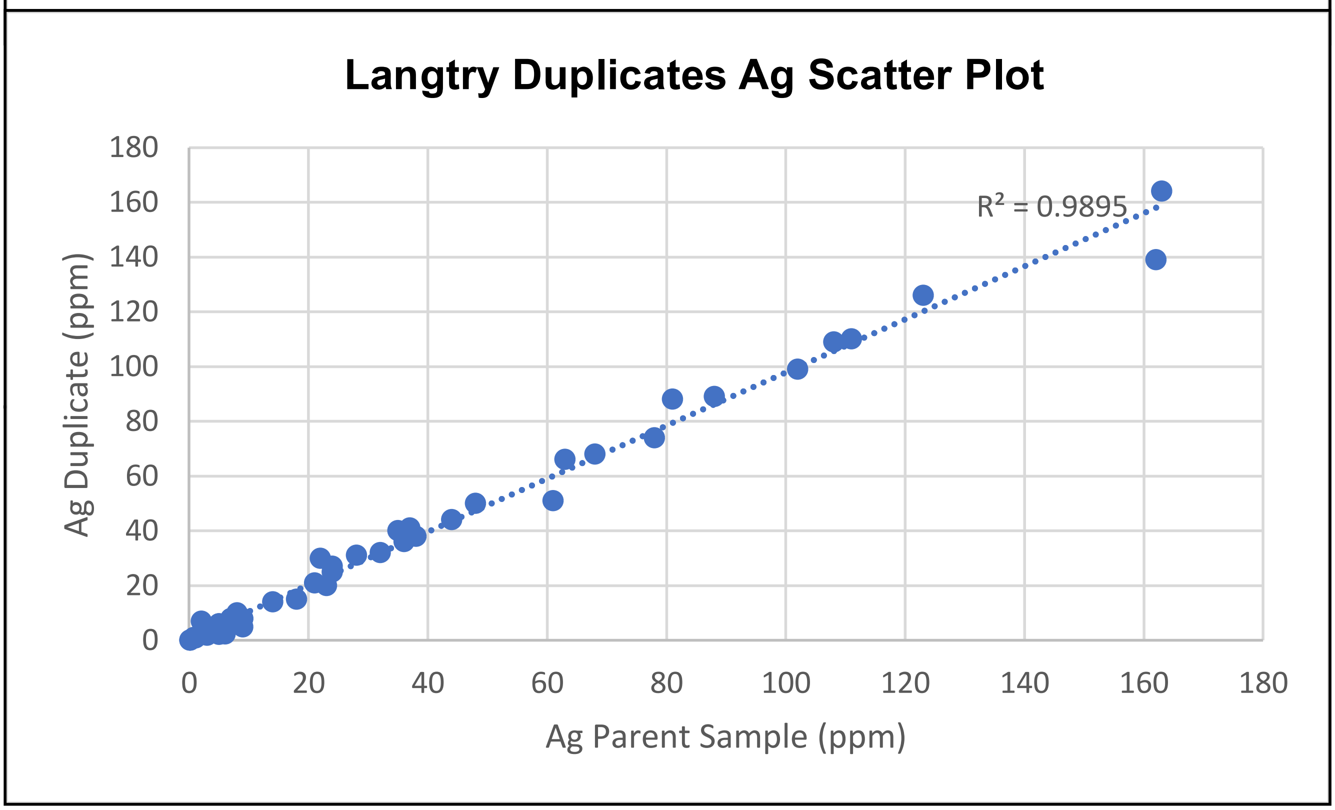
These three standards are currently listed under www.oreas.com with certificates based on ME-ICP41 testing method. According to OREAS website these standards are no longer available. Figure 12-5 compares the standard test results using two assay methods, ME-ICP41 and ME-GRA21. At the low-grade standard of (7.78 ppm Ag), fire assay (ME-GRA21) results do not show a good repeatability when compared to four acid digestion (ME-ICP41) testing method. Fire assay testing methods (ME-GRA21) are typically not performed for low silver grades such as 7.78 ppm and repeatability are not expected to be very good when compared to ME-ICP41. Repeatability for the 67a Ag standard (33.6 ppm) is good for both testing methods (ME-ICP41 and ME-GRA21) and all plot within two deviations of the published standard (www.oreas.com). Repeatability demonstrated for the 68a Ag standard (42.9 ppm) is reasonable, however there is one significant outlier for a single ME-ICP41 test result at 4.4 ppm and another minor outlier for ME-GRA21 test result at 44 ppm. The Author is of the opinion that the 4.4 ppm outlier could have been incorrectly recorded on the ALS assay certificate (RE11016545) and may possibly be 44 ppm.

12.4 QP Opinion on Adequacy

A 10% audit of the drill hole assay records did not identify any discrepancies between digital and hardcopy records. The site inspection was successful in finding evidence for historical drilling. Hole locations identified in the field did conform with drill hole survey records. Onsite observations of select Waterloo chip and core samples located at Apollo's Barstow, CA storage facility did align with digital exploration records. No Langtry samples were available for inspection during the site visit by the Stantec QP. Independent assessment of QA/QC assay records did not identify materially significant discrepancies other than one large outlier in a single assay standard results that is speculated to be a typo in the original assay certificate.

It is the opinion of the Author and QP, following an audit of drill hole assay records, site inspection and independent review of QA/QC assay data, that the historic exploration data could be used as the basis for building a geologic model and estimation of silver mineral resources on the Calico Project.





Legend

- Sample Compared to Duplicate
- Trend Line

Ag silver
ppm parts per million

Stantec
Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
Laboratory Blind Duplicates

Figure 12-2

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Gold and Silver Corporation
Project: 233001578

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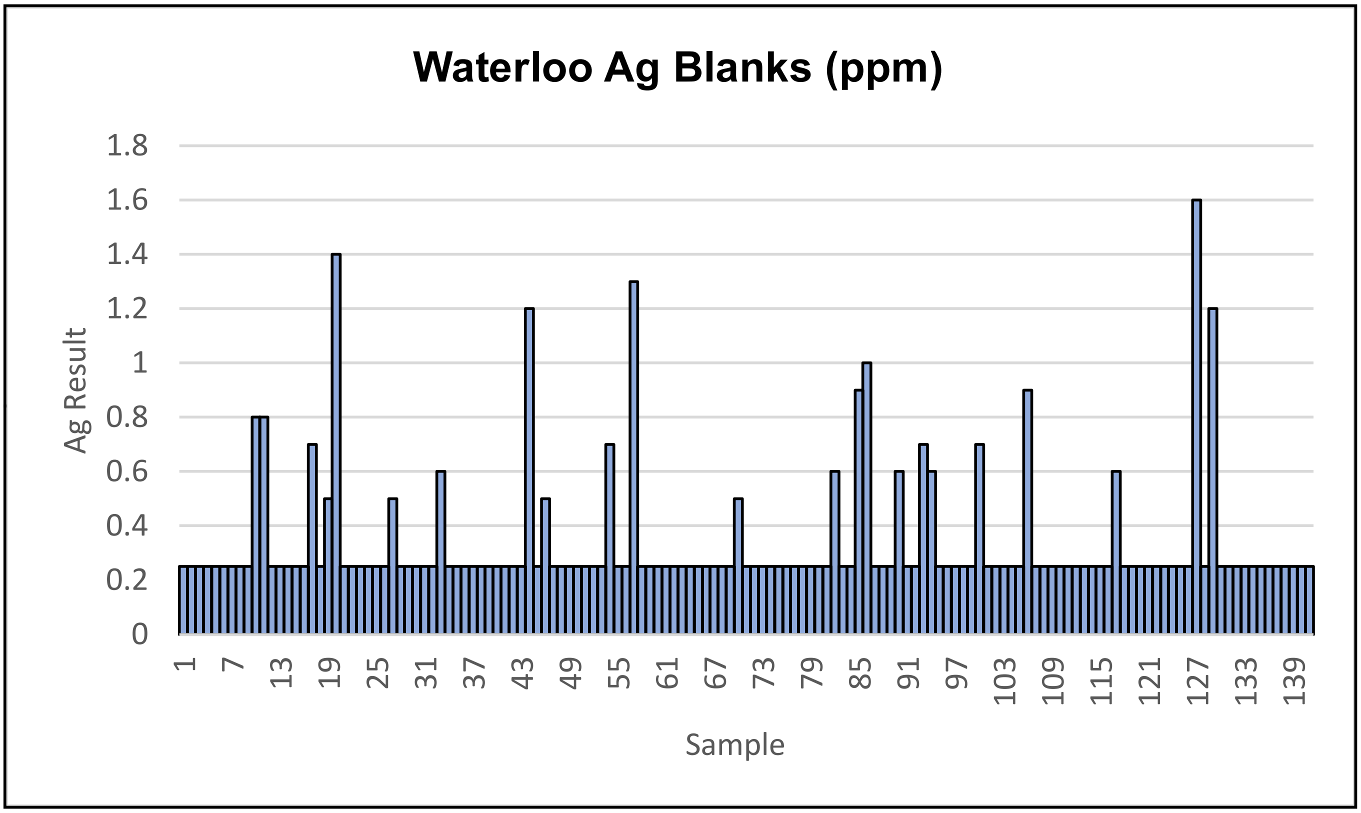
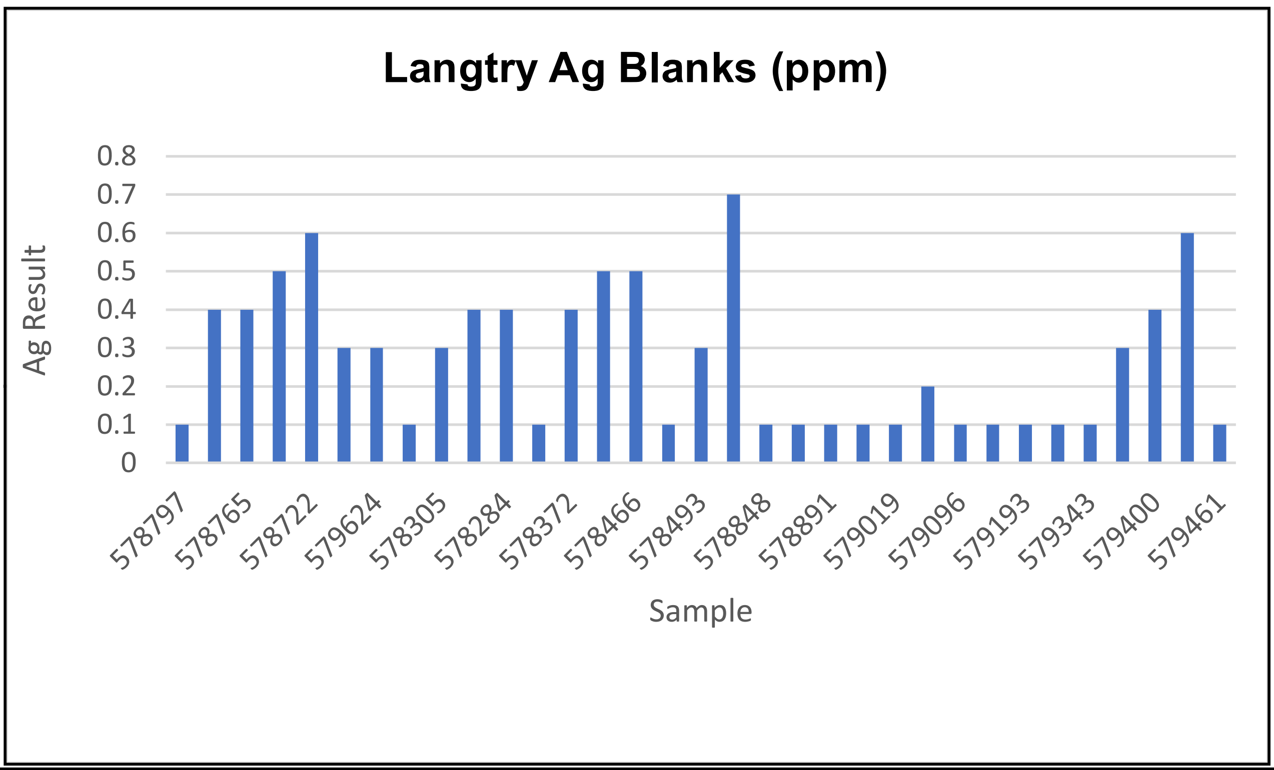




Legend

Ag silver

ppm parts per million

Stantec

Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

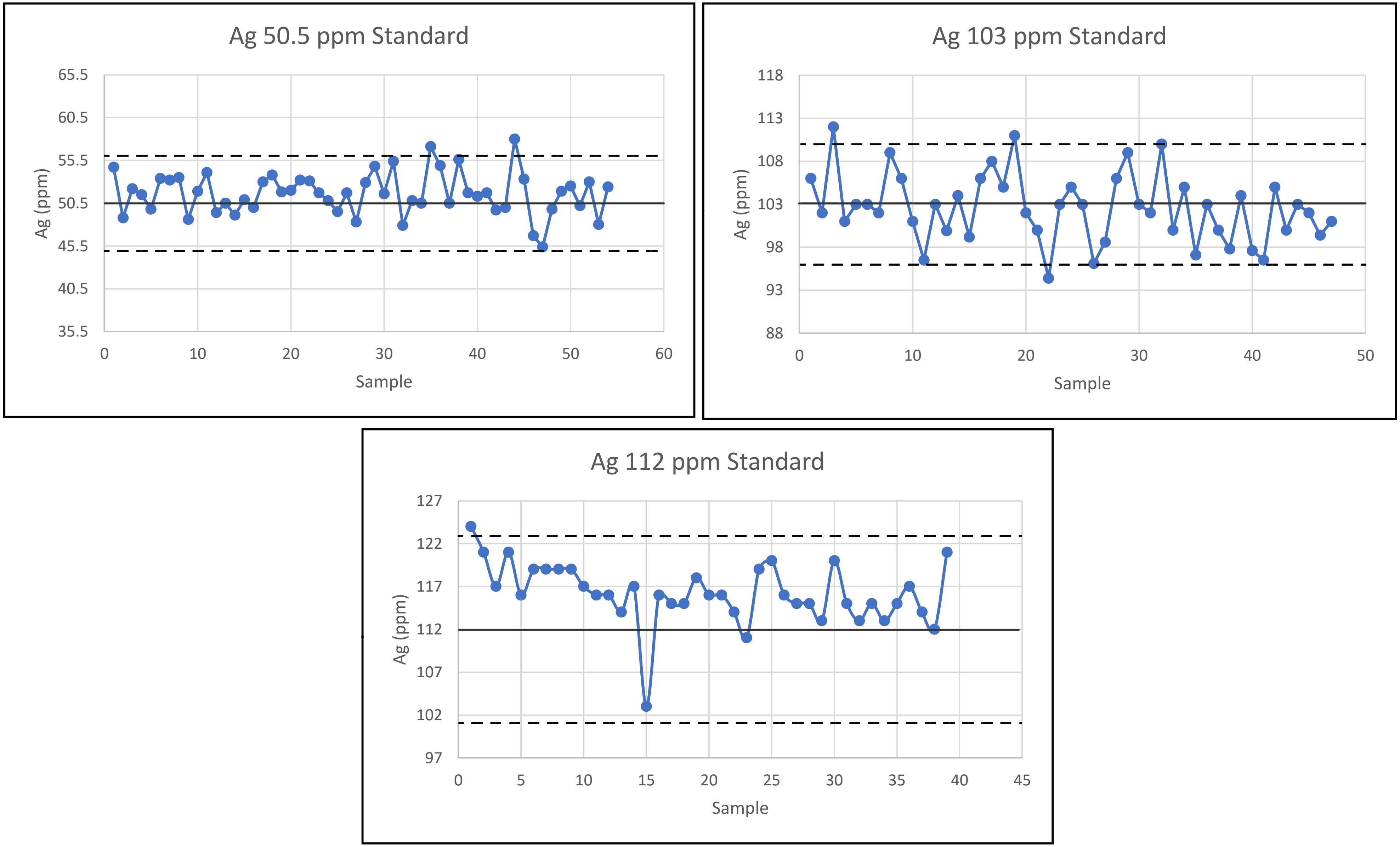
Calico Project
Laboratory Blanks

Figure 12-3

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Gold and Silver Corporation
Project: 233001578

U:\233001578\disc\gis_cad\MXD\Fig_12_3_CalicoBlanks_March2022_P.mxd



Legend

- Sample Value
- Sample Line
- Standard Value
- +/- 2 Standard Devations of Standard

Ag 50.5 identification number PANAM1
Ag 103 identification number CDN-ME-19
Ag 112 identification number PM1131

Ag silver
ppm parts per million

Stantec
Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

Waterloo Laboratory Standards

Figure 12-4

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578

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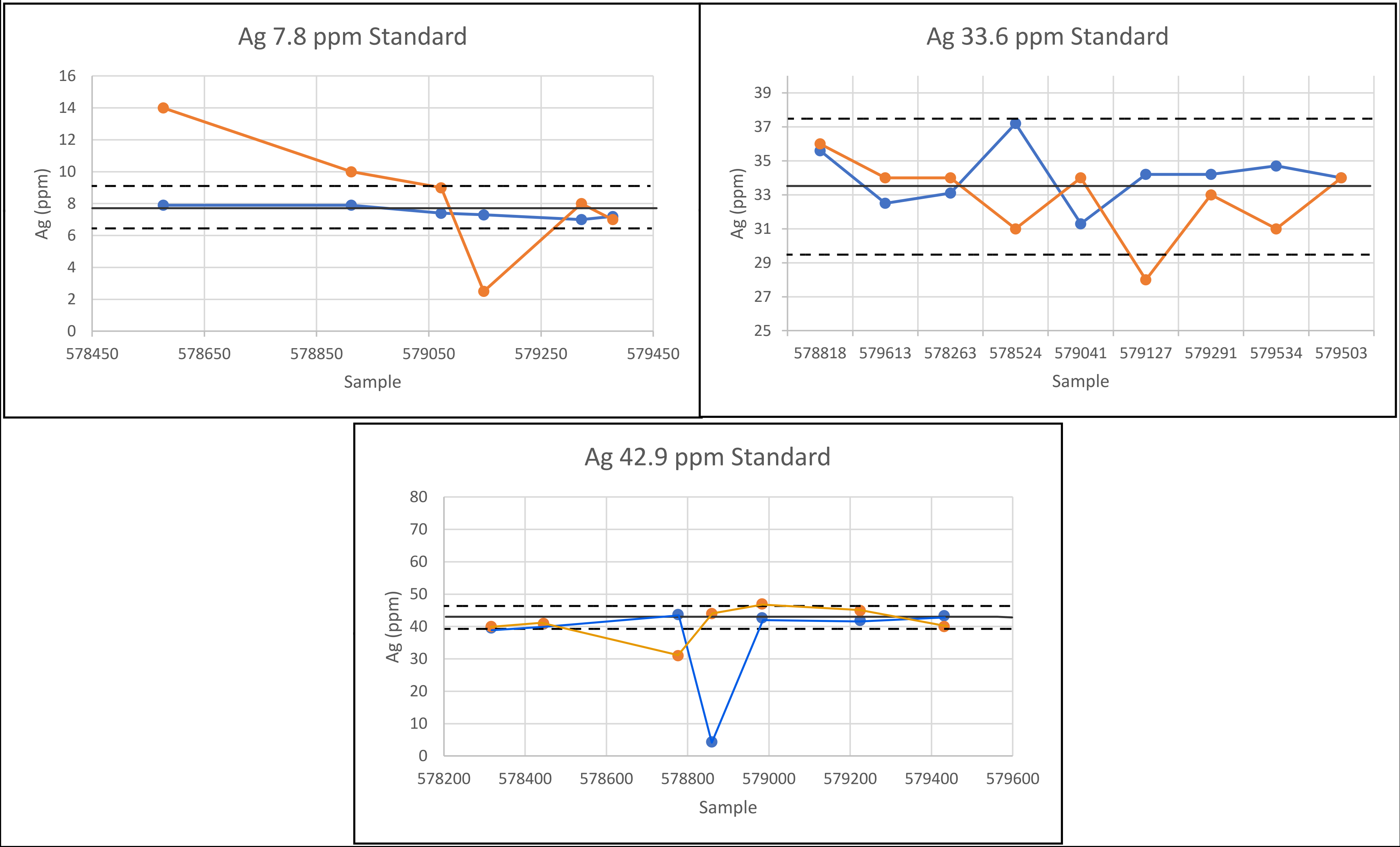

Legend

- Ag ME-ICP41 Method Sample Value
- Ag ME-ICP41 Sample Line
- Ag ME-GRA21 Method Sample Value
- Ag ME-GRA21 Sample Line
- Standard Value
- +/- 2 Standard Devations of Standard for 4 acid digestion (ICP-method), www.oreas.com

Ag 7.8 identification number 65a
Ag 33.6 identification number 67a
Ag 42.9 identification number 68a

Ag silver
ppm parts per million

Stantec

Apollo

TECHNICAL REPORT CALICO SILVER PROJECT

Langtry Laboratory Standards

Figure 12-5

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578

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13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Apollo nor Stronghold have conducted mineral processing and metallurgical testing at the Calico Project. As of the effective date of this report Apollo has engaged McClelland Laboratories, of Sparks, NV, to complete metallurgical testing of mineralized material from three core holes at Waterloo that was collected by Pan American in 2012.

14.0 MINERAL RESOURCE ESTIMATES

14.1 Approach

In accordance with the requirements of NI 43-101 and the CIM Definition Standards (2014), the Stantec QP validated the exploration records and used these data to construct geologic models of the Calico Project deposits for the purposes of estimating disseminated silver mineralization hosted in Barstow Formation sandstones. Two separate block models have been constructed: one for the Waterloo Property and the other for the Langtry Property.

Apollo has not previously prepared mineral resource estimates for the Calico Project. The geologic model construction as outlined below was used as the basis for estimating mineral resources on the Calico Project by Stantec.

14.2 Basis for Resource Estimation

NI 43-101 specifies that the definitions of the CIM guidelines be used for the identification of resources. The CIM Resource and Reserve Definition Committee have produced the following statements which are restated here in the format originally provided in the CIM Reserve Resource Definition document (CIM, 2014):

“Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.”

The Definition of Resources is as follows:

“A Mineral Resource is a concentration or occurrence of material of economic interest in or on the Earth’s crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.”

“Material of economic interest refers to diamonds, natural inorganic material, or natural fossilized organic material including base and precious metals, coal, and industrial minerals.” The Calico Projects material of economic interest fall into the base metal and precious metal category.

The committee went on to state that:

“The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of technical, economic, legal, environmental, socioeconomic and governmental factors. The phrase 'reasonable prospects for eventual economic extraction' implies a judgment by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. Interpretation of the word 'eventual' in this context may vary depending on the commodity or mineral involved. For example, for some coal, iron, potash deposits and other bulk minerals or commodities, it may be reasonable to envisage 'eventual economic extraction' as covering time periods in excess of 50 years. However, for many gold deposits, application of the concept would normally be restricted to perhaps 10 to 15 years, and frequently to much shorter periods of time."

The Calico silver deposits are most similar to gold deposits whose eventual economic extraction can cover shorter time periods of less that 15 years.

14.3 Data Sources

Information used to compile and inform the geologic model used for resource estimation included the following data provided by Apollo:

- Surface topography surveys (PhotoSat DEM and geotiff);
- Maps produced from surficial geological mapping;
- Calico fault and Barstow-Pickhandle contact wireframe surfaces;
- exploration drill hole logs;
- drill hole sample data (lithology, assays, density);
- metallurgical test results; and
- historical mining feasibility studies

Drilling information utilized for resource estimation included exploration drilling records for a total of 438 drill holes; 255 holes, 61,108 ft (18,626 m) at Waterloo and 183 holes,76,986 ft (23,465 m) at Langtry. Nominal drill hole spacing is 140 x 150 ft (40 x 45 m) at Waterloo and 160 x 200 ft (50 x 60 m) at Langtry. Average drill hole depths at Waterloo were 73 m (240 ft) and at Langtry 128 m (420 ft). Most holes are vertically oriented RC holes, with 8 holes being diamond drill holes. The drill hole silver grades were derived from RC chip samples. Bulk density data was sourced from samples taken from three drill holes. Details on drilling and sampling methods are discussed in Section 10 and 11 of this report. The locations of the drill holes are shown on Figure 6-3 for Waterloo and Figure 6-4 for Langtry.

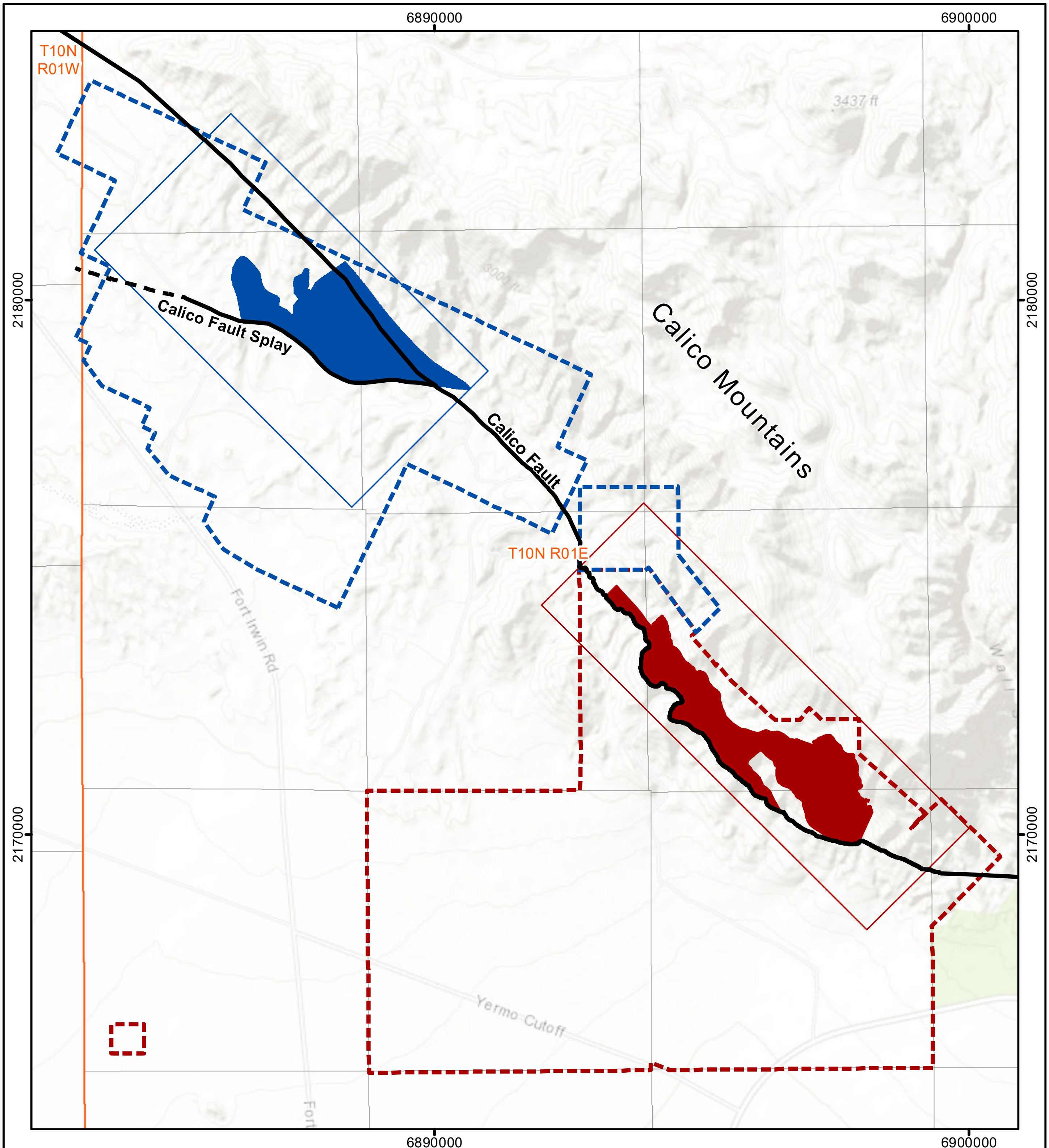
Surface geologic mapping used to inform the geological model were derived from several sources. Relevant maps and sources are illustrated and discussed in Section 7 of the report. Wireframe surfaces of the resource-limiting Calico fault surface mapping were provided by Apollo. The fault surface interpretation and surface mapping were validated against exploration records and was found by the Author to be accurate for the purposes of estimating resources. Apollo also acquired and provided Stantec satellite-based topographic survey DEM data PhotoSat (www.photosat.ca) covering the Calico Project. The DEM's were derived from a satellite stereo pair of 1.5 ft (46 cm) resolution images acquired on April 27, 2020. The resolution of the DEM is 3 ft (91 cm) with a vertical accuracy of 0.42 ft (128 mm) RMSE.

14.4 Model

The Calico geologic models were developed using HxGN MinePlan 3D© software Version 16.0 utilizing conventional grid modelling and block modelling methods. The completed model used for reporting resources is a horizontally rotated imperial-unit 3D block model. Rotation is at 045 degrees along regional strike of the Calico range front fault. Model origin, block size, rotation and overall Project area are outlined in Table 14.1 and illustrated in Figure 14-1. Model imperial coordinates are California State Plane V FIPS 0405 NAD 83 system.

Table 14.1
Block Model Properties

Parameter		Waterloo			Langtry		
		X	Y	Z (ft)	X	Y	Z (ft)
Model Origin		6,892,000	2,174,300	1,800	6,883,640	2,180,940	2,000
Block Dimension (ft)		20	20	20	20	20	20
Horizontal rotation		45 degrees					
Model Extent	Min	6,892,000	6,899,991	1,800	6,883,640	6,890,994	2,000
	Max	2,168,219	2,176,209	3,260	2,176,132	2,183,484	2,940
Model Range (ft)		8,600	2,700	1,460	6,800	3,600	1,940



Legend

- Langtry Property
- Waterloo Property
- Section
- Township and Range
- Calico Fault
- Fault Inferred
- Langtry Model Extent
- Langtry Mineralized Zone
- Waterloo Model Extent
- Waterloo Mineralized Zone

0 400 800
Meters

0 2,600
Feet

Scale 1:31,200
(At original document size of 8.5x11)

Notes

1. Coordinate System: NAD 1983 2011 StatePlane California V FIPS 0405 Ft US
2. Data Source: basemap - World Topographic Map, Esri

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TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
Resource Model Extents

Figure 14-1

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Gold and Silver Corporation
Project: 233001578

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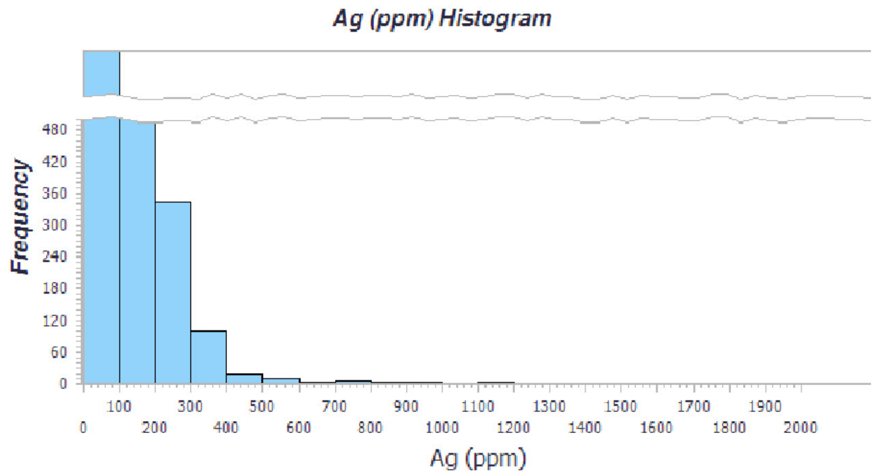
14.4.1 Data Validation, Preparation and Grade Capping

Exploration drill hole records were imported into MinePlan's proprietary Torque database management program. As part of the import process, drillhole records were checked for errata such as: overlapping log intervals, anomalous downhole survey data, extreme outliers in assay data and comparing collar survey records against DEM surface topography. No fatal flaws in the data were observed and minor discrepancies were easily resolved through cross-referencing against source records. For modelling purposes only collar elevations were made to match topo DEM elevation data given that accuracy of the DEM survey data is known, which is not the case for the drill hole collar elevations whose accuracy is not documented.

The PhotoSat-derived DEM data was re-grided in MinePlan to 5 x 5 ft (1.5 x 1.5 m) resolution to reduce the overall size of the files for more efficient model data processing. The 5 x 5 ft grid resolution was sufficiently detailed to recognise roads and historic dump locations after draping geotiff images onto the topographic surface.

The silver grade (ppm) distribution and statistics from source drill hole records are illustrated in Figure 14-2. The silver grades illustrated in Figure 14-2 were derived from RC chip samples taken at regular 5 ft (1.5 m) intervals. Prior to grade estimation the drillhole data was composited to 15 ft (4.6 m) regular composite intervals. Using the grade distributions shown in Figure 14-2 as a guide, the silver grades for Waterloo were capped at 400 ppm for Waterloo. No top capping for the Langtry drillhole data was used due in part to the smoothing effects of 15 ft (4.5 m) composite intervals.

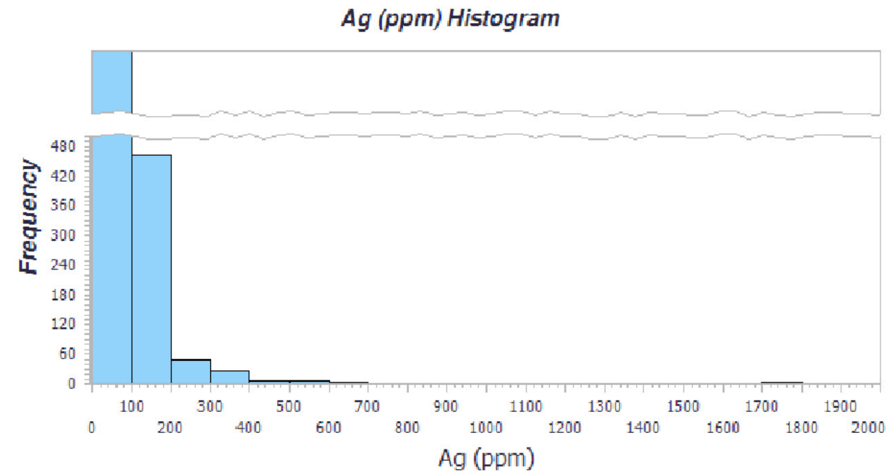
Waterloo Silver Grade (ppm) Distribution



Summary Statistics

Statistics	Ag (ppm)
Valid Data	11054
Total Data	11054
Missing Data	0
Invalid Data	0
Minimum	0.008
Maximum	2180
Mean	70.168
Variance	6291.681
Standard Deviation	79.32
Coefficient Of Variation	1.13
First Quartile (Q1)	24
Median (Q2)	51.4
Third Quartile (Q3)	92.6

Langtry Silver Grade (ppm) Distribution



Summary Statistics

Statistics	Ag (ppm)
Valid Data	13299
Total Data	13299
Missing Data	0
Invalid Data	0
Minimum	0.1
Maximum	6240
Mean	25.353
Variance	5234.716
Standard Deviation	72.351
Coefficient Of Variation	2.854
First Quartile (Q1)	0.34
Median (Q2)	10.97
Third Quartile (Q3)	32.23

Legend

Ag silver

ppm parts per million

Notes

Silver grad assays from drill hole chip samples at 5 foot intervals

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TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
Silver Grade Statistics

Figure 14-2

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578

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14.4.2 Mineralized Zone Modelling

The plan view extent of the silver mineralized zones for the Calico Project are illustrated in Figure 14-1. The mineralized zones, expressed as wireframe solids, were compiled from hard boundary wireframe surfaces. Six hard boundaries have been used to build the mineralized zone solids used constrain silver mineralization within the resource block model, these are:

1. Calico fault and associated fault splays
2. Lower Barstow-Upper Pickhandle formation contact
3. Areas of collapsed mine workings
4. Existing waste piles
5. Surface weathering
6. Silver grade estimation

14.4.2.1 Fault Modelling

As discussed in Section 7 of the report, the northwest dipping Calico fault juxtaposes unmineralized upper-Barstow formation in the south-west, Calico Mountain foothills, against the mineralized lower Barstow formation in the north-west. The Calico fault has been modelled as a wireframe surface by Apollo and used by the Author in the geological model. At Langtry the Calico fault splits into two, with the northern extension resulting in a faulted contact between the mineralized lower Barstow formation and the stratigraphically lower Pickhandle formation. At Waterloo there is a less clearly defined and postulated fault splay off the main Calico fault, named the Cascabel fault, that envelops a single anomalously low-grade drill hole (hole 183). The Cascabel fault geometry at Waterloo is not well understood, and a vertical cut-off has been used from the surface expression of the Cascabel fault down to the main Calico fault surface below.

14.4.2.2 Formation Contact Modelling

The stratigraphic contact between the mineralized lower Barstow and Pickhandle formations has not been sufficiently penetrated from drill hole records to determine subsurface extent. The Barstow-Pickhandle contact has however been identified from surface mapping at Waterloo. At Waterloo a vertical cut-off from the Barstow-Pickhandle contact on surface has been used ensure that mineralized grade trends do not project into the Pickhandle rhyolite that dominate the Calico Mountain hilltops. Although recent geologic mapping and historic surface mapping and sampling indicate that the Pickhandle Formation on the Project is silver mineralized, the very limited amount of drilling data in this formation warranted treating the Barstow-Pickhandle contact as a hard boundary for mineralization at depth below surface. There is also a small area approximately (2.77 acres, 1.12 ha) along the Barstow-Pickhandle contact at Waterloo where historic underground galleries have collapsed and clearly identifiable from the surface topography map. Similar, a vertical cut-off has been applied surrounding this area of collapsed workings to exclude this area from the resource.

14.4.2.3 Waste Dump Modelling

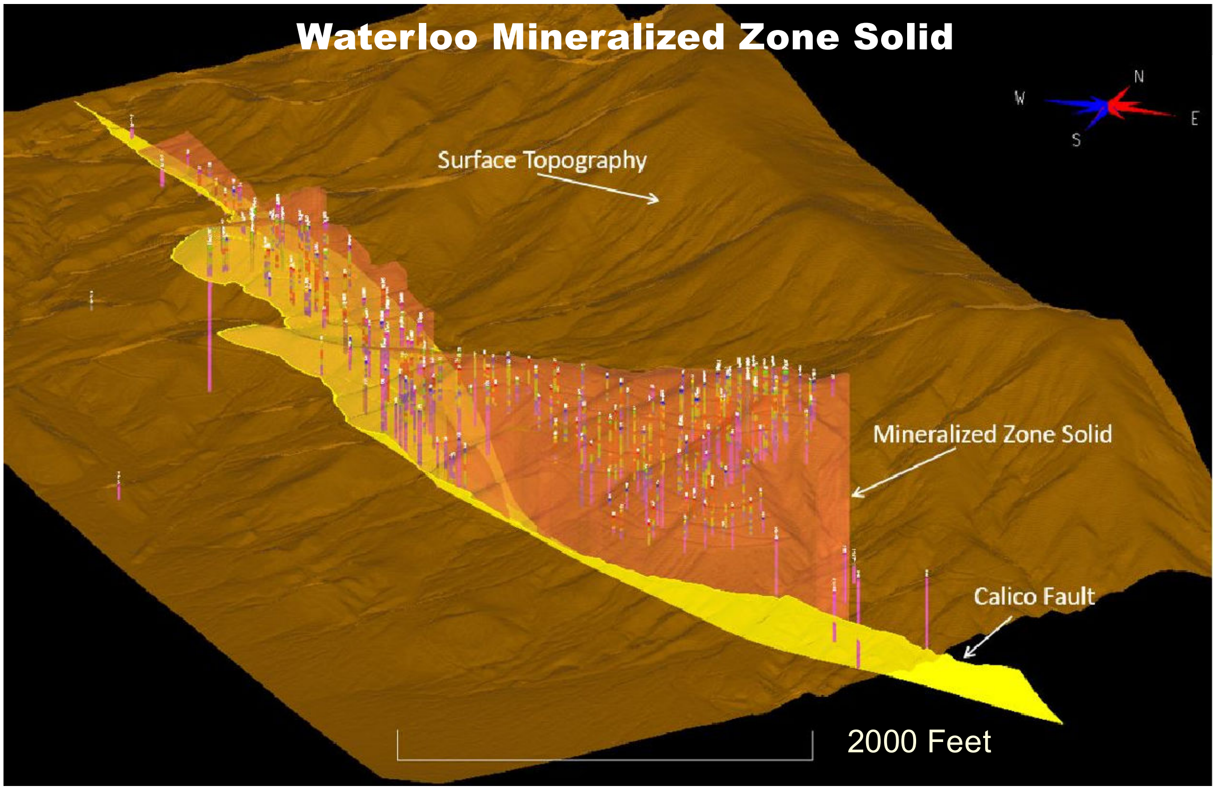
Historic mining waste dumps were identified and digitized as wireframes solids from observations of the satellite (geotiff) images (dated 4/27/2020) that were draped onto the wireframe topographic surface. Pre-mining topography below the waste dumps was built from wireframes surfaces-built boundary polylines digitized from the toe of the waste dump. Volumetrically historic waste dumps are insignificant at Waterloo at only 8,980 yd^3 (6,866 m^3) as determined using the above method. No waste dumps were identified at Langtry.

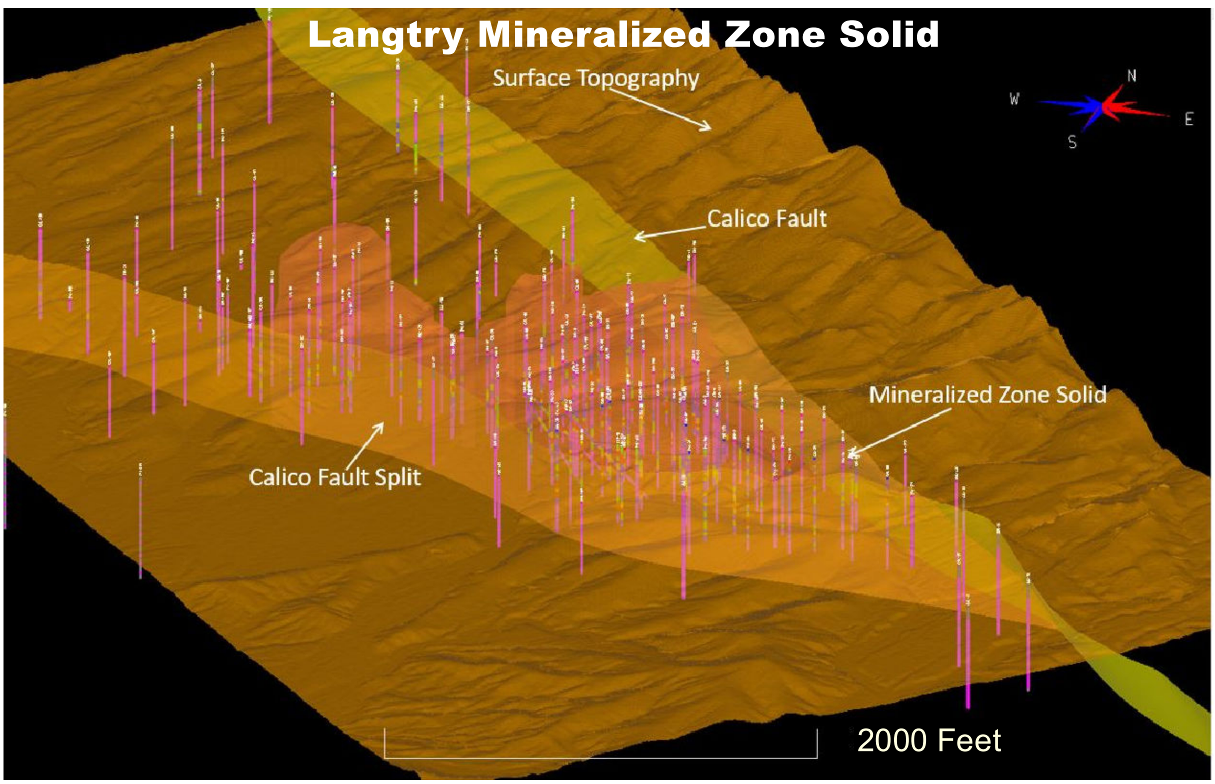
14.4.2.4 Surface Weathering Modelling

Surface weathering, comprising soil and regolith, was estimated to be on average about 2 ft (0.6 m) across both properties where mineralized lower Barstow formation has been mapped. A surface weathering cap (wireframe solid) was built by first creating a wireframe topo surface form a 20 ft x 20 ft (6.1 x 6.1 m) grid surface covering the extents of the 3D block model shown in Figure 14-3. Topo data was sourced from the PhotoSat DEM. MinePlan macros were then used to build a base of weathering grid surface at topo less 2 ft (0.6 m). A surface weathering cap was then built by combining the two topo and base of weathering grid surfaces. The weathering zone cap and waste dump solids (Waterloo only) were then combined to form a total surface waste solid.

14.4.2.5 Block Model Zone Coding

The separated 3D block models for Waterloo and Langtry were coded with block percentages by volume that included: zone below topography, zone of potential mineralization, zone of surface weathering plus waste dump material. Volumes of potential mineralization include those unweathered sediments of what is understood to be the Lower Barstow formation northeast of the Calico fault at Waterloo and within the Calico fault split wedge at Langtry. The maximum north-eastern areal extent of the potential mineralized zone in the model is the Barstow-Pickhandle formation contact. Figure 14-3 is a semi-transparent illustration of the final mineralized zone (solid) extents in the model as interpreted from the exploration data. The mineralized zone for Langtry, shown in Figure 14-3 is further constrained by silver grade trends as observed from the block grade estimates discussed separately below.





Legend

Drill hole Silver Grade in parts per million (ppm)

- 0-25
- 25-50
- 50-75
- 75-100
- >100

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TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
Mineralized Zone Solids

Figure 14-3

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Gold and Silver Corporation
Project: 233001578

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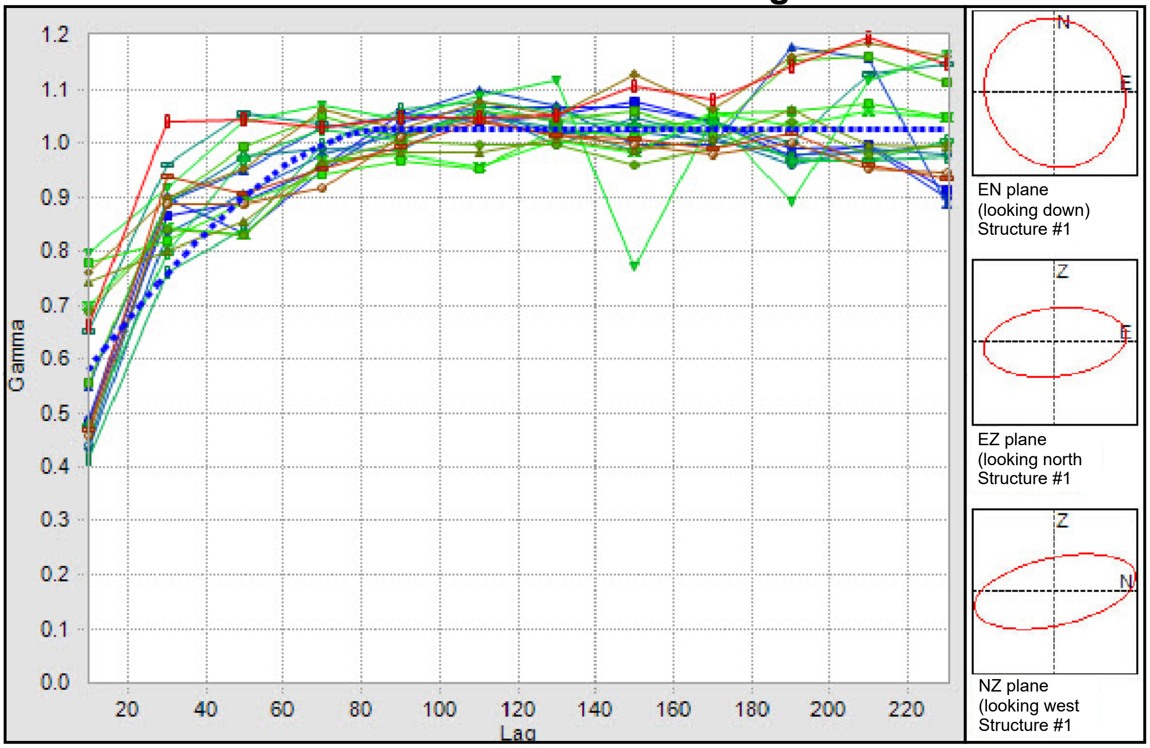
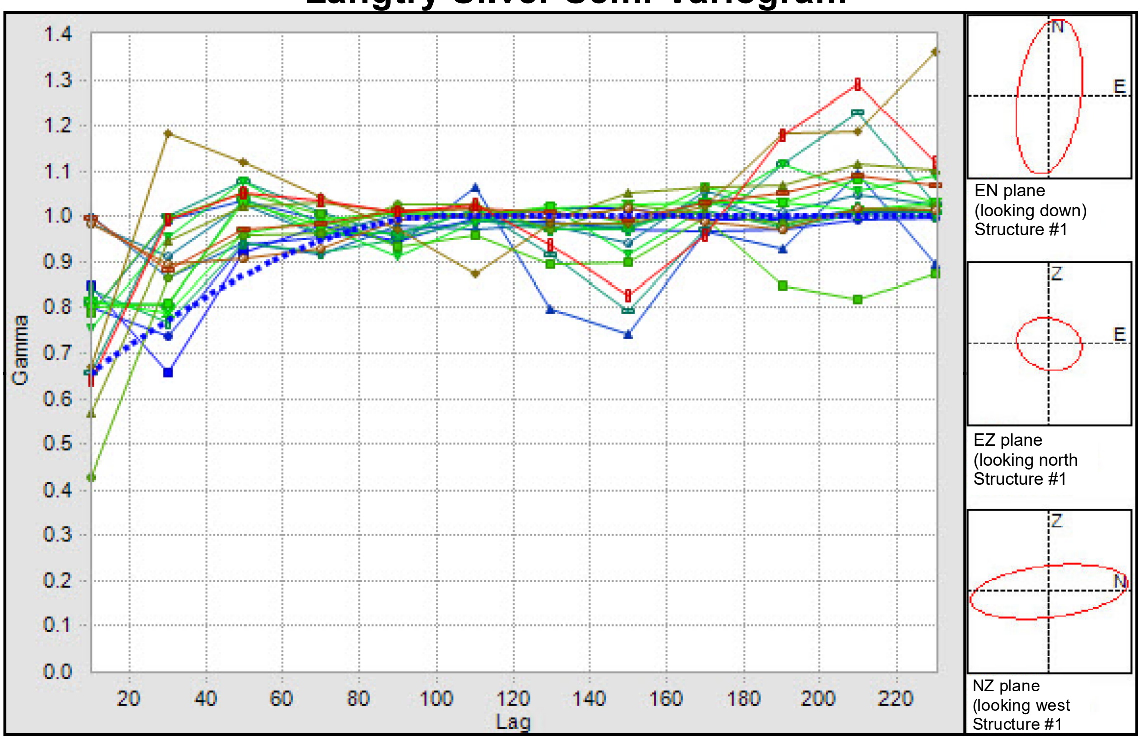
14.4.2.6 Silver Grade Estimation

Silver grades (ppm) generated from regular 15 ft (4.5 m) downhole composites were tagged with a zone code where penetrating potential mineralization (described above) and then subsequently estimated into the 3D block models using code matching using an ordinary kriging algorithm. Prior to estimation semi-variograms were generated from mineralized zone composites. The multi-directions (30-degree increments) semi-variograms generated for the Waterloo and Langtry properties are shown in Figure 14-4 as generated using MinePlan software. The single structure grade trends shown in Figure 14-4 indicated a more uniform (isotopic) grade trend for the Waterloo Property when compared to the Langtry Property. Grade trends looking west i.e., approximately across strike or the regional structural and bedding fabric, are similar for both Waterloo and Langtry. The more tightly constrained grade trends observed for Langtry in plan and looking north suggest that there is likely north-south extensional trending fault possibly associated with splitting of the Calico fault at Langtry.

Waterloo Silver Semi-Variogram



Langtry Silver Semi-Variogram



Legend

Notes

Regular 15 foot downhole composites within mineralized zone

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TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
Semi-Variograms Composite Grade Trends

Figure 14-4

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Gold and Silver Corporation
Project: 233001578

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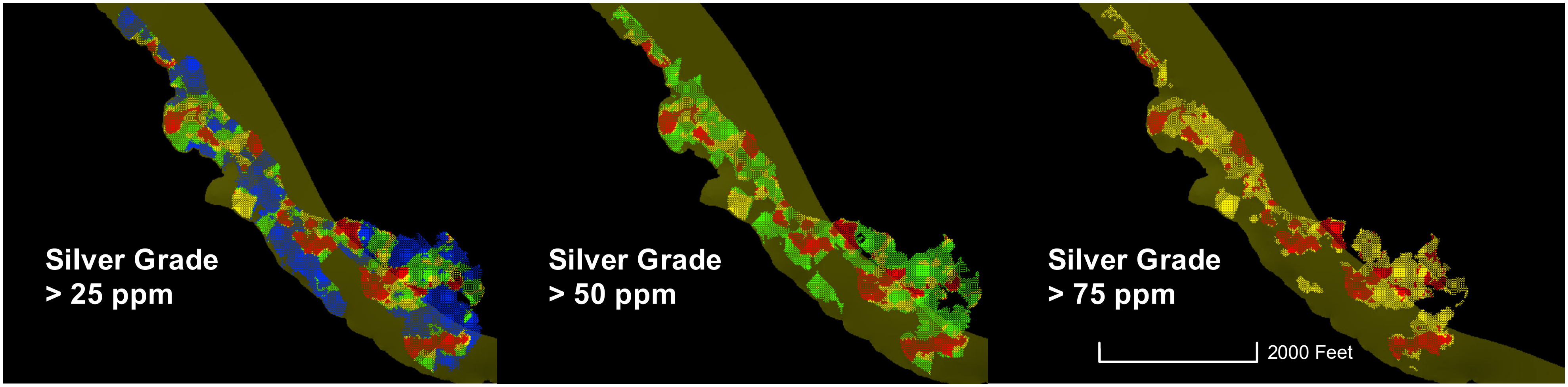
Grade trend models generated from semi-variograms shown in Figure 14-4 were used in estimation of block grades. The estimation parameters are listed in Table 14.2 below. The maximum range for grade estimates was set at 300 ft (91.4 m) based on observation of the distribution of silver grades as observed in the drill hole records in the 3D model.

Table 14.2
Silver Grade Estimation Parameters

Model	No. Composites		Nugget	Range (ft)			GSlib Rotation (degrees)		
	Min	Max		Major	Minor	Vertical	1	2	3
Waterloo	3	6	0.5	300	211	96	0	12.5	6.1
Langtry	3	6	0.6	300	98	61	8.1	10.3	-1.9

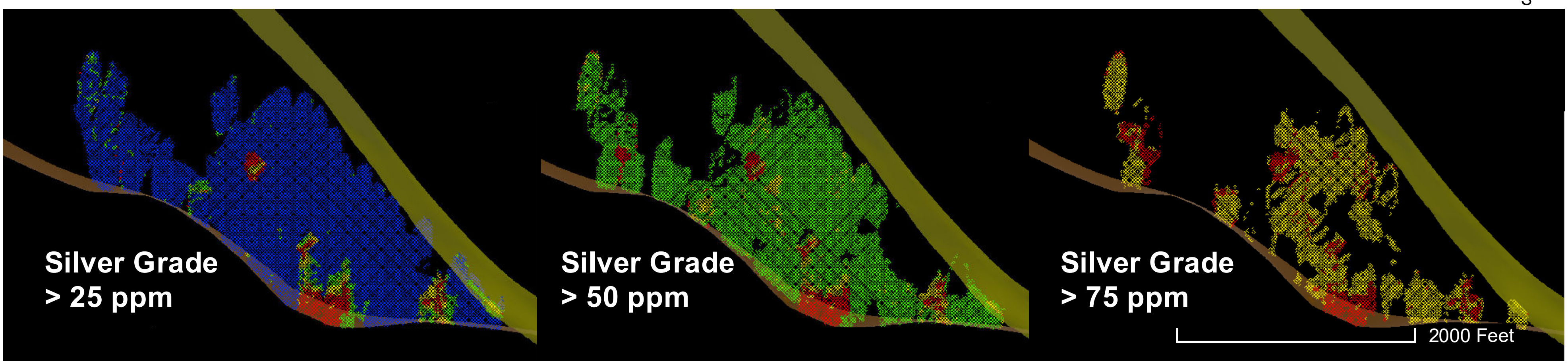
In the western half of the Langtry Property there are a few widely dispersed drill holes reporting low (<25 ppm) silver grades. This less explored areas were subsequently excluded from the final Langtry mineralized zone extent due to overall low silver grades and lack of sufficient exploration data to support a resource. The Langtry mineralized zone shown in Figure 14-3 is the final mineralized zone after talking into account exploration coverage and block model silver grade trend estimates. Plan view block model grade estimates for silver at greater than 25 ppm, 50 ppm and 75 ppm, are shown in Figure 14-5 for Waterloo and Langtry.

Waterloo Property



N
W E
S

Langtry Property



Legend

Silver Grade in parts per million (ppm)

0-25
25-50
50-75
75-100
>100

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TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
Block Model Silver Grades

Figure 14-5

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CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578

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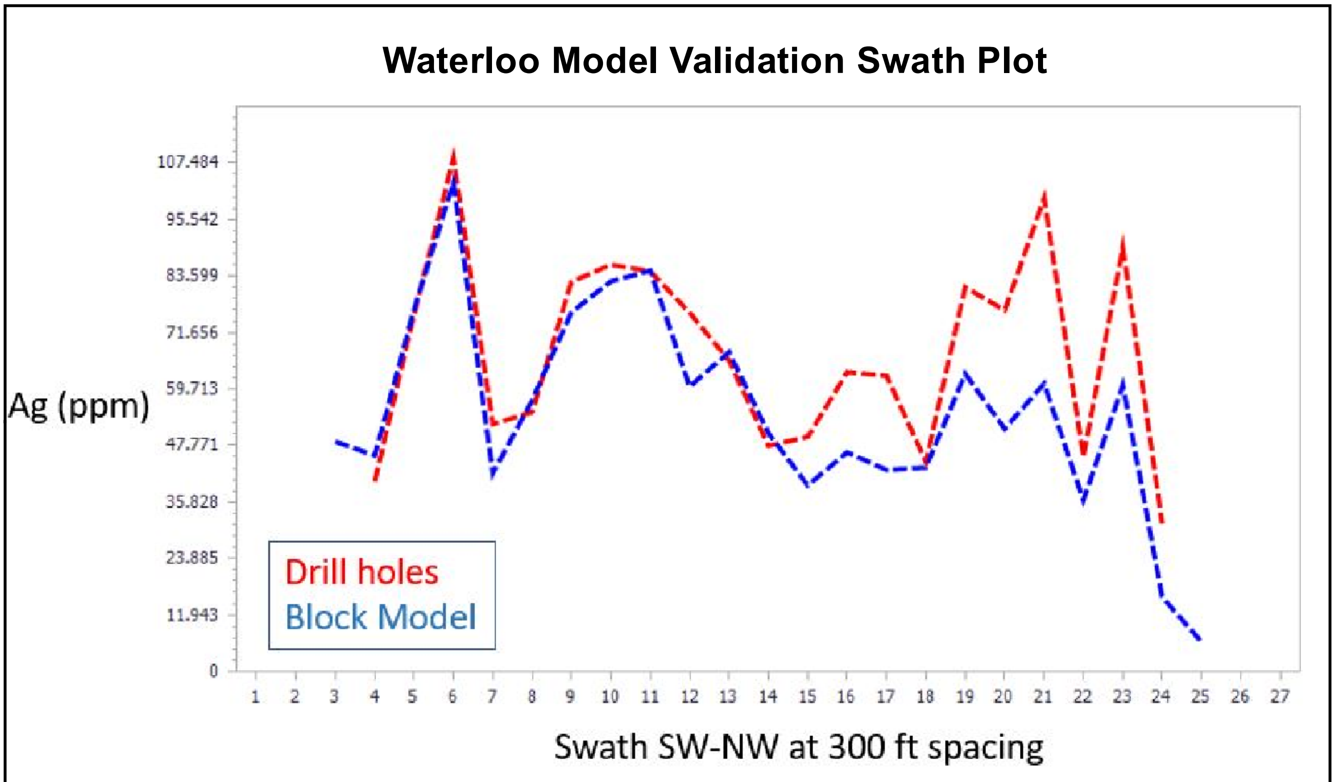
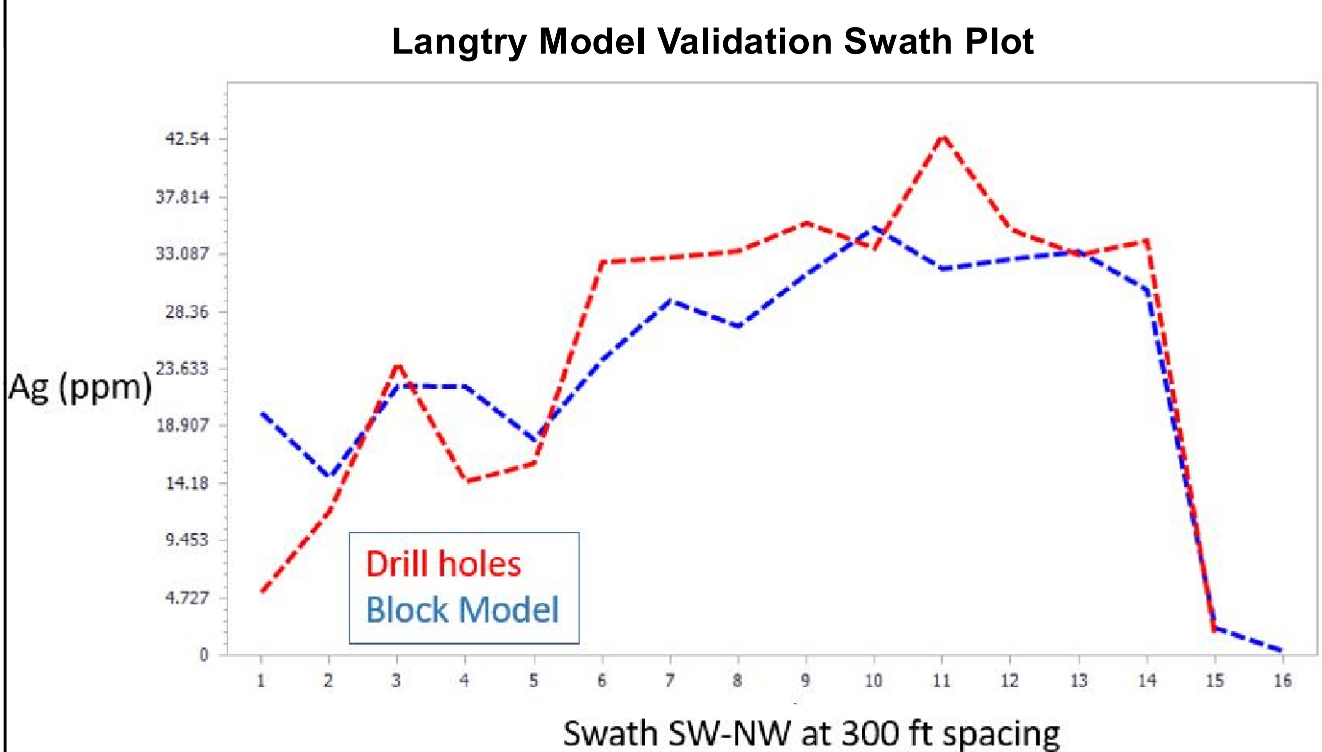
Model grade estimation validation was undertaken by comparing drill hole block grades against the block estimates both visually and with the aid of swath plots. Model validation swath plots comparing block grade estimates with source drill hole grades is shown in Figure 14-6. The swath plots show block estimates tracking source drill hole grade estimates and overall model estimates are slightly lower that the drill hole averages due to the model data smoothing.





Legend

Ag	silver
ft	foot
SW-NW	southwest-northwest
ppm	parts per million

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TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
Model Validation Swath Plots

Figure 14-6

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Gold and Silver Corporation
Project: 233001578

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14.4.2 7 Bulk Density

Average bulk density for the mineralized zone was calculated to be 13.13 ft^3/st (2.44 kg/m^3) based on an average of 109 drill core samples taken from three diamond drill holes (W-0012, W-0013, W-0014) penetrating the mineralized zone at Waterloo. Average width of the drill core samples was 0.52 ft (0.16 m). Method used to determine the core density was not documented in the available data however the reported density is within expectations for the mineralized host rock, notably predominately sandstone. No density data sample data was available for Langtry. Given overall limited density data available for the Project, the Author has used a fixed density of 13.13 ft^3/st (2.44 kg/m^3) for both the Waterloo and Langtry resource tonnage estimates.

14.4.2.8 Historic mine workings

As discussed in Section 6 of the report, the Calico Project, particularly Waterloo, have numerous historic working from underground mining activities mostly targeting narrow veins or the mineralized Barstow-Pickhandle contact. Attempts have been made to calculate the volume of historic underground workings by digitizing the total length of underground working from historic plans. As of the effective date of the report, and based on available information, a total footprint of underground mine galleries was estimated to be 260,758 ft^2 (24,225 m^2) and assuming a 6 ft (1.8 m) height mined volume is calculated at 1,564,548 ft^3 (44,303 m^3) or 119,159 tons (108,099 tonnes) using a fixed density of 13.13 ft^3/st (2.44 kg/m^3). These estimated mined volumes and tons are insignificant and have a non-material impact on overall resource estimates at Waterloo. No mined losses could be determined for the Langtry Property, though these are expected to be significantly lower at Langtry relative to Waterloo based on historical records of mining on the Property.

14.5 Assessment of Reasonable Prospects for Economic Extraction

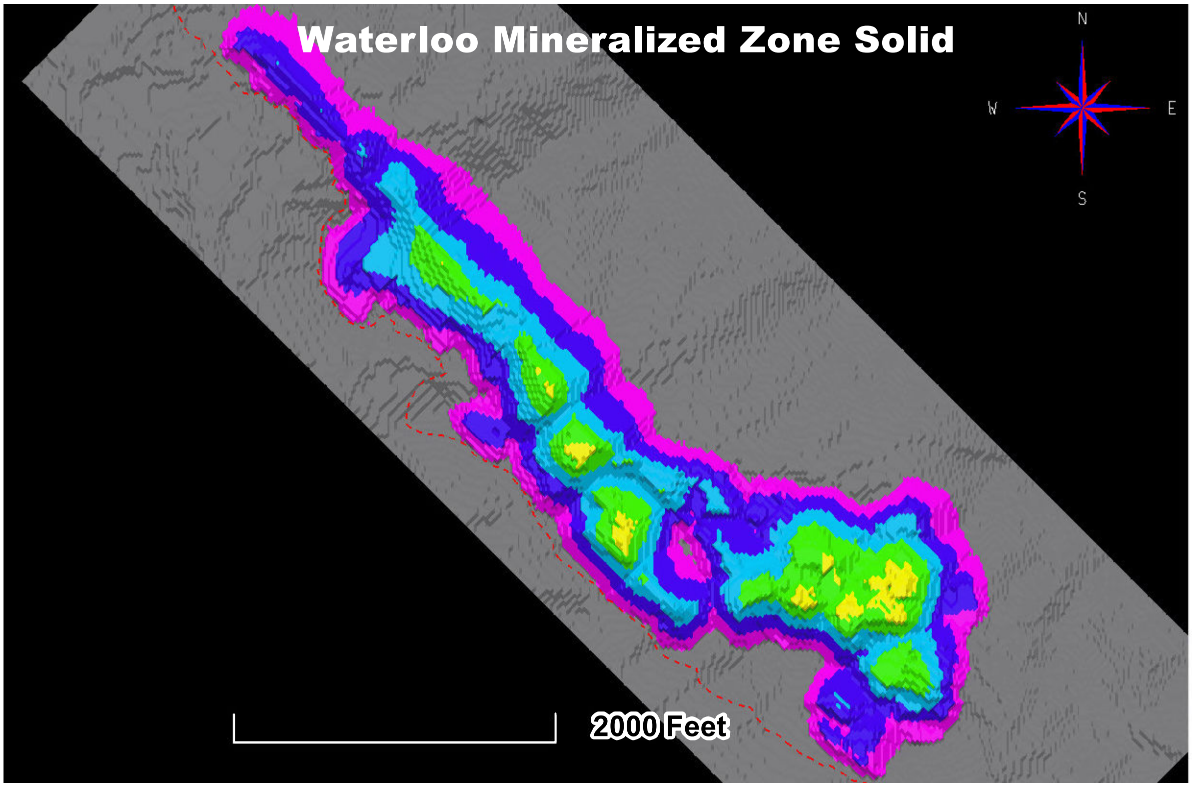
A base case silver resource cut-off grade (COG) of 50 ppm has been determined based on the economics of a surface mining operation at approximately 4 Mtpa resource tons. Processing of the mineralized material would be onsite extracting silver by a cyanidation process that may or may not include a salt roast.

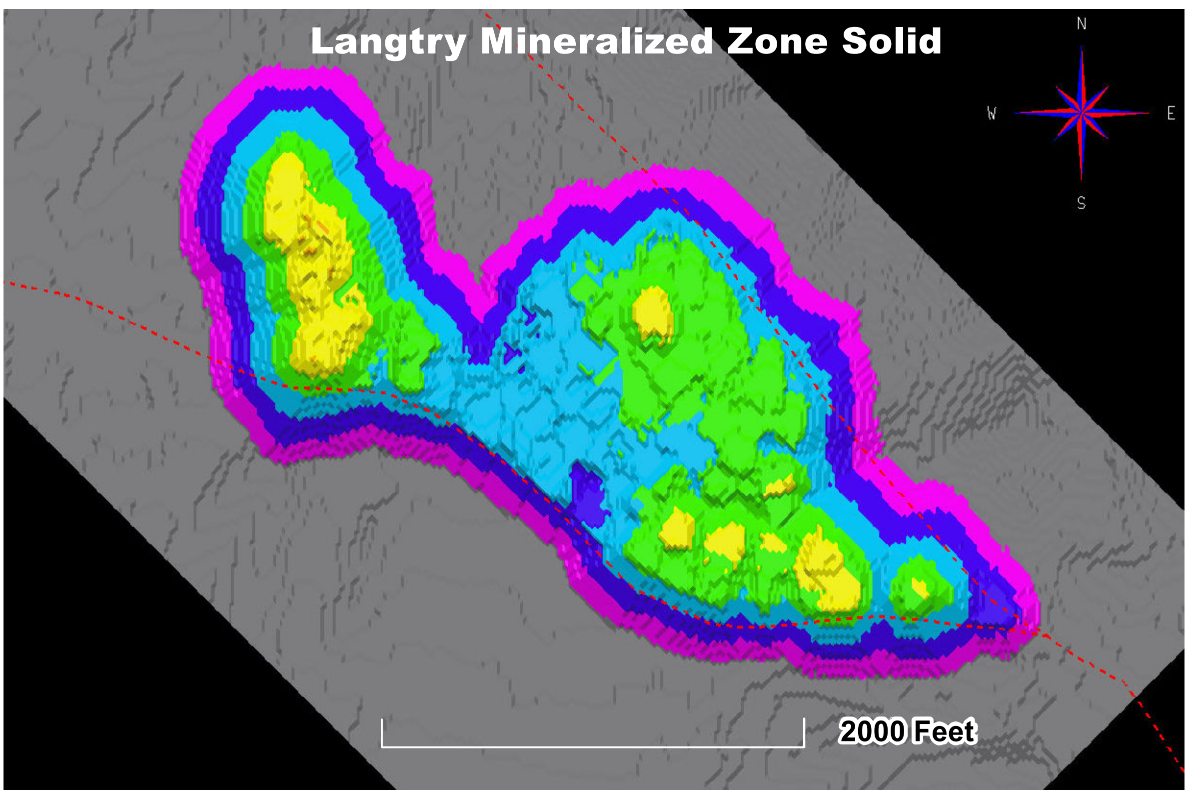
The base-case COG was determined using the following assumptions:

- Silver price of US$23 per troy oz
- Processing costs of US$29/st
- Mining costs of US$2.50/st
- Silver recovery of 80%

Silver price was determined by averaging the price from the last 24 months up to December 31, 2021, based on data from the World Bank. Royalty costs are not included as these costs are considered non-material in impact relative to processing costs. Processing cost was based on published estimates for similar deposit types, cross-checked against historical processing costs determined by ASARCO in their 1980 historical feasibility study for Waterloo, and adjusted for inflation to 2022 prices. Increased silver prices, optimised processing parameters and/or improved silver recoveries will all impact the COG and the resultant mineral resource estimate.

An economic pit shell at a constant 45 degrees slope was developed using a Lerchs-Grossmann algorithm and 50 ppm silver COG to separate resource blocks from waste blocks in the models. A US$23 per troy ounce revenue for a silver recovery of 80% and a mining cost of US$2.50/st were used in the derivation of separate economic pit shells for the Waterloo and Langtry properties. A fixed density of density of 13.13 ft^3/st (2.44 kg/m^3) for both mineralized and waste zones, relatively minor surface weathering was assumed a density of 1.78 ft^3/st (1.80 kg/m^3). The resultant ultimate pit extended to a maximum vertical depth of 450 ft (137 m) at Waterloo and 520 ft (158 m) at Langtry. Figure 14-7 shows shown the plane view vertical depth for the Waterloo and Langtry pit shells.





Legend

Pit vertical depth below surface

Feet

- 0
- 0-100
- 100-200
- 200-300
- 300-400
- 400-500
- 500-600
- >600

Calico fault trace on surface

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TECHNICAL REPORT CALICO SILVER PROJECT

Calico Project
Economic Pit Shells

Figure 14-7

DRAWN BY: J.K. CHK'D BY: D.L. DATE: 22/ 03/ 24	Project Location: T10N R01E - T10N R01W, California Client: Apollo Gold and Silver Corporation Project: 233001578

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14.6 Mineral Resource Estimate

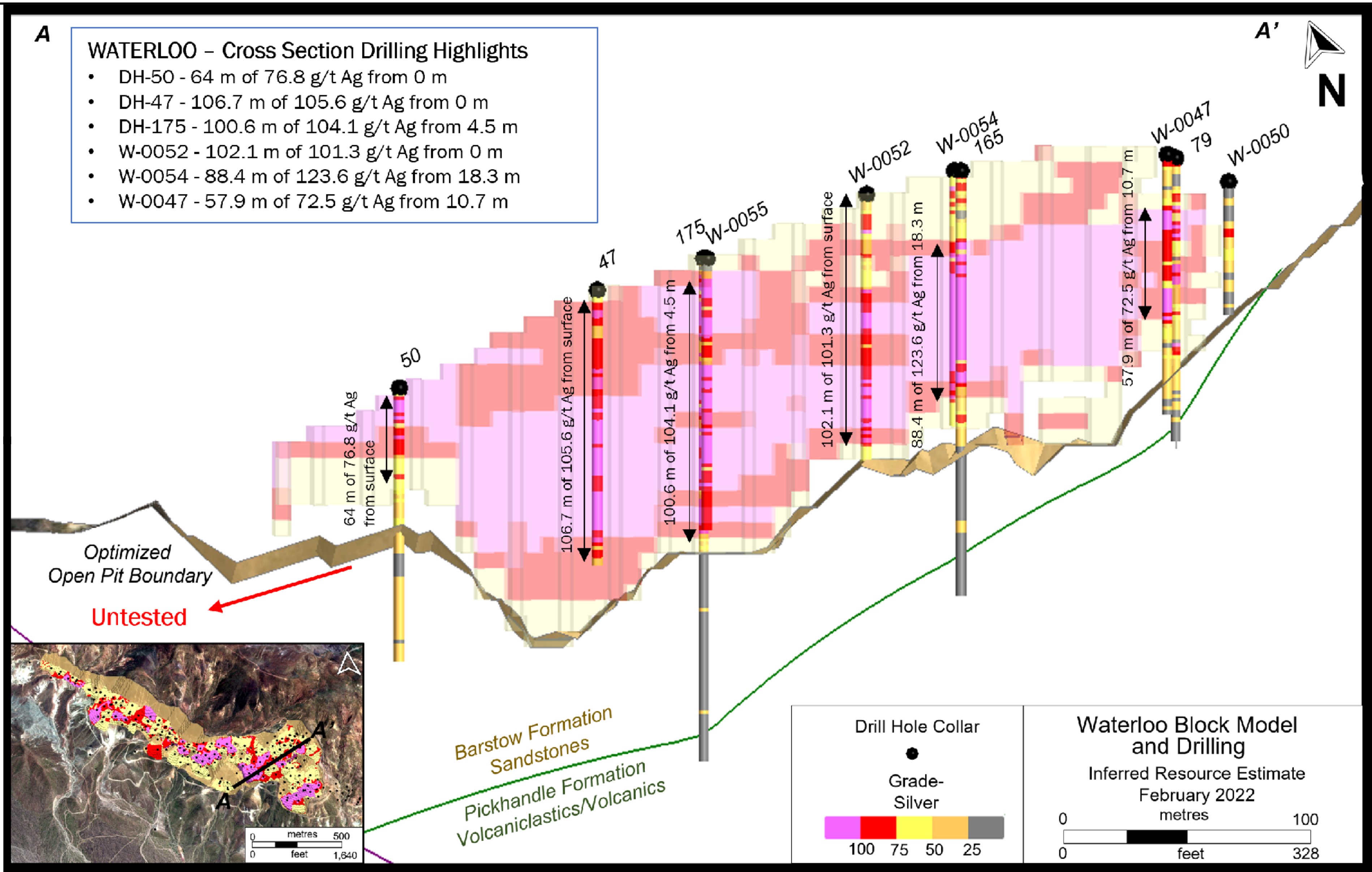
The Inferred silver mineral resource estimates for the Calico Project are presented in Table 14.3, with an effective date of January 28, 2022. Table 14.3 includes a sensitivity analysis of the silver grade and tonnage relationships at varying pit-constrained cut-off grades for the Calico Project. Base case mineral resource estimates at a COG of 50 g/t are highlighted in bold text In Table 14.3.

Table 14.3
Silver Mineral Resource Estimates. Effective January 28, 2022.

Classification	Silver COG (g/t)	Imperial Units			Metric Units			Strip Ratio (t:t)	Contained Silver
		Volume Million (yd^3)	*Tons Million (st)*	*Ag Grade (oz/st)*	*Volume Million* (m^3)	*Tonnes Million (t)*	*Ag Grade (g/t)*		*Million (oz)*
Waterloo Pit Constrained Silver Mineral Resource Estimate									
Inferred	≥ 25.0	27.6	56.8	2.54	21.1	51.5	79	0.4	131
	≥ 50.0	**20.8**	**42.8**	**2.98**	15.9	**38.9**	**93**	**2.2**	**116**
	≥ 75.0	12.2	25.1	3.69	9.3	22.8	115	6.2	84
	≥ 100.0	6.7	13.8	4.43	5.1	12.5	138	13.8	56
Langtry Pit Constrained Silver Mineral Resource Estimate									
Inferred	≥ 25.0	18.5	38.0	1.97	14.1	34.4	61	1.9	68
	≥ 50.0	**10.3**	**21.3**	**2.59**	7.9	**19.3**	**81**	**6.0**	**50**
	≥ 75.0	4.3	8.9	3.47	3.3	8.1	108	18.0	28
	≥ 100.0	1.8	3.7	4.47	1.4	3.4	139	46.4	15
Calico Project Pit Constrained Silver Mineral Resource Estimate									
Inferred	≥ 25.0	46.1	94.8	2.31	35.2	86.0	72	1.0	199
	≥ 50.0	**31.2**	**64.1**	**2.85**	23.8	**58.1**	**89**	**3.4**	**166**
	≥ 75.0	16.5	34.0	3.63	12.6	30.8	113	9.2	112
	≥ 100.0	8.5	17.6	4.44	6.5	15.9	139	20.8	71

- Base-case resource estimates reported in Table 1. Ounces are reported as troy ounces.
- Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") definitions are followed for classification of the Mineral Resource.
- Prospects for eventual economic extraction determined using surface mining operating costs of US\$2.50/st, processing costs of US\$29.00/st and silver price of US\$23.00/oz.
- Specific gravity for the mineralized zone is fixed at 2.44 kg/m^3 (13.13 ft^3/ton). Silver grade was capped at 400 g/t only for Waterloo estimation.
- Resources are constrained to within an economic pit shell targeting mineralized blocks with a minimum of 50 ppm (50 g/t) silver.
- Totals may not represent the sum of the parts due to rounding.
- The Mineral Resource estimate has been prepared by Derek Loveday, P. Geo. of Stantec Consulting Services Ltd. in conformance with CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines and are reported in accordance with the Canadian Securities Administrators NI 43-101. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that any mineral resource will be converted into a mineral reserve.

The disseminated silver mineral resources are contained within the lower Barstow Formation sediments for both the Waterloo and Langtry Properties. The mineral resources are demonstrated to be surface mineable and are constrained to within an economic pit shell. Stripping ratio (t:t) for the base case (COG 50 g/t) mineral resource vary from 2.2 at Waterloo to 6.0 at Langtry for an overall Project average of 3.4. There are no additional unconstrained mineral resources and no losses due to historical mining have been applied as these mining loses are interpreted by the Author as non-material impact for an Inferred level resource. Figure 14-8 provides summary highlights from the Calico resource model as represented by a cross-section through the Waterloo Property.



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TECHNICAL REPORT CALICO SILVER PROJECT

Calico Resource Model Summary Overview (Waterloo Example)

Figure 14-8

DRAWN BY: J.K.
CHK'D BY: D.L.
DATE: 22/ 03/ 24

Project Location: T10N R01E - T10N R01W, California
Client: Apollo Silver Corporation
Project: 233001578

Notes
1. Figure by Apollo, 2022

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The silver mineral resources on the Calico Project are identified as Inferred-only for the following reasons:

- Historic drill hole records include mostly RC chip sample data that provided limited information in the existing logs with respect to structure and lithology.
- Extent of historical mining, though to date has shown to be insignificant, need to be accurately surveyed to the extent possible to account for mining at local level.
- Exploration drillhole data is generally old, with 76% of the drilling at Waterloo completed between 1964 and 1989. At Langtry 93% of the drilling was completed between 1967 and 1976.

14.7 Potential Risks

The following potential risks associated with the mineral resource estimates have been identified in order of relative importance:

- Historic metallurgical testing has reported a wide range in silver recoveries. Silver recoveries of greater that 80 % may not be realized from the resource.
- Historical underground workings pose a risk to mining if they are not accurately surveyed and accounted for in the mine plan.
- The Calico Project is located in an arid region with limited water supplies that may impact the ability to obtain sufficient makeup water to support an onsite processing plant.

According to the available information to the Author and QP, as of the effective date of the mineral resource estimate, there are no other known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that would materially impact the resource estimate.

14.8 Mitigating Factors

The private lands at Waterloo and Langtry both have a history of mining activities. Additionally:

- The private lands at both the Waterloo and Langtry Properties have obtained a Certificate of Land Use Compliance from San Bernardino County recognizing surface mining as a legal use of the private lands and the existence of a “vested right” to conduct surface mining activities thereon.
- In 1981, ASARCO completed an Environmental Impact Report and a Reclamation Plan, both approved by the County of San Bernardino, giving them a permit to

undertake mining operations on the Waterloo Property. This permit expired in May 2004.

Considering the Project area was historically mined, received a permit to mine in 1981 and has received CLUC's from the County of San Bernardino, the future use of the private lands for mining activities is appropriate.

15.0 MINERAL RESERVE ESTIMATES

This Technical Report does not include an estimate of reserves.

16.0 MINING METHODS

There is no information for this section of the Technical Report as the Calico Project is not presently producing or under development.

17.0 RECOVERY METHODS

There is no information for this section of the Technical Report as the Calico Project is not presently producing or under development.

18.0 PROJECT INFRASTRUCTURE

There is no information for this section of the Technical Report as the Calico Project is not presently producing or under development.

19.0 MARKETS AND CONTRACTS

There is no information for this section of the Technical Report as the Calico Project is not presently producing or under development. All known existing agreements have been described under the Property Concessions subheading in Section 4.2 of this report.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

There is no information for this section of the Technical Report as the Calico Project is not presently producing or under development.

21.0 CAPITAL AND OPERATING COSTS

There is no information for this section of the Technical Report as the Calico Project is not presently producing or under development.

22.0 ECONOMIC ANALYSIS

There is no information for this section of the Technical Report as the Calico Project is not presently producing or under development.

23.0 ADJACENT PROPERTIES

The Author and QP has not verified the information regarding the adjacent properties and thus, the information is not necessarily indicative of the mineralization on the Calico Project.

The historic Calico Mining District (the District) that hosts the Calico Project area has a long history of precious metal mining. Silver was the primary metal produced from the area with most of the production occurring between 1881-1896. The Silver King-Oriental Mine was the first mine in the district, the most productive, and the longest operating mine in the Calico area (Harthrong, 1983 and Weber, 1966). The area surrounding the historical Calico townsite and encompassing the Silver King-Oriental Mines has been converted into the Calico Ghost Town regional park on land currently owned by San Bernardino County. (Weber, 1966; Samari, H. and Breckenridge, L., 2021b).

Other silver deposits in the District were hosted in rhyolite tuffs as impregnations along a zone of porous rock; the Odessa Mine is reported to have had the highest average ore grade of this type. Privately held fee land parcels cover the areas of the historical Odessa and Garfield mines (Samari, H. and Breckenridge, L., 2021a).

The Leviathan Barite Mine located 0.4 miles (0.6 km) to the east of the Langtry Property was a historical producer of high-grade barite and low-grade silver. The Leviathan Barite Mine closed in the mid 1960’s (Matson, 2008).

In the nearby vicinity of the Langtry Property two placer claims are held by private owners. No information is available about the production from the placer claims. Two unpatented lode mining claims are located 1 mile (~1.5 km) east of the Langtry Property over the Silver Contact historical producer (Figure 6-3). They are held by private owners; no additional information is available on any exploration completed on these claims (Samari, H. and Breckenridge, L., 2021a).

24.0 OTHER RELEVANT DATA AND INFORMATION

All relevant information is included in this report.

25.0 INTERPRETATION AND CONCLUSIONS

It is the opinion of the Author of this Technical Report that the Calico Project's past exploration and development history is sufficient to support a silver mineral resource estimate to an Inferred level of assurance. These conclusions are based on interpretation of the development history of silver mining in the Calico Mining District where the Project is located, as well as validation and inclusion of past exploration data into a geological model using current best practice.

The Calico Project is located approximately 9 miles northeast of the city of Barstow within San Bernadino County, CA. The Project comprises both the Waterloo and Langtry Properties that were historically explored separately. The Project can be accessed year-round by paved and dirt roads, and within the Properties there is a network of dirt roads providing access to the old drill pads and historical workings. Climatic conditions in the Project area allow for year-round mining operations.

Most significant mining in the Calico Mining District was undertaken between 1881 and 1896, reporting 15-20 million troy ounces of silver (Ag), with minor barite, gold, lead, and copper (Harthrong, 1983). Thereafter, up until the 1961 there was intermittent boom-and-bust mining activity. There are more than 50 historical past producing mines in the District. Of these, five occur on the Calico Project: at Waterloo are the Voca, Union and Waterloo silver mines and the Burcham gold-lead mine; at Langtry is the Langtry silver mine. Historic mining has focused on the persistent and thick (+50 ft (15 m) wide) veins zoned with high grade barite and silver. Historic mining is understood not to have targeted the disseminated silver mineralization that is commonly found in the surrounding vein country rock that forms the basis of the mineral resource estimate.

Exploration on the Calico Project using modern methods started in the 1960's with various drilling campaigns comprising mostly of rotary and RC drilling, ending in 2013. At Waterloo a total of 267 drillholes were completed by two previous controlling companies, ASARCO and Pan American. At Langtry a total of 186 drillholes were completed by two controlling companies, Superior Oil and Athena. Data from these drilling campaigns was identified to be adequate for the purposes of building separate geologic models for the Waterloo and Langtry properties. Data adequacy was determined by Stantec through an audit of the drill hole assay results, a site inspection of the Calico Project cross-referencing samples in storage with exploration records and validating hole locations in the field, and independent assessment of QA/QC.

Metallurgical testing undertaken at Waterloo by ASARCO and the US Bureau of Mines; and by Superior and Athena at Langtry indicated that recovery of silver at or above 80% is potentially possible from silver mineralization observed on the Calico Project properties. Metallurgical testing on the Calico Project was undertaken from samples taken from a near-surface oxidized silver mineralized zone that is the target for the minerals resource estimate.

Two historical economic studies were conducted for the Waterloo Property by ASARCO in 1969 and by Fluor Mining and Metals Inc., on behalf of ASARCO, in 1980. Pan American (2008) concluded that both historical economic studies cannot be used to give an accurate estimation of the profitability of the Project in 2008 due to the following: inflation, only a 10-year operation was considered, it did not include extraction of secondary minerals, and mining technology and price of metals had changed significantly from 1969 to 2008. At Langtry only feasibility-level recommendations for mine development, primarily addressing slope stability and the use of overburden materials for concrete aggregate were addressed as part of a study evaluating geotechnical and engineering conditions (C.H.J. Incorporated, 2010).

Exploration undertaken since the 1960's on the Project has identified disseminated silver mineralization at grades greater that 50 ppm that is hosted within the Lower Barstow Formation sediments. A cut-off grade of 50 ppm silver was identified by the Author and QP as a base case for reporting of silver mineral resource estimates on the Calico Project. The Tertiary (Miocene) Lower Barstow Formation is comprised predominately of sandstone and overlies the Tertiary Pickhandle Formation that is predominately a rhyolitic unit. Silver and gold vein mineralization is hosted in the Pickhandle Formation volcanic flows and breccias, however there is insufficient information on the mineralization within the Pickhandle Formation to identify an exploration target or mineral resource.

Geologic modelling has identified two major resource limiting boundaries below a surficial weathering surface. These are these the Calico Fault and associated fault splits/splays, and the Lower Barstow-Pickhandle formation contact. The Calico fault is a range-front fault dipping towards the north-east and has been mapped on the south-western foothills of the Calico Mountain Range. The Calico fault juxtaposes unmineralized Upper Barstow Formation sediments in the west with mineralized Barstow Formation sediments in the east. The Lower Barstow-Pickhandle formation contact is easily identified from surface mapping as the positive-weathering Pickhandle formation occupies the high ground in the Calico Mountains. The Lower Barstow-Pickhandle formation is not well defined below surface due to most exploration drilling being largely confined to within the Lower Barstow formation.

At Waterloo the mineral resource is cut-off by the Calico fault in the west and Lower Barstow-Pickhandle contact in the east. At Langtry the silver mineral resources are confined to within a Calico fault split and the main Calico fault in the west. The mineralized zone has been coded into separated 3D block models representing the Waterloo and Langtry deposits. Using current silver mineral pricing and mining costs only surface mineable silver mineral resources at an inferred level of assurance have been identified for both the Waterloo and Langtry properties. Estimated resource volumes lost to historic underground mining on the Calico Project has been identified as too small to be in material impact to the mineral resource.

25.1 Risks and Uncertainties

The following risks and uncertainties have been identified that may impact future exploration and mining development of the Calico Project.

- Historic metallurgical testing has reported a wide range in silver recoveries. Silver recoveries of greater that 80 % may not be realized from the resource.
- Historical underground workings pose a risk to mining if they are not accurately surveyed and accounted for in the mine plan.
- The Calico Project is located in an arid region with limited water supplies that may impact the ability to obtain sufficient makeup water to support an onsite processing plant.

According to the available information to the Author and QP, as of the effective date of the mineral resource estimate, there are no other known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that would materially impact exploration and mining development of the Calico Project.

26.0 RECOMMENDATIONS

The Calico Silver Project is an exploration project with an initial drill defined mineral resource. The resource defined at Calico is of sufficient size to warrant additional work to increase the confidence in the current resource estimate and to determine the potential for commercially viable operations.

26.1 Phase I Work Program

The purpose of the recommended Phase I program is to obtain sufficient exploration information to increase the confidence in the currently inferred mineral resources to that of mostly measured plus indicated level of assurance to support at a minimum a prefeasibility study (PFS). The results of the Phase I work program along with additional current surface mapping and IP geophysical survey (see section 9) should be incorporated into an updated and upgrade resource estimate and be presented in a Mineral Resource Estimate NI 43-101 technical report. The Phase I work program is expected to take five months to complete.

26.1 1 Resource Drilling

In-fill RC and core drilling to increase confidence in the resource classification is recommended. The drilling should focus on the following objectives:

1) In-fill drilling to provide better local estimates of block grades. This work will also allow for better determination of high-grade material in the current resource.
2) Twinning of a select number of holes is recommended. This will provide additional validation of and confidence in the historic drill results and data base.
3) Select holes to target resource-limiting contact boundaries such as the Calico fault and fault splays, as well as the Lower Barstow-Calico Formation contact. and of areas along strike and down dip from the current resource are recommended. This will allow for the definition of additional shallow silver mineralization if present, and to be included in the updated resource estimate.

All drill holes should only be terminated after they have penetrated the basement Pickhandle volcaniclastics and all holes should be assayed for gold. Material for the Phase I drill program can also be used for the metallurgical program discussed below.

Optical televiewer (OTV) geophysical logging of one in three RC holes is recommended to provide detailed geotechnical information and rock density data. OTV geophysical logging may be used as a substitute for the planned core holes.

26.1.2 Metallurgical Test Program

A Phase I metallurgical test program is recommended. In addition to standard bottle roll testing, the program should include assisted leach testing. Comminution testing should be completed and in addition to testing various feed sizes, HPGR crush testing should be trialed.

The costs for an infill drilling and metallurgical testing program are outlined in a Table 26.1.

Table 26.1
Phase 1 Infill Drilling Program and Metallurgical Testing

Phase I Budget	Type	Length		Rate	Cost
		Metres	Feet	C$/m	C$
Drilling	RC	12,000	39,370	225	$2,700,000
	Core	3,000	9,843	700	$2,100,000
Drilling Labour					$200,000
Geophysical Logging		12,000	39,370		$400,000
Assaying					$750,000
Metallurgical Testing					$250,000
Reporting					$300,000
Total Phase I					**$6,700,000**

26.2 Phase II Work Program

Using the Phase I revised resource estimate as input, a Phase II PEA is recommended. The costs for the recommended Phase 2 preliminary economic assessment (PEA) are outlined in a Table 26.2. The purpose of the PEA is to conceptually layout Project facilities for mining and processing and apply appropriate capital and operating costs at a scoping level of accuracy and to then determine the potential economic viability of a future development. The results would be presented in a Preliminary Economic Assessment NI 43-101 technical report and lay the groundwork necessary for the eventual development Phase 3 prefeasibility study (PFS). The Phase 2 program is expected to take 3 months to complete and is dependent on the completion of Phase I.

Table 26.2
Phase 2 Preliminary Economic Assessment

Phase II Budget	C$
PEA Study	$300,000

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