



MINE DEVELOPMENT ASSOCIATES

A Division of **RESPEC**



Technical Report and Estimate of Mineral Resources for the Tonopah West Silver-Gold Project, Nye and Esmeralda Counties, Nevada, USA



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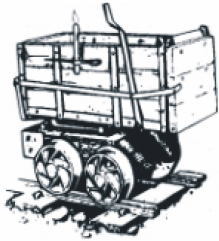
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MINE ENGINEERING SERVICES

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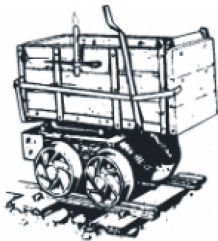
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FRONTISPIECE: *Photograph of the historical Victor Shaft, Tonopah West property; from John et al. (2022b).*



MINE DEVELOPMENT ASSOCIATES

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1.0 SUMMARY (ITEM 1)

RESPEC Company LLC (“RESPEC”), formerly Mine Development Associates, has prepared this technical report on the Tonopah West silver and gold project at the request of Blackrock Silver Corp. (“Blackrock”, TSXV:BRC; OTC:BKRRF), a Canadian company based in Vancouver, British Columbia. This report is intended to present the maiden resource estimate and a technical summary for the Tonopah West project. The resource estimates herein have been prepared in accordance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators’ National Instrument 43-101 (“NI 43-101”), Companion Policy 43-101CP, and Form 43-101F1, as well as with the Canadian Institute of Mining, Metallurgy and Petroleum’s “CIM Definition Standards - For Mineral Resources and Reserves, Definitions and Guidelines” (“CIM Standards”) adopted by the CIM Council on May 10, 2014. Effective Date of the estimated mineral resources and this technical report is April 28, 2022.

1.1 Property Description and Ownership

The Tonopah West property totals 566 hectares of private land (patented mining claims) and public land controlled by the United States Department of the Interior Bureau of Land Management (“USBLM”). The property consists of 19 unpatented lode mining claims and 100 patented claims held by Blackrock that cover portions of Section 3, Township 2 North, R42 East, and Sections 26 through 29 and 33 through 35 of Township 3 North, Range 42 East, Mount Diablo Base Meridian in Nye and Esmeralda counties, Nevada, adjacent to and locally within the town limits of Tonopah. The approximate center of the property is located at latitude 38.0719°N and longitude 117.2498°W. The current annual holding costs for the Tonopah West unpatented mining claims are estimated at \$3,135.

Historical mining and exploration activities have occurred at various areas within the Tonopah West property since the early 1900s. These activities have left roads, drill pads, historic underground workings, mine tailings and mine dumps. The authors are not aware of any environmental liabilities associated with the above. Blackrock’s US subsidiary, Blackrock Gold Corporation, is authorized for a surface disturbance of up to 65.8 acres under a surety bond for US\$173,816 posted with the Nevada Department of Environmental Protection (“NDEP”). Blackrock represents the surface disturbance permit is sufficient for the exploration work recommended in in this report.

1.2 Exploration and Mining History

The Tonopah West project is located in the western part of the Tonopah mining district which produced an estimated 8,023,371 tonnes, valued at \$150,198,315 from 1900 to the 1940s (Carpenter et al., 1953). This includes an estimated 2,305,192 tonnes, valued at \$40,189,799, reported to have been mined from the western portion of the district (Carpenter et al., 1953) where the Tonopah West property is located.

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Details of the specific mining operations are not well known. Some of the available, more important underground maps and reports have been compiled and digitized by Blackrock. Historical modern exploration commenced in 1969 with underground work by Howard Hughes' Summa Corporation. Subsequent operators included Houston Oil and Minerals ("HOM"), Chevron USA ("Chevron"), Coeur Mining, Inc. ("Coeur"), and Eastfield Resources Ltd. ("Eastfield"). Blackrock acquired an option on the Tonopah West property in 2020. The authors are not aware of any significant historical mineral resources or reserves estimated for the Tonopah West property.

1.3 Geology and Mineralization

The Tonopah West project is situated on the southwestern flank of the San Antonio Mountains between and overlapping the margins of the 20 Ma Fraction caldera to the north, and the 17.3 Ma Heller caldera to the south. Surface exposures at the Tonopah West property include Miocene volcanic rocks and Quaternary fan and pediment deposits. At depth, the andesitic to silicic volcanic flows, tuffs, and volcanoclastic rocks of the Tonopah volcanic center overlie basement granitic intrusive rocks of probable Mesozoic age.

Silver-gold mineralization at the Tonopah West property occurs in low- to intermediate-sulfidation epithermal quartz veins and quartz-cemented breccias that do not crop out at the surface. The veins generally strike west or west-northwest and dip at various angles to the north. The principal host rocks include the West End Rhyolite, and to a lesser extent, the Mizpah Andesite (also known as the Mizpah Formation), Extension Breccia, Tonopah Formation, and Sandgrass Andesite. Mineralized quartz veins range from a few centimetres to a few metres in thickness. Thicker zones tend to be characterized by sub-parallel quartz fissure veins. Vein mineralogy includes quartz, adularia, pyrite, and parallel bands of fine-grained black sulfide and/or sulfosalt minerals. Related quartz-cemented breccias contain pyrite and fine-grained black sulfide and/or sulfosalt minerals in the matrix. Veins in the Tonopah West property generally strike west or west-northwest and dip at various angles to the north.

Two groups of mineralized veins have been defined that comprise the two areas of estimated mineral resources and mineralized material in the Tonopah West property. The Denver-Paymaster-Bermuda-Merten ("DPB") vein group is located ~1 kilometer west of the town of Tonopah and was historically accessed by the westernmost underground mining workings in the Tonopah district. The DBP veins have a presently-known vertical extent of ~500 metres.

The Victor vein historically was accessed by workings more proximal to the central Tonopah mining district. The known extent of the Victor vein is approximately 750 metres in an east-west direction, with a vertical extent of about 400 metres.

1.4 Metallurgical Testing and Mineral Processing

A total of 12 bottle-roll cyanide-leach analyses have been performed at Kappes, Cassiday and Associates ("KCA") in 2022 using RC and core composited from 47 drill samples taken from six of the principal veins within the project area. Gold extractions ranged from 90% to 98% with an average of 95%. Silver extractions ranged between 81% and 94% with an average of 87%. Cyanide consumption ranged from 0.35 to 1.03 kilograms per tonne.



1.5 Mineral Resource Estimate

The estimated mineral resources presented in this Technical Report were classified in order of increasing geological and quantitative confidence to be in accordance with the “CIM Definition Standards - For Mineral Resources and Mineral Reserves” (2014) and therefore Canadian National Instrument 43-101. Mineral resources are reported at cutoffs that are reasonable for deposits of this nature given anticipated mining methods and plant processing costs, while also considering economic conditions, because of the regulatory requirements that a mineral resource exists “in such form and quantity and of such a grade or quality that it has reasonable prospects for eventual economic extraction.”

RESPEC modeled metal domains for the Tonopah West project DPB and Victor vein deposits, using geologic modeling provided by Blackrock as a guide, then estimated and classified silver and gold mineral resources. The small block size of 4.0 metres x 1.0 metres x 2.0 metres was chosen for evaluation of underground potential using the smallest equipment that possibly could be used. Estimation was done using inverse-distance to the third power. Multiple models were estimated in order to optimize the estimation parameters.

The estimate of mineral resources for the Tonopah West property is the block-diluted inverse-distance estimate and is tabulated at variable cutoffs for underground mining to evaluate sensitivities to mining costs. The assumed mining costs reflect the potential use of longhole stoping methods for the steeply-dipping veins, and cut and fill for the shallow-dipping veins. The DPB deposit consists of approximately 35% shallow-dipping veins with the remainder steeply dipping, whereas the Victor deposit is almost entirely of steeply-dipping veins. The cost cutoff for the Victor veins is \$107/tonne, whereas the averaged cutoff for the mixed shallow- and steeply-dipping DPB veins is \$118/tonne. Mineral resources were classified entirely as Inferred. Factors considered for classification include results of data verification and QA/QC results, the drill spacing within the deposit areas, and the level of metallurgical test work at the current stage of the project. Table 1.1 presents the optimized underground stope-constrained estimated mineral resources for the DPB and Victor deposits, based on a \$20/oz silver and \$1,750/oz gold prices. Known mined out material has been removed from resource tabulations at the Victor deposit. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Table 1.1 Tonopah West Inferred Mineral Resources

Area	Mining, Processing and G&A Total Cost Cutoff \$/tonne	g AgEq/t cut-off grade	Tonopah West Inferred Resources							
			Met-Recovery Weighted Block Value \$/tonne	Tonnes	Block Diluted g Ag/t	Block Diluted g Au/t	Block Diluted g AgEq/t	oz Ag	oz Au	oz AgEq
DPB	118	210	230	1,281,000	198	2.3	415	8,150,000	94,000	17,100,000
Victor	107	192	251	1,694,000	216	2.7	469	11,752,000	144,000	25,514,000
TOTAL	112	200	242	2,975,000	208	2.5	446	19,902,000	238,000	42,614,000



1.6 Conclusions and Recommendations

The Tonopah West vein system contains low- to intermediate-sulfidation epithermal precious metal mineralization that may extend west from the central part of the Tonopah district. The mineralization is silver-rich, relatively base metal-poor and consists of parallel sets of veins and vein stockworks. The authors believe that exploration potential for additional mineralization at the Tonopah West project remains significant within the historical veins and the new veins discovered by Blackrock. Most of the modeled mineralization is open at depth, and, in several areas, along strike, with opportunity to expand the current resources with further drilling, both down dip and laterally. In particular, the area between the DPB and Victor resources is poorly explored by drilling and further drilling has the potential to connect these resources.

The Inferred classification of the current mineral resources reflects the relatively early stage of exploration and delineation. As the project advances, drill-spacing and general knowledge of the geology and mineralization can improve. Higher classification will require infill drilling in order to test the current silver and gold models. Underground access may be necessary to efficiently perform infill and expansion drilling, and may also aid in locating historical underground mine development.

Blackrock's drilling has intersected new mineralized veins, which attests to the potential for discovery of additional silver-gold resources in the Tonopah West project area. Further work is warranted and the authors recommend a Phase 1 work program with an estimated total cost of \$4,000,000 (approximately CAD\$5,000,000) as summarized in Table 1.3. Blackrock would complete a combined 18,000 metres of RC and core drilling at DPB and Victor with RC drilling costs expected to be in the range of \$60 to \$65/meter. Core drilling costs would likely be in the range of \$295/meter to \$310/meter.



Table 1.2 Blackrock Silver Estimated Work Program for Tonopah West

Item	Estimated Cost (USD)
RC Pre-Collar Drilling - 8,000m (@ ~\$62.50/meter)	\$500,000
Core Drilling - 10,000m (@ ~\$300.00/meter)	\$3,000,000
Assays (@ ~\$9.00/sample)	\$250,000
Construction	\$20,000
Exploration Overhead*	\$220,000
Land	\$6,000
Metallurgical Test Work	\$24,000
Total	\$4,000,000

** Includes all payroll, consultants, travel and meals, computer software, storage rental, various supplies.*

It is the authors' opinion that the Tonopah West project is a project of merit that warrants the proposed exploration program and level of expenditures summarized above.



2.0 INTRODUCTION AND TERMS OF REFERENCE (ITEM 2)

RESPEC Company LLC (“RESPEC”), formerly Mine Development Associates, has prepared this technical report on the Tonopah West silver-gold project, Nye and Esmeralda Counties, Nevada, at the request of Blackrock Silver Corp. (TSXV: BRC; OTC: BKRRF; FSE AHZ0), a British Columbia corporation. Blackrock Silver Corp. controls the Tonopah West project and property through its wholly-owned U.S. subsidiary Blackrock Gold Corp. and both companies are referred to collectively herein as “Blackrock”.

The Tonopah West project lies in the western portion of the historic Tonopah mining district of west-central Nevada. The Tonopah district has been the site of extensive exploration and underground mining since 1900. The purpose of this report is to provide a maiden resource estimate and an updated technical summary for the Tonopah West project. This report has been prepared in accordance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators’ National Instrument 43-101 (“NI 43-101”), Companion Policy 43-101CP, and Form 43-101F1, as amended.

2.1 Project Scope and Terms of Reference

The mineral resources presented in this report were estimated and classified under the supervision of Jeffrey Bickel, formerly a Senior Geologist for RESPEC, and Michael S. Lindholm, Principal Geologist for RESPEC. Mr. Bickel and Mr. Lindholm are Qualified Persons under NI 43-101 and have no affiliations with Blackrock except that of independent consultant/client relationship. The mineral resources reported herein have been estimated in accordance with the “CIM Definition Standards - For Mineral Resources and Mineral Reserves” (2014) and therefore NI 43-101. Assistance with portions of this report were provided by Nathan Forsythe, Senior Geologist for RESPEC, and Sara Holden, Project Geologist for RESPEC. Mr. Forsythe and Ms. Holden are not Qualified Persons under NI 43-101. Mr. Bickel and Mr. Lindholm are co-responsible for Sections 14 Mineral Resource Estimates and its respective section in Section 1 Summary. Mr. Bickel takes full responsibility for Section 12 Data Verification and Mr. Lindholm takes full responsibility for all other sections of this report.

The scope of this study included a review of pertinent technical reports and data provided to RESPEC by Blackrock relative to the general setting, geology, project history, exploration activities and results, methodology, quality assurance, interpretations, drilling programs, and metallurgy. This report is based almost entirely on data and information derived from work done by historical operators and Blackrock. There has been one prior NI 43-101 technical report for the project by Wolverson (2021).

The authors have reviewed much of the available data and have made judgments about the general reliability of the underlying data. Where deemed either inadequate or unreliable, the data were either eliminated from use or procedures were modified to account for lack of confidence in the information. Mr. Bickel has visited the project site and Mr. Bickel and Mr. Lindholm have made such independent investigations as deemed necessary in their professional judgment to be able to reasonably present the conclusions, interpretations, and recommendations presented herein.

Mr. Bickel visited the Tonopah West project on September 16, 2021 while still a Senior Geologist for RESPEC. This site visit included an inspection of both core and RC drilling procedures in the field, a review of the surface geology at the property, and a visit to the Blackrock core logging facility in Tonopah.



Mr. Bickel reviewed and verified geologic logs and cross-sections at the Tonopah core facility and compared them with drill core for accuracy. Mr. Bickel engaged in geologic discussions and interpretations with Blackrock staff, and he also verified drill-hole collar locations in the field. Mr. Lindholm has not visited the Tonopah West project site.

The Effective Date of this technical report is April 28, 2022.

2.2 Frequently Used Acronyms, Abbreviations, Definitions, and Units of Measure

In this report, measurements are generally reported in metric units. Where information was originally reported in Imperial units, RESPEC has made the conversions as shown below.

Currency, units of measure, and conversion factors used in this report include:

Linear Measure

1 centimetre	= 0.3937 inch	
1 metre	= 3.2808 feet	= 1.0936 yard
1 kilometre	= 0.6214 mile	

Area Measure

1 hectare	= 2.471 acres	= 0.0039 square mile
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Capacity Measure (liquid)

1 liter	= 0.2642 US gallons
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Weight

1 tonne	= 1.1023 short tons	= 2,205 pounds
1 kilogram	= 2.205 pounds	

Conversion of Metric to Imperial

1 gram	= 31.10348 troy ounces
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Currency Unless otherwise indicated, all references to dollars (\$) in this report refer to currency of the United States.



Frequently used acronyms and abbreviations

AA	atomic absorption spectrometry
Ag	silver
Au	gold
cm	centimetres
core	diamond core-drilling method
°C	degrees centigrade
ft	foot or feet
g/t	grams per tonne
ICP	inductively coupled plasma analytical method
in.	inch or inches
km	kilometres
m	metres
Ma	million years old
mi	mile or miles
mm	millimetres
oz	ounce
ppm	parts per million
ppb	parts per billion
QA/QC	quality assurance and quality control
RC	reverse-circulation drilling method
RQD	rock-quality designation
t	tonne
ton	Imperial short ton



3.0 RELIANCE ON OTHER EXPERTS (ITEM 3)

The authors are not experts in legal matters, such as the assessment of the validity of mining claims, mineral rights, and property agreements in the United States or elsewhere. Furthermore, the authors did not conduct any investigations of the environmental, social, or political issues associated with the Tonopah West project, and are not experts with respect to these matters. The authors have therefore relied fully upon information and opinions regarding the Tonopah West property as follows:

- The property agreements with regards to the Tonopah West property were provided by Blackrock. They are summarized in Section 4.3;
- Blackrock also provided the Confidential Legal Advice reports of Erwin (2022a; 2022b) on the land and mineral status of the Tonopah West property in Section 4.3; and
- Disclosure regarding environmental liabilities in Section 4.4 and environmental permits in Section 4.5 were provided by Blackrock in a communication via email on April 13, 2022 titled “Tonopah West 43-101 April 2022-Section 4 Final.docx”.

The authors have fully relied on Blackrock to provide complete information concerning the pertinent legal status of Blackrock and its affiliates, as well as current legal title, material terms of all agreements, and material environmental and permitting information that pertains to the Tonopah West project.



4.0 PROPERTY DESCRIPTION AND LOCATION (ITEM 4)

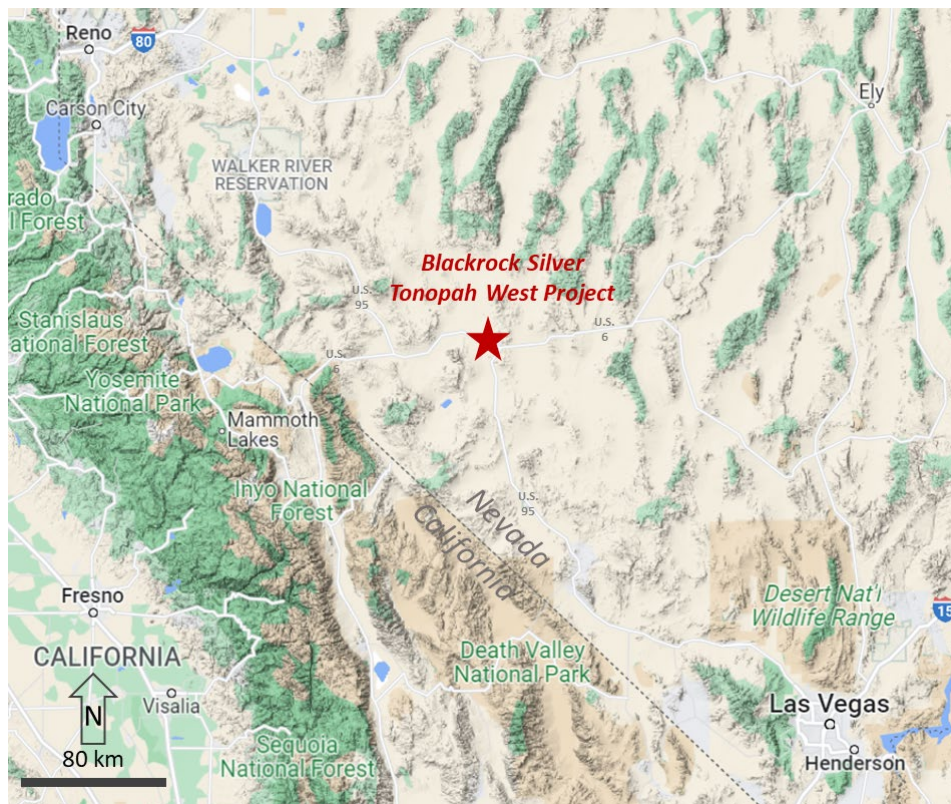
The authors are not experts in land, legal, environmental, and permitting matters and express no opinion regarding these topics as they pertain to the Tonopah West project. Subsections 4.2, 4.3, 4.4 and 4.5 were prepared with information received from Mr. William Howald, Executive Chairman of Blackrock, in a project communication document received via electronic mail on April 13, 2022. Reviews of the property status were provided in documents titled “Confidential Legal Advice” dated January 24, 2022 (Erwin, 2022a) and “Confidential Legal Advice” dated February 13, 2022 (Erwin, 2022b).

Mr. Lindholm and Mr. Bickel do not know of any significant factors and risks that may affect access, title, or the right or ability to perform work on the property, beyond what is described in this report.

4.1 Location

The Tonopah West property is in west-central Nevada approximately 370 kilometres southeast of Reno adjacent to and locally within the town limits of Tonopah (Figure 4.1). The property covers portions of Section 3, Township 2 North, R42 East, and Sections 26 through 29 and 33 through 35 of Township 3 North, Range 42 East, Mount Diablo Base Meridian in Nye and Esmeralda counties. The approximate center of the property is located at latitude 38.0719°N and longitude 117.2498°W.

Figure 4.1 Map Showing the Location of the Tonopah West Property
(RESPEC, 2022)

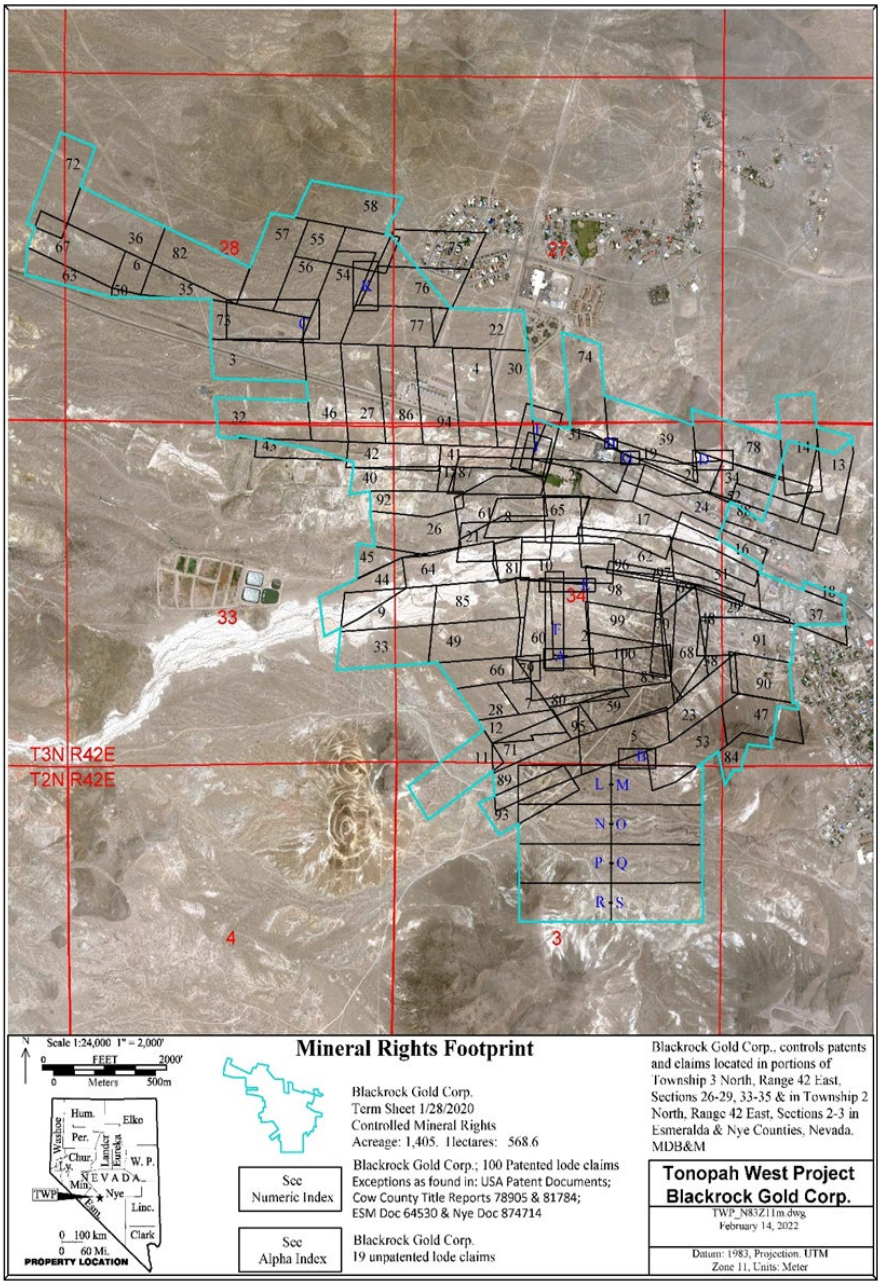




4.2 Land Area

The Tonopah West property totals 566 hectares of private land (patented mining claims) and public land controlled by the United States Department of the Interior Bureau of Land Management (“USBLM”). There are 19 unpatented lode mining claims and 100 patented claims held by Blackrock which constitute the property as shown in Figure 4.2 and as listed in Appendix A.

Figure 4.2 Tonopah West Property Map
(from Blackrock, 2022)





Ownership of the unpatented mining claims is in the name of the holder (locator), subject to the paramount title of the United States of America, under the administration of the USBLM. Under the Mining Law of 1872, which governs the location of unpatented mining claims on federal lands, the locator has the right to explore, develop, and mine minerals on unpatented mining claims without payments of production royalties to the U.S. government, subject to the surface management regulation of the USBLM. Currently, annual claim-maintenance fees of \$165 per claim are the only federal payments related to unpatented mining claims, and Blackrock represents these fees have been paid in full to September 1, 2022. The current annual holding costs for the Tonopah West unpatented mining claims are estimated at \$3,135.

All but three of the unpatented lode claims are in Esmeralda County with one straddling the county line. Blackrock has filed its notice of intent to hold and affidavit of payment of the USBLM mining claims fees in both Nye and Esmeralda County for 2021-2022.

County property taxes are due on the patented claims (private land) in both Nye and Esmeralda County by December 31st of each year. The real property tax records indicate that the taxes are current as of February 11, 2022.

The patented claims have 100% of the mineral rights and complete access to approximately 90% of the surface, including the 212 hectares of the Lambertucci Ranch. The remaining 10% of the surface rights are held by third party ownership in and adjacent to the town of Tonopah. The majority of the third-party surface rights are on the east side of the project where local businesses and property owners have surface rights to a maximum depth of 30.48 metres below the surface. The cemetery located in the NW ¼ of the NE ¼ of Section 34, Township 3 North, Range 42 East, MDB&M covers five hectares and is off limits to drilling. The unpatented lode mining claims have mineral rights and statutory surface access as long as the claims are maintained in good standing.

4.3 Agreements and Encumbrances

On February 20, 2020, Blackrock executed an Option Agreement with Nevada Select Royalty Inc. (“Nevada Select”), the wholly-owned subsidiary of Ely Gold Royalties Inc., with respect to 97 patented claims and 19 unpatented lode mining claims that make up the Tonopah West property (the “Nevada Select Option”). In March 2021, Blackrock completed a land exchange and acquired three additional patented claims. This addition brought the total of the patented claims to 100. The following subsections summarize the current agreements on the Tonopah West Property based on Blackrock corporate documents and Erwin (2022a, 2022b).

4.3.1 Nevada Select Option

The Nevada Select Option executed February 24, 2020 with Nevada Select gives Blackrock all rights and privileges incidental to ownership, including the rights to explore, develop and mine at the Tonopah West property. The following is a summary of the Nevada Select Option terms:

- Nevada Select was to complete the purchase of 74 patented mining claims from Cliff ZZ, L.L.C., which was then to become part of this agreement. Nevada Select completed the purchase and effective April 1, 2020, the 74 claims were included in the total number of claims which make up the Tonopah West property. Blackrock will pay all mining claim maintenance and rental fees at



least 15 days before the due dates of those fees in order to keep the Nevada Select claims in good standing.

- The Nevada Select Option will remain in effect until a) the option closing, b) termination of the option agreement or c) four years from the initial closing date.
- The price of the property is \$3,000,000 to be paid as option payments as follows:
 1. \$325,000 cash paid to Nevada Select on the Initial Closing, which the Optionee shall be obligated to pay if, and only if, Nevada Select has acquired record and possessory title to the Cliff ZZ Claims. The Cliff ZZ purchase is complete, and the payment was made by Blackrock,
 2. \$325,000 cash paid to Nevada Select on or before the first anniversary of the Initial Closing Date,
 3. \$650,000 cash paid to Nevada Select on or before the second anniversary of the Initial Closing Date,
 4. \$700,000 cash paid to Nevada Select on or before the third anniversary of the Initial Closing Date and
 5. \$1,000,000 cash paid to Nevada Select on or before the fourth anniversary of the Initial Closing Date.
- The Option may be exercised and the purchase price may be paid early with notice to Nevada Select.
- Blackrock has the sole and exclusive option to purchase and own 100% of the Tonopah West property for a total purchase price of US\$3,000,000 on or before February 24, 2024.
- Blackrock will pay Nevada Select a production royalty of 3% of the net smelter returns on the Tonopah West property and an Area of Interest of 1 mile (1.6 kilometres). The 3% royalty will be net of any third-party mineral production royalties, such that the total production royalty does not exceed 3% net smelter royalty.

4.3.2 Lambertucci Land Exchange

On March 26, 2021, Blackrock Gold Corporation entered into a Property Exchange Agreement with Nevada Select and three other landowners who have surface use rights on certain of the lands within the Tonopah West property.

Under the agreement, Nevada Select acquired three patented mining claims consisting of 35.411 acres (14.3 hectares) which were inliers within the Tonopah West property. In exchange for the three patented claims, the landowners will gain surface rights to a depth of 100 feet (30.48 metres) below the surface on 48.94 acres (19.8 hectares), and Blackrock will retain the mineral rights below the depth of 100 feet. The acquired patented mining claims are included in the property subject to the Nevada Select Option.

4.3.3 Other

There are eight patented mining claims with severed mineral and surface rights. Blackrock asserts that the mineral reservation in a historic deed of the patented mining claims grants Blackrock the rights to



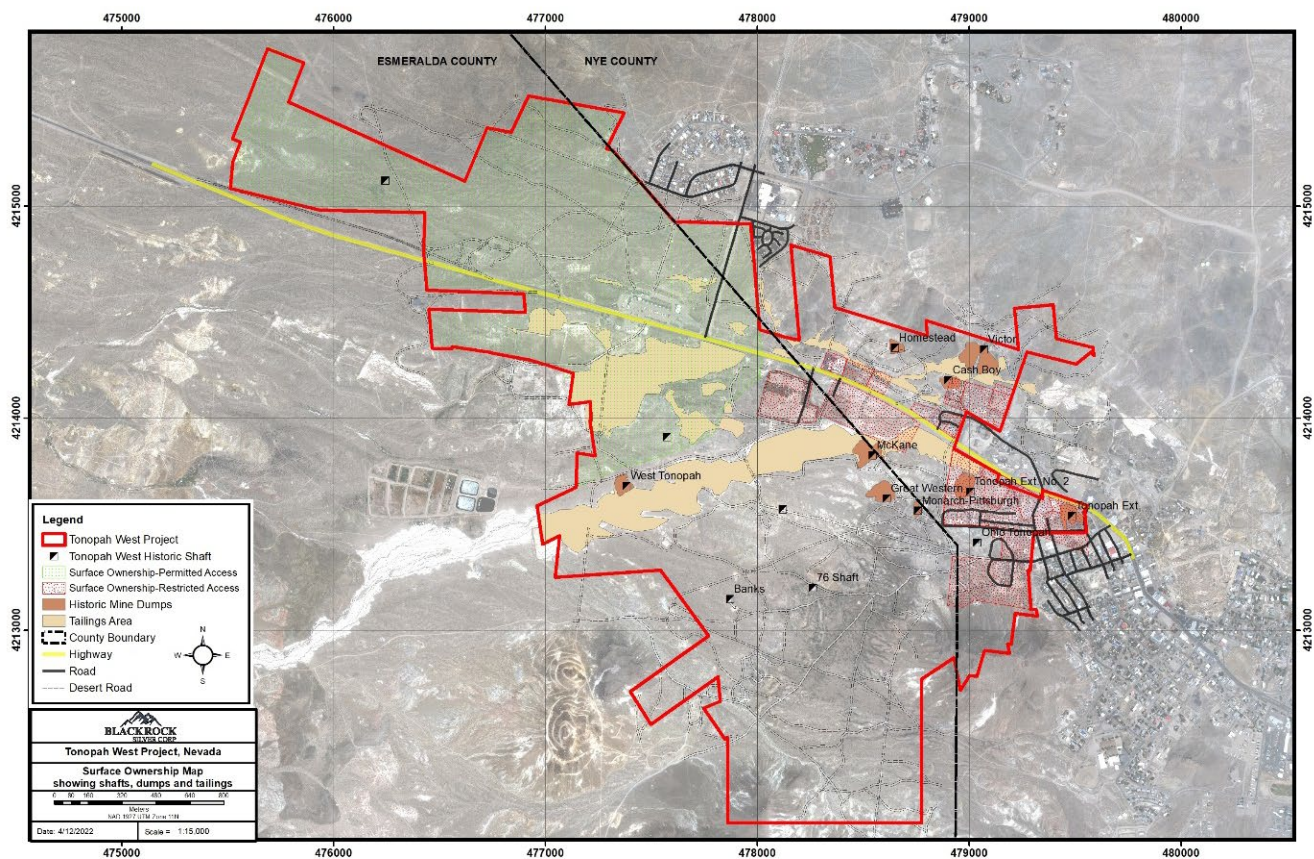
mine and use the surface for mining activities (Erwin, 2022b). Nevada Select holds ownership of 15/16's of the Taft patented claim.

There is an easement to Nevada Bell Telephone company, dba AT&T Nevada, and various easements, rights-of-way and other entries are reserved by the U.S. on federal public lands.

4.4 Environmental Liabilities

The authors are not experts on environmental issues and have fully relied on Mr. Howald and Blackrock for the information in this subsection. Historical mining and exploration activities have occurred at various areas within the Tonopah West property since the early 1900s. These activities have left roads, drill pads, historic underground workings, mine tailings and mine dumps (Figure 4.3). The authors are not aware of any environmental liabilities associated with the above. Blackrock plugs all drill holes according to State and Federal regulations and fills in the sumps upon completion of each hole. The roads and drill pads are reclaimed soon after drilling is completed unless there are plans to complete additional drilling at the same site. Access roads will be reclaimed following completion of the drill program.

Figure 4.3 Historical Surface Disturbances and Infrastructure, Tonopah West Property
(from Blackrock, 2022)





4.5 Environmental Permitting

The Blackrock activities described and proposed in this report are all on the patented claims (private land) controlled by Blackrock. The Nevada Bureau of Mining, Regulation and Reclamation (“BMRR”) within the Nevada Department of Environmental Protection (“NDEP”) requires a permit when the surface disturbance is greater than five acres.

Blackrock’s initial disturbance did not exceed five acres. Blackrock applied for the permit with BMRR in April, 2021. On April 7, 2021, permit 0410 was granted to Blackrock’s US subsidiary, Blackrock Gold Corporation. Permit 0410 authorizes Blackrock for a surface disturbance of up to 65.8 acres. Blackrock submitted a surety bond for US\$173,816 which was posted with NDEP-BMRR. Blackrock represents it is in compliance with all NDEP-BMRR requirements and the surface disturbance permit is sufficient for the exploration work recommended in Section 26.



5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY (ITEM 5)

The information summarized in this section is derived from publicly available sources, as cited. The authors have reviewed this information and believe this summary is materially accurate.

5.1 Access to Property

The property is approximately halfway between the cities of Reno and Las Vegas, Nevada and is easily accessed via U.S. Highways 6 and 95, which transect the property from northwest to southeast. A network of various paved, graveled and dirt roads and tracks also traverse the property and connect with the adjacent town of Tonopah where there are approximately 2,100 residents as of the 2020 census. U.S. Highways 95 and 6 provide all-weather and all-season access for commercial semi-trailers.

5.2 Climate

The climate in the Tonopah area is semi-arid. Average annual precipitation is approximately 12.5 centimetres, falling mainly as snow during the winter months and during occasional summer thunderstorms. Temperatures can vary from about -24 to 40°C, with an average of -5°C in the winter and 23°C in the summer. Evapotranspiration exceeds precipitation in the summer months. Rare heavy snowfalls during the winter months may reduce or delay access on secondary roads through the property for hours to a day or two at a time. Snow cover can make access to portions of the property difficult from January through April, although operations, such as drilling, should be possible during these months. Mining and exploration can be conducted year round.

5.3 Physiography

The property is situated on the gently sloping west flank of the San Antonio Mountains with elevations that vary from approximately 1,722 to 1,951 metres. The property is punctuated by a few low hills and several dry stream courses. Vegetation is sparse, consisting of mixtures of sagebrush, small desert shrubs and grasses. There are no trees.

5.4 Local Resources and Infrastructure

The surface rights summarized in Section 4 are sufficient for the exploration and mining activities proposed in this report. Electrical power is available within the property from NV Energy and the regional electrical grid. Water for exploration drilling is purchased from the Tonopah Public Utility. Ground water has been encountered in the drilling. Blackrock does not hold any water rights as of the effective date of this report and has not conducted hydrology studies at the project site. There is adequate gently sloping ground on the property for processing plant sites, heap-leach pads, waste-rock storage and tailings storage. Sufficient sources of labor for exploration and mining operations are available in the cities of Las Vegas, Reno and Carson City, Nevada, as well as in Tonopah and in Bishop, California.



6.0 HISTORY (ITEM 6)

The information summarized in this section has been extracted and modified from Wolverson (2021), Blackrock's unpublished company files, and other sources as cited. The authors have reviewed this information and believe this summary is materially accurate.

The Tonopah West project is located in the western part of the Tonopah mining district which has been active since 1900 when Jim Butler discovered precious metal mineralization in what would become known as the Mizpah vein. Tonopah was an active and productive mining district from 1900 through 1930, with sporadic production up to 1961. The authors are not aware of any significant historical mineral resources or reserves estimated for the Tonopah West property.

6.1 Mining and Exploration History

6.1.1 1900 to 1961 Activities

Following the discovery of high-grade silver and gold in 1900, numerous individuals and companies were active throughout the Tonopah mining district. The Tonopah West area of the Tonopah mining district became active in 1902-1903 and some of the mines produced until the 1940s. Some of the past producers were the Monarch-Pittsburg, Red Plume, Silver Top, Tonopah Extension, West End, McKane, Cash Boy, Tonopah Merger, Tonopah Midway, West Tonopah and West End historical mines (Figure 6.1 and Figure 6.2). The mining companies active at Tonopah West included Tonopah Extension, Tonopah 76 Mining Co., and West End Consolidated, among others (Nolan, 1935a).

Prior to 1961, an estimated 8,023,371 tonnes, valued at \$150,198,315, were mined from the entire district (Carpenter et al., 1953). This includes an estimated 2,305,192 tonnes, valued at \$40,189,799, reported to have been mined from the western portion of the district (Carpenter et al., 1953) where the Tonopah West property is located.

Details of the specific mining operations are not well known. Some of the underground maps and reports are available by levels (Nolan, 1935b). Blackrock has compiled available information but there are no certified analytical results, raw data or detailed information on sampling or sample security protocols for any of the work completed during this time period. Figure 6.3, Figure 6.4 and Figure 6.5 are level plans of the 1200, 1540 and 1880 levels, respectively, that were originally completed by Nolan (1935b). Later, during 1979-1980, Houston Oil and Minerals ("HOM") transferred these level plans to mylar. Blackrock digitized and re-projected the data to the Universal Transverse Mercator ("UTM") coordinate system, NAD27 datum, for use in their exploration activities.



Figure 6.1 Historical Tonopah West Mining Company Areas
(from Blackrock, 2022)

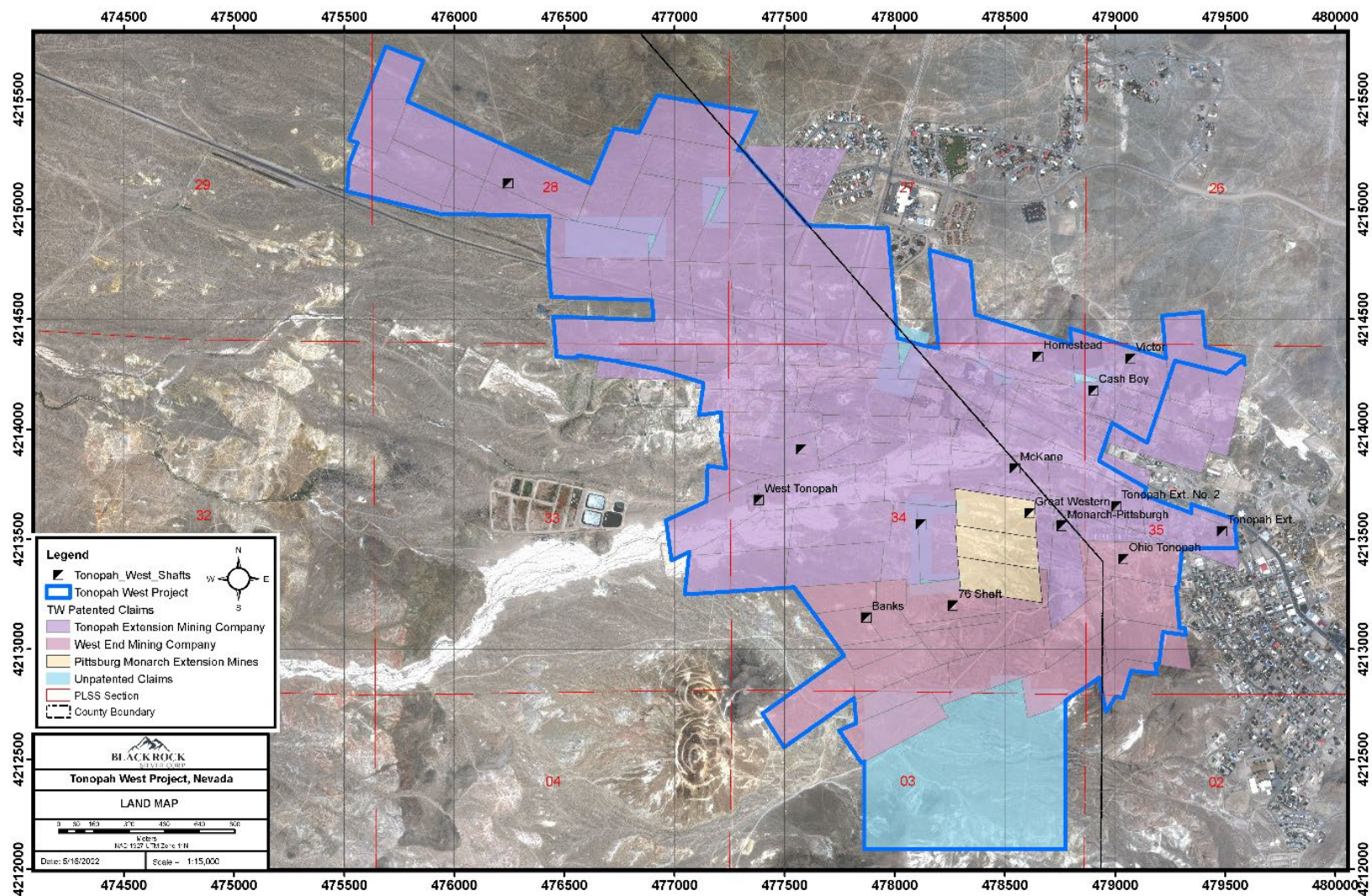




Figure 6.2 Historical Underground Mines and Underground Levels, Tonopah West
(from Blackrock, 2020)

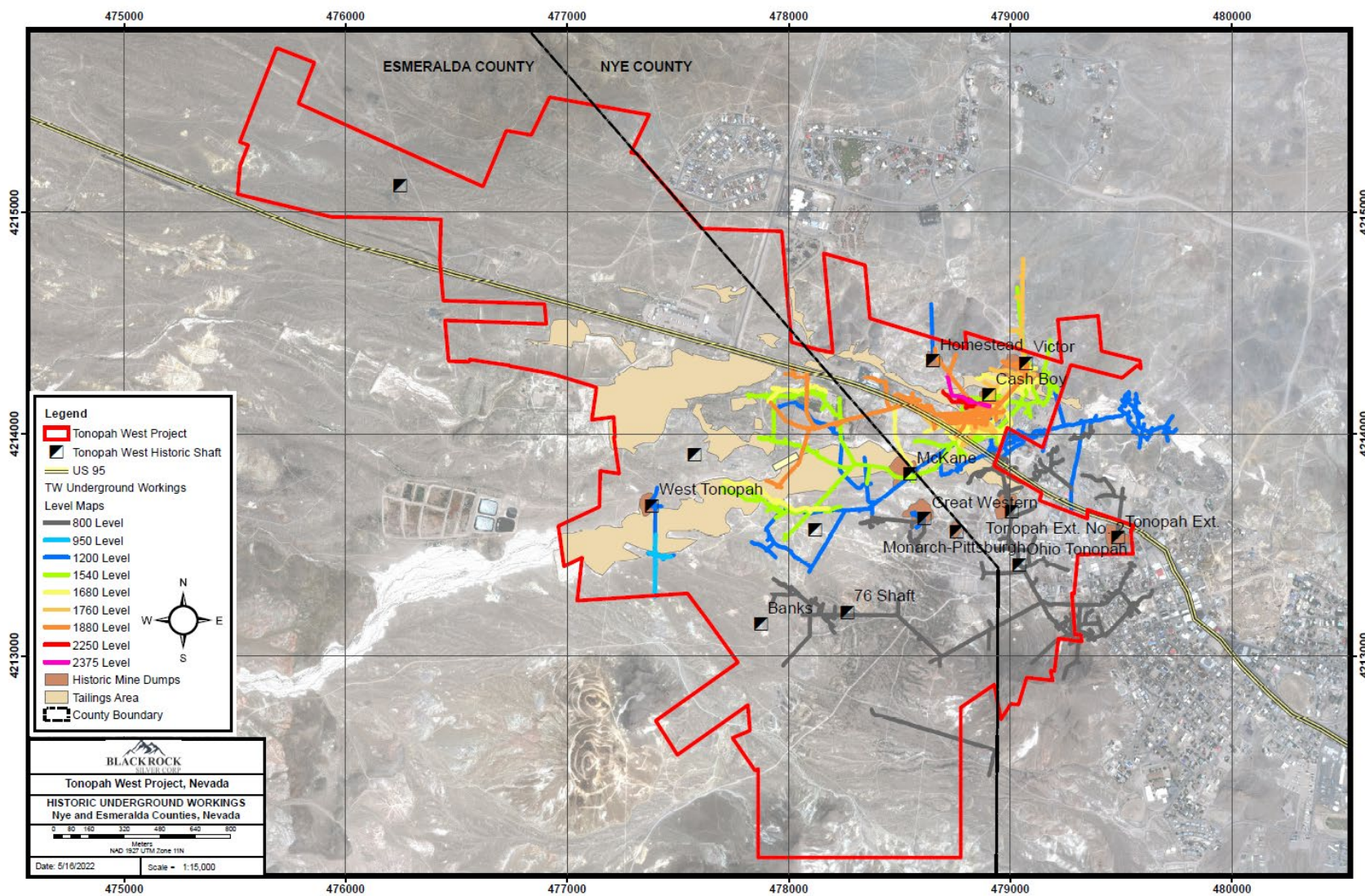




Figure 6.3 Historical Level 1200 Plan Map, Tonopah West

(from Blackrock, 2020 after maps from Nolan (1935b) and HOM, 1979; inlier claims now held by Blackrock)

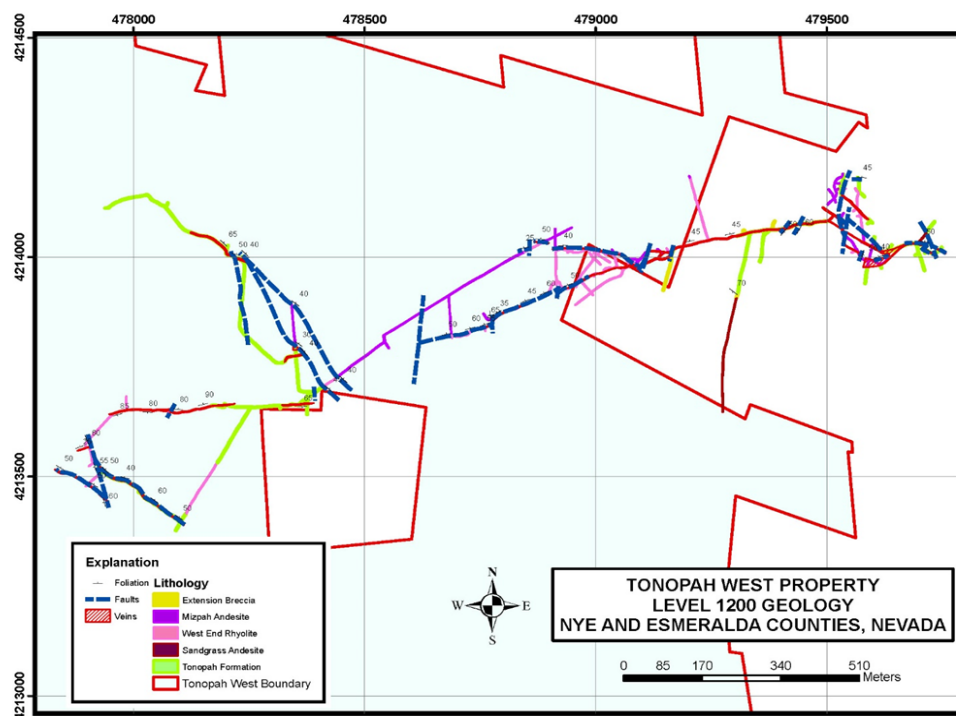


Figure 6.4 Historical Level 1540 Plan Map, Tonopah West

(from Blackrock, 2020 after maps from Nolan (1935b) and HOM, 1979 inlier claims now held by Blackrock)

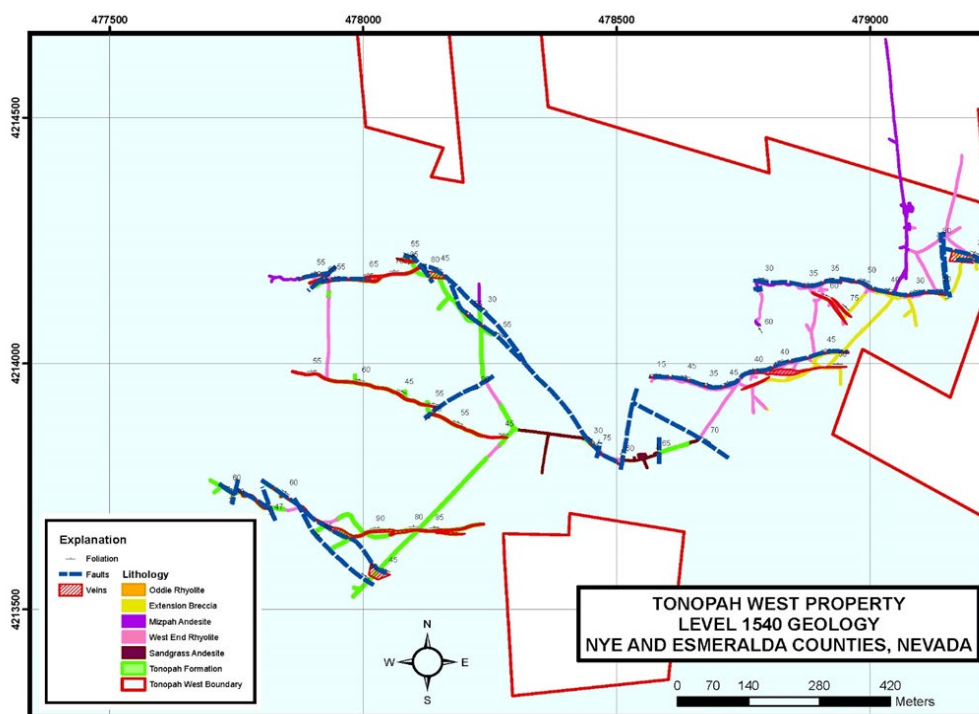
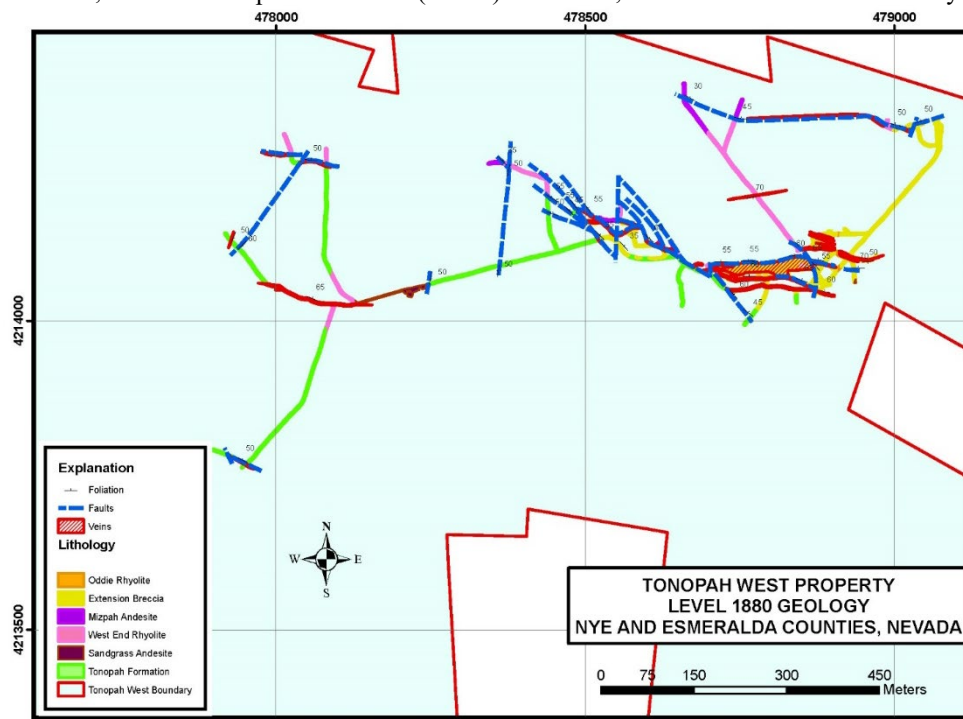




Figure 6.5 Historical Level 1880 Plan Map, Tonopah West

(from Blackrock, 2020 after maps from Nolan (1935b) and HOM, 1979 inlier claims now held by Blackrock)



6.1.2 1961 to 2022 Modern Exploration

Since 1961 there have been several periods of exploration in the Tonopah mining district, with several operators. Gold and silver exploration activities increased during this time, although most of the modern exploration at Tonopah West has occurred since the late 1970s. During this time historical mining data was compiled and exploration drilling was conducted. The results of the historical drilling are summarized in Section 10.2.

In 1969, Howard Hughes purchased patented claims from the West End Mining Company. Hughes' Summa Corporation refurbished the Mizpah shaft and some of the underground workings.

In 1974, Tonopah Extension Mines, Inc. was sold to James R. Keighley ("Keighley"). Summa Corporation sold its Tonopah claim holdings to HOM in 1977. During 1979 and 1980, HOM conducted exploration throughout the Tonopah mining district and drilled a total of 3,268 metres in ten drill holes (HT series holes) in what is presently Blackrock's Tonopah West property. Details of this drilling are summarized in Section 10.2.1. HOM performed no further work within the property.

Chevron USA ("Chevron") entered into a lease with option to purchase the Keighley ground starting in June 1984. Chevron drilled one reverse-circulation rotary ("RC") hole with a diamond-core tail in 1984 for a total of 659 metres. Details of this drilling are summarized in Section 10.2.2. Chevron relinquished the property back to Keighley in July of 1985.



Coeur Mining, Inc. (“Coeur”) acquired patented claims covering a portion of what is presently the Tonopah West property in the 1990s and sold the patented claims to Eastfield Resources Ltd. (“Eastfield”) in 1996. During 1996 and 1997, Eastfield conducted exploration in the Tonopah mining district and drilled a total of 2,149 metres in 13 RC holes (TH series holes) in the Tonopah West property. Details of this drilling are summarized in Section 10.2.3. In 1998, Eastfield purchased the patented claims held by HOM’s successor Kinross Gold Corporation.

No work is known to have been done within the Tonopah West property between 1998 and 2008. In 2008, Keighley quitclaimed 74 patented claims to Cliff ZZ. In 2017, Cliff ZZ leased these claims to Coeur. Also in 2017, Ely Gold purchased 18 patented claims from Eastfield and an additional five patented claims from a local family. Ely Gold then leased these 23 claims to Coeur later in 2017.

In 2018, Coeur drilled a total of 3,392 metres in 13 RC drill holes (TW18 series holes). Details of this drilling are summarized in Section 10.2.4. Coeur terminated their leases with Cliff ZZ and Ely Gold in October of 2019.

Blackrock acquired the Tonopah West property in 2020 through a sequence of lease-option agreements involving Ely Gold, Nevada Select Royalty, and Cliff ZZ. This included two unpatented lode claims that were located by Coeur in 2018, and quitclaimed to Nevada Select Royalty in 2020, as well as 17 unpatented mining claims that were located by Nevada Select Royalty in 2015 and 2017.

Blackrock’s exploration work is summarized in Section 9 and Section 10.3.



7.0 GEOLOGIC SETTING AND MINERALIZATION (ITEM 7)

The information presented in this section of the report is derived from multiple sources, as cited. The authors have reviewed this information and believe this summary accurately represents the Tonopah West project geology and mineralization as it is presently understood.

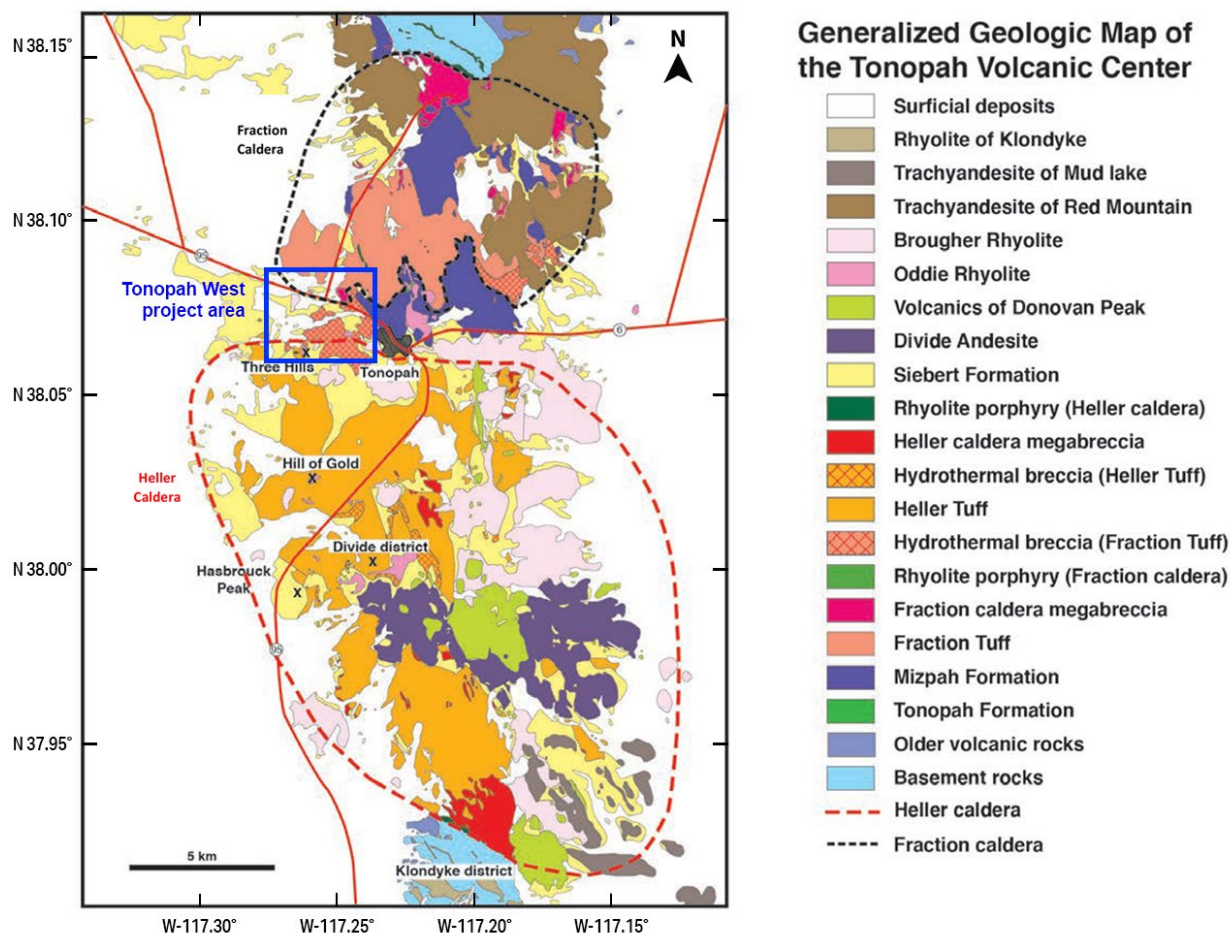
7.1 Regional and District Geologic Setting

The Tonopah West property is situated on the southwestern flank of the San Antonio Mountains, a north-south trending range in the Basin and Range physiographic province of southwestern Nevada. North of the district, the San Antonio Mountains expose Cretaceous plutons of mainly granite to granodiorite that have been intruded into folded units of Ordovician and Permian marine sedimentary rocks (Bonham and Garside, 1979; Kleinhampl and Ziony, 1985). The Paleozoic rocks are structurally overlain by folded limestone of Mesozoic age and all of the pre-Cenozoic rocks are unconformably overlain by volcanic rocks of Oligocene and Miocene ages that vary in composition from rhyolite to trachyandesite (Bonham and Garside, 1979). The Oligocene volcanic rocks include thick units of felsic ash-flow tuff erupted from the Central Nevada Caldera Complex north of the San Antonio Mountains. The Miocene units were interpreted to have been erupted from volcanic centers within the San Antonio Mountains (Bonham and Garside, 1979), including the Fraction caldera and the Heller caldera of the Tonopah volcanic center of John et al. (2022a). Intermediate to silicic-composition ash-flow tuffs, lavas and flow-dome complexes, and high-level dikes and plugs of the Tonopah volcanic center are genetically, spatially, and temporally linked to Miocene ancestral Cascade arc magmatism (du Bray et al., 2019; John and Henry, 2022; John et al., 2022a).

Geologic mapping and $^{40}\text{Ar}/^{39}\text{Ar}$ and uranium-lead (“U-Pb”) age determinations from du Bray et al. (2019) and John et al. (2022a) have defined the margins of the Fraction and Heller calderas and further constrained the timing of volcanic activity and mineralization in the Tonopah mining district. The Tonopah West project area straddles the southern margin of the approximately 20.0 Ma Fraction caldera and the northern margin of the 17.3 Ma Heller caldera as shown in Figure 7.1.



Figure 7.1 Geologic Setting of the Tonopah West Project Area, Tonopah Volcanic Center
(modified from John et al., 2022b)



7.2 Property Geology

Surface exposures at the Tonopah West property include Miocene volcanic rocks and Quaternary fan and pediment deposits as mapped by Bonham and Garside (1979) and updated by John et al. (2022b) Figure 7.2). At depth, the andesitic to silicic volcanic flows, tuffs, and volcanoclastic rocks of the Tonopah volcanic center (John et al., 2022b) overlie basement granitic intrusive rocks of probable Mesozoic age that have been identified in underground workings (Nolan, 1930) and in Blackrock's drill holes. Stratigraphic units are summarized in Figure 7.3. These units were defined by Garside and Bonham (1979) and have been revised with new field, drill hole, petrographic, geochemical and $^{40}\text{Ar}/^{39}\text{Ar}$ and U-Pb age determinations by John et al., (2022a) and Blackrock.



Figure 7.2 Generalized Geologic Map of the Tonopah West Property Area
(modified from Blackrock (2020) after Bonham and Garside (1979))

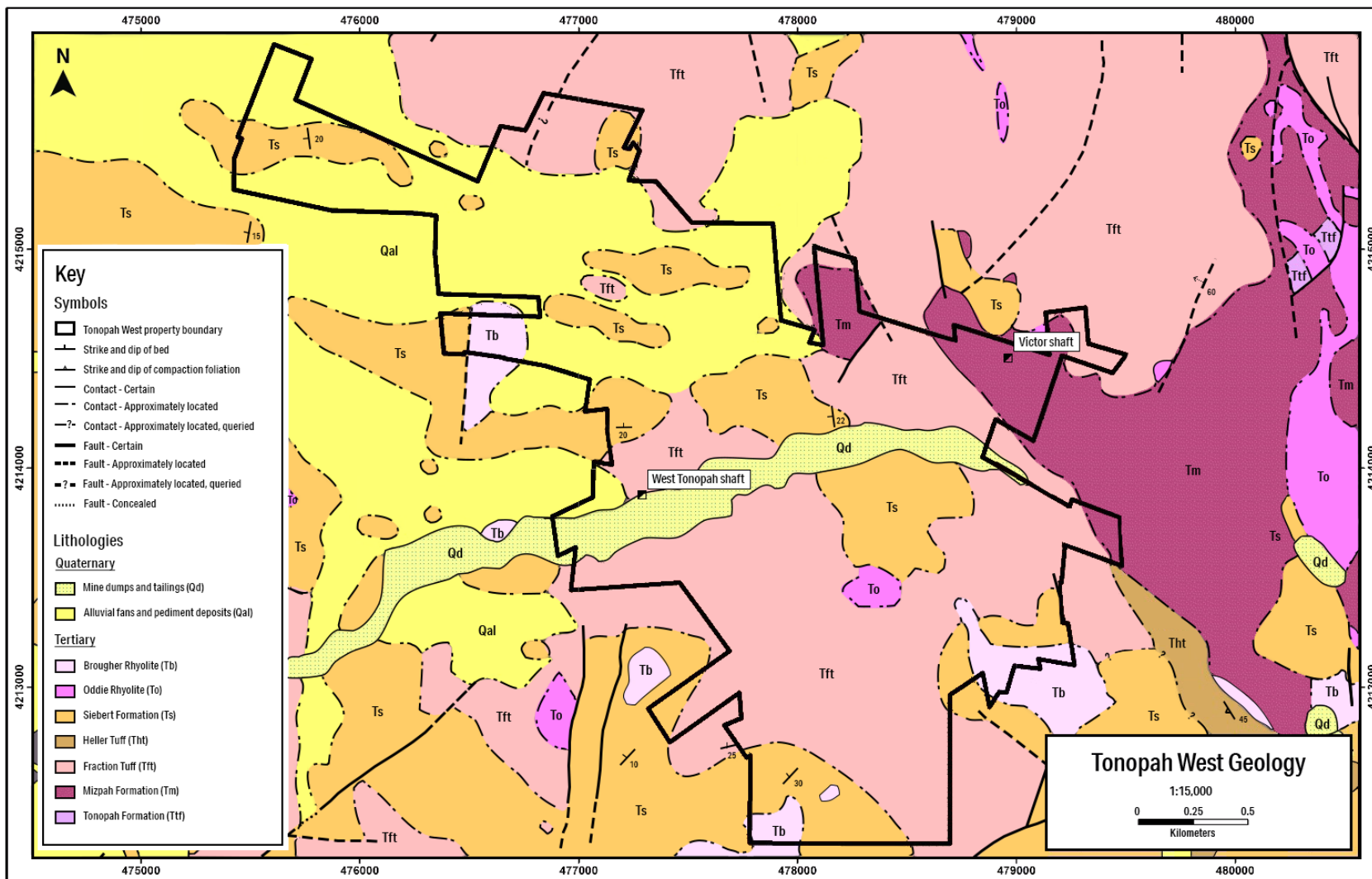
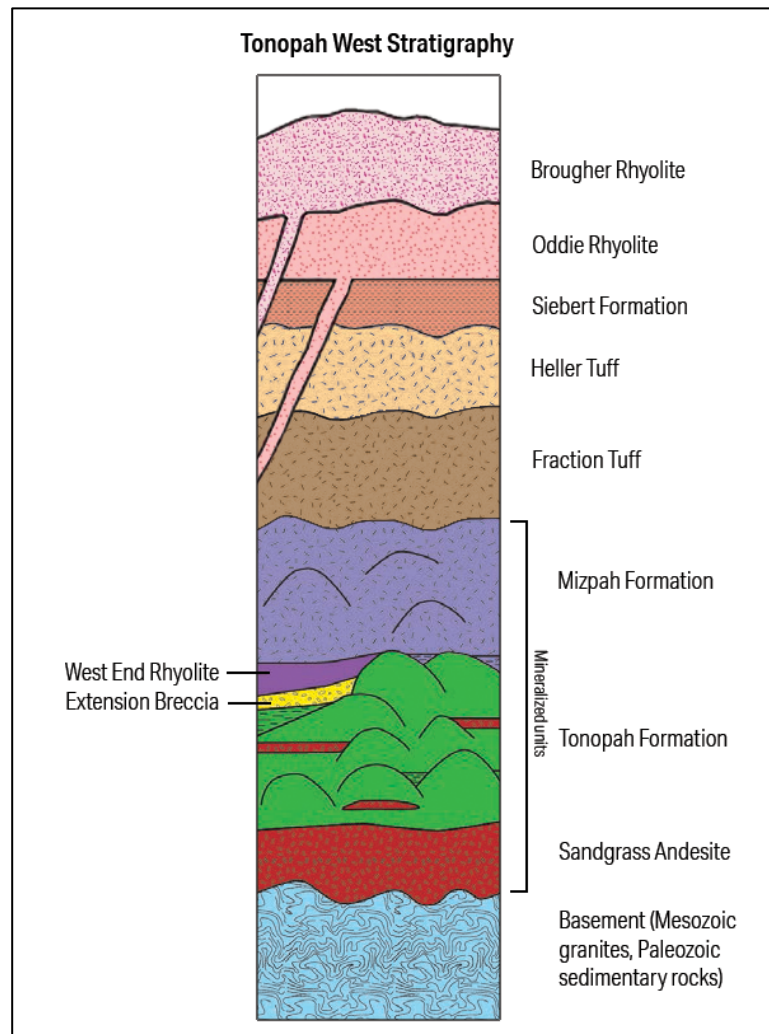




Figure 7.3 Stratigraphic Column for the Tonopah West Project
(modified from John et al., 2022b)



Property stratigraphic units are summarized from oldest to youngest as follows:

Basement rocks

Drilling at Tonopah West by Blackrock has intercepted intrusive rocks interpreted as Mesozoic granodiorite. Surface exposures of pre-Tertiary rocks that crop out peripheral to the main Tonopah district, but not within the property, include predominantly Paleozoic gray chert, argillite, and siltstone, and Mesozoic granites (Kleinhampl and Ziony, 1984; John et al., 2022b).

Sandgrass Andesite

The Sandgrass Andesite consists of propylitized andesitic lava flows and possibly high-level intrusions underlying and locally interbedded with the Tonopah Formation (John et al., 2022b). These units represent the oldest volcanic rocks exposed in underground mine workings and recovered from drill holes.



Tonopah Formation

First described by Nolan (1935b) from underground workings of the Tonopah district, the Tonopah Formation consists of silicic tuffs, lavas, intrusive rocks, and fluvial volcanoclastic rocks. The Tonopah Formation is sparsely exposed about one kilometer east of the property (Figure 7.2). A U-Pb age of 21.84 ± 0.2 Ma was reported for the Tonopah Formation by John et al. (2022a). The Tonopah Formation is one of the host-rock units for mineralization in the Tonopah district (du Bray et al., 2019) and hosts veins in the Tonopah West property.

Extension Breccia

The Extension Breccia is a heterolithic, clast-supported breccia of likely volcanoclastic origin (John et al., 2022a; 2022b) that locally overlies the Tonopah Formation. Nolan (1930) interpreted this unit as an intrusive breccia. John et al. (2022a; 2022b) interpreted this unit as debris flows and/or conglomerates deposited in paleo-topographic low points within the Tonopah Formation. The Extension Breccia is a major host rock for mineralization, particularly in the Victor mine area.

West End Rhyolite

The West End Rhyolite consists mainly of sparsely porphyritic, variably welded rhyolite tuff and subordinate volcanoclastic rocks overlying the Extension Breccia and the Tonopah Formation (John et al., 2022a). U-Pb ages of 21.59 ± 0.46 and 21.97 ± 0.41 Ma, which are identical within the limits of the analytical uncertainty, were obtained by John et al. (2022a). This unit was previously interpreted as a rhyolitic sill (Nolan, 1930).

Mizpah Andesite

The Mizpah Andesite is Blackrock's term for the Mizpah Trachyte of Spurr (1911), Nolan (1930), Kleinhampl and Ziony (1985), and John et al. (2022a). This unit was named the Mizpah Formation by Bonham and Garside (1979) as shown in Figure 7.1, Figure 7.2 and Figure 7.3, and the term was later used by John et al., 2022b. The Mizpah Andesite consists largely of hydrothermally altered hornblende-biotite andesite to dacite lavas, flow domes, and lesser debris-flow deposits (Bonham and Garside, 1974; John et al., 2022a). $^{40}\text{Ar}/^{39}\text{Ar}$ age determinations reported by John et al. (2022a) constrain the age of this unit to ~21.5 to 21.0 Ma.

Fraction Tuff

The Fraction Tuff consists of variably welded, crystal-poor rhyolite ash-flow tuff that was erupted at 20.04 ± 0.06 Ma based on seven $^{40}\text{Ar}/^{39}\text{Ar}$ age determinations (John et al., 2022a). The Fraction Tuff includes large intercalated exposures of megabreccia related to the formation of the Fraction caldera (Figure 7.1). The Fraction Tuff was formerly divided into the lower Tonopah Summit Member and the upper King Tonopah Member, by Bonham and Garside (1979). Geochemical, petrographic, and geochronologic evidence analyzed by du Bray et al. (2019) established that the revised Fraction Tuff of John et al. (2022a; 2022b) is a single eruptive unit.



Heller Tuff

The Heller Tuff consists of lithic and pumice-rich, crystal-rich ash-flow tuffs of trachydacite, dacite, and rhyolite compositions along with megabreccias (du Bray et al., 2019; John et al., 2022a). Five $^{40}\text{Ar}/^{39}\text{Ar}$ age determinations reported by John et al. (2022a) indicate the eruption of the Heller Tuff and formation of the Heller caldera occurred at 17.34 ± 0.05 Ma south of the Fraction caldera (Figure 7.1).

Siebert Formation

The Siebert Formation according to Bonham and Garside (1979) is composed of “*fluvatile and lacustrine epiclastic volcanic conglomerate, sandstone, siltstone, and lesser amounts of subaqueously deposited tuffs*” that contain volcanoclastic deposits with blocks of “Mizpah Trachyte” and Fraction Tuff (du Bray et al., 2019). The Siebert Formation likely was deposited initially within the Heller and possibly Fraction calderas.

Oddie Rhyolite

The Oddie Rhyolite is pink-gray to pale orange, sparsely porphyritic with phenocrysts of quartz, alkali feldspar, sodic plagioclase, and sparse biotite. The rhyolite is typically weakly to strongly hydrothermally altered (Bonham and Garside, 1979). The Oddie Rhyolite intruded the Siebert Formation, as well as the Fraction and Heller calderas, and formed lava domes and hypabyssal intrusions (du Bray et al., 2019). Although hydrothermally altered, the Oddie Rhyolite postdates mineralized veins at the Tonopah West property. $^{40}\text{Ar}/^{39}\text{Ar}$ age determinations on the Oddie Rhyolite domes range from ~17.29 to ~16.6 Ma (John et al., 2022a).

Brougher Rhyolite

The Brougher Rhyolite is light-gray to orange-pink, sparsely porphyritic with phenocrysts of quartz, sodic plagioclase, alkali feldspar, biotite, and trace clinopyroxene and hornblende (Bonham and Garside, 1979). The rhyolite forms topographically prominent outcrops and domes that are unaltered and postdate mineralization at the Tonopah West property. $^{40}\text{Ar}/^{39}\text{Ar}$ age determinations of the Brougher Rhyolite range from ~17.18 to ~16.55 Ma (John et al., 2022a).

7.3 Tonopah District Mineralization

Silver and gold mineralization in the Tonopah district is present in multi-stage quartz-adularia veins, stockwork and vein-cemented breccia emplaced along faults and fractures. Sulfide minerals include pyrite, pearcite, sphalerite, galena, chalcopyrite, acanthite, and the sulfosalts polybasite and pyrargyrite (du Bray et al., 2019). Gold occurs in electrum. Gangue minerals include calcite, barite, and rhodochrosite. In places the veins and vein-cemented breccia contain colloform bands, comb textures, and crustification characteristic of open-space fill. In other places the textures are more massive and were considered by early workers in the district to be of a replacement origin. Silver is predominant to gold at a ratio of approximately 100:1. Oxidized supergene ores containing silver haloids and native gold were mined early in the history of the district (Ashley et al., 1990).



Veins in the Tonopah district are primarily hosted by the Tonopah Formation, Mizpah Andesite, Extension Breccia, and the West End Rhyolite (Nolan, 1930, 1935a; du Bray et al., 2019). A major control in the central part of the district is the pre-mineralization Tonopah fault and its subsidiary structures, which range from low-angle to moderately-dipping with associated steeply-dipping splays. Ore bodies generally occurred as irregular tabular sheets, with the thickest veins following faults at the contacts between lithologic units (Nolan, 1930; Ashley et al., 1990).

Wall rocks immediately surrounding the mineralized veins are altered to a quartz-adularia-pyrite assemblage. This assemblage is bordered by an intermediate argillic zone with kaolinite-quartz-sericite-pyrite assemblage, which then transitions outward to include montmorillonite instead of kaolinite. These zones are surrounded by propylitic alteration dominated by chlorite (Nolan, 1930; Bonham and Garside, 1979; Ashley et al., 1990; John et al., 2022b).

The most productive ore zones of the Tonopah district formed a carapace-like profile with an average thickness of ~200 metres in cross-section. The apex of the carapace lies just below the surface in the center of the district and descends to the western and eastern ends of the district to depths of >1,500 metres (Bonham and Garside, 1979). Interpreting underground mapping in the Tonopah district by Nolan (1930, 1935a), Ashley et al. (1990) estimated that major ore bodies following fault contacts reached maximum dimensions of about 300 to 400 metres.

Hydrothermal activity and silver-gold mineralization in the district is believed to slightly pre-date the 20Ma eruption of the Fraction Tuff and the formation of the Fraction caldera (John et al., 2022). This is based on eight ^{40}Ar - ^{39}Ar age dates on adularia from vein material reported by du Bray et al. (2019) and John et al. (2022a).

7.4 Property Mineralization

Mineralization at the Tonopah West property is typically hosted in hydrothermal quartz veins and quartz-cemented breccias that do not crop out at the surface. Drilling discussed in Section 10.0 and reports from historical underground workings indicate the principal host rocks include the West End Rhyolite, and to a lesser extent, the Mizpah Andesite (Mizpah Formation in Figure 7.1, Figure 7.2, and Figure 7.3), Extension Breccia, Tonopah Formation, and Sandgrass Andesite. Mineralized quartz veins range from a few centimetres to several metres in thickness. Thicker vein zones tend to be characterized by sub-parallel quartz fissure veins as mapped in the Victor mine area by Nolan (1930) where the Victor vein was over 20 metres wide and 165 metres in length.

Veins in the Tonopah West property generally strike west or west-northwest and dip at various angles to the north. Dip angles of some veins, such as the Merten vein, are low to moderate (approximately 30°-40°). Other veins, such as Denver, Bermuda, Paymaster, and Victor veins, dip more steeply (approximately 60°-75°).

Vein mineralogy is characterized by quartz centerlines with local adularia, pyrite, and parallel bands of fine-grained black sulfide and/or sulfosalt minerals. The zones of fine-grained black sulfide and/or sulfosalt minerals typically occur at the vein margins or in millimeter-scale veinlets parallel to the larger veins and are inferred to contain the silver and gold. Related quartz-cemented breccias contain pyrite and fine-grained black sulfide and/or sulfosalt minerals in the matrix (Figure 7.4). Although petrographic data



have not yet been obtained, the presence of polybasite, pyrargyrite, acanthite, and possibly naumannite are inferred based on sample geochemistry. In places, subsequent stages of quartz veins have cross-cut and overprinted the black-matrix quartz-cemented brecciated zones. Argillic and propylitic alteration of the wall rock is observed proximal to mineralized veins.

Two groups of mineralized veins have been defined that comprise the two areas of estimated mineral resources and mineralized material in the Tonopah West property: the Denver-Paymaster-Bermuda-Merten vein group, which Blackrock refers to as the “DPB” vein group, and the Victor vein. The DPB vein group is located ~1 kilometer west of the town of Tonopah and was historically accessed by the westernmost underground mining workings in the Tonopah district (Figure 6.2). The Victor vein historically was accessed by workings more proximal to the central Tonopah mining district (Figure 6.2).

Figure 7.4 Denver Vein Drill Hole Interval 440.0 to 442.6 metres
(Hole number TXC21-001; assay range: 86.1-220.0g Ag/t, 0.83-1.73g Au/t)





7.4.1 Denver-Paymaster-Bermuda Vein Group

Major veins in the DPB group include, from south to north: the “New 76 vein”, the Hanging Wall vein, the Merten vein, the Bermuda vein, the Paymaster vein, and the Denver vein. All veins in the DPB area dip to the north at angles ranging from $\sim 30^\circ$ to $\sim 75^\circ$. A representative cross section through the DPB group is presented in Figure 10.2. The veins have a presently-known vertical extent of ~ 500 metres.

Mineralized material in the DPB area consists of parallel sets of veins and stockwork veins in three dominant dip orientations. These include: a package of shallow- to moderately-dipping veins ($\sim 30^\circ$ to 45°) following the New 76, Hanging Wall, and Merten veins in the southern part of the DPB area; a package of high-angle veins dipping at $\sim 75^\circ$ following the Bermuda vein in the center of the DPB area; and a package of moderately-dipping veins at angles of $\sim 60^\circ$ following the Paymaster and Denver veins in the northern part of the area. The steeper-dipping vein sets paralleling the Bermuda, Paymaster, and Denver veins in the central and northern portions of the group were the target of historic underground mining and generally contain higher-grade mineralization than the shallow-dipping vein sets to the south.

7.4.2 Victor Vein

The Victor vein was accessed via the historical Victor shaft in the northeast part of the Tonopah West property (Figure 6.2). The Victor vein (see Figure 10.3) includes relatively high-grade silver and gold mineralization within several adjacent sheeted veins occurring along, and sub-parallel with, the Pittsburgh-Monarch fault. The Victor vein dips $\sim 70^\circ$ to the north and possesses multiple mineralized splays and sub-parallel veins. Higher-grades range in thickness from about 0.5 metres to a maximum thickness of 24 metres (Carpenter et al., 1953) along the footwall of the Pittsburgh-Monarch fault.

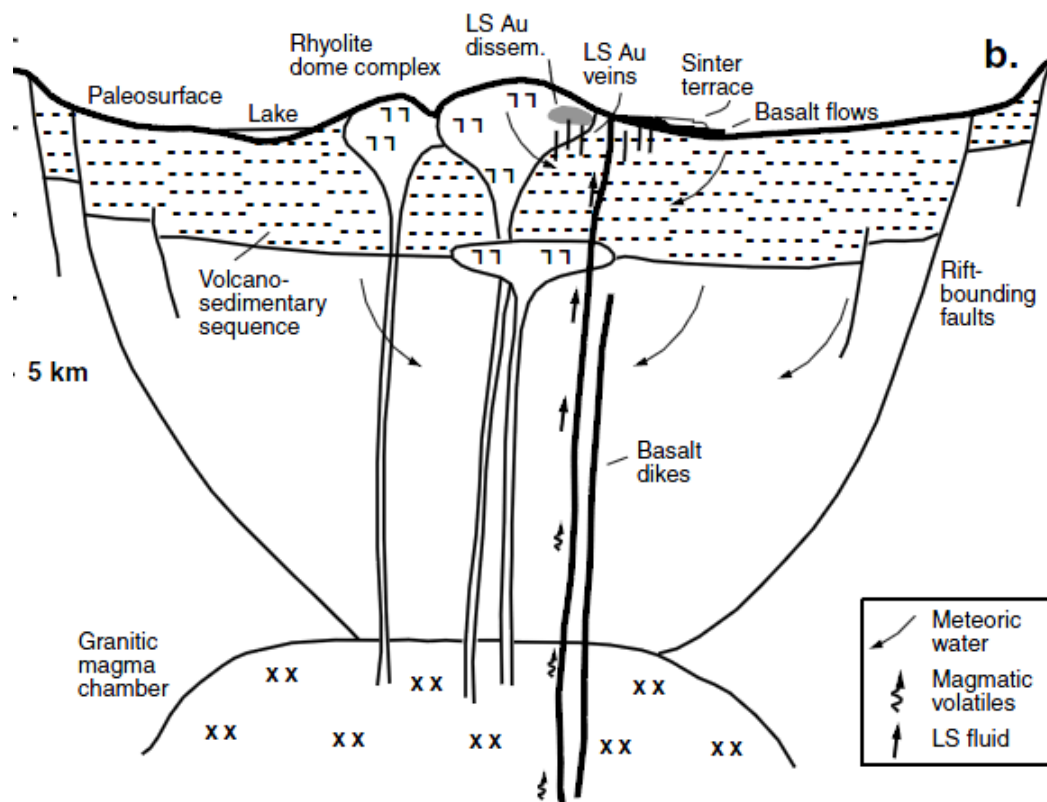
As of the effective date of this report, the known extent of the Victor vein is approximately 750 metres in an east-west direction. From the surface, drilling has encountered mineralized veins from 400 metres to a depth of approximately 800 metres. The Victor veins are open below the depth of Blackrock’s drilling.



8.0 DEPOSIT TYPES (ITEM 8)

Based upon the styles of alteration, the nature of the veins, the alteration and vein mineralogy, and the geologic setting, the silver and gold mineralization at the Tonopah West project is best interpreted in the context of the volcanic-hosted, intermediate- to low-sulfidation type of epithermal model (e.g. Heald et al., 1987; Ashley et al. 1990; John et al., 2018). This model has its origins in the De Lamar - Silver City district, where it was first developed by Lindgren (1900). Figure 8.1, below, from Sillitoe and Hedenquist (2003), is a conceptual cross-section depicting a low-sulfidation epithermal system. The host-rock setting of mineralization at the Tonopah West project is similar to the simple model shown in Figure 8.1, with the Sandgrass Andesite through the Mizpah Andesite occupying the stratigraphic position of the volcano-sedimentary rocks shown below, shortly prior to the eruption of the Fraction Tuff. Note that at the time of younger (17 Ma) mineralization in the Divide district to the south, the Siebert Formation and Oddie Rhyolite domes would have represented the near-surface portion of Figure 8.1, including the sinter deposits preserved at Hasbrouck Peak (Figure 7.1).

Figure 8.1 Schematic Model of a Low-Sulfidation Epithermal Mineralizing System
(after Sillitoe and Hedenquist, 2003)





9.0 EXPLORATION (ITEM9)

This section summarizes the exploration work carried out by Blackrock. Drilling by previous operators is summarized in Section 10.2. Blackrock commenced drilling in June of 2020 and the details are summarized in Section 10.3.

Since acquiring the project in February 2020, Blackrock initially focused on an in-depth review of the historical mining and drilling data. Some of the data had been previously compiled at varying levels of detail. Many underground maps had been made from the work by Nolan (1935b) and others during the early 1900s.

Blackrock compiled and digitized mine workings and historical drill hole data, reviewed reports and data from underground workings, and reviewed geologic reports on the controls of mineralization. Blackrock has compiled a significant amount of the data into ArcGIS, AutoCAD and Leapfrog formats. These compilation and interpretation activities are ongoing and being used with Blackrock's drill data to further guide exploration drilling.

Blackrock's compilation and digitizing work resulted in the definition of four target areas: the Victor vein target; The Denver-Paymaster-Bermuda vein target; the New Discovery area; and the Ohio vein area. Drilling by Blackrock has been focused on the Victor vein area and the Denver-Paymaster-Bermuda vein target, which are the areas of estimated gold-silver resources reported in Section 14.0. Blackrock has not conducted other exploration work.



10.0 DRILLING (ITEM 10)

The information presented in this section of the report is derived from multiple sources, as cited. The authors have reviewed this information and believe this summary accurately represents drilling done at the Tonopah West property. The authors are unaware of any drill sampling, core recovery, or additional factors related to drilling other than those described below in this section that materially impact the mineral resources discussed in Section 14.0.

10.1 Summary

The drilling described in this section was performed at the Tonopah West project by historical operators from the late 1970s to the present. The authors are aware of a total of 107,740 metres drilled in 208 drill holes from 1979 through January 12, 2022 as summarized in Table 10.1. Drilling at the project has continued through and after the effective date of this report, but drilling after January 12, 2022 is not considered herein. Approximately 82% of the holes and 91% of the metres were drilled by Blackrock in 2020, 2021 and 2022. RC methods were used for 61% of the holes and 54% of the metres drilled within the property. Most of the drill holes (96.2%) were inclined; only eight holes were vertical. A map showing the distribution of the drill holes within the property is presented in Figure 10.1.

Table 10.1 Summary of Tonopah West Drilling

Year	Company	RC Holes	RC Metres	Core Holes	Core Metres	RC+Core Holes	RC+Core Metres	Total Holes	Total Metres
Historical Operators									
1979 - 1980	Houston Oil & Minerals					10	3,268	10	3,268
1984	Chevron*					1	659	1	659
1996-1997	Eastfield Resources*	13	2,149					13	2,149
2018	Coeur Mining	13	3,392					13	3,392
1979 - 2018	Historical Totals	26	5,541	-	-	11	3,927	37	9,468
Blackrock Silver									
2020	Blackrock Silver	41	21,653	5	2,634	7	4,388	53	28,675
2021	Blackrock Silver	54	30,723	14	9,857	44	27,800	112	68,379
2022	Blackrock Silver	5	659			1	559	6	1,218
2020 - 2022	Blackrock Silver Totals	100	53,035	19	12,490	52	32,747	171	98,272
1979 - 2022	Grand Totals	126	58,576	19	12,490	63	36,674	208	107,740

* hole types as reported by Wolverson (2021); Houston Oil and Minerals holes were drilled with rotary rock bit followed by core tails (Wolverson, 2021).

10.2 Historical Drilling

Records of pre-Coeur drilling are incomplete with respect to access to original drill logs and assay certificates. However, there is sufficient documentation that supports the Coeur drill-hole data. The



Figure 10.1 Map of Tonopah West Drill Holes





10.2.1 1979 - 1980 Drilling by Houston Oil and Minerals

During 1979 and 1980, HOM drilled a total of 3,268 metres in ten drill holes (HT series holes) at Tonopah West using rotary (rock bit) methods with core tails (Wolverson, 2021). The authors have copies of drill logs for eight of the holes; the logs do not provide information regarding the drilling contractors, rigs, and specific drilling, splitting and sampling methods and procedures.

10.2.2 1984 Chevron Minerals

The authors have records for one rotary hole totaling 659 metres drilled in 1984 by Chevron. Boyles Brothers drilled a 5.5-inch (13.97 centimetres) rotary hole to 244 metres, followed by NC-diameter core to the bottom of the hole. The hole targeted a projected intersection of the Merton, Paymaster and Denver veins; it intersected several gold-silver-bearing quartz veins with intervening zones of quartz stockwork veins and silicification. The contact between overlying relatively unaltered rocks and strongly altered rocks was interpreted as a fault (Fahley, 1985). The authors are unaware of the specific splitting and sampling methods and procedures used.

10.2.3 1996 – 1997 Eastfield Resources

The authors have records for 13 RC holes totaling 2,149 metres drilled in 1996 and 1997 by Eastfield within Blackrock's Tonopah West property (Figure 10.1). In 1996 Hackworth Drilling Company drilled 5-inch (12.7-centimetres) RC holes with a MPD 1500 rig, and in 1997 drilled 5.5-inch (13.97-centimetres) RC holes with a Schramm C-560 rig. The authors are unaware of specific drilling, splitting and sampling methods and procedures used.

10.2.4 2018 Coeur Mining

The authors have records for 13 RC holes totaling 3,392 metres drilled in 2018 by HD Drilling; they completed 5.75-inch (14.6-centimeter) holes. Coeur intercepted gold and silver in several drill holes in what is referred to in this report as Blackrock's New Discovery target area. The authors are unaware of the rig type and specific drilling, splitting and sampling methods and procedures used.

10.3 2020 – 2022 Blackrock Silver Drilling

Blackrock has completed a total of 98,272 metres drilled in 171 holes at Tonopah West from June 16, 2020 to January 12, 2022 as summarized in Table.10.1. Locations of Blackrock's Tonopah West drill holes are shown in Figure 10.1. Approximately 60% of the holes and 90% of the metres were drilled with RC methods. The remaining Tonopah West holes were drilled with diamond core, or with an initial RC "pre-collar" followed by a core tail. Blackrock drilled 52 vertical holes, and 119 inclined holes at angles of -50° to -88°.

RC drilling in 2020, 2021 and 2022 was conducted by Boart Longyear of Elko, Nevada using a Schram 685 rig. Bit diameters varied from 12.065 centimetres to 17.145 centimetres (4.75 to 6.75 inches). RC drilling was conducted wet; the slurry of cuttings was passed through a rotating vane-type splitter to obtain samples.



RC samples were collected at the drill site using 5-foot (1.52-meter) intervals under the supervision of Blackrock's project geologists. The samples were placed in pre-numbered sample bags and transported from the drill site to Blackrock's fenced facility in Tonopah, Nevada. Representative cuttings from each 5-foot interval were collected at the drill rig, placed in marked chip trays, and logged either at the drill site or at the Tonopah facility.

In 2020, core holes were drilled by Timberline Drilling Inc., of Elko, Nevada ("Timberline") using a CT20-03 drill rig. HQ- and lesser PQ-size core was recovered with conventional wireline methods.

In 2021, core holes were drilled by Timberline using a CT20-03 drill rig; and Tonatec Exploration, LLC of Mapleton, Utah using a LF100 drill rig. HQ- and lesser PQ-size core was recovered with conventional wireline methods.

Blackrock's drill core was placed in wax-impregnated core boxes by the drilling contractor and transported daily from the drill sites to Blackrock's core logging and storage facility located in Tonopah, Nevada. Blackrock project geologists completed paper logs for RC chips and core either at the drill site or at the core logging facility in Tonopah. The logs included descriptions of lithology, structure, alteration, and mineralization which were subsequently entered into Blackrock's database.

The 2020 through 2022 drilling by Blackrock penetrated approximately ten principal veins, vein splays, and related vein-breccia bodies mineralized to varying degrees with silver and gold. Blackrock's drill intercepts in aggregate form the basis for the estimated silver and gold resources described in Section 14.0. Representative cross-sections showing significant assay results and typical vein geometries are presented in Figure 10.2 and Figure 10.3.

10.4 Blackrock Down-Hole Multi-Element Geochemistry

Blackrock evaluated multi-element assays from all 2020 – 2022 drill samples (see Section 11.1.2). The elements included Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, and Zr.

Regression analysis shows gold and silver correlate well as summarized in Table 10.2 and are spatially coincident within the veins. Other elements that correlate with gold and silver are selenium and antimony. There is relatively no correlation of gold and silver to lead, zinc or copper. The correlations are based on 50,823 individual sample assay determinations.

Table 10.2 Correlation Matrix for Down-hole Assays

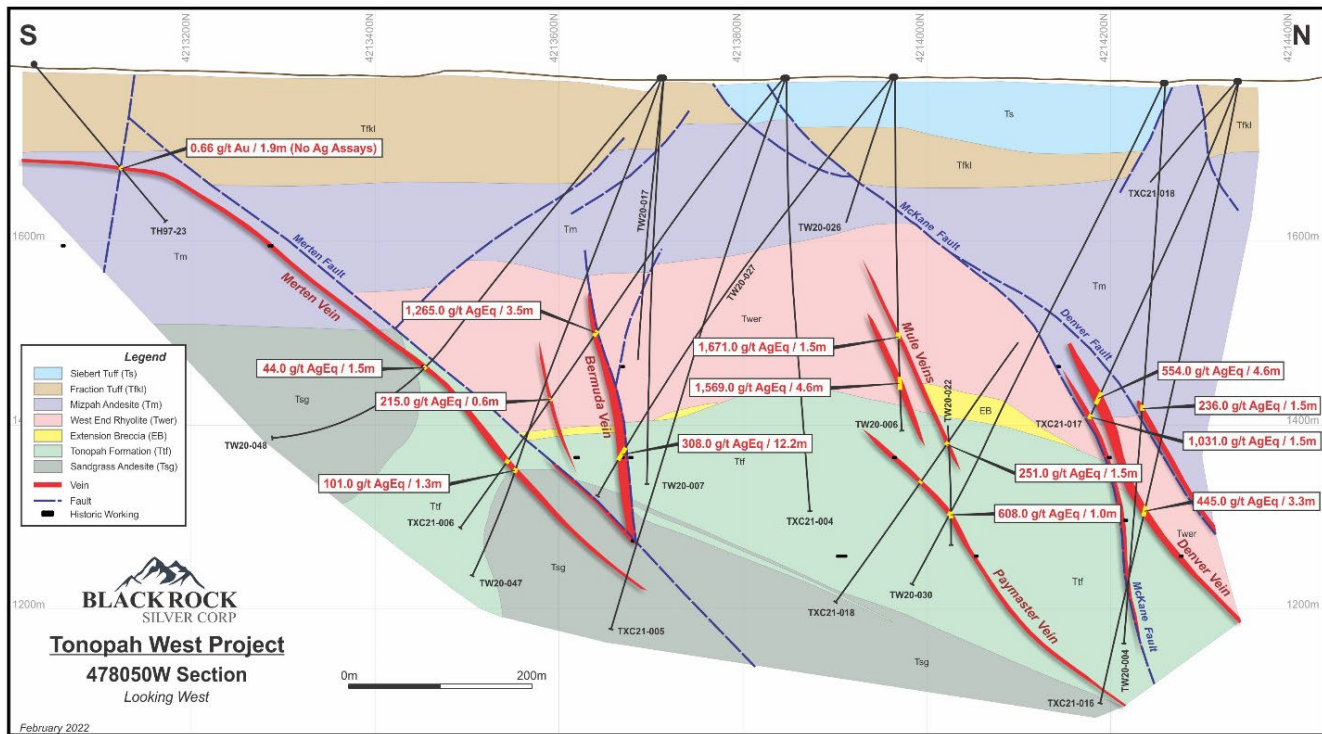
Correlation - 50823 ...	Au_ppm	Ag_ppm	As_ppm	Sb_ppm	Cu_ppm	Mo_ppm	Pb_ppm	Zn_ppm	Se_ppm	W_ppm	Fe_pct	S_pct
Au_ppm	1	0.93	0.039	0.48	0.27	0.13	0.048	0.22	0.73	0.0027	-0.036	0.054
Ag_ppm	0.93	1	0.031	0.54	0.31	0.12	0.05	0.23	0.8	0.019	-0.039	0.048
As_ppm	0.039	0.031	1	0.51	0.048	0.16	0.013	0.033	0.05	0.012	0.0093	0.27
Sb_ppm	0.48	0.54	0.51	1	0.25	0.29	-0.025	0.19	0.55	0.033	-0.16	0.17
Cu_ppm	0.27	0.31	0.048	0.25	1	0.075	0.24	0.55	0.38	0.065	0.16	0.19
Mo_ppm	0.13	0.12	0.16	0.29	0.075	1	-0.041	0.075	0.12	0.01	-0.13	0.16
Pb_ppm	0.048	0.05	0.013	-0.025	0.24	-0.041	1	0.22	0.076	0.018	0.54	0.16
Zn_ppm	0.22	0.23	0.033	0.19	0.55	0.075	0.22	1	0.34	-0.0014	0.034	0.12
Se_ppm	0.73	0.8	0.05	0.55	0.38	0.12	0.076	0.34	1	0.0069	-0.039	0.11
W_ppm	0.0027	0.019	0.012	0.033	0.065	0.01	0.018	-0.0014	0.0069	1	0.026	-0.0014
Fe_pct	-0.036	-0.039	0.0093	-0.16	0.16	-0.13	0.54	0.034	-0.039	0.026	1	0.23
S_pct	0.054	0.048	0.27	0.17	0.19	0.16	0.16	0.12	0.11	-0.0014	0.23	1



10.5 Drill-Hole Collar Surveys

The authors are not aware of collar surveys for the pre-Coeur drill hole locations. Drill hole collars for Blackrock's 2020, 2021 and 2022 drill collar locations used in this report were surveyed under the supervision of a professional land surveyor. All coordinates were recorded in UTM NAD 27.

Figure 10.2 Tonopah West Drilling Cross Section 478,050W
(from Blackrock, 2022)



Note: true widths are approximately 30-97% of the drill-hole interval lengths.

10.6 Down-Hole Surveys

Coeur's 2018 RC holes at Tonopah West were surveyed for down-hole deviations by International Directional Services ("IDS"). None of the other historical drill holes in the Tonopah West project area are known to have been surveyed for down-hole deviations. All of Blackrock drill holes have been surveyed for down-hole deviations by IDS.



BLACK ROCK
SILVER CORP

Tonopah West Project
478800W Section
Looking West

South North

1600m 1600m

1400m 1400m

1200m 1200m

0m 100m

Legend

- Mizpah Andesite (Tm)
- West End Rhyolite (Twer)
- Extension Breccia (EB)
- Tonopah Formation (Ttf)
- Vein
- Fault
- Historic Working

April 2022

4214000N 4214200N

TW21-085 TW20-051C TW20-051C TW20-020C TW21-085 TW20-031C

Victor / Murray Veins

80.3 g/t AgEq / 1.5m

106.2 g/t AgEq / 1.5m

111.0 g/t AgEq / 1.5m

422.7 g/t AgEq / 3.0m

35.2 g/t AgEq / 1.5m

1,142.0 g/t AgEq / 2.8m

95.2 g/t AgEq / 6.1m

383.4 g/t AgEq / 7.6m

41.7 g/t AgEq / 3.0m

32.4 g/t AgEq / 1.5m

Note: true widths are approximately 30-97% of the drill-hole interval lengths.



11.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY (ITEM 11)

This section summarizes all information known to Mr. Lindholm relating to sample preparation, analysis, and security, as well as quality assurance/quality control procedures and results, that pertain to the Tonopah West project. The information has either been compiled from historical records as cited or provided by Blackrock. Blackrock's contributions to this section are derived from personal correspondences with Mr. Lindholm and a recent informal summary document compiled at the request of RESPEC.

11.1 Sample Preparation, Analysis and Sample Security

11.1.1 Historical Drill Samples

Records of the sampling, analytical and security methods and procedures used by HOM, Chevron, Eastfield and Coeur are incomplete and limited. The authors are not aware of the specific sample splitting and sample security protocols used by the historical operators.

HOM's samples were analyzed for gold and silver. However, the authors are unaware of the laboratory, preparation and analytical methods used.

Chevron's drilling samples were analyzed at Cone Geochemical Inc., ("Cone") for gold and silver. The authors have no information on the sample preparation methods. Silver was analyzed by atomic adsorption spectrometry ("AAS") following a 4-acid digestion. Gold was analyzed by AAS after aqua-regia digestion. A few gold analyses were done using fire-assay fusion.

The Eastfield RC samples consisted of 5-foot intervals that were analyzed for gold at Chemex Labs Inc., ("Chemex"). The authors have no information on the sample preparation methods. Gold was analyzed by 30-gram fire-assay fusion with AAS finish.

Coeur's RC samples consisted of 5-foot intervals that were analyzed by Bureau Veritas ("BV"). The authors have no information on the sample preparation methods used. Gold was analyzed by 30-gram fire-assay fusion with an AAS finish. In some cases, the gold fire assays were finished with a gravimetric method. Silver was analyzed by fire-assay fusion with a gravimetric finish. Forty-eight major, minor and trace elements were analyzed by inductively-coupled plasma-emission ("ICP") methods.

Cone, Chemex and Bureau Veritas were independent commercial assay laboratories. The authors have no information on the certifications that may have been held by these laboratories in 1984, 1997 and 2018, respectively.

11.1.2 Blackrock Drill Samples 2020 - 2022

During RC drilling, a small portion of the RC cuttings from each 1.52-meter interval was placed by the drilling contractor in plastic chip trays at the drill rig and delivered to Blackrock's geologist. These "character samples" were logged for geology, structure, alteration, and mineralization by Blackrock geologists. Blackrock's RC assay samples were loaded directly into large porous plastic storage bins and transported by the drilling contractor to the Blackrock fenced storage and logging facility in Tonopah



where the samples were placed in large plastic bins. These bins were periodically trucked by personnel of American Assay Laboratories (“AAL”) to the AAL laboratory in Sparks, Nevada. AAL is an independent commercial laboratory accredited effective December 1, 2020 to the ISO/IEC Standard 17025:2017 for testing and calibration laboratories.

Blackrock’s drill core was placed in wax-impregnated core boxes at the drill sites and transported by the drilling contractor on a daily basis to Blackrock’s core logging facility in Tonopah. Blackrock geologists logged the core for geology, structure, alteration, mineralization, rock quality designation, and recovery. Sample intervals were selected and marked in the core boxes with red-colored wooden blocks and numbered aluminum tags that were stapled into the core boxes. Unique sample identification numbers were assigned to each sample interval, which varied between 0.3 metres (1.0 feet) to a maximum of 3.0 metres (10 feet) in length. Each core box was then photographed with the sample mark-ups. A cut sheet was created and individual samples bags with the corresponding sample numbers were completed. A quality assurance/ quality control standard was placed in the appropriate labelled sample bag, and all sample bags and associated drill core was then trucked by AAL personnel to AAL’s laboratory in Sparks, Nevada.

At the AAL laboratory, AAL personnel sawed the marked core lengthwise into halves. One half was placed in numbered sample bags. The other half was placed back into the original core boxes, which were periodically returned along with coarse rejects and pulps to Blackrock. The returned core and pulps are stored in locked shipping containers on the project site, and coarse rejects are stacked on pallets, shrink-wrapped, and stored uncovered on the Tonopah West mine dump.

RC and core samples from the 2020-2022 drilling were placed in drying ovens and dried overnight at 85°C at AAL’s Sparks facility. The dry samples were crushed to a size of -6 mesh and then roll-crushed to -10 mesh. One-kilogram (2.205-pound) splits of the -10-mesh materials were pulverized to 95% passing -150 mesh. Sixty-gram aliquots of the one-kilogram pulps were analyzed at AAL for gold mainly by fire-assay fusion with an ICP finish. Silver and 48 major, minor, and trace elements were determined by ICP and ICP-MS following a 5-acid digestion of 0.5-gram aliquots. Samples that assayed greater than 10g Au/t were re-analyzed by fire-assay fusion of 30-gram aliquots with a gravimetric finish. Samples with greater than 100g Ag/t were also re-analyzed by fire-assay fusion of 30-gram aliquots with a gravimetric finish. Standards were not crushed.

Silver and 48 major, minor and trace elements were analyzed by a combination of ICP and mass spectrometry (“MS” or “ICP-MS”) methods following a 5-acid digestion. Silver was also analyzed by fire-assay fusion with a gravimetric finish after an aqua-regia digestion. Gold was analyzed by fire-assay fusion with an ICP finish after an aqua-regia digestion. Over-limit gold assays were re-analyzed with a fire-assay fusion and gravimetric finish.

Blackrock also selected a group of sample pulps from the 2020 – 2022 drill samples analyzed by AAL for second-lab check assays as described in Section 11.2.2. This group of pulps was analyzed for gold, silver and a suite of multi-elements by ALS Minerals (“ALS”) at their laboratories in North Vancouver, British Columbia and Lima, Peru. ALS is an independent commercial laboratory accredited under ISO 9001 and ISO 17025.



Gold was analyzed by ALS using a 30-gram fire-assay fusion with an AAS finish. Pulps that assayed greater than 10g Au/t were re-analyzed for gold by 30-gram fire-assay fusion with a gravimetric finish. Silver and 32 major, minor and trace elements were analyzed by ICP methods. One sample that assayed >1,500g Ag/t was re-analyzed for silver by 30-gram fire-assay fusion with a gravimetric finish. ALS returned the pulps to Blackrock after the analysis was completed.

11.2 Quality Assurance/Quality Control

The authors are unaware of the quality assurance/quality control (“QA/QC”) protocols that may have been used by HOM, Chevron and Eastfield. For the 2018 drilling program, Coeur used four certified reference materials (“CRM” or “CRMs”) obtained from CDN Resource Laboratories Ltd. (“CDN”), of Langley City, British Columbia, Canada, and one CRM from ORE Pty Ltd. (“OREAS”) of Melbourne, Australia.

In the years 2020 through 2022, Blackrock used 35 different CRMs obtained from Moment Exploration Geoservices LLC. (“MEG”), of Lamoille, Nevada. Table 11.1 summarizes the types and quantities of QA/QC materials that were submitted to the laboratories with drill samples by Coeur and Tonopah West. The table does not include samples that were part of the internal QA/QC protocols of the laboratories.

Table 11.1 Summary Counts of Tonopah West QA/QC Analyses

QA/QC Type	2018		2020-2022	
	Au	Ag	Au	Ag
Standard (CRM):				
Number in Use	5	5	35	35
Number of Analyses	124	87	2,333	2,277
Number of Failures	30	5	29	10
Duplicate:				
Field Duplicate	144	60	0	0
Coarse (Prep) Duplicate	142	59	0	0
Pulp Duplicate or Replicate	141	59	0	0
External Check**	0	0	1,144	1,133
Blank:				
Pulp Blank	0	0	289	289
Coarse Blank	84	54	140	140
Drill Hole Samples:	3,444	2,371	49,279	49,504
Total Insertion Percent:	12.7	12.6	7.42	7.85

Note: **External check (cross-laboratory) samples were all Pulp Duplicates.

11.2.1 Coeur 2018 Drilling QA/QC

Coeur’s QA/QC program involved the use of coarse blanks, CRMs and field duplicates. Some coarse and pulp duplicates were also submitted for re-analysis. The exact procedures are not known, but the insertion rates of QA/QC materials appear to be more than adequate at 12.6% silver and 12.7% for gold. Coeur used BV as its primary laboratory in 2018.



The CRMs for the silver analyses are listed in Table 11.2. The silver sample analyses were obtained by ICP using four-acid digestion, which was the same method and digestion used for the CRM values. No information on preparation of the samples was available.

Table 11.2 Summary of Silver CRM Assay Results – Coeur, 2018

CRM ID	Silver (ppm)				Count	Dates Used		Failure Counts		Bias pct
	Target	Average	Max	Min		First	Last	High	Low	
CDN-ME-1402	131	129.088	150.0	103	36	04/11/18	12/19/18	0	0	-1.46
CDN-ME-1413	52.2	54.610	118.4	49.9	31	04/11/18	12/19/18	2	0	4.62
CDN-ME-1604	299	278.867	299.0	189.8	9	11/14/18	12/08/18	0	2	-6.73
CDN-ME-1706	11.7	11.863	12.30	11.6	8	12/03/18	12/06/18	0	0	1.39
OREAS 603	284	194.167	280.0	24.5	3	04/26/18	04/26/18	0	1	-31.63
Count or Sum	5				123			2	3	
Percent					100			1.6	2.4	

RESPEC defines a failure as a CRM assay above or below a three-standard deviation threshold relative to the target value. The standard deviation is derived from the round-robin testing conducted by the supplier (*i.e.* MEG) to certify the CRM as provided on the certificate. Five silver CRM failures represent a 4% failure rate, and are detailed in Table 11.3. Two of the five are significantly high or low, and the pulp bags may have been mislabeled. This conclusion is speculative, however, the CRM assay values are within the range of other CRMs in use at the time.

Table 11.3 Summary of Silver CRM Assay Failures – Coeur, 2018

Standard ID	Hole ID	Silver (ppm)				Comment
		Target Value	Fail Type High/Low	3-Std. Dev. Limit	CRM Assay Value	
CDN-ME-1413	TW18-001	52.2	High	56.4	57.8	
CDN-ME-1413	TX18-001	52.2	High	56.4	118.4	Mislabeled?
CDN-ME-1604	TW18-008	299	Low	276.5	189.8	
CDN-ME-1604	TX18-002	299	Low	276.5	270.0	
OREAS 603	TW18-005	284	Low	236.3	24.5	Mislabeled?

Results for CRM gold analyses associated with Coeur's drilling program are summarized in Table 11.4. There is an overall negative bias apparent in the CRM assay data.



Table 11.4 Summary of Gold CRM Assay Results – Coeur, 2018

Standard ID	Gold (ppm)				Count	Dates Used		Failure Counts		Bias pct
	Target	Average	Max	Min		First	Last	High	Low	
CDN-ME-1402	13.90	14.007	16.348	11.127	37	4/11/2018	1/7/2019	4	3	0.8
CDN-ME-1413	1.010	0.941	1.907	0.476	50	4/11/2018	1/7/2019	2	13	-6.8
CDN-ME-1604	2.510	2.456	2.800	2.200	22	11/10/2018	1/7/2019	1	4	-2.1
CDN-ME-1706	2.062	2.023	2.146	1.960	7	12/3/2018	12/6/2018	0	0	-1.9
OREAS 603	5.180	4.074	5.991	0.195	8	4/26/2018	4/26/2018	1	2	-21.4
Count or Sum	5				124			8	22	
Percent					100			6.4	17.7	

The overall failure rate for CRM gold analyses is high at 24% with 30 CRM gold analytical failures recorded (Table 11.5). Of these, three are speculated to be the result of a sample mislabeling as the values matches another CRM in use at the time. Regardless, the number and rate of failed gold CRM assays is high. Coeur's response to any silver or gold CRM failures is not known.



Table 11.5 Summary of Gold CRM Assay Failures – Coeur, 2018

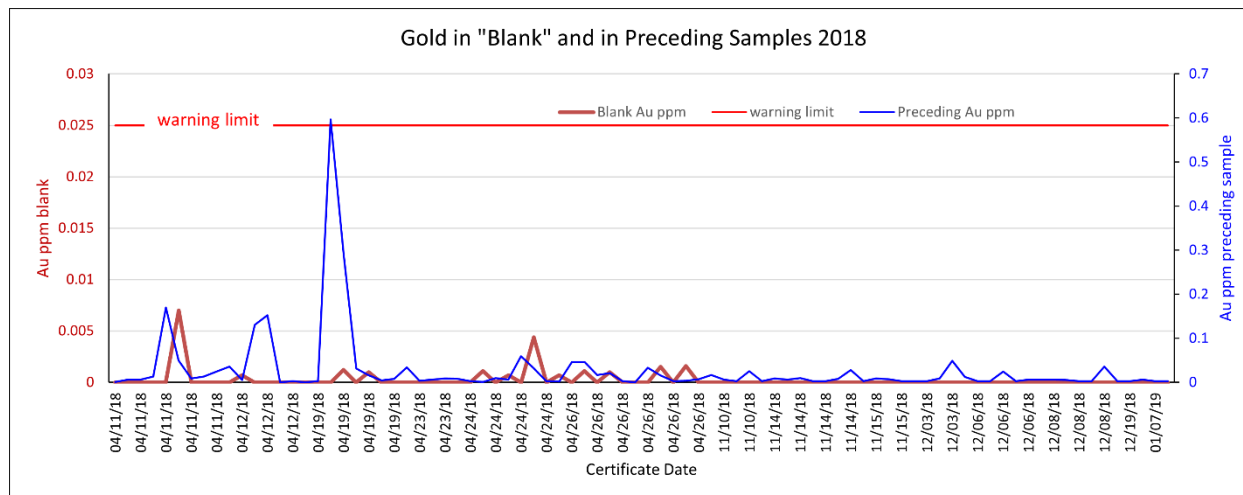
CRM ID	Hole ID	Gold (ppm)				Comment
		Target Value	Fail Type High/Low	3-Std. Dev. Limit	CRM Assay Value	
CDN-ME-1402	TW18-001	13.9	High	15.100	15.601	
CDN-ME-1402	TW18-001	13.9	High	15.100	15.156	
CDN-ME-1402	TW18-003	13.9	High	15.100	16.349	
CDN-ME-1402	TW18-008	13.9	High	15.100	16.100	
CDN-ME-1402	TW18-002	13.9	Low	12.700	11.128	
CDN-ME-1402	TW18-004	13.9	Low	12.700	11.326	
CDN-ME-1402	TW18-005	13.9	Low	12.700	11.974	
CDN-ME-1413	TW18-004	1.01	High	1.181	1.515	
CDN-ME-1413	TX18-001	1.01	High	1.181	1.907	Mislabeled?
CDN-ME-1413	TW18-001	1.01	Low	0.839	0.677	
CDN-ME-1413	TW18-002	1.01	Low	0.839	0.562	
CDN-ME-1413	TW18-002	1.01	Low	0.839	0.584	
CDN-ME-1413	TW18-002	1.01	Low	0.839	0.798	
CDN-ME-1413	TW18-003	1.01	Low	0.839	0.786	
CDN-ME-1413	TW18-003	1.01	Low	0.839	0.794	
CDN-ME-1413	TW18-003	1.01	Low	0.839	0.619	
CDN-ME-1413	TW18-004	1.01	Low	0.839	0.510	
CDN-ME-1413	TW18-004	1.01	Low	0.839	0.614	
CDN-ME-1413	TW18-005	1.01	Low	0.839	0.606	
CDN-ME-1413	TW18-005	1.01	Low	0.839	0.540	
CDN-ME-1413	TW18-005	1.01	Low	0.839	0.796	
CDN-ME-1413	TW18-006	1.01	Low	0.839	0.477	
CDN-ME-1604	TW18-009	2.51	High	2.690	2.800	
CDN-ME-1604	TW18-008	2.51	Low	2.330	2.300	
CDN-ME-1604	TW18-008	2.51	Low	2.330	2.297	
CDN-ME-1604	TX18-002	2.51	Low	2.330	2.300	
CDN-ME-1604	TX18-002	2.51	Low	2.330	2.200	
OREAS 603	TW18-005	5.18	High	5.633	5.991	
OREAS 603	TW18-005	5.18	Low	4.727	0.196	Mislabeled?
OREAS 603	TW18-005	5.18	Low	4.727	0.201	Mislabeled?

In 2018, Coeur inserted 84 blanks with no failures for either gold or silver. Sample weights in the assay certificates indicate coarse blanks were used, although the type of material is not known. As an example, Figure 11.1 shows the coarse blank and preceding gold values plotted against analysis dates. Only one each of the silver and gold blank values were preceded by samples with assays higher than their warning limits (five times detection limit), which are 0.5 ppm Ag and 0.025 ppm Au, respectively. Coarse blanks



test for contamination during sample preparation, however, the test is not effective if the preceding samples are not mineralized.

Figure 11.1 Coarse Blank and Preceding Sample Gold Assays – Coeur, 2018

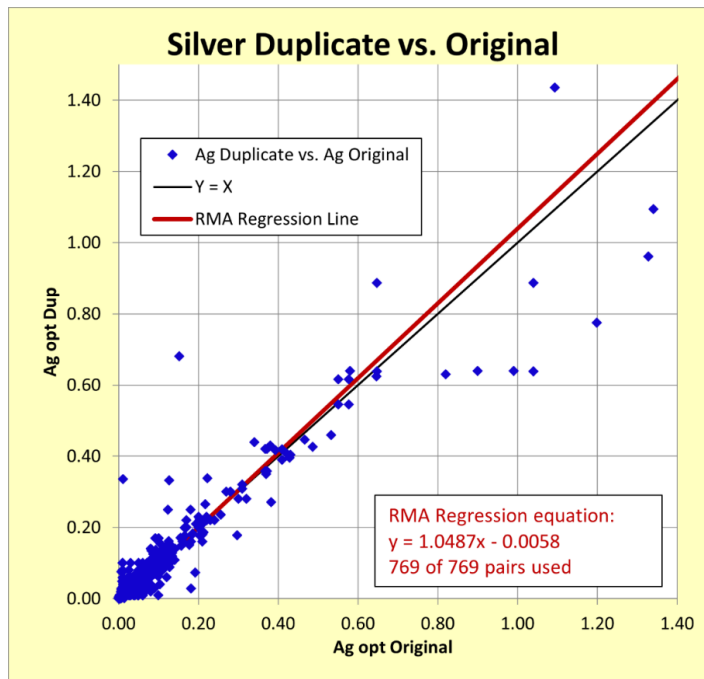


In addition to CRMs and blanks, Coeur collected five to six field duplicates per hole at the drill rig. It is not known how the sample splits were obtained. In general, field and other duplicate sample sets provide a measure of the heterogeneity of metal contents inherent in deposits. High variability between duplicate pairs suggests more heterogeneous natural metal distribution. A strong bias between sample pairs, however, can result from a consistent sample splitting issue at the rig.

The scatter plot with a regression of silver pairs (Figure 11.2) shows a reasonable correlation between duplicate and original values, however, the plot does appear to indicated some variability in the assays. Also, there is some bias indicated with original assays greater than duplicates above 0.6g Ag/t.

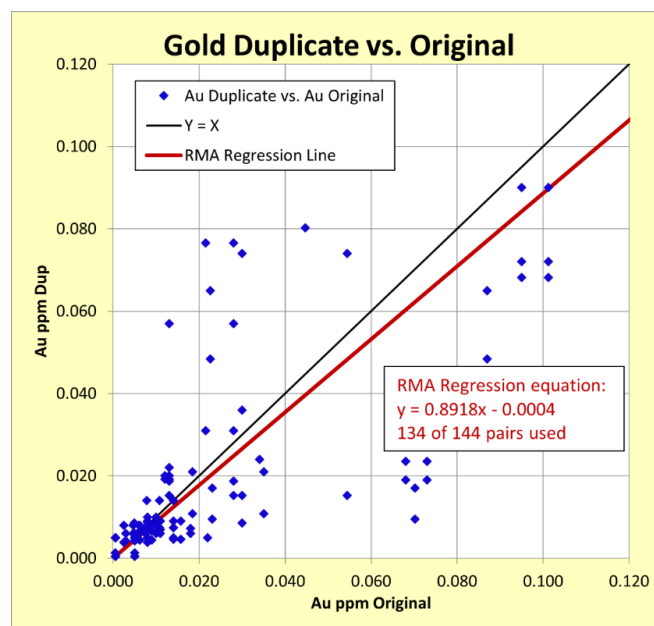


Figure 11.2 Scatter Plot of Field Duplicate vs. Original Silver Assays – Coeur, 2018



The scatter plot of gold field duplicates vs. originals (Figure 11.3) shows a variable correlation between the pairs, with a decided bias indicated by the regression line relative to the ideal $X=Y$ line. The original assays appear to be higher overall relative to the duplicates. All of the holes drilled by Coeur were RC, so the bias in sample splits could have been produced by an out-of-level “Y-Splitter” at the bottom of the cyclone splitter.

Figure 11.3 Scatter Plot of Field Duplicate vs. Original Gold Assays – Coeur, 2018





The coarse and pulp duplicates submitted to BV for re-analysis have been charted by RESPEC. Although the charts are not provided here, the duplicate assay results indicated no bias or excessive variability.

11.2.2 Blackrock Silver QA/QC

Blackrock's QA/QC program included the use of CRMs, coarse and pulp blanks, and check assay duplicates with total insertion rates above 7.4% for silver and gold. Field duplicates were not collected. Blackrock utilized several CRMs of varying gold grades for analytical QA/QC, which were inserted into the sample sequence at a rate of approximately one in 20 samples.

The silver sample analyses were obtained by ICP using five-acid digestion, which was the same method and digestion used for the CRM values. In several cases, two certified silver values by both total acid and aqua regia digestions were available on a CRM certificate. Most of the sample analyses were preceded by five-acid digestion so it is reasonable to use the total digestion certified values.

Table 11.6 summarizes the CRMs used during the 2020-2021 drilling program. There is little or no overall bias indicated in the certified CRM assay data, and 10 of the 20 CRMs with certified silver values had no associated failures. A total of seven of 1921 CRM assays were outside the certified three-standard deviation limit relative to the target which equates to a satisfactory failure rate of 0.4%. Some of the failures coincide with the target values of other CRMs in use at the time, and could possibly be mismarked labels.

Table 11.6 Summary of CRM Silver Assay Results - Blackrock, 2020-2021

CRM ID	Silver {ppm}				Use Count	Dates Used		Failure Counts		Bias pct	Comment
	Target	Ave	Max	Min		First	Last	High	Low		
MEG-Au.09.05	12.60	19.21	19.86	18.66	5	8/14/2020	12/8/2020	0	0	52.4	Not Certified
MEG-Au.09.06	10.90	22.07	22.47	21.17	5	11/24/2020	11/25/2020	0	0	102.5	Not Certified
MEG-Au.09.07	10.80	19.81	20.45	18.46	4	8/14/2020	11/25/2020	0	0	83.5	Not Certified
MEG-Au.09.08	11.60	20.36	22.96	18.14	73	8/14/2020	2/16/2022	1	0	75.5	Not Certified
MEG-Au.11.13	20.60	19.92	21.44	18.35	49	11/1/2021	2/11/2022	0	0	-3.3	Certified
MEG-Au.11.15	52.20	52.54	56.76	26.92	217	9/14/2020	2/16/2022	0	1	0.7	Certified
MEG-Au.11.16	26.00	26.04	27.91	22.97	182	7/31/2020	2/22/2022	0	0	0.2	Certified
MEG-Au.11.17	0.50	0.49	0.54	0.45	3	8/14/2020	11/25/2020	0	0	-2	Not Certified
MEG-Au.11.29	13.40	13.76	25.37	12.59	242	8/14/2020	2/22/2022	3	0	2.7	Certified
MEG-Au.11.34	10.00	10.08	12.47	4.22	76	11/25/2020	2/4/2022	1	1	0.8	Not Certified
MEG-Au.12.13	33.40	32.98	37.41	16.60	20	8/14/2020	1/19/2022	0	1	-1.3	Certified
MEG-Au.12.20	0.40	0.25	0.29	0.22	3	8/14/2020	11/25/2020	0	0	-36.7	Not Certified
MEG-Au.12.21	0.20	0.15	0.15	0.14	3	8/14/2020	11/25/2020	0	0	-26.7	Not Certified
MEG-Au.12.23	2.00	1.83	1.88	1.78	3	8/14/2020	11/25/2020	0	0	-8.3	Not Certified
MEG-Au.12.27	607.00	590.10	874.87	530.00	162	9/1/2020	2/11/2022	1	0	-2.8	Certified
MEG-Au.12.32	0.40	0.28	0.33	0.22	2	8/14/2020	11/25/2020	0	0	-31.3	Not Certified
MEG-Au.12.46	25.30	24.89	27.47	22.83	166	9/1/2020	2/16/2022	0	0	-1.6	Certified
MEG-Au.13.03	4.48	4.01	4.55	3.20	204	9/1/2020	1/3/2022	0	0	-10.6	Certified



CRM ID	Silver {ppm}				Use Count	Dates Used		Failure Counts		Bias pct	Comment
	Target	Ave	Max	Min		First	Last	High	Low		
MEG-Au.17.01	6.52	6.68	7.00	6.48	9	8/14/2020	11/25/2020	0	0	2.5	Certified
MEG-Au.17.02	4.99	5.39	5.49	5.33	4	8/14/2020	12/8/2020	0	0	8	Certified
MEG-Au.17.07	0.20	0.17	0.20	0.14	3	12/8/2020	12/8/2020	0	0	-15	Not Certified
MEG-Au.17.08	0.30	0.23	0.40	0.14	38	8/14/2020	12/8/2020	0	0	-22.4	Not Certified
MEG-Au.17.09	16.72	17.14	54.01	15.05	281	7/31/2020	2/22/2022	1	0	2.5	Certified
MEG-Au.17.21	22.59	22.88	26.11	21.14	278	8/14/2020	2/22/2022	0	0	1.3	Certified
MEG-Au.19.05	1.70	1.67	1.82	1.55	7	6/10/2021	9/29/2021	0	0	-2	Not Certified
MEG-Au.19.07	1.30	1.33	1.42	1.27	5	6/25/2021	9/29/2021	0	0	2.5	Not Certified
MEG-Au.19.08	0.90	0.95	1.12	0.89	8	6/10/2021	1/19/2022	0	0	5.8	Not Certified
MEG-Au.19.10	35.11	35.81	38.07	33.50	47	9/8/2021	2/4/2022	0	0	2	Certified
S106004X	298.80	282.66	329.00	259.53	56	8/14/2020	10/29/2021	0	0	-5.4	Certified
S106008X	3.14	2.96	3.02	2.87	4	8/14/2020	11/25/2020	0	0	-5.7	Certified
S107009X	7.40	16.36	17.56	15.41	23	7/27/2021	2/10/2022	0	0	121.1	Not Certified
S107010X	18.00	23.92	24.91	23.41	11	7/31/2020	12/8/2020	0	0	32.9	Not Certified
S107011X	18.00	21.39	22.70	19.59	46	8/14/2020	1/19/2022	0	0	18.9	Not Certified
S107012X	18.00	21.39	23.60	19.45	33	7/31/2020	9/30/2021	0	0	18.8	Not Certified
S107013X	18.00	19.85	20.50	19.15	5	11/24/2020	12/8/2020	0	0	10.3	Not Certified
Count or Sum	35				2277			7	3		
Percent					100			0.3	0.1		

According to Blackrock, CRM values that were considered high or low relative to the target value triggered a review of the assay associated with the respective batches. Internal AAL CRMs were taken into account, and materiality of the associated assays with respect to mineralized intervals was considered. AAL was notified of the errant CRM assays via email, and a review was requested. If the batch containing the CRM was associated with mineralized material, and AAL's review was not sufficient to explain the issue, then samples were selected for re-analysis.

As noted above, 20 of the CRMs used for silver were only certified for gold. Since no certified standard is provided for silver, CRM assays were compared to standard deviations derived from the CRM assay data set. Three CRM assays were above or below the three-standard deviation threshold. However, evaluation of the results in this manner does not test the accuracy of the CRM assays with respect to the target values, only the consistency of the assay results; no bias is generally indicated.

Results for CRM gold analyses are summarized in Table 11.7 and the failures are detailed in Table 11.8. Twenty-nine CRM assays exceeded the three-standard deviation threshold out of 2333 total samples, yielding a satisfactory 1.2% failure rate.



Table 11.7 Summary of CRM Gold Assay Results - Blackrock, 2020-2021

Standard ID	Gold (ppm)				Use Count	Dates Used		Failure Counts		Bias pct
	Target	Ave	Max	Min		First	Last	High	Low	
MEG-Au.09.05	8.175	8.836	8.950	8.620	5	08/14/20	12/08/20	0	0	8.09
MEG-Au.09.06	11.280	11.190	11.867	10.000	10	11/24/20	11/25/20	0	0	-0.80
MEG-Au.09.07	10.188	10.339	10.600	9.870	7	08/14/20	11/25/20	0	0	1.48
MEG-Au.09.08	5.400	5.542	5.910	4.910	73	08/14/20	02/16/22	0	0	2.63
MEG-Au.11.13	1.800	1.819	1.970	1.720	49	11/01/21	02/11/22	0	0	1.04
MEG-Au.11.15	3.445	3.514	4.160	3.230	217	09/14/20	02/16/22	2	0	2.01
MEG-Au.11.16	7.498	7.470	7.830	6.280	182	07/31/20	02/22/22	0	1	-0.37
MEG-Au.11.17	2.693	2.720	2.830	2.550	3	08/14/20	11/25/20	0	0	1.00
MEG-Au.11.29	3.600	3.658	4.490	1.100	242	08/14/20	02/22/22	0	1	1.60
MEG-Au.11.34	2.113	2.068	2.700	1.740	76	11/25/20	02/04/22	1	0	-2.15
MEG-Au.12.13	0.879	0.891	0.955	0.737	20	08/14/20	01/19/22	0	0	1.34
MEG-Au.12.20	0.500	0.496	0.503	0.489	3	08/14/20	11/25/20	0	0	-0.87
MEG-Au.12.21	0.140	0.140	0.144	0.133	3	08/14/20	11/25/20	0	0	-0.24
MEG-Au.12.23	0.290	0.297	0.317	0.272	3	08/14/20	11/25/20	0	0	2.30
MEG-Au.12.27	2.933	2.840	3.520	2.240	169	09/01/20	02/11/22	0	0	-3.17
MEG-Au.12.32	0.616	0.630	0.637	0.623	2	08/14/20	11/25/20	0	0	2.27
MEG-Au.12.46	7.551	7.531	7.960	6.880	166	09/01/20	02/16/22	0	0	-0.26
MEG-Au.13.03	1.823	1.832	2.000	1.640	204	09/01/20	01/03/22	0	0	0.49
MEG-Au.17.01	0.380	0.402	0.560	0.344	9	08/14/20	11/25/20	1	0	5.85
MEG-Au.17.02	0.511	0.473	0.511	0.456	4	08/14/20	12/08/20	0	0	-7.39
MEG-Au.17.07	0.188	0.196	0.210	0.186	3	12/08/20	12/08/20	0	0	4.43
MEG-Au.17.08	0.410	0.419	0.445	0.387	39	08/14/20	12/08/20	0	0	2.25
MEG-Au.17.09	0.767	0.750	3.170	0.622	281	07/31/20	02/22/22	1	3	-2.22
MEG-Au.17.21	1.100	1.032	1.190	0.815	279	08/14/20	02/22/22	0	8	-6.20
MEG-Au.19.05	0.660	0.599	0.661	0.520	7	06/10/21	09/29/21	0	1	-9.20
MEG-Au.19.07	0.331	0.327	0.346	0.310	5	06/25/21	09/29/21	0	0	-1.21
MEG-Au.19.08	0.198	0.194	0.205	0.189	8	06/10/21	01/19/22	0	0	-1.89
MEG-Au.19.10	0.810	0.788	0.852	0.672	47	09/08/21	02/04/22	0	2	-2.67
S106004X	1.050	1.044	1.110	1.000	58	08/14/20	10/29/21	0	0	-0.57
S106008X	6.842	6.780	7.040	6.470	4	08/14/20	11/25/20	0	0	-0.91
S107009X	4.734	4.677	5.090	3.960	23	07/27/21	02/10/22	0	3	-1.20
S107010X	6.405	6.228	6.400	6.100	11	07/31/20	12/08/20	0	0	-2.76
S107011X	9.284	8.980	9.730	7.680	47	08/14/20	01/19/22	0	2	-3.28
S107012X	16.503	15.827	16.900	14.267	64	07/31/20	09/30/21	0	3	-4.10
S107013X	26.943	26.783	27.500	25.867	10	11/24/20	12/08/20	0	0	-0.59
Count or Sum	35				2333			5	24	-1.2
Percent					100			0.2	1.0	



Table 11.8 List of 2020-2021 Failed Gold Certified Reference Materials

Standard ID	Laboratory	Drill Hole	Gold (ppm)				Comment
			Target Value	Fail Type High/Low	3-Std. Dev. Limit	CRM Assay Value	
MEG-Au.11.15	AAL	TW20-034	3.445	High	3.844	4.010	Mislabeled?
MEG-Au.11.15	AAL	TW21-089	3.445	High	3.844	4.160	Mislabeled?
MEG-Au.11.16	AAL	TW21-094C	7.498	Low	6.910	6.280	
MEG-Au.11.29	AAL	TW20-049	3.600	Low	2.643	1.100	Mislabeled?
MEG-Au.11.34	AAL	TW21-104	2.113	High	2.629	2.700	
MEG-Au.17.01	AAL	TW20-005	0.380	High	0.425	0.560	
MEG-Au.17.09	AAL	TW21-059	0.767	Low	0.653	0.622	
MEG-Au.17.09	AAL	TW21-082	0.767	Low	0.653	0.646	Close to limit
MEG-Au.17.09	AAL	TXC21-005	0.767	Low	0.653	0.653	Right at limit
MEG-Au.17.09	AAL	TXC21-048	0.767	High	0.881	3.170	Mislabeled?
MEG-Au.17.21	AAL	PC21-032	1.100	Low	0.914	0.893	
MEG-Au.17.21	AAL	PC21-050	1.100	Low	0.914	0.883	
MEG-Au.17.21	AAL	TW21-066	1.100	Low	0.914	0.874	
MEG-Au.17.21	AAL	TW21-072	1.100	Low	0.914	0.868	
MEG-Au.17.21	AAL	TW21-087	1.100	Low	0.914	0.901	
MEG-Au.17.21	AAL	TW21-105	1.100	Low	0.914	0.815	
MEG-Au.17.21	AAL	TW21-92C	1.100	Low	0.914	0.902	
MEG-Au.17.21	AAL	TXC21-003	1.100	Low	0.914	0.884	
MEG-Au.19.05	AAL	TXC21-016	0.660	Low	0.522	0.520	Close to limit
MEG-Au.19.10	AAL	TXC21-045	0.810	Low	0.720	0.672	
MEG-Au.19.10	AAL	TXC21-045	0.810	Low	0.720	0.700	
S107009X	AAL	TXC21-009	4.734	Low	4.152	4.150	Close to limit
S107009X	AAL	TXC21-042	4.734	Low	4.152	4.130	
S107009X	AAL	TXC21-047	4.734	Low	4.152	3.960	
S107011X	AAL	TXC21-006	9.284	Low	7.982	7.680	
S107011X	AAL	TXC21-013	9.284	Low	7.982	7.680	
S107012X	AAL	TW21-068	16.503	Low	14.625	14.267	
S107012X	AAL	TW21-081C	16.503	Low	14.625	14.600	
S107012X	AAL	TXC21-001	16.503	Low	14.625	14.500	

Table 11.4 shows the control chart for CRM MEG-Au.11.15 for gold. The two high failures are clearly shown. There does appear to be a slight high bias in the CRM assays relative to the certified target value of 3.445 ppm Au.



Figure 11.4 Control Chart for CRM MEG-Au.11.15

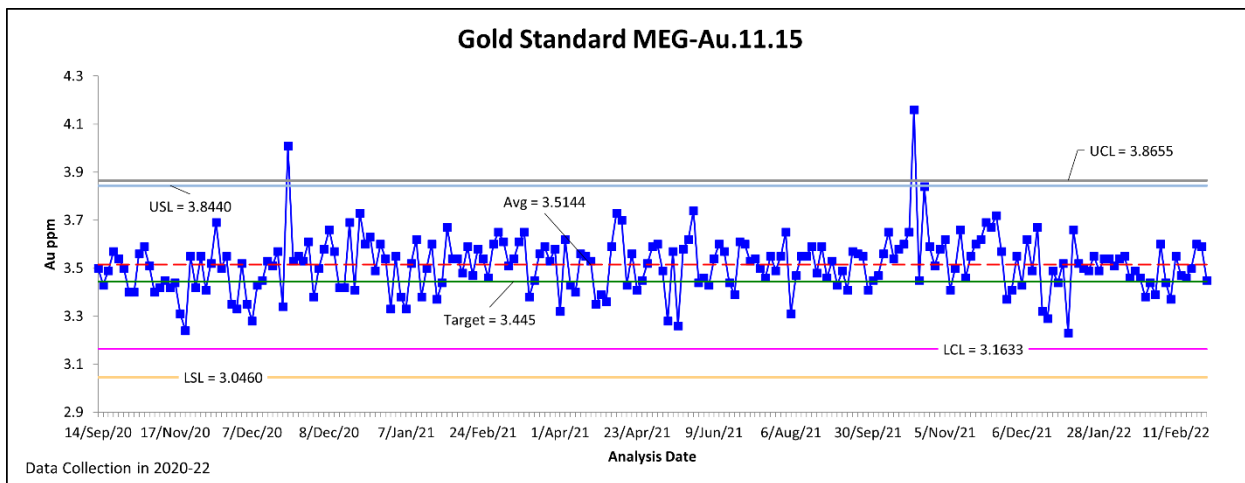
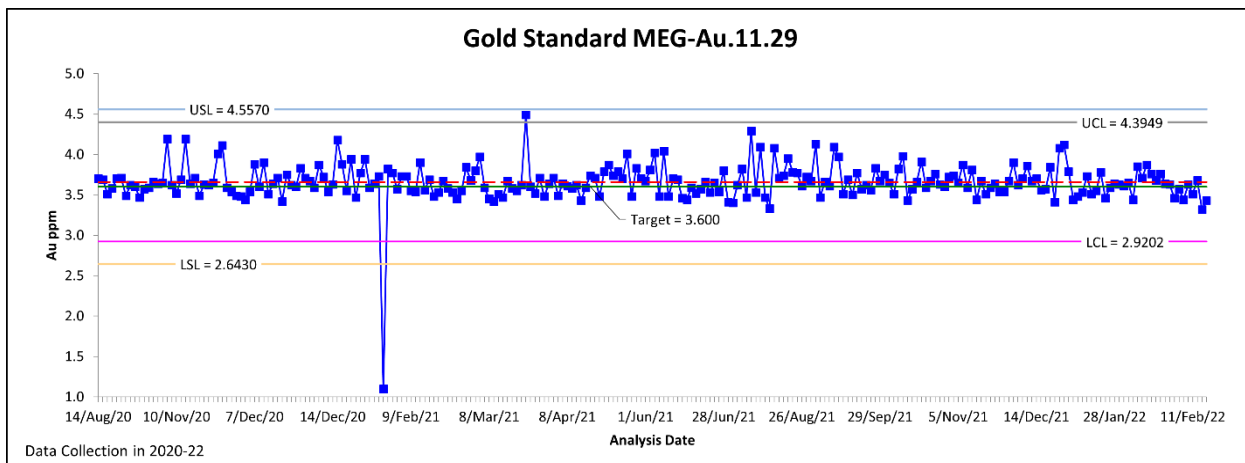


Figure 11.5 depicts the control chart for CRM MEG-Au.11.29 for gold, which has a single low failure. Only slight or no bias is indicated on the chart, as is the case for assays for charts of all 35 of the CRM's.

Figure 11.5 Control Chart for Gold CRM MED-Au.11.29



Blackrock inserted blanks at a rate of about one blank for every five CRM samples. Coarse blanks and pulp blanks were alternately inserted into the sample sequence. For the 2020-2022 drill programs, 140 coarse blanks and 289 pulp blanks, all of which were obtained from and certified by MEG, were submitted by Blackrock with drill samples. The detection limit of the AAL analyses is 0.020g Ag/t for silver and 0.003g Au/t for gold, so blank samples assaying in excess of 0.015g Au/t and 0.100g Ag/t are considered to be threshold failures that should be subject to review and possible action. A total of four silver (0.9%) and two gold (0.5%) threshold failures occurred over the course of 2020-2022 and are summarized in Table 11.9. Blackrock has stated that samples above the threshold were reviewed in real time in context with other QA/QC data and mineralized zones in each sample batch. None of the high threshold blank values were associated with mineralized intervals and were not considered material.



Table 11.9 Blank and Preceding Sample Gold Assays – Blackrock, 2020-2021

Blank	Certificate	Element	Method	Preceding		Blank	
				Sample	Value (ppm)	Sample	Value (ppm)
MEG-BLANK.17.12	SP0136925	Au	Fire/ICP	TXC21-008 357359	0.004	TXC21-008 357360	0.024
MEG-BLANK.17.12	SP0137054	Au	Fire/ICP	TW21-083 1535 1540	0.05	TW21-083 1535 1540A	0.02
MEG-PRPBLK.19.12	SP0134085	Ag	ICP-OES	TW20-043 340-345	0.33	TW20-043 340-345A	0.6
MEG-PRPBLK.19.12	SP0136291	Ag	ICP-OES	TXC21-014 626759	44.49	TXC21-014 626760	0.27
MEG-BLANK.17.12	SP0136548	Ag	ICP-OES	TXC21-006 356714	100	TXC21-006 356715	0.3
MEG-SiBlank.21.01	SP0140147	Ag	ICP-OES	TXC21-047 666279	0.39	TXC21-047 666280	1.3

No field duplicates were collected or inserted into the sample stream during the 2020 - 2021 drill programs. However, 1,144 laboratory pulp splits were sent from AAL to ALS for analysis by fire and multi-element analytical methods. The check assay duplicates were analyzed at ALS for gold using 30-gram fire assay with an AA finish, and the silver was analyzed using a four-acid digestion and ICP finish. Detection limits were 0.003 ppm Au and 0.05 ppm Ag for AAL, and 0.005 ppm Au and 0.5 ppm Ag for ALS.

In addition to a scatterplot showing an RMA regression, duplicate pairs were evaluated by using a quantile/quantile plot, and relative percent and absolute relative percent difference plots. Two relative percent difference (“RPD”) comparisons were considered. The max of the pair comparison is expressed as follows:

$$\text{RPD(max)} = 100 \times ((\text{Duplicate} - \text{Original})/(\text{Lesser of (Duplicate, Original)}))$$

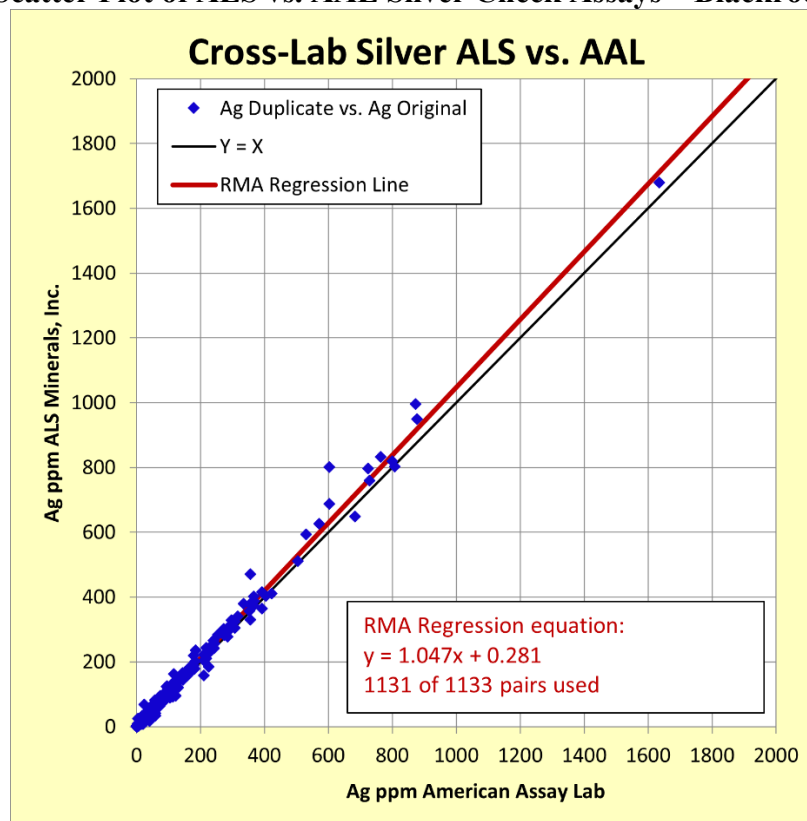
The RPD of the mean of the pair comparison, which is shown in the charts below, is expressed as follows:

$$\text{RPD(mean)} = 100 \times ((\text{Duplicate} - \text{Original})/(\text{Mean of (Duplicate, Original)}))$$

For silver there is reasonable agreement between the regression line calculated from the data and the ideal X-Y line, particularly at grades less than 400 ppm silver (Figure 11.6). Some bias with ALS greater than AAL is indicated above 400 ppm Ag.



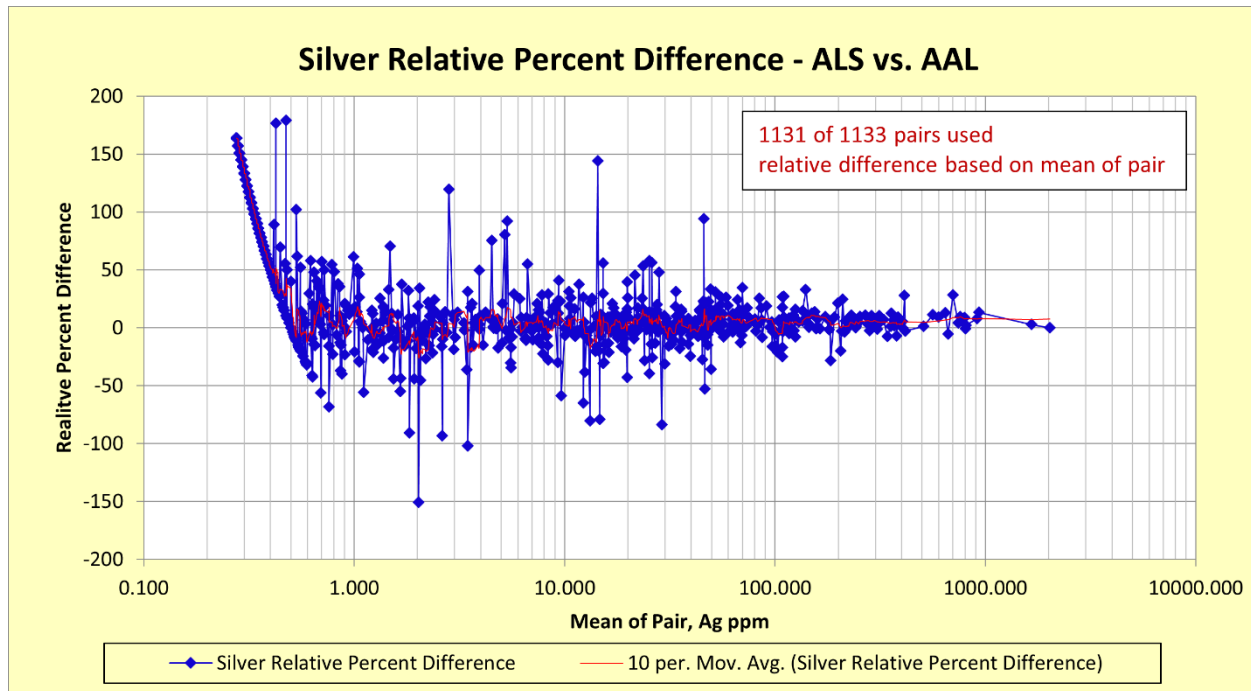
Figure 11.6 Scatter Plot of ALS vs. AAL Silver Check Assays – Blackrock, 2020 – 2021



AAL used a five-acid digestion method with an ICP detection for silver assays whereas the samples sent to ALS were digested using a four-acid method with an ICP detection method, resulting in an order of magnitude higher detection limit. The difference in detection limits resulted in some extreme RPDs at the low-grade end of the chart (Figure 11.7). The remaining pairs remain below 200% RPD, and variability indicated on the chart is within about 50%. Two outlier pairs were excluded for silver because the absolute RPD was greater than 2,000%.



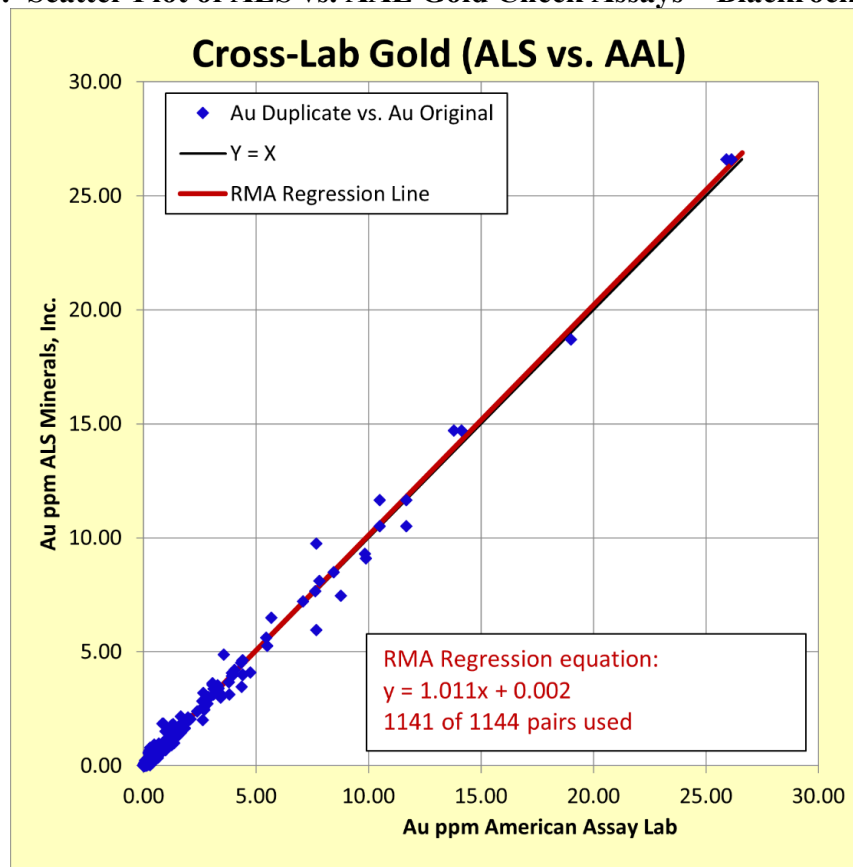
Figure 11.7: Relative Percent Difference Plot of ALS vs. AAL Silver Check Assays - Blackrock, 2020-2021



For gold, there is close agreement between the regression line calculated from the data and the ideal X-Y line (Figure 11.8). No bias is evident on the chart. Three outlier pairs were excluded for gold because their absolute RPD was greater than 2,000%.



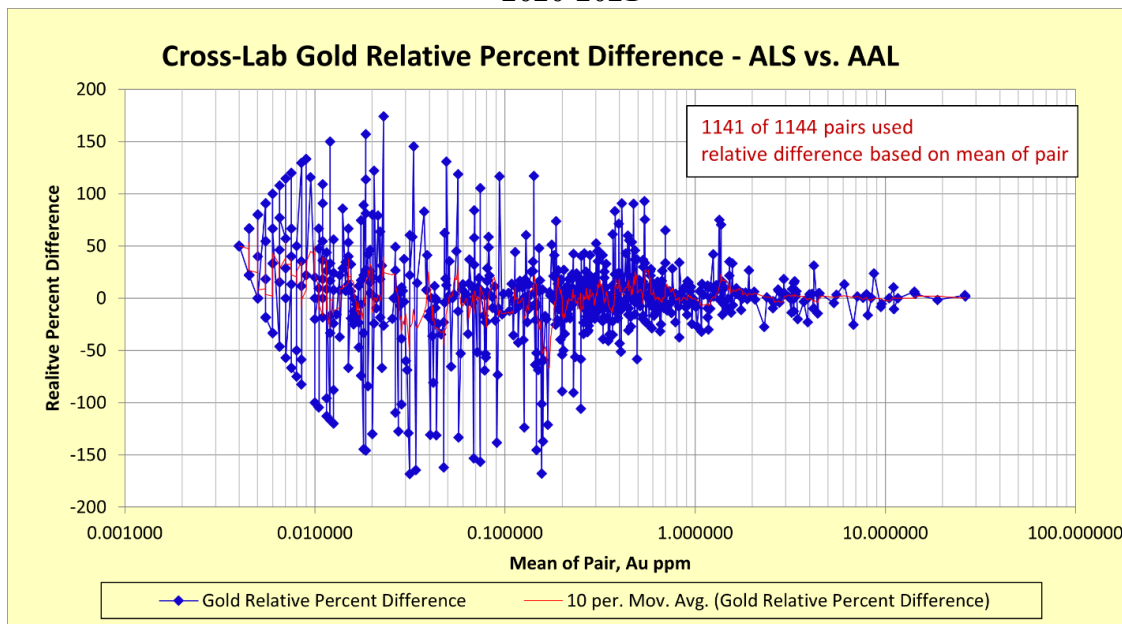
Figure 11.8: Scatter Plot of ALS vs. AAL Gold Check Assays – Blackrock, 2020 – 2021



Unlike silver, the detection limits from AAL and ALS were similar, however there are still some extreme differences observed at the low-grade end of the RPD chart (Figure 11.9). Above those mean grades, the variability in sample pairs indicated by the RPDs is about 100% to about 0.3 ppm Au, where it decreases to about 50%. The lack of bias in the gold check assays from the two laboratories increased confidence in the analyses produced by ALS. The relatively high variability is likely due to inherent heterogeneity of gold in the deposit.



Figure 11.9 Relative Percent Difference Plot of ALS vs. AAL Gold Check Assays - Blackrock, 2020-2021



11.2.3 Discussion of QA/QC Results

Overall, the types and insertion rates of QA/QC samples were acceptable for the drill programs from 2018 to 2021. Coeur submitted coarse blanks, CRMs and field duplicates with drill samples at an insertion rates of about 13%. The results of Coeur's QA/QC program is summarized as follows:

- Five silver CRM failures represent a 4% failure rate, although two of the five may have been mislabeled CRMs;
- The overall failure rate for gold CRM analyses is high at 24% with 30 CRM gold analytical failures recorded;
- No failures were recorded for either gold or silver from 84 coarse blanks that were analyzed. Only one of the preceding samples were slightly mineralized;
- For field duplicates, there is a reasonable correlation between duplicate and original values, however, some variability is indicated. There is also some bias indicated with original assays greater than duplicates above 0.6g Ag/t;
- The plot of gold field duplicates shows a variable correlation between the pairs with a decided bias of the original assays higher overall relative to the duplicates.

The high percentage of gold CRM failures is problematic. Silver CRMs performed much better, but the failure rate is still high. There is no known documented response by Coeur to any of these failures with the assaying laboratory. The lack of coarse blank failures is positive, however, all but one blank followed a sample that was unmineralized, so the potential for contamination during sample preparation was not really tested. Consistent bias in field duplicate assays is usually an indicator of a consistent issue in sample



splitting, such as the use of an out-of-level “Y-Splitter” at the bottom of the cyclone splitter. Variability in field duplicate assays is generally natural, and the results from Coeur’s sampling suggests more inherent heterogeneity in gold distribution than silver.

Blackrock’s QA/QC program included the use of CRMs, pulp blanks, and coarse and pulp duplicates with insertion rates above 7.4% for gold and silver. The evaluation of Blackrock’s QA/QC data is summarized as follows:

- A total of seven of 1921 silver CRM assays were outside the three-standard deviation limit for the CRMs certified for silver, which equates to a satisfactory failure rate of 0.4%. Some of the failures could possibly be mismarked CRMs;
- Twenty-nine gold CRM assays exceeded the three-standard deviation threshold out of 2333 total samples, yielding a satisfactory 1.2% failure rate;
- Of the certified 140 coarse blanks and 289 certified pulp blanks assayed, only five silver (0.7%) and three gold (1.2%) failures occurred.
- Some bias with ALS greater than AAL is indicated above 400 ppm Ag was apparent in check assays. No bias was observed in the gold assays.
- Variability between laboratories for check assays indicates there is less variability associated with silver assays (~50%) than with gold (200% at lower grades decreasing to ~50% at higher grades).

Analyses of CRMs for Blackrock’s drilling programs returned a very low overall failure rate for both gold and silver. Blackrock has indicated that failures that were not determined to be mislabeled pulps were evaluated, and for the few associated batches that contained significant mineralized intervals, the laboratory was asked to rerun all relevant samples. Similarly, the failure rate in coarse and pulp blank assays is low. There was a slight bias (ALS > AAL) shown by check assay pulp splits sent to ALS, and no bias demonstrated in the gold analyses. This provides support and greater confidence in the AAL assays used for resource estimation. The variability indicated by silver check assays, and higher variability in gold, can be an indication that there is more coarse gold than silver in the deposit.

11.3 Summary Statement

Based on the reviews of available documentation regarding sample preparation, gold and silver analytical methods, sample security and QA/QC evaluation and results, Mr. Lindholm believes the silver and gold assays in the Tonopah West drill-hole database are adequate for the uses described in this Technical Report. There are issues with some of the data that have been identified and described herein, but the maximum classification of the resources takes these issues into account.

Documentation of the methods and procedures used for sample preparation, analyses, and sample security, as well as for quality assurance/quality control procedures and results, associated with HOM, Chevron, and Eastfield assays is incomplete or not available. These data are used for metal domain modeling, but not for resource estimation. There is a large number of CRM failures associated with the Coeur silver and gold assays, but these are associated with only 13 RC drill holes. These issues that Mr. Lindholm has identified in Blackrock’s data are not sufficient to preclude the use of the gold or silver assays in a mineral resource estimate. However, if higher classification is considered for future resource estimates, these



issues should be considered by reducing classification for estimated block grades relying heavily on pre-Blackrock drilling assays.

Mr. Lindholm recommends that Blackrock's implement the following in future QA/QC program:

- Continue use of coarse blanks rather than pulp blanks to monitor the potential for contamination during the laboratory's sample preparation procedures;
- Collect field duplicates and split preparation duplicates from coarse rejects to provide a measure of silver and gold heterogeneity in the deposit, as well as to evaluate sample splitting at the drill rig and sample preparation at the laboratory;
- Continue to evaluate CRM assays upon receipt, make the laboratory aware of failures, then investigate and remediate the failures as needed;
- Every effort should be made to insert CRM pulps in a manner that is blind to the assay laboratory;
- Continue to send pulp split check assays to a referee laboratory, and investigate any significant bias if it is observed.



12.0 DATA VERIFICATION (ITEM 12)

Data verification, as defined in NI 43-101, is the process of confirming that data have been generated with proper procedures, have been accurately transcribed from the original sources and are suitable to be used. Additional confirmation of the drill data's reliability is based on the authors' evaluations of the Tonopah West project QA/QC procedures and results, as described in Section 11.2, and in general working with the data.

12.1 Site Visit

Mr. Bickel visited the Tonopah West project site on September 16, 2021. During the site visit, the project geology and drilling procedures were reviewed. This included a) a field tour of the Tonopah West project area and surface geology; b) visual inspection of RC and core drilling in progress; c) verification of drill-hole collar locations; and d) discussion of the current geologic interpretations with Blackrock personnel.

Mr. Bickel toured the warehouse where core and chips are stored, logged, and marked for samples before being sent to the assay lab for processing. Numerous observations were made on data collection and data storage procedures. Mr. Bickel has also maintained a relatively continual line of communication through telephone calls and emails with Blackrock personnel in which the project status, procedures, and geologic ideas and concepts have been discussed. The result of the site visit and communications is that the author has no significant concerns with the project procedures.

12.2 Independent Verification of Drill-Hole Collar Locations and Mineralization

Mr. Bickel selected 10 holes from Blackrock's 2020-2021 drilling campaigns and successfully verified the physical collar locations with a handheld GPS during the site visit on September 16, 2021. Visual verification of mineralization was also conducted during Mr. Bickel's site visit. Drill core and surface outcrops were examined. In the drill core, visible mineralization in veins, breccias, and vein selvages were observed as fine-grained sulfide and sulfosalt minerals. The existence of mineralization in the district has been widely known in the mining industry for many years and local mineralization has been documented in the historical mining records at Victor, supported by the presence of historical stope maps and voids in drilling.

12.3 Database Verification

The Tonopah West project data includes information derived from 37 historical (24 pre-Coeur and 13 Coeur) and 171 Blackrock drill holes. Documentation for pre-Coeur data is available for the Tonopah West project, however, records are either incomplete or in a form that does not provide unequivocal verification. Maps and other information from historic mining operations in the Tonopah West project area during the early 1900s were generated prior to the implementation of NI 43-101 and cannot be verified. Blackrock is using this data for exploration purposes only, and RESPEC used the pre-Coeur drilling for metal domain modeling, but not resource estimation.

The early modern exploration data generated by HOM, Chevron and Eastfield from 1979 to 1997 are not supported by full sets of certified analytical results. Sampling procedures, analytical methods and sample



security procedures are not known. Blackrock is using the data from these operators for exploration purposes only.

The drill-hole database which supports the Tonopah West resource models and estimates was created by RESPEC by combining historical drill data with the original, digital database files obtained from Blackrock's drilling and sampling data through January 12, 2022. The information was subjected to various verification measures, primarily by comparing drill-hole collar coordinates, hole orientations, and analytical information in RESPEC's compilation to the original historical paper records in the possession of Blackrock. Pre-Coeur's and Blackrock's drilling data was verified against electronic files provided by Blackrock, and to analytical reports. Any errors found during the audit process were corrected in conjunction with Blackrock staff.

12.3.1 Drill-Collar Verification

The Tonopah West database was subjected to a number of queries with the intent to identify potentially errant or suspect drill-hole collars. Collars with missing depths, missing coordinates, and switched or duplicated coordinates were identified and fixed as needed. All drill-hole-collar coordinates and hole orientations in the database were compared to original paper documentation where available, and no discrepancies were found. Drill-hole collars were visually reviewed on screen relative to the topographic surface provided by Blackrock. Several collars representing all drill programs were observed to be higher than topography by more than 5 metres, one of which was in excess of 30 metres.

12.3.2 Down-Hole Survey Verification

No down-hole deviation survey data were available for the pre-Coeur drill holes. Blackrock provided digital certificates in Excel and .pdf formats for all Coeur and Blackrock down-hole deviation surveys. The surveys for both operators were performed by International Directional Services ("IDS") located in Elko, Nevada. Comparison of Blackrock's down-hole survey database to the certificates revealed no errors or discrepancies.

12.3.3 Assay Data

Validation tests were conducted during the audit of the Tonopah West database, including identification of illogical or incorrect 'from' and 'to' intervals, excessively large or small assay or geologic intervals and gaps and overlaps in assay intervals. Errors found during these tests were iteratively corrected in the database by Blackrock, or by RESPEC with input from Blackrock.

The assay database was also compared to lab certificates. A total of 302 certificates were imported for drill-holes that were drilled from 2018 to 2022, which covers both Coeur and Blackrock drilling programs. Certificates for Blackrock drilling was obtained directly from the laboratory, whereas those for Coeur's 13 drill holes were provided to RESPEC by Blackrock. The pre-Coeur drilling was compared to data manually compiled by RESPEC from digital versions of geologic logs or certificates supplied by Blackrock. In all, 92% of the 46,192 data records with gold and silver assays were supported by digital certificates, and the remaining 8% of pre-Coeur data by digital scans of paper documents.



Issues found during the audit were mostly typographical errors, particularly in assay intervals. All discrepancies were iteratively corrected with Blackrock. The resulting database is considered by RESPEC to be adequate for use in modeling and resource estimation.

12.3.4 Additional Data Verification

In addition to the more structured verification procedures discussed above, extensive verification of the project data, with an emphasis on the historical data, was undertaken throughout the process of the resource modeling. The careful work involved in the explicit modeling of the silver and gold mineralization within the context of the project geology provided an ad-hoc checking of the accuracy of a variety of data, such as hole locations, hole orientations, drill-hole lithologic attributes, and specific silver and/or gold assays. For example, during cross-sectional geologic modeling of DPB domains, one HOM hole, HT-19, was identified as having lithologic and assay information that was contradictory with respect to adjacent drilling. A judgment was made that the single hole's location must be inaccurate, and was therefore not utilized during domain modeling. All other geologic logging and assays on drill holes appeared to be reasonably consistent with respect to surrounding data.

12.4 Summary Statement on Data Verification

There were no limitations with respect to a lack of documentation or lack of access to data during the data verification process other than for pre-Coeur drill data as summarized in Section 10.2 and Section 11.1.1. In consideration of the information summarized in this report, the authors have verified that the Tonopah West project collar and assay data generated by Coeur and Tonopah West are adequately supported by documentation, and are acceptable for use in mineral resource modeling and estimation. There was only a small amount of supporting documentation for pre-Coeur data, and associated drill data was therefore used for modeling, but not for resource estimation.

The drill-hole collars that were visually observed to be above the Tonopah West topographic surface are somewhat problematic. The location of samples, and therefore modeled domains, could be higher than the actual locations. However, in the context of the Inferred level of resources, and the future work that will be needed to properly delineate the potentially underground-mineable deposits, it does not present a risk to the resource estimate at this time. Still, the issue should be investigated and resolved.



13.0 MINERAL PROCESSING AND METALLURGICAL TESTING (ITEM 13)

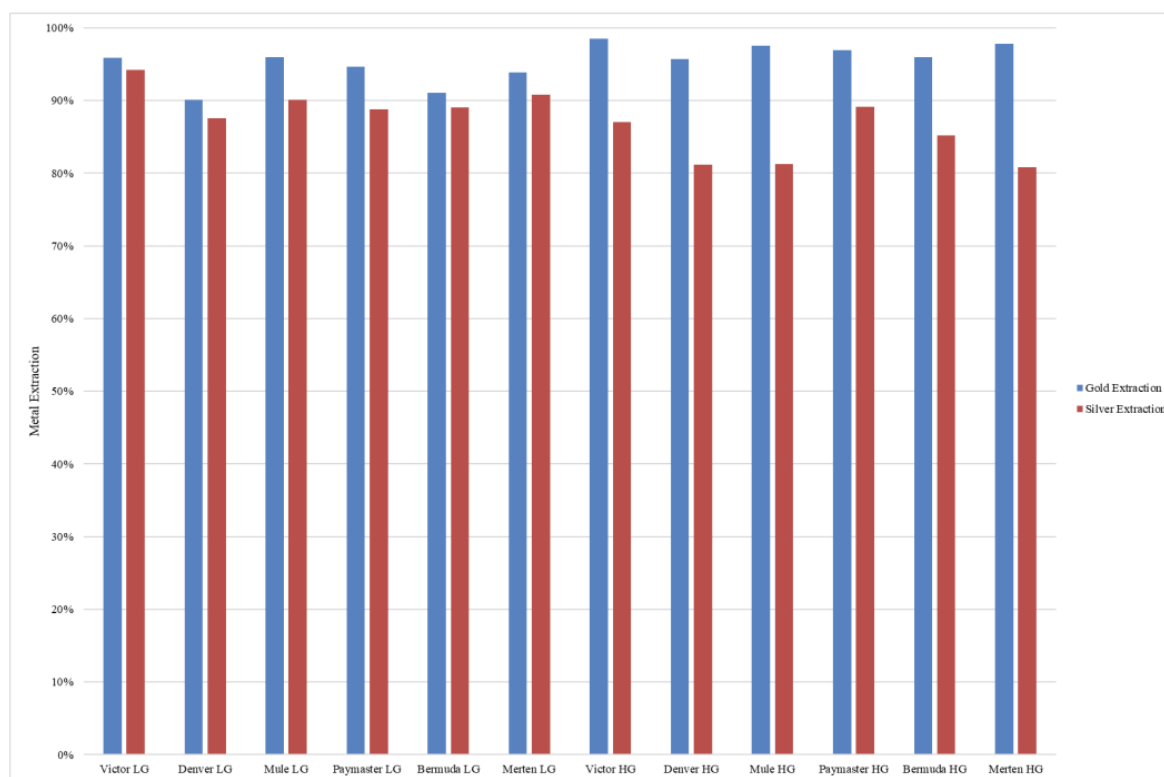
13.1 2022 Bottle-Roll Cyanide Leach Analyses

Blackrock has completed initial metallurgical testwork at Tonopah West. The metallurgical work completed consists of 12 bottle-roll cyanide leach analyses on RC and core composite drill samples. The samples were analyzed at Kappes, Cassiday and Associates (“KCA”) and the results were completed in January 2022.

The composite samples were based on 47 drill samples consisting of RC cuttings and crushed core from both low-grade (50-150ppm Ag) and high-grade (>200ppm Ag) portions of six of the principal veins within the project area. The gold extractions in the bottle-roll leach tests ranged from 90% to 98% with an average of 95%. Silver extractions ranged between 81% and 94% with an average of 87%. Cyanide consumption ranged from 0.35 to 1.03 kilograms per tonne. The gold and silver extraction results for the 12 composite samples are shown in Figure 13.1.

Figure 13.1 Bottle-Roll Cyanide Leach – Gold and Silver Extraction
(figure taken from KCA, 2022)

**Figure 1-1.
Tonopah West Project
Gold and Silver Extraction**





13.2 Summary

Although the author is not an expert with respect to metallurgy, the author has reviewed the metallurgical test studies, believes the information to be sound and appropriate for the purposes for which they have been used in this report. The data from these studies are used in this technical report solely for the purposes of deriving reasonable and appropriate cutoffs for mineral resource reporting.



14.0 MINERAL RESOURCE ESTIMATES (ITEM 14)

14.1 Introduction

The mineral resource estimation for the Tonopah West project was completed for disclosure in accordance with Canadian National Instrument 43-101 (“NI 43-101”). The modeling and estimation of the mineral resources were completed in April, 2022 under the supervision of Mr. Bickel, and have been reviewed by Mr. Lindholm, both qualified persons with respect to mineral resource estimations under NI 43-101. The effective date of the resource estimate is April 28, 2022. Mr. Bickel and Mr. Lindholm are independent of Blackrock by the definitions and criteria set forth in NI 43-101; there is no affiliation between Mr. Bickel or Mr. Lindholm and Blackrock except that of independent consultant/client relationships.

Mr. Bickel and Mr. Lindholm are not aware of any unusual environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors that may materially affect the Tonopah West mineral resources as of the date of this report.

This report presents two gold and silver resources for the Tonopah West property (Denver, Paymaster and Bermuda, collectively known as “DPB”, and Victor) that have an effective date of April 28, 2022. No mineral reserves have been estimated for the Tonopah West project.

The Tonopah West resources are classified in order of increasing geological and quantitative confidence into Inferred, Indicated, and Measured categories in accordance with the “CIM Definition Standards - For Mineral Resources and Mineral Reserves” (2014) and therefore NI 43-101. CIM mineral resource definitions are given below, with CIM’s explanatory text shown in italics:

Mineral Resource

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.

A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.

The location, quantity, grade or quality, 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 solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals.

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 Modifying 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. The Qualified Person should consider and clearly state the basis for determining that the material has reasonable prospects for eventual economic extraction. Assumptions should include estimates of cutoff grade and geological continuity at the selected cut-off, metallurgical recovery, smelter payments, commodity price or product value, mining and processing method and mining, processing and general and administrative costs. The Qualified Person should state if the assessment is based on any direct evidence and testing.

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.

Inferred Mineral Resource

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101.

There may be circumstances, where appropriate sampling, testing, and other measurements are sufficient to demonstrate data integrity, geological and grade/quality continuity of a Measured or Indicated Mineral Resource, however, quality assurance and quality control, or other information may not meet all industry norms for the disclosure of an Indicated or Measured Mineral Resource. Under these circumstances, it may be reasonable for the Qualified Person to report an Inferred Mineral Resource if the Qualified Person has taken steps to verify the information meets the requirements of an Inferred Mineral Resource.



Indicated Mineral Resource

An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Pre-Feasibility Study which can serve as the basis for major development decisions.

Measured Mineral Resource

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade or quality of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability of the deposit. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.



Modifying Factors

Modifying Factors are considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

The Tonopah West resources are reported at cutoffs that are reasonable for deposits of this nature given anticipated mining methods and plant processing costs, while also considering economic conditions, because of the regulatory requirements that a resource exists “in such form and quantity and of such a grade or quality that it has reasonable prospects for eventual economic extraction.”

14.2 Project Data

The Tonopah West silver and gold resources were modeled and estimated using information provided by Blackrock under Mr. Bickel’s supervision. These data, as well as digital topography of the project area, were provided to Mr. Bickel by Blackrock in a digital database in Universal Transverse Mercator (“UTM”) grid coordinates, using the 1927 North American Datum (NAD27), Zone 11.

In all, 208 holes totaling 107,740 metres have been drilled (Table 14.1). These drill holes, as well as Tonopah West’s property limits and the DPB and Victor mineral resource outlines, are shown in Figure 10.1. Core holes, RC holes and RC holes with core tails account for 12%, 54% and 34% of the meterage drilled, respectively. All holes drilled prior to 2018 have been excluded from the resource estimate, but were used to guide domain shapes.

Table 14.1 Summary of Drilling at Tonopah West to January 2022

Type of hole	Count	Drilled Metres
Core	19	12,490
RC	126	58,576
RC/Core Tail	63	36,674
Grand Total	208	107,740

14.3 Property Geology Relevant to Resource Model

The silver-gold mineralization at Tonopah West occurs in quartz veins primarily hosted in lower Miocene volcanic units, specifically the West End Rhyolite, Extension Breccia, Mizpah Andesite, and Tonopah Formation. Primary controls on mineralization include: quartz veining with associated zoned alteration; the upper contact of the West End Rhyolite with the overlying Mizpah Andesite; the intersection of quartz veins with important structures; and favorable volcanic units within geologic formations. Geologic factors critical to the grade domain modeling of Tonopah West silver-gold mineralization include veining, lithology, and structure. The higher-grade sulfide-bearing portions of the quartz veins generally range in thickness from 0.1 metres to 5 metres.

The DPB vein group includes both shallow- to moderate- angle (30° to 40°) north-dipping mineralized veins, such as the Merten vein, and more steeply, north-dipping (60° to 75°) mineralized veins, such as



the Denver, Paymaster, and Bermuda. The shallow-dipping veins occur within the southern half of the DPB area while the steeply dipping veins occur in the northern half of the DPB area. The steep veins were the primary focus of the limited historical underground development and in general appear to contain higher concentrations of silver and gold than the shallow veins.

Statistical analysis of the drill data, and visual inspections of downhole drill assay data, showed a consistent Ag:Au ratio of approximately 100:1 within the steeply-dipping veins within the central and northern portions of DPB area. Within the shallow veins, gold shows increased grades and thickness compared to silver. It is uncertain whether these increases represent a discrete gold mineralizing event or zoning of precious metals within the Tonopah West property.

The Victor vein lies approximately 350 metres northeast of DPB area. The Victor vein system contains a sequence of steeply north-dipping sheeted veins of which the Victor vein was the focus of historical development and mine production. The mineralization tenor and style of silver and gold mineralization within the Victor vein is similar to that in steeper veins in the DPB vein group, an indication that there may be a connection between the two vein groups.

14.4 Geologic Model

RESPEC used geologic interpretations provided by Blackrock. The geologic interpretations included solidified wireframes of veins, three-dimensional lithologic contact surfaces, and three-dimensional fault surfaces. Blackrock also provided scans of detailed paper cross-sectional interpretations of the mineralization at Tonopah West.

Blackrock's formation surfaces generally matched their respective geological logging data in drilling. The interpretations were reasonable representations of the volcanic stratigraphy and faulting as currently understood in the area, and flow of units between drill holes on section and between sections is reasonable.

The current geologic model includes a georeferenced mine stope that occurs along the Victor vein. The 3D stope is used to code the block model and the mined-out tonnes represented by the solids are removed from mineral resource consideration.

14.5 Mineral Domain Modeling

A mineral domain encompasses a volume of rock that is ideally characterized by a single, natural population of metal grades that occurs within a specific geologic environment. Mineral domains were modeled to respect the lithologic and structural interpretations within each of the two vein groups. Following statistical evaluation of the drill-hole data, low-, mid-, and high-grade mineral domains were modeled on cross sections for silver and gold and were numbered 100, 200, and 300, respectively. Material outside the modeled domains was assigned to the 0 domain. The grade domains were based on assay data populations.

All modeling of the Tonopah West mineral domains and estimation of the mineral resources were performed using GEOVIA Surpac mining software as well as complimentary software developed by RESPEC.



In order to define the mineral domains in the DPB and Victor vein groups, the natural populations of silver and gold grades were identified on population-distribution graphs for all drill-hole samples. The analysis resulted in identification of distinct populations for each metal which then could be used in conjunction with the geologic characteristics to interpret the bounds of each of the mineral domains. The similarity in mineralization tenor and style within the two vein groups justified the use of similar mineral domain grade ranges. The approximate grade ranges of the silver and gold domains are listed in Table 14.2.

Table 14.2 Grade Domain Ranges – DPB and Victor Vein Groups

Domain	Silver (g Ag/t)	Gold (g Au/t)
100	~7 to ~35	~0.07 to ~0.35
200	~35 to ~150	~0.35 to ~2.0
300	> ~150	> ~2.0

Using these grade populations in conjunction with lithologic and structural interpretations, silver and gold grade domains were independently modeled within the DPB group by interpreting mineral domain polygons on a set of 50-meter-spaced, north-south oriented cross sections. Silver domains were similarly modeled for the Victor group. Gold assay intercepts were compared to Victor silver domains, and it was determined that gold was sufficiently correlative such that the silver domains were used to code and estimate gold. Representative cross sections showing the geology and silver mineral domains in the DPB veins and silver/gold domains in the Victor group are shown in Figure 14.1 and Figure 14.2, respectively. Section locations are given in Figure 10.1.

The final cross-sectional mineral-domain polygons were projected horizontally to the drill data in each sectional window, and these three-dimensional polygons were then sliced horizontally along 2-meter planes. These slices, along with the lithologic solids and structural surfaces, were used to guide the final rectification of the metal mineral domains on the 2-meter-spaced levels which coincided with resource-model block centroids along z-axis columns. The product of this work was a set of 2-meter-spaced level plan silver and gold domain polygons that span the full extent of the drilled mineralization.



Figure 14.1 DPB Vein Group – Geology and Silver Domains on Cross Section E478050

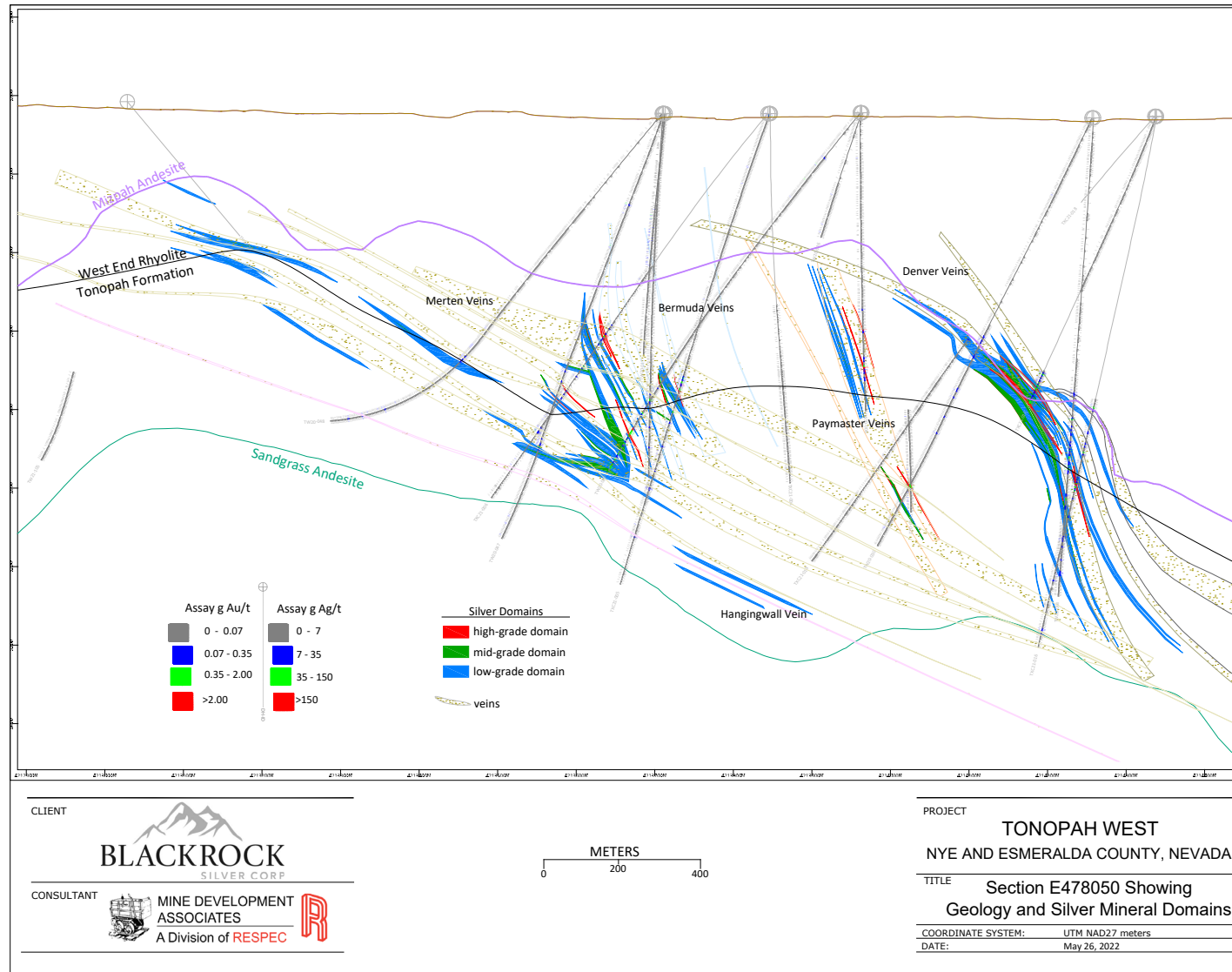
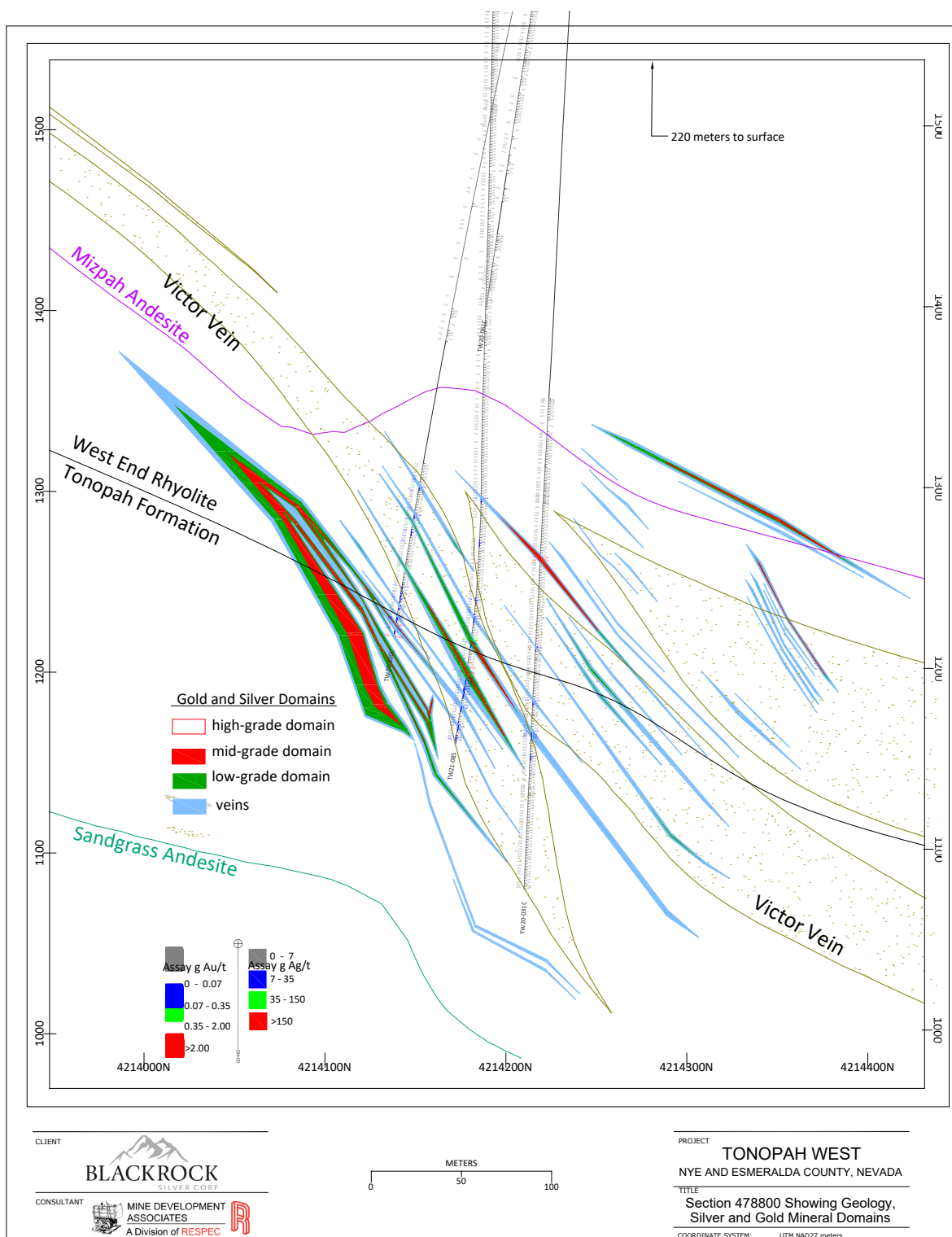




Figure 14.2 Victor Vein Group - Geology with Silver Mineral Domains on Cross Section E478800





14.6 Assay Coding, Capping, and Compositing

The cross-sectional mineral-domain polygons described in Section 14.5 were used to code drill-hole assay intervals to their respective gold and silver mineral domains. The polygons were coded 25 metres to either side of the section plane from which they were created. Assay caps were determined by domain to identify high-grade outliers that might be appropriate for capping. Visual reviews of the spatial relationships of possible outliers and their potential impacts during grade interpolation were also considered in the assay cap definitions. Descriptive statistics of the coded assays of capped and uncapped silver and gold analyses are provided in Table 14.3 through Table 14.6. If the Ag Cap or Au Cap value in the 'Max.' column in the tables is different from the Ag or Au value, then a cap was applied to that metal domain.

Table 14.3 Coded Silver Assay Statistics – DPB Vein Group

Domain	Assays	Count	Mean (g Ag/t)	Median (g Ag/t)	Std. Dev.	CV	Min. (g Ag/t)	Max. (g Ag/t)	# Samples Capped
100	Ag	1168	14.13	10.90	23.02	1.63	0.24	850.000	3
	Ag Cap	1168	13.65	10.90	10.53	0.77	0.24	100.000	
200	Ag	297	65.01	53.80	38.47	0.59	1.60	229.000	0
	Ag Cap	297	65.01	53.80	38.47	0.59	1.60	229.000	
300	Ag	96	425.25	231.74	473.79	1.11	15.39	3007.000	2
	Ag Cap	96	415.62	231.74	429.85	1.03	15.39	2000.000	
All	Ag	1561	44.23	13.68	141.42	3.20	0.24	3007.000	5
	Ag Cap	1561	43.38	13.68	131.70	3.04	0.24	2000.000	

Table 14.4 Coded Gold Assay Statistics – DPB Vein Group

Domain	Assays	Count	Mean (g Au/t)	Median (g Au/t)	Std. Dev.	CV	Min. (g Au/t)	Max. (g Au/t)	# Samples Capped
100	Au	1498	0.158	0.121	0.221	1.400	0.002	8.510	9
	Au Cap	1498	0.154	0.121	0.121	0.790	0.002	1.000	
200	Au	368	0.704	0.569	0.468	0.670	0.012	3.500	1
	Au Cap	368	0.702	0.569	0.459	0.650	0.012	3.000	
300	Au	99	4.792	2.870	5.103	1.060	0.165	27.000	4
	Au Cap	99	4.623	2.870	4.466	0.970	0.165	20.000	
All	Au	1965	0.448	0.151	1.412	3.150	0.002	27.000	14
	Au Cap	1965	0.437	0.151	1.289	2.950	0.002	20.000	

Table 14.5 Coded Silver Assay Statistics – Victor Vein Group

Domain	Assays	Count	Mean (g Ag/t)	Median (g Ag/t)	Std. Dev.	CV	Min. (g Ag/t)	Max. (g Ag/t)	# Samples Capped
100	Ag	257	16.57	14.92	13.73	0.83	0.96	185.00	2
	Ag Cap	257	15.81	14.92	7.40	0.47	0.96	35.00	
200	Ag	147	72.84	62.59	43.77	0.60	2.62	210.00	0
	Ag Cap	147	72.84	62.59	43.77	0.60	2.62	210.00	
300	Ag	52	441.42	355.40	295.20	0.67	72.04	1736.73	2
	Ag Cap	52	419.12	355.40	214.54	0.51	72.04	1000.00	
All	Ag	456	86.36	24.08	171.65	1.99	0.96	1736.73	4
	Ag Cap	456	83.22	24.08	150.21	1.80	0.96	1000.00	



Table 14.6 Coded Gold Assay Statistics – Victor Vein Group

Domain	Assays	Count	Mean (g Au/t)	Median (g Au/t)	Std. Dev.	CV	Min. (g Au/t)	Max. (g Au/t)	# Samples Capped
100	Au	257	0.154	0.135	0.151	0.980	0.005	1.960	1
	Au Cap	257	0.148	0.135	0.094	0.640	0.005	0.600	
200	Au	147	0.679	0.568	0.460	0.680	0.003	3.140	1
	Au Cap	147	0.676	0.568	0.445	0.660	0.003	2.000	
300	Au	52	4.766	3.800	3.511	0.740	0.679	19.000	0
	Au Cap	52	4.766	3.800	3.511	0.740	0.679	19.000	
All	Au	456	0.884	0.206	1.931	2.180	0.003	19.000	2
	Au Cap	456	0.880	0.206	1.929	2.190	0.003	19.000	

The capped assays were composited at 1.5 meter down-hole intervals, respecting the mineral domain boundaries. Descriptive statistics of the composites for each metal are given in Table 14.7 through Table 14.10

Table 14.7 Coded Silver Composite Statistics – DPB Vein Group

Domain	Count	Mean (g Ag/t)	Median (g Ag/t)	Std. Dev.	CV	Min. (g Ag/t)	Max. (g Ag/t)
100	1487	13.65	11.08	9.78	0.72	0.24	100.00
200	394	65.01	53.81	36.62	0.56	2.31	229.00
300	112	415.62	241.00	403.40	0.97	16.31	2000.00
All	1993	43.38	14.05	127.28	2.93	0.24	2000.00

Table 14.8 Coded Gold Composite Statistics – DPB Vein Group

Domain	Count	Mean (g Au/t)	Median (g Au/t)	Std. Dev.	CV	Min. (g Au/t)	Max. (g Au/t)
100	1998	0.154	0.123	0.115	0.750	0.002	1.000
200	524	0.702	0.569	0.449	0.640	0.020	3.000
300	119	4.623	2.920	4.159	0.900	0.168	20.000
All	2641	0.437	0.152	1.245	2.850	0.002	20.000

Table 14.9 Coded Silver Composite Statistics – Victor Vein Group

Domain	Count	Mean (g Ag/t)	Median (g Ag/t)	Std. Dev.	CV	Min. (g Ag/t)	Max. (g Ag/t)
100	357	15.81	15.03	7.09	0.45	1.20	35.00
200	187	72.84	63.18	42.10	0.58	4.30	194.63
300	68	419.12	354.11	207.48	0.50	72.04	1000.00
All	612	83.22	23.64	148.83	1.79	1.20	1000.00

Table 14.10 Coded Gold Composite Statistics – Victor Vein Group

Domain	Count	Mean (g Au/t)	Median (g Au/t)	Std. Dev.	CV	Min. (g Au/t)	Max. (g Au/t)
100	357	0.148	0.135	0.092	0.620	0.005	0.600
200	187	0.676	0.561	0.433	0.640	0.003	1.970
300	68	4.766	3.842	3.401	0.710	0.679	19.000
All	612	0.880	0.206	1.904	2.160	0.003	19.000



14.7 Density

The database contains 105 specific gravity measurements from core samples taken from Blackrock's 2021 drill program. The samples were sent to KCA for rock density analyses using ASTM Method C914 (water immersion with wax coating). The samples were collected from the various lithologies and from the mineralized veins within both the DPB and Victor veins. Based on evaluation of the analyses, which was limited by the number of available samples, specific gravity values of 2.36 and 2.49 were assigned to unmineralized wallrock and mineralized veins (mineral domains 100, 200, and 300), respectively, within the DPB and Victor block models.

14.8 Block Model Coding

The Tonopah West mineral resources were modeled and estimated in two separate block models for DPB and Victor. The DPB and Victor resource block model extents and dimensions are provided in Table 14.11. There is some overlap between the block models, and it is likely that any future development would treat the DPB and Victor areas as a single entity sharing development costs and infrastructure. However, for mineral resource estimation, the DPB and Victor areas were not combined into a single block model because of the lack of drill holes between the two vein groups.

Table 14.11 Model Parameters

Parameters (m)	DPB	Victor
X origin	477362	478362
Y origin	4212925	4213900
Z origin	900	900
X extents	1220	1000
Y extents	1800	600
Z extents	1000	600
X block size	4	4
Y block size	1	1
Z block size	2	2

origin locations are in UTM coordinates, NAD 27, Zone 11N

The Victor block model and modeled domains extended outside the current Blackrock land holdings. However, only those model blocks within Blackrock's land position were included within the current mineral resource tabulation.

The 2-meter-spaced level plan mineral-domain polygons were used to code 4m x 1m x 2m (x, y, z) blocks that comprised a digital model oriented orthogonally. The partial percentage volumes of each mineral domain as well as the portion of the block that lies outside of the modeled metal domains (domain 0) were coded directly by the level plans and stored in each block. In other words, the partial percentage of each of the four domains for silver and gold were stored in every block.

The specific gravity values were assigned to the model blocks on a weighted average basis based on the mineral domain percentages in each model block.



The wireframe solid of the Victor vein georeferenced mine stope was used to code the block model on a partial percentage basis. Any block with a portion of the block within the wireframe was considered mined out and removed from mineral resource consideration.

An estimation area wireframe solid was created to distinguish two primary areas of the DPB mineralization with different overall vein orientations in the block model. Coding of the block model by the solid is on a block-in/block-out basis. This coding was then used to control search-ellipse orientations during silver and gold interpolations. A single estimation area orientation, which was similar to the orientation applied to DPB area 2, was used for all Victor vein mineralization. The estimation area orientations shown in Table 14.12 were applied to all domains for both silver and gold.

Table 14.12 Estimation Area Orientations

Area	Bearing	Plunge	Tilt
DPB 1	90	-5	25
DPB 2	90	0	65
Victor	90	0	70

14.9 Grade Interpolation

Silver and gold grades were interpolated using inverse distance, ordinary kriging, and nearest-neighbor methods. The mineral resources reported herein were estimated by inverse distance to the third power (“ID³”) as this method produced results that most appropriately respected the drill data and geology of the resource. The kriged and nearest-neighbor estimations were completed for the purposes of statistical checking of the various estimation iterations. The parameters applied to the grade estimations at DPB and Victor are summarized in Table 14.13.

Table 14.13 DPB and Victor Estimation Parameters

Estimation Pass	Search Ranges (metres)			Composite Constraints		
	Major	Semi-Major	Minor	Min	Max	Max/hole
Pass 1	250	250	80	2	12	4
Pass 2	600	600	300	1	16	4

Grade interpolations were completed using 1.5-meter composites. The estimation passes were performed independently for each of the mineral domains, so that only composites coded to a particular domain were used to estimate grade into respective partial blocks of the domain. Multiple grades were interpolated into blocks with partial percentages of more than one domain. A single volume-weighted grade of each of the metal species was calculated from estimated grades for each of the metal domains 0, 100, 200, and 300 in a given block. The total block grades in the resource were therefore diluted to the full block volumes.

14.10 Mineral Resources

The Tonopah West project mineral resources have been estimated to reflect potential underground extraction and processing by standard sulfide milling techniques. To meet the requirement of the resources having reasonable prospects for eventual economic extraction, only those portions of blocks occurring within mineable volumes (stopes) amenable to underground extraction were included in the mineral



resource tabulation. To obtain the mineable volumes, multiple stope optimizations were performed in Deswik software at incrementally higher costs per tonne, beginning with the base case for each resource.

The assumed mining costs reflect the potential use of longhole stoping methods for the steeply-dipping veins, and cut and fill for the shallow-dipping veins. The DPB resource consists of approximately 35% shallow-dipping veins with the remainder steeply dipping, whereas the Victor resource consists almost entirely of steeply-dipping veins. The applied mining costs per tonne reflect these proportions. The use of mining cost cutoffs is a reasonable measure reflecting the potential mining/milling scenario and the limited knowledge, at this stage of the project, concerning future mining and processing operating costs.

Tabulations of mineral resources at various mining costs per tonne for mineral resources for the DPB and Victor models are shown in Table 14.14 and Table 14.15, respectively. The tonnes, grade and ounces at cutoffs above and below the base case (bolded in the tables) are presented to provide block value and grade-distribution data that allow for evaluation of the project resource sensitivity to fluctuating mining costs. All material within progressively smaller optimized stopes is reported at higher mining costs in the tables, such that the tabulations at mining costs higher than the base cases represent subsets of the reported resources. Conversely, the tabulation at a lower mining cost cutoff reflects the tonnes, grade and ounces that would be present in an optimized stope if future improvements in mining methods or other factors result in lower mining costs.

Table 14.14 DPB Inferred Mineral Resources

Mining, Processing and G&A Total Cost Cutoff \$/tonne	DPB Inferred Resources								
	g AgEq/t cut-off grade	Met- Recovery Weighted Block Value \$/tonne	Tonnes	Block Diluted g Ag/t	Block Diluted g Au/t	Block Diluted g AgEq/t	oz Ag	oz Au	oz AgEq
107	192	220	1,400,000	186	2.2	396	8,361,000	98,000	17,840,000
118	210	230	1,281,000	198	2.3	415	8,150,000	94,000	17,100,000
137	246	253	1,074,000	217	2.5	456	7,504,000	86,000	15,735,000
157	282	270	935,000	233	2.7	491	6,995,000	80,000	14,759,000
177	317	288	820,000	250	2.8	518	6,591,000	74,000	13,639,000
197	353	304	723,000	267	2.9	544	6,205,000	68,000	12,644,000
233	417	360	441,000	316	3.4	641	4,485,000	49,000	9,096,000

1. The Effective Date of the DPB mineral resources is April 28, 2022.
2. The project mineral resources are shown in bold and are comprised of all complete or partial model blocks that lie within underground stopes optimized using \$81/tonne mining, \$24/tonne processing, and \$12.50/tonne G&A costs for a total cost of \$118/tonne. This assumes mining costs for a weighted average of 35% cut and fill at \$100/tonne and 65% longhole stoping at \$70/tonne. Mining costs per tonne are based on benchmarked costs of similar-sized operations.
3. Tabulations from stopes optimized at cutoffs above and below the base case provide a measure of the sensitivity of possible resources that might result from future fluctuations in mining costs.
4. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
5. The estimate of mineral resources may be materially affected by geology, environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
6. Rounding as required by reporting guidelines may result in apparent discrepancies between tons, grade, and contained metal content.
7. Metallurgical recovery-weighted block value per tonne is calculated using the following equation:



$$\frac{(\$Ag_P * Ag_{Rec} * Ag_{id} + \$Au_P * Au_{Rec} * Au_{id})}{31.10348 \text{ g/oz}}$$

Where:

$\$Ag_P$ = \$20/Ag oz

Ag_{Rec} = 87% Ag Recovery

Ag_{id} = g Ag/t

$\$Au_P$ = \$1750/Au oz

Au_{Rec} = 95% Au Recovery

Au_{id} = g Au/t

Table 14.15 Victor Inferred Mineral Resources

Mining, Processing and G&A Total Cost Cutoff \$/tonne	Victor Inferred Resource								
	g AgEq/t cut-off grade	Met- Recovery Weighted Block Value \$/tonne	Tonnes	Block Diluted g Ag/t	Block Diluted g Au/t	Block Diluted g AgEq/t	oz Ag	oz Au	oz AgEq
97	175	247	1,847,000	207	2.5	448	12,320,000	150,000	26,590,000
107	192	251	1,694,000	216	2.7	469	11,752,000	144,000	25,514,000
127	228	268	1,559,000	225	2.8	493	11,254,000	139,000	24,679,000
147	263	285	1,419,000	237	3.0	524	10,796,000	135,000	23,893,000
167	299	301	1,299,000	248	3.1	544	10,338,000	130,000	22,730,000
187	335	318	1,185,000	259	3.3	574	9,855,000	126,000	21,886,000
213	383	373	830,000	300	3.9	673	8,004,000	104,000	17,945,000

1. The Effective Date of the Victor mineral resources is April 28, 2022.
2. The project mineral resources are shown in bold and are comprised of all complete or partial model blocks that lie within underground stopes optimized using \$70/tonne mining, \$24/tonne processing, and \$12.50/tonne G&A costs for a total cost of \$107/tonne. This assumes mining for Victor is 100% longhole stoping. Mining costs per tonne are based on benchmarked costs of similar-sized operations.
3. Tabulations from stopes optimized at cutoffs above and below the base case provide a measure of the sensitivity of possible resources that might result from future fluctuations in mining costs.
4. Mineral resources that are not mineral reserves do not have demonstrated economic viability.
5. The estimate of mineral resources may be materially affected by geology, environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
6. Rounding as required by reporting guidelines may result in apparent discrepancies between tons, grade, and contained metal content.
7. Metallurgical recovery-weighted block value per tonne is calculated using the following equation:

$$\frac{(\$Ag_P * Ag_{Rec} * Ag_{id} + \$Au_P * Au_{Rec} * Au_{id})}{31.10348 \text{ g/oz}}$$

Where:

$\$Ag_P$ = \$20/Ag oz

Ag_{Rec} = 87% Ag Recovery

Ag_{id} = g Ag/t

$\$Au_P$ = \$1750/Au oz

Au_{Rec} = 95% Au Recovery

Au_{id} = g Au/t

Silver equivalent (“AgEq”) grades were calculated, and average AgEq grades and total AgEq ounces are given for each mining cost cutoff. Examples of the block model with total block metal values are shown Figure 14.3 and Figure 14.4 for the DPB and Victor resources, respectively. Based on metal prices of \$20/oz Ag and \$1750/oz Au, and metal recoveries of 87% Ag and 95% Au, the AgEq grade assigned to each model block is determined by the following formulas:

$$(\$20/\$1750) \times (0.87/0.95) = 0.010466$$

$$\text{g AgEq/t} = \text{g Ag/t} + (\text{g Au/t} \times 0.010466)$$



The Tonopah mineral resources are entirely classified as Inferred. This classification is based on the generally wide-spaced drilling and the variability in extent and metal grade of the interpreted high-grade veins. The project also lacks sufficient metallurgical testwork to justify higher classification. Pre-Coeur drill-holes lack down-hole surveys, so their locations of samples, particularly at depth, is suspect. Additional drilling and sampling, and/or initial underground exploration/development, would be required to allow for higher classification of the project resources.



Figure 14.3 DPB Block Model Cross Section with Metal Value Block Model Grades

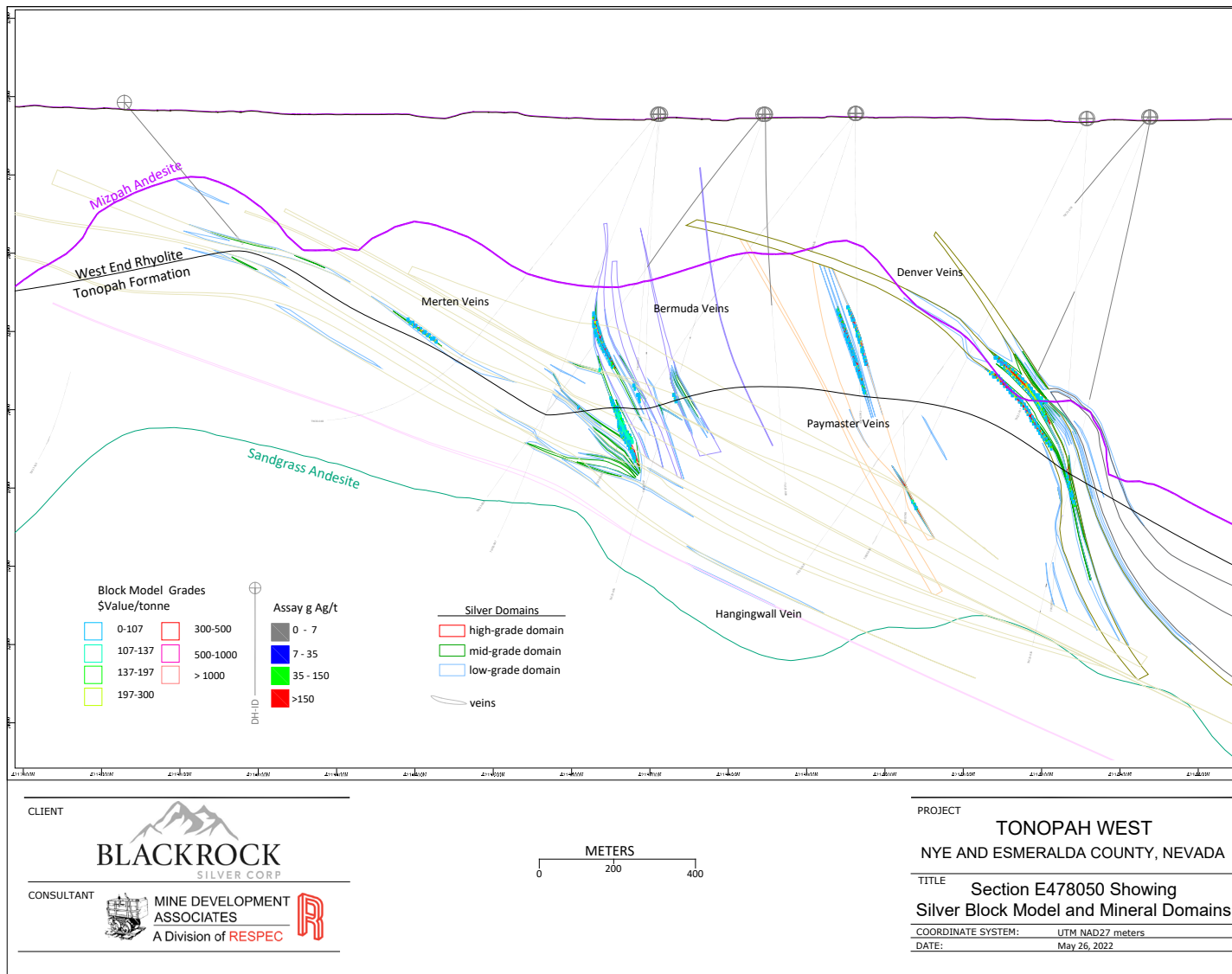
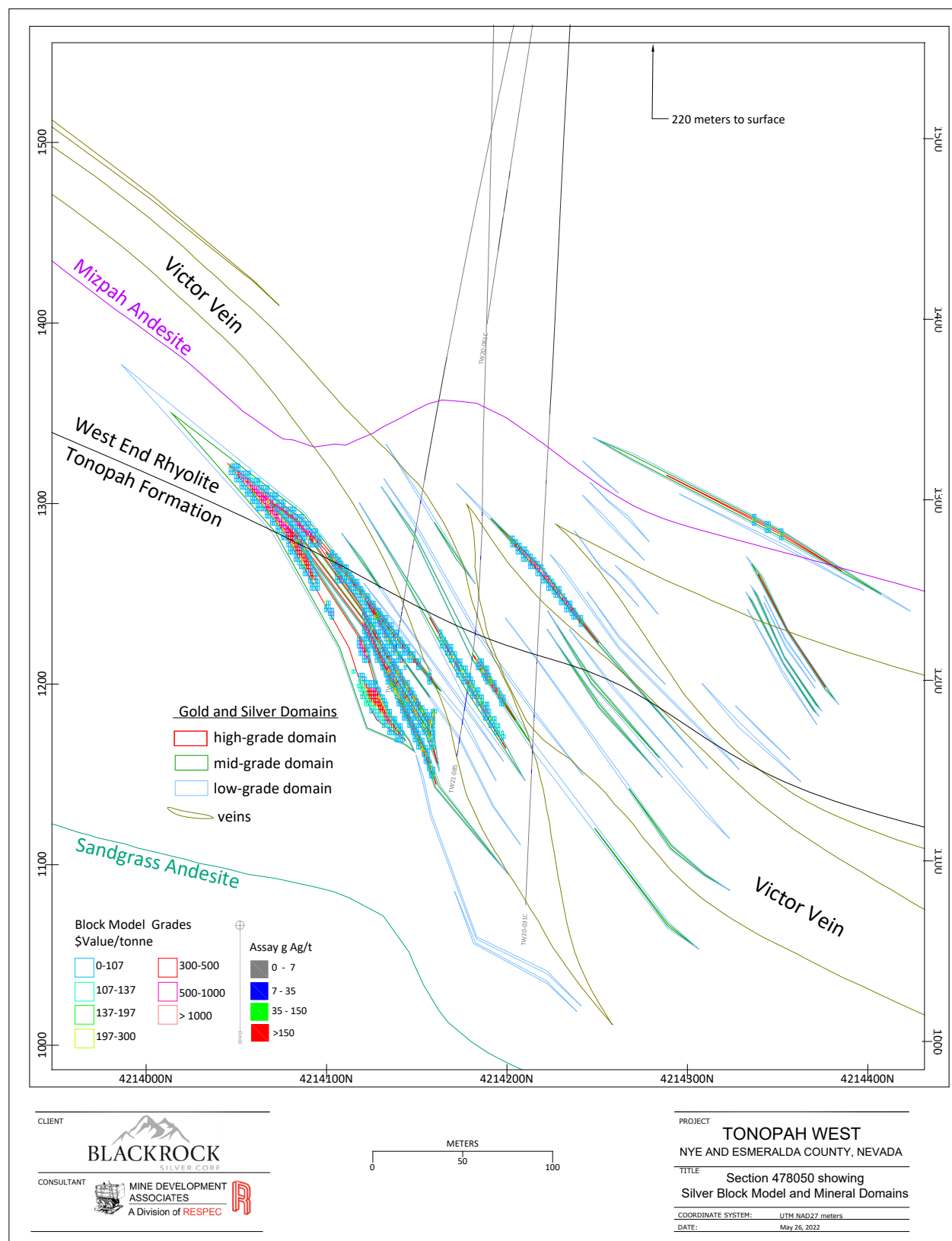




Figure 14.4 Victor Block Model Cross Section with Metal Value Block Model Grades





14.11 Discussion of Resources - Risks and Recommendations

Mr. Bickel and Mr. Lindholm are not experts regarding environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors. As of the date of this report, Mr. Bickel and Mr. Lindholm are not aware of any issues related to these factors that may materially affect the Tonopah West mineral resources that are not otherwise discussed in this report.

The risks to the reported mineral resources are primarily associated with the wide-spaced drilling, and the correspondingly low confidence in the continuity and spatial extent of the high-grade veins. The geologic model created by Blackrock has provided a satisfactory representation of the primary quartz vein locations and orientations, however, the high-grade mineralization that occurs within the quartz vein envelopes is often thin and variable in extent and grade. There are no distinctive features of any given vein structure that allows for confident correlation between the wide-spaced drill holes.

There is also some uncertainty in the location and full extent of the historical underground development and the corresponding impact on the current statement of resources is unknown. There are historical development drifts on four levels within the DPB model, but there is no known production from these workings. Accordingly, no model tonnes have been removed from the \$118 total cost per ton optimized stope in the reported resource at DPB. Conversely at Victor, there is a record of past production which is represented by a wireframe solid of a historical stope. Mineralized material in the current Victor model that is located within this stope is considered mined-out and has been removed from the tabulation of mineral resources. There is a risk in both models that the full extent and location of past mining is not known and that 1) there could be isolated areas of minor production within the DPB model, and 2) at Victor, the current stope volume is not accurate, either in location or size, to adequately inform the tabulation of resources. Sterilization adjacent to the known stope at Victor has also not been taken into account in the reported resource.

An additional issue resulting in Inferred classification is the limited metallurgical testwork consisting of 12 recent bottle-roll tests. The current metallurgical sample size is insufficient to precisely determine precious metal recoveries.

The lack of down-hole surveys associated with pre-Coeur drilling would generally lower the level of confidence in deep sample locations. However, the drilling targeted the vein system at relatively shallow levels, some of the drilling was vertical, and many of the holes did not intercept mineralization. Also, the associated data was used in modeling but not estimation. Therefore, RESPEC does not consider the lack of pre-Coeur down-hole surveys to be a significant risk.

Silver domains were used to estimate gold in the Victor model. Both precious metals are genetically related and likely deposited under similar hydrothermal conditions, so use of the same domains for both is justified for the Inferred level of resources. Gold assay intercepts were compared to Victor silver domains, and it was determined that gold was sufficiently correlative with silver, justifying the use of silver domains to code and estimate gold.

Future drilling, exploration, and resource definition at Tonopah West should focus on improving understanding of the distribution of the high-grade mineralization. Infill drilling in key areas to increase drill density is recommended, however this may be difficult to accomplish with surface drilling due to the



significant depths to mineralization and the imprecision of drill targeting due to downhole drill deviation. Additional drilling is recommended to test the unconstrained limits of the deposit, particularly down-dip from known mineralization and along trend to the west. The author recommends collection of more structural data in order to increase the current geological understanding of the deposit and mineralization controls.

Due to the difficulty in upgrading the current mineral resource classification with surface drilling, initial scoping studies should be considered for exploring and developing the two resources via underground access. Without underground access, which allows for tighter-spaced drilling and a better vein definition, it is not likely that a determination of potential mineable reserves could be attained for either the DPB or Victor mineral resources.



15.0 MINERAL RESERVE ESTIMATES (ITEM 15)

There are no current mineral reserves estimated for the Tonopah West project.



16.0 MINING METHODS (ITEM 16)

This Section is not applicable to the Tonopah West project.



17.0 RECOVERY METHODS (ITEM 17)

This Section is not applicable to the Tonopah West project.



18.0 PROJECT INFRASTRUCTURE (ITEM 18)

This Section is not applicable to the Tonopah West project.



19.0 MARKET STUDIES AND CONTRACTS (ITEM 19)

This Section is not applicable to the Tonopah West project.



20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT (ITEM 20)

This Section is not applicable to the Tonopah West project.



21.0 CAPITAL AND OPERATING COSTS (ITEM 21)

This Section is not applicable to the Tonopah West project.



22.0 ECONOMIC ANALYSIS (ITEM 22)

This Section is not applicable to the Tonopah West project.



23.0 ADJACENT PROPERTIES (ITEM 23)

The authors do not have any data from adjacent properties to report.



24.0 OTHER RELEVANT DATA AND INFORMATION (ITEM 24)

The authors are not aware of other relevant data and information regarding the Tonopah West project.



25.0 INTERPRETATION AND CONCLUSIONS (ITEM 25)

The authors have reviewed the project data, including the Tonopah West drill-hole database, and visited the project site. RESPEC believes that the data provided by Blackrock, as well as the geological interpretations Blackrock has derived from the data, are generally an accurate and reasonable representation of the Tonopah West project.

The Tonopah West area of the Tonopah mining district became active in 1902-1903 and some of the mines produced until the 1940s. Carpenter et al., (1953) estimated that 2,305,192 tonnes of ore were reported to have been mined in the vicinity where the Tonopah West property is located, however details of the specific mining operations are not well known. Although there is some question as to the location and extent of underground development, the drilling by Blackrock does indicate, and has been used to estimate, the significant, current Inferred silver-gold resources remaining within the known vein structures defined in this report. Importantly, the Blackrock drilling has discovered mineralization in previously unknown veins.

The authors conclude that, overall, exploration potential for additional mineralization at the Tonopah West project remains significant within the historical veins and the new veins discovered by Blackrock. Most of the modeled mineralization is open at depth, and, in several areas, along strike. There is a significant opportunity to expand the current resources with further drilling, both down dip and laterally. In particular, the area between the DPB and Victor resources is poorly explored by drilling and further drilling has the potential to connect these resources.

The Tonopah West vein system contains intermediate-sulfidation epithermal precious metal mineralization that may extend west from the central part of the Tonopah district. The mineralization is silver-rich, relatively base metal-poor and consists of west- to northwest-striking sub-parallel sets of veins and vein stockworks with three dominant dips:

- The New 76, Hanging Wall and Merten veins are shallow to moderately dipping at $\sim 30^\circ$ to 45° with a dominant dip of $\sim 45^\circ$;
- The Paymaster and Denver veins are a package of moderately dipping veins at angles of $\sim 60^\circ$ to 75° ; and
- The Victor and Bermuda veins are high-angle, dipping at $\sim 70^\circ$ to 75° .

The high-angle Victor vein comprises high-grade silver and gold mineralization within several adjacent steeply-dipping sheeted veins occurring along, and sub-parallel with, the Pittsburgh-Monarch fault. Higher grades reach a maximum thickness of 10 metres along the Victor vein.

The 2020 through 2022 drilling by Blackrock totaled 98,272 metres of RC and core. This drilling intersected at least ten principal veins as well as vein splays and related breccias that are mineralized to varying degrees with silver and gold. Potentially underground-mineable silver and gold resources at the Tonopah West project are constrained within optimized stopes using a mining cost per tonne cutoff of \$118/tonne for DPB and \$107/tonne for Victor. These costs reflect the potential use of long-hole stoping methods for the moderately- to steeply-dipping veins (65% of DPB veins and all Victor veins), and cut



and fill for the shallow-dipping veins (35% of DPB veins). Project-wide Inferred resources total 2,975,000 tonnes at an average grade of 208 g Ag/t (19,902,000 ounces of silver) and 2.5 g Au/t (238,000 ounces of gold).

It is the opinion of the authors that the project data are overall of sufficient quality for the modeling and estimation of the silver and gold resources disclosed in this report, although there are a few risks that have been identified and considered. Apparent risks include:

- The location and extent of past mining is not fully known, and the wireframes that exclude material from the tabulated resources may not adequately represent the mined-out areas in the deposits, particularly along the Victor vein; and
- There is a limited understanding of the continuity and distribution of the high-grade mineralization due to the current wide drill spacing; and

The lack of down-hole surveys associated with pre-Coeur drilling would generally lower the level of confidence in deep sample locations. However, the drilling targeted the vein system at relatively shallow levels, some of the drilling was vertical, and many of the holes did not intercept mineralization. Also, the associated data was used in modeling but not estimation. Therefore, RESPEC does not consider the lack of pre-Coeur down-hole surveys to be a significant risk.

The drill-hole collars that were visually observed to be above the Tonopah West topographic surface are somewhat problematic. However, in the context of the Inferred level of resources, and the future work that will be needed to properly delineate the potentially underground-mineable deposits, it does not present a risk to the resource estimate at this time. Still, the issue should be investigated and resolved.

The Inferred classification of mineral resources reflects the above identified issues and risks. Tonopah West is in a relatively early stage of exploration and delineation. As the project advances, drill-spacing and general knowledge of the geology and mineralization can improve, which will help mitigate these risks. Higher classification will require infill drilling in order to test the current silver and gold models. Exploration and development from underground may be necessary to efficiently perform infill drilling for resource delineation, expand the known resource, and may also aid in locating past development associated with historical mining activities.

Blackrock's drilling has intersected new mineralized veins, which attests to the potential for discovery of new precious metal deposits in the Tonopah West project area. Although significant mineralization has been encountered, continuity with known veins has not been established and the nature and extent of the isolated high-grade intercepts is not known. Further work is warranted, both to enhance the geologic understanding of the precious metal mineralization of known veins, but also to determine the context of new veins encountered in recent drilling.



26.0 RECOMMENDATIONS (ITEM 26)

The authors recommend that Blackrock initiate a property-scale exploration program at the Tonopah West project to include the following activities:

- Continue review, compilation, and validation of the extensive historical data;
- Continue property-wide prospecting and geologic mapping, which would include identifying structures related to mineralization and the possibility of new host units;
- Continue drilling in the DPB and Victor areas to understand the orientation and periodicity of high-grade shoots, and to upgrade the classification of current resources;
- Continue drilling along strike, down dip and between veins to expand high-grade silver and gold mineralization at DPB and Victor and explore for possible new vein structures;
- Identify select areas for geophysical and geochemical surveys;
- Conduct further metallurgical test work to better determine silver and gold recoveries;
- Conduct a scoping study towards a preliminary economic assessment of the Tonopah West project; and
- Use the results of these activities to develop a proposal for additional work, if warranted.

The recommended Phase 1 work has an estimated total cost of \$4,000,000 (approximately CAD\$5,000,000) as summarized in Table 25.1. A follow-up Phase 2 would be contingent upon the results of these activities and the scoping study.

Table 26.1 Blackrock Cost Estimate for the Recommended Phase 1 Exploration Program

Item	Estimated Cost (USD)
RC Pre-Collar Drilling - 8,000m (@ ~\$62.50/meter)	\$500,000
Core Drilling - 10,000m (@ ~\$300.00/meter)	\$3,000,000
Assays (@ ~\$9.00/sample)	\$250,000
Construction	\$20,000
Exploration Overhead*	\$220,000
Land	\$6,000
Metallurgical Test Work	\$24,000
Total	\$4,000,000

* Includes all payroll, consultants, travel and meals, computer software, storage rental, various supplies.

Under the recommended work program, Blackrock would complete a combined 18,000 metres of RC and core drilling at DPB and Victor. The proposed approximate cost of the RC drilling is expected to be in the range of \$60 to \$65/meter. Core drilling costs would likely be in the range of \$295/meter to \$310/meter. Permitting for the surface disturbance is already in place for the proposed drilling.

It is the authors' opinion that the Tonopah West project is a project of merit that warrants the proposed exploration program and level of expenditures outlined above.



27.0 REFERENCES (ITEM 27)

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28.0 DATE AND SIGNATURE PAGE (ITEM 28)

Effective Date of report: April 28, 2022

Completion Date of report: June 16, 2022

“Jeffrey Bickel”

Jeffrey Bickel, C.P.G.

Date Signed:

June 16, 2022

“Michael S. Lindholm”

Michael S. Lindholm, C.P.G.

Date Signed:

June 16, 2022



29.0 CERTIFICATE OF QUALIFIED PERSONS (ITEM 29)

I, Michael S. Lindholm, C.P.G. (AIPG) and Professional Geologist (California), do hereby certify that:

1. I am currently employed as Principal Geologist by RESPEC Company LLC (formerly Mine Development Associates, Inc.) (“RESPEC”) with an office at 210 South Rock Blvd., Reno, Nevada 89502.
2. This certificate applies to the technical report titled “Technical Report and Estimate of Mineral Resources for the Tonopah West Silver-Gold Project, Nye and Esmeralda Counties, Nevada, USA”, with an effective date of April 28, 2022 (the “**Technical Report**”) prepared for Blackrock Silver Corp. (“**Blackrock**”).
3. I graduated with a Bachelor of Science degree in Geology from Stephen F. Austin State University in 1984 and with a Master of Science degree in Geology from Northern Arizona University in 1989.
4. I am a Certified Professional Geologist in good standing with the American Institute of Professional Geologists (#11477). I am also registered as a Professional Geologist in the state of California (#8152).
5. I have worked as a geologist for more than 30 years. I have previously conducted exploration, definition, modeling and estimation in respect of volcanic-hosted epithermal precious metal deposits similar to the Tonopah West Silver-Gold Project in the western United States, southern Argentina and Uruguay.
6. I have read the definition of “qualified person” set out in National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that by reason of my education, affiliation with certified professional associations and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
7. I have not visited the Tonopah West Silver-Gold Project site.
8. I am responsible for Sections 1 through 11 and Sections 13 through 27 and co-responsible for Section 1.5 and Section 14 of the Technical Report.
9. I am independent of Blackrock and all of its subsidiaries as described in Section 1.5 of NI 43-101.
10. Prior to RESPEC’s current work on the Tonopah West Silver-Gold Project, I have had no involvement with the property that is the subject of the Technical Report.
11. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance with that instrument and form.
12. As of 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 parts of the Technical Report for which I am responsible for not misleading.

Dated this 16th day of June, 2022.

“Michael S. Lindholm” [signed and sealed]

Michael S. Lindholm, C.P.G. (#11477)



CERTIFICATE OF QUALIFIED PERSON

I, Jeffrey Bickel, C.P.G. (AIPG) and Registered Geologist (Arizona), do hereby certify that:

1. I am currently employed as Senior Geologist in the mining and exploration industry, formerly a Senior Geologist at RESPEC Company LLC (formerly Mine Development Associates, Inc.) (“RESPEC”), and I reside at 6161 Red Stable Rd, Sparks, Nevada, 89436.
2. This certificate applies to the technical report titled “Technical Report and Estimate of Mineral Resources for the Tonopah West Silver-Gold Project, Nye and Esmeralda Counties, Nevada, USA”, with an effective date of April 28, 2022 (the “Technical Report”) prepared for Blackrock Silver Corp. (“Blackrock”).
3. I graduated with a Bachelor of Science degree in Geological Sciences from Arizona State University in 2010.
4. I am a Certified Professional Geologist (#12050) with the American Institute of Professional Geologists. I am also a Registered Geologist in the state of Arizona (#60863).
5. I have worked as a geologist continuously for over 10 years since graduation from university. During that time I have been engaged in the exploration, definition, and modeling of precious and base metal mineral deposits in North America and have estimated the mineral resources for such deposits.
6. I have read the definition of “qualified person” set out in National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
7. I last visited the Tonopah West Silver-Gold Project site on September 16, 2021 while still a Senior Geologist for RESPEC.
8. I am the co-author of the Technical Report, and I am responsible for Section 12 and co-responsible for Section 1.5 and Section 14 of the Technical Report.
9. I am independent of Blackrock and all of its subsidiaries as described in Section 1.5 of NI 43-101.
10. Prior to RESPEC’s current work on the Tonopah West Silver-Gold Project, I have had no involvement with the property that is the subject of the Technical Report.
11. I have read National Instrument 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance with that instrument and form.
12. As of 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.

Dated this 16th day of June, 2022.

“Jeffrey Bickel” (“signed” and “sealed”)

Jeffrey Bickel, C.P.G. (#12050)

APPENDIX A PATENTED LODE MINING CLAIMS

List of 100 Patented Lode Mining Claims, Tonopah West Property

Designation	Patent Name	Mineral Survey	Exhibit
1	76	2669	B
2	Accidental	3167	C
3	Admiral Dewey	2400	C
4	Admiral Schley	2400	C
5	Arizona	2088	B
6	Baby Fraction	2782	C
7	Bank	4450	B
8	Bass	2189	C
9	Bear	2484	C
10	Bermuda	2188	C
11	Birds Eye	4450	B
12	Birds Eye Extension	4450	B
13	Black Mascot	2178	C
14	Bob Tail	3861	C
15	Broad	4245	C
16	Burlington	2194	C
17	C.B.& Q	2193	C
18	Cabin	2131	C
19	Cabin Wedge	2400	C
20	Cash Boy	2170	C
21	Cat's Paw	2187	C
22	Clara A	2400	C
23	Colorado	2047	B
24	Deming	2192	C
25	Denver	2191	C
26	Denver	2521	C
27	Doctor	2400	C
28	Durham	4450	B
29	Egyptian	2295	C
30	Estella	2400	C
31	Ferris Baby	2400	C
32	General Miles	2400	C
33	Georgia	2484	C
34	Golden Anchor	2177	C
35	Good Enough Fraction	2782	C
36	Grace	2782	C
37	Grand Trunk	2129	C
38	Hart	4088	B
39	Homestead	2400	C
40	I.X.L.	4245	C
41	I.X.L. NO. 1	4245	C
42	I.X.L. NO. 2	4245	C
43	I.X.L. NO. 4	4245	C
44	Lottery	2484	C

Designation	Patent Name	Mineral Survey	Exhibit
45	Lucky Dog Fraction	2521	C
46	Merry X	2400	C
47	Montana	3473	B
48	Moonlight Fraction	4468	B
49	New Jersey	2484	C
50	Nilson	2782	C
51	OK	2130	C
52	Ok Fraction	4397	C
53	Oregon Mine	2106	B
54	Oro	4607	C
55	Oro Fraction	4607	C
56	Oro No.1	4607	C
57	Oro No.2	4607	C
58	Oro No.3	4607	C
59	Pactolus	4089	B
60	Panther	2484	C
61	Parker Fraction	2877	C
62	Paymaster	2190	C
63	Pensilvania	2782	C
64	Pharo	2484	C
65	Pittsburg Fraction	2878	C
66	Protection	4556	B
67	Quineseck	2782	C
68	Red Rock	2295	C
69	Red Rock No. 1	2295	C
70	Red Rock No. 2	2295	C
71	Red Rose	4466	B
72	Rich and Rare	2782	C
73	Rost Fraction	2782	C
74	Roulette Wheel	2400	C
75	Ruth No.3	4624	C
76	Ruth No.4	4624	C
77	Ruth No.5	4624	C
78	Sagebrush	2400	C
79	Seventy-Nine Fraction	4450	B
80	Seventy-Six Fraction	4089	B
81	Short	2185	C
82	Stella	2782	C
83	Sunrise	4089	B
84	Taft	4469	B
85	Tiger	2484	C
86	Tommy	2400	C
87	Trenton	2186	C
88	Triplet	2179	C
89	Utah	2107	B
90	W 1/2 Rambler	2087	B
91	W1/2 Califomia	2041	B
92	Wall Street	2521	C
93	West Tonopah Fraction	4467	B

Designation	Patent Name	Mineral Survey	Exhibit
94	White Swan	2400	C
95	Wonder	4089	B
96	ZZZ	2295	C
97	ZZZZ	2295	C
98	Pittsburg	2506	Exchange
99	Hypatia	2506	Exchange
100	Monarch	2506	Exchange

List of 19 Unpatented Lode Mining Claims, Tonopah West Property

Designation	Claim Name	Serial Number
A	ACCIDENTAL FRACTION	NMC1148062
B	ARIZONA FRACTION	NMC1148064
C	FLAG	NMC1174886
D	KEYSTONE FRACTION	NMC1148060
E	M.R.W.	NMC1148061
F	PANTHER FRACTION	NMC1148063
G	SURPRISE # 1	NMC1148058
H	SURPRISE # 2	NMC1148059
I	TRIANGLE FRACTION	NMC1148056
J	TRIANGLE FRACTION #2	NMC1148057
K	WEDGE	NMC1174887
L	WT 1	NMC1116089
M	WT 2	NMC1116090
N	WT 3	NMC1116091
O	WT 4	NMC1116092
P	WT 5	NMC1116093
Q	WT 6	NMC1116094
R	WT 7	NMC1116095
S	WT 8	NMC1116096

APPENDIX B LISTING OF HISTORICAL DRILL HOLES

Table 6.1 Tonopah West; Historic Drill Holes, Collar Data											
HOLE ID	E_NAD27	N_NAD27	ELEV (M)	ELEV (FT)	TOTAL DEPTH (M)	TOTAL DEPTH (FT)	DIP	AZIMUTH	HOLE TYPE	YEAR	COMPANY
DDH33-01	477282	4214252	1747	5732	659	2162	-90	0	RC/Core Tail	1984	CHEVRON
HT-15	478730	4212974	1843	6047	376.4	1235	-75	340	Rotary/Core Tail	1979	HOUSTON
HT-16	478733	4212957	1843	6047	342.6	1124	-75	210	Rotary/Core Tail	1979	HOUSTON
HT-17	478636	4212952	1833	6013	421.5	1383	-90	0	Rotary/Core Tail	1979?	HOUSTON
HT-18	478733	4212931	1843	6045	422.2	1385	-90	0	Rotary/Core Tail	1979?	HOUSTON
HT-19	478391	4213151	1789	5871	193.9	636	-90	0	Rotary/Core Tail	1980	HOUSTON
HT-20	478268	4213167	1792	5880	184.7	606	-90	0	Rotary/Core Tail	1980	HOUSTON
HT-21	478721	4212961	1885	6185	389.5	1278	-90	0	Rotary/Core Tail	1980	HOUSTON
HT-22	478292	4213128	1796	5892	295.1	968	-90	0	Rotary/Core Tail	1980	HOUSTON
HT-23	478322	4213161	1797	5896	307.5	1009	-90	0	Rotary/Core Tail	1980	HOUSTON
HT-24	478144	4212600	1783	5850	334.1	1096	-90	0	Rotary/Core Tail	1980	HOUSTON
TH96-18	477459	4212726	1770	5806	121.9	400	-45	305	RC	1996	EASTFIELD
TH96-43	478191	4213184	1770	5806	176.8	580	-70	65	RC	1996	EASTFIELD
TH96-44	478160	4213069	1770	5806	152.4	500	-60	90	RC	1996	EASTFIELD
TH97-02	478520	4213326	1795	5890	152.4	500	-70	200	RC	1997	EASTFIELD
TH97-14	478229	4213275	1797	5895	172.2	565	-60	163	RC	1997	EASTFIELD
TH97-15	478151	4213186	1783	5850	243.8	800	-70	220	RC	1997	EASTFIELD
TH97-16	477965	4213208	1780	5840	243.8	800	-68	221.3	RC	1997	EASTFIELD
TH97-21	477868	4212677	1768	5800	30.5	100	-90	0	RC	1997	EASTFIELD
TH97-22	478076	4212938	1795	5890	243.8	800	-90	0	RC	1997	EASTFIELD
TH97-23	478070	4213029	1792	5880	243.8	800	-50	2	RC	1997	EASTFIELD
TH97-24	478533	4212955	1811	5940	62.5	205	-70	152	RC	1997	EASTFIELD
TH97-25	478100	4212563	1803	5915	61	200	-50	198	RC	1997	EASTFIELD
TW18-001	477944	4213222	1784	5852	243.8	800	-68	221.3	RC	2018	COEUR
TW18-002	477998	4213191	1786	5858	243.8	800	-69	219.4	RC	2018	COEUR
TW18-003	478023	4213169	1788	5867	243.8	800	-69	226.3	RC	2018	COEUR
TW18-004	477942	4213185	1783	5851	243.8	800	-68	214.7	RC	2018	COEUR
TW18-005	477892	4213191	1779	5836	243.8	800	-70	222.7	RC	2018	COEUR
TW18-006	477992	4213231	1785	5856	243.8	800	-69	226.3	RC	2018	COEUR
TW18-007	477702	4212852	1768	5801	228.6	750	-58	18.3	RC	2018	COEUR
TW18-008	477793	4212817	1773	5817	259.1	850	-60	22.9	RC	2018	COEUR
TW18-009	477873	4212813	1774	5821	313.9	1030	-50	25.5	RC	2018	COEUR
TW18-010	477966	4213376	1772	5813	259.1	850	-69	239.7	RC	2018	COEUR
TW18-011	478272	4213669	1771	5811	304.8	1000	-60	237.6	RC	2018	COEUR
TX18-001	477898	4214393	1768	5802	233.2	765	-67	198.6	RC	2018	COEUR
TX18-002	478002	4213936	1769	5805	330.7	1085	-59	205.7	RC	2018	COEUR

HOUSTON=Houston Oil and Minerals
EASTFIELD=Eastfield Resources Ltd.
COEUR=Coeur Mining Inc.