

MINE DEVELOPMENT ASSOCIATES

A DIVISION OF RESPEC



TECHNICAL REPORT SUMMARY OF THE COMSTOCK PROJECT, STOREY COUNTY, NEVADA, USA



Submitted to:

TONOGOLD RESOURCES INC.

22543 Ventura Blvd., Suite 220-1045 Woodland Hills, California 91364 USA

775-856-5700 210 S Rock Blvd Reno, NV 89502 www.mda.com www.respec.com Author: Mine Development Associates, a division of RESPEC

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APPENDICES

Appendix A: Claims Listed in Parsons Behle & Latimer's "Land Review of Comstock Mining, Inc. Purchased by Tonogold for Use in SK1300"

Appendix B: List of Claims Associated with the "Mineral Exploration and Mining Lease Agreement"

Appendix C: List of Claims Associated with the "Option to Lease Comstock Mining Inc.'s American Flat Processing Facility"

Appendix D: List of Claims Associated with the "Option to Purchase the Art Wilson Claim Group"

Appendix E: List of Claims Tonogold Owns Outright



MINE DEVELOPMENT ASSOCIATES

MINE ENGINEERING SERVICES

1.0 EXECUTIVE SUMMARY

Mine Development Associates ("MDA"), a division of RESPEC, has prepared this Technical Report Summary for the Comstock gold-silver project and including exploration targets on the Gold Hill section of the Comstock Lode and the southern extension of the Occidental-Brunswick Lode, located in Storey County, Nevada, on behalf of Tonogold Resources, Inc. ("Tonogold"), a United States ("U.S.") company (OTC:TNGL) traded over the counter. This Technical Report Summary provides results of the current mineral resource estimate for the Lucerne Deposit, including operating parameters and financial metrics. The report has been prepared in accordance with the disclosure and reporting requirements of the United States Securities and Exchange Commission's ("SEC") new mining rules under subpart 1300 and item 601 (96)(iii) of Regulation S-K (the 'New Mining Rules'). MDA is the author of this Technical Report Summary and are independent of Tonogold and all their subsidiaries and have only a client/consultant relationship with these companies.

1.1 Property Description

Through a series of four purchase and lease agreements beginning in 2019 with Comstock Mining, Inc. ("CMI") and Mr. Art Wilson, Tonogold has acquired an exclusive right to earn a 100% interest in 4,300 acres of patented and unpatented mining claims and private properties covering the Lucerne Deposit, adjacent areas of the Silver City and Comstock lodes, and the Occidental/Brunswick Lode near Virginia City, Nevada. The total land package consists of 263 unpatented mining claims, 95 patented mining claims, and 144 private-property parcels. The patented and unpatented mining claims include full mineral rights, with the exception of some unpatented claims on federal lands that are currently included in Lands Withdrawn from Mineral Appropriations as described in Section 3.8.3. The private-property parcels include partial to complete mineral rights. These agreements include an option to lease the CMI's American Flat heap-leaching and Merrill-Crowe processing facilities and all associated plant and equipment (the "American Flat Processing Facility) for 20 years.

Tonogold's 4,980 acre land package is centered between the towns of Virginia City and Silver City, Nevada, about 30 miles southeast of Reno, Nevada. Although most of Tonogold's land package is located within Storey County, the southern and southeastern margins of the property extend into adjacent Lyon County. The geographic center of the property is at approximately 39°17′ north latitude and 119°39′30″ west longitude. The current annual holding costs for the property, of which the Lucerne Deposit is part, are estimated at \$2,254,000, which includes annual taxes, annual claim fees, annual fees to maintain the American Flat Processing Facility and Tonogold's associated option to lease, and lease and option payments.

775-856-5700

210 South Rock Blvd. Reno, Nevada 89502 FAX: 775-856-6053



The Lucerne Deposit lies within the historic Silver City mining district. The most recent production from the project occurred from 2012 through 2015 by open-pit mining of the Lucerne pit with cyanide heap-leach processing of gold-silver ores. The open pit mine site of the Lucerne Deposit is located about 0.5 miles north of Silver City, adjacent to State Route 342. The American Flat processing area is located about 0.75mi west of State Route 342.

1.2 Geology and Mineralization

The Comstock Mining District is situated on the southeast flank of the Virginia Range, a broad upland of mainly intermediate-composition volcanic rocks of Miocene ages. The oldest rocks in the area are late Triassic and early Jurassic sandstone, siltstone, and metasedimentary rocks, and Jurassic meta-gabbro. These units have been intruded by Cretaceous granitic rocks. The Mesozoic basement units are overlain by Oligocene to earliest Miocene ash-flow tuffs of mainly rhyolitic compositions. The ash-flow units are overlain by thick sequences of andesitic volcanic and intrusive rocks that form the majority of the rocks in the area. Those andesitic volcanic and intrusive rocks hosted most of the historically mined orebodies.

Gold-silver mineralization in the Comstock Mining District has been found within quartz \pm adularia and calcite-bearing veins, sheeted veins and stockworks, and quartz \pm calcite-cemented breccia within faults, all of which are commonly referred to as "lodes." The lodes pinch and swell along strike and down dip.

In many locations the lodes have distinct, planar fault surfaces associated with the hanging wall, footwall, or internal gouge zones, indicating that post-mineralization fault displacement occurred. Some veins and lodes consist of gouge with only minor amounts of crushed and broken quartz vein material at the surface but transition to quartz-cemented breccia or fissures at depth. Ore minerals within the Silver City Lode, where unoxidized, are reported to be pyrite, gold, electrum, native silver, occasional argentite and sparse chalcopyrite, with total sulfide content of only 1% to 2%. In contrast, the bonanza ores of the Comstock and other lodes in the district locally contained larger percentages of pyrite, sphalerite, galena and chalcopyrite. Previous workers agree that ore shoots and the best grades were commonly found at vein intersections and sharp flexures of the veins. The vein styles and ore and gangue mineralogy are typical of the low- to intermediate-sulfidation classes of epithermal precious metals deposits.

Numerous northwest- to northeast-trending faults cut the area of the subject property. Many of those faults had down-to-the-east displacements, which tilted the intervening rocks to the northwest and west. Many of these faults and associated fractures were the sites of the Miocene hydrothermal fluid flow that deposited the quartz, calcite, and gold-silver mineralization that comprise the veins or lodes of the district.

Since 1882, the Silver City Lode, which is the site of the Lucerne Deposit, has been interpreted as a mineralized structural zone, rather than a single, discreet vein system. The single strongest structural element at the Lucerne Deposit is the footwall fault, along which the Silver City andesite unit in the hanging wall has been dropped down against the early Miocene Santiago Canyon Tuff and Mesozoic meta-igneous rocks in the footwall. The footwall also represents one of the strongest mineralized parts of the system.

The Comstock fault zone is the dominant structural feature in Gold Hill and Virginia City. The associated mineralized lode was the site of the largest and most concentrated gold-silver deposits in the district. The zone is characterized by down-to-the-east normal faulting. The mineralized zone between the well-defined



footwall structure and the hanging wall is up to 900 feet wide in places, but the zone pinches and swells both along strike and down dip.

The Occidental-Brunswick Lode is generally characterized by a series of east dipping, sub-parallel, northto northeast-trending faults which break up into a number of narrow splays in the vicinity of the Art Wilson Claim Group. A few of these faults turn to the west and intersect the Silver City fault at or near the Lucerne Pit.

1.3 Metallurgical Testing and Mineral Processing

Historical metallurgical testing of the Lucerne Deposit mineralization was mainly comprised of cyanideleach bottle roll and column testing. Based on these and other tests, heap-leach recoveries of 70% for gold and 45% for silver were estimated before the main production years of 2013-2015. CMI's column tests on monthly production composites at the production crush size of 1.25in had average recoveries of 76.3% for gold and 50.6% for silver for January 2014 through May 2015, but there was considerable variation (59% to 95% for gold and 40% to 61% for silver). Reportedly, approximately 2.6 million tons of mineralized material from 2012 through 2016 were processed, producing 59,515 ounces of gold and 735,252 ounces of silver at estimated recovery of 88.8% of the contained gold and 59.5% of the contained silver. The reported gold recovery of 88.8% is quite high compared to industry-wide heap leach gold recoveries and is also at variance with the metallurgical test data, and as such is viewed with some skepticism.

Much of the historical metallurgical test work utilized mineralized material from areas that are now mined out, and therefore of limited utility when applied to the current resources. There are some exceptions, however. Analysis of the data suggests estimated total field recoveries of 70.4% for gold and 41.3% for silver, assuming the plant is operated with the same parameters for crush size, cement addition, cyanide addition, solution application, and leach cycle. MDA recommends that spatially representative drill core intervals from the estimated mineral resources undergo metallurgical testing to better quantify expected recoveries from the resources.

1.4 Lucerne Deposit Mineral Resource Estimate

The Lucerne Deposit resource database contains 88,786 accepted gold and 89,236 accepted silver assay records from a total of 1,045 reverse circulation ("RC") holes (65% of footage), 407 core holes (29% of footage) and 402 air track holes (6% of footage) totaling 477,099ft of historical drilling. Gold domains were modeled on sections spaced 50 feet apart, oriented northeast-southwest and looking northwest. Domain boundaries were snapped to drill holes in three dimensions and sliced for further modeling on long sections oriented northwest-southeast and spaced at 10 feet. Silver domains were modeled in a similar manner. Underground stopes were modeled on the same sets of cross sections that were used for the gold and silver domains based on logged voids and stope backfill, and from historical maps. Values of 30% fill, 70% void and zero grade were applied to all stope volumes.

MDA, QP for this Technical Report Summary, capped the assays within the metal domains after reviewing outlier grades with respect to surrounding samples, general location, and materiality. Drill hole samples were down-hole composited to five-foot intervals honoring respective domain or stope boundaries. A polygonal, nearest neighbor, inverse distance, and kriged estimate were each completed, with the inverse-



distance estimate being reported (inverse-distance power was four inside all modeled gold and silver domains, and inverse-distance squared was applied outside these domains). Six different estimation areas were used to control search anisotropy, orientation, and distances according to the differing geometries of mineralization in each area.

The Lucerne Deposit mineral resources were classified with consideration to confidence in the underlying database, sample integrity, analytical precision/reliability, QA/QC results, and confidence in geologic interpretations. The Lucerne Deposit's reported estimate of mineral resources is the block diluted, predominantly ID⁴ estimate and is reported at a cutoff of 0.005oz Au/ton for open-pit mining as summarized in Table 1.1 and Table 1.2.

Cutoff					
oz Au/ton	Tons	oz Au/ton	oz Au	oz Ag/ton	oz Ag
0.005	14,117,800	0.022	312,000	0.27	3,759,600

Table 1.1: Lucerne Total In-Pit Gold and Silver Resources - Indicated

Table 1.2: Lucerne Total In-Pit Gold and Silver Resources - Inferred

Cutoff					
oz Au/ton	Tons	oz Au/ton	oz Au	oz Ag/ton	oz Ag
0.005	9,488,900	0.022	206,900	0.22	2,092,300

MDA reports the Lucerne Deposit resources at a cutoff considered reasonable for deposits of comparable size and grade. Technical and economic factors likely to influence the requirement "*in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction*" were evaluated using the best judgement of MDA QPs. MDA evaluated open-pit potential based on costs appropriate for open-pit mining, processing, and general and administrative costs in Nevada, and metallurgical recoveries related to heap leaching. Factors used in defining cutoff grades were based on a gold price of US\$1,750/oz Au.

The low quantity of Indicated resources is in part a direct result of the decrease in drilling density and localized lack of information with depth. There are significant volumes of estimated but not reported mineralization below the Resource Pit. QA/QC results for a significant portion of the drilling have been poor, including a very high failure rate for standards through many of CMI's drilling programs, although internal laboratory QA/QC showed good reliability. The poor results are reflected in the exclusion of Measured material from the model and the reduction of Indicated material to Inferred where grade estimation relied on lower-confidence data.

There remains a great degree of uncertainty in the location and limits of old stopes, the quantity and grade of stope backfill material, and the grade of mineralized wall rock adjacent to the stopes. As a result, the maximum classification assigned to blocks of $\geq 20\%$ in stopes is Inferred and the stope-backfill material is assigned a zero grade for both gold and silver.



1.5 **Conclusions and Recommendations**

MDA believes that Tonogold's Comstock project, which includes the Lucerne Deposit and exploration target areas on the Comstock and Occidental-Brunswick lodes, is a project of merit. MDA recommends a work program with additional associated costs of \$3.45 million as summarized in Table 1.3, which is focused on further exploration of the Occidental-Brunswick Lode and Gold Hill segment of the Comstock Lode.

ltem	Estimated Cost (\$)
Permitting	50,000
Southern Occidental/Brunswick Exploration Drilling (13,000ft RC)	780,000
Southern Occidental/Brunswick Resource Estimate	100,000
Occidental/Brunswick Lode Geologic Mapping and Sampling	40,000
Gold Hill Exploration drilling (2,900ft core and motor drilling, 2,600ft pre-collar RC drilling)	2,000,000
Data Acquisition, Database Compilation, and Internal Studies:	30,000
Contingency 15%	450,000
Total	3,450,000

Table 1.3:	Cost Estimate for the Recommended Program	
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Results of 2018 and 2021 drilling along the southern Occidental-Brunswick Lode demonstrate the potential to expand mineralization of economic interest in this area. MDA recommends that Tonogold completes an 8,000-foot RC drill program (23-25 holes), which has already been permitted through Storey County and an additional 5,000-foot program (10-12 holes) aimed at testing the extension of mineralization immediately to the north of the Art Wilson Claim Group and historical drilling. The budgeted cost of all proposed drilling is \$780,000.

Additional BLM permitting will be required for the recommended drilling because exploration roads and drill pads must be expanded beyond the currently allowed surface disturbance. The estimated cost of the proposed permitting is \$20,000, including bonding.

If this proposed 13,000 feet of drilling (33-37 holes) delivers positive results, MDA QPs recommend that Tonogold completes an initial resource estimate for the southern Occidental-Brunswick Lode. The resource estimate is budgeted at \$100,000, including reporting.

In tandem with drilling, surface geologic mapping and sampling should be carried out on 1.5 miles of strike length of the Occidental-Brunswick Lode running north from the Art Wilson Claim Group to the historic Brunswick Mine. The goal of this work is to define further drill targets within the land package. This field work will cost approximately \$40,000.

MDA's QPs also recommend additional drilling on the Gold Hill section of the Comstock Lode. Results of the 2020-2021 drilling at Gold Hill demonstrated that mineralization of economic interest is present in several areas including on the Con Imperial, Alpha, and Segregated Belcher claims. Other targets were identified through compilation of historical data on the Yellow Jacket and Kentuck claims. The OPs recommend an additional 7,500-foot (10-12 hole) drill program for shallow to intermediated targets

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identified by the 2020-2021 drill program and from historical research. The estimated cost of this drilling is \$800,000.

Tonogold's historical research identified several targets of interest on the Yellow Jacket and Belcher claims that should be further investigated. MDA QPs suggest implementing a 5,500-foot (2 hole) program to intersect these targets. The estimated cost of the drilling is \$2,000,000. Permitting for the proposed Gold Hill drilling will take approximately two- to three months and cost \$ 30,000, including bonding.

Although no additional drilling is currently proposed for the Lucerne Deposit, Tonogold's land package presents an opportunity to discover new resources along both the Occidental-Brunswick Lode and the Gold Hill portion of the Comstock Lode. MDA's QPs recommend locating and incorporating additional historic data into the 3D model, which could cost \$30,000 or more.



2.0 INTRODUCTION

2.1 Purpose and Basis of Report

Mine Development Associates ("MDA"), a division of RESPEC, is the Qualified Person ("QP") for this Technical Report Summary and has prepared this report for the Comstock Project on behalf of Tonogold Resources, Inc. ("Tonogold"), a United States ("U.S.") company (OTC:TNGL) traded over the counter. Tonogold's Comstock Project includes the Lucerne Deposit with defined gold-silver resources, and nearby exploration targets on the Gold Hill Section of the Comstock Lode and the southern extensions of the Occidental-Brunswick Lode, predominantly located in Storey County, Nevada. This Technical Report Summary provides an estimate of mineral resources at the Lucerne Deposit and describes Tonogold's exploration targets on the Comstock and Occidental-Brunswick lodes. The mineral resources of the Lucerne Deposit summarized in this Technical Report Summary have been classified according to and prepared in accordance with the resource classifications outlined in the SEC's new mining rules under subpart 1300 and item 601 (96)(iii) of Regulation S-K (the "New Mining Rules"). There are no mineral reserves estimated for the Lucerne Deposit.

The Effective Date of this Technical Summary Report is September 6, 2021. Unless otherwise stated, all volumes, grades, and distances are in U.S. customary units.

2.2 Units and Abbreviations

In this report, measurements are generally reported in Imperial units because in the long history of the Comstock Mining District the overwhelming majority of measurements were made and reported in feet, ounces, short tons, and miles. Where information was originally reported in metric units, MDA has made conversions as shown below. Historical assay and metallurgical parameters and results are reported in their original units of measure for historical completeness and to avoid unintended changes in precision or accuracy due to rounding and/or errors of conversion.

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

Linear Measure		
1 centimeter	= 0.3937 inch	
1 meter	= 3.2808 feet	= 1.0936 yard
1 kilometer	= 0.6214 mile	
Area Measure		
1 hectare	= 2.471 acres	= 0.0039 square mile
Capacity Measure (liquid)		
1 liter	= 0.2642 US gallons	



Weight		
1 tonne	= 1.1023 short tons	= 2,205 pounds
1 gram/tonne	= 0.0292 troy ounces/sho	ort ton
1 gram	= 0.03215 troy ounces	
1 kilogram	= 2.205 pounds	

Calculation of gold equivalent ounces (AuEq Oz)

((Oz Ag/ton x \$Ag/ton)/\$Au/ton)) + Oz Au/ton

Currency All references to dollars (\$) in this report refer to currency of the United States.

Frequently used units, acronyms, and abbreviations used in this report are shown in Table 2.1.

AA	atomic absorption spectrometry
Ag	silver
Au	gold
СНРА	Comstock Historic Preservation Area
cm	centimeters
core	diamond core-drilling method
°C	degrees centigrade
°F	degrees Fahrenheit
ft	foot or feet
g/t	grams per tonne
gpm	gallons per minute
hp	horsepower
ICP	inductively coupled plasma analytical method
ICP-AES	inductively coupled plasma - atomic emission spectroscopy method
ICP-MS	inductively coupled plasma – mass spectrometry method
in	inch or inches
kg	kilograms
kv	kilovolt
lbs	pounds
μm	micron
m	meters
Ma	million years old
mi	mile or miles
mm	millimeters
NSR	net smelter return
OZ	Troy ounce
oz/ton	Troy ounce per Imperial short ton
opt	Troy ounce per Imperial short ton
Dro collar	That portion of a drill hole started with, in this case, Reverse Circulation drilling
FTE-COllai	methods and completed with diamond core "tails"
ppm	parts per million
QA/QC	Quality assurance and quality control
RC	reverse-circulation drilling method

Table 2.1: List of Units, Acronyms, and Abbreviations



Resource Pit	Optimized pit shell for the Lucerne Deposit Resources
RQD	rock-quality designation
t	metric tonne or tonnes
Т	Imperial short ton (2,000lb)
tph	Imperial short ton per hour

2.3 Sources of Information

This Technical Report Summary is grounded in a review of technical reports and data provided to MDA by Tonogold, Comstock Mining, Inc. ("CMI"), and other former operators of the Lucerne Deposit, published sources of information as cited, as well as first-hand experience. That data covers the Lucerne Deposit's general setting, geology, history, exploration activities and results, methodology, quality assurance, interpretations, drilling programs and results, and metallurgy. MDA has fully relied on that data and on personal experience for the completion of this report. That includes the supporting data for the estimation of the mineral resources. However, MDA has reviewed much of the available data and made numerous site visits and formulated judgments about the reliability of the underlying data. Where data has been deemed inadequate or unreliable, MDA has either eliminated that specific information from use or modified procedures to account for a lack of confidence in it. MDA has made, for this Technical Report Summary, such independent investigations as their professional judgment deemed necessary to reasonably arrive at the conclusions presented herein.

The Lucerne Deposit drilling database has an effective date of December 7, 2018.

The law firm Parsons Behle & Latimer ("PB&L") prepared "Land Review of Comstock Mining Inc. Purchased by Tonogold for Use in SK 1300 Report" on behalf of Tonogold. Subsections 3.2 and 3.3 were prepared by Tonogold in part based on information summarized by PB&L.

2.4 Qualified Persons and Site Visits

MDA, the third-party firm comprising mining experts, geologists and mining engineers visited the property numerous times between May 2016 and April 2021. The site visits are broken out into several periods as shown below:

- Independent geologic surface and underground mapping and sampling at the Art Wilson Claim Group was carried out by MDA personnel between May 2016 and May 2017.
- Site visits in December 2016 and March 2019 included examination of the geology and mineralization of the Lucerne Pit, inspection of the core and sampling facilities, the American Flat mine laboratory, and reviews of the exploration target areas on the Comstock Lode in and around Gold Hill and on the Occidental-Brunswick lode in and around the Art Wilson Claim Group.
- A site visit on April 12, 2021, included inspection of the core sheds and drill rigs during exploration activities conducted by Tonogold.



- One of the MDA geologists has broad and deep first-hand knowledge of the Lucerne Deposit's geology, mineral resources, production, and historical exploration. During 2012 through 2017, she worked on the property in the employ of CMI and Wilson Mining LLC. MDA relied heavily on her first-hand experience throughout the processes of data verification, domain modeling, and resource estimation.
- Mr. Timothy Scott, Senior Engineer and Associate for Kappes, Cassiday & Associates ("KCA") of Reno, Nevada.

Mr. Scott prepared and is QP for Section 10.0, Mineral Processing and Metallurgical Testing, and Section 14.0, Processing and Recovery Methods. He visited the heap-leach, plant and processing area facilities of the project on March 12, 2019. Mr. Scott is a qualified person under SEC's "New Mining Rules."

MDA is the signer of the remainder of the Sections (not Sections 10.0 and 14.0) for this the Technical Report Summary. Mr. Timothy Scott nor MDA have any affiliation with Tonogold, CMI, Ida Consolidated Mines Company, Wilson Mining LLC, South Comstock Tailings Disposal Company, Art Wilson, or their subsidiaries, except that of independent consultant/client relationship.



3.0 PROPERTY DESCRIPTION AND LOCATION

3.1 Property Location

Tonogold's land package is centered between the towns of Virginia City and Silver City, Nevada, about 30 miles southeast of Reno, Nevada. The geographic center of the project is approximately 39°17′ north latitude and 119°39′30″ west longitude (Figure 3.1).



Figure 3.1: Project Location Map

Most of Tonogold's land package is located within Storey County, Nevada. However, the southern and southeastern margins of the property extend into adjacent Lyon County, Nevada (Figure 3.2).







Tonogold's land package contains a combination of fee, fee/patent, patented, and unpatented parcels that occupy portions of:

- Sections 1 and 12, Township 16 North, Range 20 East
- Sections 4, 5, 6, 7, 8, and 9, Township 16 North, Range 21 East
- Sections 19, 20, 28, 29, 30, 31, 32, 33, and 34, Township 17 North Range 21 East

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3.2 Land Status

Tonogold has 100% control over approximately 4,300 acres of fee and patented lands and mining claims and unpatented mining claims covering the entirety of the Lucerne Deposit and significant portions of the nearby Silver City, Comstock, and Occidental-Brunswick lodes. In addition, Tonogold controls the approximately 980 acres of fee, patented, lode, and mill site claims that comprise the American Flat Processing Facility. Due to the historical complexity of land ownership and mining claims in the Comstock Mining District, calculating a precise total acreage is a significant challenge. Many of the fee land parcels, patented claims, and unpatented claims overlap to varying extents. Figure 3.3 presents the status of the parcels and claims making up the land package.



Figure 3.3: Tonogold's Comstock Project Land Status Map



3.3 General Land Ownership, Agreements, and Options

Within the Comstock Mining District, Tonogold controls the entirety of the Lucerne Deposit and the American Flats Processing Facility and significant portions of the adjacent Comstock, Occidental-Brunswick, and Silver City lodes. This land package represents the largest consolidation of control in the district's 160-year history.

Tonogold's land package consists of 263 unpatented mining claims, 95 patented mining claims, and 144 private-property parcels in the Comstock Mining District. (That total does not include the lands that comprise the American Flats Processing Facility.) Most of the land package has been assembled by Tonogold's predecessors through a series of purchases and leases executed over the last 20 years.

The list of the Comstock Project lands and claims Tonogold controls is presented in Parsons Behle & Latimer's "Land Review of Comstock Mining, Inc. Purchased by Tonogold for Use in SK1300," which is attached as Appendix A. Parsons Behle & Latimer's land review also identifies which of those properties are controlled through underlying leases and outlines the terms of each lease.

A list of the lands and claims on and around the Comstock and Occidental/Brunswick lodes that Tonogold controls through its Mineral Exploration and Mining Lease Agreement with CMI is attached as Appendix B. A list of the lands and claims Tonogold controls through its option to lease CMI's American Flat Processing Facility is attached as Appendix C. A list of the lands and claims Tonogold controls through its option to purchase agreement with Art Wilson is attached as Appendix D. A list of the lands and claims Tonogold owns directly are attached as Appendix E.

3.3.1 Purchase Agreements, Leases, Options, and Associated Payments

3.3.1.1 Membership Interest Purchase Agreement with CMI

On January 24, 2019, Tonogold entered into a purchase agreement with CMI to acquire a 100% interest in Comstock Mining, LLC ("CM LLC"), a CMI subsidiary which controls patented mining claims, unpatented mining claims, and fee lands in the Comstock Mining District, including the entirety of the Lucerne Deposit. The original agreement has been restated and amended many times.

In consideration for the purchase of the 100% membership interest in Comstock Mining LLC, Tonogold paid a total purchase price of \$11,200,00 in cash and other non-cash considerations, of which:

- Tonogold paid CMI a non-refundable cash deposit of \$6,025,000 toward the purchase price prior to March 20, 2020, made non-refundable deposits of \$3.8 million in convertible preference shares, and paid an additional \$2.3 million in non-refundable fees in the form of convertible preference shares.
- In return for those payments and shares delivered to CMI on or prior to March 20, 2020, CMI delivered to Tonogold a 50% membership interest in CM LLC
- For the remainder of the purchase price, Tonogold delivered to CMI a 12% secured convertible note (the "Note") with a principal amount of \$5,475,000 million.



• CMI will deliver additional membership interest in CM LLC to Tonogold proportionally to Tonogold's cash principal payments pursuant to the Note.

In addition:

- Beginning on March 20, 2020, Tonogold shall be responsible for 100% of CM LLC's costs.
- As long as the Note is outstanding, Tonogold shall not assume more than \$1 million of indebtedness, except for convertible notes already issued by Tonogold with aggregate principal of \$14 million or less.
- Tonogold can prepay all or part of the balance of the Note at any time without penalty or premium.
- If Tonogold receives capital in a capital raise in excess of \$6.5 million, 50% of such proceeds shall be paid to CMI to prepay the Note.
- Tonogold shall not commence production until the Note is paid in full.
- CMI assigns all its interest in Northern Comstock LLC to Tonogold.
- CMI receives a 1.5% net smelter royalty ("NSR") over future production from the Lucerne Deposit.
- Tonogold has all current and future reclamation responsibility for the Lucerne Property.
- Tonogold has the right to explore the properties controlled by Northern Comstock LLC and CM LLC.

3.3.1.2 Tonogold's Mineral Exploration and Mining Lease Agreement with CMI

On September 19, 2019 (the "Effective Date"), Tonogold and CMI entered into a "Mineral Exploration and Mining Lease Agreement" regarding certain patented and unpatented mining claims and fee properties owned by CMI or controlled by CMI through underlying third-party lease agreements. (A list of those mining claims and properties is attached as Appendix B.) The original agreement has been restated and amended. The Mineral Exploration and Mining Lease Agreement allows Tonogold to explore, develop, and conduct mining operations on the claims and properties covered by the agreement.

The Mineral Exploration and Mining Lease Agreement is divided into several phases: the "Exploration Term," "Development Term," "Planning Term," and the "Extended Term."



The Exploration Term:

- Runs for five years from the Effective Date, from September 16, 2019, to September 16, 2024.
- By the end of the Exploration Term, Tonogold must have spent a total at least \$5 million in "Exploration Expenditures" at the rate of \$1 million per year on a cumulative basis. (To date, Tonogold has spent \$3,200,000 toward this commitment.) Tonogold must also publish a NI 43-101 compliant technical report (or similar) no later than September 16, 2024, the fifth anniversary of the Effective Date.

The Development Term:

- If the Exploration Term commitments are met, the Mineral Exploration and Mining Lease Agreement automatically renews from the end of the Exploration Term for an additional ten year "Development Term" that runs from September 17, 2024, until September 16, 2034.
- By the end of the Development Term, Tonogold must have spent a total of at least \$15 million (on a cumulative basis from the Effective Date at the rate of \$1 million per year) for exploration, development, and technical reporting that results in the production of an economically viable mine plan, as documented by an NI 43-101 compliant pre-feasibility report (or similar), published no later than September 16, 2034, the fifteenth anniversary of the Effective Date.

The Planning Term:

- If the Development Term commitments are met, the Mineral Exploration and Mining Lease Agreement automatically renews at the end of the Development Term for an additional five year "Planning Term" that runs from September 17, 2034, until September 16, 2039.
- By the end of the Planning Term, Tonogold must have spent a total of at least \$20 million (on a cumulative basis from the Effective Date at a rate of \$1 million per year) for exploration, development, permitting, and technical reporting that results in the production of an economically viable mine plan, as documented by an NI 43-101 compliant feasibility study (or similar) published no later than September 16, 2039, the twentieth anniversary of the Effective Date. Before that date, the parties will mutually agree upon a schedule for placing the properties into production.

The Extended Term

• So long as Tonogold has spent \$20 million on exploration, engineering, and reporting by the end of the Planning Term (on a cumulative basis from the Effective Date) and has created an economically viable mine plan documented by an NI 43-101 compliant feasibility report (or similar) and created a mutually agreed upon schedule, the Planning term shall automatically convert into an "Extended Term" that shall continue in force for as long as development and permitting activities continue or for so long as minerals are produced from the properties or from other lands adjacent to or in the vicinity of the properties. During the Extended Term, operations shall be deemed conducted on a continuous basis unless and until a period of 180 consecutive days



elapses in which no exploration, development, mining, or processing operations are conducted on the properties or nearby lands, excluding periods of force majeure.

Payments from Tonogold to CMI:

- Lease Fee. While the Mineral Exploration and Mining Lease is in effect, Tonogold shall pay to CMI a quarterly lease fee of \$10,000, which will increase 10% each year on the anniversary of the Effective Date.
- Carrying Costs. Tonogold will pay to CMI all costs of owning the properties and maintaining the third-party leases subject to this Mineral Exploration and Mining Lease, including property taxes, annual claim fees, environmental compliance, third-party lease payments and advance royalties, and any drilling or spending commitments required by third-party leases. A summary of estimated costs and work commitments is provided in Table 3.1 and Table 3.2, respectively.
- Net Smelter Return ("NSR") royalty. Tonogold shall pay CMI a 3% NSR for the first year of mining operations. After that, the NSR royalty shall reduce to 1.5%. This NSR royalty is in addition to any royalties required by third-party leases or other royalties recorded with the titles of any other properties. Tonogold shall pay all such third-party royalties directly. Third-party royalties are summarized in Table 3.3.

	Annual \$	Notes
Property Tax		
Storey County	\$121	
Lyon County	\$0	
Total Property tax:	\$121	
Claim Fees		
BLM	\$26,815	
Storey County	\$2,116	
Lyon County	\$0	
Total Claim Fees:	\$28,931	
Lease Payments		
Fred Garrett	\$12,000	Advance Royalty
James Obester	\$12.000	Advance Royalty
Railroad & Gold	\$22,800	Advance Royalty. \$1700/mo 2019-20
Renegade	\$9,000	
Sutro	\$60,000	
Total Lease Payments	\$67,800	
Insurance	\$9,669	LP Insurance, estimate at 5% of total
Total Estimated Costs	\$106,521	

Table 3.1: Estimated Annual Costs



Lease	Commitment	Notes
Fred Garrett	none	
James Obester	none	
Railroad & Gold	\$10,000 / yr	Starting 2017. Requires annual accounting. Tonogold has spent \$330,000 toward this commitment to date.
Renegade	\$250,000	Cumulative commitment by 9/30/2021. Requires accounting. No work completed to date.

 Table 3.2: Work Commitments

Table 3.3: Third Party Leases & Royalties

Lease	Date	Term	End	Property	Underlying NSR	Work Commitment
Fred Garrett	04/01/2008	5 yr "Exploration;" 15 yr "Development"	03/31/2028	1 patented claim "Pride of Washoe"	3.0%	None
James Obester	08/20/2008	5 yr "Exploration;" 15 yr "Development;" "Extended" if production	08/19/2028	10 unpatented claims "Alta," "Brunswick"	3.0%	None
Railroad & Gold	10/01/2009	15 years	09/30/2024	9 patents, 9 town lots, 1 rural parcel, 16 unpatented claims;	4.0%	\$50k/yr
	01/01/2015	Amendment	09/30/2024		1.0%	NSP reduced to 1%; royalty buyout for \$1M; work reset to \$10K/yr starting 2017; To date, Tonogold has spent \$330,000 toward this commitment
Renegade	10/01/2010	3 yr "Exploration"; 6 yr "Primary"; 6 yr "Additional"	09/30/2025	26 unpatented claims "NBO"	3.0%	1000' 1st 36 mo; \$20k cumulative. NSR 3% cap at \$2000 gold
	10/01/2013	Amendment; extends to "Additional" term	09/30/2025			Reset commitment 7000' drilling first 9 years (by 9/30/2019); \$200k cumulative.
	10/01/2019	Amendment 2	09/30/2025			Reset work commitment for drilling \$200,000 during first 11 years (09/30/2021)
	07/09/2020		09/30/2029			\$250,000 in exploration expenditures by 09/30/2021 and cumulative total of not less than \$500,000 by 09/30/2023
Sutro	09/20/2020	5 yr Exploration; 5 yr Development; 5 yr Planning; thereafter remains in effect so long as royalties generated	09/20/2035	28 patents, 90 fee parcels (some surface access only)	4.0%	None



3.3.1.3 Option to Lease CMI's American Flat Processing Facility

On November 18, 2019, Tonogold entered into a "Lease Option Agreement" with CMI that grants Tonogold a 20-year option to lease CMI's American Flat heap-leaching and Merrill-Crowe processing facilities and all associated plant and equipment (the "American Flat Processing Facility).

Tonogold's option to lease the American Flat Processing Facility expires at 5:00 p.m. on November 18, 2025.

During the term of Tonogold's option to lease, Tonogold shall reimburse CMI for all costs and expenses required to maintain and hold the American Flat Processing Facility.

Should Tonogold chose to exercise its option and lease the American Flat Processing Facility, Tonogold will assume full operational control of the American Flat Processing Facility and will maintain and operate it using industry best practices.

Upon exercising the option and during the term of the lease, Tonogold will pay CMI \$1.0 million per year (fixed rate), plus \$1.00 per ton of material treated (variable rate), subject to the following adjustments:

- The variable rate shall reduce to \$0.50 per ton once cumulative payments made to CMI (both fixed and variable) have reached \$15 million.
- The variable rate shall reduce to \$0.25 per ton once the cumulative payments made to CMI (both fixed and variable) have reached \$25 million, but with a minimum payment of \$100,000 per quarter.
- The fixed rate of \$1.0 million per year shall be terminated once the cumulative payments made to CMI (both fixed and variable) have reached \$25 million.

When production ceases, the lease will continue in effect until reclamation is complete. Tonogold shall be responsible for completing all reclamation to the satisfaction of all applicable County, State, and Federal regulations.

3.3.1.4 Option to Purchase the Art Wilson Claim Group

Tonogold controls six unpatented claims and 11 patented claims that straddle the boundary between Storey and Lyon counties on the southern extension of the Occidental-Brunswick Lode through an "option to purchase" agreement with Ida Consolidated Mines Company, Wilson Mining LLC, South Comstock Tailings Disposal Company, and Art Wilson (collectively, "Art Wilson") originally entered into on March 20, 2019 that granted Tonogold the exclusive option to purchase the Art Wilson Claim Group, the right to conduct mineral exploration on those properties, and the option to purchase Art Wilson's underlying 1.0% NSR. This report refers to these 17 claims as the "Art Wilson Claim Group" (Figure 3-4).

As of July 30, 2021, Tonogold had paid \$250,000 to Art Wilson, which completed in full the "First Payment to Obtain Option." From that date, Tonogold holds an exclusive 18-month option to purchase the Art Wilson Claims Group.

Mine Development Associates, a division of RESPEC April 7, 2022



On July 30, 2022, Tonogold must pay another \$250,000 payment to Art Wilson, the "Second Payment to Maintain Option."

If Tonogold desires to exercise its option to purchase, Tonogold must give written notice to Art Wilson and pay to Art Wilson \$1,000,000 on or before January 31, 2023. In addition, Tonogold must execute a Deed of Trust in favor of Art Wilson for \$1,500,000 secured by the property of the Art Wilson Claim Group, payable in full no later than July 30, 2023. (If Tonogold choses to exercise its option to purchase before July 30, 2022, Tonogold will not be required to make the Second Payment to Maintain Option.)

Upon timely payment in full of the Deed of Trust, Tonogold will have six months from that date to exercise their option to purchase Art Wilson's underlying 1.0% NSR for the Art Wilson Claim Group by making a one-time payment of \$300,000.

Art Wilson will pay the property taxes and claim fees for the Art Wilson Claim Group until the date Tonogold choses to exercise its option to purchase. From that date forward, property taxes and claim fees for the Art Wilson Claim Group will be Tonogold's responsibility.

The lands included in the Art Wilson Claim Group are shown in Appendix D.





Figure 3.4: Art Wilson Claim Group



3.3.1.5 Land Tonogold owns outright

Tonogold owns outright one fee parcel and two patented mining claims in the Comstock Mining District. Those properties are shown in Appendix E.

3.4 Mineral Rights

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 U.S. Bureau of Land Management ("BLM"). 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 BLM. Currently, annual federal claim-maintenance fees and county recording fees are the only payments related to the 297 unpatented mining claims. These fees have been paid in full through September 1, 2022. County property taxes for the 95 patented claims and 144 fee parcels are due each year to Storey and Lyon counties.

Holding costs and taxes for the various claims and fee parcels in Tonogold's land package are summarized in Table 3.4.

There is no expiration of ownership for both patented and unpatented claims as long as the annual county property taxes and recording fees and federal claim maintenance fees are paid.

Tonogold holds full surface rights for exploration, development, and mining activities, subject to applicable state and federal environmental regulations, as well as county zoning ordinances (see Section 3.5 below).

Land	Annual Taxes	Annual Claim Fees	Required Lease and Option Payments and Required Expense Reimbursements (total per year)
American Flat properties	\$36,000	\$7,425	~\$1,000,000 in expenses
Lease & Option (Mineral Exploration & Mining Lease)	\$8,000	\$26,000	\$428,000
Lucerne Properties	\$4,484	\$11,550	
Northern Comstock LLC	\$3,367	\$1,980	\$826,500
Total	\$51,851	\$46,955	~\$2,254,000

 Table 3.4: Summary of Claim Fees and Property Taxes

Royalty Agreements

Tonogold's entire property, inclusive of the Art Wilson Claim Group (as defined in section 3.3.2.4 above), is subject to a 1.5% net smelter royalty ("NSR") held by CMI. In addition, various portions of the property are subject to underlying NSR obligations as listed in the tables within Appendix A.

The Art Wilson Claim Group is subject to a 1% NSR owned by Art Wilson. However, Tonogold has the option to purchase that royalty as explained in 3.2.1 above.



3.5 Significant Encumbrances – Land Use

3.5.1 Storey County Special Use Permit

Figure 3.5 shows Storey County's Special Use Permit ("SUP") boundary and the locations of the Lucerne Deposit, the American Flat processing area, and the site of the historical American Flat Mill (also known as the Merger Mill) on BLM land. Studies conducted by Storey County and supported by CMI were used to determine an appropriate boundary by analyzing viewsheds, distances to residences, potential noise disturbances, and other factors. Portions of Tonogold's land package are within the Comstock Historic Preservation Area ("CHPA"), which precludes large-scale open pit mining within the communities of Gold Hill and Virginia City as defined by the Storey County Code. The Lucerne Deposit and the American Flat Processing area are included the CHPA, but allowance for open pit mining and mineral processing are defined within the SUP. However, underground mining operations, processing of surface waste dumps, and exploration by surface drilling are all allowed in areas of Gold Hill, Virginia City, and the Comstock Mining District outside the SUP boundary.

Should Tonogold wish to adjust the boundaries of the SUP, the Storey County Planning Department has a procedure in place that allows for its review and amendment. However, any proposed changes would include a period of public comment and would require the approval of the Board of County Commissioners. The SUP boundary currently includes an area covering the historic American Flats Mill site on BLM land that was demolished in 2014 (Figure 3.5). The now vacant land was reclaimed at the time of demolition. As the project advances, Tonogold may want to amend that area of the SUP during a future Storey County review. The SUP will be addressed further in Section 3.7.





Figure 3.5: Special Use Permit Location

Note: Green shaded area depicts the Special Use Permit land and the blue line shows the property boundary.

3.5.2 Lands Withdrawn from Mineral Appropriations

Portions of Tonogold's land package in Gold Hill and Virginia City include lands withdrawn from mineral appropriations. The withdrawal occurred when the Dingell Act passed in 2019. Tonogold claims that are affected include those on public lands administered by the BLM. Mineral patents, county land, and other private properties such as patented townsite lots are not included. The Gold Hill portion of the Comstock Lode is one of Tonogold's primary exploration targets. The withdrawal affects both the surface and underground mineral rights. shows the land withdrawal boundary and private properties including patented townsite lots internal to the boundary.



VIRGINIA CITY GOLD HILL Property Boundary Patented Mining Claims Patented Townsite Lots Land Withdrawl Boundary 0 5001,000 2,000 Feet

Figure 3-6: Land Withdrawal Boundary

For the 2020-2021 exploration drill program (discussed in detail in Section 7.3), Tonogold limited their surface disturbance such as road and drill pad preparation to patented claims and patented townsite lots. If exploration advances in this area, Tonogold can request a mineral examination report from the BLM on individual claims. The examination will determine the status of each mining claim (whether the claim was properly located and has been maintained), if the claim remains valid, and whether the claimant has found a valuable mineral deposit at the time of withdrawal (U.S Department of the Interior, Bureau of Land



Management, 2007). Tonogold would be required to pay all costs incurred by the BLM related to the mineral examination and report preparation. A mineral examination would be required for each individual claim in the affected area which could take several years to complete.

3.6 Significant Encumbrances - Environmental Liabilities

3.6.1 Carson River Mercury Superfund Site

Nineteenth century miners used large quantities of mercury in the reduction of gold and silver ores. Consequently, portions of the Tonogold property lie within the Carson River Mercury Superfund Site ("CRMSS").

The CRMSS encompasses mercury, lead, and arsenic contaminated soils and sediments at historic mill sites and mercury contamination in waterways adjacent to and downstream of historic mill sites. The CRMSS extends more than 50 miles along the Carson River and some of its tributaries, from Virginia City, Gold Hill, and eastern Carson City into the Lahontan Valley.

CMI and McGinley & Associates ("McGinley") developed a sampling and analysis plan ("SAP") to evaluate locations where modern exploration, mining, and processing activities would disturb ground within the CRMSS. The Nevada Division of Environmental Protection ("NDEP") approved their SAP in January 2012. The protocols established by that SAP remain in effect.

In 2012 and 2013, McGinley sampled soils at CMI's processing facility in American Flat, in the Lucerne Pit, in Gold Canyon, and in certain areas of Gold Hill to identify areas of mercury, lead, and/or arsenic contaminated soil. Generally, their sampling found areas of mercury contamination within the Gold Canyon drainage and around the sites of historic mine facilities such as in CMI's corporate campus parking lot, which had been the location of the Overman shaft and hoisting works. They also identified Mercury contaminated mill tailings in the Lucerne Pit.

Mercury impacted soils and tailings can be mitigated by several methods: (1) placing 12-inches of "clean" soil on top of the contaminated soil, (2) removing and storing impacted soil on a lined pad, or (3) hauling the soil to a facility licensed to dispose of contaminated materials. When CMI initiated Lucerne Pit production in late 2012, the company removed the mercury contaminated mill tailings from the pit and stored them on their lined leach pad.

McGinley conducted additional rounds of sampling from 2014 through 2020, usually to test contamination levels at the locations of proposed exploration drill pads and roads or historic underground mine portals prior to reopening. NDEP approved each discrete sampling effort. McGinley & Associates produced reports describing the results of sampling activities.



3.6.2 Historic and Current Mining Features

Tonogold's Comstock property—which includes the Lucerne Deposit—encompasses five open pits mined by historical operators and dozens of abandoned historical underground mine openings. Large scale underground mining took place on the Comstock, Silver City, and Occidental-Brunswick lodes from the 1860s to the late 1930s or early 1940s. Many open adits and shafts have been fenced and marked to minimize public hazard. Additionally, numerous shallow prospect pits and cuts remain from that era. Except for the current Lucerne Pit mined by CMI from 2012 through 2015, the majority of the mining disturbances pre-date the 1970 National Environmental Policy Act ("NEPA") and the Federal Land Policy and Management Act of 1976 ("FLPMA"). Per federal regulations, Tonogold will be responsible for installing and maintaining fencing around all hazardous features within its land package.

3.7 Environmental Permitting

3.7.1 Lucerne Resource and American Flat Processing Areas

Tonogold's predecessor, CMI, put the Lucerne Pit into production in late 2012 with all required federal, state, and county permits. The company conducted mining operations on private lands, patented mining claims, and minimally on BLM public land through late 2015. Processing and doré production ceased in 2016.

The permits that were required to put the Lucerne Pit and associated processing facility at American Flat into production are listed in Table 3.5 Comstock Mining LLC originally held the permits. However, some are currently assigned to Comstock Processing. Both were legal entities owned by CMI. During 2019 Tonogold entered into several agreements with Comstock Mining LLC (see Section 3.3 for a description of the agreements and terms) including a "Membership Interest Purchase" agreement. Upon closing, Comstock Mining LLC assumed all current and future reclamation liability on the Lucerne Deposit properties and all costs of maintaining the bonds. Additionally, CMI and Tonogold pledged to work together to re-assign and/or bifurcate each permit, so that Tonogold has all rights granted to the Lucerne Deposit properties and CMI has the rights pertinent to the American Flat properties, which includes the processing facility. Currently, Tonogold reimburses CMI for all permit compliance costs.


Regulatory Agency	Permit Document Permit Number(s)		Description
Nevada Division of Environmental Protection	Air Quality Permit	AP1041-2761, AP1041-3392, and AP1041-4051	Operating permit to construct, which covers surface disturbance activities and processing activities
Storey County Building and Planning Department	Special Use Permit for mining	SUP 2000-22A-5	Allows 24 hours per day, 365- days per year operation of mining, processing, drilling, and blasting, and exploration drilling within designated areas
Storey County Building and Planning Department	Special Use Permit for exploration drilling	SUP 2011-016	Allows for exploration drilling within the SUP boundary with 20 acres of disturbance
Storey County Code	Excavation Permit	08912 00	Allows excavation of mining property; requires preservation of prehistoric or historic remains discovered during excavation
Storey County Sheriff's Department	County Business License	40378800	License to conduct business activities
Story County – Fire Protection	Cyanide Tank Permit	APN0433115	Allows storage of cyanide in double-walled holding tank
Nevada Division of Environmental Protection	Water Pollution Control Permit	NEV2000109	Ensures ground water quality will not be degraded; protects public safety and health
Nevada Division of Environmental Protection	Reclamation Permit	196	Requires maintenance of a surety for project reclamation
Nevada Division of Environmental Protection	Storm Water General Permit	NVR300000, MSW- 272	General industry permit that requires control of storm water discharge associated with metal mining activity
Nevada Division of Wildlife	Industrial Artificial Pond Permit	S 477342 ID ST006	Ensures impound and solution ponds cause no harm to wildlife
State of Nevada - Division of Minerals		Laws Regulating Permit NRS 513.380 and NRS 513.094	Nevada law requires reporting discovery of dangerous conditions discovered due to past mining practices
State of Nevada – Fire Marshall	Hazardous Material Permit		Regulates on-site storage of hazardous materials and chemicals
Material Safety Data Sheets (MSDSs) for materials used		Permit 20830	
State of Nevada Division of Water Resources	Water Use Permit	77679, 87229, 82336, 82970, 81582	Grants permission to use and appropriate water for the purpose of mining and processing
U.S. Mine Safety and Health- MSHA	Mine Health and Safety Regulations	ID #26-01871	Regulates training and compliance during mining operations
U.S. Bureau of Land Management	Road Right-of-Way	N-78108	Grants right-of-way over federal land for road use from State Route 342 to fee land
U.S. Bureau of Land Management	Road Right-of-Way	N-091237	Grants right-of-way over Lot 51 to fee land property.

Table 3.5: Active Permits for the Lucerne Resource and American Flat Processing Areas



3.7.1.1 Local Permits

The Storey County Special Use Permit is an important local land use permit. The SUP document outlines operational requirements for mining, processing, and exploration and shows the boundaries within which those may take place. Storey County last updated the SUP in December 2018 with an expiration date of September 2034. Of special note for the Lucerne Deposit, if it were to go back into production is Section 6.2 of the permit labeled "State Route 342 Alignment and Re-Alignment." Storey County must approve any proposed relocation/realignment of State Route 342. However, their authority does not take precedence over state and federal permits required for road re-alignment.

3.7.1.2 State Permits

The Nevada Department of Conservation and Natural Resources, Division of Environmental Protection ("NDEP") office located in Carson City, Nevada is the primary state environmental regulatory agency for Tonogold's plan approvals and operations monitoring. NDEP's Bureaus of Mining Regulation and Reclamation ("BMRR") and Air Pollution Control ("APC") administer permits for mining activities. BMMR focuses on water and fluids management and on bonding for reclamation and closure. APC deals with point source emissions and with a project's overall surface disturbance.

The NDEP Water Pollution Control Permit ("WPCP") authorizes heap leach activity and is supported by a detailed Fluid Management Plan.

The Mining and Reclamation Permit emphasizes mining and reclamation impacts and mitigation, as well as water management. A surety bond (closure bond) is in place that guarantees the reclamation and closure of the project through NDEPs Bureau of Mining Regulation and Reclamation.

The Air Pollution Control Permit addresses point sources air pollution and the operation of the mercury retort and smelter at the American Flats Processing Facility.

3.7.1.3 Federal Permits

Federal land managers conform to the provisions of the National Environmental Policy Act ("NEPA") when mining companies request authorization to operate on public lands. The key federal agency for NEPA and Lucerne Pit expansion permitting is the U.S. Bureau of Land Management ("BLM") district office based in Carson City, Nevada.

A BLM Drilling Notice is the only federal permit under 43 CFR 3089 (Federal Mining Regulations on Public land) held by Comstock Mining LLC. This permit is a Notice Level disturbance authorization (less than 5 acres). A drill notice for 4.17 acres on federal land in the Hartford-Lucerne pit areas was approved December 23, 2011. Tonogold's current BLM drilling notice is addressed later in this document.

Current Right-of-Way ("ROW") haul road permits were secured by CMI for a BLM right-of-way across a portion of Federal land within the pit and an additional permit to cross Lot 51, which allows for a dedicated haul road.



3.7.1.4 Lucerne Expansion – Potential Environmental Studies

The current footprints of the Lucerne Pit and American Flat processing area are located almost entirely on private lands and patented mining claims. Future expansion of the Lucerne Pit, waste rock facilities, and processing area will likely require modifying current state and federal permits. Additional environmental studies and permitting may be needed prior to re-commencing mining activities, including:

- Acid neutralization and acid generation tests of waste rock, ore stockpiles, tailings, and pit walls
- Modeling of the hydrogeologic regime of the mine area
- Environmental impact studies
- Waters of the United States jurisdictional determination for drainages in American Flat
- Additional CRMSS sampling and analysis
- Expanded cultural studies

3.7.2 Environmental Permits – 2020-2021 Exploration Target Areas

3.7.2.1 2020-2021 Gold Hill Exploration Drilling

Permits for Tonogold's 2020-2021 exploration drill program in Gold Hill include one BLM Notice of Intent ("NOI") (#NVN-99583, with a second amendment to the permit approved on November 23, 2020) and several county exploration permits for specific claims or parcels. The total projected surface disturbance for the Gold Hill exploration permits as of July 2021 is approximately 2.0 acres.

Prior to the initiation of exploration drilling, McGinley & Associates prepared an addendum to the CRMSS SAP which was approved by NDEP. Sampling activities took place in August 2020. Testing identified no areas of elevated mercury, lead, or arsenic on the proposed drill pads and access roads that were prepared prior to initiating the 2020-2021 exploration drill program.

3.7.2.2 2020-2021 Occidental-Brunswick Lode – Art Wilson Claim Group – Exploration and Mining Permits

The Art Wilson Claim Group has several permits in place for exploration and small-scale mining. Under their option agreement with Art Wilson, Tonogold has complied with all permit requirements and paid the requisite annual fees.

The permitting status for the Art Wilson Claim Group is as follows:

- On May 17, 2016, a Notification of Commencement of Mining Operation was filed with the Nevada Division of Mine Safety and Training.
- Storey County granted the Art Wilson Claim Group (operating as Ida Consolidated Mines) a Small Operations Mining Permit (# 2016-024) on July 1, 2016, pursuant to Storey County Code, Chapter 17.92. The permit allows for small-scale underground mining and surface disturbances associated with ancillary uses that do not exceed five acres. Ancillary uses for underground mining do include road construction and drilling. The permit was renewed in July 2018 and modified to allow surface exploration drilling. The permit will remain valid unless there is a lapse of 24 or more months



without applicable activities. The permit inures to the owner of record, but the rights are transferrable.

- NDEP-BMRR granted the Art Wilson Claim Group (operating as Ida Consolidated Mines) a Water Pollution Control Permit on July 14, 2017, for the North Midas underground workings project that authorizes the property owner to extract up to 15,000 tons of material per year. Unless extended or modified, the permit expires in July 2022.
- Ida Consolidated Mines submitted a Project Description Filing to the Army Corps of Engineers ("ACOE") in January 2017 to determine the jurisdiction of waters in certain drainages on the property. Ida Consolidated submitted the filing as part of an overall plan to re-open the North Midas underground workings and perform limited mining activities. At the time, the ACOE did not respond to the filing, and no formal designation was determined. However, the regulatory rules for the Waters of the United States ("WOTUS") have changed since 2017. Any future disturbances for exploration or mining in the identified drainages will need to be re-evaluated based on current WOTUS jurisdictional regulations.
- A Sampling and Analysis Plan for surface disturbances in CRMSS designated areas was submitted to NDEP in April 2017. NDEP acknowledged the receipt of the SAP and has conducted limited sampling in areas outlined for exploration drilling. Future disturbance in drainages within the CRMSS boundaries will require formal approval of the SAP by NDEP.

Surface disturbances for exploration drilling conducted in 2018 and for the current 2020-2021 program on the Art Wilson Claim Group have been entirely confined to private land. Tonogold currently holds two county permits for drilling with a projected disturbance of 1.24 acres. Additional county permits and a BLM Notice Level permit for private and public lands will be required as exploration extends to the north along the Occidental-Brunswick Lode.

3.7.3 Future Exploration Disturbances

If accumulated projected disturbances for exploration drilling in both Gold Hill and on the Occidental-Brunswick Lode (including the Art Wilson Claim Group) exceeds five acres, Tonogold will be required to prepare an Exploration Plan of Operations for approval by NDEP's Nevada Bureau of Mining Regulation and Reclamation ("BMRR"). This level of permitting includes a reclamation plan with associated bonding and a public comment period.



3.8 Water Rights

Water rights are available through the American Flat processing facility lease-option agreement between Tonogold and CMI. Water rights are held through Storey County and State permits as shown Table 3.6 below.

Permit Number	Comments	Acre-Feet
76650	Pending hearing 8/23/21, right will move to WS-4 location For Proof of Beneficial use under new number 89340	14.33
77679		6
82209	Gash well, now WS-4	4
82970*	Gash replacement well, now WS-4. Permitted with potential to certify rights with proof of beneficial use.	100
82336*	Permitted with potential to certify rights with proof of beneficial use.	175
N/A	Access to additional water supplied by Storey County	150
	Total Acre-Feet	449.33

Table 3.6: Water Rights

*If certified both become rights for the life of mine (LOM) or life of processing

3.9 Social and Community Considerations

The mining industry in Nevada enjoys broad-based support from regulatory agencies and the general public.

Tonogold's land holdings are adjacent to the small communities of Virginia City, Silver City, and Gold Hill, which adds challenges to mineral exploration and mining operations. A Silver City community survey completed in the summer of 2016 showed mining as the residents' most significant concern — open-pit mining in particular. However, between 2012 and 2016, CMI established a pathway to production with a coordinated community outreach and education program. Future open pit operations in the Silver City vicinity will likely encounter opposition from Silver City residents, although the town itself is in Lyon County. Tonogold's projected Lucerne Deposit operations along with their Occidental-Brunswick lode and Gold Hill exploration targets are in Storey County, and Storey County strongly supports mining. Historically, Storey County has not denied Special Use Permits for mineral exploration or mining. CMI has a current Special Use Permit from Storey County that allows for exploration and open-pit and underground mining within their land package. The permit, unless extended, will expire in 2034. Additionally, Storey County issued an Operational Permit for the Art Wilson Claim Group that allows surface exploration drilling and a small underground operation.



Tonogold acknowledges the concerns of local residents. However, CMI's effective community outreach showed that a local mining company could earn a "social license" to operate. Specific issues of concern include noise, hours of operation, blasting, dust, increased traffic on local roads, impacts caused by soil disturbances within the Carson River Mercury Superfund Site and impacts on local waterways and drainages. Many local residents also enjoy using the public and private lands adjacent to their communities for recreation.

In general, the local communities have strong and knowledgeable leaders who keep up to date on permitting, regulations, and county and state politics. In the past, CMI employed a dedicated community outreach and public relations person as a point of contact for residents. That person's role included interfacing with residents on a one-on-one basis, attending town hall meetings, and working with both Storey and Lyon County governments. CMI was also proactive with other areas of community outreach. They cleaned up blighted lots in Silver City, restored historic mining structures, sampled mercury on residential lots for free, conducted vibration monitoring at several Silver City homes, maintained dust monitoring stations, and established working hours for drilling and mining activities that decreased community disturbance.

Mining operations on Tonogold properties would impact the local communities for many years. As exploration and mine plans progress, Tonogold should create an outreach program and a more formal communications plan. Although most local residents are at best ambivalent about open pit mining, many Silver City and Gold Hill residents have publicly expressed support for local underground mining.



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

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

4.1 Access to Property

Access to the property is via State Route 342 ("SR 342"), a paved, all-season road that bypasses a section of State Route 341 ("SR 341") by deviating from SR 341 just south of Silver City and reconnecting in Virginia City just south of the Fourth Ward School (Figure 3-2). SR 341 connects to Reno, Nevada approximately 30 miles to the northwest, and extends south 3 miles to U.S. Highway 50 ("US 50"), which connects with U.S. Interstate 580 ("I-580") in Carson City, Nevada, approximately 6 miles to the southwest. SR 342 bisects the property and connects with a network of paved and unpaved roads that access the property.

4.2 Climate and Vegetation

The climate is mid-latitude, semi-arid continental-montane where evaporation potential exceeds precipitation throughout the year. The average annual rainfall is about 12 inches, with an additional average snowfall of about 50 inches per year. Most precipitation occurs between November and the end of March. Summers are hot and dry. The mean annual temperature is approximately 60°F. Runoff is rapid from the mountains, where streambeds are dry most of the year. Generally, the soils are well-drained. Vegetation consists of mixtures of sagebrush, rabbit brush, bitter brush, and sparse stands of pinion and juniper trees. Mining and exploration can be conducted year-round.

4.3 Physiography

The property is situated on the eastern flank of the north-south trending Virginia Range. Topography within the property is hilly and moderately rugged. The property centers on Gold Canyon, a steep-walled, southeast-draining ravine. Elevations within the property vary from 5,100 feet to a maximum of 6,400 feet.

4.4 Local Resources and Infrastructure

Carson City and Reno-Sparks, Nevada are the nearest major communities, both about a 30-minute drive from the property with populations in the order of 60,000 and 336,000, respectively (Figure 3.1). Both communities have large, skilled workforces for mining and processing operations. The smaller populations of the nearby towns of Virginia City, Silver City, Moundhouse, and Dayton have participated in mining activities since the 1850s. Mining equipment and supplies can be easily obtained throughout Nevada. Broad varieties of accommodations and business, industrial, and government services are available in Reno, Carson City, and Virginia City.

A heap-leach pad and a processing area have been developed within Tonogold's land package in American Flat, approximately 1.25 miles from the Lucerne Pit. Although the leach pad and processing facility are not currently in operation, the heap-leach pad contains approximately 3.9 million tons of previously



leached material. Approximately 25 acres of space remains available for leach pad development. The adjacent processing area includes mine offices, maintenance shops, crushing facilities, process-water ponds, and a Merrill-Crowe gold-silver extraction system. The facilities currently have sufficient sources of water and power for future production and are described in more detail in Section 14. Waste-rock disposal areas are located adjacent to the Lucerne Deposit. Additional waste-rock facilities may be developed to the east of the Lucerne Pit or to the west in American Flat as shown in Figure 4-1.



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Figure 4.1: Lucerne Deposit Infrastructure



5.0 HISTORY

5.1 Land Ownership History

Historically, land ownership in the district has been complex due to the number of individual mines that operated in the district during the 19th century and the extreme value of the ore deposits they controlled. In the last hundred years, several companies assembled large land packages along the individual lodes in efforts to revitalize mining operations. However, Tonogold's land position is much larger than any previous consolidation.

The property has been consolidated to its current configuration predominantly by CMI and other predecessors over the course of several decades. To strengthen and consolidate land positions within the mining district, operators have purchased mining patents and surface lots and entered into lease agreements with individual owners and independent companies. In addition, almost 300 unpatented lode mining claims have been located on public lands to cover gaps in private claims and parcels and to extend land coverage of the three most important lodes within the district (Comstock, Silver City, and Occidental-Brunswick). Major land-package ownership changes and milestones since 2003 are listed below:

- November 2003 GoldSpring Inc. ("GoldSpring") acquired Plum Mining ("Plum"). The purchase included the 40-acre processing site in American Flat, Billie the Kid lease, Donovan lease, Delamere and Wilson Company Mines ("DWC") haul road agreement, and active permits. Plum continued as the subsidiary mining branch of GoldSpring during production at the Lucerne Deposit from 2004 to 2006.
- By 2009, GoldSpring had obtained additional leases from Obester, Donovan, DWC, and Sutro. GoldSpring filed additional unpatented claims with the BLM between 2003 and 2009.
- GoldSpring purchased the Obester patents in April 2010, which included five patents in the Lucerne Deposit and six patents on the Occidental-Brunswick Lode.
- GoldSpring purchased the Donovan claims in July 2010, which included seven patents and 12 unpatented claims in the Lucerne Deposit.
- In the fall of 2010, GoldSpring became CMI through a recapitalization event and new public listing.
- In October 2010, CMI formed a subsidiary called Northern Comstock LLC and gave it assets which included patented and unpatented claims of DWC, Sutro lease, and Virginia City Ventures lease.
- CMI had the Lucerne Deposit in production from 2012 through 2015. Processing extended into 2016.
- On October 3, 2017, CMI granted Tonogold an exclusive option to earn the membership interest in the Lucerne Deposit.
- On January 24, 2019, Tonogold acquired the Lucerne Deposit by entering into a membership purchase agreement with CMI through which Tonogold acquired 100% interest in the patented claims, unpatented claims, and fee lands controlled by CMI and their subsidiary Comstock Mining, LLC that comprise the Lucerne Deposit.



- On March 20, 2019 Tonogold entered into an Option to Purchase agreement for the Art Wilson Claim Group which includes 11 patented and six unpatented claims astride the Storey County and Lyon County line. The claim group totals 210.2 acres.
- Between 2019 and 2021, Tonogold made the purchases of two patented claims and one private parcel, totaling 29.76 acres.

5.2 Exploration and Mining History

The information summarized in this section has been obtained from published and unpublished sources as cited, unpublished company files, and technical reports by Martin et al. (2010), Kantor et al. (2011), Kantor et al. (2013), Weiss et al. (2017a; 2017b; 2018), Kanter et al. (2018), and Gregory Crouch, *The Bonanza King* (Scribner, 2018). MDA's QPs have reviewed this information and believe this summary is materially accurate.

In 1849, emigrants bound for California discovered placer gold at the mouth of Gold Canyon, about two miles south of present-day Silver City—the first gold discovery in what would become the state of Nevada. Within three years, miners had organized a placer mining district known as the "Washoe Diggins" in Gold Canyon. A few dozen miners worked the district seasonally, depending on the availability of water. By 1858, the best placer deposits had been worked out in the canyon and in the many ravines that feed into it around the site of modern Silver City. The following spring, nearly destitute miners struck what would become known as the Comstock Lode a few feet below the surface near the heads of Gold and Six-Mile canyons at what became the sites of Gold Hill and Virginia City. One of the original locators at both discovery sites was Henry Comstock, whose name became affixed to the most important lode of gold and silver ore ever discovered in the United States.

Through the years, the terms "Comstock" or "Comstock District" became synonymous with the various mineral lodes near and beneath Virginia City, Gold Hill, and Silver City. The Comstock is the United States' first great silver producing region, even though the total dollar value of the gold produced from the Comstock District exceeds that of silver. Copper and lead exist in the district, but are of minor economic importance, both historically and at the present time. Tonogold's land package occupies the majority of the Comstock Mining District. The land package includes more than 50 individual historical mines that account for more than half of district's historical production.

The general history of the Virginia City and Gold Hill districts has been summarized by Church (1879), Smith (1943), Bonham and Papke (1969), Ansari (1989), and Crouch (2018). Smith (1932) briefly described the history of the Silver City district. A more complete history of the Silver City district was described by Gianella (1936). Most of the district's development and production occurred between the years 1860 and 1880, when the Comstock District was the most technologically advanced and economically significant mining region in the world (Becker, 1882). Comstock production propelled Nevada to statehood and was one of the driving forces in the economy of the West. By 1886, the Comstock had been explored over a length of about eight miles, and locally to depths exceeding three thousand feet. More than fifty mills of varying size and configuration were constructed in the region during those heydays.

Important revivals in production took place in the late 1880s and again during the 1920s. Modest open pit operations first occurred in the Gold Hill and Virginia City in the mid-1930s. Later periods of exploration



and mining activity occurred from the 1970s to the early 2000s and from 2010 through 2015. These operations focused on open-pit production from the Comstock and Silver City lodes. Five of these open pits are within Tonogold's land package—the Loring, Gould & Curry, Consolidated Imperial, Overman, and Lucerne pits. Various operators have also conducted exploration drilling in the past five decades, the majority focused on the Lucerne Deposit. Much of the remaining exploration drilling was aimed at defining near-surface open pit targets on the Gold Hill section of the Comstock Lode and on the Occidental-Brunswick Lode.

Areas of historical work are shown in Figure 5.1 Historical mine production is summarized in Table 5.1 through Table 5.3. Additional information about late 20^{th} and early 21^{st} century exploration and production for specific areas of the property is summarized in Section 5.4. Historical mineral resource estimates are addressed in Section 5.2.











5.3 Historical Production

The Comstock Mining District is one of the most productive epithermal precious-metal mining regions in world history. The district includes the Comstock, Silver City, and Occidental-Brunswick lodes and several other mineralized structures of lesser historical significance. From 1860 to 1960, the district yielded more than eight million ounces of gold and 192 million ounces of silver from about 19 million tons of ore (Bonham and Papke, 1969). Underground operations during the bonanza decades of the 1860s and 1870s produced the majority of the gold and silver, although virtually every decade since has seen some precious metals production.

The production records listed in the following sections are mainly based on the State of Nevada Net Proceeds of Mines ("NNPM") filings on record with the State of Nevada and reported in Couch and Carpenter (1943). Some data are derived from United State Geological Survey ("USGS") district reports and some from company reports for individual mines or groups of mines. In most cases, the production data are stated only in terms of tons mined and gross yield, with no distinction made between the ounces of gold and silver produced. Tables 5-1 through 5-5 show a gold equivalent grade using contemporary gold prices, stating all of the value as gold. The NNPM data are incomplete, as Couch and Carpenter (1943) fully describe. Although many of the mine workings were interconnected, each mine operated independently with its own development and output records. Some production from more than one mine, making it difficult to allocate output to the underlying individual mines. This is particularly true for the companies operating in the 1920s and 1930s listed in Table 5.1. Historical mining records did not report waste and development tonnages removed.

Where such records exist, MDA believes that the NNPM tax records and recent U.S. Securities and Exchange ("SEC") filings are the most accurate and reliable. Because these were State-required reports, it would have been illegal—albeit advantageous for tax purposes—to under-report yields. Accordingly, the NNPM records are best viewed as a minimum production estimate.

5.3.1 Lucerne Deposit: 1860 – 1950

The Lucerne Deposit's underground production history dates back to the district's heydays in the 1860s and 1870s. The greater part of this production came from a group of closely-knit mines which exploited a mile-long segment of the Silver City Lode between Gold Hill and Silver City as well as the adjacent hanging-wall veins (Succor, Brown, and others. The historical production from the Lucerne Deposit between 1860 and 1950 is summarized in Table 5.1 below. This production came from the vicinity of the current mineral resources that are the subject of this report.



Table 5.1: Lucerne Deposit Reported Production to 1950							
Mine	Operator	Years	Tons	Dollars Produced	Recovered AuEq oz	Recovered grade in oz AuEq/ton	Comments
KEYSTONE	Comstock Keystone	1934 - 1939	15,074	\$146,414	4,183	0.280	Stoped from 100' level to 300' levels
KEYSTONE	Dayton Consolidated	1939 - 1942	164,735	\$1,616,041	46,172	0.280	Stoped from 300' to 800' levels; includes 15,177 tons of open-pit ore at 0.076 Au Eq grade
KEYSTONE	Dayton Consolidated	1948 - 1950	2,000	\$22,000	620	0.310	Small production from stopes on 700' and 800' levels; estimate based on company reports (Gibson, 1942)
JUSTICE	Justice Mining Co	1873 - 1905	203,577	\$3,715,187	185,660	0.910	Mainly stoped above the 800' level
JUSTICE	Dayton Consolidated	1939 - 1942	60,567	\$555,799	15,747	0.260	Primarily stope backfill from Justice/Woodville; stoped above 800' level
WOODVILLE	Woodville Mining Co.	1872 - 1875	7,076	\$121,813	6,885	0.860	Production from Justice/Woodville; stoped above 800' level
NEW YORK	Dayton Consolidated	1939 - 1942	24,124	\$272,433	7,720	0.320	Production N of Keystone line above 400' level (?)
ALTA	Alta Mining Co.	1879 - 1890	24,085	\$398,372	19,844	0.800	Stoped on 825' and 950' levels
SUCCOR	Succor Mining Co.	1860 - 1895	42,427	\$526,387	26,304	0.620	Stoped above 500' level
SUCCOR	Spearhead Co.	1925	2,251	\$7,589	1,282	0.169	Stoped above 400' level
HOLMAN/ SUCCOR	Nevada Securities / Storey County Mines	1934 - 1938	15,000	\$63,000	7,560	0.120	Stoped above 400' level in both mines?
LUCERNE	Silver Hill Mining Co.	1863 - 1940	144,802	\$778,344	38,807 to 22,154	0.268/0.153*	Lucerne totals include
LUCERNE	William Donovan	1922 - 1939	79,192	\$518,478	25,896 to 14,809	0.327/0.187*	cut ore mined prior to
LUCERNE	Delbert Davis & Son	1939 - 1940	4,458	\$61,278	1747	0.392	above 650' level
BROWN	unknown	1935	2,153	\$24,910.0	710	0.330	Probably stoped above 150' level
ST. LOUIS	unknown	1934– 1935	3,162	\$35,951	1,032	0.33	
TOTALS			794,683	\$8,863,996	360,000 to 390,000		

 Table 5.1: Lucerne Deposit Reported Production to 1950

Note: Ranges shown when production spanned change in gold price from 20/0z to 35/0z. Calculation of gold equivalent ounces (AuEq Oz): ((Oz Ag/ton x \$Ag/ton)/\$Au/ton)) + Oz Au/ton. AuEq.



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5.3.2 Lucerne Deposit: 1980s through 2015

Although the Lucerne Deposit has a surface cut dating back to the 19th Century, it wasn't until the 1980s that open-pit mining became the main production focus on this portion of the Silver City Lode. Table 5.2 lists reported open pit production from the Lucerne Pit from the late 1980s through 2016. The modern-day Lucerne Pit includes a number of historic mines such as the Justice, St. Louis, Billie the Kid, and Hartford. The larger Lucerne Deposit considers additional areas to the east and north of the pit that have not been mined in recent times, including the Woodville, Keystone, and Succor mines.

Mine	Operator	Years	Tons	Au oz	Ag oz	Comments
Lucerne	Oliver Hills	Late 1980s	40,000	1,600	20,000	Mainly from the Justice mine
Lucerne	Rae Gold	Early 1990s	80,000	4,800	53,000	
Lucerne	Plum Mining	2004-2006		12,000	53,000	
Lucerne	CMI	2012-2016	2,600,000	59,515	735,252	Includes Hartford, Billie the Kid, and Justice mines, and Silver Hill mine waste dumps

Table 5.2: Lucerne Deposit Open Pit Production 1980s – 2016

Modern exploration of the Lucerne Deposit is summarized in Section 5.3.1

5.3.3 Gold Hill and Virginia City Area: 1860 – 1926

A comprehensive review of individual historical production records for the dozens of claims and historical operators in the Virginia City – Gold Hill portion of the property is beyond the scope of this report. However, a compilation of underground and later surface mine production from that area is listed in Table 5.3 and Table 5.4, respectively.



		î.	1		
Mine	Years	Tons	\$ Produced	Recovered AuEq oz	Recovered Grade (oz AuEq/ton)
		Virginia	a City		
Gould & Curry	1860 - 1889	316,634	\$15,686,749	782,086	2.47
Savage	1863 - 1909	580,591	\$17,524,645	922,631	1.59
Hale & Norcross	1865 - 1926	457,345	\$10,299,736	542,091	1.19
Chollar-Potosi	1861 - 1904	698,356	\$17,789,599	936,295	1.34
		Gold	Hill		
Alpha	1863 - 1870	7,000	\$175,000	9,211	1.32
Exchequer*	1863 - 1870	52,000	\$700,000	36,842	0.71
Little Gold Hill Mines	1859 - 1876	485,000	\$15,520,000	776,000	1.6
Imperial Consolidated	1863 - 1876	232,922	\$5,448,050	54,317	0.76
Consolidated Imperial**	1876 - 1893	49,379	\$749,640		1.1
Empire	1863 - 1877	165,208	\$3,645,739	191,881	1.16
Challenge	1863 - 1893	20,494	\$410,228	106,578	1.13
Confidence	1863 - 1897	89,561	\$2,032,571	935,389	1.19
Yellow Jacket	1863 - 1919	1,027,900	\$17,676,736	930,355	0.91
Kentuck	1866 - 1893	211,623	\$5,763,295	303,331	1.43
Crown Point	1864 - 1915	1,292,345	\$34,201,525	1,800,000	1.39
Belcher	1863 - 1916	984,927	\$36,177,118	1,904,059	1.93
Segregated Belcher	1865 - 1898	9,911	\$178,433	133,074	0.72
Overman	1861 - 1897	175,098	\$2,536,483	133,499	0.76
Caledonia	1870 - 1878	30,015	\$400,000	201,110	0.67
<u>Totals</u>		6,886,309	186,915,547	10,698,749	

Table 5.3: Virginia City and Gold Hill Reported Underground Production to 1926

(oz AuEq/ton using Au \$20/ton)

Production from the State of Nevada Net Proceeds of Mines records, unless otherwise noted.

* Production numbers from the USGS

** Comprised of the Little Gold Hill Mines and the Imperial Consolidated

 $\label{eq:calculation} Calculation of gold equivalent ounces (AuEq Oz): ((Oz Ag/ton x $Ag/ton)/$Au/ton)) + Oz Au/ton. Gold price used = $20/oz.$



Table 5.4: Virginia City and Gold Hill Surface, Underground and Mine Dump Production1920s - 1980s

(oz AuEq/ton using Au \$35/ton, where calculated)	
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Mine	Operator	Years	Tons	\$ Produced	Recovere d AuEq oz	Recovered Grade (oz AuEg/Ton)	Comments		
Virginia City									
Chollar- Potosi, Hale & Norcross, Savage	Arizona Comstock	1933 - 1940	473,635	1,497,558.00	42,627	0.090	Mostly surface production from the Loring Pit, minor underground production		
Chollar- Potosi	Intermountain Exploration	1976 - 1977	~15,000				Surface production, Loring Pit		
Chollar- Potosi	United Mining	1982 - 1985	242,093			0.037 Au, 1.39 Ag*	Processing dump material from the Savage and Hale & Norcross mines. Less than 100,000 tons of ore from the Loring Pit and limited underground production from the New Savage mine		
				Gold <u>H</u> ill					
Consolidated Imperial and Crown Point	Sutro Tunnel Coalition	1923 - 1943	325,000	\$2,000,000	57,143	0.176	Included both underground and surface production. Surface production was from the Con Imperial Pit*		
Consolidated Imperial	Houston Oil & Minerals	1979 - 1981	~200,000				Surface mining at the Con Imperial pit primarily for stope/cave fill.		
Gold Hill Surface Dumps	United Mining	1982 - 1985	~200,000				Processing of dump material from the Yellow Jacket and Belcher		
Overman	Consolidated Chollar	1933 - 1939	544,352	\$1,188,420	33,750	0.062	100,000 tons of underground ore; remainder is from Gold Hill dump material		
Overman	Consolidated Chollar	1940 - 1948	~600,000				Open pit commenced in 1940**		
Gold Hill Mines	United Comstock Mines	1922 - 1924	900,049	\$3,394,968	170,110	0.189	Development of the Wells Haulage tunnel from American Flat to the Gold Hill Mines and block-caving operations from the Kentuck through the Con Imperial		
Gold Hill Mines	Comstock Merger Mines	1924 - 1928	920,293	\$3,970,344	198,780	0.216	Additional block-caving of Gold Hill mines from the Kentuck through the Con Imperial		

Production numbers are from the State of Nevada records of Net Proceeds of Mines (Couch and Carpenter, 1943), unless otherwise noted.

*Weighted Au and Ag recovered grades

**Production numbers are from Stoddard and Carpenter, 1950.

--Information unavailable at the time of this report.

Calculation of gold equivalent ounces (AuEq Oz): ((Oz Ag/ton x \$Ag/ton)/\$Au/ton)) + Oz Au/ton. Gold price used = \$35/oz.



5.3.4 Occidental-Brunswick Lode and the Art Wilson Claim Group

Production records for the Occidental-Brunswick Lode, which includes the Art Wilson Claim Group, are less complete than those of the mines on the Silver City and Comstock lodes. The most thorough records are from the Occidental Mine and several properties in the Art Wilson Claim Group. In some cases, such as the Cosmopolitan and Brunswick mines, there are no recorded production values in either state or county records even though open stopes and waste rock dumps are visible at both mines. Some of this is attributable to small mines or lease miners not reporting production. Table 5.5 shows the recorded values for the Occidental Mine, the Art Wilson Claim Group, and the Lager Beer and Overland mines, two adjacent mines located between the Art Wilson Claim Group and the Lucerne Pit. All these mines are within Tonogold's land package.

Table 5.5: Estimated Mine Production, Art Wilson Claim Group, Occidental Mine, and Adjacent Claims

Mine (Operator Name)	Years	Estimated Tons	\$ Produced	Recovered Grade (oz AuEq/ton)	Estimated Oz (AuEq)	Source
Badger	1870 - 1942	no data	\$35,000	no data	no data	Smith 1932
Buckeye	1931 - 1939	19,367	\$187,255	0.484 to 0.267	5,345 to 9,374	Couch and Carpenter, 1943
Grass Widow	no data	no data	\$115,000	no data	no data	Smith, 1932
Ida	1907-1911	3,000	\$33,000	0.55	1,650	Couch and Carpenter, 1943
Lager Beer	no data	no data	\$240,000	no data	no data	Smith, 1932
Lucky Star and Morningstar	1872 - 1930s?	no data	\$30,000	no data	no data	Smith,1932
Milwaukee	1903-1909	2,003	\$40,572	1.01	2,023	Couch and Carpenter, 1943
Occidental	1866-1894	38,449	\$699,559	0.96	36,819	Couch and Carpenter, 1943
Occidental (Hess and Viljoen)	1980s	less than 1,000	no data	no data	no data	verbal communication
Overland	1893-1936	43,967	\$333,805	0.383 to 0.217	9,541 to 16,839	Couch and Carpenter, 1943
Pride of the West	1907-1911	3,000	\$33,000	0.55	1,650	Couch and Carpenter, 1943
Vivian-Midas	1875-1938	2,770	\$41,944	0.756 to 0.433	1,199 to 2,094	Couch and Carpenter, 1943
Vivian-Midas (Gordon lessor)	1937-1940	2,185	\$10,529	0.137	299	Couch and Carpenter, 1943
Minimum Estimated Total		114,741	\$1,799,664		37,118 to 70,748	

(from Weiss et al., 2017a)

Note: ranges shown when production spanned change in gold price from \$20/oz to \$35/oz. Calculation of gold equivalent ounces (AuEq Oz): ((*Oz Ag/ton x \$Ag/ton)/\$Au/ton)) + Oz Au/ton*

Combined, these historical mines on the Occidental-Brunswick Lode had at least \$1,800,000 in production with an aggregate minimum production of 37,000 to 70,000 ounces, the vast majority of which came from underground workings.



5.4 Modern Exploration

A summary of modern exploration is included in the following sections. Discussion of recent activities for the exploration target areas of the Gold Hill and southern Virginia City portions of the Comstock Lode and the southern extensions of the Occidental-Brunswick Lode is included to illustrate the district-wide potential of Tonogold's land package.

5.4.1 Lucerne Deposit, 1960s to Present

Historic mines in the Lucerne Deposit include the Keystone, Woodville, Justice, Billie the Kid, Succor, and Hartford mines (Figure 5.1). Between 1961 and 2016, at least 12 historical operators have carried out drilling and other exploration work in the Lucerne Deposit.

During 1961, the Consolidated Eldorado Mining Company drilled 29 core holes from the underground workings of the Keystone-New York mine (as explained later in this report, MDA deems this drilling unreliable).

From 1977 to 1980, Houston Oil and Minerals ("HOM") drilled 84 RC holes from the surface at the historical Hartford and Lucerne mines. HOM also drilled 20 RC holes in the Lucerne historical waste dumps in 1979.

In 1980-1981, Jacqueline Gold drilled 12 RC holes in the Lucerne pit area. A more comprehensive summary of historical drilling is found in Section 7.0.

Over the next 10 years, from 1988 through 1998, a total of 276 RC holes and one core hole were drilled in the Keystone, Lucerne, and Billie the Kid areas by Delamere and Wilson Company Mines ("DWC"), Double King, BMR, Rae Gold, and Plum. GoldSpring acquired Plum in 2003, although Plum continued to operate as a subsidiary providing mining services.

Comstock Gold drilled 10 core holes at the historic Justice mine in 2003. From 2004 through 2009, GoldSpring drilled 271 RC holes in the Billie the Kid, Hartford, Lucerne, Keystone, and Woodville areas (Figure 5.1).

From 2010 to 2016 CMI drilled 1,151 holes in the Lucerne Deposit, including 750 RC holes, 326 air-track holes, and 95 core holes. Most CMI drilling focused in the Lucerne Pit area, which includes the historic Justice and Billie the Kid mines, and in the nearby Keystone and Woodville mine areas. CMI also drilled the waste dumps associated with these historic mines. During this period, CMI completed surface and underground mapping and sampling for the Lucerne Deposit and the adjacent gold-silver veins to the east.

5.4.2 Gold Hill and Virginia City – Comstock Lode, 1930s to Present

5.4.2.1 Loring Pit and Central Comstock

The Loring Pit (Figure 5.1) on the Comstock Lode, located at the south end of Virginia City on the ground of the historic Chollar and Potosi mines, was first developed from 1934 to 1938 by the Arizona Comstock Company ("Arizona Comstock"). Arizona Comstock built a mill and cyanide tank-leach circuit and mined



about 400,000 tons of ore. Some of this production is believed to have come from the small Gould & Curry Pit about 2,000 feet to the north. Siskon Corporation ("Siskon") acquired the Loring Pit and central Comstock area in the 1950s and 1960s and carried out surface and underground evaluations including limited surface drilling. Siskon leased their property to the Intermountain Exploration Company ("Intermountain") in the mid-1970s. Intermountain did further surface work and conducted a pilot heapleach in 1977 using about 10,000 tons of low-grade material from the Loring Pit. Intermountain terminated their lease in 1978. Siskon sold the central Comstock claim group (Chollar, Hale & Norcross, Savage, and others) to the Hanna Mining Corporation ("Hanna") in 1981. The claims were leased to United Mining Corporation (the same "UMC" as above) in the early 1980s. UMC believed that the historic surface dumps, augmented with underground ore, could supply profitable feed to the mill in American Flat they'd purchased from HOM. UMC drilled at the Loring pit and several of the surface dumps in the early 1980s and completed a decline to conduct cut-and-fill mining at shallow levels of the Comstock Lode. UMC expanded the Loring Pit to the south to its present configuration. UMC was the last Loring Pit operator. The UMC underground operation was known as the New Savage mine. The New Savage operation produced a limited tonnage of underground material. To feed their American Flat mill, UMC also mined about 150,000 tons of dump material from the Hale & Norcross and Savage dumps north of the pit.

5.4.2.2 Alpha and Exchequer

Two deep core holes were drilled in the Alpha and Exchequer area (Figure 5.1) in the mid- or late 1990s. Tonogold does not have results from these holes. Exploration drilling conducted by Tonogold in 2020 and 2021 will be addressed in Section 7.2.

5.4.2.3 Consolidated Imperial Pit, Yellow Jacket, Kentuck, and Belcher Dumps

The Consolidated Imperial Pit ("Con Imperial") (Figure 5.1) was developed on the site of the original Gold Hill discovery. During the 1960s and 1970s, the Union Pacific Railroad Company ("Union Pacific"), Neaves Petroleum, and Minerals Engineering Company ("MECO") each conducted drilling programs within the confines of the pit. Their results defined a sizable body of low-grade mineable material. Based on those results, Houston Oil and Minerals acquired the necessary mining leases and constructed a 1,000 ton per day, cyanide tank-leach mill at American Flat. HOM extracted and processed Con Imperial ore from 1979 until 1981.

HOM also drilled many of the historic surface dumps looking for mill feed, including the nearby Con Imperial, Yellow Jacket, and Belcher mine dumps. In 1983, HOM sold their operation and leased property to the United Mining Corporation ("UMC"). UMC ceased operating the Con Imperial Pit mine. However, they did drill exploration holes in the vicinity of the Gold Hill train depot and in the north end of the Yellow Jacket Mine. Some of those holes encountered significant mineralization. UMC also drill tested some of the nearby historical mine dumps. Between 1982 and 1985, UMC mined about 200,000 tons of dump material from Gold Hill and Virginia City and fed it into their American Flat mill. Since then, the only exploration work in and around the Con Imperial Pit has been limited surface sampling of stope fill and adjacent mineralize material at the north end of the pit by CMI in 2014 and Tonogold in 2019. Exploration drilling conducted by Tonogold in 2020 and 2021 will be addressed in Section 7.2.

The Kentuck mine was a 93-foot-wide historic mine on the Gold Hill portion of the Comstock Lode between the Yellow Jacket and the Crown Point mines (Figure 5.1). Prior to Tonogold's exploration in



2020 and 2021, the only work known to have been completed on the Kentuck post-World War II was done in 2010 by CMI, when they drilled five RC holes, and in 2014, when they explored the Kentuck's surface dumps and near-surface bedrock with 115 shallow holes made with a blast-hole drill.

Assay results of the 2010 drill program showed that weakly mineralized old dump material is present down to a depth of approximately 100 feet on Kentuck ground. This material, of mixed lithologies, likely originated from adjacent historic mines. The grades ranged from below the detection limit for gold up to about 0.125 oz Au/ton. The holes were collared in the footwall of the lode due to permit restrictions in order to limit noise disturbance of nearby residents. Consequently, much of the drilling intersected unmineralized or weakly mineralized country rock. However, one hole, S10-03, intersected the Comstock Lode from 400 to 405 feet. This interval showed strong mineralization with an assay result of 0.665 oz Au/ton and 0.232 oz Ag/ton.

Most of the 2014 holes drilled with the blast-hole rig were less than 50 to 60 feet and never penetrated beneath the old dump material. Assay results showed some low-grade mineralization in the dump material, generally at grades below 0.02 oz Au/ton.

5.4.2.4 Overman Pit

The Overman Pit (Figure 5.1), situated where the north end of the Silver City Lode intersects the southern part of the Comstock Lode, was first mined by the Consolidated Chollar Company in the 1930s. From 1935 to 1939, the Consolidated Chollar, Gould, and Savage Mining Company rehabilitated the Overman Tunnel (622-foot level) and completed an extensive underground development and sampling program between the tunnel level and the 900-foot level. The work defined low-grade material suitable for openpit mining in and around old bonanza stopes. The company began removing overburden in 1940. They mined approximately 700,000 tons from the pit over the next decade. Minerals Exploration Company ("MECO") drilled seven holes in the Overman Pit in the early to mid-1970s. HOM drilled a handful of holes in the Overman Pit from 1979-1981 and UMC added a few more in the early 1980s.

Nevex Gold Co. ("Nevex") performed surface exploration work in 1985 but conducted no drilling. The southwest part of the pit was drilled by BMR Gold Corporation ("BMR") in 1991. In 1995, H. Brockbank drilled six holes at the Overman prior to forming Plum Mining. A Canadian company known as HE5 Resources drilled 28 ODEX-type reverse-circulation and rotary holes in 2006. No further exploration work is known to have been done at the Overman Pit.

Tonogold compiled the results of the 1995 and in 2006 Overman Pit drilling. Assay results show that wide zones (up to 75 feet) of low-grade mineralization are present below the Overman Pit floor. Several drill holes intercepted mineralized zones between 10 and 20 feet wide carrying gold grades between 0.1oz Au/ton and 0.2oz Au/ton. Exploration drilling conducted by Tonogold in 2020 and 2021 will be addressed in Section 7.2.



5.4.2.5 Suicide Rock

During the mid-1980s, a group known as 2-B Partners explored the Suicide Rock area northwest of American Flat (Figure 5.1). 2-B Partners drilled 19 RC holes in 1986. A small portal and the Bright Star tunnel were opened, but little mineralization was encountered. BMR Gold drilled two RC holes in 1991 in the vicinity of the McKenzie Tunnel. They conducted surface mapping and sampling in 1992 and 1993. Neither company encountered significant mineralization.

5.4.2.6 Ward Shaft

UMC drilled several holes in the vicinity of the Ward shaft (Figure 5.1) in the early 1980s. An unknown quantity of holes was also drilled by Jacqueline Gold or Rae Gold in the late 1980s or early 1990s. Tonogold does not possess results for these holes.

5.4.2.7 Occidental-Brunswick Lode

The Occidental–Brunswick Lode, located about one mile east of the Comstock and Silver City lodes (Figure 5.1), was discovered during the early 1860s. The Occidental Mine was by far the most active mine on the lode in the 19th century—local hillside surface topography allowed it to be mined with deep adits. Other nearby claims also went into production during those years, but at lower volumes than the Occidental Mine. Most found ore or indications of ore in their upper levels but shut down after unsuccessful battles with floods around their 150-foot levels. At its south end, near Silver City, the Occidental-Brunswick Lode breaks into several discrete veins or splays which a number of small operators mined from the 1860s into the early 20th century. Production was limited from these small mines, generally less than 20,000 tons of material. However, records are incomplete in this part of the district—the lease miners who did most of the work in this area usually didn't report production figures to the state.

The following sections provide information on exploration activities on the Occidental-Brunswick Lode post 1975. Exploration drilling conducted by Tonogold in 2020 and 2021 will be addressed in Section 7.2.

5.4.2.8 Occidental and Brunswick Mines

During the early 1980s, local miners rehabilitated the St. George incline of the historic Occidental mine (Figure 5.1). They extracted less than 1,000 tons of material and shipped it to UMC's American Flat mill. Rea Gold conducted surface sampling on the northern portion of the Lode from the early to mid-1980's. In 1992, Miramar/American Eagle Resources conducted surface mapping, soil sampling, and drilled 12 RC holes aimed at defining minable material for a shallow open pit. Although Tonogold does not have any of the drilling logs or results from that time, Mr. Stephen Russell, who served as the geologist on the drill rig, indicated through verbal communication that most of the holes were located in and around the Occidental Mine workings and were less than 300 feet deep. Mr. Russell recalls mostly low-grade drill intercepts, with a few five-foot intervals showing gold assays up to about 0.1oz Au/ton.



5.4.2.9 Art Wilson Claim Group, 1977 – 2018

Data in this section has been extracted from Weiss et al. (2018), which summarized exploration done by Ida Consolidated Mines and Wilson Mining between the late 2008 and 2018 on the Art Wilson Claim Group (Mr. Art Wilson owned both operations) and from personal communication with geologist, Steve Russell. Mr. Russell was contracted occasionally by Mr. Wilson to perform geologic evaluations of his properties starting in the late 1970s. No modern-era exploration is known to have been conducted on the Wilson Claim group prior to about 1977. Recent exploration has consisted of surface and underground geologic mapping, surface and underground geochemical sampling, underground surveying, and RC and core drilling.

According to Steven Russell, Mr. Wilson rehabilitated the Ida Shaft, located on the Ida patent near the southern extent of the Art Wilson Claim group around 1977. The goal of the work was to access the historic Ida Mine workings and conduct mapping and sampling to evaluate the potential for starting up a small-scale underground mining operation. The shaft was reportedly rehabbed to the historic 300-foot level prior to issues with caving. The Ida Shaft was originally collared on a mineralized splay of the Occidental-Brunswick Lode and was reported to have open stopes encroaching on the shaft, which makes it susceptible to caving. Mr. Russell was contracted by Mr. Wilson to perform limited sampling of the accessible workings between the 100- and 200-foot levels. Mr. Russell collected approximately six rock-chip samples from mineralized material along stope margins which were analyzed for gold and silver at Mr. Wilson's in-house assay laboratory. Mr. Russell communicated that one sample collected from a narrow, mineralized zone (less than 2 feet wide) returned an assay of approximately 0.25oz Au/ton. According to Mr. Russell, any further data collected at that time is no longer available, including in Art Wilson personal archives.

Mr. Russell also communicated that in 1988 Mr. Wilson contracted him and Ben Viljoen to conduct surface and underground sampling on the entire claim group, with a focus on the Pride of the West Mine. Mr. Russell indicated that approximately 100 samples were collected from mineralized splays of the Occidental-Brunswick Lode and along historic stope margins. The samples were delivered to Mr. Wilson's in-house laboratory for analysis of gold and silver. Check assays were sent to commercial labs in Reno. According to Mr. Russell, gold assays ranged from less than the detection limits of the lab to approximately 0.5oz Au/ton. Unfortunately, none of the data generated at the time has survived to the present day.

During 2008-2009, Mr. Russell carried out an evaluation of the claim group for Mr. Wilson. Mr. Russell collected 120 surface and underground rock-chip and grab samples, which were analyzed at ALS Chemex in Reno, Nevada for gold and silver by fire-assay methods. The majority of these samples were collected from the then-accessible underground workings of the Vivian (Midas) and Pride of the West mines. Mr. Russell also performed tape and compass surveys of the workings to control the underground sample locations and carried out surface geologic mapping at a scale of 1:3,600 with hand-held GPS control. Results of the evaluation completed 2008 and 2009 was presented in Russell (2009).

During May and June of 2016, the accessible workings were surveyed by a professional surveyor. A backhoe operator opened several caved portals on the claim group. Plots of the surveyed drifts and stopes were used by Mr. Russell and Ms. Kiersten Briggs to map the underground geology and to locate rock-chip samples.



In the summer of 2016, Russell and Briggs collected 91 rock-chip samples, nearly all from the underground workings of the Vivian (Midas), North Midas, and Pride of the West mines. American Assay Laboratories ("AAL") in Sparks, Nevada assayed the samples for gold, silver, arsenic, calcium, copper, iron, mercury, molybdenum, lead, sulfur, antimony, uranium, and zinc. They took the majority of their samples from in situ vein material—material historical miners intentionally left behind because it was below their cutoff grades.

Mr. Weiss conducted geologic mapping at scales of 1:2,000 and 1:5,000 during May and June 2016, mainly to expand on the vein mapping done by Mr. Russell in 2009 and to better define the diagrammatic veins shown by Hudson et al. (2009). Mr. Weiss only made a few traverses in the area of the Vivian (Midas), Grass Widow and Piedmont workings because this area had been covered by more detailed mapping done by Russell and Briggs in 2016.

Mr. Jason Jordan collected 117 surface samples for geochemical analysis during May and June 2016. Most of the samples were taken from veins in-situ and from old mine and prospect dumps. Several others were taken from the float of concealed veins. AAL in Sparks, Nevada assayed the samples for gold, silver, and 10 other elements.

The sampling efforts described above demonstrated that elevated gold and silver concentrations are present in veins throughout the Art Wilson Claim Group and in the adjacent areas. Results of sampling completed between 2008 and 2016 are presented in Russell and Briggs (2016) and Weiss et al. (2018).

In 2018, Mr. Wilson funded the drilling of 18 RC holes on the claim group under the supervision of Mr. Russell (6,040 feet of drilling). The results and the methods and procedures used for this drilling are summarized in Section 7.3.

5.5 Historical Mineral Resource Estimates

The estimates described in this subsection are presented as an item of historical interest with respect to past open-pit mining and exploration in the Lucerne Deposit of the property. For the Lucerne Deposit, historical resource estimates prepared in 2009 by GoldSpring (Anderson, 2009) and reported by Martin et al. (2010a) are summarized in Table 5.6.



N I N

Ι

	GOLDSPR	ING'S CMP MI	NERAL RESOUR	RCE		
		Averag	e Grade	Contained Ounces		
	Tons	Au	Ag	Au	Ag	
		(ounce/ton)	(ounce/ton)	(ounces)	(ounces)	
Measured	12,761,000	0.030	0.384	383,000	4,900,000	
ndicated	10,152,000	0.025	0.353	254,000	3,584,000	
Measured and Indicated	22,913,000	0.028	0.370	637,000	8,484,000	
nferred	6,613,000	0.018	0.244	122,000	1,612,000	

 Table 5.6: 2009 and 2010 GoldSpring Estimated Resources

(from Martin et al., 2010a)

Note: based on silver price at \$18.50 per ounce, and a gold price at \$1,200 per ounce; heap leach recoveries of 65% and 30% for gold and silver, respectively; and mill recoveries of 95% and 80% for gold and silver, respectively. "CMP" denotes Comstock Mine Project.

Later in 2010, an updated resource estimate was prepared by CMI as reported by Martin et al. (2010b) and summarized in Table 5.7.

LUCERNE MODEL IN-SITU GEOLOGIC RESOURCES AT 0.007 OPT AU CUTOFF						
				Contained		
	Tons	Au (opt)	(opt)	Au (oz)	Ag (oz)	
Measured	11,220,000	0.031	0.394	348,000	4,420,000	
Indicated	15,320,000	0.025	0.324	383,000	4,960,000	
Measured and Indicated	26,540,000	0.028	0.354	731,000	9,380,000	
Inferred	12,660,000	0.023	0.252	291,000	3,190,000	

Table 5.7: 2010 CMI Estimated Resources

(from Martin et al., 2010b)

Note: based on silver price of \$18.00 per ounce, and a gold price of \$1,200 per ounce.

The Lucerne resource estimates were updated again by CMI in 2011 and 2013 as reported by Kantor et al. (2011; 2013), respectively. Table 5.8 summarizes the historical 2013 estimated resources.



	1 (11011)	untor et un,	2013)			
LUCERNE MODEL IN-SITU MINERAL RESOURCES AS OF 31 DECEMBER 2012 (0.007 OUNCES OF GOLD PER TON CUTOFF ¹)						
		A	Ag	Contained ¹		
	Tons	Au (opt)	Ag (opt)	Au (oz)	Ag (oz)	
Measured	32,620,000	0.030	0.311	979,000	10,140,000	
Indicated	20,930,000	0.029	0.248	607,000	5,190,000	
Measured and Indicated	53,550,000	0.030	0.286	1,586,000	15,330,000	
Inferred	26,300,000	0.021	0.177	552,000	4,660,000	
¹ Slight differences may occur due to rounding						

Table 5.8: 2013 CMI Estimated Resources (from Kantor et al., 2013)

Note: based on silver price of \$32.00 per ounce, and a gold price of \$1,700 per ounce.

MDA has done sufficient work to understand the parameters used for the historical estimates, but do not classify the estimates summarized in Table 5.6 to Table 5.8 as current mineral resources. A summary of MDA's review of the 2013 estimate is given below. These estimates are applicable only for historical context. Tonogold is not treating them as current mineral resources or mineral reserves. The current mineral resources for the Lucerne Deposit are discussed in Section 11 of this report.

In 2018, MDA evaluated the CMI 2013 resource block model and estimated resources reported in Table 5.8. In the opinion of MDA's QPs, the 2013 block model over-estimated the volume of higher-grade mineralization in the deposit, projecting what are probably lenses with variable continuity into larger, more continuous and thicker volumes of rock. The volume of the low-grade shell is also substantially larger in the 2013 model than what MDA deems reasonable. The use of a single, broadly defined domain in the 2013 model treats high-grade veins in a similar manner to low-grade material, contradicting the known geologic setting and controls of mineralization.

In 2014, CMI estimated resources for a small portion of the Lucerne Deposit. Because it was only a partial model of less than the whole deposit, results would be misleading and are not presented in this report.



6.0 GEOLOGIC SETTING, MINERALIZATION AND DEPOSIT TYPE

The information presented in this section of the report is derived from multiple sources, as cited, and is in part extracted from Weiss et al. (2017a). MDA has reviewed this information and believe this summary accurately represents the project geology and mineralization as it is presently understood.

The geologic setting and gold-silver mineralization of the district have been studied by geologists since the 1860s. Historic mining efforts focused initially on placer deposits, then on veins or "lodes" that cropped out at the surface or were uncovered by placer mining activities. The lodes were composed chiefly of quartz and/or calcite. Basic elements of the geology and mineral deposits were described by Richthofen (1865), King (1870) and Becker (1882), all of whom had access to active underground workings in mines along the Comstock and Silver City lodes. Early 20th century company reports by S. H. Ball and others, and a geologic map by L. Houlton and S. H. Ball (1914) described the Silver City district geology and vein styles in greater detail. Gianella (1936), Calkins and Thayer (1945), and Thompson (1956) refined the stratigraphy of the area and provided an improved geologic framework for understanding the mineralized veins for both the Silver City and Comstock lodes. Quadrangle-scale and more detailed geologic mapping by D. M. Hudson between 1985 and 2000, and by Hudson and others of the Nevada Bureau of Mines and Geology ("NBMG") from 2000 to 2003, coupled to high-precision radiometric age dating, resulted in significant revisions to the stratigraphy, a more comprehensive regional-scale depiction of major veins and faults, and an improved understanding of the timing of gold-silver mineralization with respect to periods of Miocene volcanism and magmatic activity (see Castor et al., 2005; Hudson et al. 2009). The following subsections summarize the geologic setting and mineralization based on the above studies.

6.1 Regional Geologic Setting

As summarized by Weiss et al. (2017a), the Comstock Mining district is situated on the southeast flank of the Virginia Range, a broad upland of mainly intermediate-composition volcanic rocks of Miocene ages in the northern Walker Lane structural belt. The Walker Lane is a region of northwest-trending, rightlateral strike-slip faults and less extensive, conjugate left-lateral strike-slip faults. The oldest rocks in the area are sandstone, siltstone, and metasedimentary rocks assigned by Hudson et al. (2009) to the late Triassic and early Jurassic Gardnerville Formation, and Jurassic meta-gabbro. These units have been intruded by Cretaceous granitic rocks (Thompson, 1956). In the southern part of the Virginia City 7.5-Minute Quadrangle, the Mesozoic basement units are overlain by Oligocene to earliest Miocene ash-flow tuffs of mainly rhyolitic compositions (e.g., Santiago Canyon Tuff, Bingler, 1978; Hudson et al., 2009). The ash-flow units are overlain by thick sequences of andesitic volcanic and intrusive rocks that form the majority of the rocks in the area (Silver City and Virginia City magmatic suites). Those andesitic volcanic and intrusive rocks hosted most of the historically mined orebodies.

Extensional faulting during Neogene Basin and Range tectonism affected the Virginia Range. Numerous northwest- to northeast-trending faults cut the area of the subject property during this period. Many of those faults had down-to-the-east displacements, which tilted the intervening rocks to the northwest and west. Many of these faults and associated fractures were the sites of the Miocene hydrothermal fluid flow that deposited the quartz, calcite, and gold-silver mineralization that comprise the veins or lodes of the district.



6.2 Property Geology

The most recent and most complete geologic maps of the property are those of the Virginia City 7.5minute quadrangle (Hudson et al., 2009) and the adjacent western edge of the Flowery Peak 7.5 quadrangle (Castor et al., 2013), as shown in Figure 6.1a with ages of mapped lithologic units shown in Figure 6.1b. More detailed mapping of small areas along the individual lodes has been done at various times by historical operators and Tonogold. Some of the detailed mapping has been compiled by Tonogold.



Figure 6.1a: Geologic Map of the Virginia City and Flowery Peak Quadrangles (from Hudson et al., 2009; and Castor et al., 2013)

Note: Blue lines are limits of the Tonogold property; dashed gray lines are the western and southern limits of Storey County; dashed red lines depict generalized locations of major lodes and veins; the Lucerne deposit resource is shown in dark pink.





Figure 6.1b: Map Units Hudson et al. 2009: and Castor et al. 20

The oldest rocks in the district are Triassic-Jurassic metasedimentary and Jurassic metaigneous units that sit in the footwall of the Comstock and Silver City faults and crop out immediately to the west of American Flat (Figure 6.1a). Cretaceous granitic rocks that intruded into the older metaigneous and metasedimentary



units are exposed to the west of the Lucerne Deposit in the American Ravine drainage. The older units are overlain by Oligocene to Miocene silicic ash flow tuffs, the most extensive of which is the early Miocene Santiago Canyon Tuff. This unit is present in the footwall of the Lucerne Pit, particularly on Hartford Hill, and to the west of the footwall in Gold Hill (Figure 6.1a).

Middle Miocene rocks of the Silver City (17.4 to 18.3 Ma) and Virginia City (15.2 to 15.8 Ma) magmatic suites are the most prevalent units in Tonogold's land package and are the primary hosts rocks of the mineralized lodes. Assigning these units to a specific suite can be difficult based on minerology or textures and because of regional hydrothermal alteration. However, the Sutro Tuff, which divides the Silver City and Virginia City magmatic suites and marks a two-million-year hiatus between major volcanic episodes (Hudson et al., 2009), can be used to determine the adjacent volcanic packages if it is exposed. The tuff crops out at the surface to the west of the Occidental Lode and to the west of Gold Hill at Suicide Rock, although it is commonly absent and is variable in thickness. Hornblende- and biotite-rich andesites of the Flowery Peak Magmatic Suite are present in the eastern-most portion of Tonogold's land package adjacent to the Occidental-Brunswick Lode.

All the volcanic suites include rhyolitic and intermediate intrusive units. The late Miocene Davidson diorite is the most significant intrusion in the property package. It is most common in the footwall of the Comstock Lode in Gold Hill and the southern portion of Virginia City. Associated andesite porphyry borders the diorite and forms many dikes. An intermediate intrusive extending from the southern Occidental-Brunswick Lode through the Lucerne Pit area was recognized by early workers in the district and has been logged and mapped by CMI geologists. Rhyolitic intrusive units have been mapped by S. Russell and CMI geologists in the Lucerne Pit and along the Comstock Lode in the Gold Hill.

The Comstock Fault is the most significant structure in the district and forms a continuous mineralized zone which is locally up to 900 feet wide and extends almost six miles along strike from beyond Virginia City to the north and extending south of Silver City. The fault branches into two separate splays at the southern end of Gold Hill. One splay extends to the southwest around American Flat on the west side of the property. The second and more substantial branch extends to the southeast through the Lucerne Deposit and along the west side of Silver City. This second splay is locally referred to as the Silver City Fault.

The Occidental-Brunswick Lode is located about one mile east of the Comstock and Silver City lodes (Figure 6.1a). This mineralized vein system is also controlled by east-dipping normal faults associated with late Miocene and Holocene Basin and Range extensional faulting. Although this lode is smaller in scale than the Comstock and Silver City lodes, it is also a continuous zone of low-sulfidation epithermal mineralization that extends approximately three miles along strike and is hosted almost entirely within the Silver City andesite (Tsa)- and Alta Formation (Tva) units of the Silver City and Virginia City magmatic suites, respectively. The general configuration of the principal mineralized lodes and related veins is presented in Figure 6.2.

Displacement along the Comstock Fault has been estimated to be between 1,500 and 3,000 feet in the Virginia City area. In contrast, displacement along the Silver City and Occidental-Brunswick faults has been estimated from between 300 to 1,500 feet and 0 to 900 feet, respectively. Hydrothermal alteration is widespread in the district. Hudson, et al. (2009) suggest that several periods and types of alteration are present, with wide belts (up to 2.5 km) of propylitic alteration present along all the major lodes.



Discussions of the geology for the Lucerne Deposit, Gold Hill, and the Occidental-Brunswick Lode are presented in the following sections 6.2.1 through 6.2.3 Vein styles and gold-silver mineralization for each lode are summarized in Section 6.3.





6.2.1 Lucerne Area Geology

Since the work of Becker (1882), the Silver City Lode has been interpreted as a mineralized structural zone, rather than a single, discreet vein system. Becker's (1882) horizontal plat of the mine workings defines the lode in the project area as having a west wall (footwall) and an east wall (hanging wall), separated by an area of highly variable width (up to 600 feet). CMI initially believed this wide zone of fault planes, brecciation, and fractures contained a group of rather strong, through-going mineralized structures. The present view is that the single, strongest structural element is the footwall fault, along which the Silver City andesite unit (Tsa) and Alta Andesite unit (Tva) in the hanging wall have been dropped down against the early Miocene Santiago Canyon Tuff and Mesozoic meta-igneous rocks in the footwall. The footwall also represents one of the strongest mineralized parts of the system.



The hanging-wall environment outward from the footwall structure, including the east wall, is now interpreted as containing a group of branching, sympathetic faults with minimal overall displacement. The one exception is a segment of the east wall structure near the Woodville mine where fault displacement exceeds several hundred feet. Areas of strong mineralization also occur along the hanging wall but tend to have less continuity in comparison to footwall mineralization. Revisions in structural complexity were made by CMI geologists along the Silver City Lode at or near several prominent intersections with groups of northeast- to east-trending faults and fractures, including the Woodville, Succor, and Brown faults. Earlier interpretations suggested that the Silver City Lode was significantly offset by these faults. However, no significant offsets to the footwall contact of the Silver City Lode were observed when detailed level plans were constructed in 2014, nor during CMI's mining activities in the Lucerne Pit. Further minor revisions to the orientation and location of the intersections between the Succor and Holman, and the Brown and Holman mineralized structures, and their positions east of the main Silver City Lode were made by Briggs and Russell in late 2017. Figure 6.3 presents a generalized geologic map of the Lucerne Deposit.

The existence of intrusive rhyolite on the surface in the Lucerne Pit area was first suspected in 2006, but not confirmed until 2012. Up to that time, all felsic rocks encountered in drilling and mining were automatically assigned to one or more rhyolitic ash flow tuff units forming part of the Middle to Late Tertiary volcanic package. Conversely, the presence of intrusive andesite along the Silver City Lode has been long recognized, but its extent was not fully understood until CMI's work between 2014 and 2016.







Stratigraphic units shown in the above map in the Lucerne Deposit area are summarized below, in order of increasing age as follows:

QB	Waste dumps and backfill from recent operators; Holocene.
КР	Kate Peak Formation – hornblende and pyroxene andesite flows – early to middle Miocene.
AI	Andesitic Intrusive - Biotite-hornblende andesite—middle Miocene; dikes and plugs of medium-grained, crystal-rich, biotite-hornblende andesite porphyry; pervasively hydrothermally altered. Mapped as "mica diorite" by Houlton and Ball (1914); assigned by Hudson et al. (2009) to the Flowery Peak suite or late in the Virginia City suite based on radiometric ages near Virginia City; known from drilling and mine exposures along the Silver City lode.
Tva	Alta Formation andesites, undivided—early Miocene; porphyritic hornblende- pyroxene and pyroxene- andesite.



QP	Quartz Porphyry Intrusive – rhyolitic intrusive in footwall and hanging wall of the Silver City Lode; has not been dated; however, cross-cutting relationships show this unit to be younger than the Silver City andesites.
Tsa	Silver City andesites - early Miocene; fine-grained porphyritic pyroxene- and pyroxene-hornblende andesite flows, autobreccia and debris-flow breccias; pervasively hydrothermally altered in most exposures.
SCT	Santiago Canyon Tuff - Oligocene; densely welded rhyolite ash-flow tuff with abundant pumice fiammé and conspicuous quartz phenocrysts; pervasively hydrothermally altered. >150ft thickness, base not exposed.
TG	Tertiary Gravels - Oligocene basal unit of Santiago Canyon Tuff, containing cobbles and gravels of older tuffs and granite which may have originated east of the district. Not well exposed.
GB	Granite - Cretaceous Quartz monzonite; exposed west of the Lucerne Deposit in American Ravine.
MV	Metavolcanics – Jurassic mafic metaigneous rock; predominantly metagabbro.

6.2.2 Gold Hill and Virginia City Geology

The Comstock fault zone is the dominant structural feature in Gold Hill and Virginia City. The associated mineralized lode was the site of the largest and most concentrated gold-silver deposits in the district. The zone is characterized by down-to-the-east normal faulting that dips at about 40 degrees. The mineralized zone between the well-defined footwall structure and the hanging wall is up to 900 feet wide in places, but the zone pinches and swells both along strike and down dip. The Davidson Diorite forms the main footwall unit at the surface with Sutro Tuff and Santiago Canyon Tuff cropping out locally. Rhyolitic intrusive units have also been mapped locally within the lode in Gold Hill and an upper Miocene hornblende andesite intrusive unit is present in the footwall and within the lode in Virginia City. Thick sequences of the Alta andesite unit are present in the hanging wall of the Comstock fault zone and extend to the Occidental-Brunswick Lode about one mile to the east (Figure 6.3).





Figure 6.4: Generalized Geologic Map of Gold Hill and Southern Virginia City (Hudson et al, 2009)

Stratigraphic units as shown in the map above in the Gold Hill and southern Virginia City area are summarized below, in order of increasing age as follows:


Qd	Dumps of unconsolidated mine waste; Holocene.
Qt	Talus – coarse, angular rocks fragments on steep slopes derived from adjacent bedrock units; Pleistocene to Holocene.
Qa1	Alluvium and colluvium - Quaternary; unconsolidated sand, gravel and weathered talus mainly in intermittent stream canyons.
Tdd/Tdap	Davidson Diorite – Upper Miocene. Subequigranular granitic rock (Tdd) most common in the footwall of the Comstock Lode; intrudes Virginia City volcanics and older rocks. Andesite porphyry phase (Tdap) borders exposures of Tdd; forms many dikes in the footwall of the Comstock Lode and may be present as chilled margins of Tdd.
Tva	Alta Formation andesites, undivided—early Miocene; porphyritic hornblende- pyroxene and pyroxene- andesite.
Tst	Santiago Canyon Tuff - Oligocene; densely welded rhyolite ash-flow tuff with abundant pumice fiammé and conspicuous quartz phenocrysts; pervasively hydrothermally altered.
Tsa	Silver City andesites—early Miocene; fine-grained porphyritic pyroxene- and pyroxene-hornblende andesite flows, autobreccia and debris-flow breccias; pervasively hydrothermally altered in most exposures.
Tbhap	Biotite-hornblende andesite—middle Miocene; dikes and plugs of medium-grained, crystal-rich, biotite- hornblende andesite porphyry; pervasively hydrothermally altered. Mapped as "mica diorite" by Houlton and Ball (1914); assigned by Hudson et al. (2009) to the Flowery Peak suite or late in the Virginia City suite based on radiometric ages near Virginia City; known from drilling and mine exposures along the Silver City lode as the "AI" intrusive unit (S. Russell, personal com., 2016).

6.2.3 Occidental-Brunswick Lode Geology

The Occidental-Brunswick Lode (Figure 6.2) is largely hosted in thick sequences of Alta andesite and andesites of the Flowery Peak magmatic suite. The Lode is generally characterized by a series of east dipping, sub-parallel, north- to northeast trending faults and mineralized calcite and quartz veins and veincemented breccias within the lode.

In the vicinity of the Art Wilson Claim Group, the southern portion of the Occidental-Brunswick Lode structural zone likely extends through the historic Cosmopolitan and Pride of the West mines. The area is characterized by a group of structurally related veins and fractures with variable but similar orientations and displacements. Some of the individual veins such as those extending through the Midas-Vivian and Buckeye claims sit in the footwall or hanging wall of what is considered the main part of the lode, respectively. For ease of discussion in this Technical Report Summary, MDA has included this group of related vein splays in our discussion of the southern "Occidental-Brunswick Lode." The group of splays appear to converge into a more defined lode north of the Art Wilson Claim group and south of the historic Occidental Mine (Figure 6.2). A few of these veins, such as those extending through the historic Succor, Holman, and Lager Beer mines, turn to the west and intersect the Silver City Lode at or near the Lucerne Pit. Figure 6.5 shows a geologic map of the group of veins forming the southern extension of the Occidental-Brunswick Lode in the area of the Art Wilson Claim Group based on Russell (1991 and 2009), Hudson et al. (2009), and Conibear (2012), with additional mapping by Mr. Weiss completed in May and June 2016.



/k EXPLANATION Qal Quaternary, unconsolidated Miocene; biotite hornblend andesite dikes Miocene; "hollow homblende" porphyritic andesite Miocene: "hollow hornblende" andesite breccia and laha Miocene: dense, phenocryst-rich andesite, Kate Peak Fm. Miocene; andesite breccia of Kate Peak Fm. Miocene; andesite and lahar of Kate Peak Fm Miocene; Alta Formation(?) dense andesite Miocene; Alta Formation(?) fragmental andesite Miocene; Alta Formation andesite, undivided Miocene; Sutro Tuff -- bedded sedimentary rocks and tuff. Miccene; Silver City andesite Oligocene; Santiago Canyon Tuff. Quartz Vein or Lode; dashed where approximate, dotted where concealed, infe Vein/lode, mainly calcite Geologic Map of the Ida Claims Area Silver City, Nevada Vein/lode, quartz and calcite S.I Weiss Aug 2016 NBMG 2009 Vein/

Figure 6.5: Geologic Map of the Art Wilson Claim Group

(Modified from Russell 1991 and 2009 and Hudson et al. 2009 with additional mapping by S. Weiss 2016.)

Stratigraphic units in the Art Wilson Claim Group area are summarized below, in order of increasing age as follows:



<u>Qal</u>	Alluvium and colluvium—Quaternary; unconsolidated sand, gravel and weathered talus mainly in intermittent stream canyons.
<u>Tbhap</u>	Biotite-hornblende andesite—middle Miocene; dikes and plugs of medium-grained, crystal-rich, biotite-hornblende andesite porphyry; pervasively hydrothermally altered. Mapped as "mica diorite" by Houlton and Ball (1914); assigned by Hudson et al. (2009) to the Flowery Peak suite or late in the Virginia City suite based on radiometric ages near Virginia City; known from drilling and mine exposures along the Silver City lode as the "AI" intrusive unit (S. Russell, personal com., 2016).
<u>Thpap</u>	"Hollow hornblende" andesite—middle(?) Miocene; porphyritic hornblende andesite with abundant large (0.5-1.5in length) hornblende phenocrysts, some of which have "hollow" cores of aphanitic groundmass. Flow-aligned phenocrysts are set in a dense, aphanitic matrix; locally hydrothermally altered. Considered to form dikes and plugs late in the Virginia City suite by Hudson et al. (2009), but map pattern and association with unit Thax suggest possible flow sequence, inferred to be within the Silver City suite by Russell (2009).
<u>Thax</u>	Hornblende andesite autobreccia and lahars—middle(?) Miocene; breccia and lahars containing porphyritic hornblende andesite; hornblende phenocrysts commonly \geq 0.5in in length, some with distinctive "hollow" cores; pervasive weak alteration. >250ft thickness, base not exposed. Exposures south and east of the Ida mine included in Kate Peak Formation by Hudson et al. (2009), but large abundant hornblende and mapped distribution suggests a close association with unit Thpap. Considered possibly part of the Silver City andesite by S. Russell.
<u>Tvkl</u>	Kate Peak Formation andesite lahars—early Miocene; recessive, little or no exposure due to cover by weathered talus and colluvium.
<u>Tvka</u>	Kate Peak Formation andesite—early Miocene; medium-grained, porphyritic pyroxene andesite flow sequence east and south of State Highway 341; unaltered; >300ft thickness, base not exposed. Contains intercalated thin unit of andesitic lahars (map unit Tvkl) obscured by weathered talus and colluvium.
<u>Tac</u>	"Caprock" andesite—early Miocene; medium-grained, crystal-rich, porphyritic pyroxene andesite flow with aphanitic dense matrix; strongly magnetic where unaltered. ~50-100ft thickness. Assigned by Hudson et al. (2009) to the Kate Peak Formation but considered part of the Alta Formation by Russell (2009) because identical unit within the Alta Formation caps the hill northwest of the Succor mine.
<u>Taf</u>	"Fragmental" andesite—early Miocene; medium-grained, porphyritic, pyroxene±hornblende andesite autobreccia; top defined by local, ~25ft thick sequence of andesite tuff and cross-bedded sandstone; pervasively hydrothermally altered. Assigned by Hudson et al. (2009) to the Kate Peak Formation but considered part of the Alta Formation by Russell (2009). >300ft thickness, base not exposed.
<u>Ta</u>	Alta Formation andesites, undivided—early Miocene; porphyritic hornblende- pyroxene and pyroxene-andesite. > 200ft thickness, top not exposed.
<u>Ts</u>	Sutro Tuff—early Miocene; bedded volcanic sedimentary rocks and tuff; includes shale, sandstone, conglomerate and tuff; comprises important marker unit north of the Badger mine. \leq 50ft thickness.
<u>Tsa</u>	Silver City andesites—early Miocene; fine-grained porphyritic pyroxene- and pyroxene-hornblende andesite flows, autobreccia and debris-flow breccias; pervasively hydrothermally altered in most exposures. >300ft thickness, base not exposed.
<u>Tst</u>	Tuff of Santiago Canyon—Oligocene; densely welded rhyolite ash-flow tuff with abundant pumice fiammé and conspicuous quartz phenocrysts; pervasively hydrothermally altered. >150ft thickness, base not exposed.

6.3 Mineralization



Gold-silver mineralization in the Virginia City and Silver City districts has been found within quartz \pm adularia and calcite-bearing veins, sheeted veins and stockworks, and quartz \pm calcite-cemented breccia within faults, all of which are commonly referred to as "lodes." The Silver City Lode, which contains the Lucerne Deposit estimated gold and silver resources that are the focus of this report (see Section 11.0 on Mineral Resources), similarly pinches and swells along strike and down dip, but is typically narrower than the Comstock Lode (Figure 6.1a).

In many locations the lodes have distinct, planar fault surfaces associated with the hanging wall, footwall, or internal gouge zones, indicating that post-mineralization fault displacement occurred. Some veins and lodes consist of gouge with only minor amounts of crushed and broken quartz vein material at the surface but transition to quartz-cemented breccia or fissures at depth. Ore minerals within the Silver City Lode, where unoxidized, are reported to be pyrite, gold, electrum, native silver, occasional argentite and sparse chalcopyrite, with total sulfide content of only 1% to 2% (Gianella, 1936). In contrast, the bonanza ores of the Comstock and other lodes in the district locally contained larger percentages of pyrite, sphalerite, galena, and chalcopyrite. Previous workers agree that ore shoots and the best grades were commonly found at vein intersections and sharp flexures of the veins. The vein styles and ore and gangue mineralogy are typical of the low- to intermediate-sulfidation classes of epithermal precious metals deposits.

The Silver City andesite and Alta andesite units have long been considered the best host rocks for mineralization in the Comstock District (e.g., Ball, 1914). Despite this, ores have also been found in veins hosted in older Tertiary rocks such as the Oligocene-Miocene ash flow tuffs and a number of Miocene intrusives. According to Castor et al. (2005), age dates derived from adularia from the Comstock and Silver City lodes are nearly indistinguishable at 14.1 Ma and within the range of analytical error. The Occidental-Brunswick Lode is distinctly younger with age dates from adularia yielding approximately 13.4 Ma. These age dates suggest that the epithermal mineralization found along the Comstock and Silver City lodes was emplaced near the end of, or soon after, volcanism and magmatic activity of the Flowery Peak suite, which occurred north of the property.

6.3.1 Lucerne Deposit Mineralization

As described by Ball (1914) and others, the veins of the Silver City Lode and other proximal veins vary from simple fissure veins to swarms of subparallel veins, including sheeted veins and vein stockworks, all with or without structural gouge. Unlike the Comstock Lode and other Virginia City veins, where quartz is the major gangue mineral, the majority of the Silver City Lode and associated veins can vary laterally and down dip from entirely quartz to combinations of quartz and calcite to dominantly calcite. Adularia commonly occurs as inter-growths within quartz, as bands or selvages along quartz vein margins, or as fracture linings in altered wallrock.

The Silver City Lode, composed of multiple veins, breccias, and stockwork, is reported to range up to 250ft wide (Hudson et al., 2009), although most individual veins along the Lode are much narrower, measuring less than 30ft wide, and commonly on the order of 5 to 15ft wide. Most veins are anastomosing, with numerous splays and intersections.

Silver-to-gold ratios in the Silver City deposits are much lower than those of the Virginia City district, and it is generally documented (e.g., Gianella, 1936) that gold provided most of the economic value of Silver City Lode production. The primary ore minerals in this part of the district are electrum and acanthite.



Along the Silver City Lode, oxidation extends to greater depths along the veins and mineralized zones as opposed to the surrounding wall rock. This is likely due to oxygenated surficial waters percolating through the more fractured ground interior to the Lode.

In the Lucerne Deposit, the Silver City Lode dips east at 35° to 50°. The lode extends in a continuous zone approximately 5,400 feet along strike and to depths greater than 800 feet down-dip. Precious metal mineralization typically occurs within quartz and quartz-calcite filled fractures, hydrothermal breccias, and stockwork veinlets with associated clays and oxides of iron and manganese. Cockscomb- and sugary-textured quartz veins are also good indicators of favorable grades. Mineralization is dominantly hosted in the Silver City andesites and to a lesser degree within hypabyssal quartz porphyry and intermediate composition intrusives.

The Silver City Lode is structurally controlled with mineralization developed most strongly on the footwall fault as compared to the hanging wall structures. Several sets of east-west to northeast-striking faults form intersections with the main Silver City Lode in the Lucerne Deposit. These intersections can exhibit localized zones of strong mineralization with silver-to-gold ratios of approximately 5:1 or less.

Along the length of the lode, zones of mineralization can be broken into several distinct areas controlled by the structural setting and host lithology (Figure 6.6). They are described from north to south:

- **Keystone-Justice area**: In general, mineralization occurs within narrow zones along the footwall fault ranging from about 5ft to 20ft wide and extending to depths of 800 feet. In the southern part of the Justice, mineralization is hosted predominantly in the Silver City andesites, while in the northern part of the Justice and in the Keystone area, mineralization is typically confined to a narrow, strongly silicified zone occurring along the footwall fault within the Santiago Canyon Tuff. Additional weakly mineralized stockwork veining in this area occurs in the hanging wall and is hosted within the Silver City andesites. This part of the lode is generally less oxidized and contains up to 2-3% pyrite adjacent to the vein margins.
- **Woodville area**: The Woodville area is defined by a group of northeast-trending faults that dip to the southeast at about 40°. These structures are situated between the main Silver City Lode footwall and the "East Wall" fault which in this area are separated by 400 feet or more. It is unclear if mineralization is continuous along these structures or if it is constrained to discrete, locally developed zones. As evidenced by the historic Woodville Bonanza stopes, mineralization appears to be stronger below 200 feet and extends to depths of 600 feet or more. Mineralization is hosted predominantly within the Silver City andesites, with secondary zones developed along the margins of the intermediate composition intrusive. Mineralization is associated with oxidized quartz veins, breccias, and stockworks with minor calcite veins. Similar to the northern Justice area, up to 2-3% pyrite can be found fringing veins in the Woodville area. Bastian (1922) reported that the Woodville and adjacent Alta mines contained high-grade sulfide ore on the 1,200-foot level.





Figure 6.6: Map of Notable Veins in the Lucerne Deposit

• Main Lucerne and PQ areas: South of the Woodville area and within the northern portion of the Lucerne pit, a distinct zone of mineralization is hosted dominantly within the quartz porphyry intrusive or "PQ" unit (Figure 6.3). The PQ area represents the widest zone of continuous mineralization within the Lucerne Deposit with widths up to 150 feet. The PQ area extends for approximately 500 feet along strike and more than 350 feet down-dip along the main footwall,



ultimately pinching down to less than 30 feet wide below this depth. The intensity of mineralization is variable throughout the PQ zone, but higher grades tend to be associated with highly oxidized and brecciated quartz veins that are likely related to narrow, high-angle structures confined to the PQ rock unit. To the south, this style of mineralization diminishes in the area where the Succor vein intersects the Silver City Lode.

- **Succor vein**: The Succor vein is hosted entirely in the Silver City andesites along a narrow fault that dips as steeply as 65° to the south. The mineralized vein is typically 5 feet to 15 feet in width and extends down-dip for about 800 feet. Mineralization is predominantly related to oxidized clays, stockwork quartz veins, and quartz-vein-breccia zones with varied amounts of very fine-grained quartz infill. The intersection of the Succor vein and the Silver City Lode is an area of strong mineralization as evidenced by CMI's drilling and historic stoping (Becker, 1882).
- Southern Lucerne area: South of the Succor vein, the Silver City Lode branches into a group of two or more mineralized fault systems. Overall, the mineralized zone along the main footwall fault is wider (up to 50 feet) and more strongly developed than the "East Zone." The notable exception is where the northern-most portion of the East Zone intersects the Succor vein. The Silver City andesites are the dominant host of mineralization. However, mineralization also occurs along the margin of the intermediate-composition intrusive in the area of the East Zone. In general, mineralization is associated with highly oxidized clays, quartz-calcite breccia zones, stockwork veins, and especially in zones of quartz replacement of calcite.

To the south of the Southern Lucerne area, the footwall portion of the Silver City Lode crosses an eastwest-trending set of faults and narrows to about 10 feet in width. Mineralization in this area is within highly silicified Santiago Canyon Tuff.





Figure 6.7: Cross-Section through the Main Lucerne Pit and PQ Areas (from CMI; looking northwest)

Note: view looking north, fault labeled "Silver City Fault" is the footwall fault of the Silver City Lode, while the "East Wall" is the hanging wall fault. Elevations at 100-foot intervals for scale, no vertical exaggeration. AA- Silver City andesite (this designation was commonly used prior to adopting the naming scheme in Hudson et al., PQ - Quartz porphyry intrusive, MV- Jurassic mafic metaigneous unit, QB - backfill material, HG - modeled 'high-grade' material.

6.3.2 Gold Hill Mineralization

The Gold Hill portion of the Comstock Lode extends for approximately 5,000 feet from the historic Bullion Mine on the north to the Caledonia Mine on the south and includes some of the district's greatest historical producing mines (Figure 5.1)

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The majority of the lode's near-surface mineralization is located along the east wall of the lode, which has a vertical to west dipping orientation. At depths of 300 feet to 700 feet below the surface, the lode transitions into an eastward dip. Below that level, the lode dips eastward at 40-45 degrees. That dip extends to the deepest explored levels. The wide upper portion of the lode contains a group of west-dipping veins that extend along strike through most of the mines and typically terminate against the footwall structure at depths of 300 feet to 500 feet. Most of the early production came from this moderately- to steeply west-dipping set of mineralized veins. Historic mining widths varied from approximately 5 feet to as much as 50 feet, with the Crown Point-Belcher bonanza being the exception with mined widths of up to 70 feet between the 900 and 1600 levels.

In the Gold Hill area, the lode is dominantly hosted in the Alta andesite unit of the Virginia City Magmatic Suite and Sutro Tuff. The Silver City andesites and rhyolitic rocks of the Santiago Canyon Tuff locally host mineralization in the southern end of lode. The andesite and tuff units found in the hanging wall have been tilted gently to the west. In the northern end of the Gold Hill section of the lode, the footwall block is dominated by the extensive Davidson Diorite intrusive. To the south, the diorite becomes less extensive and Mesozoic metasediments and metavolcanics dominate the footwall block. (Figure 6.8).



Figure 6.8: Geologic Cross Section Through Gold Hill and the Comstock Lode

Note: View looking N20W, VC Andesites – Alta andesite of the Virginia City Magmatic Suite, Sutro Seds – tuffs and sediments of the Sutro Tuff, SC Tuff – Santiago Canyon Tuff. Elevations at 500-foot intervals for scale, no vertical exaggeration.

The dominant gangue mineral in this part of the lode is quartz, occurring in a variety of textures and as microcrystalline quartz/chalcedony and silicification. Calcite and clays are less common but still important gangue minerals, along with pyrite, iron and manganese oxides, and minor secondary sulfates (primarily gypsum). Where exposed in the Consolidated Imperial and Overman pits, the lode is characterized by quartz-cemented breccias, quartz stockworks, and rare massive quartz veins. Post-mineral movement has



further brecciated, crushed, and even pulverized parts of the lode. The hanging wall structure in most of the mines is marked by a distinctive zone of clay gouge up to 10 feet thick.

The primary ore minerals in the Gold Hill mines are electrum and acanthite, the former typically associated with coarse-grained pyrite. Acanthite tends to occur as discreet grains and thin seams within zones of strongly mineralized material. Mines in the Gold Hill area contained a higher silver-to-gold ratio in comparison to the mines of the Lucerne Deposit, and a lower ratio when compared to the mines of Virginia City. Similar to the Lucerne area, the depth and extent of oxidation is highly variable and dependent on the degree of fracturing and structural preparation. The lode is characterized by a mixed oxide and sulfide mineral assemblage to depths of about 800 feet.

6.3.3 Central Comstock Lode Geometry and Mineralization

The Tonogold property includes a portion of the Comstock Lode that directly underlies the southern part of Virginia City and is here termed the "middle Comstock Lode." Four historic bonanza mines exploited the middle Comstock Lode—the Chollar-Potosi, Hale & Norcross, Savage, and Gould & Curry (Figure 5.1). The robust production history of these mines is summarized in Section 5.2 of this report.

The Comstock Lode in this part of the district strikes north-northeast and has an overall dip of about 40° to 45° to the east-southeast. Lode widths are noteworthy, varying from about 300 feet to as much as 600 feet in the near-surface environment. Intrusive rocks of the Davidson Diorite form the footwall both at the surface and at depth. Alta Andesite belonging to the Virginia City Magmatic Suite form the bulk of the hanging wall.

The broad upper part of the lode is characterized by large masses of quartz occurring along the footwall, most of which were only weakly mineralized. Significant underground production in all of the mines came from the area in and around the hanging wall contact and exploited a more or less continuous zone of mineralization some 2,500 feet in length along strike with widths averaging 40 feet. Historic mine maps such as those of Becker (1882) suggest that mineralization along the hanging wall occupies a complex zone of west-dipping to near vertical faults and fractures extending to about the 500 foot level in each of the mines. Below that depth, both walls of the lode converge and thereafter assume an east dip. Most of the production from the Gould & Curry and the Chollar-Potosi came from above the 500 foot level within the system of steeply-dipping hanging wall structures. The Hale & Norcross and the Savage mines also had production from the hanging wall zone as well as from a deeper zone of mineralization extending from the 600 foot to the 1,600 foot level.

The middle Comstock Lode is exposed in two historical open pits. The Loring Pit, which is the larger of the two pits, was developed on Chollar-Potosi ground immediately adjacent to Highway 342. A smaller pit is located about 2,000 feet to the northeast on the historic Gould & Curry Mine (Figure 5.1). Each pit affords a good general cross section through the lode, including small, exposed segments of the highly productive hanging wall zone. In both pits, the area of footwall quartz is separated from the hanging wall zone by a belt of intense argillic alteration, silicification, and stockwork veining hosted in andesites and/or diorite. The hanging wall zone in the Loring Pit is not particularly distinct from the neighboring highly altered rocks but is marked by evidence of historic mining (mine timbers, rails, and backfilled tunnels). This is not the case with the Gould & Curry Pit, where the hanging wall zone is more easily distinguished based on texture and mineralogy. Evidence of post mineral movement within the lode is evident in both pits, particularly near the hanging wall.



Throughout the two pits, quartz is the dominant gangue constituent along with lesser amounts of clays, iron and manganese oxides, and calcite. Historically, pyrite was an important accessory mineral, but it is not prevalent in surface exposures due to recent oxidation. Electrum and acanthite were the principal ore minerals in mines of the middle Comstock Lode, with higher silver to gold ratios in comparison to the mines of Gold Hill and the Lucerne Deposit. Deeper mineralization from within the Hale & Norcross and Savage mines contained abundant base metals, and it is probable that ancillary copper and lead production came from the deep stopes in these two mines.

6.3.4 Occidental-Brunswick Lode Mineralization

Gold and silver mineralization within the Occidental-Brunswick Lode is associated with quartz and calcite veins that are similar to the mineralized veins found in and surrounding the Silver City Lode. Veins of the Occidental-Brunswick Lode vary in width from a foot or less to as much as 15 feet wide, with localized areas extending up to 30 feet wide. Most veins are comprised of a variety of quartz textures including finely banded, fine- to medium-grained comb quartz, commonly with cockade textures and druse-lined open cavities between altered rock fragments in fault-bounded breccias. In general, calcite is more common along the Occidental-Brunswick Lode than in other lodes found in the district. The distribution of calcite in portions of the lode appears to be the result of vertical zonation. This is evident in the area of the Occidental Mine where abundant calcite occurs within a vertical horizon extending over approximately 300 feet of elevation (Hudson, 2003). Iron oxides are present in and surrounding the veins in variable quantities, with the strongest concentrations associated with quartz veins, quartz stockworks, and silicification. The portion of the Occidental-Brunswick Lode controlled by Tonogold dips moderately to the east-southeast at 35 to 40 degrees. Although propylitic alteration is wide-spread throughout the district, Argillic alteration is present in localized areas along the Occidental-Brunswick Lode, particularly in the vicinity of the Occidental and Brunswick mines and may extend up to 300 feet from the veins and lodes.

6.4 Deposit Types

Gold-silver vein mineralization mined historically in the project area is best assigned to the low- and intermediate-sulfidation classes of epithermal precious metal deposits. This is based on the banded and crustiform textures of the gangue minerals quartz and calcite, the presence of adularia, and the variably low to moderate silver and base-metal contents of the veins. The lack of appreciable base-metal production and lower silver production in the Lucerne area of the Silver City Lode is clearly distinct from the Virginia City district where the Comstock Lode is now considered an intermediate-sulfidation type of silver-gold epithermal vein deposit (John, 2001; Sillitoe and Hedenquest, 2003). These differences may be due to a different depth of exposure, spatial-temporal evolution of the hydrothermal fluids, and/or slightly different fluid and metal sources or hydrothermal events compared to the Comstock Lode. Perhaps mining to date in the Silver City district has not been deep enough to encounter the intermediate-sulfidation mineralization mined at Virginia City.



7.0 EXPLORATION

Tonogold has not done any exploration in the Lucerne Deposit. However, Tonogold did conduct exploration drilling from September 2020 through June 2021 at two exploration target areas on the Gold Hill section of the Comstock Lode and on the southern portion of the Occidental-Brunswick Lode in the Art Wilson Claim Group. Since the vast majority of drilling was done by previous operators, MDA determined it is relevant to list and describe that drilling. Section 7.0 describes historical drilling at Lucerne while Section 7.2 presents the hole locations and results of Tonogold drill campaigns at their exploration targets in Gold Hill and Art Wilson Claim Group.

7.1 Historical Drilling – Lucerne Deposit

Historical operators working from the 1960s through 2016 completed all the drilling summarized in this section. Tonogold has no information for any drilling prior to the 1960s. The information presented in this section derives from multiple sources, as cited. MDA has reviewed this information and believe this summary accurately represents drilling done at the Lucerne Deposit.

The summary presented in Table 7.1 is based on data compiled by CMI for the Lucerne Deposit. CMI made this data available to MDA in 2018. MDA audited, in some cases corrected, and recompiled this information. Due to the extensive history of the district, other drilling may have been completed in the Lucerne Deposit area but MDA has no records of them if there are any. Available records show 1,874 drill holes and 477,729 feet drilled in the general Lucerne Deposit area from 1961 through the end of 2016. Table 7.1 summarizes the historical drilling.

	Lubic /// Summing of Eucorne Deposit Driming											
Year	ear Company		Core Feet	RC Holes	RC Feet	Air Track Holes	Air Track Feet	Total Holes	Total Feet			
1961	Consolidated Eldorado Mining	29	2,569					29	2,569			
1977 - 1980	НОМ	1	13*	47	1,980	76	6,536	124	8,529			
1980	Jacqueline Gold			12	1,890			12	1,890			
1988	1988 DWC			14	373			14	373			
1990	1990 Double King			10	2,720			10	2,720			
1991 - 1992	BMR	1	260*	208	31,101			209	31,361			
1993 - 1994	Rea Gold			20	4,910			20	4,910			
1997	BMR			12	2,255			12	2,255			
1998	Plum Mining			12	1,750			12	1,750			
2003	Comstock Gold	10	661					10	661			
2004 - 2009	GoldSpring	271	112,900					271	112,900			
2010 - 2016	CMI	95	23,038	730	261,189	326	23,584	1,151	307,811			
Tota	Total Drilling		139,441	1,083	308,168	402	30,120	1,874	477,729			
*Uncertain drill ty	pe, probably RC											

Table 7.1: Summary of Lucerne Deposit Drilling

Most of the historical drilling was done with RC methods, accounting for 57% of the holes and 65% of the feet drilled. Diamond-core drilling was used for 22% of the holes and 29% of the feet drilled. Shallow



air-track drilling accounts for the balance, about 22% of the holes drilled, but only 6% of the footage. Further information about the historical drilling is summarized by operator in the sub-sections below. MDA applied confidence/reliability codes to each drill campaign, and in some cases individual drill holes. These 'confidence codes' were used for modifying classification of the Lucerne Deposit resources. Section 11.0 details the results and interprets the sample integrity of the available drilling data and discusses the use of that information in resource classification.









7.1.1 1961 Eldorado Consolidated

In 1961, Eldorado Consolidated Mining Company ("Eldorado") drilled 29 underground core holes for a total of 2,569 feet. Eldorado drilled their holes from the Keystone mine workings, having accessed them via the New York shaft. These holes are known only from historical maps. No other information is available. MDA does not consider the Eldorado data reliable. These data were not used the estimate.

7.1.2 1977-1980 Houston Oil and Minerals (HOM)

From 1977 through 1980, HOM drilled a total of 8,529 feet in 124 holes. All were vertical and the majority were shallow holes drilled with an air-track rig in the Hartford and Lucerne mine areas. This included 20 RC holes (630 feet of total drilling) drilled in 1979 in the Lucerne Mine waste dump. MDA has no information about HOM's drilling contractors, specific rig types, sample collection methods, or collar and down-hole surveys.

7.1.3 1980 Jacqueline Gold

A total of 1,890 feet were drilled in 1980 by Jacqueline Gold in 12 vertical RC holes located in the Lucerne Deposit. MDA has no information about Jacqueline Gold's drilling contractor, specific rig type, or sample collection methods. Anecdotal evidence suggests that a registered professional surveyor located the collars. Jacqueline Gold performed no down-hole surveys.

7.1.4 1988 DWC

In 1988, DWC drilled 373 feet in 13 shallow vertical RC holes at the Keystone mine. The collar locations were surveyed by a registered professional land surveyor, but MDA has no information about DWC's the drilling contractor, specific rig type, and sample collection methods.

7.1.5 1990 Double King

Double King drilled 2,720 feet in 10 vertical RC holes in the Lucerne Deposit area in 1990. MDA has obtained no information on Double King's drilling contractor, specific rig type, or sample collection methods. Anecdotal evidence tells that a registered professional surveyor located the drill collars. Double King performed no down-hole surveys.

7.1.6 1991-1992 BMR

During 1991, BMR drilled 24,536 feet in 171 RC holes and 260 feet in one core hole, all in the Lucerne Deposit. Of these, 46 holes were inclined. The remainder were vertical. Becker Drilling was the drilling contractor for the RC holes. Drift Exploration Drilling ("Drift") drilled the one core hole. BMR drilled another 6,565 feet in 37 RC holes at the Lucerne Deposit area in 1992. Fifteen of these were vertical, and 22 were inclined. Drift was the contractor for the 1992 drilling. MDA has obtained no information on the specific rig types or sample collection methods used by BMR. Anecdotal evidence suggests a registered professional surveyor located the collars. BMR did not conduct any down-hole surveys.



7.1.7 1993-1994 Rea Gold

Rea Gold drilled a total of 4,910 feet in 20 RC holes in the Lucerne Deposit area in 1993 and 1994. Seven holes were inclined, and the rest were vertical. Drift was the drilling contractor, but MDA has no information on the specific rig type or sample collection methods used. A registered professional surveyor located the drill collars. Rea Gold did not perform any down-hole surveys.

7.1.8 1997 BMR

In 1997, BMR drilled 2,255 feet in 12 RC holes at the Lucerne Deposit area—nine vertical and three inclined. Drift was the drilling contractor, but MDA has no information on the specific rig type or sample collection methods used. Anecdotal evidence suggests that a registered professional surveyor located the collars. BMR did not conduct any down-hole surveys.

7.1.9 1998 Plum Mining

Plum Mining drilled a total of 1,750 feet in 11 vertical and one inclined RC holes at the Billie the Kid mine in 1998. Drift was the drilling contractor, but MDA has no information on the specific rig type or sample collection methods used. A registered professional surveyor located the collars. Plum did not perform any down-hole surveys.

7.1.10 2003 Comstock Gold

During 2003, Comstock Gold drilled a total of 661 feet in 10 shallow core holes on the historic Justice Mine. Seven of these were inclined, and three were vertical. The drilling contractor was Leroy Kay Core Drilling of Yerington, Nevada. They used a truck-mounted Joy core rig. Drill core was placed into corrugated, waxed, cardboard core boxes with wooden blocks marking the depth. At the time of drilling, a Comstock Gold geologist collected and sawed half-core samples from obvious mineralized zones. In 2012, CMI re-logged, photographed, and sampled the core. All remaining cores that had not been previously tested were sawn in half for assay samples and submitted on 5-foot intervals. At the time of drilling, a registered professional surveyor located the drill collars. Comstock Gold did not conduct downhole surveys.

7.1.11 2004-2009 GoldSpring

GoldSpring conducted extensive RC drilling from 2004 to 2009. In total, GoldSpring drilled 271 holes and 112,900 feet. During 2004 and 2005, GoldSpring drilled 95 holes in the Olympia, Billie the Kid, Hartford, and Lucerne mines. Of these, 78 were inclined. Drift was the drilling contractor in 2004 and 2005, but MDA has no information on the specific rig type or sample collection methods employed. A registered professional surveyor located the collars. GoldSpring did not conduct down-hole surveys.

In 2007, three vertical and three inclined RC holes were drilled at the Lucerne Mine. Telesto Nevada performed the collar surveys. Drift was the drilling contractor, but MDA possess no information on the specific rig type or sample collection methods used. Down-hole surveys were not performed.

GoldSpring drilled 145 RC holes in 2008. One hole was drilled at the Keystone Mine, and the remaining 144 at the Lucerne and Woodville mine areas. Ninety-seven holes were inclined. The 2008 drilling was



conducted partly by DeLong Drilling of Winnemucca, Nevada ("DeLong") and partly by Drift. Collar locations were surveyed in part by GoldSpring personnel and in part by Telesto Nevada. MDA has no information on the specific rig type or sample collection methods employed. International Directional Services LLC of Elko, Nevada used a truck-mounted, surface-recording gyroscopic system to conduct down-hole surveys on 12 holes for direction and deviation.

During 2009, GoldSpring drilled 22 RC holes at the Lucerne and Hartford mine areas and three RC holes at the Keystone Mine. Eighteen holes were inclined. The 2009 drilling was done partly by DeLong and partly by Drift. GoldSpring personnel surveyed the collar locations. MDA has no information about the specific rig type or sample collection methods utilized. International Directional Services LLC of Elko, Nevada used a truck-mounted, surface-recording gyroscopic system to conduct down-hole surveys for direction and deviation on two holes in the Keystone Mine and 10 holes in the Lucerne and Hartford mine areas.

7.1.12 2010-2016 Comstock Mining Inc.

From 2010 through 2016, CMI drilled a total of 306,631 feet in 1,150 RC, air-track, and core holes in the Lucerne Deposit (Table 7.1).

During 2011 and 2012, CMI drilled 707 RC and 46 core holes focused on the Lucerne, Hartford, Justice, and Keystone mine areas and on the Billie the Kid Mine and waste dumps (aka Olympia dumps, located along the southwest margin of the Lucerne Pit). Two RC holes were drilled at the American Flats plant site. Nineteen of the core holes in this period were inclined and 381 of the RC holes were inclined. DeLong conducted part of this drilling, and K B Drilling Company ("K B") of Mound House, Nevada conducted the other part. Tri State Surveying Ltd. of Sparks, Nevada surveyed the collar locations.

According to Kantor et al. (2013), DeLong utilized a Schramm 685 truck-mounted drill and MPD-1000 and MPD-1500 track-mounted drills for their 2012 RC drilling. Hole diameters varied from 5.125 inches to 5.75 inches. Water, drilling mud, and hole conditioners were injected during the RC drilling to suppress dust and maintain the integrity of the holes. DeLong set surface casing to stop the collars collapsing and cased all the holes drilled through loose material in mine dumps or mine fills until intersecting competent rock. DeLong advanced all RC holes with hammer bits, except when they encountered adverse ground conditions, through which they used tri-cone bits. RC hole samples were collected via a 'wet splitter' at the rig by the drill crews. The drilling done by K B recovered HQ, HQ3, and PQ diameter core (Kantor et al., 2013). International Directional Services LLC of Elko, Nevada used a truck-mounted, surface-recording gyroscopic system to conduct down-hole surveys for direction and deviation of 111 holes.

CMI geologists logged the RC drill holes using small, washed, representative chip samples from each 5foot interval (Kantor et al., 2013). The geologists stored the samples in plastic chip trays marked with hole numbers and drill intervals, recorded the logging information on paper forms, and entered the data into electronic spreadsheets.

CMI stored drill core in corrugated, waxed, cardboard core boxes with wood depth indicators and logged geologic information from the drill core along with rock quality, point load tests, and recoveries (Kantor et al., 2013). CMI photographed the core after logging. Intervals chosen for sampling were then sawed in half for assay samples, unless it was to be used for metallurgical purposes.



In 2013 and 2014, CMI did nearly all of their exploration drilling with an air-track drill. CMI drilled 326 vertical air-track holes and 22 vertical RC holes in this period, focused on the Lucerne, Hartford, Justice, Keystone, Billie the Kid, "St. Louis ramp", and Woodville mines, and along the Succor vein located to the east of the Lucerne Pit. The 2013-2014 drilling contractors were California Drilling & Blasting Co. of Pasadena, California and Cal-Nevada Precision Blasting, Inc. of Carson City, Nevada. CMI geologists collected samples on 10-foot intervals by quartering chips collected on a rubber mat at the drill hole collar, then logged the chips for geologic information. CMI's onsite surveyor located the drill collars. Down-hole surveys were not performed for these air-track holes.

CMI drilled 49 inclined underground core holes in 2015 and 2016 in the Lucerne Mine area. The drills accessed their bays via the Harris Portal. American Drilling Corp. ("ADC") was the drilling contractor. ADC utilized a Diamec U8-04 or UG-02 rig. HQ3 drill core was placed into corrugated, waxed, cardboard core boxes with wood depth indicators. Geologic information along with rock quality and recoveries were logged from drill core. After logging, the core was photographed and intervals to be sampled were sawed in half for assay samples. CMI personnel surveyed the collar locations. ADC conducted down-hole surveys of all holes.

7.1.13 Historical Drilling Summary Statement

MDA believes that the drill-sampling procedures utilized by CMI provided samples that are representative and of sufficient quality for use in the resource estimations discussed in Section 11.0, subject to the limitations described in Section 9.1.3, and Section 11.8. For drilling conducted prior to 2010, MDA does not have sufficient information on the drilling and sampling methods and procedures to assess the representativeness and quality of the drilling samples. As summarized in Section 11.8, due to this lack of information, the author's assigned lower confidence to the pre-2010 drill data during domain modeling and resource estimation. Other than the issues described above, MDA is aware of no sampling or recovery problems that materially impact the mineral resources discussed in Section 11.0.

7.2 Gold Hill and Occidental-Brunswick Lode Drilling

7.2.1 2020-2021 Tonogold Exploration Drilling

Tonogold conducted exploration drilling at Gold Hill and on the southern portion of the Occidental-Brunswick Lode in the Art Wilson Claim Group from September 2020 through June 2021. Along the Gold Hill section of the Comstock Lode, Tonogold drilling focused on intermediate to deep targets at several of the historic mines where research indicated that 19th century miners left mineralized material in place that was below their cutoff grades. (The high per-ton costs of 19th century mining, transportation, and processing kept 19th century cutoff grades much higher than modern underground cutoff grades). Tonogold's drilling on the southern Occidental-Brunswick Lode expanded on 2018 drilling done by Art Wilson on his claims and targeted several near-surface mineralized structures within and adjacent to the historic Pride of the West Mine. Tonogold completed a total of 20 holes and 18,913 feet of drilling using a combination of core and RC drilling methods to investigate the nature and extent of mineralization at the two target areas (Table 7.2). DrillRite of Elko, Nevada conducted both the RC and core drilling.



Figure 7.2 shows the location of the current exploration targets, including holes drilled by Tonogold in 2020-2021 and those drilled by Art Wilson in 2018. Figure 7.3 and Figure 7.4 show collar locations for each target area.

1 auto 7.2. 2	020-2021 Taiget Are	as - Di ming
Area	Drilling Method	Total Feet
Art Wilson Claims	Core	370
Art Wilson Claims	RC	800
Gold Hill	Core	2,746
Gold Hill	RC	9,440
Gold Hill	RC Pre-Collar with Core Tail	5,557
	Total	18,913

Figure 7.2: 2020-2021 Exploration Target Area Locations





DrillRite conducted the RC drilling with an Ingersoll Rand RD-10 truck-mounted drill rig that utilized 20foot drill rods. Hole diameters ranged from 5.25 inches to 5.75 inches for the standard RC holes and 6.0 inches to 6.25 inches for RC pre-collars. DrillRite advanced most holes using a down-the-hole conventional hammer with an interchange. Where they encountered significant ground water, they switched to a tricone bit. Early in the program, DrillRite attempted to drill with a center-return hammer, but the fractured and rubbly nature of the ground and the presence of substantial clay seams precluded its effective use.

For core drilling, DrillRite employed an Atlas Copco CT14 truck-mounted rig. The majority of core recovered during the program was HQ diameter. When the deeper core holes encountered difficult ground conditions (at depths generally greater than 1,600 ft), DrillRite reduced the holes to NQ diameter for the remainder of their length.



Virginia City TC-015 and 016 TC-01 and 01 TC-013 Gold Hill O TC-004-D1 O TC-002D and 005 TC-009 and 010 O TC-003-D1 O 2020-2021 Drill Collars 2020-2021 Angle Hole Trace TC-001D N Principal Lode Notable Vein TC-001 and 002 Property Boundary _ Counties 0.13 0.25 0.5 Miles Roads









All RC drilling was completed wet, either as a result of injecting water and drilling fluids into the hole or due to the presence of groundwater. DrillRite personnel collected samples on five-foot intervals utilizing a rotary wet splitter. They collected two samples per interval using the wet splitter for the standard RC holes and a single sample per interval for the RC pre-collar portion of the holes. Tonogold geologists then

1,000 Feet

250

500



collected a small, representative geologic sample for each interval and washed and stored them in plastic chip trays with hole number, depth, and sample number. They logged and recorded geologic data on tablets that entered the data directly into GeoSequel® drill-database software.

Recovered drill core was placed in core boxes with depths marked on inserted wooden blocks. Tonogold geologists recorded geotechnical data, including recovery, rock quality, hardness, joint spacing, and weathering into GeoSequel®. After logging, they photographed each core box and marked sample intervals for assaying based on mineralized, structural, and lithologic breaks. A technician sawed the core in half lengthwise and submitted one half of the core for assaying.

DrillRite's crews used a north-seeking Reflex EZ-Gyro for downhole surveying on all drillholes except two RC holes (TC-006 and TC-008). For some of the deeper drill holes, the drill crews conducted multiple downhole surveys to various depths to track deviation as the hole advanced.

Table 7.3 presents a list of mineralized intervals drilled during Tonogold's 2020-2021 exploration drill programs at Gold Hill and Art Wilson Claims Group.

Hole ID From (ft)		To (ft)	Length (ft)	Au (oz/ton)	Au (g/t)	Ag (oz/ton)	Ag (g/t)
			Gold Hill	Area			
TC-001D	75	80	5	0.015	0.531	0.36	12.20
and	90	95	5	0.014	0.482	0.11	3.90
and	595	600	5	0.010	0.355	0.95	32.50
TC-002D	1900	1905	5	0.009	0.303	0.13	4.30
and	1956	1961	5	0.100	3.430	0.06	2.10
TC-003-D1	1741	1746	5	0.036	1.235	0.09	3.20
and	1768	1784	16	0.009	0.314	0.97	33.23
TC-001	1210	1215	5	0.012	0.424	0.04	1.40
and	1225	1230	5	0.019	0.651	0.06	1.90
TC-002	1095	1105	10	0.033	1.134	0.56	19.15
TC-009	700	740	40	0.098	3.359	2.27	77.74
including	705	725	20	0.142	4.867	3.32	113.88
and	970	995	25	0.051	1.754	0.50	17.20
TC-010	900	915	15	0.056	1.915	0.55	18.90
TC-011	365	390	25	0.058	1.984	0.90	30.96
including	370	375	5	0.133	4.560	1.83	62.60
and	425	465	40	0.044	1.516	1.51	51.83
including	435	445	10	0.088	3.000	2.62	89.85
TC-012	335	360	25	0.174	5.959	6.22	213.18
including	335	345	10	0.386	13.250	13.26	454.50
and	485	515	30	0.048	1.650	0.54	18.67
including	510	515	5	0.083	2.840	0.28	9.60
TC-013	75	85	10	0.047	1.618	2.91	99.75

Table 7.3: 2020-2021 Gold Hill and Art Wilson Claim Group Drill-Hole Intervals of Interest



Hole ID	From (ft)	To (ft)	Length (ft)	Au (oz/ton)	Au (g/t)	Ag (oz/ton)	Ag (g/t)					
including	80	85	5	0.056	1.920	3.68	126.00					
and	110	165	55	0.024	0.822	1.20	40.98					
and	195	205	10	0.035	1.186	2.45	83.95					
including	200	205	5	0.047	1.595	4.11	141.00					
and	275	280	5	0.057	1.965	2.32	79.70					
and	335	360	25	0.070	2.399	2.73	93.58					
including	335	345	10	0.108	3.690	4.99	171.00					
TC-014	420	435	15	0.123	4.213	5.62	192.67					
Art Wilson Claim Group												
TC-003D	26	108	82	0.393	13.490	1.41	48.40					
including	44	61	17	1.688	57.859	2.25	77.20					
and	168	188	20	0.011	0.367	0.07	2.50					
TC-004D	43	132	89	0.023	0.800	0.19	6.39					
TC-006	115	125	10	0.014	0.485	0.03	0.95					
and	215	265	50	0.047	1.596	0.41	14.03					
including	240	255	15	0.088	3.012	0.76	25.90					
and	305	315	10	0.029	1.009	0.22	7.55					
TC-007	85	155	70	0.094	3.226	0.46	15.66					
including	85	110	25	0.211	7.238	0.79	26.94					
and	195	210	15	0.014	0.472	0.06	1.90					
TC-008	0	60	60	0.043	1.458	0.13	4.38					
including	10	25	15	0.081	2.770	0.10	3.47					

7.2.2 Target Areas Historical Drilling: Gold Hill and Occidental-Brunswick Lode

Historical drilling occurred outside of the Lucerne Deposit, but within the Tonogold's land package in the present exploration target areas of Gold Hill and the southern Occidental-Brunswick Lode in the Art Wilson Claim Group. Table 7.4 summarizes those Gold Hill area drill holes for which MDA obtained records. Historical drilling in Gold Hill was done by Union Pacific and Siskon (1960s), MECO (early 1970s), 2-B Partners (1986), BMR (1991), and American Eagle Resources (1992), but the data has not yet been compiled by Tonogold. Data for these drill campaigns are less complete than that of the holes presented in the table below and in some cases are known only through anecdotal evidence provided by former workers in the district. Tonogold intends to compile and evaluate additional historical drilling as it becomes available.



Gold Hill Area	No. Drill Holes	Total Footage	Company	Years	Drilling Method
Con Imperial	115*	24,308	Western Gold Ventures and HOM	1975-1980	Rotary/ Air-track?
	27 10,181 United Mining		1983-1984	Rotary	
5 2,350 (СМІ	2010	RC	
Kentuck	115	2,500	СМІ	2013	Air-track
Overmen	6	640	Hughs Brockbank	1995	RC
Overman	22**	2,165	HE-5 Resources	2006	Rotary casing
VC Divide	8	12,041	Virginia City Exploration	2001	RC and one hole with core 'tail'
Total	306	54,185			

Table 7.4: Historical Gold Hill Area Drilling

Note: One drill campaign (six RC holes) in the Overman area is missing collar locations for an additional 1,935 feet of drilling.

* Collars have been located for 115 drill holes in the Con Imperial area. Assays are available for 1,129 feet of drilling in six additional holes with no collar data.

** Collars have been located for 22 drill holes in the Overman area. Assays are available for 145 feet of drilling in two additional holes with no collar data.

Between March 1 and April 2, 2018, 18 RC holes were drilled at the Art Wilson Claim Group. These holes aggregated 6,035 feet of drilling as summarized in Table 7.5. Thirty-nine percent of the footage drilled was in vertical holes and 61% of the footage was with inclined holes.

Iubie			Of oup 1	
DHID	Area	Azimuth	Dip	Total Depth (feet)
118-01	Ida	0	-90	375
118-02	Ida	220	-60	140
I18-03	Ida	30	-60	225
118-04	Ida	210	-80	620
I18-05	Morningstar	0	-90	450
I18-06	Pride of the West	0	-90	200
I18-07	Pride of the West	340 -70		230
I18-08	Pride of the West	0	-90	250
I18-09	Pride of the West	315	-45	245
I18-10	Pride of the West	0	-90	400
118-11	Middle Ridge	310	-45	450
118-12	Pride of the West	0	-90	200
I18-13	Pride of the West	105	-45	300
118-14	Midas/Grass Widow	325	-45	500
I18-15	Midas/Grass Widow	0	-90	500
I18-16	Midas/Grass Widow	295	-45	350
I18-17	Midas/Grass Widow	270	-70	350
118-18	Midas/Grass Widow	270	-45	250
		Total Footag	e Drilled:	6,035

Table 7.5: 2018 Art Wilson Claim Group Drilling



DeLong Construction and Drilling of Winnemucca, Nevada performed the 2018 drilling with a trackmounted Foremost MPD 1500 RC drill under the supervision of Mr. Russell. DeLong drilled all holes with water injection (required for dust suppression) using 5½-inch diameter bits and a conventional interchange. Drill cuttings were split and sampled over 5.0-foot intervals using a rotating, wet, vane-type splitter positioned directly beneath the cyclone. The sample splits were discharged vertically into prelabeled, water-permeable sample bags positioned beneath the sample discharge tube, while the balance of the sample material was directed laterally out of the splitter discard tube. Excess water was drained from the sample bags at the drill sites. After drying, samples weighed from 8 to 16 pounds.

For each 5.0-foot drilling interval, DeLong personnel extracted a portion of the discarded drill cuttings and placed it in a pre-labeled plastic chip tray for geologic logging and future reference. Mr. Russell examined the chip trays at the drill sites and prepared geologic logs for each hole based on the material in the chip trays. Mr. Russell recorded the log data on paper log sheets. Later, MDA entered the recorded information into electronic spreadsheets.

Veins or lodes consisting of variable proportions of quartz and calcite were penetrated in 11 of the 18 holes. Narrower veins, defined as 1% to 30% of the drill cuttings in a 5.0-foot sample interval, were encountered in all 18 holes. Table 7.6 summarizes the drill intervals of interest.



				A			
Hole ID	From (ft)	To (ft)	Length (ft)	Au (oz/ton)	Au (g/t)	Ag (oz/ton)	Ag (g/t)
I18-02	90	100	10	0.074	2.520	0.17	5.88
I18-04	365	375	10	0.05	1.700	bd	bd
and	450	455	5	0.044	1.520	bd	bd
I18-05	100	110	10	0.109	3.730	0.58	19.97
and	130	145	15	0.015	0.510	bd	bd
and	215	300	85	0.035	1.180	0.41	14.07
including	215	265	50	0.046	1.590	0.59	20.25
I18-06	95	100	5	0.118	4.060	0.27	9.40
and	130	160	30	0.012	0.410	0.12	4.08
and	180	200	20	0.025	0.840	bd	bd
l18-07	110	115	5	0.034	1.180	0.27	9.31
and	145	230	85	0.03	1.010	bd	bd
including	170	215	45	0.043	1.480	bd	bd
I18-08	140	175	35	0.025	0.840	0.33	11.16
including	160	170	10	0.043	1.480	0.34	11.65
and	200	230	30	0.045	1.550	0.22	7.42
including	200	205	5	0.172	5.900	0.80	27.34
also	240	250	10	0.017	0.590	bd	bd
I18-09	20	35	15	0.033	1.130	0.21	7.01
and	120	245	125	0.049	1.690	0.33	11.19
including	155	160	5	0.178	6.090	0.86	29.55
and	165	170	5	0.482	16.530	0.50	17.05
I18-10	190	205	15	0.02	0.670	0.16	5.63
and	210	225	15	0.011	0.390	bd	bd
and	280	290	10	0.021	0.710	bd	bd
and	355	360	5	0.014	0.500	bd	bd
and	375	395	20	0.013	0.450	bd	bd
l18-11	180	195	15	0.027	0.910	bd	bd
including	185	190	5	0.063	2.160	bd	bd
and	325	410	85	0.025	0.850	bd	bd
including	330	335	5	0.128	4.380	bd	bd
I18-12	25	130	105	0.201	6.900	0.79	27.00
including	25	70	45	0.439	15.060	1.59	54.50
including	30	50	20	0.906	31.060	2.74	93.85
and	170	190	20	0.151	5.170	0.19	6.50
including	175	180	5	0.609	20.890	0.46	15.72
118-13	5	15	10	0.033	1.130	bd	bd
118-14	230	235	5	0.008	0.280	bd	bd
I18-15	10	20	10	0.043	1.460	0.17	5.64

Table 7.6: 2018 Art Wilson Claim Group Drill-Hole Intervals of Interest



Hole ID	From (ft)	To (ft)	Length (ft)	Au (oz/ton)	Au (g/t)	Ag (oz/ton)	Ag (g/t)
and	75	80	5	0.012	0.420	bd	bd
and	290	300	10	0.025	0.860	bd	bd
and	390	395	5	0.013	0.430	bd	bd
I18-16	25	30	5	0.029	0.990	bd	bd
and	40	55	15	0.013	0.430	bd	bd
and	115	125	10	0.022	0.750	bd	bd
and	235	240	5	0.012	0.410	bd	bd
l18-17	75	80	5	0.224	7.670	0.38	12.84
and	90	105	15	0.01	0.330	bd	bd
and	225	235	10	0.006	0.210	bd	bd
l18-18	45	50	5	0.053	1.800	bd	bd
and	65	70	5	0.009	0.310 bd		bd
and	105	110	5	0.005	0.170	bd	bd
and	195	210	15	0.004	0.140	bd	bd
and	230	235	5	0.005	0.180	bd	bd

Note: bd = below lower limit of detection. True thickness of mineralization estimated to vary from about 20% to 100% of the interval length, with an average of about 77% of the interval length.

Permitting issues restricted the sites of the 2018 drilling, particularly in the Midas-Grass Widow area where Storey County regulations limited disturbances within 1,000 feet of a residence. This permit condition confined the drilling to a single drill site for the Midas and Grass Widow lodes. NDEP also determined that the Buckeye patented claim is within a designated "risk zone" of the CRMSS, so no drilling could be done there because of the lack of an approved and implemented "Sampling and Analysis Plan."

Mr. Grahame Ross, of Silver City, Nevada surveyed the Art Wilson Claim Group 2018 collar locations utilizing a Trimble S6 Total Station and a Trimble TSC 3 data collector. International Directional Services LLC of Elko, Nevada conducted a direction and deviation down-hole survey of Hole I18-04 using a truck-mounted, surface-recording gyroscopic system.

7.3 2008 – 2017 Art Wilson Claim Group Mapping and Sampling

A discussion and results of exploration work conducted on the Art Wilson Claim Group from 2008 to 2017 is presented below. Most of the information was taken from the technical report prepared for the property by MDA in 2018, entitled "2018 Updated Technical Report on Gold-Silver Mineralization at the Ida Claim Group, Silver City Mining District, Storey and Lyon Counties, Nevada: History, Geology, and Exploration" (Weiss et al., 2018).

7.3.1 2008 - 2009 S. Russell – Art Wilson Claim Group

During 2008 – 2009, Mr. Stephen Russell carried out a preliminary evaluation of the Art Wilson Claim Group. Mr. Russell collected 120 surface and underground rock-chip and grab samples, which were analyzed at ALS Chemex in Reno, Nevada for gold and silver by fire-assay methods. Mr. Russell collected



most of these samples from the accessible underground workings of the Vivian-Midas and Pride of the West mines. Mr. Russell performed tape and compass surveys of the workings to control the underground sample locations and carried out surface geologic mapping at a scale of 1:3,600 with a hand-held GPS for control. Figure 7.5 and Figure 7.6 present the tape and compass maps of the Vivian-Midas and Pride of the West mines, respectively, showing sample locations and assays.

The 2009 work performed by Mr. Russell showed that remaining widths of veins left in the workings at the Vivian-Midas mine are one- to five feet wide and contain grades of 0.1 to 0.9oz Au/ton and 0.5 to 2oz Ag/ton over a horizontal distance of approximately 400ft.

Remaining vein widths in the Pride of the West workings are slightly wider, mainly at two- to five feet, but grades are somewhat lower, generally at 0.1 - 0.20z Au/ton and 0.5 - 20z Ag/ton. The highest-grade sample came from the surface and assayed 1.280z Au/ton and 90z Ag/ton over a 1.5ft width.





Figure 7.5: 2009 Tape and Compass Field Map of the Vivian-Midas Mine







7.3.2 2016 Jordan – Art Wilson Claim Group

Mr. Jason Jordan collected a total of 117 surface samples for geochemical analysis during May and June 2016. Jordan took most of his samples from veins in-situ and from old mine and prospect dumps. He collected several others from the float of concealed veins. Jordan used a Garmin hand-held GPS to obtain sample location coordinates. AAL in Sparks, Nevada assayed the samples for gold, silver and 10 other elements.

The northern continuation of the Ida vein is strongly mineralized as shown by a dump grab sample that assayed 0.64oz Au/ton (21.9g Au/ton) and 1.78oz Ag/ton (60.8g Ag/ton). Dump-grab and rock-chip samples from the low ridge west of the Pride of the West mine and from the Badger vein returned similar grades.



Many of the sampled mineralized veins are narrow, in the range of 1ft to 2ft based on surface exposures and the maximum width of float fragments. However, as is demonstrated by the Ida and Pride of the West workings, such narrow surface veins can increase in width to mineable widths down dip.

Silver to gold ratios in the surface samples vary more than those taken from the Vivian-Midas and Pride of the West underground workings. Copper, lead, and zinc concentrations are low. For the most part, arsenic, mercury, and antimony concentrations are low as well, but there is an apparent increase in arsenic, antimony, and mercury in samples from the Cosmopolitan (Mammoth Lode) and Badger mine areas to the north of the Art Wilson Claim Group. Such low concentrations of volatile elements are typical of lowsulfidation epithermal gold-silver deposits in Nevada and elsewhere.

7.3.3 2016 MDA- Art Wilson Claim Group

S. Weiss, on behalf of MDA, conducted geologic mapping at scales of 1:2,000 and 1:5,000 during May and June 2016 to expand the mapped veins shown on Russell's 2009 surface geologic map and to better define the diagrammatic veins shown by Hudson et al. (2009). Weiss delineated additional veins and concealed vein zones that had not been part of the Russell area (2009) and were not well defined by Hudson et al. (2009). Weiss paid particular attention to the low ridge between the Vivian-Midas and Pride of the West mines (the "Middle Ridge") and to areas north and east of the Pride of the West claim. Weiss made only a few traverses in the area of the Vivian-Midas, Grass Widow, and Piedmont workings because this area had been covered by Russell and Briggs' more detailed 2016 mapping.

7.3.4 2016 S. Russell and K. Briggs - Art Wilson Claim Group

Mr. Russell and Ms. Kiersten Briggs collected a total of 91 rock-chip samples in the summer of 2016, nearly all from the underground workings of the Vivian-Midas, north Midas and Pride of the West mines. American Assay Laboratories in Sparks, Nevada assayed the samples for gold by fire-assay with an inductively-coupled plasma-emission spectrometry ("ICP") finish, and for silver, arsenic, calcium, copper, iron, mercury, molybdenum, lead, sulfur, antimony, uranium, and zinc by ICP following aqua regia digestion.

Most of the samples were taken from along vein margins which represents material that previous miners left behind, in addition to samples collected from pillars and vein exposures too narrow for historical miners to stope. The summer 2016 samples fill-in and extend the 2009 sample coverage, particularly in the Vivian-Midas and the north Midas workings (see Russell and Briggs, 2016). Russell and Briggs also completed surface geologic mapping for the Vivian-Midas and Pride of the West mines at a scale of 1:1,200.

Working with a professional surveyor, Mr. Grahame Ross of Silver City, Russell and Briggs obtained more accurate, laser-scanned data for the shapes of the Vivian-Midas and Pride of the West workings during May and June 2016. A local backhoe contractor re-opened the caved north portal of the 5,395ft level of the Midas workings. Russell, Briggs, and Ross surveyed the accessible underground areas with a Trimble S6 Total Station and a Trimble TSC 3 data collector and tied the mapping to surveyed points at the mine portals. Russell and Briggs then used plots of the surveyed workings to map the underground geology at scales of 1:1,200 and 1:480 and to locate their 2016 rock-chip samples (Russell and Briggs, 2016).



The maximum and median assay values obtained give an indication of the tenor of remaining vein exposures in the workings and show very clearly that the veins have low concentrations of copper, lead and zinc (Table 7.7). The maximum gold grade in these samples is 2.15oz Au/ton (sample V-156, over a width of 1.5ft). Silver to gold ratios average ~5:1, with a maximum of ~62:1 and a median of ~2:1. Arsenic, antimony and mercury contents are low.

	Wt kg	Au ppm	Au opt	Ag ppm	Ag opt	As ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	S ppm	Sb ppm	Zn ppm	Ag/Au
Maximum	5.97	73.77	2.154	75.40	2.202	127.00	78.00	2.30	64.0	318.0	1240.0	11.0	91.0	62.0
Median	4.40	3.11	0.091	7.90	0.231	27.00	14.00	<0.5	3.0	24.0	42.0	<3.0	34.0	2.1
Average	4.28	7.57	0.221	12.53	0.37	29.36	16.62	0.42	5.9	40.0	85.5	2.3	35.9	4.7

 Table 7.7: Summary of 2016 Underground Assays (91 Samples)

7.3.5 Late 2016 S. Russell and K. Briggs Underground Mapping

In late 2016, a backhoe reopened four small adits on the Grass Widow, Ida, and Badger claims. (On the Grass Widow Claim, the Upper Grass Widow and Upper Piedmont adits were reopened; an unnamed adit was reopened approximately 90ft north of the Ida shaft collar; an unnamed adit was opened near the eastern boundary of the Badger claim.)

Grahame Ross surveyed the accessible areas of the Upper Grass Widow adit and the un-named adit on the Badger claim in November 2016 utilizing a Trimble S6 Total Station and a Trimble TSC 3 data collector as described for the work performed in the spring and summer of 2016. The surveyed point data was imported into ArcGIS v.10.4.1. Russell and Briggs then used plots of the ribs and stopes to map the underground geology at a scale of 1:240 in the spring of 2017. In conjunction with the adit surveys, Ross also surveyed the rock chip sample locations.

The Upper Piedmont adit was caved approximately 50ft into the drift at or near the intersection of the vein exposure. Likewise, the adit on the Ida claim ended approximately 40ft into the drift with only very minor exposure of the vein. Consequently, no survey was performed in either of these drifts.

Russell and Briggs collected 14 rock-chip samples in November 2016, six from the Upper Grass Widow adit and eight from the un-named adit on the Badger claim. AAL in Sparks, Nevada assayed the samples for gold and silver. Russell and Briggs collected most of these samples from material remaining along the un-mined vein margins and pillars and from vein exposures too narrow for historical miners to stope.

The results from the samples taken in the Upper Grass Widow adit reflect the general range and Ag:Au ratios described by the 2009 and early 2016 underground sampling campaigns on the Grass Widow veins. The maximum gold grade is 0.884oz Au/ton (sample V-201, over a width of 0.5ft) and the silver to gold ratios average about 5.5:1, with a maximum of ~13:1.

The results from samples collected from the un-named adit on the Badger claim extend the overall sample coverage and density for the Pride of the West area. The maximum gold grade is 0.115oz Au/ton (sample B-106, over a width of 2.0ft). Silver values were below the laboratory detection limit of 0.2oz Ag/ton for all samples, with the exception of B-106, which assayed 0.2oz Ag/ton.



7.4 2021– Art Wilson Claim Group Mapping and Sampling

During the summer of 2021, Tonogold mapped and sampled a group of claims including the Cosmopolitan and a portion of the Renegade claim block located along the southern Occidental-Brunswick Lode. The purpose of the work was to expand surface mapping and sampling in an area that had previously lacked definition and to identify potential targets for future drilling. The subject area includes a group of patented and unpatented claims that lie to the north of the Art Wilson Claim Group and to the south of State Route 341 (Figure 7.7).

Tonogold collected a total of 34 samples from veins, alteration zones, float of concealed veins, and prospect dumps and used a hand-held GPS to obtain sample location coordinates. The samples were assayed for gold, silver, and 58 other elements at ALS Minerals in Reno, Nevada. Figure 7.7 presents a thematic map showing sample locations with corresponding gold assays symbolized for oz Au/ton. Mineralized veins exposed in prospects and outcrops are generally narrow in this portion of the southern Occidental-Brunswick Lode, with widths on the order of one to three feet. Zones of altered rock are up to several hundred feet wide. The highest-grade gold samples were collected from a vein extending north from the historic Pride of the West mine on the Cosmopolitan claim and a prospect dump located about 2,700-feet north of the Pride of the West area. Gold assays for samples collected at the two locations are 0.013oz Au/ton and 0.015oz Au/ton, respectively. Gold and silver mineralization is also present in samples collected on narrow veins and veinlets, stockwork quartz, altered andesite, and breccias located to the east of the ridge extending north from the Pride of the West mine.





Figure 7.7: 2021 Cosmopolitan and Renegade Claims Surface Samples



7.5 Historical Work (1970s to 1990s) – Occidental-Brunswick Lode

Mapping, sampling, and drilling was conducted by a few exploration companies as described below on the Occidental–Brunswick Lode north of State Route 341 from the 1970s to the 1990s, mostly in the vicinity of the historical Occidental and Brunswick mines.

In 1975, Boyles Bros. Drilling Company drilled nine exploration holes for an unknown operator for a total of 2,045 feet in the vicinity of the Brunswick Mine. All holes were inclined 55 degrees to the west and were between 200 and 300 feet deep. Samples were collected on five-foot intervals. Rocky Mountain Geochemical Corp. in Sparks, Nevada assayed the samples for gold and silver by atomic absorption. MDA does not have information regarding the project owners or collar locations of the drill holes.

Western Gold Ventures drilled 17 exploration holes in the vicinity of the Brunswick Mine in the summer of 1975. Eklund Enterprise, Inc drilled the holes for a total of 2,665 feet. Rocky Mountain Geochemical assayed the samples on five-foot intervals for gold and silver by atomic absorption methods. MDA does not have the drill collar locations for these holes.

In the fall of 1983, Rae Gold Corporation ("Rae Gold") contracted Charlton International to map and sample approximately 350 acres in the vicinity of the historic Brunswick and Occidental mines. Work accomplished included geologic and alteration mapping of the first level drift of the Brunswick Mine and of the surface of the Occidental Mine (Charlton International, 1983). Rae Gold also mapped three bulldozer trenches across the "Brunswick vein" and "#1 vein." Charlton International personnel collected a total of 135 channel and grab samples from the surface and from accessible underground workings. The samples were analyzed for gold and silver by atomic absorption methods. They also collected 125 samples from the bulldozer trenches which were analyzed for gold, silver, mercury and, arsenic by atomic absorption. Samples assaying above one ppm gold, or five ppm silver were reanalyzed with fire assay techniques. The laboratory that performed the assays was not listed in Charlton International's 1983 project report (the available version of the report is missing several appendices). Charlton International completed the work for Rae Gold to evaluate the potential for defining an open-pit resource on the Occidental-Brunswick Lode.

Tonogold has not yet compiled the work accomplished on the Brunswick and Occidental mines in the 1970s and 1980s. Although scanned assays are available for the work cited above, drill collar, channel, and grab sample locations are currently unknown due to missing figures in scanned reports and the absence of locations reported in drill logs. If Tonogold continues exploration efforts on the Occidental-Brunswick Lode north of State 341, they should make additional efforts to acquire sample and drill hole locations for this data.

In 1991, Miramar Mining Corporation ("Miramar") and American Eagle Resources ("American Eagle") jointly conducted surface geologic mapping and sampling and exploration drilling in the vicinity of the Occidental and Brunswick mines. Miramar and American Eagle collected 63 soil samples on a 50-foot by 200-foot grid for geochemical analysis. Rocky Mountain Geochemical analyzed the samples by fire assay with atomic absorption. They also conducted surface mapping of geologic units and alteration zones and drilled 16 RC exploration holes. Although the surface geologic map showing drill collar locations is available, Tonogold has been unable to locate any of the drill logs or assays for the 1991 drill program. Steve Russell of Virginia City, Nevada conducted the mapping and sampling for Miramar and American


Eagle. Through personal communication, Russell indicated that most of the holes were in the vicinity of the historic Occidental Mine workings and were generally less than 300 feet deep. The purpose of the work was to evaluate the potential for defining an open-pit resource on the Occidental-Brunswick lode with a focus around the Occidental Mine.



8.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

This section summarizes all information known to MDA relating to sample preparation, analysis, and security, and quality assurance/quality control ("QA/QC") procedures that pertain to the Lucerne Deposit. The information has either been compiled by MDA from historical records or provided by CMI and audited. MDA has reviewed this information and believe it is materially accurate. Tonogold has not carried out exploration at the Lucerne Deposit. Sections 8.1 and 8.2 pertain to procedures carried out for historical drilling by previous operators. Section 8.25 discusses sample preparation, analysis, and security procedures for Tonogold's exploration at Gold Hill and the southern Occidental-Brunswick Lode.

The historical records of sample preparation, analysis, security, and QA/QC procedures summarized below are incomplete. Historical assay parameters and results are reported in their original units of measure for historical completeness and to avoid unintended changes in precision or accuracy due to conversion and rounding.

8.1 Sample Preparation and Analysis

8.1.1 1977-1980 HOM

In 1977, Houston Oil & Mineral's RC drill samples were analyzed at Skyline Labs, Inc. ("Skyline"), in Wheatridge, Colorado. Gold and silver were determined by fire-assay fusion. MDA is unaware of the preparation methods, or the specific analytical procedures employed. Skyline was a commercial laboratory independent of HOM and Tonogold.

During 1979 and 1980, HOM prepared and analyzed air-track and RC drilling samples at their in-house mine laboratory at the American Flats processing area. Gold and silver were assayed. MDA has no further information on the methods and procedures used.

8.1.2 1980 Jacqueline Gold

Jacqueline Gold's 1980 RC drilling samples were analyzed for gold and silver. MDA has no information on the laboratory where the assays were conducted or about the methods and procedures used to prepare and analyze the samples.

8.1.3 1990 Double King

During 1990, Double King's RC drill samples were prepared and analyzed at Barringer Laboratories Inc. ("Barringer") in Sparks, Nevada, a commercial laboratory independent of Double King. MDA has no information on the methods and procedures used to prepare the samples. Gold was determined for some samples by fire-assay fusion of 60-gram aliquots with an atomic adsorption ("AA") finish. Other samples were analyzed by fire-assay fusion with an AA finish, but the fusion aliquot size is not known. Silver was determined by AA, but the digestion size and procedures are not known to MDA. A few samples were analyzed for copper, lead and zinc, but MDA is not aware of the analytical methods used.



8.1.4 1991-1992 BMR Gold

BMR's 1991 and 1992 RC samples were mainly analyzed by Barringer, most likely at their laboratory in Sparks, Nevada. Gold was analyzed by fire-assay fusion with an AA finish; silver was analyzed by AA. MDA has no information on the preparation methods or exact precision used.

A smaller quantity of BMR's 1991 samples were analyzed at Minerals Processing and Environmental Laboratories, Inc. ("MPEL"), in Sparks, Nevada, a commercial laboratory independent of BMR. Gold and silver were determined by fire-assay fusion with an AA finish. MDA has no information on the preparation methods or analytical precision used.

8.1.5 1993 Rea Gold

Rea Gold's 1993 RC samples were analyzed at MPEL in Sparks, Nevada, a commercial laboratory independent of Rea Gold. Gold and silver were determined by fire-assay fusion with an AA finish. MDA has no information on the preparation methods or exact analytical precision used.

8.1.6 1998 Plum Mining

RC samples from Plum's 1998 drilling were analyzed by Barringer, most likely at their laboratory in Sparks, Nevada. Barringer was independent of Plum. Gold was analyzed by fire-assay fusion with an AA finish. Silver was analyzed by AA. MDA has no information on the preparation methods or exact analytical precision used.

8.1.7 2003 Comstock Gold

In 2003, Comstock Gold's drill-core samples were analyzed by BSi Inspectorate ("Inspectorate") in Sparks, Nevada, a commercial laboratory independent of Comstock Gold. Gold was analyzed by fireassay fusion with an AA finish; silver was analyzed by AA. Some samples were analyzed or re-analyzed for gold and silver using fire-assay fusion with a gravimetric finish. The current database prioritizes the values derived from fire-assay fusion with a gravimetric finish over the AA finish. MDA has limited information on the preparation methods and details of the analytical precision used.

8.1.8 2004-2010 GoldSpring

GoldSpring's primary assay laboratory for their 2004 through 2009 core and RC drill samples was American Assay Laboratories ("AAL") in Sparks, Nevada, a commercial laboratory independent of GoldSpring. After crushing, splitting, and pulverizing, 30-gram aliquots of the pulps were analyzed for gold by fire-assay fusion with an AA finish. Silver was determined by inductively coupled plasma opticalemission spectrometry ("ICP-OES") following aqua regia digestion of 0.5g aliquots of the sample pulps. For some samples, the pulps were analyzed and re-analyzed for gold using a 30-gram fire-assay fusion with a gravimetric finish. In the database, GoldSpring prioritized the gravimetric finish results over the AA finish results. During 2008, some of the samples were analyzed and re-analyzed for gold using a 30g fire-assay fusion with a gravimetric finish. The gravimetric finish results were prioritized over the AA finish results in the database. Some of the 2008 samples were also analyzed for gold using a screen fire-assay.



During 2008 and 2009, selected RC duplicate samples were prepared and analyzed by ALS Minerals ("ALS") in Reno, Nevada, a commercial laboratory independent of GoldSpring. These samples were crushed in their entirety to at least 70% at <2 mm and riffle-split to obtain 250g subsamples. The subsamples were then pulverized to at least 85% at <75 μ m. In 2008, gold was determined by 50-gram fire-assay fusion with an AA finish. Silver was determined on separate aliquots of 0.5g using AA following an aqua regia digestion. In 2009, gold and silver were determined by 30g fire-assay fusion with a gravimetric finish.

In 2010, prior to the acquisition by CMI, some of the 2008 through 2010 drill samples were analyzed and re-analyzed at AAL for gold using a screen fire-assay procedure for the E08-XX, L08-XX, P09-XX, and P10-XX drill series.

8.1.9 2010 – 2016 CMI Drill Samples

The principal laboratory for the preparation and analysis of the majority of CMI's RC samples, and all of their core samples, was AAL in Sparks, Nevada, a commercial laboratory independent of CMI. The specific crushing, splitting, and pulverizing methods are not known to MDA. Following pulverizing, the same analytical methods were used for both core and RC samples. Sample pulp aliquots of 30g were assayed for gold by fire-assay fusion with an AA finish. Separate 0.5g aliquots were analyzed for silver by ICP-OES following aqua regia digestion. Samples that assayed greater than or equal to 10g Au/t were re-analyzed by fire-assay fusion followed by a gravimetric finish. A small number of samples were re-analyzed for silver by 30g fire-assay fusion with a gravimetric finish. A small number of samples also were analyzed for 72 major, minor, trace and rare-earth elements by a combination of ICP-OES and inductively-coupled plasma mass spectrometry ("ICP-MS") following aqua regia digestion of 0.5g aliquots. For some drill holes, a small number of selected samples were also assayed for gold by fire-assay fusion of 60g aliquots, followed by an AA finish.

A few selected samples were analyzed for gold in 2013 by a screen fire-assay. More frequently, gold was analyzed by either a 30g, 2-hour and 24-hour, bottle-roll cyanide-leach with an AA finish. In other samples, silver was also analyzed by either a 30g, 2-hour or 24-hour, bottle-roll cyanide-leach with an AA finish. These samples are kept in separate fields and used for evaluation of changes in gold and silver solubility, and not used for gold or silver grade estimation.

In 2010, 2011, 2012, and 2013, CMI sent duplicate RC samples to ALS in Reno, Nevada for preparation and analysis. ALS is a commercial laboratory independent of CMI. These samples were crushed in their entirety to at least 70% at <2 mm and riffle-split to obtain 250g subsamples. The subsamples were then pulverized to at least 85% at <75 μ m. Gold was determined by 30g fire-assay fusion with an AA finish. Silver was determined on separate aliquots of 0.5g using AA following an aqua regia digestion. Samples assayed at greater than or equal to 10g Au/t were re-analyzed by fire-assay fusion followed by a gravimetric finish.

8.1.10 CMI Blast-Hole Samples 2014-2015

During 2014 and 2015, CMI analyzed their production blast-hole samples for gold and silver in their inhouse laboratory at the American Flats Processing Area. Blast hole cuttings were crushed, split, and pulverized, but MDA has no information on the specific procedures used. Blast-hole samples were not used in this study.



8.1.11 CMI Rock-Chip Samples

The rock-chip samples CMI collected during 2011 through 2013 were prepared and analyzed at AAL in Sparks, Nevada. The samples were crushed in their entirety and a sub-sample was split and pulverized, but MDA has no information on the specific procedures used. Sample pulp aliquots of 30g were assayed for gold by fire-assay fusion with an AA finish. Separate 0.5g aliquots were analyzed for silver by ICP-OES following aqua regia digestion. Some samples were also analyzed for 72 major, minor, trace and rare-earth elements by a combination of ICP-OES and ICP-MS following aqua regia digestion of 0.5g aliquots. Samples that assayed greater than 10g Au/t were re-analyzed by fire-assay fusion followed by a gravimetric finish. A small number of samples were re-analyzed for silver by 30g fire-assay fusion with a gravimetric finish.

Selected samples were assayed for gold by fire-assay fusion of 60g aliquots, followed by an AA finish. In some cases, gold was also analyzed by either a 30g, 2-hour or 24-hour, bottle-roll cyanide-leach with an AA finish. In 2013, a few samples were analyzed for gold using a bulk leach extractable gold ("BLEG") technique.

8.2 Historical Sample Security

MDA is unaware of most sample security methods and procedures used by historical operators of the property prior to 2007. From 2007 through 2016, CMI's core samples were transported by contracted drillers or CMI geologists on a daily basis from the drill sites to CMI's secured core sheds. After logging and sampling by CMI personnel, the vast majority of core samples were transported by CMI staff or contractor to the AAL facility in Sparks, Nevada. A small number of core samples were transported by CMI staff or CMI staff or contractor to the ALS facility in Reno, Nevada.

CMI's RC samples were transported by CMI staff or contracted drillers each day to secured storage bins at the core shed site. The samples were generally stored in the bins for less than seven days and then transported by CMI staff or AAL personnel to the AAL facility in Sparks, Nevada.

8.3 Historical Quality Assurance/Quality Control

MDA is not aware of the QA/QC methods and procedures used by historical operators prior to 2010. Starting in 2010, CMI began to implement QA/QC procedures for drilling samples. These procedures involved inserting blanks, standards, and duplicate samples into the sample stream.

8.4 Summary Statement on Historical Sample Preparation, Analyses and Security, Lucerne Deposit

MDA has compiled and reviewed available supporting data for the Lucerne Deposit drilling. Much supporting documentation is not available. Furthermore, much work was done early in the history of the project when general sampling criteria may not have been as rigorous. Consequently, confidence in different drilling campaigns varies. MDA coded samples with a ranking of reliability graded from "no confidence and unreliable" to "reliable." Drill samples were not used when deemed and coded unreliable. See Section 11.7 for discussion and details.



8.5 Exploration Target Areas: Gold Hill and Occidental-Brunswick Lode

This section summarizes all information known to MDA relating to sample preparation, analysis, and security, and quality assurance/quality control ("QA/QC") procedures that pertain to the exploration target areas on the southern portion of the Comstock Lode in Gold Hill and the southern portion of the Occidental-Brunswick Lode on the Art Wilson and Cosmopolitan claims. MDA has reviewed this information and believe it is accurate.

8.5.1 2008 – 2017 Art Wilson Claim Group Surface and Underground Samples

Underground and surface samples collected by Mr. Steve Russell for his 2008-2009 study of the Art Wilson Claim Group consisted of rock-chip samples taken across the width of the veins and grab samples from mine and prospect dump materials. Most samples were in the range of 4.5 to 11 pounds (2 to 5kg), but some of the dump samples weighed as much as 20 pounds (9kg). Mr. Russell transported the samples to the ALS Chemex analytical laboratory in Sparks, Nevada, a commercial operation independent of Mr. Art Wilson. ALS Chemex weighed and crushed the samples to a minimum of 70% at <2mm (0.079in), from which a 250g (0.114lb) sub-sample was riffle split and ring-mill pulverized to 85% at <75µm. Gold and silver were analyzed by fire-assay fusion and gravimetric finish (ALS Chemex method code ME-GRA21). In 2009, ALS Chemex held ISO 9001:2000 and ISO 17025 accreditations.

Surface rock-chip and dump grab samples collected in 2016 by Mr. Jordan were transported from the project site to AAL in Sparks, Nevada. The samples were dried at 105°C, weighed, and then jaw-crushed to 85% at <6 mesh (0.132in). The jaw-crushed samples were then roll-crushed to 90% at <10 mesh (0.0661in) and riffle split in a Jones splitter to obtain approximately 1kg (2.205lb), which was then ring-pulverized to 90% at <150 mesh (0.0041in). Gold was determined by 30g fire-assay fusion and ICP (AAL method code FA-Pb30-ICP). Silver, arsenic, calcium, copper iron, mercury, molybdenum, lead, sulfur, antimony, uranium, and zinc were determined by ICP following aqua regia digestion of a separate, 0.5g aliquot of the pulps. AAL was independent of Mr. Wilson and held ISO 17025 accreditation in 2016.

A total of 107 underground and surface rock-chip and grab samples collected in 2016 by Mr. Steve Russell and Ms. Kiersten Briggs were transported to AAL in Sparks, Nevada for preparation and assay. One certified commercial gold reference material (RockLabs OxK18) was inserted every 13 to 14 samples to monitor analytical quality. The samples were prepared and assayed with the same methods as described above for the surface samples.

8.5.2 2018 Art Wilson Claim Group

The 2018 Art Wilson Claim Group drill samples were prepared and analyzed at AAL in Sparks, Nevada. AAL was independent of Mr. Wilson and held ISO 17025 accreditation. The drill samples were oven dried, roll crushed, and riffle-split to obtain subsamples of approximately 300g (0.66lb), which were then ring pulverized to 90% at <150 mesh (0.0041in). Gold was determined by 30g fire-assay fusion and an ICP finish (AAL method code FA-Pb30-ICP). Silver was determined by 30g fire-assay fusion with a gravimetric finish (AAL method code +GravAg).

Prior to transport of the drilling samples to AAL, quality control/quality assurance samples were inserted into the sample stream for all but the first three drill holes. Coarse blanks and two different, commercially



prepared, certified reference materials ("standards") were inserted with the samples from holes I18-04 through I18-18.

Field-duplicate samples taken at the drill site were inserted into the sample stream with the last two drill holes. Field duplicates from holes I18-01 through I18-16 were inserted following the samples from hole I18-18. Altogether, 15 standards, 15 blanks, and 103 field duplicates were analyzed, representing 11% of the assayed intervals in the database.

8.5.3 2020-2021 Tonogold Exploration Drilling

The primary assay lab used for both RC and core samples from Tonogold's 2020-2021 drill program was ALS Minerals in Reno, Nevada, which was independent of Tonogold and held ISO 17025:2005 accreditation. Samples were oven dried and crushed to 70% passing -2 mm (0.079 in). A 250g split from this material was pulverized to better than 85% passing 75 microns. For all core holes and RC holes up through TC-008, gold was determined by 30-gram fire assay with an AA finish (ALS method code Au-AA23). For RC holes from TC-009 through TC-016, gold was determined by 50-gram fire assay with an AA finish (ALS method code Au-AA24). Samples that contained greater than 10 g Au/t were reanalyzed utilizing fire assay with a gravimetric finish (ALS method code Au-GRA21). Silver was determined by a four-acid digestion with an AAS finish (ALS method code Ag-AA61). Samples containing greater than 100 g Ag/t were reanalyzed utilizing a four-acid digestion with an ICP-AES finish (ALS method code Ag-OG62).

Tonogold geologists collected drill core from the rig daily and transported it to a secure core shed. Following logging and sampling of the core, samples were moved to bins located in CMI's fenced yard. ALS personnel retrieved the sample bins and transported them to the ALS facility in Reno, Nevada. Tonogold personnel occasionally transported select intervals directly to the ALS facility.

QA/QC samples were inserted and numbered sequentially with the primary drill samples prior to transport to ALS. On average, one coarse blank, one certified reference material (standard), and one field duplicate were inserted for every 20 drill samples. Three standards were acquired from CDN Labs of Vancouver, Canada and utilized during the program. These included a high-grade standard (CDN-ME-1901: 7.85 g Au/t, 373 g Ag/t), a mid-grade standard (CDN-GS-4L: 4.01g Au/t, 125.9 g Ag/t), and a low-grade standard (CDN-ME-1601: 0.613g Au/t, 39.6g Ag/t). Field duplicate samples were collected at the rig at the same time as the corresponding primary sample. A total of 163 blanks, 163 standards, and 158 duplicates were analyzed representing 15% of the total number of assayed intervals. Assay results for standards and blanks were monitored for accuracy. Standards assaying greater than 3 standard deviations above or below their certified values were considered analytical failure. Blanks assaying greater than ten times the detection limit were considered analytical busts. Tonogold resolved analytical failures by reanalyzing the problematic QA/QC sample plus five samples above and five samples below.



9.0 DATA VERIFICATION

MDA has verified the Lucerne Deposit database and compiled and analyzed available QA/QC data. Data verification is the process of confirming that data has been generated with proper procedures, has been accurately transcribed from the original source, and is suitable for inclusion. There were no limitations on, or failure to conduct, the data verification for this report, except as described below.

Data for areas outside of the Lucerne Deposit, such as the 2018 drilling on the Art Wilson Claim Group, has been evaluated and verified. Section 9.4 presents a discussion of the evaluation. These data are not material to the Lucerne Deposit presented in this report but are material to the conclusions being made on exploration potential of the project within the Comstock District. MDA has not yet conducted an evaluation and verified Tonogold's 2020-2021 drill campaigns at Gold Hill and the southern Occidental-Brunswick Lode. The southern Occidental-Brunswick Lode includes several mineralized veins on the Art Wilson claims and the Cosmopolitan claim immediately to the north.

Blast-hole data generated during mining activities in the Lucerne pit from 2012 to 2016 was supplied by CMI. The blast-hole data was not in a condition that could be used and remains unchecked. Most issues with those data were associated with poor naming conventions and lack of clarity in usage of the bench toe, crest, or mid-bench elevations as the level designation. The blast-hole data was not used in the current Lucerne Deposit resource estimate.

Site visits were made as discussed in Section 2.0. In addition, Ms. Kiersten Briggs of MDA worked for CMI between 2012 and 2016, primarily on the Lucerne Deposit. Her responsibilities consisted of geology, environmental compliance, exploration, and production. Her first-hand experience was heavily relied on throughout the data verification, metal modeling, and resource estimation processes.

When discussing duplicate samples grades in this section, the term "variability" refers to Absolute Relative Difference ("ARD").

9.1 CMI Provided Data

9.1.1 Drill-Collar Audit

To evaluate the Lucerne Deposit coordinate data, MDA audited a random sampling of 232 of 1,854 of the drill hole collar entries. (12.5% of the total.) MDA compared collar coordinates, elevation, and hole depths in the database provided by CMI in 2017 to scanned drill logs, coordinate files, or other sources of data such as collar spreadsheets created by CMI. Most of the discrepancies identified were, 1) rounding errors due to Excel imports and exports, or 2) re-projections of data from historical, pre-CMI coordinate systems to CMI's custom coordinate system. All discrepancies of these types are considered insignificant. The six significant errors detected were differences between the total depth recorded in the database and that recorded on the drill logs. (2.5% of the total.) MDA corrected the database accordingly.

Some air-track drill collars did not have original location or other backup documents. CMI's mine site surveyor located these drill collars at the time of drilling. The collar locations were loaded from the survey instrument directly into CMI's database on a daily basis, but the original instrument files were not



preserved. Because these procedures were observed or carried out by Ms. Briggs, who was a CMI mine geologist between 2013 and 2016, MDA considers the air-track collar locations suitable for use.

9.1.2 Down-Hole Survey Audit

MDA audited about 10% of the down-hole surveys performed on Lucerne Deposit exploration drill holes (188 holes total). The audit detected discrepancies of reversed dip signs or azimuths rounded from hundredths to tenths of a degree. MDA corrected the database accordingly. However, the audit discovered four holes from the 1961 "K-xx" underground drilling that contained erroneous dip and azimuth entries.

In general, down-hole surveys were not performed on drill holes less than 300 feet deep. For these holes, the measured collar orientations were verified by comparing the database entries to the azimuth and dip recorded on original drill-hole logs. These shorter drill holes comprise about 85% of the holes identified for auditing.

9.1.3 Drilling Assay Database Audit

In December 2017, MDA compiled and audited a drilling assay database for the Lucerne Deposit, beginning with existing assay certificates and supplementing them with project data received from CMI in 2017. During the database construction process, CMI was supportive in providing and documenting data.

MDA imported all the available original Lucerne area laboratory assay certificates into the GeoSequel database manager. Table 9.1 presents the number of samples and assays compiled for the initial database.

Lab	Certificates	No. of Samples	No. of Individual Assays	
American Assay	1,118	78,510	261,426	
Bureau Veritas	20	802	2,854	
Chemex Labs	70	3,806	11,530	
Totals	1,208	83,118	275,810	

 Table 9.1: Initial Assay Database Compiled from Original Laboratory Certificates

To identify and then correct errors, MDA compared the interim database created from certificates to the data provided by CMI in July 2017. All discrepancies were resolved in correspondence with CMI staff. Because laboratory certificates were not available for all assays, particularly the older historical drilling, MDA augmented the data with records from the CMI database provided in July 2017. In all, 56,934 assay values from 29,009 samples were added, representing 26% of the total number of samples.

MDA manually audited for completeness, reasonableness, and integrity that portion of gold and silver assays taken directly from the data supplied by CMI. This data primarily represents older drill campaigns (pre-CMI) and CMI's air-track drill programs. According to CMI staff, assay data derived from 2004 to 2005 was imported into their database from the original American Assay Laboratory certificates. Older project data from previous operators had been exported from a Micromine database text file export. All



but eight of the 24 drill programs from which CMI data was taken (as opposed to imported directly from laboratory certificates) had supporting documentation at various confidence levels, ranging from scanned laboratory certificates to hand-written assays on drill logs or Micromine print outs.

MDA created a random sampling of ~10% of the assays from each drill campaign as designated by their unique drill series name (*e.g.* L91-xx). This drill-hole sampling list comprised drill holes representing various regions of the Lucerne Deposit (Lucerne Pit, Billie the Kid, Justice, and Woodville, for example), and included several different drilling techniques. MDA performed an initial manual audit of 108 of the 759 drill holes (14%) not compiled from certificates. This preliminary audit identified several of the drill campaigns as having a high percentage of significant errors. These errors included groups of data shifted to incorrect assay intervals, incorrectly entered data, or missing data (predominantly for Ag results).

Based on the initial findings, MDA performed a second round of auditing on each drill campaign to correct all errors found. MDA audited and corrected additional drill holes until the percentage of significant errors was less than one percent for each drill campaign. Ultimately, MDA manually audited assays from 287 holes, over two-and-a-half times more holes than originally chosen. A total of 4,929 samples were examined during the audit (Table 9.2). All identified errors and discrepancies were corrected and incorporated into the final resource database.

Summary of Manual Assay Audit by Drill Campaign							
Drill Campaign	<u>No. Holes</u>	<u>No. Holes</u> <u>Audited</u>	No. Samples Checked (Au and Ag)				
97-xx	12	12	451				
BK-xx-04	11	2	56				
D90-xx	10	10	496				
ED-xx	48	9	42				
HLA-xx	76	52	1050				
HO-xx	5	4	99				
L91-xx	171	32	983				
L92-xx	37	7	221				
L93-xx	16	16	53				
L98-xx	12	1	30				
LHRC-xx	2	2	44				
L-xx	12	12	378				
SL-xx	168	115	899				
WV-xx	25	16	127				
Total	605	290	4,929				

 Table 9.2: Assay Audit Summary Table

The eight drill programs lacking any digital or hard-copy backup included some of CMI's air-track drilling done between 2013 and 2014 and a few pre-CMI programs. These drill campaigns (148 holes) comprise only about 7.9% of the total number of exploration holes drilled at the Lucerne Deposit and less than 3.04% of the total drilled footage. One drill campaign from this group from 1961 (KY-xx series) was



deemed unreliable because of anomalously high grades that were not confirmed by more recent CMI drilling. MDA did not use these holes in the resource estimation. The CMI air-track drilling without documentation was deemed reliable because nearby RC and/or core drill holes confirmed the assay grades and because CMI handled the sample collection in a similar fashion to their other air-track programs in 2014 and 2015. However, where air track drilling was the only drilling, MDA omitted these holes from the resource estimation.

9.1.4 Geologic Data

CMI provided all the geologic and geotechnical data for the Lucerne Deposit. Direct verification of these data was not performed, although MDA gained a general sense that they are reasonable during geologic and metal domain modeling. MDA reviewed core photos while modeling.

9.2 CMI Quality Assurance/Quality Control

MDA compiled several sets of QA/QC sample data from lab certificates or provided in spreadsheet form from CMI for the Lucerne Deposit drill holes. These are summarized in Table 9.3 below. Almost all the QA/QC work was performed by CMI, representing 65% of all footage in the drilling database. Only a small amount of QA/QC work supports assay data generated by earlier historical operators. Additional QA/QC data could be compiled and used to support more of the CMI and historical assays for the Lucerne Resource Area, but the quantity of such data would not likely change the conclusions given herein.

		y of fittenable	Eucerne Deposie	QIII QO Dutu
Company	Drill Campaigns	Type of QA/QC	No. Samples	Comments
CMI	BK12, CP10, CP11, E08,	Standards	4,442	17 samples eliminated from
	E11, E12, EC11J03, K08,			evaluation
	K09, L07, L08, P09, P10,	Field Duplicates	3,138	40 samples eliminated from
	P11, P12, P13, PC10,			evaluation
	PC11, PC12	Blanks	2172	
		Re-Assay	2573	
CMI	ED, SL, WV	Standards	90	CMI In-house laboratory
		Field Duplicates	84	CMI In-house laboratory
		Pulp Blanks	88	CMI In-house laboratory
		Coarse Sand	86	CMI In-house laboratory
		Blanks		
НОМ	HLA	Re-Assay	358	HOM In-house laboratory

Table 9.3: Summary of Available Lucerne Deposit QA/QC Data

In general, blank materials test for contamination during sample preparation, and certified reference materials ("CRMs" or "standards") test for the accuracy of assaying. Duplicate samples of all types provide an indication of material heterogeneity and sampling/splitting bias in the field and laboratory. Insertion rates of QA/QC samples into the CMI sample stream are unknown, but CMI regularly submitted blanks, standards, and field- and pulp-duplicate samples for assay. In addition, the laboratory inserted reference materials as part of their internal QA/QC program. MDA evaluated both CMI-submitted and laboratory-internal QA/QC results. An insignificant number of QA/QC samples were submitted with samples analyzed for cyanide-soluble gold and cyanide-soluble silver. Those were not evaluated.



9.2.1 Certified Reference Materials (Standards)

9.2.1.1 Material Type of Standard

Seventeen of the standards are Rocklabs "Ox" series standards prepared using material intended to represent oxide mineralization. One of the CDN Resource Laboratory ("CDN") standards is described as coming from oxide gold mineralization. The remaining eight standards are made from or are intended to represent sulfide mineralization.

Figure 9.1 illustrates failure rates according to material type. The data makes a compelling case that the laboratory performed better on standards representing sulfide mineralization than on standards representing oxide mineralization. If the only data available had been from the sulfide standards, the results would have been considered very good, and in six of eight cases deemed poor. While MDA is not an expert in analytical methods, it seems likely that laboratory procedures should have been better adapted for the oxide mineralization.





A note of caution regarding the results in Figure 9.1. The commercial lab performed best on the standards that it used in its own internal QA/QC protocol, which complicates interpretation of the results. Regardless, the lab's performance on oxide mineralization should be scrutinized.

9.2.1.2 Precision of Standards

Rocklabs standards are usually quite artificial, prepared from formula mixtures of mineral constituents rather than natural mineralized and unmineralized rocks. CDN standards are usually prepared from



mixtures of natural rock materials and ores obtained from mineral deposits. While those are still artificial, CDN standards possibly more closely approximate "nature" than do Rocklabs standards.

Another difference between Rocklabs standards and CDN standards is that Rocklab standards tend to have "tight" control limits, due to relatively small standard deviations. One way of looking at this is to look at the relative standard deviation ("RSD"), also known as coefficient of variation. Table 9.4 compares RSDs for the 23 Rocklabs standards in the CMI data set to the RSDs for 18 CDN standards (including the three in the CMI data set), using the averages and standard deviations for gold provided by the two makers of the standards. The Table Table 9.4 statistics show that laboratories find it significantly easier to achieve within-specification results when analysing CDN standards than when analysing Rocklabs standards.

	Rocklabs	CDN
Min	1.82	3.57
Max	9.43	9.68
Mean	3.22	5.19
Median	2.66	5.00

 Table 9.4: Comparison of Coefficients of Variation

9.2.1.3 Gold Standards

AAL was the primary laboratory for all but ten drill holes in CMI's Lucerne Deposit drilling programs between March 2008 and March 2016. The CMI drilling represents 62% of the drill holes and 65% of the footage in the Lucerne Deposit database. American Assay Laboratories ("AAL") analyzed twenty-eight different gold standards. Figure 9.2 gives an example of the graphs made for all 28 standard evaluations. Table 9.5 summarizes all but three standards with suspected issues.

Standard failures are defined as results in excess of three standard deviations from the certified mean. Although there are no failures associated with some standards, the failure rate was very high for others (for example, 44% for OxG99). If consecutive samples exceeding two standard deviations are considered, confidence in the accuracy of assaying is reduced further. It became evident while reviewing the graphs that many of the errors were likely caused by mishandling or mislabeling of inserted standards. Seventeen failed samples that matched other standard grades were excluded from MDA's QA/QC evaluation. The number of incorrectly labeled pulp standards could be greater.





Figure 9.2: Example of Standard Charts Used



Table 9.5: Summary of Gold CRMs and Failure Rates for CMI Samples Analyzed by AAL

Standard ID		Grades	in oz Au/ton		Count	Count	Dates Used		Dates Used Failure Failure Counts Rate		Failure Counts		Bias
	Certified Value	Average	Maximum	Minimum	Total	Deleteu	First	Last	High	Low	(%)	(70)	
OxL51	0.171	0.166	0.194	0.153	24	0	28-Oct-15	25-Jan-16	3	7	42.0	-2.9	
OxH66	0.037	0.038	0.041	0.035	26	0	7-Sep-11	24-Jun-12	1	0	4.0	2.7	
OxJ68	0.068	0.068	0.091	0.034	82	2	14-Apr-11	29-Jan-16	5	3	10.0	1.0	
OxK69	0.105	0.102	0.113	0.093	72	1	30-Dec-08	29-Jan-16	2	9	14.1	-2.9	
OxD73	0.012	0.012	0.013	0.005	67	2	30-Dec-08	18-Mar-09	0	2	0.0	0.0	
Oxi81	0.053	0.053	0.058	0.047	68	0	24-May-11	30-Dec-15	8	4	17.6	0.0	
OxG83	0.029	0.029	0.039	0.025	97	1	14-Apr-11	10-Jul-12	7	12	19.6	0.0	
OxF85	0.023	0.024	0.028	0.012	102	1	31-Jan-11	18-Jul-12	15	1	15.8	4.3	
OxK94	0.104	0.101	0.111	0.048	41	1	13-Apr-12	22-Oct-12	0	1	2.5	-2.9	
OxH97	0.037	0.036	0.043	0.030	120	5	28-Jun-12	5-Dec-12	8	20	24.8	-2.7	
OxG99	0.027	0.026	0.032	0.022	127	4	24-Jun-12	5-Dec-12	11	44	39.8	-3.7	
OxF100	0.023	0.023	0.024	0.022	19	0	16-Nov-12	27-Dec-12	0	0	0.0	0.0	
OxK119	0.105	0.105	0.110	0.100	14	0	4-Nov-15	18-Feb-16	0	0	0.0	0.0	
OxJ120	0.069	0.071	0.077	0.068	8	0	22-Jan-16	26-Feb-16	1	0	12.5	2.9	
CDN-GS-P7B	0.021	0.020	0.023	0.018	30	1	29-Nov-10	24-Jan-11	0	0	0.0	-4.8	
CDN-ME-15	0.040	0.041	0.045	0.033	16	1	29-Dec-10	24-Mar-11	2	1	20.0	2.5	
Si25/Rocklabs10	0.053	0.053	0.058	0.048	176	5	30-Dec-08	11-Jan-11	5	7	4.1	0.0	
CDN-GS-1P5L*	0.045	0.046	0.048	0.043	47	0	21-Oct-15	22-Mar-16	0	0	0.0	2.2	
OxA89*	0.002	0.002	0.003	0.002	262	0	6-Sep-12	22-Mar-16	0	0	0.0	0.0	
Oxi96*	0.053	0.052	0.055	0.049	273	0	5-Sep-12	14-Jun-13	0	3	1.1	-1.9	
Si42*	0.051	0.051	0.056	0.049	964	0	17-Nov-10	17-Sep-12	0	0	0.0	0.0	
SK52*	0.120	0.118	0.124	0.111	943	0	17-Nov-10	19-Feb-16	0	0	0.0	-1.7	
SK62*	0.119	0.118	0.127	0.109	266	0	21-Aug-12	6-Jan-16	0	0	0.0	-0.8	
SK78*	0.121	0.122	0.128	0.115	14	0	13-Jan-16	22-Mar-16	0	0	0.0	0.8	
SK33*	0.118	0.117	0.125	0.111	601	0	10-Mar-08	6-Oct-10	0	0	0.0	-0.8	
Sum	4459 24							68	114	4.1	%		
* Probable inter	e internal-laboratory standards												

Notes: Many failures in Si25/Rocklabs10 could be incorrect recording of standard actually inserted. OxA45 has a certified grade of 0.002oz Au/ton and failed in 156 of 515 insertions, most failures likely due to lack of precision at low grades. Regardless, all samples returned very low grades, and no systemic analytical problems are indicated.



The standards summarized in Table 9.5 include those submitted by CMI and those analyzed as part of American Assay Laboratories' internal QA/QC program. Because it was difficult to distinguish whether some of the standards in Table 9.5 were submitted by CMI or AAL, only those standards positively identified as internal to AAL are flagged in the summary. Note that the failure rate associated with the internal standards (identified with an asterisk) is 0% for all but one of the standards (Oxi96, 1.1%). All high failure rates are associated with other standards.

Samples from ten drill holes not analyzed by AAL were sent to Veritas Laboratories. Of the 22 standards submitted with those samples, four are considered failures, a failure rate of 18%.

Extensive air-track drilling (326 holes) was performed by CMI for exploration. CMI conducted QA/QC monitoring by inserting standard Oxi121 into the sample stream at the mine's in-house laboratory where the air-track samples were analyzed. Analytical results for this standard showed that out of 90 insertions there were 15 low failures and two high failures, an overall failure rate of almost 19%. Also, in general, the gold standard analyses showed a laboratory low bias of about 4.4% compared to the certified mean.

9.2.1.4 CMI's Silver Standards

Ten separate silver standards were submitted with samples sent to AAL during CMI's drilling programs between March 2008 and March 2016. Only four are summarized in Table 9.5 because 850 of the analyzed standards in six data sets produced over-limit silver values (*i.e.* the silver content of a given sample exceeds the upper limit of the initial assaying technique, in this case, >2.917oz Ag/ton) rendering those checks unusable. Those samples with over-limit values were not re-run using assaying techniques with higher detection ranges. For three of the four standards evaluated, the failure rate ranged between 25% and 35%. The remaining one standard recorded no failures.

For internal QA/QC standard AAL10/AAL2010, there was a failure rate of 56% on the low side that indicates an analytical issue at the laboratory with respect to under-reported silver assays. Unfortunately, 491 over-limit standard samples were not re-assayed and were removed from this data set, which skews the results of the remaining 1,207 samples, rendering the data set unreliable.

The results for standard CDN-ME-6, also one of AAL's internal QA/QC standards, were excluded from Table 9.6. AAL inserted this standard 1,209 times between December 2010 and March 2016, but 850 over-limit analyses were not re-run. While there is an apparent low bias in the laboratory results resulting from the over-limit cap on the results, only four out of 359 standard samples with actual values failed. Had the over limit analyses been re-run, the failure rate for this standard might have been less than 1%.



Stendard ID		Grades i	n oz Ag/ton	1	Count	Count	Dates Used		Failure Counts		Failure Rate	Bias
Standard ID	Certified Value	Average Value	Maximum Value	Minimum Value	Total	Deleted	First	Last	High	Low	(%)	(%)
CDN-GS-P7B	0.391	0.407	0.437	0.373	30	1	29 Nov 2010	24 Jan 2011	0	0	0.0	0.8
CDN-ME-15	0.992	0.871	0.970	0.804	16	0	29 Dec 2010	24 Mar 2011	0	4	25.0	12.2
Si25/Rocklabs10	0.970	1.051	1.266	0.102	175	1	30 Dec 2008	11 Jan 2011	61	1	35.4	8.9
AAL08-LABSTD*	3.792	3.798	5.577	2.733	832	0	10 Mar 2008	18 Mar 2009	121	135	30.8	0.2
Sum					1053	2			182	140	322 or failure	30.6% a rate
* Probable Inter	* Probable Internal Standards											
Notes: 296 samp were not re-anal	Notes: 296 samples were removed from the AAL08-LABSTD evaluation between 13 April 2010 to 10 June 2010 because over-limit assays were not re-analysed using techniques with higher detection ranges.											

Table 9.6:	Summary of	Silver CRMs an	d Failure Rates	for CMI Sam	ples Analyzed b	v AAL
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9.2.2 Duplicate Samples

MDA evaluated duplicate samples by comparing the duplicate sample assay to the original sample assay using the equation given below:

Equation 100 x (Duplicate - Original) Lesser of (Duplicate,Original)

9.2.2.1 Core Duplicates

Out of 38 core-duplicate samples, eight of the gold and fifteen of the silver samples were below the laboratory detection limits. All the core duplicate samples were from CMI's underground drilling campaign conducted in 2015 and 2016. Consequently, the quantity of data at meaningful grades is too small for evaluation of sample splitting and natural heterogeneity of gold and silver.

9.2.2.2 RC Field Duplicate Samples

As described in Section 7.1.10, CMI collected RC field duplicate samples at the drill rig with a wet splitter. AAL in Sparks, Nevada analyzed the primary samples. ALS in Reno, Nevada analyzed the duplicate samples. Analyzing field duplicates at a different lab than the original means that bias between labs is added to (or subtracted from) bias instilled by sampling, with no way to separate the two.

Extreme outlier-sample pairs (20% different) and all samples at or below 0.001oz Au/t were excluded from the field-duplicate comparison shown in Figure 9.3 and Figure 9.4. (That is 1,917 samples, leaving 1,221 total samples.) Similar graphs were compiled for all duplicate sample sets, although only one set is presented. The field duplicates show reasonable reproducibility, but the fact that so many samples have to be excluded to obtain reasonable results is a concern.





Figure 9.3: Relative Difference of Field Duplicate Samples – Gold Assays

Figure 9.4: Absolute Value of Relative Difference of Field Duplicate Samples – Gold Assays



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Ten extreme outlier sample pairs were excluded from the field duplicate comparison for silver. There is an overall bias in the AAL assay results, which are higher than ALS assay results below a mean grade of ~0.275oz Ag/ton. The bias becomes more pronounced with increasing grades and is apparent in all drill programs conducted between 2008 and 2013. This higher bias in silver values corresponds with the high bias in silver standards grade results. The average grade variability as expressed by a moving average between sample pairs range from about 100% to above 500% for samples whose silver grades are less than ~0.275oz Au/t. For silver grades above 0.275oz Ag/ton there is no consistent bias.

If one strips out 64 pairs having average relative differences exceeding 1000%, and all pairs in which one or both members have values of 0.003oz Au/t (half the detection limit), the data set is relatively unbiased, remaining with an average relative difference of -0.4% and still contains 2,539 pairs. Within that set, all pairs having a mean of less than 0.1oz Au/t have an average relative difference of -6.9%. All pairs having a mean greater than or equal to 0.1oz Au/t and less than 0.7oz Au/t have an average relative difference of +21%. All pairs having a mean greater than or equal to 0.7oz Au/t have an average relative difference of -11%.

9.2.2.3 Preparation Duplicates

Preparation duplicates are coarse-reject splits, and test for variability or bias caused after the primary crushing stage of sample preparation. Preparation duplicates also provide a measure of the homogeneity of gold or silver in the rock.

For gold, CMI's mine laboratory prepared coarse-reject splits after the secondary crushing stage and analyzed 81 pairs of the preparation duplicate samples from air-track holes. Most of the sample pairs (52, or 64%) had mean grades of less than 0.005oz Au/ton, so their effectiveness in evaluating gold variability and sampling bias at material grades is minimal. Two sample pairs had relative differences of more than 1,500% and were excluded from the analysis. With the removal of the two outliers, there was a 12% low bias between the two sets of samples. Based on a moving average, average variability ranged between 25% and 75% and decreased with increasing grade.

CMI's mine laboratory prepared and analyzed 83 preparation duplicate sample pairs from air-track holes for silver. As with gold, 52 of these samples were below economically meaningful grades. Four outlier pairs with differences of \geq 250% were excluded. The remaining data above 0.05oz Ag/ton showed a minor bias with original>duplicate. The average variability in grade between sample pairs ranged between 5% and 30%, substantially lower than gold's variability in the preparation duplicates.

9.2.2.4 Pulp Duplicates – HOM Mine Lab Internal QA/QC

HOM's internal QA/QC gold assays on pulp splits were not fully independent checks. However, they do provide insight into material heterogeneity and consistency in lab assaying techniques. Variability and bias resulting from sample handling prior to pulp preparation was not directly tested. MDA compiled and plotted 358 mine lab pulp-reruns and original assays from hard-copy assay records (Figure 9.5 and Table 9.6). Of these sample pairs, 177 (~50%) are at or above a cutoff grade of 0.005oz Au/ton. With three extreme outlier sample pairs removed, the relative difference plot of these data indicates a consistent and significant bias (rerun>original) above 0.005oz Au/ton. The absolute value of the relative difference graph shows strong gold assay variability between the splits. Although variability does decrease overall with



increasing grade, the magnitude of the variability is still high above 0.025oz Au/ton. The data are skewed by an anomalous number of sample pairs for which one assay is \geq 0.045oz Au/ton, but the other is below detection. Overall, the large variability and apparent bias is caused by many results grading less than detection limit. After removing those samples, the relationship between duplicates is acceptable. These data were used in estimation. However, the poor pulp duplicate results have been incorporated into a reduced confidence assigned to the 1979 series of air-track holes (see section 11.7).





(excluding all samples below detection limit)





(excluding all samples below detection limit)

MDA also compiled HOM's internal QA/QC silver assays on pulp duplicates. The compiled graphs for silver are not particularly useful because of the many paired samples with different detection limits. The bias is extreme as well—a strong majority of original assays are greater than the pulp duplicate. The level of bias and variability becomes drastically lower above ~0.23oz Ag/ton, although it remains high. Confidence for silver assays from HOM's air-track drilling have been reduced in a similar manner to gold (see section 11.7).

9.2.2.5 Pulp Duplicates – AAL Internal QA/QC

CMI compiled 2,515 pulp duplicate analyses from AAL's internal QA/QC program. Low-grade samples ≤ 0.001 oz Au/ton were eliminated from the graph shown in Figure 9.7. The relative difference plot indicates no consistent bias. The absolute value of the relative difference presented in Figure 9.8 shows gold assay variability between the splits at around 20% at low grades. Variability decreases to less than 10% at grades above 0.01 oz Au/ton. These are good results and contradict the poor results found in the CMI work, confounding the explanation of why this may be happening.

The relatively higher variance in duplicate sample grades at lower grades is likely a function of lower precision at grades near the detection limit. At grades of $>\sim 0.5$ oz Ag/t, there remains a significant bias with the check assays being lower grade. The variability is lower at these higher grades. Variability at 10% to 20% for pulp duplicates is high, especially considering it does not account for variability induced by sample splitting and handling at the drill rig. During future production, the high variability could impact blasthole sampling and assaying, affecting grade control and reconciliation.



CMI also compiled AAL's internal QA/QC silver assays on pulp splits. The compiled graphs for silver (not shown) indicate a bias of around 5% to 10% (original>duplicate) from ~0.02oz Ag/ton to ~0.2oz Ag/ton. Below this grade range, the bias can be as high as 20%, but above this range, no bias is shown. About 5% to 30% silver variability is indicated, and like gold, decreases with increasing grade.





Figure 9.8: Absolute Value of Relative Difference of Pulp Duplicate Samples – Gold Assays, AAL Internal QA/QC





9.2.2.6 Pulp Duplicates, Air-Track Drilling Program – CMI Mine Lab Internal QA/QC

MDA compiled 128 internal QA/QC pulp-duplicate results from CMI's mine laboratory. There is a strong bias of about 100% with the duplicates being lower grade. There were only two CMI mine-lab internal pulp check analyses for silver in the CMI air-track samples, so no conclusions can be drawn.

9.2.3 Blanks

Coarse, pulp, and matrix blank materials, which were a combination of HCl, HNO₃, and deionized water submitted during the digestion procedure, were inserted by CMI into the sample stream for assaying performed by AAL and CMI's mine lab. Coarse blanks of various types are placed into the sample stream during sample preparation and test for contamination. Pulp blanks test only for analytical contamination or error. Blank data was compiled, along with the preceding assay, and represented graphically by gold and silver separately for various campaigns. The warning limit for a blank assay failure is set arbitrarily at five-times the detection limit.

9.2.3.1 Pulp Blanks, RC Drilling - AAL Internal QA/QC

AAL inserted laboratory pulp blanks as part of their internal QA/QC procedures. MDA compiled 2,173 AAL blank gold assays for evaluation. Only three blanks returned gold values above the laboratory detection limit of 0.001oz Au/ton. The highest blank assay value reported was at 0.0024oz Au/ton, which is still only half of the warning limit of 0.005oz Au/ton that would signify a failure.

MDA compiled a total of 2,177 silver blank assays from AAL's internal QA/QC program. Twenty-nine blanks returned silver values above the laboratory detection limit of 0.006oz Ag/ton. All but two of these blanks followed samples with mineralized grades above the laboratory detection limit. One blank sample was anomalously high at 0.283oz Ag/ton, which is just under the warning limit of 0.30oz Ag/ton. The remaining 28 blanks that returned silver values above the detection limit ranged in grade from 0.007oz Ag/ton to 0.076oz Ag/ton.

9.2.3.2 Matrix Blanks, Air-Track Drilling – CMI Mine Lab Internal QA/QC

The CMI mine laboratory analyzed matrix blanks—a combination of HCl, HNO₃, and deionized water mixed during the digestion procedure—for gold and silver. The reagent-grade acids were purchased from Anachemia. Out of 88 matrix blanks inserted, five assayed gold above the laboratory detection limit of 0.001oz Au/ton, but all were \leq 0.003oz Au/ton. None of the matrix blanks returned any detectable silver grades.

9.2.3.3 Sand Blanks, Air-Track Drilling – CMI Mine Lab Internal QA/QC

The CMI mine laboratory also inserted internal coarse-sand blank samples. The sand consisted of 30-mesh sand acquired from Legend assay supply in Reno, Nevada, that was inserted into the milling process during sample preparation. Of 87 coarse-sand blanks, two returned grades above the warning limit of 0.005oz Au/ton (0.008 and 0.009oz Au/ton). The two assays above the warning limit are preceded by assays of 0.015 and 0.021oz Au/ton, representing a failure rate of 2.3%, and indicates that minor contamination



occurred at the CMI mine lab during sample preparation. Eleven other samples assayed greater than the laboratory detection limit of 0.001oz Au/ton, but \leq 0.003oz Au/ton.

Of the 87 coarse-sand blanks inserted into the CMI mine-laboratory sample stream, two samples returned grades of 0.079 and 0.060oz Ag/ton. One of these was a sample that also assayed above the warning limit for gold. Both represent blank-assay failures. Another eight samples returned grades between the detection limit of 0.01oz Ag/ton and 0.035oz Ag/ton.

9.2.4 Core Sample Integrity

The Lucerne Deposit database includes entries for 4,727 samples from 20,908 feet of core drilling. There are 4,208 and 4,199 samples with core recovery and Rock Quality Designation ("RQD") measurements, respectively. Graphs showing the distribution of these data within recovery and RQD ranges are presented in Figure 9.9 and Figure 9.10. The majority of core recoveries were greater than 90%, whereas about half of the RQD values were less than 10%, implying that moderate core recovery was achieved even in intensely fractured and broken rock.



Figure 9.9: Lucerne Deposit Core Recovery Distribution



Figure 9.10: Lucerne Deposit RQD Distribution

There is an apparent weak inverse relationship between gold grade and core recovery Figure 9.11). Higher-grade samples are generally associated with intervals with lower core recovery, although the decrease from lower to higher grades is only about 10%. There is no relationship between RQD and gold grades (Figure 9.12).









Figure 9.12: Lucerne Deposit RQD versus Gold Grade

Core recovery and RQD categorized by gold domain for breccia veins (high-grade), breccia, vein and stockwork (mid-grade), stockwork (low-grade), and outside modeled domains are shown in Figure 9.13 and Figure 9.14. Both graphs indicate a decrease in core recovery and RQD with increasing grade domain.





Figure 9.13: Lucerne Deposit Core Recovery by Gold Domain



Graphs were made for core recovery and RQD versus silver grade and domains. They show similar relationships to gold.

The lower core recoveries and RQD values associated with progressively higher-grade material, as shown in Figure 9.10 through Figure 9.14, supports the general impression that there has been a history of core recovery issues within the most highly mineralized parts of the Lucerne Deposit (Russell, S. and Briggs, K., personal communication). The physical characteristics of high-grade material in the Lucerne Deposit



are intensely fractured and broken. Historical sources note that high-grade material elsewhere in the district contains notable quantities of crushed and pulverized quartz with the consistency of granulated sugar. (For example, *Becker*, 1882). Fine-grained material associated with intensely fractured and pulverized rock can be washed out during coring. Because there is a disproportionate concentration of gold and silver in the finer-sized fractions of many epithermal precious metal deposits, including the Lucerne Deposit, loss of gold during drilling could conceivably skew grade distributions toward lower grades.

9.3 Summary Statement on Data Verification for CMI Historical Drilling Data

MDA performed audits on the collar, survey, and gold and silver assay data in the Lucerne Deposit drilling database. MDA checked roughly 10% of collar coordinates and down-hole surveys that had supporting certificate documentation and found few errors or discrepancies. For assays, MDA compiled 76% of the entire database directly from digital laboratory data files. MDA compared 12.5% of the remaining assays against hard-copy certificates and logs and corrected all errors detected, resulting in an after-corrections error rate below 1%.

QA/QC programs were associated with the majority of drilling and assaying done at the Lucerne Deposit. All but a small number were implemented by CMI. MDA's QA/QC evaluation generated contradictory results. AAL's gold standards analyzed for their internal QA/QC program yielded only two assay values outside the three-standard deviation threshold of 3,370 analyses. However, error rates exceeding 10% occurred for ten of the 17 external standards inserted into the sample stream and sent to AAL. For three out of four external silver standards evaluated, the failure rate ranged between 25% and 35%. This is a high failure rate, but the internal laboratory standard results were very good. MDA cannot explain why AAL's internal QA/QC standards results were so good, and yet about half of CMI's inserted standards had high failure rates. In MDA's experience, these are unprecedented failure rates. This "risk" has been taken into account in the assignment of confidence codes (see section 11.7) to various drilling campaigns and ultimately in resource classification.

Gold and silver duplicate analyses of various types were evaluated to provide an indication of inherent sample heterogeneity and consistency in sample handling and splitting. In general, high assay variability was associated with field duplicates. This progressively decreased from preparation duplicates to the lowest variability in pulp duplicates, as expected. Also, the usual decrease in variability was noted with increasing grade. Variability in duplicate pairs from the Lucerne Deposit is somewhat high in all sample sets, suggesting a relatively high degree of natural heterogeneity in gold distribution. Small biases between original and duplicate analyses were noted in some groups, which suggests issues in sample handling and splitting that could hint at problems. Similar to assay variability, the magnitude of biases decreases with increasing gold and silver grade.

An anomalously large variability and bias was noted in the pulp duplicate analyses performed by HOM's mine laboratory in 1979. This anomalous large variability may be due to more than inherent sample heterogeneity. It could indicate pulps were coarse or were not homogenous when aliquots were extracted for assaying. These data were used in estimation. However, the risk from poor correlation of pulp duplicate results has been incorporated into a reduced confidence assigned to the 1979 series of air-track holes.



Analyses of pulp and matrix blanks by AAL and CMI's mine laboratory generally indicate no contamination during analysis. For coarse blanks inserted at an intermediate crushing stage at CMI's mine lab, there were two assays above the warning limit. This represents a failure rate of 2.3%, and indicates some contamination, albeit minor, was occurring during sample preparation.

Evaluation of core recoveries and RQD's versus gold and silver grades indicates that the majority of core recoveries were greater than 90%, whereas about half of the RQD values were less than 10%. This implies that moderate core recovery was achieved even in intensely fractured and broken rock. Graphs of geotechnical data by gold and silver domains indicate a decrease in core recovery with increasing grade and increasing metal domains. The sample integrity evaluation concludes that loss of gold during core drilling may have resulted in skewed, lower-grade assays.

Due to the high error rates in the QA/QC data and the variable biases, the drilling-assay intervals were ranked for quality. MDA accomplished this by assigning a confidence code to each drill campaign based in part on their specific QA/QC results (see section 11.7). This confidence code was incorporated into each block estimate and considered when determining the resource classification. For example, MDA down-graded to Inferred classification those block-model grades estimated using a majority of samples with low confidence (<0.50).

MDA believes the data is adequate for the purposes used in this report.

9.4 Exploration Target Area: Southern Occidental-Brunswick Lode - Art Wilson Claim Group

MDA verified the 2016 surface sample database for the Art Wilson Claim Group located on the southern portion of the Occidental-Brunswick Lode. MDA also compiled and analyzed available QA/QC data for all sampling programs conducted on these claims between 2008 and 2018. Verification and analysis of the recent drilling completed by Tonogold between September 2020 and June 2021 at the Gold Hill and Southern Occidental-Brunswick Lode exploration targets has not yet been undertaken as of February 2022.

9.4.1 2016 Surface Sample Assay Database Audit - Art Wilson Claim Group

While mapping the Art Wilson Claim Group in 2016, MDA visited approximately 15% of Mr. Jordan's surface sample sites and observed that samples had been taken at these locations. Based on 2016 data verification and field-verification of the sample locations, the surface-sample database is considered reasonable for an early-stage project and of adequate quality for use in further exploration of the property, such as guiding the selection of drilling targets.

9.4.2 2016 Verification Samples - Art Wilson Claim Group

In 2016, MDA collected five rock-chip samples from surface exposures of veins at the Art Wilson claims to verify the presence of gold-silver mineralization at the exploration target. MDA collected the samples on four separate veins in three different areas of the property and placed each sample into numbered sample bags sealed with string ties and delivered them to ALS in Reno, Nevada.

Table 9.7 demonstrates the presence of modestly elevated gold concentrations in all five samples.

	Au					
Sample ID	(ppm)	Au (opt)	Ag (ppm)	Ag (opt)	Claim	Comment
						Select chip across 1m vein by old
A164	0.665	0.0194	9.2	0.268	Ida	truck
						Float grab, select on qtz vein
A165	0.132	0.0039	1.1	0.032	Morningstar	w/boxwork
						Float grab, select on qtz vein
A166	0.544	0.0159	2.6	0.076	Morningstar	w/boxwork
					Midas	0.25 m select chip; hanging wall
A179	0.426	0.0124	13.4	0.391	(Vivian)	margin upper Midas
						0.5m chip across vein margin to
					Midas	HW; site of V-103, upper Midas
A180	0.356	0.0104	4.3	0.125	(Vivian)	stope at surface

 Table 9.7:
 Summary of Surface Verification Samples by MDA 2016

9.4.3 Audit of 2018 Drilling Assay Database - Art Wilson Claim Group

MDA constructed a drilling database of the 2018 drill campaign on the Art Wilson Claim Group. Mr. Art Wilson provided the assay certificates and drill logs. For the data verification process, MDA audited a total of 230 assay intervals in the database. These intervals come from all 18 drill holes and represent 19% of the total number of assayed intervals. MDA compared sample depths, sample weights, and the gold and silver assays of the selected intervals in the database with the AAL certificates of assays. MDA found zero discrepancies.

9.4.4 Quality Assurance/Quality Control - Art Wilson Claim Group

The Art Wilson Claim Group is an early-stage exploration target with recent historical drilling in 2018. The underground and surface samples collected by Mr. Steve Russell (2008-2009) were subjected to internal laboratory QA/QC. However, no external controls were used for that study. For the 2016 underground sampling program, project geologists Mr. Russell and Ms. Briggs inserted a certified standard for gold to monitor assay analytical quality. No standards were inserted with the surface samples collected and analyzed in 2016, but this is not unusual for very early-stage work with the primary objectives of proving the presence or absence of gold-silver mineralization and broadly determining variations in the tenor of mineralization from place to place over the property. A preliminary check-assay program was started in 2016.

The 2018 drilling program implemented a QA/QC program to monitor and control possible issues with sample numbering, laboratory contamination during sample preparation, and laboratory analytical results. That program inserted 15 coarse blank samples and 15 CRM pulps into the sample stream prior to shipment to the laboratory. A large number of field-duplicate samples were also analyzed. However, most were inserted at the end of the drill sample stream.



9.4.4.1 Certified Reference Materials for 2016 Underground Samples

For QA/QC purposes, a certified commercial reference material (OxK18 from RockLabs, Inc.) was inserted with the 2016 underground rock-chip samples and assayed at AAL. The insertion rate was 5.5%, or five insertions for the 91 underground samples analyzed, as summarized in Table 9.8. All but one of the standard samples assayed within two standard deviations of the certified, expected gold concentration. Results within three standard deviations are generally considered acceptable. There was one low-side failure of the standard inserted with the Vivian samples, V-133A, Table 9.8.

Underground Area	rground Area Standards Inserted (n)		Low Failures			
Vivian(Midas)	4	0	1			
Pride of the West	1	0	0			
All Areas Combined	5	0	1			
Certified Standard OxK18 by RockLabs, Inc.; 3.463g Au/t; 1 std dev =0.132g Au/t						
Standard Sample ID	AAL Au g/t	Diff from Cert g/t	AAL Job Number			
V-163A	3.54	0.077	SP0116140			
PW-103A	3.59	0.127	SP0116140			
V 112A						
V-113A	3.68	0.217	SP0116113			
V-113A V-133A	3.68 1.77	0.217 -1.693	SP0116113 SP0116113			

 Table 9.8: Summary of 2016 QA/QC Standards, Underground Samples

9.4.4.2 Certified Reference Materials for 2018 Drilling

Two commercially prepared CRMs were inserted as "standards" to monitor possible laboratory analytical issues:

- RockLabs OxK18 Gold Value = 3.463g Au/t ± 0.132 (one std. dev.)
- KLEN International BN_74108 Gold Value = 1.76 Au/t ± 0.04 (95% conf)

The CRMs were inserted with samples from drill holes I18-04 through I18-18. Figure 9.14 and Figure 9.15 summarizes the results. No significant errors or failed batches were defined. Both sets of analyses showed minor but high biases. However, the number of cases is too small to draw firm conclusions.





Figure 9.15: AAL Analyses of 2018 Drilling CRMs

9.4.4.3 Blanks for 2018 Drilling

Fifteen coarse blank samples were inserted with the samples from drill holes I18-04 through I18-18. The blank material consisted of hydrothermally altered andesite of the Alta Formation from a site near Silver City. If truly barren of gold, the blank material should have values below the lower limit of detection, which was 0.003g Au/t for the AAL gold fire-assay method used. Results less than or equal to twice the limit of detection are considered within the level of analytical uncertainty. Results greater than or equal to five times the detection limit are considered unreliable.

All 15 of the inserted blanks contained low but detectable amounts of gold, ranging from 0.005g Au/t to 0.087g Au/t (Figure 9.16), suggesting that either the blank material was not truly barren of gold or that insignificant amounts of contamination occurred during sample preparation. Eleven of the blanks contained 0.009g Au/t or less, effectively within the analytical uncertainty of the detection.





Figure 9.16: Coarse Blanks 2018 Drilling

One blank returned a value of 0.087g Au/t. The previously prepared sample prior to this anomalous blank had a grade of 0.042g Au/t, so contamination was not likely. The source of the gold in this blank sample is unknown.

9.4.4.4 Duplicate Samples for 2018 Drilling

A total of 103 duplicate samples were collected at the drill rig. Ten of these, from holes I18-17 and I18-18, were inserted along with the original samples. The other 93 samples, from holes I18-01 through I18-16, were inserted following the last sample from I18-18. Gold and silver assays were done on both sets. Figure 9.17 is a graph of the relative difference of the duplicate-sample gold grade compared to the original sample. MDA uses a relative difference expressed as a percentage for each duplicate pair calculated as follows:

Equation 100
$$x \frac{(Duplicate - Original)}{Lesser of (Duplicate, Original)}$$

Any point that lies above the 0% line indicates a pair of samples with the duplicate grade higher than the original and vice versa for points below the 0% line. While duplicate samples are generally higher grade than the original samples, there is enough variability to suggest that any apparent bias is far from definitive. The graph for silver is not included because there was so little silver above the relatively high detection limit that the graph didn't provide meaningful information. Figure 9.18 presents a graph of the absolute value of those data in Figure 9.17. Except for the six largest outliers, the grade variability shown in Figure 9.18 is typical for field-duplicate RC samples in epithermal, volcanic-hosted gold deposits.







Figure 9.18: Absolute Value of Relative Difference, Gold in 2018 Field Duplicates





9.4.5 Summary Statement – Southern Occidental-Brunswick Lode, Art Wilson Claim Group

MDA has evaluated the 2018 QA/QC data, conducted site visits, done some verification sampling, and verified the drilling (for 2018) and surface assay databases for the Art Wilson Claim Group. In MDA's opinion, the data are reliable. As the Art Wilson Claim Group portion of Tonogold's exploration target proceeds, QA/QC procedures should be expanded, beginning with check assays at a second laboratory and "screen-fire" gold assays to investigate gold grain-size and potential sample pulp heterogeneity issues.

The assay data collected at the claim group between 2008 and 2016 are considered to be of adequate quality and confidence for broadly defining variations in the tenor of gold-silver mineralization and guiding the selection of areas to be tested by future drilling. The 2018 drilling results are of sufficient quality to be used in future resource estimation.



10.0 MINERAL PROCESSING AND METALLURGICAL TESTING

This section has been prepared under the supervision of Mr. Timothy D. Scott, Senior Engineer and Associate with KCA. The information presented below was received from CMI and sources as cited. Mr. Scott has reviewed this information and believes it to be materially accurate.

10.1 Historical Metallurgical Tests

During 2011 (prior to mining) a significant test program was conducted at an independent laboratory, McClelland Laboratories Inc. in Reno NV (ISO 17025 accredited), Job 3439. This program consisted of:

- 12 Bulk ore samples in three grade classes, tested by bottle roll at two crush sizes (2in. and 0.5in.), and by column test at two crush sizes (1 in. and 0.5 in.);
- 31 Reverse Circulation (RC) drill cuttings (-0.5in.) bottle rolled as-received;
- 13 core composites bottle rolled at 1in.

During production (2014 and 2015) a number of in-house metallurgical test programs were also conducted by CMI's onsite lab. These included:

- 13 bottle roll programs testing production mining areas;
- 13 column tests of production mining areas;
- 2 ROM studies;
- 1 size vs recovery investigation (2in. vs 1.25in.);
- Monthly production column tests composited from daily crusher samples.

Almost all of the metallurgical tests in these programs used samples from ore that has since been mined out. Although instructive, the data is of limited use and cannot be specifically applied to the current mineral resource being evaluated. This is discussed in more detail in the sections below, and particularly in Section 7.4. As such, only the portions of this data that have some relevance to the current mineral resource are presented.

10.2 All Column Tests – Size vs. Recovery

A plot of crush size vs. recovery for all column tests performed to date on Lucerne Deposit mineralized materials yields a gold recovery of 76.8% and a silver recovery of 48.3% at the plant crush size of 1.25in. Using a recommended operating discount of 2% for gold and 4% for silver, a 74.8% gold recovery and a 44.3% silver recovery would be expected at the production crush size of 1.25in Figure 10.1 and Figure 10.2 below show the size vs. recovery plots.

10.3 Production Heap-Leach Metal Recoveries

Metal recoveries were also estimated from the actual heap-leach production by CMI. Reportedly, CMI processed approximately 2.6 million tons of mineralized material from 2012 through 2016, producing


59,515 ounces of gold and 735,252 ounces of silver at estimated recovery of 88.8% of the contained gold and 59.5% of the contained silver. By calculation, this implies a gold head grade of 0.026oz Au/ton, and a silver head grade of 0.475oz Ag/ton. The gold recovery of 88.8% is high when benchmarked against industry-wide heap leach gold recoveries. It is also at variance with the metallurgical test data, both from drill samples and monthly production composites. As such, it should be viewed with some skepticism.





Figure 10.2: All Column Tests – Gold





Although details of the production head-grade sampling, weights, and moisture determinations, etc., have not been provided, it is well known that careful measurements of these parameters are critical for reliable recovery calculations. For example, the gold head grade for the heap indicated at 0.026oz Au/ton is somewhat lower than the 0.029oz Au/ton expected from initial work. While this may be accurate, a sampling error of only 0.003oz Au/ton on the low side would decrease the actual gold recovery from the stated 88.5% to 78.9%, which is more in line with typical gold heap-leach recoveries, as well as being in line with the recovery expected from Lucerne Deposit metallurgical data.



Figure 10.3: All Column Tests – Silver

10.4 Recovery Estimate – Current Resource

Much of the prior metallurgical test work is represented by sampling of areas that have since been mined. It is therefore of limited utility when applied to the current resources. There are some exceptions, however. MDA has studied the data to determine which of the tests have relevance to current resources. Only one column test (PC10-07, 08) partially represents the central part of the current resources. Generally, the most representative samples remaining are samples that were only tested using bottle rolls at 0.5in crush size. Even among these, some are only partially representative as some intervals have been mined. However, given the sparsity of the data, these have been included in the evaluation. As such, relations from the entire dataset have been developed to correlate 0.5in bottle-roll recovery to 0.5in column-test recovery on data sets where both tests were run on the same sample. This relation can be provisionally used to extrapolate from 0.5in bottle-roll recovery to an estimate of 0.5in column-test recovery. The estimated column-test recovery must then be normalized to compensate for the coarser crush size of 1.25in. employed at the existing crushing plant. Figure 10.4 and Figure 10.5 graph the derivation of 0.5in bottle-roll to 0.5in column-test recoveries for gold and silver.





Figure 10.4: Column-Test and Bottle-Roll Gold Recoveries

Figure 10.5: Column-Test and Bottle-Roll Silver Recoveries





To arrive at an estimated 0.5in crush size column-test recovery, an average of 9.3% can be added to a 0.5in crush size bottle-roll recovery for gold and of 9.4% for silver. These are then applied to the 0.5in bottle-roll data set as shown in Table 10.1. Note that from metallurgical report MRI 3273 (McClelland, 2011), the grade class designation was defined as:

	Conversion to Estimated 0.5in Column Test Metals Recovery							
Drillhole /			Calc Head	Calc Head	Bottle Roll	Bottle Roll	Estimated Column Test (+9.3%)	Estimated Column Test (+9.4%)
Composite	Interval	Grade Class	Au opt	Ag opt	Au % Recovery	Recovery	Au % Recovery	Ag % Recovery
L08-33	425-435	High Grade	0.149	2,105	87.8	77.3	97.1	86.7
L08-33	415-425	High Grade	0.834	32.713	76.2	64.5	85.5	73.9
L08-22	350-360	High Grade	0.188	5.341	60.4	36.5	69.7	45.9
L08-14A	95-115	High Grade	0.103	1.353	70.2	48.0	79.5	57.4
L08-33	435-440	Mid Grade	0.053	0.638	92.0	81.7	101.3	91.1
L08-33	210-225	Mid Grade	0.049	0.653	65.4	40.4	74.7	49.8
L08-25	265-270	Mid Grade	0.055	0.857	88.8	35.4	98.1	44.8
L08-33	485-495	Mid Grade	0.058	1.583	87.7	59.4	97.0	68.8
L08-22	340-350	Mid Grade	0.077	1.797	48.4	20.0	57.7	29.4
L08-20	170-185	Mid Grade	0.075	0.769	18.2	16.5	27.5	25.9
L08-22	? - 395	Mid Grade	0.062	1.656	49.4	29.0	58.7	38.4
PC10-07, 08	comp	Mid Grade	0.050	1.210	48.4	42.1	57.7	51.5
L07-02	160-200	Mid Grade	0.087	0.683	30.0	37.8	39.3	47.2
L08-01	215-245	Mid Grade	0.091	2.906	86.6	42.9	95.9	52.3
L08-03	125-140	Mid Grade	0.053	1.529	65.2	47.8	74.5	57.2
L08-14	145-150	Mid Grade	0.059	2.147	77.6	33.7	86.9	43.1
L08-14A	115-150	Mid Grade	0.093	1.856	76.7	40.2	86.0	49.6
L08-22	160 - ?	Low Grade	0.044	0.310	89.5	56.1	98.8	65.5
L08-35	150-155	Low Grade	0.017	0.560	64.9	46.1	74.2	55.5
L08-23	415-425	Low Grade	0.030	0.817	70.2	35.7	79.5	45.1
L08-23	370-385	Low Grade	0.012	0.138	76.3	50.7	85.6	60.1
L08-27	450-465	Low Grade	0.009	0.052	67.0	44.2	76.3	53.6
L08-35	420-435	Low Grade	0.003	0.042	80.6	31.0	89.9	40.4
L08-35	260-265	Low Grade	0.038	0.506	91.1	55.9	100.4	65.3
L08-25	355-360	Low Grade	0.022	0.993	79.7	39.4	89.0	48.8
L08-35	250-255	Low Grade	0.017	0.589	75.2	53.8	84.5	63.2
L08-35	280-285	Low Grade	0.001	0.037	45.4	21.6	54.7	31.0
L08-32	475-485	Low Grade	0.014	1.067	66.9	41.7	76.2	51.1
L08-33	225-235	Low Grade	0.033	0.112	55.2	56.2	64.5	65.6
L08-35	210-215	Low Grade	0.030	0.457	60.5	46.8	69.8	56.2
L08-35	200-205	Low Grade	0.030	1.441	74.8	31.8	84.1	41.2
L08-27	590-635	Low Grade	0.014	0.749	67.9	23.4	77.2	32.8
L08-27	570-585	Low Grade	0.013	1.322	65.4	10.3	74.7	19.7
L08-20	315 - ?	Low Grade	0.020	1.172	39.7	15.4	49.0	24.8
L07-01	145-175	Low Grade	0.006	0.432	70.2	46.3	79.5	55.7
L07-02	250-290	Low Grade	0.024	0.613	53.1	28.5	62.4	37.9
L08-01	195-215	Low Grade	0.033	2.089	/3.6	25.6	82.9	35.0
L08-02	155-200	Low Grade	0.041	0.240	56.9	54.6	66.2	64.0
L08-02	200-225	Low Grade	0.018	0.088	47.2	51.1	56.5	60.5
L08-02	265-295	Low Grade	0.011	1.635	62.9	40.4	/2.2	49.8
LU8-14	135-140	Low Grade	0.024	0.998	59.6	32.0	68.9	41.4
LU8-14	140-145	Low Grade	0.045	2.443	52.2	24.4	01.5 7 7 4	33.8 EC 2
	Average	ALL Low Grade	0.064	1.919	00.1 CE 9	40.9	/ 5.4	50.3
	Average	Mid Grade	0.022	1 126	64.2	30.0	73.6	40.2
	Average	High Grade	0.001	10 279	72 7	40.5 56.6	22 N	43.7 66.0
L	Average	nigii Graue	0.310	10.370	/3./	50.0	05.0	00.0

Table 10.1: ½in Bottle Rolls Within or Partially Within 2021 Resources

High Grade: >0.080 oz Au/ton

Mid-Grade: 0.041 to 0.080 oz Au/ton

Low Grade: 0.010 to 0.040 oz Au/ton

Very Low Grade: 0.0011 to 0.0099 oz Au/ton



Overall, estimated 0.5in column-test recoveries were 75.4% for gold and 50.3% for silver. Normalizing to the plant crush size of 1.25in, a deduction of 3% for gold and 5% for silver are applied (estimated from slopes of regression lines in Figure 10.2 and Figure 10.3). A further operational deduction of 2% for gold and 4% for silver has been applied against column-test recoveries. Those deductions result in estimated field recoveries of 70.4% for gold and 41.3% for silver. These estimates assume that the plant is operated in the same manner as formerly with respect to crush size, cement addition, cyanide addition, solution application, and leach cycle.

The same laboratory-to-field operational deductions can be applied to the monthly production column tests and the data set of all column tests to date at the 1.25in crush size as presented in Table 10.2

Summary Comparison Metals Recovery Estimates						
	Au %	Ag%				
Monthly 1-1/4 in. Production Columns w/ Lab to Field Deduction*	74.3	46.6				
All Columns 1-1/4 in. Crush Size w/ Lab to Field Deduction*	74.8	44.3				
Original 2013 Feasibility Study Assumptions	70.0	45.0				
Expected Production Recovery 70.4						

Fable 10.2:	Overall Lucerne	Gold and Silver	Recover	y Estimates
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*Lab to field deductions recommended are 2% for gold and 4% for silver.

There are anecdotal indications that recoveries may decrease with depth based upon very limited cyanidesoluble gold shake-leach tests on assay intervals throughout the deposit. This is far from conclusive, however. It should be noted that data from column test PC10-07, 08 from within the resource yielded particularly low recoveries of 50.0% gold and 45.7% silver, even at a 0.5in crush size. Reportedly, this composite was intentionally selected for testing as a highly siliceous composite and was not considered representative of the overall silicification of the deposit. This may imply encapsulation of gold to some degree in the Lucerne ores. Silicification/encapsulation may increase with depth.

From mineralogical examinations commissioned by MLI (Thompson, 2011), select samples of mineralized andesite and quartz porphyry with quartz/calcite veining and breccia showed hydrothermal alteration with disseminated pyrite altered to goethite or hematite. Vein material consisted predominantly of quartz with calcite, adularia, sericite, and trace copper sulfides, pyrolusite, silver sulfosalts, and gold. Silver occurs as wire silver or as the ruby silver minerals proustite and pyrargyrite. Gold and silver minerals occur as free grains that can be encapsulated in quartz or calcite. Manganese minerals are minor, but occurrences of manganese encapsulation were also observed. Single gold particles were observed up to 450 microns by 50 microns in size. Wire silver particles were observed with lengths up to 100 microns with 5-micron diameters.

From the bottle-roll data presented in Table 10.1, a grade vs. recovery relation may be implied. However, the full data set of all metallurgical samples which includes the mined-out material does not support a grade vs. recovery relationship.

10.5 Summary Statement

Given the past production history and the corresponding metallurgical tests of the processed material, and the extrapolations from the historical data that bears relevance to the existing mineral resource, the metals



recovery estimates presented in Table 10-2 (70.4% for gold and 41.3% for silver) are reasonable for the purposes of this study. For advancement of the project to the next level of study, or to a production decision, additional work as recommended in Section 10.6, as a minimum, is considered essential.

10.6 Recommendations for Additional Metallurgical Work

Although these recovery estimates are sufficient for this study, given the lack of column-test data representing the current resources, MDA highly recommended that a new metallurgical program be initiated using spatially representative drill core intervals. The samples should be tested using column tests at the intended production crush size of P_{100} 1.25in with cement agglomeration tests. Compacted permeability tests should be performed as well.

Ideally, a minimum of eight to ten column tests should be conducted to define metals recoveries, reagent requirements, and advance the project toward new production. The sample composites could be grouped into grade and lithology classes to define grade vs. recovery relations. Investigation of finer crushing sizes could also be considered. However, the existing crushing plant would have to be modified to achieve this in practice.



11.0 MINERAL RESOURCE ESTIMATES

11.1 Introduction

These estimated mineral resources were classified in order of increasing geological and quantitative confidence into Inferred and Indicated categories in accordance with the New Mining Rules. SEC mineral resource definitions are given below:

Mineral resource is a concentration or occurrence of 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 economic extraction. A mineral resource is a reasonable estimate of mineralization, taking into account relevant factors such as cut-off grade, likely mining dimensions, location or continuity, that, with the assumed and justifiable technical and economic conditions, is likely to, in whole or in part, become economically extractable. It is not merely an inventory of all mineralization drilled or sampled.

Indicated mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve.

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. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project and may not be converted to a mineral reserve.

MDA reports resources at cutoffs that are reasonable for deposits of this nature given anticipated mining methods and plant processing costs, while also considering economic conditions, according to the regulatory requirements that a resource exists "*in such form, grade or quality, and quantity that there are reasonable prospects for economic extraction*."

The Lucerne Deposit mineral resource estimate was completed on January 3, 2019, based on data derived from drilling performed through 2016 and included the drill-hole series LUGC15-001 to LUGC16-041. The drill-hole database on which this estimate is based was received from the previous operator, CMI, in November of 2017. The database was audited prior to use, and the last minor changes to collar, survey, and assay data were made on December 7, 2018. Pit optimizations used to define reasonable prospects for economic extraction were completed at the end of August 10, 2021. Gold and silver resources were estimated and are reported herein with an Effective Date of September 6, 2021. The block model is rotated 42° to the northwest, and the blocks are 10ft by 10ft by 10ft.



11.2 Database

Twelve companies have conducted exploration drilling programs in the Lucerne Deposit area since 1961. In all, 1,045 RC (65% of footage), 407 core (29% of footage) and 402 air track (6% of footage) holes totaling 477,099ft have been drilled (Table 11.1). Drill-hole locations and the Lucerne Deposit outline are shown in **Error! Reference source not found.**

Type of hole	Count	Drilled feet
Core	407	139,441
RC	1,045	307,538
Air Track	402	30,120
Total	1,854	477,099

Table 11.1:	Summary of Drill	ing in the D	atabase for the	Lucerne Deposit	Resource Estimate
1			mense for ene		

Table 11.2 presents descriptive statistics of all audited and accepted Lucerne Deposit drill-hole analytical and geotechnical data imported into MinePlan 3D[©] software (v. 13.0). Data from rejected samples have been excluded from the table. There is little to no trace-element and whole-rock geochemical data.

					Co. of			
	Valid	Median	Mean	Std. Dev.	Variation	Minimum	Maximum	Units
From	91,476					0	1,395	ft
То	91,476					1	1,400	ft
Length	91,476	5.0	5.1	0.9		0.3	22.0	ft
Au	88,786	0.002	0.012	0.049	4.177	0	4.307	oz/ton
Ag	89,236	0.04	0.16	0.41	2.61	0.00	17.70	oz/ton
AuCN	4,816	0.013	0.021	0.031	1.458	0.000	0.589	oz/ton
AuCN Ratio	4,812	43.60	45.51	22.59	0.5	0.00	100.00	%
AgCN	2,352	0.25	0.40	0.47	1.2	0.00	5.99	oz/ton
AgCN Ratio	2,350	69.70	64.48	20.42	0.3	0.00	100.00	%
Core recovery	4,208	93.6	86.3	20.3	0.2	0	231	%
RQD	4,199	9.0	18.9	23.8	1.3	0	104	%

 Table 11.2: Descriptive Statistics of Sample Assays in Lucerne Drill-Hole Database

The Lucerne Deposit database contains 88,786 accepted gold and 89,236 accepted silver assay records (Table 11.2). The total number of rejected assays, which are not included in Table 11.2, is 586 and 158 for gold and silver, respectively (some intervals did not have silver assays). Most of these records were rejected due to suspected down-hole contamination. Other data from relatively old holes, such as those drilled in 1961 in the New York shaft area, contained unusually high-grade assay values that conflicted with surrounding, more recent drilling, and were therefore deemed unreliable. Cyanide-soluble gold and cyanide-soluble silver were also assayed for 4,816 and 2,352 samples, respectively. These represent about 5.0% and 2.5% of the total gold and silver analyses, respectively.

Logged core recovery and RQD were loaded into the database. The database also contains logged geologic characteristics, including rock type, oxide and sulfide mineral contents, fault material, and vein type and



quantity. Operational information such as drill-hole type, company, drill-hole sequence, and year drilled were included. Metallurgical data was compiled and loaded into the database with the best-available, and sometimes approximated, sample and composite locations.

Blast-hole data from mining in 2013 to 2015 was provided by CMI but was not usable in the current format and was not deemed sufficiently reliable for inclusion. Drill-hole numbers were frequently duplicated. Elevations assigned to the blast holes were not clearly referenced.

11.3 Deposit Modeling

Ms. Kiersten Briggs, an MDA geologist who previously worked for CMI during project development and mining at the of the Lucerne Deposit, compiled a three-dimensional digital geologic model to guide modeling of mineralized domains. Included in the geology model is the Silver City fault, also referred to as the footwall fault, which defines the footwall of most mineralization. Modeled in the central Lucerne Deposit area (the historic Justice, Keystone and Succor areas) is an unnamed, high-angle fault in the hanging wall of the Silver City fault. A surface defining the top of bedrock and the base of surface backfill, where it exists, was updated for the current resource estimate. Digitized geologic contacts, faults and veins at the surface were draped to the most current topographic surface. A stope model was modeled explicitly based on drill data and is described in Section 11.3.3. CMI's interpreted three-dimensional representations of rock types were not used in the geologic model because they were incomplete.

All geologic interpretations were used to guide metal-domain modeling and to estimate cyanide-soluble gold and silver ratios in combination with assays and logged data. CMI's paper maps and sections, coupled with logged geology and modeled faults, were used to model metal domains. Although not available digitally, these provided sufficient guidance for domain modeling with respect to lithology.

11.3.1 Gold Domain Model

Gold domains were modeled on sections spaced 50ft apart, oriented northeast-southwest, and looking northwest. Modeling used core photos, historical maps and cross sections, and the extensive personal experience MDA has with the deposit. Gold-domain sample-assay ranges were defined from population breaks on the cumulative probability plots ("CP plot") for all gold assays (excluding rejected assays) (Figure 11.1). The following grade ranges were identified and used to model gold:

- Low-grade gold domain, interpreted to be stockwork mineralization: ~0.006 oz Au/ton to ~0.050oz Au/ton;
- Mid-grade gold domain, interpreted to be breccia, vein, and stockwork mineralization: ~0.050 oz Au/ton to ~0.60oz Au/ton; and
- High-grade gold domain, interpreted to be breccia mineralization: >~0.60oz Au/ton

The grade break at 0.05oz Au/ton is very subtle, which likely indicates a correspondingly subtle geological difference between the low- and mid-grade domains.





Figure 11.1: Cumulative Probability Plot of Lucerne Gold and Silver Assays

Gold mineralization occurs primarily in the hanging wall of the Silver City fault. Host rocks are generally limited to the Silver City andesites, quartz porphyry intrusive, and intermediate intrusive. The features that define strength of mineralization that pertain to modeled domains can be very difficult to distinguish in reverse circulation cuttings. Mineralization is present where the ground has undergone structural deformation, and vein materials such as quartz, calcite, and minor sulfides were introduced. The quantity of the vein materials does not seem to correlate to grade, at least not in a manner which distinguishes modeled grade domains. Rather, grade appears to increase with increased amount and complexity of structural preparation usually occurring in proximity to major faults. Higher grades are associated with variable breccias and clay gouges with quartz-vein fragments and secondary minerals, including iron and manganese oxides. The mineralized breccia and gouge zones tend to be more abundant in the more extensive fault zones although they are also found distal to the faults, and therefore can be present in all domains.

Given the above observations, the geological differences that would definitively define respective domains could not easily be recognized, particularly since most of the drilling was done by RC. However, proximity to major faults and structural control is critical to mineralization. Therefore, domains were modeled to follow the primary structural trends, such as those defined by the Silver City, Succor, and Woodville faults. Mine stopes were also important to domain modeling. Domains and stopes were generally modeled together, following the primary structural trends.

The quantity of the high-grade domain material at $>\sim 0.602$ Au/ton is limited. Only 0.1% of all assays exceed 0.602 Au/ton. The highest grades tend to occur in areas of historic stopes, so that there is only a small volume in the model that has not been mined. Historic reports suggest that silver-bearing minerals, such as argentite, are associated with the highest grades in the district. However, silver is much less



abundant in the Lucerne Deposit compared to the Virginia City mines, so it is not surprising that these minerals were not observed in logging or core photos.

Descriptive statistics of assays within the modeled domains are presented in Table 11.3. Schematic cross sections of gold domains in the central Lucerne Deposit at the intersections with the Succor and Woodville faults are shown in Figure 11.2 and Figure 11.3, respectively.

After sectional interpretations were completed, the gold domains were snapped to drill holes in three dimensions and sliced for further modeling on long sections oriented northwest-southeast. The modeled long sections were spaced 10ft apart and were located to correspond with the mid-plane of each row of blocks in the block model.



	Gold D	omain	1	Stockwork	low-grade	•		
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
From	21,654					0	1185	ft
То	21,654					2	1190	ft
Length	21,654	5.0	5.1	1.0		0.3	22.0	ft
Au	21,003	0.012	0.017	0.026	1.5	0	1.598	oz/ton
Capped Au	21,003	0.012	0.017	0.022	1.2	0	0.700	oz/ton
Core recovery	1,539	90.4	84.1	21.3	0.3	0	230.8	%
RQD	1,533	0.0	10.8	17.6	1.6	0	104.0	%
	Gold D	omain	2	Breccia, vein a	and stockwork			
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
From	3,656					0	1195	ft
То	3,656					5	1200	ft
Length	3,656	5.0	5.0	0.9		0.4	18.0	ft
Au	3,571	0.078	0.114	0.104	0.9	0	1.657	oz/ton
Capped Au	3,571	0.078	0.113	0.097	0.9	0	0.800	oz/ton
Core recovery	417	89.1	80.1	24.5	0.3	4	134.1	%
RQD	415	0.0	7.3	13.8	1.9	0	100.0	%
	Gold D	omain	3	High-grad	le breccia			
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
From	81					20	1000	ft
То	81					25	1005	ft
Length	81	5.0	4.6	0.9		1.0	7.0	ft
Au	79	0.920	1.034	0.605	0.6	0	4.307	oz/ton
Capped Au	79	0.920	1.034	0.605	0.6	0	4.307	oz/ton
Core recovery	23	70.0	69.5	30.4	0.4	10	114.3	%
RQD	23	0.0	4.8	10.4	2.1	0	33.0	%
	Gold D	omain	99	Outside mod	eled domains			
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
From	64,936					0	1395	ft
То	64,936					1	1400	ft
Length	64,936	5.0	5.1	0.8		0.5	20.0	ft
Au	63,709	0.001	0.003	0.008	3.0	0	0.574	oz/ton
Capped Au	63,709	0.001	0.003	0.005	2.0	0	0.060	oz/ton
Core recovery	2,179	96.0	89.5	17.4	0.2	0	150.0	%
RQD	2,179	20.8	27.2	26.3	1.0	0	102.0	%

Table 11.3: Descriptive Sample Assay Statistics for Gold by Gold Domain















11.3.2 Silver Domain Model

Silver domain sample-assay ranges are shown in Figure 11.4 along with the gold data. The following grade ranges were identified and used to model the silver domains:

- Low-grade silver domain, interpreted to be stockwork mineralization: ~0.11 oz Au/ton to ~0.70oz Au/ton;
- Mid-grade silver domain, interpreted to be breccia, vein, and stockwork mineralization: ~0.70 oz Au/ton to ~6.0oz Au/ton; and
- High-grade silver domain, interpreted to be breccia mineralization: >~6.0oz Au/ton

Silver domains were modeled in a similar manner to the gold domains. Major faults, stopes and gold domains were used as guides so that all stopes, and both gold and silver metal domains, were coincident. During domain modeling, respective grade breaks for gold and silver occurred in similar locations, although there were some differences between the two sets of domains. Gold and silver distributions are similar (see Figure 11.4), but not exactly the same, thereby requiring separate domains for each. Silver domains were then sliced and modeled on the same planes as the gold domain long sections.









The grade breaks in Figure 11.1 are more evident for silver than for gold. In particular, the grade break between the low- and mid-grade domains is more pronounced. Gold and silver distributions (Figure 11.4) are similar globally, but not necessarily locally.

Descriptive statistics of the silver assays within the modeled domains are presented in Table 11.4. Schematic cross sections of silver domains in the north-central Lucerne Deposit and Woodville areas are shown in Figure 11.5 and Figure 11.6, respectively.

	Silver Do	omain	11	Stockwork low	<i>ı</i> -grade	•		
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
From	17,127					0	1205	ft
То	17,127					2	1210	ft
Length	17,127	5.0	5.1	1.0		1.0	20.0	ft
Ag	16,723	0.230	0.295	0.233	0.8	0	7.500	oz/ton
Capped Ag	16,723	0.230	0.294	0.226	0.8	0	4.000	oz/ton
Core recovery	1,194	92.0	84.5	21.4	0.3	0	230.8	%
RQD	1,190	3.4	11.6	16.6	1.4	0	104.0	%
	Silver Do	main	12	Breccia, vein a	nd stockwork			
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
From	4,675					0	1090	ft
То	4,675					5	1095	ft
Length	4,675	5.0	4.9	0.8		0.3	12.0	ft
Ag	4,567	1.006	1.293	0.997	0.8	0	16.200	oz/ton
Capped Ag	4,567	1.006	1.290	0.970	0.8	0	9.000	oz/ton
Core recovery	735	85.8	78.8	23.5	0.3	4	133.3	%
RQD	731	0.0	5.2	11.7	2.3	0	100.0	%
	Silver Do	main	13	High-grade bro	eccia			
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
From	10					60	440	ft
То	10					65	445	ft
Length	10	5.0	4.4	1.4		1.0	5.0	ft
Ag	10	10.200	11.509	4.523	0.4	1	17.700	oz/ton
Capped Ag	10	10.200	11.509	4.523	0.4	1	17.700	oz/ton
Core recovery	1	12.5	12.5	0.0	0.0	13	12.5	%
RQD	1	0.0	0.0	0.0	0.0	0	0.0	%

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1 able 11.4:	Descriptive Sam	iple Assay Statis	tics for Silver b	y Silver Domain



	Silver Do	omain	99	Outside modeled domains				
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
From	68,515					0	1395	ft
То	68,515					1	1400	ft
Length	68,515	5.0	5.1	0.8		0.5	22.0	ft
Ag	67,511	0.024	0.041	0.074	1.8	0	3.100	oz/ton
Capped Ag	67,511	0.024	0.041	0.062	1.5	0	0.900	oz/ton
Core recovery	2,228	96.0	90.1	17.0	0.2	0	150.0	%
RQD	2,228	21.0	27.6	26.5	1.0	0	102.0	%









Figure 11.6: North-Central Lucerne Deposit and Woodville Silver Domains, Section 1914



11.3.3 Historical Stopes

Underground stopes were modeled on the same set of cross sections that were used for the gold and silver domains, based on logged voids and stope backfill, and from historical maps. Stope shapes were drawn to follow higher-grade gold and silver domains and vice versa, on the assumption that historical miners would have preferentially mined these grades. As with gold and silver domains, the stope outlines were snapped to drill holes in three dimensions, sliced, and re-modeled on northwest-southeast long sections at 10ft spacings. These and developmental drifts digitized by CMI from historic maps were used to code respective voids into the block model.

The gold and silver grades of stope backfill were estimated using 938 gold and silver assays coded as stope backfill (see Table 11.5). Overall, the stope-fill data set is small and irregularly distributed, the geometry and distribution of historic stope backfill is not generally well known, and grade in back-fill material has no continuity or predictability. While an estimate of stope-fill grades was done and is stored in the model for internal use, because confidence is too low, stope material is not tabulated, nor is it part of the resource presented herein. For this study, the stope-fill material has zero grade applied to it.

	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
From	938					5	930	ft
То	938					10	935	ft
Length	938	5.0	5.0	0.9		1.0	15.0	ft
Au	218	0.018	0.039	0.052	1.3	0	0.319	oz/ton
Ag	219	0.401	0.605	0.696	1.2	0	5.314	oz/ton

Table 11.5:	Sample Assa	y Statistics of Gold and Silver Assays in Stopes

The quantity of stope backfill within the stopes and underground workings is largely unknown. Stopes can be empty or partially to completely backfilled. Furthermore, original stope backfill was commonly mined by subsequent historical operators, who may have left the stopes empty or filled with new material. Mr. Stephen Russell provided MDA with a generalized estimation of the amount of stope backfill in stopes by area, which ranged from no more than one quarter to over half filled, or as completely unknown.

MDA applied values of 30% fill and 70% void to all stope volumes. A more accurate estimate of stope backfill will likely never be possible.

11.3.4 Cyanide-Soluble Gold and Silver Assay and Ratio Data

The ratios of cyanide-soluble gold and cyanide-soluble silver to fire-assay gold and aqua regia-digested silver, respectively, are depicted graphically in the CP plot in Figure 11.7. The plot indicates that silver is generally more cyanide-soluble than gold—by as much as 30%. Two distinct cyanide-soluble gold ratio populations are apparent, separated by a gradation from ~18% to ~25% cyanide-soluble. Two other grade breaks occur at ~55% and ~87% cyanide-soluble gold, although these are subtle changes. Like gold, the cyanide-soluble silver curve shows two strong, distinct ratio populations, one from ~23% to ~58% cyanide-soluble silver, and the other between ~67% and ~90% cyanide-soluble silver. These populations are also separated by gradational assays. The remainder of the assays below 23% and above ~90% cyanide-soluble silver represents a small percentage of the total population. Descriptive statistics for cyanide-soluble gold and silver are given in Table 11.6 and Table 11.7 respectively.



Figure 11.7: CP Plot of Cyanide-Soluble to Fire-Assay Gold and Aqua Regia-Digested Silver Ratios

Table 11.6: Descriptive Statistics of Cyanide-Soluble Gold Assays and Ratios in Gold Domains

All Modeled Domains										
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units		
From	25,391					0.0	1195	ft		
То	25,391					2.0	1200	ft		
Length	25,391	5.0	5.1	1.0		0.3	22.0	ft		
AuCN	4,129	0.013	0.022	0.032	1.5	0.0	1	oz/ton		
AuCN/Au										
Ratio	4,129	43.7	45.8	22.4	0.5	0.0	100.0	%		

Table 11.7: Descriptive Statistics of Cyanide-Soluble Silver and Assay Ratios in Silver Doma	ins

All Modeled Domains								
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
From	21,812					0.0	1205	ft
То	21,812					2.0	1210	ft
Length	21,812	5.0	5.1	0.9		0.3	20.0	ft
AgCN	2,114	0.255	0.409	0.476	1.2	0.0	6	oz/ton
AgCN/Ag								
Ratio	2,114	69.9	65.0	19.7	0.3	0.0	100.0	%



Gold and silver solubility in cyanide solution was examined with respect to geology, gold and silver grade domains, and solubility populations indicated in Figure 11.7. Ultimately, the strongest correlation was between gold solubility ratios and modeled gold domains, and similarly, between soluble silver and modeled silver domains. In a geological context, it is likely that gold-silver mineralization and subsequent weathering were controlled by similar or related faults, fractures, and groundwater elevations. If precious metals are at least partially encapsulated or bound in sulfide minerals, then the oxidation of sulfide minerals would render gold and silver more susceptible to cyanide solubility. No meaningful connection between cyanide-soluble assays and logged iron oxide or sulfide content was apparent. Interestingly, cyanide-soluble to fire-assay gold ratios do increase from ~44% to ~63% with increasing vein content from 1% to 100%. Conversely, cyanide-soluble to aqua regia-digested silver ratios decrease from ~64% to ~56% with this same increase in vein content. At present, MDA cannot explain this contradictory correlation of gold and silver solubilities.

Figure 11.8 and Figure 11.9 are CP plots of the ratios of cyanide-soluble gold and silver to fire-assay gold and aqua regia-digested silver, respectively, from samples within each of the gold or silver domains. Each graph clearly indicates a decrease in cyanide solubility from low- to mid- to high-grade domains. The curve for assay ratios for samples outside domains represents a range of assays from below detection to high grades that have been excluded from domain modeling.



Figure 11.8: CP plot of Ratios of Cyanide-Soluble to Fire-Assay Gold by Domain



Figure 11.9: CP plot of Ratios of Cyanide-Soluble to Aqua Regia-Digested Silver by Domain

In most areas, there is an apparent spatial zonation in the ratios of cyanide-soluble to fire-assay gold and cyanide-soluble to aqua regia-digested silver, with decreasing solubilities with depth down-dip along the Silver City fault. There are localized areas with up to 70% gold solubility, generally near the surface, and extending 100ft to 400ft down-dip along the fault zone. Some continuity in higher cyanide solubilities is apparent along strike as well. Deeper in the central Lucerne deposit, ratios decrease to about 20% to 50% overall in domains. Ratios also tend to decrease with increasing distance into the hanging wall from the Silver City fault. Cyanide-soluble silver ratios are noticeably greater than gold. Ratios of cyanide-soluble to aqua regia-digested silver range from about 75% near the surface to about 40% at depth. Outside gold and silver domains, both cyanide-soluble gold and cyanide-soluble silver ratios are extremely variable and localized.

Only about 5% of samples with fire-assay gold and 2.5% of samples with aqua regia-digested silver assays were analyzed for cyanide solubility. Because the samples chosen for solubility analyses were generally above certain gold and silver grades, there is a sample-selection bias in the solubility data.

11.4 Density

Densities were measured for 385 samples for the Lucerne Deposit in various studies by Geocon Consultants, Inc., Sierra Geotechnical, Mactec, and McClelland Labs prior to CMI initiating production in 2012. Those measurements yielded average density values of 2.49g/cm3 and 2.61g/cm3 for mineralized bedrock and bedrock, respectively. These values are 1% and 2% higher than the values assigned to the block model which were used by CMI during their mining and applied to both mineralized and



unmineralized bedrock materials. MDA assigned a density value of 1.78 g/cm3 for surface and stope backfill, which is consistent with the values used by CMI. These densities and tonnage factors, as applied to the Lucerne Deposit resource model are given in Table 11.8.

Lithology	Tonnage Factor (ft³/ton)	Density (g/cm³)					
Bedrock	12.5	2.56					
Mineralized bedrock	13	2.47					
Surface Backfill	18	1.78					
Stope Backfill*	18	1.78					
* Stope volume reduced to reflect estimated 30% backfill remaining in stopes, then applied to toppage per block calculations							

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able 11.8:	Density values	Applied to the	Lucerne Block	Niodel

11.5 Capping and Composites

The 50ft-spaced cross-sectional domain and stope-shape interpretations were used to assign metal-domain and stope codes to the drill-hole samples. CP plots were made of the coded assays. Capping of assays within the metal domains was applied after reviewing outlier grades on screen samples with respect to geology and proximity of surrounding samples, general location, and materiality, as summarized Table 11.9. Descriptive statistics of sample assays by domain (Table 11.3 and Table 11.4) were also considered for determining capping levels. Assay data outside modeled domains is widespread but lacks grade continuity. Therefore, capping assays for samples outside domains was more severe than within modeled domains.

 Table 11.9: Capping Levels for Gold and Silver by Domain

	Go	old	Silver		
Domain	Capping Grade (oz Au/ton)	No. of Samples Capped	Capping Grade (oz Ag/ton)	No. of Samples Capped	
Low-grade, Stockwork	0.7	4	4.0	4	
Mid-grade, Breccia, vein and stockwork	0.8	8	9.0	2	
High-grade, Breccia	None	None	None	None	
Outside domains	0.06	221	0.9	66	

A particularly low cap grade was applied to stope grades because it is impossible to accurately predict the quantity or estimate the grade of stope backfill. Although stope-fill grades were estimated into the resource block model, the stope grades are not part of the reported resource.

Once the gold- and silver assay capping was completed, the drill holes were down-hole composited to five-foot intervals honoring respective domain or stope boundaries. Descriptive statistics for capped and composited gold and silver by domain are given in Table 11.10 and Table 11.11, respectively. Cyanide-soluble gold and cyanide-soluble silver ratio composites were also generated.



Correlograms were generated from the composited gold grades to evaluate grade continuity. Correlogram parameters were determined and applied to the kriged estimate. The correlogram parameters for gold by area and domain are summarized below:

<u>Lucerne Pit area: Low-grade, stockwork gold domains</u> - The nugget is 25% of the total sill. The first sill is 70% of the total sill with an isotropic range of 17ft. The remaining 5% of the total sill has a range of 100ft to 130ft depending on direction.

Lucerne Pit area: Mid-grade, breccia, vein and stockwork, and high-grade, breccia gold domains -The nugget is 60% of the total sill. The first sill is 30% of the total sill with an essentially isotropic range of 15ft to 17ft depending on direction. The remaining 10% of the total sill has a range of 55ft to 150ft depending on direction.

<u>Succor Fault area: Low-grade, stockwork gold domains</u> - The nugget is 40% of the total sill. The first sill is 45% of the total sill with an essentially isotropic range of 14ft to 15ft depending on direction. The remaining 15% of the total sill has a range of 70ft to 110ft depending on direction.

<u>Succor Fault area: Mid-grade, breccia, vein and stockwork, and high-grade, breccia gold domains</u> - The nugget is 40% of the total sill. The first sill is 55% of the total sill with a range of 12ft to 15ft depending on direction. The remaining 5% of the total sill has a range of 50ft to 200ft depending on direction.

Table 11.10:	Gold Composit	e Descriptive	Statistics by	y Gold Domain
	0014 00110001			0014 2011411

	Gold Dom	nain	1	Stockwork low-grade				
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
Length	19,531					0	5	ft
Au	18,980	0.012	0.017	0.021	1.3	0	1.552	oz/ton
Capped Au	18,980	0.012	0.017	0.019	1.1	0	0.700	oz/ton

	Gold Dom	nain	2	Breccia, vein	and stockwork			
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
Length	3,609					0	5	ft
Au	3,524	0.078	0.112	0.099	0.9	0.001	1.657	oz/ton
Capped Au	3,524	0.078	0.112	0.093	0.8	0.001	0.800	oz/ton

	Gold Domain 3			High-grade breccia					
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units	
Length	81					0	5	ft	
Au	79	0.894	1.025	0.581	0.6	0.391	4.307	oz/ton	
Capped Au	79	0.894	1.025	0.581	0.6	0.391	4.307	oz/ton	



	Gold Dom	nain	99	Outside modeled domains				
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units
Length	64,599					0	5	ft
Au	63,515	0.001	0.003	0.008	3.1	0	0.574	oz/ton
Capped Au	63,515	0.001	0.002	0.005	2.0	0	0.060	oz/ton

 Table 11.11: Silver Composite Descriptive Statistics by Silver Domain

	Silver Dor	main	11	Stockwork low-grade					
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units	
Length	15,181					0	5	ft	
Ag	14,828	0.218	0.275	0.196	0.7	0	7.500	oz/ton	
Capped Ag	14,828	0.218	0.275	0.189	0.7	0	4.000	oz/ton	
	Silver Dor	main	12	Breccia, vein a	and stockwork				
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units	
Length	4,423					0	5	ft	
Ag	4,316	1.003	1.281	0.946	0.7	0.032	8.585	oz/ton	
Capped Ag	4,316	1.003	1.280	0.946	0.7	0.032	8.585	oz/ton	
	Silver Domain		13	High-grade breccia					
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units	
Length	9					2.500	5	ft	
Ag	9	12.600	11.655	4.772	0.4	1.448	17.700	oz/ton	
Capped Ag	9	12.600	11.655	4.772	0.4	1.448	17.700	oz/ton	
	Silver Dor	main	99	Outside mode	led domains				
	Valid	Median	Mean	Std. Dev.	C. of Var.	Minimum	Maximum	Units	
Length	68,226					0	5	ft	
Ag	67,265	0.023	0.040	0.070	1.8	0	2.856	oz/ton	
Capped Ag	67,265	0.023	0.040	0.060	1.5	0	0.900	oz/ton	

The correlogram evaluation of grade continuity contributed to the classification of the resources in Section 11.7.

11.6 Estimation

A polygonal, nearest neighbor, inverse distance, and kriged estimate were each completed, with the inverse distance estimate being reported. All the estimates, excluding the polygonal, were run several times to determine sensitivity to estimation parameters and to evaluate and optimize results. The inverse-distance power was four ("ID⁴") inside all modeled gold and silver domains. Inverse-distance squared ("ID²") was applied outside these domains.

The resource block model was divided into six estimation areas, four on the predominant Lucerne/Silver City Fault trend and two along the intersecting Succor Fault, in order to control search anisotropy,



orientation, and distances according to the differing geometries of mineralization in each area. The Lucerne/Silver City Fault trend consists of the central Lucerne area, Justice, and Keystone deposits from southeast to northwest along the entire Silver City fault segment within the resource area. The block-model estimate used elevations relative to the main controlling fault, the Silver City fault, to control the search orientation. Table 11.12 summarizes the estimation areas and associated search orientations and maximum search distances by domain. Figure 11.10 depicts the spatial relationship of the numbered estimation areas in Table 11.12 to the drilling and the gold domains.



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Table 11.12: Estimation Areas, Search-Ellipse Orientations and Maximum Search Distances by Domain and Area of the Block Model

		Search Ellipse Orientation		Maximum Search Distance (ft)							
				Gold and Silver				Cyanide-Soluble G and Silver			
Estimation Area	Description	Azimuth*	Dip	Rotation	Low- Grade	Mid- Grade	High- Grade	Outside Domains	Stope Backfill	In All Modeled Domains	Outside Domains
1	Lucerne/Silver City Fault Trend - Very shallow-dipping	330	0	-12.5	1000**	600	240	50	300	500	100
2	Lucerne/Silver City Fault Trend - Shallow-dipping, default	330	0	-30	1600**	600	360	50	300	500	100
3	Lucerne/Silver City Fault Trend - Moderate-dipping Lucerne/Silver City Fault Trend - Sub-horizontal.	330	0	-50	600	600	200	50	300	500	100
4	includes Woodville	330	0	-2.5	440	400	160	50	300	500	100
5	Succor Fault - NW-striking	330	0	45	400	300	160	50	300	500	100
6	Succor Fault - East-west-striking	90	0	-55	400	360	240	50	300	500	100
* Azimuth given in real space. Actual values applied to model are relative to the rotated model north.											
** Some extreme long pass search distances were required to fill in the model where data is lacking. These areas were defined based on presence of stopes and for the most part lie below the pit-resource confining surface, or are classified as Inferred.											





Figure 11.10: Spatial Relationship Between Estimation Areas and Drill Holes

(Estimation areas: 1 – brown, 3 – green, 4 – orange, 5 – tan, and 6 – cyan)

Two estimation passes were run for low- and mid-grade domains in estimation areas one, two, and three. An initial long pass was run to estimate grades into domains that were deemed geologically reasonable. In estimation areas one and two, extreme long passes (\geq 1,000ft) were necessary to fill in low-grade domains modeled down-dip along the Silver City Fault. Justification for projecting these deep domains was mineralization presumed to be associated with deep stopes and drifts. Because of the extreme depth and lack of supportive drilling, none of these volumes are included in the reported resources. Even with the use of the long passes, grades were not estimated into all modeled low-grade domain blocks. Second estimation passes were performed at shorter distances (up to 600ft) following the long passes.

Domains in estimation areas four, five, and six were estimated by a single short pass. The maximum search distance for any estimation area was 440ft, 400ft, and 240ft for the low-, mid-, and high-grade domains,



respectively. For all estimation areas, any material in blocks classified as Indicated was estimated by the short passes.

Search ellipse anisotropy for all estimation runs is 1:1.33:4 (major versus semi-major versus minor axes). The semi-major axis represents the down-dip direction in the plane of the mineralized fault zones. The major search axis along strike was made slightly stronger because the gold and silver mineralization in the district is known to have a component of elevation control.

Estimation parameters for gold and silver estimates by domain are given in Table 11.13 and Table 11.14. Composite-length weighting was applied to all estimation runs.

Description	Parameter				
	Falameter				
Low-Grade, Stockwork Gold Domains					
Samples: minimum/maximum/maximum per hole	1 / 12 / 3				
Search (ft): major/semimajor/minor (vertical)	1 / 0.75 / 0.25				
Inverse distance power	4				
High-grade restrictions (gold grade in oz/ton, distance in ft)	None				
Mid-Grade, Breccia, Vein and Stockwork Gold D	omains				
Samples: minimum/maximum/maximum per hole	1/9/3				
Search (ft): major/semimajor/minor (vertical)	1 / 0.75 / 0.25				
Inverse distance power	4				
High-grade restrictions (gold grade in oz/ton, distance in ft)	None				
High-Grade, Breccia Gold Domain					
Samples: minimum/maximum/maximum per hole	1 / 9 / 4				
Search (ft): major/semimajor/minor (vertical)	1 / 0.75 / 0.25				
Inverse distance power	4				
High-grade restrictions (gold grade in oz/ton, distance in ft)	None				
Outside Modeled Gold Domains					
Samples: minimum/maximum/maximum per hole	2 / 12 / 3				
Search (ft): major/semimajor/minor (vertical)	1 / 1 / 0.25				
Inverse distance power	2				
High-grade restrictions (gold grade in oz/ton, distance in ft)	0.005 / 10				

Table 11.13: Estimation Parameters - Gold (for example, circulations and maximum distances, con Table 11 12)

Stope Backfill - Gold					
Samples: minimum/maximum/maximum per hole	2/8/2				
Search (ft): major/semimajor/minor (vertical)	1/1/1				
Inverse distance power	4				
High-grade restrictions (gold grade in oz/ton, distance in ft)	0.030 / 10				

Table 11.14: Estimation Parameters - Silver

(for search orientations and maximum distances, see Table 11.12)



Description	Parameter					
Low-Grade, Stockwork Silver Domains						
Samples: minimum/maximum/maximum per hole	1/12/3					
Search (ft): major/semimajor/minor (vertical)	1 / 0.75 / 0.25					
Inverse distance power	4					
High-grade restrictions (silver grade in oz/ton, distance in ft)	None					
Mid-Grade, Breccia, Vein and Stockwork Silver Don	nains					
Samples: minimum/maximum/maximum per hole	1 / 12 / 3					
Search (ft): major/semimajor/minor (vertical)	1 / 0.75 / 0.25					
Inverse distance power	3					
High-grade restrictions (silver grade in oz/ton, distance in ft)	None					
High-Grade, Breccia Silver Domain						
Samples: minimum/maximum/maximum per hole	1 / 12 / 4					
Search (ft): major/semimajor/minor (vertical)	1 / 0.75 / 0.25					
Inverse distance power	3					
High-grade restrictions (silver grade in oz/ton, distance in ft)	None					
Outside Modeled Silver Domains						
Samples: minimum/maximum/maximum per hole	2/12/3					
Search (ft): major/semimajor/minor (vertical)	1 / 1 / 0.25					
Inverse distance power	2					
High-grade restrictions (silver grade in oz/ton, distance in ft)	0.10 / 10					
Stope Backfill - Silver						
Samples: minimum/maximum/maximum per hole	2/8/2					
Search (ft): major/semimajor/minor (vertical)	1/1/1					
Inverse distance power	4					
High-grade restrictions (silver grade in oz/ton, distance in ft)	0.40 / 10					

Parameters used for the estimation of gold and silver grades for stope backfill are included in Table 11.13 and Table 11.14. Stope-backfill grades were estimated using an isotropic search ellipse and maximum search distance of 300ft. However, as noted in Section 11.3.3, confidence in this stope-backfill estimate is too low to be considered in the resource. All stope-fill material has been assigned a grade of 0.0oz Au/ton. Potential stope-backfill tons and grade ranges from 700,000 tons at a 0.01oz Au/ton cutoff to 1,300,000 tons at 0.02oz Au/ton assuming 30% fill.

Ratios of cyanide-soluble gold and silver to fire-assay gold and aqua regia-digested silver, respectively, were also estimated into block models, each controlled by the gold or silver domains. One ratio estimate was performed for the combined low-, mid-, and high-grade domains, and another, more restrictive estimation was done outside modeled domains. Maximum search distance within domains was 500ft. However, the overall lack of cyanide-soluble assays and sample-selection bias imparts a low level of confidence in the cyanide-soluble gold and silver models. Therefore, the models are relied upon only to demonstrate general trends in the cyanide solubilities of gold and silver.



11.7 Mineral Resources

MDA classified the Lucerne Deposit mineral resources with consideration to confidence in the underlying database, sample integrity, analytical precision/reliability, QA/QC results, and confidence in geologic interpretations. The classification parameters are given in Table 11.15.

Indicated
In modeled domain
and
in estimation areas 1, 2, 3 or 4 (excludes Succor), and
Isotropic distance ≤ 20ft
or
Number of Samples \geq 7 and isotropic distance \leq 50ft
or
Number of Samples ≥ 4 and average distance ≤ 60ft
or
All estimated blocks with closest distance \leq 20ft
or
Number of Samples ≥ 2 and closest distance ≤ 10ft

Table 11.15: Classification Parameters

Inferred					
In modeled domain that is not Indicated and distance \leq 600ft					
or					
All estimated blocks outside modeled domains, and isotropic distance \leq 50ft**					
or					
in estimation areas 5 or 6 (Succor)					
or					
Confidence code* ≤ 0.5					
or					
All estimated blocks that are not Indicated, with stope $\geq 1\%$					
or					
With stope ≥ 20%					
or					
Other areas where the maximum classification was Inferred (Holman, deep south-central Lucerne and deep Woodville)					
*Drill-hole confidence code was estimated with grades. Value of '1' indicates maximum confidence in block, whereas a code of '0' means minimum and no confidence (unreliable).					
**A strong pullback on composites ≥0.005oz Au/ton and ≥0.10oz Ag/ton within 10ft was applied					

Some assay data were excluded from use in the estimate, as described in Section 11.2. The remaining samples were assigned a confidence code using a matrix in which various characteristics were rated by drilling campaign (sequence) on a scale of '0' (no confidence) to '1' (maximum confidence).



Consideration was given to a) the availability of supporting documentation for collar coordinates, downhole surveys, and assay data, b) drilling type and c) QA/QC program existence and/or results.

Air-track holes were assigned lower confidence than core and RC. Much of the air-track drilling lacked supporting documentation and QA/QC programs and were assigned confidence codes of '0'. Although no significant sample preparation issues were indicated by blank assays, there was a very high standard failure rate through most drilling programs, regardless of program, operator, or assay laboratory. Evaluation of duplicate assay pairs of all types reveals unusually high variability in analyses, particularly in the HOM mine lab data. Overall, QA/QC results were poor, which is reflected in the relevant confidence codes.

The confidence codes assigned to samples were estimated along with gold and silver into the blocks using the same estimation parameters. The estimated confidence codes were used to assign or modify classification of a given block. Indicated blocks with estimated confidence codes of ≤ 0.5 , or those blocks with estimated gold or silver grades that relied on data for which confidence was $\leq 50\%$, were reduced to Inferred. The poor QA/QC results were incorporated by excluding Measured material from the model entirely.

All south- and west-dipping mineralized zones in the hanging wall of the Silver City Fault, such as at the Succor and nearby Brown areas, were classified as Inferred or not reported. The geology and stope locations are poorly understood in these areas and, except for a few deeper holes from Donovan Ridge, drilling was mostly shallow air-track. Solids were used to code additional areas in the model that were classified as Inferred. These areas include Woodville, where drilling was limited, and large stopes of poorly defined volume exist.

Since stopes are unsurveyed and their limits are uncertain, the maximum classification assigned to blocks that are $\geq 20\%$ inside stopes was Inferred.

Gold and silver resource classifications were assigned separately. The final classification is equivalent to the gold classification, except for the few blocks where silver was estimated in a silver domain, but gold was not, in which case the silver classification was applied.

MDA reported the Lucerne Deposit resources at cutoffs that are reasonable for deposits of comparable size and grade. Technical and economic factors likely to influence the requirement "*in such form, grade or quality, and quantity that there are reasonable prospects for economic extraction*" were evaluated using the best judgement of the Qualified Person responsible for this section of the report. For evaluating the open-pit potential, a series of Whittle-optimized pits were run using costs appropriate for open-pit mining in Nevada (\$2/ton), estimated processing costs (\$5.30/ton), metallurgical recoveries related to heap leaching (80% and 60% for gold and silver, respectively), and standard General and Administrative costs (\$0.88ton). The factors used in defining cutoff grades were based on a gold price of US \$1,750/oz Au and US \$21/oz Ag. The optimized pit shell defines a surface here termed the "Resource Pit"

The QPs are not experts with respect to environmental, permitting, legal, title, taxation, socio-economic, marketing, or political matters. As of the date of this report, MDA is not aware of any unusual factors relating to these matters that may materially affect the Lucerne Deposit mineral resources that are not already described in appropriate sections, with a few exceptions. These include 500ft buffer zones centered on occupied residences and the Devil's Gate Historic Landmark, although none of the buffer zones



materially encroach on the Resource Pit. However, State Route 342 traverses across the northeast side of any potential pit and would need to be taken out of service or relocated prior to mining (see Section 22.4.

The Lucerne Deposit reported estimate of mineral resources is the fully block diluted, predominantly ID^4 estimate and is reported at a cutoff of 0.005oz Au/ton for open-pit mining. Some of the resource was estimated using ID^2 , ID^3 and ID^4 depending on the metal and domain. Table 11.16 and Table 11.17 present the estimates of the Indicated and Inferred gold resources, respectively, within the preliminary pits. Representative cross sections of the gold, silver, and cyanide-soluble gold and cyanide-soluble silver block models in the central Lucerne-Succor and north-central Lucerne-Woodville areas are given in Figure 11.11 through Figure 11.14.



Cutoff oz					
Au/ton	Tons	oz Au/ton	oz Au	oz Ag/ton	oz Ag
0.001	16,872,200	0.019	320,600	0.24	3,983,500
0.002	16,369,300	0.020	319,200	0.24	3,953,200
0.003	15,696,000	0.020	318,600	0.25	3,905,200
0.004	14,910,800	0.021	316,100	0.26	3,838,000
0.005	14,117,800	0.022	312,000	0.27	3,759,600
0.006	13,302,700	0.023	307,300	0.28	3,668,900
0.008	11,629,500	0.026	296,600	0.30	3,441,200
0.010	10,007,100	0.028	281,200	0.32	3,179,300
0.012	8,530,500	0.031	265,300	0.34	2,908,100
0.014	7,217,200	0.034	248,300	0.37	2,643,600
0.016	6,113,900	0.038	231,700	0.39	2,404,000
0.018	5,179,800	0.042	216,000	0.42	2,187,400
0.020	4,416,700	0.046	201,800	0.45	1,996,800
0.030	2,326,800	0.065	151,500	0.60	1,385,900
0.040	1,520,800	0.081	123,800	0.71	1,073,400
0.050	1,089,000	0.096	104,500	0.78	853,300
0.100	294,600	0.170	50,200	1.01	298,900

Fable 11.16:	Lucerne Tota	In-Pit Gold	and Silver	Resources - Indicated
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Table 11.17: Lucerne Total In-Pit Gold and Silver Resources - Inferred

Cutoff	Tons	oz Au/ton	oz Au	oz Ag/ton	oz Ag
0.004	10,220,600	0.021	209,500	0.21	2,135,100
0.005	9,488,900	0.022	206,900	0.22	2,092,300
0.006	8,975,200	0.023	203,700	0.23	2,052,600
0.008	7,931,400	0.025	196,700	0.24	1,939,200
0.010	6,739,400	0.028	186,000	0.26	1,761,000
0.012	5,626,600	0.031	173,900	0.28	1,583,300
0.014	4,618,300	0.035	160,700	0.30	1,399,800
0.016	3,731,300	0.040	147,400	0.33	1,225,000
0.018	3,013,300	0.045	135,300	0.36	1,081,200
0.020	2,501,800	0.050	125,600	0.39	977,200
0.030	1,321,100	0.074	97,200	0.51	675,600
0.040	910,600	0.091	83,200	0.58	531,300
0.050	667,500	0.108	72,400	0.63	420,200
0.100	204,900	0.199	40,800	0.87	178,300

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Figure 11.12: North-Central Lucerne and Woodville Gold Domains and Block Model – Section NW1914



















11.8 Discussion of Resources

The geometry and occurrence of structurally controlled gold and silver zones within the Lucerne Deposit are well understood, particularly along the well-defined, northwest-striking and northeast-dipping Silver City (footwall) fault, which is a lower boundary for most mineralization. Variable gold and silver grades are associated with varying amounts of quartz, calcite, iron and manganese oxides, vein-breccias, clay gouge and minor sulfides. Less-well understood is the mineralization within hanging wall fault zones, such as along the intersecting the Succor deposit, which dips west and/or south toward the central Lucerne mineralization. Gold and silver domains in the deposits located in the hanging-wall of the Silver City Lode are narrower, more limited in extent, and less well-defined by drilling. As a result of the lesser degree of geological understanding and limited drilling of the hanging-wall zones, the Succor and associated mineralization is classified as Inferred.

Drilling density, and therefore resource classification, decreases with depth. There are significant volumes of estimated but not reported mineralization below the Resource Pit. There are also volumes above the Resource Pit that lack drilling where mid- and high-grade domains were intentionally not extended into these undrilled volumes. The low quantity of Indicated resources (~60%) versus Inferred, above the Resource Pit is a direct result of this localized lack of information and the issues of sample quality (Sections 9.3 and 11.7). Drilling into these areas should add to the resources and upgrade classification.

Localized high-grade bonanzas that were famous in the Comstock Lode may have been missed by the relatively wide-spaced drilling in the Lucerne Deposit and could be encountered during mining or future infill drilling. More importantly, however, new drilling likely would raise resource classification, which is critical in order to advance the project to the pre-feasibility study phase.

The Lucerne Deposit has a long history of modern exploration drilling dating back to 1961. Consequently, there are many drill holes of varying types, quality, and reliability, and with varying amounts of supporting documentation and quality control for assays. Nearly 75% of the holes were drilled by CMI, for which nearly all the assay certificates exist, and QA/QC programs were consistently performed. However, QA/QC results for a significant portion of the project drilling have been poor. Although no significant sample preparation issues were indicated by blank assays, there was a very high failure rate for standards through many of CMI's drilling programs, regardless of assay lab and yet internal laboratory QA/QC showed good reliability. These poor results are reflected in the overall classification of the resources, not only in the exclusion of Measured material from the model, but the local reduction of Indicated material to Inferred where grade estimation relied on lower-confidence data.

Evaluation of duplicate data of all types reveals significant variability in analyses. This variability without a bias in grade won't affect a global estimate but it will affect production decisions about ore/waste if the project goes into production and similar variability still exists.

Production in the Lucerne Deposit has resulted in extensive underground development and stoping. Historical maps and drill intercepts of voids, stope backfill, and surface backfill have allowed for the modeling of stopes and underground workings. However, there remains a great degree of uncertainty in the location and limits of stoping, the quantity and grade of stope backfill material, and the grade of mineralized wallrock adjacent to the stopes. As a result of these uncertainties, the maximum classification



assigned to blocks in the vicinity of known stopes (*i.e.* blocks $\geq 20\%$ in stopes) is Inferred and the stope-backfill material is assigned a zero grade for resource reporting both gold and silver.

The uncertain characterization of stope backfill and physical limits of stopes in areas of underground development presents some upside as well. Since grades for material within the stopes are assigned a grade of 0.0g Au/ton, *any* stope backfill encountered during mining at grades above cutoff would add to gold and silver production.

There are several issues with cyanide-soluble gold and silver assays, first and foremost being their limited number. There are significant areas spaces without such data within the resource limits. And there is a sample-selection bias in the cyanide-soluble gold and silver assays. Commonly, only isolated sample series were submitted for cyanide-leach assays, leaving most of any drill hole with no cyanide-solubility data. As a result, representation of cyanide solubilities in the deposit are localized and incomplete. A more reasonable and confident solubility model will require better spatial coverage and more consistent sampling for cyanide-soluble assays. Moreover, a decrease in cyanide-solubility from low- to mid- to high-grade gold and silver domains has been demonstrated. CP plots indicate that silver is more soluble than gold by as much as 30%.

While material classified as Indicated exists, the lack of sufficient metallurgical data precludes even this Indicated material from being incorporated into any reserves of the Probable category.

Densities were measured for 385 samples for the Lucerne Deposit in various studies by Geocon Consultants, Inc., Sierra Geotechnical, Mactec, and McClelland Labs prior to CMI initiating production in 2012. Those measurements yielded average density values of 2.49g/cm3 and 2.61g/cm3 for mineralized bedrock and bedrock, respectively. These values are 1% and 2% higher than the values assigned by CMI during their mining and applied to both mineralized and unmineralized bedrock materials. MDA assigned a density value of 1.78 g/cm3 for surface and stope backfill, which is consistent with the values used by CMI.

The Lucerne Deposit has clustered drill data, which lie primarily above the Resource Pit. This area also contains a large proportion of the highest-grade material, particularly in the central Lucerne area. This effect of clustered data on the estimate in the high-grade is mitigated somewhat by estimating with higher inverse-distance power (ID^3 or ID^4 rather than ID^2), and because the areas with the least information where the effects of clustered data would have the negative effects are generally below the open-pit-material-defining surface.

In addition to the resources reported herein, there is contiguous mineralization that extends beyond the reported resources. The reported resource is constrained above the Resource Pit and therefore much estimated mineralization is unreported. The additional mineralization is shown graphically in Figure 11.15.







Orange - \$1750 optimized pit, light blue 0.005oz Au/ton grade shell, drill hole traces shown in dark gray

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12.0 MINERAL RESERVE ESTIMATES

There are no current mineral reserves at the Lucerne Deposit. Therefore, the project is not considered an "advanced project".



13.0 MINING METHODS

This section is not applicable to the Comstock gold and silver property.



14.0 PROCESSING AND RECOVERY METHODS

This section has been prepared under the supervision of Mr. Timothy D. Scott, Senior Engineer and Associate with KCA. The information presented below was received from CMI and sources as cited. Mr. Scott has reviewed this information and believes it is materially accurate.

Heap-leach pad areas and a processing area have been developed within the property in American Flat, approximately 1.25mi from the Lucerne pit. The processing area includes mine offices, maintenance shops, crushing facilities, process-water ponds, and a Merrill-Crowe gold-silver extraction system.

14.1 Existing Processing Plant

The existing crushing and stacking equipment consist of a two-stage crushing plant with a 200hp KPI 3055 jaw crusher, a 6ft x16ft Mesabi scalping screen, a JCI 7202 secondary screen, a 400hp twin drive JCI K400 secondary cone crusher, a 10ft by 32ft drum agglomerator, a 480ft overland conveyor, nine portable 36in-wide conveyors, and a KPI33-36150 portable super-stacker. The crushing plant is configured to produce 100% minus 1-1/4in crushed material at 529 tph (based upon Kappes, Cassiday and Associates plant simulations, and in line with previous operating data).

Assuming 24hrs. operation with a 365-day operating year, and 75% availability, this crushing plant is capable of 3.47 million tons per year. A photo of the existing crushing plant is shown in Figure 14.1, and a layout of the existing crushing plant is shown in Figure 14.2.



Figure 14.1: Existing Crushing Plant 2020







Figure 14.2: Crushing Plant General Arrangement



The existing stacking system consists of one overland conveyor (484ft x 36in); 10 grasshopper field conveyors (115ft x 36in); and one mobile radial stacker (80-150ft x 36in).

Irrigation pumping and piping systems are in place to provide up to 1,800gpm leaching capacity. The pregnant solution discharges into a 3.2-million-gallon pregnant solution pond.

The Merrill-Crowe plant is capable of running up to 1,320gpm of pregnant solution. The plant includes a diatomaceous earth pre-coat filter system including body-feed and pre-coat tanks and pumps. There are also two 1,500gpm capacity U.S. Filter Clarifiers; a 7ft by 21ft de-aeration tower; a high-capacity vacuum pump; a zinc feeder system with cone level control and a single motor; a high-accuracy Fisher Porter Magnetic flow meter with totalizer; and two 1,000gpm filter press feed pumps.

The refinery incorporates three 500gpm plate and frame filter presses, a 10ft³ mercury retort and mercury abatement system with associated baghouse, and a T200 propane gas fired furnace. The filter presses are shown in Figure 14.3.



Figure 14.3: Existing Plate and Frame Filters

A general arrangement drawing of the Merrill Crowe building is presented in Figure 14.4.







There is also a full 200 sample per day fire assay laboratory with all sample preparation equipment as well as wet lab and atomic absorption for processing solution samples.

All of the equipment is in serviceable condition and the site is secure with personnel present during ongoing care and maintenance operations.

14.2 Heap-Leach Facilities and Utilities

The existing heap-leach pad and process area are within a mix of private and public land controlled by CMI in American Flat, approximately 1.25mi from the Lucerne pit. A single, dedicated-use heap-leach pad containing an estimated 3.9 million tons of leached material is present at the processing area. There are approximately 300 acres of adjacent development area on a mix of private and public land controlled by CMI, most of which is favorable for additional leach pad area.

The mine offices, maintenance shops, and crushing and process facilities are supplied with 25 KW, 4,000amp electrical service from the NV Energy, Inc. regional electrical grid. Water is supplied to the heapleach and process facilities from two sources, an onsite water well (WS-4) with rights to 124 ac-ft/yr, and a contract with Story County for an additional 150 ac-ft/yr from the county reservoir system. The combined supply capacity is equal to 186gpm around the clock.

The cyanide system uses liquid cyanide from a bulk delivery tank and can be delivered from a northern Nevada cyanide vendor. There are two cement silos, with capacities of 75 tons and 50 tons. The 50-ton silo is a remnant of prior operators and was never used by CMI. However, it appears fully functional.



15.0 INFRASTRUCTURE

This section is not applicable to the Comstock gold and silver property.

16.0 MARKET STUDIES

This section is not applicable to the Comstock gold and silver property.

17.0 ENVIRONMENTAL STUDIES, PERMITTING, AND PLANS, NEGOTIATIONS, OR AGREEMENTS WITH LOCAL INDIVIDUALS OR GROUPS

This section is not applicable to the Comstock gold and silver property.

18.0 CAPITAL AND OPERATING COSTS

This section is not applicable to the Comstock gold and silver property.

19.0 ECONOMIC ANALYSIS

This section is not applicable to the Comstock gold and silver property.



20.0 ADJACENT PROPERTIES

The following information derives from published and unpublished historical literature on the Virginia City and Silver City mining districts and from the files of CMI. MDA has been unable to verify the information and the information is not necessarily indicative of the mineralization on the property that is the subject of this Technical Report Summary. However, the conclusions of this Technical Report Summary are not dependent on this information.

North of the Tonogold land package, another important group of historic mines exploited the Comstock Lode. These included the Consolidated Virginia, California, Ophir, Mexican, Union, and Sierra Nevada mines. The fabled "Big Bonanza" discovered in the Consolidated Virginia and California mines produced more bullion than any other Comstock ore body. The Big Bonanza remains the most valuable concentrated precious minerals deposit ever discovered in the United States. Little modern surface drilling has been completed in the area due to the location of these mines within the heart of Virginia City. In 1977 and 1978, Rosario Resources drilled several deep core holes in an unsuccessful attempt to find an extension of the Consolidated Virginia and California mines' bonanza zone. Marshall Earth Resources ("Marshall") controls much of the ground in this part of the district. Over the past thirty years, Marshall has completed some underground exploration work—drifting and raising to test various parts of the shallow mineralized zone.

The Silver City Lode extends southeast beyond the Lucerne Deposit into adjacent mining claims largely controlled by CMI. Until 1942, the historical Dayton Consolidated Mine ("Dayton") exploited gold-silver mineralization in the Silver City Lode about one mile southeast of the Lucerne Deposit. CMI conducted extensive drilling in the Dayton Mine vicinity as recently as 2015. CMI also re-opened several underground drifts to facilitate underground mapping and sampling. With those efforts, CMI refined their understanding of the structural and stratigraphic setting and gained a clearer understanding of gold-silver mineralization at the Dayton Mine.

About 0.75mi west of the Dayton Mine and one-mile south of the Lucerne Deposit, Mesozoic metavolcanic rocks contain several north- and northeast-trending faults which are locally mineralized over narrow widths. Several small historical mines were developed on these structures. The most noteworthy was the Oest Mine, which produced a small tonnage of high-grade material during the 1880s. HOM drilled the Oest Mine area in the late 1970s, but this effort failed to expand additional mineralization of interest to HOM.

Land adjacent to the west and southwest of the Lucerne Deposit has been the site of sporadic surface and underground exploration since the 1870s. Faults along the north and west sides of American Flat received the majority of that exploration. Globe Consolidated Mines explored some of these faults with shallow underground mine workings in the 1870s and early 1880s. They recorded no production. Comstock Gold Exploration Ventures Ltd ("CGEV") conducted a major exploration program just south of American Flat from 1971 to 1992. CGEV completed more than 20,000ft of core, rotary, and air-track drilling, and undertook extensive geophysical, geochemical, and geologic work. CGEV focused on the obvious fault system that juxtaposes Mesozoic metamorphic rocks and Tertiary volcanic rocks, but they did not encounter significant gold-silver mineralization. However, in one core hole, the CGEV drilling discovered weak, porphyry-style copper mineralization of Mesozoic age at a depth of about 1,800ft.



21.0 OTHER RELEVANT DATA AND INFORMATION

At the request of Tonogold, MDA completed a preliminary economic study to support Tonogold's yearend carrying value for the deposit as of December 2020. The study was based on an estimate of gold and silver mineral resources completed by MDA in February of 2019. An update in July 2021 included adjustments in metal prices from \$1,350/oz Au to \$1,500/oz Au and \$16.00/oz Ag to \$17.50/oz Ag. MDA concluded that the Lucerne gold-silver deposit is a project of merit and shows an established value positive net present value with a reasonable Net Present Value ("NPV"). MDA believes that the work done for Tonogold, as well as the geological interpretations MDA derived from the data, are a realistic economic representation of the Lucerne Deposit.

MDA is not aware of any additional information to the above or explanation necessary to make the Technical Report Summary understandable and not misleading.



22.0 INTERPRETATIONS AND CONCLUSIONS

MDA has reviewed the project data for the Lucerne Deposit along with the data for the exploration targets on the Gold Hill portion of the Comstock Lode and the southern extension of the Occidental-Brunswick Lode. MDA has visited the project at various times since 2016. Ms. Kiersten Briggs, an MDA geologist, also worked for CMI on the Lucerne Deposit from 2012 to 2016 and for Mr. Art Wilson on his claim group in 2016 and 2017. MDA believes that the data provided by Tonogold and CMI, as well as the geological interpretations MDA has derived from the data, are an accurate and reasonable representation of the project, subject to those concerns written elsewhere in this Technical Report Summary.

As a result of the data compilation, 3D modeling, and resource estimation for the Lucerne Deposit, the project emphasis has expanded from near-term production at the Lucerne Deposit with minor exploration to district-wide exploration. The work Tonogold has contracted has created a first-time, 3D rendering of the district-wide scale of the historic mines, the general geology, and the available drill data. The vast majority of the work done by historical operators and technical experts over the last 160 years has focused on individual claims or small groups of claims. The quantity of information Tonogold has compiled about the entire district has created a framework for the discovery of new gold-silver resources.

22.1 Exploration Potential, Gold Hill Area of the Comstock Lode

Tonogold's land package and data compilation covering the Gold Hill section of the Comstock Lode is unprecedented in its continuity and extent compared to all previous operators in the district. There is significant potential to discover resources in numerous areas within the Gold Hill segment of the Comstock Lode. Although many of the historic mines along this section of the lode produced large amounts of gold and silver during the extensive history of the district, there has been little modern exploration since the late 1970s and early 1980s. At that time, the majority of the work focused on developing low-grade, near-surface, bulk-mineable mineralization and processing material from old waste dumps.

Gold Hill portion of the Comstock Lode encompasses a mile-long segment of the Lode and six of the district's dozen or so historic bonanza mines. Any discussion of the Gold Hill area as an underground exploration target should include past production history. Grades remaining in situ will have lower grades than those that have been mined historically unless a new bonanza deposit is found. Table 22.1 illustrates this point, showing the tons and grades extracted from the individual mines during three eras of historical production. The table demonstrates successively lower gold and silver grades being extracted following the mining of the original bonanzas. Later production reworked older stope backfill and the margins of the original bonanza stopes. The introduction of bulk underground mining techniques in the 1920s increased dilution of ore and reduced grades, however.



Mine	1859 - 1881		1882 - 1920		1921 - 1940	
	Tons	Grade (Eqiv. oz Au/ton)	Tons	Grade (Eqiv. oz Au/ton)	Tons	Grade (Eqiv. oz Au/ton)
Consolidated Imperial*	964,153	1.375	85,199	0.901**		
Yellow Jacket	472,153	1.390	555,747	0.410	1,820,342	0.203***
Kentuck	138,094	1.630	73,529	0.858		
Crown Point	842,552	1.770	449,793	0.488	150,000	0.330****
Belcher	738,171	2.291	246,126	0.481		
Segregated Belcher	8,124	0.950				
Overman	104,900	0.800	70,198	0.661	5,000	0.400****
Caledonia	30,015	0.663				

Table 22.1:	Production	Summary,	Gold Hill M	Aines 1859	through 1940

Data is from Smith (1943) and Couch and Carpenter (1943).

* The Con. Imperial is here defined to include the Confidence, Challenge, Empire, Imperial, Consolidated Imperial, Little Gold Hill Mines, and the Alpha.

** Ounces per ton (opt) stated as an Au equivalent grade at \$20 Au per ounce.

*** Production of United Comstock Mines and Comstock Merger Mines from the Consolidated Imperial, Yellow Jacket, Kentuck, and Overman (?).

**** Approximate estimates based on Couch and Carpenter (1943) and company records.

Table 22.1 also shows by inference the grades that are expected to remain in unmined portions of the lode (Couch and Carpenter, 1943), particularly in the upper levels that were mined over several periods between the 1860s and about 1940. As a result of block-caving operations in the 1920s, only a limited tonnage of material with gold-equivalent grades exceeding 0.25oz Au/ton likely remains in the upper levels of the Kentuck, Yellow Jacket, and Consolidated Imperial mines. However, it is worth noting that block caving was not conducted in the other Gold Hill mines. Significant resources could be defined for material with gold equivalent grades in the range of 0.10 to 0.30oz AuEq/ton to a depth of about 900 feet.

Thorough historical research conducted by Tonogold and MDA since 2018 suggests zones of significant mineralization may be present from depths of 900 feet to 3,000 feet below the surface at several historic mines including the Segregated Belcher mine in the south to the Consolidated Imperial mine in the north. Information on these potential targets was recorded in historic mine reports and newspaper accounts and on geologic maps. Major flooding of the deeper levels in the early 1880s destroyed access to workings from the Sutro Tunnel elevation down to 3,000 feet. However, while exploring those deep levels before they were flooded, several major Gold Hill mines reported intersecting mineralized material exceeding the cut off grades required for 19th century mining. In fact, grades as high as \$400/ton (~200z EqAu/t) are reported in areas where stoping was never developed.

Mine dumps of various age exist in much of the Gold Hill area. Many of the dumps were reworked at various times up to the 1970s. However, some of the remaining dumps have not been evaluated since that time. There is a possibility that some of the material has grades suitable for heap leaching, though these should not be primary targets of exploration.



22.2 Exploration Potential, Southern Occidental-Brunswick Lode - Art Wilson Claim Group

Geological mapping by various workers since 1914 has defined an aerially extensive array of lowsulfidation epithermal quartz and calcite lodes within and adjacent to the Art Wilson Claim Group on the southern extensions of the Occidental-Brunswick Lode. At least seven of these veins and lodes sustained small-scale commercial gold-silver production at various times between the 1860s and the early 1940s. Historical data indicates that nearly all of the value these operations produced derived from gold, with an aggregate minimum production of 22,000 to 35,000 gold-equivalent ounces.

Underground mapping and sampling conducted on behalf of Mr. Art Wilson in 2008-2009 and 2016-2017 demonstrated that the Midas/Vivian, Grass Widow, and Pride of the West lodes were mined over 2ft to ~15ft widths and that gold grades in the lodes were locally as high or higher than 1oz Au/ton. Remnants of mineralization left along the margins of the lodes commonly contain grades of 0.1 to 0.25oz Au/ton. The data indicate that past production is best estimated in the range of 25,000 to 100,000 tons at average grades in the range of 0.25 to 1.0oz Au/ton. Widths from 5 feet to 15feet, and average grades of 0.25oz Au/ton or better over a few hundred feet laterally and 200 to 300ft vertically, could exist and could potentially be mined by conventional underground mining methods.

Surface sampling and geological mapping conducted on the claims in 2016 show that portions of the Ida, Pride of the West, and Middle Ridge veins extend laterally beyond the limits of the known underground workings and locally contain gold concentrations in the range of 0.015 to 0.22oz Au/ton. Four surface samples assayed in the range of 0.5 to 1.1oz Au/ton.

Drilling conducted in 2018 and again in 2020-2021 on the Art Wilson Claim Group demonstrated that gold-silver mineralization is present in unmined veins and lodes in the Morningstar, Pride of the West, Middle Ridge, and Midas-Grass Widow areas, with gold assays up to 3oz Au/ton. (Error! Reference source not found. and Error! Reference source not found. summarize the results of those drill programs). Additional drilling to the north and south of the Art Wilson Claim Group could lead to the discovery of new gold and silver resources.

22.3 Lucerne Deposit Expansion Potential

New drilling could incrementally expand the current mineral resources above the defined Resource Pit in the Lucerne Deposit. Furthermore, gold-silver mineralization is open-ended both along strike to the northwest and southeast and down-dip along the Silver City fault zone and intersecting faults such as the Succor and Woodville.

Significant areas in the resource block model above the Resource Pit lack drilling. MDA's resource estimate intentionally did not extend the mid-and high-grade domains into these potentially mineralized volumes of material. Further drilling into these areas could add to the resources. Localized high-grade zones that were commonly mined along the Silver City Lode may have been missed by the drill-hole spacing and could be encountered during mining or infill drilling. More importantly, however, new drilling could upgrade Inferred resources to at least Indicated. That new drilling and resource upgrade will be critical to maximize project economics in a pre-feasibility or higher study phase.



22.4 Project Risks

Comprehensive metallurgical data and studies for the Lucerne Deposit are insufficient for pre-feasibility work and converting the defined Indicated resources to reserves. Representation of cyanide extractions and metallurgical test work are localized and incomplete, which adds risk to the project and again precludes converting the Indicated material to reserves. Many bottle-roll and column-leach tests have been performed on material in the Lucerne Deposit that were mined out by CMI between 2012 and 2015, but test work is still limited or lacking in many areas within the current resources. Additionally, test work covering various lithologic types has not yet been undertaken.

Assays for cyanide-soluble gold and silver are available for only about 5% of gold and 2.5% of silver samples, and there are significant voids in the data at various locations within the resource area. There was also a bias applied to sample selection, in that apparently only samples with gold assays above a given threshold were submitted for cyanide-soluble assays.

Metallurgical data and test work that do exist, preliminarily indicate that silver is as much as 30% more soluble than gold. A decrease in cyanide-solubility from low- to mid- to high-grade gold and silver domains has been demonstrated. Therefore, the potential exists for lower recoveries at higher grades.

QA/QC results for a significant portion of the project drilling have been poor—especially with regard to a high failure rate in certified standards. Contradicting this finding, internal-laboratory QA/QC work demonstrated that the analyses were, in fact, reliable. At this stage, MDA cannot determine which finding more accurately reflects reality. The overall classification of the resources reflects those QA/QC uncertainties, not only in the exclusion of Measured material from the model, but also in the local reduction of Indicated material to Inferred classification where grade estimation relied on low-confidence data.

Variability associated with duplicate-sample assays of all types is high. That finding indicates that elevated natural variability of gold and silver needs to be considered when defining sample handling and subsampling procedures. High sample grade variability will have some effects on local resource estimates, but if no biases exist, that variability should not have a material global effect. However, during production, this large grade variability will impact ore/waste decisions.

Uncertainty exists about the location and extents of historical stoping, the quantity and grade of the stope backfill, and the grade of mineralized wall rock adjacent to stopes within the same blocks. To portray that uncertainty, the maximum classification assigned to blocks in the vicinity of known stopes has been reduced to Inferred even if they otherwise might have been classified higher. Stope-fill material is assigned a zero grade for both gold and silver. That presents an upside as stope-fill material is usually mineralized. Because block grades with some percentage of stopes were calculated using a stope-backfill grade of 0g Au/ton, *any* stope backfill encountered with grades greater than economic mining cutoff encountered during mining would add to gold and silver production.

The Lucerne Deposit and adjacent regions are part of the Comstock Historic Preservation Area ("CHPA"). Large-scale open pit mining is precluded in the Gold Hill community and areas to the north as defined in the Storey County Code. However, the ordinance does not apply to the mining of old mine dumps, nor does it prevent exploration by surface drilling within any portion the CHPA. The Lucerne Deposit area is within the CHPA, but it is in an area that allows for open pit mining as defined by the SUP boundary. In



essence, the restrictions limit exploration north of the Lucerne Deposit to the definition of underground targets and to the development of potential tonnages within existing mine dumps. The CHPA does not preclude underground exploration and mining.

Portions of Tonogold's land package in Gold Hill and Virginia City include lands withdrawn from mineral appropriations. The withdrawal was included in a land conveyance bill attached to the Dingell Act of 2019. All of the Tonogold claims affected are mining claims in Gold Hill and Virginia City on public lands administered by the BLM. Mineral patents, county land, and patented townsite lots are not included. If exploration advances in this area, Tonogold can request a mineral examination report from the BLM on individual claims. The examination will determine the status of each mining claim (whether the claim was properly located and has been maintained), if the claim remains valid, and whether the claimant has found a valuable mineral deposit at the time of withdrawal (U.S Department of the Interior, Bureau of Land Management, 2007). Tonogold would be required to pay all costs incurred by the BLM related to the mineral examination and report preparation. A mineral examination would be required for each individual claim in the affected area which could take several years to complete.

Future Lucerne Deposit production will require the relocation or realignment of Nevada State Route 342. This will likely have an impact on, and provoke a response from, the local communities of Silver City, Gold Hill and Virginia City. That situation will need to be proactively managed by the operator. Expanding the processing facilities and haul roads will require updating or expanding permits from various agencies as well.

The Devil's Gate Historical Landmark and several occupied residences adjacent to the Lucerne Deposit could limit the aerial extent of open pits and mine infrastructure although potential mining operations may not encroach into a 500ft buffer zone associated with the historical landmark and the occupied residences. The proximity of these buffer zones to the current resources, as well as the population in and around the nearby towns of Silver City, Gold Hill and Virginia City may complicate permitting and development of the project. However, CMI was able to develop, permit, and execute a mine plan on the Lucerne Deposit, and support for the project that exists within Storey County, largely due to the project's potential to generate local employment and revenue. Regardless, some level of resistance from the local community should be anticipated.

The geometry and occurrence of structurally controlled gold and silver zones are well understood at the Lucerne Deposit, particularly along the Silver City fault, which is a lower boundary for most mineralization. Less well understood is the mineralization associated with hanging wall structures such as the Succor and Brown that dip south and intersect the principal Silver City Lode mineralization. Gold and silver occurrences in the hanging-wall deposits are narrower, more limited in extent, and less well-defined by drilling. The Succor and its associated mineralization is classified as Inferred as a result of the lesser degree of geological understanding and limited drilling of the hanging-wall zones.

Drilling density and level of resource classification decrease with depth. The low percentage of Indicated resources (~60%) above the Resource Pit is, in part, a result of insufficient local drilling data. Further drilling would likely convert Inferred resources to Indicated resources.



23.0 RECOMMENDATIONS

MDA believes that Tonogold's Comstock project, which includes the Lucerne Deposit and exploration target areas on the Comstock and Occidental-Brunswick lodes, is a project of merit. MDA recommends a work program with additional associated costs of \$3.45 million as summarized in **Error! Reference source not found.** which is focused on further exploration of the Occidental-Brunswick Lode and the Gold Hill segment of the Comstock Lode.

Item	Estimated Cost
Permitting	\$50,000
Southern Occidental/Brunswick Exploration Drilling (13,000ft RC)	\$780,000
Southern Occidental/Brunswick Resource Estimate	\$100,000
Occidental/Brunswick Lode Geologic Mapping and Sampling	\$40,000
Gold Hill Exploration drilling (2,900 ft core and motor drilling, 2,600 ft pre-collar RC drilling)	\$2,000,000
Data Acquisition, Database Compilation, and Internal Studies:	\$30,000
Contingency 15%	\$450,000
Total	\$3,450,000

Table 23.1:	Cost Estimate for the Recommended Program
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Results of 2018 and 2021 drilling along the extensions of the southern Occidental-Brunswick Lode demonstrate the potential to expand mineralization of potential economic interest. MDA recommends that Tonogold completes an 8,000-foot RC drill program (23-25 holes), which has already been permitted through Storey County. In addition, MDA recommends a 5,000-foot program (10-12 holes) aimed at testing the extension of mineralization immediately to the north of the Art Wilson Claim Group and historical drilling. Tonogold has already designed the additional 5,000-foot program. The budgeted cost of all proposed drilling is \$780,000.

Additional BLM permitting will be required for the recommended drilling because exploration roads and drill pads must be expanded beyond the currently permitted surface disturbance. As the 8000-foot, 23–25-hole portion of the proposed drill program is already permitted, fulfilling the permitting obligations for the additional 5,000-foot, 10-12-hole program will require only minimal work. Based on Tonogold's experience working in the district, the additional permitting could take up to two months to complete. The estimated cost of the proposed permitting is \$20,000, including bonding.

If this proposed 13,000 feet of drilling (33-37 holes) delivers positive results, MDA recommends that Tonogold complete an initial resource estimate for the southern Occidental-Brunswick Lode. The resource estimate is budgeted at \$100,000, including reporting.

In tandem with drilling, surface geologic mapping and sampling should be carried out on 1.5 miles of strike length of the Occidental-Brunswick Lode from the Art Wilson Claim Group north to the historic Brunswick Mine. The goal of this work is to define further drill targets within the land package. This field work will cost approximately \$40,000.



MDA also recommends additional drilling on the Gold Hill section of the Comstock Lode. Results of the 2020-2021 drilling at Gold Hill demonstrated that mineralization of economic interest is present in several areas including on the Con Imperial, Alpha, and Segregated Belcher claims. The intercepts were at depths ranging from approximately 300 to 1,000 feet. If additional permitting can be obtained from Storey County, several of these intercepts should be explored along strike and down-dip. Other targets were identified by Tonogold and MDA based on compilation of historical data on the Yellow Jacket and Kentuck claims that are present at depths ranging from 500 to 1,400 feet. MDA recommends an additional 7,500-foot (10-12 hole) drill program for the shallow to intermediate targets identified by the 2020-2021 drill program and from historical research. The estimated cost of this drilling is \$800,000.

Although deeper drilling at Gold Hill proved difficult in 2020-2021 for a number of reasons, Tonogold investigated continuing the exploration effort of deep targets by motor-drilling methods. Tonogold's historical research identified several targets of interest on the Yellow Jacket and Belcher claims that should be pursued. MDA suggests implementing a 5,500-foot (2 hole) program to intersect these targets. The estimated cost of the drilling is \$2,000,000. Permitting for the proposed Gold Hill drilling will take approximate two to three months and cost \$30,000, including bonding.

Although no additional drilling is currently proposed for the Lucerne Deposit, Tonogold's land package presents an opportunity to discover new resources along both the Occidental-Brunswick Lode and the Gold Hill portion of the Comstock Lode. Therefore, one of the more important aspects of this project is locating and incorporating additional historic data into the 3D model, particularly for the Occidental-Brunswick Lode. Although a fixed budget cannot be defined with any accuracy, this task could cost \$30,000 or more. However, using historic data to define additional targets and avoid drilling in areas with limited potential could deliver benefits many times greater than that of the costs of compiling new data.



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25.0 RELIANCE ON INFORMATION PROVIDED BY THE REGISTRANT

MDA is not an expert in legal matters, such as the assessment of the validity of mining claims, mineral rights, and property agreements in the United States or elsewhere. MDA has therefore relied fully upon information and opinions provided by Tonogold and Mr. Rew Goodenow, an attorney with Parsons Behle & Latimer, with regards to report Sections 3.2 through 3.5, which pertain to legal status of Tonogold and its affiliates, current legal title and material terms of all agreements that pertains to the Comstock project, land tenure, ownership, and encumbrances.

Sections 3.9 through 3.11, which pertain to environmental permits and liabilities and water rights were prepared by MDA and reviewed by Mr. Chris Peterson, General Manager and Director of Health, Safety, and Environmental Permitting for Comstock Mining Inc.

MDA has fully relied on CMI and Tonogold to provide complete information concerning historical drilling, assay lab testing, and metallurgical testing for the Comstock project, particularly for the Lucerne Deposit and for the Gold Hill exploration target. Sections 7.0 and 8.0 were prepared by MDA using the relevant information provided by CMI and Tonogold. MDA considers information provided by both CMI and Tonogold to be reliable based on a working relationships with each of the companies established over the course of five or more years.

Appendix A: Claims Listed in Parsons Behle & Latimer's "Land Review of Comstock Mining, Inc. Purchased by Tonogold for Use in SK1300"



50 West Liberty Street, Suite 750 Reno, Nevada 89501 Main 775.323.1601 Fax 775.348.7250

A Professional Law Corporation Rew R. Goodenow Attorney at Law Direct 775.789.6543 RGoodenow@parsonsbehle.com

September 3, 2021

Via email: bmetzenheim@gmail.com

Brian Metzenheim 16130 Edmonds Court Reno, NV 89511

Re: Land Review of Comstock Mining Inc. Purchased by Tonogold For Use in SK1300 Report

Dear Mr. Metzenheim:

You have asked that we provide Kiersten Briggs with information that she requires for the purpose of compiling the land description portion of an SK1300 Report. Our work included reviews by Greg Morrison, Esq. and Randy Watkins, paralegal, of the records provided to us by Mr. Mike Norred of Comstock Mining. We have, when we deemed it to be necessary to confirm the information, supplemented the information provided by reference to our prior related Title Opinion and Story County Recorder's records available on the web and the U.S. Bureau of Land Management's MLRS database.

Our review shows the following current real property legal description and estates:

I. FEE AND PATENTED LANDS

The real property in this section consists of fee titled real property and patented mining claims that are owned or leased from the fee title holder by Comstock Mining and its subsidiaries.

A. Lands Owned by Comstock Mining LLC

The following properties are owned in fee by Comstock Mining LLC. The vesting documents and any applicable royalties are as follows:

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The following parcels were conveyed to Comstock Mining LLC from Comstock Mining Inc. by Grant, Bargain, Sale Deed dated May 1, 2019, recorded as Doc. No. 129646 with the Office of the Storey County Recorder.

	Size	
Parcel No	(acres)	Name and Location
		Lot 40 – Block 8, Range D on the Official Plat of Gold Hill (map 02-
002-112-02	1.6	11). SW1/4 NW1/4, Sec. 8, T16N, R21E
		Lot 41 – Block 8, Range D on the Official Plat of Gold Hill (map 02-
002-112-02	2.0	11). NW1/4 SW1/4, Sec. 5, T16N, R21E
		Lot 42 – Block 8, Range D on the Official Plat of Gold Hill (map 02-
002-112-02	1.6	11). NW1/4 SW1/4, Sec. 5, T16N, R21E

The following parcel was conveyed to Comstock Mining LLC from Comstock Mining Inc. by Grant, Bargain, Sale Deed dated May 1, 2019, recorded as Doc. No. 129647 with the Office of the Storey County Recorder.

	Size	
Parcel No	(acres)	Name and Location
		Lots 47-50 & 52 – Block 8, Range D on the Official Plat of Gold Hill
002-122-02	3.4	(map 02-12). NW1/4 SW1/4, Sec. 5, T16N, R21E

The following parcel was conveyed to Comstock Mining LLC from Comstock Mining Inc. by Grant, Bargain, Sale Deed dated May 1, 2019, recorded as Doc. No. 129648 with the Office of the Storey County Recorder.

	Size	
Parcel No	(acres)	Name and Location
		Lot 33 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-141-03	1.82	14). NE1/4 NW1/4, Sec. 8, T.16N, R21E

The following parcel was conveyed to Comstock Mining LLC from Comstock Mining Inc. by Grant, Bargain, Sale Deed dated May 1, 2019, recorded as Doc. No. 129657 with the Office of the Storey County Recorder.

	Size	
Parcel No	(acres)	Name and Location
		2586 Keystone Circle – Lot 6 of Keystone Estates (Map Recorded as
002-141-07	1.3	File 51883). NE1/4 NW1/4, Sec. 8, T.16N, R21E

The following parcels were conveyed to Comstock Mining LLC from Comstock Mining Inc. by Grant, Bargain, Sale Deed dated June 15, 2017, recorded as Doc. No. 125908 with the Office of the Storey County Recorder.

	Size	
Parcel No	(acres)	Name and Location
		Lot 27 D – Block 6, Range C of Turney-Bowers Parcels (Map
002-141-15	14.6	recorded as File 92782). NE1/4 NW1/4, Sec. 8, T.16N, R21E,
		Lot 30 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-141-16	3.0	14). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 31 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-141-16	0.9	14). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 32, Pt Lot 33 – Block 6, Range C on the Official Plat of Gold Hill
002-141-16	5.9	(map 02-14). SW1/4 SE1/4, Sec. 5, T.16N, R21E
• The Ni	ne Parcel	s that follow are Subject to a One and One-Half Percent (1.5%) NSR
in favo	r of Donc	ovan Silver Hill, L.L.C, pursuant to a reservation in Grant, Bargain and
Sale D	eed dated	July 14, 2010 recorded with the Office of the Storey County Recorder
as Doc	. No. 113	454.
		Niagra (surface rights only) – Lot 125; a portion of Sec. 8, T.16N,
800-000-91	2.6	R.21E
		South Comstock (surface rights only) – Lot 88; a portion of Sec. 8,
800-000-92	12.1	T.16N, R.21E
800-000-93	0.8	Tarto – Lot 84; a portion of Sec. 8, T.16N, R.21E
800-000-94	15.0	Hartford – Lot 86; a portion of Sec. 8, T.16N, R.21E
800-000-95	4.8	Succor – Lot 1723; a portion of Sec. 8, T.16N, R.21E
800-000-96	5.6	Olympia - a portion of Sec. 8, T.16N, R.21E
800-000-97	6.2	Hardluck – a portion of Sec. 8, T.16N, R.21E
800-000-98	4.5	Friendship – a portion of Sec. 8, T.16N, R.21E
800-000-99	2.8	Brown – a portion of Sec. 8, T.16N, R.21E

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- The Five Parcels that Follow are Subject to a 2.15% Percent NSR as follows:
 - Pursuant to Mining Claim Deed dated April 1, 2010, recorded as Doc. No. 112887 with the Office of the Storey County Recorder, GoldSpring Inc. granted a 1% NSR in perpetuity in favor of Claire (.5%), James (.25%) and Alan (.25%) Obester.
 - Pursuant to a Final Agreement dated December 12, 2012, a Memorandum of which was recorded with the Stoery County Recorder as Doc. No. 123166, Comstock Mining granted a 1.15% NSR in favor of Precious Royalties, LLC

800-001-08	7.4	St. Louis (Storey Cty) – Lot 67; a portion of Sec. 8, T.16N, R.21E
800-001-09	10.8	Green – Lot 95; a portion of Sec. 8, T.16N, R.21E
800-001-11	6.9	Echo – Lot 50; a portion of Sec. 8, T.16N, R.21E
800-001-12	8.4	Lucerne – Lot 140; a portion of Sec. 8, T.16N, R.21E
800-002-71	16.0	Billie the Kid – a portion of Sec. 8, T.16N, R.21E

The following parcels were conveyed to Comstock Mining LLC from Comstock Mining Inc. by Grant, Bargain, Sale Deed dated May 1, 2019, recorded as Doc. No. 129649 with the Office of the Storey County Recorder.

	Size	
Parcel No	(acres)	Name and Location
		Lot 53-54 – Block 8, Range D on the Official Plat of Gold Hill (map
002-142-01	1.2	02-14). SW1/4 SE1/4, Sec. 5, T.16N, R21E
		Lot 55 N1/2 – Block 8, Range D on the Official Plat of Gold Hill (map
		02-14). SW1/4 SE1/4, Sec. 5, T.16N, R21E
		• Records of Comstock Mining Inc. indicate that there is a One
		Percent (1%) NSR attached to this parcel in favor of Arthur
		Wilson. We located a Grant of Royalty Interest from D.W.C.
		resources to Wilson, recorded with the Storey County Recorder
		as Doc. 104664, that likely establishes this interest. However,
		neither the copy of the Grant of Royalty Interest provided by
		Comstock nor the recorded copy available online includes the
002-142-01	0.6	attachment that describes the property subject to the royalty.
		Lot 57 – Block 8, Range D on the Official Plat of Gold Hill (map 02-
002-142-03	1.5	14). SW1/4 SE1/4, Sec. 5, T.16N, R21E

The following parcel was conveyed to Comstock Mining LLC from Comstock Mining Inc. by Grant, Bargain, Sale Deed dated May 1, 2019, recorded as Doc. No. 129650 with the Office of the Storey County Recorder.

	Size	
Parcel No	(acres)	Name and Location
		Lot 34 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-151-01	1.8	15). NE1/4 NW1/4, Sec. 8, T.16N, R21E

The following parcels were conveyed to Comstock Mining LLC from Comstock Mining Inc. by Grant, Bargain, Sale Deed dated May 1, 2019, recorded as Doc. No. 129651 with the Office of the Storey County Recorder.

	Size	
Parcel No	(acres)	Name and Location
		Lot 36 E 200ft – Block 6, Range C on the Official Plat of Gold Hill
002-151-03	1.0	(map 02-15). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Pt Lot 36 – Block 6, Range C on the Official Plat of Gold Hill (map
002-151-04	1.7	02-15). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Pt Lot 35 – Block 6, Range C on the Official Plat of Gold Hill (map
002-151-06	0.3	02-15). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 37 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-161-01	0.4	15). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 38 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-161-01	0.3	15). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 39 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-161-01	0.8	15). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 40 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-161-01	0.2	15). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 41 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-161-01	0.2	15). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 42 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-161-01	1.2	15). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 43 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-161-01	0.7	15). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 44 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-161-01	0.2	15). NE1/4 NW1/4, Sec. 8, T.16N, R21E

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		Lot 45 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-161-01	0.2	15). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 46 – Block 6, Range C on the Official Plat of Gold Hill (map 02-
002-161-01	1.7	15). NE1/4 NW1/4, Sec. 8, T.16N, R21E

The following parcel was conveyed to Comstock Mining LLC from Comstock Mining Inc. by Grant, Bargain, Sale Deed dated May 1, 2019, recorded as Doc. No. 129656 with the Office of the Storey County Recorder.

• The parcel is subject to a Two and One-Half Percent (2.5%) NSR granted in an Exploration License and Option to Purchase dated November 1, 2010 and memorialized in the Grant Bargain Sale Deed dated May 1, 2019 and recorded with the Storey County Recorder as Doc. No. 129656.

	Size	
Parcel No	(acres)	Name and Location
800-002-72	1.8	Comet N Ext - a portion of Sec. 8, T.16N, R.21E

B. Fee and Patented Owned by Northern Comstock

The following properties are owned in fee by Northern Comstock LLC. The vesting documents and any applicable royalties are as follows:

The following parcels were conveyed to Northern Comstock LLC from DWC Resources Inc. Inc. by Quitclaim Deed dated January 4, 2010, recorded as Doc. No. 114494 with the Office of the Storey County Recorder, with the exception of APN 800-000-87, which remains under record owner DWC Resources.

• By a Grant of Royalty Interest dated August 23, 2006, recorded as Document No. 104664 with an Addendum thereto recorded as Document No. 105664 with the Office of the Storey County Recorder, DWC Resources granted a 1% NSR on all parcels except for 002-131-01 to Arthur and Maria Wilson.

	Size	
Parcel No	(acres)	Name and Location
		Lot 16 - Block 6, Range C on the Official Plat of Gold Hill (map 02-12).
002-121-01	0.6	NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 17- Block 6, Range C on the Official Plat of Gold Hill (map 02-12).
002-121-01	2.6	NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 19- Block 6, Range C on the Official Plat of Gold Hill (map 02-12).
002-121-01	2.0	NE1/4 NW1/4, Sec. 8, T.16N, R21E

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		Lot 20- Block 6, Range C on the Official Plat of Gold Hill (map 02-12).
002-121-01	0.4	NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 21- Block 6, Range C on the Official Plat of Gold Hill (map 02-12).
002-121-01	0.3	NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 22- Block 6, Range C on the Official Plat of Gold Hill (map 02-12).
002-121-01	0.6	NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 43 – Block 8, Range D on the Official Plat of Gold Hill (map 02-
002-122-01	1.7	12). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 43.5- Block 8, Range D on the Official Plat of Gold Hill (map 02-
002-122-01	0.1	12). NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 44- Block 8, Range D on the Official Plat of Gold Hill (map 02-12).
002-122-01	0.8	NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 45- Block 8, Range D on the Official Plat of Gold Hill (map 02-12).
002-122-01	0.8	NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 46- Block 8, Range D on the Official Plat of Gold Hill (map 02-12).
002-122-01	0.6	NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 51- Block 8, Range D on the Official Plat of Gold Hill (map 02-13).
002-131-01	25.8	NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 56- Block 8, Range D on the Official Plat of Gold Hill (map 02-14).
002-142-02	0.4	NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 36-Block 6, Range C on the Official Plat of Gold Hill (map 02-15).
002-151-02	4.5	NE1/4 NW1/4, Sec. 8, T.16N, R21E
		Lot 35- Block 6, Range C on the Official Plat of Gold Hill (map 02-15).
002-151-05	0.6	NE1/4 NW1/4, Sec. 8, T.16N, R21E
PATENTI	ED MIN	ING CLAIMS
800-000-78	8.9	Holman – Lot 129; portions of Sec. 5 & 8, T.16N, R21E
800-000-80	11.9	White – Lot 131; portions of Sec. 5 & 8, T.16N, R21E
800-000-81	16.9	Cliffhouse- Lot 144; portion of Sec. 8, T.16N, R21E
800-000-82	11.0	Black Bird – Lot 1896; portions of Sec. 4 & 5, T.16N, R21E
800-000-83	9.4	South Alamo - Lot 1897; portions of Sec. 4 & 5, T.16N, R21E
800-000-84	12.0	East Alamo Ledge - Lot 1898; portions of Sec. 4 & 5, T.16N, R21E
800-000-85	7.4	Corey Jay Boer - Lot 1980; portion of Sec. 8, T.16N, R21E
		Bells Hill (Lager Beer #1) – Lot 2023; portions of Sec. 5 & 8, T.16N,
800-000-86	4.0	R21E
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		German (Lager Beer #2) - Lot 2023; portions of Sec. 5 & 8, T.16N,
800-000-86	3.4	R21E
800-000-87	0.8	Sebastopol - portions of Sec. 5 & 8, T.16N, R21E
800-000-88	1.3	Wedge – Lot 2025; portion of Sec. 5, T.16N, R21E
800-000-89	0.0	Ledge Lode - Lot 2025; portion of Sec. 5, T.16N, R21E
800-000-90	0.5	Overland - Lot 2025; portion of Sec. 5, T.16N, R21E
800-001-14	19.2	Justice – Lot 48; portions of Sec. 5 & 8, T.16N, R21E
800-001-15	5.3	Woodville – Lot 53; portions of Sec. 5 & 8, T.16N, R21E
800-001-16	12.1	Keystone Comstock – Lot 55; portion of Sec. 5, T.16N, R21E
800-001-17	13.0	Memphis – Lot 100; portion of Sec. 5, T.16N, R21E
800-001-18	7.5	Chonta Lode
800-001-19	1.6	Front Lode N -Lot 49A; portion of Sec. 5, T.16N, R21E
800-001-19	8.8	Front Lode S -Lot 49B; portion of Sec. 5, T.16N, R21E
800-000-77	12.1	South Comstock (minerals) – Lot 88; portion of Sec. 8, T.16N, R21E
800-000-79	2.6	Niagra (minerals) – Lot 125; portion of Sec. 8, T.16N, R21E

C. Fee Parcels and Patented Claims Controlled by Northern Comstock Pursuant to Virginia City Ventures Lease

Comstock Mining has the right to operate on all of the following parcels pursuant to a leasehold interest established pursuant to a Mineral Exploration and Mining Lease dated January 1, 2008 between Virginia City Ventures, Inc. as Lessor and John V. Winfield as Lessee. Northern Comstock LLC assumed the leasehold from Winfield pursuant to an Assignment and Assumption Agreement dated October 20, 2010. The initial term of the Lease was 60 months of Exploration Term, followed by an additional 15 years of Development term, extended as long as mineral development continues on the properties.

• The Mineral Exploration and Mining Lease created a Five Percent (5%) NSR in favor of Virginia City Ventures on the subject claims.

Virginia City Ventures received fee title to the parcels through the following vesting documents:
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The following parcel was conveyed to Virginia City Ventures, Inc. from Siskon Gold Corporation by Grant, Bargain, Sale Deed dated January 18, 1994, recorded as Doc. No. 73184 with the Office of the Storey County Recorder.

Parcel No	Size	Name and Location
	(acres)	Hale & Norcross – Patent No. 42; Lot No. 31 & 32, portion of Sec. 5,
800-000-60	10.1	T.16N, R.21E

The following parcel was conveyed to Virginia City Ventures, Inc. from Siskon Gold Corporation by Grant, Bargain, Sale Deed dated January 18, 1994, recorded as Doc. No. 73186 with the Office of the Storey County Recorder.

	Size	
Parcel No	(acres)	Name and Location
		Chollar Potosi (above 1000') - Patent No. 42; Lot No. 31 & 32,
800-002-69	35.2	portion of Sec. 5, T.16N, R.21E

The following parcel was conveyed to Virginia City Ventures, Inc. from Siskon Gold Corporation by Grant, Bargain, Sale Deed dated January 18, 1994, recorded as Doc. No. 73185 with the Office of the Storey County Recorder.

	Size	
Parcel No	(acres)	Name and Location
		Savage (above 1000') - Patent No. 51; Lot No. 31 & 32, portion of
800-000-61	19.4	Sec. 5, T.16N, R.21E

D. Patented Claims Owned by Comstock Mining Included in Mineral Lease Agreement September 2019

The following patented mining claims are owned in fee by Comstock Northern Exploration and Development LLC, which conveyed a leasehold interest in the parcels to Tonogold Resources by Mineral Exploration and Mining Lease Agreement dated September 16, 2019. Comstock Northern Exploration and Development LLC obtained title to the patented claims through the following vesting documents.

The following parcel was conveyed to Comstock Northern Exploration LLC from Comstock Mining Inc. by Grant, Bargain, Sale Deed dated May 1, 2019, recorded as Doc. No. 129653 with the Office of the Storey County Recorder.

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Parcel	Size	
No	(acres)	Name and Location
800-002-11	8.3	Red (Read) Wing – Patent No. 516; a portion of Sec. 1, T. 16N, R.20E

The following parcels were conveyed to Comstock Northern Exploration LLC from Comstock Mining Inc. by Grant, Bargain, Sale Deed dated May 1, 2019, recorded as Doc. No. 129652 with the Office of the Storey County Recorder.

- All parcels are subject to a 4.15% NSR as follows:
 - Pursuant to a Net Smelter Royalty Agreement dated April 1, 2010, recorded with the Storey County Recorder as Doc. No. 112888 a One Percent (1%) NSR held by Obesters (Claire (0.33%), Julian and Joanna Smith (0.33%), James (0.265), and Alan (0.165%))
 - 2% held by Summa Corporation (no document but stated and acknowledged on recorded Deed Doc. 129652)
 - Pursuant to a Final Agreement dated December 12, 2012, a Memorandum of which was recorded with the Stoery County Recorder as Doc. No. 123166, Comstock Mining granted a 1.15% NSR in favor of Precious Royalties, LLC

*	Size	
Parcel No	(acres)	Name and Location
800-001-21	10.7	Dean - Lot 37; portion of Sec. 33, T.17N, R.21E
800-001-25	11.6	East North-Occidental – Lot 201; portion of Sec. 33, T.17N, R.21E
800-001-26	18.5	Edwards – Lots 155 & 200; portion of Sec. 4, T.16N R.21E.
		North Occidental (New Brunswick) – Lot 112; portion of Sec. 33,
800-001-10	7.3	T.17N, R.21E
		Occidental (Brunswick) - Lots 155 & 200; portion of Sec. 4, T.16N,
800-001-68	7.8	R.21E
800-001-24	20.6	South Occidental - Lot 154; portion of Sec. 4, T.16N, R.21E

E. Garrett Properties Mineral Lease Agreement September 2019

Comstock Northern Exploration and Development LLC obtained the right to operate on the following parcel pursuant to a Mineral Exploration and Mining Lease with Garrett, Hess, Carel, et al. dated May 1, 2020. The initial term of the Lease is 60 months of Exploration Term, followed by an additional 15 years of Development Term, automatically extended as long as mineral development continues on the properties. Brian Metzenheim September 3, 2021 Page Eleven

A 50 percent interest in the following parcel was conveyed to Fred and Barbara Jean Garrett and Mary Lydia Carel by Deed dated April 13, 2006, recorded with the Storey County Recorder as Document No. 103810. Storey County Assessor records indicate that the remaining 50 percent interest is held by Gregory F. and Joyce G. Hess. No vesting document was located for Hess.

 Pursuant to the Mineral Exploration and Mining Lease, this Parcel is subject to a 3% NSR held by Fred Garrett, Gregg Hess and Mary Carel.

	Size		
Parcel No.	(acres)	Name and Location	
800-000-54	25.3	Pride of Washoe; portion of Sec. 5, T.16N, R.21E	

F. Railroad and Gold Properties Lease Agreement September 2019

Comstock Mining obtained the right to operate on the following parcels through a Mining Lease between GoldSpring, Inc. and Railroad and Gold, LLC dated October 1, 2009, amended by a First Amendment to Mining Lease dated January 1, 2015 between Comstock Mining Inc. and Railroad and Gold, LLC. Railroad and Gold, LLC obtained fee title to the parcels through the following vesting documents:

The following parcels were conveyed to Railroad and Gold, LLC by Russel D. and Pamela A. Brandon, Trustees of the Brandon Family Trust by Quitclaim Deed dated April 17, 2009, recorded with the Storey County Recorder as Document No. 111300.

• Pursuant to a First Amendment to Mining Lease dated January 1, 2015, the parcels are subject to a One Percent (1%) NSR held by Railroad and Gold LLC.

	Size	
Parcel No.	(acres)	Description
		Lot 29 - Block 8, Range D on the Official Plat of Gold IIill (map 02-09).
002-091-01	1.2	Portion of Sec. 5 & 8, T.16N, R21E
		Lot 25 - Block 8, Range D on the Official Plat of Gold Hill (map 02-09).
002-091-04	0.7	Portion of Sec. 5 & 8, T.16N, R21E
		Lot 30 - Block 8, Range D on the Official Plat of Gold Hill (map 02-09).
002-091-09	3.0	Portion of Sec. 5 & 8, T.16N, R21E
	0.1	Lot 19 - Block 8, Range D on the Official Plat of Gold Hill (map 02-09).
002-091-10		Portion of Sec. 5 & 8, T.16N, R21E
	1.6	Lots 1 through 8 - Block 8, Range D on the Official Plat of Gold Hill
002-091-13		(map 02-09). Portion of Sec. 5 & 8, T.16N, R21E
	1.7	Lots 12 & 32 - Block 8, Range D on the Official Plat of Gold Hill (map
002-091-14		02-09). Portion of Sec. 5 & 8, T.16N, R21E

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002-231-02	10.5	S Ptn Block L-1 – Portion of NE1/4 NE1/4, Sec. 6, T. 16N, R.21E
	5.5	Ptn Lots 8 & 12 - Portion of E1/2, Sec. 6, T. 16N, R.21E (map 04-33,
004-331-35		Detail "D")
PATENTE	D MINI	NG CLAIMS – We did not review the legal descriptions on the patents
themselves;	nor were	e there legal descriptions in the vesting documents.
800-000-45	25.3	Gould & Curry (below 1000') – Mineral Survey No. 62
800-001-00	13.8	Culver – Mineral Survey No. 178
800-001-01	4.3	Culver Addition (S) – Mineral Survey No. 142
800-001-02	6.4	Culver Addition (N) – Mineral Survey No. 179
800-001-03	3.1	Gibbs (1/2 interest) – Mineral Survey No. 107
800-001-04	7.3	Gibbs (1/2 interest) – Mineral Survey No. 126
800-002-04	5.5	Knickerbocker (N half) – Mineral Survey No. 39
		Chollar Potosi (below 1000', Sutro Tunnel level) – Mineral Survey No.
800-000-46	35.2	61
800-000-47	19.3	Savage (below 1000', Sutro Tunnel level) – Mineral Survey No. 51

Parcel below conveyed to Railroad and Gold, LLC by Grant, Bargain, Sale Deed dated April 19, 2012, recorded with the Storey County Recorder as Document No. 116585. This parcel is not subject to the 1% NSR noted above.

004-331-34 21.1 PTN Lot 8 - Sec. 6, T.16N, R.21E

G. Sutro Leased Properties

A Leasehold interest in the following properties was conveyed to Comstock Northern Exploration and Development LLC by a Mineral Exploration and Mining Lease Agreement dated September 1, 2020. Lease Term is as follows:

- Exploration Term of 5 years from the Effective Date of the Lease (Sept. 1, 2020).
- Development Term of 5 years by automatic renewal at expiration of Exploration Term.
- Planning term of 5 years by automatic renewal at expiration of Development term.
- Lease remains effective as long as operations continue on property and royalties are generated.

A four percent (4%) NSR applies to all Sutro Tunnel Co. properties pursuant to Section 6 of the Mineral Exploration and Mining Lease Agreement. Vesting is as follows:

The following parcels were conveyed to Sutro Tunnel Company from Storey County by Quitclaim Deed dated July 17, 1984, recorded with the Storey County Recorder as Document No. **55248**.

	Size	
Parcel No	(acres)	Description
001-044-06	0.1	Block 247, Range E Lot 8; N1/2 NW1/4, T.17N R.21E
001-113-02	0.2	Block 250, Range H Lots 5-6; N1/2 NW1/4, Sec. 32, T.17N R.21E
002-071-05	0.7	Block 1, Range A Lots 37, 37.5; SW1/4 SW1/4, Sec. 32, T.17N R.21E
002-062-06	0.1	Block 1, Range B Lot 12, Pt 13; W1/2 SW1/4, Sec. 32, T.17N R.21E
002-062-03	0.3	Block 1, Range B Lots 1-7; W1/2 SW1/4, Sec. 32, T.17N R.21E
002-061-01	0.4	Block 1, Range O Lot 10-11; W1/2 SW1/4, Sec. 32, T.17N R.21E
002-062-44	0.1	Block 2, Range B Lot 6-9; W1/2 SW1/4, Sec. 32, T.17N R.21E
002-052-25	0.1	Block 2, Range P Lot 11-12; SW1/4 NW1/4, Sec. 32, T.17N R.21E
002-083-05	0.8	Block 4, Range E Lot 29-30, 35; NW1/4 NW1/4, Sec. 5, T.16N R.21E
002-062-15	0.1	Block 5, Range C Lots 36-37; W1/2 SW1/4, Sec. 32, T.17N R.21E
002-201-32	1.5	Block 1, Range G Lot 16; SE1/4 SE1/4 Sec. 31, T.17N R.21E
002-062-22	0.1	Block 5, Range C Lot 33; W1/2 SW1/4, Sec. 32, T.17N R.21E
002-121-02	0.4	Block 6, Range C Lot 23, 24; E1/2 Sec. 5, T.16N R.21E
002-082-06	0.1	Block 7, Range D Lot 14; NW1/4 NW1/4 Sec. 5, T.16N R.21E
002-082-08	0.2	Block 7, Range D Lot 17-18; NW1/4 NW1/4 Sec. 5, T.16N R.21E
002-211-05	0.1	Block 1, Range I Lot 25; SW1/4 SW1/4 Sec. 32, T17N R.21E
002-211-04	1.1	Block 1, Range I Lot 15-24; SW1/4 SW1/4 Sec. 32, T17N R.21E
002-201-05	0.3	Block 1, Range G Lot 37-38; SE1/4 SE1/4 Sec. 31, T.17N R.21E
002-201-08	0.1	Block 1, Range G Lot 46; SW1/4 SW1/4 Sec. 32, T.17N R.21E
002-201-15	0.0	Block 1, Range G Lot 48; SE1/4 SE1/4 Sec. 31, T.17N R.21E
002-201-20	0.0	Block 1, Range G Lot 9; SW1/4 SW1/4 Sec. 32, T17N R.21E
002-201-31	0.1	Block 1, Range G Lot 14; SW1/4 SW1/4 Sec. 32, T17N R.21E
002-201-30	0.2	Block 1, Range G Lot 30-31; SW1/4 SW1/4 Sec. 32, T17N R.21E
002-041-17	0.4	Block 1, Range O Lot 8E, Pt 27; NW1/4 SW1/4 Sec. 32, T.17N R.21E
002-041-20	0.2	Block 1, Range O Lot 8; NW1/4 SW1/4 Sec. 32, T.17N R.21E
		Block 1, Range A Lot 1-5, 7, 8, 15-16; W1/2 SW1/4, Sec. 32, T.17N
002-062-42	0.5	R.21E

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001-113-04	0.3	Block 250 Lot 7; N1/2 NW1/4, Sec. 32, T.17N R.21E
002-062-40	0.1	Block 4, Range C Lot 12, 19; W1/2 SW1/4, Sec. 32, T.17N R.21E
002-071-22	0.4	Block 1, Range A Lot 35.5, 36; SW1/4 SW1/4, Sec. 32, T.17N, R.21E
002-063-21	0.6	Block 1, Range D Lot 1-2; W1/2 SW1/4, Sec. 32, T.17N R.21E
002-061-11	0.2	Block 1, Range O Lot 12; W1/2 SW1/4, Sec. 32, T.17N R.21E
002-011-09	1.5	Block 1, Range O Lot 40; SW1/4 NE1/4 Sec. 32, T.17N R.21E
002-071-36	1.8	Block 2, Range B Lot 29, 30; SW1/4 SW1/4, Sec. 32, T.17N, R.21E
002-052-24	1.5	Block 2, Range P Lot 1; SW1/4 NW1/4, Sec. 32, T.17N R.21E

The following parcels were conveyed to Sutro Tunnel Company from Comstock Tunnel and Drainage Company d/b/a Comstock Resources, Inc. by Grant, Bargain, Sale Deed dated February 28, 1992, recorded with the Storey County Recorder as Document No. **69161**.

	Size	
Parcel No	(acres)	Description
001-071-01	2.3	S. 475' of Block 143, Range A; SW1/4 Sec. 29, T.17N R.21E
002-063-18	0.0	Block 1, Range D Lot 14; W1/2 SW1/4, Sec. 32, T.17N R.21E
002-063-19	0.2	Block 1, Range D Lot 16-18; W1/2 SW1/4, Sec. 32, T.17N R.21E
002-181-06	1.4	Block 1, Range F Lot 40; NE1/4 SE1/4, Sec. 31, T.17N R.21E
002-181-08	0.2	Block 1, Range F Lot 18-20; NE1/4 SE1/4, Sec. 31, T.17N R.21E
002-181-10	0.8	Block 1, Range F Lot 11; NW1/4 SW1/4, Sec. 32, T.17N R.21E
		Block 1, Range H Lot 1,2,10,11,15-21, 25-27,34, 35, 42-44; NW1/4
002-191-01	10.2	SW1/4, Sec. 32, T.17N R.21E
002-201-22	0.0	Block 1, Range G Lot 15; SE1/4 SE1/4 Sec. 31, T.17N R.21E
		Block 1, Range G Lot 16-21, 25, 40-41, 44; SE1/4 SE1/4 Sec. 31,
002-201-32	1.5	T.17N R.21E
002-211-05	0.1	Block 1, Range I Lot 25; SE 1/4 SE 1/4 Sec. 31, T.17N R.21E
002-221-02	8.3	Block 1, Range I 1/2 Lot 30; SW1/4 SW1/4, Sec. 32, T.17N R.21E
002-231-01	1.04	Block 1, Range L, N. Portion; NE1/4 NE1/4 Sec. 6, T.16N R.21E
002-241-01	2.2	Block 1, Range I Lot 40-41; NE1/4 NE1/4 Sec. 6, T.16N R.21E
002-242-01	0.6	Block 2, Range J Lot 17-19; NE1/4 NE1/4 Sec. 6, T.16N R.21E
002-243-01	3.0	Block 1, Range J Lot 20; NE1/4 NE1/4 Sec. 6, T.16N R.21E
002-254-01	0.8	Block 1, Range J Lot 21; NE1/4 NE1/4 Sec. 6, T.16N R.21E

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The following parcels were conveyed to Sutro Tunnel Company from Comstock Tunnel and Drainage Co. d/b/a Comstock Resources Inc. by Grant, Bargain, Sale Deed dated April 27, 1992, recorded with the Storey County Recorder as Document No. **69396**.

002-201-26	0.7	Block 1, Range G Lot 26-29, 42-43; SE1/4 SE1/4 Sec. 31, T.17N R.21E
002-211-03	0.1	Block 1, Range I Lot 13-14; SE 1/4 SE 1/4 Sec. 31, T.17N R.21E

Parcel below conveyed to Sutro Tunnel Company from Donald B. Mills by Grant, Bargain, Sale Deed dated February 7, 1997, recorded with the Storey County Recorder as Document No. **79535.**

	Size	
Parcel No	(acres)	Description
002-071-01	1.3	Block 1, Range A Lot 33-35; SW1/4 SW1/4, Sec. 32, T.17N, R.21E

The following parcels were conveyed to Sutro Tunnel Company from Overman Mining Properties, Inc. by Quitclaim Deed dated July 14, 2003, recorded with the Storey County Recorder as Document No. **94927.**

	Size	
Parcel No	(acres)	Description
002-083-05	0.8	Block 4, Range E Lot 29-30,35; NW1/4 NW1/4 Sec. 5, T.16N R.21E
002-082-07	0.1	Block 7, Range D Lot 15-16; NW1/4 NW1/4 Sec. 5, T.16N R.21E
002-083-04	0.8	Block 4, Range E Lot 23-28; NW1/4 NW1/4 Sec. 5, T.16N R.21E

The following parcels were conveyed to Sutro Tunnel Co from Sutro Tunnel Coalition, Inc. by Grant, Bargain, Sale Deed dated December 1992, recorded with the Storey County Recorded as Document No. **52213.**

	Size	
Parcel No	(acres)	Description
		Lots 1-14, lying east of Noyes St., in Block 226, Range D; NW1/4
001-056-02	0.3	NW1/4, Sec. 32, T.17N R.21E

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The following parcels were conveyed by Storey County to Sutro Tunnel Co by Quitclaim Deed dated June 10, 1991, recorded with the Storey County Recorded as Document No. 67722.

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002-021-	2.5	
01		Block 1, Range O Lot 34; SW1/4 NE1/4, Sec/ 32, T.17N R.21E
002-063-	0.4	
16		Block 1, Range D Lot 11, 23-27; S1/2 NW1/4 Sec. 32, T.17N R.21E
002-211-	2.3	
06		Block 1, Range I Lot 3-4; SE 1/4 SE 1/4 Sec. 31, T.17N R.21E
002-211-	0.1	
07		Block 1, Range I Lot 13-14; SE 1/4 SE 1/4 Sec. 31, T.17N R.21E

The following parcel was conveyed to Sutro Tunnel Co by Daniel Bowers and Dail Turney by Quitclaim Deed dated October 4, 2000, recorded with the Storey County Recorded as Document No. **88321**

002-141-11 5.8	Block 6, Range C Lot 29;	; SW1/4 SE1/4 Sec. 5, T.16N R.21E
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The following parcel was conveyed to Sutro Tunnel Co by Overman Mining Properties, Inc. by Quitclaim Deed dated July 14, 2003, recorded with the Storey County Recorded as Document No. **94927**

002-083-03	0.4	Block 4, Range E Lot 19-21; NW1/4 NW1/4 Sec. 5, T.16N R.21E
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Vesting documents for the following parcels were not located; however, the online records of the Storey County Assessor's Office indicate that all parcels are owned by the Sutro Tunnel Co.

002-022-01	1.0	Block 1, Range O Lot 42; SW1/4 NE1/4, Sec/ 32, T.17N R.21E
002-031-27	1.1	Block 1, Range O Lot 43, SE1/4 NW1/4 Sec. 32, T.17N R.21E
	0.5	Block 1, Range O Lot 25-26, Pt 27; NW1/4 SW1/4 Sec. 32, T.17N
002-041-18		R.21E
002-061-05	0.1	Block 1, Range O Lot 21; S1/2 NW1/4, Sec. 32, T.17N R.21E
002-061-12	0.2	Block 1, Range O Lot 13-14; S1/2 NW1/4, Sec. 32, T.17N R.21E
002-062-02	0.3	Block 4, Range C Lot 3-4; NW1/4 SW1/4, Sec. 32, T.17N R.21E
		Block 5, Range C Lot 1-2, 34-35; NW1/4 SW1/4, Sec. 32, T.17N
002-062-21	0.3	R.21E
		Block 5, Range C Pt Lot 14, 15; NW1/4 SW1/4, Sec. 32, T.17N
002-062-59	0.2	R.21E
002-063-10	0.1	Block 2, Range D Pt Lot 15; NW1/4 SW1/4, Sec. 32, T.17N R.21E
002-071-38	0.4	Block 2, Range B Lot 38; SW1/4 SW1/4, Sec. 32, T.17N, R.21E

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002-071-39	0.4	Block 2, Range B Lot 39; SW1/4 SW1/4, Sec. 32, T.17N, R.21E
002-075-01	0.5	Block 3, Range E Lot 10-14; NW1/4 SW1/4, Sec. 32, T.17N R.21E
002-082-01	0.1	Block 7, Range D Lot 1 ,2, 19; NW1/4 NW1/4 Sec. 5, T.16N R.21E
002-141-05	1.1	Keystone Estates Lot 1; SW1/4 SE1/4 Sec. 5, T.16N R.21E
002-141-08	1.0	Keystone Estates Lot 5; SW1/4 SE1/4 Sec. 5, T.16N R.21E
002-141-09	1.1	Keystone Estates Lot 4; SW1/4 SE1/4 Sec. 5, T.16N R.21E
002-141-10	1.1	Keystone Estates Lot 3; SW1/4 SE1/4 Sec. 5, T.16N R.21E
002-141-11	11.5	Block 6, Range C Pt Lot 26; SW1/4 SE1/4 Sec. 5, T.16N R.21E
002-141-11	1.5	Block 6, Range C Lot 28; SW1/4 SE1/4 Sec. 5, T.16N R.21E
		Block 2-3. Range E Lot 1-11, 16; SE1/4 SE1/4 Sec. 31, T.17N
002-202-01	1.3	R.21E
002-211-02	1.0	Block 1, Range I Lot 5-12; SE1/4 SE1/4 Sec. 31, T.17N R.21E
		Block 4, Range E Lot 9-18,22,31-34,36-37; NW1/4 NW1/4 Sec. 5,
002-083-08	2.4	T.16N R.21E
002-201-04	1.0	Block 1, Range G Lot 34-35; SE1/4 SE1/4 Sec. 31, T.17N R.21E
002-201-14	0.0	Block 1, Range G Pt Lot 6; SE1/4 SE1/4 Sec. 31, T.17N R.21E
002-201-16	0.4	Block 1, Range G Lot 1-2; SE1/4 SE1/4 Sec. 31, T.17N R.21E
002-202-05	0.5	Block 2, Range E Lot 1, 2, 4; SE1/4 SE1/4 Sec. 31, T.17N R.21E
002-252-01	1.1	Block 8, Range D Lot 38; S1/2 NE1/4 Sec. 6, T.16N R.21E

The following patented claims were conveyed by Constock Tunnel and Drainage Co., d/b/a Comstock Resources, Inc. to Sutro Tunnel Co by Grant, Bargain, Sale Deed dated February 28, 1992, recorded with the Storey County Recorded as Document No. **69160.** Again, the legal descriptions of the patented claims did not appear in the vesting documents.

	Size	
Parcel No	(acres)	Description
800-000-63	9.2	Julia; Mineral Survey 84
800-000-64	13.8	La Cata; Mineral Survey 85
800-000-65	13.8	Sara Ann; Mineral Survey 86
800-000-66	25.3	Gould & Curry (above 1000'); Mineral Survey 62
800-001-40	5.7	Lady Washington; Mineral Survey 51
800-001-41	0.7	Joesph Trench; Mineral Survey 53
800-001-42	1.3	Burke & Hamilton; Mineral Survey 54
800-001-43	1.5	Challenge; Mineral Survey 55
800-001-44	1.8	Empire North; Mineral Survey 56

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800-001-45	1.5	Bacon; Mineral Survey 58
800-001-46	4.0	Confidence; Mineral Survey 60
800-001-47	8.6	Alpha; Mineral Survey 63
800-001-48	0.9	Wm Sharon; Mineral Survey 64
800-001-50	2.7	Kentuck; Mineral Survey 69
800-001-52	7.1	Ward; Mineral Survey 90
800-001-53	15.5	Grosh; Mineral Survey 147
800-001-54	0.7	Empire South; Mineral Survey 57
800-001-55	0.6	Bacon; Mineral Survey 59
800-001-56	5.3	Groch; Mineral Survey 146
800-001-57	7.4	Grosh; Mineral Survey 147
800-001-58	6.0	Yellow Jacket; Mineral Survey 192
800-001-59	2.6	Imperial; Mineral Survey 193
800-001-60	3.3	Crown Point; Mineral Survey 194
800-001-61	0.9	Kentuck; Mineral Survey 195
800-001-62	23.7	Alta (Woodville); Mineral Survey 65
800-001-63	10.0	Exchequer; Mineral Survey 66
800-001-64	27.3	Bullion (Comstock Lode); Mineral Survey 79
800-001-65	9.2	Capital; Mineral Survey 101

II. UNPATENTED MINING CLAIMS

A. Lucerne Project

NMC No.	Claim Name	Mer. TWP. Rng. Sec Quadrant		
NMC1000122	Omaha Fraction #1	21 0160N 0210E 005 SW		
		21 0160N 0210E 006 SE		
NMC1000123	Omaha Fraction #2	21 0160N 0210E 005 SW, SE		
		21 0160N 0210E 006 NE, NW		
NMC1000124	Omaha Fraction #3	21 0160N 0210E 005 NW, SW		
NMC1000125	Omaha Fraction #4	21 0160N 0210E 005 NW, SW		
NMC1000126	Omaha Fraction #5	21 0160N 0210E 005 SW		

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County Recorder's Office as Document No. 120071			
NMC No.	Claim Name	Mer. TWP. Rng. Sec Quadrant	
NMC1000127	Omaha Fraction #6	21 0160N 0210E 005 SW, SE	
NMC1000128	Omaha Fraction #7	21 0160N 0210E 008 NE	
NMC1000129	Omaha Fraction #8	21 0160N 0210E 006 NE	
		21 0160N 0210E 005 NW, SW	
NMC1000130	Omaha Fraction #9	21 0160N 0210E 005 SE	
NMC1000131	Omaha Fraction #10	21 0160N 0210E 004 SW	
		21 0160N 0210E 005 SE	
NMC1000137	Omaha Fraction #18	21 0160N 0210E 004 SW	
		21 0160N 0210E 005 SE	
NMC1062751	Plum Fraction 6	21 0160N 0210E 008 NE	
		21 0160N 0210E 009 NW	
NMC1062752	Plum Fraction 7	21 0160N 0210E 005 SE	
		21 0160N 0210E 009 NW	
		21 0160N 0210E 004 SW	
		21 0160N 0210E 008 NE	
NMC1062753	Plum Fraction 8	21 0160N 0210E 005 SE	
		21 0160N 0210E 008 NE	
NMC1062754	Plum Fraction 9	21 0160N 0210E 008 NE	
		21 0160N 0210E 009 NW	
NMC 1062755	Plum Fraction 10	21 0160N 0210E 008 NE	
		21 0160N 0210E 009 NW	
NMC1062756	Plum Fraction 11	21 0160N 0210E 008 NE	
		21 0160N 0210E 005 SE	
NMC1093495	KC Frac	21 0160N 0210E 005 NW, SW	
NMC1093497	Arastr Frac 1	21 0160N 0210E 005 NE, SE	
NMC1093498	Arastr Frac 2	21 0160N 0210E 005 SE	
NMC1093499	Arastr Frac 3	21 0160N 0210E 005 SE	
		21 0160N 0210E 004 SW	
NMC1093500	Arastr Frac 4	21 0160N 0210E 004 SW	
		21 0160N 0210E 005 SE	
NMC1093502	Arastr Frac 6	21 0160N 0210E 005 SE	
NMC1093504	DG Frac	21 0160N 0210E 008 NE, SE	

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NMC No.	Claim Name	Mer. TWP. Rng. Sec Quadrant
NMC416033	Vindicator #8	21 0160N 0210E 008 NW, SW
NMC416040	Hartford St Louis Frac	21 0160N 0210E 008 NE, NW
NMC416041	Green St Louis Frac	21 0160N 0210E 008 NE
NMC416042	Hartford South Extension	21 0160N 0210E 008 NE, SE
NMC416043	Echo St Louis Frac	21 0160N 0210E 008 NE
NMC416044	Justice Lucerne Frac	21 0160N 0210E 008 NW
NMC416045	S Comstock St Louis Frac	21 0160N 0210E 008 NE
NMC416046	Justice Woodville Frac	21 0160N 0210E 005 SW
NMC416047	New Deal Fraction	21 0160N 0210E 005 SW, SE
		21 0160N 0210E 008 NE, NW
NMC416048	Cliff House Fraction	21 0160N 0210E 008 NE
NMC416049	Big Mike	21 0160N 0210E 005 SW, SE
		21 0160N 0210E 008 NE, NW
NMC676492	Hartford Lucerne Frac	21 0160N 0210E 008 NW
NMC810321	Lee #5	21 0160N 0210E 008 NW
		21 0160N 0210E 005 SW
NMC810323	Lee #2	21 0160N 0210E 005 SE
NMC810324	Lee #3	21 0160N 0210E 005 SE
		21 0160N 0210E 008 NE
NMC814553	Lee #8	21 0160N 0210E 005 SW, SE
		21 0160N 0210E 008 NE, NW
NMC814554	Lee #9	21 0160N 0210E 005 SW, SE
NMC821729	Comstock #1	21 0160N 0210E 006 NE, SE
		21 0160N 0210E 005 NW, SW
NMC821730	Comstock #2	21 0160N 0210E 006 NE, SE
		21 0160N 0210E 005 NW, SW
NMC821731	Comstock #3	21 0160N 0210E 006 NE
		21 0160N 0210E 005 NW, SW
NMC821740	Comstock #12	21 0160N 0210E 006 NE, SE
NMC821741	Comstock #13	21 0160N 0210E 005 SW
		21 0160N 0210E 006 SE

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NMC No.	Claim Name	Mer. TWP. Rng. Sec Quadrant
NMC821745	Comstock #17	21 0160N 0210E 005 SW
		21 0160N 0210E 006 SE
NMC821746	Comstock #18	21 0160N 0210E 005 SW
		21 0160N 0210E 006 SE
NMC871496	Comstock 119	21 0160N 0210E 005 NW, SW
NMC871497	Comstock 120	21 0160N 0210E 005 NW, SW
NMC871502	Comstock 125	21 0160N 0210E 005 SE
NMC871503	Comstock 126	21 0160N 0210E 006 SE
NMC871504	Comstock 127	21 0160N 0210E 005 SE
		21 0160N 0210E 008 NE
NMC871505	Comstock 128	21 0160N 0210E 008 NE
NMC884216	Plum	21 0160N 0210E 006 SE
		21 0160N 0210E 005 SW
NMC965375	Ghost 1	21 0160N 0210E 008 NW
NMC965376	Ghost 2	21 0160N 0210E 008 NW
NMC965377	Ghost 3	21 0160N 0210E 008 NW
NMC965378	Ghost 4	21 0160N 0210E 008 NW, SW
NMC965379	Ghost 5	21 0160N 0210E 008 NW, SW
NMC965380	Ghost 6	21 0160N 0210E 008 NW, SW
NMC965381	Ghost 7	21 0160N 0210E 008 SW
NMC983372	Comstock Lode 119	21 0160N 0210E 005 NE, SE
NMC983373	Comstock Lode 120	21 0160N 0210E 005 SW, SE
NMC992973	Comstock Lode 169	21 0160N 0210E 005 SW, SE
NMC992974	Comstock Lode 172	21 0160N 0210E 005 NE, SE
NMC992978	Comstock Lode 176	21 0160N 0210E 005 NE, SE
		21 0160N 0210E 004 NW, SW
NMC116351	Windy Fraction	RW DELAMARE
NMC116353	Cook & Gray	RW DELAMARE
NMC116356	Flora Temple	RW DELAMARE
NMC116358	Overland	RW DELAMARE
NMC116359	Cumberland #2	RW DELAMARE

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The following unpatented mining claims were conveyed to Comstock Mining LLC from Comstock Mining Inc. by Quitclaim Mining deed dated June 13, 2017 recorded with the Storey County Recorder's Office as Document No. **125891**.

NMC No.	Claim Name	Mer. TWP. Rng. Sec Quadrant	
NMC116360	Cumberland #3	RW DELAMARE	
NMC116362	Overlap	RW DELAMARE	
NMC116363	Overlap #1	RW DELAMARE	
NMC116369	Cumberland Frac	RW DELAMARE	
NMC555211	Overlap #3	DWC RESOURCES	
NMC705982	New Flora Temple	DWC LODE MINES	
NMC705983	Woodville Extension	DWC LODE MINES	

The following unpatented mining claims were conveyed to Comstock Mining LLC from					
Comstock Mining Inc. by Quitclaim Mining deed dated March 14, 2019 and recorded with the					
Storey County Recorde	r's Office as Document No. 1	129248.			
NMC No. Claim Name Mer. TWP. Rng. Sec Quadrant					
NMC1062758	NMC1062758 Plum Fraction 13 21 0160N 0210E 008 SW				
NMC1093501	Arastr Frac 5	21 0160N 0210E 005 SE			
21 0160N 0210E 004 SW					
NMC1093503	Arastr Frac 7	21 0160N 0210E 004 SW			
21 0160N 0210E 009 NW					

21 0160N 0210E 005 SE 21 0160N 0210E 008 NE

B. Unpatented Claims Included in American Flat Net Lease Agreement

NMC No.	Claim Name	Mer. TWP. Rng. Sec Quadrant
NMC1105470	CMI Mill Site 1	21 0160N 0210E 006 SE
NMC1108961	MS 38 B	21 0160N 0210E 007 NW
		21 0160N 0210E 006 SW
NMC1108962	MS 38 C	21 0160N 0210E 007 NW
		21 0160N 0210E 006 SW
		21 0160N 0200E 001 SE

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	J J		
	NMC1108963	MS 38 D	21 0160N 0210E 006 SW
			21 0160N 0200E 001 SE
	NMC1108964	MS 38 E	21 0160N 0210E 007 NW
			21 0160N 0200E 012 NE
			21 0160N 0200E 001 SE
			21 0160N 0210E 006 SE
	NMC983374	Comstock Lode 121	21 0160N 0210E 006 NW, SW
	NMC983375	Comstock Lode 122	21 0160N 0210E 006 SW, SE
	NMC983376	Comstock Lode 123	21 0160N 0210E 006 NE, NW, SW, SE
	NMC983377	Comstock Lode 124	21 0160N 0210E 006 SW, SE
	NMC983378	Comstock Lode 125	21 0160N 0210E 006 NE, NW
	NMC983379	Comstock Lode 126	21 0160N 0210E 006 NE, SE
	NMC983380	Comstock Lode 127	21 0160N 0210E 007 NW
	NMC983381	Comstock Lode 128	21 0160N 0210E 007 NE, NW, SW, SE
	NMC983382	Comstock Lode 129	21 0160N 0210E 007 NW
	NMC983383	Comstock Lode 130	21 0160N 0210E 007 NE, NW
	NMC983384	Comstock Lode 131	21 0160N 0210E 007 NE, NW
			21 0160N 0210E 006 SW
	NMC983385	Comstock Lode 132	21 0160N 0210E 007 NE
	NMC983386	Comstock Lode 133	21 0160N 0210E 006 SW, SE
			21 0160N 0210E 007 NE, NW
	NMC983387	Comstock Lode 134	21 0160N 0210E 007 NE
	NMC983388	Comstock Lode 135	21 0160N 0210E 006 SE
			21 0160N 0210E 007 NE
	NMC983389	Comstock Lode 136	21 0160N 0210E 007 NE
	NMC983390	Comstock Lode 137	21 0160N 0210E 006 SE
			21 0160N 0210E 007 NE
	NMC983391	Comstock Lode 138	21 0160N 0210E 008 NW
			21 0160N 0210E 007 NE
	NMC983392	Comstock Lode 139	21 0160N 0210E 006 SE
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The following unpatented mining claims were conveyed to Comstock Mining LLC from Comstock Mining Inc. by Quitclaim Mining deed dated June 13, 2017 recorded with the Storey County Recorder's Office as Document No. **125891**.

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NMC983393	Comstock Lode 140	21 0160N 0210E 007 NE
		21 0160N 0210E 005 SW
		21 0160N 0210E 008 NW
		21 0160N 0210E 006 SE

NMC No.	Claim Name	Mer. TWP. Rng. Sec Quadrant
NMC1105470	CMI Mill Site 1	21 0160N 0210E 006 SE
NMC1108961	MS 38 B	21 0160N 0210E 007 NW
		21 0160N 0210E 006 SW
NMC1108962	MS 38 C	21 0160N 0210E 007 NW
		21 0160N 0210E 006 SW
		21 0160N 0200E 001 SE
NMC1108963	MS 38 D	21 0160N 0210E 006 SW
		21 0160N 0200E 001 SE
NMC1108964	MS 38 E	21 0160N 0210E 007 NW
		21 0160N 0200E 012 NE
		21 0160N 0200E 001 SE
		21 0160N 0210E 006 SE
NMC871506	Comstock 129	21 0160N 0210E 007 NE, NW, SW, SE
NMC871507	Comstock 130	21 0160N 0210E 007 NE, SE
NMC871508	Comstock 131	21 0160N 0210E 007 NE, SE
NMC871509	Comstock 132	21 0160N 0210E 007 NE, SE
NMC871510	Comstock 133	21 0160N 0210E 007 NE, SE
NMC871511	Comstock 134	21 0160N 0210E 007 SE
NMC871512	Comstock 135	21 0160N 0210E 007 SE
NMC871513	Comstock 136	21 0160N 0210E 007 SE
NMC871514	Comstock 137	21 0160N 0210E 007 SE
NMC871515	Comstock 138	21 0160N 0210E 007 SW, SE
NMC871516	Comstock 139	21 0160N 0210E 007 NW
NMC871517	Comstock 140	21 0160N 0210E 007 NW

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	·		
	NMC871518	Comstock 141	21 0160N 0210E 007 NE, NW
	NMC871519	Comstock 142	21 0160N 0210E 007 NE
	NMC983374	Comstock Lode 121	21 0160N 0210E 006 NW, SW
	NMC983375	Comstock Lode 122	21 0160N 0210E 006 SW, SE
	NMC983376	Comstock Lode 123	21 0160N 0210E 006 NE, NW, SW, SE
	NMC983377	Comstock Lode 124	21 0160N 0210E 006 SW, SE
	NMC983378	Comstock Lode 125	21 0160N 0210E 006 NE, NW
	NMC983379	Comstock Lode 126	21 0160N 0210E 006 NE, SE
	NMC983380	Comstock Lode 127	21 0160N 0210E 007 NW
	NMC983381	Comstock Lode 128	21 0160N 0210E 007 NE, NW, SW, SE
	NMC983382	Comstock Lode 129	21 0160N 0210E 007 NW
	NMC983383	Comstock Lode 130	21 0160N 0210E 007 NE, NW
	NMC983384	Comstock Lode 131	21 0160N 0210E 007 NE, NW
			21 0160N 0210E 006 SW
	NMC983385	Comstock Lode 132	21 0160N 0210E 007 NE
	NMC983386	Comstock Lode 133	21 0160N 0210E 006 SW, SE
			21 0160N 0210E 007 NE, NW
4	NMC983387	Comstock Lode 134	21 0160N 0210E 007 NE
	NMC983388	Comstock Lode 135	21 0160N 0210E 006 SE
L			21 0160N 0210E 007 NE
	NMC983389	Comstock Lode 136	21 0160N 0210E 007 NE
	NMC983390	Comstock Lode 137	21 0160N 0210E 006 SE
			21 0160N 0210E 007 NE
	NMC983391	Comstock Lode 138	21 0160N 0210E 008 NW
			21 0160N 0210E 007 NE
L	NMC983392	Comstock Lode 139	21 0160N 0210E 006 SE
	NMC983393	Comstock Lode 140	21 0160N 0210E 007 NE
			21 0160N 0210E 005 SW
			21 0160N 0210E 008 NW
	- 16 - 56 - 26 - 27 - 27 - 27 - 27 - 27 - 27 - 2		21 0160N 0210E 006 SE
	NMC983378	Comstock Lode 125	21 0160N 0210E 006 NE, NW

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C. Unpatented Claims Included in Mineral Lease

Comstock Northern Exploration and Development LLC conveyed a leasehold interest to Tonogold in the following unpatented claims by Mineral Exploration and Mining Lease Agreement dated September 16, 2019.

NMC No.	Claim Name	Mer. TWP. Rng. Sec Quadrant
NMC1000132	Omaha Fraction #11	21 0160N 0210E 006 NE
		21 0170N 0210E 031 SE
NMC1000133	Omaha Fraction #12	21 0160N 0210E 006 NE
		21 0170N 0210E 031 SE
NMC1000134	Omaha Fraction #13	21 0160N 0210E 005 NE
		21 0170N 0210E 032 SE
NMC1000135	Omaha Fraction #14	21 0170N 0210E 032 SE
NMC1000136	Omaha Fraction #17	21 0170N 0210E 032 SW
		21 0170N 0210E 031 SE
NMC1000138	Omaha Fraction #19	21 0160N 0210E 005 NW
		21 0170N 0210E 032 SW
NMC1000139	Omaha Fraction #20	21 0170N 0210E 032 SW, SE
		21 0160N 0210E 005 NE, NW
NMC1000140	Omaha Fraction #21	21 0170N 0210E 032 SE
NMC1000141	Omaha Fraction #22	21 0170N 0210E 032 SW, SE
NMC1000142	Omaha Fraction #23	21 0170N 0210E 032 SW
NMC1000143	Omaha Fraction #24	21 0170N 0210E 032 NE, NW, SW, SE
NMC1003426	Loring 1	21 0170N 0210E 032 NW
		21 0170N 0210E 031 NE
NMC1003427	Loring 2	21 0170N 0210E 032 NE
NMC1003428	Loring 3	21 0170N 0210E 031 NE
		21 0170N 0210E 032 NW
NMC1003429	Loring 4	21 0170N 0210E 032 NW
		21 0170N 0210E 031 NE
		21 0170N 0210E 030 SE

NMC1003430	Loring 5	21 0170N 0210E 032 NW
		21 0170N 0210E 031 NE
		21 0170N 0210E 029 SW
		21 0170N 0210E 030 SE
NMC1003431	Loring 6	21 0170N 0210E 032 NW
		21 0170N 0210E 029 SW
NMC1003432	Loring 7	21 0170N 0210E 029 SW
NMC1003433	Loring 8	21 0170N 0210E 032 NW, SW
NMC1003434	Loring 9	21 0170N 0210E 032 NW
		21 0170N 0210E 029 SW
NMC1003435	Loring 10	21 0170N 0210E 031 NW, SW
		21 0170N 0200E 036 NE
NMC1003436	Loring 11	21 0170N 0210E 031 NW, SW
NMC1003437	Loring 12	21 0170N 0210E 031 NW
NMC1003438	Loring 13	21 0170N 0210E 031 NE, NW
NMC1003439	Loring 14	21 0170N 0210E 031 NE, NW
NMC1003440	Loring 15	21 0170N 0210E 030 SW, SE
		21 0170N 0210E 031 NE, NW
NMC1003441	Loring 16	21 0170N 0210E 031 NE
		21 0170N 0210E 030 SE
NMC1003442	Loring 17	21 0170N 0210E 031 NE
		21 0170N 0210E 030 SE
NMC1003443	Loring 18	21 0170N 0210E 031 NE
		21 0170N 0210E 030 SE
NMC1003444	Loring 19	21 0170N 0210E 030 SE
		21 0170N 0210E 029 SW
NMC1003445	Loring 20	21 0170N 0210E 029 SW
		21 0170N 0210E 030 SE
NMC1003446	Loring 21	21 0170N 0210E 030 SE
		21 0170N 0210E 029 SW
NMC1003446	Loring 22	21 0170N 0210E 029 SW
NMC1015691	West Lode 203	21 0170N 0210E 031 NW
		21 0170N 0200E 036 NE

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NMC1015692	West Lode 204	21	0170N 0210E 030	NW
		21	0170N 0200E 036	NE
		21	0170N 0210E 031	NW
NMC1015693	West Lode 205	21	0170N 0210E 030	SW
		21	0170N 0200E 036	NE
		21	0170N 0200E 025	SE
		21	0170N 0210E 031	NW
NMC1015696	West Lode 223	21	0170N 0210E 030	SW
		21	0170N 0210E 031	NW
NMC1015697	West Lode 224	21	0170N 0210E 030	SW
		21	0170N 0210E 031	NW
NMC1015698	West Lode 225	21	0170N 0210E 030	SW
NMC1015699	West Lode 226	21	0170N 0210E 030	NE
		21	0170N 0200E 025	SE
NMC1015700	West Lode 227	21	0170N 0200E 025	SE
		21	0170N 0210E 030	SW
NMC1015701	West Lode 228	21	0170N 0210E 030	NW, SW
		21	0170N 0200E 025	NE, SE
NMC1015702	West Lode 229	21	0170N 0210E 030	NW
		21	0170N 0200E 025	NE
		21	0170N 0200E 025	SE
NMC1015703	West Lode 243	21	0170N 0210E 031	NW
		21	0170N 0210E 030	SW, SE
NMC1015704	West Lode 244	21	0170N 0210E 030	SW, SE
NMC1015705	West Lode 245	21	0170N 0210E 030	SW, SE
NMC1015706	West Lode 246	21	0170N 0210E 030	NW, SW
NMC1015707	West Lode 247	21	0170N 0210E 030	NW, SW
NMC1015708	West Lode 248	21	0170N 0210E 030	NW, SW
NMC1015709	West Lode 249	21	0170N 0200E 025	NE
		21	0170N 0210E 030	NW
NMC1015710	West Lode 250	21	0170N 0200E 030	NW
		21	0170N 0200E 025	NE
NMC1015711	West Lode 263	21	0170N 0210E 030	SE

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County Recorder s offi	ce as Document No. 1272	50.	
NMC1015712	West Lode 264	21	0170N 0210E 030 SE
NMC1015713	West Lode 265	21	0170N 0210E 030 NE, SW, SE
NMC1015714	West Lode 266	21	0170N 0210E 030 NE, NW, SW, SE
NMC1015715	West Lode 267	21	0170N 0210E 030 NE, NW
NMC1015716	West Lode 268	21	0170N 0210E 030 NE, NW
NMC1015717	West Lode 269	21	0170N 0210E 030 NW
NMC1015718	West Lode 270	21	0170N 0210E 019 SW
		21	0170N 0210E 030 NW
NMC1093920	Redwing Fraction	21	0160N 0200E 001 SE
NMC821735	Comstock #7	21	0160N 0210E 005 NW
		21	0160N 0210E 006 NE
		21	0170N 0210E 032 SW
		21	0170N 0210E 031 SE
NMC821736	Comstock #8	21	0160N 0210E 005 NW
		21	0170N 0210E 032 SW
NMC821737	Comstock #9	21	0170N 0210E 032 SW
NMC821739	Comstock #11	21	0170N 0210E 031 SE
		21	0170N 0210E 032 SW
NMC821742	Comstock #14	21	0170N 0210E 031 SE
		21	0160N 0210E 006 NE
NMC821743	Comstock #15	21	0170N 0210E 031 SE
		21	0160N 0210E 032 SW
NMC821744	Comstock #16	21	0170N 0210E 032 SW
		21	0170N 0210E 031 SE
NMC871492	Comstock 115	21	0160N 0210E 006 NE
		21	0170N 0210E 031 SE
		21	0160N 0210E 005 NW
NMC871493	Comstock 116	21	0160N 0210E 005 NW
NMC871494	Comstock 117	21	0160N 0210E 005 NW
NMC871495	Comstock 118	21	0170N 0210E 032 SW
		21	0160N 0210E 005 NW
NMC871498	Comstock 121	21	0160N 0210E 005 NW

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		100.	
NMC871499	Comstock 122	21	0160N 0210E 005 NE, NW
NMC871500	Comstock 123	21	0160N 0210E 005 NE, NW
NMC871501	Comstock 124	21	0160N 0210E 005 NE, NW
		21	0170N 0210E 032 SW, SE
NMC983353	Comstock Lode 100	21	0170N 0210E 032 NW, SW
NMC983354	Comstock Lode 101	21	0170N 0210E 032 NW, SW
NMC983355	Comstock Lode 102	21	0170N 0210E 032 SW
NMC983356	Comstock Lode 103	21	0170N 0210E 032 NE, NW, SW, SE
NMC983357	Comstock Lode 104	21	0170N 0210E 032 SW, SE
NMC983358	Comstock Lode 105	21	0170N 0210E 032 SW, SE
NMC983359	Comstock Lode 106	21	0170N 0210E 032 NE, SE
NMC983360	Comstock Lode 107	21	0170N 0210E 032 NE, SE
NMC983361	Comstock Lode 108	21	0170N 0210E 032 SE
		21	0160N 0210E 005 NE
NMC983362	Comstock Lode 109	21	0170N 0210E 032 SE
		21	0160N 0210E 005 NE
NMC983363	Comstock Lode 110	21	0170N 0210E 032 SE
NMC983364	Comstock Lode 111	21	0170N 0210E 033 NW
		21	0170N 0210E 032 NE
NMC983365	Comstock Lode 112	21	0170N 0210E 032 NE
NMC983366	Comstock Lode 113	21	0170N 0210E 032 NE
NMC983367	Comstock Lode 114	21	0170N 0210E 032 NE, NW
NMC983368	Comstock Lode 115	21	0170N 0210E 032 NW
NMC983369	Comstock Lode 116	21	0170N 0210E 033 SW
		21	0170N 0210E 032 SE
NMC983370	Comstock Lode 117	21	0160N 0210E 005 NE
NMC983371	Comstock Lode 118	21	0170N 0210E 032 SE
		21	0170N 0210E 033 SW
		21	0160N 0210E 005 NE
NMC983405	Comstock Lode 152	21	0160N 0210E 006 NW
NMC983406	Comstock Lode 153	21	0160N 0210E 006 NW
NMC983407	Comstock Lode 154	21	0160N 0210E 006 NW

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NMC983408	Comstock Lode 155	21 0160N 0210E 006 NE, NW
		21 0170N 0210E 031 SW
NMC983409	Comstock Lode 156	21 0160N 0210E 006 NW
		21 0170N 0210E 031 SW, SE
NMC983410	Comstock Lode 157	21 0170N 0210E 031 SW
NMC983411	Comstock Lode 158	21 0170N 0210E 031 SW, SE
NMC983412	Comstock Lode 159	21 0170N 0210E 031 NW, SW
NMC983413	Comstock Lode 160	21 0170N 0210E 031 SW, SE
NMC983414	Comstock Lode 161	21 0170N 0210E 031 NW, SW, SE
NMC983415	Comstock Lode 162	21 0170N 0210E 031 SE
NMC983416	Comstock Lode 163	21 0170N 0210E 031 NE, NW, SW, SE
NMC983417	Comstock Lode 164	21 0170N 0210E 031 NE, SE
NMC983418	Comstock Lode 165	21 0170N 0210E 031 NE, SE
NMC983419	Comstock Lode 166	21 0170N 0210E 031 NE, SE
		21 0170N 0210E 032 SW
NMC983420	Comstock Lode 167	21 0170N 0210E 031 NE
NMC983421	Comstock Lode 168	21 0170N 0210E 032 NE
NMC992975	Comstock Lode 173	21 0160N 0210E 005 NE
NMC992976	Comstock Lode 174	21 0160N 0210E 005 NE, SE
NMC992977	Comstock Lode 175	21 0160N 0210E 005 NE
á.		21 0160N 0210E 004 NW
NMC992979	Comstock Lode 177	21 0160N 0210E 005 NE
		21 0160N 0210E 004 NW
NMC992980	Comstock Lode 179	21 0160N 0210E 005 NE
		21 0170N 0210E 033 SW
		21 0160N 0210E 004 NW
		21 0170N 0210E 032 SW
NMC992981	Comstock Lode 180	21 0170N 0210E 033 NW, SW
		21 0170N 0210E 032 NE, SE
NMC992982	Comstock Lode 181	21 0170N 0210E 032 SE
		21 0170N 0210E 033 SW
NMC992983	Comstock Lode 182	21 0170N 0210E 033 NW, SW

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The following unpatented mining claims were conveyed to Comstock Northern Exploration LLC from Comstock Mining LLC by Quitclaim Deed dated March 14, 2019 recorded with the Storey County Recorder's Office as Document No. **129250**.

NMC992984	Comstock Lode 183	21	0160N 0210E 033 SW	
NMC992985	Comstock Lode 184	21	0160N 0210E 033 NW, SW	

The following unpatented mining claim was conveyed to Comstock Northern Exploration LLC from the W. Hughes Brockbank Living Trust dated May 8, 1991 by Quitclaim Deed dated April 22, 2019 recorded with the Storey County Recorder's Office as Document No. **129536**.

NMC No.	Claim Name	Mer. TWP. Rng. Sec Quadrant				
NMC704516	Overman 1	21 0160N 0210E 006 NE				

D. Railroad and Gold Leased Unpatented Claims

Documents vesting title to the following unpatented claims in Railroad and Gold, LLC were not located on the Storey County Recorder's website. However, the online records of the BLM confirm that Railroad and Gold, LLC holds title to the unpatented claims, subject only to the superior title of the United States of America. That means that BLM received sufficient documentation to confirm ownership.

Comstock Mining LLC (as Goldspring Inc.) obtained a leasehold interest on the unpatented claims through a Mining Lease dated October 1, 2009, a memorandum of which was recorded with the Storey County Recorder's Office as Document No. **111963**.

NMC No.	Claim Name	Mer. TWP. Rng. Sec Quadrant
NMC705388	Latigo	21 0160N 0200E 012 NE
		21 0160N 0210E 007 NW
NMC705389	Latigo 2	21 0160N 0210E 007 NW
		21 0160N 0200E 012 NE
NMC705390	Angels No. 1	21 0160N 0210E 006 NE
		21 0170N 0210E 031 SE
NMC705391	Angels No. 2	21 0170N 0210E 031 SE
		21 0160N 0210E 006 NE, NW
NMC705392	Angels East Annex	21 0160N 0210E 006 NE

Documents vesting title to the following unpatented claims in Railroad and Gold, LLC were not located on the Storey County Recorder's website. However, the online records of the BLM confirm that Railroad and Gold, LLC holds title to the unpatented claims, subject only to the superior title of the United States of America. That means that BLM received sufficient documentation to confirm ownership.

Comstock Mining LLC (as Goldspring Inc.) obtained a leasehold interest on the unpatented claims through a Mining Lease dated October 1, 2009, a memorandum of which was recorded with the Storey County Recorder's Office as Document No. **111963**.

	The second se	-	
NMC705393	Merrilite	21	0160N 0210E 006 NE
		21	0160N 0210E 005 NW
		21	0170N 0210E 031 SE
NMC705394	Merrilite North Annex	21	0160N 0210E 006 NE
NMC705395	Hawk	21	0160N 0210E 006 NE, NW
NMC705396	Hawk Fraction	21	0160N 0210E 006 NE, NW, SW, SE
NMC705397	Alt. No 9	21	0160N 0210E 006 NE
		21	0160N 0210E 005 NW
NMC705398	West Nick	21	0160N 0210E 006 NE, NW
NMC705399	West Nick No. 1	21	0160N 0210E 006 NE, NW
NMC705400	Iona	21	0160N 0200E 001 SE
		21	0160N 0210E 006 SW
NMC705401	Oro Plato	21	0160N 0200E 001 SE
		21	0160N 0210E 006 SW
NMC705402	Owl	21	0160N 0210E 006 NW, SW
NMC705403	Maryland Fraction	21	0160N 0210E 006 NE, SE

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E. James Obester Leased Unpatented Claims

The following unpatented mining claims were conveyed to James Allen Obester from Claire Obester and First Interstate Bank of Nevada, N.A. by Quitclaim Deed dated August 16, 1994 recorded with the Storey County Recorder's Office as Document No. **74927**.

Obester conveyed a leasehold interest in the unpatented claims to Goldspring, Inc. by Mineral Exploration and Mining Lease dated August 20, 2008.

- The initial exploration term was 60 months from the effective date;
- If development continued, the term would be extended by agreement of the parties for fifteen (15) years, and indefinitely thereafter so long as operations continue on a consistent basis.

Pursuant to the Mineral Exploration and Mining Lease, the unpatented claims are subject to a two percent (2%) NSR in favor of Obester if the price of gold is less than \$900 per ounce; if gold exceeds \$900 per ounce, the royalty is a three percent (3%) NSR.

NMC No.	Claim Name	Mer. TWP. Rng. Sec Quadrant
NMC275502	Alta #5	21 0170N 0210E 033 NE, SE
NMC275503	Alta #6	21 0170N 0210E 033 NE, SE
		21 0170N 0210E 034 NW, SW
NMC275504	Alta #7	21 0170N 0210E 034 SW
		21 0170N 0210E 033 SE
		21 0160N 0210E 003 NW
		21 0160N 0210E 004 NE
NMC275505	Alta #8	21 0170N 0210E 033 NE, NW, SW, SE
NMC275506	Alta #9	21 0170N 0210E 033 NW, SW
NMC275507	Alta #10	21 0170N 0210E 033 NW, SW
NMC275509	Alta #12	21 0170N 0210E 033 NW, SW
NMC300858	Brunswick #1	21 0170N 0210E 033 NE, SE
NMC300859	Brunswick #2	21 0170N 0210E 033 NE, NW, SW, SE
NMC300860	Brunswick #4	21 0170N 0210E 033 NW, SW

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F. Renegade Leased Unpatented Claims

The following unpatented mining claims were conveyed Renegade Mineral Holdings LLC from Platte River Gold (U.S.) Inc. by Quitclaim Deed dated August 5, 2010 recorded with the Storey County Recorder's Office as Document No. **113710**.

Renegade conveyed a leasehold interest in the unpatented claims to Comstock Mining, Inc. by Mineral Exploration and Mining Lease Agreement dated October 1, 2010.

- The initial exploration term was 36 months from the effective date;
- If development continued, the term would be extended by agreement of the parties for six (6) years, with an additional six (6) year term if specified by the lessee, and indefinitely thereafter so long as operations continue on a consistent basis.

three percent (3%) NSR in favor of Renegade capped at a price of \$2000 per ounce of gold.							
NMC No.	Claim Name	Mer. TWP. Rng. Sec Quadrant					
NMC890651	NBO 1	21 0170N 0210E 033 NE					
NMC890652	NBO 2	21 0170N 0210E 033 NE					
NMC890653	NBO 3	21 0170N 0210E 033 NE					
NMC890654	NBO 4	21 0170N 0210E 033 NE, SE					
NMC890655	NBO 5	21 0170N 0210E 033 NE					
		21 0170N 0210E 034 NW					
NMC890656	NBO 6	21 0170N 0210E 033 NE, SE					
NMC890657	NBO 7	21 0170N 0210E 033 SE					
NMC890658	NBO 8	21 0170N 0210E 033 SE					
NMC890659	NBO 9	21 0170N 0210E 033 SE					
NMC890660	NBO 10	21 0170N 0210E 033 SE					
NMC890661	NBO 11	21 0160N 0210E 004 NE					
		21 0170N 0210E 033 SE					
NMC890662	NBO 12	21 0160N 0210E 004 NE					
		21 0170N 0210E 033 SE					
NMC890663	NBO 13	21 0160N 0210E 004 NE					
NMC890664	NBO 14	21 0170N 0210E 033 SW					
NMC890665	NBO 15	21 0160N 0210E 004 NE, NW					
NMC890667	NBO 17	21 0160N 0210E 004 NW					
NMC890668	NBO 18	21 0160N 0210E 004 NW					

Pursuant to the Mineral Exploration and Mining Lease, the unpatented claims are subject to a three percent (3%) NSR in favor of Renegade capped at a price of \$2000 per ounce of gold.

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The following unpatented mining claims were conveyed Renegade Mineral Holdings LLC from Platte River Gold (U.S.) Inc. by Quitclaim Deed dated August 5, 2010 recorded with the Storey County Recorder's Office as Document No. **113710**.

Renegade conveyed a leasehold interest in the unpatented claims to Comstock Mining, Inc. by Mineral Exploration and Mining Lease Agreement dated October 1, 2010.

- The initial exploration term was 36 months from the effective date;
- If development continued, the term would be extended by agreement of the parties for six (6) years, with an additional six (6) year term if specified by the lessee, and indefinitely thereafter so long as operations continue on a consistent basis.

three percent (570) its	it in favor of ftenegade ea	pped at a price of \$2000 per bance of Bora.
NMC890669	NBO 19	21 0160N 0210E 004 NW
NMC890670	NBO 20	21 0160N 0210E 004 SW
NMC890671	NBO 21	21 0160N 0210E 004 SW
NMC890672	NBO 22	21 0160N 0210E 004 SW
NMC890673	NBO 23	21 0160N 0210E 004 SW
NMC890674	NBO 24	21 0160N 0210E 033 SW
NMC890675	NBO 25	21 0160N 0210E 033 SW
NMC997060	NBO 26	21 0170N 0210E 033 NE, NW
NMC997061	NBO 27	21 0170N 0210E 033 NE
		21 0170N 0210E 028 SE

Pursuant to the Mineral Exploration and Mining Lease, the unpatented claims are subject to a three percent (3%) NSR in favor of Renegade capped at a price of \$2000 per ounce of gold.

This is not a title report or title opinion. We do not warrant title to the described properties. The purpose of this letter is for description only, for use in preparation of the SK1300 Report. We have not performed a site inspection, have not searched liens or encumbrances, and have not evaluated perfection of claims or claims and boundary conflicts.

Very truly yours,

PARSONS BEHLE & LATIMER

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APPENDIX B

Appendix B: List of Claims Associated with the "Mineral Exploration and Mining Lease Agreement"

Exhibit El - "Properties" (Mineral Exploration and Mining Lease Agreement)

The following patents, fee land, and unpatented mining claims are included in the Mineral Exploration and Mining Lease Agreement, and are shown in Figure El, below.

Parcel No	Description	Current Owner	Туре	Acres	County	Underlying NSR%	Underlying Royalty Owner
800-002-11	Red Wing	Comstock Northern Exploration LLC	Patent	8.3	Storey	0%	None
800-001-21	Dean	Comstock Northern Exploration LLC	Patent	10.7	Storey	4.15%	Obester 2
800-001-25	East North-Occidental	Comstock Northern Exploration LLC	Patent	11.6	Storey	4.15%	Obester 2
800-001-26	Edwards	Comstock Northern Exploration LLC	Patent	18.5	Storey	4.15%	Obester 2
800-001-10	North Occidental (New Brunswick)	Comstock Northern Exploration LLC	Patent	7.3	Storey	4.15%	Obester 2
800-001-68	Occidental (Brunswick)	Comstock Northern Exploration LLC	Patent	7.8	Storey	4.15%	Obester 2
800-001-24	South Occidental	Comstock Northern Exploration LLC	Patent	20.6	Storey	4.15%	Obester 2

El.1: CMI-Owned Properties Included in Mineral Lease

El.2: CMI-Owned Unpatented Claims Included in Mineral Lease

BLM No	Description	Current Owner	Туре	Acres	County	Underlying NSR%	Underlying Royalty Owner
		Comstock Northern	Lode	1.12	Storey	0	None
NMC1000132	Omaha Fraction #11	Exploration LLC					
		Comstock Northern	Lode	0.36	Storey	0	None
NMC1000133	Omaha Fraction #12	Exploration LLC					
		Comstock Northern	Lode	1.08	Storey	0	None
NMC1000134	Omaha Fraction #13	Exploration LLC					
		Comstock Northern	Lode	1.41	Storey	0	None
NMC1000135	Omaha Fraction #14	Exploration LLC					
		Comstock Northern	Lode	2.7	Storey	0	None
NMC1000136	Omaha Fraction #17	Exploration LLC					
		Comstock Northern	Lode	2.33	Storey	0	None
NMC1000138	Omaha Fraction #19	Exploration LLC					
		Comstock Northern	Lode	0.02	Storey	0	None
NMC1000139	Omaha Fraction #20	Exploration LLC					
		Comstock Northern	Lode	0.74	Storey	0	None
NMC1000140	Omaha Fraction #21	Exploration LLC					
		Comstock Northern	Lode	3.41	Storey	0	None
NMC1000141	Omaha Fraction #22	Exploration LLC					
		Comstock Northern	Lode	1.5	Storey	0	None
NMC1000142	Omaha Fraction #23	Exploration LLC					
		Comstock Northern	Lode	0.53	Storey	0	None
NMC1000143	Omaha Fraction #24	Exploration LLC					
		Comstock Northern	Lode	11.05	Storey	0	None
NMC1003426	Loring 1	Exploration LLC					
		Comstock Northern	Lode	18.76	Storey	0	None
NMC1003427	Loring 2	Exploration LLC					
		Comstock Northern	Lode	18.68	Storey	0	None
NMC1003428	Loring 3	Exploration LLC					
		Comstock Northern	Lode	18.94	Storey	0	None
NMC1003429	Loring 4	Exploration LLC					
		Comstock Northern	Lode	15.61	Storey	0	None
NMC1003430	Loring 5	Exploration LLC					

NMC1003431	Loring 6	Comstock Northern Exploration LLC	Lode	9.11	Storey	0	None
NMC1003432	Loring 7	Comstock Northern Exploration LLC	Lode	1.56	Storey	0	None
NMC1003433	Loring 8	Comstock Northern Exploration LLC	Lode	1.7	Storey	0	None
NMC1003434	Loring 9	Comstock Northern Exploration LLC	Lode	1.96	Storey	0	None
NMC1003435	Loring 10	Comstock Northern Exploration LLC	Lode	20.72	Storey	0	None
NMC1003436	Loring 11	Comstock Northern Exploration LLC	Lode	20.68	Storey	0	None
NMC1003437	Loring 12	Comstock Northern Exploration LLC	Lode	20.7	Storey	0	None
NMC1003438	Loring 13	Comstock Northern Exploration LLC	Lode	20.69	Storey	0	None
NMC1003439	Loring 14	Comstock Northern Exploration LLC	Lode	20.69	Storey	0	None
NMC1003440	Loring 15	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC1003441	Loring 16	Comstock Northern Exploration LLC	Lode	20.72	Storey	0	None
NMC1003442	Loring 17	Comstock Northern Exploration LLC	Lode	20.62	Storey	0	None
NMC1003443	Loring 18	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC1003444	Loring 19	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC1003445	Loring 20	Comstock Northern Exploration LLC	Lode	20.58	Storey	0	None
NMC1003446	Loring 21	Comstock Northern Exploration LLC	Lode	13.87	Storey	0	None
NMC1003447	Loring 22	Comstock Northern Exploration LLC	Lode	6.62	Storey	0	None
NMC1015691	West Lode 203	Comstock Northern Exploration LLC	Lode	10.31	Storey	0	None
NMC1015692	West Lode 204	Comstock Northern Exploration LLC	Lode	10.44	Storey	0	None
NMC1015693	West Lode 205	Exploration LLC	Lode	4.57	Storey	0	None
NMC1015696	West Lode 223	Exploration LLC	Lode	20.67	Storey	0	None
NMC1015697	West Lode 224	Exploration LLC	Lode	20.67	Storey	0	None
NMC1015698	West Lode 225	Exploration LLC	Lode	10.15	Storey	0	None
NMC1015699	West Lode 226	Exploration LLC	Lode	13.13	Storey	0	None
NMC1015700	West Lode 227	Exploration LLC	Lode	7.64	Storey	0	None
NMC1015701	West Lode 228	Exploration LLC	Lode	1.88	Storey	0	None
NMC1015702	West Lode 229	Exploration LLC	Lode	1.00	Storey	0	None
NMC1015703	West Lode 243	Exploration LLC	Lode	13.5	Storey	0	None
NMC1015704	West Lode 244	Exploration LLC Comstock Northern	Lode	18.88	Storey	0	None
NMC1015705	West Lode 245	Exploration LLC Comstock Northern	Lode	20.67	Storey	0	None
NMC1015706	West Lode 246	Exploration LLC	Lode	20.67	Storey	0	None
NMC1015707	West Lode 247	Exploration LLC	LOUE	20.07	Silley	U	INDIC

NMC1015708	West Lode 248	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC1015709	West Lode 249	Comstock Northern Exploration LLC	Lode	20.56	Storey	0	None
NMC1015710	West Lode 250	Comstock Northern Exploration LLC	Lode	16.57	Storey	0	None
NMC1015711	West Lode 263	Comstock Northern Exploration LLC	Lode	12.42	Storey	0	None
NMC1015712	West Lode 264	Comstock Northern Exploration LLC	Lode	7.23	Storey	0	None
NMC1015713	West Lode 265	Comstock Northern Exploration LLC	Lode	15.28	Storey	0	None
NMC1015714	West Lode 266	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC1015715	West Lode 267	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC1015716	West Lode 268	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC1015717	West Lode 269	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC1015718	West Lode 270	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC1093920	Redwing Fraction	Comstock Northern Exploration LLC	Lode	5.88	Storey	0	None
NMC704516	Overman 1	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC821735	Comstock #7	Comstock Northern Exploration LLC	Lode	18.89	Storey	0	None
NMC821736	Comstock #8	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC821737	Comstock #9	Comstock Northern Exploration LLC	Lode	20.51	Storey	0	None
NMC821739	Comstock #11	Comstock Northern Exploration LLC	Lode	18.8	Storey	0	None
NMC821742	Comstock #14	Comstock Northern Exploration LLC	Lode	9.15	Storey	0	None
NMC821743	Comstock #15	Comstock Northern Exploration LLC	Lode	3.33	Storey	0	None
NMC821744	Comstock #16	Comstock Northern Exploration LLC	Lode	19.47	Storey	0	None
NMC871492	Comstock 115	Comstock Northern Exploration LLC	Lode	2.84	Storey	0	None
NMC871493	Comstock 116	Comstock Northern Exploration LLC	Lode	18.57	Storey	0	None
NMC871494	Comstock 117	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC871495	Comstock 118	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC871498	Comstock 121	Comstock Northern Exploration LLC	Lode	19.3	Storey	0	None
NMC871499	Comstock 122	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC871500	Comstock 123	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC871501	Comstock 124	Comstock Northern Exploration LLC	Lode	18.54	Storey	0	None
NMC983353	Comstock Lode 100	Comstock Northern Exploration LLC	Lode	16.2	Storey	0	None
NMC983354	Comstock Lode 101	Comstock Northern Exploration LLC	Lode	6.11	Storey	0	None
NMC983355	Comstock Lode 102	Comstock Northern Exploration LLC	Lode	15.9	Storey	0	None
NMC983356	Comstock Lode 103	Comstock Northern Exploration LLC	Lode	0.77	Storey	0	None

NMC983357	Comstock Lode 104	Comstock Northern Exploration LLC	Lode	16.2	Storey	0	None
NMC983358	Comstock Lode 105	Comstock Northern Exploration LLC	Lode	17.2	Storey	0	None
NMC983359	Comstock Lode 106	Comstock Northern Exploration LLC	Lode	10.45	Storey	0	None
NMC983360	Comstock Lode 107	Comstock Northern Exploration LLC	Lode	12.66	Storey	0	None
NMC983361	Comstock Lode 108	Comstock Northern Exploration LLC	Lode	3.56	Storey	0	None
NMC983362	Comstock Lode 109	Comstock Northern Exploration LLC	Lode	2.31	Storey	0	None
NMC983363	Comstock Lode 110	Comstock Northern Exploration LLC	Lode	19.24	Storey	0	None
NMC983364	Comstock Lode 111	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC983365	Comstock Lode 112	Comstock Northern Exploration LLC	Lode	16.57	Storey	0	None
NMC983366	Comstock Lode 113	Comstock Northern Exploration LLC	Lode	17.08	Storey	0	None
NMC983367	Comstock Lode 114	Comstock Northern Exploration LLC	Lode	1.42	Storey	0	None
NMC983368	Comstock Lode 115	Comstock Northern Exploration LLC	Lode	9.66	Storey	0	None
NMC983369	Comstock Lode 116	Comstock Northern Exploration LLC	Lode	20.4	Storey	0	None
NMC983370	Comstock Lode 117	Comstock Northern Exploration LLC	Lode	20.39	Storey	0	None
NMC983371	Comstock Lode 118	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC983405	Comstock Lode 152	Comstock Northern Exploration LLC	Lode	19.72	Storey	0	None
NMC983406	Comstock Lode 153	Comstock Northern Exploration LLC	Lode	14.46	Storey	0	None
NMC983407	Comstock Lode 154	Comstock Northern Exploration LLC	Lode	8.26	Storey	0	None
NMC983408	Comstock Lode 155	Comstock Northern Exploration LLC	Lode	8.26	Storey	0	None
NMC983409	Comstock Lode 156	Comstock Northern Exploration LLC	Lode	20.66	Storey	0	None
NMC983410	Comstock Lode 157	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC983411	Comstock Lode 158	Comstock Northern Exploration LLC	Lode	20.62	Storey	0	None
NMC983412	Comstock Lode 159	Comstock Northern Exploration LLC	Lode	20.63	Storey	0	None
NMC983413	Comstock Lode 160	Comstock Northern Exploration LLC	Lode	20.66	Storey	0	None
NMC983414	Comstock Lode 161	Comstock Northern Exploration LLC	Lode	20.66	Storey	0	None
NMC983415	Comstock Lode 162	Comstock Northern Exploration LLC	Lode	19.24	Storey	0	None
NMC983416	Comstock Lode 163	Comstock Northern Exploration LLC	Lode	20.65	Storey	0	None
NMC983417	Comstock Lode 164	Comstock Northern Exploration LLC	Lode	12.82	Storey	0	None
NMC983418	Comstock Lode 165	Comstock Northern Exploration LLC	Lode	20.66	Storey	0	None
NMC983419	Comstock Lode 166	Comstock Northern Exploration LLC	Lode	7.58	Storey	0	None
NMC983420	Comstock Lode 167	Comstock Northern Exploration LLC	Lode	20.66	Storey	0	None
NMC983421	Comstock Lode 168	Comstock Northern Exploration LLC	Lode	16.15	Storey	0	None

		Comstock Northern					
NMC99297S	Comstock Lode 173	Exploration LLC	Lode	20.67	Storey	0	None
NMC992976	Comstock Lode 174	Comstock Northern Exploration LLC	Lode	15.32	Storey	0	None
NMC992977	Comstock Lode 17S	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC992979	Comstock Lode 177	Comstock Northern Exploration LLC	Lode	19.04	Storey	0	None
NMC992980	Comstock Lode 179	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC992981	Comstock Lode 180	Comstock Northern Exploration LLC	Lode	20.67	Storey	0	None
NMC992982	Comstock Lode 181	Comstock Northern Exploration LLC	Lode	20.18	Storey	0	None
NMC992983	Comstock Lode 182	Comstock Northern Exploration LLC	Lode	10.23	Storey	0	None
NMC992984	Comstock Lode 183	Comstock Northern Exploration LLC	Lode	19.78	Storey	0	None
NMC99298S	Comstock Lode 184	Comstock Northern Exploration LLC	Lode		Storey	0	None
NMC1097411	Three Brothers	Comstock Northern Exploration LLC	Lode	18.61	Lyon	0	None

El.3: Garrett Leased Properties Included in Mineral Lease

Parcel No	Description	Current Owner	TYPE Acres County	NSR%	Royalty Owner
800-000-S4	Pride of Washoe	Fred Garrett	Patent 25.3 Storey	3%	Hess-Garrettson

El.4: Railroad and Gold Leased Properties Included in Mineral Lease

Parcel No	Description	Current Owner	TYPE	Acres	County	NSR%	Royalty Owner	
002-091-01	D-8 Lot 29	RR & Gold	Fee	1.2	Storey	1%	Railroad and Gold LLC	
002-091-04	D-8 pt Lot 2S	RR & Gold	Fee	0.7	Storey	1%	Railroad and Gold LLC	
002-091-09	D-8 Lot 30	RR & Gold	Fee	3.0	Storey	1%	Railroad and Gold LLC	
002-091-10	D-8 Lot 19	RR & Gold	Fee	0.1	Storey	1%	Railroad and Gold LLC	
002-091-13	D-8 Lot 1-8	RR & Gold	Fee	1.6	Storev	1%	Railroad and Gold LLC	
002-091-14	D-8 Lot 12,32	RR & Gold	Fee	1.7	Storey	1%	Railroad and Gold LLC	
002-231-02	S Ptn Block L-1	RR & Gold	Fee	10.5	Storey	1%	Railroad and Gold LLC	
004-331-34	Ptn Lot 8	RR & Gold	Fee	21.1	Storev	1%	Railroad and Gold LLC	
004-331-35	ptn Lots 8&12	RR & Gold	Fee	5.5	Storey	1%	Railroad and Gold LLC	
800-00Q-45	Gould & Curry (below 1000')	RR & Gold	Patent	25.3	Storey	1%	Railroad and Gold LLC	
800-00Q-46	Chollar Potosi (below 1000')	RR & Gold	Patent	35.2	Storev	1%	Railroad and Gold LLC	
800-00Q-47	Savage (below 1000')	RR & Gold	Patent	19.3	Storey	1%	Railroad and Gold LLC	
800-001-00	Culver	RR & Gold	Patent	13.8	Storey	1%	Railroad and Gold LLC	
800-001-01	Culver Addition (SJ	RR & Gold	Patent	4.3	Storey	1%	Railroad and Gold LLC	
800-001-02	Culver Addition (N)	RR & Gold	Patent	6.4	Storey	1%	Railroad and Gold LLC	
800-001-03	Gibbs (1/2 interest)	RR & Gold	Patent	3.1	Storey	1%	Railroad and Gold LLC	
800-001-04	Gibbs (1/2 interest)	RR & Gold	Patent	7.3	Storev	1%	Railroad and Gold LLC	
800-002-04	Knickerbocker (N Half)	RR & Gold	Patent	5.5	Storey	1%	Railroad and Gold LLC	

El.5: Railroad and Gold Leased Unpatented Claims Included in Mineral Lease

BLM No	Description	Current Owner	TVDE	Acres	County	Underly1ng	Underlying Royalty Owner
BLWI NO	Description	Current Owner	TIFE	Actes	County	INSK 70	Royalty Owner
NMC70S388	Latigo	RR & Gold	Lode	18.73	Storey	1%	Railroad and Gold LLC
NMC70S389	Latigo 2	RR & Gold	Lode	22.41	Storey	1%	Railroad and Gold LLC

NMC705390	Angels No.1	RR & Gold	Lode	14.65	Storey	1%	Railroad and Gold LLC	
NMC705391	Angels No. 2	RR & Gold	Lode	20.68	Storey	1%	Railroad and Gold LLC	
NMC705392	Angels East Annex	RR & Gold	Lode	7.45	Storey	1%	Railroad and Gold LLC	
NMC705393	Merrilite	RR & Gold	Lode	15.61	Storey	1%	Railroad and Gold LLC	
NMC705394	Merrilite North Annex	RR & Gold	Lode	15.71	Storey	1%	Railroad and Gold LLC	
NMC705395	Hawk	RR & Gold	Lode	13.38	Storey	1%	Railroad and Gold LLC	
NMC705396	Hawk Fraction	RR & Gold	Lode	18.3	Storey	1%	Railroad and Gold LLC	
NMC705397	Alto no. 9	RR & Gold	Lode	10.71	Storey	1%	Railroad and Gold LLC	
NMC705398	West Nick	RR & Gold	Lode	20.55	Storey	1%	Railroad and Gold LLC	
NMC705399	West Nick No. 1	RR & Gold	Lode	20.67	Storey	1%	Railroad and Gold LLC	
NMC705400	Iona	RR & Gold	Lode	9.39	Storey	1%	Railroad and Gold LLC	
NMC705401	Oro Plato	RR & Gold	Lode	11.08	Storey	1%	Railroad and Gold LLC	
NMC705402	Owl	RR & Gold	Lode	7.69	Storey	1%	Railroad and Gold LLC	
NMC705403	Maryland Fraction	RR & Gold	Lode	20.69	Storey	1%	Railroad and Gold LLC	

El.6: James Obester Leased Unpatented Claims Included in Mineral Lease

BLM No	DescrlDtlon	Current Owner	TYPE	Acres	County	Underlying NSR%	Underlying Royalty Owner
NMC275502	Alta #5	James Obester	Lode	20.67	Storey	3%	James Obester
NMC275503	Alta #6	James Obester	Lode	20.67	Storey	3%	James Obester
NMC275504	Alta #7	James Obester	Lode	20.67	Storey	3%	James Obester
NMC275505	Alta #8	James Obester	Lode	12.64	Storey	3%	James Obester
NMC275506	Alta #9	James Obester	Lode	20.67	Storey	3%	James Obester
NMC275507	Alta #lO	James Obester	Lode	20.67	Storey	3%	James Obester
NMC275509	Alta #12	James Obester	Lode	12.06	Storey	3%	James Obester
NMC300858	Brunswick #1	James Obester	Lode	20.67	Storey	3%	James Obester
NMC300859	Brunswick #2	James Obester	Lode	20.67	Storey	3%	James Obester
NMC300860	Brunswick #4	James Obester	Lode	20.67	Storey	3%	James Obester

El.7: Renegade Leased Unpatented Claims Included in Mineral Lease

BLM No	Description	Current Owner	TYPE	Acres	County	Underlying NSR%	Underlying Royalty Owner
NMC890651	NBO 1	Renegade	Lode	19.21	Storey	3%	Renegade Mineral
NMC890652	NBO 2	Renegade	Lode	1.35	Storey	3%	Renegade Mineral
NMC890653	NB03	Renegade	Lode	20.67	Storey	3%	Renegade Mineral
NMC890654	NB0 4	Renegade	Lode	20.29	Storey	3%	Renegade Mineral
NMC890655	NB05	Renegade	Lode	20.51	Storey	3%	Renegade Mineral
NMC890656	NB06	Renegade	Lode	15.93	Storey	3%	Renegade Mineral
NMC890657	NB07	Renegade	Lode	13.74	Storey	3%	Renegade Mineral
NMC890658	NB08	Renegade	Lode	20.67	Storey	3%	Renegade e Mineral
NMC890659	NB09	Renegade	Lode	20.67	Storey	3%	Renegade Mineral
NMC890660	NBO 10	Renegade	Lode	16.72	Storey	3%	Renegade Mineral
NMC890661	NBO 11	Renegade	Lode	9.9	Storey	3%	Renegade Mineral
NMC890662	NBO 12	Renegade	Lode	18.07	Storey	3%	Renegade Mineral
NMC890663	NBO 13	Renegade	Lode	12.83	Storey	3%	Renegade Mineral
NMC890664	NBO 14	Renegade	Lode	3.37	Storey	3%	Renegade Mineral
NMC890665	NBO 15	Renegade	Lode	6.05	Storey	3%	Renegade Mineral
NMC890667	NBO 17	Renegade	Lode	13.45	Storey	3%	Renegade Mineral
NMC890668	NBO 18	Renegade	Lode	18.5	Storey	3%	Renegade Mineral
NMC890669	NBO 19	Renegade	Lode	16.18	Storey	3%	Renegade Mineral
NMC890670	NBO 20	Renegade	Lode	16.51	Storey	3%	Renegade Mineral

NMC890671	NBO 21	Renegade	Lode	10.69	Storey	3%	Renegade Mineral
NMC890672	NBO 22	Renegade	Lode	6.64	Storey	3%	Renegade Mineral
NMC890673	NBO 23	Renegade	Lode	11.84	Storey	3%	Renegade Mineral
NMC890674	NBO 24	Renegade	Lode	9.53	Storey	3%	Renegade Mineral
NMC890675	NBO 25	Renegade	Lode	7.6	Storey	3%	Renegade Mineral
NMC997060	NBO 26 (invalid?)	Renegade	Lode	7.6	Storey	3%	Renegade Mineral
NMC997061	NBO 27	Renegade	Lode	19.69	Storey	3%	Renegade Mineral

E1.8: Sutro Leased Properties Included in Mineral Lease

hrcel No	Description	Current Owner	TYPE	Acres	County	Underlying NSR%	Underlying Royalty Owner
001-044-06	Rng E Lot 8	Sutro	Fee	0.1	Storey	5%	Sutro
001-056-02	Rng E Lot 1-14	Sutro	Fee	0.3	Storey	5%	Sutro
001-071-01	Rng A S Pt Lot 143	Sutro	Fee	2.3	Storey	5%	Sutro
001-113-02	Rng H Lot 5-6	Sutro	Fee	0.2	Storey	5%	Sutro
001-113-04	Block 250 Lot 7	Sutro	Fee	0.3	Storey	5%	Sutro
002-011-09	Rng O-1Pt Lot 40	Sutro	Fee	1.5	Storey	5%	Sutro
002-021-01	Rng O-1Pt Lot 43	Sutro	Fee	2.5	Storey	5%	Sutro
002-022-01	Rng O-1Lot 42	Sutro	Fee	1.0	Storey	5%	Sutro
002-031-27	Rng O-1Pt Lot 34	Sutro	Fee	1.1	Storey	5%	Sutro
002-041-17	Rng O-1Lot 8E, Pt 27	Sutro	Fee	0.4	Storey	5%	Sutro
002-041-18	Rng O-1Lot 25-26, Pt 27	Sutro	Fee	0.5	Storey	5%	Sutro
002-041-20	Rng O-1 Pt Lot 8	Sutro	Fee	0.2	Storey	5%	Sutro
002-052-24	Rng P-2 Pt Lot 1	Sutro	Fee	1.5	Storey	5%	Sutro
002-052-25	Rng P-2 Lot 11-12	Sutro	Fee	0.1	Storey	5%	Sutro
002-061-01	Rng 0-1 Lot 10-11	Sutro	Fee	0.4	Storey	5%	Sutro
002-061-05	Rng 0-1 Lot 21	Sutro	Fee	0.1	Storey	5%	Sutro
002-061-11	Rng 0-1 Lot 12	Sutro	Fee	0.2	Storey	5%	Sutro
002-061-12	Rng 0-1 Lot 13-14	Sutro	Fee	0.2	Storey	5%	Sutro
002-062-02	Rng C-4 Lot 3-4	Sutro	Fee	0.3	Storey	5%	Sutro
002-062-03	Rng B-1Lot 1-7	Sutro	Fee	0.3	Storey	5%	Sutro
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002-062-06	Rng B-1 Lot 12, pt 13	Sutro	Fee	0.1	Storey	5%	Sutro
002-062-15	Rng C-5 Lot 36-37	Sutro	Fee	0.1	Storey	5%	Sutro
002-062-21	Rng C-5 Lot 1-2,34-35	Sutro	Fee	0.3	Storey	5%	Sutro
002-062-22	Rng C-5 Lot 33	Sutro	Fee	0.1	Storey	5%	Sutro
002-062-40	Rng C-4 Lot 12,19	Sutro	Fee	0.1	Storey	5%	Sutro
002-062-42	Rng A-1 Lot 1-5,7-8,15-16	Sutro	Fee	0.5	Storey	5%	Sutro
002-062-44	Rng B-2 Lot 6-9	Sutro	Fee	0.1	Storey	5%	Sutro
002-062-59	Rng C-5 Pt Lot 14,15	Sutro	Fee	0.2	Storey	5%	Sutro
002-063-10	Rng D-2 Pt Lot 15	Sutro	Fee	0.1	Storey	5%	Sutro
002-063-13	Rng D-1 Lot 28	Sutro	Fee	0.1	Storey	5%	Sutro
002-063-16	Rng D-1 Lot 11,23-27	Sutro	Fee	0.4	Storey	5%	Sutro
002-063-17	Rng D-1 Lot 15,19-22,29	Sutro	Fee	0.3	Storey	5%	Sutro
002-063-18	Rng D-1Lot 14	Sutro	Fee	0.0	Storey	5%	Sutro
002-063-19	Rng D-1Lot 16-18	Sutro	Fee	0.2	Storey	5%	Sutro
002-063-21	Rng D-1Lot 1-2	Sutro	Fee	0.6	Storey	5%	Sutro
002-071-01	Rng A-llot 33-35	Sutro	Fee	1.3	Storey	5%	Sutro
002-071-05	Rng A-1 Lot 37, 37.5	Sutro	Fee	0.7	Storey	5%	Sutro
002-071-06	Rng B-2 Lot 36, 36.5	Sutro	Fee	1.0	Storey	5%	Sutro
002-071-22	Rng A-1 lot 35.5, 36	Sutro	Fee	0.4	Storey	5%	Sutro
002-071-36	Rng B-2 Lot 27-29, 37; C-5 Lot 25-27	Sutro	Fee	1.8	Storey	5%	Sutro
002-071-38	Rng B-2 Lot 38	Sutro	Fee	0.4	Storey	5%	Sutro
002-071-39	Rng B-2 Lot 39	Sutro	Fee	0.4	Storey	5%	Sutro
002-075-01	Rng E-3 Lot 10-14	Sutro	Fee	0.5	Storey	5%	Sutro
002-082-01	Rng D-7 Lot 1,2,19	Sutro	Fee	0.1	Storey	5%	Sutro
002-082-06	Rng D-7 Lot 14	Sutro	Fee	0.1	Storey	5%	Sutro
002-082-07	Rng D-7 Lot 15-16	Sutro	Fee	0.1	Storey	5%	Sutro
002-082-08	Rng D-7 Lot 17-18	Sutro	Fee	0.2	Storey	5%	Sutro
002-083-03	Rng E-4 Lot 19-21	Sutro	Fee	0.4	Storey	5%	Sutro

002-083-04	Rng E-4 Lot 23-28	Sutro	Fee	0.8	Storey	5%	Sutro
002-083-05	Rng E-4 Lot 29-30, 35	Sutro	Fee	0.8	Storey	5%	Sutro
002-083-08	Rng E-4 Lot 9-18, 22, 31-34, 36-37	Sutro	Fee	2.4	Storey	5%	Sutro
002-121-02	Rng C-6 Lot 24	Sutro	Fee	0.4	Storey	5%	Sutro
002-121-02	Rng C-6 Lot 23	Sutro	Fee	0.2	Storey	5%	Sutro
002-141-05	K-E Lot 1	Sutro	Fee	1.1	Storey	5%	Sutro
002-141-08	K-E Lot 5	Sutro	Fee	1.0	Storey	5%	Sutro
002-141-09	K-E Lot 4	Sutro	Fee	1.1	Storey	5%	Sutro
002-141-10	K-E Lot 3	Sutro	Fee	1.1	Storey	5%	Sutro
002-141-11	Rng C-6 Pt Lot 26	Sutro	Fee	11.5	Storey	5%	Sutro
002-141-11	Rng C-6 Lot 28	Sutro	Fee	1.5	Storey	5%	Sutro
002-141-11	Rng C-6 Lot 29	Sutro	Fee	5.8	Storey	5%	Sutro
002-181-06	Rng F-1 Lot 40	Sutro	Fee	1.4	Storey	5%	Sutro
002-181-08	Rng F-1 Lot 18-20	Sutro	Fee	0.2	Storey	5%	Sutro
002-181-10	Rng F-1 Lot 11	Sutro	Fee	0.8	Storey	5%	Sutro
002-191-01	Rng H-1 Lot 1-41	Sutro	Fee	10.2	Storey	5%	Sutro
002-201-04	Rng G-1 Lot 34-35	Sutro	Fee	1.0	Storey	5%	Sutro
002-201-05	Rng G-1 Lot 37-38	Sutro	Fee	0.3	Storey	5%	Sutro
002-201-08	Rng G-1 Lot 46	Sutro	Fee	0.1	Storey	5%	Sutro
002-201-14	Rng G-1 Pt Lot 6	Sutro	Fee	0.0	Storey	5%	Sutro
002-201-15	Rng G-1 Lot 48	Sutro	Fee	0.0	Storey	5%	Sutro
002-201-16	Rng G-1 Lot 1-2	Sutro	Fee	0.4	Storey	5%	Sutro
002-201-20	Rng G-1 Lot 9	Sutro	Fee	0.0	Storey	5%	Sutro
002-201-22	Rng G-1 Lot 15	Sutro	Fee	0.0	Storey	5%	Sutro
002-201-26	Rng G-1 Lot 26-29, 42-43	Sutro	Fee	0.7	Storey	5%	Sutro
002-201-30	Rng G-1 Lot 30-31	Sutro	Fee	0.2	Storey	5%	Sutro
002-201-31	Rng G-1 Lot 14	Sutro	Fee	0.1	Storey	5%	Sutro
002-201-32	Rng G-1 Lot 16-21, 25, 40-41, 44	Sutro	Fee	1.5	Storey	5%	Sutro
002-202-01	Rng E-2, E-3 Lot 1-11, 16	Sutro	Fee	1.3	Storey	5%	Sutro

002-202-05	Rng E-2 Lot 1,2,4	Sutro	Fee	0.5	Storey	5%	Sutro
002-211-02	Rng 1-1Lot 5-12	Sutro	Fee	1.0	Storey	5%	Sutro
002-211-03	Rng 1-1Lot 13-14	Sutro	Fee	0.1	Storey	5%	Sutro
002-211-04	Rng 1-1 Lot 15-25	Sutro	Fee	1.1	Storey	5%	Sutro
002-211-05	Rng 1-1 Lot 25	Sutro	Fee	0.1	Storey	5%	Sutro
002-211-06	Rng 1-1Lot 3-4	Sutro	Fee	2.3	Storey	5%	Sutro
002-211-07	Rng 1-1 Lot 13-14	Sutro	Fee	0.1	Storey	5%	Sutro
002-221-02	Rng 1-11/2 Lot 30	Sutro	Fee	8.3	Storey	5%	Sutro
002-231-01	N Ptn Block L-1	Sutro	Fee	10.4	Storey	5%	Sutro
002-241-01	Rng 1-1Lot 40-41	Sutro	Fee	2.2	Storey	5%	Sutro
002-242-01	Rng J-2 Lot 17-19	Sutro	Fee	0.6	Storey	5%	Sutro
002-243-01	Rng J-1 Lot 20	Sutro	Fee	3.0	Storey	5%	Sutro
002-252-01	Rng D-8 Lot 38	Sutro	Fee	1.1	Storey	5%	Sutro
002-254-Ql	Rng J-1 Lot 21	Sutro	Fee	0.8	Storey	5%	Sutro
800-000-66	Gould & Curry (above 1000')	Sutro	Patent	25.3	Storey	5%	Sutro
800-000-63	Julia	Sutro	Patent	9.2	Storey	5%	Sutro
800-000-64	La Cata	Sutro	Patent	13.8	Storey	5%	Sutro
800-000-65	Sara Ann	Sutro	Patent	13.8	Storey	5%	Sutro
800-001-40	Lady Washington	Sutro	Patent	5.7	Storey	5%	Sutro
800-001-41	Joesph Trench	Sutro	Patent	0.7	Storey	5%	Sutro
800-001-42	Burke & Hamilton	Sutro	Patent	1.3	Storey	5%	Sutro
800-001-43	Challenge	Sutro	Patent	1.5	Storey	5%	Sutro
800-001-44	Empire North	Sutro	Patent	1.8	Storey	5%	Sutro
800-001-45	Bacon (MS 58)	Sutro	Patent	1.5	Storey	5%	Sutro
800-001-46	Confidence	Sutro	Patent	4.0	Storey	5%	Sutro
800-001-47	Alpha	Sutro	Patent	8.6	Storey	5%	Sutro
800-001-48	Wm Sharon	Sutro	Patent	0.9	Storey	5%	Sutro
800-001-50	Kentuck MG.	Sutro	Patent	2.7	Storey	5%	Sutro
800-001-52	Ward	Sutro	Patent	7.1	Storey	5%	Sutro

800-001-53	Grosh	Sutro	Patent	15.5	Storey	5%	Sutro
800-001-54	Empire South	Sutro	Patent	0.7	Storey	5%	Sutro
800-001-55	Bacon (MS 59)	Sutro	Patent	0.6	Storey	5%	Sutro
800-001-56	Grosh	Sutro	Patent	5.3	Storey	5%	Sutro
800-001-57	Grosh	Sutro	Patent	7.4	Storey	5%	Sutro
800-001-58	Yellow Jacket	Sutro	Patent	6.0	Storey	5%	Sutro
800-001-59	Imperial	Sutro	Patent	2.6	Storey	5%	Sutro
800-001-60	Crown Point	Sutro	Patent	3.3	Storey	5%	Sutro
800-001-61	Kentuck	Sutro	Patent	0.9	Storey	5%	Sutro
800-001-62	Alta (Woodville)	Sutro	Patent	23.7	Storey	5%	Sutro
800-001-63	Exchequer	Sutro	Patent	10.0	Storey	5%	Sutro
800-001-64	Bullion (Comstock Lode)	Sutro	Patent	27.3	Storey	5%	Sutro
800-001-65	Capital	Sutro	Patent	9.2	Storey	5%	Sutro



Figure E1 "Mineral Lease Properties"

APPENDIX C

Appendix C: List of Claims Associated with the "Option to Lease Comstock Mining Inc.'s American Flat Processing Facility"

(American Flat Net Lease Agreement)

The following patents, fee land, and unpatented mining claims are included in the American Flat Net Lease Agreement, and are shown in Figure D1, below.

	uned Properties Included in	Lesse Ontion					
	vited Properties included in	Lease Option					
Parcel No	Description	Current Owner	ТҮРЕ	Acres	County	NSR %	Royalty Owner
004-331-08	Texas	Comstock Processing LLC	Fee	37.5	Storey	0%	None
004-331-19	Baltimore Patent Homesite	Comstock Processing LLC	Fee	9.0	Storey	0%	None
004-331-22	Salzwimmer 79 Acres	Comstock Processing LLC.	Fee	77.9	Storey	0%	None
004-331-27	Salzwimmer House & "Barn"	Comstock Processing LLC.	Fee	11.0	Storey	0%	None
004-331-28	Salzwimmer House & "Barn"	Comstock Processing LLC.	Fee	3.5	Storey	0%	None
004-331-36	American Flat Process Site	Comstock Processing	Fee	77.0	Storey	0%	None
004-331-37	American Flat Process Site	Comstock Processing	Fee	4.7	Storey	0%	None
004-331-40	Texas	Comstock Processing	Fee	150.0	Storey	0%	None
016-091-33	Texas	Comstock Processing	Fee	32.8	Lyon	0%	None
800-002-06	Baltimore Patent Pcl 1	LLC	Patent	9.0	Storey	0%	None
800-002-10	Ledge No 2	LLC.	Patent	14.5	Storey	0%	None
800-002-14	Baltimore Patent Pcl C	LLC	Patent	1.4	Storey	0%	None
800-002-22	Baltimore Patent PCl 3	LLC.	Patent	9.0	Storey	0%	None
800-002-38	Baltimore Patent Pcl 2	LLC	Patent	8.9	Storey	0%	None
800-002-45	Baltimore Patent Pcl 4	LLC.	Patent	7.5	Storey	0%	None

D1.2: CMI-Owned Unpatented Claims Included in Lease Option

1.		- iti			2	(m) (m)	4.00
BLM No	Description	Current Owner	ТҮРЕ	Acres	County	Underlying NSR %	Underlying Royalty Owner
		Comstock Processing				1) 1	
NMC1105470	CMI Mill Site 1	LLC	Mill	0.38	Storey	0	None
		Comstock Processing					
NMC1108961	MS 38 B	LLC	Lode	1.82	Storey	0	None
NMC1108962	MS 38 C	Comstock Processing	Lode	63	Storey	0	None
141/10/02	1015 50 C	Comstool: Proposing	Loue	0.5	Storey	0	
NMC1108963	MS 38 D	LLC	Lode	3.67	Storey	0	None
		Comstock Processing					
NMC1108964	MS 38 E	LLC	Lode	9.83	Storey	0	None
		Comstock Processing					
NMC871506	Comstock 129	LLC	Lode	20.67	Storey	0	None
		Comstock Processing					
NMC871507	Comstock 130	LLC	Lode	20.67	Storey	0	None

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NIMC 971509	Comstools 121	Comstock Processing	Loda	20.67	Storm	0	None
111/100/1500		Comstock Processing	Loue	20.07	Storey	0	
NMC871509	Comstock 132	LLC Comstock Processing	Lode	20.67	Storey	0	None
NMC871510	Comstock 133	LLC	Lode	20.67	Storey	0	None
NMC871511	Comstock 134	Comstock Processing	Lode	20.67	Lyon,Storey	0	None
NMC871512	Comstock 135	Comstock Processing LLC	Lode	20.67	Lyon,Storey	0	None
NMC871513	Comstock 136	Comstock Processing LLC	Lode	20.67	Storey,Lyon	0	None
NMC871514	Comstock 137	Comstock Processing	Lode	20.67	Storey.Lyon	0	None
NMC871515	Comstock 138	Comstock Processing	Lode	20.67	Storey Lyon	0	None
NN(C07151)	Comstock 130	Comstock Processing	Loue	14.20	Storey,Lyon	0	None
NMC8/1516	Comstock 139	Comstock Processing	Lode	14.30	Storey	0	None
NMC871517	Comstock 140	LLC Comstock Processing	Lode	18.33	Storey	0	None
NMC871518	Comstock 141	LLC	Lode	20.67	Storey	0	None
NMC871519	Comstock 142	LLC	Lode	20.67	Storey	0	None
NMC983374	Comstock Lode 121	Comstock Processing	Lode	2.72	Storey	0	None
NMC983375	Comstock Lode 122	Comstock Processing LLC	Lode	17.93	Storey	0	None
NMC983376	Comstock Lode 123	Comstock Processing	Lode	1.76	Storey	0	None
ND (CO02277		Comstock Processing		20.00			
NMC983377	Comstock Lode 124	Comstock Processing	Lode	20.66	Storey	0	None
NMC983379	Comstock Lode 126	LLC	Lode	20.69	Storey	0	None
NMC983380	Comstock Lode 127	LLC	Lode	14.49	Storey	0	None
NMC983381	Comstock Lode 128	Comstock Processing LLC	Lode	9.95	Storey	0	None
NMC983382	Comstock Lode 129	Comstock Processing	Lode	2.42	Storey	0	None
NMC983383	Comstock Lode 130	Comstock Processing	Lode	0.76	Storey	0	None
	Comstock Lode 131	Comstock Processing	Lode	1.65	Storey	0	Neze
INIVIC985584	Comstock Lode 151	Comstock Processing	Lode	1.05	Storey	0	None
NMC983385	Comstock Lode 132	LLC Comstock Processing	Lode	6.91	Storey	0	None
NMC983386	Comstock Lode 133		Lode	15.84	Storey	0	None
NMC983387	Comstock Lode 134	LLC	Lode	14.92	Storey	0	None
NMC983388	Comstock Lode 135	Comstock Processing	Lode	20.67	Storey	0	None
NMC983389	Comstock Lode 136	Comstock Processing	Lode	18.57	Storey	0	None
NMC983390	Comstock Lode 137	Comstock Processing LLC	Lode	20.67	Storey	0	None
NMC083301	Comstock Lode 138	Comstock Processing	Lode	91	Storey	0	None
NIMC092202	Cometeek Lode 120	Comstock Processing	Lode	20.67	Storey	0	None
111110983392	Constock Lode 139	Comstock Processing	Lode	20.07	Storey	U	INONE
NMC983393	Comstock Lode 140	LLC	Lode	6.86	Storey	0	None



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APPENDIX D

Appendix D: List of Claims Associated with the "Option to Purchase the Art Wilson Claim Group"

Claim Name	Туре	APN or BLM ID	Area (acres)	Ownership Status								
Patented Claims												
Badger	Patent; MS3792	800-001-30	16.7	100% Wilson Mining LLC								
Bennett	Patent; MS3761	016-151-02	3.9	100% Wilson Mining LLC								
Buckeye	Patent; MS47	016-101-04	13.9	100% Wilson Mining LLC								
Grass Widow	Patent; MS3792	800-000-73	2.7	100% Wilson Mining LLC								
Ida	Patent; MS3761	016-151-02	15.9	100% Wilson Mining LLC								
Lucky Star	Patent; MS3792	800-000-74	13.8	100% Wilson Mining LLC								
Lucky Star Fraction	Patent; MS3792	800-001-32	6.8	100% Wilson Mining LLC								
Morning Star	Patent; MS3761	016-151-02	18.2	100% Wilson Mining LLC								
Pride of the West	Patent; MS3792	800-001-31	8.3	100% Wilson Mining LLC								
Vivian (Midas)	Patent; MS103	800-001-67	7.2	100% Wilson Mining LLC								
Westerly Portion of Silver King	Patent; MS4573	016-101-13	6.7	100% Wilson Mining LLC								
	Unpat	ented Claims										
Daisy	Unpatented	NV105285793	8.7	100% Wilson Mining LLC								
Last Chance	Unpatented	NV105285794	20.7	100% Wilson Mining LLC								
Milwaukee	Unpatented	NV105285793	4.6	100% Wilson Mining LLC								
Valentine	Unpatented	NV105285795	20.7	100% Wilson Mining LLC								
Wilson 1	Unpatented	NV105285796	20.7	100% Wilson Mining LLC								
Wilson 2	Unpatented	NV105285797	20.7	100% Wilson Mining LLC								
		Total Ida Area:	209.9									

APPENDIX E

Appendix E: List of Claims Tonogold Owns Outright

Parcel No	Description	Current Owner	ТҮРЕ	Acres	County	Underlying NSR %	Underlying Royalty Owner	Mineral Survey No.
002-074-01	1820 Main St Gold Hill	Tonogold	Fee	1.13	Storey	0	None	None
800-000-50	VC Mills/Mines - Lamson	Tonogold	Fee	14.846172	Storey	0	None	None
800-000-75	GH Mills/Mines Sec 4 T16N R21E - Cosmopolitan	Tonogold	Patent	13.78108	Storey	0	None	MS 40