First Majestic Silver Corp.

Jerritt Canyon Gold Mine, Elko County, Nevada, USA
NI 43-101 Technical Report on Mineral Resource Estimates

Qualified Persons:	Gonzalo Mercado, P.Geo. David Rowe, CPG Michael Jarred Deal, RM SME María Elena Vázquez, P.Geo. David Wanner, PE

Report Prepared For:	**First Majestic Silver Corp.**
Effective Date:	**March 31, 2023**
Report Date:	**August 2, 2023**

CERTIFICATE OF QUALIFIED PERSON

Mr. Gonzalo Mercado, P.Geo
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I, Gonzalo Mercado, P. Geo, am employed as VP of Exploration and Technical Services with First Majestic Silver Corp. (First Majestic).

This certificate applies to the technical report "First Majestic Silver Corp., Jerritt Canyon Gold Mine, Elko County, Nevada, USA, NI 43-101 Technical Report on Mineral Resource Estimates" that has an effective date of March 31, 2023 (the Technical Report).

I hold a degree in Geology (2004) from the Universidad Nacional de Tucuman, Argentina.

I am a Professional Geologist with Professional Geoscientists Ontario (PGO), Membership #3139.

I have practiced my profession continuously for more than 19 years, and I have a considerable amount of experience in precious and base metal deposits in Mexico, the United States, Canada, Chile, and Argentina. My relevant experience in base and precious metal spans across all exploration stages and includes various corporate and senior roles within the areas of mineral exploration, project management, geological interpretation, three-dimensional geological modeling, and mineral resource estimation.

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

I have visited the Jerritt Canyon Gold Mine on numerous occasions during 2021 to 2023, and my most recent site inspection occurred over the span of four days commencing on February 22, 2023.

I am responsible for Sections 1.1, 1.2, 1.5-1.8, 1.13-1.14, 2, 3, 6-10, 15-24, 25.4, 25.5, and 26 of the Technical Report.

I am not independent of First Majestic as that term is described in Section 1.5 of NI 43–101.

I have been involved with the Jerritt Canyon Gold Mine overseeing the development of exploration activities since 2021.

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

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

"Signed and sealed"

Gonzalo Mercado, P. Geo

Dated: August 2, 2023

CERTIFICATE OF QUALIFIED PERSON

Mr. David Rowe, CPG
Director of Mineral Resources
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I, David Rowe, CPG, am employed as Director of Mineral Resources with First Majestic Silver Corp. (First Majestic).

This certificate applies to the technical report "First Majestic Silver Corp., Jerritt Canyon Gold Mine, Elko County, Nevada, USA, NI 43-101 Technical Report on Mineral Resource Estimates" that has an effective date of March 31, 2023 (the Technical Report).

I hold a BA degree in Geology (1984) from the University of Montana and a Master of Science degree in Structural Geology (1987) from the University of Wyoming.

I am a Certified Professional Geologist with the American Institute of Professional Geologists, membership number 10953.

I have practiced my profession continuously for more than 35 years, and I have a considerable amount of experience in precious and base metal deposits in Mexico, the United States, Central America, the Caribbean, and Africa. My relevant experience in polymetallic and precious metal gold and silver projects includes various senior roles within the areas of mineral exploration, project management, geological interpretation, three-dimensional geological modeling, and mineral resource estimation. I have previously acted as a Qualified Person for a number of precious metal and polymetallic projects including the: Ixhuatan Gold Project (Mexico), Golouma Project (Africa), Niblack Sulphide Project (USA), Golden Meadows (USA), Goldstrike Project (USA), La Encantada Silver Mine (Mexico), and Jerritt Canyon (USA).

I have visited Jerritt Canyon Gold Mine on numerous occasions from 2021 to 2023, with the most recent site visit being from March 22–24, 2023, a duration of three days.

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

I am responsible for the preparation of Sections 1.12, 2, 3, 14, 25.8 and 25.9 of the Technical Report.

I am not independent of First Majestic as that term is described in Section 1.5 of NI 43–101.

I have been involved with the Jerritt Canyon Gold Mine overseeing the development of geological models and mineral resource estimations since 2021.

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

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

"Signed and sealed"

David Rowe, CPG

Dated: August 2, 2023

CERTIFICATE OF QUALIFIED PERSON

María Elena Vázquez Jaimes, P. Geo.
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I, María Elena Vázquez Jaimes, P.Geo., am employed as Geological Database Manager with First Majestic Silver Corp. (First Majestic).

This certificate applies to the technical report "First Majestic Silver Corp., Jerritt Canyon Gold Mine, Elko County, Nevada, USA, NI 43-101 Technical Report on Mineral Resource Estimates" that has an effective date of March 31, 2023 (the Technical Report).

I graduated from the National Autonomous University of Mexico with a Bachelor in Geological Engineering degree in 1995 and obtained a Master of Science degree in Geology from the "Ensenada Center for Scientific Research and Higher Education", Ensenada, BC, Mexico, in 2000.

I am a member of the Engineers and Geoscientists British Columbia (P.Geo. #35815).

I have practiced my profession continuously since 1995. I have held technical positions working with geological databases, conducting quality assurance and quality control programs, managing geological databases, performing data verification activities, and conducting and supervising logging and sampling procedures for mining companies with projects and operations in Canada, Mexico, Peru, Ecuador, Brazil, Colombia, and Argentina. I have served as the Geologic Database Manager for First Majestic since 2013, and I direct the QAQC programs, sampling and assay procedures, and database verification for all their mines in Mexico.

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

I visited the Jerritt Canyon Gold Mine on several occasions since 2021. My most recent site visit and inspection was from January 29 to February 2, 2023, a duration of five days.

I am responsible for Sections 1.9, 1.10, 2, 11, 12, and 25.6 of the Technical Report.

I am not independent of First Majestic as that term is described in Section 1.5 of NI 43–101.

I have been directly involved with the Jerritt Canyon Gold Mine in my role as the Geological Database Manager since 2021.

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

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

"Signed and sealed"
Maria Elena Vazquez Jaimes, P.Geo.
Dated: August 2, 2023

CERTIFICATE OF QUALIFIED PERSON

Michael Jarred Deal
Vice President of Metallurgy & Innovation
First Majestic Silver Corp.
925 West Georgia Street, Suite 1800
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I, Michael Jarred Deal, RM SMEP, am employed as Vice President of Metallurgy and Innovation with First Majestic Silver Corp. (First Majestic).

This certificate applies to the technical report "First Majestic Silver Corp., Jerritt Canyon Gold Mine, Elko County, Nevada, USA, NI 43-101 Technical Report on Mineral Resource Estimates" that has an effective date of March 31, 2023 (the Technical Report).

I graduated from the Colorado School of Mines in 2009 with a Bachelor of Science Degree in Chemical Engineering. I am a Registered Member of the Society for Mining, Metallurgy, and Exploration (#4152005).

I have practiced my profession continuously since 2009 and have been involved in precious and base metal mine projects and operations in Nevada, South Carolina, New Mexico, and Colorado. My relevant experience in base and precious metal spans across managing all types of mineral processing facilities and projects including roasting, autoclaving, heap leaching, and concentrators. I have worked in Operations Management positions along with corporate technical support roles serving as a Process and Projects Subject Matter Expert.

I have been involved with the Jerritt Canyon Gold Mine since June 2021 serving as General Manager shortly after the acquisition by First Majestic. I held this role until June 2022 when I was promoted to Vice President of US Operations with continued full responsibility and accountability for Jerritt Canyon Gold Mine.

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

I worked full-time at the Jerritt Canyon Gold Mine from 2021 as General Manager of the mine and from 2022 as Vice President – Operations (US), and this familiarity with the operations serves as my scope of personal inspection.

I am responsible for Sections 1.11, 1.4, 2, 4.1-4.4, 4.9, 13, 25.1, 25.2, and 25.7 of the Technical Report.

I am not independent of First Majestic as that term is described in Section 1.5 of NI 43–101.

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

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

"Signed and sealed"

Michael Jarred Deal, RM SME

Dated: August 2, 2023

CERTIFICATE OF QUALIFIED PERSON

David W. Wanner, P.E.
Chief Project Engineer
Jerritt Canyon Gold, LLC
HC 31 Box 78 Elko, Nevada, USA, 89801

I, David W. Wanner, P.E., am employed as Chief Project Engineer for Jerritt Canyon Gold, LLC, owned by First Majestic Silver Corp. (First Majestic).

This certificate applies to the technical report "First Majestic Silver Corp., Jerritt Canyon Gold Mine, Elko County, Nevada, USA, NI 43-101 Technical Report on Mineral Resource Estimates" that has an effective date of March 31, 2023 (the Technical Report).

I graduated from Montana Technological University (formerly Montana Tech of the University of Montana) with a Bachelor of Science Degree in Environmental Engineering in 1995 and obtained my professional engineering (PE) license in the United States of America (USA) for the states of Nevada (#20519), Montana (#41083), and Utah (#9187564-2202).

I have over 25 years of experience in the mining industry, 15 of which have been in consulting and construction. Throughout Nevada, I have designed and permitted numerous mine and process facilities to include tailings storage facilities, process ponds, heap leach pads, solution conveyance structures, concrete containments, and stormwater control structures. Along with the design of new mining and process facilities, I have completed the designs and obtained permits for reclaiming and closing numerous mine and process facilities to include tailings impoundments and heap leach pads. I was the lead design engineer for these projects but also acted as project superintendent and manager for the construction of several of these projects.

Since 2002, I have been involved with the Jerritt Canyon Gold Mine overseeing, consulting, and supporting technical and operational aspects including civil engineering related to tailings management and processing, environmental permitting and compliance, interim reclamation and closure, and reclamation planning and budgets. Since 2011, I have conducted site visits at least monthly if not weekly, and since April 2022, I have been on site at least four days per week as an employee of Jerritt Canyon.

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

I am responsible for sections 1.3, 2, 4.5-4.8, 5, and 25.3 of the Technical Report.

I am not independent of First Majestic as that term is described in Section 1.5 of NI 43–101.

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

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

"Signed and sealed"
David W. Wanner, P.E.
Dated: August 2, 2023

Table of Contents

Index of Tables

Index of Figures

1. SUMMARY

1.1. Introduction

This Technical Report (the Report) provides information on the Mineral Resource estimates for the Jerritt Canyon Gold Mine (the Project, Jerritt Canyon or Jerritt Canyon mine) located in Elko, in the state of Nevada, USA.

The mine is owned by Jerritt Canyon Gold LLC (JCG). First Majestic Silver Corp. (First Majestic) acquired JCG in April 2021. In March 2023, First Majestic temporarily suspended all mining activities at the Jerritt Canyon Mine and retracted the Mineral Reserve estimates for the Project.

1.2. Report Purpose

The Report was prepared to support disclosure of technical information included in First Majestic's Base Shelf Prospectus anticipated to be filed on or about August 2, 2023.

Units of measurement used in this Report can be either US Customary or metric units, unless otherwise stated. All grid references are based on a local mine grid system adapted from the Nevada East State Plane Coordinate System (‘SPCS’), NAD27 Datum, in planar units of feet. All currency units are in United States dollars unless otherwise stated.

Mineral Resource estimates are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (May 2014; the 2014 CIM Definition Standards) and the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 2019; 2019 CIM Best Practice Guidelines).

1.3. Project Setting

Jerritt Canyon is located approximately 50 miles north of the city of Elko. Access to the Jerritt Canyon Project is via the paved Nevada State Route (SR) 225 and a seven-mile-long paved mine access road that leads to the main gate where the administrative offices, processing plant, warehouse, maintenance shops, and tailings impoundment areas are located. The mines are accessed via a main haul road which is maintained on a regular basis. This road network is approximately 17 miles long. Exploration sites, active reclamation sites and historical mines are accessed through roads and trails that are maintained as required.

The climate is temperate. Exploration can be conducted year-round from surface and underground mine access. Temporary halts may result from major snowfalls.

Elko is a supply centre for the mining industry of northern Nevada, sourcing most equipment, supplies, and services. All supplies and equipment can be transported to site over the Nevada SR 225 highway, the mine access road, and the mine haul road.

Surface infrastructure supporting exploration and potential mining activities at Jerritt Canyon includes:

- Mine portals and decline access to the underground workings at the Smith, SSX, West Generator (WGen), and Murray mines equipped with ventilation fans;
- Ventilation raises and secondary egress infrastructure;
- A processing plant;
- On-site analytical laboratory;
- Waste rock disposal areas;
- Mineralized stockpiles;
- Tailings storage facilities 1 and 2;
- Administrative office buildings;
- Warehouses for storage and inventory;
- Exploration drill-core storage facility;
- A communications tower to link data and voice systems;
- A process water treatment plant and an underground water treatment plant;
- A water storage reservoir;
- A water evaporation pond;
- Sewage and waste disposal facilities.

Electrical power for Jerritt Canyon is purchased from Nevada Energy through a 125 kV, three-phase transmission line. All water used at Jerritt Canyon is from permitted and certificated water rights held by JCG and regulated by the Nevada Division of Water Resources (NDWR).

There are a number of mineralized material stockpiles, two tailings storage facilities (TSFs), TSF-1 (currently inactive and in the process of being closed and reclaimed) and TSF-2 (currently active), and two main process water storage facilities that include the water storage reservoir (WSR) and evaporation pond. First Majestic intends to convert the WSR into a TSF (TSF 3) in the future, and has submitted requests to, and received approval from, both the NDEP-Bureau of Mining Regulation and Reclamation (BMRR) and the Nevada Division of Water Resources (NDWR) for this planned construction.

There are two water treatment plants, designed to treat process and underground water.

1.4. Mineral Tenure, Surface Rights, and Royalties

The Project comprises of 3,242 mining claims covering a surface area of 32,110 hectares extending approximately 21 miles north-south and 17 miles east-west at its widest.

The Jerritt Canyon operations are located on a combination of public and private lands, with the mines and mining-related surface facilities being located primarily on United States Forest Service (USFS) and mining claims within the Humboldt-Toiyabe National Forest. The processing facilities, offices, shops, and tailings dams are located on private land owned by JCG. Additional claims in the southern portion of the land package are predominantly located on private land with some located on land administered by the United States Bureau of Land Management (BLM).

Land tenure on the Jerritt Canyon Project includes patented claims, unpatented claims, and fee land. The rights associated with the fee land include mineral and surface rights and are different for the various land packages (agreements). Yearly fees to maintain the claims in good order is undertaken by Jerritt Canyon staff and is reviewed on a monthly basis with the major payments taking place in September and November

Surface rights at Jerritt Canyon are held by the BLM, USFS, Jerritt Canyon and multiple private owners. The break down is 17% Jerritt Canyon Gold owned private and deeded land, 54% USFS, 12% BLM, and 16% owned by multiple external private owners, and 1% without surface or mineral rights.

Some Jerritt Canyon claims and fee lands are subject to a net smelter return (NSR) royalty which varies from 1.5% to 8% depending upon the lease agreements with various property owners. The fee land, which was originally purchased to secure access from State Route 225, is subject to a 33% NSR. There are currently three Nevada (NV) lease file agreements (files NV-10106, NV-10110, NV-10113) that cover land that has mine production. As a result, the lease holders of the producing land are entitled to receive production royalty payments that range from 2.5% to 8%.

Other land held by lease holders may be subject to annual or semi-annual land payments that include advance royalties, land use payments, rentals, loss of grazing, and the use of land for a communications tower. The advance royalties are the minimum amounts the lease holders are entitled to annually. On producing land, these advance royalties may be recovered by JCG if certain production royalty thresholds are met or surpassed during the production year. Some of the land payments may be adjusted annually based on consumer/producer price indexes or annual increases.

1.5. History

The Jerritt Canyon deposit was discovered by Food Machinery Corporation in 1972. In 1976, Meridian Gold LLC and Freeport Minerals Company formed a joint venture to explore and develop the gold deposits in the Jerritt Canyon area and, in 1980, mining commenced with production from the North Generator and Marlboro Canyon open pit mines. Open pit mining continued until late 1999. Underground operations started in 1997 at the SSX mine and continued with some temporary suspensions until March of 2023.

From the commencement of mining in 1981 to March 2023, approximately 9.85 million ounces of gold (M oz Au) were produced from approximately 50.7 million short tons (Mst) of ore mined at an average grade of 0.194 oz/st Au (Table 6-1). Open pit mining at Jerritt Canyon produced a total of approximately 5.2 M oz Au from approximately 29.9 Mst of ore at an average grade of 0.174 oz/st Au. The underground mines produced a total of approximately 4.65 M oz Au from approximately 20.6 Mst of ore at an average grade of 0.227 oz/st Au. Since 2010, the majority of the production has come from the SSX and Smith deposits, as detailed in Table 6-1; Table 6-2 and Table 6-3.

From May 2021 to March 2023 JCG produced approximately 155,000 ounces of gold from approximately 1.7 Mst of mineralized material at an average grade of 0.106 oz Au/st., which included marginal grade from previously mined surface material located on the Project.

On March 20th, 2023, First Majestic announced the temporary suspension of mining activities at Jerritt Canyon due to ongoing challenges such as high costs, inflationary cost pressures, lower than expected head grades and multiple extreme weather events affecting northern Nevada during the winter of 2023.

1.6. Geological Setting and Mineralization

The Jerritt Canyon deposit is considered to be an example of a Carlin-type gold deposit.

The Jerritt Canyon district is located in the Great Basin geological province, north and northeast of the Carlin Trend of gold deposits. Carlin-type gold mineralization at Jerritt Canyon is hosted by silty carbonate or carbonaceous siliciclastic rocks originally deposited as shelf sedimentary rocks during the Lower Paleozoic. The Paleozoic host rocks have been imbricated, faulted, and folded through several orogenic events through the Upper Paleozoic and Mesozoic. An early phase of intrusive igneous activity is represented by west-northwest mafic igneous dikes of Paleozoic age. Carlin-type gold deposits were emplaced in the Middle to Late Eocene during an initial phase of extensional tectonics at which time high potassium calc-alkaline magmatic rocks were emplaced. Mafic and intermediate igneous dikes were emplaced during this phase of igneous activity and trend north-northeast.

The occurrence and distribution of gold mineralization at Jerritt Canyon is controlled by both lithology and structure. The mineralized zones form along well defined structural and mineralization trends as stratigraphically controlled tabular pods that are locally stacked upon one another resulting from the presence of more than one favourable stratigraphic unit and/or local thrust and/or high-angled fault intersection controls. Gold occurs as very fine-grained micrometer-sized particles concentrated in rims or inclusions in pyrite.

1.7. Exploration

The early, major discoveries in the Jerritt Canyon district were made within the Lower Plate windows found in the area. Exploration activities completed on the Project by the various owners since the original Meridian-Freeport JV have included prospecting, geological mapping, various types of geophysical surveys and various types of geochemistry.

Exploration efforts at Jerritt Canyon include a combination of surface and underground geologic mapping at various scales, geochemical sampling (rock chip and soil mainly) and geophysical surveys (gravity, magnetics, DIGHEM EM, etc.). All data sets and information from drilling are combined to determine areas of high prospectivity where further work is completed.

1.8. Drilling

Over 83,000 drill holes for a total of ~ 16,577,550ft have been drilled in the Project area since 1973.

Surface RC drilling is used for exploration purposes. Widely spaced offsets to open, known mineralization or geological features are the most common drilling targets. Underground core drilling is used by exploration to test mineralization that has often been defined by surface drilling at a spacing of 100 ft or greater. It is also used to test anomalous areas, or areas of exploration potential defined by surface holes and targets defined by Jerritt Canyon geologists based on the interpretation of stratigraphy, structures, and dikes. Occasionally, core drilling is used for resource de-risking or defining the geometry, volume, and gold grade of a mineralized zone. RC Cubex drill holes are completed for delineation, definition, and extension of resources to support mine planning and near-mine exploration. Cubex drill holes have a maximum length of approximately 300 ft. Typically, mine development drilling stations are established where a Cubex drill is set up and the target delineated. Delineation drilling is completed along drifts with drill holes fanned to intercept targets at 25 ft centres, depending on the distance and angle from the drift. This commonly results in Mineral Resource estimate definition of sufficient detail to support mine planning and development.

Core and chips are logged, recording lithology, mineralization, structure, and alteration. For core programs, core recovery and rock quality designation (RQD) are also recorded. Drill collars are typically surveyed using global positioning system (GPS) or total station instruments. Down-hole surveys have been collected using gyroscopic, Trushot, Reflex EZ-Trac, and magnetic survey tools. Surveys are collected at 3 or 15 m intervals down hole, depending on the survey instrument.

There are no drilling, sampling or recovery factors that could materially impact the accuracy and reliability of the drill results. In the opinion of the QP, the quantity and quality of the logged geological data, collar, and downhole survey data collected in the drill programs since 2008 are sufficient to support Mineral Resource estimation.

1.9. Sampling Preparation, Analysis and Security

Cubex and surface RC samples are typically taken on 5 ft intervals. Core sample intervals are based on geology and mineralogy, are typically three feet long, and respect geological contacts. Where core is geologically and mineralogically uniform over extended lengths, samples are designated by the run length blocks in which case the samples are five feet long. The core is sawn in half for sampling using a core saw equipped with a diamond blade. Half of the core is placed in a sample bag, while the remaining half is returned to the core box. Logged data is recorded into the acQuire database system.

Primary sample preparation and analytical laboratories have included:

- ALS Limited Vancouver (ALS) received ISO 9001 certification in 2005 and received accreditation of ISO/IEC 17025 from Standards Council of Canada in 2005 and 2020. ALS is independent of First Majestic. The sample preparation facility is located in Sparks, Nevada, USA and samples are analyzed at the analytical laboratory located in Vancouver, BC, Canada or at the Sparks laboratory;
- American Assay Laboratory (AAL) received ISO 9001:2008 accreditation and ISO/IEC 17025 for their competence of laboratory testing of gold samples by fire assay. AAL is independent of First Majestic. The sample preparation facility is located in Sparks and samples are analyzed at the analytical laboratory located in Vancouver Canada or at the Sparks laboratory;
- ACME Laboratories Ltd. (now Bureau Veritas Commodities Canada Ltd or Bureau Veritas) received ISO 9001 certification in 1996 and received accreditation of ISO/IEC 17025 from Standards Council of Canada in 2011 and 2020. Bureau Veritas is independent of First Majestic. The sample preparation facility is located in Sparks and samples are analyzed at the analytical laboratory located in Vancouver, Canada or at the Sparks laboratory;
- Paragon Geochemical is located in Sparks, and received ISO 9001:2015 certification and ISO/IEC 17025:2017;
- The Central Laboratory received ISO 9001:2008 certification in June 2015 and ISO 9001:2015 certification in June 2018. The Central Laboratory is not independent of First Majestic. The laboratory is located at San Jose La Parrilla, Durango, Mexico;
- The Jerritt Canyon laboratory is not independent of First Majestic and is not certified. It is located at the Jerritt Canyon mine site.

Since 2007 drilling programs, drill core samples have been submitted to ALS, AAL, Bureau Veritas, Paragon Geochemical and Jerritt Canyon laboratories. During 2021 and 2022, samples were prepared at the Jerritt Canyon laboratory and submitted for analysis to Paragon Geochemical or First Majestic's Central laboratory (Central Laboratory). Since late 2022, samples have been submitted to Paragon Geochemical or the Central Laboratory for sample preparation and analysis.

For drilling programs prior to 2021, Cubex samples have been prepared and analyzed at the Jerritt Canyon laboratory. During 2022, samples were prepared and analyzed at Jerritt Canyon laboratory and ALS. In late 2022, Cubex samples were prepared at the Jerritt Canyon laboratory and analyzed at Paragon Geochemical or the Central Laboratory. Since 2023, Cubex samples are prepared and analyzed at Central Laboratory.

For drilling programs prior to 2020, RC surface samples were submitted to Jerritt Canyon, ALS, American Assay, Bureau Veritas, and Paragon Geochemical laboratories. After 2015, RC surface samples were prepared and analyzed at Bureau Veritas.

At ALS, samples were dried, weighed, then crushed 70% passing 2 mm, split to a 250 g and pulverized to 85% passing 75 µm. At AAL, samples were dried, weighted, crushed 80% passing 2 mm, split to 300 g and pulverized to 85% passing 75 µm. At ALS and AAL samples were analyzed for gold using 30 g fire assay with an atomic absorption (AA) spectroscopy (AAS) finish. Samples returning >1 g/t Au were reanalyzed for gold by 30 g fire assay with a gravimetric finish.

At Bureau Veritas and Paragon Geochemical, samples were dried, weighed, then crushed 70% passing 2 mm, and split to a 250 g subsample that was pulverized to 85% passing 75 µm. Gold was analyzed by 30 g fire assay with an AA finish. At Bureau Veritas samples >10 g/t Au were reanalyzed for gold by 30 g fire assay with a gravimetric finish. At Paragon Geochemical, samples >8 g/t Au were reanalyzed by 30 g fire assay with a gravimetric finish.

At Central Laboratory, samples were dried at 105 °C ± 5°C and then crushed to 80% passing 2 mm, split to a 250 g subsample, and pulverized to 85% passing 75 µm. Gold is analyzed by 20 g fire assay with an AAS finish. Samples >10 g/t Au were reanalyzed for gold by 20 g fire assay with a gravimetric finish. Samples also were analyzed for a 31-element suite by aqua regia digestion and inductively coupled plasma–mass spectrometry (ICP-MS).

At the Jerritt Canyon laboratory, samples are dried at 121 C, crushed to 65% passing 2 mm, split to 200 g subsample, and pulverized to 80% passing 75 µm. Samples are analyzed by aqua regia digestion, with an AAS finish. Samples >15 g/t Au are analyzed by fire assay with a gravimetric finish or diluted at bench top with a matrix matched blank. The laboratory also conducts LECO analysis and moisture determination.

From 2008 to 2021, underground drill-core, RC Cubex and surface RC samples submitted to the primary laboratories included in-house prepared reference (SRMs) and certified reference materials (CRMs), blanks, and pulp duplicates for quality assurance and quality control (QAQC) purposes. Since 2022, field and coarse duplicates were added. All quality control results were assessed using statistical analysis and visual inspection of control plots. An analysis of QAQC data collected for Jerritt Canyon from 2008 to 2023 concluded that no significant accuracy, precision, or contamination issues were observed. Data verification from data collected before 2021 included data entry error checks, visual inspections in 3D of important data, review of historical data and assay results collected between 2018 and 2020. No significant transcription errors were observed. Bias related to RC Cubex field sampling procedure has not yet been fully assessed. However, the assessment of accuracy, contamination, and precision at Central, PGL and JC laboratories confirms that assay results are suitable to support Resource Estimation.

1.10. Data Verification

Data verification from data collected before 2020 by previous operators included data entry error checks, review of historical data and assay results. No significant transcription errors were observed. Since 2021, data verification consists in data entry errors checks, review of the QAQC assay results, verifying the position of collars relative to the underground workings, down-hole deviation relative to drill trace, lithology, and assay intervals relative to the three-dimension geological models.

No significant errors have been detected during this verification and the analysis of QAQC data indicates no significant accuracy, precision, or contamination issues from assay results were observed. The data validation and verification procedures carried out since 2007 complied with industry standards and it is considered suitable to support Mineral Resource estimation.

1.11. Mineral Processing and Metallurgical Testing

Mineralized material is classified as double refractory that contains relatively high concentrations of sulfide sulfur in addition to organic carbon. Since 1989, whole ore roasting started to be applied for processing crushed and milled material. The roasted product is then quenched, cyanide leached and refined to produce gold doré bars.

As a matured operation, there are years of processing data which can be used as the basis for recovery projections. In addition, in 2021, three representative samples were prepared and submitted to the Hazen research laboratory for analytic analysis, X-ray diffraction (XRD) analysis, and for Bond ball mill work index (BWI) determinations. The analytic results confirmed the presence of organic carbon (0.7 to 0.9 wt%) and sulfide sulfur (1 to 2.3 wt%), the XRD analysis showed that quartz, dolomite, muscovite, and calcite are the main minerals in the material, and the comminution testwork demonstrated a soft to moderate level of grindability with BWI ranging from 11 to 13 kWh/t. In 2021, Hazen conducted grind, roast and leach recovery tests and these tests suggested that the suitable grind size falls within the range of 75 to 100 µm, which is in accordance with recent processing practice.

The projected gold recovery for Mineral Resource estimates at Jerritt Canyon is 82.3% based on the head grade, relying on the established historical daily gold grade-recovery relationship. This historical gold grade-recovery relationship is updated monthly at a minimum and is also compared to laboratory results to continue to validate it against plant performance.

The operation has been mine limited for many years averaging 2,000-2,500 tons processed per day compared to the permitted limit of 4,100 tpd. As a result, extensive variability testing has not been completed as all ore mined is processed. The material is sorted by sulfide and organic carbon content and blended to target fuel value in the roaster to obtain necessary roasting temperatures and conditions. Minimal variability testing completed between the Smith and SSX does not indicate a difference in performance.

The facilities include, primary crushing, mill feed material drying, secondary crushing, tertiary crushing, dry grinding, roasting, thickening, CIL, carbon stripping, carbon reactivation, electrowinning, electrowinning sludge refining, oxygen plant, cooling pond, water evaporation pond, and tailing impoundment.

1.12. Mineral Resource Estimates

The block model Mineral Resource estimates for the Jerritt Canyon deposits are based on the current database of exploration drill holes, the geological interpretation and model, as well as surface topography and underground and open pit mining excavation wireframes. Geostatistical analysis, analysis of semi-variograms, block model resource estimation, and validation of the model blocks were completed.

The drill hole composite samples were evaluated for high-grade outliers and those outliers were capped to values considered appropriate for estimation. Capping of composite sample values was limited to a few extreme values. Outlier restriction was also used to limit the influence of high-grade samples.

The dominant gold mineralization trends were identified based on the modeled host rock geometry for each domain. To establish the gold grade continuity within the domains, model variograms for composite values were developed along the trends identified, and the nugget values were established from downhole variograms.

Block grades were estimated by ordinary kriging (OK). The method chosen considered the characteristics of the domain, data spacing, variogram quality, and which method produced the best representation of grade continuity. The grade estimation was completed in two successive passes. The first pass only estimated blocks within a restricted short distance from the composite samples. The second pass applied less restrictive criteria.

The Mineral Resource estimates were classified into Measured, Indicated, or Inferred categories based on the confidence in the geological interpretation and models, the confidence in the continuity of metal grades, the sample support for the estimation and reliability of the sample data, and on the presence of underground mining development.

The Mineral Resource estimates were evaluated for reasonable prospects for eventual economic extraction by application of input parameters based on assumed mining costs and metallurgical recoveries. Parameters including operating costs, metallurgical recovery, long-term forecast metal prices and other technical and economic factors were used as follows (tonnage is in metric units):

Underground mining:

- Direct mining cost $93.39/t;
- Milling cost $66.57/t
- G&A and indirect mining cost $20.06/t;
- Sustaining cost $14.38/t;
- Au metallurgical recovery 82.30%;
- Au payable 99.90%;
- Au metal price $1,900/oz.

Open pit mining:

- Direct mining cost $3.50/t;
- Milling cost $66.57/t
- G&A and indirect mining cost $10.00/t;
- Sustaining cost $14.38/t;
- Au metallurgical recovery 82.30%;
- Au payable 99.90%;
- Au metal price $1,900/oz.

Note: The underground mining costs shown above were applied to evaluate the portion of the deposit that could fully cover these costs above a general cut-off grade, and a variable portion of the mining and milling costs were considered to evaluate additional material that could potentially be extracted at an incremental grade.

These economic parameters result in gold resource cut-off grades of 2.8 g/t for estimates potentially amenable to underground mining methods and 1.4 g/t for estimates potentially amenable to open pit mining methods.

For the Mineral Resource estimates potentially amenable to underground mining methods, Deswik Stope Optimizer software was used to identify the blocks that represent mineable volumes that exceed the cut-off grade while complying with the aggregate of economic parameters. This process was undertaken for all domains. The tool allows blocks to be aggregated into the minimum stope dimensions and eliminate outliers that do not comply with these conditions.

For the Mineral Resource estimates potentially amenable to open pit mining methods, Whittle software was used to identify the pit-shells that represent the mineable constraining shapes. This process was undertaken for all the open pit domains. The tool allows blocks to be aggregated within the economic pit-shell and discard blocks that do not comply with these conditions.

Wireframe models of the underground and open pit mining excavations at Jerritt Canyon were evaluated into the block models for all domains. These volumes were used to deplete the block model Mineral Resource estimates prior to reporting estimates. Regions within the mine that are in situ but judged to be un-mineable were also removed from the estimates.

The Mineral Resource estimates are reported in situ, using the 2014 CIM Definition Standards in Table 1-1 and Table 1-2, using the gold cut-off grade appropriate for the mining method assigned to each domain. Mineral Resources estimates have an effective date of March 31, 2023. The Qualified Person for the estimate is Mr. David Rowe, CPG, a First Majestic employee.

Table 1-1: Jerritt Canyon Mineral Resource Estimates, Measured and Indicated Category (Effective date March 31, 2023)

Category	Mineral Type	Tonnage	Average Value	Material Content
Measured		**k tonnes**	**Au (g/t)**	**Au (k Oz)**
Smith Mine	Sulphides	2,607	5.28	443
SSX Mine	Sulphides	2,134	5.97	409
Saval	Sulphides	19	4.58	3
Starvation	Sulphides	54	5.31	9
Total Measured (UG)	**All Mineral Types**	**4,813**	**5.58**	**864**
Category	**Mineral Type**	**Tonnage**		
Indicated		**k tonnes**	**Au (g/t)**	**Au (k Oz)**
Smith Mine	Sulphides	1,683	5.41	293
SSX Mine	Sulphides	1,296	5.86	244
West Generator	Sulphides	276	6.03	54
Murray Mine	Sulphides	308	6.45	64
Wright Window (OP)	Sulphides	116	4.01	15
Winters Creek	Sulphides	190	4.46	27
Saval	Sulphides	171	4.42	24
Saval (OP)	Sulphides	67	3.84	8
Starvation	Sulphides	141	5.69	26
Total Indicated (UG + OP)	**All Mineral Types**	**4,248**	**5.53**	**755**
Total Measured & Indicated (UG & OP)	**All Mineral Types**	**9,061**	**5.56**	**1,619**

Table 1-2: Jerritt Canyon Mineral Resource Estimates, Inferred Category (Effective date March 31, 2023)

Category	Mineral Type	Tonnage	Average Value	Material Content
Inferred		**k tonnes**	**Au (g/t)**	**Au (k Oz)**
Smith Mine	Sulphides	1,199	6.80	262
SSX Mine	Sulphides	5,595	4.79	861
West Generator	Sulphides	528	5.28	90
Murray Mine	Sulphides	1,077	5.69	197
Wright Window (OP)	Sulphides	30	3.29	3
Winters Creek	Sulphides	464	4.80	74
Saval	Sulphides	240	4.11	32
Saval (OP)	Sulphides	134	3.32	14
Starvation	Sulphides	70	5.01	11
Total Inferred (UG + OP)	**All Mineral Types**	**9,337**	**5.14**	**1,544**

(1) Mineral Resources have been classified in accordance with the 2014 CIM Definition Standards and are reported in situ.

(2) The Mineral Resources information provided above is based on internal estimates prepared as of March 31, 2023. Preparation of the Mineral Resource estimates were supervised by David Rowe, CPG, a First Majestic employee.

(3) All mineral resource estimates are for deposits considered amenable to underground mining except those marked by (OP), which assumed open pit assumptions and parameters.

(4) Key assumptions used when considering reasonable prospects for mineralization potentially amenable to underground mining methods included: gold price of US$1,900/oz; direct mining cost US$93.39/t mined; process cost of US$66.57/t

milled; indirect and general and administrative costs of US$20.06/t milled; sustaining costs of US$14.38/t milled, metallurgical recovery of 82.30%; gold payable 99.90.

(5) *Mineral resources potentially amenable to underground mining methods are reported within conceptual mineable shapes above a cut-of grade of 2.8 g/t Au.*

(6) *Key assumptions used when considering reasonable prospects for mineralization potentially amenable to open pit mining methods included: gold price of US$1,900/oz; direct mining cost US$3.50/t mined; process cost of US$66.57/t milled; indirect and general and administrative costs of US$10.00/t milled; sustaining costs of US$14.38/t milled, metallurgical recovery of 82.30%; gold payable 99.90; conceptual maximum pit slope angles of 40 degrees.*

(7) *Mineral resources potentially amenable to open pit mining methods are reported within a conceptual pit shell above a cut-of grade of 1.4 g/t Au.*

(8) *Tonnage is expressed in thousands of tonnes; metal content is expressed in thousands of ounces.*

(9) *Totals may not add up due to rounding.*

Risk factors that could materially impact the Mineral Resource estimate include metal price assumptions; changes in the interpretations of mineralization geometry and continuity of mineralized zones; changes to geotechnical, mining, and metallurgical recovery assumptions; and changes to the assumptions related to the continued ability to access the site, retain mineral and surface right titles, maintain environment and other regulatory permits, and maintain the license to operate.

1.13. Interpretation and Conclusions

Under the assumptions used in this Report, the Mineral Resource estimates for Jerritt Canyon can be supported.

1.14. Recommendations

Based on the Mineral Resource estimates at Jerritt Canyon and the recent decision by First Majestic to temporarily suspend mining operations, the QPs recommend that mineral exploration continues in order to increase the Mineral Resource estimates base, and that several studies be completed to at least Pre-Feasibility level to support Mineral Reserve estimation. If Mineral Reserve estimates are promising, then further work may be conducted in support of a re-start of mining operations.

The QPs propose a two-phase program of work, with an overall budget recommendation of $44M to $73M.

Phase 1 consists of mineral exploration and studies on updated mine design, with an estimated budget to complete of between $21 M to $37 M.

Phase 2, which is contingent on the results of Phase 1, would include: underground delineation drilling, and a series of mining studies completed to at least prefeasibility level to potentially support Mineral Reserve estimation. The estimated budget to complete this work is $23 M to $36 M.

2. INTRODUCTION

2.1. Introduction

This Technical Report (the Report) provides information on the Mineral Resource estimates for the Jerritt Canyon Gold Mine (the Project, Jerritt Canyon or Jerritt Canyon mine) located in Elko County, in the state of Nevada, USA.

The mine is owned by Jerritt Canyon Gold LLC (JCG). First Majestic Silver Corp. (First Majestic) acquired JCG in April 2021. In March 2023, First Majestic temporarily suspended all mining activities at the Jerritt Canyon Mine and retracted the Mineral Reserve estimates for the Project.

2.2. Report Purpose

The Report was prepared to support disclosure of technical information included in First Majestic's Base Shelf Prospectus anticipated to be filed on or about August 2, 2023.

Units of measurement used in this Report can be either US Customary ("imperial") or metric units, unless otherwise stated. All grid references are based on a local mine grid system adapted from the Nevada East State Plane Coordinate System ('SPCS'), NAD27 Datum, in planar units of feet. The local mine grid can be converted to SPCS by adding 2,000,000 to all northing coordinates. All currency units are in United States dollars unless otherwise stated.

Mineral Resource estimates are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (May 2014; the 2014 CIM Definition Standards) and the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (November 2019; 2019 CIM Best Practice Guidelines).

2.3. Qualified Persons

The following as the Qualified Persons (QPs) for this Technical Report as defined in National Instrument 43-101, Standards of Disclosure for Mineral Projects, and in compliance with Form 43-101F1:

- Mr. Gonzalo Mercado, P.Geo, Vice President of Exploration and Technical Services, First Majestic;
- Mr. David Rowe, CPG, Director of Mineral Resources, First Majestic;
- Ms. María Elena Vázquez Jaimes, P. Geo., Geological Database Manager, First Majestic;
- Mr. Michael Jarred Deal, RM SME, Vice President of Metallurgy & Innovation, First Majestic;
- Mr. David W. Wanner, P.E., Chief Project Engineer, Jerritt Canyon Gold.

2.4. Cut-off and Effective Dates

The effective date of the Mineral Resource estimates included in this Report is March 31, 2023. Information on mineral tenure and permitting, exploration drilling, sample assaying data and mining depletion is also current as of March 31, 2023. The overall Report effective date is March 31, 2023.

The Qualified Persons for this Report have reviewed the latest information available from the effective date of the Report to the signature date of the Report and there are no material changes to the information reported here.

2.5. Site Visits and Scope of Personal Inspection

Mr. Mercado visited Jerritt Canyon on numerous occasions during 2022 and 2023, with the most recent visit being February 22 to 25, 2023, a duration of four days. During the inspections which were typically 4-7 days in duration, he visited the underground mines, reviewed grade control mapping and sampling, drilling and drill sample practices, project geology, logging as well as mine to mill reconciliation.

Mr. Rowe has visited Jerritt Canyon on numerous occasions from 2021 to 2023, with the most recent visit being March 22 to 24, 2023, a duration of three days. During these site inspections, which were typically 4–7 days in duration, he reviewed and coordinated database management, project geology, drilling, core handling and logging, interpretation, and integration of primary data for geological interpretation and modeling, and the Mineral Resource estimation process. The site inspections included:

- Geological review of mapping, deposit geology, mineralization styles, and elements of interest;
- Field visits to review surface and underground geology for all significant mineral deposits in the mine;
- Review of the drill hole core handling, sampling, quality control, photography, and logging;
- Review of production-related channel sampling and quality control for the sampling program;
- Discussions with project geologists to integrate interpretation of the geological controls with mineralization.

Ms. Vazquez visited the Jerritt Canyon Gold mine on several occasions from 2021 to 2023, with the most recent site visit being January 29 to February 2, 2023, a duration of five days. During these visits, she conducted database audits and inspected drill core handling procedures to support Mineral Resource estimates. During the most recent visit, she carried out validation and verification of the resource estimation database, assessment of the quality assurance and quality control (QAQC) data, validation of core logging and sampling procedures, and inspection of samples storage.

Mr. Deal served as General Manager at Jerritt Canyon Gold Mine in 2021 and Vice President of US Operations in mid-2022. He was acting as interim General Manager of the operations since January 2023, and is currently the Vice President of Metallurgy & Innovation, First Majestic. This day-to-day familiarity with the operations serves as his personal inspection.

Mr. Wanner has been involved with the Jerritt Canyon Gold Mine since 2002 overseeing, consulting, and supporting technical and operational aspects including civil engineering related to tailings management and processing, environmental permitting and compliance, interim reclamation and closure, and reclamation planning and budgets. Since 2011, he has conducted site visits at least monthly if not weekly.

2.6. Sources of Information

For the purposes of the Report, all information, data, and figures have been provided by First Majestic unless otherwise stated. Information sources are listed in Section 27 of this Report.

The Qualified Persons for this report have reviewed the latest information available from the effective date of the report to the signature date of the report and there are no material changes to the information reported here.

2.7. Previously Filed Technical Reports

First Majestic has previously filed a technical report on the Project:

- Rodney, R., Fellows, G.L., Hamilton, C., Hampton, A.P., and Collyard, J.S., 2021: Technical Report on the Jerritt Canyon Gold Mine, Elko County, Nevada, USA: report prepared by SLR Consulting for First Majestic, effective date December 31, 2020.

Prior to First Majestic's Project interest, predecessor companies had filed the following technical reports:

- Evans, L., Mishra, P., Altman, K.A., and Ladd, S.C., 2018: Technical Report on the Jerritt Canyon Mine, Elko County, Nevada, USA: report prepared by RPA Consulting for Jerritt Canyon Gold LLC, effective date September 18, 2018;
- Johnson, T.W., Odell, M., Swanson, K. White, M., and Fox, J., 2013: NI 43-101 Technical Report Veris Gold Corp, Jerritt Canyon Property, Elko Count, Nevada: report prepared for Veris Gold Corp., effective date December 31, 2012;
- Odell, M., White, M., Swanson, K., and Fox, J., 2012: NI 43-101 Technical Report, Yukon-Nevada Gold Corp., Jerritt Canyon Property, Elko County, Nevada, USA: report prepared for Yukon-Nevada Gold Corp., effective date December 31, 2011;
- Johnson, T.W., Swanson, K., and Odell, M., 2011: NI 43-101 Technical Report Update, Yukon-Nevada Gold Corp., Jerritt Canyon Property, Elko County, Nevada, USA: report prepared for Yukon-Nevada Gold Corp., effective date January 1, 2011;
- Stinnett, L., Kuestermeyer, A., Mach, L., Sawyer V., and Michael, N., 2007: NI 43-101 Technical Report, Jerritt Canyon Mine, Elko County, Nevada: report prepared by SRK Consulting for Queenstake Resources Ltd., report dated April 2007;
- Addison, R., Borrastero, R.H., Buffington, D.L., Milne, S., and Tschabrun, D.B., 2005: Jerritt Canyon Mine, Elko County, Nevada, Technical Report: report prepared by Pincock, Allen and Holt for Queenstake Resources Ltd., effective date February 23, 2005;

- Borrastero, R.H., Buffington, D.L., King, N.D., McNamara, T.M., and Milne, S., 2004a: Jerritt Canyon Mine, Elko County, Nevada, Technical Report: report prepared by Pincock, Allen and Holt for Queenstake Resources Ltd., effective date February 6, 2004;
- Borrastero, R.H., Buffington, D.L., King, N.D., McNamara, T.M., and Milne, S., 2004b: Jerritt Canyon Mine, Elko County, Nevada, Technical Report: report prepared by Pincock, Allen and Holt for Queenstake Resources Ltd., effective date July 26, 2004.

2.8. Units and Currency and Abbreviations

Units of measurement are imperial and metric. All costs are expressed in United States dollars unless otherwise noted. Common and standard abbreviations are used wherever possible. Table 2-1 shows the list of abbreviations used in this Report.

Table 2-1: List of Abbreviations and Units

μ	micron	kVA	kilovolt-amperes
μg	microgram	kW	kilowatt
a	annum	kWh	kilowatt-hour
A	ampere	L	litre
bbl	barrels	lb	pound
Btu	British thermal units	L/s	litres per second
°C	degree Celsius	m	metre
C$	Canadian dollars	M	mega (million); molar
cal	calorie	m^2	square metre
cfm	cubic feet per minute	m^3	cubic metre
cm	centimetre	MASL	metres above sea level
cm^2	square centimetre	m^3/h	cubic metres per hour
d	day	mi	mile
dia	diameter	min	minute
dmt	dry metric tonne	μm	micrometre
dwt	dead-weight ton	mm	millimetre
°F	degree Fahrenheit	mph	miles per hour
ft	foot	MVA	megavolt-amperes
ft^2	square foot	MW	megawatt
ft^3	cubic foot	MWh	megawatt-hour
ft/s	foot per second	oz	Troy ounce (31.1035g)

g	gram
G	giga (billion)
Gal	Imperial gallon
g/L	gram per litre
Gpm	Imperial gallons per minute
g/t	gram per tonne
gr/ft^3	grain per cubic foot
gr/m^3	grain per cubic metre
ha	hectare
hp	horsepower
hr	hour
Hz	hertz
in.	inch
in^2	square inch
J	joule
k	kilo (thousand)
kcal	kilocalorie
kg	kilogram
km	kilometre
km^2	square kilometre
km/h	kilometre per hour
kPa	kilopascal
oz/st, opt	ounce per short ton
ppb	part per billion
ppm	part per million
psia	pound per square inch absolute
psig	pound per square inch gauge
RL	relative elevation
s	second
st	short ton
stpa	short ton per annum
stpd	short ton per day
t	metric tonne
tpa	metric tonne per annum
tpd	metric tonne per day
US$	United States dollar
USg	United States gallon
USgpm	US gallon per minute
V	volt
W	watt
wmt	wet metric tonne
wt%	weight percent
yd^3	cubic yard
yr	year

3. RELIANCE ON OTHER EXPERTS

This section is not relevant to this Report.

4. PROPERTY DESCRIPTION AND LOCATION

4.1. Property Location

The Jerritt Canyon Project is located in Elko County, northeastern Nevada (Figure 4-1). The mill site, shops, administration, and security buildings are located approximately 50 miles north of the town of Elko.

The Project covers a large area that extends approximately 21 miles north-south and 17 miles east-west at its widest and is approximately 119 square miles. The Project is bounded by 116°10' west and 115° 78'W longitude and 41°23'N and 41° 46' N latitude. The Project boundaries have been surveyed and are identified in the field with wooden stakes.

The Jerritt Canyon operations are located on a combination of public and private lands, with the mines and mining-related surface facilities being located primarily on United States Forest Service (USFS) and mining claims within the Humboldt-Toiyabe National Forest. The processing facilities, offices, shops, and tailings dams are located on private land owned by JCG. Additional claims in the southern portion of the land package are predominantly located on private land with some located on land administered by the United States Bureau of Land Management (BLM) (Figure 4-2).

4.2. Mineral Tenure

The Jerritt Canyon Project boundary covers an area of 32,110 ha in total, and contains the following claims within the Project area:

- BLM filed lode claims: 2,910 claims covering 19,186.5 ha;
- BLM leased lode claims: 278 claims covering 2,298.96 ha;
- Leased lands with mineral rights: covering 5,262 ha;
- Deeded ground covering 965.5 ha;
- Patent lode claims: 54 claims covering 377.98;
- Granted Federal land exchange patents: 2 covering 4,018.12 ha.

The distribution of load claims and owned land can be seen in Figure 4-3 to Figure 4-5. The Project boundary can be seen on all three maps. The rights associated with the fee land include mineral and surface rights and are different for the various land packages (agreements).

Yearly fees to maintain the claims in good order is undertaken by Jerritt Canyon staff and is reviewed on a monthly basis with the major payments taking place in September and November.

4.3. Surface Rights

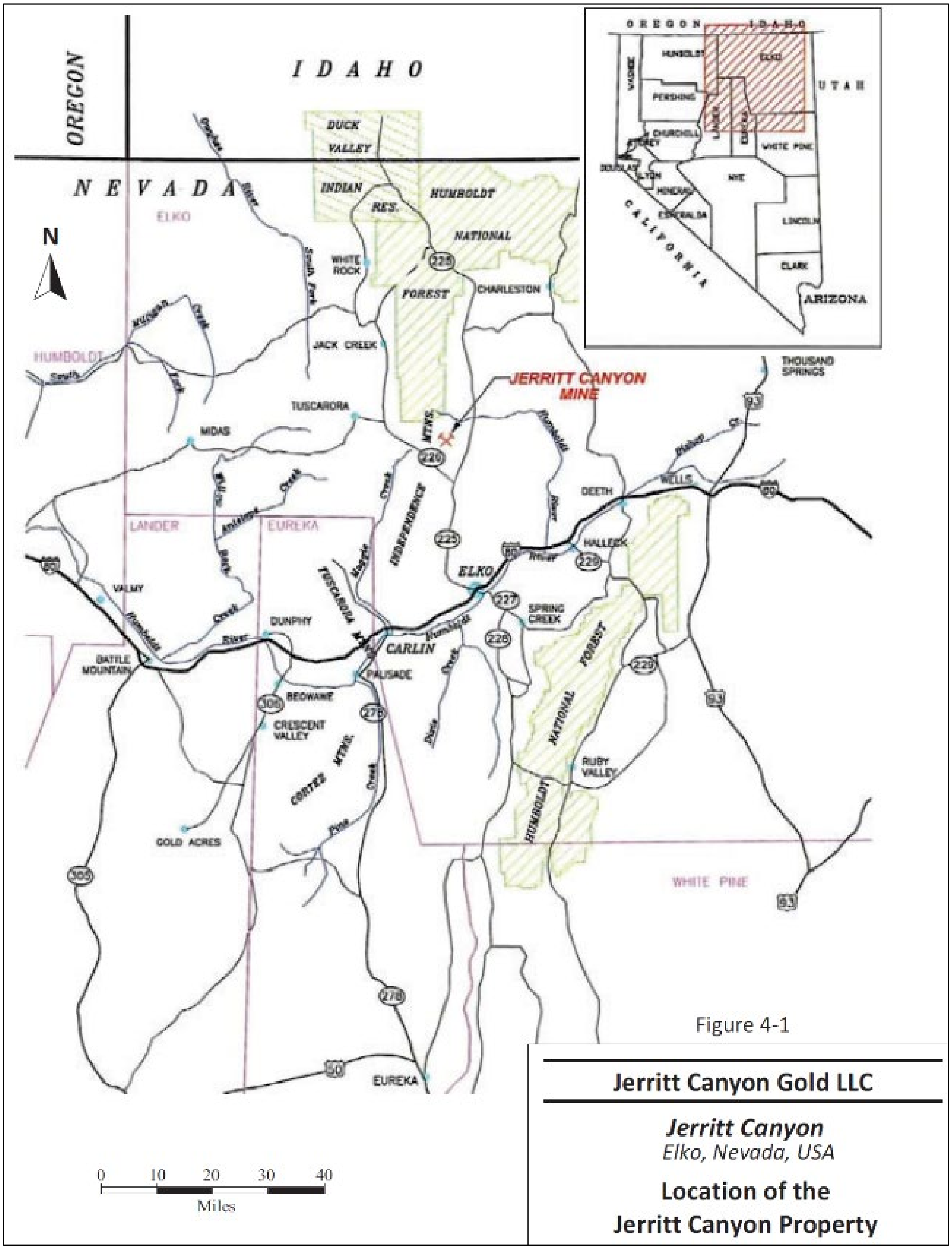
Surface rights at are held by the BLM, USFS, Jerritt Canyon and multiple private owners. The break down is 17% JCG-owned private and deeded land, 54% USFS, 12% BLM, and 16% owned by multiple private owners, and 1% without surface or mineral rights. The breakdown of lands can be seen in Figure 4-2 with the Project outline.

4.4. Royalties and Encumbrances

Some Jerritt Canyon claims and fee lands are subject to a net smelter return (NSR) royalty which varies from 1.5% to 8% depending upon the lease agreements with various property owners. The fee land, which was originally purchased to secure access from State Route 225, is subject to a 33% NSR. There are currently three Nevada (NV) lease file agreements (files NV-10106, NV-10110, NV-10113) that cover land that has mine production. As a result, the lease holders of the producing land are entitled to receive production royalty payments that range from 2.5% to 8%.

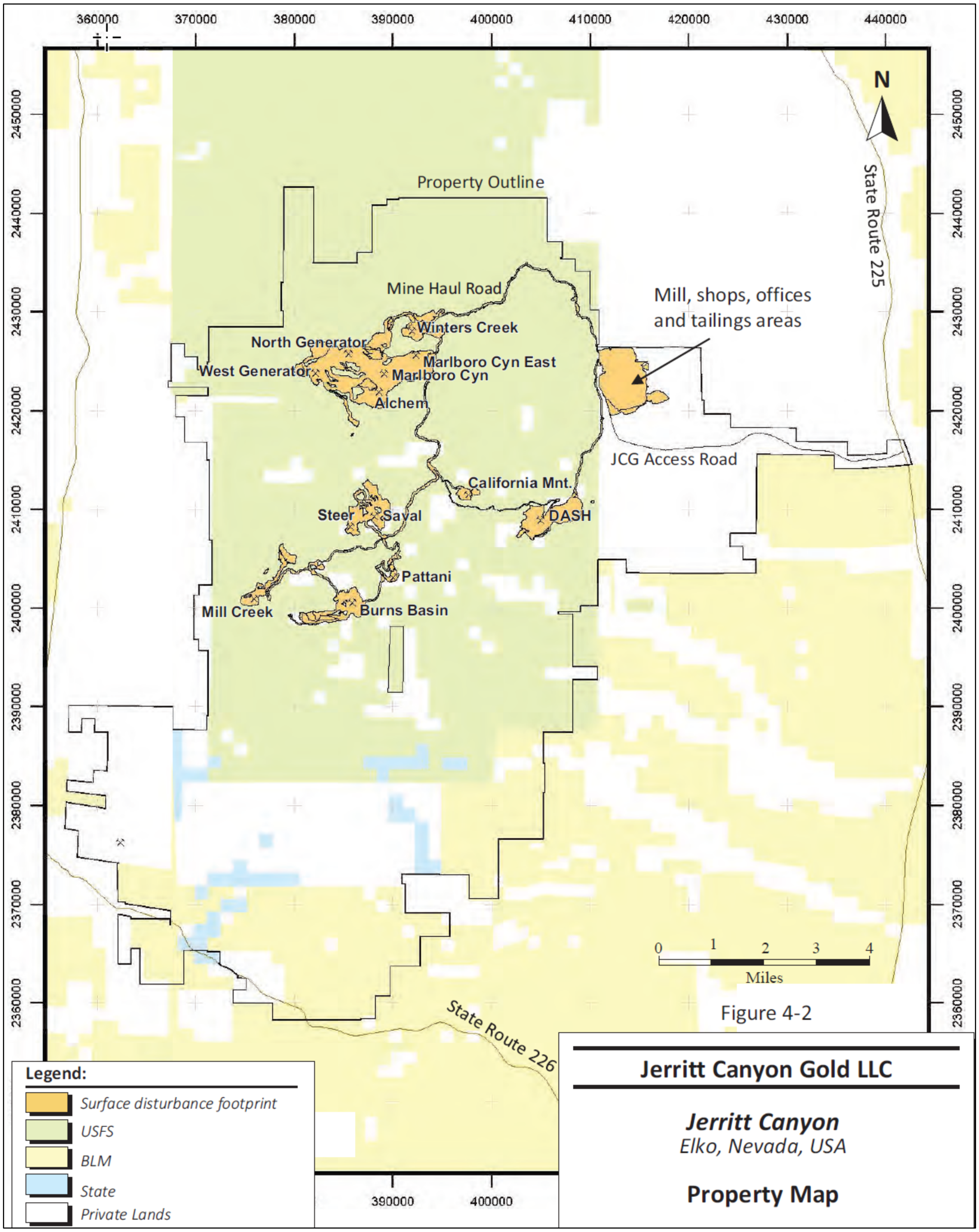
Other land held by lease holders may be subject to annual or semi-annual land payments that include advance royalties, land use payments, rentals, loss of grazing, and the use of land for a communications tower. The advance royalties are the minimum amounts the lease holders are entitled to annually. On producing land, these advance royalties may be recovered by JCG if certain production royalty thresholds are met or surpassed during the production year. Some of the land payments may be adjusted annually based on consumer/producer price indexes or annual increases.

Figure 4-1: Location of the Jerritt Canyon Gold Mine



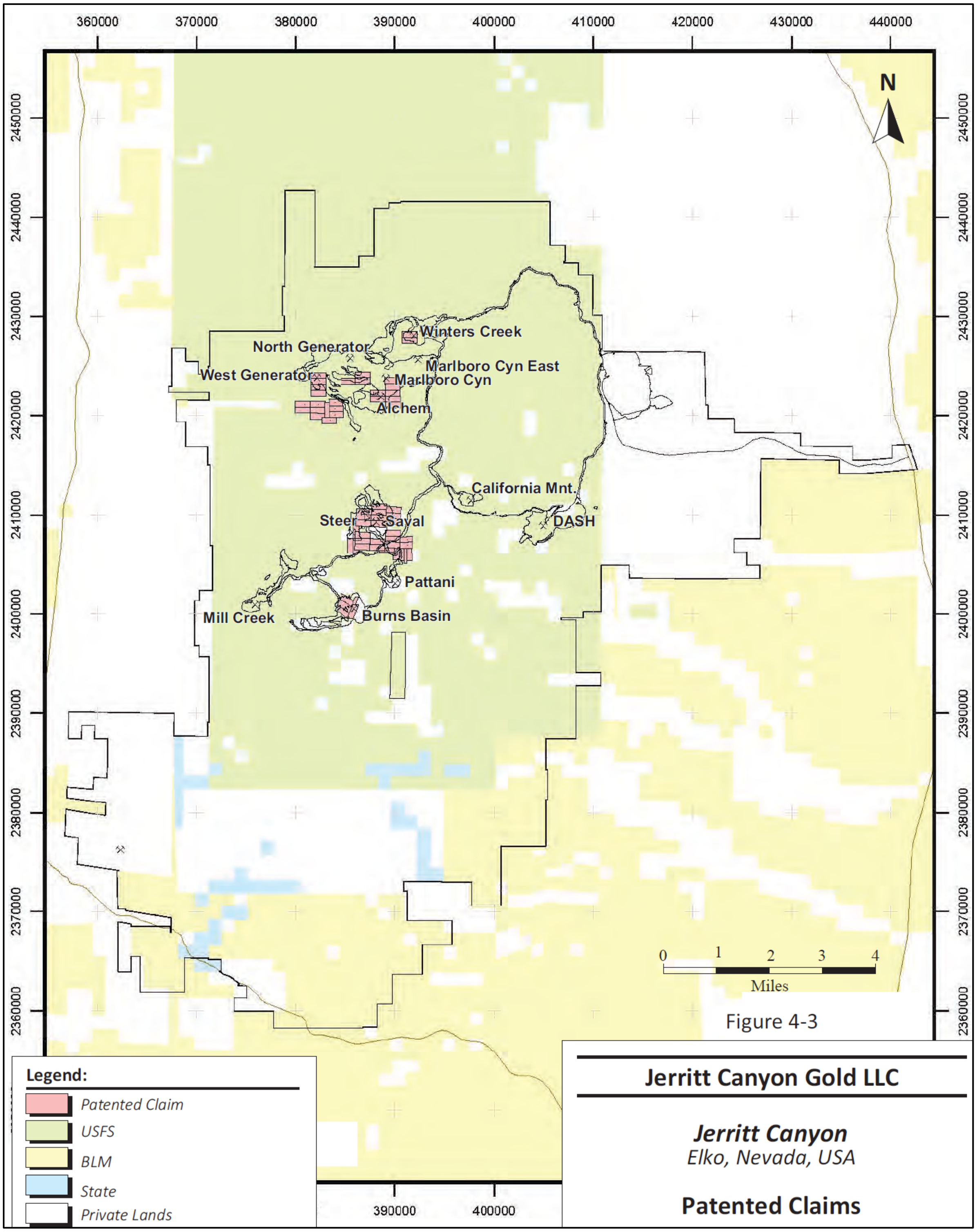
Note: Adapted from SLR Consulting (Canada) Ltd., 2021.

Figure 4-2: Project Map for Jerritt Canyon



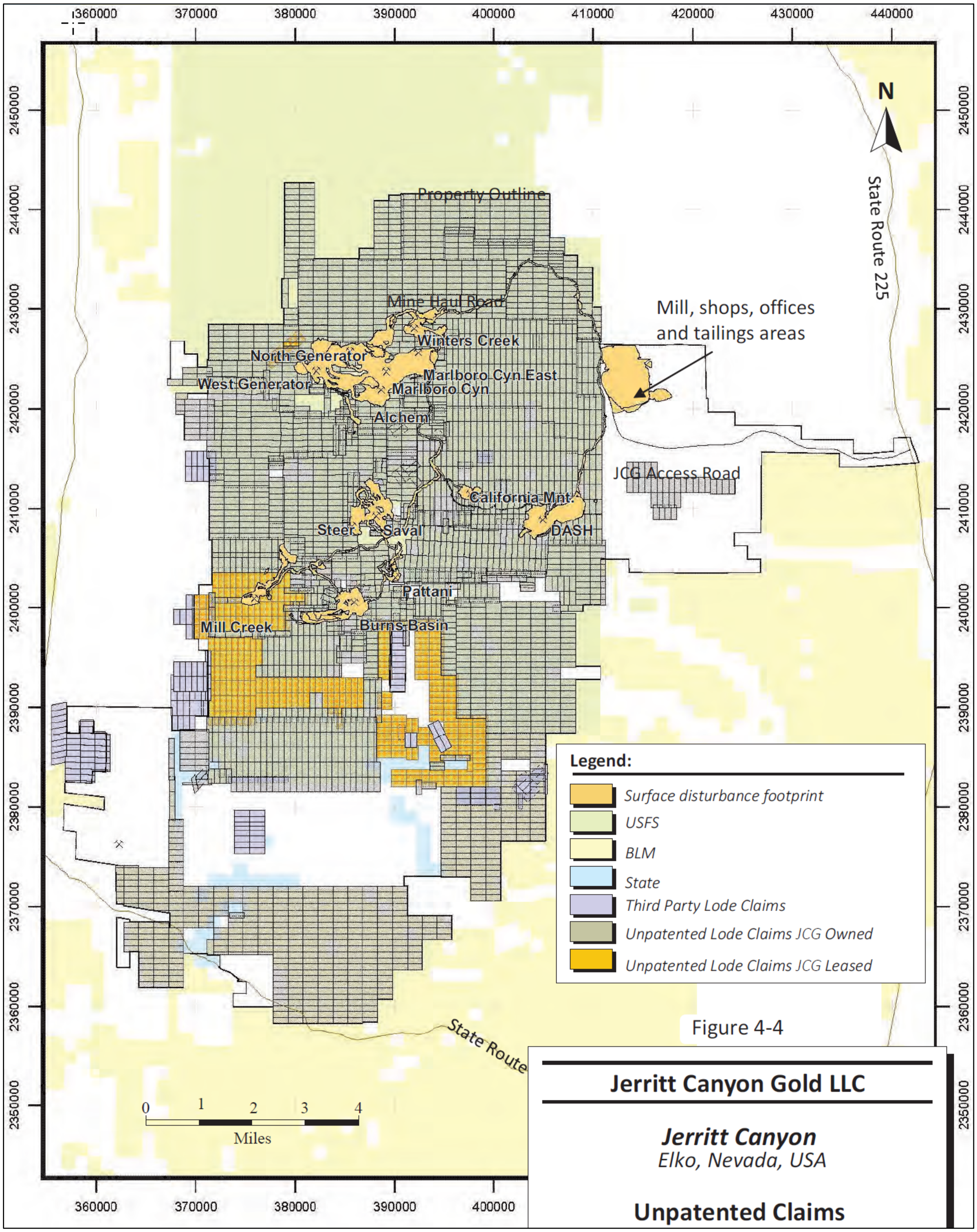
Note: Adapted from SLR Consulting (Canada) Ltd., 2021.

Figure 4-3: Location of Patented Claims and Fee Land, Jerritt Canyon



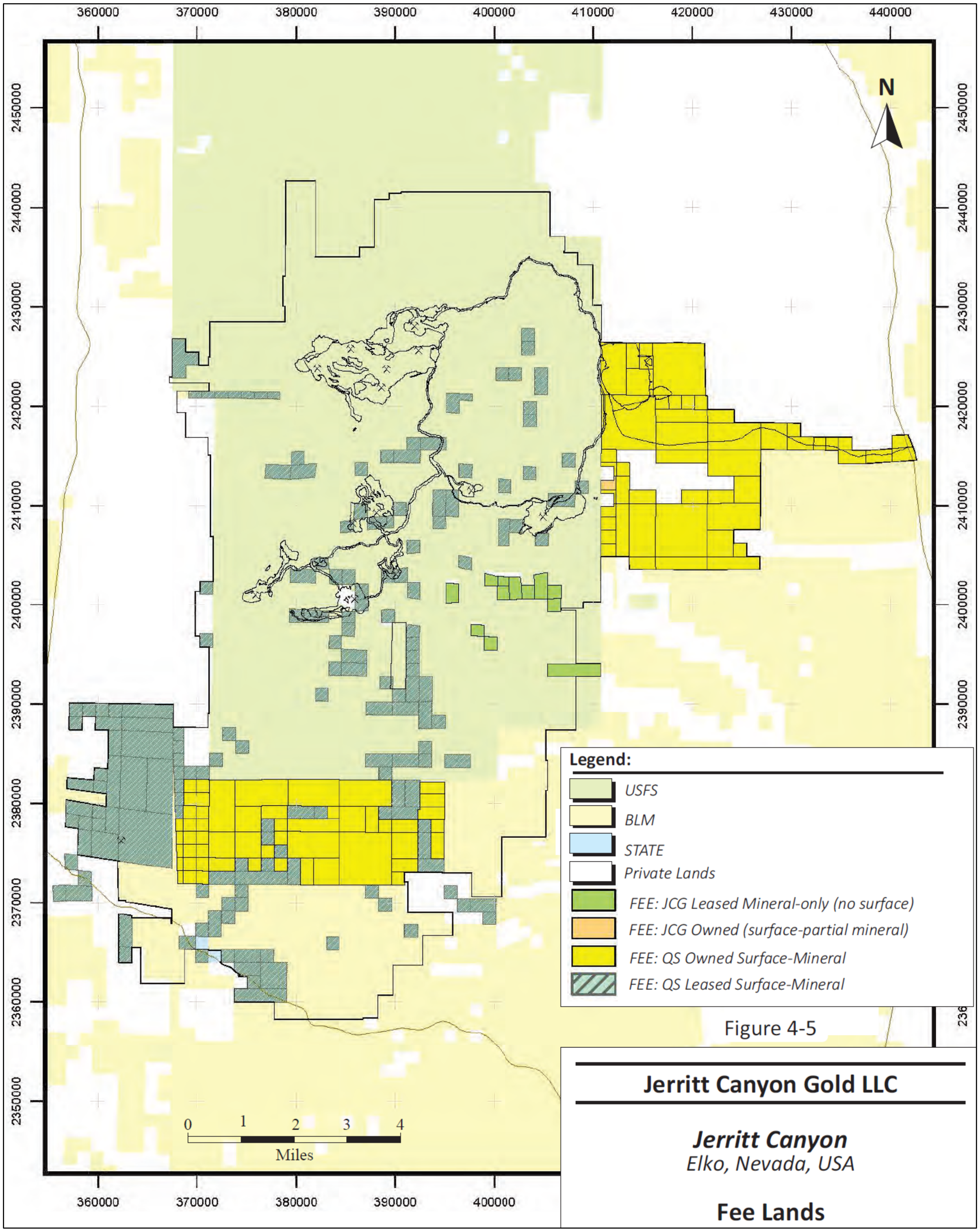
Note: Adapted from SLR Consulting (Canada) Ltd., 2021.

Figure 4-4: Location of Unpatented Claims, Jerritt Canyon



Note: Adapted from SLR Consulting (Canada) Ltd., 2021.

Figure 4-5: Location of Fee Lands, Jerritt Canyon



Note: Adapted from SLR Consulting (Canada) Ltd., 2021.

4.5. Environmental Considerations

4.5.1. Environmental Studies

Prior to and during operation, numerous environmental studies and evaluations have been conducted to support permit applications and operations. An Environmental Impact Statement (EIS) was completed, and the Record of Decision (ROD) was issued in 1980. Since then, there have been other environmental assessments with subsequent approvals.

On May 9, 2022, JCG received a Decision Notice and Finding of No Significant Impact (FONSI) for the South Jerritt Exploration Project from the USFS. The FONSI allows for seven years of exploration activities. JCG received a favorable Biological Opinion from the US Fish and Wildlife Service (USFWS) for impacts to Lahontan cutthroat trout from the South Jerritt Exploration Project. USFS received concurrence (No Adverse Effect) from the Nevada State Historic Preservation Office regarding the South Jerritt Exploration Project work plan for the 2022 exploration season. For exploration purposes, a permitting plan is in place and surface access to drill targets can be achieved following the different requirements per the multiple surface owners.

To supplement process feed to the process facility in 2022, two historic mines were re-established, West Generator and Saval II. Both mines were in a care and maintenance phase. A formal Notice of Intent to the USFS and State of Nevada describing the mining activities and schedule was submitted.

In May 2022, underground mining at the West Generator Mine resumed. All mining activities occurred above the water table so there were no impacts to surface and groundwater. Mining activities were carried out on existing disturbance.

In July 2022, JCG resumed underground mining at the Saval II Mine. Mining occurred within the existing footprint and no waste rock was generated. No groundwater was encountered during operations, and there was no impact to, or degradation of surface waters or groundwater occurred from the resumed mining activities.

4.5.2. Environmental Compliance

The historic operation of Jerritt Canyon resulted in a number of material environmental concerns, including air emission exceedances, ground water contamination from the TSF-1 tailings storage facility, lack of water treatment capacity, and surface water contamination from the rock disposal areas (RDAs). Since the acquisition of Jerritt Canyon Gold Mine on April 30, 2021, JCG has worked diligently to address legacy environmental issues with the regulators. These are summarized in Table 4-1.

In 2021 and 2022, the Nevada Division of Environmental Protection (NDEP) issued a number of Notices of Alleged Violation (NOAVs) relating to emission monitoring, testing, record-keeping requirements, and emission and throughput limits, alleged exceedances of mercury emission limitations, exceedances of operating parameters, and installation of equipment. JCG has appealed the NOAVs. As of the Report effective date, the estimated amount of any potential fine or penalty for the NOAVs could not be reliably determined. In addition to the action plan to address the NOAVs, JCG has developed an action plan to address all other known environmental issues. This includes working in collaboration with the NDEP.

Table 4-1: Environmental Issues

Item	Note
Class I Air Quality Operating Permit and Mercury Operating Permit Violations	The Class I Air Quality Permit has historically and is currently a challenge for Jerritt Canyon. In 2021, JCG developed an action plan in coordination with NDEP to address mercury emissions, dust, and record keeping. Significant improvements have been made to date, particularly toward controlling mercury emissions within permit limits. Mitigation activities are ongoing by JCG.
High/Increasing Concentrations of Constituents of Concern in Groundwater and Surface Water	Associated with mining activities and in particular seepage from the RDAs. These will be addressed though either active or passive remediation systems. Studies are ongoing as well as discussions with the NDEP regarding the final solution for remediation of the RDAs. Surface water concentrations can be directly associated with the RDAs, which have been in various stages of water treatment/reclamation since 1999 and closure plans to address these issues are currently being developed. High/increasing concentrations of constituents of concern (i.e., total dissolved solids (TDS) and chloride) in groundwater associated with the operation of the TSF-1 are mitigated through facility closure and operation of groundwater extraction wells.
Seepage from RDAs	JCG staff have been working with NDEP-BMRR to develop mitigation actions and monitoring plans for the seepages since the late 1990s. JCG recently commissioned a study to identify options for closure of the RDAs. These options are currently under review and once the preferred option is selected, JCG with work with the NDEP to get their concurrence. These closure plans are designed to mitigate the impacts to surface water as a result of seepage from the RDAs.
Seepage from TSF-1	As TSF-1 was unlined, tailings drainage seeped through the facility's base and resulted in contamination of the underlying vadose zone and groundwater. The contamination is mainly due to chloride, which was used in the chlorination plant to oxidize mineralized material during process operations in the 1980s and 1990s. Groundwater recovery wells were installed beginning in 1985 to intercept and pump contaminated groundwater back to the mill circuit, and downgradient monitoring wells were installed to measure the extents of groundwater contamination.
Water Management Constraints	The water management system at Jerritt Canyon relies on pumping water from TSF-1 and TSF-2 to the evaporation pond, WSR-E, and WSR-W. Analyses of water samples taken from the various ponds indicate that the blended water quality from all ponds exceeds Nevada Profile I standards for antimony, arsenic, cadmium, chloride, manganese, mercury, nitrogen, selenium, sulfate, thallium, and TDS (Linkan, 2017). Bench and pilot testing was conducted to develop a process that will remove the contaminants in order to meet the standards required for discharge. The Process Water Treatment Plant (WTP) is located adjacent to the existing DASH East WTP, now known as the Smith Mine WTP. Brine generated from the Process WTP and Smith Mine WTP is stored within the evaporation pond which also receives inflows associated with the operation of TSF-2. As a result, the evaporation pond is net gaining – the free capacity is diminishing over time. Additionally, the WSR-E and WSR-W are planned to be utilized as the footprint of TSF3 and only the WSR-E is currently storing solution.
Drinking Water Standards	Sampling indicated that Jerritt Canyon may have exceeded the secondary drinking water quality standard for iron at one of the water supply wells (WW7) in 2023. Subsequent sampling, however, has indicated iron concentrations below the drinking water standard.

4.5.3. Current Environmental Liabilities

Environmental liabilities for the Jerritt Canyon operation are typical of those that would be expected to be associated with an operating underground precious metals mine, including future closure and reclamation of mine portals and ventilation infrastructure, access roads, processing facilities, power lines, tailings storage facilities and all surface infrastructure that supports the operations.

4.6. Closure Planning

Approved closure and reclamation plans are in place for Jerritt Canyon. Concurrent reclamation is completed when feasible.

JCG submits reclamation cost estimate updates every three years to the NDEP and USFS. For reclamation bond cost estimates, Nevada uses the Standardized Reclamation Cost Estimator model. Two separate estimates are completed for Jerritt Canyon. One is for the work to be done on private lands and the other is for work to be done on public lands (i.e., USFS and BLM). Bonding is in place.

4.7. Permitting Considerations

First Majestic has all required permits to conduct the proposed work on the Project. Operating permits are in place and current, or in the process of being renewed. Expired permits are administratively extended while renewal is in progress.

4.8. Social Considerations

The Jerritt Canyon Mine is located in Elko County, Nevada which is a mining friendly jurisdiction. JCG employees are residents of Elko, Nevada and the local area, and numerous other mining operations are located nearby.

JCG supports the Adopt-a-Highway Program and conducts roadside cleanup on a voluntary basis as well as supports the local ranchers with fencing.

4.9. Comment on Section 4 “Property Description and Location”

To the extent known to the QPs, there are no other significant factors and risks that may affect access, title, or the legal right or ability to perform work on the Jerritt Canyon mine that are not discussed in this Report.

5. ACCESSIBILITY, CLIMATE, PHYSIOGRAPHY, LOCAL RESOURCES, AND INFRASTRUCTURE

5.1. Accessibility

Jerritt Canyon is located in Elko County, Nevada approximately 50 miles north of the town of Elko.

Access to the Jerritt Canyon Project area is via Nevada State Route (SR) 225 and an approximately seven mile-long, paved mine access road that leads to the main gate where the administrative offices, processing plant, warehouse, maintenance shops, and tailings impoundment areas are located (refer to Figure 4-1 and Figure 4-2).

The mines are accessed via a main haul road which is maintained on a regular basis. This road network is approximately 17 miles long.

Exploration sites, active reclamation sites and historical mines are accessed through roads and trails maintained as required.

5.2. Physiography

Jerritt Canyon is located in the Independence Mountain Range in the Basin and Range Province of northern Nevada. The mill and associated buildings and facilities are located in the eastern foothills of the range at an elevation of approximately 6,400 ft. All past and present mining operations are located at various elevations within the mountain range. The main haul road reaches a maximum elevation of approximately 8,000 ft.

The vegetation is typical of the Basin and Range Province with sagebrush dominant at lower elevations. Small stands of aspen and isolated fir trees grow in canyons and drainages.

5.3. Climate

The climate is temperate with winter temperatures between 0ºF and 40ºF and summer temperatures between 35ºF and 90ºF. Average annual precipitation at Jerritt Canyon is 14 inches and average annual evaporation is 43 inches. A significant amount of precipitation falls as snow and increases with elevation towards the mine portal areas. Snowfall is generally common from December to May. Exploration and mining activities can be conducted year-round from surface and underground mine access. Temporary halts may result from major snowfalls. Access to the mine portals can be halted a few times a year while snow is being cleared from the roads. The mill, warehouse, shop, and administrative facilities are at a lower elevation and therefore less exposed to extremes in weather.

5.4. Local Resources

With a population of approximately 20,700, Elko is the closest city to Jerritt Canyon. Elko is situated approximately 230 miles west of Salt Lake City, Utah and 290 miles east of Reno, Nevada. Elko straddles the Interstate 80 highway and is serviced by daily commercial flights from/to Salt Lake City, Utah.

Most of the Jerritt Canyon workforce resides in Elko and the adjacent town of Spring Creek. Other communities in northern Nevada and Utah provided labour force to support exploration and mining activities at Jerritt Canyon and other operations in northern Nevada.

Elko is a supply centre for the mining industry of northern Nevada, sourcing most equipment, supplies, and services. All supplies and equipment can be transported to site over the Nevada SR 225 highway, the mine access road, and the mine haul road.

5.5. Infrastructure

5.5.1. Surface Infrastructure

Surface infrastructure supporting exploration and potential mining activities at Jerritt Canyon is shown in Figure 5-1 and includes:

- Mine portals and decline access to the underground workings at the Smith, SSX, West Generator (WGen), and Murray mines equipped with ventilation fans;
- Ventilation raises and secondary egress infrastructure;
- A processing plant;
- On-site analytical laboratory;
- Waste rock disposal areas;
- Mineralized stockpiles;
- Tailings storage facilities 1 and 2;
- Administrative office buildings;
- Warehouses for storage and inventory;
- Exploration drill-core storage facility;
- A communications tower to link data and voice systems;
- A tailings water treatment plant and an underground water treatment plant;
- A water storage reservoir;
- A water evaporation pond;
- Sewage and waste disposal facilities.

Figure 5-1: Surface Infrastructure

Note: Figure prepared by First Majestic, April 2023. Satellite image from September 2022.

5.5.2. Transport and Logistics

During operations personnel are transported by passenger buses and light vehicles from Elko. The mill site and mining operations are primarily accessed from Elko via highway SR 225.

5.5.3. Power

Electrical power for Jerritt Canyon is purchased from Nevada Energy through a 125 kV, three-phase transmission line.

Power is supplied to the Project via a station located in the mill processing area and is distributed to the mines and other necessary facilities through a grid of surface lines.

5.5.4. Water

Water available at Jerritt Canyon is sufficient to support any future mining and milling operations.

Approximately 700 gallons per minute (gpm) of water is required to operate the mill with two primary water sources: (1) recycled water sourced from the seepage collection system consisting of 90 small diameter water wells surrounding the TSF-1, four seepage collection trenches, and three embankment blanket drains that collectively produce approximately 3000 gpm, and (2) a fresh water source from two deep water wells that are capable of producing 500 gpm each.

All water used at Jerritt Canyon is from permitted and certificated water rights held by JCG and regulated by the NDWR.

5.5.5. Stockpiles

There are a number of mineralized material stockpiles present at the mine site. The remote stockpiles are located distal to the mill facilities and are spread throughout the Project, mostly in the areas of the Smith and SSX mines. During operations, there are also several mineralized material stockpiles located in the run-of-mine stockpile area adjacent to the mill.

5.5.6. Tailings Storage Facilities

Jerritt Canyon currently has two TSFs, TSF-1 and TSF-2, and two main process water storage facilities that include the WSR and evaporation pond. Currently, Jerritt Canyon operates the Process WTP intended to produce water that meets NDEP Profile I discharge standards from the process water contained in the WSR and evaporation pond.

Additionally, First Majestic intends to convert the WSR into a TSF (TSF 3) in the future, and has submitted to, and received approval from both the NDEP- BMRR and the NDWR for this planned construction.

TSF-1 is currently inactive and in the process of being closed and reclaimed. TSF-1 provides a pipe corridor on which tailings and reclaim pipelines between the Jerritt Canyon mill and TSF-2 are located. Other infrastructure associated with TSF-1 includes over 90 pumpback/interception wells, pipelines, and electrical transmission lines that make up the TSF-1 seepage collection system.

During operations, TSF-2 disposes of tailings solids delivered to the impoundment in a slurry consisting of a ratio of 40 tons solids to 60 tons water. TSF-2 Phase 1 and Phase 2 were designed with a two-layer high-density polyethylene (HDPE) liner (i.e., double-lined system) which incorporates a leak collection and recovery system (LCRS) to limit the risk of groundwater contamination (as in the case of its predecessor TSF-1). This design meets or exceeds the most current environmental and engineering standards. As part of the TSF-2 monitoring program, JCG measures pumped flows from the LCRS, hydraulic head development above the TSF-2 secondary HDPE liner, and surrounding groundwater depths, and the presence (or absence) of process solution in the vadose zone underlying TSF-2. TSF-2 Phase 3 construction was completed in April 2021 as an eight-foot raise using the centerline/downstream method. Phase 3 HDPE containment was installed as a single-lined system tied into the Phase 2 primary liner, as approved by the NDEP-BMRR.

The final TSF-2 Phase 4 raise constructed in November 2021 added 12 ft to the Phase 3 embankment elevation and allows storage of an additional 1.7 Mst of tailings. The Phase 4 embankment was designed and constructed using downstream construction methods. The Phase 4 HDPE containment was also installed as a single-lined system tied into the Phase 3 liner.

The WSR is designed to store approximately 402 million gallons (Mgal) of process solution and is approved for conversion to TSF 3. Process solution in the WSR is being removed by pumping to and treating the Process WTP. As of May 2023, the volume of stored process solution within the WSR is less than half its maximum operating capacity.

The evaporation pond is designed to store approximately 450 Mgal of process solution and is currently being maintained at its maximum operating capacity. The evaporation pond is also being used for disposal of brine concentrate from the Process WTP and Smith WTP.

5.5.7. Water Treatment Plants

The process WTP consists of chemical pre-treatment, pH adjustment, coagulation, oxidation, clarifier, ultrafiltration (UF) system, sea water reverse osmosis (SWRO), and ion exchange (IX) vessels. The process WTP is designed to treat antimony, arsenic, cadmium, chloride, manganese, mercury, nitrogen, selenium, sulfate, thallium, and TDS. Process solution from the WSR, TSF-2, and evaporation pond requires treatment to remove the water from inventory and allow for future TSF expansions.

The Smith WTP is designed to reduce arsenic and antimony concentrations in the Smith Mine underground water.

5.6. Comment on Section 5 “Accessibility, Climate, Local Resources, Infrastructure and Physiography”

In the opinion of the QP, there is sufficient surface area within First Majestic’s tenure and surface rights holdings for the mines, RDAs, mill, tailings storage facilities, associated infrastructure and other operational requirements.

6. HISTORY

6.1. Ownership History

In 1972, Food Machinery Corporation (FMC) discovered a disseminated gold deposit at Jerritt Canyon. The subsequent ownership history of the Jerritt Canyon Project is summarized as follows:

- In 1976, FMC, later Meridian Gold LLC (Meridian) formed a joint venture (JV) with Freeport Minerals Company, later Freeport-McMoRan (Freeport), to explore and develop the Jerritt Canyon property. Mining activities at Jerritt Canyon commenced in 1980;
- In 1990, Freeport sold its interest in the Jerritt Canyon JV to Minorco SA (Minorco). This purchase allowed Minorco (through its wholly owned subsidiary Independence Mining Company) to attain a 70% ownership of the Jerritt Canyon property and become the operator. Meridian retained its 30% ownership of the Jerritt Canyon property;
- In 1998, Minorco sold its 70% interest in the Jerritt Canyon JV to AngloGold Ltd. (AngloGold);
- In 2003, Queenstake Resources USA Inc. (Queenstake) (a subsidiary of Queenstake Resources Ltd.) purchased a 100% interest in the Jerritt Canyon property from the JV partners Meridian and AngloGold;
- In June 2007, Queenstake became a wholly owned subsidiary of Yukon-Nevada Gold Corp. (Yukon-Nevada) which was formed by the merger of Queenstake Resources Ltd. and YGC Resources Ltd.
- In October 2012, Yukon-Nevada changed its name to Veris Gold Corp. (Veris);
- In January 2013, Queenstake, now a wholly owned subsidiary of Veris, changed its name to Veris Gold USA Inc. (VUSA). In 2014, Veris declared bankruptcy;
- In 2015, Jerritt Canyon Gold LLC acquired an 80% interest in the Jerritt Canyon Project. The remaining 20% was held by WBOX 2014-1 Ltd. which had an outstanding balance on a loan made to Veris;
- In June 2020, JCG acquired the remaining 20% from WBOX 2014-1 Ltd., holding 100% interest in the Jerritt Canyon Project;
- On April 30, 2021, First Majestic Silver Corp. acquired all of the issued and outstanding common shares of JCG.

6.2. Production History

Gold mineralization discovered in the Jerritt Canyon area in 1972 was found to share similar metallurgical challenges to the mineralization discovered by Newmont Corporation (Newmont) elsewhere in the Carlin Trend. Subsequent advances in processing technologies for gold deposits of the Carlin Trend, resulted in this style of mineralization becoming economically viable. In 1976, Meridian and Freeport formed a joint venture to explore and develop the gold deposits in the Jerritt Canyon area and in 1980 mining commenced with production from the North Generator and Marlboro Canyon open pit mines. The first gold production from Jerritt Canyon occurred in July 1981.

From early 1981 until late 1999, open pit mining was conducted in the areas of Marlboro Canyon, Alchem, Lower North Generator Hill, Upper North Generator Hill, West Generator, Burns Basin, Mill Creek, Pattani Springs, California Mountains, DASH, Winters Creek, Steer Canyon, and Saval Canyon. Open pit production from these areas ranged from approximately 40,000 ounces of gold in Pattani Springs to 1.4 million ounces of gold (Moz Au) in Marlboro Canyon and totalled 5.2 Moz Au.

In 1993, underground operations commenced at the West Generator underground mine, and continued until 2008 with production from the Steer, Murray, MCE, Smith, SSX, and Saval deposits. In 2008 the operating company, Queenstake, made the decision to cease mining operations due to increasing costs associated with infrastructure expenditures, in addition to an inability to secure required environmental permits in a timely manner.

In 2009, the NDEP approved plans for the recommencement of Jerritt Canyon production. Queenstake also completed major modifications to the key components of the roaster, leach circuit, thickener, and other sections of the processing plant.

In 2009, a new mine plan was prepared, and in 2010 underground mining from the Smith deposit restarted using contract miner Small Mine Development (SMD). Underground mining at SSX recommenced using Queenstake staff.

From the commencement of mining in 1981 to March 2023, approximately 9.85 Moz Au were produced from approximately 50.7 million tons (Mst) of ore mined at an average grade of 0.194 oz/st Au. Open pit mining at Jerritt Canyon produced a total of approximately 5.2 Moz Au from approximately 29.9 Mst of ore at an average grade of 0.174 oz/st Au. The underground mines produced a total of approximately 4.65 Moz Au from approximately 20.6 Mst of ore at an average grade of 0.227 oz/st Au. Since 2010, the majority of production has come from the SSX and Smith deposits, as detailed in Table 6-1, Table 6-2, Table 6-3 and Table 6-4.

From May 2021 to March 2023 JCG produced approximately 155,000 ounces of gold from approximately 1.7 Mst of mineralized material at an average grade of 0.106 oz Au/st, which included marginal grade from previously mined surface material located on the Project.

On March 20, 2023, First Majestic announced the temporary suspension of mining activities at Jerritt Canyon due to ongoing challenges such as high costs, inflationary cost pressures, lower than expected head grades and multiple extreme weather events affecting northern Nevada during the winter of 2023.

Figure 6-1 shows the locations of the historical mining areas.

Table 6-1: Jerritt Canyon Production History

	Production Period	Tons Mined	Grade (oz/st Au)	Contained Metal (oz Au)
Open Pit Deposits				
Marlboro Canyon	1981-1990	5,798,600	0.241	1,400,045
Alchem	1991-1994	1,657,600	0.098	162,621
L. North Gen. Hill	1980-1993	1,226,000	0.192	235,461
U. North Gen. Hill	1980-1993	7,636,300	0.170	1,298,308
West Generator	1986-1993	3,979,000	0.155	616,647
Burns Basin	1988-1998	2,441,800	0.169	412,328
Mill Creek	1992-1994	895,700	0.121	108,270
Pattani Springs	1988-1990	387,000	0.108	41,896
California Mountain	1993-1994	410,300	0.162	66,341
Dash	1996-1999	1,906,100	0.221	420,789
Winters Creek	1992-1995	1,243,700	0.126	156,317
Steer Canyon	1994-1997	477,300	0.132	63,004
Saval Canyon	1994-1997	1,741,900	0.126	218,682
Subtotal – Open Pit	**1980-1999**	**29,801,300**	**0.175**	**5,200,709**
Underground Deposits				
SSX	1997-2008; 2011; 2012-2020	7,969,243	0.229	1,825,969
Steer	2004-2006	68,174	0.233	15,879
MCE (formerly Papillion)	1997-2004	258,295	0.369	95,359
Murray	1997-2006	3,780,795	0.330	1,248,777
Smith	1999-2008; 2010-2020	5,525,953	0.187	1,033,520
West Generator	1993-1997	460,100	0.235	108,108
Saval	2004-2006	3,500	0.495	1,730
Saval 4	2014-2015; 2017-2019	271,420	0.147	39,856
Starvation	2013-2016	845,490	0.198	167,819
Subtotal - UG	**1993-2020**	**19,182,970**	**0.237**	**4,537,017**
Total - All Mines	**1980-2020**	**48,984,270**	**0.199**	**9,737,726**

Table 6-2: Production by JCG from 2015 to December 2020

Mine	Tons Mined	Grade (oz/st Au)	Contained Metal (oz Au)
Smith	2,244,973	0.152	342,207
SSX	2,524,542	0.154	388,837
Starvation	193,573	0.215	41,531
Saval 4	250,149	0.148	36,946
Total	**5,213,237**	**0.155**	**809,521**

Table 6-3: Production by JCG from May 2021 to December 31, 2021, Jerritt Canyon

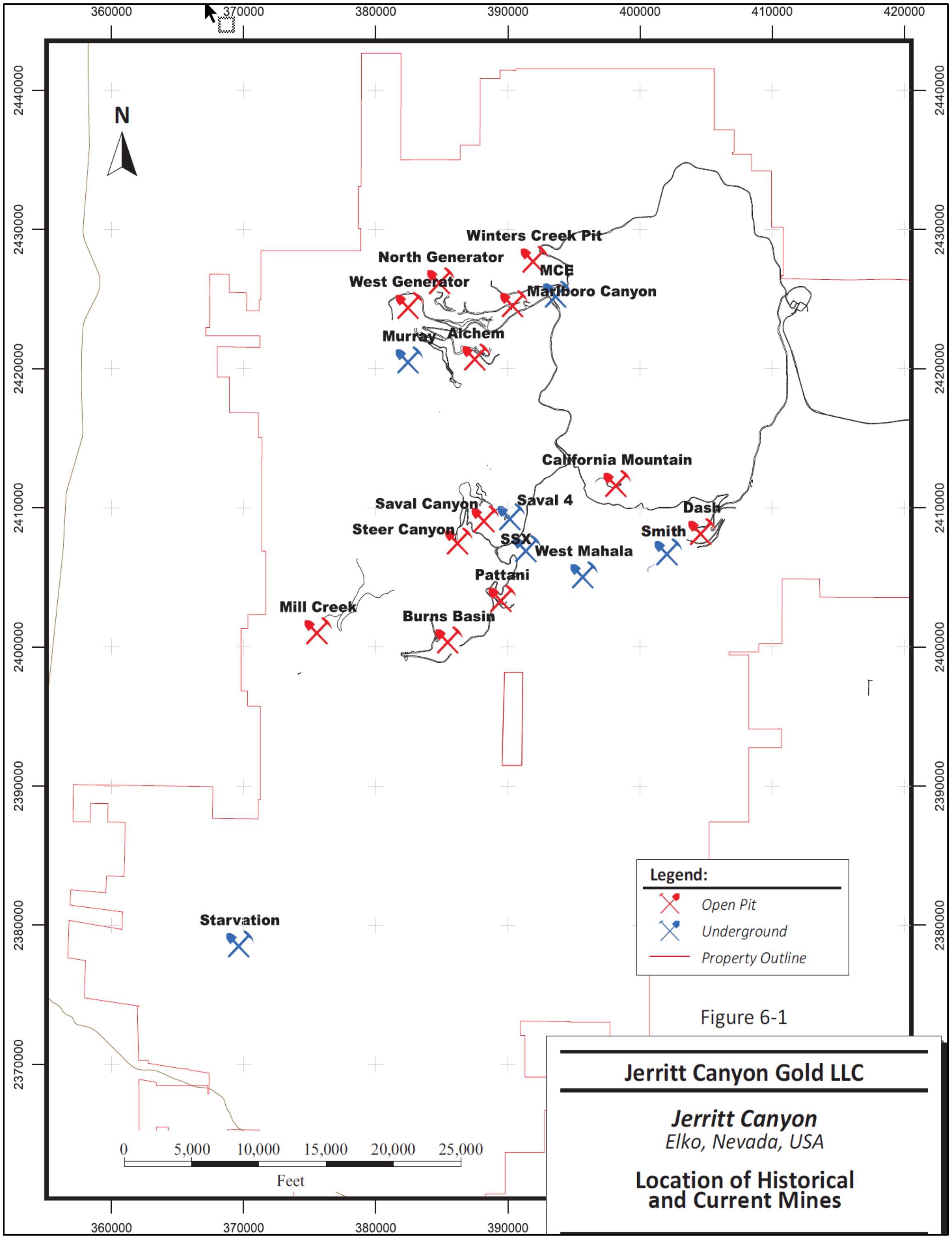
Mine	Tons Mined	Grade (oz/st Au)	Contained Metal (oz Au)
Underground Ops	613,488	NA	NA
Surface Ops	33,238	NA	NA
Total	**646,686**	**0.126**	**81,625**

Note: 2021 metal accounting/allocation by mine and operation (Surface vs Underground) are approximate as tracking processes were being developed after acquisition.

Table 6-4: Production by JCG from January 2022 to March 31, 2023, Jerritt Canyon

Mine	Tons Mined	Grade (oz/st Au)	Contained Metal (oz Au)
Smith	387,427	0.122	47,293
SSX	439,972	0.137	60,201
West Gen	30,619	0.118	3,619
Saval 2	1,138	0.133	152
Surface Ops	68,069	0.061	4,150
Total	**927,224**	**0.124**	**115,415**

Figure 6-1: Map of Jerritt Canyon Historical Exploration Areas



Note: Adapted from SLR Consulting (Canada) Ltd., 2021.

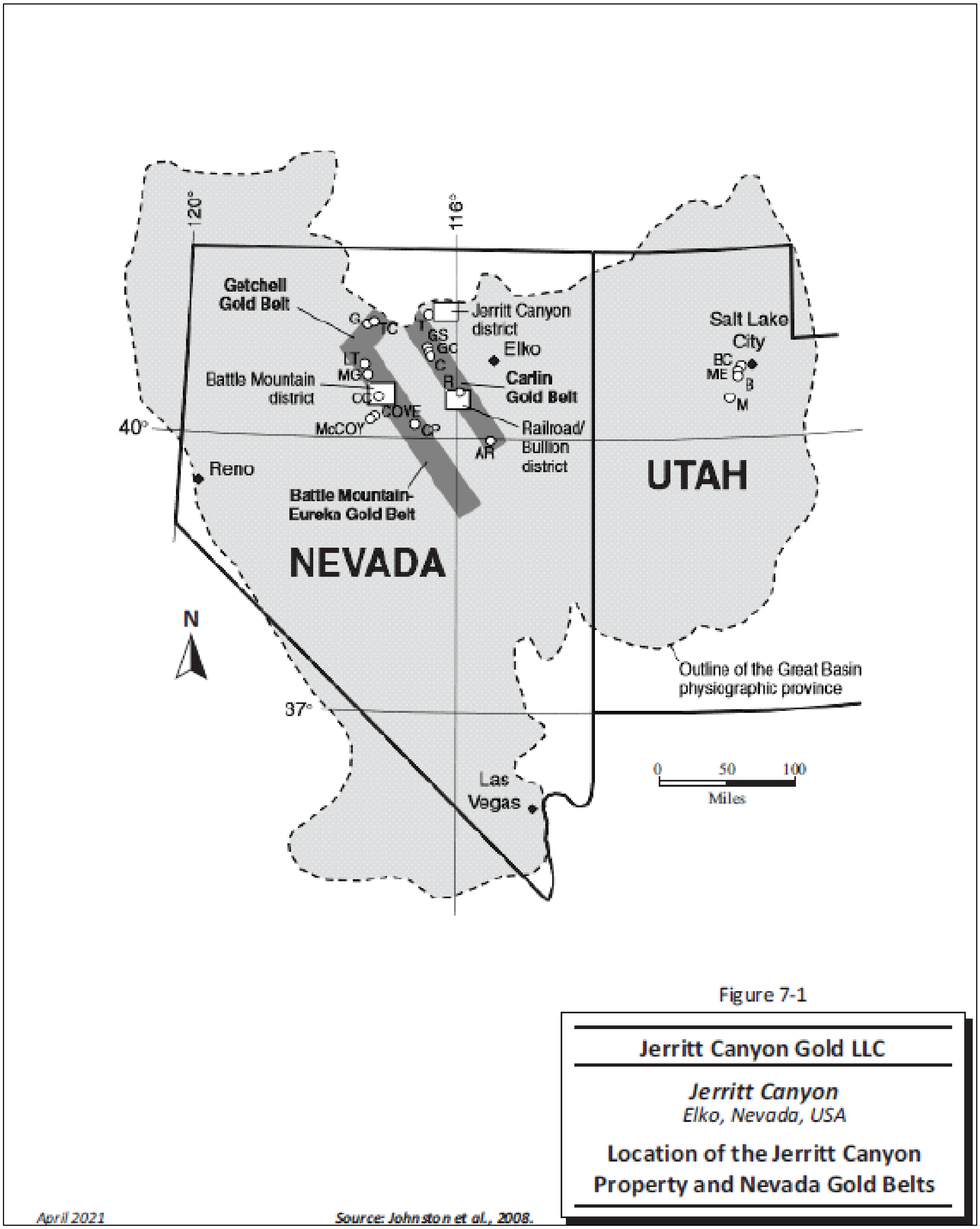
7. GEOLOGICAL SETTING AND MINERALIZATION

7.1. Regional Geological Setting

The Jerritt Canyon district is located to the north-northeast of the Carlin Trend of gold deposits discovered within the Great Basin (Figure 7-1). The Great Basin preserves a protracted geological history from Proterozoic through to recent time. Continental rifting of the Archean-Proterozoic craton resulted in the deposition of rift facies Neoproterozoic and Cambrian clastic sedimentary rocks and the establishment of a passive continental margin on the western edge of North America. A miogeoclinal sequence developed on the passive margin with deposition of Ordovician to Devonian shallow carbonates and shales in the shelf-slope environment (e.g., Hanson Creek, Roberts Mountain, Popovich, and Rodeo Creek Formations) and Cambrian to Ordovician deep siliciclastic sedimentary rocks on the slope floor environment to the west (e.g., Vinini, Slaven Valmi, Elder and Snow Canyon Formations). During the Late Devonian to Early Mississippian Antler Orogeny, the deep water siliciclastic sedimentary and minor basaltic rocks were thrust over the shallow shelf slope shallow carbonates and shales. The regional thrust fault is referred to as the Roberts Mountain Thrust.

A foredeep basin formed to the east in front of the thrust belt resulting in deposition of Early Mississippian syn-orogenic and Pennsylvanian post-orogenic sedimentary rocks including conglomerate, siltstone, and limestone (Antler Overlap Sequence). Northeast Nevada was further subject to compressional tectonism in the Pennsylvanian through to the Permian Humboldt and the Early Triassic Sonoma Orogenies. East-dipping subduction was established along the western margin of North America by the Middle Triassic. The main magmatic arc attributed to this subduction is the Sierra Nevada batholith located to the west of northeast Nevada. Related magmatism in northern Nevada includes Middle Jurassic back arc volcanic-plutonic complexes. Early Cretaceous S-type granites to Late Cretaceous I-type granites emplaced in northern Nevada are related to progressive crustal thickening during the Cretaceous Sevier and Laramide Orogenies. Numerous regional extensional basins started to develop in northeastern Nevada and western Utah in the Middle Eocene and a distinctive high potassium calc-alkaline magmatism was emplaced at approximately 42 Ma. Eocene extension is interpreted to have been largely accommodated by the reactivation of earlier structures. Middle Eocene magmatic rocks include the deposition of volcaniclastic rocks, ash-flow tuffs, and flows in newly formed basins, subsequent basin fill volcanic rocks, small flow-dome complexes, and high-level intrusions and dikes. Regionally, Eocene dikes range in composition from porphyritic dacite, basalt-andesite, and rhyolite.

Figure 7-1: Location of Jerritt Canyon Within the Nevada Gold Belt



Note: Adapted from SLR Consulting (Canada) Ltd., 2021. Source Johnston et al. (2008).

Carlin-type gold mineralization is preferentially hosted by Ordovician to Devonian shallow shelf-slope carbonate sequences. These rocks are commonly referred to as “Lower Plate” rocks owing to their position in the footwall of the regional Roberts Mountain Thrust. The deep water siliciclastic dominant rocks forming the hanging wall of the Roberts Mountain Thrust are commonly referred to as “Upper Plate” rocks. This sequence of less reactive and less permeable upper plate rocks, acting as an aquitard over variable to highly permeable lower plate rocks, is regarded as a primary control on the deposition of Carlin-type gold mineralization. The Carlin-type gold deposits in northeastern Nevada formed in the Middle to Late Eocene during the period 42 Ma to 36 Ma. Mineralization is regarded as part of a magmatic-hydrothermal event related to regional extension utilizing reactivated, variably oriented pre-Eocene structures.

Finally, during the Miocene (14-20 Ma) basin-and-range extension occurred; the tectonic event is dominated by north-south normal faulting forming the traditional valley and range landscape. Deposition of Carlin Formation volcaniclastic sediments in basins and the emplacement of rift related basaltic flows and its feeder zones occurred during this period.

Figure 7-2 shows the general stratigraphic section of the Jerritt Canyon district and Figure 7-3 shows the Project geology. The stratigraphic units present at Jerritt Canyon from younger to older are:

- Intrusive rocks (JKi);
- Snow Canyon Formation (Osc);
- Waterpipe Canyon Formation (Mwc);
- Roberts Mountain Formation (DSrm);
- Hanson Creek Formation (SOhc12, SOch3, SOhc45);
- Eureka Quartzite (Oe);
- Pognip Group (Op).

7.2. Local Geological Setting

The local geology for the Smith Mine, SSX Mine, WGen Mine, and Murray Mine deposits are described in the following sub-sections, and the locations of these deposits is shown in Figure 7-4. These four gold deposits contain more than 90% of the Mineral Resource estimates detailed in Section 14.

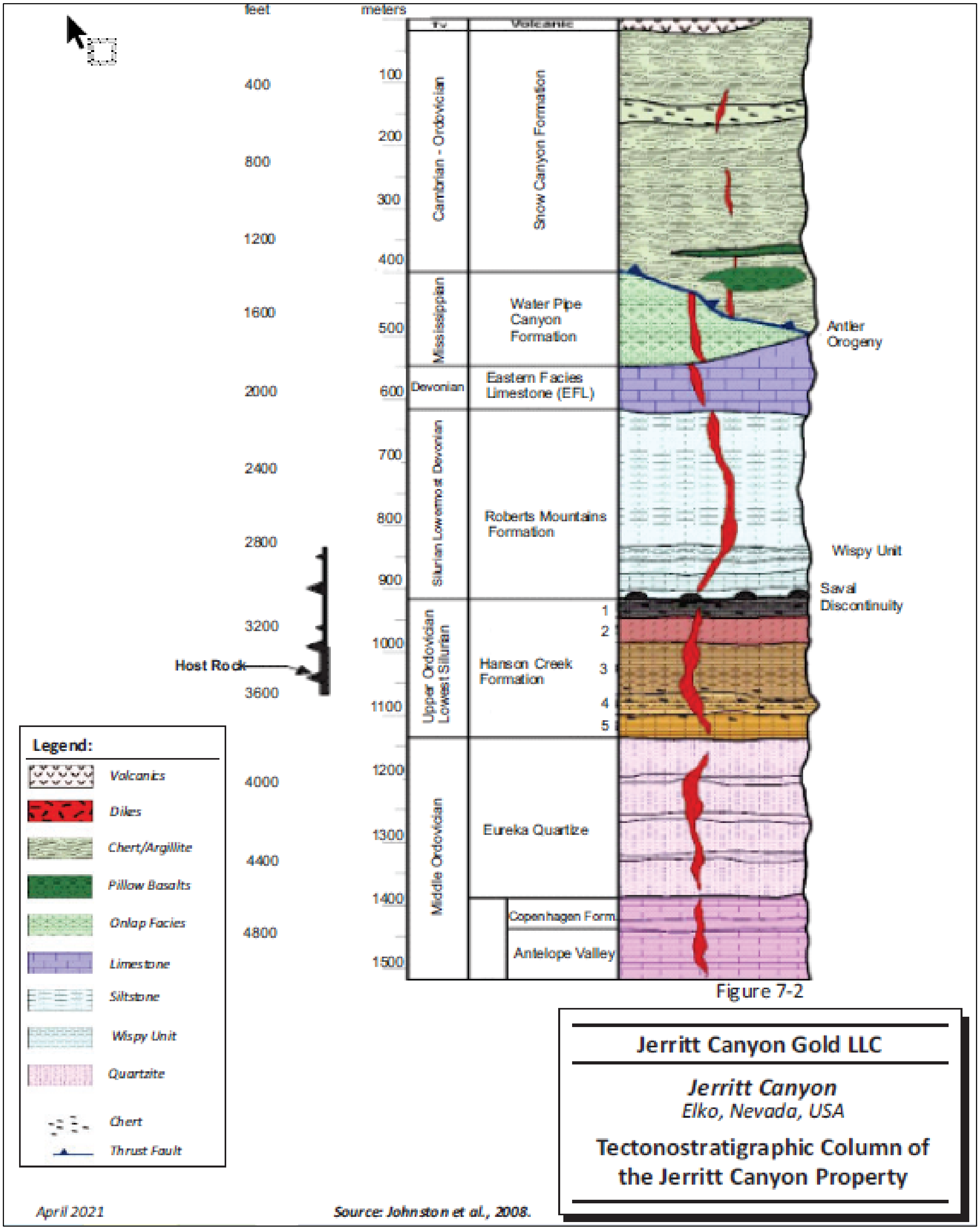
7.2.1. SSX Mine

The drift connecting the SSX and Steer mines was completed in the latter half of 2005 and the mines have been operated as a single unit referred to in this Report as the SSX mine.

The SSX deposit was discovered in the early 1990s following the northeast structural trends between the Burns Basin and California Mountain deposits and the west-northwest trends from the Steer/Saval deposits. Mining at SSX began in 1997.

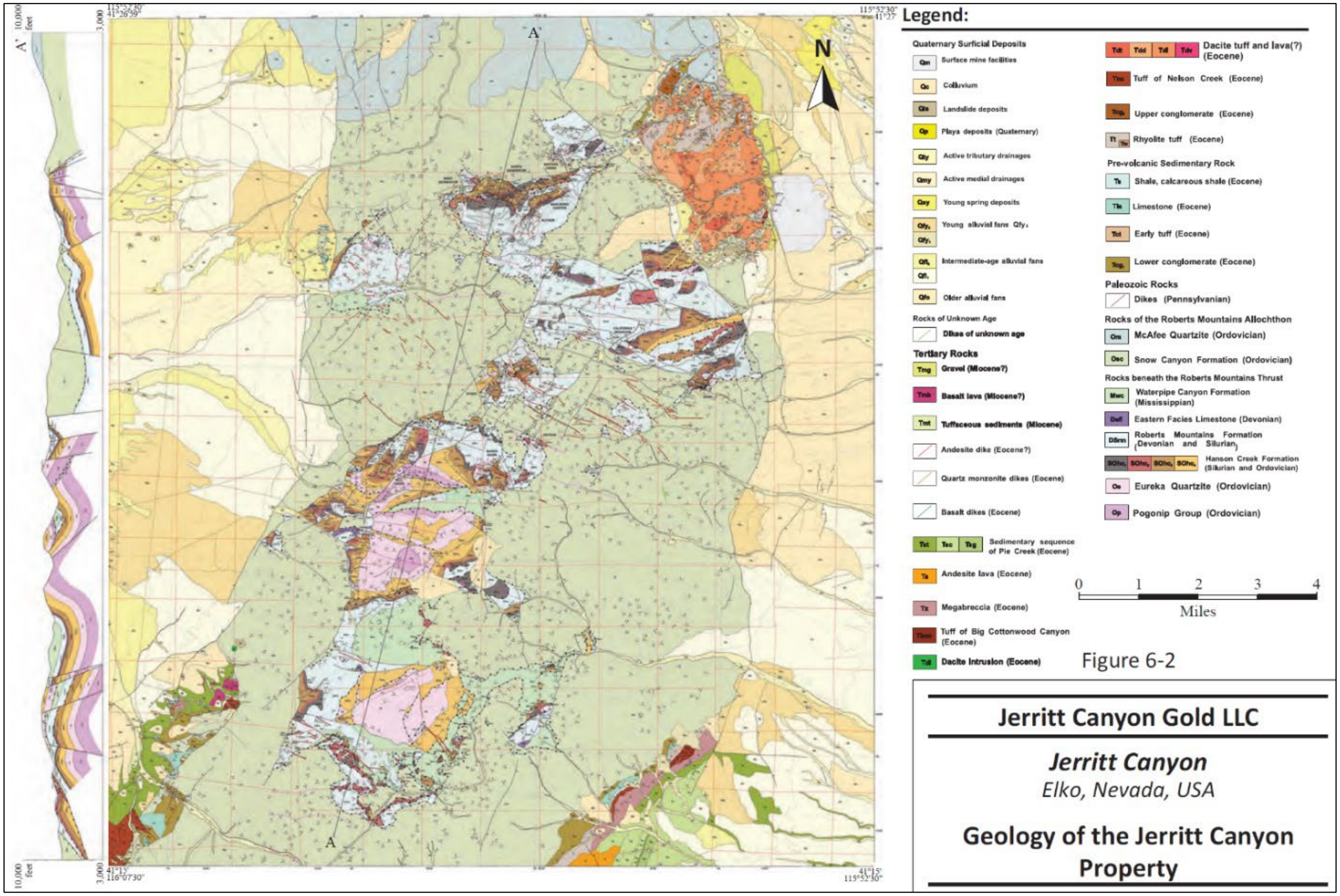
While the resource wireframes indicate a distinct northwest trend in the eastern portion of the SSX area, a generally more east-west trend is exhibited in the Steer Domain. Additionally, the mineralized zones are more continuous in the SSX area ranging from 200 ft to 2,000 ft in length along the northwest strike and 50 ft to 200 ft in width, with thickness ranging from 10 ft to 100 ft.

Figure 7-2: Tectonostratigraphic Column of the Jerritt Canyon Project Area



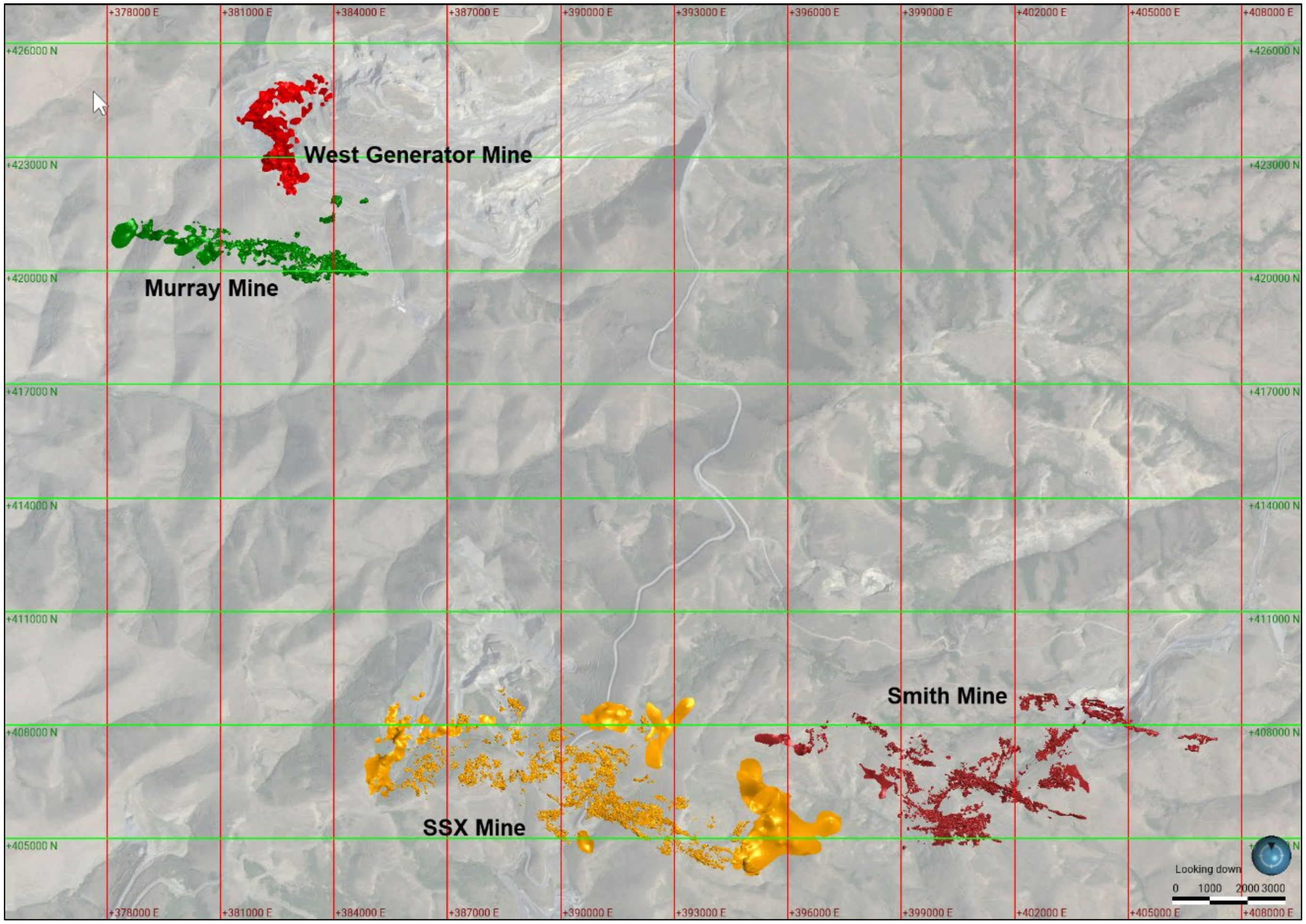
Note: Adapted from SLR Consulting (Canada) Ltd., 2021. Source Johnston et al. (2008).

Figure 7-3: Geology of Jerritt Canyon Project Area



Note: Adapted from SLR Consulting (Canada) Ltd., 2021. Source Nevada Bureau of Mines NBM OF 07-3.

Figure 7-4: Gold Mineral Deposits of the Northern Jerritt Canyon Project Area



Note: Figure prepared by First Majestic, April 2023.

Note: When used for plan maps and figures, this compass symbol is a graphical representation of grid north, with the black triangle marking north. All map scales are in feet unless otherwise noted.

Mineralization at Steer is less continuous ranging from 50 ft to 500 ft in strike length and 50 ft to 300 ft in width, with thickness ranging from 20 ft up to 100 ft. The depth to mineralization ranges from near surface at the west end of Steer to a depth of approximately 800 ft below the surface for most of the SSX deposit. Most of the mineralization occurs between 600 ft and 1,000 ft below the surface.

SSX mineralization occurs predominantly in the micritic unit III of the Hanson Creek Formation. A smaller portion of the mineralization occurs in calcareous siltstone at the base of the Roberts Mountains Formation or in the upper two cherty and dolomitic members of the Hanson Creek Formation. Mineralized zones are localized in and near west-northwest-trending steeply dipping dikes (e.g., South Boundary Dike); however, dike material is a minor component of the mineralized material at SSX. Mineralization is also localized along cross-cutting northeast-trending faults. Folding of the mineralized horizons is apparent along axes parallel to the west-northwest dike trend and, more prominently, parallel to the northeast fault set. Gold occurs in decarbonatized rock, commonly in association with variable amounts of orpiment and realgar. Silicification with stibnite can also be associated with gold in portions of the upper cherty member of the Hanson Creek Formation.

Gold mineralization in the Steer portion of the SSX complex has been identified in an area stretching approximately 3,000 ft east from the old Steer pit to halfway along the connection drift to SSX Zone 5. Most gold mineralization at Steer is associated with gently dipping structures cutting through the Hanson Creek Formation unit III. These structures strike northeast and dip southeast, offsetting strata. Zones of mineralization typically follow the structures and tend to be broad and relatively thin. The mineralized zones are usually at the contact between the Hanson Creek Formation units III and IV and occasionally follow the structures up through unit III. Both within the Steer portion and the western side of SSX, several low-angle features have been observed. These features are at least partly responsible for the gold mineralization at the contact of the Hanson Creek Formation units III and IV.

In the eastern portion of the Steer area, high grade mineralization is associated with the Husky Fault, a major northeast-trending normal fault with approximately 300 ft of normal dip-slip displacement to the southeast. Major northwest trending dikes appear to have locally compartmentalized high-grade mineralization. The intersection of these dikes with the Hanson Creek Formation unit III and the Husky Fault and its related structures offers excellent exploration potential. One of these dikes is interpreted to be the western extension of the South Boundary dike, which is an important structure controlling gold mineralization at SSX to the east.

At Steer and SSX, the structural intersections are the primary targets for resource expansion, as well as the westward extension of the South Boundary dike. The gold domain wireframes for the SSX deposit are illustrated in Figure 7-5.

7.2.2. Smith Mine

The Smith mine, accessed from near the bottom of the DASH open pit, began operations in 1999 as the DASH open pit was being mined out. Gold mineralization in the Smith, Mahala, and West DASH deposits is associated with the northeast-trending Coulee Fault and west-northwest-trending faults and dikes. The mineralization at Smith generally trends northwest with minor northeast trends along minor structures. Mineralization is continuous along the northwest trend ranging from 200 ft to 2,500 ft. The width of the mineralization ranges from 20 ft to 400 ft and the thickness ranges from 10 ft to 100 ft. The depth of the mineralization ranges from near surface at the DASH open pit to 1,200 ft below the surface to the south and east.

In Smith Zone 1, high-grade gold mineralization is hosted in the upper and middle portions of the Hanson Creek Formation unit III within a northwest-trending horst block between the South Graben Fault and the 170 fault. Mineralization in Zones 2 and 3 is directly associated with west-northwest-trending dikes. High-grade mineralization occurs within the Hanson Creek Formation units II and III along the steeply dipping dikes. Lesser amounts of mineralization exist at higher levels where the dikes intersect favourable beds in the Roberts Mountains Formation. An exception to the tight elevation controls on mineralization is observed at the intersection of the west-northwest-trending dikes and the Coulee Fault. Here, high-grade mineralization extends into the Hanson Creek Formation unit III along the west plunging intersection of the dikes and the fault for a down-dip depth of 600 ft. The gold domain wireframes for the Smith deposit are illustrated in Figure 7-6.

7.2.3. West Generator Mine (WGen)

The geologic model of WGen mineralization has a north-northwest trend, and this control is believed to coincide with the West Generator Fault and local anticlinal folding (Figure 7-7). Mineralized zones range from 400 ft to 700 ft in length and 100 ft to 350 ft in width, with thickness ranging from 20 ft to 200 ft. The depth to mineralization ranges from approximately 190 to 1000 feet below surface. Most of the mineralization occurs between 50 ft and 550 ft below the surface.

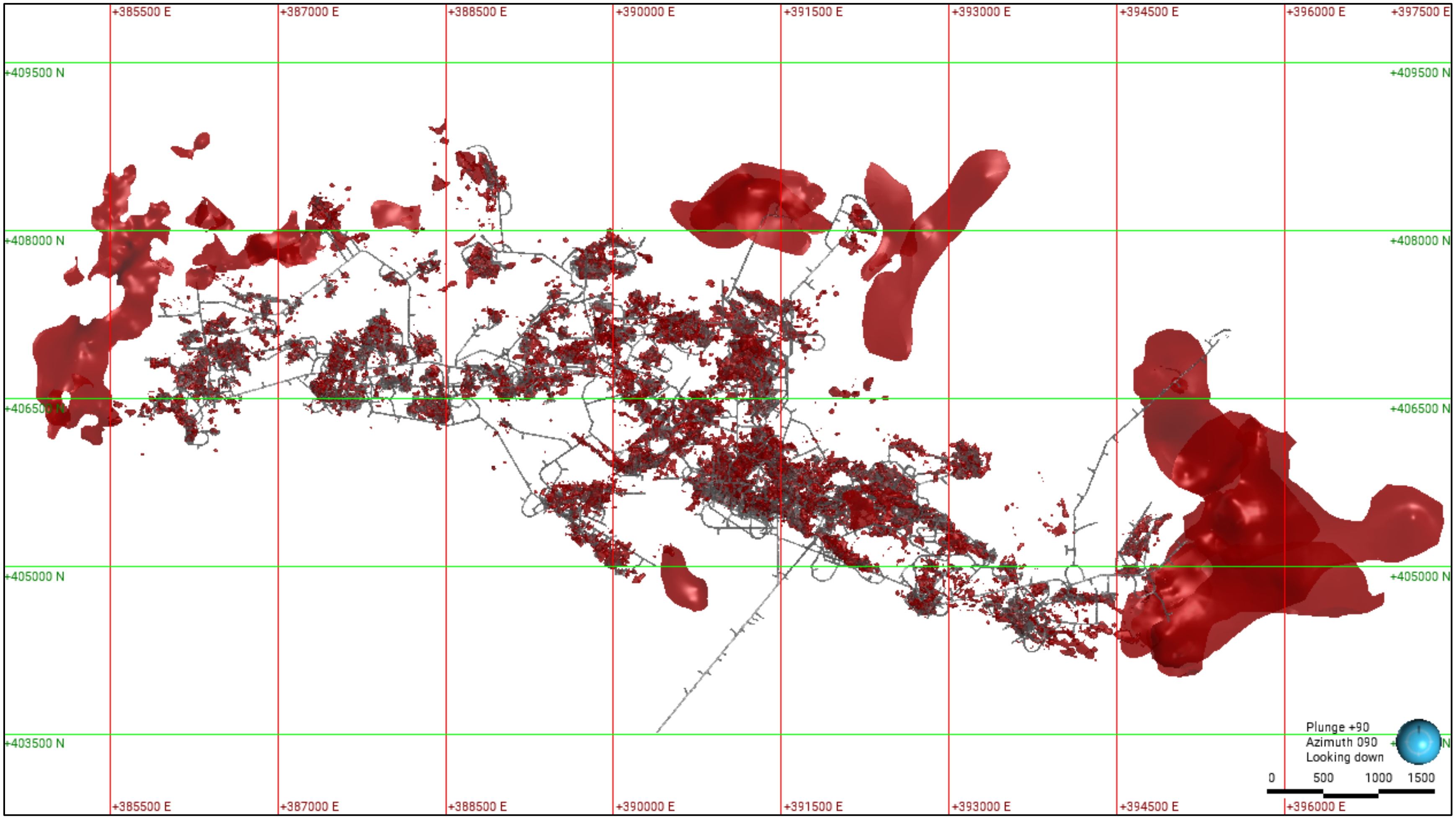
The WGen underground mineralization is hosted mainly in the basal unit of the Roberts Mountain Formation. Gold mineralization at the North Generator and West Generator open pits appears to be controlled by a anticlinal feature that varies from a roughly east–west (North Generator) to a northwest-trending axis (West Generator Pit), this change in orientation on folding and the unusual orientation to the mineralization at WGen underground could be due to the influence of the West Generator Fault, a roughly north–south structure exposed in the West Generator pit and offsets Snow Canyon siliciclastic rock juxtaposing it against the Roberts Mountains Formation at the bottom of the pit.

7.2.4. Murray Mine

Gold domain wireframes indicate a strong west-northwest trend in the Murray mineralization, and this control is believed to coincide with the New Deep Fault and related anticlinal folding (Figure 7-8). Mineralized zones range from 200 ft to 1,000 ft in length along the northwest strike and 50 ft to 200 ft in width, with thickness ranging from 20 ft to 160 ft. The depth to mineralization ranges from approximately 500 to 1000 feet below surface. Most of the mineralization occurs between 600 ft and 900 ft below the surface.

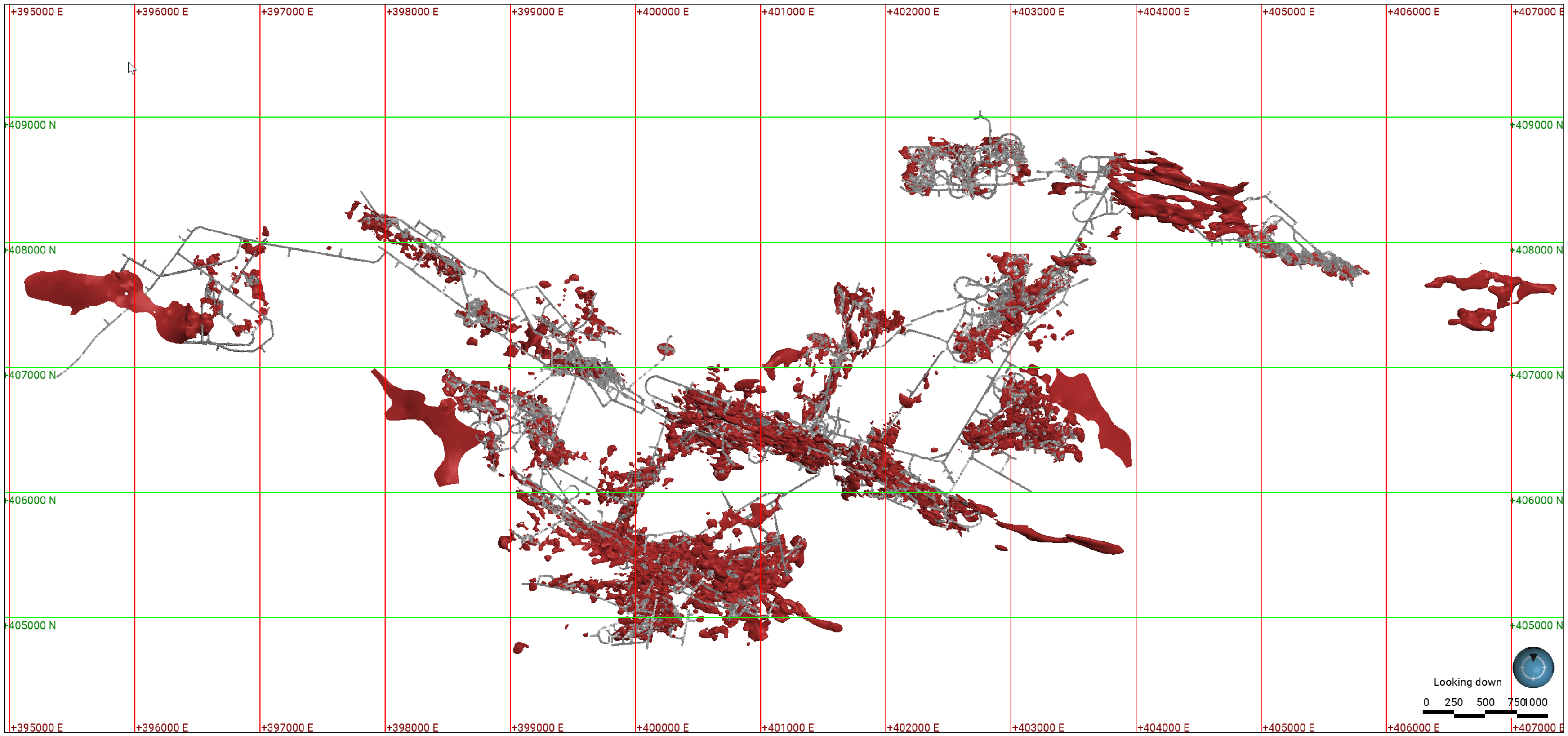
Murray mineralization occurs predominantly in the basal calcareous siltstone unit of the Roberts mountains formation and in the micritic unit III of the Hanson Creek Formation. A minor portion of the mineralization (mainly structurally controlled) is also hosted on unit IV of the Hanson Creek Formation. Mineralized zones are localized around west-northwest-trending, steeply dipping dikes; secondary controls to mineralization are cross-cutting northeast-trending faults. There appears to be a thrust fold related repetition of stratigraphy and anticlinal folding; the leading edge of this fold appears to be another control to mineralization. Gold occurs in decarbonatized and or silicified rock, commonly in association with variable amounts of orpiment and realgar. Silicification with stibnite can also be associated with gold in portions of the upper cherty member of the Hanson Creek Formation.

Figure 7-5: Model of Gold Mineralization for the SSX Mine



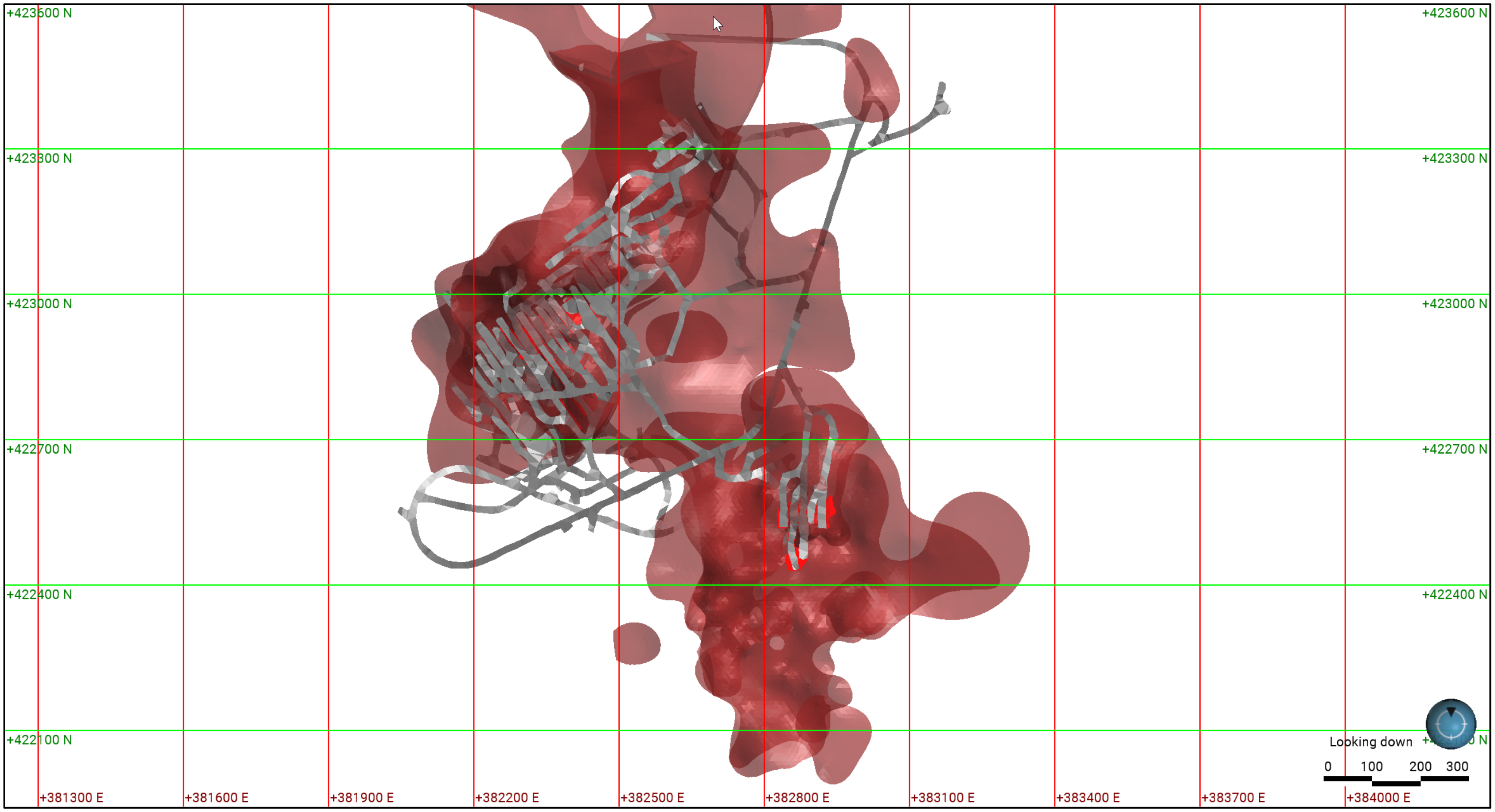
Note: Figure prepared by First Majestic, April 2023.

Figure 7-6: Model of Gold Mineralization for the Smith Mine



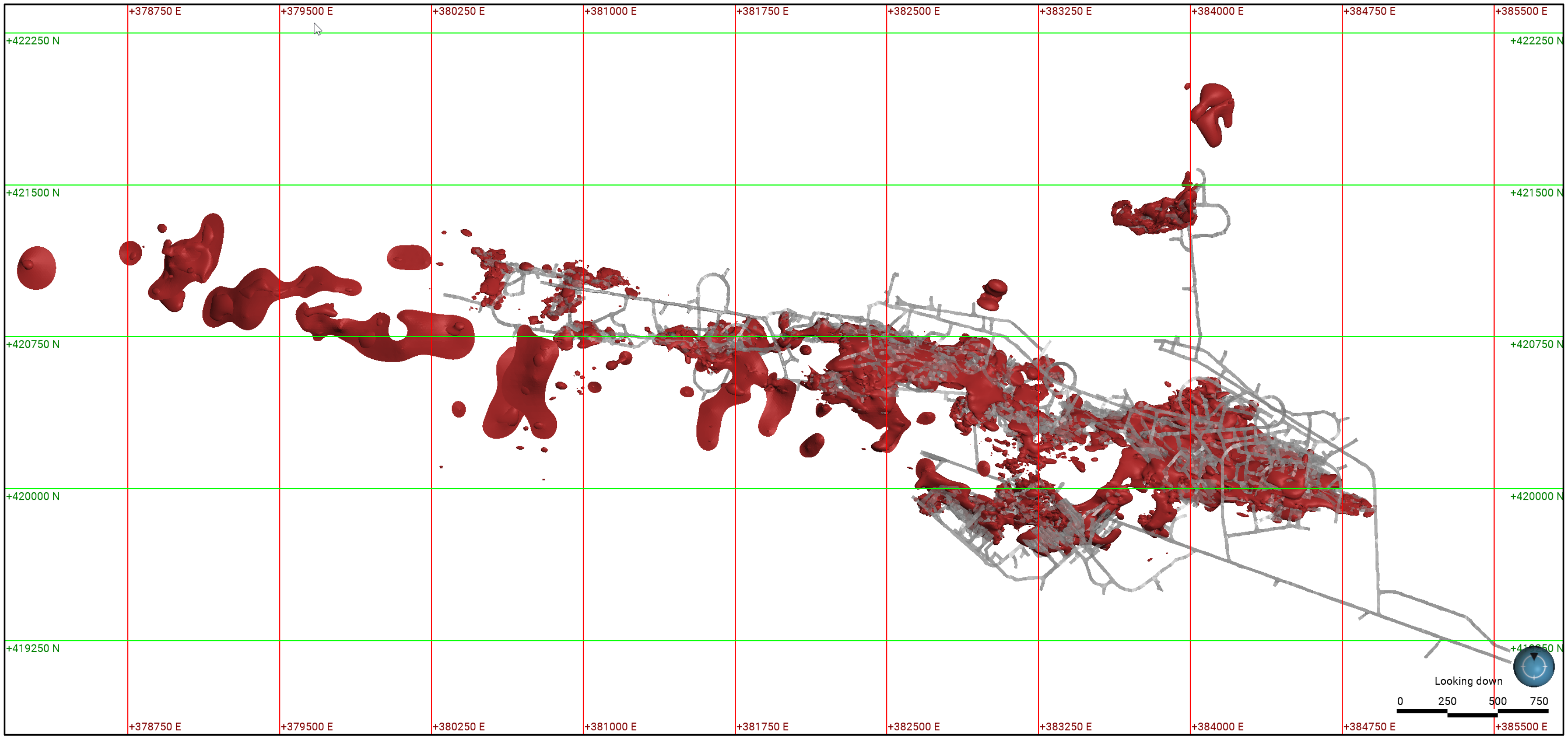
Note: Figure prepared by First Majestic, April 2023.

Figure 7-7: Model of Gold Mineralization for the West Generator Mine



Note: Figure prepared by First Majestic, April 2023.

Figure 7-8: Model of Gold Mineralization for the Murray Mine



Note: Figure prepared by First Majestic, April 2023.

7.3. Mineralization

The occurrence and distribution of gold mineralization at Jerritt Canyon is controlled both by lithology and structure. Gold mineralization at Jerritt Canyon is hosted by the Hanson Creek Formation units I to III and the lower part of the Roberts Mountains Formation. The Saval discontinuity, being the contact between the Hanson Creek and the Roberts Mountain Formations, is interpreted as a primary control on gold mineralization at Jerritt Canyon.

Gold mineralization is hosted by, or spatially associated, with high-angle west-northwest and north-northeast-trending structures. Much of the more continuous gold mineralization occurs within favourable stratigraphic intervals along the limbs or hinge zones of large anticlinal folds, and at the intersection of the two sets of high-angle structures. The mineralized zones form along well defined structural and mineralization trends as stratigraphically controlled tabular pods that are locally stacked upon one another resulting from the presence of more than one favourable stratigraphic unit and/or local thrust and/or high angled-fault intersection controls.

The sediment-hosted gold mineralization is hosted within carbonaceous sediments. Gold occurs as very fine-grained micron-sized particles as grain boundaries or inclusions in arsenic-rich pyrite rims, and as free grains in carbonaceous-rich and fine-grained, calcareous, clastic sedimentary rocks.

Alteration in the Jerritt Canyon district includes silicification, dolomitization and reconstitution of organic carbon, decalcification, argillization, and pyritization (typically containing elevated arsenic). The rocks also exhibit hypogene and supergene oxidation and bleaching. The most important alteration types relative to gold deposition are silicification, and reconstitution of organic carbon, pyritization, and decalcification.

8. DEPOSIT TYPES

8.1. Deposit Style

Jerritt Canyon is a Carlin-type gold deposit, hydrothermal in origin, and structurally controlled within specific lithologies as favorable host rock.

Jerritt Canyon gold mineralization is hosted by silty carbonate or carbonaceous siliciclastic rocks originally deposited as shelf sedimentary rocks during the Paleozoic age. The Paleozoic host rocks have been imbricated, faulted, and folded through several orogenic events in the Paleozoic and Mesozoic. An early phase of intrusive igneous activity is represented by west-northwest mafic igneous dikes of Paleozoic age.

Carlin-type gold deposits formed during the Middle to Late Eocene during an initial phase of extensional tectonics at which time high potassium calc-alkaline magmatic rocks were emplaced. Mafic and intermediate igneous dikes were emplaced during this phase of igneous activity and demarcate north-northeast-oriented structures. The primary controls on the occurrence, distribution, and form of the deposits are:

- Favourable host rocks (formation units);
- The reactivation of Paleozoic and Mesozoic structures;
- Eocene syn-mineralization normal faults.

Gold mineral deposits at Jerritt Canyon are mostly strata bound or fault hosted. Gold occurs as very fine, micrometer sized, particles in pyrite and arsenian pyrite. Other sulfides are orpiment, realgar, and stibnite. Alteration includes decarbonatization, decalcification, and silicification (jasperoid).

There are currently several models for the genesis of Carlin-type gold deposits:

- Epizonal plutons that contributed heat and potentially fluids and metals;
- Meteoric fluid circulation resulting from crustal extension and widespread magmatism;
- Metamorphic fluids, possibly with a magmatic contribution, from deep or mid-crustal levels;
- Upper-crustal orogenic-gold processes within an extensional tectonic regime.

8.2. QP Comment on Section 8 "Deposit Types"

The QP is of the opinion that exploration programs that target a Carlin-style deposit model are appropriate for the Project area.

9. EXPLORATION

The early, major discoveries in the Jerritt Canyon district were made by following predominantly northeast- and northwest-trending structures within the Lower Plate rocks exposed in the area. Exploration activities completed on the Project by various owners prior to First Majestic's project interest have included prospecting, geological mapping, various types of geophysical surveys and various types of geochemistry.

9.1. Geological Mapping

Geological maps, sections and sketches pertaining to the Project are numerous, and are located in the data archives at the Jerritt Canyon mine site, representing more than 35 years of exploration.

In 1984, the "Jerritt Gold Study" was undertaken as a collaboration between Freeport and the United States Geological Survey (USGS).

A digital compilation of the historical geological mapping completed by the Nevada Bureau of Mines and Geology (NBM) was followed by new geological mapping completed by NBM during 2005-2007. This resulted in the publication of a comprehensive geological map for the Project (NBM OpenFile 07-3) (refer to Figure 7-3).

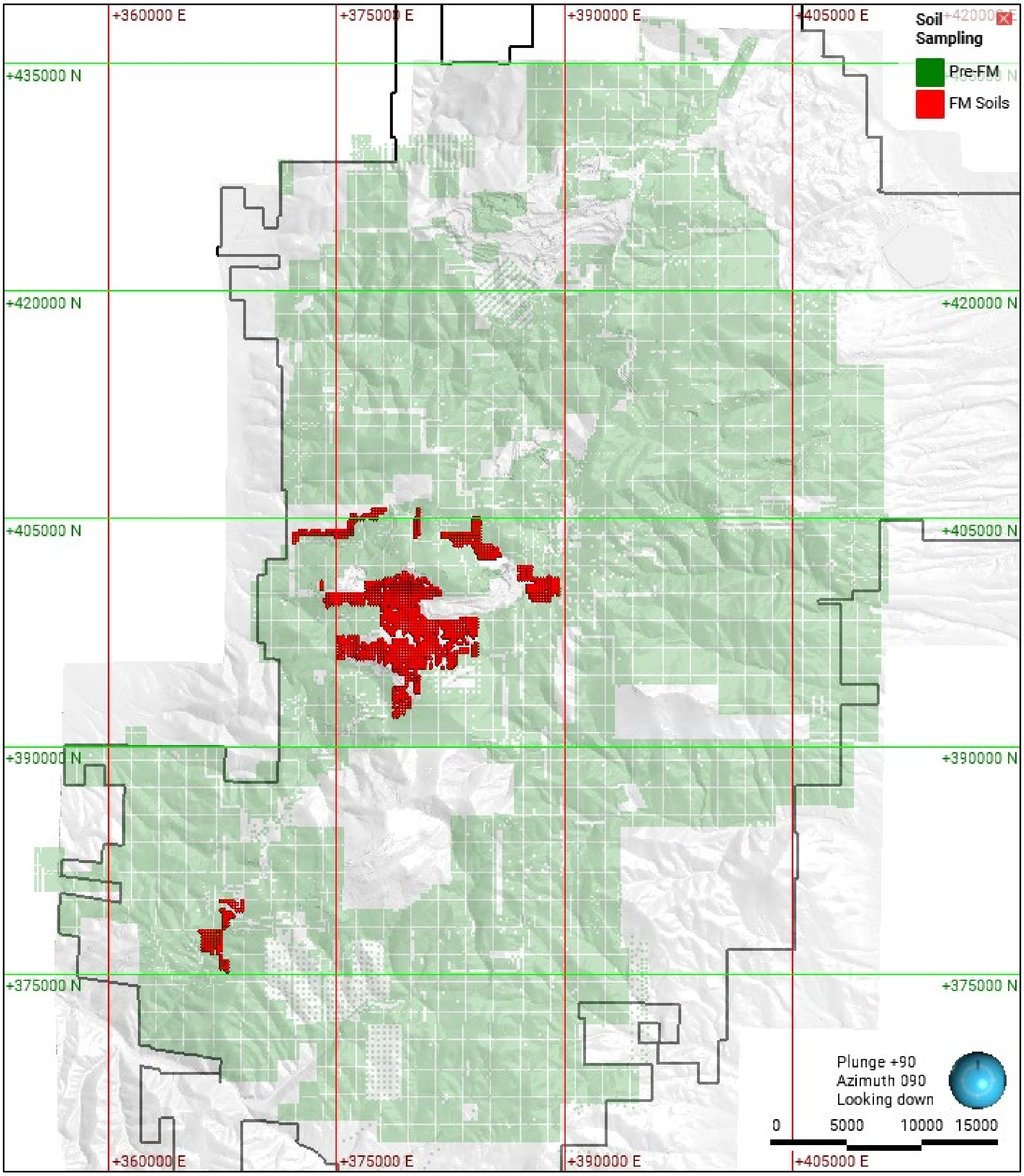
Geological surface mapping by First Majestic personnel of the Upper Plate rocks that cover the primary Lower Plate gold host rocks on the Project has continued to the Report signature date . Surface mapping on Upper Plate focuses on the identification of structures that may evidence "leakage" of mineralized fluids from the underlying more favorable Lower Plate rocks through the Upper Plate. Structures with evidence of alteration and returning geochemically anomalous values (gold, arsenic, thallium, mercury) were further defined in order to project their intersection with favorable rocks and drill test.

9.2. Geochemistry

Geochemical surveys completed on the Project include soil and stream sediment sampling and outcrop, trench, and road cut bedrock sampling. In addition, exploration/research oriented geochemical studies have been completed along the Saval discontinuity and on the mafic dikes.

The soil geochemical database for Jerritt Canyon consists of 59,611 samples collected over 30 years, including 1,232 samples by First Majestic in 2021 (Figure 9-1). Approximately 24,000 surface rock chip samples have been collected in the same time frame, rock and soil samples are used as vectoring tools to determine areas that merit drill testing.

Figure 9-1: Soil Sampling Location Map



Note: Figure prepared by First Majestic, April 2023.

9.3. Geophysics

Considerable geophysical work has been completed throughout the Jerritt Canyon Project area since the early 1970s by numerous contract geophysical companies. This includes numerous ground surveys using magnetic, electric, and electromagnetic (EM) methods, gravity surveys, and airborne magnetic, radiometric, and EM surveys. During 2015, JCG contracted consulting geophysicist R.B. Ellis to compile and interpret the available historical geophysical survey data. Ellis (2016) noted:

- The self potential (SP), gradient array, early audio magnetotelluric (AMT) survey, and 3D resistivity (ESCAN) surveys are not expected to provide consistently useful targeting information in the future. The SP and gradient array have uncertain depth information making them of little value. The AMT and ESCAN were acquired in specific areas to estimate the depth to more resistive lower plate rocks. If these survey areas undergo further exploration, the datasets are in a format where they can be easily reviewed and may provide value when combined with geochemistry and geological mapping;
- The radiometric and airborne electromagnetic resistivity data collected as part of the DIGHEM survey do not show a consistent signature with known mineralization. These datasets have been reviewed over the years in their present form and there is little probability that some general correlation with mineralization has gone unrecognized;
- There is evidence that elevated induced polarization (IP) values (due to increased abundances of sulfide minerals) occur within and proximal to areas of gold mineralization. Additional IP surveying in prospective areas is worth consideration;
- Inversion of the gravity data provides a 3D picture of the distribution of the density of the various rock types located at Jerritt Canyon. High density rocks are seen to flank the Independence Range with a north-south trending lower density core present that may be dominated by less dense intrusive rocks or deeper low-density sediments. Locally, a correlation exists between low density anomalies and mineralization trends (e.g., the SSX deposit) that may identify areas of decalcification. This correlation should be examined in well known areas to understand the extent to which decalcification is being identified and can be used for broader targeting. While the use of density contrasts to identify areas of low-density readings that may represent areas of decalcification is complicated by the terrain correction factor, the results have identified areas of density lows that have not been tested by drilling;
- Inversion of the DIGHEM aeromagnetic data shows a good correlation of magnetic susceptibility highs with known intrusive rocks. Intrusive rocks interpreted to be present at Starvation Canyon are shown to extend northeast across the core of the mineralized area at depth. There is an observed correlation of intrusive rocks with mineralization at Starvation Canyon and along the northwest SSX deposit trend. The source of the magnetic susceptibility highs is interpreted to be an infusion of intrusive dikes. These dikes increase the total magnetic susceptibility of the non-magnetic host lithologies that extend to depth into more coherent intrusive stocks. Similar susceptibility signatures to those at SSX, Burns, and Starvation Canyon may identify other areas for more detailed examination by geologic mapping and geochemical methods;

- Based on the new gravity and magnetic inversion modelling, there is strong evidence for the presence of intrusive rocks on the east flank of the Independence Range adjacent to and beneath the Tertiary Mill Creek volcanic rocks and gravel.

In early 2017, JCG commissioned further detailed evaluation of the historical gravity data, inversion and examination of DIGHEM EM and magnetic data, inversion and examination of the ground magnetic data, and examination of the Titan survey results. This work has been completed by Condor Consulting (Witherly, 2017). The main observations and conclusions include:

- DIGHEM EM: Over much of the Jerritt Canyon Project area, there is a good relationship between the high resistivity and Lower Plate rocks. In some areas, however, there is high resistivity and no Lower Plate rocks, and the reason for the high resistivity is unclear. Additionally, in some areas mapped as Lower Plate, the resistivity has moderate values, and it is not clear whether this is due to a soil cover or change in the physical properties of the Lower Plate rocks;
- DIGHEM EM magnetics: The magnetic results show mostly low response which is inconclusive. The major feature is a strong magnetic high wrapping along the eastern margin of the range that appears to be associated with Tertiary volcanic rocks, much of it being located under Quaternary cover. While there are limited exposures of Tertiary volcanic rocks on the western margin of the range, these do not appear to be magnetic. There could be significant structural information contained in the magnetic data which could be defined with suitable processing;
- DIGHEM EM radiometrics: Potassium is relatively low over two major Lower Plate areas, the Burn's Creek/Charlies Hill and Wheeler Mt. There are a series of lows across the top of the survey area where no significant Lower Plate rocks occur. The apparent resistivity values are high in the same areas, which suggests that there is a specific rock unit that is part of the Upper Plate package being mapped;
- Gravity survey: The reasons for the gravity pattern described in Ellis (2016) are not well understood. The Lower Plate rocks are expected to be of higher density; however, this is not clear from the images examined. Given the cost of acquisition of the primary data, the survey results should be reviewed in detail, and it should be ensured that the most suitable form of terrain correction has been applied;
- IP-Titan resistivity: The resistivity results show that the Lower Plate rocks (eastern 40% of the survey block) are quite resistive at all depths. The western part of the block over Upper Plate rocks is medium-conductive at a shallow depth, however, a strong conductive zone is noted in the central part of the block at depths of approximately 1,500 ft;
- IP-Titan chargeability: The chargeability shows a strong response from surface to a depth of 2,500 ft, where the contact between the Upper Plate and Lower Plate rocks is assumed to be located. The chargeability zone can be seen to extend over 4,000 ft (sections are 2,000 ft apart) whereas the resistivity low only goes to depth on one section. Based on resistivity and chargeability data, the contact between the Upper Plate and Lower Plate rocks cannot be defined with certainty;

- IP-Titan magneto-tellurics (MT): The modelled MT results were visually examined and while they appeared to show some strong subvertical features, there was little evidence that any layering between the Upper Plate and Lower Plate rocks was being mapped.

In the spring of 2017, JCG commissioned Goldspot Discoveries Inc. (Goldspot) to complete a machine learning (AI) compilation, interpretation, and targeting study. The 2017 Goldspot study incorporated several datasets from Jerritt Canyon including drilling (lithology and assay), surface geology, topography, soil geochemistry, gravity, DIGHEM EM, magnetic, and radiometric data. Goldspot incorporated hyperspectral data into the compilation and interpretation. Based on the 2017 study, Goldspot generated target areas, planned drill holes, and completed a 3D geological model incorporating structural and lithological information in Leapfrog software.

Drilling remains the best and most widely used exploration tool within the Jerritt Canyon Project and is described in Section 10 of this Report.

10. DRILLING

10.1. Introduction

Prior to First Majestic's involvement at Jerritt Canyon, historic drilling programs completed 15,509,312 feet of drilling in 76,980 drill holes, and since May of 2021, First Majestic completed surface and underground drilling programs consisting of 6,027 drill holes with a total of 1,068,239 feet. Tables 10-1 and Table 10-2 summarize the drilling completed both historically and by First Majestic. Drill collar locations at the Property are shown in Figure 10-1.

10.2. Drilling Methods

Over the history of the exploration drilling on the Project, several different drilling techniques have been employed including:

- Reverse circulation (RC) surface;
- RC underground (Cubex);
- Core;
- Air rotary;
- Mud rotary.

Tables 10-3 to Table 10-4 list the drill holes completed by drill hole type. For drill type location and distribution at SSX and Smith see Figure 10-2 and Figure 10-3.

10.2.1. Surface RC Drilling

Surface RC drilling is used for exploration purposes. Widely spaced offset holes from open, known mineralization or geological features are the most common drilling targets. RC holes range in diameter from 11.4-17.8 cm. Diameters of 6.5 cm and 17.15 cm are currently used for exploration. RC drilling reaches depths ranging from 100 to 1,600 feet.

Collar surveys by the mine surveyors are transferred electronically from the global positioning system (GPS)/total station instrument to the computer of the appropriate project geologist who validates the data and then emails the data to the site database administrator to load into the acQuire database.

Down hole surveys are completed with the use of gyroscopic and magnetic surveys; with results transmitted electronically and then loaded to the database using pre-set software. Gyroscopic and magnetic surveys are normally reported at 10 feet or 50 feet intervals down hole.

Table 10-1: Historic Drilling Completed through April 2021

Historic Drilling at Jerritt Canyon		
Year	**No. Holes**	**Total Drilled Feet**
1973	12	1,582
1974	84	16,306
1975	106	20,678
1976	23	3,493
1977	169	54,998
1978	598	182,610
1979	460	133,237
1980	453	99,605
1981	424	140,902
1982	457	137,579
1983	310	101,409
1984	467	160,957
1985	693	239,178
1986	414	160,464
1987	509	210,785
1988	821	366,102
1989	1,077	471,877
1990	713	374,397
1991	1,336	931,033
1992	1,076	802,091
1993	1,099	718,723
1994	517	443,245
1995	723	157,764
1996	295	213,598
1997	530	376,864
1998	456	194,982
1999	829	351,183
2000	3,888	784,134
2001	235	113,806
2002	6,736	526,426
2003	5,871	419,862
2004	5,896	828,808
2005	4,981	505,837
2006	3,308	440,515
2007	3,437	500,069
2008	1,011	236,758
2009	*NO DRILLING*	
2010	1,152	79,831
2011	1,065	251,613
2012	799	122,854
2013	1,788	259,087
2014	1,664	189,761
2015	2,188	288,833
2016	3,474	469,404
2017	3,057	536,849
2018	2,878	468,401
2019	3,175	508,732
2020	4,085	715,137
2021	1,641	196,958
Grand Total	**76,980**	**15,509,312**

Table 10-2: Drilling Completed to March 31, 2023, by First Majestic

Drilling by First Majestic at Jerritt Canyon		
Year	**No. Holes**	**Total Drilled Feet**
2021	2,919	543,884
2022	2,861	482,442
2023	247	41,913
Grand Total	**6,027**	**1,068,239**

Table 10-3: Historic Drilling Completed by Drill Hole Type

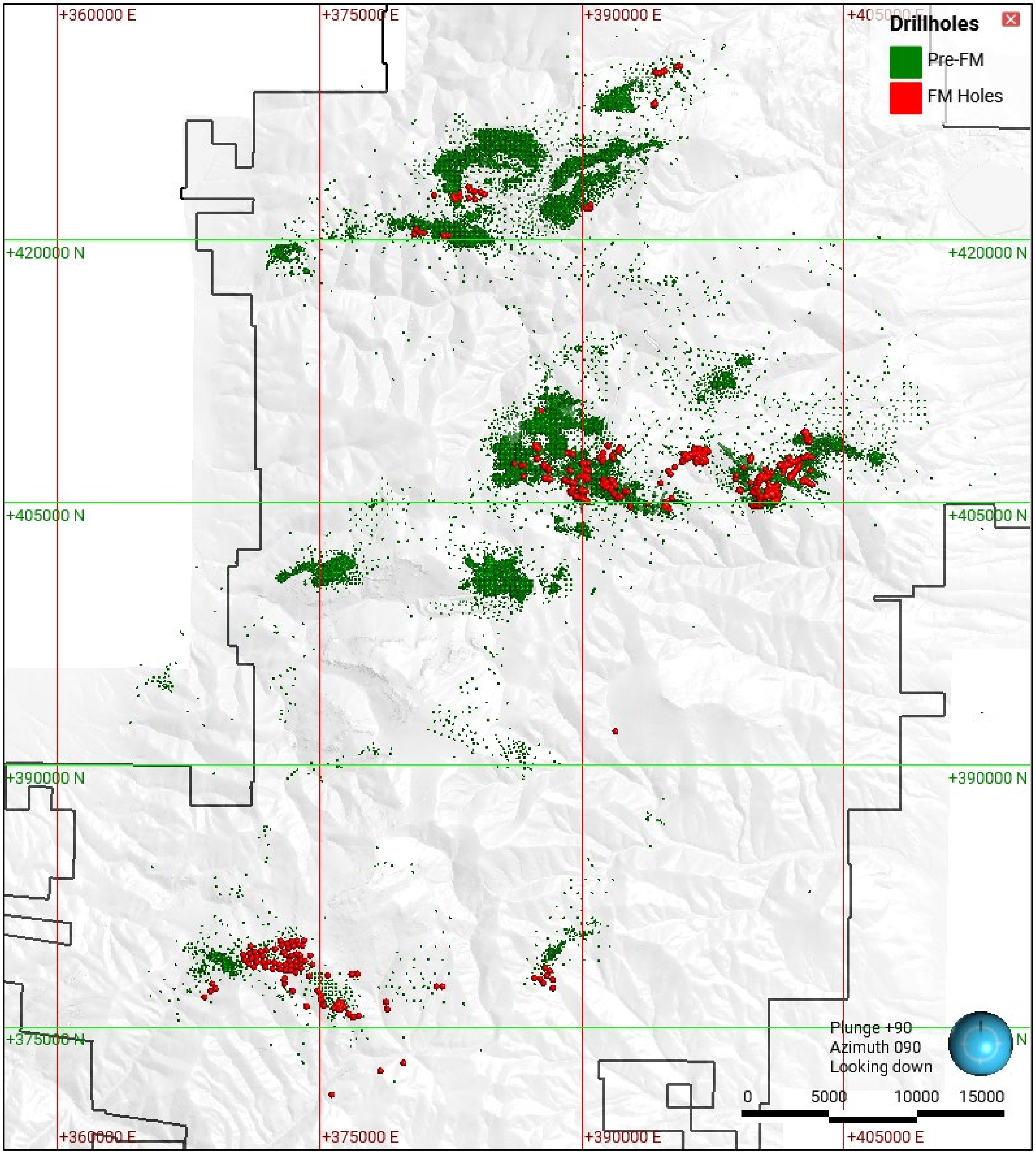
Historic Drilling at Jerritt Canyon		
Surface Drill Type	**No. Holes**	**Total Drilled Feet**
Reverse Circulation	14,849	8,490,308
Core	164	93,582
Other	477	192,411
Total	**15,490**	**8,776,301**
UG Drill Type	**No. Holes**	**Total Drilled Feet**
Reverse Circulation	48,981	5,252,408
Core	2,399	1,081,883
Other	10,110	398,721
Total	**61,490**	**6,733,012**

Note: Other includes holes that have an RC pre-collar and a core tail. The designation also includes rotary drill holes and records for which the drill type was not recorded.

Table 10-4: Drilling by First Majestic Completed by Drill Hole Type

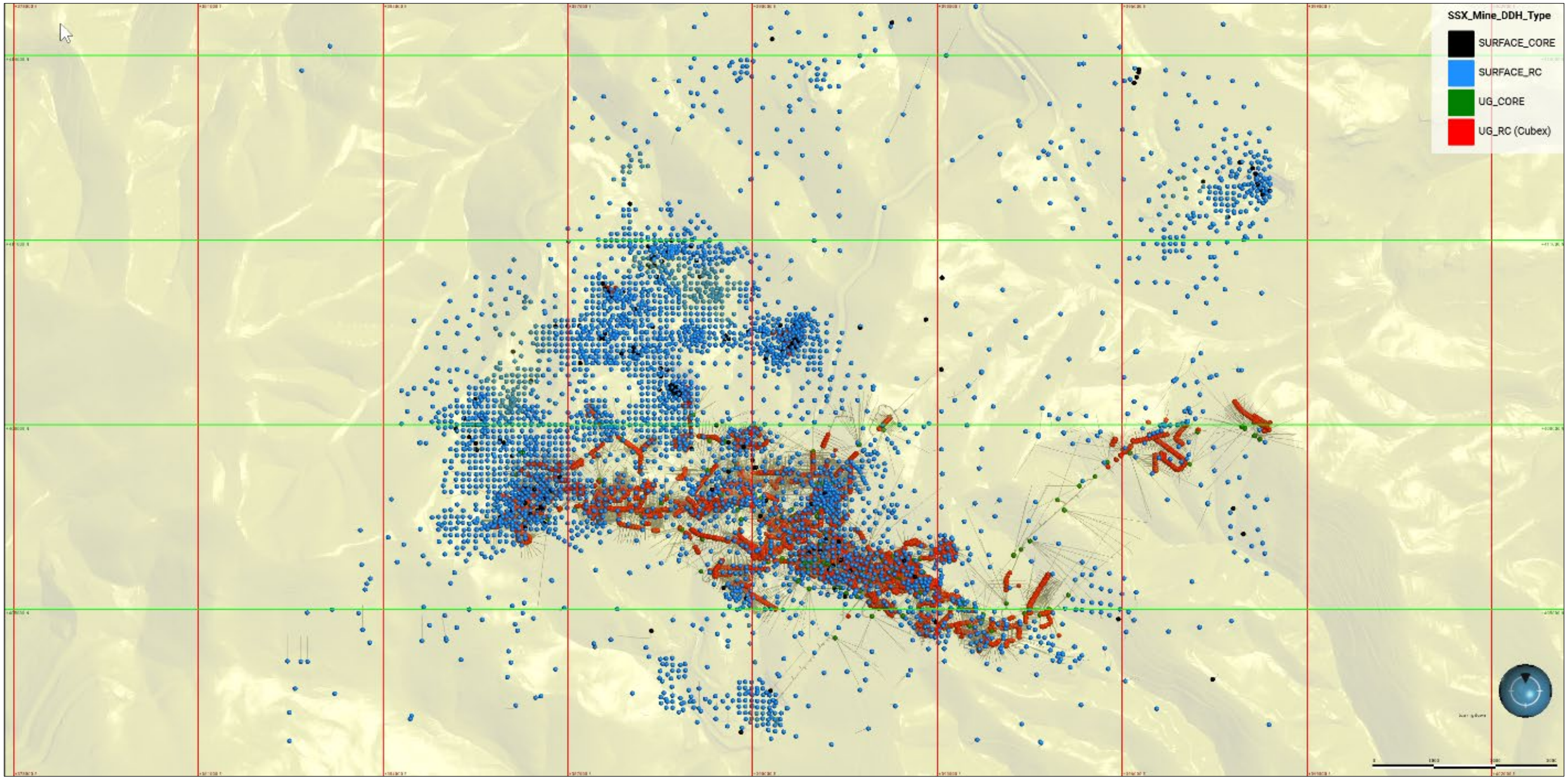
Drilling by First Majestic at Jerritt Canyon		
Surface Drill Type	**No. Holes**	**Total Drilled Feet**
Reverse Circulation	162	147,437
Total	**162**	**147,437**
UG Drill Type	**No. Holes**	**Total Drilled Feet**
Reverse Circulation	5,659	760,911
Core	206	159,891
Total	**5,865**	**920,802**

Figure 10-1: Drill Collar Locations at Jerritt Canyon. Plan View



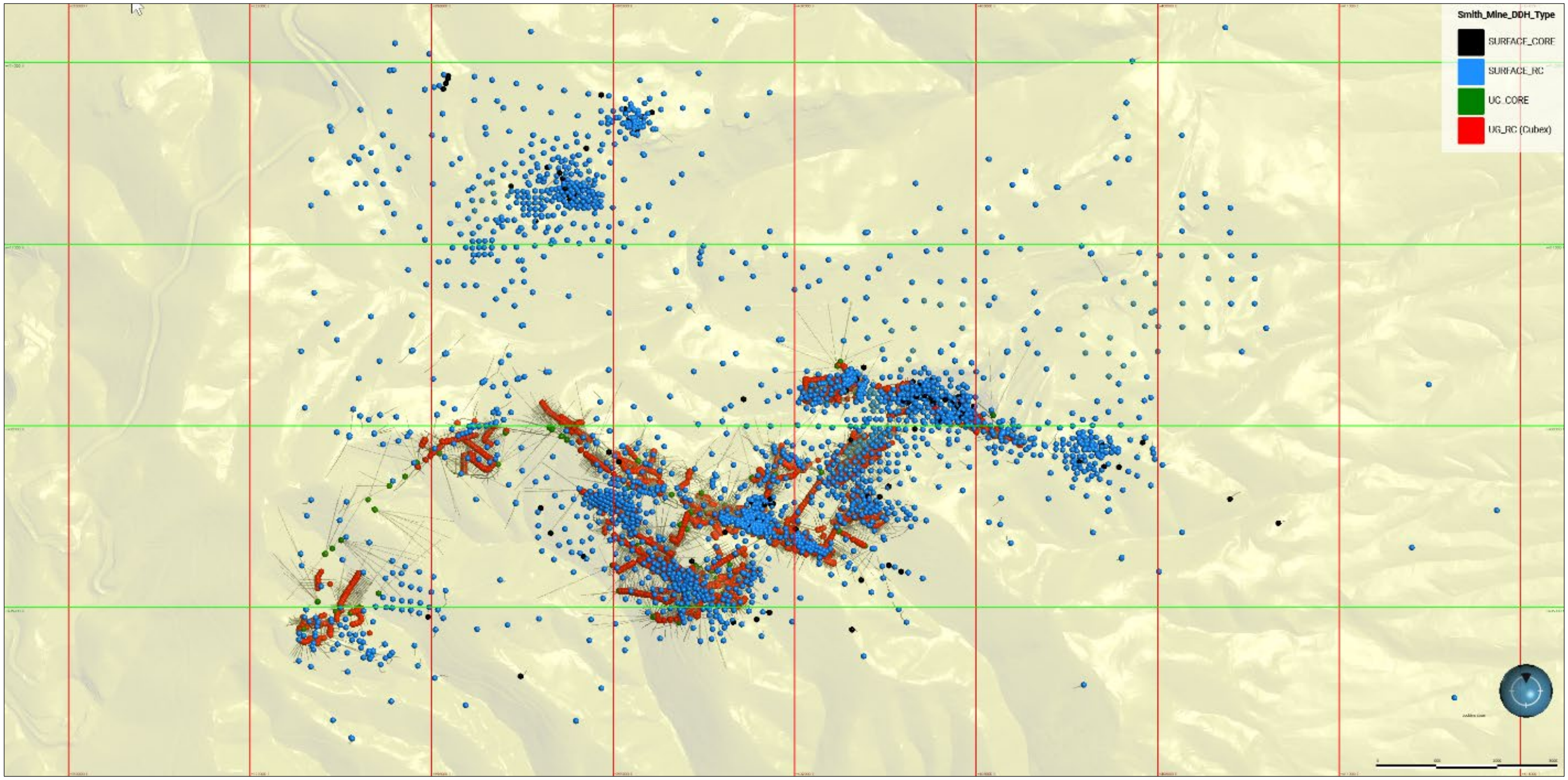
Note: Figure prepared by First Majestic, April 2023. Red collars completed by First Majesitc.

Figure 10-2: SSX Mine, Drill Type Distribution and Location



Note: Figure prepared by First Majestic, April 2023.

Figure 10-3: Smith Mine, Drill Type Distribution and Location



Note: Figure prepared by First Majestic, April 2023.

10.2.2. Underground Core Drilling

Underground core drilling is used to test mineralization that has often been defined by surface drilling at a spacing of 100 ft or greater. It is also used to test anomalous areas, or areas of exploration potential defined by surface holes and targets defined by Jerritt Canyon geologists based on the interpretation of stratigraphy, structures, and dikes. Occasionally, core drilling is used for resource de-risking or defining the geometry, volume, and gold grade of a mineralized zone.

Core drilling is carried out from underground drill platforms with the availability and location of platforms determining the orientation and depth of the drill holes. Core sizes are typically HQ (2.5” core diameter), with some core holes are reduced from HQ to NQ (1.875”) in difficult drilling conditions. Lengths of the underground core drilling over the last decade ranged from 28 to 1,789 feet.

Core recovery averaged 93% over the last decade. Run lengths are reduced in bad ground to optimize recoveries. Core recovery is sufficient to provide representative samples of sediment-hosted gold deposits.

Collar locations are produced by mine surveyors using total stations. The collar location in the database is validated by the responsible geologist. Drill hole locations are field checked by either geologists or support staff, plotted on maps, and visually checked for accuracy in the database and in Leapfrog Geo.

Downhole surveying is completed by drilling contractors using Boart-Longyear Trushot, Reflex EZ-Trac, or conventional Gyro instruments. These tools have built-in quality assurance and quality control (QAQC) protocols and drill holes are resurveyed if there is a failure. The data are also checked for appropriateness of survey, before being approved for upload. Survey intervals are every 15 feet or 50 feet m depending on the survey type. Survey values are transferred into the acQuire database primarily through Reflex Hub Data Management software, although the conventional gyro measurements are manually recorded and transcribed into the database.

10.2.3. Underground RC (Cubex) Drilling

Underground RC “Cubex” drill holes are completed for delineation, definition, and extension of resources to support mine planning and near-mine exploration. Cubex drill holes have a maximum length of approximately 300 ft. Typically, underground mine development drilling stations are established where a Cubex drill is set up and the target delineated. Delineation drilling is completed along drifts with drill holes fanned to intercept targets at 25 ft centres, depending on the distance and angle from the drift. This commonly results in Mineral Resource estimate definition of sufficient detail to support mine planning and development.

The Cubex drill hole diameter is 4.25”.

Cubex final collar locations are either picked up by mine surveyors using a Lecia M60 total station or by physical tape measurement from the nearest survey point.

Historically underground RC holes received a down-hole survey performed by the drilling contractor using an SPT GyroScout survey tool. Since 2020, down hole surveys were not routinely completed on the Cubex drill holes by the mine contractor due to the relatively short nature of the holes and advancing production needs.

10.3. Logging Procedures

10.3.1. Core

The entire length of drill core is photographed and logged for lithology, mineralization, structure, alteration, core recovery and rock quality designation (RQD). Core is digitally photographed dry and loaded to the cloud based Imago photo management system. From 2007 to 2022, logging observations were recorded in paper or entered into in Microsoft Excel and imported into AcQuire desktop. Since 2022, core logging data has been entered directed into acQuire.

10.3.2. RC

Reverse Circulation drill holes were logged on paper from 2007 to 2022 and entered into Microsoft Excel. The Excel files were later imported into AcQuire desktop. All surface reverse circulation drill holes were logged by geologists using a binocular microscope. Data recorded includes lithology, mineralization, structure, and alteration. The RC chip tray character samples were photographed. Most underground reverse circulation drill holes (Cubex) were not logged or photographed.

10.4. QP Comments on Section 10 “Drilling”

In the opinion of the QP, the quantity and quality of the logged geological data, collar, and downhole survey data collected in the drill programs since 2008 are sufficient to support Mineral Resource estimation and mine planning. Missing downhole surveys on the shorter production related Cubex drill holes have some risk of introducing relative position errors into the primary assay data used in the mineral resource estimate. The high density of drill hole locations and short length of the Cubex drilling was believed to mitigate the absence of down hole surveying and the physical nature of collar location in most cases.

11. SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1. Sample Preparation Methods before Dispatch to Laboratories

Since 2008, sample preparation procedures for underground core, Cubex and RC surface samples supporting Mineral Resource estimation, have been in place at Jerritt Canyon without significant change.

The sample preparation methods used before the samples are dispatched to the analytical laboratories are described following the following sub-sections.

11.1.1. Underground Drill Core Sampling

Sampling intervals are selected following lithology and mineralization for 0.5 to 6.5 feet sample lengths. Longer and shorter sample intervals rarely occur and are related to poor recovery or obvious grade boundaries.

After the core is marked and photographed, the core is cut in half with a diamond blade saw. After splitting, half of the core is placed in a plastic bag with a unique sample number tag and a matching sample number tag is placed with the matching half core in the core box at the start of each sample interval. The other half of the core is placed back in the core boxes for storage. Quality assurance and quality control samples (QAQC) are inserted into the sample stream as the sample bags are being filled by the core technicians. Sample quality control is monitored using certified reference materials (CRMs), blanks, quarter core field duplicates, coarse reject, and pulp duplicates. Coarse reject and pulp samples are prepared and inserted by the laboratory during sample preparation. Core sample bags and QAQC samples are placed in a plastic pallet tote by the core technicians. Sample laboratory submittals are prepared and included in the sample stream submitted to the designated laboratories.

11.1.2. Underground Reverse Circulation Sampling (Cubex)

Underground Cubex samples are collected by drilling contractors in five-foot intervals from the collar with a sample weight typically between 5 and 10 lbs. The samples are placed in bags and labelled with hole ID and sample interval. The sample bags are placed in a five-gallon plastic bucket installed under the cyclone on the drill and later into a metal pallet tote. The totes are brought out of the mine by a drilling contractor and taken to the mine laydowns for staging. At the laydown, QAQC samples are inserted in the sample stream by Jerritt Canyon geologists. After sample submittals are completed, the Cubex samples are dispatched to the Jerritt Canyon laboratory or external laboratories by Jerritt Canyon geologists. Cubex sample data are first recorded on paper, and then entered into in Microsoft Excel and imported into acQuire desktop. Sample quality control is monitored using CRMs, blanks, coarse reject, and pulp duplicates. Coarse reject and pulp samples are prepared and inserted by the laboratory during sample preparation.

11.1.3. Surface Reverse Circulation Sampling

Surface RC samples are collected in five-foot intervals from the collar with a sample weight typically between 5 and 10 lbs. RC samples are collected by drilling contractors using a cyclone/splitter apparatus and placed in bags. Each bag has the hole ID and sample interval written on it with permanent marker. The samples are loaded into plastic pallet totes and transported to a mine laydown for stagging. At the laydown, QAQC samples are inserted by Jerritt Canyon geologists in the sample stream and sample submittal forms are prepared. The samples and submittal forms are transported to the designated external laboratory by a laboratory representative.

RC sample data are entered into acQuire desktop. Sample quality control is monitored using CRMs, blanks, field, coarse reject, and pulp duplicates. Field duplicates are taken from a second split of the uncollected portion of the drill cuttings. Coarse reject and pulp samples are prepared and inserted by the laboratory during sample preparation.

11.2. Sample Preparation and Analytical Laboratories

The laboratories used for sample preparation and analysis are summarized in Table 11-1.

Table 11-1: Laboratories Summary

Laboratory	Drilling Period	Certification	Independent	Comments
ALS	1993, 2001-2013 2021-2022	ISO 9001, ISO/IEC 17025	Yes	Primary laboratory for surface RC, underground and surface drill-core samples. Check laboratory for samples submitted to AAL. Sample preparation at Elko, NV, USA, and analysis at the Vancouver laboratory in Canada.
American Assay Laboratory (AAL)	1985, 2002, 2004-2008, 2010-2013, 2016 -2017	ISO:9001:2008, ISO/IEC 17025:2005	Yes	Primary laboratory for surface RC, underground and surface drill-core samples. Check laboratory for samples submitted to ALS. Sample preparation and analysis at Sparks, Nevada, USA.
Bureau Veritas Minerals Laboratories (BV)	2006 , 2015-2022	ISO 9001:2008, ISO/IEC 17025:2017	Yes	Primary laboratory for RC surface and underground drill-core samples. Sample preparation at the Sparks, Nevada, USA laboratory. Sample analysis at the Bureau Veritas Vancouver laboratory in Canada.
Paragon Geochemical (PGL)	2021 -2023	ISO:9001:2015, ISO/IEC 17025:2017	Yes	Primary laboratory for RC cubex and underground drill-core samples. Sample preparation and analysis at Sparks, Nevada, USA.
Jerritt Canyon Laboratory (JC)	Pre-2006, 2006-2023	Uncertified	No	Primary laboratory (sample preparation and analysis) for RC cubex samples, drill-core (pre-2022), production samples (sludge and windrow). Sample preparation laboratory for cubex and drill-core samples analyzed at Central Laboratory. Jerritt Canyon Laboratory location at the Jerritt Canyon Mine Property.
First Majestic Central Laboratory (Central Laboratory or FMC)	2022-2023	ISO 9001-2015	No	Primary laboratory for RC cubex and underground drill-core samples. Sample preparation and analysis. Located at La Parrilla mine in San Jose La Parrilla, Durango, Mexico.

Note: ALS = ALS Limited Vancouver; AAL = American Assay Laboratory. Bureau Veritas includes the former ACME Laboratories Ltd.

Since 2007, drill core samples have been submitted to ALS, AAL, Bureau Veritas, Paragon Geochemical and Jerritt Canyon laboratories. During 2021 and 2022, samples were prepared at the Jerritt Canyon laboratory and submitted for analysis to Paragon Geochemical or First Majestic's Central laboratory (Central Laboratory). Since late 2022, samples have been submitted to Paragon Geochemical or the Central Laboratory for sample preparation and analysis.

For drilling programs prior to 2021, Cubex samples have been prepared and analyzed at the Jerritt Canyon laboratory. During 2022, samples were prepared and analyzed at Jerritt Canyon laboratory and ALS. In late 2022, Cubex samples were prepared at the Jerritt Canyon laboratory and analyzed at Paragon Geochemical or the Central Laboratory. Since 2023, Cubex samples are prepared and analyzed at Central Laboratory.

For drilling programs prior to 2020, RC surface samples were submitted to Jerritt Canyon, ALS, American Assay, Bureau Veritas, and Paragon Geochemical laboratories. After 2015, RC surface samples were prepared and analyzed at Bureau Veritas.

11.3. Laboratory Sample Preparation and Analysis

11.3.1. ALS

At ALS, samples were dried, weighed, then crushed 70% passing 2mm, split to a 250 g subsample which was pulverized to 85% passing 75 µm.

Samples were analyzed for gold using 30 g fire assay with an atomic absorption spectroscopy (AAS) finish (package Au-AA23). Samples returning >1 g/t Au, were reanalyzed for gold by 30 g fire assay with a gravimetric finish (package Au-GRA21).

11.3.2. AAL

At AAL, samples were dried, weighted, crushed 80% passing 2 mm, split to 300 g subsample which was pulverized to 85% passing 75 µm. Samples were analyzed by gold (Au) using fire assay with and inductively coupled plasma (ICP) and by 30 g fire assay with a gravimetric finish for samples returning >10 g/t Au.

11.3.3. Paragon Geochemical

Samples were weighed, dried at 100 C, crushed 70% to pass 10 mesh, split to 250 g and then pulverized to 85% passing 200 mesh. Samples were analyzed by Au by 30 g fire assay aqua regia digest with an atomic absorption (AA) finish (Au-AA30). Samples assaying >8 g/t Au were analyzed by 30 g fire assay, with a gravimetric finish (Au-GR30). Samples also were analyzed for a 35element suite by aqua regia digestion followed by an ICP- optical emission spectrometry (OES) finish; (35AR-OES).

11.3.4. Bureau Veritas

At Bureau Veritas, samples were dried, weighed, then crushed 70% passing 2 mm, and split to a 250 g subsample that was pulverized to 85% passing 75 µm.

Gold was analyzed by 30 g fire assay with an AA finish (package FA430). Samples returning >10 g/t Au were reanalyzed for gold by 30 g fire assay with a gravimetric finish (package FA530). RC surface samples submitted to BV in 2021 and 2022, in 20 ft pulp composites, were prepared and analyzed by 36-elements by aqua regia digestion and an ICP- mass spectrometry (MS) finish (package AQ200).

11.3.5. First Majestic Central Laboratory (Central Laboratory)

At Central Laboratory, samples were dried at 105 °C ± 5°C and then crushed to 80% passing 2 mm, split to a 250 g subsample, and pulverized to 85% passing 75 µm.

Gold is analyzed by 20 g fire assay with an AAS finish (package AUAA-13). Samples returning >10 g/t Au were reanalyzed for gold by 20 g fire assay with a gravimetric finish (package ASAG-14). Samples were analyzed by 31-elements by aqua regia digestion and an ICP-MS finish (package ICP34BM).

11.3.6. Jerritt Canyon Laboratory

Before 2018, samples were dried at 205 ^{o}F, crushed in two stages to 99% to 1 inch and to 99% passing 3/8 inch, split, and pulverized to 95%-150 mesh (Tyler). Gold was analyzed by fired assay fusion/cupellation with a gravimetric finish.

From 2018 to 2021, samples were dried, crushed to 50% passing 2 mm, split to a 200 g subsample, and pulverized to 95% passing 106 µm. Gold was analyzed by ½ assay ton fire assay method with an AAS finish using aqua regia digestion.

Since 2021, samples have been dried at 121 C, crushed to 65% passing 2mm, split to 200 g subsample, and pulverized to 80% passing 75 µm and split again to obtain a sub-sample of approximately 15 g. Samples are analyzed by aqua regia digestion with an AAS finish. Samples returning >15 g/t Au are analyzed by fire assay with a gravimetric finish or diluted at bench top with a matrix matched blank. LECO analysis and moisture determination are also completed by the Jerritt Canyon laboratory.

11.4. Quality Control and Quality Assurance Procedures for Assays

11.4.1. Quality Control and Quality Assurance Sampling Procedures

There is no information related to QAQC procedures prior to 2006.

Since 2007, QAQC procedures have been implemented at Jerritt Canyon for underground and surface drill-core, surface RC and underground Cubex samples. The procedures include the insertion in the sample stream of in-house prepared standards (SRMs), CRMs, blank materials and duplicates. External checks were included until 2016.

From 2007 to 2011, the QAQC program for the Jerritt Canyon laboratory included the insertion of one SRM sample per 20 samples, one blank consisting of silica sand sample per drill hole, one pulp duplicate, one coarse reject and one pulp check every 20 samples.

The QAQC program for samples submitted to ALS included one standard inserted in a 40-sample batch, one blank inserted at the beginning or end of the hole, or after mineralized zone and a pulp duplicate.

Check samples primary assayed at ALS were submitted to AAL . The Check program included submission of SRMs and silica sand blanks.

2012-2018

From 2012 to 2018, the QAQC program for the Jerritt Canyon laboratory included insertion of one SRM or one CRM sample, one blank consisting of silica sand, one laboratory replicate sample per 24 samples, and check samples.

The QAQC program for samples submitted to ALS, AAL and Bureau Veritas included the insertion of one SRM or one CRM every 20th sample, a silica sand blank sample inserted as the second sample for each drill hole, pulp duplicates and check samples submitted to AAL.

2019-2023

From 2019 to 2021, the QAQC insertion procedures changed to include three CRMs, three blank samples from commercial grade-sand, and two pulp duplicates inserted in a group of 40 samples.

Since 2022, CRMs, pulp blanks, pulp and coarse duplicates in the RC surface, underground drill-core and RC Cubex sample stream submitted to the Jerritt Canyon, Bureau Veritas, Paragon Geochemical and Central Laboratory laboratories. CRMs, pulp blanks, field (quarter core), coarse and pulp duplicates are inserted in the RC Cubex and underground drill-core sample stream every 15 to 20 samples in a fixed position. CRMs and rig field duplicates are inserted in the RC surface sample stream every 20 samples. Coarse and pulp duplicates are inserted every 50 samples. Pulp blanks are inserted at the beginning of each surface RC drill-hole.

The CRMs were purchased from CDN Resource Laboratories Ltd, OREAS, and Rocklabs. Pulp blanks were purchased from CDN and Legend Inc.

11.4.2. Accuracy Assessment (Standards)

2008–2020 Assessment

There is no information supporting accuracy assessments before 2007. Between 2008 and 2020, standard results from SRM and CRMs with grades between 1.3 g/t (0.039 opt) and 9 g/t (0. 268 opt) produced by all primary laboratories indicate an overall acceptable low bias. (Johnson et.al., 2013; RPA, 2018; and SLR, 2021).

2021–2023 Assessment

First Majestic assesses accuracy in terms of bias of the mean values returned for CRMs relative to the CRM expected value. Bias between ± 5% is considered acceptable. Gold results from the CRMs are plotted on time sequence performance charts. Sample swaps and transcription errors are removed before assessing bias. CRMs results that are greater than the CRM mean ± three times the standard deviation are re-assayed.

Paragon Geochemical

Standards submitted had grades ranging from 1.477 to 8.461 g/t Au. Few standard results exceeded expected tolerances and were submitted for re-assay. The re-assay results confirmed that the apparent failures were related to sample switches with the adjacent regular sample or related to mislabeling of standard samples during the sample collection. After applying corrections to the database, biases are between -1.1% and 1.7%, which is considered acceptable.

Central Laboratory

Between March 2022 and March 2023, CRMs were submitted to Central Laboratory along with core and Cubex samples. The inserted standards had grades ranging from 1.477 to 7.34 g/t Au. There were no standard results exceeding tolerances and small acceptable biases between -0.43% and 2.53% were observed.

Jerritt Canyon Laboratory

Standards submitted to with Cubex samples had grades ranging from 1.333 to 6.91 g/t Au. More than 10% of standard results received in 2021 and 2022 from SH82, SL34 and OREAS 241 exceed expected tolerances suggesting problems with the analytical accuracy. First Majestic has taken measures to address the accuracy issues that were identified at Jerritt Canyon laboratory by updating the sample preparation equipment and running updates to the fire assay methodology.

After excluding the apparent outliers, acceptable bias between -1 % and 3.49% was observed.

Bureau Veritas

From 2021 to 2022, CRMs along with surface RC samples were submitted to Bureau Veritas. The standards had grades ranging from 0.41 to 8.52 g/t Au.

The majority of the standards supporting grades around 1.79 to 3.2 g/t Au exceeded expected tolerances. Re-assays of the samples confirmed that the apparent errors were related to the physical properties of the standard material and to transcription errors during logging. The standard with a certified value of around 1.79 g/t Au (Si81) has been discontinued and the mislabeled samples were identified and corrected in the database. Sampling logging protocols have been revised by geological staff at Jerritt Canyon and the logging software has been updated to prevent transcription errors. After excluding the apparent failures, no significant bias for gold results was observed.

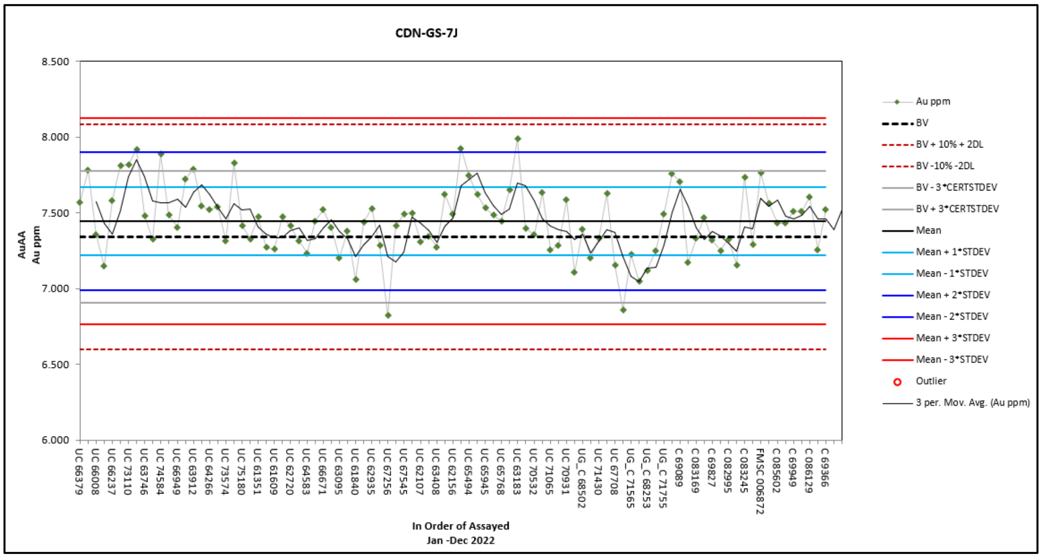
A summary of bias of the standard results received from each laboratory between January and March 2023 is shown in Table 11-2.

Table 11-2: Summary of Bias. January–December 2022 Assay Results

Laboratory	Standard	BV (ppm)	BV (opt)	Sample Type	Bias %	Outliers %
PGL	CDN GS-1AB	1.48	0.043	Core	1.7	3.8
	CDN GS-1AB	1.48	0.043	Cubex	1.4	3.8
	CDN GS-3X	3.23	0.094	Core	1.1	4.9
	CDN GS-3X	3.23	0.094	Cubex	1.5	3.6
	CDN GS-7J	7.34	0.214	Core	1.0	2.9
	CDN GS-7J	7.34	0.214	Cubex	-0.1	4.0
	OREAS 278	4.99	0.146	Core	-0.6	>10%
	OREAS 278	4.99	0.146	Cubex	-1.1	2.6
Central Laboratory	CDN GS-1AB	1.48	0.043	Core & Cubex	0.4	0.0
	CDN GS-3X	3.23	0.094	Core & Cubex	2.5	0.0
	CDN GS-7J	7.34	0.214	Core & Cubex	-0.4	0.0
JC	SH82	1.33	0.039	Cubex	-1.0	>10%
	Si81	1.79	0.052	Cubex	-1.2	8.0
	SL34	5.86	0.171	Cubex	2.3	11.0
	CDN GS-1AB	1.48	0.043	Cubex	2.6	7.0
	CDN GS-3X	3.23	0.094	Cubex	-0.1	4.0
	OREAS 241	6.91	0.202	Cubex	0.2	>10%
	OREAS 278	4.99	0.146	Cubex	-2.7	6.7
	OREAS 238	3.03	0.088	Cubex	3.5	4.0
BV	MEG-Au.21.03	1.10	0.032	Surface	-3.7	4.2
	MEG-Au.21.02	0.41	0.012	Surface	-1.8	3.4
	SK112	4.11	0.120	Surface	-4.5	8.7
	SK109	4.10	0.120	Surface	-2.4	5.3
	SN103	8.52	0.249	Surface	-3.6	1.9

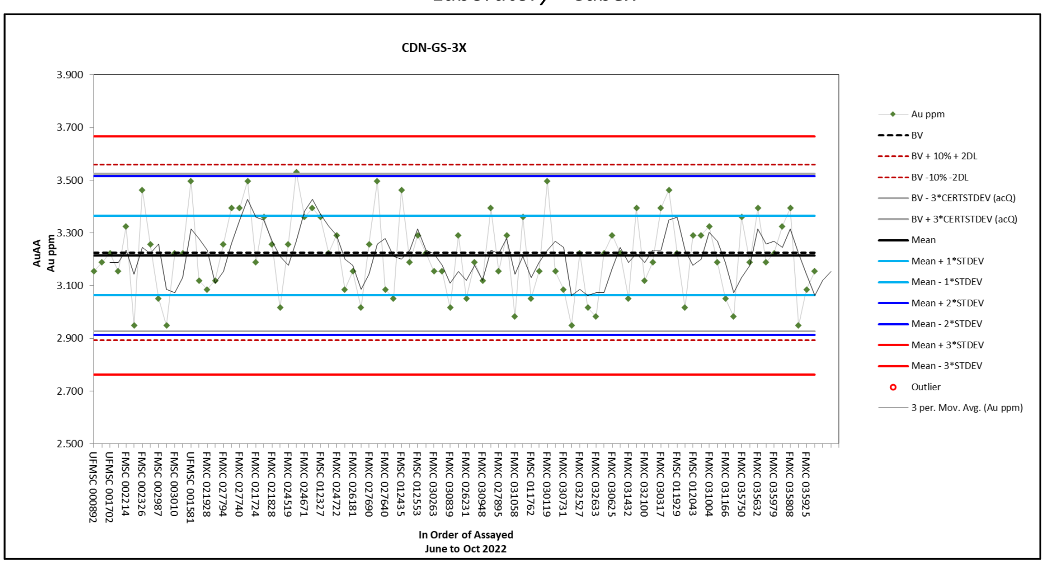
An example of the time sequence plots for the 2022 standard assessment from the Paragon Geochemical and Jerritt Canyon laboratories is shown in Figures 11-1 and Figure 11-2.

Figure 11-1: Time Sequence Performance Chart (excluding outliers) - Gold Results 2022, Paragon Geochemical - Cubex



Note: Figure prepared by First Majestic, April 2023.

Figure 11-2: Time Sequence Performance Chart (excluding outliers) - Gold Results 2022, Jerritt Canyon Laboratory - Cubex



Note: Figure prepared by First Majestic, April 2023.

11.4.3. Contamination Assessment (Blanks)

2008–2020 Assessment

Between 2008 and 2020, the contamination assessment conducted by SLR in 2021 (SLR, 2021) confirmed there are no contamination issues observed in blanks samples inserted in the surface and underground samples submitted to all laboratories.

2021–2023 Assessment

First Majestic assesses contamination in terms of results from blank control samples. It is considered acceptable if the laboratory returns coarse blank results less than twice the detection limit value 80% of the time, and pulp blank results less than twice the detection limit 90% of the time. Gold blank results are plotted on a time-sequence blank performance chart. Blank results above the twice detection limit-line are considered outliers. Outliers related to sample swaps or transcription errors are removed before calculating the frequency. Less than 10% of outliers is considered acceptable. Batches with excessive blank failure rates were re-assayed.

Paragon Geochemical

Blank results showed no contamination during sample preparation and analysis. Six percent of results from blanks inserted in the core sample stream and 5% of blank results from blanks inserted in the Cubex sample stream were identified as outliers.

Central Laboratory

Blank results showed no contamination during sample preparation and analysis. No failures from blanks inserted in the core and Cubex sample stream were observed.

Jerritt Canyon Laboratory

Blank results from blanks inserted in the Cubex sample sequence show no contamination during sample preparation and analysis. Six percent of samples are outside the threshold limits.

Bureau Veritas

Blank results from blanks inserted in the surface RC samples show between 8% and 11% failures. The number of failures indicates small but not concerning levels of contamination during sample preparation.

The percentage of blank results below threshold (less than two times the lower detection limit reported by the laboratories) is shown in Table 11-3.

Table 11-3: Blank Results and Percentage of Results Reported Below Threshold

Laboratory	Blank Type	Core %	Cubex %	Surface RC %
PGL	Blank	94.07	93.48	--
	CDN BL-10	95.09	95.61	--
Central Laboratory	CDN BL-10	96	100	--
JC	Blank	--	99	--
	CDN BL-10	--	93.65	--
BV	Blank	--	--	85.64
	CDN BL-10	--	--	88.46

11.4.4. Precision Assessment (Duplicates)

2008–2020 Assessment

Precision assessment conducted by SLR in 2021 (SRL, 2021) using duplicate pair assay results reported between 2008 and 2020 indicate no significant sampling or analytical errors.

2020–2023

Field, coarse and pulp duplicate gold results from drill-core samples, and coarse and pulp duplicates results from Cubex samples were used by First Majestic to assess laboratory precision.

First Majestic assesses precision in terms of the frequency of the absolute relative difference (ARD) of paired duplicate values. A 90% frequency of ARD less than 30%, 20% and 10% for field, coarse and pulp duplicates, respectively, is the target precision. Pair results below 10 times the analytical detection limits were excluded in the assessment. Sample swaps and transcription errors are removed before assessing the ARD sample frequency. Paired duplicate gold and silver results, excluding outliers are plotted on ARD versus frequency charts to visually inspect that the sample frequency is meeting the precision target. Duplicate precision is continually monitored. If the precision targets are not met, the laboratories are consulted.

Paragon Geochemical

Field, coarse and pulp drill-core duplicate results from January to November 2022 had more than 10% of failures. Coarse and pulp duplicate results from RC Cubex samples had less or close to 10% of failures. The apparent failures are related to samples originally crushed and pulverized at the Jerritt Canyon laboratory. At the end of 2022, the Jerritt Canyon Laboratory acquired new crushers and First Majestic instructed Paragon Geochemical to make changes to the sample preparation procedures during the crushing stage. Excluding 10% of outliers, assay gold results from drill-core and RC Cubex met precision targets.

Central Laboratory

Field duplicate from drill-core samples met precision targets. No significant sample handling issues or transcription errors were apparent.

More than 10% of pulp duplicate results from Cubex samples were considered failures. After receiving the re-assay results and investigating for transcription errors during sample logging, it was concluded these failures reflect sample preparation issues at the Central Laboratory or at the Jerritt Canyon laboratory. First Majestic has taken measures to address these issues at both laboratories.

Jerritt Canyon Laboratory

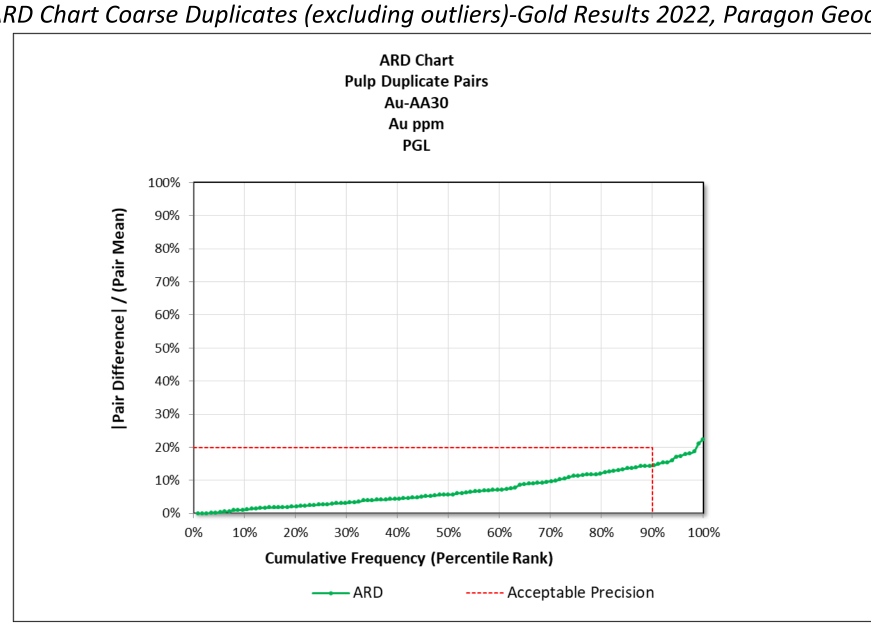
Coarse and pulp duplicate results from Cubex samples were close to precision targets. No significant sample handling issues or transcription errors were observed.

Bureau Veritas

Field, coarse and pulp duplicate results from surface RC samples met precision targets. No significant sample handling issues or transcription errors were apparent.

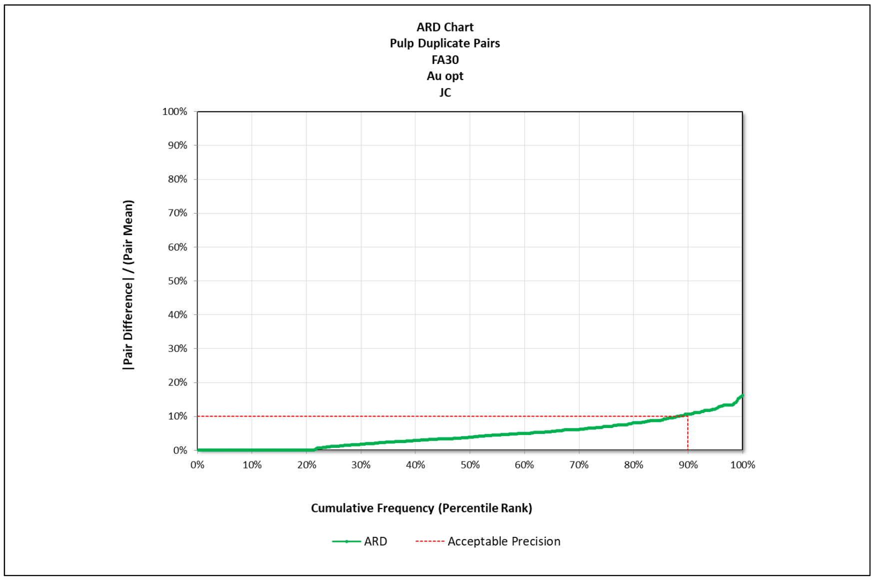
An example of the ARD plots for the 2022 precision assessment from the Paragon Geochemical and Jerritt Canyon laboratories is shown in Figure 11-3 to Figure 11-5.

Figure 11-3: ARD Chart Coarse Duplicates (excluding outliers)-Gold Results 2022, Paragon Geochemical- Cubex



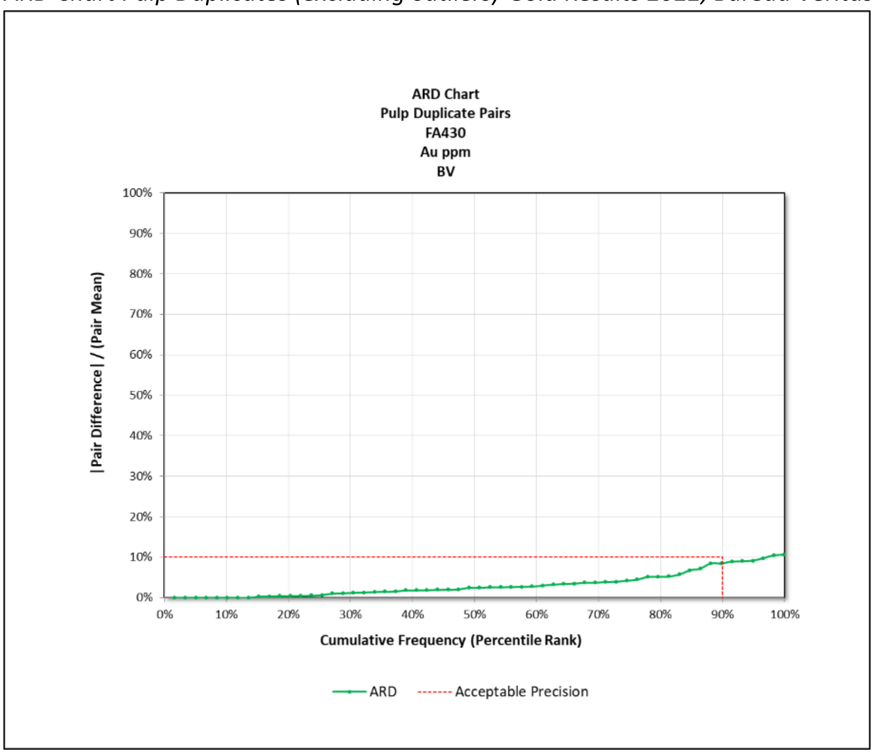
Note: Figure prepared by First Majestic, April 2023.

Figure 11-4: ARD Chart Pulp Duplicates (excluding outliers)-Gold Results 2022, Jerritt Canyon Laboratory - Cubex



Note: Figure prepared by First Majestic, April 2023.

Figure 11-5: ARD Chart Pulp Duplicates (excluding outliers)-Gold Results 2022, Bureau Veritas- RC Surface



Note: Figure prepared by First Majestic, April 2023.

11.4.5. Between-Laboratory Bias Assessment (Checks)

To assess bias at the primary laboratories, pulps assayed at the primary laboratory are submitted to a separate certified independent laboratory and re-analyzed them using equal analytical procedures.

No external check program was conducted from 2016 to 2021. First Majestic relied on the data and plots produced by previous operators to confirm between-laboratory bias for assay data reported before 2021.

In 2020, SLR conducted a between-laboratory check assessment (SLR, 2021) by using a Q-Q plot to compare pulp sample pair gold results from the Jerritt Canyon laboratory and ALS. In this assessment, SLR concluded an overall moderate correlation between results and a high bias less than 5% towards ALS.

11.5. Databases

The Jerritt Canyon data is stored in a secured SQL database. The SQL database is based on acQuire database scheme and contains underground and surface collar, sample, and assay data from 1975 to 2023 drilling campaigns.

Since 2013, assay data was received from the laboratories via emails containing excel or comma-separated value (CSV) data files.

Underground and surface collar, sample, and assay data were compiled and imported using acQuire GIM, a database management software provided by acQuire. The acQuire GIM import process includes a series of built-in checks for errors at all stages, from headers to individual tables.

Once data has been logged or imported into acQuire, visual inspections are completed to ensure that data were properly imported. The database is periodically backed up and the backup files are securely stored in the Jerritt Canyon server located at the Jerritt Canyon Project and also to secure offsite servers.

11.6. Sample Security

Throughout historical and most recent mine operations, underground drill-core and RC surface samples are transported to external laboratories by Jerritt Canyon laboratory personnel using company trucks or by external laboratory trucks operated by external laboratory personnel. Underground RC Cubex samples have been transported to the Jerritt Canyon laboratory by Jerritt Canyon geologists.

Core and RC Cubex samples prepared for analysis at Jerritt Canyon laboratory and submitted to the Central Laboratory, are transported from the Project to Nogales, Arizona using Precision Air Cargo, a private transportation company. Samples at this location are retained for one week in secured facility managed by Gamas, a custom broker company. After a week, private third-party companies contracted by Gamas, transport the samples by trucks directly to the Central Laboratory at La Parrilla mine, Mexico. Chain of custody documents in paper and sample electronic submittal forms are in place to track the sample shipment and sample reception at Central Laboratory. After analysis, drill-core and RC Cubex sample rejects are securely stored at La Parrilla Project.

Chain of custody documents in paper and sample electronic submittal forms are in place to track sample shipments and sample reception at destinated laboratories. After analysis, drill-core and RC sample rejects are secured stored at buildings located inside the Jerritt Canyon Project area.

The analytical results from channel samples are received by authorized First Majestic personnel using secure digital transfer transmissions, and access is restricted to these results.

The analytical results from core samples are received by authorized First Majestic personnel using secure digital transfer transmissions, and access is restricted to these results.

11.7. QP's Opinion Statement

Sample preparation, analysis and quality control measures used at the primary laboratories meet current industry standards and are providing reliable gold results for drill-core and underground and surface RC samples.

Sample security procedures used for shipping and receiving drill-core and RC samples between underground and surface working areas, drill core shed, sample preparation facilities and laboratories are in accordance with industry standards. The database management procedure used to receive and record results is providing reliable integrity to the samples results.

Insertion rates for standards and blanks inserted in the drill-core, RC surface and Cubex sample-stream over the year are acceptable. Insertion rates for duplicates previous 2022 were below expected rates and improved in 2022.

The 2020 assessment of the quality control sample results from ALS, AAL, Bureau Veritas and Jerritt Canyon laboratories and the 2022 assessment from the Bureau Veritas, Jerritt Canyon, Paragon Geochemical and Central Laboratory results, identified no significant errors, biases or contamination in gold results. The high error rate from standard samples reported by the Jerritt Canyon laboratory in 2021 and during 2022 was related to issues with the fire assay methodology. These issues were reported and corrected by the Jerritt Canyon laboratory in early 2022. The original analytical batches containing original samples and the standard sample failures were re-assayed at Paragon Geochemical or the Central Laboratory. No accuracy issues were identified at these laboratories during the re-assay period. The high failure rates observed in duplicate results from Paragon Geochemical and the Central Laboratory were related to errors in the sample preparation during the crushing stage at the Jerritt Canyon sample preparation facility. In late 2022, the Jerritt Canyon laboratory obtained newer crushers, updated the fire assay AA methodology and implemented the report system, LabWare LIMS. Since late 2021, the Central Laboratory has been auditing and supervising sampling and analysis procedures at the Jerritt Canyon laboratory. First Majestic will continue monitoring precision at the Jerritt Canyon laboratory.

The pulp check results reported by the Jerritt Canyon and ALS laboratories before 2020, indicate that there was an agreement between the Jerritt Canyon and ALS laboratory results. First Majestic will implement an external check program for the 2022 and 2023 sample results.

Underground RC Cubex samples used to support grade estimation were assessed for laboratory accuracy contamination and precision. The RC Cubex field sampling procedure has some risk of introducing sampling bias and this possible bias has not yet been fully assessed. However, the assessment of accuracy, contamination, and precision at Central, PGL and JC laboratories confirms that assay results are suitable to support Resource Estimation.

12. DATA VERIFICATION

12.1. Verification of Legacy Data

From 1993 to 2020, several database audits and data verifications were carried out by previous operators at Jerritt Canyon (SRK, 2008, Johnson et.al., 2013, RPA, 2018 and SLR, 2021). The data verification comprised the following validations: collar coordinates, down-hole surveys, lithology, sample intervals and assay results quality. In addition, all assay data in the drill-hole databases was checked for transcription errors against original laboratory reports. No significant data verification issues were reported by previous operators.

12.2. Data Verification

The data verification carried out by First Majestic included data entry error checks, visual inspections of key data, and a review of QAQC assay results for data collected between 2021 and 2022 from Smith, SSX, Murray and West Generator mine areas (the verification dataset). Drill-hole data are typically verified prior to Mineral Resource estimation through 3D software checks, comparison to original hard-copy and electronic data, and internal peer-review. Site visits were completed as part of the data verification process.

12.2.1. Data Entry Error Checks

The data entry error checks consisted of comparing data recorded in the database with collar survey reports, historical lithology logs and assay reports, and investigation of gaps, overlaps and duplicate intervals in the sample and lithology tables from the database.

No significant data entry errors were observed in a 5% random selection of the drill collar locations of the verification dataset.

Five percent of downhole survey records in the verification dataset were inspected mathematically for angular deviation tolerance greater than 5°/50 feet. Less than 1% of records in the data verification data set were identified as transcription errors. All transcription errors were corrected in the database.

No significant data entry errors were observed in a 5% random selection of the lithology records of the verification dataset. The error check consisted of a comparison of the verification dataset lithology records with original hard-copies and digital records.

No significant data entry errors were observed in a 5% random selection of the gold assay results of the verification dataset. The error check consisted of a comparison of the verification dataset assays with original electronic copies and final laboratory certificates issued by the Central Laboratory, Paragon Geochemical, Bureau Veritas and Jerritt Canyon laboratories.

The inspection for gaps, overlap, and duplicates for all lithology and sample records identified no issues.

12.2.2. Visual Inspection of Key Data

The visual inspection consisted of verifying the position of underground and surface drill-hole collars, down-hole survey deviations relative to the underground workings and the three-dimensional (3D) geological models. The visual inspection also included comparison of lithology, sample and core recovery intervals with core photos.

A 5% random selection of drill hole underground and surface collar locations in the verification dataset indicated no significant position errors.

A 5% random selection of drill hole traces revealed no unusual kinks or bends.

Lithology, sample, and core recovery intervals were visually checked with core photos and in three dimensions. Sample lengths and assay results from the database were compared to the logged data originally recorded in hard and digital copies. No significant differences were observed.

12.2.3. Review QAQC Assay Results

Verification of assay accuracy and contamination is provided in Section 11 of this Report.

12.3. Verification by the QP

12.3.1. Mr. Gonzalo Mercado

Mr. Mercado performed numerous site visits as discussed in Section 2.5. During these visits he reviewed and coordinated exploration programs with the site exploration manager and exploration geologists, reviewed core handling and logging, and the integration of primary data into the geologic model. He interacted with the Resource Modelling team to review block model parameters and the impact of drilling results on modelling. He also reviewed underground mapping and sampling where available and oversaw mine to mill reconciliation studies in January and February of 2023. No significant issues were identified during this work.

12.3.2. Mr. David Rowe

Mr. Rowe performed numerous site visits as discussed in Section 2.5. During these visits he reviewed and coordinated database management with the senior resource geologists, and reviewed core handling and logging, and integration of primary data into the geologic model and resource estimation. The database is updated continuously with new primary data, and these data are carefully inspected for any variances or position errors each time the geologic model is updated from the data. No significant issues were identified during this work.

12.3.3. Ms. María Elena Vázquez Jaimes

Ms. Vázquez performed site visits as discussed in Section 2.5. During these visits she reviewed the AcQuire database, core handling, and logging procedures. Data review included data entry error checks, visual inspections, review of QAQC assay results, field inspections of the core and review of the drilling, logging, and sampling procedures. The data verification conducted by the QP identified no significant issues with data entry, grade accuracy, precision and contamination and no issues with drill holes and sample locations.

The data validation and verification procedures carried out since 2007 complied with industry standards and the data are considered suitable to support Mineral Resource estimation.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

13.1. Introduction

Mining and processing by the Freeport-FMC JV commenced at Jerritt Canyon in 1981. The initial feed was mildly refractory, carbonaceous, preg-robbing mineralized material. Alkaline chlorination was used to passivate the carbonaceous constituents of the mineralized material to reduce preg-robbing during cyanidation to extract the gold. As a result of increases in chlorine consumption due to increased sulfide sulfur, the cost of operating the alkaline chlorination circuit increased. Thus, roasting, an alternative oxidation process that could treat both carbonaceous and sulfide refractory mineralized materials was selected to replace the chlorination circuit. The whole ore roaster was commissioned in 1989 and from 1989 to 1997, the two plants operated in parallel, with the chlorination circuit processing the less refractory mineralized materials at 3,500 stpd to 4,200 stpd until 1997, and the more refractory carbonaceous shale mineralized materials processed in the whole ore roaster at a design rate of 4,000 stpd.

13.2. Mineralogy

In mid-2021, three representative samples were prepared and submitted to the Hazen research lab for analytic analysis and subsequently X-day diffraction (XRD) analysis. Table 13-1 displays the origin of the samples along with their corresponding head gold grade, organic carbon content, and sulfide sulfur content.

Table 13-1: Analytical Results

Sample ID	Sample Origin	Gold grade g/t	Gold grade oz/st	Organic Carbon wt%	Sulfide Sulfur wt%
Smith	Smith UG Mine	8.5	0.248	0.9	2.33
SSX	SSX UG Mine	11	0.321	0.7	1.38
MWR	Mineralized Waste Rock	2.21	0.064	0.8	1.04

The purpose of the XRD analysis was to identify and quantify the mineral constituents of the samples. A summary of the XRD analysis results is shown in Table 13-2.

Table 13-2: XRD Results

Phase ID	Weight %		
	Smith	SSX	MWR
Quartz	47.6	37.5	39.3
Muscovite	8.3	19	9.3
Kaolinite	1.8	1.4	1.5
Calcite	1.8	21.5	29.7
Dolomite	36.7	18.6	14.5
Ankerite	-	-	2.8
Pyrite	3.8	2	1.5
Szomolnokite	-	-	1.4

13.3. Metallurgical Testwork

13.3.1. Comminution

In mid-2021, gold mineralized samples were submitted to the Hazen research laboratory for Bond ball mill work index (BWI) testing. Table 13-3 presents the BWI test results for the three samples. Each sample underwent the test using 3 different closing sizes. Based on the results obtained, both gold zone sources (Smith and SSX) exhibit a soft to moderate level of grindability, with a slight increase in BWI observed at finer closing screens. It should be noted that the low-grade material described as mineralized waste rock (MWR) was found be harder than the gold mineralized sources.

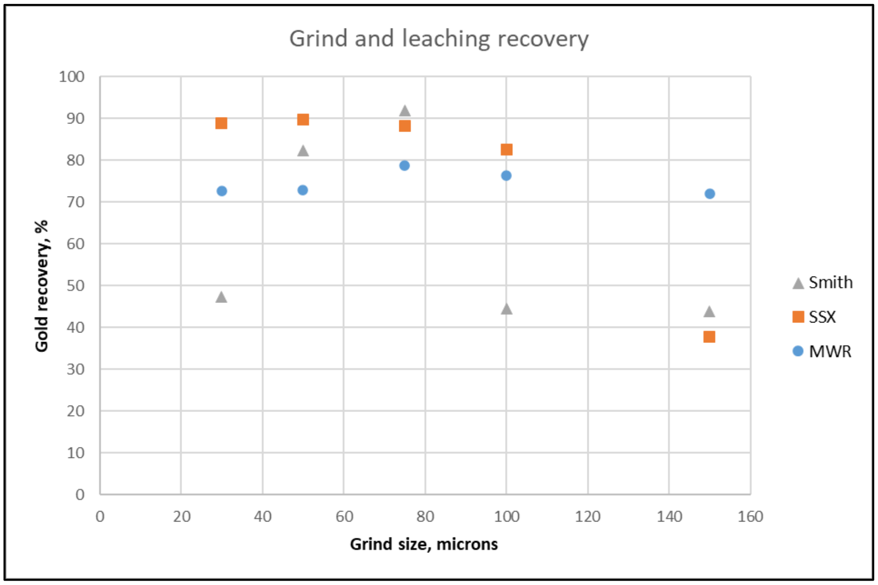
Table 13-3: Comminution Testing Results

Client ID	Closing Size, µm	BW_i, kWh/t
Smith Met Composite Gold Sample	65	11.7
Smith Met Composite Gold Sample	100	11.4
Smith Met Composite Gold Sample	150	11.4
SSX Met Composite Gold Sample	65	11.3
SSX Met Composite Gold Sample	100	10.9
SSX Met Composite Gold Sample	150	10.7
MWR Comp Gold Sample	65	13.5
MWR Comp Gold Sample	100	12.4
MWR Comp Gold Sample	150	12.8

13.3.2. Leaching

In late 2021, Hazen conducted grind and leach recovery tests on subsamples of the roasted calcine from SSX and Smith gold mineralized, and from mineralized waste rock (MWR). All samples were roasted for 20 minutes at 540°C under constant atmospheric conditions. The roasting and leaching tests were conducted at various grind sizes, with the finest grind size being P_{80}=30 um. Figure 13-1 suggests that the suitable grind size falls within the range of 75 to 100 µm. Grind size >100 µm could result in a significant recovery reduction.

Figure 13-1: Grind vs Leaching Recovery

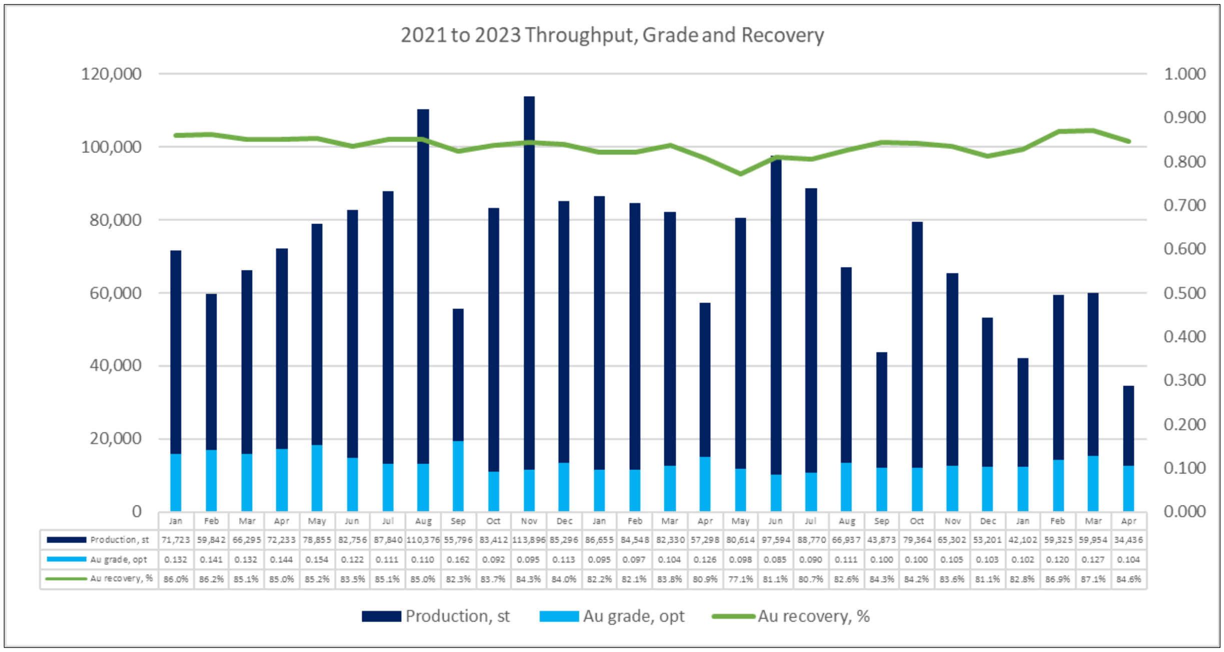


Note: Figure prepared by First Majestic, April 2023.

13.3.3. Metallurgical Recovery Records

Figure 13-2 graphically presents the monthly mill throughput, gold feed grade and recovery for January 2021 Jan to April 2023 April illustrating the variance in these key performance indicators over the two-year period.

Figure 13-2: Monthly Mill Throughput, Feed Grade, and Recovery for 2021 to 2023

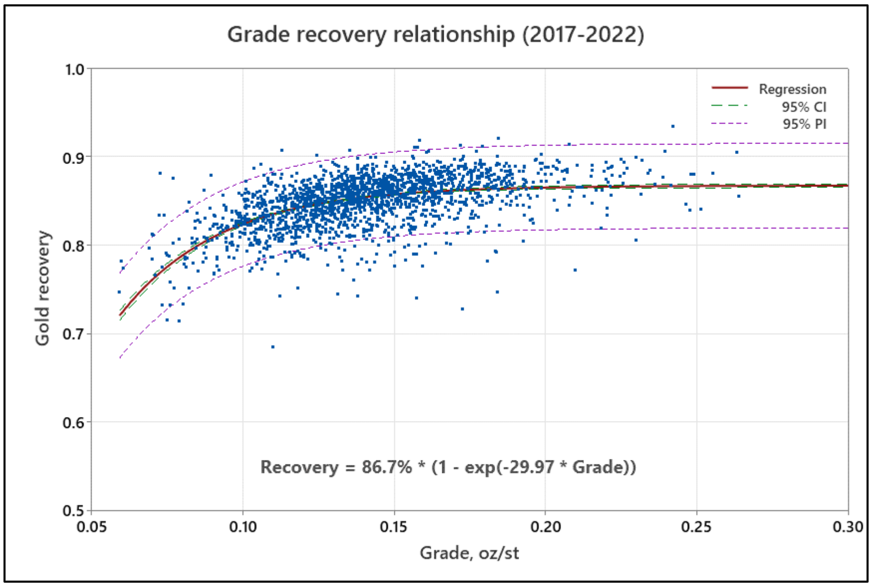


Note: Figure prepared by First Majestic, April 2023.

13.4. Recovery Prediction

Figure 13-3 presents the daily gold grade-recovery relationship over the years 2017 to 2022, which serves as the basis for the recovery projections used in the Mineral Resource estimates.

Figure 13-3: Historical Gold Grade Feed Versus Recovery, Jerritt Canyon



Note: Figure prepared by First Majestic, April 2023.

Figure 13-4 is a statistical representation of the gold feed grade and recovery relationship spanning from 2017 to 2022. Although the gold recovery correlation established in Figure 13-2 is informative, it is important to acknowledge that factors beyond gold head grade, such as sulfide sulfur content, total organic carbon (TOC) content, and roaster performance can also impact the gold recovery. To improve the accuracy of recovery prediction over shorter time intervals, it is recommended to conduct further metallurgical testing on the main gold mineralized types to obtain the optimal operating conditions in grinding, roasting and leaching.

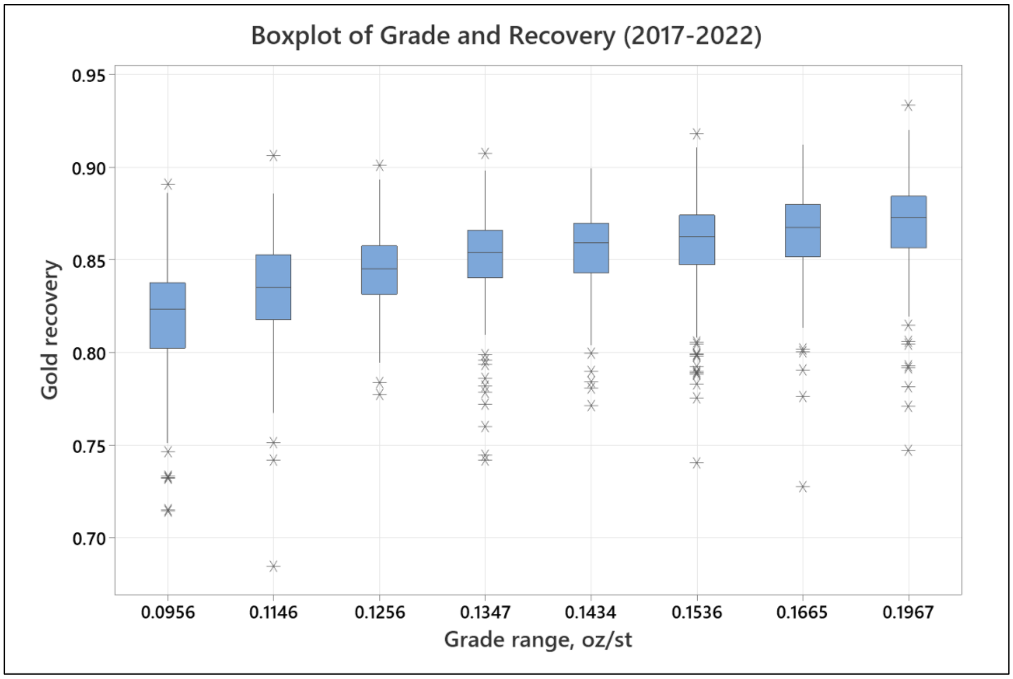
13.5. Variability

The operation has been mine limited for many years averaging 2,000-2,500 tonnes processed per day compared to the permitted limit of 4,100 tpd. As a result, extensive variability testing has not been completed as all mineralized material mined is processed. The material is sorted by sulfide and organic carbon content and blended to target fuel value in the roaster to obtain necessary roasting temperatures and conditions. Minimal variability testing completed between the Smith and SSX does not indicate a difference in performance.

13.6. Deleterious Elements

There are no known deleterious elements in the doré processed. The gold mineralization contains significant levels of mercury but there are controls in the process to manage mercury.

Figure 13-4: Boxplot of Gold Grade and Recovery from 2017 to 2022



Note: Figure prepared by First Majestic, April 2023.

13.7. Process Plant

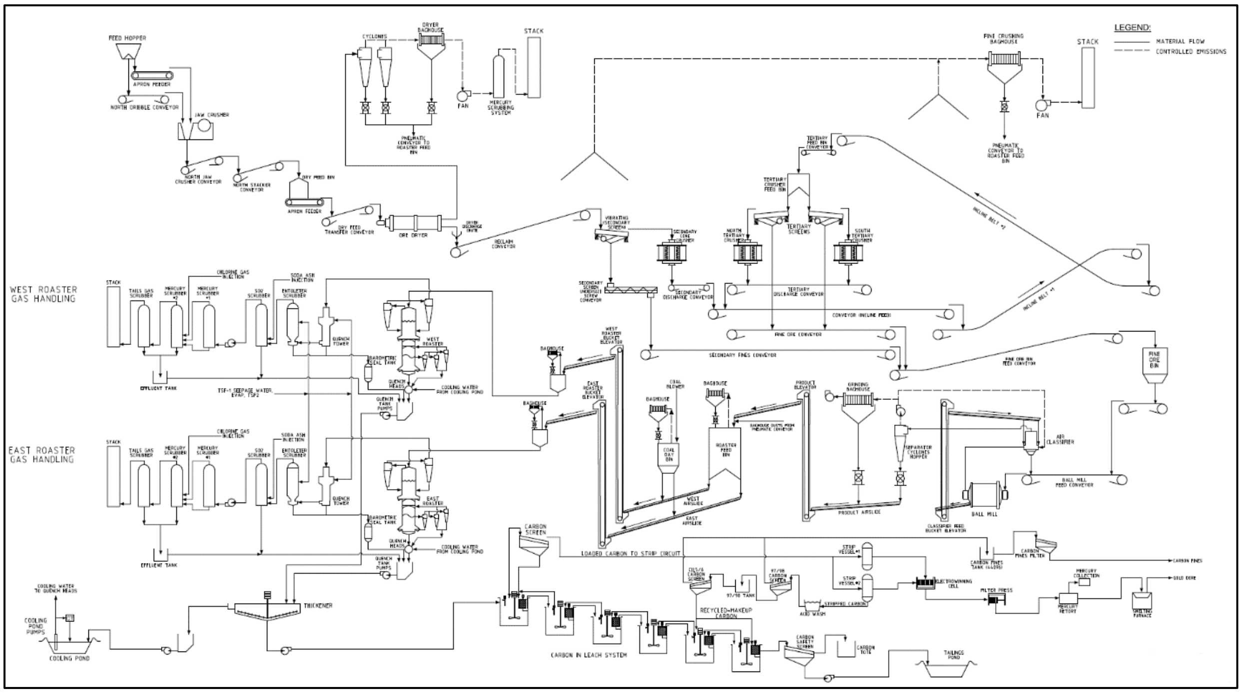
The processing facilities at Jerritt Canyon were designed to operate at a rate of 4,500 stpd with an operating availability of 90% and are permitted to operate at 4,100 stpd. The plant consists of the operating units listed in Table 13-4. The process flow sheet is presented in Figure 13-5.

The Jerritt Canyon processing plant has the systems to treat gases and remove contaminants such as particulate, mercury, and sulphur dioxide. Within the plant, gas treatment systems exist for the two roaster off-gas streams, the refinery, and the ore dryer. The off-gas treatment systems for the roasters and the refinery off-gas treatment system were upgraded in 2022 to improve the mercury removal efficacy for each system. The roaster off-gas system upgrade included the addition of some tanks for more robust solution chemistry management. For the refinery, the carbon tray scrubbers were replaced with sulphur in carbon beds alongside additional gas conditioning units.

Table 13-4: Plant Operating Units

Unit	Comment
Primary crushing	ROM mineralized material is crushed to minus six inches with jaw crusher.
Ore drying	Crushed mineralized material from the primary crushing circuit is fed to the propane fired dryer.
Secondary crushing	Dried mineralized material from the dryer is conveyed to the secondary crushing vibrating screen. Screen oversize is fed to a crusher. Minus ¼ inch screen undersize by-passes the secondary crusher and is fed to a fine ore bin.
Tertiary crushing	Ore from the secondary crusher is conveyed to the tertiary crusher feed bin. Oversize from each screen is fed to a crusher. Minus ¼ inch material by-passes the tertiary crushers and reports to fines conveyor that transports the material to a fine ore bin.
Dry grinding	Ore from the fine ore bin is conveyed to the ball mill. Mineralized material passes through the discharge grates to an air slide and then to a bucket product elevator that transfers the ground material to an air classifier. Classifier oversize reports back to the ball mill for further size reduction. Fines from the classifier oversize report to separator cyclones.
Roasting	The roaster feed bucket elevator lifts the mixture of mineralized material and pulverized coal approximately 135 ft and discharges into the roaster feed air slide. The roaster system is comprised of two identical, side by side roaster trains. Calcine from the roasters discharges into quench tanks for cooling.
Thickening	Cooled slurry from the roaster quench system is pumped to a thickener. Thickener overflow is subsequently pumped to the cooling pond where it is recycled back to the roasters after cooling. Slurry from thickener underflow is pumped across a vibrating trash screen to remove oversize mineralized material particles, which are recycled back to the primary crusher.
Carbon in leach (CIL)	Trash screen undersize discharges directly to the first of six CIL tanks. The slurry in the CIL circuit flows by gravity from tank 1 to tank 2 to tank 3, and so on until the slurry discharges from the circuit. As carbon is loading with gold, it is advanced countercurrent to the slurry flow using carbon advance pumps.
Carbon stripping	Activated carbon is stripped in six-ton batches.
Electrowinning	Pregnant solution from the carbon strip solution reports to electrowinning (EW) cells where gold is recovered from the solution.
Electrowinning sludge refining	Doré bars weighing approximately 1,000 oz and containing approximately 90% to 95% gold are poured and shipped off site for additional refining.
Oxygen plant	
Cooling pond	
Water evaporation pond	
Tailings impoundment	The Jerritt Canyon gold mine currently pumps CIL tailings directly to TSF-2 at 30% to 48% solids density by mass, nominally 40%.

Figure 13-5: Process Flowsheet, Jerritt Canyon



Note: Figure adopted from Hatch, 2021.

14. MINERAL RESOURCE ESTIMATES

14.1. Introduction

This section describes the mineral resource estimation methodology and summarizes key assumptions considered by First Majestic for Jerritt Canyon. The Mineral Resource estimates are prepared in accordance with CIM Estimation of Mineral Resource and Mineral Reserve Best Practice Guidelines (November 2019) and follow the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014), that are incorporated by reference in NI 43-101.

Geological modelling, data analysis, and mineral resource estimates for Jerritt Canyon were completed under the supervision of David Rowe, CPG, a First Majestic employee.

All units in this section are US Customary (imperial system) unless otherwise specified as metric system.

14.2. Mineral Resource Estimation Process

The block model Mineral Resource estimates are based on the database of exploration drill holes, underground level geological mapping, geological interpretations and models, surface topography and underground mining development wireframes available as of March 31, 2023, the cut-off date for scientific and technical data supporting the estimates.

Geological modeling, geostatistical analysis, analysis of semi-variograms, block model estimation, and validation of the block models were completed with Leapfrog Geo, Leapfrog EDGE, and Datamine Supervisor. Stope analysis to determine reasonable prospects for eventual economic extraction was completed with Deswik Stope Optimizer, and Whittle software was used to identify the open pit-shells that represent the mineable constraining shapes.

The process followed for the estimation of Mineral Resources included:

- Database compilation and verification;
- Review of data quality for primary and interpreted data and QAQC;
- Setup of the resource project with sample database, surface topography, and mining depletion wireframes and inspection in 3D space;
- Three-dimensional geological interpretation, modelling, and definition of the Mineral Resource estimation domains;
- Exploratory data and boundary analysis of the resource estimation domains;
- Sample data preparation (compositing and capping) for variography and block model estimation;
- Trend and spatial analysis: variography;
- Bulk density review;
- Block model resource estimation;
- Validation and classification of the block model resource estimates;

- Development of appropriate economic parameters and assessment of reasonable prospects for eventual economic extraction;
- Depletion of the Mineral Resource estimates due to mining;
- Summary compilation of the Mineral Resource estimates.

The following sub-sections describe the estimation procedures used for mineral deposits located at the Smith Mine, SSX Mine, WGen Mine, and the Murray Mine. The gold deposits at these four locations contain 92% of the estimated Measured and Indicated Mineral Resource gold ounces and 90% of the estimated Inferred Mineral Resource gold ounces for Jerritt Canyon. The estimation process described here was used for the other smaller deposits.

14.3. Sample Database

The drill hole database for Jerritt Canyon was reviewed and verified by the resource geologists, and the QAQC program was considered to be sufficient. The sample data used in the estimate has an effective date of March 31, 2023, and consists of RC and core drill holes. Tables 14-1 to Table 14-4 summarize the drill hole sample data used in the estimates, and Figures 14-1 to Figure 14-4 show the location of the sample data with respect to the mineral deposit zones in plan views.

Table 14-1: Drill Hole Composite Sample Data Used in the Mineral Resource Estimation, Smith Mine

Mine	Domain	Composite Samples	Length (ft)	% of Total
Smith	Smith1-5_LG	30,114	149,048	9%
	Smith1_HG	15,145	75,063	5%
	Smith2-3_HG	44,126	218,260	14%
	Smith2-3_LG	49,068	242,236	15%
	Smith4_HG	38,053	188,770	12%
	Smith4_LG	72,770	361,654	22%
	Smith5_HG	10,124	50,395	3%
	Smith7-9_LG	13,614	67,171	4%
	Smith7_HG	6,161	30,435	2%
	Smith8_HG	14,769	73,180	5%
	Smith8_LG	27,837	137,827	9%
	Smith9_HG	7,014	34,925	2%
	Smith10_HG	2,261	11,252	1%
	Smith10_LG	3,867	19,215	1%
	Smith2A_HG	7,050	34,936	2%
	Smith2A_LG	13,150	65,096	4%
	Total	**325,009**	**1,610,416**	**100%**

Table 14-2: Drill Hole Composite Sample Data Used in the Mineral Resource Estimation, SSX Mine

Mine	Domain	Composite Samples	Length (ft)	% of Total
SSX	SSX1-9_HG	13,943	67,859	4%
	SSX1-9_LG	29,209	145,163	9%
	SSX2-3_HG	77,361	377,682	23%
	SSX2-3_LG	63,563	308,859	19%
	SSX4_HG	10,062	49,329	3%
	SSX4_LG	15,891	79,197	5%
	SSX5_HG	23,849	116,134	7%
	SSX5_LG	30,354	150,997	9%
	SSX6_HG	4,768	23,722	1%
	SSX6_LG	9,864	49,129	3%
	SSX7_HG	22,963	113,582	7%
	SSX7_LG	30,462	150,604	9%
	Total	**332,289**	**1,632,257**	**100%**

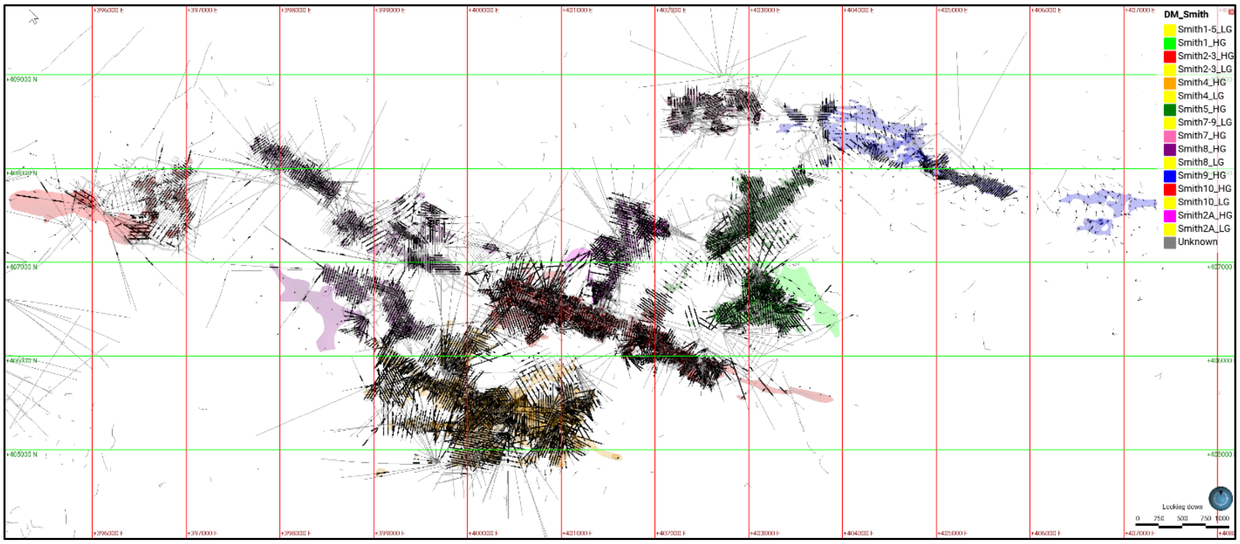
Table 14-3: Drill Hole Composite Sample Data Used in the Mineral Resource Estimation, WGen Mine

Mine	Domain	Composite Samples	Length (ft)	% of Total
WGEN	WGHGF1	284	1,412	3%
	WGHGF2	583	2,907	7%
	WGHGF3	195	974	2%
	WGHGF4	32	160	0%
	WGHGH1	403	2,010	5%
	WGHGH2	792	3,950	9%
	WGHGH3	775	3,852	9%
	WGHGH4	196	976	2%
	WGLGFW	2,278	11,285	26%
	WGLGHW	3,201	15,909	37%
	Total	**8,739**	**43,434**	**100%**

Table 14-4: Drill Hole Composite Sample Data Used in the Mineral Resource Estimation, Murray Mine

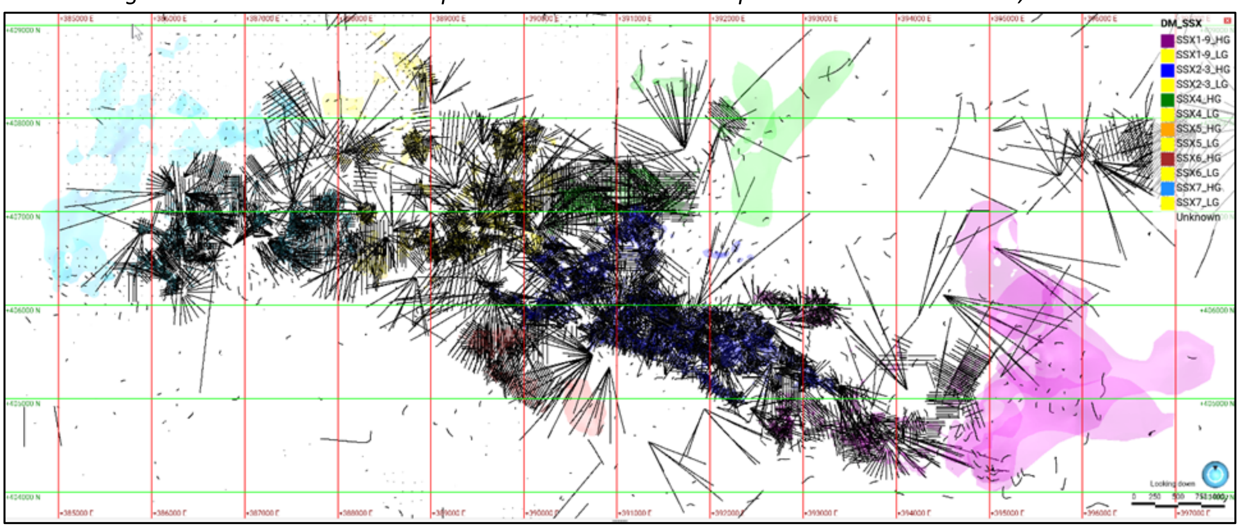
Mine	Domain	Composite Samples	Length (ft)	% of Total
Murray	MRZ7HG1	1,258	6,115	2%
	MRZ7HG2	346	1,703	0%
	MURY_HG	29,843	143,308	41%
	MURY_LG	35,495	170,136	49%
	MURY_MG	6,908	28,745	8%
	Total	**73,850**	**350,007**	**100%**

Figure 14-1: Drill Hole and Sample Data Locations with Respect to Resource Domains, Smith Mine



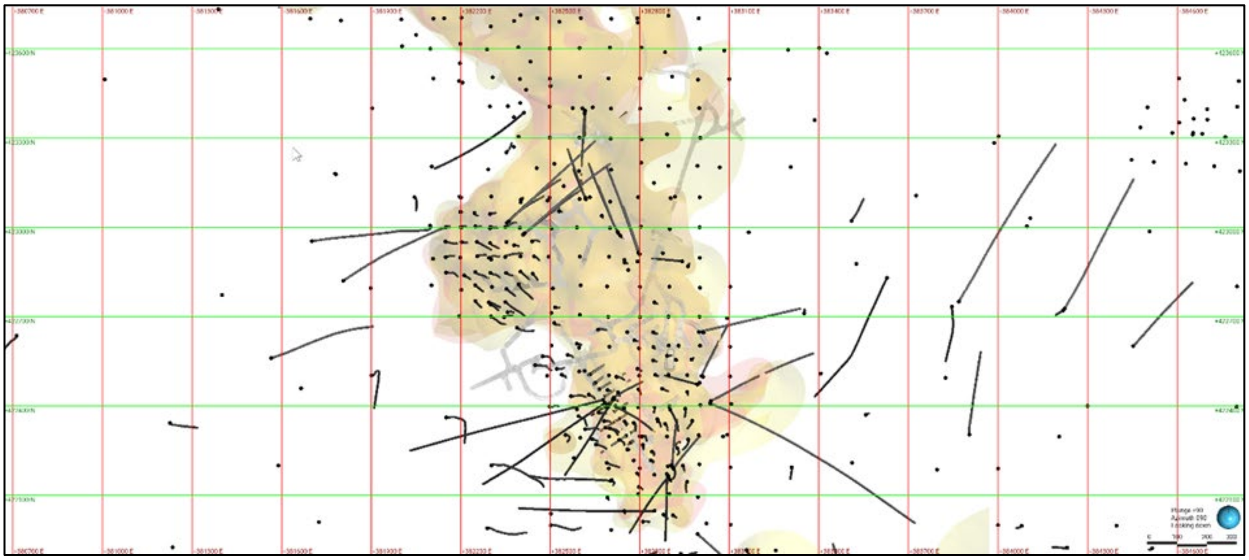
Note: Figure prepared by First Majestic, April 2023.

Figure 14-2: Drill Hole and Sample Data Locations with Respect to Resource Domains, SSX Mine



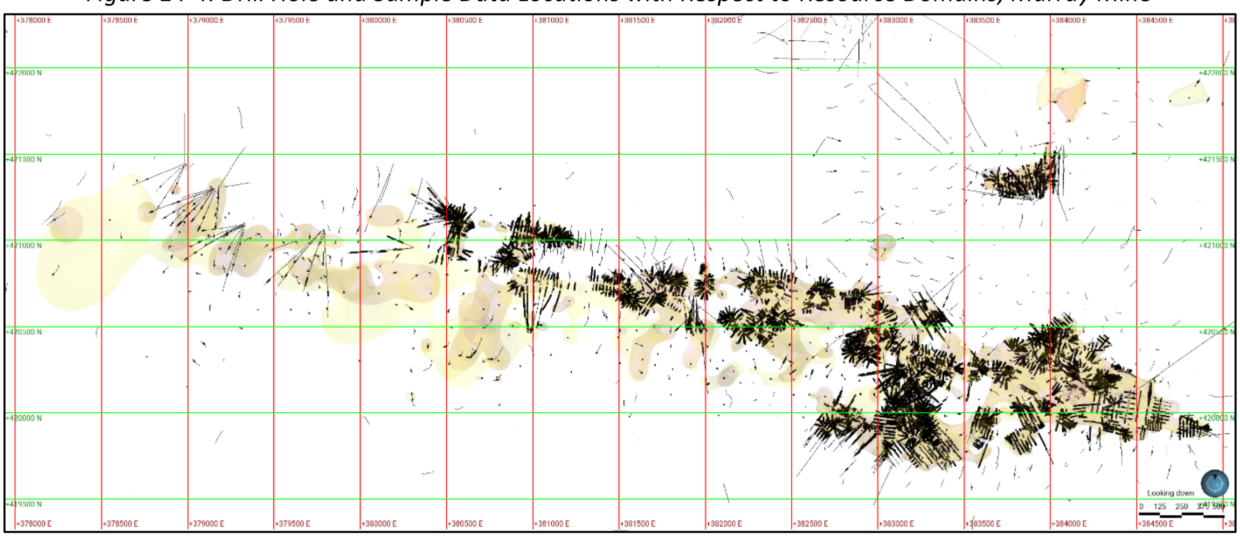
Note: Figure prepared by First Majestic, April 2023.

Figure 14-3: Drill Hole and Sample Data Locations with Respect to Resource Domains, WGen Mine



Note: Figure prepared by First Majestic, April 2023.

Figure 14-4: Drill Hole and Sample Data Locations with Respect to Resource Domains, Murray Mine



Note: Figure prepared by First Majestic, April 2023.

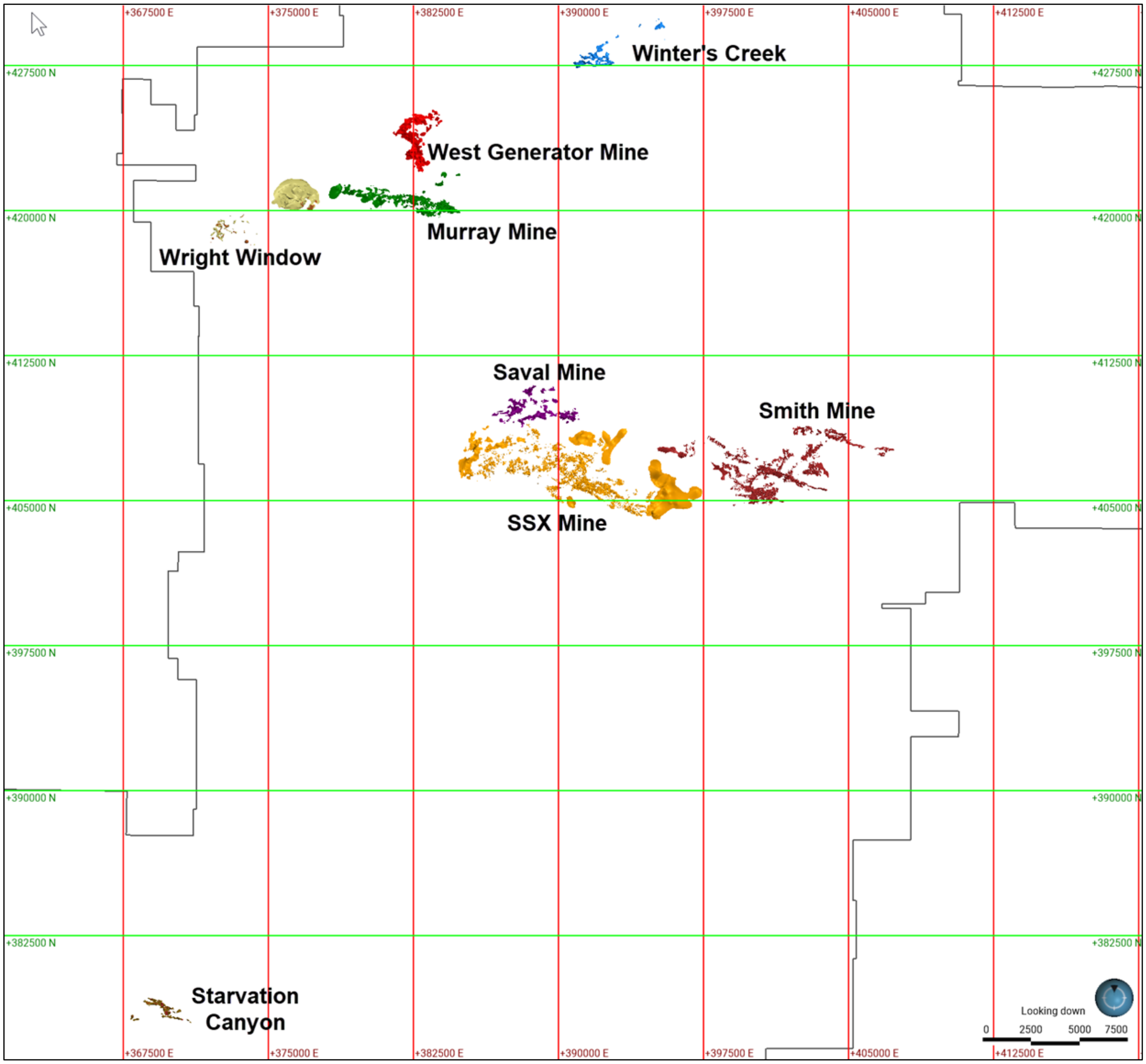
The drill hole sample data were collected with a logger system that captured collar, survey, lithology, and assay information. Integrated validation tools were used to check for gaps, errors, overlapped intervals and total lengths prior to geological modeling and estimation of Mineral Resources.

14.4. Geological Interpretation and Modeling

The Mineral Resource estimates for Jerritt Canyon are constrained by the interpretation and construction of three-dimensional wireframe domains representing the geometry of the gold mineralization. The distribution of gold mineralization at Jerritt Canyon is controlled both by lithology and structure. The host rock stratigraphy, which is a primary control on gold mineralization Jerritt Canyon, was constructed as three-dimensional wireframe surfaces along with spatially associated high-angle structures. The gold mineralization that occurs along the controlling geologic framework was modeled next. The boundaries and gold domains were constructed from drill hole logs and assay intervals as solid wireframes. The geometry of these domains was strongly influenced by the controlling lithologies and structures. The model boundaries strictly adhere to the downhole sample assay intervals. These resource mineral domains outline gold assay values greater than 0.02 and 0.08 oz/st gold. The 0.08 oz/st gold resource wireframes, which are nested within the lower grade wireframes, contain nearly all estimated mineral resources greater than the designated gold cut-off grade for reporting.

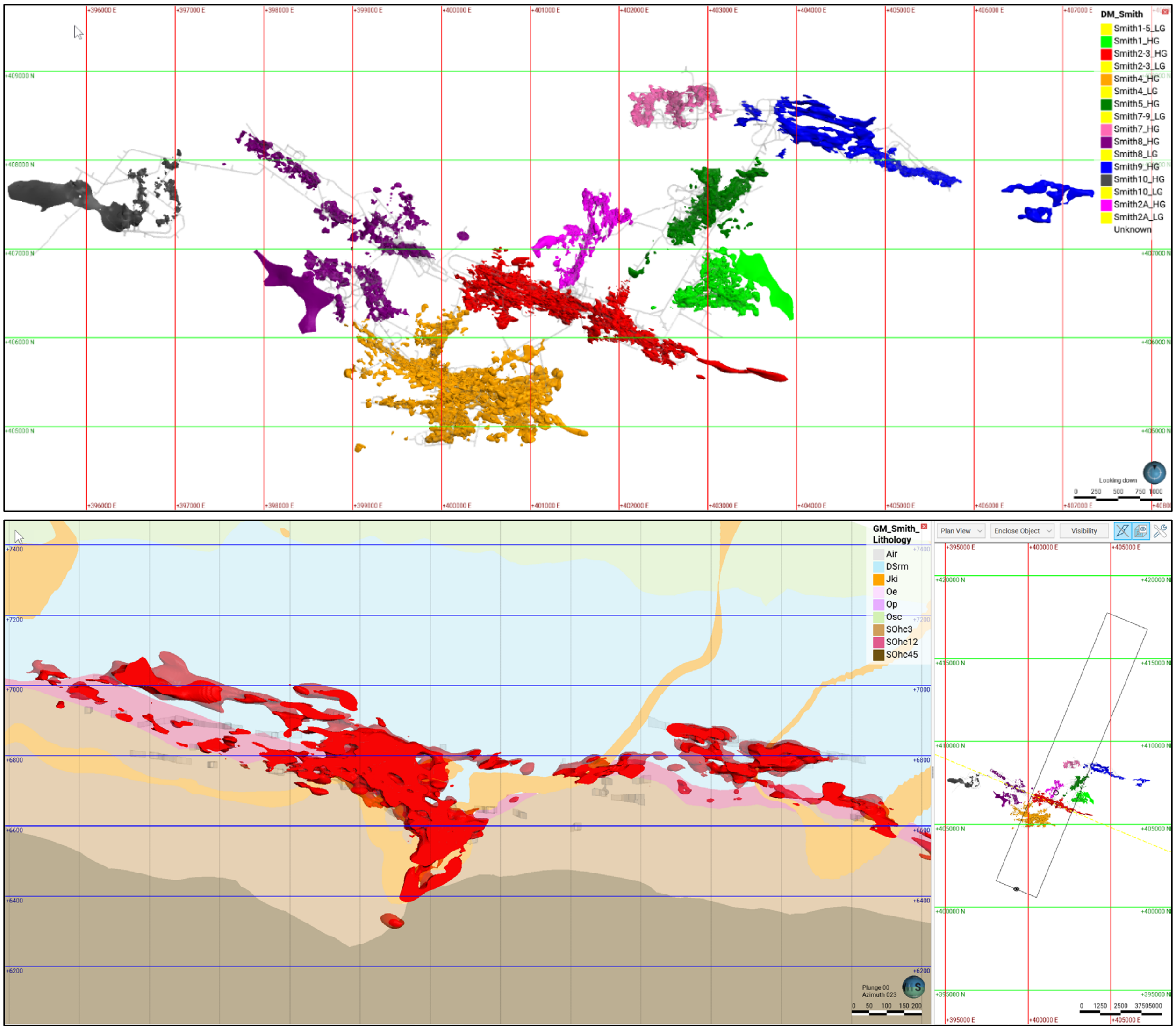
Figure 14-5 provides the location of the resource domains at Jerritt Canyon. Figures 14-6 to Figure 14-9 are examples of the gold resource domains for the Smith, SSX, WGen, and Murray mine areas.

Figure 14-5: Location Map of the Jerritt Canyon Resource Domains



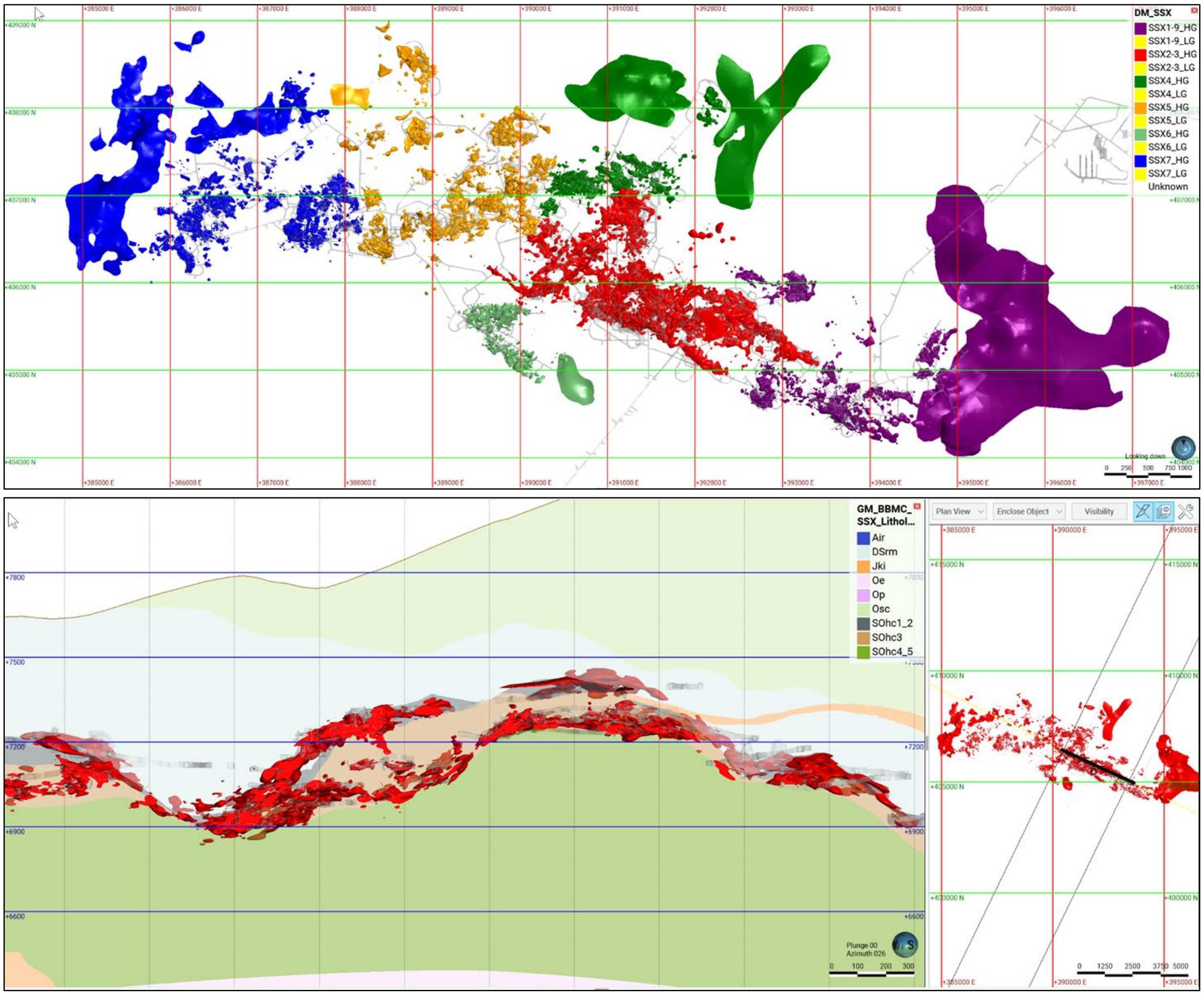
Note: Figure prepared by First Majestic, April 2023. Plan View.

Figure 14-6: Mineral Resource Domains at Smith Mine with Model of Host-rock Stratigraphy (0.08 oz/st Gold Domains)



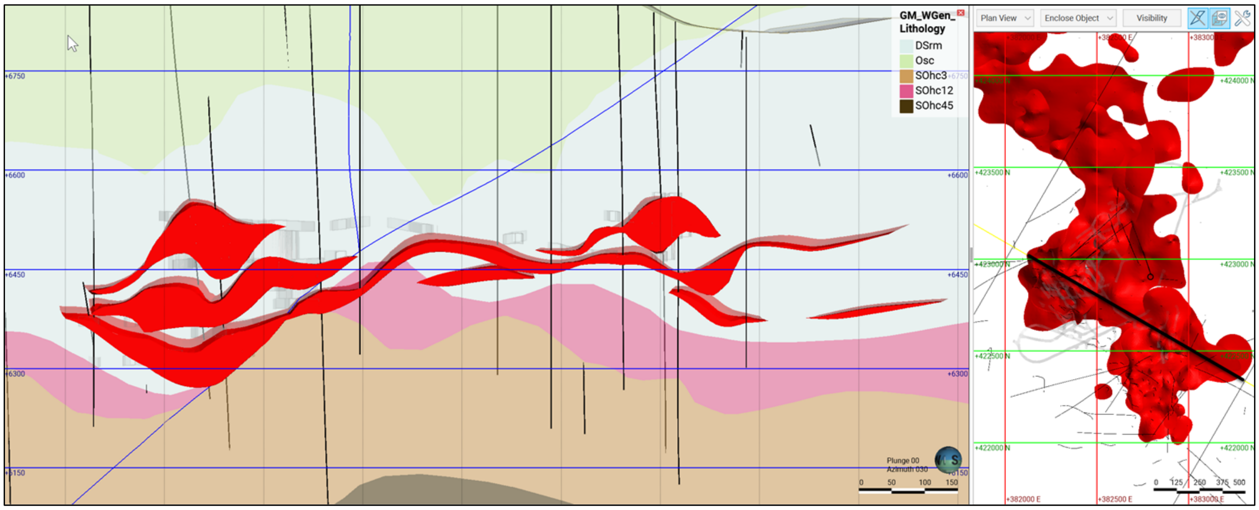
Note: Figure prepared by First Majestic, April 2023. Plan view at top with vertical section below. Looking northeast.

Figure 14-7: Mineral Resource Domains at SSX Mine with Model of Host-rock Stratigraphy (0.08 oz/st Gold Domains)



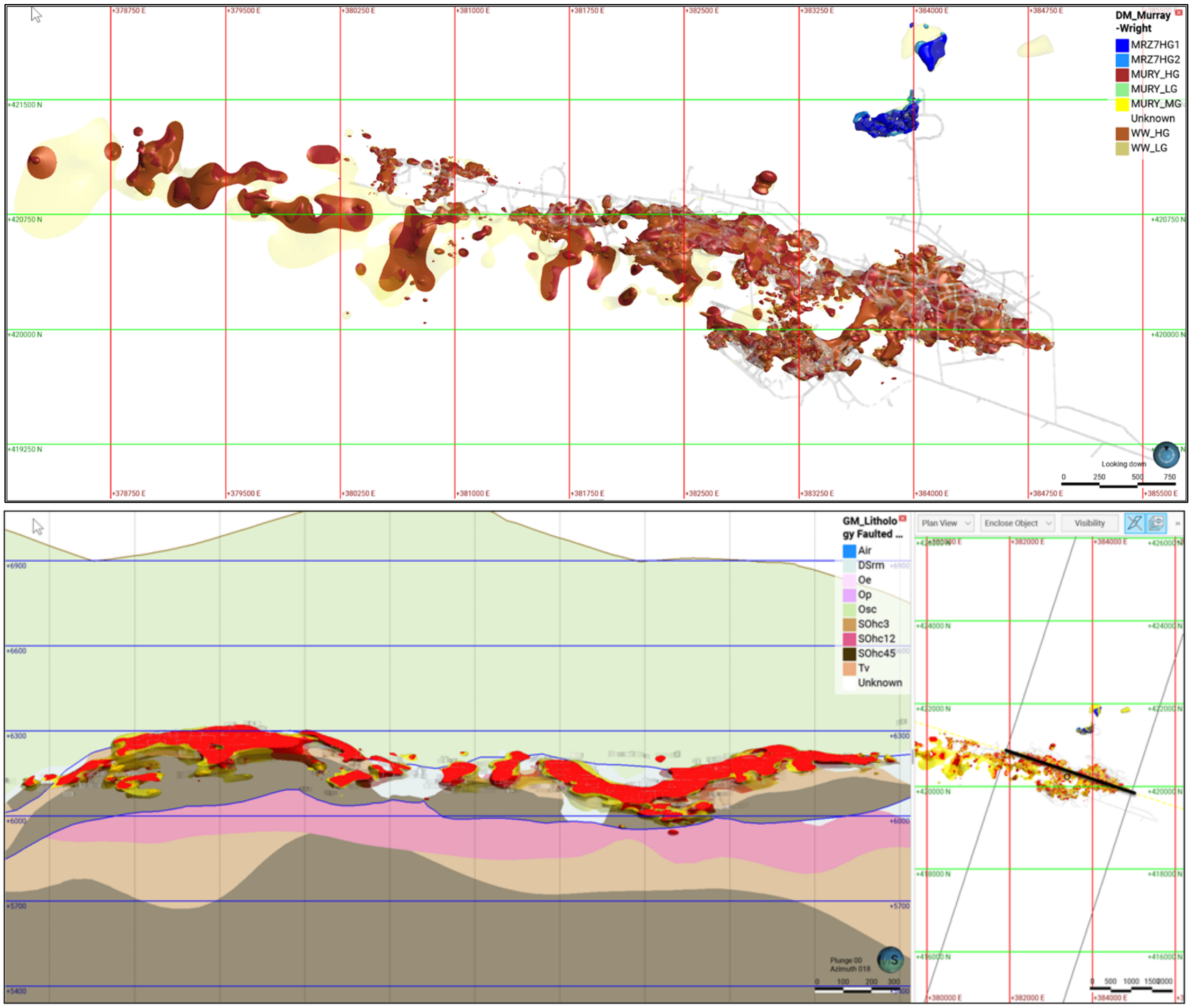
Note: Figure prepared by First Majestic, April 2023. Plan view at top with vertical section below. Looking northeast.

Figure 14-8: Mineral Resource Domains at WGen Mine with Model of Host-rock Stratigraphy (0.08 oz/st Gold Domains)



Note: Figure prepared by First Majestic, April 2023. Vertical Section with plan view at right. Looking northeast

Figure 14-9: Mineral Resource Domains at Murray Mine with Model of Host-rock Stratigraphy (0.08 oz/st Gold Domains)



Note: Figure prepared by First Majestic, April 2023. Plan view at top with vertical section below. Looking northeast.

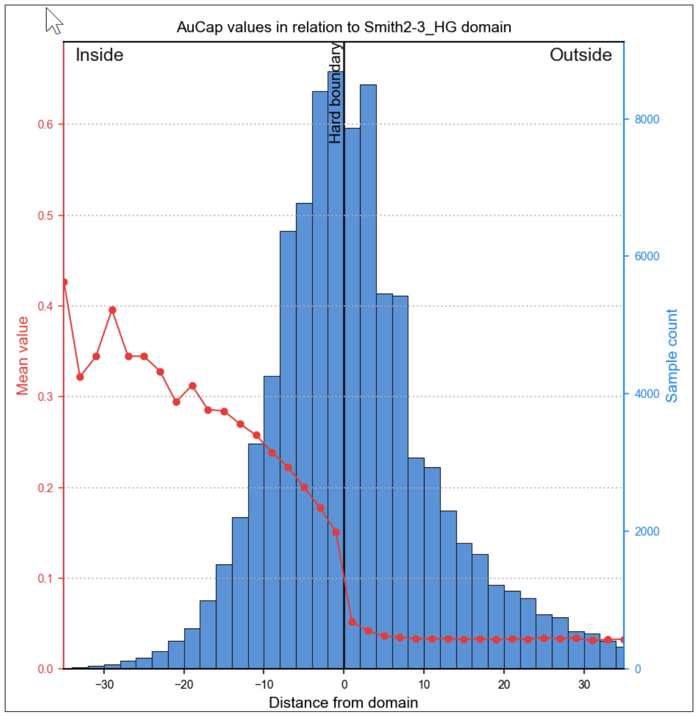
14.5. Exploratory Sample Data Analysis

Exploratory data analysis was completed for gold sample values for each of the domains to assess the statistical and spatial character of the sample data. The sample data were examined in 3D to understand the spatial distribution of mineralized intervals. The sample assay data statistics were analyzed within each domain to look for possible mixed sample populations.

14.6. Boundary Analysis

Boundary contact analysis was completed for each domain to review the change in metal grade across the domain contacts using boundary plots. There is a sharp grade change across the contact and hard boundary conditions were observed for all domains as shown in the example in Figure 14-10.

Figure 14-10: Example of Gold Boundary Analysis from the Smith2-3 domain



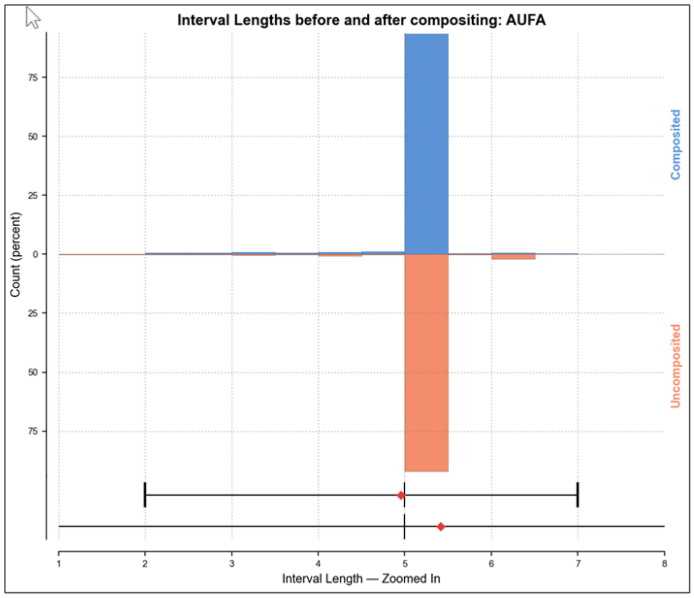
Note: Figure prepared by First Majestic, April 2023.

Hard boundaries were used during the construction of sample composite samples and during Mineral Resource estimation. Composite samples were restricted to their respective resource domain.

14.7. Composite Sample Preparation

To select an appropriate composite sample length, the assay sample intervals were reviewed for each resource domain. The selected composite length was five feet, with short residual composite samples left at the end of the domain intersection added to the previous interval. Figure 14-11 shows an example of the sample interval lengths before and after compositing, which was similar for all domains.

Figure 14-11: Sample Interval Lengths, Composited vs. Un-composited – Smith Mine Domains

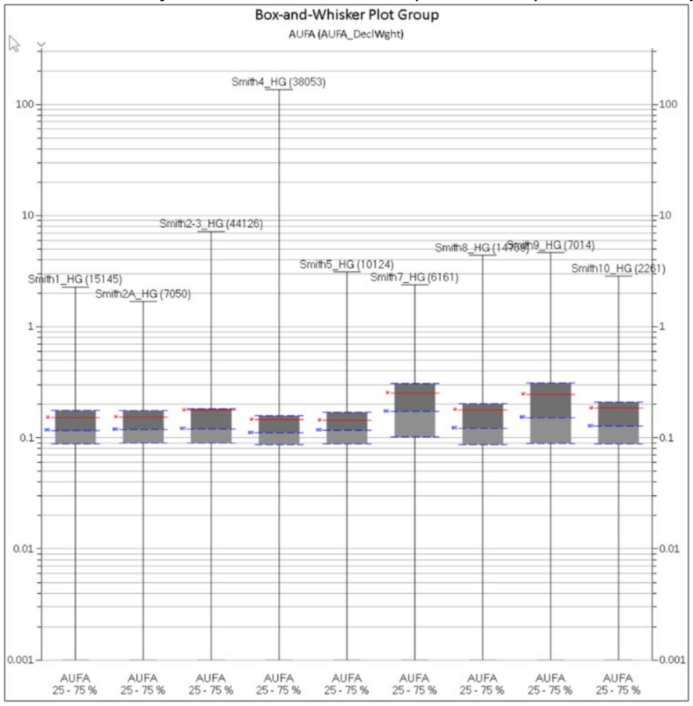


Note: Figure prepared by First Majestic, April 2023.

14.8. Composite Sample Statistics

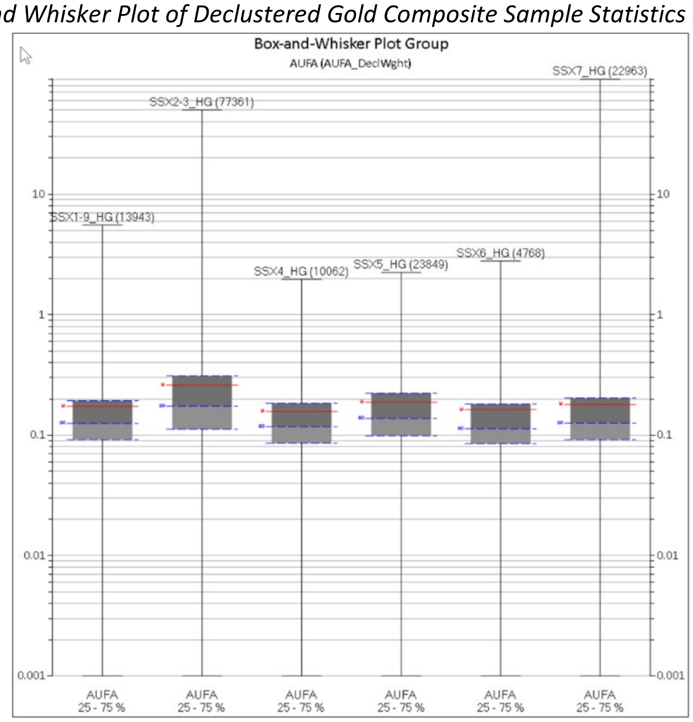
Composite sample data were declustered to account for over-sampling in certain regions. Clustered data result in an apparent low or a high-grade bias for the composite sample mean value. The declustered gold composite sample statistics for the gold resource domains are graphically displayed by box and whisker plots in Figure 14-12 to Figure 14-15, and are summarized in Tables 14-5 to Table 14-8.

Figure 14-12: Box and Whisker Plot of Declustered Gold Composite Sample Statistics by Domain, Smith Mine



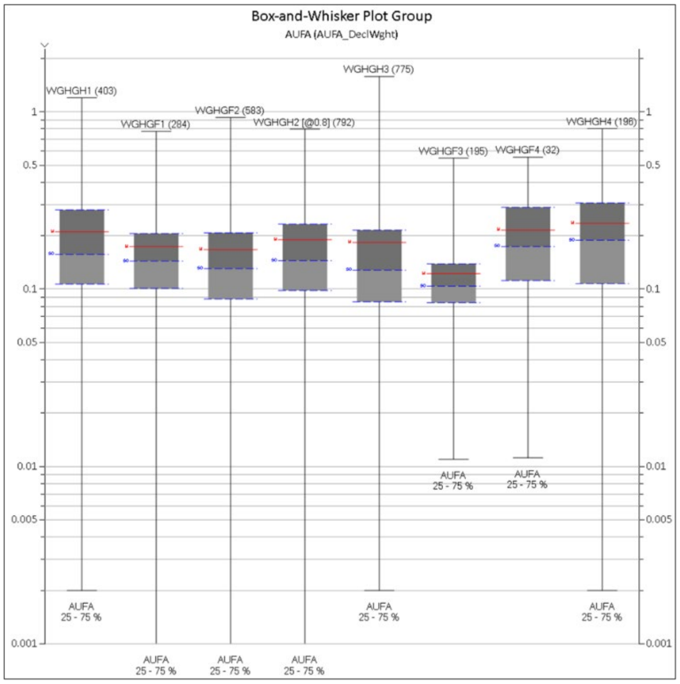
Note: Figure prepared by First Majestic, April 2023.

Figure 14-13: Box and Whisker Plot of Declustered Gold Composite Sample Statistics by Domain, SSX Mine



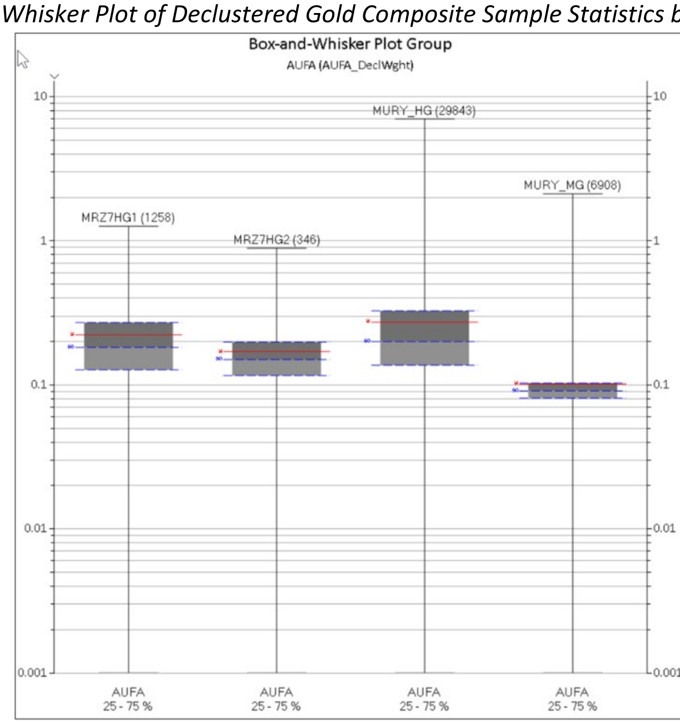
Note: Figure prepared by First Majestic, April 2023.

Figure 14-14: Box and Whisker Plot of Declustered Gold Composite Sample Statistics by Domain, WGen Mine



Note: Figure prepared by First Majestic, April 2023.

Figure 14-15: Box and Whisker Plot of Declustered Gold Composite Sample Statistics by Domain, Murray Mine



Note: Figure prepared by First Majestic, April 2023.

Table 14-5: Declustered Gold Composite Sample Statistics by Domain, Smith Mine

Domain	Smith1_HG	Smith2A_HG	Smith2-3_HG	Smith4_HG	Smith5_HG	Smith7_HG	Smith8_HG	Smith9_HG	Smith10_HG
Samples	15,145	7,050	44,126	38,053	10,124	6,161	14,769	7,014	2,261
Minimum	0	0	0	0	0	0	0	0	0
Maximum	2.276	1.69	7.19	135.891	3.116	2.379	4.393	4.64	2.858
Mean	0.152	0.154	0.178	0.146	0.144	0.252	0.179	0.245	0.185
Standard deviation	0.129	0.121	0.217	0.335	0.101	0.247	0.205	0.275	0.192
CV	0.848	0.789	1.216	2.294	0.698	0.977	1.146	1.12	1.037
Variance	0.017	0.015	0.047	0.113	0.01	0.061	0.042	0.075	0.037

Table 14-6: Declustered Gold Composite Sample Statistics by Domain, SSX Mine

Domain	SSX1-9_HG	SSX2-3_HG	SSX4_HG	SSX5_HG	SSX6_HG	SSX7_HG
Samples	13,943	77,361	10,062	23,849	4,768	22,963
Minimum	0.001	0.001	0.001	0.001	0.001	0.001
Maximum	5.557	50.259	1.968	2.246	2.798	90.257
Mean	0.173	0.261	0.157	0.188	0.163	0.18
Standard deviation	0.165	0.307	0.138	0.154	0.178	0.398
CV	0.952	1.177	0.879	0.817	1.088	2.218
Variance	0.027	0.094	0.019	0.024	0.032	0.159

Table 14-7: Declustered Gold Composite Sample Statistics by Domain, WGen Mine

Domain	WGHGH1	WGHGF1	WGHGF2	WGHGH2	WGHGH3	WGHGF3	WGHGF4	WGHGH4
Samples	403	284	583	792	775	195	32	196
Minimum	0.002	0.001	0.001	0.001	0.002	0.011	0.011	0.002
Maximum	1.2	0.776	0.929	1.411	1.584	0.549	0.555	0.804
Mean	0.21	0.174	0.167	0.193	0.183	0.122	0.216	0.235
Standard deviation	0.165	0.123	0.127	0.164	0.171	0.082	0.133	0.169
CV	0.782	0.709	0.76	0.847	0.934	0.67	0.615	0.717
Variance	0.027	0.015	0.016	0.027	0.029	0.007	0.018	0.028

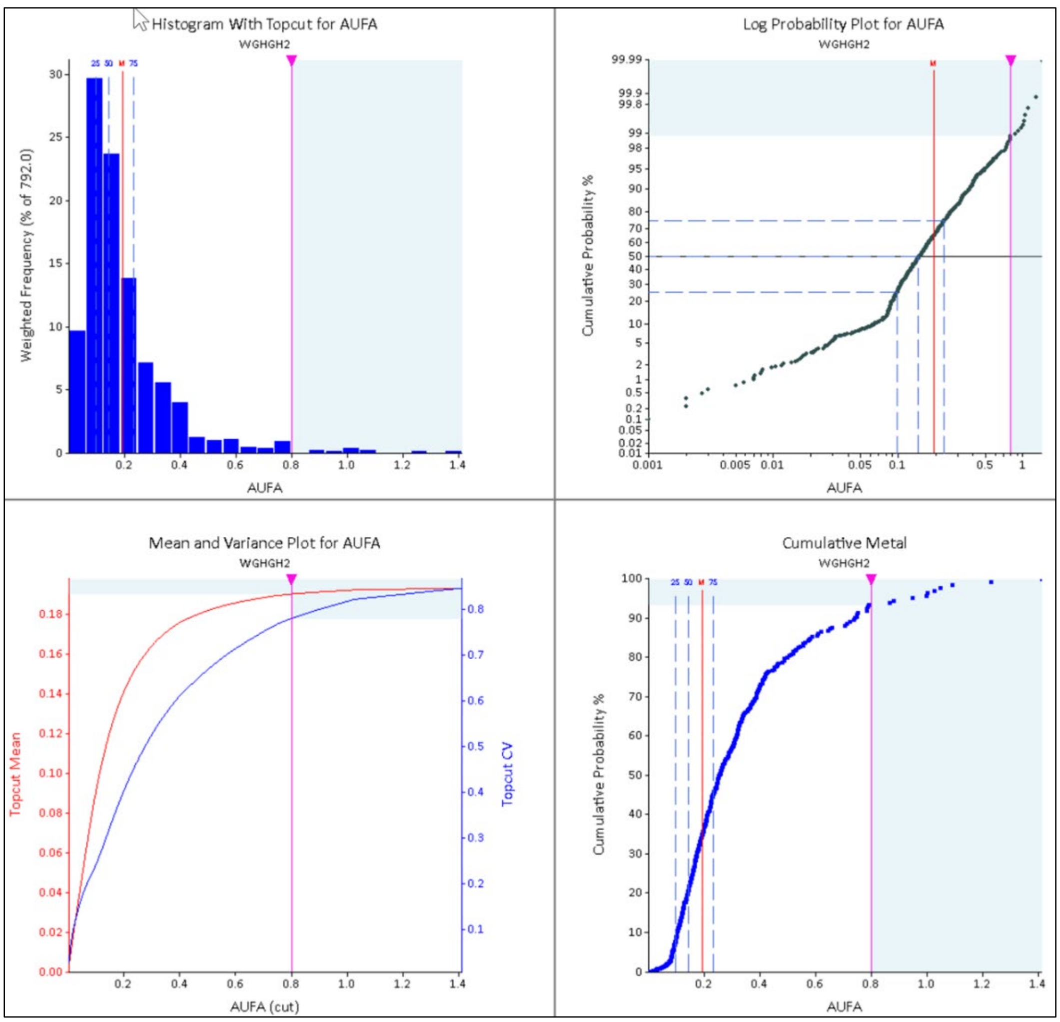
Table 14-8: Declustered Gold Composite Sample Statistics by Domain, Murray Mine

Domain	MRZ7HG1	MRZ7HG2	MURY_HG	MURY_MG
Samples	1258	346	29843	6908
Minimum	0.001	0.001	0.001	0.001
Maximum	1.264	0.89	7.011	2.118
Mean	0.223	0.17	0.273	0.101
Standard deviation	0.151	0.093	0.238	0.093
CV	0.676	0.546	0.873	0.917
Variance	0.023	0.009	0.057	0.009

14.9. Evaluation of Composite Sample Outlier Values

Drill hole composite samples were evaluated for high-grade outliers and those outliers were capped to values considered appropriate for the estimation. Outlier values at the high end of the grade distributions were identified from analysis of histograms, log cumulative probability, mean variance, and cumulative metal plots. The spatial distribution of outlier values was also considered. To reduce bias from a larger set of high-grade samples, those high-grade values were occasionally range restricted. Figure 14-16 is an example of the outlier value analysis for WGen Domain WGHGH2. Tables 14-9 to Table 14-12 show the declustered gold composite statistics following outlier value capping.

Figure 14-16: Example of the Global Analysis for Sample Outlier Values, WGen Mine



Note: Figure prepared by First Majestic, April 2023.

Table 14-9: Declustered Gold Composite Sample Capping Statistics by Domain, Smith Mine

Smith Declustered Composite Sample Statistics									
Domain	**Smith1_HG**	**Smith2A_HG**	**Smith2-3_HG**	**Smith4_HG**	**Smith5_HG**	**Smith7_HG**	**Smith8_HG**	**Smith9_HG**	**Smith10_HG**
Samples	15,145	7,050	44,126	38,053	10,124	6,161	14,769	7,014	2,261
Minimum	0	0	0	0	0	0	0	0	0
Maximum	2.276	1.690	7.190	135.891	3.116	2.379	4.393	4.640	2.858
Mean	0.152	0.154	0.178	0.146	0.144	0.252	0.179	0.245	0.185
Smith Declustered Composite Sample Statistics, Capped									
Domain	**Smith1_HG**	**Smith2A_HG**	**Smith2-3_HG**	**Smith4_HG**	**Smith5_HG**	**Smith7_HG**	**Smith8_HG**	**Smith9_HG**	**Smith10_HG**
Samples	15,145	7,050	44,126	38,053	10,124	6,161	14,769	7,014	2,261
Top Cut Count	39	25	211	229	20	58	113	52	10
Minimum	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maximum	1.000	1.000	1.800	1.100	0.800	1.300	1.500	1.500	1.500
Mean	0.152	0.153	0.176	0.143	0.144	0.250	0.176	0.242	0.185
Metal Cut	**0.00%**	**-0.65%**	**-1.12%**	**-2.05%**	**0.00%**	**-0.79%**	**-1.68%**	**-1.22%**	**0.00%**

Table 14-10: Declustered Gold Composite Sample Capping Statistics by Domain, SSX Mine

SSX Declustered Composite Sample Statistics						
Domain	**SSX1-9_HG**	**SSX2-3_HG**	**SSX4_HG**	**SSX5_HG**	**SSX6_HG**	**SSX7_HG**
Samples	13,943	77,361	10,062	23,849	4,768	22,963
Minimum	0	0	0	0	0	0
Maximum	5.557	50.259	1.968	2.246	2.798	90.257
Mean	0.173	0.261	0.157	0.188	0.163	0.180
SSX Declustered Composite Sample Statistics, Capped						
Domain	**SSX1-9_HG**	**SSX2-3_HG**	**SSX4_HG**	**SSX5_HG**	**SSX6_HG**	**SSX7_HG**
Samples	13,943	77,361	10,062	23,849	4,768	22,963
Top Cut Count	12	164	24	62	9	57
Minimum	0.000	0.000	0.000	0.000	0.000	0.000
Maximum	1.800	2.000	1.000	1.200	2.000	1.600
Mean	0.173	0.260	0.157	0.188	0.163	0.177
Metal Cut	**0.00%**	**-0.38%**	**0.00%**	**0.00%**	**0.00%**	**-1.67%**

Table 14-11: Declustered Gold Composite Sample Capping Statistics by Domain, WGen Mine

WGen Declustered Composite Sample Statistics								
Domain	**WGHGH1**	**WGHGF1**	**WGHGF2**	**WGHGH2**	**WGHGH3**	**WGHGF3**	**WGHGF4**	**WGHGH4**
Samples	403	284	583	792	775	195	32	196
Minimum	0.002	0.001	0.001	0.001	0.002	0.011	0.011	0.002
Maximum	1.200	0.776	0.929	1.411	1.584	0.549	0.555	0.804
Mean	0.210	0.174	0.167	0.193	0.183	0.122	0.216	0.235
WGen Declustered Composite Sample Statistics, Capped								
Domain	**WGHGH1**	**WGHGF1**	**WGHGF2**	**WGHGH2**	**WGHGH3**	**WGHGF3**	**WGHGF4**	**WGHGH4**
Samples	403	284	583	792	775	195	32	196
Top Cut Count	4	7	9	10	6	3	2	4
Minimum	0.002	0.001	0.001	0.001	0.002	0.011	0.011	0.002
Maximum	0.800	0.600	0.600	0.800	1.000	0.450	0.400	0.700
Mean	0.209	0.173	0.165	0.190	0.182	0.121	0.207	0.234
Metal Cut	**-0.48%**	**-0.57%**	**-1.20%**	**-1.55%**	**-0.55%**	**-0.82%**	**-4.17%**	**-0.43%**

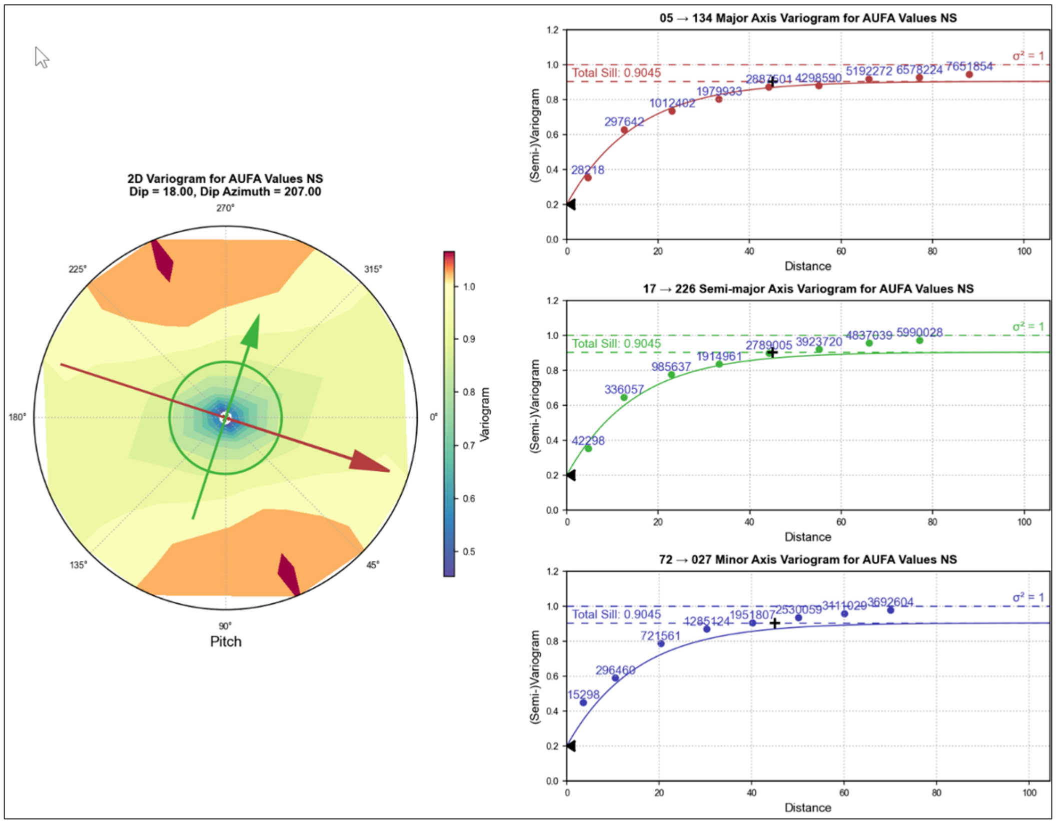
Table 14-12: Declustered Gold Composite Sample Capping Statistics by Domain, Murray Mine

Murray Declustered Composite Sample Statistics				
Domain	**MRZ7HG1**	**MRZ7HG2**	**MURY_HG**	**MURY_MG**
Samples	1,258	346	29,843	6,908
Minimum	0.001	0.001	0.001	0.001
Maximum	1.264	0.890	7.011	2.118
Mean	0.223	0.170	0.273	0.101
Murray Declustered Composite Sample Statistics, Capped				
Domain	**MRZ7HG1**	**MRZ7HG2**	**MURY_HG**	**MURY_MG**
Samples	1,258	346	29,843	6,908
Top Cut Count	9	5	69	9
Minimum	0.001	0.001	0.001	0.001
Maximum	0.800	0.500	2.000	1.000
Mean	0.222	0.169	0.272	0.101
Metal Cut	**-0.45%**	**-0.59%**	**-0.37%**	**0.00%**

14.10. Gold Trends and Spatial Analysis: Variography

All variography was performed using Leapfrog Edge for the separate gold resource domains. The dominant trends for gold mineralization were identified based on the three-dimensional models for each resource domain. Model variograms for gold composite values were developed along the trends identified, and the nugget values were determined from downhole variograms. Figure 14-17 is an example of the variography and experimental variograms produced.

Figure 14-17: Example of Variography from Smith Mine Domain, Smith2-3



Note: Figure prepared by First Majestic, April 2023.

14.11. Bulk Density

A constant tonnage factor used for the Jerritt Canyon resource estimates was 12.6 ft^3/st, which is equivalent to a density of 0.0794 st/ft^3. Tests, carried out in 2000 at the University of Nevada, Reno, and ALS Chemex on 67 samples, defined the tonnage factor as 12.616 ft^3/st. Zonge Engineering and Research of Tucson, Arizona tested 55 samples from the SSX Mine deposits. The testing resulted in average tonnage factors ranging from 12.45 ft^3/st to 13.0 ft^3/st.

14.12. Block Model Setup

Block model resource estimates were completed for each of the resource estimation domains at Jerritt Canyon using Leapfrog Edge. The block models are either unrotated or rotated so that the x and y axes lie parallel to the domains dominant trend. A sub-blocked model type was created that consists of primary parent blocks which are sub-divided into smaller sub-blocks whenever triggering surfaces intersect the parent blocks. The resource estimation domains and depletion boundaries served as such triggers. The size of the parent blocks was generally 15 ft x 15 ft x 15 ft which was based on the anticipated mining method and drill hole spacing. Gold values were estimated into the parent blocks and resource domains were evaluated into the sub-blocks.

14.13. Resource Estimation Procedure

Block model gold grade estimation was completed separately for the high-grade and low-grade domains (0.08 and 0.02 oz/st gold). Block grade estimation was generally completed using a two-pass strategy with a short search ellipsoid radius in the first pass and a longer search radius in the second pass. Block grades were estimated by ordinary kriging (OK). OK was selected as the estimation method based on the observation that OK produced the most reasonable estimate of grade. The estimation method chosen considered the characteristics of the domain, data spacing, variogram quality, and which method produced the best representation of grade continuity. Variable orientation of the search ellipsoid was used so that the search ellipsoid was re-oriented for each block according to the geometry of the host rock stratigraphy and local structure.

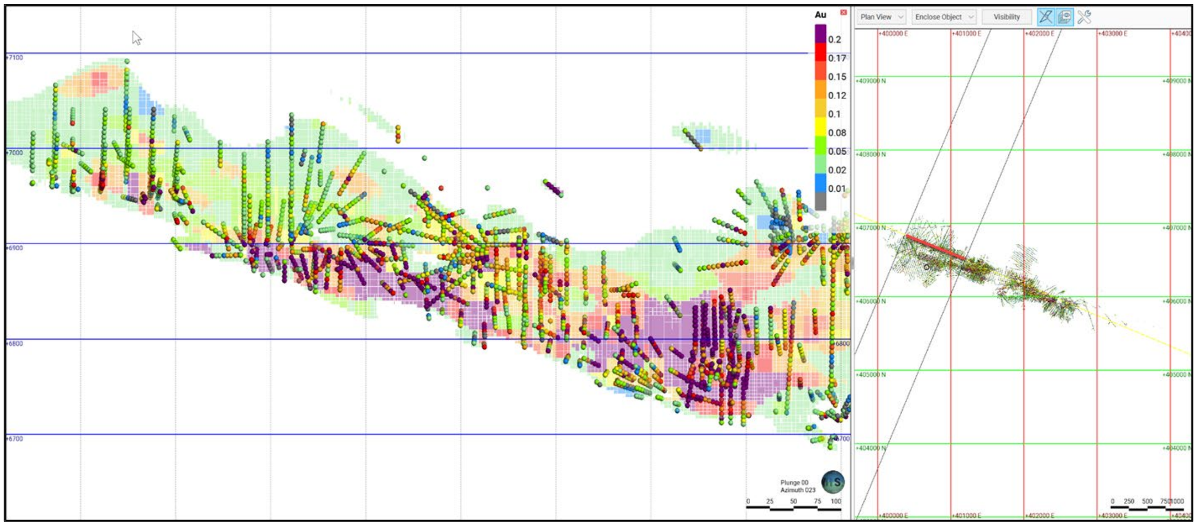
14.14. Block Model Validation

Validation of the estimated block gold grades was completed for each of the domains. The procedure was conducted as follows:

- Comparison of wireframe domain volumes to block model volumes for each domain;
- Visual inspection comparing the composite sample gold grades to the estimated block values;
- Comparison of the gold grades in "well-informed" parent blocks with the average sample values of the composited samples contained within those blocks using scatter plots to evaluate the estimate for over smoothing.
- Comparison of the global mean composite grades to the block model mean grade for each resource domain;
- Comparison of local block grade trends to composited sample grades along the three block model axes (i.e., easting, northing, and elevation) with swath grade trend plots.

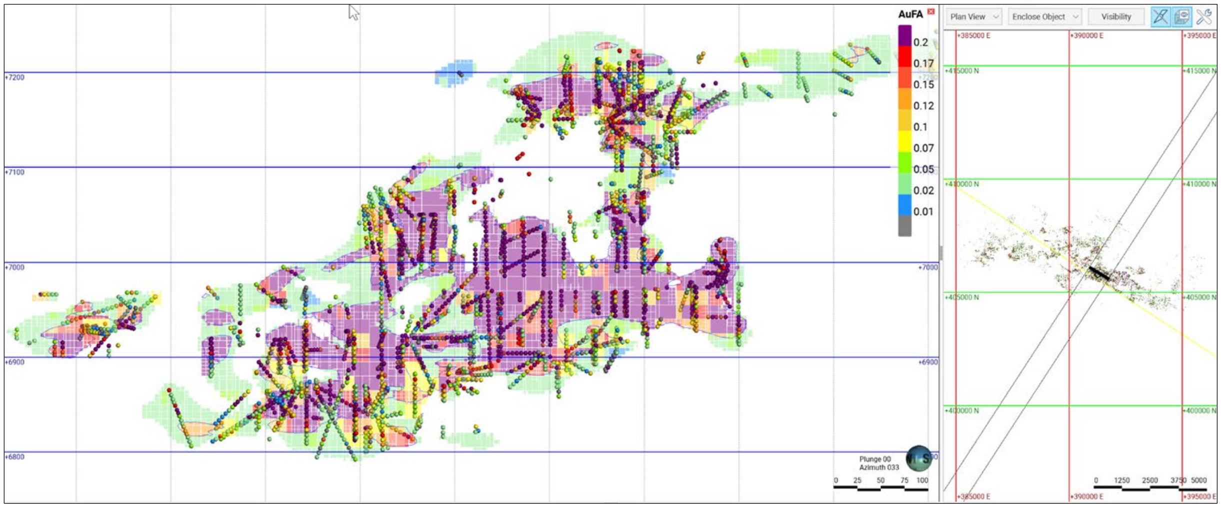
The estimated gold block grades were visually inspected in vertical sections. This review showed that the supporting composite sample grades closely match the estimated block values. Figures 14-18 to Figure 14-21 are comparisons of the estimated block model gold grades and the composite sample grades used in the estimates.

Figure 14-18: Example of Estimated Block Model Gold Values and Composite Sample Values, Smith Mine Domain 2-3. Vertical Section and Plan View Location



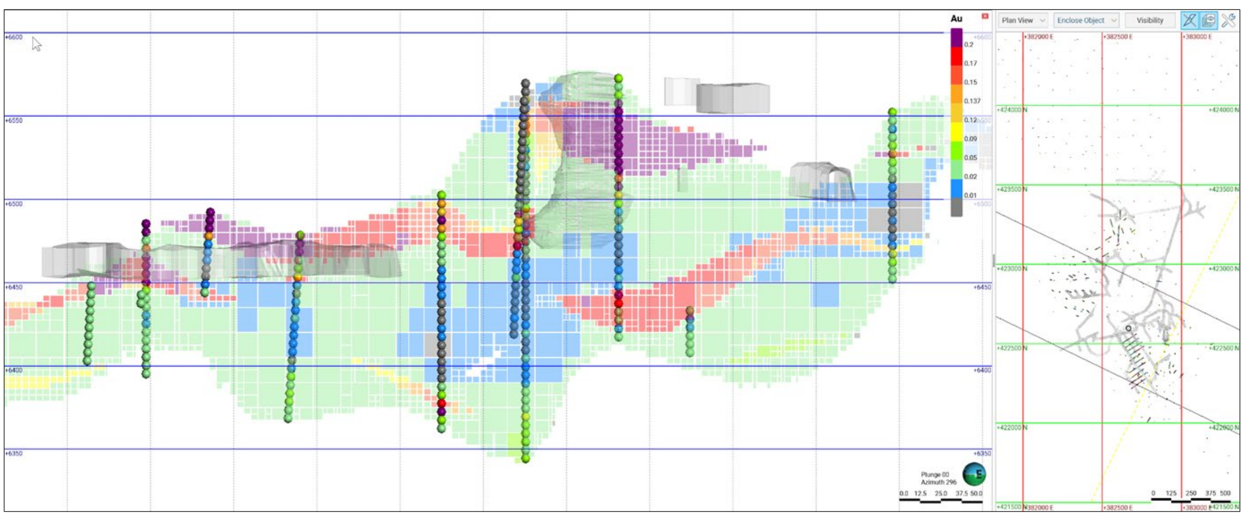
Note: Figure prepared by First Majestic, April 2023. Vertical Section looking northeast.

Figure 14-19: Example of Estimated Block Model Gold Values and Composite Sample Values, SSX Mine Domain2-3. Vertical Section and Plan View Location



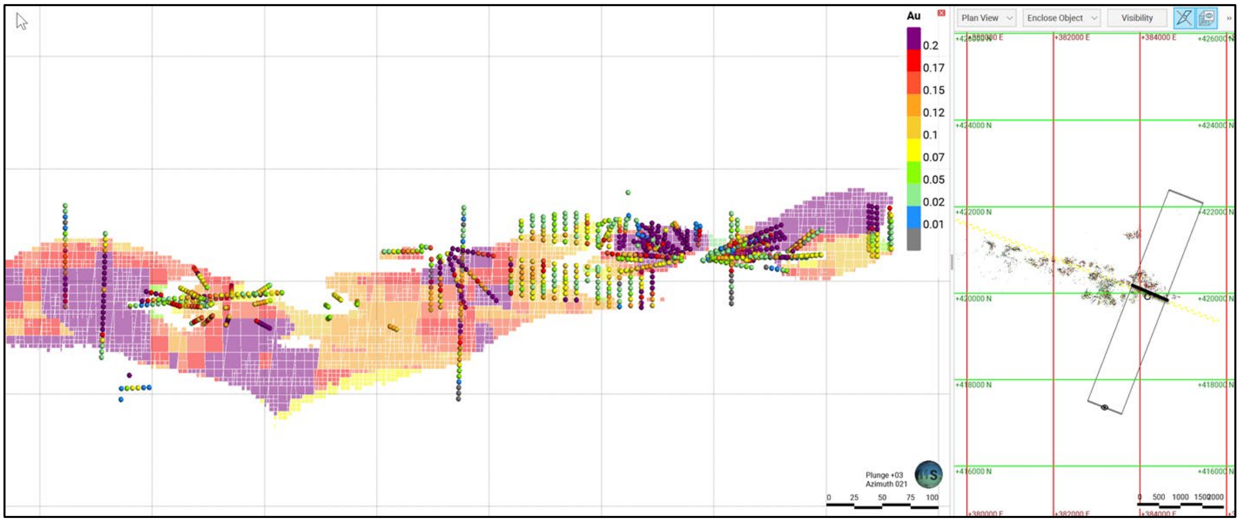
Note: Figure prepared by First Majestic, April 2023. Vertical section, looking northeast.

Figure 14-20: Example of Estimated Block Model Gold Values and Composite Sample Values, WGen Mine Domains. Vertical Section and Plan View Location



Note: Figure prepared by First Majestic, April 2023. Vertical section, looking west.

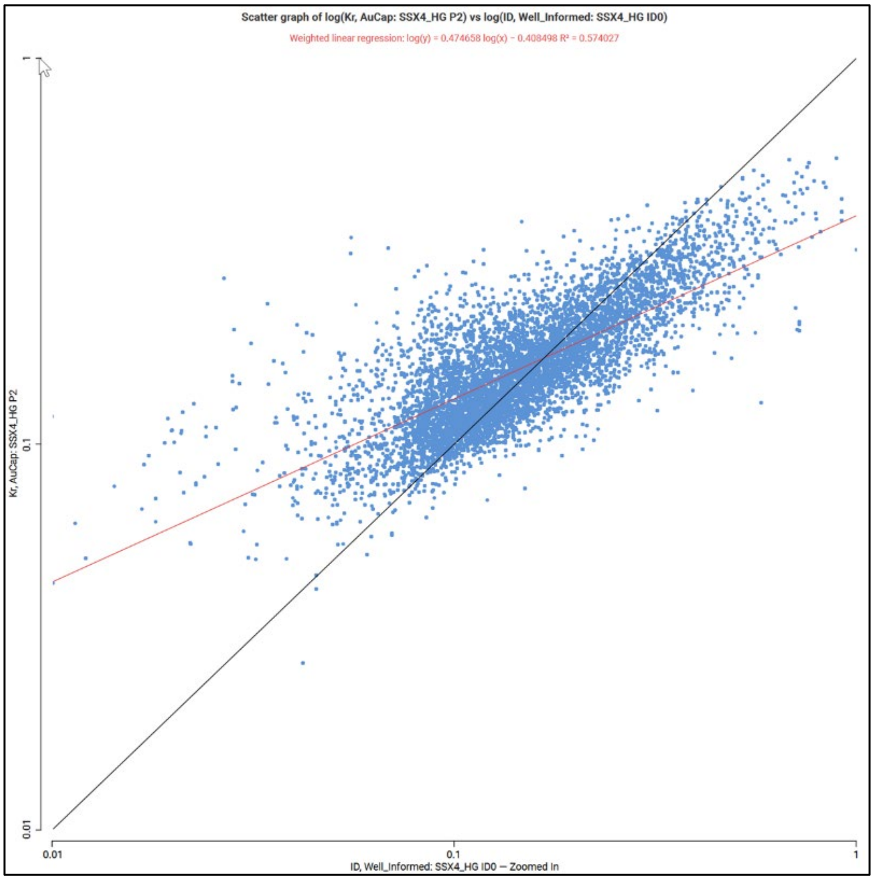
Figure 14-21: Example of Estimated Block Model Gold Values and Composite Sample Values, Murray Mine Domains. Vertical Section and Plan View Location



Note: Figure prepared by First Majestic, April 2023. Vertical section, looking northeast.

Estimated block grades always display conditional bias with higher block grades underestimated and lower block grades overestimated. Figure 14-22 is an example of a scatterplot comparing estimated bock grades with sample composite values using the average of samples contained within each block. The scatterplot demonstrates how the estimated block grades correlate with the composite samples, and that the estimated grades are also variable and not overly smooth.

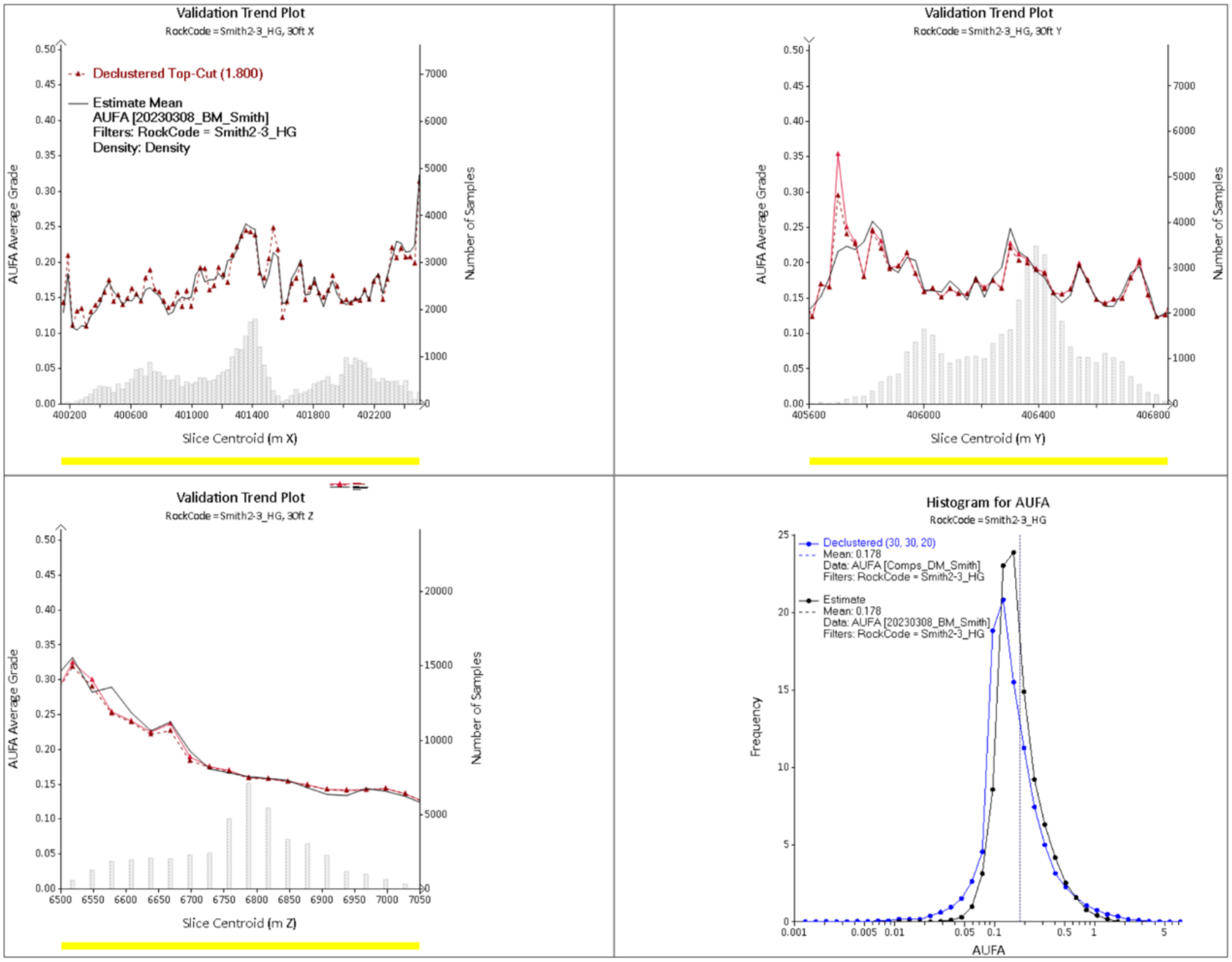
Figure 14-22: Scatter Plot of Gold Composites with Estimated Block Grades, SSX Mine Domain 4



Note: Figure prepared by First Majestic, April 2023.
X-axis is the gold grade of well-informed blocks; y-axis is estimated block grades.

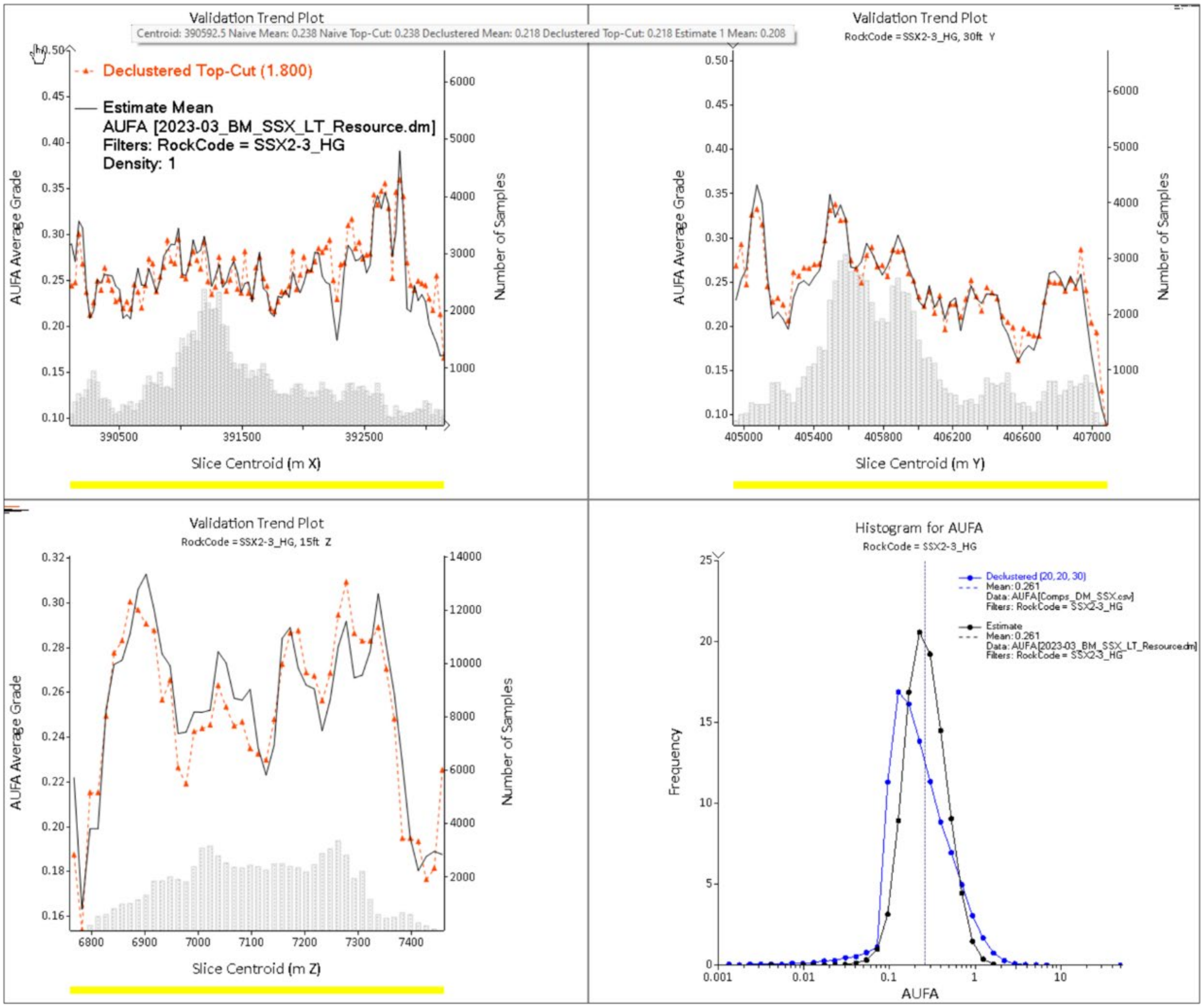
The block model estimates were validated by comparing the estimated block grades for gold to the composite sample values in swath plots oriented in three directions and by comparing the histograms of declustered composite sample grades with the estimated grades. The estimated gold block grades and composite sample grade trends are similar in all directions for all resource domains (Figure 14-23 to Figure 14-26), and the histogram plots show similar distributions and similar mean gold grades between the composite samples and the estimated block grades.

Figure 14-23: Validation trend plot and histogram of composite vs estimated block grades for Smith Mine Domain 2-3



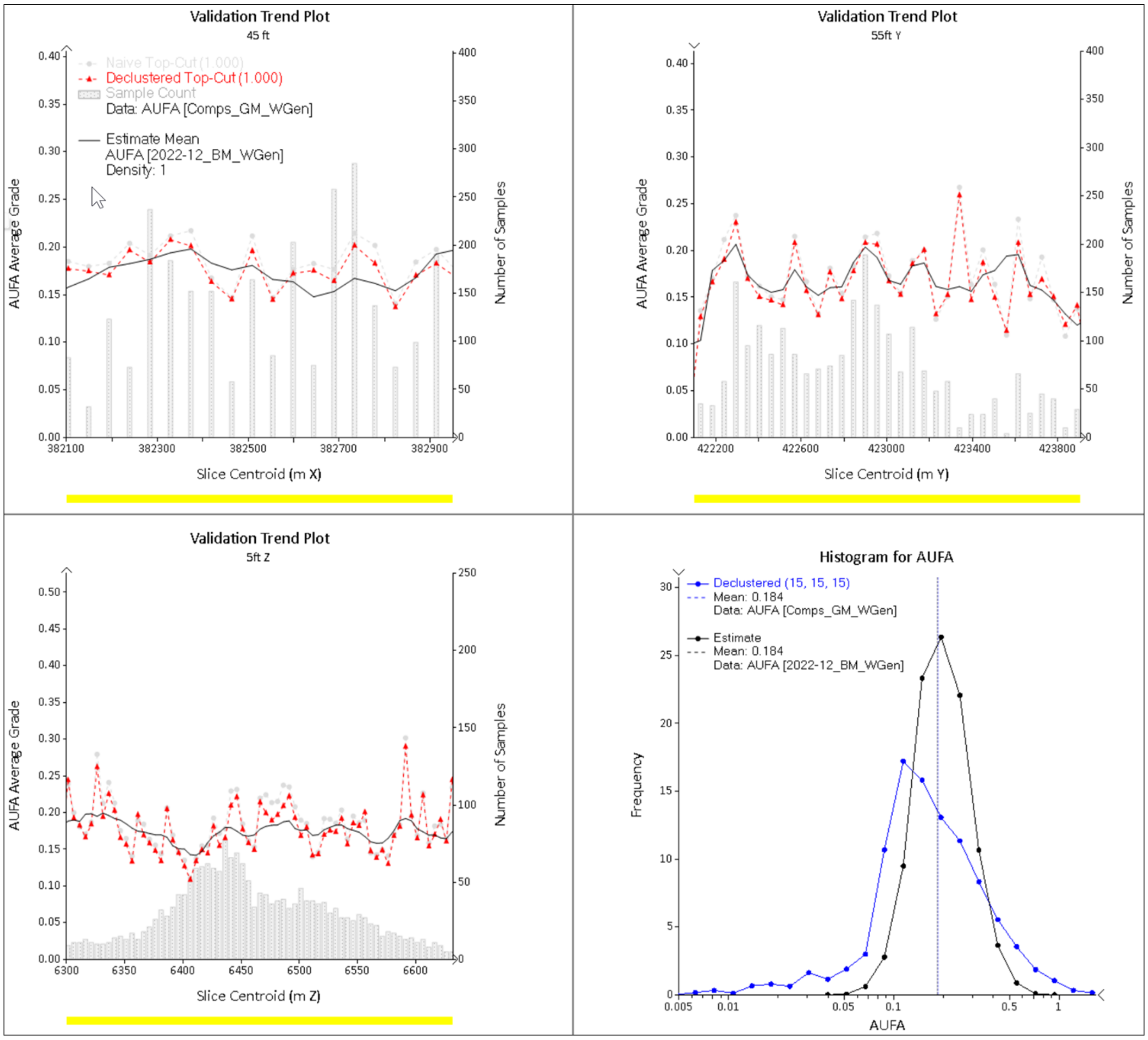
Note: Figure prepared by First Majestic, April 2023.

Figure 14-24: Validation trend plot and histogram of composite vs estimated block grades for SSX Mine Domain 2-3



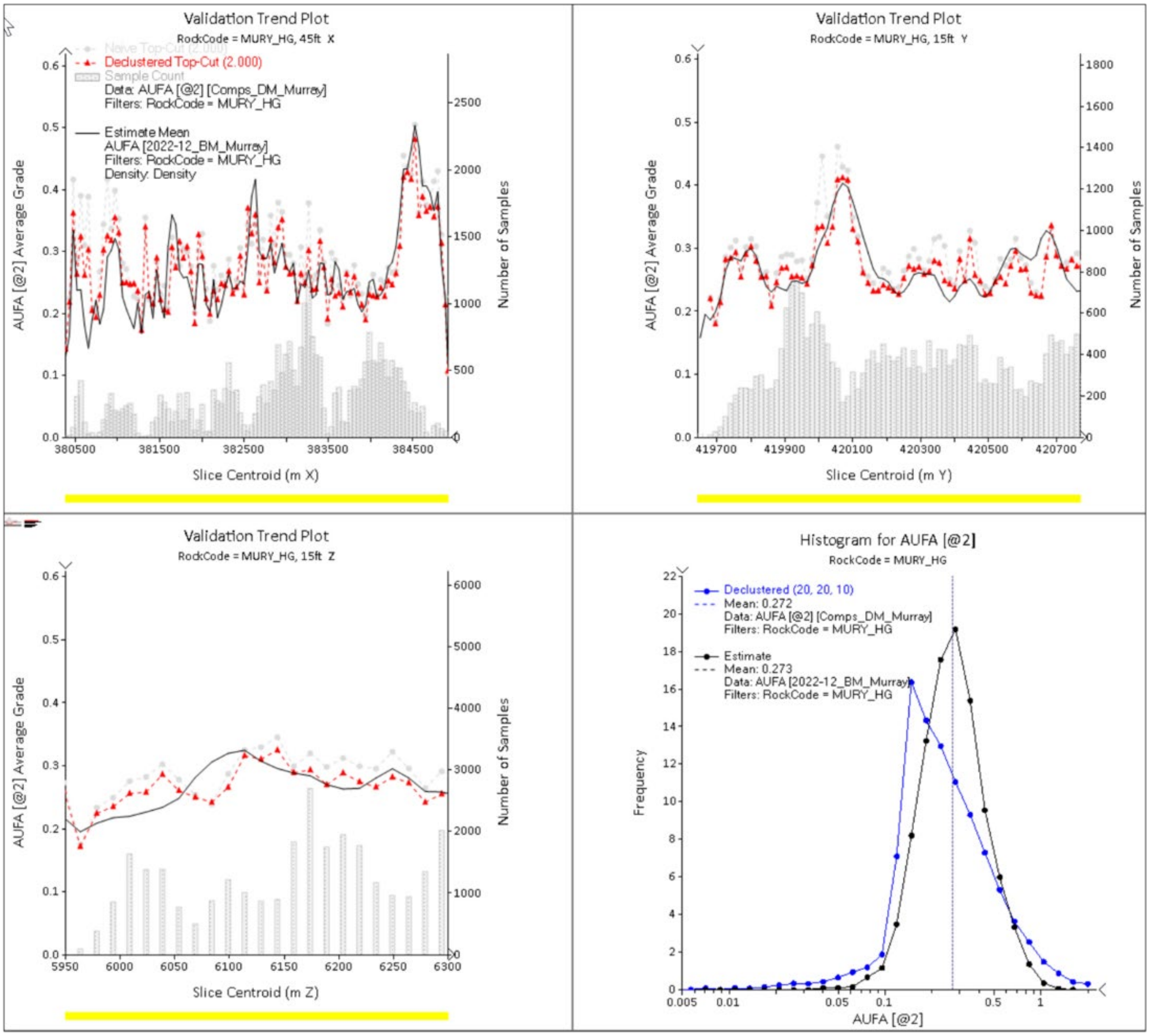
Note: Figure prepared by First Majestic, April 2023.

Figure 14-25: Validation trend plot and histogram of composite vs estimated block grades for WGen Mine Domains



Note: Figure prepared by First Majestic, April 2023.

Figure 14-26: Validation trend plot and histogram of composite vs estimated block grades for Murray Mine Domains



Note: Figure prepared by First Majestic, April 2023.

Overall, the validation demonstrates that the current resource estimates are a reasonable representation of the input sample data.

14.15. Mineral Resource Classification

The Mineral Resource estimates were classified into Measured, Indicated, and Inferred confidence categories based on the following factors:

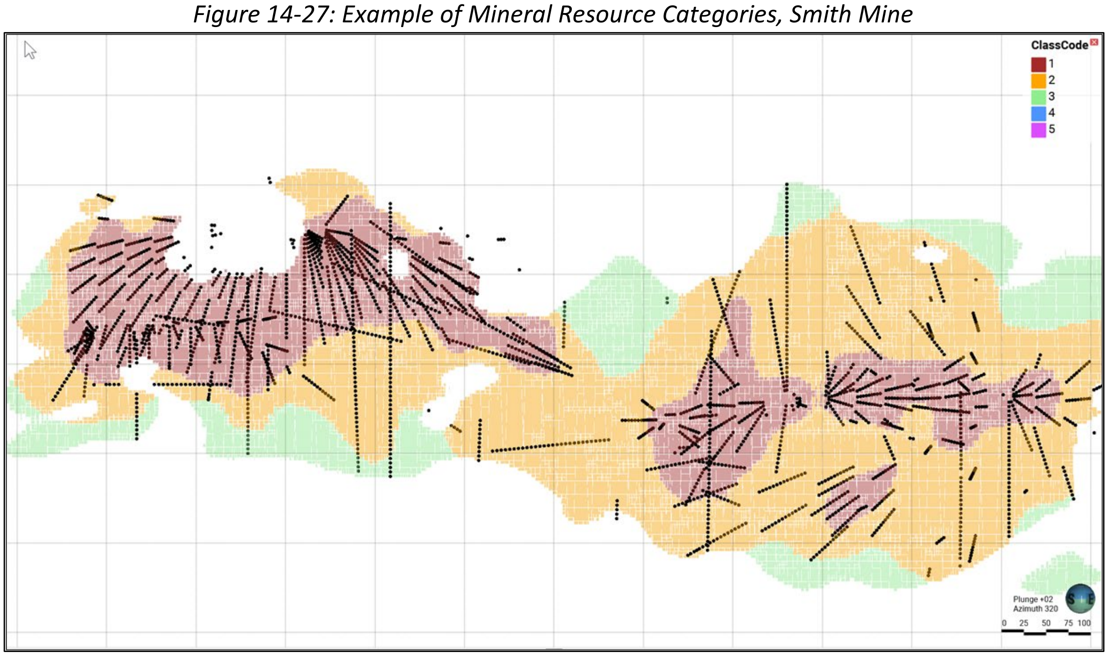
- Confidence in the geological interpretation and models;
- Confidence in the continuity of metal grades as determined from variography;
- Presence of underground mining development;
- The sample support for the estimation and reliability of the sample data.

Nominal drill hole spacing was used to measure the sample support used for the Mineral Resource classification. The nominal drill hole spacing was produced by an estimation pass for each block in the model that used three composite samples with a maximum of one sample per drill hole, which requires three separate drill holes.

Blocks were flagged to be considered for the Measured category if the drill hole spacing was <30 ft. A drill hole spacing of 30-60 ft was reviewed for the Indicated category and 60-200 ft was considered for the Inferred category. Wireframes were constructed to encompass block model zones flagged for the Measured, Indicated, and Inferred categories. This process allowed for review of the geological confidence for the deposit together with drill hole support and expanded certain areas but excluded others from the classification. Blocks were finally assigned to a classification category by the respective wireframe if the centroid of the block fell inside the wireframe. Blocks not meeting the above criteria were unclassified.

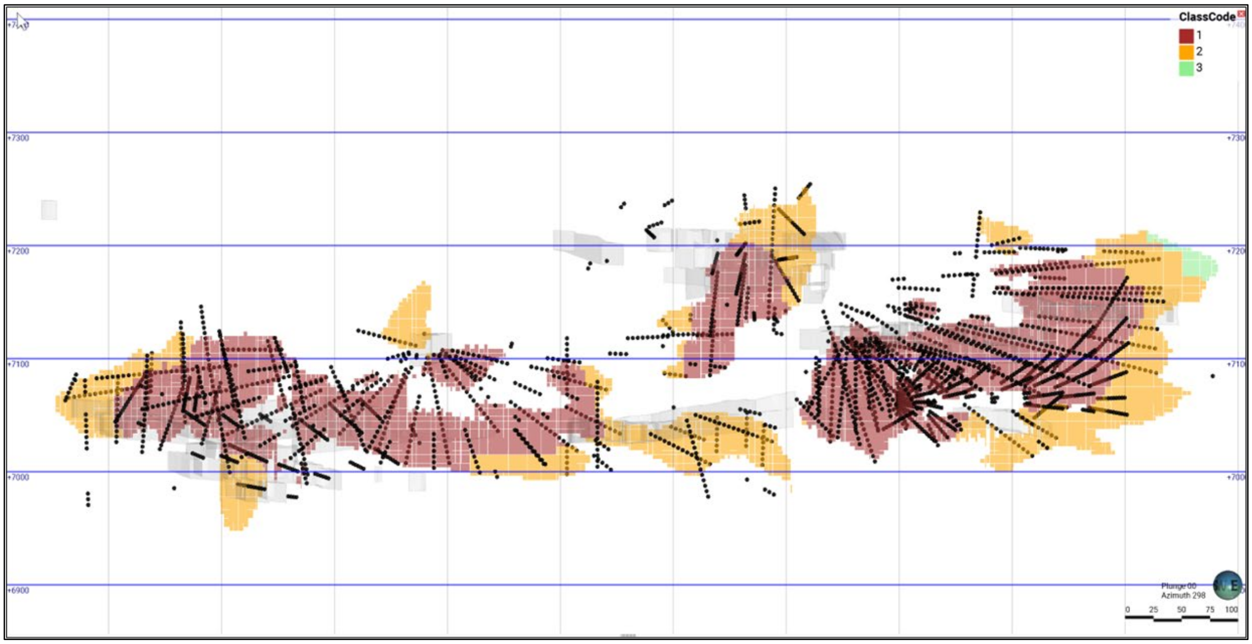
Additional drill hole sample data collected since March 31, 2023, has been reviewed and supports the mineral resource classifications presented here. Figure 14-27 to Figure 14-30 are vertical sections through the estimates showing the Measured, Indicated, and Inferred Mineral Resource classification categories for the Smith, SSX, WGen, and Murray mines.

Figure 14-27: Example of Mineral Resource Categories, Smith Mine



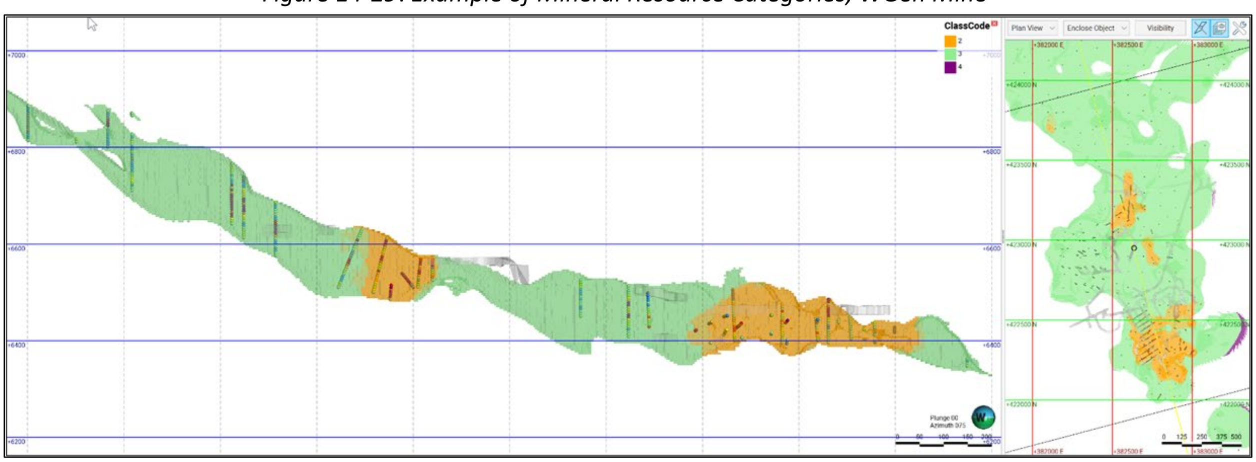
Note: Figure prepared by First Majestic, April 2023. Red = Measured, Orange = Indicated, Green = Inferred. Vertical section with composite samples displayed.

Figure 14-28: Example of Mineral Resource Categories, SSX Mine



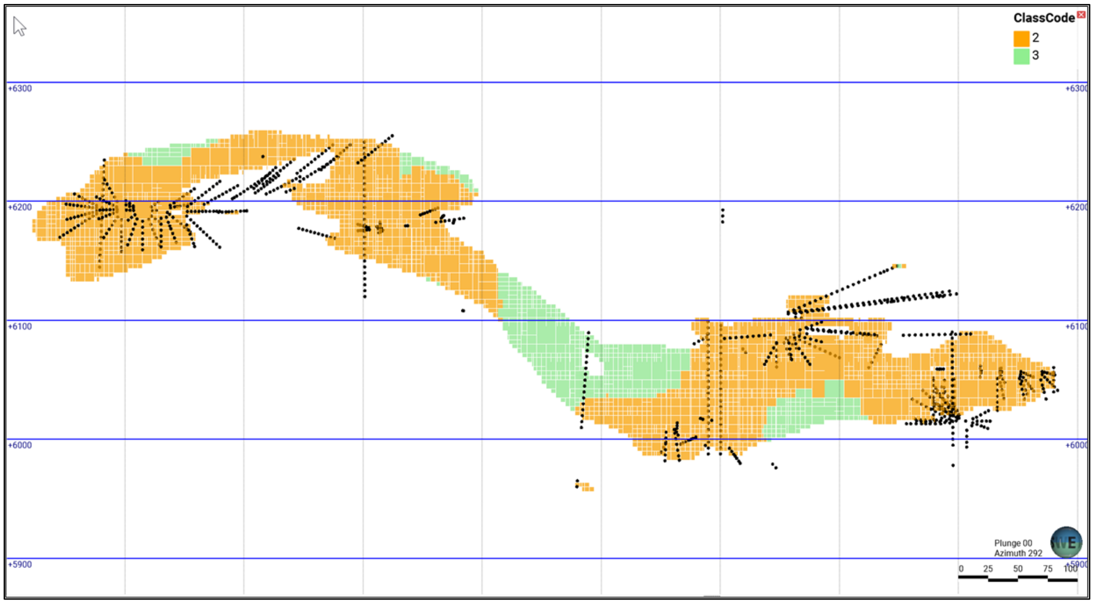
Note: Figure prepared by First Majestic, April 2023. Red = Measured, Orange = Indicated, Green = Inferred. Vertical section with composite samples displayed.

Figure 14-29: Example of Mineral Resource Categories, WGen Mine



Note: Figure prepared by First Majestic, April 2023. Orange = Indicated, Green = Inferred. Vertical section with composite samples displayed.

Figure 14-30: *Example of* Mineral Resource *Categories, Murray Mine*



Note: Figure prepared by First Majestic, April 2023. Orange = Indicated, Green = Inferred. Vertical section with composite samples displayed.

14.16. Reasonable Prospects for Eventual Economic Extraction

The Mineral Resource estimates were evaluated for reasonable prospects for eventual economic extraction by application of input parameters based on assumed mining costs and metallurgical recoveries. Parameters including operating costs, metallurgical recovery, long-term forecast metal prices and other technical and economic factors were used as follows (tonnage is in metric units):

Underground Mining

- Direct mining cost $93.39/t;
- Milling cost $66.57/t;
- G&A and indirect mining cost $20.06/t;
- Sustaining cost $14.38/t;
- Au metallurgical recovery 82.30%;
- Au payable 99.90%;
- Au metal price $1,900/oz.

Open Pit Mining

- Direct mining cost $3.50/t;
- Milling cost $66.57/t
- G&A and indirect mining cost $10.00/t;

- Sustaining cost $14.38/t;
- Au metallurgical recovery 82.30%;
- Au payable 99.90%;
- Au metal price $1,900/oz.

Note: The underground mining costs shown above were applied to evaluate the portion of the deposit that could fully cover these costs above a general cut-off grade, and a variable portion of the mining and milling costs were considered to evaluate additional material that could potentially be extracted at an incremental grade.

These economic parameters result in gold resource cut-off grades of 2.8 g/t for underground mining and 1.4 g/t for open pit.

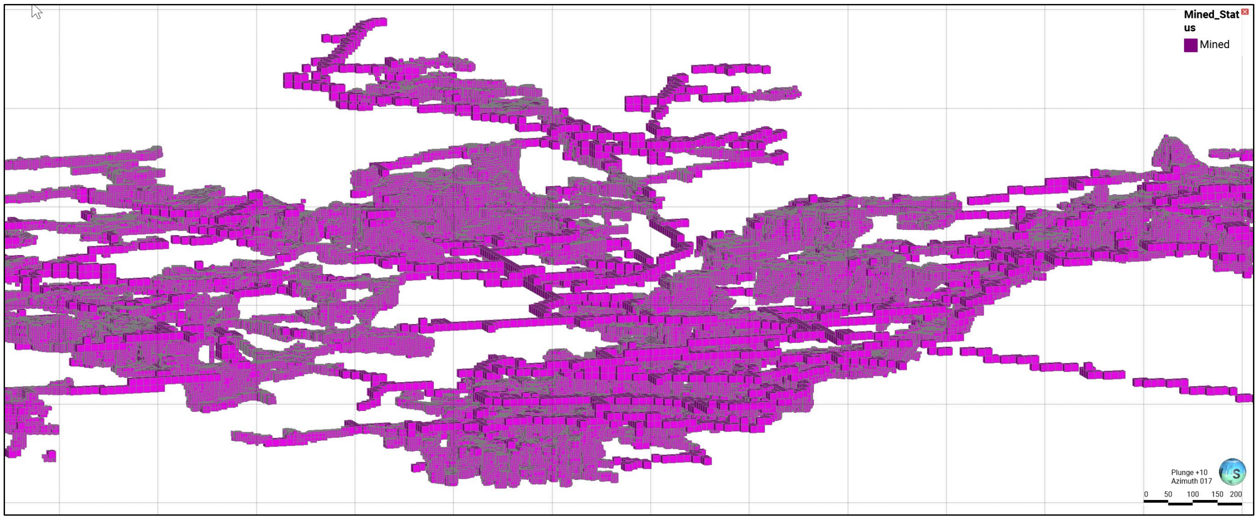
For the Mineral Resource estimates potentially amenable to underground mining methods, Deswik Stope Optimizer software was used to identify the blocks that represent mineable volumes that exceed the cut-off grade while complying with the aggregate of economic parameters. This process was undertaken for all domains. The tool allows blocks to be aggregated into the minimum stope dimensions and eliminate outliers that do not comply with these conditions.

For the Mineral Resource estimates potentially amenable to open pit mining methods, Whittle software was used to identify the pit-shells that represent the mineable constraining shapes. This process was undertaken for all the open pit domains. The tool allows blocks to be aggregated within the economic pit-shell and discard blocks that do not comply with these conditions.

14.17. Mining Depletion

Wireframe models of the underground and open pit mining excavations at Jerritt Canyon were evaluated into the block models for all domains. These volumes were used to deplete the block model Mineral Resource estimates prior to reporting estimates. Regions within the mine that are in situ but judged to be un-mineable were also removed from the estimates. Figure 14-31 shows a block model example for the underground mining excavations at the SSX Mine.

Figure 14-31: Block Model Example of Underground Mining Excavations, SSX Mine



Note: Figure prepared by First Majestic, April 2023.

14.18. Mineral Resource Estimate Statement

The Mineral Resource estimates are reported in situ, using the 2014 CIM Definition Standards, and have an effective date of March 31, 2023. The Qualified Person for the estimate is Mr. David Rowe, CPG, a First Majestic employee.

The Mineral Resource estimates are reported assuming either underground or open pit mining methods, with related cut-off grades of 2.8 g/t Au for underground mining and 1.4 g/t Au for open pit mining. Estimates reported as suitable for underground mining method provide 98% of the total Measured and Indicated tonnes and 98% of the Inferred tonnes. Only the blocks that represent reasonable underground mineable volumes that exceed cut-off grade while complying with the aggregate of economic parameters, or those captured by reasonable pit-shells that represent mineable constraining shapes are reported.

The Measured and Indicated Mineral Resource estimates for Jerritt Canyon are provided in Table 14-13 and Inferred Mineral Resource estimates are included in Table 14-14. Metric units were used.

Table 14-13: Jerritt Canyon Mineral Resource Estimates, Measured and Indicated Category (Effective date March 31, 2023)

Category	Mineral Type	Tonnage	Average Value	Material Content
Measured		**k tonnes**	**Au (g/t)**	**Au (k Oz)**
Smith Mine	Sulphides	2,607	5.28	443
SSX Mine	Sulphides	2,134	5.97	409
Saval	Sulphides	19	4.58	3
Starvation	Sulphides	54	5.31	9
Total Measured (UG)	**All Mineral Types**	**4,813**	**5.58**	**864**
Category	**Mineral Type**	**Tonnage**		
Indicated		**k tonnes**	**Au (g/t)**	**Au (k Oz)**
Smith Mine	Sulphides	1,683	5.41	293
SSX Mine	Sulphides	1,296	5.86	244
West Generator	Sulphides	276	6.03	54
Murray Mine	Sulphides	308	6.45	64
Wright Window (OP)	Sulphides	116	4.01	15
Winters Creek	Sulphides	190	4.46	27
Saval	Sulphides	171	4.42	24
Saval (OP)	Sulphides	67	3.84	8
Starvation	Sulphides	141	5.69	26
Total Indicated (UG + OP)	**All Mineral Types**	**4,248**	**5.53**	**755**
Total Measured & Indicated (UG & OP)	**All Mineral Types**	**9,061**	**5.56**	**1,619**

Table 14-14: Jerritt Canyon Mineral Resource Estimates, Inferred Category (Effective date March 31, 2023)

Category	Mineral Type	Tonnage	Average Value	Material Content
Inferred		**k tonnes**	**Au (g/t)**	**Au (k Oz)**
Smith Mine	Sulphides	1,199	6.80	262
SSX Mine	Sulphides	5,595	4.79	861
West Generator	Sulphides	528	5.28	90
Murray Mine	Sulphides	1,077	5.69	197
Wright Window (OP)	Sulphides	30	3.29	3
Winters Creek	Sulphides	464	4.80	74
Saval	Sulphides	240	4.11	32
Saval (OP)	Sulphides	134	3.32	14
Starvation	Sulphides	70	5.01	11
Total Inferred (UG + OP)	**All Mineral Types**	**9,337**	**5.14**	**1,544**

(1) Mineral Resources have been classified in accordance with the 2014 CIM Definition Standards and are reported in situ.

(2) The Mineral Resources information provided above is based on internal estimates prepared as of March 31, 2023. Preparation of the Mineral Resource estimates were supervised by David Rowe, CPG, a First Majestic employee.

(3) All mineral resource estimates are for deposits considered amenable to underground mining except those marked by (OP), which assumed open pit assumptions and parameters.

(4) Key assumptions used when considering reasonable prospects for mineralization potentially amenable to underground mining methods included: gold price of US$1,900/oz; direct mining cost US$93.39/t mined; process cost of US$66.57/t

milled; indirect and general and administrative costs of US$20.06/t milled; sustaining costs of US$14.38/t milled, metallurgical recovery of 82.30%; gold payable 99.90.

(5) *Mineral resources potentially amenable to underground mining methods are reported within conceptual mineable shapes above a cut-of grade of 2.8 g/t Au.*

(6) *Key assumptions used when considering reasonable prospects for mineralization potentially amenable to open pit mining methods included: gold price of US$1,900/oz; direct mining cost US$3.50/t mined; process cost of US$66.57/t milled; indirect and general and administrative costs of US$10.00/t milled; sustaining costs of US$14.38/t milled, metallurgical recovery of 82.30%; gold payable 99.90; conceptual maximum pit slope angles of 40 degrees.*

(7) *Mineral resources potentially amenable to open pit mining methods are reported within a conceptual pit shell above a cut-of grade of 1.4 g/t Au.*

(8) *Tonnage is expressed in thousands of tonnes; metal content is expressed in thousands of ounces.*

(9) *Totals may not add up due to rounding.*

14.19. Sensitivity of Mineral Resource Estimates to Changes in Cut-off Value

Mineral Resource estimates are sensitive to the selection of the reporting gold cut-off value. Table 14-15 illustrates the sensitivity to cut-off grade for Mineral Resource estimates potentially amenable to underground mining methods.

Table 14-15: Sensitivity of Mineral Resource Estimates to Gold Cut-off Value for Underground Mining Estimates

Category	Cut-off Value	Tonnage	Average Value	Material Content
	Au (g/t)	k tonnes	Au (g/t)	Au (k Oz)
Measured & Indicated	2.1	9,204	5.48	1,623
	2.5	9,082	5.53	1,614
	2.8	8,878	5.59	1,596
	3.2	8,440	5.73	1,554
	3.5	7,749	5.94	1,480
	3.8	6,877	6.23	1,377
	4.2	5,975	6.56	1,261
Inferred	2.1	9,399	5.12	1,546
	2.5	9,351	5.13	1,543
	2.8	9,173	5.18	1,528
	3.2	8,442	5.37	1,456
	3.5	7,493	5.62	1,355
	3.8	6,533	5.91	1,242
	4.2	5,622	6.22	1,124

(1) *Note: Only block estimates that represent reasonable underground mineable volumes that exceed a 2.8 g/t cut-off grade while complying with the aggregate of economic parameters are included.*

14.20. Factors that May Affect the Mineral Resource Estimates

Risk factors that may materially impact the Mineral Resource estimates include:

- Metal price assumptions;
- Changes to the assumptions used to generate the gold cut-off grade;
- Changes in local interpretations of mineralization geometry and continuity of mineralized zones;
- Changes to geological and grade continuity assumptions;
- Changes to the conceptual mining shapes used to constrain the estimates;
- Changes to geotechnical, mining, and metallurgical recovery assumptions;
- Assumptions as to the continued ability to access the site, retain mineral and surface rights titles, maintain environment and other regulatory permits, and maintain the social license to operate.

14.21. Comment on Section 14

The QP is of the opinion that the Mineral Resource estimates for Jerritt Canyon were estimated using industry best practices and conform to the 2014 CIM Definition Standards for Mineral Resources. To the extent currently known, there are no environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other factors or risks that could materially affect the Mineral Resource estimates discussed in this Report.

15. MINERAL RESERVE ESTIMATES

This section is not relevant to this Report.

16. MINING METHODS

This section is not relevant to this Report.

17. RECOVERY METHODS

This section is not relevant to this Report.

18. PROJECT INFRASTRUCTURE

This section is not relevant to this Report.

19. MARKET STUDIES AND CONTRACTS

This section is not relevant to this Report.

20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

This section is not relevant to this Report.

21. CAPITAL AND OPERATING COST

This section is not relevant to this Report.

22. ECONOMIC ANALYSIS

This section is not relevant to this Report.

23. ADJACENT PROPERTIES

This section is not relevant to this Report.

24. OTHER RELEVANT DATA AND INFORMATION

This section is not relevant to this Report.

25. INTERPRETATION AND CONCLUSIONS

The following interpretations and conclusions are a summary of the QPs' opinions based on the information presented in this Report.

25.1. Project Setting

The Jerritt Canyon Mine is located in the vicinity of the town of Elko, Nevada with land access year-round through well maintained state roads, as well as access to site using a service road.

The Jerritt Canyon Mine is well equipped with the basic services required to support mine and plant operations. Infrastructure supporting exploration and potential mining activities at Jerritt Canyon is in place.

Exploration can be conducted year-round from either the surface or underground mine locations.

25.2. Mineral Tenure, Surface Rights and Agreements

Information provided by JCG technical and legal experts supports that the mining tenure held is valid and is sufficient to support declaration of Mineral Resource estimates. First Majestic has adequate mineral concessions and surface rights to support mining operations.

For exploration purposes, a permitting plan is in place and surface access to drill targets can be achieved following the different requirements per the multiple surface owners.

25.3. Environmental and Permitting

Prior to and during operation, numerous environmental studies and evaluations have been conducted to support permit applications and operations. An EIS was completed, and the record-of-decision was issued in 1980. Since then, there have been other environmental assessments with subsequent approvals.

Approved closure and reclamation plans are in place for Jerritt Canyon. Concurrent reclamation is completed where feasible. Bonding is in place.

Since the acquisition of Jerritt Canyon Gold Mine on April 30, 2021, JCG has worked diligently to address legacy environmental issues with the regulators. The historic operation resulted in a number of material environmental concerns, including air emission exceedances, ground water contamination from the TSF-1, lack of water treatment capacity, and surface water contamination from the RDAs. Issues that JCG is still addressing include Class I Air Quality Operating Permit and Mercury Operating Permit violations; high/increasing concentrations of constituents of concern in groundwater and surface water; seepage from RDAs; seepage from TSF-1; water management constraints; and drinking water standards.

In 2021 and 2022, the NDEP issued a number of NOAVs relating to emission monitoring, testing, record-keeping requirements, emission and throughput limits, alleged exceedances of a mercury emission limitations, exceedances of operating parameters, and installation of equipment. JCG has appealed the violation notices. At the Report effective date, the estimated amount of any potential fine or penalty for the 2021 and 2022 NOAV could not be reliably determined. In addition to the action plan to address the air permit NOAVs, JCG has developed an action plan to address all other known environmental issues. This includes working in collaboration with the NDEP-BMRR.

First Majestic has all required permits to conduct exploration activities on the Project. Operating permits are in place and current, or in the process of being renewed. Expired permits are administratively extended while renewal is in progress.

25.4. Geology and Mineralization

The current understanding of mineralization and alteration styles, as well as the structural and lithological controls on mineralization at the Jerritt Canyon Mine are sufficient to support the Mineral Resource estimations.

The Jerritt Canyon mineralization is considered to be an example of Carlin-type gold mineralization.

25.5. Exploration and Drilling

The exploration programs completed to date are appropriate for the mineralization style.

Drilling methods (core drill hole and channel sampling) and data collection are acceptable given the Jerritt Canyon deposits dimensions, mineralization true widths, and the nature of the deposits. The programs reflect industry-standard practices and can be used in support of Mineral Resource estimation.

25.6. Data Verification

Drill hole collar, downhole survey, lithology, core and RC recovery, and assay data collected are considered suitable to support Mineral Resource estimation.

Sample preparation, security, analysis, and quality-control measures generally meet current industry standards and provide reliable gold results.

Data verification performed by the QPs, including site visits, indicated that the data used in the Report can support Mineral Resource estimation.

25.7. Mineral Processing and Metallurgical Testwork

The metallurgical analysis draws on a range of sources, including historical plant operational data, mineralogical investigations, and metallurgical tests.

Comminution behaviors of the mineralized material (Smith and SSX), based in the BWi approach, are similar to the historically observed material grindability. Several grinding-roasting-leaching tests indicate that the grind size ranging from 75 to 100 µm gave more favorable recoveries, while large grind size (>100 microns) appeared to negatively impact the recovery. Nevertheless, additional confirmatory testing is necessary as the grind size can also influence the throughput capacity of existing comminution circuit.

The projected gold recovery used for Mineral Resource estimation at Jerritt Canyon is estimated at 82.3% based on the head grade, relying on the established historical daily gold grade-recovery relationship. However, it is worth noting that gold recovery can be influenced by a range of factors beyond head grade, such as sulfide sulfur content, total organic carbon (TOC) content, and roasting conditions. Therefore, these additional factors should be taken into consideration in order to achieve more accurate estimate of gold recovery for use in Mineral Resource estimation from each gold mineral deposit.

The Jerritt Canyon whole ore roaster plant was designed and commissioned in 1989 to treat both carbonaceous and sulfide refractory mineralized materials using a series of processes including dry comminution, fluid-bed roasting, and carbon in leach.

Overall plant availability in 2022 was about 80% due to the combination of aging equipment and harsh winter climate. The areas requiring improvement are the dryer circuit and the dust collection system including the plant air supply.

The off-gas treatment systems for both roasters and the refinery off-gas treatment system were upgraded in 2022 to improve the mercury removal efficacy for each system. The roaster off-gas system added additional tanks for more robust solution chemistry management. For the refinery, the carbon tray scrubbers were replaced with dual-banjo sulphur in carbon beds alongside additional gas conditioning units.

25.8. Mineral Resource Estimates

The Mineral Resource estimates for Jerritt Canyon were prepared using the 2019 CIM Guidelines and are reported using the 2014 CIM Definition Standards. The resource estimates are a reasonable representation of the gold mineralization found in the Project at the current level of sampling.

The Mineral Resource estimates are based on drilling, underground level geological mapping, the geological interpretation and model, as well as the surface topography and underground mining development wireframes available as the March 31, 2023, cut-off date for scientific and technical data.

The Mineral Resources were classified into Measured, Indicated, or Inferred confidence categories based on the following factors:

- Confidence in the geological interpretation and models;
- Confidence in the continuity of metal grades;
- The sample support for the estimation and reliability of the sample data;
- Areas that were mined associated geological control.

Factors that may materially impact the Mineral Resource estimates include:

- Metal price assumptions;
- Changes to the assumptions used to generate the gold cut-off grade;
- Changes in local interpretations of mineralization geometry and continuity of mineralized zones;
- Changes to geological and mineralization shape and geological and grade continuity assumptions;
- Changes to geotechnical, mining, and metallurgical recovery assumptions;
- Assumptions as to the continued ability to access the site, retain mineral and surface rights titles, maintain environment and other regulatory permits, and maintain the social license to operate.

25.9. Conclusions

Under the assumptions used in this Report, the Mineral Resource estimation and reporting of Mineral Resource estimates can be supported.

26. RECOMMENDATIONS

26.1. Introduction

Based on the Mineral Resource estimates at Jerritt Canyon and the recent decision by First Majestic to temporarily suspend mining operations, the QPs recommend that mineral exploration continues in order to increase the Mineral Resource estimates, and that studies be completed to at least pre-feasibility level to support Mineral Reserve estimation. If Mineral Reserve estimates are promising, then further work may be conducted in support of a re-start of mining operations.

The QPs propose a two-phase program of work, with an overall budget recommendation of $44M to $73M.

Phase 1 consists of mineral exploration and studies on updated mine design, with an estimated budget to complete of between $21 M to $37 M.

Phase 2, which is contingent on the results of Phase 1, would include: underground delineation drilling, and a series of mining studies completed to at least prefeasibility level to potentially support Mineral Reserve estimation. The estimated budget to complete this work is $23 M to $36 M.

26.2. Phase 1

Phase 1 recommendations are estimated to cost between $21 M to $37 M and consist of:

- Exploration for additional high quality mineralized material (high grade and continuous).
    - Surface and underground mapping, surface rock and soil sampling, estimated cost of $200,000 to $400,000;
    - Geophysical surveying (seismic, induced polarization, magnetics) estimated cost of $300,000 to $1 M;
    - Drill test geologically prospective, volumetrically large untested areas. Each drill hole in the exploration program will be drilled contingent on the results of the previous drill hole. If no significant alteration, structures, or mineralization are encountered in a drill target area, the drilling planned for that drill target may be allocated to another drill target. The estimated drilling budget cost is $20 M to $35 M for between 240,000 and 420,000 feet of drilling (estimated at ~$83/foot all in drilling cost).
- Update mine design aiming to improve the capital development per ton of mineralization and increase the expected bulk tonnage mining methods at an estimated cost of $100,000 to $150,000.

26.3. Phase 2

Phase 2 recommendations are contingent on the results of Phase 1 and would consist of infill drilling programs and the advance of at least pre-feasibility level studies. Phase 2 is estimated to cost $23 M to $36 M and consists of:

- Pre-feasibility level studies:
  - Geotechnical studies to improve understanding and modelling of expected rock quality and required ground support, expected cost of $300,000 to $600,000;
  - Hydrogeological studies, tests and upgrades to dewatering wells to improve capability to forecast dewatering rates and water quality, expected cost of $2 M to $4 M;
  - Detailed mine design and owner-operated vs contractor mining trade-off study. The mine design study is to improve the understanding of the expected mine recovery and mine dilution as well as update expected mining rates and mineralized material and waste tonnage extraction rates. The estimated cost is $300,000 to $600,000.
  - Comminution testing to improve the existing crushing, drying, and grinding circuits. Grind recovery relationships should also be investigated. Another study aspect is to determine how to efficiently modify and weatherize the plant for sustained year-round operation. Required studies are estimated to cost $300,000–500,000;
  - Evaluation of all major infrastructure to assess required updated/upgrades and operation sustainability including, but not limited to, water management systems, mine infrastructure, site buildings, and process equipment is recommended. This is estimated to cost $200,000–$500,000.
- Infill Drilling
  - Infill drilling programs designed to increase confidence in the mineral resource estimates. The estimated cost for the infill drilling program is $20 M to $30 M for between 220,000 and 330,000 feet of drilling (estimated cost of $90/ft all in cost).

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