

O R Q G E N

ANNUAL INFORMATION FORM

For the Year Ended

December 31, 2022

March 31, 2023

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1. INTRODUCTORY NOTES

General Matters

The information contained in this Annual Information Form (“**AIF**”), unless otherwise indicated, is given as of December 31, 2022 for Orogen Royalty Inc. (the “**Company**” or “**Orogen**”). The Company’s consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (“**IFRS**”), as issued by the International Accounting Standards Board.

Cautionary Note Regarding Forward-Looking Statements

This AIF may contain “forward-looking statements” within the meaning of applicable securities legislation that reflect Orogen’s projections about its future results. These statements are based on analysis and other information to forecasts of future results, estimates of amounts not yet determinable and assumptions made by management. The Company does not intend to and does not assume any obligation to update forward-looking information, except as required by securities law.

Forward-looking statements may include statements regarding perceived merit of properties, exploration results and budgets, mineral reserves and resource estimates, work programs, capital expenditures, operating costs, cash flow estimates, production estimates and similar statements relating to the economic viability of a project, timelines, strategic plans, completion of transactions, market prices for metals or other statements that are not statements of fact. Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, identified by words or phrases such as “expects”, “anticipates”, “believes”, “plans”, “projects”, “estimates”, “assumes”, “intends”, “strategy”, “goals”, “objectives”, “potential”, “possible” or variations thereof or stating that certain actions, events, conditions or results “may”, “could”, “would”, “should”, “might” or “will” be taken, occur or be achieved, or the negative of any of these terms and similar expressions) are not statements of historical fact and may be forward-looking statements.

Forward-looking statements are based on a number of reasonable assumptions that have been made as at the date of this AIF and is subject to known and unknown risks and uncertainties that may cause actual result and performance to be materially different than from those expressed by those forward-looking information, including the following:

- i. The Company’s ability to continue its growth organically through prospect generation;
- ii. The Company’s expectation to successfully purchase royalties and other rights;
- iii. The Company’s ability to successfully generate early-stage mineral exploration projects and to further advance these projects through earn-in option agreements for milestone payments and work commitments with the ultimate goal of generating an Net Smelter Return (“**NSR**”) royalty or other royalty agreements (“**Royalties**” or individually a “**Royalty**”) once the earn-in agreement is completed and the earn-in option is exercised or sale the sale of mineral exploration projects for cash and/or equity consideration and obtaining a Royalty interest;
- iv. The counterparties’ technical and financial commitment to advance the projects, comply to the terms of the earn-in option agreements to continue its milestone payments and work commitments, and exercise of the earn-in option when all obligations are fully satisfied;
- v. The impact of the novel coronavirus (“**COVID-19**”) on the Company’s operations and performance;
- vi. Assumptions and projections on operating and capital costs, commodity prices, interest rates and foreign currency;
- vii. Sufficient liquidity in its marketable securities portfolio assets; and

- viii. Statements referencing to the Company's opportunities, future growth prospects and performance.

Forward-looking information in this AIF includes disclosures regarding NSR royalty payments to be paid to the Company by First Majestic Silver Corp. ("**First Majestic**"), the owners and operator of the Ermitaño mine located in Mexico and that the forecasted revenue which are based on First Majestic "*NI 43-101 Technical Report on Mineral Resource and Mineral Reserve Estimates*" having an effective date of June 30, 2021. In addition to the technical report, the disclosure herein also contains and the updated mineral reserve and resource estimates for the Ermitaño mine based on the Santa Elena Mineral Reserve and Resource Estimates with an effective date of December 31, 2022 as announced by First Majestic on March 31, 2023 and as disclosed in their December 31, 2022 AIF. Forward-looking statements are based on several material assumptions, which management of the Company believe to be reasonable, including, but not limited to, the continuation of mining operations in respect of which the Company will receive NSR royalty payments, that the commodity prices will not experience a material adverse change, mining operations that underlie the royalty will operate in accordance with the disclosed parameters and other assumptions may be set out herein.

Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors that could result in actual performance being different than those reflected in forward-looking statements and these include the following but not limited to:

- i. Uncertainty of whether there will be development and commercial production of the Company's Royalty assets;
- ii. Uncertainty in advancing the Company's early-stage mineral property assets through earn-in agreements with counterparties;
- iii. Uncertainty in the Company's ability to continue to receive milestone payments and other considerations through earn-in agreements;
- iv. Uncertainty in the Company's ability to monetize its mineral property interests for cash and/or equity consideration and generating Royalties;
- v. Uncertainty in the Company's ability to monetize equity considerations received as recorded in its marketable securities portfolio;
- vi. Uncertainty relating to the underlying assumptions and estimates that the operators of the Company's Royalty assets made in their technical reports related to inferred mineral resources, resource and reserve estimates, metal pricing, mineability, marketability, operation and capital costs;
- vii. Risks related to the Company's ability to acquire Royalty assets;
- viii. Environmental and climate change risks;
- ix. Political risks and uncertainties where the Company holds its mineral property and Royalties;
- x. Risks related to the Company's ability to continue as a going concern that is dependent on its ability to obtain additional equity or debt financing to successfully advance its operations;
- xi. Risks related to counterparties of earn-in agreements and other third parties which the Company depends on to advance its exploration activities;
- xii. Risks related to macro economic factors and conditions;
- xiii. Capital and operation costs, price, interest rates and foreign currency risks;
- xiv. Technical risks and uncertainties related to drill results, geology, grade and continuity;
- xv. Development and operating risks related to the Company's producing NSR royalty asset;
- xvi. Environmental, permitting and regulatory risks related to obtaining necessary approvals required to explore, mine and develop the Company's mineral property interests;
- xvii. Uncertainties related to changes in regulatory and compliance policies and associated costs;
- xviii. Risks related to requirements, estimation, uncertainties, and costs related to reclamation activities on the Company's mineral property interests;
- xix. Risks related to the Company's ability to acquire and maintain title to its mineral property interests;

- xx. Increase competition in the mining industry and especially the royalty sector;
- xxi. Uncertainty related to the Company's ability to maintain adequate internal controls over financial reporting;
- xxii. Risks related to rising costs and shortage in skilled labour and supplies;
- xxiii. Risks related to the Company's ability to attract and retain qualified management, technical personnel and consultants; and
- xxiv. Uncertainties related to the impact of Covid-19 on the Company's operations.

This list of risks and uncertainties is not exhaustive of the factors and conditions that may affect the Company's forward-looking statements which are inherently uncertain and actual results may materially differ from those reflected in the forward-looking statements. The Company does not assume any obligation to update forward looking statements if circumstances change except as required by law. Accordingly, the investor should not place undue reliance of forward-looking statements. Readers of this AIF should carefully review the risk factors set out in this AIF under *Section 5- Risks and Uncertainties*.

Cautionary Note Regarding Mineral Reserve and Resource Estimates

This AIF has been prepared in accordance with the requirements of Canadian securities laws in effect in Canada, which differ from the requirements of U.S. securities laws. Unless otherwise indicated, all mineral resource and reserve estimates included in this AIF have been prepared by the owners or operators of the relevant properties (as and to the extent indicated by them) in accordance with National Instrument 43-101 — Standards of Disclosure for Mineral Projects ("**NI 43-101**") and the Canadian Institute of Mining and Metallurgy Classification System. NI 43-101 establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects.

Canadian standards, including NI 43-101, may differ from the requirements of the Securities and Exchange Commission ("**SEC**") under subpart 1300 of Regulation S-K ("**S-K 1300**"), and reserve and resource information contained herein may not be comparable to similar information disclosed by U.S. companies.

The terms "mineral reserve", "proven mineral reserve" and "probable mineral reserve" are Canadian mining terms as defined in accordance with NI 43-101 and the standards of the Canadian Institute of Mining, Metallurgy and Petroleum ("**CIM**"). Pursuant to S-K 1300, the SEC now recognizes estimates of "measured mineral resources," "indicated mineral resources" and "inferred mineral resources." In addition, the SEC has amended its definitions of "proven mineral reserves" and "probable mineral reserves" to be substantially similar to the corresponding standards of the CIM.

Investors are also cautioned that while the SEC now recognizes "measured mineral resources", "indicated mineral resources" and "inferred mineral resources", investors should not assume that any part or all of mineral deposits in these categories will ever be converted into reserves. Mineralization described using these terms has a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an "measured mineral resource", "indicated mineral resource" or "inferred mineral resource" will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies, except in rare cases. Investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically or legally mineable.

Accordingly, information contained in this AIF and the portions of documents incorporated by reference herein containing descriptions of the Company's interests in mineral deposits held by third party mine operators may not be comparable to similar information made public by U.S. and other foreign companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.

Technical and Third-Party Information

Except where otherwise stated, the disclosure in this AIF relating to properties and operations in which Orogen holds a Royalty, including the disclosure in this AIF under the *Section 6- Mineral Properties* are based on information publicly disclosed by the owners or operators of these properties and information/data available in the public domain as at the date hereof, and none of this information has been independently verified by Orogen. Specifically, as a Royalty holder and prospect generator, the Company has limited, if any, access to properties on which it holds Royalty or other interests in its asset portfolio. The Company may from time to time receive operating information from the owners and operators of the mining properties, which it is not permitted to disclose to the public. Orogen is dependent on, (i) the operators of the mining properties and their qualified persons to provide information to Orogen, or (ii) on publicly available information to prepare disclosure pertaining to properties and operations on the properties on which the Company holds Royalty or other interests, and generally has limited or no ability to independently verify such information. Although the Company does not have any knowledge that such information may not be accurate, there can be no assurance that such third-party information is complete or accurate. Some reported public information in respect of a mining property may relate to a larger property area than the area covered by Orogen's Royalty or other interest. Orogen's Royalty or other interests may cover less than 100% of a specific mining property and may only apply to a portion of the publicly reported mineral reserves, mineral resources and or production from a mining property.

As at the date of this AIF, the Company considers its 2.0% NSR royalty interest in the Ermitaño mine to be its only material mineral property for the purposes of NI 43-101. Information included in this AIF with respect to the Ermitaño mine has been prepared in accordance with the exemption set forth in section 9.2 of NI 43-101.

Unless otherwise noted, the disclosure contained in this AIF of a scientific or technical nature for the Ermitaño mine is based on the technical report entitled "*First Majestic Silver Corp. Santa Elena Silver/Gold Mine, Sonora, Mexico, NI 43-101 Technical Report on Mineral Resource and Mineral Reserve Estimates*" having an effective date of June 30, 2021, and filed under First Majestic's SEDAR (www.sedar.com) profile on November 24, 2021. In addition to the technical report, the disclosure herein also contains updated mineral reserve and resource estimates for the Ermitaño mine based on the Santa Elena Mineral Reserve and Resource Estimates with an effective date of December 31, 2022 announced by First Majestic on March 31, 2023 and as disclosed in their December 31, 2022 AIF and filed under First Majestic's SEDAR (www.sedar.com) profile on March 31, 2023.

Laurence Pryer, Ph.D., P.Geol, Vice President Exploration for Orogen and a "Qualified Person" under NI 43-101 has reviewed and approved the written scientific and technical disclosure contained in this AIF.

Currency Presentation

All dollar amounts referenced as "\$", "CAD" or "CAD\$" are references to Canadian dollars, all references to "US\$", "USD" or "USD\$" are references to United States dollars, and all references to "MXN" is references to Mexican Pesos.

Exchange Rate Information

The following table sets out for each period indicated: (i) one U.S. dollar, and (ii) one Mexican Peso, each expressed in Canadian dollars, in effect at the end of each period, the average rate of exchange for those periods, and the rate of exchange in effect at the end of each period, based on rate published by the Bank of Canada:

	U.S. Dollar for the Year			Mexican Peso for the Year		
	2022	2021	2020	2022	2021	2020
Rate at the end of period	1.3544	1.2678	1.2732	0.0695	0.0621	0.0640
Average rate during the period	1.3011	1.2535	1.3415	0.0647	0.0618	0.0627
High rate for the period	1.3856	1.2942	1.4496	0.0707	0.0648	0.0714
Low rate for the period	1.2451	1.2040	1.2718	0.0602	0.5856	0.0565

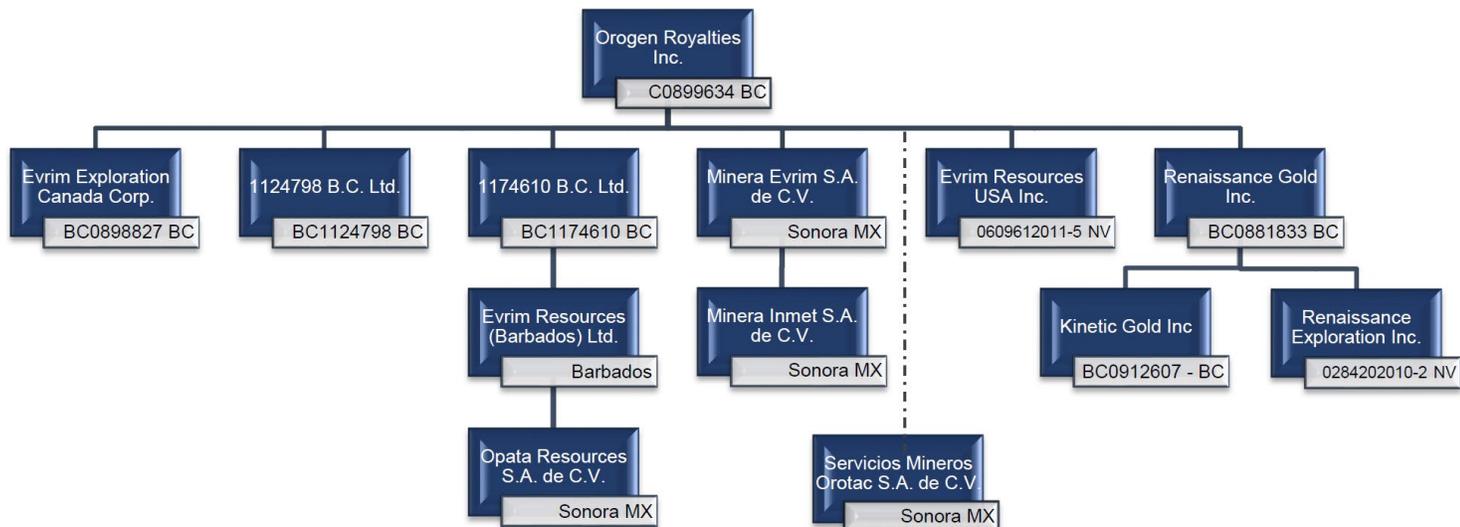
2. CORPORATE STRUCTURE

The Company was incorporated on May 11, 2005, as a capital pool company for the purposes of the policies of the TSX Venture Exchange (the “**Exchange**”) and is a reporting issuer in British Columbia, Alberta, Saskatchewan and Ontario. The shares of the Company commenced trading on the Exchange under the symbol EVM on January 25, 2011. On August 18, 2020, the Company acquired Renaissance Gold Inc. through a Plan of Arrangement under the Business Corporation Act (British Columbia) and was renamed Orogen Royalties Inc. The Company’s common shares (“**Common Shares**”) commenced trading on the Exchange under the symbol OGN and on the OTCQX under the symbol OGNRF.

The head office, principal registered, and records office of the Company are located at 1015-789 West Pender Street, Vancouver, British Columbia, Canada, V6C 1H2.

The Company has twelve subsidiaries being the following:

	Place of incorporation	Proportion of ownership interest December 31, 2022	Proportion of ownership interest December 31, 2020	Proportion of ownership interest December 31, 2020	Principal activity
Evrin Exploration Canada Corp.	BC, Canada	100%	100%	100%	Mineral exploration
1124798 B.C. Ltd.	BC, Canada	100%	100%	100%	Mineral exploration
1174610 B.C. Ltd.	BC, Canada	100%	100%	100%	Holding company
Evrin Resources (Barbados) Ltd.	Barbados	100%	100%	100%	Holding company
Minera Evrim, S.A. de C.V.	Sonora, Mexico	100%	100%	100%	Mineral exploration
Servicios Mineros Orotac, S.A. de C.V.	Sonora, Mexico	100%	100%	100%	Service company
Opata Resources, S.A. de C.V.	Sonora, Mexico	100%	100%	100%	Mineral exploration
Minera Inmet Mexico S.A. de C.V.	Sonora, Mexico	100%	100%	100%	Holding company
Evrin Resources USA Inc.	Nevada, USA	100%	100%	100%	Mineral exploration
Renaissance Gold Inc.	BC, Canada	100%	100%	100%	Mineral exploration
Renaissance Exploration Inc.	Nevada, USA	100%	100%	100%	Mineral exploration
Kinetic Gold Corp.	BC, Canada	100%	100%	100%	Holding company



3. DESCRIPTION OF BUSINESS

Orogen is a royalty and mineral exploration company with a diverse portfolio of precious metal royalties and copper, gold and silver exploration projects in Canada, United States, Mexico, Kenya, and Argentina. The Company has two business segments including mineral royalties and mineral exploration project generation. The Company also owns a geological database covering parts of Mexico, central Asia, South Pacific, western Canada and western United States.

Orogen uses prospect generation to manage exploration and financial risks. Prospect generation allows Orogen to grow its existing royalties and securities assets in a disciplined and sustainable manner, while gaining exposure to exploration opportunities and discoveries. In addition, Orogen is positioned to operate counter-cyclical to the market by acquiring exploration targets when the projects are inexpensive and transact in well capitalized markets when the project demand is strong. The Company leverages its geological and financial expertise to identify and advance high-quality exploration projects. The Company monetizes these projects to generate royalties and recuperate its investment through transactions with industry or joint venture partners. This approach allows the Company to generate discovery opportunities while minimizing project risks and maximizing financial sustainability with the goal of royalty creation for the Company.

Orogen identifies, stakes and acquires new projects and performs early-stage work to demonstrate their geologic potential. The Company then seeks partners who bring the capital and expertise to delineate a mineral deposit. Orogen retains exposure to the property through royalties, milestone payments, and equity consideration.

Royalty Portfolio

The following summarizes royalty interests that the Company owns on projects that are in production and undergoing various stages of exploration:

	Project Name	Location	Metals	Operator	NSR Royalty Interest	Asset Status
1	Cuale	Jalisco, Mexico	Au	Rockstar Mining S.A. de C.V.	0.5%	Exploration
2	Cumaro	Sonora, Mexico	Au, Ag	Heliostar Metals S.A. DE C.V.	1.0%	Exploration
3	Cumobabi	Sonora, Mexico	Au, Ag	First Majestic Silver Corp.	1.5%	Exploration
4	Ermitaño	Sonora, Mexico	Au, Ag	First Majestic Silver Corp.	2.0%	Production
5	La Lola	Sonora, Mexico	Au, Ag	Heliostar Metals S.A. DE C.V.	2.0%	Exploration
6	Sarape	Sonora, Mexico	Au, Ag	Advance Lithium Corp.	2.0%	Exploration
7	Cuprite	Nevada, United States	Au	Strikepoint Gold Inc.	1.5%	Exploration
8	Kalium Canyon	Nevada, United States	Au	Green Light Metals Inc.	2.0% to 3.0%	Exploration
9	Silicon	Nevada, United States	Au	AngloGold Ashanti NA	1.0%	Exploration
10	South Roberts	Nevada, United States	Au	Ivy Minerals Inc.	0.5% to 1.0%	Exploration
11	Spruce Mountain	Nevada, United States	Au	Conquest Nevada LLC	0.5%	Exploration
12	Axe	BC, Canada	Au, Cu	Kodiak Copper	2.0%	Exploration
13	Ball Creek West	BC, Canada	Cu, Au	P2 Gold Inc.	1.0% and right to buy 1.0% on Sandstorm's NSR for \$1.0 million	Exploration
14	Ecstall	BC, Canada	Cu, Au	Kingfisher Metals Inc.	1.0%	Exploration
15	Hank	BC, Canada	Au, Cu	Kingfisher Metals Inc.	3.0%	Exploration
16	Onjo	BC, Canada	Au, Cu	Pacific Ridge Exploration Ltd.	2.0%	Exploration
17	Lake Victoria Gold Fields	Western Kenya	Au	Shanta Gold Limited	3.0%	Exploration
18	Argentina Royalties	Argentina	Au	Magna Terra Minerals	1.0%	Exploration

Mineral Exploration Portfolio

The following summarizes the Company's mineral properties, either acquired or developed through the Company's prospect generation model, that are optioned or joint ventured with other counterparties, or are available for option or joint venture:

	Project Name	Location	Metals	Underlying Agreements and Encumbrances		Joint Venture/Alliances	Projects Optioned	
				Counter Party	NSR Royalty		Counter Party	NSR Royalty
Joint Venture and Alliances								
1	Yamana Alliance	Western, United States	Au	-	-	Yamana Gold Inc.	-	-
2	Nevada Generative Alliance	Nevada, United States	Au	-	-	Altius Minerals Corporation	-	-
Projects Optioned								

	Project Name	Location	Metals	Underlying Agreements and Encumbrances		Joint Venture/Alliances	Projects Optioned	
				Counter Party	NSR Royalty	Counter Party	Counter Party	NSR Royalty
1	Llano del Nogal	Sonora, Mexico	Au, Ag, Cu	-	1.0% - base metals; 1.5% - precious metals	-	Riverside Resources Inc.	1.0% (production royalty)
2	Suanse	Mexico	Au, Ag	San Marco Resources Inc.	1.0%	-	Riverside Resources Inc.	1.0% (production royalty)
3	Astro	Northwest Territories, Canada	Au	Newmont Mining Corporation	0.5%	-	Rackla Metals Inc	2.5%
4	Ball Creek East (Hwy 37)	BC, Canada	Cu, Au	Sandstorm Gold Royalties	2.0%	-	Kingfisher Metals Inc.	Right to 1.0% buy on Sandstorm's NSR for \$1.0 million
5	Callaghan	Nevada, United States	Au	-	-	-	Meridian Gold Company	3.0%
6	Ecru	Nevada, United States	Au	-	-	-	Moneghetti Minerals Limited	2.0%
7	Ghost Ranch	Nevada, United States	Au	-	-	-	Ivy Minerals Inc.	0.5% to 1.5%
8	Gilbert South	Nevada, United States	Au	Various	2-3%	-	Eminent Gold Corp.	2.0%
9	Maggie Creek	Nevada, United States	Au	Various	2.0%	-	Nevada Gold Mines LLC	2.0%
10	Manhattan Gap	Nevada, United States	Au, Ag, Cu	-	-	-	Stampede Metals Corp.	1.5%
11	Mustang Canyon (Tabor)	Nevada, United States	Au	Gold Royalty Corp.	2.0%	-	i-80 Gold Corp.	1.0%
12	Pearl String	Nevada, United States	Au	-	-	-	Barrick Gold Corporation	2.0%
13	Raven	Nevada, United States	Au	Ivy Minerals Inc.	0.5%	-	Meridian Gold Company	2.5%
14	Si2 (Elba)	Nevada, United States	Au	-	-	-	K2 Gold Corporation.	2.0%
15	Spring Peak	Nevada, United States	Au	Kuzma	2.5%	-	Headwater Gold Inc.	0.5% and right to buy 0.5% for US\$1.0 million

	Project Name	Location	Metals	Underlying Agreements and Encumbrances		Joint Venture/Alliances	Projects Optioned	
				Counter Party	NSR Royalty	Counter Party	Counter Party	NSR Royalty
16	Tabor	Nevada, United States	Au	-	-	-	i-80 Gold Corp.	3.0%
Projects Available for Option/JV								
1	La Verdad	Sonora, Mexico	Au, Ag	-	-	-	-	-
2	Lemon Lake	BC, Canada	Au, Cu	Metalogix	-	-	-	-
3	Cuervo	BC, Canada	Au, Cu	-	-	-	-	-
4	Celts	Nevada, United States	Au	-	-	-	-	-
5	Jake Creek	Nevada, United States	Au	-	-	-	-	-

Additional details regarding the agreements entered by Orogen for the above mineral royalties and mineral properties assets can be found under the heading *Section 4 -General Development of the Business*.

Specialized Skill and Knowledge

All aspects of Orogen's business require specialized skills and knowledge including the areas of finance, accounting, law, and geology.

Competitive Conditions

Competition in the mineral exploration and royalty industry is significant. The Company competes with other mining, exploration, and mineral royalty companies, which may have greater financial and technical resources, to acquire exploration and royalty interests. The Company also competes with these companies for human resources and capital.

Employees

As at the date of this AIF, Orogen has ten employees. All management functions are preformed by executive officers of the Company.

Components

The Company expects to continue to acquire and/or generate mineral property interests through its prospect generation model. The Company also expects to grow its Royalty assets and other rights by monetizing its mineral properties or through acquisition.

Intangible Property

The Company has generated a large volume of geological database from its prospect generation and exploration activities over the years. This database has been an asset in identifying opportunities in the Company's prospect generation business.

Business Cycle and Seasonality

Orogen's business is not seasonal, however, it is impacted by capital markets and commodity price volatility.

Foreign Operations

The Company operates in and has mineral properties and Royalty assets in Canada, United States, Mexico, Kenya, and Argentina. Changes in legislation or government regulations in foreign jurisdictions are beyond Orogen's control and could adversely affect the Company's business. The Company may also be exposed to political, economic or other risks and uncertainties. The effects of such risks cannot be forecasted with any accuracy by Orogen (see *Section 5- Risks and Uncertainties "Foreign Countries and Political Risks"*)

Material Reorganization

All material reorganizations have been disclosed under "*Three Year History*" in *Section 4- General Development of the Business*, especially the August 18, 2020 Arrangement with Renaissance.

Bankruptcy Reorganizations

There has not been any voluntary or involuntary bankruptcy, receivership or similar proceedings against the Company.

Renegotiation or Termination of Contracts

There are no other material renegotiation or termination of contracts other than those disclosed under "*Three Year History*" in *Section 4- General Development of the Business*.

Economic Dependence

The Company's business is dependent on the performance of its Royalty on the Ermitaño mine as it is the only cash generating Royalty in commercial production at the date of this AIF.

The Company's business is not dependent on any other contract that could have significant impact on its business.

Environmental Protection

The Company is subject to environmental regulation in all phases of its exploration and in all jurisdictions that it operates. Environmental regulation is evolving and may result in stricter standards, increased fines and penalties for non-compliance and additional responsibilities for the Company and its directors, officers and employees which may result in increased costs.

The Company is not subject to environmental regulation for the projects in which it holds a Royalty since the agreements giving rise to such Royalties make the owner or operator of the project responsible for such matters.

Social or Environmental Policies

Orogen has various environmental, social, and labour, health and safety policies in place regarding its relationship with all internal and external stakeholders. The Company ensures that these policies are made known to its employees, contractors, joint venture partners and other stakeholders:

- i. Environmental Policy
The Company strive to minimize its impact on the environment by undertaking each exploration program with minimal disturbance. Orogen carries out progressive reclamation of surface disturbance activities such as the establishment of camps, drilling, trenching and access construction:
 - Disturbed sites are left free of refuse and re-seeded (where applicable) to encourage revegetation;
 - Drill sites are, to the extent possible, restored to their original contours and reseeded to facilitate revegetation;

- Drill cuttings are collected in sump and are backfilled, restored to their original contours and reseeded (where applicable); and
- Rehabilitated access roads are restored to their pre-existing condition and are reseeded to encourage revegetation. Erosion prevention measures are installed on new access roads unless local stakeholders prefer to keep the roads open for their own use.

ii. Diversity

The Company's goal is to create, nurture and support a diverse workforce and environment. The Board of Directors and management takes full ownership of the Company's approach to diversity, inclusion and their outputs. The Company's aim is to attract and retain talent that have an appropriate mix of diversity, skill and expertise. All appointments are based on merit, experience, skill and contribution with due consideration given to the benefits of diversity.

iii. Community Engagement

Having active exploration projects in Mexico, U.S. and Canada means building relationships with a wide range of people and communities. People are identified based on their traditional territory, their technical capability and their extent of interest for information and involvement.

The Company value the trust and respect of the communities where it operates, and to the extent possible, support local engagement in the form of services and labour.

Engagement varies greatly with each project. Traditional knowledge and archeological surveys may be included as part of the engagement process. Engagement is tailored to the needs of the communities and varies from regular updates of activities to formal meetings and presentations.

iv. Health and Safety

The exploration side of the Company's business may be exposed to a range of potential hazards. The most common risks at this stage are transportation related to and from an exploration program, drilling operations, field operations (slips, falls, forest fires, wildlife encounters), aircraft operations and security (depending on the jurisdiction).

The Company use safety training, daily risk assessments and toolbox meetings, incident and near miss reporting as ways to assess, prevent, and where possible eliminate, potential risks to the health and safety of our workers. Orogen promotes a culture of health and safety that flows from management to field crews. Every member is empowered to take charge of their own health and safety as well as for fellow team members.

The Company measure its health and safety performance through its track record and participate in industry forums and surveys as a baseline for continuous improvement.

4. GENERAL DEVELOPMENT OF THE BUSINESS

Three Year History

For the Financial year ended December 31, 2022

Prospect Generation - Summary of Activities

- i. **Si2:** On January 19, 2022, the Company entered into an earn-in agreement with K2 Gold Corporation ("K2") for 100% interest in the Si2 project subject to K2 making total cash

payments of US\$2.5 million and incurring exploration expenses of US\$2.5 million over a five-year period and grant the Company a 2.0% NSR royalty once the earn-in obligations are fulfilled;

- ii. **Onjo:** On February 3, 2022, the Company announced the sale of the Onjo project to Pacific Ridge Exploration Ltd. ("Pacific Ridge") for \$50,000 cash, 750,000 common shares of Pacific Ridge and a 2.0% NSR royalty of which 0.5% can be purchased for US\$1.5 million;
- iii. **Llano del Nogal:** On May 3, 2022, the Company entered into an option agreement with Riverside Resources Inc. ("Riverside") whereby Riverside can earn 100% interest in the property by making cash payments totaling US\$2.48 million and incur exploration expenditures of US\$5.0 million over a six-year period. The Company will retain a 1.0% production royalty and Riverside will retain a 10 year buy-down right whereby 0.5% can be purchased for US\$10.0 million. In addition, during the option period, the Company and Riverside will jointly retain the right to exercise and retain any NSR royalty buydown rights with respect to the Suanse claims (0.5% NSR royalty for \$1.0 million) and the Coyotes claim (1.5% NSR royalty for US\$1.5 million);
- iv. **Lake Victoria Gold Fields:** On July 25, 2022, the Company acquired 3.0% net smelter royalty on three prospective mineral licenses in Lake Victoria Gold Fields in western Kenya from Advanced Lithium Corp. ("Advance"). As consideration, the Company paid US\$120,000 and the transferred of 100% of its title and interest in the Sarape gold-silver project, located in Sonora, Mexico, to Advance. The Company retains 2.0% NSR royalty on the Sarape project;
- v. **Astro:** On September 1, 2022, the Company entered into an option agreement with Rackla Metals Inc. ("Rackla") whereby Rackla can earn 100% interest in the Astro project. Rackla's obligations under the terms of the agreement include issuing 120,000 common shares of Rackla on the closing date and making a payment of \$382,000 and incurring exploration expenditures of \$250,000 by the first anniversary of regulatory approval date. Once Rackla has exercised its option to acquire the Astro project, the Company will retain a 2.5% NSR royalty;
- vi. **Nevada Generative Alliance:** on September 12, 2022, the Company announced a generative exploration alliance (the "Alliance") with a subsidiary of Altius. The Alliance will focus on generating gold and silver targets considered geologically similar to the recent major gold deposit discovery at Silicon in the Walker Lane trend in Nevada, US. The initial annual budget of US\$300,000 is fully funded by Altius while the Company provides technical expertise and extensive technical database. Once a project is designated, ongoing expenses and recoveries are shared equally between the Company and Altius;
- vii. **Kalium Canyon:** the Company completed a purchase and sale agreement with Green Light Metals Inc. ("Green Light") to sell 100% title and interest in Kalium Canyon gold project on September 14, 2022 for total cash consideration of US\$30,000 and 1,000,000 common shares of Green Light with a fair value of \$400,000. The common shares are subject to certain provisions upon listing on a recognized Canadian stock exchange. The Company retains a 2.0-3.0% NSR royalty, depending on the certain claim blocks, of which 1% NSR royalty can be purchased for US\$2.0 million. On the Marty 1-7 and SP 11 claims, the Company will receive a one-time payment of US\$5 per ounce gold-equivalent based on gold equivalent ounces estimated in a mineral reserve and resource statement set out in a NI 43-101 feasibility study and paid within 60 days from the start of commercial production, capped at US\$5.0 million;

- viii. **Pearl String:** On October 22, 2022, the Company entered into an option agreement with a wholly-owned subsidiary of Barrick Gold Corporation (“Barrick”) whereby Barrick can earn a 100% interest in the Pearl String gold project located in the Walker Lane trend in Nevada, US. Barrick’s obligations under the terms of the agreement include making cash payments of US\$1.5 million and incurring US\$4.0 million in exploration expenditures over a period of five years. Once Barrick exercises its option, the Company retains a 2.0% NSR royalty;
- ix. **TREK 31:** On October 31, 2022, the Company and Pacific Imperial Mines Inc. agreed to terminate the October 18, 2020 option agreement on TREK 31;
- x. **Maggie Creek:** On November 4, 2022, the Company entered into an option agreement with Nevada Gold Mines (“NGM”) whereby NGM can earn 100% interest in the Maggie Creek gold project located in the Carlin trend in Nevada, US. NGM’s obligations under the terms of the agreement include making cash payments of US\$5.0 million and incurring US\$6.0 million in exploration expenditures over a period of five years. Once NGM exercises its option, the Company will retain a 2.0% NSR royalty. This agreement has been assigned and amended from a pre-existing option agreement between Company and US Gold Corp. dated February 15, 2022.

In connection with this agreement, the Company acquired a 3.0% NSR royalty (subject to a 1.0% buydown for US\$3.0 million) and the right to a US\$2.5 million milestone payment on the 17 square kilometre Hank copper-gold project located in British Columbia’s Golden Triangle. The Hank project is located within the Company’s 539 square kilometre Ball Creek claims;

- xi. **Celts:** on January 9, 2023, the Company announced the acquisition of the Celts epithermal gold-silver project in Walker Lane, Nevada. The project was acquired under the Alliance with Altius;
- xii. **Cuprite:** On January 23, 2023, the Company announced that it has completed a purchase and sales agreement with a wholly-owned U.S. subsidiary of Strikepoint whereby Strikepoint has acquired 100% interest in the Cuprite gold project located in Nevada. Total consideration includes the issuance of 6,428,571 common shares of Strikepoint with a fair market value of \$450,000, reimbursement of US\$35,208 in project related costs, and a 3% NSR royalty on the project. The project was generated under the Alliance and as such, total consideration received will be split even between the Company and Altius; and
- xiii. **Ball Creek:** On March 2, 2023, the Company announced that the Ball Creek project was divided into two claim blocks that included Ball Creek East and Ball Creek West. The Company entered into a purchase and sales agreement with P2 Gold Inc. (“P2 Gold”) for the sale of 100% interest in Ball Creek West. As consideration, the Company will receive \$1.0 million in fair value of P2 Gold common shares, 1.0% NSR royalty, and the right to acquire an additional 1.0% NSR royalty of an underlying agreement on the project held by Sandstorm Gold Royalties (“Sandstorm”).

The Company also announced that it has entered into an option agreement with Kingfisher Metals Inc. (“Kingfisher”) whereby Kingfisher can earn 100% interest in Ball Creek East. Kingfisher’s obligations under the terms of the option agreement includes issuing \$3.5 million in fair value of Kingfisher common shares and incurring \$7.5 million in exploration expenditures over a four-year period. Upon exercise of the option agreement, Kingfisher will transfer to Orogen the right to acquire 1.0% NSR royalty of an underlying agreement on the project held by Sandstorm. As additional consideration of the option agreement, Kingfisher will also grant the Company 1.0% NSR on its Ecstall project, located in central coast BC, Canada.

Mineral Royalties - Summary of Activities

For the year ended December 31, 2022, the Company recognized \$3,744,776 in royalty revenue generated from the Ermitaño. This represents a gold equivalent ounce (“GEOs”) of 1,588 based on an average price of US\$1,791 per ounce.

During the year ended December 31, 2022, the Company added eight additional assets to its Royalty portfolio including Sarape, Cuprite, Kalium Canyon, Spruce Mountain, Hank and three properties in Lake Victoria Gold Field, Kenya. All of the Company’s Royalty assets are in exploration stage except for Ermitaño that commenced commercial production in Q4-2021.

Management Changes

- i. On March 29, 2022, Mr. Justin Quigley was elected as Chairman of the Board of Directors. Justin joined the Board of Directors on August 3, 2021;
- ii. On July 1, 2022, Mr. Laurence Pryer, Ph.D., P.Geol, was appointed Vice President Exploration. Laurence has been employed and held various positions within the Company since 2017; and
- iii. The Company held an Annual General and Special Meeting (the “Meeting”) on October 27, 2022. The Company welcomed Samantha Shorter to the Board. Bob Felder, a former director of the Company, did not stand for re-election at the Meeting and has been appointed as the Company’s Technical Advisor.

For the Financial year ended December 31, 2021

Prospect Generation - Summary of Activities

- i. **Ball Creek:** On February 8, 2021, the Company and Golden Ridge Resources Ltd. (“**Golden Ridge**”) terminated the July 19, 2019 option agreement on the Ball Creek project. The Company paid consideration of \$15,000 and returned 149,573 Golden Ridge common share with a deemed fair value of \$22,436 to Golden Ridge;

On August 18, 2021, the Company announced a plan to spinout the Ball Creek project into a new company (“SpinCo”) by way of a Plan of Arrangement under the British Columbia Corporation Act. Shareholders of the Company will maintain their existing ownership of Common Shares in the Company and gain new shares of SpinCo on a ratio to be determined. In addition, the Company will also retain 0.5% NSR royalty on the project. SpinCo will focus on the exploration and advancement of the project;
- ii. **Axe:** On April 16, 2021, the Company sold the Axe project to Kodiak Copper Corp. (“**Kodiak**”) for consideration of 950,000 common shares of Kodiak for a deemed fair value of \$1,472,500 and a 2.0% NSR royalty, of which 0.5% can be purchased for \$2.0 million. Kodiak also assumes the remaining obligation owed to Nova and Bearclaw, up to certain limits, in accordance with the December 6, 2016 acquisition agreement;
- iii. **Lemon Lake:** On February 18, 2021, the Company entered into an agreement with Acme Company Limited (“**Acme**”) to option the Lemon Lake property. Acme can acquire a 100% interest in the Lemon Lake by making cash payments of \$575,000 and work expenditures of \$3.0 million over a five-year period and granting a 1.0% NSR royalty to the Company;
- iv. **Jupiter:** On March 3, 2021, the Company and Ramelius Resources Ltd. terminated the November 30, 2017 farm-in and joint venture agreement on the Jupiter project;

- v. **Spring Peak:** On February 10, 2021, the Company and OceanaGold terminated the January 17, 2019 Spring Peak option agreement;
- i. **Ecru:** On March 8, 2021, the Company entered into an agreement with Moneghetti Minerals Limited (“**Moneghetti**”) to option the Ecru project. Moneghetti can acquire a 100% interest in Ecru by making cash payments of US\$2.5 million and work expenditures of US\$5.0 million over a six-year period. The Company retains a 2.0% NSR royalty on the property;
- vi. **Manhattan Gap:** On April 20, 2021, the Company entered into an option agreement with Stampede Metals Corp. (“**Stampede Metals**”) to acquire 100% interest in the Manhattan Gap for total consideration of US\$176,243 including US\$18,243 in cash and US\$158,000 in deemed value of common shares of Stampede Metals in addition to meeting minimum drilling requirements by Stampede Metals;
- vii. **Gilbert South:** On June 24, 2021, the Company entered into an option agreement with Eminent Gold Corp. (“**Eminent Gold**”) to acquire 100% interest in the South Gilbert for total cash payment of US\$875,000, issuance of 500,000 common shares of Eminent Gold, and a total minimum exploration expenditure of US\$100,000 over a five year period. The company also retains a 2.0% NSR royalty on the overall project of which 1.0% can be purchased for US\$1.0M million. Eminent Gold will also assume all underlying vendor obligations;
- viii. **Spring Peak:** On July 12, 2021, the Company signed an option agreement with Headwater Gold Inc. (“**Headwater**”) to earn a 100% interest in the Spring Peak project by making a cash payment of US\$10,000, a cash or share payment of US\$250,000 subject to receipt of certain permits from the US Forest Service, incur exploration expenditures US\$250,000 within 24 months of the agreement date, and maintaining all underlying obligations. The Company also retains a 0.5% NSR royalty and has the option to purchase an additional 0.5% NSR royalty for US\$1.0 million;
- ix. **Kalium Canyon:** the Company entered into an option agreement with Badger Minerals LLC (“**Badger**”) on June 21, 2021. Badger may earn 100% interest in the Kalium Canyon project by making total cash payments and exploration expenditures of US\$1.75 million and US\$5.0 million over a five-year period, respectively. The Company also retains a 3.0% NSR royalty of which 0.5% can be purchased for US\$2.0 million;
- x. **Ghost Ranch:** On August 23, 2021, the Company entered into an exploration and option agreement with Ivy Minerals Inc. (“**Ivy Minerals**”) to acquire 51% interest in the Ghost Ranch project by spending US\$1.65 million over a four-year period, including a firm commitment of 4,000 feet of drilling. The Company will retain a 49% interest in Ghost Ranch and reserve a 0.5% NSR royalty. Both Ivy and Orogen will then participate in a joint venture to develop Ghost Ranch. If either parties’ equity interest in Ghost Ranch falls below 10%, their interest will convert to a 1% NSR royalty. Orogen would then retain a total 1.5% NSR royalty in the event the Company is diluted below 10%; and
- xi. **Sarape:** On September 19, 2021, Hochschild Mining PLC and the Company terminated the August 25, 2020 option agreement following their recently completed drilling program.

Mineral Royalties- Summary of Activities

The Company recognized \$609,288 for the year ended December 31, 2021 in royalty revenue generated from the Ermitaño mine that commenced production in November 2021. This represents 268 GEOs based

on an average gold price of US\$1,795. A total of 103,742 tonnes produced with average head grades of 5.28 grams per tonne (“g/t”) gold and 49 g/t silver.

Production tables below were taken from First Majestic’s “*Santa Elena Silver/Gold Mine, Sonora, Mexico, NI 43-101 Technical Report on Mineral Resource and Mineral Reserve Estimates*” having an effective date of June 30, 2021.

The following table outlines Ermitaño’s LOM production schedule:

Ermitaño LOM	Units	Total	2021	2022	2023	2024	2025	2026	2027
Total Ore	Kt	2,835	77	384	629	669	486	380	210
Silver Grades	g/t Ag	54	40	40	45	70	51	57	44
Gold Grades	g/t Au	3.69	3.47	4.32	4.90	3.60	2.92	2.64	3.01
Silver Mined	MOz	4.9	0.1	0.5	0.9	1.5	0.8	0.7	0.3
Gold Mined	kOz	337	9	53	99	77	46	32	20

Orogen’s expected revenue on P&P Reserves over the LOM is as follows:

	Units	Total	2021	2022	2023	2024	2025	2026	2027
Orogen’s expected Revenue	US\$M	\$12.25	\$0.3	\$1.85	\$3.45	\$2.95	\$1.7	\$1.25	\$0.75

Management Changes

- i. On January 13, 2021, the Company announced the appointment of Mr. Daniel Pace as Vice President of Exploration of the Company and the retirement of Mr. Dave Groves from the Company;
- ii. On January 29, 2021, the Company announced the resignation of Mr. David Caulfield from the Board of Directors;
- iii. On February 10, 2021, the Company announced the reappointment of Mr. J. Patrick Nicol to the Board of Directors;
- iv. On February 16, 2021, the Company announced the resignation of Mr. Paul van Eeden as Director and Chairman of the Company;
- v. On February 26, 2021, Mr. Robert Felder resigned as Senior Vice President of the Company due to his retirement, however, he maintains his position as Director;
- vi. On March 25, 2021, the Company announced the appointment of Mr. Roland Butler to the Board of Directors;
- vii. On June 15, 2021, Mr. Daniel Pace resigned as Vice President of Exploration;
- viii. On August 3, 2021, the Company announced the appointment of Mr. Justin Quigley to the Board of Directors; and
- ix. On October 26, 2021, the Company appointed Mr. Marco LoCascio as Vice President of Corporate Development.

For the Financial year ended December 31, 2020

Plan of Arrangement with Renaissance Gold Inc.

On June 9, 2020, the Company entered into a “merger of equals” transaction with Renaissance Gold Inc. (“**Renaissance**”), a company listed on the Exchange under the symbol REN. The transaction was

completed through a Plan of Arrangement under the Business Corporation Act (the “**Arrangement**”) on August 18, 2020, whereby the Company acquired Renaissance. Renaissance shareholders exchanged all issued and outstanding common shares, options and warrants at a ratio of one (1) common share, option, or warrant for 1.2448 (the “**Exchange Ratio**”) Common Shares, options or warrants of the Company. As a result, the Company issued 86,808,513 Common Shares with a total fair value of \$42,874,725 or \$0.49 per share. In addition, the Company issued 6,486,152 replacement stock options and 23,302,059 replacement warrants. The total consideration for acquiring a 100% interest in Renaissance was \$45,834,963.

In conjunction with the Arrangement, the Company was renamed Orogen Royalties Inc. and commenced trading on the Exchange under the symbol OGN on August 20, 2020.

Prospect Generation - Summary of Activities

- ii. **TREK 31:** On February 18, 2020, the Company announced its ownership of the TREK 31 property in the Nechako Plateau of British Columbia. The property was identified by the Company using data from Geoscience BC’s TREK initiative and was staked in 2018. On October 13, 2020, the Company entered into an option agreement with Pacific Imperial Mines Inc. whereby Pacific Imperial Inc. can earn up to a 100% interest in the project by making cash payments totaling US\$1.3 million and incurring \$3.0 million in exploration expenditures over a five-year period. The Company will retain a 3.0% NSR royalty on the TREK 31 claims of which 1.0% can be repurchased for \$3.0 million;
- iii. **Newmont Alliance:** On April 10, 2020, the Company and Newmont Mining Corporation (“**Newmont**”) have both agreed to terminate the June 10, 2019 alliance agreement. The alliance focused on generating greenfield exploration opportunities in terranes favorable for world-class gold orebodies;
- iv. **Astro Project:** the Astro Project was identified as a result of the Newmont alliance and the Company designated the Astro project for option on March 6, 2019. The Company received the option payment of US\$200,000 from Newmont due upon assignment in April 2019. The option agreement was terminated on April 10, 2020;
- v. **Jupiter:** The Company holds 100% interest in the project subject to a 1.0% NSR royalty to Altius Minerals Corp. On November 30, 2017, the Company entered into an earn-in agreement with Ramelius Resources Ltd. This earn-in agreement was terminated by both the Company and Ramelius Resources Ltd. on March 3, 2021;
- vi. **Spring Peak:** On January 17, 2019, the Company entered into an earn-in agreement with OceanaGold (US) Inc. (“**OceanaGold**”) whereby OceanaGold can earn a 51% interest in the project by making total cash payments of US\$215,000 and incur total exploration expenditures of US\$4.0 million over a five-year period. Once the 51% interest has been earned, OceanaGold may elect to exercise an option to earn an additional 24% interest by incurring US\$6.0 million in exploration and development expenditures over a period of four years from the time the option was exercised. The Company became the operator for the drilling program in August 2020. This earn-in agreement was terminated on February 10, 2021;
- vii. **Tabor (formerly Baby Doe):** On August 24, 2020, the Company entered into an earn-in agreement with Au-Reka Gold Corporation, a subsidiary of i-80 Gold Corp. (“**i-80**”) (formerly Premier Gold Mines U.S.A.), whereby i-80 can earn up to a 100% of interest in the project. The Company will retain a 3.0% NSR royalty on the Tabor claims and a 1.0% NSR royalty on the Mustang claims. Half of the NSR royalty on all the claims can be repurchased by i-80 for US\$3.0 million; and

- viii. **Mustang Canyon:** The Company entered into an option agreement with Nevada Select Royalty Inc., a wholly owned subsidiary of Gold Royalty Corp. (“Gold Royalty”) (formerly Ely Gold Royalties Inc.) on June 24, 2020 to purchase 100% of 27 unpatented mining claims of the Mustang Canyon property whereby Gold Royalty is the registered and beneficial owner. The total purchase price for the property is US\$200,000 with payments to be made over certain milestones. The Company has paid US\$35,000 over two milestones to date and the remaining obligations were transferred to i-80 as the Mustang Canyon claims were included in the August 24, 2020 Tabor option agreement.

Management Changes

- i. In connection with the Arrangement, Mr. J. Patrick Nicol and Mr. John Thompson resigned as directors and were replaced by Mr. Robert P. Felder and Mr. Timothy M. Janke on August 18, 2020. The changes to the Board of Directors were effected to ensure that the Arrangement reflected a true “merger of equals” with both Renaissance and the Company’s predecessor, Evrim Resources Corp., having an equal number of directors; and
- ii. On November 24, 2020, the Company appointed Mr. Marc Tran as Chief Financial Officer. Mr. Tran takes over from Mr. Mahesh Liyanage who is pursuing other opportunities.

5. RISK AND UNCERTAINTIES

Investment in Common Shares involve a significant degree of risks and should be considered speculative due to the nature and stage of the Company’s business. Investors should carefully consider all the information disclosed in this AIF before investing in Common Shares of the Orogen.

i. **Mineral Properties Exploration Risks**

The Company is in the business of mineral exploration and extraction which involves a high degree of risk. The main operating risks include establishing and maintaining ownership of and access to mineral properties and confirming that royalty and option agreements, mineral title and claims are in good standing in addition to obtaining permits for exploration activities, mine development and operations.

The Company holds title to its mineral properties through acquisition of mineral titles and option agreements when obligations have been met. These conditions generally include making annual option payments and incurring exploration expenditures which also may include completion of NI 43-101 level technical studies. If the Company does not complete these conditions as per the terms of the option agreements, the Company’s title to the related property will not vest and the Company will have to impair previously the property’s carrying costs.

ii. **Changes in Commodity Price that underlie the Royalty or Other Interests**

The price of Orogen’s Common Shares may be significantly affected by declines in commodity prices. The revenue received by Orogen from its Royalty assets and the continuation of active option agreements will be significantly affected by changes in market price of the commodities that underlie the Royalty or option agreements. The Company’s revenue is particularly sensitive to changes in gold and silver prices as cash flow derived from the Ermitaño Royalty is dependent on gold and silver production from this asset. The Company also receives additional revenue and recoveries from staged option payments and management fees with various joint ventures and option agreements. There is a risk that any of these payments will be received, and timing of receipts may fluctuate. When these agreements are signed, management cannot reasonably estimate the value and likelihood of these future receipts.

The price of gold and other commodities fluctuates daily and are affected by factors beyond the control of Orogen, including levels of supply and demand, industrial development, inflation and interest rates, the U.S. dollar's strength, and geopolitical events. External economic factors that affect commodity prices can be influenced by changes in international investment patterns, monetary systems, and political developments.

iii. Revenue and Royalty Risks

The Company expects future revenue from the Ermitaño mine Royalty to fluctuate depending on production, the price of gold and silver, and smelting costs. Therefore, the Company cannot accurately forecast the operating results of this asset. Orogen also earns additional revenue and recoveries from staged option payment and management fees with various joint ventures and option agreements. There is a risk that any of these payments will be received. Additionally, payments may be dependent on milestone conditions or value may be based on certain market conditions including metal price or market price of equity interests received.

iv. Impairment of Royalty Interests

Unknown issues or disputes relating to the Company's Royalties may prevent Orogen from realizing the benefits from its Royalties and could have a significant adverse impact on the Company's business, results of operations, cash flow and financial condition. Material changes may also occur that adversely affect management's estimate of the carrying value of the Company's Royalty assets which could result in impairment. Even if existence, validity, enforceability, terms and geographic extent of the Royalties are confirmed, there can be no assurance that disputes over these and other matters will not arise. Confirming these matters and mineral title on properties which the Company holds or seeks to acquire a royalty interest, is a complex matter, and is subject to application of the laws of each jurisdiction. In addition, royalty interests are contractual in nature and therefore may be subject to change of control, bankruptcy or other insolvency of the operators. Even if the Company retains its royalty interest after any change of control, bankruptcy or insolvency of the operator, the project may or may not operate in the same manner by the new operator which may negatively impact Orogen.

v. Non-Payment of a Royalty

The Company is dependent on the financial viability and the operational effectiveness of owners and operators of the relevant mines and mineral properties underlying the Company's Royalties. Payments from production generally flow through the operator and there is a risk of delay and additional expenses in receiving such revenues. Payments may be delayed by restrictions imposed by lenders, sale or delivery of products, the ability or willingness of smelters and refiners to process mine products, recovery by the operators of expenses incurred in the operation of the mines, the establishment by the operators of reserves for such expenses or the insolvency of the operator. Delayed payments as a result of factors that are beyond the control of the Company could result in material and adverse affect on the status of and performance of its Royalties. Failure to receive payment on its Royalties or termination of Orogen's rights generally, may result in a material and adverse effect on the Company's profitability, results of operations, cash flow, financial condition and value of Common Shares.

vi. Contract Risk

Option agreements on mineral properties, Royalty, and other agreements are contractual in nature. Parties to contracts do not always honour contractual terms and contracts and may be subject to interpretation or technical defects. To the extent that counterparties to the option agreements, Royalties, and other interests do not abide by their contractual obligations, the Company may be forced to take legal action to enforce its contractual rights. Such litigation may be time consuming and costly and there is no guarantee of success. Any pending

proceedings or actions or any decisions determined adversely to the Company, may have a material and adverse effect on the Company's profitability, results of operations, cash flow, financial condition and value of Common Shares.

vii. Defects in Royalties

A defect in a contract underlying a Royalty other interest in a property or project may arise that impacts the claim to the Royalty or other interest in a property or project. A defect in an underlying contract may result in a material adverse impact to Orogen's profitability, results of operations, cash flow, financial condition and value of Common Shares.

viii. Exploration Funding Risk

The Company's ability to advance its mineral properties and generate royalties is dependent on third parties or operators of the option agreements' ability to raise sufficient capital to satisfy option payments, exploration and other expenditure terms of the option agreement. As a result, the exploration and development of one or more of the Company's mineral property interests may be delayed or impaired.

ix. No Control Over Mining Operations

The Company is not directly involved in the exploration activities of its optioned mineral properties and exploration, development or operation of its Royalties. The Company's revenue may be derived from its portfolio of optioned mineral properties and Royalty that are based on activities of the third-party owners and operators. The owners and operators generally will have the power to determine the exploration activities of the properties and the way they are exploited, including decisions to expand, continue or reduce, suspend, or discontinue production from a property, decisions about marketing of products extracted and decisions to advance exploration efforts and conduct exploration and development on non-production properties. The owners and operators' interests may not always align with Orogen. The inability of the Company to control operations for properties in which it has a Royalty or other interest may result in a material adverse effect on its profitability, results of operations, cash flow and financial condition. In addition, Royalties of early staged exploration assets may never achieve economic feasibility and commence commercial production and there can be no assurance that such mines or projects will advance. The owners may be unable or unwilling to fulfill their obligations under their agreements, have difficulty obtaining financing and technical resources required to advance the projects, which could limit the owner or the operator's ability to perform its obligations under the agreements with the Company. The Company is also subject to risk that a project may be put on care and maintenance, or be suspended on a temporary or permanent basis.

x. Government Regulation and Permitting Requirements Risks

Exploration, development and mining of minerals are subject to extensive laws and regulations at various governmental levels governing the acquisition of the mining interests, prospecting, development, mining, production, exports, taxes, labour standards, occupational health, waste disposal, toxic substances, land use, environmental protection, mine safety and other matters. In addition, the current and future operations, from exploration through development activities and production, require permits, licenses and approvals from some of these governmental authorities. Orogen believes the operators of its optioned mineral properties and properties on which it holds royalty interests have, obtained all government licenses, permits and approvals necessary for the operation of its business to date. However, additional licenses, permits and approvals may be required. The failure to obtain any licenses, permits or approvals that may be required or the revocation of existing ones would have a material and adverse effect on Orogen, its business and results of operations.

Failure to comply with applicable laws, regulations and permits may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities requiring Orogen's or the project operator's operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Orogen and such operators may be required to compensate those suffering loss or damage by reason of their mineral exploration activities and may have civil or criminal fines or penalties imposed for violations of such laws, regulations and permits. Any such events could have a material and adverse effect on Orogen and its business and could result in Orogen not meeting its business objectives.

xi. Public Health Crises, including the COVID-19 Pandemic

Since December 31, 2019, the outbreak of the novel strain of coronavirus, specifically identified as COVID-19, has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and physical distancing, have caused material disruption to business globally. Since COVID-19 vaccination programs began in early 2021, the Company's operations have generally returned to normal and the Company is pleased to report that COVID-19 did not have a significant impact on the Company's core business including its ability to generate and market mineral property and royalty assets as demonstrated by the number of transactions that were closed during the year in addition to operating two joint venture drill programs. As at December 31, 2022, operations and Royalty revenue received from the Ermitaño mine have not been adversely affected by COVID-19. Most of the Company's earn-in option agreements with other partners were in good standing and the termination of earn-in agreements during the year were not due to the impact of COVID-19.

However, the current COVID-19 global health pandemic is still significantly impacting the global economy, commodity and financial markets. The full extent and impact of the COVID-19 pandemic is unknown and to date has included extreme volatility, high inflation, and has raised the risk of global recession. It has also resulted in operating, supply chain and project development delays that can adversely affect the operations of third parties in which the Company has an interest. Exploration activities and mining operations in which the Company holds an interest could be suspended for precautionary purposes or as governments declare states of emergency or other actions are taken to combat the spread of COVID-19. If the operation or development of one or more of the properties in which Orogen holds a royalty or other interest and from which it receives or expects to receive significant revenue is suspended, it may have a material adverse impact on Orogen's profitability, results of operations, cash flow, financial condition, and Common Share price.

xii. Foreign Countries and Political Risks

The Company operates in and has Royalties on properties in Canada, United States, Mexico, Kenya, and Argentina. It is subject to certain risks including currency fluctuations, and possible political or economic instability which may result in the impairment or loss of mineral concessions or other mineral rights, opposition from environmental or other non-governmental organizations, and mineral exploration and mining activities may be affected in varying degrees by political stability and government regulations relating to the mineral exploration and mining industry. Any changes in regulations or shifts in political attitudes are beyond the control of the Company and may adversely affect its business. Exploration and development may be affected in varying degrees by government regulations with respect to restrictions on future exploitation and production, price controls, export controls, foreign exchange controls, income taxes, expropriation of property, environmental legislation and mine and site safety.

Notwithstanding any progress in restructuring political institutions or economic conditions, the present administration, or successor governments, of some countries in which the Company operates or holds royalty interests may not be able to sustain any progress. If any negative changes occur in the political or economic environment of these countries, it may have an adverse effect on the Company's operations in those countries. The Company does not carry political risk insurance.

xiii. Global Financial Conditions

Market events and conditions, including disruptions in the international capital markets and other financial systems and deteriorating global economic conditions, could increase the cost of capital or impede the Company's access to capital. Economic and geopolitical events may create uncertainty in global financial and equity markets. The conflict between Russia and Ukraine and sanctions and export controls taken by Canada, US and other countries could have potential negative implications on the financial markets. The outcome of the conflict is uncertain and is likely to have wide ranging consequences on the peace and stability of the region and the world economy. As Russia is a major exporter of oil and natural gas, any disruption of supply of oil and natural gas from Russia could cause a significant worldwide supply shortage of oil and natural gas and significantly impact pricing of oil and gas worldwide. A lack of supply and high prices of oil and natural gas could also have a significant adverse impact on the world economy. The long-term impacts of the conflict and the sanctions imposed on Russia remain uncertain. The ultimate impact of the Russia-Ukraine conflict on the Company's business is difficult to predict and depends on factors that are evolving and beyond the Company's control. Orogen may experience material adverse impact to its business, results of operations, cash flow, financial condition and the Common Share price as a result of any of these disruptions, even after the Russia-Ukraine conflict is resolved.

The market price of the Common Share may decline even regardless of the status of the Company's operating performance, the Company's growth prospects, or value of underlying assets. There can be no assurance that fluctuation and volatility in the markets will decrease and if these conditions continue, the Company's operations and the trading price of Common Share could be negatively impacted. Such disruptions could make it more difficult for the Company to obtain capital and financing for operations, or increase the cost of it, among other things. If the Company cannot raise capital when it is needed, or are unable to access capital on reasonable terms, it may have a material adverse effect its business, results of operations, cash flow, financial condition and the Common Share price. These and other related factors can lead to lower longer term asset values, which can result in impairment losses.

xiv. Inflation Risk

General inflationary pressures may affect labour and other operating costs, which could have a material adverse effect on the Company's financial condition, results of operations and the capital expenditures required to advance the Company's mineral properties. There can be no assurance that any governmental action will be taken to control inflationary or deflationary cycles, that any governmental action taken will be effective or whether any governmental action may contribute to economic uncertainty. Governmental action to address inflation or deflation may also affect currency values. Accordingly, inflation and any governmental response thereto may have a material adverse effect on the Company's business, results of operations, cash flow, financial condition and the Common Share price.

xv. Financing and Liquidity Risks

Liquidity risk is the risk that the Company cannot meet its planned and foreseeable commitments, including operating and capital expenditure requirements. The Company may be exposed to liquidity risks if it cannot maintain its cash positions, cash flows or mineral

properties, or appropriate financing is not available on terms satisfactory to. The Company mitigates liquidity risk through the implementation of its capital management policy by spreading the maturity dates of investments over time, managing its capital expenditures and operational cash flows. Management uses a rigorous planning, budgeting and forecasting process to help determine the funds the Company will need to support ongoing operations and exploration plans.

Management believes that the working capital at December 31, 2022, together with future cash flows from the Ermitaño Royalty are sufficient to support the Company's existing and foreseeable commitments for the next twelve months. However, if planning and budgeting is materially different to that forecasted, or financing, if required, is not available to the Company on terms satisfactory to meet these material changes to planning or budgeting, then this may adversely affect the ability of the Company to meet its financial obligations and operational and development plans. There is no assurance that additional funding will be available. Failure to obtain this financing could negatively impact the Company's overall business, result in delay or indefinite postponement of further exploration and development of its projects which could result in the loss of one or more of its properties.

The securities markets can experience a high degree of price and volume volatility, and the market price of securities of many companies, particularly those considered to be early-stage companies such as Orogen, may experience wide fluctuations in share prices which will not necessarily be related to their operating performance, underlying asset values or prospects. There can be no assurance that share price fluctuations will not occur in the future, and if they do occur, the severity of the impact on the Company's ability to raise additional funds through equity issues.

xvi. Currency Risk

The Company operates in Canada, United States and Mexico, as such, it is subject to foreign currency fluctuations which may have a material adverse effect on its profitability, business, results of operations, cash flow, financial condition, and the Common Share price. There can be no assurance that steps taken by management will eliminate the adverse effects of these fluctuations and the Company may suffer losses as a result.

xvii. Environmental

Exploration, development, and mining of minerals are subject to environmental regulations issued and enforced by government agencies. Environmental legislation is evolving to stricter standards and enforcement and involve increased fines and penalties for non-compliance, more onerous environmental assessments of proposed projects, and an increased responsibility for directors, officers, employees and contractors of the Company. There can be no assurance that future changes in environmental regulation, if any, will not adversely affect the Company's operations. Environmental hazards may exist on properties in which the Company holds interests which are unknown to the Company at present.

xviii. Competition

The Company competes with many other mining, exploration and royalty companies that have substantially greater financial and technical resources in obtaining capital funding, acquisition, and development of its projects as well as for the recruitment and retention of qualified employees.

xix. Third Party Reporting

Orogen relies on public disclosure and other information regarding specific mines or projects that is received from the owners or operators of the mines or projects or other independent

experts. The information received may be inaccurate as the result of it being compiled by certain third parties. The disclosure created by the Company may be inaccurate if the information received contains inaccuracies or omissions, which could create a material adverse effect on Orogen.

A Royalty agreement may require an owner or operator to provide the Company with production and operating information that may, if applicable, enable the Company to detect errors in the calculation of Royalty amounts owed. As a result, the ability of the Company to detect payment errors through its associated internal controls and procedures is limited, and if errors are later discovered, the Company will need to make retroactive adjustments. The Royalty agreements may also provide the Company the right to audit the operational calculations and production data for associated payments; however, such audits may occur many months following the recognition of the applicable revenue and if inaccuracies are discovered, this may require the Company to adjust its revenue in later periods.

As a holder of an interest in a Royalty, the Company will have limited access to data on the operations or to the actual properties underlying the Royalty. This limited access to data or disclosure regarding operations could affect the ability of the Company to assess the performance of the Royalty. This could result in delays in cash flow from that which is anticipated by the Company based on the stage of development of the properties covered by the assets within the portfolio of the Company.

xx. Disclosure Regarding Operations

Some Royalties may be subject to confidentiality arrangements which govern the disclosure of information about the Royalty and, as such, the Company may not be in a position to publicly disclose non-public information with respect to certain Royalties. The limited access to data and disclosure regarding the operations of the properties in which the Company has an interest, may restrict the ability of the Company to enhance its performance which may result in a material and adverse effect on the profitability, business, results of operations, cash flow, financial condition and the Common Share price. There can be no assurance that the Company will be successful in obtaining these rights when negotiating the acquisition of Royalties or Streams.

xxi. Return on Investment Risk

Investors cannot expect to receive a dividend on an investment in the Common Shares in the foreseeable future, if at all.

xxii. No Assurance of Titles

The acquisition of the right to explore for and exploit mineral properties is a very detailed and time consuming process. There can be no guarantee that the Company has acquired title to any such surface or mineral rights or that such rights will be obtained in the future. To the extent they are obtained, titles to the Company's surface or mineral properties may be challenged or impugned and title insurance is generally not available. The Company's surface or mineral properties may be subject to prior unregistered agreements, transfers or claims and title may be affected by, among other things, undetected defects. Such third-party claims and defects could have a material adverse impact on the Company's operations.

xxiii. Insured and Insured Risks

The Company is subject to several risks and hazards in general, including adverse environmental conditions, operational accidents, labour disputes, unusual or unexpected geological conditions, changes in the regulatory environment and natural phenomena such as inclement weather conditions, floods, and earthquakes. Such occurrences could result in the

damage to the Company's property or facilities and equipment, personal injury or death, environmental damage to properties of the Company or others, delays, monetary losses and possible legal liability.

Although the Company may maintain insurance to protect against certain risks in such amounts as it considers reasonable, its insurance may not cover all the potential risks associated with its operations. The Company may also be unable to maintain insurance to cover these risks at economically feasible premiums or for other reasons. Should such liabilities arise, they could reduce or eliminate future profitability and result in increased costs, have a material adverse effect on the Company's results and a decline in the value of the securities of the Company.

Some work is carried out through independent consultants and the Company requires all consultants to carry their own insurance to cover any potential liabilities as a result of their work on a project.

xxiv. Labour and Dependence on Key Personnel

The Company depends on several key personnel including executives, senior management, and skilled workforce including mining and mineral geologists. Employment contracts are in place with each of these key personnel, however, losing any of them could have an adverse effect on the Company's operations. The Company may also need to identify and retain additional skilled management and specialized technical personnel to efficiently operate its business. Recruiting and retaining qualified personnel is critical to the success of the Company and there can be no assurance that the Company will be successful in recruiting and retaining the personnel it needs to successfully operate its business. If Orogen is not successful in attracting and retaining qualified personnel, the ability of Orogen to execute on its business model and strategy could be affected, which may have a material and adverse impact on its profitability, business, results of operations, cash flow, financial condition and the Common Share price.

xxv. Climate Change

Governments at all levels are moving towards enacting legislation to address climate change by regulating carbon emissions and energy efficiency, among other things. Where legislation has already been enacted, regulation regarding emission levels and energy efficiency are becoming more stringent. The mining industry as a significant emitter of greenhouse gas emissions is particularly exposed to these regulations. Various governments have introduced or are moving to introduce climate change legislation and treaties at the international, national, state or provincial, and local levels. Regulation relating to emission levels (such as carbon taxes) and energy efficiency is becoming more prevalent. If the current regulatory trend continues, this may result in increased costs at some or all of the Company's operations. In addition, the physical risks of climate change may also have an adverse effect on the Company's operations. Extreme weather events have the potential to disrupt operations at the Company's properties and may require the Company to make additional expenditures to mitigate the impact of such events. The effects of such risks cannot be forecasted with any accuracy by Orogen which may have a material and adverse impact on its profitability, business, results of operations, cash flow, financial condition and the Common Share price.

xxvi. Strategy for Acquisitions

In addition to generating Royalties organically through the Company's prospect generation business, the Company may also acquire Royalties from third parties. The Company cannot offer any assurance that it can complete any acquisition or proposed business transactions on

favourable terms or at all, or that any completed acquisitions or proposed transactions will benefit Orogen.

From time to time, the Company may have various types of transactions and acquisition opportunities in various stages of review. This process also involves the engagement of consultants and advisors to assist in analyzing opportunities. Any such acquisition or transaction could be material to the Company and may involve the issuance of Common Shares by the Company to fund any such acquisition. There may also be other transaction specific risks associated with these transactions, including risks related to the completion of the transaction, the project operators or the jurisdictions in which assets may be acquired.

The Company may also consider opportunities to restructure its Royalties and option agreements where it believes such a restructuring may provide a long-term benefit to the Company, even if such restructuring may reduce near-term revenues or result in the Company incurring transaction related costs.

xxvii. Conflicts of Interest

In accordance with the corporate laws of British Columbia, the directors and officers of a corporation are required to act honestly, in good faith and in the best interests of the Company. Orogen's directors and officers may serve as directors or officers of other companies or have significant shareholdings in other resource companies and, to the extent that such other companies may participate in ventures in which the Company may participate, such directors and officers may have a conflict of interest in negotiating and concluding terms respecting the extent of such participation. If such a conflict of interest arises at a meeting of the Company's directors, a director with such a conflict will abstain from voting for or against the approval of such participation or such terms.

xxviii. Passive Foreign Investment Company

U.S. investors in Common Shares should be aware that Orogen currently expects that it will be classified as a passive foreign investment company ("PFIC") for the financial year ending December 31, 2022 and expects to be a PFIC in future tax years. If Orogen is a PFIC for any tax year during a U.S. shareholder's holding period, then such U.S. shareholder generally will be required to treat any gain realized upon a disposition of Common Shares, or any so-called "excess distribution" received on its Common Shares, as ordinary income, and to pay an interest charge on a portion of such gain or distributions, unless the U.S. shareholder makes a timely and effective "qualified electing fund" election ("QEF Election") or a "mark-to-market" election with respect to the Common Shares. A U.S. shareholder who makes a QEF Election generally must report on a current basis its share of Orogen's net capital gain and ordinary earnings for any year in which Orogen is a PFIC, whether or not Orogen distributes any amounts to its shareholders. For each tax year that Orogen qualifies as a PFIC, Orogen intends to: (a) make available to U.S. shareholders, upon their written request, a "PFIC Annual Information Statement" as described in Treasury Regulation Section 1.1295-1(g) (or any successor Treasury Regulation) and (b) upon written request, use commercially reasonable efforts to provide all additional information that such U.S. shareholder is required to obtain in connection with maintaining such QEF Election with regard to Orogen. Each U.S. investor should consult its own tax advisor regarding the PFIC rules and the U.S. federal income tax consequences of the acquisition, ownership and disposition of Common Shares.

xxix. Internal Controls over Financial Reporting

Securities law requires the Company to assess its internal controls annually by management on the effectiveness of the Company's internal control over financial reporting. The Company may fail to achieve and maintain the adequacy of its internal control over financial reporting,

as such standards are modified, supplemented, or amended from time to time, and the Company may not be able to ensure that it can conclude on an ongoing basis that it has effective internal controls over financial reporting in accordance with applicable laws. The failure to satisfy these requirements on a timely basis could result in the loss of investor confidence in the reliability of its financial statements which may have an adverse effect on the Company's business and value of the Company's Common Shares. Any failure to implement applicable internal controls could harm the Company's operating results or cause it to fail to meet its reporting obligations. There can be no assurance that the Company will be able to remediate material weaknesses, if any, identified in future periods, or maintain all of the controls necessary for continued compliance, and there can be no assurance that the Company will be able to retain sufficient skilled finance and accounting personnel.

Future acquisitions of companies, if any, may provide the Company with challenges in implementing the required processes, procedures, and controls in its acquired operations. Future acquired companies, if any, may not have disclosure controls and procedures or internal control over financial reporting that are as thorough or effective as those required by securities laws currently applicable to the Company.

There can be no assurance that evaluation of the Company's internal control over financial reporting will detect or uncover all failures of persons within the Company to disclose material information otherwise required to be reported. The effectiveness of the Company's controls and procedures could also be limited by simple errors or faulty judgments. In addition, as the Company continues to expand, the challenges involved in implementing appropriate internal controls over financial reporting will increase and will require that the Company continue to improve its internal controls over financial reporting.

xxx. Corporate Governance and Public Disclosure Requirements

The Company is a reporting issuer of British Columbia, Alberta, Saskatchewan and Ontario and its Common Shares are also listed on the Exchange and OTCQX and is subject to changing rules and regulations enforced by the Securities Commissions of these jurisdictions and the Exchange. These rules and regulations continue to evolve in scope and complexity and many new requirements have been created, making compliance more difficult and uncertain. The Company's efforts to comply with the new rules and regulations have resulted in, and are likely to continue to result in, increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

xxxi. Equity Investment Risk

The Company has acquired common shares of other public and private mining companies from considerations received as a result of option agreements and sale of mineral properties completed. The common shares held by the Company are subject to equity price risk. The applicable daily traded volume of any of the securities that underlie an equity investment may not be sufficient to enable the Company to liquidate a position in a short period of time without affecting the market value of such securities. In some cases, there may not be a market at all for the securities that underlie an equity investment. The Company does not actively trade the investments. Equity prices of these investments are impacted by various factors, including commodity prices. The effects of such risks cannot be forecasted with any accuracy by Orogen which may have a material and adverse impact on its profitability, business, results of operations, cash flow, financial condition and the Common Share price.

xxxii. Changes In and Interpretation of Tax Laws

The introduction of new tax laws or regulations, interpretation or application of, existing tax laws or regulations in Canada, United States and Mexico could result in an increase to the Company's taxes, withholdings, and duties and could adversely affect the Company's ability to conduct its business. No assurance can be given that new taxation rules or accounting policies will not be enacted or that existing rules will not be applied in a manner which could result in the profits of the Company being subject to additional taxation that may have an adverse effect on the Company's business, results of operations, cash flow, financial condition and the Common Share price.

The Company may also be subject to tax audits and reviews that may result in adverse tax consequences to the Company. A review could result in adverse tax consequences and unexpected financial costs. Management of the Company believes that the Company has filed its tax returns and paid all applicable taxes in compliance with Canadian, United States and Mexican tax laws. If the tax authority successfully challenges the manner in which the Company or a subsidiary has filed its tax returns and reported its income, this could potentially result in additional income taxes, penalties and interest, which could have a material adverse effect on the Company.

xxxiii. Information Technology and Cyber Security Risks

Orogen's operations depend, in part, upon information and operating technology systems. The Company's information and operating technology systems, including machines and equipment, are subject to disruption, damage, disabling, misuse, malfunction or failure from a number of sources, including, but not limited to, hacking, computer viruses, security breaches, natural disasters, power loss, vandalism, theft, malware, cyber threats, extortion, employee error, malfeasance and defects in design. The Company may also be a target of cyber surveillance or a cyber-attack from cyber criminals, industrial competitors or government actors. Any of these and other events could result in information and operating technology systems failures, operational delays, production downtimes, operating accidents, loss of revenues due to a disruption of activities, incurring of remediation costs, including ransom payments, destruction or corruption of data, release of confidential information in contravention of applicable laws, litigation, fines and liability for failure to comply with privacy and information security laws, unauthorized access to proprietary or sensitive information, security breaches or other manipulation or improper use of our data, systems and networks, regulatory investigations and heightened regulatory scrutiny, any of which could have material adverse effects on our reputation, business, results of operations, cash flow, financial condition and the Common Share price.

To date, the Company has not experienced any material losses relating to cyber-attacks or other information security breaches and there is no assurance that the Company will not incur such losses in future. The Company's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cyber security and the continued development and enhancement of controls, processes and practices designed to protect our systems, computers, software, data and networks from attack, damage or unauthorized access remain a priority. As cyber threats continue to evolve, the Company may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities. Risks related to cyber security are monitored on an ongoing basis by the Company's senior management.

xxxiv. Actions of Activist Shareholders

Publicly-traded companies have also increasingly become subject to campaigns by investors seeking to advocate certain governance changes or corporate actions such as financial restructuring, strategic direction, operating performance, sales of assets or the entire company. The Company could be subject to such shareholder activity or demands. Responding to proxy contests, media campaigns and other actions by activist shareholders, if required, will be costly and time-consuming, will disrupt the Company's operations and would divert the attention of the Board and senior management from the pursuit of the Company's business strategies, which could adversely affect the business, results of operations, cash flow, financial condition and the Common Share price of the Company. Perceived uncertainties on the future direction of the Company resulting from shareholder activism could also result in the loss of potential business opportunities and may make it more difficult to attract and retain qualified personnel and business partners.

xxxv. Risks Applicable to Owners and Operators of Properties in which Orogen holds and Interest

To the extent that the risks are related to or have an impact on production of minerals or continued operations of properties in which the Company holds a Royalty, the Company will be subject to all risk factors applicable to the owners and operators of such mines or projects. These risks may include all of the risks mentioned above and may also include the following additional risks:

- **Exploration, Development and Operating Risks**

Projects that the Company has Royalty interests are subject to all risks normally encountered in the exploration, development and production of metals, including weather-related events, unusual and unexpected geology formations, seismic activity, rock bursts, cave-ins, pit-wall failures, flooding, environmental hazards and the discharge of toxic chemicals, explosions and other conditions involved in the drilling, blasting and removal of material, any of which could result in damage to, or destruction of, mines and other producing facilities, damage to property, injury or loss of life, environmental damage, work stoppages, delays in production, increased production costs and possible legal liability. Any of these hazards and risks and other acts of God could shut down mining operations temporarily or permanently. Mining operations are subject to hazards such as equipment failure or failure of retaining dams around tailings disposal areas which may result in environmental pollution and consequent liability for the owners or operators of the mining operations.

- **Government Regulations, Permits and Authorizations**

The exploration and development activities related to mine operations are subject to extensive laws and regulations governing exploration, development, production, exports, taxes, labour standards, waste disposal, protection and remediation of the environment, reclamation, historic and cultural resources preservation, mine safety and occupational health, handling, storage and transportation of hazardous substances and other matters.

The costs of discovering, evaluating, planning, designing, developing, constructing, operating, and closing specific mine operations in compliance with such laws and regulations are significant. It is possible that the costs and delays associated with compliance with such laws and regulations could become such that the owners or operators of mines or projects would not proceed with the development of, or continue to operate, a mine. Moreover, it is possible that future regulatory developments, such as increasingly strict environmental protection laws, regulations, and enforcement

policies thereunder and claims for damages to property and persons resulting from mining operations could result in substantial costs and liabilities for the owners or operators of mines or projects in the future such that they would not proceed with the development of, or continue to operate, a mine.

Government approvals, licences and permits are currently, and will in the future be, required in connection with mining operations. To the extent such approvals are required and not obtained, mining operations may be curtailed or prohibited from proceeding with planned operations, which could have an impact on the business and financial condition and prospects of the Company. Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed.

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on mining operations, resulting in increased capital expenditures or production costs, reduced levels of production at producing properties or abandonment or delays in development of properties.

- **Permitting**

The operation of a mine or project is subject to receiving and maintenance of permits from appropriate governmental authorities. The owners and operators of the mines and projects in which the Company has an interest may have or require permits for their respective operations. There is no assurance that receipt or delays will not occur in obtaining all permits or renewals for existing permits for development and operations.

- **Infrastructure**

Natural resource exploration, development and mining activities are dependent on the availability of mining, drilling and related equipment in the areas where such activities are conducted. A limited supply of such equipment or access restrictions may affect the availability of such equipment to the owners and operators of mines or projects and may delay exploration, development, or extraction activities. Certain equipment may not be immediately available or may require long lead time orders. The lack of availability on acceptable terms or the delay in the availability of any one or more of these items could prevent or delay exploration, development or production at a mine or project. Mining, processing, development, and exploration activities depend, to one degree or another, on adequate infrastructure. Reliable roads, bridges, power sources and water supply are important determinants which affect capital and operating costs. Unusual or infrequent weather phenomena, sabotage, government or other interference in the maintenance or provision of such infrastructure could adversely affect operations at a mine or project.

- **Operator's Employees**

Exploration, development and production from the properties in which the Company holds an interest depends on the efforts of operators' employees. The market to attract and retain persons with mining expertise is competitive. The ability of the owners and operators of such properties to hire and retain geologists and persons with mining expertise is key to those operations. Further, relations with employees may be affected by changes in the scheme of labour relations that may be introduced by the relevant governmental authorities in the jurisdictions in which those operations are conducted. Changes in such legislation or otherwise in the relationships of the owners and

operators of such properties with their employees may result in strikes, lockouts, or other work stoppages, any of which could have a material adverse effect on such operations, results of operations and financial condition of the Company. If these factors cause the owners and operators of such properties to decide to cease production at one or more of the properties, such decision could have a material adverse effect on the business and financial condition of the Company.

- **Mineral Resource and Mineral Reserve Estimates**

Mineral reserve and or mineral resource estimates for a specific mine or project may not be correct. The figures for mineral resources and mineral reserves in this AIF are estimates only and were obtained from the NI 43-101 Technical Report on Mineral Resource and Mineral Reserve Estimates filed by First Majestic for the Santa Elena Silver/Gold Mine, Sonora, Mexico for the Ermitaño project. There can be no assurance that estimated mineral reserves and mineral resources will ever be recovered or recovered at the rates as estimated. Mineral reserve and mineral resource estimates are based on sampling and geological interpretation and are uncertain because samples used may not be representative. Mineral reserve and mineral resource estimates require revision (either to demonstrate an increase or decrease) based on production from the mine or project. The fluctuations of commodity prices and production costs, as well as changes in recovery rates, may render certain mineral reserves and mineral resources uneconomic and may result in a restatement of estimated reserves and/or mineral resources.

Mineral resources that are not mineral reserves do not have demonstrated economic viability. Due to the uncertainty of mineral resources, there is no assurance that mineral resources will be upgraded to proven and probable mineral reserves because of continued exploration.

- **Depleted Mineral Reserve Replacement**

Mines have a limited time of operation because of the proven and probable mineral reserves attributed to a specific mine. A mining company operating a specific mine will be required to replace and expand mineral reserves depleted by a mine's production to maintain production levels over a long term. It is possible to replace depleted mineral reserves by expanding known ore bodies through exploration, locating new deposits, or acquiring new mines or projects. Mineral exploration is highly speculative in nature. It can take several years to develop a potential site of mineralization. There is no assurance that current or future exploration programs conducted by the operators or owners of the mines in which Orogen has Royalty interests will be successful and therefore mineral reserves cannot be replenished by discoveries or acquisitions.

- **Uninsured Risks**

The mining industry is subject to significant hazards and a high degree of risk that could result in damage to, or destruction of, mineral properties or producing facilities, personal injury or death, environmental damage, delays in mining, monetary losses and possible legal liability. Where a mining company considers it practical to do so, it maintains insurance in amounts that it believes to be reasonable, including insurance for workers' compensation, theft, general liability, all risk property, automobile, directors and officers' liability and fiduciary liability and others. Such insurance, however, contains exclusions and limitations on coverage. Accordingly, a mining company's insurance policies may not provide coverage for all losses related to their business (and specifically do not cover environmental liabilities and losses). The occurrence of losses, liabilities or damage not

covered by such insurance policies could have a material adverse effect on the mining companies' profitability, results of operations and financial condition.

- **Construction and Development**

Certain mines or projects that the Company has Royalty interests may require, in the future, or in various stages of permitting, construction, development, and expansion. Construction, development and expansion of such mines or projects is subject to numerous risks, including, but not limited to delays in obtaining equipment, materials, and services essential to completing construction of such projects in a timely manner; delays or inability to obtain all required permits; changes in environmental or other government regulations; currency exchange rates; labour shortages; and fluctuation in metal prices. There can be no assurance that the owners or operators of such mines or projects will have the financial, technical, and operational resources to complete the permitting, construction, development and expansion of such mines or projects in accordance with current expectations or at all.

- **Indigenous Peoples**

Various international and national laws, codes, resolutions, conventions, guidelines, and other materials relate to the rights of indigenous peoples. The Company holds Royalty or other interests on operations and projects which may be located in some areas presently or previously inhabited or used by indigenous peoples. Many of these materials impose obligations on government to respect the rights of indigenous people. Some mandate that government consult with indigenous people regarding government actions which may affect indigenous people, including actions to approve or grant mining rights or permits. The obligations of government and private parties under the various international and national materials pertaining to indigenous people continue to evolve and be defined. The projects' current or future operations may be subject to a risk that one or more groups of indigenous people may oppose continued operation, further development, or new development on those projects or operations. Such opposition may be directed through legal or administrative proceedings or protests, roadblocks, or other forms of public expression against the Company or the owner/operators' activities. Opposition by indigenous people to such activities may require modification of or preclude operation or development of projects or may require the entering into of agreements with indigenous people. Claims and protests of indigenous people may disrupt or delay activities of the owners or operators of the Company's Royalty assets.

6. MINERAL PROPERTIES

Introduction

Prospect generation allows Orogen to grow its existing royalties and securities assets in a disciplined and sustainable manner, while gaining exposure to exploration opportunities and discoveries. In addition, Orogen is positioned to operate counter-cyclical to the market by acquiring exploration targets when the projects are inexpensive and sell them into well capitalized markets when the project demand is strong. This approach allows the Company to generate discovery opportunities while minimizing project risks and maximizing financial sustainability with the goal of royalty creation for the Company. The Company leverages its geological and financial expertise to identify and advance high-quality exploration projects. Through its prospect generation program, Orogen has built over 44 precious metal Royalties and mineral property interests in Canada, United States, Mexico, Kenya and Argentina. These assets provide revenue

including cash and equity considerations received from royalty payments, sale of mineral property interests, option payments, and management fees.

As at the date of this AIF, the Company's Royalty on the Ermitaño mine is its material asset. Other Royalties and mineral properties included in this report, individually, are not considered material at this time. These include Royalties on early-stage projects and mineral properties that are available for option or optioned to other third parties for milestone payments and scheduled exploration expenditure requirements.

Ermitaño Mine, Mexico

The technical report for the Ermitaño mine was prepared for First Majestic pursuant to NI 43-101:

- the technical report entitled "*First Majestic Silver Corp. Santa Elena Silver/Gold Mine, Sonora, Mexico, NI 43-101 Technical Report on Mineral Resource and Mineral Reserve Estimates*" having an effective date of June 30, 2021, and filed under First Majestic's SEDAR (www.sedar.com) profile on November 24, 2021 (the "**Report**")

In addition to the Report, the disclosure herein also contains updated mineral reserve and resource estimates for the Ermitaño mine based on the Santa Elena Mineral Reserve and Resource Estimates with an effective date of December 31, 2022 as announced by First Majestic on March 31, 2023 and as disclosed in their December 31, 2022 AIF (the "**December 31, 2022 Mineral Reserve and Resource Estimates**").

The following description of the Ermitaño mine has been prepared with reliance on the Report and the December 31, 2022 Mineral Reserve and Resource Estimates and readers should consult these source materials to obtain further information on the Ermitaño mine. Readers should also note that the Report, the December 31, 2022 Mineral Reserve and Resource Estimates, and discussions below include results from both the Santa Elena and the Ermitaño mines, whereas the Company's 2.0% NSR royalty interest only pertains to the Ermitaño mine. The Company does not have a Royalty interest in the Santa Elena mine.

All currency displayed in the Report are expressed in U.S. Dollars, unless otherwise noted.

The Company does not have any knowledge that information disclosed from the Report and the December 31, 2022 Mineral Reserve and Resource Estimates are not accurate and the Company has not independently verified this information and there can be no assurance that this third-party information is complete or accurate (see *Introductory Notes- Technical and Third-Party Information*).

i. Introduction

In 2015, First Majestic completed the acquisition of SilverCrest Mines Inc., the then-owner of subsidiary company Nusantara and the Santa Elena mine. First Majestic expanded their claim holdings in 2018 by completing the acquisition of a 100% interest in the Ermitaño and Cumobabi properties from Orogen. Upon completion of the exercise, Orogen retained a 2.0% NSR royalty from the sale of mineral products extracted from the Ermitaño property, and retained a 1.5% NSR royalty from the sale of mineral products extracted from the Cumobabi property for the first two years of production, and a 1.0% NSR royalty thereafter. In addition, there is an underlying NSR royalty where Osisko Gold Royalties Ltd. ("**Osisko**") retains a 2% NSR royalty from the sale of mineral products extracted from the Ermitaño and Cumobabi properties.

The Company does not have a Royalty interest in the Santa Elena Mine.

ii. Technical Report Issuer

Santa Elena is owned and operated by Nusantara de Mexico S.A. de C.V. ("**Nusantara**"), which is a 100% owned Mexican subsidiary of First Majestic.

iii. Cut-off and Effective Dates

The effective date the Report is June 30, 2021, which represents the cut-off date for the most relevant scientific and technical information used in the Report, including mineral tenure and permitting, drilling and assaying data, depletion, and operating costs. Some data on metallurgical recoveries resulting from the metallurgical testwork program was received after the cut-off date and incorporated into the Mineral Reserves estimation process and the economic analysis. However, *Part xxi- Mineral Reserve* and *Part xxii- Mineral Reserves* of this section are based on the December 31, 2022 Mineral Reserve and Resource Estimates with an effective date of December 31, 2022.

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.

iv. Units, Currency, and Abbreviations

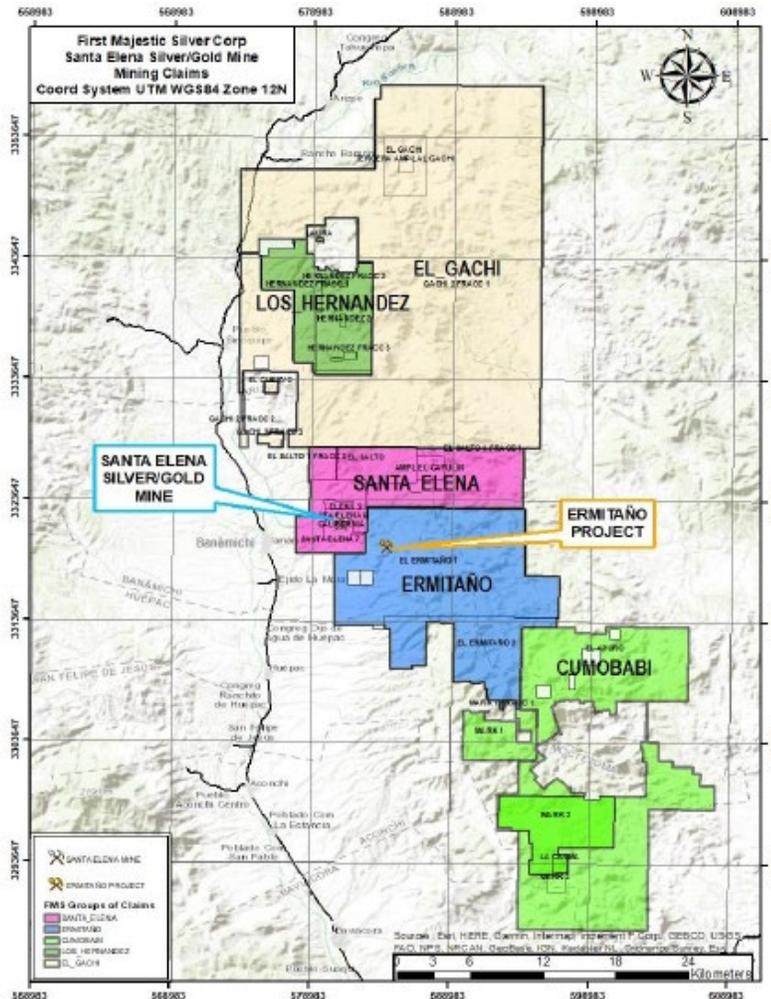
Units of measurement are metric unless otherwise noted. All costs are expressed in United States dollars unless otherwise noted. Common and standard abbreviations are used wherever possible. Table 2-1 shows the list of abbreviations used in this Report.

Table 2-1: List of Abbreviations and Units

Distances:	mm – millimetre cm – centimetre m – metre km – kilometre masl – metres above sea level ft - feet	Other:	tpd – tonnes per day ktpd – 1,000 tonnes per day Mtpa - 1,000,000 tonnes per year kW – kilowatt MW – megawatt kVA – kilovolt-ampere MVA – Megavolt-ampere kWh – kilowatt hour MWh – megawatt hour °C – degrees Celsius Ag – silver Au – gold Pb – lead Zn – zinc Cu – copper Mn - manganese Ag-Eq – silver equivalent
Areas:	m ² – square metre ha – hectare km ² – square kilometre		
Weights:	oz – troy ounces k oz – 1,000 troy ounces lb - pound g – grams kg – kilograms t – tonne (1,000 kg) kt – 1,000 tonnes Mt – 1,000,000 tonnes		
Time:	min – minute hr – hour op hr – operating hour d – day yr – year	Assay/Grade:	g/t – grams per tonne g/L – grams per litre ppm – parts per million ppb – parts per billion
Volume/Flow:	m ³ – cubic metre m ³ /hr – cubic metres per hour cu yd – cubic yards	Currency:	\$ – United States dollar k – thousand M – million

v. Property Location

The Santa Elena mine is a producing mine complex located in the municipality of Banámichi, State of Sonora, Mexico, approximately 150 km northeast of the state capital city of Hermosillo. The community of Banámichi is located seven kilometre west of the mine complex.



vi. Mineral Tenure

In Mexico, mineral rights can be held by private entities in the form of mining concessions granted by the federal government through the Mines Directorate of the Ministry of Economy. The Santa Elena mine consists of 32 individual concessions covering 102,172 ha and four concessions applications in process which cover 72 ha, for a total of 102,244 ha. These concessions were organized into five groups to facilitate land management. The five concession groups are: Santa Elena, Ermitaño, Cumobabi, Los Hernandez and El Gachi.

The Ermitaño group consists of two contiguous mining concessions, Ermitaño I and Ermitaño II, which are contiguous with the Santa Elena group, and cover 16,527 ha. The concessions group is located 12 km west of Banámichi near the intersection of 30° 00' north latitude, and 110° 07' west longitude. The Ermitaño concessions group is covered by the INEGI “Agua Caliente” H12-B84, “Aconchi” H12-D13 and “Cumpas” H12-D14, 1:50,000 topographic maps.

vii. Permitting Considerations

The Santa Elena mine and the Ermitaño mine hold all of the necessary permits to operate, such as the Environmental License, water rights concessions, and federal land occupation concessions.

viii. Existing Environmental Liabilities

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

ix. Geological Setting

The Santa Elena concessions lie within the Arizpe-Mazocahui quadrangle of north-central Sonora, Mexico. González-León (2011) describes this region as being composed of volcanic rocks assigned to the Tarahumara Formation and several granitic plutons that intrude it. A basal conglomerate of the >4 km thick Tarahumara Formation overlies deformed Proterozoic igneous rocks and Neoproterozoic to Early Cretaceous strata. The lower part of the Tarahumara Formation is composed of rhyolitic ignimbrite and ash-fall tuffs, andesite flows, and interbedded volcanoclastic strata, and its upper part consists of rhyolitic to dacitic ignimbrites, ash-fall tuffs, and volcanoclastic rocks.

Ausenco (2021) report the rocks hosting the nearby Las Chispas deposit form a gentle syncline and anticline complex indicating greater local structural complexity in these lower volcanic rocks than implied in this cross section. Near the eastern margin, the Tarahumara Formation is unconformably overlain by conglomerate and rhyolite of the Báucarit Formation. The lower portion of the Tarahumara Formation, between the cross-section line and the Santa Elena mine, is intruded by a quartz phenocryst-bearing rhyolite dome dated as 73.56 ± 1.3 Ma (González-León, 2011).

The Santa Elena and the Ermitaño deposits are the most significant zones of gold and silver mineralization known within the Santa Elena concessions.

x. Geology

The current geological interpretation for the Ermitaño project area is based on logging of volcanogenic textures and has allowed the delineation of a host rock volcanogenic sequence that consists of an older compact brittle volcanic sequence or rhyolitic rocks overlain by less brittle felsic lava flows and an alluvial fan environment of volcanogenic sedimentary rocks, volcanoclastic rocks, and mafic lava flows. The current Ermitaño geology model is shown in plan and section views in Figure 7-7 to Figure 7-8.

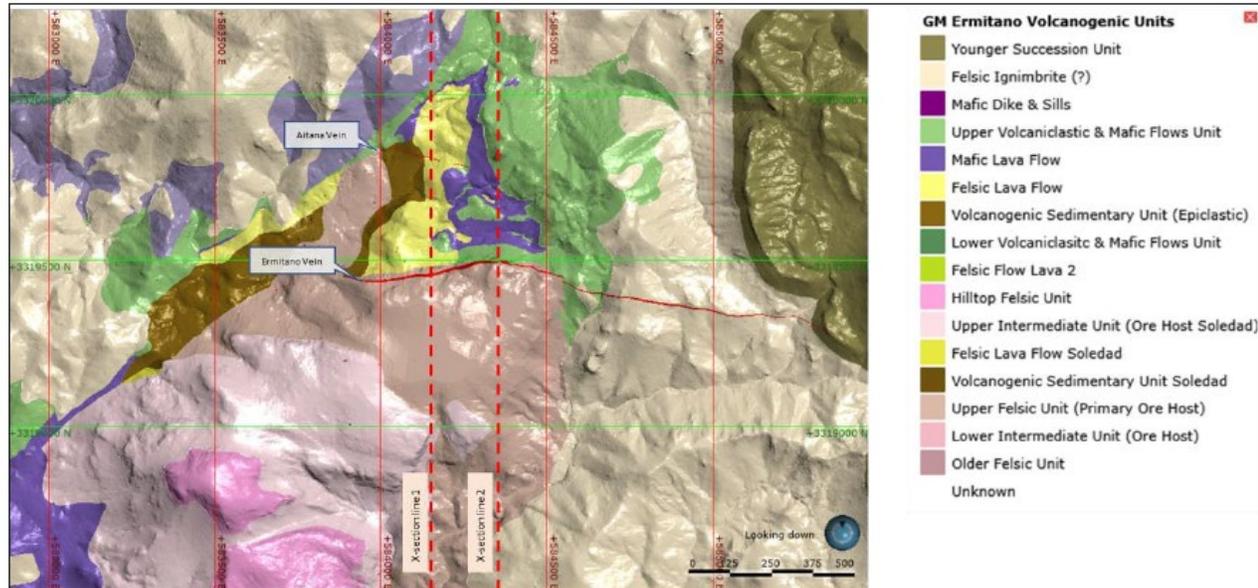


Figure 7-7: Ermitaño Deposit Local Geology Map. Figure prepared by First Majestic, February 2021.

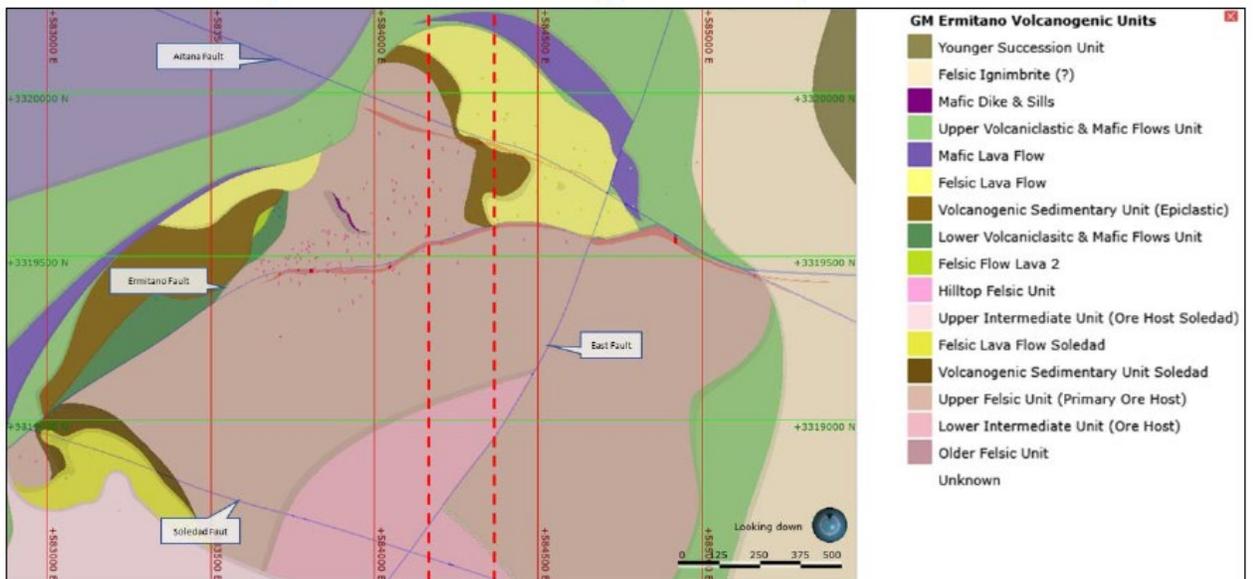


Figure 7-8: Ermitaño Local Geology Level Plan View, 800 masl. Figure prepared by First Majestic, February 2021.

Drilling at the Ermitaño project has delineated one primary vein, one secondary vein and several tertiary veins. The Ermitaño Vein is the most prominent and strikes east and dips approximately 80° north in the west where the bulk of current gold and silver mineralization occurs, and approximately 60° north in the eastern area. The Ermitaño Vein is mostly defined as a formal vein with an enclosing hanging wall and footwall breccia and stockwork zone. Drilling has delineated the Ermitaño structure for 1,800 m along strike and 550 m down dip. The Ermitaño Vein width varies from 0.2–20.1 m and averages 5.9 m. The Aitana Vein, the second most prominent structure, strikes northwest and dips at approximated 55° to the northeast. Drilling has delineated the Aitana Vein 500 m along strike and 300 m down dip. The Aitana vein width is generally <2 m wide. The tertiary veins range in strike length from 200–

800 m and in down dip length from 250–500 m and are generally narrower and discontinuous compared to the Ermitaño and Aitana Veins. Widths are variable from <1–4 m.

xi. Structure

Four major faults dissect the volcanic rocks. The Ermitaño Fault strikes roughly east, dips steeply to the north and has normal down to the north displacement. Drilling has shown this fault juxtaposes the older compact brittle volcanic rocks with the younger less brittle volcanic and volcanoclastic rocks. The Aitana Fault strikes northwest, dips northeast, and has apparent down to the northeast normal displacement. This fault is not as well defined as the Ermitaño Fault. The East Fault strikes northeast, dips steeply to the east and has an apparent down to the southeast normal displacement. This fault is inferred from limited drilling and surface mapping. The Soledad Fault strikes southeast, dips steeply to the southwest and has apparent down to the southwest normal displacement and is also inferred from limited drilling and surface mapping. These structures constrain an uplifted horst-like fault block of the older more competent volcanic rocks surrounded by the younger basin-filling volcanic and epiclastic rocks. These structures are shown in Figure 7-9 to Figure 7-10.

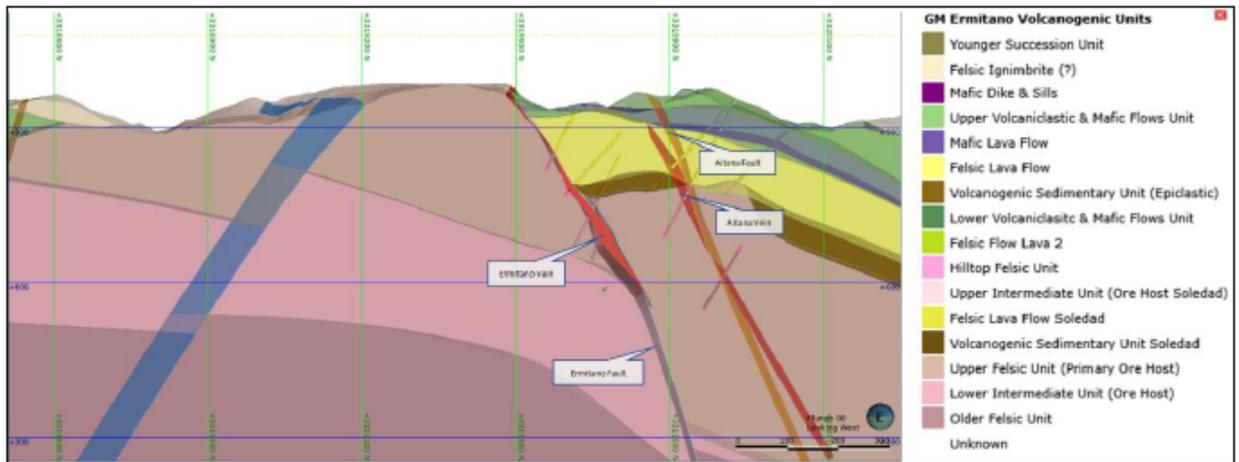


Figure 7-9: Ermitaño Local Geology Cross Section 1. Figure prepared by First Majestic, February 2021. Looking to the west.

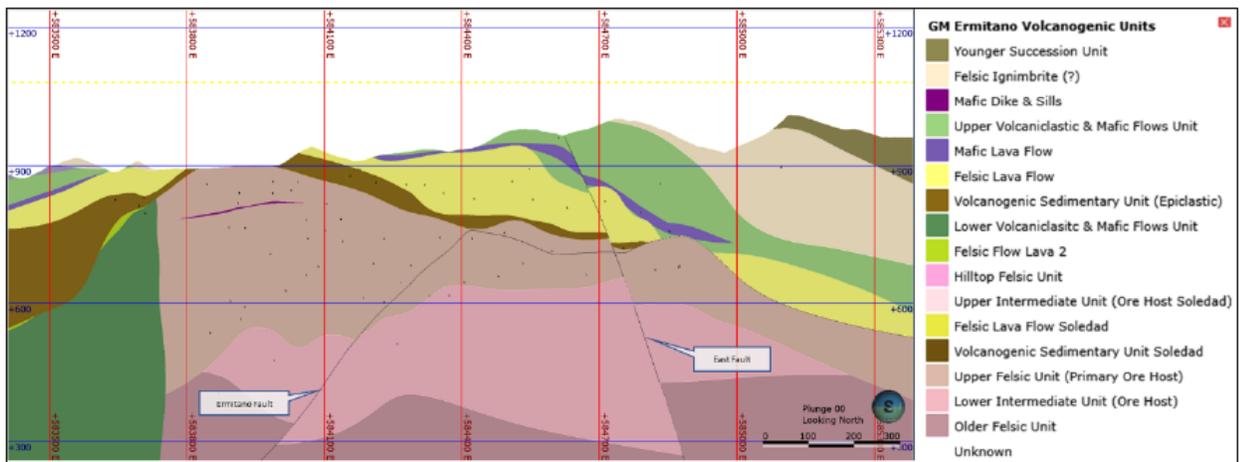


Figure 7-10: Ermitaño Local Geology Cross Section 2. Figure prepared by First Majestic, February 2021. Looking to the west.

xii. Mineralization

Mineralizing fluids are interpreted to have used the Ermitaño Fault as a conduit to form the Ermitaño Vein and sub-parallel tertiary veins which drilling has delineated over 1,800 m along strike and 550 m down dip. The vein is best developed where the structure cuts the older brittle volcanic rocks, where the older volcanic rocks are juxtaposed with younger brittle volcanic rocks, and where the structure shows deflection.

A four-stage vein paragenesis is observed for the Ermitaño Vein. Stage 1 consists of grey quartz, normally cementing breccias, well banded white quartz + pyrite, and calcite pseudomorphs. Stage 2 is dominantly banded and crustiform textured green veins and typically hosts the highest grades of gold and silver. Stage 3 consists of several hydrothermal/tectonic breccia facies with some calcite pseudomorphs, tensile veins, and crack and seal textures. Stage 4 is dominated by white quartz fragments in a hematite + silica cement. The vein assemblage also includes minor adularia, and rarely fluorite and barite.

xiii. Alteration

Sericite is common in host rocks immediately surrounding the Ermitaño Vein and stockwork veins. Carbonate veins are present but are typically minor and late.

xiv. Zonation

Gold and silver mineral zonation shows silver grades increasing with depth and gold grades typically decreasing with depth. Arsenic, antimony, copper, lead, and zinc grades are generally very low and no apparent zonation is evident yet.

xv. Regional Exploration Targets

The Santa Elena concessions have high potential to host additional epithermal deposits. There are several drilled prospects within the concessions, each of which hosts mineralized veins. None have been drilled adequately to allow delineation of significant continuity of the structures. The drilling results are discussed in Section 10 of this Report.

xvi. Deposit Types

The Santa Elena and Ermitaño deposits are examples of epithermal low to intermediate sulphidation gold–silver vein deposits. The following description of epithermal and specifically low sulfidation epithermal deposits is summarized from Hedenquist (2000, 2003) and, Simmons (2005).

The Santa Elena mine and Ermitaño project gold and silver deposits form as prominent east–west-trending veins and associated breccias in sub-aerial felsic volcanic rocks. The Santa Elena Main Vein is delineated by drilling along a 1,950 m strike length and 750 m down dip. The Ermitaño Vein is delineated by drilling along an 1,850 m strike length and vertically over 550 m, starting at surface.

The regional geology and the form, textures, alteration, and mineralization observed to date within the Santa Elena and Ermitaño deposits are diagnostic of low-sulphidation epithermal mineralization. The Santa Elena veins display classic epithermal minerals and textures comprising quartz, lattice quartz (and calcite), adularia, and localized crustiform banding with widespread development of strong hydrothermal alteration comprising variable amounts of quartz, calcite, illite, chlorite, pyrite, adularia, and epidote in the host sequence of volcanic lavas and tuffs. The Ermitaño Vein is also hosted in a sequence of volcanic lavas and tuffs and displays epithermal minerals and textures.

Exploration programs that use a low-sulphidation epithermal model are considered appropriate for the Santa Elena and Ermitaño areas.

First Majestic is using geochemical and geophysical surveys, and field X-ray fluorescence analyzers and spectrometers as part of its ongoing regional exploration program. Mapping, rock chip sampling and drilling of vein outcrops remain the primary exploration tools at Santa Elena and the Ermitaño project.

xvii. Exploration

There have been several surface and airborne exploration surveys and studies completed within the Santa Elena mineral concessions since 2006 including prospecting, mapping, rock and soil geochemical sampling, petrographic and spectrographic studies, magnetic, EM, and IP surveys. Most of this work has focused on the Santa Elena mine and Ermitaño project areas. The regional satellite and airborne surveys have been useful for developing a conceptual geological framework and local mapping and geochemical soil and rock sampling have been useful for identifying prospective drill targets. It is uncertain if further exploration will result in the prospective exploration targets being delineated as a Mineral Resource.

xviii. Drilling

The Ermitaño project Mineral Resource estimate is based on logging and sampling of HQ diameter core collared from surface and BQ (36.5 millimetres (“mm”)) collared from underground at the Ermitaño project (One NQ hole was drilled from underground).

Between 2016 and June 30, 2021, 288 core drill holes totalling 88,056 m were drilled at the Ermitaño project, including six metallurgical holes and four geotechnical holes. Drill hole sampling ranges from 11–100% of the drilled hole length and averages 53%. Sample lengths range from 0.15–4.95 m, averaging approximately 1.0 m. The metallurgical and geotechnical holes were not assayed for resource estimation and fourteen holes from the 2021 drill program had not been assayed as of June 30, 2021. Ermitaño drilling is summarized in Table 10-2.

Between 2011 and June 30, 2021, 155 core drill holes totalling 39,875 m of drilling have been completed in 11 regional target areas. These holes were drilled using the same approach described for the Santa Elena mine and the Ermitaño project. Starting in 2019, the First Majestic guidance was modified to sample the entire hole length for early-stage exploration drill holes.

Major Drilling, Cabo Drilling, Intercore Perforaciones, Guardian Drilling, Grupo Drilcor, Globexplore Drilling and Versa Perforaciones (“Versa”) have been used as drill contractors since 2006. Versa is currently the primary exploration drill contractor and has been so since 2016.

As-drilled underground drill hole collar locations are surveyed by mine surveyors using a Total Station tool, and as-drilled surface drill hole locations are surveyed by mine surveyors using a differential global positioning system (“GPS”) tool.

Core drill holes are surveyed down hole using a variety of Devico and Reflex magnetic tools which collect azimuth relative to magnetic north, inclination, and magnetic field. Magnetic declination corrections are applied during entry to the database. Down hole measurement intervals range from 1–400 m and averages 37 m. The average down hole interval decreased from 115 m in 2008 to 28 m in 2021.

Core recovery information has been collected at the Santa Elena mine since 2012 and at the Ermitaño project since 2016. Drill core recovery is measured by drilled run length and is recorded for 88% of the metres drilled at the Santa Elena mine and 75% of the metres drilled at the Ermitaño project. Core recovery averaged 96% at the Santa Elena mine and 94% at the Ermitaño project, and in both cases more than 95% of the measurements returned greater than 80% recovery. There is no apparent correlation between decreasing core recovery and grade greater than 100 ppm Ag-Eq grade at Santa Elena mine and Ermitaño project across the range of recoveries. Rock quality designation (“RQD”) has been collected since 2012 and measured by drilled run length. RQD averages 60% and 66% at Santa Elena mine and Ermitaño project, respectively.

Table 10-2: Ermitaño project Drilling Summary by Category

	Year	Surface Diamond Drilling		Underground Diamond Drilling		Metallurgical Diamond Drilling		Geotechnical Diamond Drilling	
		No. of Holes	Metres	No. of Holes	Metres	No. of Holes	Metres	No. of Holes	Metres
Ermitaño	2016	7	1,951						
	2017	4	1,758						
	2018	41	17,540						
	2019	88	29,372			3	821		
	2020	56	19,162			2	288	4	1,164
	Mid 2021	44	14,225	39	1,776				
	Grand Total		240	84,008	39	1,776	5	1,109	4

Widely spaced drilling in 2020 and 2021 on the Ermitaño project has shown that gold and silver mineralization in the Ermitaño Vein remains open at depth to the east. The western end of the Ermitaño Vein rapidly decreases in thickness and may be offset by a yet to be recognized fault.

xix. **Sample Preparation, Analysis and Security**

Laboratory	Drilling Period	Certification	Independent	Comments
ALS	2006-2008, 2012-2013, 2015	ISO 9001, ISO/IEC 17025	Yes	Primary laboratory for underground drill core. Sample preparation at Hermosillo or Chihuahua, Mexico laboratory. Sample analysis at the Vancouver laboratory in Canada.
Bureau Veritas Minerals Laboratories (BV)	2014-2015, 2020 check program	ISO 9001, ISO/IEC 17025	Yes	Primary laboratory for underground drill core and check samples. Sample preparation at the Hermosillo, Mexico laboratory. Sample analysis at the Bureau Veritas Vancouver, Canada laboratory.
Santa Elena Laboratory (Formerly Nusantara Laboratory)	2012-2013, 2015, 2016- 2021	ISO 9001- 2015	No	Primary laboratory for underground delineation drill core, ore control and production chip and channel samples. Located at Santa Elena mine. Sample preparation and analysis.
SGS	2016-2021	ISO/IEC 17025, ISO 9001	Yes	Primary laboratory for surface drill core. Sample preparation at the Durango or Hermosillo, Mexico laboratory. Analysis at the Durango laboratory.
First Majestic Central Laboratory (Central Laboratory)	2016-April 2021	ISO 9001- 2015	No	Primary laboratory for underground drill core, underground chip channel and sawn-channel samples used for Resource Estimation. Located at La Parrilla mine in San Jose La Parrilla, Durango, Mexico. Sample preparation and analysis.

The Santa Elena and Ermitaño Mineral Resource estimates are based on logging and sampling of NQ and HQ diameter core and underground channel samples. The entire length of drill core is photographed and logged for lithology, mineralization, structure, and alteration. Core recovery, RQD and specific gravity measurements are also collected. Sampling intervals respect lithology and mineralization boundaries. The core is sawn in half for sampling. Channels are taken within a 20 centimetres (“**cm**”) wide swath along the line using a hammer and hand chisel and are collected on a tarpaulin and then bagged.

Sample quality control is monitored using certified reference materials (“**CRMs**”), blanks, and quarter-core field duplicates, coarse reject duplicates, and pulp duplicates. Coarse reject and pulp samples are prepared and inserted by the primary laboratory during sample preparation. Pulp duplicates are also periodically submitted to a secondary laboratory to assess between-laboratory bias.

Before 2016, samples were dispatched to ALS in Hermosillo or Chihuahua, Mexico and Bureau Veritas in Hermosillo, Mexico. Since 2016, samples from Ermitaño are dispatched to SGS in Durango or Hermosillo, Mexico. The ALS and SGS laboratories are independent of First Majestic. Samples from the Santa Elena mine underground drill holes are dispatched to First Majestic’s Central Laboratory in Jose La Parrilla, Durango, Mexico (“**Central Laboratory**”). This laboratory is not independent of First Majestic. Underground channel samples are sent to the Santa Elena Laboratory.

The SGS laboratories conform to the ISO/IEC 17025 standard and most regional facilities have been ISO 9001 certified since 2008. The Central Laboratory received ISO 9001 accreditation in mid-2015 and 2017. The Santa Elena laboratory received ISO 9001 accreditation in August 2021 has been managed by the Central Laboratory since 2016.

At SGS samples are dried crushed and pulverized and then analyzed for 34 elements using aqua regia digestion with an inductively-coupled plasma (“ICP”) atomic emission spectroscopy finish. Samples are also analyzed for silver by three-acid digestion with an atomic absorption (“AA”) spectroscopy finish. Samples returning greater than 300 g/t Ag from are reanalyzed for silver by 30 grams (“g”) fire assay with a gravimetric method. Gold is analyzed by a 30 g fire assay with an AA finish and samples returning >10 g/t Au are reanalyzed for gold by a 30 g fire assay with a gravimetric finish.

At the First Majestic Central Laboratory samples are dried crushed and pulverized and then analyzed for 34 elements by two-acid digestion with an ICP finish. All samples are also analyzed for silver by three-acid digestion with AA finish. Samples returning greater than 300 g/t Ag are reanalyzed for silver by a 20 g fire assay with a gravimetric finish. Gold is analyzed by two-acid digestion with an AAS finish. Samples returning >10 g/t Au are reanalyzed for gold by a 20 g fire assay with a gravimetric finish.

At the Santa Elena Laboratory samples are dried crushed and pulverized and then analyzed for silver by a 30 g fire assay gravimetric finish. Gold is analyzed by a 30 g fire assay AA finish. Samples with gold values >10 g/t Au are analyzed by a 30 g fire assay gravimetric method.

Data verification included data entry error checks, visual inspections of important data, and a review of QAQC assay results for data collected between 2012 and June 2021 from the Ermitaño, Alejandra, America, Santa Elena Main, and Tortugas veins (the verification dataset). Several site visits were also completed as part of the data verification process at which time drilling, logging, and sampling procedures were observed and cross sections as, core photos, core logs, and QAQC reports were reviewed. No significant transcription errors or grade accuracy and contamination issues were observed.

xx. Mineral Processing and Metallurgical Testing

To determine the metallurgical behavior of the Ermitaño mineralized material that will be fed to the Santa Elena processing plant, a preliminary testwork program was carried out at the Central Laboratory, followed by a comprehensive sampling and testwork program conducted at SGS Mineral Services, Lakefield, ON, Canada in 2020 and 2021. Based on this testwork, metal recoveries for the Ermitaño deposit for Q1 to Q3 2022 are projected at 92.6% for gold and 66.0% for silver. In Q4 2022, a new Tailings Press Filter and additional equipment will be added to the processing plant improving expected gold recovery to 94.5%.

Due to the high purity of the Santa Elena doré (>98% silver and gold), no penalties are applied by the refineries for the presence of heavy metals. This purity is expected to be maintained after processing the Ermitaño ore.

To determine the metallurgical behavior of the Ermitaño mineralized material that will be fed to the Santa Elena processing plant, metallurgical testing started in 2019 at the Central Laboratory using limited drill core material prior to the development of a comprehensive sampling and testwork program which was conducted at SGS Mineral Services, Lakefield, ON, Canada in 2020 and 2021.

At the Central Laboratory, a master composite was prepared using 12 quarter-core sections from the Ermitaño deposit as shown in Table 13-5. The composite was prepared based mainly on sample assay results due its smaller size, 42.9 kg.

xxi. Mineral Resources

The block model Mineral Resource estimates for the Santa Elena and Ermitaño deposits are based on the current database of exploration drill holes and production channel samples, the underground level geological mapping, the geological interpretation and model, as well as surface topography and underground mining excavation wireframes. Geostatistical analysis, analysis of semi-variograms, block model resource estimation, and validation of the model blocks were completed.

The drill hole and channel 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 select few extreme values. Outlier restriction was also used to restrict the influence of high-grade samples.

The dominant gold and silver mineralization trends were identified based on the 3D numeric models for the metal in each domain. To establish the metal 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.

Bulk density was derived from SG measurements. Bulk density for the resource domains was either estimated into the block models from the SG data or the mean SG value was assigned.

Block grades were estimated by either inverse distance squared (ID2) or ordinary kriging (OK). The method chosen in each case considered the characteristics of the domain, data spacing, variogram quality, and which method produced the best representation of grade continuity.

All channel samples that were used during construction of the geological models were reviewed. Only those channels that completely cross the mineralized deposit were used during grade estimation.

The grade estimation was completed in two successive passes if channel samples were used. The first pass used all composites, including channel samples, and only estimated blocks within a restricted short distance from the channel samples. The second pass applied less restrictive criteria using drill hole composites only. If only drill hole composites were used, the estimation was often completed with a single pass.

The Mineral Resources 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 providing detailed mapping and production channel sample support.

The Mineral Resource estimates for Santa Elena and Ermitaño are summarized in Table 13 and Table 14 using the Ag-Eq cut-off grades or NSR cut-off value appropriate for the mining method assigned to each domain. Measured and Indicated Mineral Resources are reported inclusive of Mineral Reserves and have an effective date of December 31, 2022. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Table 13: Santa Elena Mineral Resource Estimates, Measured and Indicated Category (Effective Date December 31, 2022)

Category / Area	Mineral Type	Tonnage ktonnes	Grades			Metal Content		
			Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Measured Main Vein	Sulphides	323	91	1.23	195	950	12.8	2,030
Measured Alejandras	Sulphides	91	215	2.40	417	630	7.0	1,220
Measured America	Sulphides	69	233	1.69	376	520	3.7	830
Measured Ermitaño	Sulphides	354	40	4.11	552	460	46.8	6,280
Total Measured (UG)	Sulphides	837	95	2.61	385	2,560	70.3	10,360
Indicated Main Vein	Sulphides	848	95	1.28	203	2,590	34.9	5,530
Indicated Alejandras	Sulphides	316	205	1.73	351	2,080	17.6	3,570
Indicated America	Sulphides	198	366	1.18	466	2,330	7.5	2,960
Indicated Tortugas	Sulphides	115	115	2.45	322	430	9.1	1,190
Indicated other narrow veins	Sulphides	13	208	2.77	442	90	1.2	180
Indicated Ermitano	Sulphides	2,487	67	4.02	568	5,360	321.4	45,380
Indicated Aitana	Sulphides	14	22	2.11	285	10	0.9	130
Indicated Heap Leach-Pad	Oxides Spent Ore	190	34	0.61	85	210	3.7	520
Total Indicated (UG)	All Mineral Types	4,181	97	2.95	442	13,100	396.3	59,460
Total Measured + Indicated (UG+Pad)	All Mineral Types	5,018	97	2.89	433	15,660	466.6	69,820

Table 14: Santa Elena Mineral Resource Estimates, Inferred Category (Effective Date December 31, 2022)

Category / Area	Mineral Type	Tonnage ktonnes	Grades			Metal Content		
			Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Inferred Main Vein	Sulphides	288	68	1.11	162	630	10.3	1,500
Inferred Alejandras	Sulphides	338	170	1.42	289	1,850	15.4	3,140
Inferred America	Sulphides	130	262	0.85	334	1,100	3.6	1,400
Inferred Tortugas	Sulphides	30	73	0.91	149	70	0.9	140
Inferred other narrow veins	Sulphides	219	151	1.97	317	1,060	13.9	2,230
Inferred Ermitano	Sulphides	2,219	68	2.81	417	4,850	200.5	29,750
Inferred Aitana	Sulphides	179	41	2.51	353	240	14.4	2,030
Inferred Soledad	Sulphides	453	181	3.70	642	2,640	53.9	9,350
Inferred Total (UG)	Sulphides	3,856	100	2.52	400	12,440	313	49,540

Measured and Indicated Mineral Resources are reported inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

1. Mineral Resource estimates are classified in accordance with the 2014 CIM Definition Standards on Mineral Resources and Mineral Reserves, whose definitions are incorporated by reference into NI 43-101.
2. The Mineral Resource estimates are based on internal estimates prepared as of December 31, 2022. The information provided was reviewed and prepared by Phillip Spurgeon, P.Geol., QP Geology for FMS, who has the appropriate relevant qualifications, and experience in geology and resource estimation.
3. Silver-equivalent grade is estimated considering metal price assumptions, metallurgical recovery, and the metal payable terms.
4. $Ag-Eq = Ag\ Grade + (Au\ Grade \times Au\ Recovery \times Au\ Payable \times Au\ Price) / (Ag\ Recovery \times Ag\ Payable \times Ag\ Price)$.
5. Metal prices used in the Mineral Resources estimates were \$23.00/oz Ag and \$1,900/oz Au.
6. Metallurgical recovery was 92% for silver and 95% for gold for Santa Elena and the heap leach pad. For Ermitaño, the metallurgical recovery used was 66% for silver and 95% for gold.
7. Metal payable used was 99.85% for silver and 99.80% gold.
8. The cut-off values and grades used to constrain the Santa Elena Mineral Resource estimates were \$65 for cut and fill and \$75 for long hole stoping and 65 g/t Ag-Eq for the heap leach pad. The NSR cut-off value used to constrain Mineral Resources for Ermitaño was \$90.

9. Tonnage is expressed in thousands of tonnes; metal content is expressed in thousands of ounces.

10. Totals may not add up due to rounding.

11. Orogen has a 2.0% NSR royalty on the Ermitaño mine. Orogen does not have a Royalty on the Santa Elena mine which are all other categories or areas.

Risk factors that could materially impact the Mineral Resource estimates include: metal price and exchange rate assumptions; changes to the assumptions used to generate the silver-equivalent grade cut-off grade; changes in the 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; changes to the assumptions related 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. The production channel sampling method has some risk of non-representative sampling that could result in poor precision and accuracy.

xxii. Mineral Reserves

The Mineral Reserves estimation process consists of converting Mineral Resources into Mineral Reserves by identifying material that exceeds the mining cut-off grades while conforming to specified geometrical constraints determined by the applicable mining method and applying modifying factors such as mining dilution and mining recovery factors. If the Mineral Resources comply with the previous constraints, Measured Resources could be converted to Proven Reserves and Indicated Resources could be converted to Probable Reserves, and, in some instances, Measured Resources could be converted to Probable Reserves if any or more of the modifying factors reduces the confidence of the estimates.

The Mineral Reserves for the Santa Elena mine are presented in Table 15.

Table 15: Santa Elena Mineral Reserves Estimates (Effective Date December 31, 2022)

Category / Area	Mineral Type	Tonnage k tonnes	Grades			Metal Content		
			Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Proven Ermitaño (UG)	Sulphides	274	36	3.40	453	310	30	3,990
Proven Alejandras (UG)	Sulphides	70	142	1.51	249	320	3	560
Proven Main Vein (UG)	Sulphides	98	103	1.24	191	330	4	610
Proven America (UG)	Sulphides	53	183	1.19	267	310	2	450
Total Proven	Sulphides	495	80	2.47	352	1,270	39	5,610
Probable Ermitaño (UG)	Sulphides	2,265	59	3.35	470	4,280	244	34,200
Probable Alejandras (UG)	Sulphides	408	121	0.98	191	1,590	13	2,510
Probable Main Vein (UG)	Sulphides	245	102	1.53	210	800	12	1,650
Probable America (UG)	Sulphides	182	304	0.66	351	1,780	4	2,050
Probable Tortuga (UG)	Sulphides	56	101	2.67	292	180	5	520
Probable (PAD)	Oxides Spent Ore	188	31	0.55	70	190	3	420
Total Probable	Oxides + Sulphides	3,344	82	2.61	385	8,820	281	41,350
P&P Ermitaño (UG)	Sulphides	2,539	56	3.36	468	4,590	274	38,190
P&P Alejandras (UG)	Sulphides	478	124	1.06	199	1,910	16	3,070
P&P Main Vein (UG)	Sulphides	343	102	1.44	205	1,130	16	2,260
P&P America (UG)	Sulphides	234	277	0.78	332	2,090	6	2,500
P&P Tortuga (UG)	Sulphides	56	101	2.67	292	180	5	520
P&P (PAD)	Oxides Spent Ore	188	31	0.55	70	190	3	420
Total Proven & Probable	Oxides + Sulphides	3,839	82	2.59	381	10,090	320	46,960

1. *Mineral Reserves have been classified in accordance with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards on Mineral Resources and Mineral Reserves, whose definitions are incorporated by reference into NI 43-101.*
2. *The Mineral Reserves statement provided in the table above is based on internal estimates prepared as of December 31, 2022. The information provided was prepared and reviewed under the supervision of Ramon Mendoza Reyes, P.Eng., a First Majestic employee.*
3. *The Mineral Reserves were estimated from the Measured and Indicated portions of the Mineral Resource estimate. Inferred Mineral Resources were not considered to be converted into Mineral Reserves.*
4. *Silver-equivalent grade (Ag-Eq) is provided as a reference and is estimated based on metal price assumptions, metallurgical recovery for the corresponding mineral type/mineral process and the metal payable)*
 - a. *The Ag-Eq grade formula used was:
Ag-Eq Grade = Ag Grade + Au Grade * (Au Recovery * Au Payable * Au Price) / (Ag Recovery * Ag Payable * Ag Price).*
 - b. *Metal prices considered for Mineral Reserves estimates were \$21.50/oz Ag and \$1750/oz Au.*
 - c. *Other key assumptions and parameters include: metallurgical recoveries of 92.0% for silver, 95.7% for gold; metal payable of 99.85% for silver and 99.80% for gold; direct mining costs of \$25.33/t, mill feed, process and treatment costs of \$28.15/t mill feed and general and administration costs (indirect costs) of \$18.00/t.*
5. *A two-step constraining approach was implemented to estimate reserves for each mining method in use: a general cut-off grade was used to delimit new mining areas that will require development of access, infrastructure and all sustaining costs. A second incremental cut-off grade was considered to include adjacent mineralized material which has a recoverable value that pays for all associated costs, including but not limited to the variable cost of mining and processing, indirect costs, treatment, administration costs and plant sustaining costs but excludes the access development assumed to be covered by the block above the general cut-off grade.*
6. *Modifying factors for conversion of resources to reserves include consideration of planned dilution due to geometric aspects of the designed stopes and economic zones, and additional dilution consideration due to unplanned events, materials handling and other operating aspects. Mineable shapes were used as geometric constraints.*
7. *Tonnage is expressed in thousands of tonnes, metal content is expressed in thousands of ounces. Metal prices and costs expressed in USD.*
8. *Numbers have been rounded as required by reporting guidelines. Totals may not sum due to rounding.*
9. **Orogen has a 2.0% NSR royalty on the Ermitaño mine. Orogen does not have a Royalty on the Santa Elena mine which are all other categories or areas.**

Factors which may materially affect the Mineral Reserve estimates for the Santa Elena mine include fluctuations in commodity prices and exchange rates assumptions used; material changes in the underground stability due to geotechnical conditions that may increase unplanned dilution and mining loss; unexpected variations in equipment productivity; material reduction of the capacity to process the mineralized material at the planned throughput and unexpected reduction of the metallurgical recoveries; higher than anticipated geological variability; cost escalation due to external factors; changes in the taxation considerations; the ability to maintain constant access to all working areas; changes to the assumed permitting and regulatory environment under which the mine plan was developed; the ability to maintain mining concessions and/or surface rights; the ability to renew agreements with the different surface owners in Santa Elena; and the ability to obtain and maintain social and environmental license to operate.

First Majestic is not aware of any known mining, metallurgical, environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the mineral reserve estimates, other than discussed in the 2021 Santa Elena Technical Report.

xxiii. Mining Operations

The Santa Elena Mine operation consists of the Santa Elena and Ermitaño underground mines. Mining activities are conducted by First Majestic and contractor personnel. In December 2022 active mining operations at the Santa Elena mine were temporarily

suspended and all mining was concentrated on the Ermitano mine for 2023 as exploration activities continued in both mines.

The Santa Elena and the Ermitaño deposits vary in dip, thickness, and geotechnical conditions along strike and dip. Multiple mining methods are required to achieve an efficient extraction of mineralized material at site. Three well-established methods were selected for mining extraction at Santa Elena: Longitudinal longhole stoping, Modified Avoca, and Cut-and-fill. The Modified Avoca mining method was selected for the Ermitaño project.

Ground conditions throughout most of the Santa Elena underground workings are considered good. Bolting is used systematically in the main haulage ramps, drifts, and underground infrastructure. For those sectors that have poorer rock quality, shotcrete, mesh and/or steel arches are used.

Groundwater inflow has been increasing at depth in the Santa Elena Mine. Dewatering systems consist of main and auxiliary pumps in place in each of the active mine areas. Groundwater inflows in Ermitaño increased when the workings reached the 760 metres above sea level (masl) elevation. A new permanent mine dewatering system is being installed in Ermitano and is expected to be commissioned in Q2-2023.

The ventilation system consists of a forced air intake system through two main fans located on surface. These fans generate the necessary pressure change for return air to exhaust through the portals and ventilation raises. The ventilation system in Ermitaño is using a pull system with fresh air being drawn through the main twin ramps, as well as the planned Western Access ramp. Spent air is exhausted out of the three vent raises to surface at the centre and edges of planned underground operations.

The consolidated LOM production schedule for Santa Elena mine, Ermitaño mine and the Leach Pad material is shown in Table 16-29.

Table 16-29: Consolidated Santa Elena Production Schedule

LOM Production Schedule	Units	Total	2021	2022	2023	2024	2025	2026	2027
Total Ore	kt	5,047	470	982	924	904	774	662	331
Santa Elena Mine	kt	1,929	263	509	231	235	288	282	121
Ermitaño Mine	kt	2,835	77	384	629	669	486	380	210
Leach Pad	kt	283	130	89	64	-	-	-	-
Silver Grades	g/t Ag	78	73	76	57	89	88	85	66
Santa Elena Mine	g/t Ag	120	95	110	108	146	151	121	103
Ermitaño Mine	g/t Ag	54	40	40	45	70	51	57	44
Leach Pad	g/t Ag	31	48	35	-	-	-	-	-
Gold Grades	g/t Au	2.58	1.44	2.40	3.58	3.00	2.29	2.06	2.51
Santa Elena Mine	g/t Au	1.24	1.31	1.18	0.97	1.28	1.21	1.29	1.65
Ermitaño Mine	g/t Au	3.69	3.47	4.32	4.90	3.60	2.92	2.64	3.01
Leach Pad	g/t Au	0.56	0.48	1.08	-	-	-	-	-
Total Silver Mined	MOz	12.6	1.1	2.4	1.7	2.6	2.2	1.8	0.7
Santa Elena Mine	MOz	7.4	0.8	1.8	0.8	1.1	1.4	1.1	0.4
Ermitaño Mine	MOz	4.9	0.1	0.5	0.9	1.5	0.8	0.7	0.3
Leach Pad	MOz	0.3	0.2	0.1	-	-	-	-	-
Total Gold Mined	kOz	418	22	76	106	87	57	44	27
Santa Elena Mine	kOz	77	11	19	7	10	11	12	6
Ermitaño Mine	kOz	337	9	53	99	77	46	32	20
Leach Pad	kOz	5	2	3	-	-	-	-	-

Orogen has a 2.0% NSR royalty on the Ermitaño mine. Orogen does not have a Royalty on the Santa Elena mine. Numbers have been rounded as required by reporting guidelines. Totals may not sum due to rounding.

xxiv. Processing and Recovery Methods

At the Report effective date, the Santa Elena mine processes a blended feed consisting of high-grade underground mineralized material and spent-ore from the existing heap leach pad. The processing plant has been successfully operating for several years and has continuously improved silver and gold metallurgical recoveries. The process is based on cyanide tank leaching and Merrill-Crowe smelting of fine-ground ore to produce silver-gold doré bars. The nominal plant capacity is for the processing of 3,000 tpd with the possibility for higher throughput rates depending on ore hardness, targeted final grind, and leaching residence time. Throughput levels averaged 2,150 tpd in 2020 and 2,450 in the first half of 2021.

With the introduction of mineralized material from Ermitaño, starting with industrial trials in Q4 2021 and commercial production in 2022, the plant will continue to process Santa Elena blended material in campaigns alternating with mineralized material from Ermitaño. There are significant differences between these two ores in hardness and metallurgical performance at different grinding sizes. To achieve optimum levels of metal recoveries and the corresponding maximum metal production, the Santa Elena ore will be processed at higher throughput rates than the Ermitaño ore during their corresponding production campaigns.

The process plant is mostly built as a single train with the crushing area split from the remaining areas and connected through a belt conveyor to transfer the crushed product to the fine stockpiles. The current leaching plant includes a grinding ball mill, one Metso-Outotec HIG-Mill, leaching tanks, three counter-current decantation or washing tanks, a previously processed leach-pad, a belt-filter facility and a filtered-tailings storage facility (FTSF). The

processing plant was upgraded in 2022 to include an additional leaching tank, a fourth CCD thickener, and a new high-capacity filter plant for dewatering tailings material.

There are significant differences between the mineralized material from Santa Elena and Ermitaño, in hardness and metallurgical performance at different grinding sizes. To achieve optimum levels of metal recoveries and the corresponding maximum metal production, during 2022 the Santa Elena ore was processed at higher throughput rates than the Ermitaño ore during their corresponding production campaigns. Throughput levels averaged 2,434 tpd in 2022. After the plant upgrade in 2022 the projected plant capacity ranges from 3,200 tpd when processing Santa Elena mineralized material and 2,500 tpd when processing Ermitaño mineralized material.

xxv. Infrastructure, Permitting and Compliance Activities

The existing infrastructure can support current and LOM plan mining and mineral processing activities.

Most of the operation's support facilities are located within a 1.5 km radius of the Santa Elena plant, facilitating the transportation and logistics of personnel, material, and equipment. Operations personnel are transported by passenger buses from nearby towns. All equipment, supplies and materials are brought in by road.

Most non-local staff and contractor personnel stay in rental homes available in the nearby towns of Banámichi, Huepac and Aconchi. There are multiple hotels available in the area for visitors.

The main infrastructure consists of roads, administrative offices, a first-aid station, warehouse, assay laboratory, diesel and natural gas power generation plants, maintenance shop, water storage tanks, and water supply tank.

The FTSF has 11 Mt of storage capacity, which at current throughput rates can support approximately 3.5 additional years of operation. The area where the previously processed leach pad was located provides an additional 1.5 years of operation at current throughput rates. The storage capacity of the Santa Elena FTSF and the leach-pad area is 51 sufficient to support the LOM plan presented in the 2021 Santa Elena Technical Report. Geotechnical investigations and engineering studies are ongoing to prepare an extension to the current FTSF for future usage.

The electric power required for the Santa Elena mine operation and supporting infrastructure is generated on-site. In 2022 an expansion to the liquified natural gas ("LNG") power generation plant was completed and commissioned at site. This newly expanded plant has an installed capacity of 20MW, supporting the Ermitano Mine and the new tailings filter-press plant, replacing the diesel generation at the property, significantly reducing greenhouse gas (GHG) emissions and reducing energy costs.

Industrial water is supplied mainly from the Santa Elena mine dewatering system. A licensed water-well is also equipped and regularly pumps water to an elevated tank for non-process uses.

The Santa Elena mine has implemented the First Majestic Environmental Management System, which supports the adoption of an environmental policy and is applied to standardize tasks and strengthen a culture focused on minimizing environmental impacts. The EMS is based on the requirements of the international standard ISO 14001:2015 and the requirements to obtain the Certificate of Clean Industry, issued by the Mexican environmental authorities,

the Ministry of Environment and Natural Resources (“**SEMARNAT**”), through the Federal Attorney for Environmental Protection in Mexico (“**PROFEPA**”). The EMS includes an annual compliance program to review all environmental obligations.

Environmental and social studies are routinely performed to characterize existing conditions and to support the preparation of Risk Assessments and Accident Prevention Programs for the operation and are documented as part of the EMS.

Santa Elena is an operating mine, as such it holds all major environmental permits and licenses required by the Mexican authorities to carry out mineral extracting activities in the mining complex. The environmental permits that are in place at the Report effective date authorize the various works and mining activities that are currently being carried out in the Santa Elena mine, in the surroundings of the site and in the Ermitaño project.

The main environmental permit is the environmental license “Licencia Ambiental Unica” (LAU) under which the mine operates its industrial facilities in accordance with the Mexican environmental protection laws administered by SEMARNAT as the agency in charge of environment and natural resources. The most recent update to the main environmental permit was approved in July 2018.

Other permits and authorizations include:

- Environmental risk study (“**ERA**”);
- Accident prevention program (“**PPA**”);
- Mining waste management plan;
- Environmental impact assessment for the Santa Elena mine, FTSP, and the Ermitaño project;
- Change of land use for the Santa Elena mine and the Ermitaño project;
- Industrial water and mine groundwater discharge; and
- Power generation permits.

In 2017, the Santa Elena mine started the voluntary process to obtain the Clean Industry Certification. The certification recognizes improvements in environmental management practices, regulatory compliance and environmental performance. At the Report effective date this program was still in process.

In February 2021, for the seventh consecutive year, Nusantara was awarded the Socially Responsible Company (“**ESR**”) designation by the Mexican Center for Philanthropy (“**CEMEFI**”).

xxvi. Capital and Operating Costs

The LOM plan includes estimates for sustaining capital expenditures for the planned mining and processing activities.

Sustaining capital expenditures will mostly be allocated for on-going development in waste, infill drilling, mine equipment rebuilding, equipment overhauls or replacements, plant maintenance and on-going refurbishing, and for tailings management facilities expansion as needed. Table 1-4 shows the capital costs for the major components.

Equipment purchased by First Majestic for stoping activities has been included in the capital estimate. It is based on quotes provided by recognized equipment suppliers. A similar approach has been taken for Ermitaño when estimating capital costs. Continuing exploration

for potential expansion is included in the capital estimate due to the nature of the deposit. Table 21-2 presents the summary of the capital expenditures for Ermitaño.

Table 21-2: Ermitaño Capital Costs Summary

Type	Units	Total	2021 ⁽¹⁾	2022	2023	2024	2025	2026	2027
Shared Capital (Surface)	\$ M	\$23.7	\$1.1	\$22.4	\$0.2	-	-	-	-
Mining Development	\$ M	\$46.2	\$10.6	\$21.0	\$13.9	\$0.7	-	-	-
Property, Plant & Equipment	\$ M	\$79.3	\$20.4	\$24.1	\$12.6	\$4.3	\$7.4	\$9.4	\$1.2
Total Capital Costs	\$ M	\$149.1	\$32.1	\$67.4	\$26.8	\$4.9	\$7.4	\$9.4	\$1.2

Table 21-3: Santa Elena Consolidated Capital Costs Summary

Type	Units	Total	2021 ⁽¹⁾	2022	2023	2024	2025	2026	2027
Shared Capital (Surface)	\$ M	\$23.7	\$1.1	\$22.4	\$0.2	-	-	-	-
Mining Development	\$ M	\$70.0	\$18.0	\$28.4	\$19.8	\$3.4	\$0.4	-	-
Property, Plant & Equipment	\$ M	\$100.8	\$20.6	\$27.6	\$21.4	\$8.5	\$10.3	\$11.1	\$1.3
Total Capital Costs	\$ M	\$194.5	\$39.7	\$78.3	\$41.5	\$12.0	\$10.7	\$11.1	\$1.3

Operating costs for Santa Elena have been estimated for the underground mining, processing costs, operations indirect, and general and administrative costs. First Majestic currently estimates operating costs at an average of \$105.10 per tonne of ore processed based on current and projected costs. Table 1-5 lists the annual operating costs.

Estimation of the operating expenses for Ermitaño used an approach similar to that used at Santa Elena. Production is proposed to be carried out by Santa Elena personnel while contractors complete development. A summary of the operating expense estimated from the site cost model used for assessing economic viability is presented in Table 21-6.

Table 21-6: Ermitaño Operating Costs

Type	\$/tonne
Mining Cost	\$52.7
Processing Cost	\$44.9
Indirect Costs	\$2.8
Total Production Cost	\$100.4
Refining, Selling Costs	\$0.6
Royalties	\$8.6
Total Cash Cost	\$109.6

A summary of the annual operating expense for Ermitaño is presented in Table 21-7.

Table 21-7: Ermitaño Estimated Annual Operating Costs

Type	Units	Total	2021 ⁽¹⁾	2022	2023	2024	2025	2026	2027
Mining Cost	\$ M	\$149.3	\$10.1	\$30.0	\$34.5	\$26.5	\$19.1	\$18.4	\$10.8
Processing Costs	\$ M	\$127.1	\$4.0	\$16.6	\$26.3	\$27.2	\$22.0	\$19.2	\$11.9
Indirect Costs	\$ M	\$8.1	\$0.2	\$0.9	\$1.7	\$1.7	\$1.4	\$1.3	\$0.9
Total Production Cost	\$ M	\$284.5	\$14.3	\$47.4	\$62.4	\$55.3	\$42.6	\$38.9	\$23.6
Refining, Selling Costs	\$ M	\$1.7	\$0.1	\$0.2	\$0.4	\$0.5	\$0.3	\$0.2	\$0.1
Royalties	\$ M	\$24.5	\$0.6	\$3.7	\$6.9	\$5.9	\$3.4	\$2.5	\$1.5
Total Cash Cost	\$ M	\$310.7	\$14.9	\$51.4	\$69.8	\$61.6	\$46.2	\$41.5	\$25.2

The leach pad material contains approximately 232 kt of remaining mineralized material, and it will be fed to the processing facility when the opportunity arises. As such, this material is only expected to pay for mining, surface haulage, and the variable cost component for the processing. Due to its low grade, it will not displace higher grade material from the two underground mines.

Total operating cost is estimated to be \$4 M and equates to \$17/t processed.

The consolidated average cash costs are estimated at \$105/tonne, including royalties and selling costs. Operating costs exclude the streaming impacts on the Santa Elena revenue, where approximately 6.3% of the revenue from the Santa Elena mine, including the leach pad, is paid to a third party. Revenue from the Ermitaño mine is subject to a 4% NSR royalty. Estimated royalty payments are included in the operating cost summary as presented in Table 21-8 and Table 21-9.

Table 21-8: Complex Average Unit Operating Costs

Type	\$/tonne
Mining Cost	\$57.6
Processing Cost	\$39.0
Indirect Costs	\$2.8
Total Production Cost	\$99.3
Refining, Selling Costs	\$0.8
Royalties	\$4.9
Total Cash Cost	\$105.1

Table 21-9: Santa Elena Consolidated Estimated Annual Operating Costs

Type	Units	Total	2021	2022	2023	2024	2025	2026	2027
Mining Cost	\$ M	\$287.6	\$29.5	\$67.5	\$55.4	\$44.5	\$36.6	\$35.0	\$19.2
Processing Costs	\$ M	\$194.7	\$15.9	\$33.2	\$33.1	\$33.9	\$31.2	\$29.3	\$18.0
Indirect Costs	\$ M	\$14.1	\$1.1	\$2.3	\$2.3	\$2.3	\$2.3	\$2.3	\$1.5
Total Production Cost	\$ M	\$496.3	\$46.6	\$102.9	\$90.8	\$80.6	\$70.1	\$66.6	\$38.7
Refining, Selling Costs	\$ M	\$4.0	\$0.3	\$0.8	\$0.7	\$0.8	\$0.7	\$0.5	\$0.2
Royalties	\$ M	\$24.5	\$0.6	\$3.7	\$6.9	\$5.9	\$3.4	\$2.5	\$1.5
Total Cash Cost	\$ M	\$524.9	\$47.6	\$107.5	\$98.3	\$87.3	\$74.2	\$69.6	\$40.4

xxvii. Economic Analysis

The financial analysis of Santa Elena considers only revenue from Proven and Probable Mineral Reserves. The analysis considers current and projected costs incurred at the Santa Elena mine, processing plant, plus existing contractor quotes for estimating costs for development in the Santa Elena mine and at the Ermitaño project.

A general financial summary for Santa Elena, which includes the Santa Elena mine, the Ermitaño project, and reclaiming of the remaining leach pad material is provided in Table 1-6.

Table 1-6: Santa Elena Financial Summary

Item	Units	Total
Net Revenue	\$M	884.6
Total Costs (excluding taxes)	\$M	(719.4)
Net Profit Before Tax	\$M	165.2
Net Profit After Tax (37.5%)	\$M	85.0
NPV Before Tax (DCFBT @ 5%)	\$M	133.7
NPV After Tax (DCFAT @ 5%) (37.5%)	\$M	64.8
IRR Before Tax	%	54%
IRR After Tax (37.5%)	%	34%
Maximum Cash Outlay	\$M	(60.4)
Payback (discounted, after tax from June 2021)	months	44

Notes: Metal prices assumptions used to calculate the economic parameters above were \$22.50/oz for silver and \$1,700/oz for gold. Royalties, streaming, payable and refining terms have been included as stated in table 22-1 of the Report.

The sensitivity analyses completed shows the relative strength of the project under changes to commodity prices, which along with metallurgical recoveries, impact the financial performance of the mine complex more so than changes to operating or capital cost estimates. Table 1-7 summarise the sensitivity to the after-tax net present value due to changes in metal prices and different discount rates.

Table 1-7: Project Sensitivity to Metal Prices - NPV @ 5% (After Tax)

NPV (\$M) After Tax	Gold Price (\$/oz Au) and Silver Price (\$/oz Ag)						
	1,550 Au	1,600 Au	1,650 Au	1,700 Au	1,750 Au	1,800 Au	1,850 Au
Discount	19.50 Ag	20.50 Ag	21.50 Ag	22.50 Ag	23.50 Ag	24.50 Ag	25.50 Ag
Rate	(9.9%)	(6.6%)	(3.3%)	Base Case	3.3%	6.6%	9.9%
% Change	22.5	39.2	55.9	72.3	88.8	105.3	121.8
3%	17.4	33.3	49.2	64.8	80.5	96.2	111.8
5%	12.7	28.0	43.1	58.0	72.9	87.8	102.7
7%	6.4	20.8	34.9	48.8	62.7	76.7	90.6
10%							

The impact to the after-tax internal rate of return (“IRR”) for each of the revenue scenarios are also summarised in Table 1-8. The sensitivity demonstrates that even at the lower commodity prices scenario, Santa Elena demonstrates positive IRR.

Table 1-8: IRR Project Sensitivity to Metal Prices (After Tax)

IRR (%) After Tax	Gold Price (\$/oz Au) and Silver Price (\$/oz Ag)						
	1,550 Au	1,600 Au	1,650 Au	1,700 Au	1,750 Au	1,800 Au	1,850 Au
	19.50 Ag	20.50 Ag	21.50 Ag	22.50 Ag	23.50 Ag	24.50 Ag	25.50 Ag
IRR	13%	20%	27%	34%	41%	48%	55%

xxviii. Exploration, Development and Production

The following general annual exploration drill programs are executed:

- 15,000 m near-mine drill program at the Santa Elena mine
- 25,000 m near-mine drill program at the Ermitaño project
- 10,000 m brownfields surface drill program regionally.

This amount of drilling is expected to continue on an annual basis while production continues, amounts required will be reviewed annually. In addition, an annual prospect generation program consisting of prospecting, soil and rock geochemical surveys, mapping, or geophysical surveys is underway.

In 2022 the Company continued mining the Alejandras veins and the Americas veins in the Santa Elena underground mine and the Ermitaño Core and North Splays veins. No reprocessing of spent-ore material from the leach-pad was carried out in 2022. During 2022, 851,973 tonnes of mineralized material were processed with an average grade of 61 g/t Ag and 3.75 g/t Au.

In Ermitaño, stope panels at elevations 771, 796 and 821 m were extracted, and development of the main ramp reached sublevels 746 and 721 during 2022.

xxix. Recommendations

Exploration:

First Majestic has successfully replaced depleted Mineral Resources through near-mine drilling at the Santa Elena mine since acquiring the property in 2015 and has made a significant new discovery at the Ermitaño project through brownfield drilling. Mineralization remains open down dip in the America and Alejandra Veins at Santa Elena, and good exploration targets remain in the footwall of the Santa Elena Main Vein. Mineralization remains open to the east along the strike of the Ermitaño Vein.

The Santa Elena concessions cover more than 102,000 ha of prospective ground with potential to host additional epithermal gold–silver deposits. Several drilled and undrilled prospects warrant continued exploration. Significant portions of the Santa Elena concessions remain under explored; prospecting, mapping, and geochemical and geophysical surveys are expected to identify new prospects in the under-explored areas.

The following annual drilling programs are recommended.

- At Santa Elena: an annual 4,000 m infill sustaining drill program to support short-term production plans and an annual 15,000 m near-mine drill program to support mid-term production projections;
- At Ermitaño: an annual 5,000 m underground infill drill program to increase confidence in the current Indicated and Inferred Mineral Resources and a 15,000 m near-mine drill program to explore for expansions to the mineralization; and
- Regionally: an annual 15,000 m brownfield surface drill program on two or three prospects.

This 55,000 m annual exploration drill program is estimated to cost \$6.5 M per year excluding related underground access development costs.

In addition, an annual prospect generation program consisting of prospecting, soil and rock geochemical surveys, mapping, and geophysical surveys is recommended. This prospect generation program is estimated to cost \$250,000 per year.

The amounts and estimated cost of these recommended exploration programs should be reviewed annually.

Ermitaño Hydrogeology Studies:

A pre-feasibility study for the Ermitaño project was completed and included field investigations in hydrogeology and geotechnical drilling and modeling. The results of the study show the potential to find localized water bodies when reaching levels below the 760 masl elevation, but the amount of data was inadequate to design a detailed dewatering system for deeper levels expected to be mined after two to three years of operation.

It is recommended that field investigations be continued, and a detailed hydrogeological model be constructed to support the design of the dewatering system for the deep portion of the mine which according to the LOM plan will be operated in years 2025-2026. The estimated cost to complete these studies and field investigations is \$500,000.

Below summarizes all other Royalties and mineral properties at the Company owns as at the date of this AIF:

United States

Silicon

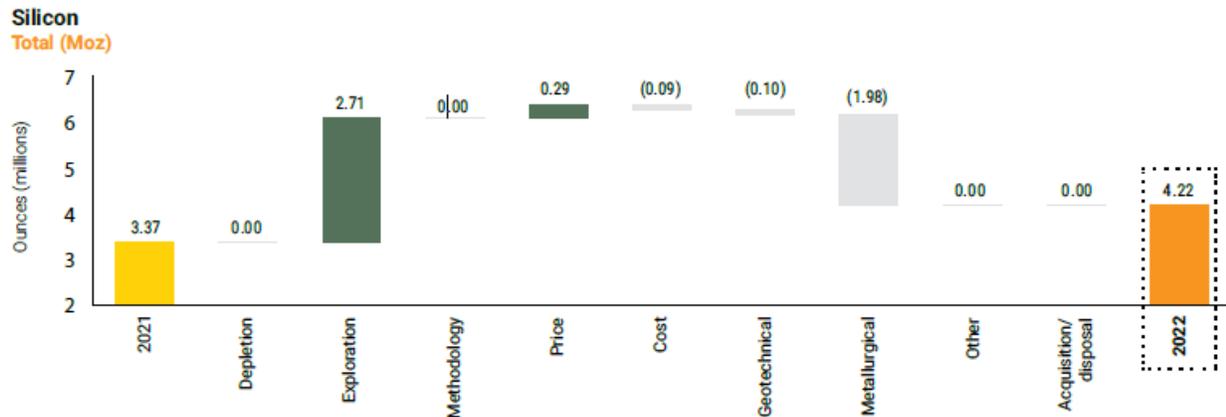
The Silicon project is project is located in Bare Mountain mining district, Nye County, Nevada. On February 20, 2015, the Company entered into a royalty agreement with Altius (formerly Callinan Royalties Corporation) whereby the Company retained 100% ownership of the Silicon property, discovered through an alliance between the Company and Altius pursuant to an October 22, 2013 alliance agreement, for a 1.5% NSR royalty payable to Altius.

On May 1, 2017, the Company entered into an option agreement with AngloGold Ashanti NA ("**AngloGold**") whereby AngloGold may acquire 100% interest in the Silicon project by making aggregate payments of US\$3.0 million over three years. In addition, the 1.5% royalty obligation payable to Altius was transferred to AngloGold. The Company also retains a 1.0% NSR royalty on future production from the project. On June 3, 2020, AngloGold exercised its option to acquire 100% of the project by making the final payment of US\$2.4 million.

On February 22, 2022, AngloGold announced a maiden 3.37 million ounce inferred gold resource at the Central-Silicon zone on the Silicon project. Highlights from AngloGold's Annual Report included the following:

- Maiden resource of 3.37 million ounces of oxide gold from the Central-Silicon zone as of December 31, 2021;
- Resources do not include the Merlin zone, located approximately two kilometres south of Central-Silicon;
- Conceptual plan of 300,000 ounces of annual production from North Bullfrog and Silicon using heap leach and gravity recovery;
- Silicon prefeasibility studies planned in 2022 and 2023 were underway with permitting and mine construction to come in future years; and
- Ongoing exploration and infill drilling are planned to continue at the Central-Silicon and Merlin areas.

On February 22, 2023, AngloGold declared a total mineral resource on the Silicon deposit of 4.22 million ounces, including indicated resources of 3.4 million and inferred resources of 800,000 ounces gold. The increase in mineral resource ounces was a result of successful greenfields exploration, supported by an open pit optimization at US\$1,750 per ounce gold to demonstrate reasonable prospect of economic extraction. Testing completed in 2022 provided more details regarding metallurgical variability of the transitional and unoxidized material. This resulted in a reduction in heap leach recovery compared to the previous assumptions. Continued studies will further refine the recovery estimates and evaluate the addition of a third processing option that may be more suitable for those materials. The table below illustrates the year-on-year changes in mineral resource:



Source: AngloGold Ashanti Mineral Resource and Mineral Reserve Report as at December 31, 2022

Additional highlights include the following:

- Indicated resources of 121.56 million tonnes grading 0.87 g/t gold for 3.4 million ounces, signalling a full conversion from inferred resources announced in 2022;
- Additional inferred resources of 36.03 million tonnes grading 0.70 g/t gold for 800,000 ounces;
- Silicon pre-feasibility study to integrate Merlin area for potentially larger scale mining activity is expected to be completed in 2023; and
- Over US\$50 million was spent in the Silicon camp in 2023, including twelve drill rigs.

As disclosed in AngloGold's Mineral Resource and Mineral Reserve Report as at December 31, 2022, the following activities were completed to date on the Silicon project including:

- Exploration drilling comprised of 262 RC drill holes, 65 DD holes and 40 RC pre-collar/diamond tail for a total of 146,109 metres;
- Detailed geological mapping at 1:5,000 scale has been completed over a total of 58 square kilometres;
- Ground geophysics was carried out on the project including a total of 1,307 kilometres of induced polarization/resistivity, ground magnetics and gravity surveys;
- Geochemical sampling comprising outcrop rock chip sampling and 26 x 2.3 kilometres soil survey was also carried out at various phases of the exploration program; and
- Drilling program is continuing not infill and further delineate the deposit as well as collect test work material in support of the planned pre-feasibility study.

Other exploration targets are present within the Silicon claim block, including Merlin and Maverick where Merlin is a drilling-stage prospect that is showing potential and is planned to move into project work during 2023.

Yamana Alliance- Raven and Callaghan

The Raven project is a Carlin-type gold target covering windows of prospective lower plate carbonate host rocks and Paleozoic normal faults, including extensions of the Roberts Mountain thrust. The southern claim block covers a mineralized body hosted by an upper-plate Ordovician calcareous siltstone. Thirty-six drill holes have tested this target with intercepts up to 9.96 grams per tonne gold over three metres. The lower plate target below this high-grade gold cell remains largely untested. The northern claim block at Raven has seen limited exploration. Recent mapping by Orogen geologists combined with conodont ages have refined the stratigraphy and identified favorable lower plate horizons in multiple locations. Soil samples taken at Raven display a large arsenic, antimony and mercury anomaly across the area. Multiple shallow drill targets exist below these gold-in-soil anomalies.

The Callaghan project is a Carlin-type gold targets covering a window of lower plate carbonates and siltstones exposed within an anticline. Anomalous gold values and elevated arsenic, antimony and mercury occur within decalcified sandstone, siltstones and jasperoid breccias that occur as outcropping islands along a 7.5 kilometre strike length. Historic drilling intercepted shallow Carlin-style mineralization associated with high angle structures and along the contact between upper and lower Cambrian rocks with drill intercepts up to 1.6 g/t gold over 10 metres. Similar targets exist immediately east and within the untested hinge of the anticline concealed under shallow pediment.

The Company has an alliance with a subsidiary of Yamana Gold Inc. (“**Yamana**”) on the Raven and Callaghan projects as follows:

On July 23, 2021, the Company signed two option agreements with Meridian Gold Company (“**Meridian**”), a wholly owned subsidiary of Yamana, for the option of the Raven and Callaghan gold projects and a three-year funded generative exploration alliance. The Callaghan and Raven projects are Carlin-type gold targets located in Lander County, Nevada.

Under the terms of the Option agreement, Meridian can earn up to 100% interest in the Raven and Callaghan projects by making cash payments and incurring minimum exploration expenditures according to the following:

	Cash payments (US\$)	Status	Minimum work requirements (US\$)	Status
Effective Date	\$50,000	<i>Received</i>	-	-
July 23, 2022 (1 st anniversary)	\$50,000	<i>Received</i>	\$375,000*	<i>Completed</i>
July 23, 2023 (2 nd anniversary)	\$50,000		\$500,000	
July 23, 2024 (3 rd anniversary)	\$50,000		\$750,000	
July 23, 2025 (4 th anniversary)	\$50,000		\$1,000,000	
July 23, 2026 (5 th anniversary)	\$50,000		\$2,000,000	
Total	\$300,000		\$4,625,000	

The Company will retain a 2.5% NSR royalty on the Raven project and 3.0% NSR royalty on the Callaghan project, with a buy down right up to 1.0%% on each NSR royalty for up to US\$10.0 million.

Under the terms of the Alliance agreement, generative exploration program will be conducted within a 4,000 square kilometre area of influence (“**AOI**”) in Nevada. Projects staked within the AOI and selected by Meridian will be subject to similar earn-in terms as the Option agreement. The Company will retain a 1.0% NSR royalty on the ground acquired within the AOI.

Maggie Creek

The Maggie Creek project is located in Eureka County, Nevada. The Maggie Creek Project lies in the core of the Carlin Trend. The land position covers the northeast projection of the Chukar-Alunite Fault Zone, which is mineralized at the Gold Quarry Mine. The property also covers the southeast projection of the Castle Reef Fault zone, which is mineralized at the Leeville Mine. Historical drilling has intersected gold mineralization in the upper plate of the Roberts Mountain Allochthon that ranges in grade from below detection limit to more than one gram in numerous drill holes. A window of lower plate carbonates is exposed in the core of the Orogen claim block. Gold mineralization in the window has been drilled at Newmont’s Rainbow Deposit immediately south of Orogen’s land position.

On August 20, 2015 the Company acquired the Maggie Creek project from Wolfpack Gold (Nevada) Corporation (“**Wolfpack**”) in exchange for a 1.0% NSR royalty that can be bought down for US\$1.5 million, or fractions thereof at the pro-rata cost, at any time during the term of the agreement. In addition, a 2.0% NSR royalty is payable to EMX Royalty Corp. pursuant to a pre-existing deed of royalties.

On February 15, 2019, the Company entered into an earn-in agreement with Orevada Metals Inc. that was subsequently acquired by US Gold Corp. (“US Gold”). Pursuant to the agreement, US Gold can earn a 70% interest in the project. The agreement was subsequently amended on December 17, 2019 to postpone the First and Second Work Obligation to June 15, 2021.

To earn a 50% interest in the project, US Gold is required to pay US\$17,034 for BLM fees when the agreement was signed (received) and incur US\$4.5 million in exploration expenditures by with the according to the following schedule:

	Cash payments (US\$)	Status	Minimum work expenditure (US\$)	Status
Effective Date	\$32,034*	Received	-	-
June 15, 2021 (1 st anniversary) “First Work Obligation”	-	-	\$100,000	Completed
June 15, 2021 (2 nd anniversary) “Second Work Obligation”	-	-	\$200,000	Completed
June 15, 2022 (3 rd anniversary)	-		\$500,000	Completed
June 15, 2023 (4 th anniversary)	-		\$700,000	Amended Assigned to Nevada Gold Mines LLC
June 15, 2024 (5 th anniversary)	-		\$1,000,000	-
June 15, 2025 (6 th anniversary)	-		\$1,000,000	-
June 15, 2026 (7 th anniversary)	-		\$1,000,000	-
Completion of exploration minimum expenditure requirements	\$250,000		-	-
Total	\$282,034		\$4,500,000	-

*Includes \$15,000 for initial option payment and \$17,034 for reimbursement of claim fees.

Upon completing the initial earn-in expenditures, US Gold shall vest its 50% interest by paying the Company US\$250,000, up to US\$125,000 of which may be paid in shares of US Gold, provided such shares are listed on Toronto Stock Exchange, TSX Venture Exchange or Canadian Stock Exchange (or their equivalent), at US Gold’s sole election.

US Gold can earn an additional 20% interest in the project by producing a Feasibility Study. The parties will thereafter participate in expenditures on the property in accordance with their respective interests or have their interest diluted. If through dilution the interest of a party is reduced to less than 10%, then the party’s participating interest shall automatically be converted to a 2.0% NSR royalty.

On February 23, 2021, US Gold has submitted a Notice of Intent for a spring 2021 drill program. The program is planned to test the northeast extension of the Chukar-Alunite fault zone under post-mineral cover. This structural corridor is one of the primary controls on Nevada Gold Mines’ adjacent Gold Quarry deposit where it hosts more than 25 million ounces of gold¹.

On April 7, 2021, US Gold announced that drilling was underway with up to 1,500 metres planned in up to 2 holes.

On June 30, 2021, U.S. Gold provided a drilling update with results from a two-hole 1,353 metre drill program. The first hole, MC21-1c encountered typical lower plate stratigraphy with sometimes intense alteration, brecciation and faulting throughout. The strongest alteration and sulphides, including sooty pyrite and orpiment in brecciated hydrothermal dolomite, was encountered within the Wispy Member of the

¹ Muntean, J.L., 2020, Carlin-Type Gold Deposits in Nevada: Geologic Characteristics, Critical Processes, and Exploration, SEG Special Publication no. 23, pp. 775-795

Popovich at 823 metres. This interval was anomalous in gold, arsenic, mercury and thallium, with a high of 165 ppb of gold.

The second hole, MC21-2c, angled to the north from the same pad as MC21-1c. This hole was terminated at 458 metres within Upper Plate Vinini siltstone and mudstone. The Vinini in MC21-2c displays much more intense clay alteration and sulfidation than in MC21-2c.

On November 4, 2022, the Company and US Gold have agreed to assign the option agreement to Nevada Gold Mines LLC.

On November 4, 2022, the Company entered into an option agreement with Nevada Gold Mines LLC (“NGM”) whereby NGM can earn 100% interest in the Maggie Creek gold project. NGM’s obligations under the terms of the agreement include:

	Cash payments (US\$)	Status	Minimum work expenditure (US\$)	Status
November 4, 2022	\$200,000	<i>Received</i>	-	-
November 4, 2023 (1 st anniversary)	\$400,000		\$750,000	
November 4, 2024 (2 nd anniversary)	\$750,000		\$1,000,000	
November 4, 2025 (3 rd anniversary)	\$1,000,000		\$1,250,000	
November 4, 2026 (4 th anniversary)	\$1,250,000		\$1,500,000	
November 4, 2027 (5 th anniversary)	\$1,400,000		\$1,500,000	
Total	\$5,000,000		\$6,000,000	

Spring Peak

The Spring Peak project is located in Mineral County, Nevada. The Spring Peak project features a low-sulfidation epithermal gold system with hydrothermal breccias and banded epithermal quartz veins exposed at surface. Rock sampling returned up to 35.7 grams per tonne gold with anomalous pathfinder elements that coincide with a soil geochemical anomaly. The epithermal gold system is fully preserved from surface sinters to basement, contains classic banded veins and quartz after calcite boiling textures, all of which indicate exploration potential at depth.

On January 20, 2012, as amended on September 5, 2013 and April 12, 2016, the Company entered into mineral lease and option to purchase agreements with Gregory J. Kuzma and Heidi A. Kuzma (the “**Kuzma Lease**”). The Company is required to make cash payments according to the following milestones:

	Cash payments (US\$)	Status
January 20, 2012 (Execution Date)	\$10,000	<i>Paid</i>
January 20, 2013 (1 st anniversary)	\$10,000	<i>Paid</i>
May 18, 2016- upon the execution of a 3 rd party option agreement	\$12,500	<i>Paid</i>
30 day after Permit Date- December 13, 2019	\$20,000	<i>Paid</i>
February 7, 2019- upon the execution of the January 17, 2019 Option Agreement with OceanaGold (US) Inc.	\$12,500	<i>Paid</i>
December 13, 2020- 1 st anniversary of Permit Date*	\$30,000	<i>Paid</i>
December 13, 2021- 2 nd anniversary of Permit Date*	\$40,000	<i>Assigned to Headwater Gold Inc.</i>
3 rd -11 th anniversaries of drill permit	\$50,000/anniversary	<i>Assigned to Headwater Gold Inc.</i>
12th anniversary to termination	\$60,000/ anniversary	<i>Assigned to Headwater Gold Inc.</i>

The Company has the option to purchase the Spring Peak project for US\$500,000 within one year following the completion of a technical report that documents a minimum 500,000-ounce gold equivalent inferred resource. The Kuzma Lease is subject to a 2.5% NSR royalty, of which 1.5% of the NSR royalty may be repurchased for US\$1.5 million.

On July 12, 2021, the Company entered into an exploration and option agreement with Headwater Gold Inc. (“**Headwater**”) to acquire 100% interest in the Spring Peak project with the following consideration:

	Cash payments (US\$)	Cash or Common shares payment	Minimum work requirements	Status
On signing	\$10,000	-	-	<i>Received</i>
Receipt of final approval from US Forest Service on Headwater’s full Plan of Operations	-	\$250,000	-	
On or before July 12, 2023 (2 nd anniversary)	-	-	\$250,000	
Total	\$10,000	\$250,000	\$250,000	

The Company will retain a 0.5% NSR royalty and an option to purchase an additional 0.5% NSR royalty for US\$1.0 million. Headwater is also required to maintain existing underlying vendor payments and royalties.

Headwater announced the completion of its drill program on the Spring Peak project on September 15, 2021, which consisted of five reverse circulation drill holes totaling 1,350 metres. Results announced by Headwater on November 22, 2021, returned gold anomalous quartz veins in four of five holes with a new blind gold discovery made with drill hole SP21-03 which intersected 38.1 metres grading 1.00 g/t gold including 9.2 metres grading 2.49 g/t gold. Drill results confirms the presence of a laterally continuous gold-bearing epithermal boiling zone below a cap of silica sinter and barren alteration at surface. Vein textures and multi-element geochemistry suggest the mineralization encountered occurs in the top of the targeted boiling horizon, with follow-up targets immediately down dip.

On August 16, 2022, Headwater announced an earn in exploration agreement with Newcrest Mining Limited (“Newcrest”) that includes Spring Peak. Newcrest has committed to a minimum expenditure of US\$5.0 million on the project within 36 months from the execution date. Newcrest can earn a 65% interest in the project by spending US\$55.0 million.

On September 28, 2022 Headwater announced the commencement of a multi-rig 4,000 metre drill program on the property.

On January 9, 2023, Headwater announced results from drill hole SP22-13 which intersected 34.72 metres grading 2.73 grams per tonne (“g/t”) gold including 15.92 g/t gold over 2.38 metres and 10.43 g/t gold over 2.01 metres. Assay results from additional drilling remain pending.

On March 2, 2023, Headwater announced additional drill results from the main “Disco vein” including: SP22-11 which intersected 40.63 metres grading 1.86 g/t gold including 43.7 g/t gold over 0.63 metres and SP22-12 which intersected 42.61 metres grading 0.94 g/t gold including 23.5 g/t gold over 0.33 metres. A new high-grade epithermal vein was announced located approximately 900 metres west of the Disco Zone in the Opal Ridge target area. Reverse circulation scout hole SP22-14 intercepted 16.4 g/t Au over 1.52 m within a broader interval of 10.67 metres grading 2.73 g/t gold.

Tabor

The Tabor project, located in Esmeralda County, Nevada is a 5-kilometre-long volcanic hosted steam heated alteration cell which represents the uppermost expression of a prospective low-sulfidation epithermal system. Historic mercury mineralization occurs as fumarolic cinnabar and native sulfur veins associated with widespread, structurally controlled zones of alunite. Powdery leached silica occurs along structural zones overlying a large gently northeast dipping chalcedonic blanket. Elevated gold, arsenic and antimony occurs in the deepest incised canyons in the middle of the project associated with crystalline, locally platy quartz after calcite, supporting the low-sulfidation epithermal model, and potential for precious metal mineralization at moderate depths.

On August 24, 2020, the Company entered into an earn-in agreement with Au-Reka Gold Corporation, a subsidiary of i-80 Gold Corp. (formerly Premier Gold Mines U.S.A.) (“i-80”) whereby i-80 can earn up to a 100% of interest in the project as follows:

- an initial 55% interest can be earned by making US\$200,000 in cash payments and completing US\$5.0 million of exploration expenditures over a four-year period:

	Other payments (US\$)	Status	Option payments (US\$)	Status	Minimum work expenditure (US\$)	Status
August 24, 2020	-		\$25,000	Received	-	-
30 days before BLM Payment Due Date for 2020/2021 Tabor holdings cost	\$46,972	Received	-	-	-	-
On or Before August 24, 2021 (1 st anniversary)	-		-	-	\$100,000	Completed
The later of i) August 24, 2021 or 2) the Permit Date	-		\$25,000		-	
1 st anniversary of Permit Date* If the two committed expenditure amounts are not met, the difference between the actual expenditures and the \$300,000 commitment will be paid in cash to the Company.	-		\$50,000	-	\$200,000	
Following the 1 st anniversary of the Permit Date, minimum annual Expenditures of at least an additional \$150,000 until the earliest of the following: (1) the fourth anniversary of the Permit Date; and (2) Expenditures in the total aggregate amount of \$5,000,000.	-		-		-	
2 nd anniversary of Permit Date	-		\$50,000		\$150,000	
3 rd anniversary of Permit Date	-		\$50,000		\$150,000	
4 th anniversary of Permit Date	-				\$150,000	
Total	\$46,972		\$200,000		\$5,000,000	

*Permit Date means the date the United States Forest Service or Bureau of Land Management, as applicable, approves i-80's notice of intent to conduct exploration activities or exploration plan of operations pursuant to which i-80 is authorized to conduct exploration drilling on the Property.

- the remaining 45% interest can be earned by making a US\$300,000 payment and incurring US\$5.0 million in exploration expenditures:

	Cash Payments (US\$)	Minimum aggregate work expenditure (US\$)
Bump-Up Option Notice	\$300,000	
4 th anniversary of Bump-Up Notice- Above and beyond those made as part of the Initial Earn-In Option Payments		\$5,000,000
Total	\$300,000	\$5,000,000

- a payment of US\$500,000 upon completion of the earn in.

i-80 will also assume all obligations on the adjoining Mustang Canyon property, including cash payments of US\$200,000 and a 2.0% NSR royalty to Gold Royalty (formerly Ely Gold Royalties Inc.). i-80 has to make a further payment of US\$1.0 million upon making a commercial production decision and an additional cash payment equal to US\$7.50 per gold-equivalent ounce in resources and reserves, up to a maximum US\$10.0 million, within 90 days of such decision.

The Company will retain a 3.0% NSR royalty on the Tabor claims and a 1.0% NSR royalty on the Mustang claims. Half of the NSR royalty on all the claims can be repurchased by i-80 for US\$3.0 million.

On February 23, 2021, the Company announced that i-80 expanded the project area by an additional 16.9 square-kilometres for a total project area of 25 square-kilometres. i-80 is advancing the project through geologic and alteration mapping supported by radiogenic dating of both host rocks and alteration phases on the project. An airborne magnetics survey is scheduled for 2021 and will be used in conjunction with the surface mapping to define drill targets. Permitting is underway for a drill program.

Mustang Canyon

The Mustang Canyon claims form part of the Tabor property. The Company entered into an option agreement with Nevada Select Royalty Inc., a wholly owned subsidiary of Gold Royalty on June 24, 2020 to purchase 100% of 27 unpatented mining claims of the Mustang Canyon property whereby Gold Royalty is the registered and beneficial owner. The total purchase price for the property is US\$200,000 with payments to be made according to the following milestones:

	Cash payments (US\$)	Status
On Signing of Agreement	\$10,000	<i>Paid</i>
Upon signing of a 3 rd party agreement related to the Mustang Canyon Project*	\$15,000	<i>Paid</i>
10 business days after Issuance of NS Claims Permit	\$25,000	<i>Obligation transferred to I-80*</i>
1 st anniversary of NS Claims Permit	\$25,000	<i>Obligation transferred to I-80*</i>
2 nd anniversary of NS Claims Permit	\$50,000	<i>Obligation transferred to I-80*</i>
3 rd anniversary of NS Claims Permit	\$75,000	<i>Obligation transferred to I-80*</i>
Total	\$200,000	

*Pursuant to the August 24, 2020 option agreement with i-80 on Tabor, i-80 has assumed all obligations on the Mustang Canyon property.

Gold Royalty will retain a 2.0% NSR royalty on all properties acquired within Mustang Canyon AOI after the option is exercised.

Ecro

The Ecro property located is Nevada and consist of a Carlin-type sediment hosted gold prospect in the Cortez area of the Battle Mountain-Eureka Trend. The Ecro project area is underlain by upper plate siliciclastic rocks of the Vinini Formation and quaternary alluvium and as such is a blind target with

prospective Carlin target mineralization at depth. A large gravity high interpreted to be an upthrown block of lower plate carbonates occurs in the northeast portion of the project. Two core holes were drilled by S2 in 2018 using gravity and AMT to target Carlin-style mineralization hosted in lower plate carbonate rocks. Neither hole penetrated the target stratigraphy, but one hole did intersect significant gold mineralization up to 3.4 grams per tonne gold in upper plate rocks with a geochemical signature very similar to the adjacent Robertson project.

On March 8, 2021, the Company signed an option agreement with Moneghetti Minerals Limited (“**Moneghetti**”) to option the Ecu gold project located in Nevada. Moneghetti can acquire a 100% interest in Ecu by making cash payments of US\$2.5 million, work expenditures of US\$5.0 million over a six-year period according to the following schedule:

	Cash payments (US\$)	Status	Minimum aggregate work expenditure (US\$)	Status
On signing	\$25,000	<i>Received</i>	-	
August 8, 2022 (18 months)	\$50,000	<i>Received</i>	\$200,000	<i>Completed</i>
August 8, 2023 (30 months)	\$50,000		\$500,000	
August 8, 2024 (42 months)	\$100,000		\$1,000,000	
August 8, 2025 (54 months)	\$100,000		\$2,000,000	
August 8, 2026 (66 months)	\$175,000		\$3,000,000	
March 8, 2027 (72 months)	\$2,000,000		\$5,000,000	
Total	\$2,500,000			

The Company retains a 2.0% NSR royalty on the property. Moneghetti will also make annual payments of US\$50,000 starting on the first year of exercising the option until the project is placed into commercial production. In addition, Moneghetti will pay US\$7.50 per ounce to a maximum US\$7.5 million on all mineral resources and reserves at the time of a production decision.

Manhattan Gap

The Manhattan Gap property located in Nevada is a porphyry and polymetallic carbonate replacement target located in the historic Pioche mining district in Lincoln County, Nevada. Multiple target areas exist in the district associated with a large zoned Cretaceous porphyry system that has been tilted and dismembered by post-mineral faulting. By combining Orogen’s 8.2 square kilometre land package with Stampede Metals’ 8.5 square kilometre land package, the project can be explored effectively as a unified district-scale project.

On April 20, 2021, the Company entered into an option agreement with Stampede Metals Corp. (“**Stampede Metals**”) to acquire 100% interest in the Manhattan Gap with the following consideration:

	Cash payments (US\$)	Common shares payment	Minimum work requirements	Status
On signing (cash)	\$18,243	-	-	<i>Received</i>
On signing (common shares)	\$158,000*	375*	-	<i>Received</i>
April 20, 2022 (1 st anniversary)	-		500 metres of drilling	<i>Completed</i>
April 20, 2027 (6 th anniversary)	-		7,500 metres of drilling	
Total	\$176,243			

*Estimated fair value of \$158,000 as Stampede Metals is not a public issuer.

In the event Stampede Metals has not completed the 7,500 metres of drilling on the 6th anniversary of the option agreement, Stampede Metals will make a cash payment of US\$500,000 to the Company. Upon commencement of commercial production, Stampede Metals will pay the Company US\$2.50 per gold-equivalent ounces and will also grant the Company a 1.5% NSR royalty.

In late 2021, Stampede completed geophysics and drilling on the combined property including 500 metres of drilling on Orogen's ground. The single drill hole returned no significant alteration or anomalism.

Gilbert South

The Gilbert South gold property is located in the Walker Lane epithermal belt in Nevada. It lies within the historic Gilbert District where gold was first discovered in the 1800's. Multiple small shafts and adits on the Gilbert South property are developed along free-gold bearing epithermal quartz veins and vein stockworks. Modern exploration on the property has focused on near surface bulk tonnage gold targets with most drill holes extending less than 150 metres from surface. This drilling intercepted strongly anomalous gold in many different target areas indicating a large gold bearing system. Minimal exploration has focused on identifying zoning within the gold bearing system and testing for feeder structures at depths greater than 100 metres. Multiple target zones have been identified where shallow level quartz veins with anomalous mercury outcrop on the margin of dome complexes. The root zones and pressure shadows of these domes are the primary target for the next round of exploration drilling.

On November 17, 2017, the Company entered into an option agreement with Nevada Select Royalty Inc. ("**Nevada Select**") to acquire 100% right, title and interest on certain claims of the Gilbert South Property, the Company has the following obligations:

	Cash payments (US\$)	Status
On Closing Date	\$668	<i>Paid</i>
On Effective Date (November 17, 2017)	\$5,000	<i>Paid</i>
November 17, 2018- 2021 (1 st to 4 th anniversary)	\$5,000	<i>Paid (1st to 3rd anniversaries)</i>
November 17, 2022 and onward	\$10,000	<i>Obligation transferred to Eminent Gold</i>

Nevada Select retains a 2.0% NSR royalty on the project.

On August 19, 2015, the Company entered into a royalty agreement with Timberline Resources Corporation ("**Timberline**") and Wolfpack Gold (Nevada) Corporation ("**Wolfpack**") to acquire certain claims of the Gilbert South Project in exchange for 1.0% NSR royalty on the property. The Company has the right to buy down the 1.0% NSR royalty for US\$1.5 million or fractions thereof at pro-rata.

On June 24, 2021, the Company entered into an option agreement with Eminent Gold Corp. ("**Eminent Gold**") to acquire 100% interest in the Gilbert South project with the following consideration:

	Cash payments (US\$)	Common shares payment	Minimum work requirements	Status
On signing	\$25,000	50,000	-	<i>Received</i>
June 24, 2022 (1st anniversary)	\$50,000	100,000	-	<i>Received</i>
June 24, 2023 (2 nd anniversary)	\$100,000	150,000	-	
June 24, 2024 (3 rd anniversary)	\$100,000	200,000	-	
June 24, 2025 (4 th anniversary)	\$100,000	-	-	
June 24, 2026 (5 th anniversary)	\$500,000	-	-	
To be incurred during the term of the option	-	-	\$100,000	
Total	\$875,000	500,000	\$100,000	

In addition to the underlying NSR royalty held by Nevada Select (2.0% NSR royalty on certain claims) and by Timberline and Wolfpack (1.0% NSR royalty on certain claims), the Company will also retain a 2.0% NSR royalty on the overall project of which 1.0% can be purchased for US\$1.0 million. Eminent Gold will also assume all underlying vendor obligations.

Eminent Gold announced results from its first phase exploration program at the Gilbert South project in October and November 2021 from two mapping and sampling programs on Gilbert South that defined two multiple-kilometre long gold-anomalies in soils coincident with mapped fault zones and rock samples that returned up to 30.7 g/t gold. These results define numerous north south trending epithermal quartz veins on the property.

On February 8, 2022 Eminent Gold announced results from a CSAMT study on the property the displayed a strong correlation between gold rich veins on the property and a conductivity and resistivity response. Two multiple-kilometre long gold-anomalies were defined in soils coincident with mapped fault zones and rock samples that returned up to 30.7 g/t gold. These results define numerous north-south trending epithermal quartz veins on the property.

Kalium Canyon

The Kalium Canyon gold property is located in the Walker Lane epithermal belt in Nevada is a low-sulphidation epithermal target in an undrilled, 3.5 km long northeast trending structural zone on the western margin of the Silver Peak District. Historic underground mines exploited high grade silver from three parallel en echelon vein zones southeast of the project, including the Nivloc, 16-1, and Mohawk mines. Orogen's claims control the next structural corridor to the west in the vein swarm, which cross-cuts the Silver Peak Caldera boundary and appears to be the best preserved cell in the district.

On June 8, 2021, the Company entered into an agreement with Bridgeport Gold Inc. ("**Bridgeport**") to acquire 21 claims comprising of the Argentite Project located in Esmeralda County, Nevada for consideration of 100,000 common shares of the Company with a deemed value of \$0.35 per share or \$35,000 and 1.0% NSR royalty. The Company will also assume a 2.0% NSR royalty on eight of the 21 claims.

On June 21, 2021, the Company entered into an option agreement with Badger Minerals LLC ("**Badger**") to acquire 100% interest in the Kalium Canyon project with the following consideration:

	Cash payments (US\$)	Minimum work requirements	Status
On signing	\$25,000	-	<i>Received</i>
June 21, 2022 (1st anniversary)	\$50,000	\$250,000	<i>Agreement Terminated on July 15, 2022.</i>
June 21, 2023 (2 nd anniversary)	\$100,000	\$500,000	-
June 21, 2024 (3 rd anniversary)	\$100,000	\$1,000,000	-
June 21, 2025 (4 th anniversary)	\$250,000	\$1,500,000	-
June 21, 2026 (5 th anniversary)	\$1,225,000	\$1,750,000	-
Total	\$1,750,000	\$5,000,000	

Within 60 days following the commencement of commercial production, Badger is required to pay the Company a one time payment of US\$5.00 per ounce of gold equivalent contained in the property based on NI 43-101 mineral reserve and resource estimates in a feasibility study up to a maximum of US\$10.0 million.

The Company retains a 3.0% NSR royalty on the project of which 0.5% can be purchased for US\$2.0 million.

The Company and Badger terminated the option agreement on July 15, 2022.

On September 14, 2022, the Company completed a purchase and sale agreement with Green Light Metals Inc. ("**Green Light**") to sell 100% title and interest in Kalium Canyon gold project for total cash consideration of US\$30,000 and 1,000,000 common shares of Green Light with a fair value of \$400,000. The common shares are subject to certain provisions upon listing on a recognized Canadian stock exchange. The

Company retains a 3.0% NSR royalty on 34 KC claims and 80 MS claims of which 1% NSR royalty can be purchased for US\$2.0 million. In addition, the Company will retain 2.0% NSR royalty on the Marty 8-14 and 30-35 claims.

On the Marty 1-7 and SP 11 claims, the Company will receive a one-time payment of US\$5 per ounce gold-equivalent based on gold equivalent ounces estimated in a mineral reserve and resource statement set out in a NI 43-101 feasibility study and paid within 60 days from the start of commercial production, capped at US\$5.0 million.

Ghost Ranch

The Ghost Ranch project located in Nevada is a Carlin Gold target that encompasses a shallow shelf covered by less than one hundred metres of alluvium. Prospective Cambrian and Ordovician host rocks project into the subsurface and have seen no historic drilling. This stratigraphy outcrops to the east at Morgan Pass where Carlin-type mineralization occurs at surface. At Ghost Ranch, enzyme leach soils covering the northern half of the property display a strong correlation between inferred structures and anomalous gold and Carlin Suite elements.

On August 23, 2021, the Company entered into an exploration and option agreement with Ivy Minerals Inc. (“Ivy Minerals”) to acquire 51% interest in the Ghost Ranch project by performing the following Earn-in Obligation:

	Minimum obligation (US\$)	Cumulative earn-in amount (US\$)	Other
On or before 1 year after Effective Date (August 23, 2022)	\$100,000	-	Ivy Minerals shall perform geoscientific work
On or before the 18 th month after Effective Date (February 23, 2023)	\$150,000	\$150,000	-
On or before 2 years after Effective Date (August 23, 2023)	\$100,000	-	Ivy Minerals shall preform geoscientific work
On or before 3 years after Effective Date (August 23, 2024)	\$100,000	-	Ivy Minerals shall preform geoscientific work
On or before the 30 th month after Effective Date (February 23, 2024). Deadline shall be extended, if required, to obtain approval of the plan of operations.	-	-	4,000 feet drilled
On or before 4 years after Effective Date (August 23, 2025)	\$100,000	-	Ivy Minerals shall preform geoscientific work
On or before 4 years after Effective Date (August 23, 2025)	-	\$1,500,000	Ivy Minerals shall incur commutative earn-in obligations including all federal annual mining claim maintenance fees
Total	\$550,000	\$1,650,000	

Upon completion of the initial Earn-in Obligation on or before the fourth anniversary of the Effective Date, August 23, 2025, Ivy Minerals may exercise its option to earn and vest an undivided 51% interest in Ghost Ranch. Orogen will retain 49% interest and 0.5% NSR royalty. If Ivy Minerals does not complete the Earn-in Obligation by August 23, 2025, Ivy Minerals shall have no right, title or interest in the property.

After completion of the initial earn-in, Ivy Minerals and the Company shall form a joint venture with the Company to develop Ghost Ranch. Both parties shall contribute to future exploration and development work expenditures in accordance with their respective participating interest. If either party chooses not to participate at the level of its interest in the joint venture, its interest will be diluted. If at any time a party's

participating interest in the joint venture is diluted or falls below 10%, such diluted party shall deem to have withdrawn from the joint venture and their interest be converted to a 1.0% NSR royalty.

The Company shall retain a total of 1.5% NSR royalty in the event that the Company's interest in the joint venture is diluted below 10%.

In the fall 2022, Ivy Minerals followed up geophysical and geochemical targets generated in 2021 with 1,236 metre drill program in late 2022. Results and details are pending.

Si2 (formerly Elba)

The Si2 project located 60 kilometres northwest of Tonopah in Esmeralda County, Nevada covers the northeast of a large steam heated alteration cell hosted by a rhyolite flow dome complex. Alteration is dominated by pervasive alunite and chalcedony replacement of breccias with mercury values up to 20 ppm. Breccias and altered domes define an annular zone cored by a large recessive area mostly covered by shallow alluvium. Small, altered exposures in the central portion of the target include milled hydrothermal breccias with leached silica textures and cross-cutting chalcedonic silica veins. No drilling has targeted this area, or any of the steam heated alteration at the appropriate depth for gold mineralization.

The project was generated using the same methodology used by the Company when it staked the Silicon project in 2015.

On January 18, 2022, the Company entered into an option agreement with K2 Gold Corporation ("K2") to earn 100% interest in the Si2 project subject to the following obligations:

	Cash payments (US\$)	Status	Minimum cumulative work requirements (US\$)	Status
On signing	\$50,000	<i>Received</i>	-	-
January 18, 2023 (1st anniversary)	\$100,000	<i>Received</i>	\$150,000	<i>Completed</i>
January 18, 2024 (2 nd anniversary)	\$100,000		\$650,000	
January 18, 2025 (3 rd anniversary)	\$250,000		\$1,250,000	
January 18, 2026 (4 th anniversary)	\$500,000		\$1,750,000	
January 18, 2027 (5 th anniversary)	\$1,500,000		\$2,500,000	
Total	\$2,500,000			

The Company retains 2.0% NSR royalty once the obligations are completed and the earn-in option is exercised.

In 2022, K2 completed a geochemical and geophysical program on the Si2 project outlining a region of strong mercury anomalism coincident with surface alteration. Induced Polarization and ELF surveys define a number of prospective structural targets that will be the focus of a 2023 drill program.

Nevada Generative Alliance

On September 12, 2022, the Company announced a generative exploration alliance (the "Alliance") with a subsidiary of Altius Minerals Corporation ("Altius"). The Alliance will focus on generating gold and silver targets considered geologically similar to the recent major gold deposit discovery at Silicon in the Walker Lane trend in Nevada, US. The initial annual budget of US\$300,000 is fully funded by Altius while the Company provides technical expertise and extensive technical database. Once a project is designated, ongoing expenses and recoveries are shared equally between the Company and Altius. The following projects were acquired during the Alliance to date:

- i. **Cuprite:** On September 12, 2022, the Company announced the acquisition of the Cuprite gold project. The project contains over twenty square-kilometres of advanced argillic alteration in

the Walker Lane, Nevada. The project is a strong analog to AngloGold Ashanti's Silicon deposit.

On January 23, 2023, the Company announced that it has completed a purchase and sales agreement with a wholly-owned U.S. subsidiary of Strikepoint Gold Inc. ("Strikepoint") whereby Strikepoint has acquired 100% interest in the project. Total consideration includes the issuance of 6,428,571 common shares of Strikepoint with a fair value of \$450,000, reimbursement of US\$35,208 in project related costs, and a 3% NSR royalty on the project. The project was generated under the Alliance and as such, total consideration received will be split even between the Company and Altius.

- ii. **Celts:** On January 9, 2023, the Company announced the acquisition of the Celts gold project. The project contains an untested advanced argillic alteration cell overlying possible epithermal gold mineralization at depth.

Pearl String

The Pearl String project is located in Mineral County, Nevada and is prospective for high sulphidation epithermal gold deposits. The project area encompasses the northwestern margin of a 25 square kilometer zone of magmatic hydrothermal alteration that has been dismembered by post-mineral right lateral strike slip faults. The southeastern fault block hosts the Isabella Pearl Mine, one of Nevada's newest heap leach gold operations.

On October 22, 2022, the Company entered into an option agreement with a wholly-owned subsidiary of Barrick Gold Corporation ("Barrick") whereby Barrick can earn a 100% interest in the Pearl String gold project located in the Walker Lane trend in Nevada, US. Barrick's obligations under the terms of the agreement include:

	Cash payments (US\$)	Status	Minimum cumulative work requirements (US\$)	Status
On signing	\$50,000	<i>Received</i>	-	-
October 22, 2023 (1st anniversary)	\$50,000		\$300,000	
January 18, 2024 (2 nd anniversary)	\$70,000		\$500,000	
January 18, 2025 (3 rd anniversary)	\$100,000		\$700,000	
January 18, 2026 (4 th anniversary)	\$375,000		\$1,000,000	
January 18, 2027 (5 th anniversary)	\$855,000		\$1,500,000	
Total	\$1,500,000		\$4,000,000	

Once Barrick exercises its option, the Company retains a 2.0% NSR royalty.

Other Projects

The Company also holds 100% in the Jake Creek project, Nevada. The project contains open ended epithermal gold mineralization in the Northern Nevada Rift. With historic drilling encountering up to 11.3 g/t over 1.5 metres in tertiary volcanic rocks.

Orogen holds up to 1.0% NSR royalty interest in the South Roberts project owned by Ivy Minerals, a Carlin-type gold target under shallow alluvial cover, just south of McEwen's Gold Bar Mine, on the Battle Mountain-Eureka Trend, approximately 82 kilometers (25 miles) NW of Eureka, Nevada and a 0.5% NSR on Conquest Nevada LLCs Spruce Mountain project.

Canada

Ball Creek

Ball Creek is a copper porphyry and epithermal gold project comprising 53,913 hectares, located in the Golden Triangle, northwestern British Columbia. The ground contains several porphyry copper-gold and epithermal gold systems associated with Jurassic intrusive rocks.

On April 20, 2015, the Company acquired a 100% interest in the Ball Creek property from LUFF Enterprises Ltd. (formerly Ascent Industries Corp. and Paget Minerals Corp.) Pre-existing encumbrances payable to Sandstorm Gold Royalties (“**Sandstorm**”) include:

- 2.0% NSR royalty payable to Sandstorm and the Company has an option to repurchase 1.0% of the NSR royalty for \$1.0 million;
- \$1.0 million payable to Sandstorm upon announcement of a measured or indicated mineral resource estimate (NI 43-101 compliant) of at least 1.0 million oz gold equivalent resource; and
- \$3.0 million payable to Sandstorm on a positive NI 43-101 compliant Feasibility Study.

To earn a 100% interest, the Company is required to make the following payments:

- \$150,000 upon closing of the agreement (paid);
- If the Company enters into an option agreement whereby the Company would receive payments related to the property at any time within the four years following the date of the agreement, the Company will be required to pay additional consideration of 40% of payments received during the first year, 30% of payments received during the second year, 20% of payments received during the third year and 10% of payments received during the fourth year; and
- Milestone share payments (or cash equivalent at the Company’s election) of:

	Share or cash equivalent payments	Status
Signing	100,000	<i>Issued- 2017</i>
Completion of 10,000 metres of drilling	250,000	<i>Agreement terminated- December 12, 2020</i>
Announcement of M&I Resource Estimate of at least 500 million tonnes at grade of at least 0.50% copper equivalent	400,000	<i>Terminated</i>
Completion of a NI 43-101 Feasibility Study	500,000	<i>Terminated</i>
Total Shares	1,250,000	

On December 12, 2020, the Company terminated the agreement with LUFF and paid \$20,000 in consideration to acquire 100% interest in Ball Creek. The Company has no further obligation to LUFF and retains 100% interest in the Ball Creek property.

On August 18, 2021, the Company announced the spinout the Ball Creek project into a new company (“**SpinCo**”) by way of a Plan of Arrangement under the British Columbia Corporation Act. Shareholders of the Company will maintain their existing ownership of common shares in the Company and gain new shares of SpinCo on a ratio to be determined. In addition, the Company will also retain 0.5% NSR royalty on the project. SpinCo will focus on the exploration and advancement of the project.

On March 2, 2023, the Company announced that the Ball Creek project has been divided into two claim blocks that included Ball Creek East (Hwy 37) and Ball Creek West.

- i. **Ball Creek West:** Consist of 18,893 hectares of mineral claims. Porphyry targets on the Ball Creek West property including More, Mess, and Hickman have seen limited exploration:
- The More zone consists of an undrilled Galore Creek style megacrystic syenite porphyry occurrence partially hidden by Quaternary basalts;
 - The Mess zone consists of copper mineralization associated with the eastern contact of a monzonitic stock; and
 - The Hickman target, discovered in 2019, represents an undrilled porphyry target with copper-gold mineralization at surface in a potassically altered diorite eight kilometres from Schaft Creek.

On March 3, 2023, the Company entered into a purchase and sales agreement with P2 Gold Inc. (“P2 Gold”) for the sale of 100% interest in Ball Creek West. As consideration, the Company will receive \$1.0 million in fair value of P2 Gold common shares, 1.0% NSR royalty, and the right to acquire an additional 1.0% NSR royalty of the underlying agreement on the project held by Sandstorm.

- ii. **Ball Creek East (Hwy 37):** Consist of 35,080 hectares of mineral claims focussed on the Ball Creek Main zone (“MZ”) a 1,200 by 400 metre porphyry system that has returned drill intersects including 455 metres grading 0.28 g/t gold and 0.11% copper in drill hole BC12-47, and 231 metres grading 0.54 g/t gold and 0.21% copper in drill hole BC07-12. The MZ remains open with anomalous intercepts at the extremities of the drilled area, untested internal areas, and depth potential. Outside of the MZ, the 12 square-kilometre Ball Creek Cluster is defined by highly anomalous copper, gold and molybdenum soil and rock geochemistry with multiple exposures of porphyry-style alteration.

On March 3, 2023, the Company announced that it has entered into an option agreement with Kingfisher Metals Inc. (“Kingfisher”) whereby Kingfisher can earn 100% interest in Ball Creek East by meeting the following obligations:

	Fair Value of Common Shares to be Issued	Additional Consideration	Minimum Exploration Expenditures
On signing	\$300,000	1% NSR on Ecstall Project	-
March 3, 2024 (1 st anniversary)	\$400,000	-	\$500,000
March 3, 2025 (2 nd anniversary)	\$500,000	-	\$1,000,000
March 3, 2026 (3 rd anniversary)	\$1,000,000	-	\$2,000,000
March 3, 2027 (4 th anniversary)	\$1,300,000	-	\$4,000,000
Total	\$3,500,000	-	\$7,500,000

Upon exercise of the option agreement, Kingfisher will transfer to Orogen the right to acquire 1.0% NSR royalty of the underlying agreement on the project held by Sandstorm. As additional consideration of the option agreement, Kingfisher will also grant the Company 1.0% NSR on its Ecstall project, located in central coast BC, Canada.

Axe

The Axe project lies immediately south and adjacent to Kodiak’s MPD project, where drilling in 2019 resulted in the discovery of the Gate Zone, a high-grade copper-gold zone with characteristics of a large porphyry system. The 4,893- hectare Axe project contains extensive copper-gold bearing porphyry systems within the highly prospective southern Quesnellia terrane rocks, the same rocks that host the Highland Valley, Copper Mountain and New Afton Mines in south-central British Columbia.

On December 6, 2016, the Company acquired a 100% interest in the Axe property from Liberty Leaf Holdings Ltd. (“**Liberty Leaf**”) and Bearclaw Capital Corp. (“**Bearclaw**”), subject to:

- 1.0% NSR royalty covering 21 claims and the Company has an option to repurchase the 1.0% NSR royalty for \$1.5 million; and
- 2.0% NSR royalty on four separate claims and the Company has an option to repurchase 1.0% of the NSR royalty \$1.0 million and the remaining 1.0% NSR royalty for \$2.0 million.

To earn a 100% interest, the Company is required to make the following payments:

- \$30,000 (\$21,000 to Liberty Leaf and \$9,000 to Bearclaw) upon closing of the agreement (paid); and
- Share or cash equivalent payments at the Company's selection according to the following milestones:

	Share or cash equivalent payments	Status
Upon entering into a future option agreement	75,000	<i>Issued</i>
Upon entering into a future agreement to drill 5,000 metres	75,000	<i>Assigned to Kodiak Copper Corp. ("Kodiak") whereby Kodiak will make a cash payment to the value of 75,000 common shares of the Company up to a maximum of \$50,000.</i>
Upon announcement of a measured or indicated mineral resource estimate (NI 43-101 compliant) of at least 500 million tonnes at a grade of at least 0.40% copper equivalent	200,000	<i>Assigned to Kodiak whereby Kodiak will make a cash payment to the value of 200,000 common shares of the Company up to a maximum value of \$150,000.</i>
Completion of a NI 43-101 compliant Feasibility Study	250,000	<i>Assigned to Kodiak whereby Kodiak will make a cash payment to the value of 250,000 common shares of the Company up to a maximum value of \$200,000.</i>
Total Shares	600,000	

On April 16, 2021, the Company sold the Axe project to Kodiak for consideration of 950,000 common shares of Kodiak for a deemed fair value of \$1,472,500 and a 2.0% NSR royalty, of which 0.5% can be purchased for \$2.0 million. Kodiak also assumes the remaining obligation owed to Nova and Bearclaw, up to certain limits (see part (a)), in accordance with the December 6, 2016 acquisition agreement.

Lemon Lake

The Lemon Lake Project is a 26 square kilometer alkalic porphyry copper-gold project located 6 kilometres east of the Hamlet of Horsefly in the Cariboo Mountains, British Columbia. The project covers the Lemon Lake stock and a copper-gold porphyry target defined by soils, IP and shallow percussion drilling through glacial till.

On October 4, 2018, the Company acquired a 100% interest in the Lemon Lake property from Metalogic Exploration Inc. The agreement was subsequently amended on February 17, 2021. To earn a 100% interest, the Company is required to make cash or share equivalent payments according to the following milestones:

	October 4, 2018 Agreement- cash or share equivalent payments	February 17, 2021, Amendment- cash or share equivalent payments	Status
Closing of agreement	\$15,000	\$15,000	<i>Paid</i>
Upon entering into a Future Option Agreement	\$25,000	-	
February 18, 2022 - On the 1 st anniversary of the Acme option agreement	-	\$7,500	<i>Paid</i>
February 18, 2023 - On the 2 nd anniversary of the Acme option agreement	-	\$17,500	<i>Acme Option Agreement Terminated on February 15, 2023</i>
Upon entering into an agreement to drill 10,000 metres	\$25,000	\$25,000	
Upon announcement of a M&I or inferred (NI 43-101 compliant) mineral resource estimate of at least 200,000,000 tons at a grade of at least 0.50% copper equivalent.	\$150,000	\$150,000	
Upon decision to bring the property into commercial production	\$500,000	\$500,00	
Total	\$715,000	\$715,000	

On February 18, 2021, the Company entered into an agreement with Acme Company Limited (“**Acme**”), a private British Columbia based company to option the Lemon Lake property. Acme can acquire a 100% interest in the Lemon Lake by making cash payments of \$575,000 and work expenditures of \$3.0 million over a five-year period according to the following schedule and granting a 1.0% NSR royalty to the Company:

	Option payments	Status	Minimum work expenditure	Status	Milestone payments	Status
On or before February 18, 2022 (1 st anniversary)	-		\$75,000		\$7,500	<i>Received</i>
February 18, 2023 (2 nd anniversary)	\$10,000		\$75,000		\$17,500	<i>Terminated February 15, 2023</i>
February 18, 2024 (3 rd anniversary)	\$65,000		\$350,000		-	-
February 18, 2025 (4 th anniversary)	\$100,000		\$1,000,000		-	-
February 18, 2025 (5 th anniversary)	\$400,000		\$1,500,000		-	-
Upon the completion of an aggregate of 10,000 metres of drilling as part of Mining Work	-		-		\$25,000	-
Upon the announcement of a measured or indicated mineral resource estimate of at least 200,000,000 tons at a grade of at least 0.50% copper equivalent	-		-		\$150,000	-
Upon the Optionee’s decision to bring a mine on the property into commercial production.	-		-		\$500,000	-
Total	\$575,000		\$3,000,000		\$700,000	

On September 20, 2022, Acme announced results from a two hole, 501 metre diamond drilling program. Results included Hole LL-22-01 which returned 60.95 metres at 0.096% copper and 0.069 g/t gold and LL-22-02 which returned 39.8 metres at 0.044% copper and 0.079 g/t gold.

On February 15, 2023, the Company and Acme agreed to terminate this option agreement.

TREK 31

The Trek 31 project is an early-stage exploration property located in the Nechako Plateau, British Columbia. The property is located 30 kilometres northeast of New Gold Inc.'s Blackwater gold silver deposit (year-end reserves of 8.2 M ounces gold and 60.8 M ounces silver. TREK 31 was identified by Orogen using data from Geoscience BC's TREK initiative.

On February 18, 2020, the Company announced its ownership of the TREK 31 property which covers a Blackwater-Davidson like intermediate sulfidation target in the Nechako Plateau of British Columbia. The property was staked in 2018 covering one of the largest and strongest geochemical anomalies identified by Geoscience BC's TREK initiative.

On October 13, 2020, the Company entered into an option agreement with Pacific Imperial Mines Inc. ("Pacific Imperial") whereby Pacific Imperial can earn up to a 100% interest in the project by making cash payments totaling US\$1.3 million and incurring \$3.0 million in exploration expenditures over a five-year period. The Company will retain a 3.0% NSR royalty on the TREK 31 claims of which 1.0% can be repurchased for \$3.0 million.

	Option payments (US\$)	Status	Minimum aggregate work expenditure	Status
April 13, 2021 (6 months from Effective Date)	\$20,000	<i>Received</i>	-	-
October 13, 2021 (1 st anniversary)	\$30,000	<i>Received</i>	\$300,000	<i>Extended for nine months</i>
October 13, 2022 (2 nd anniversary)	\$50,000	<i>Terminated October 31, 2022</i>	\$1,000,000	<i>Terminated October 31, 2022</i>
October 13, 2023 (3 rd anniversary)	\$100,000	-	\$1,500,000	-
October 13, 2024 (4 th anniversary)	\$100,000	-	\$2,000,000	-
October 13, 2025 (5 th anniversary)	\$1,000,000	-	\$3,000,000	-
Total	\$1,300,000			

Basal Till geochemical sampling by the Company outlined a 2.3 kilometre by 900 metre gold-in-till anomaly situated down ice of a major structural break between rocks of the Stikine Terrane and magnetic rocks interpreted to be volcanic and intrusive rocks of Eocene age. TREK-31 exhibits potential for a Blackwater-Davidson deposit exploration target.

On February 23, 2021, the Company announced that with Pacific Imperial, it has completed additional till sampling and approximately 12 kilometres of pole dipole IP geophysics on the TREK-31 project. The survey defined a greater than 200 metre wide chargeability anomaly within a highly resistive unit immediately south of a pronounced magnetic high and coincident with a strong gold in basal till anomaly. This geophysical signature prompted the acquisition of an additional 26.1 square kilometres of claims and will serve as the basis for drill targeting by Pacific Imperial in 2021.

On October 31, 2022, the Company and Pacific Minerals agreed to terminate this option agreement. For the year ended December 31, 2022, the Company recognized an impairment of \$155,657 on this project, resulting in a carrying value of \$nil (2021 - \$170,494).

In January 2023, the project was dropped and all permits were closed.

Astro

The 288 square-kilometre Astro project is located six kilometres north of the Mile 222 airstrip and 195 kilometres northeast of Ross River along the Canol Road in the Northwest Territories, providing seasonal road access to the southern boundary of the property. The Astro project was generated from a July 10, 2017 alliance between the Company and Newmont Mining Corporation (“**Newmont**”). The alliance focused on generating greenfield exploration opportunities in terranes favorable for world-class gold orebodies. On April 10, 2020, the Company and Newmont have both agreed to terminate the alliance agreement.

Newmont retained a 0.5% NSR royalty on all minerals produced from the project of which the entire royalty can be purchased for US\$1.0 million.

On September 1, 2022, the Company entered into an option agreement with Rackla Metals Inc. (“Rackla”) for the Astro project. Under the terms of the option agreement, Rackla can earn a 100% interest in the project by meeting the following obligations:

	Cash payments	Common Share issuance	Minimum qualified expenditures	Status
On signing (3-days after regulatory approval)	-	120,000- fair value of \$25,200	-	<i>Received</i>
September 1, 2023 (12 months following regulatory approval date)	\$382,000*	-	\$250,000	
Total	\$382,000	120,000	\$250,000	

*Payable in common shares of Rackla, or a combination of common shares and cash at the discretion of Rackla. However, the amount of cash portion may not exceed \$191,000 and the number of common shares issued will be calculated based on a 30-day VWAP of Rackla’s shares immediately preceding the date of issuance of common shares.

In addition to the above, Rackla is also replacing the \$40,000 bond that was placed by the Company on the project.

Once Rackla has exercised its option to acquire the Astro project, the Company will retain a 2.5% NSR royalty.

Onjo

Onjo is a copper-gold porphyry project located in north central British Columbia in the Quesnellia arc and on a magnetic trend hosting the Mount Milligan mine and the Kwanika and Chuchi copper-gold deposits. It is also within ten kilometres from Centerra Gold’s Mt. Milligan Mine.

On February 3, 2022, the Company completed a purchase and sales agreement with Pacific Ridge Exploration Ltd. (“**Pacific Ridge**”) to sell 100% interest in the Onjo project for \$50,000 cash, 750,000 common shares of Pacific Ridge, and retaining a 2.0% NSR royalty, of which 0.5% can be purchased for US\$1.5 million. The Company recorded a gain of \$177,741 whereby proceeds from sale were greater than carrying value.

On December 13, 2022 Pacific Ridge announced that the 2022 exploration program at the Onjo copper-gold project identified three new porphyry copper-gold targets. The exploration program at Onjo consisted of prospecting, geological mapping, a soil sampling program and ZTEM airborne geophysical survey.

Hank

Hank is a 17 square kilometre copper-gold project located in British Columbia's Golden Triangle. The current operator of the project is Kingfisher who acquired the Hank project from Golden Ridge Resources on March 7, 2023. The Hank project is located within the Company's 520 square kilometre Ball Creek claims and is prospective for porphyry copper-gold mineralization and high-grade epithermal style mineralization.

In connection with the November 4, 2022 option agreement between the Company and NGM on the Maggie Creek project, the Company acquired a 3.0% NSR royalty and the right to a US\$2.5 million milestone payment.

Ecstall

The Ecstall property is a 280 square kilometre copper-gold VMS project in the central coast of British Columbia focused on the Ecstall Greenstone Belt. The current operator of the project is Kingfisher.

In connection with the March 3, 2023 option agreement between the Company and Kingfisher on the Ball Creek East property, the Company acquired a 1.0% NSR royalty on the Ecstall property.

Other Projects

On February 23, 2021, the Company announced that it has acquired three land positions in the Nechako Plateau targeting Blackwater-Davidson like intermediate sulfidation epithermal gold systems covered by shallow glacial till. One of these targets, Cuervo, is currently being marketed.

Mexico

Cumobabi

Cumobabi consists of 240 square kilometres of contiguous mineral tenure adjoining First Majestic's Ermitaño project. Cumobabi covers the majority of the Cumobabi breccia district and surrounds the past producing Cumobabi mine.

Pursuant to the Cumobabi acquisition agreement (as amended) with Kiska Metals Corporation, now Centerra Gold Inc. ("**Centerra**"), the Company issued 25,000 (fair valued \$32,250) and 50,000 (fair valued \$18,750) common shares on September 17, 2018 and 2019, respectively. In the event the property is put into commercial production (in which case it is acknowledged that the Company will receive an NSR royalty in accordance with the terms of the First Majestic option agreement), the Company will pay to Centerra one-third (1/3) of all amounts received under the NSR royalty commencing on the second anniversary of commercial production (as defined pursuant to the terms of the agreement governing the NSR royalty).

On May 23, 2018, Centerra transferred the NSR royalty rights to 10782343 Canada Limited/ Triple Flag.

In September 2018, First Majestic acquired 100% interest in the Cumobabi project for US\$500,000 subject to a 1.5% NSR royalty.

Sarape

The Sarape Project is a 57 square-kilometre land package covering quartz-carbonate veins with high-level epithermal features developed on the margins of a horst. The Sarape vein, which varies in width from 3 to 12 metres, has been mapped and sampled over a strike length of five kilometres. The Chiltepin vein, which averages 3 metres in width on surface, has been traced over a strike length of 2.5 kilometres. Both veins display high-level epithermal features and elevated gold-silver values.

In August 2017, the Company announced the acquisition of the Sarape gold-silver project in central Sonora, Mexico. Sarape was identified through the Company's generative programs with reconnaissance exploration completed in early 2017. The project is 100% owned by the Company with no underlying

royalties and is located near excellent infrastructure with roads and power crossing the 5,776-hectare property.

On August 25, 2020, the Company optioned the Sarape project to Hochschild Mining PLC (“**Hochschild**”). Hochschild can earn a 100% interest in the project by making staged cash payments of US\$5.35 million and incurring exploration expenditures of US\$5.0 million over a five-year period. Upon earn in, the Company will retain a 3.0% NSR royalty of which 1.0% can be repurchased for US\$2.0 million.

On September 19, 2021, the option agreement with Hochschild was terminated.

On July 25, 2022, the Company announced the closing of a royalty acquisition whereby the Company acquired 3.0% net smelter royalties on three prospective mineral licenses in the Lake Victoria Fields in western Kenya from Advance. As consideration, the Company paid Advance US\$120,000 and transferred its interest in the Sarape Gold project located in Sonora, Mexico, to Advance. Orogen will retain 2.0 % NSR royalty on the Sarape project.

Cumaro

The Cumaro project is located 45 kilometres from Las Chispas mine and 45 kilometres southeast of the Cananea copper mine. Cumaro is owned by Heliostar Metals S.A. DE C.V. and the Company holds a 1.0% NSR royalty on the project. The Cumaro project is a low to intermediate sulphidation epithermal variety and the type of mineralization is typical of the silver-gold metallogenic of the Sierra Madre Occidental. The main geological structures hosting the mineralized vein run for 1.5 kilometres and generally occur in Lower Volcanic Complex at, or near, the inferred contact between andesitic and felsic sequences.

On February 9, 2022, Heliostar announced the following drill results:

- VVDH22-09: 0.89 g/t gold equivalent over 8.1 metres including 1.65 g/t over 3 metres;
- VVDH21-02: 1.87 g/t gold equivalent over 1.15 metres; and
- VVDH21-01: 1.79 g/t gold equivalent over 1.1 metres.

Remaining drill results have not been released.

La Lola

The project is located in Sonora, Mexico and is a large 6,301-hectare land package located ten kilometers southeast of the town of Esqueda, Sonora in the Sierra Madre in northern Sonora State. Located within an emerging low to intermediate sulphidation epithermal. The project covers the La Barra vein, a five-kilometre long manganiferous calcite-fluorite vein with elevated gold, silver, and mercury values in flexures along the strike of the vein. Margins of the La Barra vein also display lattice-bladed quartz after calcite. Collectively, widespread clay alteration and low temperature vein textures suggesting only minor erosion, these features are indicative of the higher levels of an epithermal vein system. Potential exists for epithermal gold-silver targets at depth, none of which have been tested by drilling.

On March 25, 2019, the Company entered into an agreement with a group of third parties to purchase 100% of the La Lola property by making a total cash payment of US\$100,000 per the following schedule:

	Cash payment (US\$)	Status
Signing	\$25,000	<i>Paid</i>
March 25, 2020 (1 st anniversary)	\$25,000	<i>Paid</i>
March 25, 2021 (2 nd anniversary)	\$25,000	<i>Project sold- July 24, 2020</i>
March 25, 2022 (3 rd anniversary)	\$25,000	<i>Project sold- July 24, 2020</i>
Total	\$100,000	

The optionor holds 1.0% NSR royalty. The Company or any other third party it elects shall have a buyback right of the 1.0% NSR royalty by paying US\$500,000.

On July 24, 2020, the Company sold the project to Heoliodor Metals S.A. DE C.V., a private company, for US\$12,500. The Company retains a 2.0% NSR royalty, of which 1.0% may be repurchased for US\$1.75 million.

On March 4, 2021, Heliostar announced a 1,500 metre drilling program on the 63.6 square kilometre at the La Lola property.

On March 29, 2021, Heliostar Metals announced the results of a 1,500 metre drilling program. Three holes were completed with the following results:

- LOLA21-01 - no significant results;
- LOLA21-02 - 2.5 metres grading 92.0 g/t silver; and
- LOLA21-03 – assays pending.

On June 3, 2021 Heliostar Metals announced the completion of four holes at La Lola with assays from LOLA 21-03 and 21-04 pending. There has been no further update.

Llano del Nogal

The project is located in Sonora, Mexico and is a 98 square kilometre concession covering 25 square kilometres of altered volcanic and intrusive rocks on the prolific Nacozari porphyry copper trend in northern Mexico.

On December 18, 2012, the Company signed an agreement with Altius Minerals Corp. (“**Altius**”) for a four-year, \$1.5 million, regional exploration alliance. Altius has the right of first offer on the sale of any alliance Project royalties owned by the Company.

Pursuant to the alliance agreement with Altius, encumbrances on the Llano del Nogal project include:

- Llano del Nogal Claims - 1.0% NSR royalty on base metals and 1.5% NSR royalty on precious metals payable to Altius; and
- Coyotes Claims - 1.5% NSR royalty payable to Altius and the 1.5% NSR royalty can be repurchased for US\$1.5 million.

Suanse

The project is located in Sonora, Mexico and covers 1,115 hectares of ground north of the Company’s porphyry target on the Llano del Nogal project.

On November 21, 2019, the Company entered into an agreement with San Marco Resources Inc. (“**San Marco**”) to acquire 100% interest in Suanse project for US\$75,000 per the following schedule:

	Cash payment (US\$)	Status
Signing	\$25,000	<i>Paid</i>
Completion of 1,000 metres of drilling	\$25,000	
Entering into a future option agreement	\$25,000	
Total	\$75,000	

San Marco holds a 1.0% NSR royalty and the Company has a buyback right to acquire the 1.0% NSR royalty by paying \$1.0 million.

On May 3, 2022, the Company signed an option agreement with Riverside for the Llano de Nogal and Suanse whereby Riverside can earn 100% interest in the properties by making cash payments totalling US\$2.48 million and incur exploration expenditures of US\$5.0 million over a six-year period per the following schedule:

	Cash payment (US\$)	Status	Cumulative Exploration Expenditures (\$US)	Status
Closing of Transaction	\$30,000	<i>Received</i>	-	
May 3, 2023 (1 st anniversary)	\$50,000		\$500,000	
May 3, 2024 (2 nd anniversary)	\$50,000		\$1,300,000	
May 3, 2025 (3 rd anniversary)	\$100,000		\$2,000,000	
May 3, 2026 (4 th anniversary)	\$200,000		\$3,000,000	
May 3, 2027 (5 th anniversary)	\$300,000		\$4,000,000	
May 3, 2028 (6 th anniversary)	\$1,750,000		\$5,000,000	
Total	\$2,480,000			

Orogen will retain a 1.0% production royalty and Riverside will retain a 10 year buy-down right whereby 0.5% can be purchased for US\$10.0 million. In addition, during the option period, Orogen and Riverside will jointly retain the right to exercise and retain any NSR royalty buydown rights with respect to the Suanse claims (0.5% NSR royalty for \$1.0 million) and the Coyotes claim (1.5% NSR royalty for US\$1.5 million).

Other Projects

On August 15, 2022, the Company announced that it has acquired the La Verdad epithermal gold-silver project in Durango Mexico. The property consists of drill ready subparallel quartz veins measuring over 2.5 kilometers along strike with recent trench results including 3.1 grams per tonne (“g/t”) gold and 190 g/t silver over 2.3 metres.

The Company holds a 0.5% NSR royalty on the Cuale gold project in Jalisco, Mexico operated by Rockstar Mining.

Kenya

Lake Victoria Gold Fields

On July 25, 2022, the Company acquired a 3.0% net smelter royalty on three prospective mineral licenses in Lake Victoria Gold Fields in western Kenya from Advanced. These include Rosterman, Sigalagala, and Burkura. The licenses collectively cover approximately 20 square kilometres of ground within a larger land package known as the West Kenya Project held by Shanta Gold Limited (“Shanta Gold”). Shanta Gold is an AIM-listed gold producer with operations in Tanzania and western Kenya. As consideration, the Company paid US\$120,000 and transferred 100% of its title and interest in the Sarape gold-silver project, located in Sonora, Mexico, to Advance. The Company retains 2.0% NSR royalty on the Sarape project.

Sigalagala and Bukura are located approximately four kilometres east and two kilometres northwest respectively of the Isulu and Bushiangala deposits that are currently being advanced by Shanta Gold. Indicated resources of 378,000 ounces gold grading 11.70 g/t and inferred resources of 739,000 ounces gold grading 10.80 g/t gold at Isulu and Bushiangala were announced in March 2021. Recent infill drilling at the Bushiangala announced in May 2022 include drill-hole 336 grading 19.2 g/t gold over 4.0 metres and 1,015 g/t gold over 0.5 metres within a 13.8 metre interval grading 46.7 g/t gold. Shanta Gold plans to initiate a feasibility study on the deposits over the duration of 2022. Bukura and Sigalagala cover the extensions of the shear zone that forms the structural setting for Isulu and Bushiangala.

Previous exploration on the Sigalagala and Bukura licenses includes soil geochemistry, geophysics and several air-core, reverse circulation, and diamond drilling campaigns. Highlight drill holes from the Sigalagala license include LCD0013 grading 8.74 g/t gold over three metres from 62 metres, and LCD0036

grading 4.94 g/t gold over 1.2 metres from 221.9 metres. At Bukura, drillhole LCD0043 grades 7.10 g/t over one metre.

The Rosterman license lies approximately eight kilometres north of the Isulu and Bushiangala deposits and contains the historical Rosterman Mine where approximately 250,000 ounces of gold grading 12.3 g/t were produced from shallow dipping quartz veins hosted within diorite. An interpreted splay fault travels northeast from the mine and coincides with a coherent gold soil anomaly extending over 1.8 kilometres. The extensive and strong soil geochemistry appears to be related to the historical Rosterman Mine and defines an attractive drill target.

Argentina

Four Royalty Package

The Company holds a 1% NSR on a four royalties package covering properties held by Magna Terra Minerals. The four properties are Luna Roja, Piedra Negra/Cerro Covadonga, El Meridiano, and Gertrudis; all are located in the Deseado Massif in Santa Cruz Province, Patagonia, in southern Argentina.

7. DIVIDENDS

Since incorporation, Orogen has not declared and paid any dividends on any of its Common Shares. The Company currently has no intention to pay dividends, however, any future dividend policy shall be determined by the Board of Directors of the Company the basis of profitability, results of operations, cash flow, and financial condition. See *Section 5- Risks and Uncertainties*. The Company is prohibited from paying any dividend which would render it insolvent.

8. DESCRIPTION OF CAPITAL STRUCTURE

Orogen's authorized share capital consist of an unlimited number of Common Shares without par value at December 31, 2022, the Company had 179,200,795 Common Shares outstanding. As at March 31, 2022 the Company had 184,028,600 Common Shares outstanding.

All issued Common Shares are fully paid and non-assessable. The Common Shares have equal voting rights, participation and distribution of Orogen's assets upon liquidation, dissolution or winding-up. Holders of Common Shares are entitled to receive notice of, attend and vote at all meetings of shareholders of Orogen. Each Common Share carries one vote at such meetings. Holders of Common Shares are also entitled to dividends if and when declared by the directors and, upon liquidation, to receive such portion of the assets of Orogen as may be distributable to such holders.

9. MARKET FOR SECURITIES

i. Trading Price and Volume

The Common Shares are listed and trading on the TSX Venture Exchange (the "Exchange") under the symbol OGN and OTCQX under the symbol OGNRF. The following table summarizes trading of the Common Shares on the Exchange for the most recently completed financial year.

The price of the Common Share as quoted on the Exchange at the close of business on March 31, 2022 was \$0.51.

Month Ended	High (\$)	Low (\$)	Volume
January 1 to March 31, 2023			
March 31, 2023	0.53	0.46	1,478,800
February 28, 2023	0.54	0.48	1,262,000
January 31, 2023	0.55	0.49	1,356,400
Year Ended December 31, 2022			
December 31, 2022	0.54	0.40	1,477,400
November 30, 2022	0.43	0.38	1,168,700
October 31, 2022	0.44	0.38	1,021,800
September 30, 2022	0.42	0.38	911,300
August 31, 2022	0.44	0.38	892,500
July 31, 2022	0.44	0.34	1,086,800
June 30, 2022	0.47	0.36	1,700,500
May 31, 2022	0.47	0.35	1,773,900
April 30, 2022	0.51	0.44	1,934,000
March 31, 2022	0.48	0.45	1,386,400
February 28, 2022	0.52	0.45	1,162,000
January 31, 2022	0.51	0.44	880,000

ii. **Common Share Purchase Warrants**

The following are issued and outstanding common share purchase warrants as at December 31, 2022. Each common share purchase warrant entitles the holder to acquire one Common Share of the Company upon exercise and payment of exercise price before expiry date.

Expiry Date	Warrants Outstanding (number of shares)	Exercise Price	Weighted Average Remaining Life
May 16, 2023	15,801,871	\$ 0.39	0.37
April 30, 2024	7,115,545	\$ 0.40	1.33
	22,917,416	\$ 0.39	0.67

Subsequent to December 31, 2021, 4,827,805 common share purchase warrants with an exercise price of \$0.39 were exercised resulting in 18,089,611 common share purchase warrants outstanding.

iii. **Omnibus Equity Compensation Plan**

At the Annual General and Special Meeting on October 27, 2022, the Company has adopted an Omnibus Equity Compensation Plan (the "Plan") that allows the Board of Directors of the Company to grant Stock Options, Restricted Share Units, Deferred Share Units and Performance Share Units to senior officers, employees, consultants and Directors through the acquisition of common shares of the Company. The Plan is a "rolling up to 10%" as defined by Policy 4.4- Security Based Compensation of the TSX Venture Exchange. Pursuant to the plan, the number of shares that are issuable pursuant to the exercise of awards granted shall not exceed 10% of the issued shares of the Company as at the date of any award grant. Shareholders are required to adopt the Plan and re-approve it on a yearly basis thereafter.

iv. Options Issued

The following are outstanding stock options as at December 31, 2022.

Expiry Date	Options Outstanding (number of shares)	Options Exercisable (number of shares)	Exercise Price	Weighted Average Remaining Life
2023-08-14	373,440	373,440	\$ 0.16	0.62
2024-07-17	821,568	821,568	\$ 0.23	1.55
2025-11-23	500,000	300,000	\$ 0.33	2.90
2026-03-25	500,000	333,334	\$ 0.33	3.23
2026-08-03	500,000	333,334	\$ 0.37	3.59
2026-10-26	2,990,000	1,980,000	\$ 0.36	3.82
2027-11-28	500,000	166,666	\$ 0.41	4.91
	6,185,008	4,308,341	\$ 0.33	3.27

No stock options were exercised subsequent to December 31, 2022.

On February 2, 2023, the Company granted 1,953,000 stock options to officers, employees and consultants. The stock options have a life of five years, an exercise price of \$0.51 and will vest over three years including 25% that will vest immediately followed by 25% on the first, second and third anniversaries from the date of grant.

On February 17, 2023, the Company granted 238,000 stock options to independent Board members. The stock options will have a life of five years and an exercise price of \$0.53 and will vest over three years including 25% that will vest immediately followed by 25% on the first, second and third anniversaries from the date of grant.

As at March 31, 2023, the Company has 8,376,008 stock options outstanding with a weighted average exercise price of \$0.38 and weighted average life of 3.5 years.

v. Restricted Share Units

On February 2, 2023, the Company granted 711,111 Restricted Share Units (“RSUs”) to officers and employees. The RSUs will fully vest on the second anniversary of the date of grant.

On February 17, 2023, the Company granted 156,000 RSUs to independent Board members. The RSUs will fully vest on the second anniversary of the date of grant.

As at March 31, 2022, the Company has 867,111 RSUs outstanding.

vi. Restricted Share Units

On February 17, 2023, the Company granted 156,000 DSUs to independent Board members. The DSUs awarded will vest 50% each on the third and fourth anniversaries of the grant date and will settle on the termination of service.

As at March 31, 2022, the Company has 156,000 DSUs outstanding.

10. DIRECTORS AND OFFICERS

i. Directors and Officers

The name, province or state and country of residence and position with the Company of each director and executive officer of the Company, and the principal business or occupation in which each director or executive officer has been engaged during the immediately preceding five years, effective on the date of this AIF, is as follows:

Name and Address of Nominee and Present Position with the Company	Position(s) with the Company	Period from which Nominee has been a Director and/or Officer	Principal Occupation During the Preceding Five Years
J. Patrick (Paddy) Nicol ^[2] Coquitlam, BC, Canada	President & Chief Executive Officer, Director	February 10, 2021	President & Chief Executive Officer, Orogen Royalties Inc. (2011-Present).
Justin J. Quigley Sandy, UT, United States	Director and Chair	July 27, 2021	Vice President- Commercial of Rio Tinto Exploration in the Americas (2008-2021), non-executive Director of MCC Mining (2021-2022), and VP- Commercial & Legal Affairs for MCC Mining (2022-Present).
Timothy M. Janke ^[1] Winnemucca, NV, United States	Director	August 18, 2020	Director of Renaissance Gold Inc. (2011 to 2020), Director of US Gold Corp. (2014-2020), and COO of Pershing Gold (2014-2019).
Roland W. Butler ^[1,2] Laurenceton, NL, Canada	Director	March 25, 2021	President & CEO of Callinan Royalties Corporation (2010-2014), non-executive Director of Millrock Resources (2010-Present), Adia Resources (2018-Present), and Aurum Global Exploration (2020-Present).
Samantha Shorter ^[1,2] Vancouver, BC	Director	October 27, 2022	Partner at Red Fern Consulting Ltd., Director of Pacific Empire Metals Corp. (2021 – Present), Sorrento Resources Ltd (2022 – Present), and Hawthorn Resources Corp. (2022 – Present)
Marc Tran Vancouver, BC	CFO	November 26, 2020	CFO of eCobalt Solutions Inc.,(2011-2019), Consultant (2020), and CFO of Orogen (2020-Present).
Rosana Batista Vancouver, BC	Corporate Secretary	September 1, 2016	Corporate Secretary for the Company since (2016 – Present)

Name and Address of Nominee and Present Position with the Company	Position(s) with the Company	Period from which Nominee has been a Director and/or Officer	Principal Occupation During the Preceding Five Years
Marco LoCascio New York, NY, United States	VP Corporate Development	October 1, 2021	Director at Orezone Gold Corporation (2018 – Present), and CEO at Adia Resources (2018 – 2021)

1. Member of the Compensation Committee.

2. Member of the Audit Committee

ii. Shareholdings of Directors and Executive Officers

As at December 31, 2022, directors and officers of the Company, in aggregate, beneficially owned, directly and indirectly, or exercised control or direction 7,398,077 Common Shares, representing approximately 4.13% of the total number Common Shares outstanding before giving effect to the exercise of options or warrants to purchase Common Shares held by such directors and executive officers.

iii. Case Trade Orders, Bankruptcies, Penalties or Sanctions

Corporate Cease Trade Orders

As at the date of this AIF, no current director or executive officer of the Company is, or within the ten years prior to the date of this AIF has been, a director, chief executive officer or chief financial officer of any company (including Orogen), that was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued:

- a. while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or
- b. after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

Bankruptcy

To the best of the Company's knowledge, no director, executive officer or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company:

- a. is, as at the date of this AIF, or has been within 10 years before the date of this AIF, a director or executive officer of any company (including Orogen) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceeding, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- b. has, within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, become subject to or instituted any proceedings, arrangement or compromise with

creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

Penalties and Sanctions

To the knowledge of the Company, as at the date of this AIF, no current director, executive officer, or shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company has been subject to:

- a. any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or
- b. any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

iv. Conflicts of Interest

To the best of the Company's knowledge, and other than as disclosed in this AIF, there are no known existing or potential material conflicts of interest between the Company and any director or officer of the Company, except that certain of the directors and officers serve as directors and officers of other public companies and therefore it is possible that a conflict may arise between their duties as a director or officer of the Company and their duties as a director or officer of such other companies.

Directors and officers of the Company also serve as directors and/or officers of other companies involved in natural resource exploration and development or investment in natural resource companies and consequently there exists the possibility for such directors and officers to be in a position of conflict. Any decision made by any of such directors and officers involving the Company will be made in accordance with their duties and obligations to deal fairly and in good faith with a view to the best interests of the Company and its shareholders. In addition, each of the directors is required to declare and refrain from voting on any matter in which such directors may have a conflict of interest in accordance with the procedures set forth in the Business Corporation Act (British Columbia) and other applicable laws.

11. LEGAL PROCEEDINGS AND REGULATORY ACTIONS

The Company is not party to any material legal proceedings or regulatory actions as of the date of this AIF. The Company is not aware of any material contemplated legal proceedings involving it or its operations. The Company has not had any penalties or sanctions imposed by a court or regulatory body relating to securities legislation or regulatory requirements, or by a court or regulatory body that would be considered important to a reasonable investor in making an investment decision. The Company has also never been involved in a settlement agreement with a court relating to securities legislation or with a securities regulatory authority.

12. INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Orogen is not aware of any material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, of (i) any director or executive officer of the Company, (ii) a person or company that is, as of the date hereof, the direct or indirect beneficial owner of, or who exercises control or direction over, more than 10% of any class or series of Orogen's outstanding Common Shares, and (iii) any associate or affiliate

of any person or company referred to in either (i) or (ii) above, in any transaction within the three most recently completed financial years or during the current financial year which has materially affected or would materially affect Orogen or any of its subsidiaries.

13. TRANSFER AGENT AND REGISTRARS

The transfer agent and registrar for the Common Shares is Computershare Investor Services Inc. at its principal office in Vancouver, BC.

14. MATERIAL CONTRACTS

Material contracts under National Instrument 51-102 Continuous Disclosure Obligations of the Canadian Securities Administrators are contracts, other than contracts entered into in the ordinary course of the Company's business that are material to the Company.

Except for contracts entered into in the ordinary course of business, there are no material contracts that the Company entered into during the financial year ended December 31, 2021 or before the last financial year that are still in effect.

15. INTEREST OF EXPERTS

The Company rely on experts to audit its financial statements. Smythe LLP, Chartered Professional Accountants, are independent auditors of Orogen who have issued an audit report dated March 30, 2023 in connection with the consolidated financial statements of the Company for the years ended December 31, 2022 and 2021. They have confirmed that with respect to Orogen, that they are independent within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada and any applicable legislation or regulations.

Laurence Pryer, Ph.D., P.Geo, Vice President Exploration for Orogen is a Qualified Person as defined by NI 43-101 who has reviewed, verified, and approved the disclosure of some of the technical information contained in this AIF.

To the Company's knowledge, none of these experts or their employers have directly or indirectly, any material interest, or beneficial interest in the property or Common Shares of the Company or any of the Company's affiliates or associated parties, other than those experts that are employed by the Company. Mr. Pryer holds less than 1.0% outstanding Common Shares of the Company.

Other than as otherwise described in this AIF and the Company's December 31, 2022, Management's Discussion and Analysis, the Company is not aware of any transactions in its three most recently completed financial years, or during the current financial year, that has had or is reasonably expected to have a material effect on the Company where any of the following had a direct or indirect material interest:

- Any of the Company's Directors or Executive Officers, or those of the Company's subsidiaries;
- A person or company that beneficially owns, controls or directs, directly or indirectly, more than 10% of the Company's voting securities; or
- Any associate or affiliate of the above.

16. ADDITIONAL INFORMATION

Additional information, including directors' and officers' remuneration and indebtedness, principal, is holders of the Company's securities, securities authorized for issuance under equity compensation plans, where applicable, is contained in the Company's Management's Information Circular for its most recent annual meeting of shareholders.

Additional financial information is provided in the Company's financial statements and Management's Discussion and Analysis for its most recently completed financial year, all of which are filed on SEDAR. See Schedules A and B for the Audit Committee's charter and particulars of related matters.

Other additional information related to the Company may be found on SEDAR at www.sedar.com.

17. AUDIT COMMITTEE

NI 52-110 requires the Company, as a venture issuer, to disclose annually in its Information Circular certain information concerning the constitution of its Audit Committee and its relationship with its independent auditors, which is set forth below.

i. **The Audit Committee's Charter**

The Company's Audit Committee has adopted an Audit Committee Charter, attached as Appendix "A", which includes the following significant responsibilities as responsibilities of the Audit Committee:

- reviewing the appointment of the Company's Chief Financial Officer;
- reviewing the adequacy and effectiveness of the Company's systems of internal control and the adequacy and timeliness of its financial reporting processes;
- reviewing all financial disclosure prior to filing or distribution;
- reviewing the Company's financial reporting and accounting standards and principles and significant changes in such standards or principles;
- reviewing significant related party transactions and potential conflicts of interest; and
- recommending the appointment of the external auditor, approving all audit engagement terms and fees and pre-approving all audit, non-audit and assurance services provided to the Company by the external auditor.

ii. **Composition of the Audit Committee**

The Company's Audit Committee is comprised of three directors, Samantha Shorter, Roland W. Butler, and J. Patrick Nicol. Samantha Shorter and Roland W. Butler are considered independent members of the Board pursuant to the meaning of "independent" provided in NI 52-110, and J. Patrick Nicol, Chief Executive Officer of the Company is considered non-independent.

All three members are considered financially literate pursuant to NI 52-110.

iii. **Relevant Education and Experience**

- **Samantha Shorter**
Ms. Shorter was the Chief Financial Officer of Medipure Holdings Inc., a CSE listed issuer, when it failed to file audited financial statements as well as associated MD&A and certifications for the financial year ended June 30, 2015. The British Columbia Securities Commission issued a cease trade order on November 4, 2015. Ms. Shorter resigned as CFO on November 16, 2015, and the Ontario Securities Commission issued a cease trade order on November 20, 2015. Both cease trade orders remain in place as

of the date of this AIF though Medipure Holdings Inc. has since filed the outstanding financial statements.

Ms. Shorter was the Chief Financial Officer of Winchester Minerals and Gold Exploration Ltd., a TSX-V listed issuer, when it failed to file audited financial statements as well as associated MD&A and certifications for the financial year ended December 30, 2014. The British Columbia Securities Commission issued a cease trade order on May 8, 2015. Ms. Shorter resigned as CFO in June 2015, and the Alberta Securities Commission issued a cease trade order on August 7, 2015. Both cease trade orders remain in place as of the date of this AIF.

- **Roland W. Butler**
Mr. Butler has a B.Sc. (Earth Science), held senior executive positions with several companies, and has significant entrepreneurial experience, currently serving as independent director in one public company as well as private companies. Mr. Butler is experienced in reading and analyzing financial statements.
- **J. Patrick Nicol**
Mr. Nicol has significant experience as a senior executive in the mineral exploration industry. He is well versed in reviewing budgets and financial statements and management discussion and analysis (MD&A) reports. Mr. Nicol is the acting Chair of the Audit Committee.

iv. Committee Oversight

As at the commencement of the Company's most recently completed financial year ended December 31, 2022, the Board of Directors has not failed to adopt a recommendation of the Audit Committee to nominate or compensate an external auditor.

v. Reliance on Certain Exemptions

Since the commencement of the Company's most recently completed financial year ended December 31, 2022, the Company has not relied on the exemptions contained in section 2.4 "De Minimis Non-Audit Services" or Part 8 "Exemptions" of NI 52-110. Section 2.4 of NI 52-110 provides an exemption from the requirement that the Audit Committee must pre-approve all non-audit services to be provided by the auditor, where the total amount of fees related to the non-audit services are not expected to exceed 5% of the total fees payable to the auditor in the fiscal year in which the non-audit services were provided. Part 8 of NI 52-110 permits a company to apply to the Canadian Securities Authorities for an exemption from the requirements of NI 52-110, in whole or in part.

vi. Exemptions

The Company is relying on the exemption provided by section 6.1 of NI 52-110 which provides that the Company, as a venture issuer, is not required to comply with Part 3 (Composition of the Audit Committee) and Part 5 (Reporting Obligations) of NI 52-110.

vii. External Auditor Service Fees

The fees paid by the Company to its auditor in each of the last three fiscal years, by category, are as follows.

	Fiscal Year ended December 31, 2022	Fiscal Year ended December 31, 2021	Fiscal Year ended December 31, 2020
Audit Fees	\$ 65,000	\$ 68,000	\$ 50,500
Audit-Related Fees	-	762	513
Tax services – Canadian and US (for	20,000	22,000	7,000
Total fees billed	\$85,000	\$ 90,762	\$ 58,013

APPENDIX “A”

AUDIT COMMITTEE CHARTER

1. PURPOSE

The primary function of the Audit Committee (the “**Committee**”) of Orogen Royalties Inc. (the “**Company**”) is to provide an open avenue of communication between management, the independent auditor and the Board as well as to assist the Board in its oversight of the:

- a) integrity, adequacy and timeliness of the company’s financial reporting and disclosure practices;
- b) processes for identifying and managing the principal financial risks of the company and the company’s internal control systems that ensures fair, complete and accurate financial reporting;
- c) company’s compliance with legal and regulatory requirements related to financial reporting; and
- d) independence and performance of the company’s external auditor.

The Committee shall perform the duties listed in this Charter consistent with the Company’s by-laws and governing laws as the Committee deems necessary or appropriate.

2. MEMBERSHIP AND OPERATIONS

The Committee shall consist of at least three directors with a majority of the members being “independent” as such term is defined in National Instrument 52-110, *Audit Committees*, as may be amended or replaced from time to time.

All members shall have sufficient financial literacy, which means the ability to read and understand a balance sheet, income statement, cash flow statement and the notes attached thereto, to enable them to discharge their responsibilities in accordance with applicable laws and/or requirements of the TSX Venture Exchange on which the company’s securities trade.

Committee members shall serve until qualified successors are duly designated and appointed by the Board. Any member may be removed at any time, with or without cause, by a majority of the Board then in office. Any vacancy in the Committee occurring for any cause may be filled by a majority of the Board then in office.

The Committee’s chairperson shall be designated by the Board. A majority of the members of the Committee shall constitute a quorum for the transaction of business and the act of a majority of those present at any meeting at which there is a quorum shall be the act of the Committee.

3. AUTHORITY

The Board of Directors has granted the Committee the authority herein provided. The Committee has been, and shall be, granted unrestricted access to all information and all employees have been, and shall be, directed to cooperate as requested by members of the Committee. The Committee has the authority to retain, at the Company's expense, persons having special competencies (including, without limitation, legal, accounting, compensation or other consultants and experts) to assist the Committee in fulfilling its responsibilities. The Committee has the sole authority to terminate the Committee's engagement of its experts and to approve the fees and other terms of retention of such experts.

4. RESPONSIBILITIES

The Committee's role is one of oversight. Management is responsible for preparing the company's financial statements and other financial information and for the fair presentation of the information set forth in the financial statements in accordance with IFRS. Management is also responsible for establishing systems of internal control and for maintaining the appropriate accounting and financial reporting principles and policies designed to assure compliance with accounting standards and all applicable laws and regulations.

The external auditor's responsibility is to audit the company's financial statements and provide its opinion, based on its audit conducted in accordance with generally accepted auditing standards, that the financial statements present fairly, in all material respects, the financial position, results of operations and cash flows of the company in accordance with IFRS. The external auditor is also responsible for issuing an attestation report on management's assessment of the effectiveness of the Company's systems of internal control as of the end of the Company's most recent fiscal year end. The Committee is directly responsible for the appointment, compensation, evaluation, termination and oversight of the work of the external auditor. The external auditor shall report directly to the Committee, as they are accountable to the Board and the Committee as representatives of the company's shareholders. As such, it is not the duty or responsibility of the Committee or any of its members to plan or conduct any type of audit or accounting review or procedure.

In performing its oversight responsibilities, the Committee shall:

- a) Review and assess the adequacy of this Charter and recommend any proposed changes to the Board for approval at least once per year.
- b) Review the appointments of the company's Chief Financial Officer and any other key financial executives involved in the financial reporting process.
- c) Review with management and the external auditor the adequacy and effectiveness of the company's systems of internal control and the adequacy and timeliness of its financial reporting processes.
- d) Review with management and the external auditor the annual audited financial statements, management discussion and analysis reports and other financial reporting documents, including the CEO and CFO certifications, prior to filing or distribution, including financial matters required to be reported under applicable legal or regulatory requirements.
- e) Review with management the unaudited quarterly financial statements, management discussion and analysis reports and other financial reporting documents, including the CEO and CFO quarterly certifications, prior to filing or distribution, including financial matters required to be reported under applicable legal or regulatory requirements.
- f) Review with management and the external auditor and approve earnings news releases and other financial information and earnings guidance disclosures contained in such

news releases prior to their release.

- g) Where appropriate and prior to release, review with management and approve any other news releases that contain significant financial information that has not previously been released to the public.
- h) Review the company's financial reporting and accounting standards and principles and significant changes in such standards or principles or in their application, including key accounting decisions affecting the financial statements, alternatives thereto and the rationale.
- i) Review the quality and appropriateness, not just the acceptability, of the accounting policies and the clarity of financial information and disclosure practices adopted by the company, including consideration of the external auditors' judgments about the quality and appropriateness of the company's accounting policies. This review shall include discussions with the external auditor without the presence of management.
- j) Review with management and the external auditor significant related party transactions and potential conflicts of interest.
- k) Recommend to the Board and shareholders the external auditor selected to examine the company's accounts and financial statements. The Committee has the responsibility to approve all audit engagement terms and fees. The Committee shall pre-approve all audit, non-audit and assurance services provided to the company by the external auditor, but the Chairperson or his appointee may be delegated the responsibility to approve these services where the fee is not significant.
- l) Review with management and the external auditor and approve the annual audit plan and results of and any problems or difficulties encountered during any external audits and management's responses thereto.
- m) Receive the report of the external auditor on completion of the audit.
- n) Monitor the independence of the external auditors by reviewing all relationships between the independent auditor and the company and all audit, non-audit and assurance work performed for the company by the independent auditor on at least an annual basis. The Committee will receive an annual written confirmation of its independence from the external auditor.
- o) Review the company's procedures and establish procedures for the Committee for the:
 - i. receipt, retention and resolution of complaints regarding accounting, financial disclosure, internal controls or auditing matters; and
 - ii. confidential, anonymous submission by employees regarding questionable accounting, auditing and financial reporting and disclosure matters.
- p) Conduct or authorize investigations into any matter that the Committee believes is within the scope of its responsibilities. The Committee has the authority to retain independent counsel, accountants or other advisors to assist it in the conduct of any investigation, at the expense of the Company.
- q) The Committee shall report its recommendations and findings to the Board after each meeting and shall conduct and present to the Board an annual performance evaluation of the effectiveness of the Committee.

5. KEY PRACTICES

The Committee has adopted the following key practices to assist it in fulfilling its responsibilities.

5.1 MEETINGS

The Committee will meet at least four times per year to perform its responsibilities as set out in this Charter; however, it may perform its duties by consent resolution instead of meetings. The foregoing notwithstanding, the Audit Committee shall meet at least once per year.

The Committee may ask members of management or others to attend meetings to provide information as necessary. The Committee shall meet separately with each of management and the independent auditor, as required, to discuss matters that the Committee, or these groups, believe should be discussed privately with the Committee. Additional meetings shall be held as required in the opinion of the Audit Committee or the external auditor. Minutes of all meetings of the Committee will be provided to the Board. Written or verbal reports on Committee meetings whose minutes have not been completed will be provided at each meeting of the Board.

5.2 REVIEW OF FINANCIAL STATEMENTS

Prior to releasing to the public, the Committee will review and approve the company's annual and quarterly reports, including the financial statements, the management discussion and analysis reports and other information contained therein, in detail with the company's Chief Executive Officer and Chief Financial Officer. The company's external auditors may be present at these meetings.

5.3 REVIEW OF THE CEO AND CFO CERTIFICATION PROCESS

The Committee will review the company's process for the CEO and CFO certifications required by the various regulatory agencies in the jurisdictions in which the company operates with respect to the company's financial statements, disclosures and internal controls, including any significant changes or deficiencies in such controls. The Chairperson of the Committee or his appointee shall review the company's disclosure controls and procedures.

5.4 REVIEW OF INFORMATION PROVIDED TO ANALYSTS AND RATING AGENCIES

The Committee shall review other news releases containing significant financial information that has not been previously released to the public with the company's Chief Financial Officer prior to their release. The substance of presentations to analysts and rating agencies involving material changes in the company's strategy or outlook shall be reviewed with the full Board prior to the event.

5.5 APPROVAL OF AUDIT AND NON-AUDIT SERVICES

In addition to approving the engagement of the external auditor to audit the company's financial statements, the Committee will approve all audit, non-audit and assurance services provided by the independent auditor prior to the commencement of any such engagement. The Committee may delegate the responsibility for approving these services to the Chairperson or his appointee where the fee is not significant. The Committee will review a summary of all audit, non-audit and assurance work performed for the company at least twice per year. To minimize relationships that could impair the independence of the external auditor, it is the Committee's practice to limit non-audit and assurance services provided by the independent auditor to assistance with financings, taxation, acquisition due diligence and merger integration or other services where there are compelling reasons for the external auditor to provide such services.

5.6 HIRING GUIDELINES FOR EMPLOYEES OF THE INDEPENDENT AUDITOR

The Committee shall review and approve the appointment of any employee or former employee of the company's external auditor to a senior financial management position with the company. The Committee shall request management to annually prepare a report of the profiles of all individuals hired during the past year who were employed by the external auditor at any time during the two years prior to being hired by the company.

5.7 COMPLAINTS ABOUT ACCOUNTING, AUDITING AND FINANCIAL REPORTING AND DISCLOSURE MATTERS

The company's Whistle Blower policy prohibits reprisals or intimidation of employees who draw attention to problems or violations of ethical standards. Employees can report any concerns to their superior or the company's legal counsel, confidentially and anonymously. Employees may also submit, confidentially and anonymously, concerns regarding questionable accounting, auditing and financial reporting and disclosure matters to the Chairperson of the Audit Committee. A summary of all complaints related to auditing, accounting and financial reporting and/or disclosure matters will be reported to the Committee at each meeting, and if the Committee so directs, to the full Board. The Committee may retain outside counsel or other advisors to investigate and resolve any complaints disclosed to it.

5.8 OTHER MATTERS

Management shall report any real or suspected incidents of fraud, theft or violations of the Company's Code of Ethics to the Committee. Corporate Counsel shall report to the Committee any litigation, claim or other contingency that could have a significant effect on the company's financial results or disclosures.