NI 43-101 TECHNICAL REPORT ON THE CROWN PROJECT



Frontispiece: The Crown Project is located in the heart of the Golden Triangle surrounded by significant mineral deposits.

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Upper Unuk River Area Northwest British Columbia, Canada

Centered at approximately Latitude 56° 21' 02" N, Longitude 130° 14' 22" W UTM 423,400 E, 6,245,800 N (NAD83 Zone 9) NTS Map Sheet 104B/8 Skeena Mining Division

Report Prepared For

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> Effective Date: July 28, 2022

Revised: August 11, 2022

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1.0 Summary

Introduction

Goldstorm Metals Corp. ("Goldstorm Metals", "Goldstorm" or "the Company") retained Mr. Jeffrey Rowe, P.Geo. to prepare an independent Technical Report on the Crown Project (the "Project" or "Property"), located 45 kilometers north-northwest of the community of Stewart in northwest British Columbia, Canada. The author has had previous involvement with the Project, with respect to preparation of claim assessment reports in 2018, 2019 and 2021. The purpose of this report is to provide a comprehensive review of exploration carried out to date on the Property and, if warranted, to provide recommendations for future work. The author carried out an independent study and evaluation of available exploration data and conducted a site examination in September 2020, comprising helicopter reconnaissance, as well as site examinations with check sampling of mineralized rocks, at three locations. This Technical Report conforms to NI 43-101 Standards of Disclosure for Mineral Projects.

Subsequent to the author's visit, a program of geological reconnaissance and rock sampling was undertaken in 2021 on a small part of the Property, as well as an airborne magnetic survey in 2022 on the central part of the Property by the Company's parent company (Tudor Gold Corp.). The author has reviewed all the results of the 156 rock samples from 2021 and, although there were three anomalous gold values over widths of 0.4 to 2.0 m, the samples were from areas of previously known mineralization. Some of the continuous chip sampling has better defined the character of mineralization, providing more representative widths and grades than the previous grab samples, however, the extent of the known mineralized areas has not changed, and no new mineralized areas were discovered. Much more sampling, which may include trenching and diamond drilling, will be required to thoroughly evaluate the mineral showings. Preliminary maps from the recent airborne magnetic survey have also been examined and evaluated by the author. These results revealed magnetic anomalies associated with areas of surface mineralization.

The author has searched public records of Tudor Gold's disclosures of exploration work for the Crown Project since the author's visit to the Property and has found no other indication of exploration work besides the geological reconnaissance and rock sampling undertaken in 2021 and the airborne magnetic survey undertaken in 2022, as indicated in the preceding paragraph. The author is of the opinion that there is no material change to the scientific and technical information since the time of the author's inspection.

Tudor Gold Corp. ("Tudor") and Goldstorm entered into an arrangement agreement dated July 7, 2021, as amended and restated on August 10, 2022 (the "Arrangement Agreement") pursuant to which, among other things, the parties will complete a proposed spin-off transaction of Tudor's Crown Property, comprised of six adjacent mineral claim groups, by way of a plan of arrangement under the *Business Corporations Act* (British Columbia) (the "**Arrangement**"). The Arrangement will involve, among other things, Tudor transferring the Crown Property to Goldstorm in consideration for Goldstorm issuing such number of common shares in the capital of Goldstorm

(the "Goldstorm Shares") as is equal to the number of common shares in the capital of Tudor outstanding as of the Distribution Record Date (as defined below) multiplied by 0.251. The Distribution Record Date means the close of business on the date as agreed to by Tudor and Goldstorm, which date establishes the shareholders of Tudor who will be entitled to receive new shares of Tudor and Goldstorm Shares pursuant to the Arrangement. The Arrangement will result in such shareholders of Tudor receiving their pro rata portion, at an exchange ratio of 0.251, of the Goldstorm Shares that Tudor will hold upon completion of the transaction.

The Project has received early-stage exploration in several target areas and more advanced exploration by diamond drilling and bulk sampling in one area, with more than 113 holes drilled on the Property to date.

Currently, there are no major assets or facilities associated with the Project other than a few drill roads and pads and a small extent of underground tunnels. The Project has gravel access road to the southeastern concessions; however, most of the Property is currently accessible only by helicopter.

Nearby mine development has occurred 14 km to the south of the Property at the Granduc mine, which, from 1971 to 1984, produced approximately 190,000 tonnes of copper at average grades of 1.23% Cu, 0.13 g/t Au and 8.0 g/t Ag (BCGS Minfile Report, https://minfile.gov.bc.ca/ summary.aspx?minfilno=104B%20%20021). At the Scottie Gold deposit, 4 km to the south of the Property, mining and milling from 1981 to 1984 totalled 160,264 tonnes at an average grade of 16.2 g/t Au, recovering 2.98 M grams of gold and 1.63 M grams of silver (BCGS Minfile Report, https://minfile.gov.bc.ca/summary.aspx?minfilno=104B%20%20034). The Brucejack mine, 4 km to the northeast of the Property, has produced 1.32 million ounces (41.06 M grams) of gold since startup in 2017, and as of January 2021 had Proven plus Probable reserves of 11.5 million tonnes averaging 8.7 g/t Au and 9.8 g/t Ag containing 3.2 million ounces of gold in the Valley of the Kings Zone (Pretium website, https://s23.q4cdn.com/277467366/files/doc_downloads /brucejack/Brucejack-Resources_web-March-2021.pdf).

The author has been unable to verify all of the above information on adjacent properties, and the information is not necessarily indicative of the mineralization on the Crown Property that is the subject of this technical report.

Conclusions

Previous exploration programs within the Crown Project area have focused on discovery of highgrade precious metal veins, VMS/ subaqueous hotspring mineralization, or porphyry-style Au-Cu mineralization, similar to some of the deposits found on nearby properties. Work has been undertaken primarily in four areas of the Property where significant mineralization of each of these types has been revealed. Historical work has primarily been concentrated in these four areas, leaving extensive regions of this large property under-explored. Recent geological reconnaissance and rock sampling have been concentrated in areas near the edges of retreating glacial ice sheets and have successfully discovered freshly exposed mineralization. Of the four main targets, the **Electrum** area in the southeast part of the Property has received the greatest amount of drilling to date. This work has primarily tested for extensions of epithermal vein systems that have returned a number of high silver and gold values from limited underground mining and trench exposures. Several holes intersected relatively wide zones containing variable quartz-sulfide veining that returned moderate precious metal values. These intercepts are located beneath surface exposures that were subsequently blasted, trenched and bulk sampled in the New Blast Zone. The 3.8 tonne bulk sample collected from this 5-m-wide zone averaged 2.82 g/t gold, 539 g/t silver, 1.96% lead and 1.97% zinc. Localized veins, found within some of the wider drill intervals, contain electrum and silver sulfosalt minerals that have returned significant silver and gold values over narrow widths.

Although drilling to date has revealed some encouraging grades over narrow widths, the continuity of these vein zones and grades is not well demonstrated between drill holes, even as close as 10 m apart. As well, the areas of low to moderate grade, stockwork veining intersected over widths of several meters, to tens of meters, have lacked continuity between holes, though it is recognized that drill information in some areas is widely spaced, or lacking. Fault offset complications have been noted by previous authors and a better understanding of structural complexities will help guide exploration; 3D drill hole modelling may prove useful. Further drilling, utilizing a larger core size and more systematic grid spacing of holes, is required to better define the known mineralized areas. Additional bulk sampling and metallurgical test work are warranted to better understand the grades and distribution of mineralization and to refine the beneficiation processes to maximize mineral recoveries. Limited IP surveys over the main showing areas at Electrum have revealed conductive targets at depth that appear to be continuations of the main mineralized structures, and these targets warrant drill testing at depths of up to 300 m.

The epithermal style of mineralization sought at Electrum may contain high precious metal values, however, mineralization commonly occurs within relatively narrow vein or breccia zones that may have limited extent. There is a risk at Electrum that mineralized zones may be too small or erratic to extract economically.

In the southern part of the Electrum area a granodiorite stock contains silicified zones with quartz veining carrying arsenopyrite, pyrite and minor chalcopyrite. The only hole drilled in this area, which tested an electromagnetic anomaly, intersected quartz veins 1 to 15 centimeters wide containing pyrite and arsenopyrite that returned spotty anomalous gold and silver values. This area warrants additional geophysical surveying and follow-up diamond drilling to test for porphyry-style Au-Cu-Ag mineralization.

In the central part of the Property, the <u>Orion</u> area contains numerous mineral showings distributed over about 4 kilometers along the east and west edges of a north-south trending nunatak of rocks that have been mapped as Stuhini Group, but may include faulted slices of Hazelton Group rocks. This area is about 10 km south from the Kerr Au-Cu deposit on the KSM property and is situated along the projected trend of the Sulphurets Thrust Fault, which has implications for possible fault-related stockwork-style mineralization. Although the nearby known mineral deposits are hosted by

similar geological features to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property.

Several rock samples spread over a distance of about 800 m, from within the north-south mineralized Orion trend, have returned strongly anomalous silver values, with coincident anomalous arsenic and lesser lead, zinc and gold. These samples have been mostly described as quartz veins or breccia in andesite or volcaniclastic rocks that contain pyrite, arsenopyrite and tetrahedrite. A significant discovery was a lengthy boulder train of angular blocks of massive, stratified pyrite with a siliceous, possibly exhalative, matrix containing rip-up fragments of black mudstone within the massive, layered pyrite. The source of the boulders has not been discovered but is assumed to be nearby due to their angularity.

Also within the Orion trend, the Cat-in-the-Hat showing has mineralized stockwork veining over widths of 2 to 15 meters and has returned anomalous values of gold and arsenic. A few shallow holes that were drilled in 2007 at the Cat-in-the-Hat showing intersected fracture-controlled pyrite and local quartz veins in rhyolite breccia, with several anomalous Au-As sections.

The Orion area lies just west of the important Upper Triassic - Lower Jurassic contact zone. Localized geophysical surveys in the Orion area have revealed several subparallel conductive zones, as well as resistivity contrasts that are believed to distinguish the Upper Triassic Stuhini Group rocks from Lower Jurassic Hazelton Group rocks. Geophysical interpretations may prove useful in identifying the potential extension of the Sulphurets Fault zone, which is spatially associated with mineralization in the region. A recent airborne magnetic survey over the Orion area has defined moderately strong magnetic anomalies associated with surface mineral showings that may be indicative of mineralization continuing at depth.

There are abundant small exposures of mineral showings in the Orion trend, however, to date, exploration has primarily consisted of collecting grab samples and some local continuous chip samples over narrow widths. Five short holes have been drilled at one showing intersecting brecciated felsic volcanics over 31 m, with a few anomalous gold values. Exposures are limited in some of the prospective areas due to glacial moraine or ice cover, requiring additional methods of evaluating the underlying potential, such as geochemical or geophysical surveys.

The porphyry-related stockwork vein style of mineralization has potential for large low-grade bodies of Cu-Au mineralization. To date, sampling in the Orion area has indicated relatively narrow stockwork zones but there is a risk that there has been insufficient faulting and brecciation of the rock units in this area to host a sizeable mineralized body. As well, much of the area is covered by glacial ice that could hinder exploration.

Mapping of the Orion trend will aid in interpreting the stratigraphic and structural settings and to produce geological models that will help identify the most favourable areas for hosting mineralization.

In the **Fairweather** area, located about 6 km east of Orion, several very significant anomalous samples were collected from rocks that may be of exhalative origin, suggestive of a possible VMS or sub aqueous hotspring environment of deposition. These include a 70 cm-thick band of semimassive pyrite in layered silica matrix that returned anomalous Au, Ag and As values, as well as underlying brecciated siliceous argillite with white drusy, vuggy quartz stockwork, containing fine disseminations and veinlets of pyrite and arsenopyrite with significant Au, Ag, Cu, Zn Pb and As values that may represent footwall feeder veining to the exhalative horizon.

Additional mineral showings in the Fairweather area have been described as quartz-calcite veins and breccias that host pyrite, galena, sphalerite, tetrahedrite and chalcopyrite, such as the Ptuck showing, comprised of a 15 to 20-meter-wide zone of iron carbonate altered sedimentary rocks hosting mineralized stockwork quartz-carbonate veins. The Gamma showing, 1500 m northeast of Ptuck, includes a 60 cm-wide quartz-pyrite-sphalerite-tetrahedrite vein within a 5-15 m wide shear zone, from which samples returned anomalous Au and Ag. Near the Gamma zone a 200-meter-long gold-silver-arsenic-copper anomaly in soils has been defined.

In the **Delta** area, about 3 km north of Fairweather, stream sediment surveys, rock sampling, and hand trenching discovered showings with high gold and silver values, some of which had indications of stratiform mineralization in argillite. Soil geochemistry defined a multi-element anomaly and rock samples of silicified tuff returned anomalous Au values. Five holes were drilled in the Delta area in 1986, however, there were no significant results. Airborne and ground geophysical surveys defined several targets including two prominent IP-resistivity anomalies (with coincident Mag/VLF trends) that partly coincide with a combined gold-silver-lead-zinc geochemical anomaly. High gold values in float samples were followed up, revealing anomalous Ag, Pb and Zn values in outcrop, but not the source of the high gold.

In the western Delta area, about 400 m north of the Feld Minfile showing, samples consisting of silicified siltstone containing disseminated pyrite, with minor arsenopyrite and galena and cut by narrow quartz-sulfide veins, returned notable Au and Ag values. In 2011-12 seven diamond drill holes, totalling 1,953 meters, were drilled in the western Delta area from two pads, targeted two gold-mineralized zones previously discovered by surface rock sampling. Gold enrichment in drill core appears to be concentrated near the contacts between diorite dykes and siltstone, or hematite-altered volcanic rocks, and in narrow discordant stockwork stringers in volcaniclastic rocks.

The area encompassing Fairweather and Delta is underlain by Hazelton Group rocks that include clastic and volcaniclastic rocks, as well as felsic volcanics. Some of the mineral showings in the area show VMS characteristics such as laminated sulfides in sedimentary rocks, however, the majority of the mineral occurrences are quartz-carbonate veins or breccias containing Ag-rich sulfide minerals, with variable Au values. These are potentially feeder-style veins that commonly underlie stratiform bodies, however, they could also represent porphyry-style stockwork mineralization. The presence of mineralized diorite dykes in the area suggests the possibility of a buried stock that could be the source of related porphyry or epithermal-style mineralization.

There are abundant small exposures of mineral showings in the Fairweather and Delta areas, however, to date, exploration has primarily consisted of collecting grab samples and some local continuous chip samples over narrow widths. Twelve short holes have been drilled at three showings with limited success, returning a few anomalous gold values over narrow sections of veining. These drilled areas may have benefitted from geophysical surveying that could have helped determine the potential presence of mineralization at depth and guided drill targeting. There has been no geophysical testing or drilling of the stratiform sulfide at the Fairweather Zone, which is a priority target. Exposures are limited in some of the prospective areas that are located at the edges of ice sheets, and these require geochemical and geophysical methods of evaluating the underlying potential. Parts of the Fairweather and Delta areas have been soil sampled in the past, revealing some strong multi-element anomalies. Additional soil sampling should be conducted in these areas, as well as in areas of other mineral showings, or prospective geologic settings.

The geological model provides the possibility for various styles of mineralization in the Fairweather and Delta areas but, to better define the modelling, this part of the Property requires more detailed geological mapping in addition to the suggested ground surveys. VMS-style mineralization typically has a small footprint, with sulfide bodies often less than a few hundred meters in length, requiring detailed sampling and geophysical testing for exploration. There is a risk that buried VMS mineralization may be missed due to these limitations. All previous and future exploration data should be compiled into a GIS database to allow merging of the anomalous results and accurate positioning of targets defined by the results. The most promising targets should be drill tested.

Recommendations

On the Crown Property there has been a relative lack of concentrated exploration beyond the limits of the historically worked vein structures, both on surface and at depth. In addition, there appears to have been a lack of a coherent property-scale stratigraphic and structural modelling that might help guide exploration and develop drill targets, as well as a relative lack of geochemical and geophysical work, which again may help in guiding exploration and developing targets.

Based on reconnaissance rock sampling undertaken by Tudor in the last four years on the Crown Property it appears that the more encouraging results have come from the 800 m-long zone of veining and possible exhalative mineralization on the east side of the Orion trend and, secondly, the similar styles of mineralization that have been discovered near the edges of receding glaciers in the Fairweather and Delta areas. The Electrum area has been more thoroughly explored, but has untested geophysical targets at depth beneath the main vein zones, as well as an area at the south end of Electrum that should be further evaluated for porphyry-style mineralization.

The following recommendations are made by the author:

 Geographic Information System (GIS) Database: All historical exploration data, as well as topographic and geologic data, should be compiled in a GIS database to help determine the most prospective areas for concentration of further work.

- Geological Mapping: Mapping should be undertaken over the entire Property to outline the geological framework, with more detailed mapping in the four primary mineralized zones. Emphasis should be placed on defining the Stuhini-Hazelton contact zone, the upper Hazelton Eskay Creek-equivalent stratigraphy, the projection of the Sulphurets Thrust Fault, the possible projection of the Brucejack Fault or any other major structures; especially on the east side of the Property, and the location of intrusive bodies; including dykes and stocks. Gossanous or altered zones should be mapped and categorized as to type of alteration. Mineralized zones should be mapped in detail to determine trends and possible mineral controls.
- Soil Geochemical Sampling: Soil sample lines should be established, spaced about 200 m apart with 50 m stations, primarily oriented across the slopes along elevation contour lines to test for downslope dispersed anomalous values that may be traced upslope to their mineralization sources. Soil sampling should be considered for areas that have known mineral showings or gossan zones, such as Orion, Fairweather, Delta and south Electrum. Soil sampling has been completed in some of these areas in the past and the information from that sampling should be compiled in GIS to determine areas requiring additional sampling, and to prevent duplication of previous work.
- Stream Sediment Geochemical Sampling: Property-wide stream sediment sampling can
 effectively evaluate large swaths of the rugged terrain by collecting samples from the many
 small, fast-flowing streams that occupy channels that cut into the steep hillsides. Sample
 collection traverses, in many cases, can follow the breaks in slope along the moraines that
 flank several of the glaciers. Although it may be difficult to obtain silt-size material in these
 channels, over-bank sediments could be selectively sieved in the field to collect enough fine
 material for lab analyses. Anomalies defined by sediment samples should be followed-up by
 prospecting and focused soil sampling, targeting the upper parts of anomalous drainages.
- Prospecting: Areas of recent ablation of glacial ice should be prospected for possible mineral showings in freshly exposed bedrock. Areas of anomalous soils or stream sediments also require prospecting, geological evaluation, and rock sampling.
- Airborne magnetic survey: An airborne magnetic survey was recently flown over the Orion area. Additional magnetic surveying should be considered for the mineralized areas on the eastern part of the Crown Property to provide a magnetic framework that will aid in delineation of host lithologic units during geologic mapping and to help identify key geological structures, particularly those that may host or offset gold systems.
- Induced Polarization (IP) geophysical survey: A program of ground-based IP is recommended as a targeting tool to help identify mineral-controlling structures, disseminated or stockwork

sulfide mineralization, or alteration zones that commonly surround mineral bodies. Lines should initially be spaced at 200 meters, with in-fill lines at spacings as close as 50 meters over areas showing strong chargeability and low to high resistivity responses (these responses might be expected in areas containing sulfide mineralization, with silicification causing high resistivity or certain clay alteration minerals causing low resistivity). IP has already identified targets at the main vein areas at Electrum but may be considered for testing potential porphyry mineralization at south Electrum, as well as stockwork zones and VMS massive sulfides found at Orion, Fairweather and Delta. Areas of abundant carbonaceous sedimentary rocks are not recommended for IP since these rocks can have very high chargeability, thereby masking any responses from mineralization.

 Diamond Drilling: Two deep geophysical targets underlying the main vein structures at Electrum have been recommended for drilling based on previous exploration work. GIS compilation of historical data may also reveal promising targets that warrant drill testing in other areas of the Property. Geological models developed in conjunction with exploration results from geochemical and geophysical programs are also expected to define favourable drill targets. Based on the currently known targets in four areas of the Property, preliminary drilling, as a phase 2 program, could total as much as 7500 m in 25 to 30 holes.

Tudor Gold Corp. holds a permit for the Electrum area that authorizes 20 drill sites, 5 trenches and the collection of a 1000 tonne bulk sample, to be processed offsite. As well, a 5-year exploration permit has recently been granted to Tudor Gold Corp. for the remainder of the Crown Project area, which authorizes 20 drill sites, 10 trenches or test pits, and 50 line-km of ground-based electrode geophysical surveying. These permits will be transferred to Goldstorm upon Goldstorm assuming all reclamation liabilities and replacing Tudor's reclamation security deposits of \$30,000 for Electrum and \$26,900 for the remainder of the Crown area.

In summary, the presence in at least four areas of the Crown Property of geochemically anomalous rock samples containing precious metal-bearing stockwork veins and exhalative-type silica-pyrite bands suggest the possibility of significant mineralization. Further geological, geochemical, and geophysical exploration is warranted at an estimated cost of \$437,000, and if further compelling evidence is found then diamond drilling should be conducted to test areas at depth and under ice cover.

1.2 TECHNICAL SUMMARY

Property Description and Location

The Crown Property is approximately 45 kilometers north-northwest of the community of Stewart in northwest BC. The southeast part of the Property is close to the gravel-surface Granduc road that runs north from Stewart to the remnants of the historical Granduc mill-site and the Granduc tunnel entrance, and from there continues northerly to adjacent mineral prospects. The west side

of the Property is 12 km north of the historical Granduc mine, which is connected to the Stewart-Granduc access road by a 17 km-long un-maintained tunnel. The north side of the Property lies 4 kilometers southwest of the road accessible, currently producing Brucejack mine. Access to most areas of the Property is currently via a 25-minute helicopter flight from a base in Stewart.

The terrain at the Crown Property is varied, and a large part of the Property lies completely above treeline. Elevations range from about 500 m to 2560 m asl. A rugged "spine" of rock runs north-south across the central part of the Property, flanked on both sides by northern arms of the Frank Mackie Glacier, each up to 2 km wide. Ridges extend east and west along the long axis of the Property and some of the larger streams between ridges drain off the east and west ends of the claim block. Most slopes are moderate to steep and are commonly incised by steep stream gullies that provide good exposures of bedrock.

The climate on the Crown Property is generally that of northern coastal temperate zone, with subarctic conditions at high elevations. Precipitation is high, with an annual total precipitation estimated to be similar to Stewart, BC, which receives 1,295 mm of rain and 572 cm of snow annually on average, however, more occurs as snow at the higher elevations on the Property. Surface exploration on the Property is generally restricted to the period from June through early October due to the heavy snowfall.

Land Tenure

The Crown Property consists of 50 Mineral Titles Online (MTO) digitally registered mineral tenures totalling 16,468.67 ha in two separate parcels that are separated by approximately 6 km of tenures owned by others. The tenures are all currently registered as 100% ownership by Tudor Gold Corp., however, the tenures will be transferred to Goldstorm Metals Corp. upon issuance of 44,999,999 common shares in the capital of Goldstorm to Tudor, and certain exchanges of securities resulting in shareholders of Tudor receiving their pro rata portion, at an exchange ratio of 0.251, of all 45,000,000 Goldstorm shares that Tudor holds. Some of the tenures that make up the Property are subject to small net smelter return (NSR) royalties, which will be assumed by Goldstorm.

Separate 5-year exploration permits for the Electrum area, and for the remainder of the Crown area have been issued to Tudor by the BC Ministry of Mines in 2019 and 2022. These permits allow drilling, trenching, and electrode-based geophysical surveys, as well as a 1000-tonne bulk sample in the Electrum area. These permits can be transferred to Goldstorm Metals upon assumption of the reclamation commitment and issue of security bonds by the Company.

Site Infrastructure

There is currently no infrastructure located on the Crown Property other than a few drill roads and pads and short, abandoned mine tunnels in the Electrum area. All exploration activity on the Property has been facilitated by existing services located in the nearby town of Stewart, or the larger centers of Smithers and Terrace. Stewart has deep-water loading facilities for shipping bulk mineral concentrates and has a seasonal airport with a 1190-meter-long runway, although it is not currently serviced by scheduled flights.

The 287-kilovolt Northwest Transmission powerline that extends along highway 37 is 40 km east of the Property. This line could provide a potential future supply of readily accessible power, as could the run-of-flow power project at Long Lake, which provides power to Pretium's Brucejack mine via a line that extends northerly near the eastern boundary of the Property.

In the immediate future, exploration and drilling operations on the Property are expected to be supported by helicopter transport, either from Stewart or from a camp facility on the Granduc road near the southeast part of the Property.

History

A significant amount of exploration has been undertaken in several different areas of the Property by various operators, and this work has been well documented in assessment reports that are publicly available. Descriptions of mineral occurrences are summarized from assessment reports on the Minfile website of the British Columbia Geological Survey

(https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbiageological-survey/mineralinventory). The author has quoted from Minfile descriptions for some of the mineralized areas on the Property in the following excerpts.

Electrum Area (Minfile 104B 033)

The most advanced exploration on the Property has taken place in the Electrum area encompassing the old underground workings of the East Gold mine on the southeastern part of the Project area.

Initial drilling work in 1930 by Cominco intersected sporadically mineralized veins, but one hole drilled under a high-grade siliceous outcrop showed values of 299 g/t gold, 301 g/t silver over a drilled width of 1.5 meters. This may have been what was later to become known as the "high-grade" vein. In 1939, A. Phillips and associates began underground development work and from time-to-time shipped small quantities of gold-silver mineralization to the Provincial Government sampling plant at Prince Rupert. Intermittent work was carried on until 1954 establishing about 82 meters of lateral work, a small stope winze, and two worked out stopes.

Various companies optioned the claims from 1959 to 1963 and undertook underground and surface drilling and apparently a new adit was driven under the original workings for a length of 150 meters.

In 1987 a small diamond drill program tested the area of the previously mined high-grade goldsilver mineralization and eight of the twelve holes intersected quartz veined intervals, generally less than 1 m wide, contained pyrite, sphalerite, galena, arsenopyrite and tetrahedrite, with possible ruby silver, although grades were not comparable to the underground mineralization.

American Creek Resources Ltd. acquired six of the currently registered Electrum claims in 2004 and in 2005 undertook geologic mapping, lithogeochemical sampling, and a helicopter-borne magnetic and electromagnetic survey outlining several broad areas of elevated magnetics that correspond to areas of strong pyrite-sericite alteration and silicification.

In 2006 American Creek undertook a ground-based induced polarization (IP) geophysical survey, as well as diamond drilling of 21 holes. The drilling tested various targets and the results confirmed small veins that typically returned values in the range of 0.5 to 3.0 g/t Au and 5.0 to 150.0 g/t Ag over 0.5 to 2.0 m, with occasional high values such as 440.78 g/t gold and 400.0 g/t silver over 0.5 m. Of greater significance may be a wider mineralized interval that averaged 0.55 g/t Au and 2.0 g/t Ag over a substantial length of 70.3 m (Dandy and Grunenberg, 2006). This hole was located about 250 m south of the historical mine workings and appears to indicate that wider zones of mineralization are present, with the potential to discover areas containing higher grades over significant widths.

In 2007, forty-four diamond drill holes tested geological and geochemical targets covering a northsouth corridor about 1200 m long by 300 m wide. Many of the holes returned sporadic intersections of relatively low-grade gold and silver, however, there were highlights such as a 50.36 m intersection of 1.06 g/t gold, and a 109 m intersection of 12.25 g/t silver. Additional highlights included 3.01 g/t gold and 2.05 g/t silver over 26 meters; 29.9 g/t gold and 10.2 g/t silver over 2 meters; and 0.53 g/t gold and 2.49 g/t silver over 31 meters. As well, two of the holes returned 31.0 meters averaging 0.0118% molybdenum and 84.3 meters of 0.007% molybdenum, possibly indicative of porphyry-style mineralization at depth (Sanabria, 2008). Holes were drilled at a variety of orientations and dips to cover a large area, but there is insufficient drill information to determine continuity of mineral zones and grades between holes.

The Electrum area has potential for high-grade gold-silver mineralization in epithermal breccia-vein systems that consistently show a 120-130 strike direction and have been found in drill core at depths greater than 200 meters from surface. The south part of the Electrum area also has potential for bulk tonnage porphyry-style molybdenum-gold mineralization. Rocks found in core and in surface mapping suggest that molybdenum-gold porphyry-style mineralization could be related to the intrusion of the Summit Lake granodiorite stock that may, in part, underlie the area. This southern area has not had systematic sampling or drill testing and follow-up work has been recommended.

In 2016, Tudor Gold Corp. optioned the Electrum claims from American Creek and undertook diamond drilling of 19 holes, trenching and rock sampling, and the collection of a 3,846 kg metallurgical bulk sample. Drilling returned strong Au-Ag intercepts over generally narrow widths of less than 2m, such as 5.41 g/t Au, 728.0 g/t Ag over 0.27 m and 1.18 g/t Au, 89.9 g/t Ag over 1.48 m, however, some intercepts containing multiple veins averaged moderate silver values over broader widths, such as 7.9 g/t Ag with 0.13 g/t Au, over 34.59 m (McCrea, 2017). There is insufficient detailed drilling to determine the extent, orientation, and true widths of mineralized zones. The three holes that returned the strongest values were directly beneath a new surface showing called the New Blast Zone.

A trench blasted across a central vein structure in the New Blast Zone in 2016 exposed vein mineralization over a strike length of 15 m and width of 5 m with a trend of about 140°. The central axis of the quartz vein structure hosts fine-grained, dark grey to black sulfide mineralization that

includes pyrite and pyrrhotite, with thin galena seams. Twelve selected samples collected from individual veins and breccia reportedly averaged 3,461.92 g/t (111.30 oz/T) silver and 2.24 g/t gold (McCrea, 2017). A bulk sample was collected from this trench and the entire lot was crushed, split and sampled for metallurgical test work. The metallurgical balance indicated that the 3,846 kg sample averaged 2.82 g/t Au, 539 g/t Ag, 1.96% Pb, 1.97% Zn and 13.8% S (McCrea, 2017).

In 2018 Tudor undertook a limited Induced Polarization (IP) survey of 5.0 line-km in four lines. Four distinct zones of elevated chargeability were resolved, extending to depths of more than 300m. Two of the responses are interpreted as fault zones, which could be associated with sulfide bearing veins; one is the potential extension of the Blast Zone while the other is on trend from the area of the historical tunnel at the East Gold Zone. Drilling of these targets was recommended.

Mackie Area

On the far west part of the Property, there are exposures of favourable Hazelton Group volcanic rocks in contact with an Eocene batholith, however, there has been only limited exploration undertaken, focussed mainly around known mineral showings consisting of narrow quartz veins 1 to 10 cm wide with stringers and blebs of pyrite, galena sphalerite and chalcopyrite that have returned anomalous gold and silver values.

The area of the western claims is partly underlain by the Eskay Rift, a geological feature that contains the very rich and successfully mined Eskay Creek deposit, located about 25 km to the north. This part of the Property is prospective both for gold-bearing quartz veins and for volcanic-hosted massive sulfide deposits, which can be very rich but typically have a rather small footprint and are therefore not readily apparent on surface. Although the nearby known mineral deposits are hosted by similar geological features to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property.

Orion Area

In the central part of the Property, known as Orion, more advanced work has been undertaken around the Tribe and Cat-in-the-Hat occurrences. In 1988 a stockwork zone measuring about 30 m by 13 m was discovered, within which chip samples across the most strongly mineralized vein ran 0.915 oz/t (31.37 g/t) Au over 1.6 m (Tribe, 1987). In 1990, airborne magnetic, EM and VLF-EM surveys flown by Amphora Resources revealed several subparallel conductive zones, however, there is no record of these being followed-up. In 1994 Teuton Resources acquired the claims and conducted trenching and rock sampling, which returned significant values, such as 13 continuous chip samples averaging 0.074 opt (2.54 g/t) gold and 1.36% arsenic across 13 meters in an outcrop of brecciated rhyolite at the Cat-in-the-Hat zone (Cremonese, 1995). In 2007 Teuton drilled 5 holes at this showing, to test areas of anomalous Au-As mineralization in gossanous, altered, pyritic felsic volcanics. The first hole apparently intersected fracture-controlled pyrite and local quartz veins in rhyolite breccia from surface to 31.4 m depth with several anomalous Au-As sections. Twelve core samples returned greater than 400 ppb Au over widths of 1.0 to 1.5 m, the best of which averaged 4.04 g/t Au, 0.85% As over 2.0 m (Cremonese, 2008). The other four holes were not reported.

In 2015 Tudor Holdings Ltd. undertook prospecting and limited rock sampling in the southeastern part of the Orion area. Four widely separated grab samples returned significant values of 1.98 to 5.31 g/t Au, with anomalous Ag and As values (Hutter, 2015). The rocks are described as sheared, foliated, altered volcanics with limonitic quartz veining.

In 2016 Tudor Gold Corp. commissioned a magnetotelluric (MT) survey in the Orion area, covering the Cat-in-the-Hat showing and the contact zone between Stuhini and Hazelton Group rocks. The areas with lowest resistivity coincide with Stuhini Group rocks, while areas with higher resistivities are probably underlain by Hazelton Group rocks farther to the east. This agrees with the interpretation that the Sulphurets Fault may continue southerly from the KSM property, extending down the east side of the ridge and bringing Stuhini in contact with Hazelton rocks. This could have implications for potential fault-related stockwork-style mineralization in this area. The survey also identified possible northwest and northeast structures at depth in the Cat-in-the-Hat area. Recommendations included geological mapping and an airborne magnetic survey to help define structures.

In 2018, Tudor undertook geological reconnaissance and rock sampling in the Orion, Delta and Fairweather areas. Approximately 70 samples at Orion were distributed over an elongate area about 3 km in length, along the east and west edges of the north-south trending Orion ridge. The main area of anomalous results extends over about 500 m on the east side of the ridge. Ten grab samples returned high Ag values ranging from 13.6 to 778.0 g/t, several with coincident anomalous As, and a few with anomalous Pb, Zn, Cu and/or Au. Eight grab samples returned greater than 100 ppb Au, with a highest value of 31.1 g/t Au, with 25.9 g/t Ag, 625 ppm Cu and >10,000 ppm As (Rowe, 2019). Most of the samples are described as quartz veins in volcanic rocks containing stringers, disseminations, or pods of pyrite with lesser base metals and local tetrahedrite. A significant discovery in 2018 was a lengthy boulder train of angular blocks of jasperoidal quartz and massive, stratified pyrite with a siliceous, possibly exhalative, matrix with shards of rip-up fragments of black mudstone within the massive, layered pyrite.

Follow up by Tudor in 2019 of the Orion anomalous trend was successful in identifying additional quartz-sulfide breccia stringer zones along an 800 m, north-south stretch, west of, and parallel to, the contact between Upper Triassic and Lower Jurassic units. Eleven of 69 rock grab samples contained anomalous gold values ranging from 0.108 to 0.577 g/t Au, and ten samples returned anomalous silver values ranging from 3.7 to 434 g/t Ag (Konkin and Rowe, 2019). Generally, elevated arsenic correlated well with both gold and silver anomalies. Further geological and geochemical exploration has been recommended, in addition to geophysical surveys over the highly prospective Triassic-Jurassic contact area to test at depth and under ice cover.

In 2021, 56 man-days were spent by Tudor personnel mapping and collecting rock samples in four of the Orion mineral showing areas. Mapping on Orion ridge led to a re-interpretation of the exposed rock units, originally defined as part of Stuhini Group to more likely part of the younger Hazelton Group, which is a more prospective host for mineralization in the region.

Rock sampling focused on quartz-sulfide veins at the showings and the immediately surrounding areas. Of the 156 rock chip and grab samples collected, 8 samples returned anomalous gold values ranging from 0.101 to 2.201 g/t Au. As well, these samples returned anomalous values for Ag, and some also contained elevated levels of As and Cu.

Recommendations included continuation of the detailed mapping and sampling, in conjunction with magnetic geophysical surveying, to help develop an understanding of the geological setting and the controls on mineralization.

In May 2022 an airborne magnetic survey was flown over the Orion area. As of the date of this report only preliminary maps of the magnetic results are available to the author.

Delta and Fairweather Areas

In the eastern part of the Property several mineral showings in the north are referred to as the Delta area and the southern showings are known as the Fairweather area. Near the Delta showings, stream sediment and rock sampling, as well as hand trenching, was undertaken by Teuton Resources in 1985, leading to discovery of mineral showings with high gold and silver values, some of which had indications of stratiform mineralization in argillite. Five short holes were drilled by Territorial Petroleum in the Delta Northeast showing area in 1986 with little success. Soil geochemistry in 1986 defined a multi-element anomaly surrounding and downslope from the Delta Northeast occurrence, and rock grab samples of silicified tuff from within the geochemically anomalous area returned occasional anomalous gold values, such as 6.8 g/t Au (Cremonese, 1995). Also in 1986, at the Gamma showing in the Fairweather area, a pyritized agglomerate carrying anomalous values in gold and arsenic was discovered. It was trenched in 1987 by Wedgewood Resources, returning a chip sampling average of 4.05 g/t gold over a continuous width of 7 meters (Kruchkowski, 1988), however, the true width is not reported. A small follow-up program in 1988 was not fruitful, and Wedgewood dropped the option.

In 1989 and 1990 Canarc explored the eastern area of the Property with prospecting, sampling, trenching, geological mapping and geochemical surveys, as well as airborne and ground geophysical surveys. Several targets were identified from this work including two prominent IP-resistivity anomalies (with coincident Mag/ VLF EM trends) in the Delta Northeast and Delta zones, however, no follow-up work was reported. The claims later reverted to Teuton, which undertook soil sampling in 1991-92, indicating a gold-silver-lead-zinc geochemical anomaly coincident with some of the geophysical anomalies. In 1994-95 reconnaissance rock sampling by Teuton near the Delta Southwest showing tested for the source of pyritic argillite in float that had returned anomalous gold values from 4 grab samples, ranging from 0.37 to 13.9 g/t Au (Cremonese, 1995). Anomalous Pb, Zn, Ag was found in outcrop but not the source of the high gold.

No further work was recorded until 2007, when Hathor Exploration undertook airborne EM, magnetic and radiometric surveys that were part of a more widespread regional geophysical campaign. In 2009 Hathor and Max Minerals Ltd. conducted wide-ranging reconnaissance silt, rock and soil sampling that tested some of the geophysical targets. The Gamma and Delta Northeast

showings were briefly investigated, with three rock grab samples at Delta Northeast from a 60 cmwide quartz-pyrite-sphalerite-tetrahedrite vein and breccia returning 1.0 to 10.1 g/t Au with 0.7 to 100.1 g/t Ag and base metal values (Harris, 2009). Also, near the Gamma zone a gold-silverarsenic-copper anomaly in soils was defined extending 350 m east and 200 m west of the Gamma showing and remains open to the west. The anomalous soils may be partly related to narrow quartzcarbonate-sulfide veinlets that have yielded significant silver values.

In 2010 Max Minerals targeted precious metal-rich quartz-carbonate veining on the Delta block of claims, and also discovered a new zone of mineralization named Ptuck in the Fairweather area that comprises a 5 to 10 m-wide shear zone hosting a 0.5 to 1 m-wide quartz-carbonate vein with sporadic associated sphalerite, galena, chalcopyrite and tetrahedrite. Reconnaissance soil sampling between the Delta and Gamma showings discovered a 500 m-long multi-element anomaly within sedimentary rocks near the contact with volcanic rocks. Prospecting of the anomaly did not reveal any mineralization.

In 2011 Teuton Resources Corp. drilled five holes in the Delta area targeting two mineralized zones previously discovered by surface rock sampling with anomalous gold values. The best drill result of 3.0 g/t Au over 5.8 m was associated with silicification and 5-7% disseminated and fracture-coating pyrite within variably sericite-chlorite altered diorite (Cremonese, 2013). True width was not determined. Elevated gold values also occur in siliceous siltstone cut by randomly oriented quartz-calcite veinlets with limonite or pyrite seams. The gold appears to be concentrated near the contacts between diorite and siltstone or hematite-altered volcanic rocks.

In 2012 Teuton drilled two holes in the Delta area approximately 150 m north of the 2011 drilling. Both holes intersected locally brecciated siltstone overlying variably chlorite-sericite altered volcaniclastic rocks. Dykes of sericite-altered, pyritic intermediate intrusive cut all rock types. Lengthy sections of intense iron carbonate alteration with cross-cutting fractures containing pyrite and sphalerite were intersected. These intervals did not return significant values in gold, however, at the end of Hole H12-02, narrow sections of fine-grained, massive sulfide mineralization containing appreciable lead, zinc, silver and gold values were encountered, including 0.4 meters grading 7.18% lead, 4.12% zinc, 243 g/t silver, and 7.18 g/t gold. The lead-zinc mineralization appears to have been remobilized and is hosted within a volcaniclastic flow sequence with associated discordant stockwork stringers, however, Cremonese and Mullin (2013) commented that these veins could have affinities with VMS-type mineralization.

In 2018 Tudor undertook limited geological reconnaissance and rock sampling in the Delta and Fairweather areas prospecting recently exposed outcrops along the edges of retreating glaciers. Near the Feld showing four grab samples of silicified siltstone with disseminated pyrite, galena and arsenopyrite, and narrow quartz veins returned 0.1 to 10.2 g/t Au and 0.9 to 7.7 g/t Ag. About 750m west of the Gamma showing, a talus float sample of brecciated argillite, with quartz matrix containing pyrite and arsenopyrite, returned 9.3 g/t Au, 51.2 g/t Ag, 1660 ppm Cu, 766 ppm Pb, 2.43% Zn and >10,000 ppm As (Rowe, 2019). This sample was collected about 5 m downslope from a massive, layered siliceous, pyritic outcrop, approximately 70 cm thick, that may be

exhalative in origin, from which a grab sample returned 3.87 g/t Au, 51.1 g/t Ag, 0.3% As and 19.4% Fe (Rowe, 2019). Other samples in the area returned significant Ag, Pb and Zn values from quartziron carbonate veins with galena and sphalerite, cutting greywacke. The discovery of these mineral showings in areas previously covered by glacial ice emphasizes the very good potential for additional new discoveries to be made through continuing exploration.

Geology

The regional geology has been mapped by a number of geologists from the BC Geological Survey and the Geological Survey of Canada, several of which are listed in References, Section 19.0. The Crown Property is underlain by Late Triassic to Middle Jurassic stratified volcanic and volcaniclastic rocks, volcanic flows and sedimentary units of the Stuhini and Hazelton Groups, which are found throughout much of Stikinia. Stikinia makes up a large part of the northern Intermontane Belt in this part of the northern Cordillera and is bounded by rocks of the largely plutonic Coast Belt, which lie immediately adjacent to the west. Rocks making up the Stikine terrane are almost exclusively of intra-oceanic island arc affinity and were accreted to the North American continental margin in mid-Mesozoic time. In northwestern BC the Stikine terrane follows an arc-like trend that is known as the Stikine Arch, which hosts a number of economically significant Late Triassic to Early Jurassic porphyry copper (gold, silver, molybdenum) deposits as well as an abundance of gold-rich mineral occurrences that include vein and volcanogenic categories.

Significant mineral deposits surround the Crown Project. Of particular importance are the nearby, large porphyry-style KSM Au-Cu deposits that lie immediately to the north, and the gold-rich vein deposits that are currently being mined at the Valley of the Kings deposit, all found within similar geological settings to Crown. As well, there are indications of possible Au- and Ag-bearing exhalative-style mineralization at Crown that bear similarities to the Eskay Creek deposit, a volcanogenic sulfide deposit with very high gold and silver values, located 25 km north-northwest of the Property. Although the nearby known mineral deposits are hosted by similar geological units to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property that is the subject of this Technical Report.

The Property lies within a 300 km-long, northerly trending, commonly fault-bounded belt of Triassic and Jurassic rocks. Within this belt a structural feature known as the Eskay Rift was the site of deposition of Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. Deposition environments appear to have ranged from subaerial, to shallow water depth, to deepwater ocean floor settings. Associated exhalative mineral deposits are known within different segments of the Eskay Rift, such as at the nearby past-producing Eskay Creek deposit, as well as at the Anyox and Bonanza copper-silver deposits south of Stewart. The eastern part of the Crown Property hosts lithologies from the upper part of the Hazelton Group that appear to be rift-fill type clastic and volcaniclastic rocks, as well as including felsic volcanic units.

Small stocks in the area surrounding the Property range in age from 195 to 187 Ma and may have partly coincided with the regional rifting events. Associated with some of these stocks, as well as the Stuhini Group and lower Hazelton Group rocks they intrude, are several very large porphyry

Au-Cu deposits: primarily the Kerr, Sulphurets, Mitchell, Iron Cap, Snowfield and Goldstorm deposits, all located within 3 to 15 km north of the Property. Additionally, lower Hazelton Group rocks host high-grade epithermal gold vein stockworks at the Valley of the Kings deposit, located 4 km to the northeast, and at the Scottie Gold deposit 4 km south of the Property. Although the nearby known mineral deposits are hosted by similar geological units to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property that is the subject of this Technical Report.

Very little detailed geological mapping has been undertaken on the Property, other than localized geological evaluation of individual showing areas. The far west side of the Property is underlain by Stuhini Group marine sedimentary and volcanic rocks, extending easterly to the north-northwest trending South Unuk / Harrymel Fault, which is the western boundary of the Eskay Rift zone that passes diagonally through the west side of the claim block. Several Minfile mineral occurrences are mapped close to this fault zone along its length. Hazelton Group rocks lie east of the fault and are primarily comprised of andesitic volcanics, which are overlain by a north-northwest trending linear belt of basaltic volcanics. This sequence is cut by the Lee Brant stock, an outlier of Eocene granitic rock.

In the central part of the Property the southern extent of the McTagg Anticlinorium has been mapped, with a core of Stuhini Group rocks exposed along a north-south trending ridge. MT geophysical surveying has suggested that the anticlinal limbs are steeply dipping, but there is also geophysical data that suggests that the eastern contact of Stuhini Group rocks may be thrust over Hazelton Group along the possible southern extension of the Sulphurets Thrust Fault. This contact zone is a prospective area to search for mineralization, however, within the Property area it may be largely covered by glacial ice.

The eastern part of the Property is underlain by Hazelton Group units that appear to be folded into a north-northwest trending synform with a core of sedimentary rocks that host many of the mineral occurrences in the area. This stratigraphy may be equivalent in age to host rocks for the Eskay Creek deposit, and past exploration in the Delta and Fairweather areas has been focused on argillite-hosted Ag-Au-Pb-Zn mineralization that may be volcanogenic in origin. Although the nearby known mineral deposits are hosted by similar geological features to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property. The sedimentary unit is underlain by a thin unit of calc-alkaline volcanic rocks that may belong to the Mount Dilworth Formation. This unit is underlain by a thicker sequence of volcaniclastic rocks that are likely part of the Betty Creek Formation. No intrusions have been mapped in the central and eastern parts of the Property, however, due to limited bedrock exposure they could be hidden from view or may be present at depth.

The Electrum area in the southeast part of the Project is primarily underlain by strata that has been correlated with the Lower Jurassic Unuk River Formation of the Hazelton Group. The area of the East Gold mineral showings is underlain by a north-northwest trending belt of folded andesitic volcanic rock that contains a thick sedimentary sequence in-folded along a synclinal axis. This belt

is cut by Mesozoic and Tertiary intrusions. The rocks at East Gold are mainly comprised of highly fractured and sheared fine-grained siltstone with minor clastic horizons in a tightly folded anticline with a north-northwest trend. A pervasive sericite, quartz, carbonate, pyrite alteration has overprinted much of the strata producing reddish gossans in outcrops. A northerly trending section of the Early Jurassic Summit Lake Stock lies about 600 meters southwest of the showings and a lobe of the stock extends onto the southwest corner of the claims, where mineralized veins have been found in the granodiorite.

Fault-controlled subsidence led to development of a number of sub-basins within the 300 km long by 50 km wide Eskay Rift volcanic belt. These types of structures are interpreted to be synvolcanic (growth) faults and likely were not active past the last deposition of Hazelton rocks. The north-trending, steeply-dipping Brucejack fault that extends northward from the Valley of the Kings Au-Ag deposit is thought to be a reactivated segment of one of the growth faults and is spatially related to numerous gold occurrences on the Brucejack property. Although not shown on regional maps, the Brucejack Fault could extend farther south under glacial ice cover and its trend projects through the east part of the Property near the Delta Mineral showings. Farther south the regional geology map shows a north-northwest trending fault through the Electrum area, very close to the East Gold mineral occurrence, which could be a distant continuation of the Brucejack Fault.

During Cretaceous and possibly Tertiary time the area surrounding the Property was affected by regional contractional events consisting of extensive east-northeast vergent systems of folding and thrust faulting. The Kerr, Sulphurets, Snowfield, Iron Cap and Goldstorm porphyry deposits are in the footwall of the east-vergent Sulphurets thrust fault. It is probable that the Sulphurets Fault, or splays of it, continue southerly through the central part of the Crown Property, perhaps along the eastern contact of the Stuhini Group rocks, although this area is poorly exposed due to glacial ice cover. Although the nearby known mineral deposits are hosted by similar geological features to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property.

Nelson and Kyba (2014) have theorized that the Brucejack and Sulphurets Faults may have originated as steep, bounding faults that formed a rift on the east flank of the McTagg highland. These deep-seated faults may have been the conduits for porphyry intrusions and associated hydrothermal fluids that deposited many of the known mineral bodies in the area. As such the areas where these major faults project southward across the Crown Property are prime exploration targets.

Mineralization

There are several known mineral deposits in the area surrounding the Property and the potential for discovery of similar mineralization on the Crown tenures is considered very good. Some of the most significant deposits at the adjacent KSM property, described by Febbo et al. (2015), comprise porphyry Au-Cu-Ag mineralization related to large multi-stage, hydrothermal systems that developed within and above genetically related Early Jurassic intrusions. Redistribution, and possibly further concentration of metals, occurred in some deposits during waning stages of

intrusion and later tectonic deformation. In the porphyry deposits, stockworks, veinlets and disseminations of mineralization occur in large, possibly economic, bulk-mineable zones within the intrusive bodies and the adjacent rocks. The mineralization is spatially and genetically associated with hydrothermal alteration of the intrusive bodies and host rocks. Alteration commonly consists of phyllic quartz-sericite-pyrite, intermediate argillic, and potassium silicate zones, which have produced large expanses of gossanous rock in surface exposures. The mineralization may include chalcopyrite, molybdenite, tetrahedrite-tennantite and lesser galena and sphalerite. Gold typically occurs as electrum encased in fine-grained pyrite, as well as within late stage, higher grade gold-quartz veins that show epithermal-style banded textures.

High-grade gold-silver mineralization in the Brucejack camp, north of the Property, is generally hosted within quartz-carbonate and quartz-adularia veins and vein stockworks in what is described as a transitional epithermal environment. Mineralization and alteration are structurally and stratigraphically controlled, roughly following the contact between underlying conglomerate and overlying andesitic fragmental rocks. Gold-silver mineralization occurs as coarse electrum in multi-stage generations of veins and breccias. Sulfide mineralization present in most of the veins includes pyrite, sphalerite, galena, chalcopyrite, and pyrargyrite. Alteration associated with mineral zones consists dominantly of quartz-sericite-pyrite, with lesser sericite-chlorite, and is believed to be Early Jurassic in age. The strongest alteration is observed within the sedimentary and fragmental volcanic rocks. Intense silica alteration developed along the favoured stratigraphic contact, and it is believed that fluid pressure build-up below this siliceous impermeable boundary caused multi-stage explosive fracturing and brecciation, followed by emplacement of gold-bearing veins.

Although the nearby known mineral deposits are hosted by similar geological units to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property that is the subject of this Technical Report.

There are several reported mineral occurrences on the Crown Property, as well as surrounding the Property. Occurrences encompass several styles of mineralization, but are typically comprised of veins, disseminations or breccias with local wider zones of stockwork-style mineralization that may be related to shear zones. Many of the narrower veins (generally <1m width) have returned high Ag, Pb and Zn values, with some high Au values, but most are lacking in continuity. In the Orion area of the central part of the Property quartz-arsenopyrite veins in brecciated rhyolitic rocks have returned gold values over respectable widths, such as 2.54 g/t Au over 13 meters (Cremonese, 1995). At the Electrum area on the southeast part of the Property, selective underground mining of some narrow veins in the 1940's and 50's produced 45.7 tonnes that averaged 1132.2 g/t Au and 3124.6 g/t Ag (Minfile Report No. 104B 033). More recently at Electrum, a 3,846 kg bulk sample collected from a central vein with surrounding stockwork veins over a 5 m by 15 m trenched area averaged 2.82 g/t Au and 539.0 g/t Ag, with elevated Pb and Zn values (McCrea, 2017). As well, there are indications of stratiform VMS-style mineralization on the eastern claims, including samples of argillite and banded jasperoidal rocks containing galena and sphalerite with anomalous gold and silver values from float boulders and small outcrop areas.

2.0 INTRODUCTION

At the request of Goldstorm Metals Corp. the author carried out an independent review and evaluation of the Company's exploration results for the Property, as well as reviewing available historical documentation and conducting a property examination on September 22, 2020. Since the author's visit, the Company's parent company (Tudor Gold Corp.) has undertaken geological reconnaissance and collection of 156 rock samples, as well as a recent airborne magnetic survey on the central part of the Property. The author has reviewed the results of the rock samples and, although there were several anomalous gold and silver values over widths of 1 to 2.5 m, most of the samples were from areas of previously known mineralization. Preliminary maps from the airborne magnetic survey have also been examined and evaluated by the author. The author is of the opinion that there is no material change to the scientific and technical information since the time of the author's inspection. Details of the work undertaken in 2021 and 2022 are included in Section 9.0. This Report was prepared in accordance with the formatting requirements of *National Instrument 43-101 and Form 43-101F1 Standards of Disclosure for Mineral Properties* to be a comprehensive review of exploration carried out to date on the Property and, if warranted, to provide recommendations for future work. It is intended to be read in its entirety.

Tudor Gold Corp. and Goldstorm have entered into an arrangement agreement, pursuant to which the parties will complete a proposed spin-off transaction of Tudor's Crown Property. Tudor owns 100% interest in the mineral claims, and these will be transferred to Goldstorm Metals in accordance with the agreement. The Project has received early-stage exploration in several target areas and more advanced exploration by diamond drilling in three areas, with more than 113 holes drilled to date.

Currently, there are no major assets or facilities associated with the Project other than a few drill roads and pads and a small extent of underground tunnels. The Project has a gravel access road extending to the southeastern concessions; however, most of the Property is currently accessible only by helicopter. A small amount of hand-picked mineralization has been processed from the underground workings in the past. Reports indicate that approximately 46 tonnes yielded 118,719 grams (3,817 oz) of silver and 75,985 grams (2,443 oz) of gold, mostly during the period 1939 to 1945 (Sanabria, 2008).

Nearby mine development has occurred 14 km to the south of the Property at the Granduc mine, which, from 1971 to 1984, produced approximately 190,000 tonnes of copper mineralization at average grades of 1.23% Cu, 0.13 g/t Au and 8.0 g/t Ag (BCGS Minfile Report,

https://minfile.gov.bc.ca/summary.aspx?minfilno=104B%20%20021). At the Scottie Gold deposit, 4 km to the south of the Property, mining and milling from 1981 to 1984 totalled 160,264 tonnes at an average grade of 16.2 g/t Au, recovering 2.98 M grams of gold and 1.63 M grams of silver (BCGS Minfile Report, https://minfile.gov.bc.ca/summary.aspx?minfilno=104B%20%20034). The Brucejack mine is currently producing gold and silver from the Valley of the Kings (VOK) deposit, located 4 km northeast of the Property. Since the start of production in July 2017 to First Quarter 2021 the VOK deposit has produced 41.06 M grams (1.32 M ounces) of gold. Proven plus Probable

Mineral Reserves for VOK as of January 2021 have been reported to total 11.5 M tonnes at 8.7 g/t 3.2 Μ οz Au and 9.8 q/t Ag, containing of gold (Pretium website. https://s23.g4cdn.com/277467366/files/doc downloads/brucejack/Brucejack-Resources web-March-2021.pdf). As well, the Property lies immediately south of Seabridge Gold's KSM property where five porphyry-style deposits have reported Measured plus Indicated Resources containing 76.4 M oz Au, 17.1 B pounds Cu and 345.5 M oz Ag (Seabridge Website link, December 2020 Mineral Resources table, https://assets.websitefiles.com/5f8f6760f825687e7c1c6508/5fdb652460559d050e6cd7ef 12172020Reserves-Resources-Dec-2020-withSnowfield.pdf). Seabridge has received preliminary government permitting and their conceptual mining plans call for open pit extraction followed by underground

The author has been unable to verify all of the above information on adjacent properties, and the information is not necessarily indicative of the mineralization on the Crown Property that is the subject of this technical report.

2.1 SITE VISIT

mining by block caving.

The author visited the Crown Property on September 22, 2020. Three of the principal target areas and their respective mineral showings were examined and 6 selected samples of mineralization were collected from the Fairweather Zone and the Electrum Blast Trench Zone. The author observed several outcrops of altered and locally mineralized rocks, photographed rock types and general vistas of the Property, and visited sites of previous drilling to verify drill hole locations and determine any possible reclamation requirements. Inclement weather for helicopter flying prohibited access to some of the known mineral zones in the central and western parts of the Property. Descriptions and photographs from the site visit are provided in Section 12, along with results from the check samples.

Subsequent to the author's visit, a brief program of geological reconnaissance and rock sampling was undertaken in 2021 on a small part of the Property by the Company's parent company (Tudor Gold Corp.). Tudor has reported the results of this work in an assessment report submitted to the Mineral Titles Branch of BC Ministry of Energy, Mines and Low Carbon Innovation (MEMLCI). The author has reviewed all the results of the 2021 rock samples and, although there were three moderately anomalous gold values over widths of 0.4 to 2.0 m, the samples were from areas of known mineralization and no new mineralization was discovered. In May 2022 Tudor commissioned an airborne magnetic survey to be flown over the central part of the Property. The author has viewed and evaluated preliminary maps of data from this survey. Descriptions of the anomalous samples from the 2021 work and preliminary magnetic results from the 2022 survey are included in Sections 9.0 and 12.0.

The author has searched public records of Tudor Gold's disclosures of exploration work for the Crown Project since the author's visit to the Property and has found no other indication of exploration work besides the geological reconnaissance and rock sampling undertaken in 2021

and the airborne magnetic survey undertaken in 2022, as indicated in the preceding paragraph. The author is of the opinion that there is no material change to the scientific and technical information since the time of the author's inspection.

In preparation for the site visit, the author reviewed all aspects of exploration work carried out to date on the Property, including results from historical sampling, trenching, drilling, and geochemical and geophysical surveys. The Property hosts at least 15 known mineral showings, most of which have received only limited early-stage exploration work. The most advanced is the Electrum area, which has had a small amount of underground drifting, more than 95 surface drill holes totalling in excess of 18,000 m, 600 m of underground drilling, and a small bulk sample from one surface showing sent for metallurgical testing. The Crown Project is considered to have excellent exploration potential, based mainly on the presence of stockwork-style silver- and gold-bearing mineralization observed over wide areas, and the occurrence of VMS-style mineral showings that have potential for higher grade mineral zones. As well, some of the showings are coincident with broad soil geochemical anomalies that remain open in several directions, and local geophysical testing has indicated prospective targets at depth. There has been a relative lack of exploration beyond the limits of the historically worked vein structures, both on surface and at depth. In addition, there appears to have been a lack of a coherent property-scale structural model developed which might help guide exploration and develop drill targets, and a relative lack of geophysical work, which likewise may help in guiding exploration and drilling.

Some of the historical drill core from the Electrum area of the Property is stored at the private, enclosed yards of More Core Drilling in Stewart, BC. Several of the boxes of core were cursorily examined by the author, however, the labels on the boxes and meterage blocks were in poor condition and often unreadable. The core that was observed contains several areas with abundant quartz veining, some with disseminated sulfide minerals, as well as zones of alteration surrounding the veins, resembling the descriptions found in Electrum technical reports. It would be possible, although time-consuming, to re-label the core blocks and determine the mineralized intervals, however, for the purposes of the inspection it was sufficient to determine that the reported drilling appears to have been performed and that there is veining and alteration present. Drill core from the few holes drilled at other locations on the Property was not available to the author.

2.2 SOURCES OF INFORMATION

The author has reviewed previous exploration activities on the Property, including assessment reports on file available through the MEMLCI ARIS (Assessment Report Indexing System) database, which includes reports prepared between the 1970's and 2020. This Report in part draws upon and references past work and reports by other qualified geologists and professional field personnel. Other non-project specific reports by qualified personnel have been referenced wherever possible. Although some of the earlier work referenced was carried out in the era prior to adoption of the NI 43-101 standards, it is the opinion of the author that the work referred to appears to have been carried out in a workmanlike, professional manner, and the results are representative. The information, conclusions, opinions and recommendations in this Report are based upon:

- information available to the author at the time of preparation.
- assumptions, conditions and qualifications as set forth in this report.
- data, reports and other information provided by Goldstorm Metals and other third-party sources.
- published reports from the current and past operating mines in the region, plus other published government reports and scientific papers.

Information concerning Tudor Gold's option agreements for purchase of the mineral tenures currently comprising the Property was provided by Goldstorm Metals and has not been independently verified by the author. Statistics, weather, and local information for the Project area was obtained from online sources, historical reports and personal knowledge of the Property area. A detailed list of references and sources of information is provided in the References section of this Report.

Much of the background information for this report, such as geological descriptions, regional mineral occurrences, geochemical and geophysical results, and interpretations was derived from previous technical reports prepared for Tudor and associated companies. The documentation reviewed, as well as other sources of information, are listed at the end of this report in Section 19.0 (References).

2.3 ABBREVIATIONS AND UNITS OF MEASURE

Metric units are used throughout this Report and currencies are in Canadian Dollars (C\$) unless otherwise stated. Market gold or silver metal prices are reported in US\$ per troy ounce. A list of abbreviations that may be used in this Report is provided in Table 2.1 below.

Abbreviation	Description	Abbreviation	Description	
AA	atomic absorption	li	limonite	
Ag	silver	m	meter	
ASL	above sea level	m²	square meter	
As, aspy	Arsenic, arsenopyrite	m ³	cubic meter	
Au	gold	Ма	million years ago	
AuEQ	gold equivalent grade	mg	magnetite	
AgEQ	silver equivalent grade	mm	millimeter	
Az	azimuth	M oz	million troy ounces	
Bi	bismuth	ser	sericite	
b.y.	billion years	MEMLCI	Ministry of Energy, Mines and Low Carbon Innovation	
C\$ or \$	Canadian dollar	M t	million tonnes	
са	calcite	mu	muscovite	
cl	chlorite	m.y.	million years	
cm	centimeter	NI 43-101	National Instrument 43-101	
cm ²	square centimeter	NSR	Net Smelter Return	
ср	chalcopyrite	oz/ton	troy ounces per short ton (34.285 grams/tonne)	
Cu	copper	oz	troy ounce (31.1035 grams)	
су	clay	Pb	lead	
°C	degree Celsius	ро	pyrrhotite	
°F	degree Fahrenheit	ppb	parts per billion	
DDH	diamond drill hole	ppm	parts per million	
ер	epidote	ру	pyrite	
ft	feet	QA	Quality Assurance	

Table 2.1	Abbreviations	used in	this	Report
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ft ²	square feet	QC	Quality Control	
ft ³	cubic feet	qz	quartz	
g	gram	RQD	rock quality description	
gn	galena	Sb	antimony	
go	goethite	SEDAR	System for Electronic Document Analysis & Retrieval	
GPS	Global Positioning System	SG	specific gravity	
gpt, g/t	grams per tonne	sph	sphalerite	
ha	hectare	t	tonne (1,000 kg or 2,204.6 lbs)	
Hg	mercury	Те	Tellurium	
hm	hematite	to	tourmaline	
ICP	inductively coupled plasma	ton	short ton (2,000 pounds)	
kf	potassium feldspar	um	micron	
kg	kilogram	US\$	United States dollar	
km	kilometer	VMS	Volcanogenic massive sulfide	
km ²	square kilometer	Zn	Zinc	

3.0 RELIANCE ON OTHER EXPERTS

This Technical Report has been prepared by Jeffrey Rowe (author) for Goldstorm Metals Corp. Publicly available reports and publications that have provided information are referenced in the text and listed in References, (Section 19.0). The author reserves the right, but will not be obligated, to revise the Technical Report and conclusions if additional information becomes known to the author subsequent to the effective date of this Technical Report. The author does not assume any responsibility or liabilities that may arise as a result of this Technical Report being used contrary to its intended purpose.

On November 5, 2021, the author confirmed the status and registration of the subject mineral tenures with information available through the web page of the Mineral Titles Branch, MEMLCI, Government of British Columbia at: *https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/mineral-titles/mineral-placer-titles/mineraltitlesonline*. This B.C. government agency records real-time tenure information for all mineral claims in the province.

The British Columbia MEMLCI geological library was accessed for geological maps and reports found at: *https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/geology.*

The author, Jeffrey D. Rowe, is responsible for preparing all sections of this report. The author is a Qualified Person only in respect of the areas in this Technical Report identified in their "Certificate of Qualified Person" submitted with this Technical Report to the Canadian Securities Administrators.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 PROPERTY LOCATION

The Crown Property is located in the Skeena Mining Division of northwest British Columbia, approximately 45 kilometers north-northwest of the community of Stewart BC (Figures 4.1 & 4.2). The claims are centered at Latitude 56° 21'00" N, Longitude 130° 14' 20" W or, in the North

American Datum 83 (NAD 83) coordinate system, Zone 9 N, at 423,435 E, 6,245,725 N on NTS Map Sheet 108B/08. The Property lies 4 kilometers southwest of the road accessible Brucejack mine, which is producing from the Valley of the Kings gold-silver deposit, and the west side of the Property is 14 kilometers north of the past-producing Granduc Cu-Au-Ag mine that is connected to the Granduc-Stewart Road by a 17 km access tunnel. The southeast part of the Property is 4 km north of the past-producing Scottie gold mine and the remnants of the historical Granduc mill-site that is located along the Granduc road, approximately 50 road-km north from Stewart.





Figure 4.2 The Crown Project is adjacent to several major deposits, of which some are current or past-producing mines



4.2 PROPERTY DESCRIPTION

The Crown Property consists of 50 Mineral Titles Online (MTO) digitally registered mineral tenures totalling 16,468.67 ha in two separate parcels that are separated by approximately 6 km. The mineral tenures are listed in Table 4.1 and the claim locations are shown on Figures 4.2 and 4.3.

Tenure Number	Claim Name	Issue Date	Expiry Date	Area (ha)	Zone
394819	DELTA 1	2002/JUL/02	2023/DEC/11	300.00	Delta
394820	DELTA 2	2002/JUL/02	2023/DEC/11	450.00	Delta
394821	DELTA 4	2002/JUL/02	2023/DEC/11	150.00	Delta
394823	DELTA 6	2002/JUL/02	2023/DEC/11	500.00	Delta
394824	DELTA 8	2002/JUL/02	2023/DEC/11	500.00	Delta
394825	DELTA 7	2002/JUL/02	2023/DEC/11	500.00	Delta
394826	DELTA 9	2002/JUL/02	2023/DEC/11	500.00	Delta
1035987	Deltaex 1	2005/MAR/11	2024/JUL/15	304.61	Delta
1035991	Extension 1	2006/JUN/29	2024/JUL/15	232.93	Delta
1035993		2006/JUN/29	2023/AUG/10	35.83	Delta
1062868	DELTAFAIR	2018/SEP/07	2023/AUG/10	17.92	Delta
1078966	MACKIE3	2020/OCT/01	2023/AUG/10	89.64	Delta
394822	DELTA 5	2002/JUL/02	2023/DEC/11	300.00	Fairweather
394827	DELTA 10	2002/JUL/02	2024/DEC/11	400.00	Fairweather
394828	DELTA 11	2002/JUL/02	2023/DEC/11	300.00	Fairweather
394829	DELTA 12	2002/JUL/02	2023/DEC/11	400.00	Fairweather
394830	DELTA 13	2002/JUL/02	2023/DEC/11	300.00	Fairweather
508817		2005/MAR/11	2023/AUG/10	502.05	Fairweather
1078964	MACKIE1	2020/OCT/01	2023/AUG/10	107.63	Fairweather
1078965	MACKIE2	2020/OCT/01	2023/AUG/10	53.80	Fairweather
508930	High W	2005/MAR/14	2023/AUG/10	357.89	High North
509574	High C3	2005/MAR/23	2023/AUG/10	250.55	High North
1013708		2012/OCT/13	2023/DEC/31	53.71	High North
1021721	WHATS UP	2013/AUG/16	2023/AUG/10	17.89	High North
1029297	HIGH HOPES	2014/JUN/30	2023/AUG/10	71.56	High North
1031091	TUO	2014/SEP/22	2023/AUG/10	17.90	High North
1035983	High 6	2005/MAR/23	2023/DEC/31	339.99	High North
1035985	Hiah 8	2005/MAR/11	2023/DEC/31	644.62	High North
1039281	HUTTER	2015/OCT/13	2023/AUG/10	304.98	Mackie East
1039441	RILEY	2015/OCT/20	2023/AUG/10	1272.47	Mackie East
1038154	STORM	2015/AUG/23	2023/AUG/10	1488.17	Mackie West
1039179	STORM3	2015/OCT/08	2023/AUG/10	179.23	Mackie West
1076070	MackieWest	2015/OCT/08	2023/AUG/10	1702.88	Mackie West
508809		2005/MAR/11	2023/DEC/31	358.62	Orion
508810		2005/MAR/11	2023/DEC/31	322.73	Orion
535891	ER3	2006/JUN/18	2023/DEC/31	448.24	Orion
535893	RIFFY1	2006/JUN/18	2023/DEC/31	394.35	Orion
535894	RIFFY 2	2006/JUN/18	2023/DEC/31	286.65	Orion
1013107		2012/SEP/22	2023/DEC/31	716.67	Orion
1035986	High 9	2005/MAR/11	2023/DEC/31	519.58	Orion
1041330	FM#1	2016/JAN/16	2023/AUG/10	107.65	Orion
1062867	ORIMAC	2018/SEP/07	2023/AUG/10	17.94	Orion
255205	ROLLIN NO. 1	1970/JUL/22	2029/DEC/31	25.00	Electrum
255206	ROLLIN NO. 2	1970/JUL/22	2029/DEC/31	25.00	Electrum
255207	ROLLIN NO.3	1970/JUL/22	2029/DEC/31	25.00	Electrum
255208	ROLLIN NO.4	1970/JUL/22	2029/DEC/31	25.00	Electrum
255209	ROLLIN NO.5	1970/JUL/22	2029/DEC/31	25.00	Electrum
255210	ROLLIN NO.6	1970/JUL/22	2029/DEC/31	25.00	Electrum
374303	SLIPPERY WILLOW#1	2000/FEB/01	2029/DEC/31	200.00	Electrum
374304	SLIPPERY WILLOW#2	2000/FEB/01	2029/DEC/31	300.00	Electrum
			Total Area	16468.67	

 Table 4.1 Crown Property mineral tenures



Figure 4.3 Tenure map of the Crown Project

The author has determined, by viewing British Columbia Mineral Titles Online records, that the mineral tenures are in good standing as of the writing of this Report, with expiration dates ranging from August 10, 2023 to December 31, 2029, as shown in the above table. The tenures are all currently registered with the MTO office as 100% ownership by Tudor Gold Corp.

An application for a 5-year exploration permit for the Electrum part of the Project was submitted by Tudor Gold Corp., and approved by the BC Ministry of Energy, Mines and Low Carbon Innovation in 2019. This permit allows drilling, trenching and collection of a 1000 tonne bulk sample from surface exposures for further test work in the Electrum area. Application for a 5-year exploration permit covering the remainder of the Project area was submitted to the Ministry office in Smithers and, as of July 22, 2022, the application to allow drilling, trenching and electrode-type ground geophysics has been granted to Tudor Gold. These permits can be transferred to Goldstorm by Tudor.

4.3 CROWN PROPERTY OPTION AGREEMENTS

Tudor Gold Corp. ("Tudor") and Goldstorm entered into an arrangement agreement dated July 7, 2021, as amended and restated on August 10, 2022 (the "Arrangement Agreement") pursuant to which, among other things, the parties will complete a proposed spin-off transaction of Tudor's Crown Property, comprised of six adjacent mineral claim groups, by way of a plan of arrangement under the *Business Corporations Act* (British Columbia) (the "Arrangement"). The Arrangement will

involve, among other things, Tudor transferring the Crown Property to Goldstorm in consideration for Goldstorm issuing such number of common shares in the capital of Goldstorm (the "Goldstorm Shares") as is equal to the number of common shares in the capital of Tudor outstanding as of the Distribution Record Date (as defined below) multiplied by 0.251. The Distribution Record Date means the close of business on the date as agreed to by Tudor and Goldstorm, which date establishes the shareholders of Tudor who will be entitled to receive new shares of Tudor and Goldstorm Shares pursuant to the Arrangement. The Arrangement will result in such shareholders of Tudor receiving their pro rata portion, at an exchange ratio of 0.251, of the Goldstorm Shares that Tudor will hold upon completion of the transaction.

The Crown Property is comprised of several parcels of claims that were subject to separate option agreements between Tudor and Teuton Resources Corp., American Creek Resources Ltd. and Mr. Richard Mill. Some of the adjacent claims were staked by Tudor Gold and are 100% owned. Tudor has now satisfied all the terms of the option agreements and is 100% owner of all the tenures that make up the Crown Property. Each of the areas that were subject to Tudor's option agreements are shown on Figure 4.3. Some of the agreement area tenures are subject to Net Smelter return (NSR) royalty payments from any future mineral production, as outlined below. Upon Tudor's transfer of 100% ownership of all the tenures that comprise the Crown Property to Goldstorm Metals, the NSR agreements will be assumed by Goldstorm.

Electrum NSR

The Rollin No.1 to No.6 mineral claims (tenures 255205, 255206, 255207, 255208, 255209, 255210), which comprise 23% of the Electrum area, are subject to a 2% net smelter return royalty granted to Douglas Halfyard, Al Soucie and Robert McKay. The 2% NSR may be bought out at any time for \$1,000,000.

High North NSR

The claims that make up the High North agreement area are subject to a 2.5% NSR royalty payable to Teuton Resources Corp., with no buyout price stated.

Orion NSR

The claims that make up the Orion agreement area are subject to a 2.5% NSR royalty payable to Teuton Resources Corp., with no buyout price stated.

Delta NSR

All claims that make up the Delta agreement area, other than tenures 1035987, 1035991 and 1035993, are subject to a 2.0% NSR royalty payable to Matthew J. Mason and a 1.5% NSR royalty payable to Teuton Resources Corp. Tenures 1035987, 1035991 and 1035993 are subject to a 2.5% NSR royalty payable to Teuton Resources Corp. There is no buyout price stated.

Fairweather NSR

All claims that make up the Fairweather agreement area, other than tenure 508817, are subject to a 2.0% NSR royalty payable to Matthew J. Mason and a 1.0% NSR royalty payable to Teuton

Resources Corp. Tenure 508817 is subject to a 2.0% NSR royalty payable to Teuton Resources Corp. There is no buyout price stated.

4.4 MINERAL TENURE OWNERSHIP IN BRITISH COLUMBIA

In British Columbia, the owner of a mineral claim is granted 100% ownership of all sub-surface minerals. A valid Free Miner Certificate ("FMC") is required to record a claim or acquire a recorded claim or interest in a recorded claim by transfer, and to conduct exploration for minerals on mineral claims within British Columbia. A company FMC is available to any registered corporation in good standing for a fee of \$500, and to individuals for \$25, renewable annually.

Mineral titles in British Columbia are acquired and maintained through Mineral Titles Online, a computerized system that provides map-based staking. Acquisition costs for new claims are \$1.75 per hectare. This confers ownership of the claim for one year beyond the date of staking. To continue to hold the claims beyond the first year, the owner must complete assessment work, either physical or technical, on the property, or pay cash in lieu. A report must be filed detailing the work performed and the results. These assessment reports remain confidential for one year and then become available for public access. If assessment work or cash in lieu is not filed by the required date the claims will automatically forfeit. To extend the expiry date for years 1 and 2 the work requirement is \$5 per hectare per year, for years 3 and 4 it is \$10 per year, years 5 and 6 it is \$15 per year, and thereafter \$20 per year. Rather than perform work on the Property, cash in lieu may be paid to hold the claims, at a rate twice that of required exploration expenditures. The Crown Property tenures were mostly staked prior to 2015, therefore the majority are in their seventh year or more, thereby requiring \$20 per hectare in exploration costs for each year applied for assessment or \$40 per hectare cash in lieu for each year.

The claims that comprise the Property are wholly located on Crown Land and the Province of British Columbia owns all surface rights. There is no privately held ground within the area of the Property.

4.5 ENVIRONMENTAL REGULATIONS & EXPLORATION PERMITS

A reclamation bond or security is required to be posted with the government of BC as part of the exploration permitting process to pay for the cost of reclamation of surface disturbance in the event that a company defaults on its obligation to perform any required remediation. Permits and reclamation security are required for any type of exploration work that may cause disturbance or possible environmental damage to the land. These include, but are not limited to, the following:

- construction of drill sites and helicopter pads
- cutting of timber for geophysical grid lines
- trenching
- construction of roads or trails
- camp construction
- drilling and blasting
- underground development
- · use of wheeled or other mobile equipment

fuel storage

The posted bond, or security, can be recovered by the company upon acceptable remediation of environmental disturbance on the Property caused by exploration activities.

A Multi-Year (5 year) Area-Based ("MYAB") permit can be obtained from the BC Ministry of Mines which provides for a range of property exploration activities, including specified levels of diamond drilling, blasting, geophysical surveys, camp site disturbance, fuel storage, underground exploration, bulk sampling and more, by making application to the regional BC Ministry of Mines office. The permit process generally takes from 3 to 5 months to complete, following consultation with other Ministries and affected groups. Tudor Gold has submitted, and been granted, a Notice of Work application for a 5-year MYAB permit for the Electrum area of the Property, allowing up to 20 diamond drill sites, 5 trenches and surface sample collection. Tudor has posted reclamation security in the amount of \$30,000 for the proposed work. Tudor has also recently been issued a 5year MYAB permit for the remainder of the Property area that allows up to 20 helicopter-supported drill sites, 10 trenches, and 50 line-km of IP geophysical surveying. Tudor has posted reclamation security in the amount of \$26,900 for this proposed work. The permits can be transferred to Goldstorm Metals once the Company assumes the reclamation bonding. The permitting process for specific types of work may also require baseline archaeological and environmental studies (water quality, flora, fauna) in the areas proposed for exploration, the development of flight plans to minimize disturbance to mountain ungulates, acid rock drainage and water management plans, and consultation with any affected First Nations or local workers. The author does not foresee any significant factors or risks that may affect access, title, or the right or ability to perform work on the Property.

4.6 ENVIRONMENTAL CONSIDERATIONS

To the best knowledge of the author, there are no environmental considerations or other significant factors or risks that may affect the right or ability to perform work on the Property.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESSIBILITY

The Crown Project is located in northwestern British Columbia, approximately 45 kilometers northnorthwest of the village of Stewart (Figures 4.1 and 4.2). The southeast part of the Property is close to the gravel-surface Granduc road that runs north from Stewart to the remnants of the historical Granduc mill-site and the Granduc tunnel entrance, and from there continues northerly to adjacent mineral prospects. A short branch road runs to the historical adits in the Electrum area, however, the approach to a small bridge along this road has been washed out making the Electrum Road inaccessible at this time. A portion of the Granduc road runs through Alaska, therefore proper identification is required to pass through US Customs, which is located near Stewart, BC. The west side of the Property is 14 km north of the historical Granduc mine, which is connected to the
Stewart-Granduc access road by a 17 km-long un-maintained tunnel. The center of the Crown Property is at approximately 56° 21' 02" N latitude and 130° 14' 22" W longitude, or UTM 423400 E, 6245800 N (NAD83 Z9) on NTS map sheet 104B/8.

Access to most areas of the Property is currently via a 25-minute helicopter flight from a base in Stewart, located 45 km to the south-southeast. During the exploration season, helicopters may also be based at Bob Quinn airstrip, located 60 km north of the Property.

The 287-kilovolt Northwest Transmission powerline, 40 km east of the Property, extends along Highway 37 to a substation near Bob Quinn Lake. This line could provide a potential future supply of readily accessible power, as could the run-of-flow power project at Long Lake, near the now-closed Premier mine, which provides power to Stewart and to Pretium's Brucejack mine via a line that extends northerly near the eastern boundary of the Property. A deep-water ocean port located at Stewart is used for shipping of mineral concentrates by existing mining operations in the region.

Most of the Property is within steep mountainous terrain, however, the Electrum area, at lower elevations on the eastern part of the Property, covers flat ground along the Bowser River that may contain suitable sites for possible future processing plant facilities, tailings storage, waste disposal and a housing complex. The Property is all within Crown land; there are no privately held land titles, therefore, surface rights to accommodate possible mining operations and facilities could be granted by the Crown upon application.

5.2 CLIMATE, VEGETATION AND WILDLIFE

The climate on the Crown Property is generally that of northern coastal temperate zone, with subarctic conditions at high elevations. Precipitation is high with an annual total of rainfall plus snow equivalents estimated to be somewhere between the historical averages for the Eskay Creek mine and the village of Stewart, BC. These range from 801 to 1,295 mm of rain and 1,098 to 570 cm of snow, respectively (data to 2005) (Ghaffari et al. 2016).

Surface exploration is generally restricted to the period from June through early October due to heavy snowfall in winter months, some of which typically remains on north-facing slopes until late summer, or year-round in areas of glacial ice (mostly found within the central part of the Property). Treeline in the area is approximately 1250 meters ASL. Soil development is generally poor except in the valley bottoms and on lower treed slopes. Above treeline, hillsides are characterized by barren rock and ice, with patches of heather, grasses, and scrub brush, as well as occasional stunted black spruce and balsam fir in protected areas. The highest elevations, particularly in the central part of Crown, are typically devoid of any vegetation, except lichens. Vegetation in the valley bottoms is characterized primarily by stands of hemlock, spruce, fir, aspen and alder.

It is unknown if fish inhabit the South Unuk River at the west edge of the Property, although several varieties are known to inhabit the Unuk River farther downstream to the west. Streams on the east side of the Property flow east into Bowser River where varieties of trout and salmon are known. Large wildlife such as moose and caribou inhabit valley bottoms but are rare at higher elevations

due to the rugged topography, limited food, and poor access, however, bears, wolverine, and mountain sheep may be present locally.

5.3 PHYSIOGRAPHY

The terrain at the Crown Property is varied, and a large part of the Project area lies completely above treeline. A rugged "spine" of rock runs north-south across the central part of the Property, flanked on both sides by northern arms of the Frank Mackie Glacier, each up to 2 km wide. Ridges extend east and west along the long axis of the Property and some of the larger streams between ridges drain off the east and west ends of the claim block. Most slopes are moderate to steep and are commonly incised by steep stream gullies that provide good exposures of bedrock. Ridge tops are commonly more than 1800 m in elevation, up to a maximum peak of 2560 m. Elevations drop sharply on the east and west ends of the block, down to river valleys at about 500 m above sea level. Fifty to sixty percent of the main block of Crown claims is covered by permanent ice and snow. The Electrum area of the Property, farther to the southeast, is lower, straddling a section of the upper Bowser River and ranging in elevation from 640 to 880 m. Mineral showings found on the northwestern part of the Electrum area are on a rounded, elongate, northerly-trending hill that protrudes from the moderately steep, forested, east-facing slope of the Bowser River valley.

Streams draining the west part of the Property flow westerly into the South Unuk River, ultimately discharging into the Pacific Ocean via the Unuk River. Streams draining the east part of the Property flow into the Bowser River which enters the Bell-Irving River that flows south to join the Nass River continuing west to the Pacific Ocean. Sufficient water for camp and drilling purposes can be collected from ponds and seasonal streams at higher elevations and from larger streams and rivers at lower elevations.

5.4 LOCAL RESOURCES & INFRASTRUCTURE

There is currently no infrastructure located on the Crown Property other than a few drill roads, drill pads, and short abandoned mine tunnels at Electrum. All exploration activity on the Property has been facilitated by existing services located in the nearby town of Stewart, or the larger centers of Smithers and Terrace.

The town of Stewart BC, with a population of approximately 400, is connected to the provincial highway system via paved, all-weather Highway 37A and 37, which connects to Highway 16 at Kitwanga. Deep-water loading facilities for shipping bulk mineral concentrates exist at Stewart and are currently utilized by the Brucejack gold-silver and Red Chris copper-gold mines, located 4 km and 155 km to the northeast of Crown, respectively. Stewart has a seasonal airport with a 1190-meter-long runway, although it is not currently serviced by scheduled flights. Groceries, camp and exploration supplies, skilled exploration and mining personnel, drill contractors and construction workers are available in Stewart and the regional service centres of Terrace and Smithers, a further 311 and 327 road-kilometers southeast of Stewart, respectively. Scheduled airline flights to Vancouver and other major centres are also available in Terrace and Smithers. The closest First Nation communities are Gitanyow, located approximately 165 kilometers to the southeast, and the

community of Iskut, located about 160 kilometers to the north. Both communities are accessed via Highway 37.

For exploration projects, supplies can be driven to Troy Flats, approximately 40 km north from Stewart on the Granduc road, where a large staging area can be used for mobilization of personnel and supplies to the Property. There is presently no wheeled access to the western part of the Property. Overland transport on glaciers has been proven possible at the Brucejack mine 4 km north of the Project and may be a feasible option at Crown in the future. In the immediate future, exploration and drilling operations on the Property are expected to be supported by helicopter transport.

6.0 HISTORY

A significant amount of exploration has been undertaken in several different areas of the Property by various operators, and this work has been well documented in assessment reports that are referenced in Minfile summary descriptions of the mineral occurrences (https://minfile.gov.bc.ca/). The reader is referred to these assessment reports, as listed in References (Section 19.0), for detailed descriptions of the work programs. The areas that are described below are identified on Figure 6.1.

Electrum Area

The most advanced exploration on the Property has taken place in the Electrum area encompassing the old underground workings of the East Gold mine on the southeastern part of the Project area. The following history for the Electrum area is summarized from the report for Minfile No. 104B 033.

The Pioneer group claims were staked in 1927 and during 1929-30 were under option to Cominco Ltd. which undertook trenching and diamond drilling on quartz veins, but this work failed to show any continuity of values. Hole No. 2, drilled under a high-grade siliceous outcrop, showed values of 299 g/t gold, 301 g/t silver over a drilled width of 1.5 meters. Location of this hole is not known but presumably it was drilled on what was later to become known as the "high-grade" vein. The owners resumed work on the property and began driving an adit at the 762-meter elevation. Work on the property ceased in about 1934 and no further activity was reported until 1939. A. Phillips and associates began development work and from time-to-time shipped small quantities of gold-silver mineralization to the Provincial Government sampling plant at Prince Rupert.

The ground was apparently re-staked as the East group by A. Phillips and associates in about 1944 and intermittent work was carried on until 1954. Development work to this date in the adit driven on the north side of a ravine some 80 meters above the valley floor, consisted of about 82 meters of lateral work, a small stope winze, and two worked out stopes.

No further activity was reported until 1959 when the East Gold claims, owned by A. Phillips, and the Luck claims, owned by S.A. Liening, were optioned to Dempster Explorations Limited. Work by

the company included 380 meters of underground drilling, and 211 meters of surface diamond drilling; the option was later dropped.





Table 6.1 Reported Historical Production from East Gold Mine (after Sanabria, 2008)

Production	Tonnes	Recovery				
Year	Mined	Au (gms)	Ag (gms)	Cu (kg)	Pb (kg)	Zn (kg)
1965	2		8,522		278	471
1954	2	1,866	3,670	3	564	
1953	3	1,151	4,012			
1952	1	1,089	1,586			
1950	17	24,602	52,129	27	738	151
1949	6	2,986	28,708		774	407
1939-1945	14.74	44,291	20,092			
Totals:	45.74	75,985	118,719	30	2,354	1,029

Utica Mines Ltd optioned the East Gold property in 1962 and apparently a new adit was begun and driven under the original workings for a length of 150 meters. A total 227 meters of EX-size diamond drilling was done, apparently from this adit. The option was relinquished in June 1963 and the claims lapsed again.

In March 1965 A. Phillips re-staked claims on the showings. Some development work was carried on until November when Mr. Phillips died in a blasting accident.

In 1986, Sun Valley Gold optioned the property and completed limited mapping and sampling, as well as a 12 hole, 800-meter diamond drill program in 1987. Figure 6.2 shows a plan view of the underground workings projected to surface with traces of the 1987 drill holes. The Sun Valley program was designed to test the zones that contained the previously mined high-grade gold-silver mineralization. The main structure trends 160° and dips 65-80° to the west, with intersecting splay faults at 120° dipping steeply to the south. Gold-silver-bearing shoots occur near these intersections (Wares, 1987). Although the drilling did not intersect any mineralization with grades similar to that previously mined, quartz veins that could have hosted this type of mineralization were intercepted in eight of the twelve holes completed. Quartz veined intervals, generally less than 1 m wide, contained pyrite, sphalerite, galena, arsenopyrite and tetrahedrite, with possible ruby silver. A splay fault structure was also drill tested and other holes were designed to test secondary targets. Wares (1987) concluded that the main structure is discontinuous, possibly due to faulting, and that grades are sporadic. He also stated that a splay structure, while showing some continuity in strike and dip from surface to drill intercepts, returned values less than immediate economic interest.

American Creek Resources Ltd. acquired the six currently registered Electrum claims named Rollin 1-6 in September 2004 and started initial exploration with the collection of 84 rock samples. Preliminary geologic mapping and lithogeochemical sampling was completed by American Creek in the summer and fall of 2005, with a total of 1,446 rock samples submitted for analyses. A helicopter-borne magnetic and electromagnetic survey was also conducted in 2005. The results of the survey showed several broad areas of elevated magnetics that correspond to areas of strong pyrite-sericite alteration and silicification.



Figure 6.2 East Gold plan view of underground workings and 1987 drill hole locations (from Wares, 1987)

In 2006 American Creek Resources Ltd undertook a ground-based induced polarization (IP) geophysical survey on the Electrum Property, as well as 2,794.8 m of diamond drilling in 21 holes. The drilling tested various targets and the results confirmed small veins that typically returned values in the range of 0.5 to 3.0 g/t Au and 5.0 to 150.0 g/t Ag over 0.5 to 2.0 m, with occasional high values such as 440.78 g/t gold and 400.0 g/t silver over 0.5 m (Table 6.2) (Dandy and Grunenberg, 2006). The narrow, structurally controlled, epithermal breccia-veins typically occur in structures striking about 120 degrees and dipping from 60 degrees southwest to vertical, particularly where these structures intersect the main vein structure that, within the underground workings, trends 160° and dips 65-80° to the west. However, the wide spacings and variable orientations of the drill holes did not reveal continuity of narrow mineralized veins. Of greater significance may be the wider mineralized interval in hole EL06-17, that averaged 0.55 g/t Au and 2.0 g/t Ag over a substantial length of 70.3 m (Dandy and Grunenberg, 2006). This hole was located about 250 m south of the historical mine workings and drilled easterly at about -50° dip, however, the trend of mineralization in this area is not known, so the true thickness of the mineralized section is unknown. It does, however, indicate that wider zones of mineralization are present, with the potential to discover areas containing higher grades over significant widths.

Hole No.	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)
EL06-01	2.4	3.4	1.0	1.48	18.1
EL06-01	35.9	36.3	0.4	2.78	58.9
EL06-01	38.9	39.5	0.6	2.98	501.0
EL06-01	39.5	40.0	0.5	1.07	145.0
EL06-02	0.6	2.6	2.0	1.41	5.1
EL06-02	4.4	5.0	0.6	0.63	143.0
EL06-02	110.6	111.0	0.4	2.61	5.4
EL06-03	5.2	5.8	0.6	3.53	14.6
EL06-03	5.8	6.4	0.6	0.83	10.1
EL06-03	37.9	38.8	0.9	0.93	60.7
EL06-04	44.3	45.7	1.4	10.50	89.7
EL06-05	20.5	21.9	1.4	0.67	149.0
EL06-05	24.2	26.5	2.3	0.55	47.9
EL06-07	22.5	25.4	2.9	0.94	125.8
EL06-07	29.6	31.1	1.5	1.46	43.8
EL06-07	39.0	42.0	3.0	0.24	8.3
EL06-08	21.2	26.0	4.8	0.72	70.2
EL06-09	43.1	49.0	5.9	1.20	13.3
EL06-09	71.0	72.5	1.5	1.16	9.8
EL06-09	101.5	102.7	1.2	2.12	4.0
EL06-10	34.5	36.0	1.5	0.81	52.4
EL06-10	45.2	46.8	1.6	1.48	8.7
EL06-11	50.4	53.6	3.2	0.80	16.0
EL06-12	85.0	96.0	11.0	0.65	2.7
	105.9	106.7	0.9	1.98	127.0
	225.0	233.0	8.0	0.77	22.8
	272.0	272.5	0.5	0.42	52.0
EL06-13	50.5	51.5	1.0	0.65	14.0
	111.5	112.5	1.0	16.86	2.1
	127.5	128.5	1.0	0.26	36.0
	133.3	134.3	1.0	0.54	21.0
	181.5	182.1	0.6	0.86	42.0
	184.1	185.9	1.8	0.84	73.1
EL06-14	46.9	47.5	0.6	0.86	26.0
	47.5	48.6	1.1	0.51	28.0
	103.7	104.4	0.7	1.80	144.0
EL06-16	34.7	35.3	0.6	7.15	123.0
5106.47	61.5	62.7	1.2	1.24	12.0
EL06-17	69.7	87.6	17.9	0.39	4.8
	89.6	159.9	/0.3	0.55	2.0
CLU0-18	/2.0	100.0	0.5	440.78	400.0
	93.8 177 1	170 1	7.0	0.04	12.0
FL06-10	70 /	1/0.1	1.0	0.57	13.U 51.0
100-19	116.0	117 2	1.9	0.10	166.0
<u> </u>	110.9	11/.3	0.4	0.54	100.0
<u> </u>	117 0	110 2	2.0	0 02	27 0
FL06-20	22.2	20.1	2.0	0.03	21 0
LL00-20	20.2	29.1	0.9	2 51	31.0
	72 5	7/ 1	0.9	0.50	<u> </u>
<u> </u>	73.5	74.1	0.0	2 70	21 0
<u> </u>	20 2	21 7	1 5	2.73	16.2
<u> </u>	<u>م.2</u>	Q5 Q	1.5	2.13	11.0
<u> </u>	205.0	206.4	0.0	2.41	292.0
<u> </u>	203.3	200.4	5.5	0.33	14.8
FL06-21	87 N	230.2	0.5	0.33	57.0
2100 21	105.8	106.8	1.0	0.24	37.0
<u> </u>	151 8	152.4	0.6	0.20	77 0

 Table 6.2 Selected drill intercepts from 2006 program (Dandy and Grunenberg, 2006)

In 2007 two additional claims, Slippery Willow 1 and 2, were added to the Property by American Creek to cover an area near the river that contains a gravel airstrip as well as several locations for constructing a camp. An extensive exploration program in 2007, that included drilling, was carried out in the Electrum area, designed to test targets outlined by surface mapping and sampling, and to identify targets for deeper drilling. Forty-four diamond drill holes, totalling 12,561 meters were completed (Figure 6.3). The drilling covered a north-south corridor about 1200 m long by 300 m wide, testing geological and geochemical targets. American Creek issued a news release December 11, 2007 indicating that the assay results for the first 26 holes totalling 7,407 meters had been received. It stated that "*the results only include sporadic intersections of relatively low-grade gold and silver highlighted by a 50.36 m intersection of 1.06 g/t gold and a 109 m intersection of 12.25 g/t silver*". It also indicated that approximately half of the roughly 1 square kilometer area of exposed gossans had been tested by the 2007 program with the remainder still to be systematically tested. Holes were drilled at a variety of orientations and dips to cover a large area, but there is insufficient drill information to determine continuity of mineral zones and grades between holes.

Results for holes 28 through 45 were subsequently received and addressed in an assessment report by Sanabria (2008), who stated that *"highlights of the results included 3.01 g/t gold and 2.05 g/t silver over 26 meters (hole EL07-31); 29.9 g/t gold and 10.2 g/t silver over 2 meters (hole EL07-29); 0.53 g/t gold and 2.49 g/t silver over 31 meters (hole EL07-28)" (See selected results in Table 6.3).*

Sanabria (2008) went on to state, "*Elevated silver values occur within narrow veins, as shown in drill hole EL07-12, with 420 g/t over 0.91 meters (181.15 to 182.06m), drill hole EL0709 with 384 g/t over 0.70 meters (238.30 to 239m) and 301 g/t over 0.50 meters (131.50 to 132.00m). There are several other intervals of core that range from 100 to 200 g/t silver in the same style of mineralized epithermal breccia-veins, as well as significant intervals with molybdenum values, such as drill hole EL07-03 which shows 31.0 meters with 0.0118% molybdenum and hole EL07-33 which shows 84.3 meters averaging 0.007% molybdenum".*

Sanabria (2008) concluded that "The Electrum property has potential for high-grade gold-silver mineralization in epithermal breccia-vein systems that consistently follow a 120-130 strike direction and have been found at depths greater than 200 meters from surface in drill core.

The Property also has potential for bulk tonnage porphyry-style molybdenum-gold mineralization. Rocks found in core and in surface mapping suggest that molybdenum-gold porphyry-style mineralization may be related to the intrusion of the Summit Lake granodiorite stock and may underlie the Property. The contact between both styles of mineralization (epithermal breccia-veins and molybdenum-porphyry) appears to be gradual, and in some cases, it is evident the epithermal breccia-veins overprint the molybdenum mineralization".



Figure 6.3 Electrum Area drillhole traces from 1987, 2006 & 2007 programs and projected underground workings (from Sanabria, 2008)

Hole No.	From (m)	To (m)	Interval (m)	Gold (g/t)	Silver (g/t)
EL07-28	93.0	124.0	31.0	0.53	2.49
including	97.0	99.0	2.0	2.41	3.20
including	103.0	105.0	2.0	1.25	0.60
including	121.0	122.0	1.0	1.42	1.80
	211.0	213.0	2.0	0.66	144.00
	215.0	217.0	2.0	1.47	0.20
	257.0	259.0	2.0	1.38	7.20
	275.8	277.0	1.2	1.25	6.00
EL07-29	155.0	157.0	2.0	29.90	10.20
	185.0	195.0	10.0	0.56	0.42
	239.8	241.0	1.2	1.03	0.90
EL07-31	194.0	220.0	26.0	3.01	2.05
including	210.0	212.0	2.0	31.40	19.00
EL07-36	73.0	94.0	21.0	0.49	6.45
	139.0	142.0	3.0	1.44	3.90
EL07-38	117.0	121.0	4.0	0.52	13.65
EL07-39	80.7	84.0	3.3	0.98	11.50
	147.4	148.0	0.6	0.70	54.30
	223.0	224.5	1.5	0.52	24.02
	282.0	282.5	0.5	1.35	18.30
EL07-41	80.2	80.7	0.54	1.25	7.30
	97.7	99.6	1.9	9.30	39.50
	139.0	145.0	6.0	1.70	2.20
	167.0	169.0	2.0	0.35	40.70
	207.4	210.7	3.3	0.88	12.70
EL07-42	134.9	136.06	1.16	1.03	12.60
	233.4	235.3	1.9	0.97	1.90
EL07-43	69.72	74.0	4.28	0.51	5.28
	122.0	125.0	3.0	1.41	14.20
	146.3	146.9	0.6	3.86	11.10
EL07-45	73.0	74.0	1.0	0.94	7.50
	255.0	259.0	4.0	1.06	4.95

Table 6.3 Selected drill intercepts from 2007 program (Sanabria, 2008)

Outcrops of porphyry-style mineralization were identified in 2007 in the southwest part of the Electrum area, and these may be part of, or an extension of, the molybdenum-gold mineralization interpreted from 2006-2007 drilling and similar showings on the adjacent Tide property. This area has not had systematic sampling or drill testing and follow-up work has been recommended.

In 2016, Tudor Gold Corp. negotiated an option on the Electrum property from American Creek and during the year undertook an exploration program that included 1,406 m of diamond drilling in 19 BTW-size holes, trenching and rock sampling, and the collection of a 3,846 kg metallurgical bulk sample. The drilling results in the area of the showings were inconclusive. The mineralized intercepts with high grades were narrow, such as 5.41 g/t Au, 728.0 g/t Ag over 0.27 m (hole TG16-13) and 1.18 g/t Au, 89.9 g/t Ag over 1.48 m (hole TG16-14) (McCrea, 2017), however some broader intercepts returned moderate silver values, such as 7.9 g/t Ag, with 0.13 g/t Au, over 34.59 m (hole TG16-12). The Tudor drilling program is further discussed in Section 10.0.

Year	No. of Holes	Meterage (Sfc)	Meterage (UG)	Company
1930	?	?		Cominco
1959	?	221	380	Dempster Expl
1962	?		227	Utica Mines
1987	12	800		Sun Valley Gold
2006	21	2,795		American Creek
2007	44	12,561		American Creek
2016	19	1,406		Tudor Gold
Total:		17,795+	607	

Table 6.4 Electrum Diamond Drilling Summary

Note: Question marks (?) denote lacking or incomplete drilling information in published documents

A trench blasted across a central vein structure in the New Blast Zone in 2016 exposed vein mineralization over a strike length of 15 m and width of 5 m with a trend of about 140°. The central axis of the quartz vein structure hosts fine-grained, dark grey to black sulfide mineralization, and has a northern contact that is 0.5 m wide with angular quartz fragments in a foliated sulfide-quartz-carbonate matrix. The sulfides include pyrite and pyrrhotite with thin galena seams. Twelve selected samples collected from individual veins and breccia reportedly averaged 3,461.92 g/t (111.30 oz/T) silver and 2.24 g/t gold (McCrea, 2017). A bulk sample was collected from this trench, as well as from a second trench on a parallel vein structure, separated by about 20 m. The entire lot was crushed, split and sampled for metallurgical test work. The metallurgical balance indicated that the 3,846 kg sample averaged 2.82 g/t Au, 539 g/t Ag, 1.96% Pb, 1.97% Zn and 13.8% S (McCrea, 2017).

In 2018 Tudor Gold Corp. undertook an Induced Polarization (IP) survey, as well as initiation of a bulk sampling plan with supporting environmental test work. Four lines, comprising 5.0 line-km of IP data, was acquired using 'dipole-pole-dipole' configuration with 50m station spacing. Strong chargeability responses were mapped in the central and western parts of the section lines where four distinct zones of elevated chargeability are resolved, extending to depths of more than 300m. Two of the responses are interpreted as fault zones, which could be associated with sulfide-bearing veins; one is the potential extension of the Blast Zone while the other is on trend from the area of the historical tunnel at the East Gold Zone.

Tudor has designed plans to conduct a future bulk sampling program, larger than the initial test, that will help to assess mining and processing techniques, procedures and costs, test suitability of mineralization for off-site processing facilities, and gain a better understanding of the distribution of high-grade zones within the vein structures. As part of the planning process for bulk sample extraction the company undertook test work that involved metal leaching (ML) and acid rock drainage (ARD) assessment, conducted on 52 samples collected primarily from drill core. As well, water quality baseline sampling and analysis was carried out during the field season in 2018.

Mackie Area

On the far west part of the Property, there are exposures of favourable Hazelton Group volcanic rocks in contact with an Eocene batholith, however, there has been only limited exploration undertaken, focussed mainly around known mineral showings. The Divel and Mack occurrence areas (Figure 6.1) have received work during the 1980's and 90's, included geological mapping, silt sampling and reconnaissance rock and soil sampling. Showings typically consist of narrow quartz veins 1 to 10 cm wide with stringers and blebs of pyrite, galena sphalerite and chalcopyrite that have returned anomalous gold and silver values.

The area of the western claims is partly underlain by the Eskay Rift, a geological feature that contains the very rich and successfully mined Eskay Creek deposit, located about 25 km to the north. This part of the Property is prospective both for gold-bearing quartz veins and for volcanic-hosted massive sulfide deposits, which can be very rich but typically have a rather small footprint and are therefore not readily apparent on surface. Although the nearby known mineral deposits are hosted by similar geological features to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property.

Orion Area

In the central part of the Property, known as Orion area, more advanced work has been undertaken around the Tribe and Cat-in-the-Hat occurrences (Figure 6.1). In 1987-88 geological mapping, silt sampling and reconnaissance rock and soil sampling by Jantri Resources revealed a stockwork zone measuring about 30 m by 13 m, within which chip samples across the most strongly mineralized vein ran 0.915 oz/t Au over 1.6 m (the showing was named the "No. 13") (Tribe, 1987). In 1990, airborne magnetic, EM and VLF-EM surveys flown by Amphora Resources revealed several subparallel conductive zones, however, there is no record of these being followed-up. In 1994 Teuton Resources acquired the claims and conducted trenching and rock sampling, which returned significant gold and silver values. At the Cat-in-the-Hat zone continuous chip sampling returned an interval averaging 0.074 opt (2.54 g/t) gold and 1.36% arsenic across 13 meters in an outcrop of brecciated rhyolite (Cremonese, 1995). A 2006 rock sampling program by Teuton was followed in 2007 by drilling of 5 holes at Cat-in-the-Hat, to test areas of anomalous Au-As mineralization in gossanous, altered, pyritic felsic volcanics. The total meters drilled are not known since only the first hole (210.7 m) was reported. This hole apparently intersected fracture-controlled pyrite and local guartz veins in rhyolite breccia from 0 m to 31.4 m, with several anomalous Au-As sections. Twelve core samples returned greater than 400 ppb Au over widths of 1.0 to 1.5 m, the best of which averaged 4.04 g/t Au, 0.85% As over 2.0 m (hole OR2007-1, 20.42-22.46 m) (Cremonese, 2008).

In 2015 Tudor Holdings Ltd. undertook prospecting and rock sampling on tenure number 1039441, which is in the southeastern part of the Orion area. At the south end of the tenure, 23 rock grab samples were collected, and 4 widely separated samples returned significant values of 1.98 to 5.31 g/t Au, with anomalous Ag and As values (Hutter, 2015). The rocks are described as sheared, foliated, altered volcanics with limonitic quartz veining, largely leached of sulfide minerals.

In 2016 Tudor commissioned a magnetotelluric (MT) survey by Quantec Geophysics in the Orion area. MT data was collected at 44 sites on six profile lines. Two of the profiles were acquired along Orion ridge in a roughly NNW orientation covering the Cat-in-the-Hat showing and a further four profiles were collected on east-west orientations to define the contact zone between Stuhini Group and Hazelton Group rocks. The areas with lowest resistivity coincide with the Stuhini Group rocks along the ridge, with higher resistivities on either side of the ridge probably underlain by Hazelton Group rocks. This agrees with the interpretation that the Sulphurets Fault may continue southerly from the KSM property, extending down the east side of the ridge and thrusting Stuhini Group rocks onto Hazelton Group rocks. This could have implications for potential fault-related stockwork-style mineralization in this area. The survey also identified a distortion in the shape of the geophysical data in the Cat-in-the-Hat area that suggests possible northwest and northeast structures at depth. Recommendations included geological mapping and an airborne magnetic survey to help define structures.

In 2018, Tudor had 3 personnel undertake 19 man-days of geological reconnaissance and rock sampling in the Orion, Delta and Fairweather areas (Figure 6.1). Approximately 70 samples at Orion were distributed over an elongate area about 3 km in length, along the east and west edges of the north-south trending Orion ridge. The main area of anomalous results extends over about 500 m on the east side of the ridge. Ten grab samples returned high Ag values ranging from 13.6 to 778.0 g/t, several with coincident anomalous As, and a few with anomalous Pb, Zn, Cu and/or Au. Eight grab samples returned greater than 100 ppb Au. Two of the samples with elevated Au correlate most strongly with anomalous Cu and Ag values. The highest Au value was 31.1 g/t Au, with 25.9 g/t Ag, 625 ppm Cu and >10,000 ppm As (Rowe, 2019). Most of the samples are described as quartz veins in volcanic rocks containing stringers, disseminations, or pods of pyrite with lesser base metals and local tetrahedrite. A significant discovery in 2018 was a lengthy boulder train of angular blocks of jasperoidal quartz and massive, stratified pyrite layered with a siliceous, possibly exhalative matrix, with shards of rip-up fragments of black mudstone within the massive, layered pyrite. Of eight grab samples collected over about 200 meters of the float train, four returned significant Ag values greater than 25 g/t, with the most strongly anomalous rock sample returning 778.0 g/t Ag, 1200 ppm Pb, 2340 ppm Zn, 645 ppm As, 95 ppm Cu and 8 ppb Au from a boulder of cryptocrystalline quartz with 3% sulfides (Rowe, 2019).

The area identified in 2018 was followed up in 2019 with a reconnaissance geological program by Tudor. It was successful in identifying additional quartz-sulfide breccia stringer zones along an 800 m, north-south stretch, west of, and parallel to, the contact between Upper Triassic and Lower Jurassic units. Six man-days of prospecting and sampling in an area about 750 m long by 150 m wide produced 69 rock samples, comprised of both continuous chip and selected grab samples. Eleven samples contained anomalous gold values ranging from 0.108 to 0.577 g/t Au, and ten samples returned anomalous silver values ranging from 3.7 to 434 g/t Ag. Generally, elevated arsenic correlated well with both gold and silver anomalies (Konkin & Rowe, 2019). Further geological and geochemical exploration was recommended, in addition to geophysical surveys over the projected Triassic-Jurassic contact area to test at depth and under ice cover. No work was undertaken in 2020. In 2021 a program of geological mapping and rock chip sampling provided

more detail in areas of known mineralization and in 2022 an airborne magnetic survey was flown over the Orion area. Additional descriptions of these recent programs are included in Section 9.0.

Delta and Fairweather Areas

In the eastern part of the Property several mineral showings in the north are referred to as the Delta area and southern showings are known as the Fairweather area. Near the Delta showings, stream sediment and rock sampling, as well as hand trenching, was undertaken by Teuton Resources in 1985, leading to discovery of mineral showings with high gold and silver values, some of which had indications of stratiform mineralization in argillite. Five short holes, totalling 300 m, were drilled by Territorial Petroleum in the Delta Northeast showing area in 1986 but failed to intersect any significant mineralization. Soil geochemistry in 1986 defined a multi-element anomaly surrounding and downslope from the Delta Northeast occurrence, and rock grab samples of silicified tuff from within the geochemically anomalous area returned occasional anomalous gold values, such as 6.8 g/t Au (Cremonese, 1995). Also in 1986, at the Gamma showing in the Fairweather area, a pyritized agglomerate carrying anomalous values in gold and arsenic was discovered. It was trenched in 1987 by Wedgewood Resources, returning a chip sampling average of 4.05 g/t gold over a width of 7 meters. A small follow-up program in 1988 was not fruitful, resulting in Wedgewood dropping the option.

In 1989 and 1990 Canarc optioned claims in the eastern area of the Property from Teuton and conducted prospecting, sampling, trenching, geological mapping and geochemical surveys, as well as airborne and ground geophysical surveys. Several targets were identified from this work including two prominent IP-resistivity anomalies (with coincident Mag/VLF trends) in the "M" and "J" zones, also referred to in Minfile as "Delta Northeast" and "Delta", however, no follow-up work was reported. The claims reverted to Teuton, which undertook small programs of soil sampling in 1991-92, indicating a gold-silver-lead-zinc geochemical anomaly coincident with the geophysical anomalies. In 1994-95 reconnaissance rock sampling (60 samples) by Teuton in the Delta Southwest showing area tested for the source of pyritic, sericitic volcanics and argillite float that had returned anomalous gold values from 4 grab samples, ranging from 0.37 to 13.9 g/t Au (Cremonese, 1995). Anomalous Pb, Zn, Ag was found in outcrop but not the source of the high gold.

No further work was recorded until 2007, when Hathor Exploration optioned claims that covered the eastern part of the current Property and undertook airborne EM, magnetic and radiometric surveys that were part of a more widespread regional geophysical campaign. It was recommended that the geophysical results should be further software-processed and studied in conjunction with the known geology, RGS data, Minfile data and satellite imagery to generate a general prospecting-exploration strategy as well as possible targets for ground follow-up.

In 2009 Hathor and Max Minerals Ltd. conducted wide-ranging reconnaissance silt, rock and soil sampling that tested some of the geophysical targets. The Gamma and Delta Northeast showings were briefly investigated, with three rock grab samples at Delta Northeast from a 60 cm-wide quartz-pyrite-sphalerite-tetrahedrite vein and breccia trending approximately 222 /45° NW,

returning 1.0 to 10.1 g/t Au with 0.7 to 100.1 g/t Ag and base metal values (Harris, 2009). Also, near the Gamma zone a gold-silver-arsenic-copper anomaly in soils was defined extending 350 m east and 200 m west of the Gamma showing and remains open along trend to the west. The anomalous soils may be related to narrow quartz-carbonate-sulfide veinlets that have yielded significant silver values.

In 2010 Max Minerals targeted precious metal-rich quartz-carbonate veining on the Delta block of claims, and also discovered a new zone of mineralization named Ptuck in the Fairweather area. The Ptuck showing comprises a 5 to 10 m-wide, S to SW-trending, shear zone hosting a 0.5 to 1 m-wide quartz-carbonate vein with sporadic associated sphalerite, galena, chalcopyrite and tetrahedrite. Ridgeline reconnaissance soil sampling conducted between the Delta showings and the Gamma zone discovered a 500 m-long multi-element anomaly within sedimentary rocks near the contact with volcanic rocks. Prospecting of the anomaly did not reveal any mineralization.

In 2011 Teuton Resources Corp. drilled five holes totalling 1,224.7 meters in the Delta area from two pads, located about 200 m and 700 m north of the Feld showing (Figure 6.1). The holes targeted two gold-mineralized zones previously discovered by surface rock sampling. Only two of the holes intersected mineralization, with reported values of 3.0 g/t Au over 5.8 m from hole H11-03 and 0.41 g/t Au over 55.5 m from hole H11-04 (Cremonese, 2013). True widths were not determined. Gold mineralization occurs within a variably sericite-chlorite altered diorite, associated with silicification and 5-7% disseminated and fracture-coating pyrite. Elevated gold values also occur in siliceous siltstone cut by randomly oriented quartz-calcite veinlets with limonite or pyrite seams. The gold appears to be concentrated near the contacts between diorite and siltstone or hematite-altered volcanic rocks.

In 2012 Teuton Resources Corp. drilled two holes totalling 728.5 meters in the Delta area from a pad located approximately 150 m north of the southernmost pad used for the 2011 drilling. The holes were drilled to the east and northeast targeting the projection of a surface showing lying to the southeast. Both holes intersected a sequence of locally brecciated siltstone and mudstone overlying variably chlorite-sericite-altered volcaniclastic rocks. Dykes of sericite-altered, pyritic intermediate intrusive cut all rock types. Lengthy sections of intense iron carbonate alteration with cross-cutting fractures containing pyrite and sphalerite were intersected. These intervals did not return significant values in gold, however, at the end of Hole H12-02, narrow sections of extremely fine-grained, massive sulfide mineralization containing appreciable lead, zinc, silver and gold values were encountered. These two short intervals of 0.1 and 0.4 meters returned grades of 2.75% and 7.18% lead, 5.03% and 4.12% zinc, 70.8 g/t and 243 g/t silver, and 2.85 g/t and 7.18 g/t gold, respectively (Cremonese and Mullin, 2013). The lead-zinc mineralization appears to have been remobilized and is hosted within a volcaniclastic flow sequence with associated discordant stockwork stringers, however, Cremonese and Mullin (2013) commented that these veins could have affinities with VMS-type mineralization.

In 2018 three Tudor personnel undertook one day of geological reconnaissance and rock sampling in the Delta and Fairweather areas. Fourteen rock samples were collected during prospecting of

recently exposed outcrops along the edges of retreating glaciers. Approximately 400 m north of the Feld showing four grab samples of silicified siltstone with disseminated pyrite, galena and arsenopyrite, and narrow quartz veins returned 0.1 to 10.2 g/t Au and 0.9 to 7.7 g/t Ag, with 737 ppm Cu. About 750 m west of the Gamma showing, a talus float sample of brecciated argillite with quartz matrix containing pyrite and arsenopyrite returned 9.3 g/t Au, 51.2 g/t Ag, 1660 ppm Cu, 766 ppm Pb, 2.43% Zn and >10,000 ppm As (Rowe, 2019). This sample was collected about 5 m downslope from a massive, layered siliceous, pyritic outcrop, approximately 70 cm thick, that may be exhalative in origin. The author visited this site in 2020 and collected a grab sample from the semi-massive pyrite, which returned 3.87 g/t Au, 51.1 g/t Ag, 0.3% As and 19.4% Fe (see Section 12.0). Some of the other samples collected during the 2018 program returned significant Ag, Pb and Zn values from quartz-iron carbonate veins with galena and sphalerite, cutting greywacke. The discovery of these mineral showings in areas previously covered by glacial ice emphasizes the very good potential for additional new discoveries to be made through continuing exploration.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

The regional geology has been mapped by a number of geologists from the BC Geological Survey and the Geological Survey of Canada, several of which are listed in References, (Section 19.0). The Crown Property is underlain by Late Triassic to Middle Jurassic stratified volcanic and volcaniclastic rocks, volcanic flows and sedimentary units of the Stuhini and Hazelton Groups, which are found throughout much of Stikinia (Stikine Arch; Figure 7.1). Stikinia makes up a large part of the northern Intermontane Belt in this part of the northern Cordillera and is bounded by rocks of the largely plutonic Coast Belt, which lie immediately adjacent to the west. Rocks making up the Stikine terrane are almost exclusively of intra-oceanic island arc affinity and were accreted to the North American continental margin in mid-Mesozoic time. In northwestern BC the Stikine terrane follows an arc-like trend that is known as the Stikine Arch, which hosts a number of economically significant Late Triassic to Early Jurassic porphyry copper (gold, silver, molybdenum) deposits as well as an abundance of gold-rich mineral occurrences that include vein and volcanogenic categories.

Significant mineral deposits surround the Crown Project. Of particular importance are the nearby, large porphyry-style KSM Au-Cu deposits that lie immediately to the north, and the gold-rich vein deposits that are currently being mined at the Valley of the Kings deposit, all found within similar geological settings to Crown. As well, there are indications of possible Au- and Ag-bearing exhalative-style mineralization at Crown that bear similarities to the Eskay Creek deposit, a volcanogenic sulfide deposit with very high gold and silver values, located 25 km north-northwest of the Property. Although the nearby known mineral deposits are hosted by similar geological units to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property that is the subject of this Technical Report.





7.1 REGIONAL SETTING

Regionally, Stikinia consists of mid-Paleozoic to Middle Jurassic oceanic volcano-sedimentary successions and coeval plutons that are commonly subdivided into Paleozoic, Triassic and Jurassic tectonic assemblages (Anderson, 1993). In the area surrounding the Crown Property rocks of the latter two assemblages are present in abundance.

The Property lies within a 300 km-long, northerly trending, commonly fault-bounded belt of Triassic and Jurassic rocks. Within this belt a structural feature known as the Eskay Rift was the site of deposition of Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group (Alldrick, 2006). Studies have shown that the rifting may have begun in Early Jurassic time (191 Ma) (Alldrick, 2006) and that strata deposited within the Eskay rift generally have similar lithological characteristics; however, regionally they display a range of different facies that may reflect proximity to volcanic centers. As well, some rift-fill sequences appear to have been deposited in isolation from those of adjacent rift segments, suggesting that they occupied nearby but unconnected basins (Alldrick, 2006). Deposition environments appear to have ranged from subaerial, to shallow water depth, to deep-water ocean floor settings. Associated exhalative mineral deposits are known within different segments of the Eskay Rift, such as at the nearby past-producing Eskay Creek deposit. as well as at the Anyox and Bonanza copper-silver deposits south of Stewart. Numerous showings comprised of similar-style mineralization have been found near each of these deposits, as well as along the rift zone to the north. The eastern part of the Crown Property hosts lithologies from the upper part of the Hazelton Group that appear to be rift-fill type clastic and volcaniclastic rocks, as well as including some felsic volcanic units.

Small stocks in the area surrounding the Property range in age from 195 to 187 Ma (Febbo et al., 2015) and may have partly coincided with the regional rifting events. Associated with some of these stocks, as well as the Stuhini Group and lower Hazelton Group rocks they intrude, are several very large porphyry Au-Cu deposits: primarily the Kerr, Sulphurets, Mitchell, Iron Cap, Snowfield and Goldstorm deposits, all located within 3 to 15 km of the Property. Additionally, lower Hazelton Group rocks host high-grade epithermal gold-silver vein stockworks at the Valley of the Kings deposit, located 4 km to the northeast, and at the Scottie Gold deposit 4 km south of the Property. Although the nearby known mineral deposits are hosted by similar geological units to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property that is the subject of this Technical Report.



Figure 7.2 Crown Property location and regional geology

Geolog	y Legend
	PeEShgr - Cenozoic - Coast Plutonic Complex granitoid intrusive rocks
	QMI - Cenozoic - alkaline volcanic rocks
	Qvb - Cenozoic - basaltic volcanic rocks
	Pivk - Cenozoic - alkaline volcanic rocks
	ESvf - Cenozoic - rhyolite, felsic volcanic rocks
	JTqp - Mesozoic to Cenozoic - high level quartz phyric, felsitic intrusive rocks
	MJqm - Mesozoic - quartz monzonitic to dioritic intrusive rocks
	EJTCdg - Mesozoic - monzodioritic to gabbroic intrusive rocks
	LTrJCsy - Mesozoic - syenitic to monzonitic intrusive rocks
	MLTrP - Mesozoic - ultramafic rocks
	MLTrqd - Mesozoic - quartz dioritic intrusive rocks
	KPesc - Mesozoic to Cenozoic - Sustut Group coarse clastic sedimentary rocks
	mJKB - Mesozoic - Bowser Lake Group undivided sedimentary rocks
	ImJH - Mesozoic - Hazelton Group fine clastic sedimentary rocks and calc-alkaline volcanic rocks
	IJS - Mesozoic - Spatsizi Group undivided sedimentary rocks
	uTrSv - Mesozoic - Stuhini Group fine clastic sedimentary rocks and undivided volcanic rocks
	LDFdr - Paleozoic - dioritic to granitic intrusive rocks
	CSsc - Paleozoic - Stikine Assemblage sedimentary rocks and basaltic to rhyolitic volcanic rocks

7.1.1 Stratified Rocks

Souther (1972) has described the geologic history of the region as a successive series of volcanic arcs developed in marine settings ranging from sediment-poor to sediment-rich. The major stratigraphic components of the region are the Paleozoic Stikine Assemblage, and the Triassic to Jurassic Stuhini, Hazelton and Bowser Lake Groups.

The nearest Paleozoic rocks are 35 km northwest of the Property and extend in a north-trending belt, ranging from 10 to 30 km wide (Figure 7.2). The Paleozoic rocks, shown in blue on Figure 7.2, consist of volcanic flows and tuffs, thin-bedded clastic sedimentary rocks and limestone of Carboniferous to Lower Permian age. The predominant rock types include argillite, siltstone and conglomerate with calcareous interbeds and limestone or marble units, as well as basaltic to andesitic flows with crystal and lithic lapilli tuffs. This unconformity-bounded belt is in contact to the east with a belt of Upper Triassic and Jurassic sedimentary and volcanic rocks.

The Triassic-Jurassic belt is comprised mainly of the Stuhini and Hazelton Groups, shown in shades of green on Figure 7.2. The Upper Triassic Stuhini Group (Figure 7.2, light green) consists of a lower volcanic package with lesser intercalated sedimentary rocks, overlain by a thick upper sedimentary package with lesser interlayered volcanic rocks. Alldrick et al. (2004) have interpreted the Stuhini Group in the map area as a subaqueous accumulation of dacite, andesite and bimodal basalt-rhyolite volcanic rocks in a setting characterized by a progressively increasing accumulation

of volcaniclastic sedimentary rocks with carbonate cement. The top of the Stuhini group is defined by a regional angular unconformity, overlain by Hazelton Group strata. Total thickness of Stuhini Group strata cannot be determined due to this truncation, but minimum thickness is 3,000 meters (Alldrick et al., 2004).

Gagnon et al. (2012) have noted that following deposition of the Stuhini Group, extension-controlled volcanism existed in the narrow, elongate, north-trending Eskay rift basin during the relatively short period between upper Early Jurassic and lower Middle Jurassic. Fault-controlled subsidence led to development of at least 12 north-trending sub-basins within the 300 km long by 50 km wide volcanic belt (Alldrick et al. 2005; Barresi et al. 2008). Volcanic and sedimentary units of the Hazelton Group (Figure 7.2, dark green) show great lateral and vertical variability because of the limited connectivity between sub-basins and the local nature of the volcanic processes. Quiescent depositional environments in some of the sub-basins were more prone to accumulation and preservation of exhalative sulfides (Alldrick et al., 2004). It has also been observed that felsic volcanism is commonly closely associated with mudstone intervals containing sulfide mineralization (Gagnon et al., 2012).

Within the Eskay rift, the lower part of the Hazelton Group, which consists of predominantly arcrelated intermediate volcanic rocks, is separated by an unconformity from the upper Hazelton Group, comprised predominantly of bimodal rift-related volcanic rocks and fine-grained clastic rocks. The lower Hazelton Group includes a wide range of lithologies dominated by maroon and green andesitic to dacitic flows, associated volcanic breccias and tuffs, and sedimentary volcaniclastic rocks (Gagnon et al., 2012). These include the units defined in earlier geological mapping in the region; namely the Jack, Unuk River, Betty Creek and Mt. Dilworth formations. The lower Hazelton Group rocks lie unconformably on Triassic volcanic rocks of the Stuhini Group and, in some localities, Paleozoic rocks of the Stikine assemblage. Most volcanic rocks of the lower Hazelton Group are calc-alkaline to tholeiitic, and most were deposited in subaerial, oxidizing environments, and likely developed into stratovolcanoes (Alldrick et al. 1989). Discontinuous siltstone beds attest to a marine emergent arc setting. The upper boundary of the lower Hazelton Group is typically defined by an erosional surface that separates it from the overlying upper Hazelton Group.

The upper Hazelton Group specific to the region surrounding the Crown Property has been defined by Gagnon et al. (2012) to include their newly proposed Iskut River Formation (previously called Salmon River Formation) in the lower part, overlain locally by Quock Formation. At the Eskay Creek type section described by Gagnon et al. (2012), rhyolite of the Iskut River Formation disconformably overlies lower Hazelton Group rocks comprised of andesitic breccia, volcaniclastic, and dacitic volcanic rocks. This felsic unit, which has been termed "footwall rhyolite", varies in texture from massive to auto-brecciated, and was interpreted by Bartsch (1993) to represent a series of flowdome complexes. Overlying and inter-fingering in part with the rhyolite is a fine-grained dark grey sedimentary unit known as the "contact mudstone". The contact is irregular along strike and is marked by rhyolite breccia, in which black mudstone fills the interstices of quench-fragmented rhyolite. Clasts in the mudstone include altered rhyolite, barite, and fragmental sulfides and sulfosalts (Roth 2002). The Eskay Creek deposit comprised stratiform volcanogenic massivesulfide bodies at the base of the mudstone interval, and underlying feeder vein systems that were mined between 1995 and 2008, producing 2.18 million tonnes of ore with an average grade of 46 g/tonne Au and 2267 g/tonne Ag (Minfile No. 104B 008).

In excess of 150 meters of massive basalt sills and pillowed basalt flows and breccia, with thin (<1 m) intervals of bedded argillite, chert, and felsic tuff, overlie the contact mudstone. Conformably above this basalt sequence at Eskay Creek is a succession of tuffaceous mudstone, on the order of 50 meters thick, which Gagnon et al. (2012) have included in the Quock Formation. Conformably overlying the Quock Formation are thick turbidite and deltaic sedimentary sequences of the Middle to Late Jurassic Bowser Lake Group.

The Bowser Lake Group, (Figure 7.2, grey unit) is a thick, clastic marine sedimentary succession, including greywacke, chert pebble conglomerate, sandstone and mudstone. The lower Bowser Lake Group is a marine sequence of complexly inter-fingering deltaic, shelf, slope and submarine fan assemblages in excess of 3000 meters thick, sourced mostly from uplifted rocks to the northeast. These are overlain by several thousand meters of low energy fluvial deposits and sedimentary rocks of alluvial fan and braided stream systems.

7.1.2 Plutonic Rocks

Small plutonic bodies with a wide variety of compositions and ages occur near the Property to the north and south and larger bodies are common in the region farther to the west and northwest (Figure 7.2). The oldest intrusions in the area form a belt trending north from a point about 45 km northwest of the Property (Figure 7.2, light pink). They are Late Devonian in age and together form one of the larger intrusive bodies in the region, which varies in composition from granite to hornblende diorite to local hornblendite. Other large intrusions comprised of Middle to Late Triassic hornblende quartz diorite to granodiorite (Figure 7.2, dark orange) are found farther to the west and northwest of the Property within a belt of roughly coeval Stuhini Group rocks. Localized ultramafic bodies of Middle to Late Triassic age are also found in the same area.

Sizeable stocks of Early Jurassic monzodiorite to gabbro (Figure 7.2, medium orange) are located 25 to 45 km northwest of the Property, where they cut rocks of the Stuhini and Hazelton Groups. Similar age, leucocratic porphyry plugs (Knipple and Inel Porphyry) are found near the Property, to the north and south, cutting Stuhini and Hazelton Group rocks. These intrusions are part of the Texas Creek Plutonic Suite and have a number of associated mineral occurrences in the region, including the large porphyry gold-copper systems at Kerr-Sulphurets-Mitchell-Iron Cap (KSM), 3 to 12 km north of the Property, and the Red Chris porphyry copper-gold deposit, 140 km to the north-northeast. A number of small, poorly age-constrained, Triassic to Jurassic quartz diorite to quartz monzonite to syenite stocks intrude Stuhini and Hazelton Group rocks in the area surrounding the Property, including two diorite stocks on the southwest claims. Some of these belong to the Copper Mountain Plutonic Suite and many may be coeval with their host volcanic rocks.

Located in the southwest part of the map area shown in Figure 7.2, Paleocene to Eocene granitoid stocks (Figure 7.2, dark pink) are probable outliers of the more massive Coast Belt plutons located farther to the west. A smaller outlier batholith of quartz monzonite is present in the northwest part of the Property, intruded into Hazelton Group rocks.

Several of the plutonic episodes have mineral occurrences associated with them, especially concentrated near the contact zones of the intrusive bodies, as shown by Minfile occurrences plotted on Figure 7.2. Additionally, a majority of the occurrences are spatially associated with faults that trend north, northeast and northwest. These faults commonly occur along the boundaries between lithostratigraphic units and also at intrusive contacts (Figure 7.2). The KSM porphyry deposits and related intrusive bodies are believed to be associated with northeast-trending, northwest-dipping thrust faults, which may extend southerly onto the Crown Property.

7.1.3 Regional Mineralization

There are several known mineral deposits in the area surrounding the Property and the potential for discovery of similar styles of mineralization on the Crown tenures is considered very good. Some of the most significant deposits at the adjacent KSM property, described by Febbo et al. (2015), comprise porphyry Au-Cu-Ag mineralization related to large multi-stage, hydrothermal systems that developed within and above genetically related Early Jurassic intrusions. Redistribution, and possibly further concentration of metals, occurred in some deposits during waning stages of intrusion and later tectonic deformation. In the porphyry deposits, stockworks, veinlets and disseminations of mineralization occur in large, possibly economic, bulk-mineable zones within the intrusive bodies or the adjacent rocks. The mineralization is spatially and genetically associated with hydrothermal alteration of the intrusive bodies and host rocks. Alteration commonly consists of phyllic quartz-sericite-pyrite, intermediate argillic, and potassium silicate zones, which have produced large expanses of gossanous rock in weathered surface exposures. The mineralization may include chalcopyrite, molybdenite, tetrahedrite-tennantite and lesser galena and sphalerite. Gold typically occurs as electrum encased in fine-grained pyrite, as well as within late stage, higher grade gold-quartz veins that show epithermal-style banded textures.

High-grade gold-silver mineralization in the Brucejack camp, north of the Property, is generally hosted within quartz-carbonate and quartz-adularia veins and vein stockworks in what is described as a transitional epithermal environment. Mineralization and alteration are structurally and stratigraphically controlled, roughly following the contact between underlying conglomerate and overlying andesitic fragmental rocks. Gold-silver mineralization occurs as coarse electrum in multi-stage generations of veins and breccias. Sulfide mineralization present in most of the veins includes pyrite, sphalerite, galena, chalcopyrite, and pyrargyrite. Alteration associated with mineral zones consists dominantly of quartz-sericite-pyrite, with lesser sericite-chlorite, and is believed to be Early Jurassic in age. The strongest alteration is observed within the sedimentary and fragmental volcanic rocks. Intense silica alteration developed along the favoured stratigraphic contact, and it is believed that fluid pressure build-up below this siliceous impermeable boundary caused multi-stage explosive fracturing and brecciation, followed by emplacement of gold-bearing veins.

Although the nearby known mineral deposits are hosted by similar geological units to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property that is the subject of this Technical Report.

7.2 LOCAL GEOLOGY

Very little detailed geological mapping has been undertaken on the Property, other than localized geological evaluation of individual showing areas. The general geology of the Property has been interpreted from scattered bedrock exposures located between large areas of ice cover and compiled as part of a 1:250,000 scale map made by geologists of the BC Geological Society (Massey et al., 2005). The geology of the Property and surrounding area is shown on Figure 7.3 utilizing some of this regional data, and a description of map units summarized from various reports follows below.

7.2.1 Property Geology

The far west side of the Property, on the west-facing slope above the South Unuk River, is underlain by Upper Triassic Stuhini Group marine sedimentary and volcanic rocks (Figure 7.3). These rocks are characterized by schist and gneiss of upper greenschist to lower amphibolite grade metamorphism (Coates, 2017). The eastern extent of the Stuhini Group in this area is defined by the north-northwest trending South Unuk / Harrymel Fault, which is the western boundary of the Eskay Rift zone and passes diagonally through the west side of the claim block. Several Minfile mineral occurrences are mapped close to this fault zone along its length. Jurassic Hazelton Group rocks lie east of the fault and are primarily comprised of andesitic volcanics of lower greenshist facies, which are overlain by a north-northwest trending linear belt of basaltic volcanics. This sequence is cut by the Lee Brant stock, an outlier of Eocene granitic rock that occupies the headwaters of Divelbliss Creek.



Figure 7.3 Crown Property local geology and Minfile mineral occurrences

In the central part of the Property the southern extent of the McTagg Anticlinorium has been mapped, with a core of Stuhini Group rocks exposed along a north-south nunatak that emerges from a broad glacial field. MT geophysical surveying has suggested that the anticlinal limbs are steeply dipping, but there is also geophysical data that suggests that the eastern contact of Stuhini Group rocks may be thrust over Hazelton Group along the possible southern extension of the Sulphurets Thrust Fault. This contact zone is a prospective area to search for mineralization, however, within the Property area it may be largely covered by glacial ice.

Coates (2017) comments that some of the rock types mapped as Stuhini Group in the area of the Cat-In-the-Hat Showing, with descriptions by others of "rhyolite dome complexes, high sulphidation epithermal vein stockwork, native sulphur and acid sulphate "hot springs" rocks", are very reminiscent of those in the Treaty Creek area which belong to the upper Hazleton Group. Therefore, it is possible that local faulting may have emplaced a block of Hazelton Group rocks into the north-south belt of Stuhini Group rocks in this area.

The eastern part of the Property is underlain by Hazelton Group units that appear to be folded into a north-northwest trending synform with a core of sedimentary rocks comprised of mudstone, siltstone, shale and fine clastic rocks (Figure 7.3, unit IJHB_S) that host many of the mineral occurrences in the area. Past exploration in the Delta and Fairweather areas has been focused on argillite-hosted Ag-Au-Pb-Zn mineralization that may be volcanogenic in origin. The sedimentary

unit is underlain by a thin unit of calc-alkaline volcanic rocks (Figure 7.3, unit ImJHD_S). These volcanic rocks in the area of the Feld occurrence are described as a 75 to 150 meter-wide band of felsic pyroclastics that may belong to the Mount Dilworth Formation. This unit is underlain by a thicker sequence of volcaniclastic rocks (IJHB_S) that are likely part of the Betty Creek Formation. No intrusions have been mapped in the central and eastern parts of the Property, however, due to the extensive ice coverage they could be hidden from view or may be present at depth. Some historical assessment reports mention feldspar porphyry dikes and small stocks, which support the possibility of buried intrusions.

The Electrum area in the southeast part of the Project is primarily underlain by strata that has been correlated with the Lower Jurassic Unuk River Formation of the Hazelton Group. The area of the East Gold mineral showings is underlain by a north-northwest trending belt of folded andesitic volcanic rock that contains a thick sedimentary sequence in-folded along a synclinal axis. This belt is cut by Mesozoic and Tertiary intrusions. The rocks at East Gold mine are mainly comprised of highly fractured and sheared fine-grained siltstone with minor clastic horizons. Greywacke, argillite and tuffaceous sediments also occur. The major structure in the mine area is a tightly folded anticline made up of minor folds and locally contorted beds. It has a north-northwest trend and plunges to the south. A pervasive sericite, quartz, carbonate, pyrite alteration has overprinted much of the strata producing reddish gossans in outcrops. East of the showings there is a possibly faulted contact with volcaniclastic rocks that have been mapped as Betty Creek Formation. A northerly trending section of the Early Jurassic Summit Lake Stock lies about 600 meters southwest of the showings and a lobe of the stock extends onto the southwest corner of the Electrum claim area, where mineralized veins have been found in the granodiorite.

7.2.2 Structural Geology

Alldrick et al. (2005) and Barresi et al. (2008) have provided convincing arguments for faultcontrolled subsidence which led to development of a number of sub-basins within the 300 km long by 50 km wide Eskay Rift volcanic belt. These types of structures are interpreted to be synvolcanic (growth) faults and likely were not active past the last deposition of Hazelton rocks. The northtrending, steeply-dipping Brucejack fault that extends northward from the Valley of the Kings Au-Ag deposit is thought to be a reactivated segment of one of the growth faults and is spatially related to numerous gold occurrences on the Brucejack property. Although not shown on regional maps, the Brucejack Fault could extend farther south under glacial ice cover and its trend projects through the east part of the Property near the Delta Mineral showings. Farther south the regional geology map shows a north-northwest trending fault through the Electrum area, very close to the East Gold mineral occurrence, which could be a distant continuation of the Brucejack Fault.

During Cretaceous and possibly Tertiary time the area surrounding the Property was affected by regional contractional events consisting of extensive east-northeast vergent systems of folding and thrust faulting, which includes the Skeena Fold and Thrust Belt (Evenchick, 1991). Many of the folds and thrust faults of the Skeena event trend northwest and have accommodated at least 150 km of north-easterly shortening (Evenchick, 1991).

Contractional structures show a transition from broad open folds in the Eskay Creek area to tight folds and thrust faults in the Sulphurets area. Beds in the district are generally north striking with moderate to steep dips and have been deformed into upright buckle folds. Two-fold geometries are documented in the district: 1) north-northwest-plunging buckle folds with a related axial planar cleavage and 2) west-plunging buckle folds, with a variably developed steep cleavage (Febbo et al., 2015).

In the north, in the vicinity of the Eskay Creek deposit, thrust faults are rare to non-existent, whereas McKinley (2008) reports that a series of imbricate thrusts are exposed immediately to the northwest of the Property in the Unuk Valley and the John Peaks - Mount Madge areas, where the thrust slices contain locally inverted stratigraphic sections of Hazelton Group rocks.

The Kerr, Sulphurets, Mitchell, Snowfield, Iron Cap and Goldstorm porphyry deposits are all situated in the footwall of the east-vergent Sulphurets thrust fault. It is probable that the Sulphurets Fault, or splays of it, continue southerly through the central part of the Crown Property, perhaps along the eastern contact of the Stuhini Group rocks on Orion ridge. Nelson and Kyba (2014) have proposed a model whereby the Brucejack and Sulphurets Faults were originally steep, bounding faults that formed a rift on the east flank of the McTagg highland. These deep-seated faults may have been the conduits for porphyry intrusions and associated hydrothermal fluids that deposited many of the known mineral bodies in the area. As such, the areas where these major faults project southward across the Crown Property are prime exploration targets. Although the nearby known mineral deposits are hosted by similar geological features to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property.

7.2.3 Mineralization and Alteration

There are several reported mineral occurrences on the Crown Property, as well as surrounding the Property. Occurrences encompass several styles of mineralization, but are typically comprised of veins, disseminations or breccias with local wider zones of stockwork-style mineralization that may be related to shear zones. Many of the narrower veins (generally <1m width) have returned high Ag, Pb and Zn values with lesser high Au values, but most are lacking in continuity. In the central part of the Property quartz-arsenopyrite veins in brecciated rhyolitic rocks have returned moderate gold values from stockworks up to several meters in width. At the Electrum area on the southeast part of the Property selective underground mining in the 1940's and 50's of narrow veins, less than 1 m in width, produced 45.7 tonnes that averaged 1661 g/t Au and 2596 g/t Ag (Sanabria, 2008). More recently at Electrum, a 3,846 kg bulk sample collected from a central vein with surrounding stockwork veins over a 5 m by 15 m trenched area averaged 2.82 g/t Au and 539.0 g/t Ag, with additional elevated Pb and Zn.

Indications of stratiform VMS-style mineralization on the eastern claims include samples of argillite containing galena and sphalerite with anomalous values of zinc, lead and silver. In the same area, sulfide-bearing argillite float boulders carry anomalous gold values, but the source has yet to be

discovered. Many of the occurrences on the Property are recorded and described in the British Columbia Government's "Minfile" database (https://minfile.gov.bc.ca/), from which their locations are plotted on Figure 7.3. The Minfile descriptions of the mineral showings that have been discovered on the Property are summarized below.

Granite Creek showing (Minfile 104B 229) area is underlain by the northwest trending contact between Hazelton Group andesitic volcanics and, to the west, Stuhini Group marine sedimentary and volcanic rocks. Traces of copper mineralization are reported to occur in an area of amphibolitic rock just east of a cataclasite zone, which may be part of a regional fault structure. Malachite stains were also observed in rock less than a kilometer to the southwest.

The **Divel** occurrence (Minfile 104B 215) is underlain by rocks of the Hazelton Group consisting of andesitic flows, tuffs and associated sediments that have a north to northwest structural trend. A fault with similar trend occurs immediately east of the showings. Complex alteration and deformation in the area are related to regional faulting and Jurassic and Tertiary plutonism. In addition, the degree of dynamic metamorphism increases toward the South Unuk River cataclasite zone (Grove, 1986). Galena occurs in a quartz vein within unspecified host rock. Traces of chalcopyrite, with abundant pyrite are reported to occur in amphibolite outcrops a few hundred meters north and several hundred meters south of the vein.

The **Bliss 1** showing (Minfile 104B 216) is underlain by rocks of the Hazelton Group composed primarily of thick-bedded epiclastic volcanic rocks and lithic tuffs with closely associated pillow lavas, carbonate lenses and thin-bedded siltstones. A small gossan is reported to occur in possibly basaltic pillow lavas that locally contain as much as 25% pyrite and 2% copper minerals. A syenite body of unreported size and dimension outcrops approximately 300 meters west of the gossan zone. Chalcopyrite occurs in fractures within this body. The syenite is likely related to the small syenite stock of possible Lower Jurassic or younger age that occurs less than 3 kilometers to the south.

The **DC** showing (Minfile 104B 134) area is underlain by Hazelton Group, composed primarily of thick-bedded epiclastic volcanic rocks and lithic tuffs with closely associated pillow lavas, carbonate lenses and thick-bedded siltstones. Galena is reported to occur; however, no details are provided.

The **Mack** occurrence (Minfile 104B 618) area is underlain by andesitic rocks of the Hazelton Group. Veins exist as simple, quartz fracture fillings 1 to 10 centimeters wide with minor pyrite in millimeter-scale stringers and/or clots. Galena is present in isolated blebs or associated with the pyrite. Anomalous values of gold have been obtained from narrow quartz veins in outcrop, with silver and copper values ranging widely, and with sporadic anomalous zinc values.

The area of the **Bou** showing (Minfile 104B 673) in the north-central part of the Property is underlain by rock of the Stuhini and Hazelton Groups. Small masses and disseminated mineralization consists of pyrite, chalcopyrite and arsenopyrite. The host rock is predominantly gossanous quartzplagioclase-sericite schist. Two rock samples yielded anomalous silver values with anomalous arsenic and trace gold. The **Tribe** showing (Minfile 104B 201) is underlain by volcanic and sedimentary rocks tentatively correlated with the Hazelton Group, although earlier mapping showed the area underlain by the Stuhini Group. Host rocks consist of chert, andesite agglomerate and andesite tuff intruded by small syenite stocks. In areas of strong sericitic alteration, quartz and quartz-carbonate veins and stockworks are present that locally carry pyrite, pyrrhotite, arsenopyrite, sphalerite, and galena. Anomalous gold assays were returned from chip samples of a stockwork zone measuring 13 by 30 meters, and individual veins from 1 to 40 cm in width returned local strong gold and silver values.

The **Cat in the Hat** showing (Minfile 104B 672) is underlain by chert, andesite agglomerate and andesite tuff that are tentatively correlated with the Unuk River Formation of the Hazelton Group, intruded by small syenite stocks. The showing consists of a wide stockwork zone of quartz-pyrite-arsenopyrite veinlets and fracture fillings. Within this zone, mineralization was also noted as massive pods and cement in voids between rhyolite breccia fragments. The stockwork zone has veinlets that strike in two directions; one is flat lying, with veinlets generally 1 centimeter wide with coarse cubes of pyrite and minor patchy arsenopyrite. The second veinlet direction is 310 degrees dipping shallowly to the northeast, with widths varying from 1 to 10 centimeters and containing finer grained pyrite and locally massive arsenopyrite.

Arsenopyrite totals 2 to 4% in the most fractured part of the Cat in the Hat stockwork area and, in heavily mineralized sections the arsenopyrite may represent 20% of the narrow sulfide stringers. In addition to quartz-sulfide stockworks, pyrite and arsenopyrite also occur as fine-grained mineralization along minute fractures. The largest, most intensely fractured zone is at least 15 meters wide within the more extensive stockwork area. Semi-massive arsenopyrite has been noted as fracture filling in voids within brecciated rhyolite. These pockets of arsenopyrite cemented fragments are generally sparse and usually are less than 1 meter in diameter. The stockwork zone is about 30 to 40 meters in length with overburden obscuring it to the south. It may be terminated or offset to the north by a north-south linear feature. The mineralized zone is readily apparent due to the dark red-brown weathered surface in comparison to the surrounding lighter red weathered surfaces and, within the zone, arsenopyrite mineralization is indicated by its distinct greenish oxidation colour.

Continuous chip sampling of a gold-bearing quartz-pyrite-arsenopyrite stockwork zone in brecciated rhyolite, exposed in a trench, returned an average of 2.54 g/t gold and 1.36% arsenic over 13 meters (Cremonese, 1995). Native sulphur was also reported. Farther to the south, grab samples of small quartz carbonate veins returned local high silver values.

The most prominent rock exposures consist of felsic rocks thought to be of the Mt. Dilworth Formation, locally marked by a series of intense gossans rich in pyrite and other sulfides and which, in certain discrete zones, host anomalous gold-arsenic mineralization. The felsic rocks are overlain by fine grained, carbon-rich sedimentary rocks, possibly of the Salmon River Formation, and underlain by andesitic rocks. It is suspected that zones of strongly sericitic schist, developed over widths of 2 to 3 meters, represent alteration along shear zones.

The area of the **Lake** showing (Minfile 104B 671) was originally mapped as Stuhini Group, but more recently is believed to be comprised of Hazelton Group rocks. Carbonate alteration occurs within andesitic rocks along the contact with a syenite dike. The altered rocks contain discontinuous stringers and veins of massive to semi-massive galena and sphalerite with minor pyrite and abundant malachite stain. The aerial extent of the mineralized stringers is restricted to a strike length of 50 meters and from less than 1 to 2 meters in width. Small pockets contain semi-massive sulfides, from which a grab sample returned 20.88 g/t gold, 637.38 g/t silver, 66.06% lead, 1.53% zinc and 0.03% copper. A second grab sample about 50 m southwest of the first, assayed 4.56 g/t gold, 2423.68 g/t silver, 0.65% copper, 48.08% lead and 12.22% zinc.

In the eastern part of the Property, the **Feld** occurrence (Minfile 104B 202) is located within a 75to 150-meter-wide band of felsic pyroclastic rock of the Mount Dilworth Formation, in upper Hazelton Group. Intense quartz-pyrite-carbonate-sericite alteration has obscured original lithologies, but they appear to be sheared tuffs. Hand trenching and rock chip sampling were undertaken over the area of most intense alteration. Two grab samples from float boulders returned 3.5 and 7.0 g/t gold and nearby talus samples had anomalous levels of zinc, lead, and silver.

The **Delta Southwest** occurrence (Minfile 104B 241) is located within a narrow band of felsic pyroclastic rock of the Mount Dilworth Formation of the Hazelton Group. The mineralization occurs in an area of intense quartz-pyrite-carbonate-sericite alteration. The showing area is comprised of calcareous rhyolite tuffs with flat to shallow dips. Underlying rocks consist of carbonaceous argillite with some limey sections. A steeply dipping, 150-degree trending, cross fault cuts these rocks. A small body of Eocene age feldspar porphyry intrudes just east of the area of interest.

A number of mineralized "minor steep drag fold nose dilations" and tension faults contain pyrite and tetrahedrite respectively. In one location visible gold was observed with the tetrahedrite. The tension faults appear to feather off the main fault. One sample from a large gossanous outcrop contained massive pyrite, with values in gold, silver, and lead.

The area of the **Delta** occurrence (Minfile 104B 166) is underlain by Salmon River Formation siltstone of the upper Hazelton Group. The sedimentary rocks have been folded into synclines and anticlines with north trending fold axes. Small Eocene feldspar porphyry intrusions occur near the mineralized zone. An alteration zone, of undetermined width, trends for several hundred meters in a north-northwest direction paralleling the eastern wall of the creek.

Reported mineralization is described as very minor galena and sphalerite in argillite. A 2.44 meterwide chip sample taken across the altered zone near the glacier edge contained 0.48% zinc, 0.18% lead and 52.80 g/t silver, however, the zone disappears under ice, so its extent is not known (Cremonese,1985). Reconnaissance rock geochemical sampling revealed a number of argillite float boulders nearby carrying anomalous gold and silver values, however the source was not located.

At **Delta Northwest** (Minfile 104B 341) a mineralized vein is hosted by sedimentary rocks of the Hazelton Group that have been folded along north trending fold axes. The vein is about 5.0 meters

in length, varies from 2 to 15 centimeters in width, and appears to be a fracture filling in a silicified zone within black siltstone. The vein is composed of quartz, carbonate and massive tetrahedrite along with malachite, chalcopyrite, azurite, and pyrite. Small parallel fractures in the vicinity are also mineralized, but to a much lesser degree. Two character samples from the vein assayed 14,263 g/t silver, 6.14 g/t gold, and 17,966 g/t silver, 4.32 g/t gold (Cremonese, 1988).

The **Delta North** (Minfile 104B 242) area is underlain by folded siltstone and sandstone of the Hazelton Group. A "sedex-style" pod, of unknown dimensions due to snow cover, containing jamesonite and siderite occurs in an outcrop of sedimentary rocks. A nearby grab sample from quartz-sulfide float contained 14.41% lead, 2.77% zinc, 25.94% iron, 6.17% antimony, 1.85 g/t gold, and 73.03 g/t silver (Cremonese, 1985).

The **Delta Northeast** (Minfile 104B 289) area is underlain by Hazelton Group intermediate volcaniclastic rocks. A mineralized zone occurs within a north trending, 100- to 150-meter-wide band of sericite schist. This zone consists of small bands of pyrite, silicified sections, and quartz veins. The quartz veins carry pyrite, chalcopyrite, bornite, tetrahedrite, argentite, sphalerite, galena, native gold, malachite and azurite. The Delta Northeast zone is within a broad soil anomaly several hundred meters long, defined by strongly anomalous gold, arsenic, lead, antimony, and zinc that continues east of the showing. The core of higher values follows a northwest trend.

Rocks in the area of the **Theta** showing (Minfile 104B 169) belong to the Hazelton Group and have been folded on a regional northwest-southeast axis, cut by faults and selective tectonism, locally hydrothermally altered and intruded by plugs of probable Mesozoic, as well as Cenozoic age. Small feldspar porphyry dykes, sills, and plugs host related quartz-sulfide veins of probable epithermal origin.

Two quartz veins sampled in the southeastern part of the Theta area host mineralization over widths ranging from 0.3 to 0.6 meter. The lower quartz vein, found in altered andesite, hosts galena, sphalerite, chalcopyrite and pyrite. Four chip grab samples selected over 1 to 2 meter lengths along the vein ranged from 0.2 to 0.38 g/t gold, 13.4 to 441.8 g/t silver, 0.12 to 7.42% lead, 0.11 to 4.85% zinc, and 0.01 to 2.14% copper. To the north, the second quartz vein hosts lensoidal mineralization. A selected chip grab sample collected over 3 to 4 meters of vein length assayed 0.82 g/t gold, 1520.0 g/t silver, 19.6% lead, 7.75% zinc, and 0.64% copper (Cremonese, 1987).

Other nearby mineralization consists of a brecciated quartz-calcite vein which marks a contact between fine-grained andesite tuff and pyritic agglomerate. The vein hosts galena, sphalerite, chalcopyrite, pyrite, azurite, and malachite. Nine chip panel samples were collected over continuous 1 m lengths across the 60 cm width of the vein. The average of the nine samples was 1.84 g/t gold, 41.41 g/t silver, 0.05% lead, 0.27% zinc, and 0.08% copper (Cremonese, 1987).

The **Ptuck** showing (Minfile 104B 679) area is underlain by siltstones, sandstones and andesitic fragmental rocks of the Hazelton Group. The showing comprises a 5- to 10-meter-wide shear zone hosting a 0.5- to 1-meter-wide quartz-carbonate vein with associated sphalerite +/- galena +/- chalcopyrite +/- tetrahedrite. Five selected grab samples were taken along the strike length with

values ranging from 0.13 to 0.66 g/t gold, 8.7 to 57.8 g/t silver, 0.02 to 0.53 % copper, 0.04 to 1.24% lead, and 0.63 to 16.60% zinc (Branson, 2010). The overall extent of the Ptuck zone is 50 by 70 meters.

Immediately to the east of Ptuck is another 15- to 20-meter-wide shear zone within iron-carbonate altered sedimentary rocks hosting stockwork quartz-carbonate veins. Four grab samples were taken in this zone with significant values ranging from 0.18 to 0.25 g/t gold, 39.7 to 257.0 g/t silver, 0.07 to 0.48% copper, 1.32 to 8.74% lead, and 4.48 to 30.10% zinc (Branson, 2010). The trend of the shear zones and veining is variable, although generally they are striking south to southwest and dipping steeply to the west or northwest, approximately on strike with the Gamma zone.

The **Gamma** zone (Minfile 104B 168) (also called Fairweather) is underlain by dacitic fragmental rocks, fine-grained siliciclastics and massive andesite of the Hazelton Group. These are intruded by feldspar porphyry bodies that are highly fragmented. The zone has been trenched in a northwest orientation over approximately 120 meters. The most significantly mineralized trench exposed a 60 cm wide quartz-pyrite-sphalerite-tetrahedrite vein striking approximately 222/45 NW. Two of the remaining three blast trenches host similar mineralization comprising quartz veining with galena, as well as quartz breccia/veining with pyrite and tetrahedrite.

Veins display open space fill textures that resemble dilational zones related to moderately to steeply northeast-dipping shearing that has produced a strong fracture foliation and locally truncates mineralization. Veins are not continuous but appear to be en echelon veins within a northwest trend. Three selected grab samples collected from mineralized veins in this zone yielded gold values from 1.3 to 5.1 g/t with 32.0 to >10,000 g/t silver, 0.1 to 3.0% copper, 0.3 to 30.1% lead, and 0.2 to 5.2% zinc (Harris, 2009).

Mineralization in the Gamma area primarily consists of quartz-calcite veinlets containing galena, sphalerite, chalcopyrite, pyrite and significant amounts of silver. A grab sample from a quartz vein a few cm wide, containing tetrahedrite, sphalerite, and galena, assayed 12,950 g/t silver and 1.99 g/t gold. An equally significantly pyritized quartzose brecciated conglomerate exposed by trenching over a 7.15 meter length yielded a weighted average of 4.04 g/t gold from 3 samples, across a 1.1 meter average width (Kruchkowski and Konkin, 1988). A grab sample of similar pyritic quartzose breccia, located 120 m upslope, returned 1.05 g/t Au, but it is not known if this is the same zone.

Grab samples collected from an area 570 meters west of the Gamma trenches, displaying a zone of ankerite alteration with centimeter-scale quartz-carbonate-tetrahedrite-chalcopyrite veinlets, returned high silver values .

The **East Gold** occurrence (Minfile 104B 033), in the Electrum area, has been classified as a lowsulfidation epithermal deposit hosting mineralized breccia-veins. Limited mining and underground exploration conducted on the vein system from 1931 to 1965 produced a small tonnage of highgrade gold and silver. Intermittent shipments of sorted mineralization from the short underground workings recorded between 1939 and 1965, totalled 31 tonnes containing 31,694 grams of gold, 98,627 grams of silver, 2,354 kg of lead, 1,029 kg of zinc and 30 kg of copper (https://minfile.gov.bc.ca/report.aspx?f=PDF&r=Minfile_Detail.rpt&minfilno=104B++033).

The area of the mineral showings is underlain by a north-northwest trending belt of folded volcanic rock that contains a thick sedimentary sequence in-folded along a synclinal axis. This belt has been correlated with the Lower Jurassic Unuk River Formation of the Hazelton Group, with the deposit occurring in the Upper Siltstone Member. This belt is cut by Mesozoic and Tertiary intrusions. A northern extension of the Early Jurassic Summit Lake Stock occurs within 600 meters to the southwest of the occurrence. A pervasive sericite, quartz, carbonate, pyrite alteration has overprinted the tuffaceous sedimentary strata producing a reddish hue to outcrops in the area. Three types of mineralization occur at the East Gold deposit:

1) A high-grade vein zone varying from 3 to 60 centimeters in width is bounded on the hangingwall side by a fault with average strike of 165 degrees and dip of 68 degrees west. On surface the vein is knife edge thick and can be traced for 53 meters. Underground the vein extends from the foot of a raise 12 meters northward, where it appears to merge into a diffuse shear zone. The zone is sheared and silicified and contains stringers of quartz and calcite, much pyrite, and discontinuous 1- to 2.5-cm-wide lenses of dark brown sphalerite and some galena. Minor amounts of pyrargyrite (ruby silver), electrum, arsenopyrite, tetrahedrite, chalcopyrite, and native silver also occur, with rich pockets of electrum formed locally. A 30-centimeter sample across the zone taken within the drift assayed 24.0 g/t silver and a trace of gold. A 6.5-centimeter sample including a 4-centimeter stringer of sphalerite and galena assayed 476.58 g/t silver and 2.06 g/t gold (Minister of Mines, BC Ann. Rept., 1946) The entire production of the mine up to 1945 came from this one vein zone, but it is not clear if post-1945 production also came from this source.

2) Several strong and persistent shears cut the sediments, striking from 110 to 125 degrees, and dipping from 70 to 85 degrees southwest. The rocks along the shear are silicified and carbonatized in narrow bands, with the bands closely spaced over a width of 0.6 to 4.6 meters. This zone is believed to extend for about 450 meters. Mineralization occurs in the altered sediments and in stringers and bands of quartz. Mineralization is similar to that of the high-grade vein zone but much less abundant, and with lower gold and silver values.

3) A stockwork of quartz veins occurs in highly fractured sediments about 300 meters southeast of the raise, approximately on strike with the high-grade vein. One vein is 30 centimeters wide and contains approximately 5% metallic minerals, including chalcopyrite, sphalerite, galena and small amounts of tetrahedrite, arsenopyrite and malachite.

In 2016, trenches were blasted by Tudor Gold on a vein system identified approximately 100 m west of the mine workings. There are two parallel, possibly en echelon, veins, with surrounding stockworks, that are separated by about 20 m and trending about 150/60° SW, which is roughly parallel to the East Gold vein system. The structures include sharp-edged quartz fragments in a foliated sulfide-quartz-carbonate matrix; the sulfides consist of pyrite and pyrrhotite with thin silver-bearing galena seams. Within a 15 m by 5 m trench exposure, twelve selected specimens collected from individual vein structures and breccia yielded an average of 3,461.9 g/t silver and 2.24 g/t gold

(McCrea, 2017). Several drill holes revealed subsurface veining and mineralization in the area below the newly identified blast zone. Due to fault complexity Tudor was unable to state with certainty if the mineralization revealed in the drill holes was linked, or continuous between holes. A 3.8 tonne bulk sample collected from the new blast zone averaged 2.82 g/t gold, 539 g/t silver, 1.96% lead and 1.97% zinc (McCrea, 2017).

The **Tide TV 86-1** occurrence (Minfile 104B 254) at the south end of the Electrum area consists of quartz-sulfide veins in granodiorite. The surrounding area is underlain by strata of the Lower Jurassic Unuk River Formation of the Hazelton Group. A north trending extension of the Lower Jurassic Summit Lake hornblende granodiorite stock 300 to 500 meters wide separates dacitic tuffs on the east from andesitic fragmental rocks on the west. Mineralization was encountered in a hole that was drilled to test an electromagnetic anomaly and a zone of arsenopyrite filled fractures in granodiorite. This north trending diamond drill hole cut locally silicified granodiorite for the first 105 meters and tuffaceous rocks for the last 100 meters. Quartz veins 1 to 15 centimeters wide cut the granodiorite and contain trace to 8% pyrite and 1% arsenopyrite, with trace chalcopyrite. A few minor quartz veins contain as much as 70% arsenopyrite and 10% pyrite. A weighted average of two assays from contiguous drill core samples gave 3.18 g/t gold and 13.03 g/t silver over a combined length of 1.37 meters, consisting of silicified granodiorite with arsenopyrite and chalcopyrite (MacLeod, 1986).

8.0 DEPOSIT TYPES

Within the Crown Project area there is potential for discovery of various styles of mineralization such as those found on nearby properties. Large deposits in the area include porphyry-style Au-Cu-Ag systems, high-grade epithermal Au-Ag vein systems, and VMS precious and base metal-rich massive sulfide systems.

In most **porphyry deposits** copper is the primary commodity of economic interest, although some deposits with low copper grades are mined principally for their gold. Gold-bearing porphyry-style mineralization is one of the main target types sought on the Property.

A porphyry deposit has the following characteristics:

- Sulfide minerals are localized in a network of fracture-controlled stockwork veinlets and as disseminated grains in the altered rock adjacent to veins;
- Alteration and mineralization are genetically related to predominantly intermediate to silicic magma reservoirs, typically at 1-4 km depth, emplaced into shallow crustal rocks, in magmatic arcs above subduction zones;
- Intrusive rock complexes that are emplaced immediately before porphyry deposit formation, and that host the deposits, are predominantly in the form of upright-vertical cylindrical stocks and(or) complexes of dikes;
- Zones of phyllic-argillic and marginal propylitic alteration overlap or surround a potassic alteration assemblage; and,

• Sulfide minerals may also be introduced during overprinting phyllic-argillic alteration events.

Porphyry deposits form in continental magmatic arcs along convergent plate-margin boundaries or in island-arc environments. Most porphyry deposits are Triassic or younger. The deposits are commonly associated with subduction-related volcanic centers. The localization of volcanic centers may reflect local tectonic features that have controlled permeability, while chains of volcanic centers may reflect more regional-scale strains. Such issues are important when trying to interpret the location of porphyry deposits within extensive magmatic arcs.

Porphyry deposits result from the condensation of hydrothermal fluids derived from a crystallizing magma reservoir in the shallow crust. These shallow subvolcanic complexes are typically made up of multiple intrusions of varying composition, derived from a source reservoir at greater depth. The compositions of the shallow intrusions that host porphyry deposits are dependent on the deep melt reservoirs from which both the shallow intrusions and the ore fluids were derived, and may range from calc-alkaline, to alkali-calcic, to alkaline. High-potassium calc-alkaline (and alkaline) intrusions are typically related to gold-rich porphyry systems. Most associated intrusions are small stocks, often with a greater vertical than horizontal dimension, and dikes. Most are porphyritic, hence the term, porphyry deposit.

Most porphyry deposits are copper bearing. The principal copper sulfide mineral is chalcopyrite, although substantial amounts of copper may occur as bornite, enargite, and chalcocite. By-product minerals frequently include molybdenite and native gold. Other associated minerals may include pyrite, sphalerite, galena, tetrahedrite, and gold tellurides.

Copper-ore mineral assemblages are a function of the chemical composition of the fluid phase and the pressure and temperature conditions affecting the fluid. Thus, specific mineral associations may vary in a deposit as the composition of the hydrothermal fluid changes. In primary, unoxidized ores, the most common sulfide assemblage is chalcopyrite ± bornite, with pyrite and minor amounts of molybdenite.

Gold is an important by-product in many porphyry copper deposits, but the details of its occurrence are variable. In some deposits, gold is found within quartz veins attached to sulfide grains, and as free gold along silicate grain boundaries. Gold is commonly found in association with bornite, within the sulfide mineral structure and present as small grains of native gold. In chalcopyrite-rich ores, the gold occurs primarily as small grains within the copper sulfide.

Geochemical zoning studies have shown that copper, molybdenum, gold, and tin are the most anomalous elements within ore zones. Although silver and arsenic are also anomalous within ore zones, they may additionally occur with barium, zinc, lead, and antimony in overlying and lateral subeconomic, altered rock. Some deposits show anomalous tellurium above ore, and zinc and lead may form negative anomalies immediately above and within ore.

Deposits are typically elliptical in plan view and vary greatly in dimensions, with long axis ranging from <0.5 km to >5 km, minor axis from <0.2 km to >1 km and depths of up to 1 km or more.

Geophysically, porphyry deposits often appear as magnetic highs, with alteration halos usually manifest as donut-shaped or open-ring peripheral magnetic lows. Induced polarization (IP) anomalies are generally, but not always, a diagnostic indicator of economic mineralization. The IP anomalies correlate with both mineralization and alteration-related magnetic lows; however, IP anomalies often indicate the most abundant pyrite zones in altered rocks rather than areas of less-IP-reactive clay minerals. Radiometric methods will show the potassic alteration if significant potassically-altered parts of the system are exposed. Potassic, phyllic, argillic, and propylitic alteration halos of porphyry deposits contain distinct spectral absorption features that can be mapped in surface exposures using multispectral and hyperspectral remote sensing data.

Porphyry deposit modelling shows that the same general zoning pattern of alteration is present in most deposits (Figure 8.1). When a deposit begins to form, potassic alteration occurs in the core of the up-flow zone of the mineralizing magmatic fluid, with mineralization deposited at the edges of the potassic zone. The thermal gradient associated with this high temperature up-flow leads to convection of surrounding ground waters that results in a peripheral propylitic alteration zone. Phyllic alteration is typically observed to crosscut potassic alteration, and this alteration is believed to form from a mixture of meteoric and magmatic fluids. Phyllic alteration is associated with important tonnages of ore in some deposits but is not always present. Clay-rich alteration assemblages, such as argillic to advanced argillic, commonly occur above the core of a deposit and laterally along the margins of the system.
Figure 8.1 Cross section of a porphyry copper deposit showing idealized alteration zoning and mineralization (after Lowell and Guilbert, 1970).



Porphyry copper deposits can be associated with high-sulfidation epithermal deposits (copper, gold, silver), late and/or distal intermediate-sulfidation polymetallic base metal and precious element veins (lead, manganese, zinc, silver), as well as distal disseminated gold deposits (Figure 8.2). All of these styles of mineralization have been identified in various showings on the Crown Property. Areas with potential for porphyry-style mineralization include the central part of the Property along the projected southerly extension of the Sulphurets Fault, as well as in the southern part of the Electrum area where pyrite, arsenopyrite and minor chalcopyrite occur in quartz veins within a lobe of the Summit Lake stock.

Figure 8.2 Schematic diagram of a porphyry copper system in the root zone of an andesitic volcano showing mineral zonation and possible relationship to precious metal and base metal vein and replacement, epithermal precious-metal, skarn and manto deposits (adapted from Kirkham & Sinclair, 1995).



Epithermal gold-silver deposits are shallowly formed vein, stockwork, disseminated, and replacement deposits that are mined primarily for their gold and silver contents; some deposits also contain substantial resources of lead, zinc, copper, and/or mercury. Epithermal gold-silver deposits range in size from 10,000 to >1 billion tonnes and have gold contents of 0.1 to >30 g/t and silver contents of <1 to several thousand g/t (John et al., 2018). Although epithermal deposits are commonly known for their high gold grades, many bulk tonnage deposits with as little as 1 g/t gold or less are presently being exploited by open-pit mining.

Lindgren (1933) theorized that certain Au-Ag deposits formed by the discharge of hydrothermal fluids from magmatic sources at low temperatures (< 200°C). It has more recently been recognized that epithermal deposits form at temperatures as high as about 300 °C and at depths from about 50 to as much as 1,500 m below the water table, and that these deposits commonly represent the shallow parts of larger hydrothermal systems (Henley and Ellis, 1983).

Epithermal gold-silver deposits form in a variety of regional tectonic settings, but most commonly occur as veins or breccias developed in local extensional or dilational fault and fracture zones.

Disseminated and replacement mineralization also commonly forms in permeable lithologies where horizons have been intersected by faults or fractures that acted as conduits for mineralizing fluids. Most epithermal districts world-wide have been found in volcanic rocks associated, on a continental scale, with subduction zones at plate boundaries. Epithermal deposits are shallow, extending to maximum depths about 1,500 m below the water table and are therefore susceptible to erosion in tectonically unstable regions.

Most deposits are genetically related to hydrothermal systems associated with subaerial volcanic rocks and intrusions ranging from basalt to rhyolite, with the bulk of epithermal deposits hosted by lava domes and associated diatreme complexes. Most epithermal mineralization is related to hydrothermal systems that form from the release of magmatic fluids during crystallization of intrusions at depth.

Epithermal gold-silver deposits are frequently classified by a scheme that separates them into low-, intermediate-, and high-sulfidation subtypes based on their alteration assemblages and mineral associations. All three deposit subtypes form under similar circumstances, however, intermediateand high-sulfidation deposits form at greater depths, with larger magmatic fluid contributions, tending to be richer in sulfide minerals and often with links to underlying porphyry deposits. Lowsulfidation deposits, though, may form at some distance from an associated magmatic source.

Hydrothermal alteration associated with epithermal deposits varies considerably between deposit subtypes, as well as within individual deposits, due to differing sulphur fugacity related to paleowater mixing with magmatic fluids. High-sulfidation deposits formed from very low pH magmatic fluids that had little interaction with meteoric water and are characterized by a core zone of residual, commonly vuggy quartz, flanked by quartz-alunite and advanced argillic alteration containing kaolinite, dickite and/or pyrophyllite. In contrast, low- and intermediate-sulfidation deposits are cored by potassic alteration with quartz, adularia and/or carbonate minerals and/or illite, indicative of formation from near-neutral pH fluids. More distal argillic and propylitic alteration may surround all deposit subtypes. Silica sinter deposits may overlie and locally host some low-sulfidation deposits but are absent in high-sulfidation deposits.

Distinct ore and gangue mineral assemblages characterize each of the deposit subtypes. Low- and intermediate- types commonly have a higher Ag:Au ratio than high-sulfidation types. Ore minerals in low-sulfidation deposits include electrum, silver sulfides, selenides, and sulfosalts, and/or gold and silver tellurides. Intermediate-sulfidation deposits have similar mineralogy but may also include silver-bearing tetrahedrite-tennantite, chalcopyrite, galena, and sphalerite. Gangue minerals in these deposits include quartz, adularia, illite/sericite, and carbonate minerals. High-sulfidation deposits are characterized by gold and/or electrum, gold tellurides, acanthite, enargite, luzonite, and other copper sulfide and sulfosalt minerals, hosted by quartz gangue. Pyrite and/or marcasite are common in all deposit subtypes.

Epithermal gold-silver deposits commonly contain elevated values of As, Sb, Hg, Se, Te, Tl, and/or W; some deposits also are enriched in Pb, Zn, Cu, and Mo. Concentrations of these elements may

be zoned within individual deposits, sometimes providing useful pathfinders to help vector toward higher grade zones.

The mineralized veins in the Electrum area on the Crown Project have intermediate-sulfidation characteristics, such as a high Ag:Au ratio, associated base metals and less advanced alteration of host rocks. However, banded and veined mineralization and adularia-type alteration common in intermediate-sulfidation types is not well developed at Electrum near surface but may exist at greater depth in areas not well tested to date.

Volcanogenic massive sulfide (VMS) is the third style of mineralization sought at Crown, including **subaqueous hot-spring** deposits, a sub-division that defines transition type deposits that display both VMS and epithermal attributes. Characteristics of the subaqueous hot-spring type of deposit have been summarized by D. Alldrick (1995) of the BC Geological Survey and are presented below.

- The typical commodities are Ag, Au (Cu, Pb, Zn, As, Sb, Hg).
- Vein, replacement and syn-sedimentary bedded sulfides are deposited in volcanic rocks and associated sediments in areas of shallow lacustrine, fluvial or marine waters.
- Active volcanic arcs (both oceanic island arcs and continental margin arcs) are likely settings.

1) Water-filled reservoirs in active continental volcanic areas (crater lakes, playa lakes, stream flood plains, glacier subfloors).

2) Sea-flooded, breached calderas, or unconsolidated shallow marine sediments at the foot of a volcano.

- Deposits of this type in BC are commonly Mesozoic but may be any age.
- Mineralization is hosted by intermediate to felsic flows and tuffs and minor intercalated sedimentary rocks. Pillow lavas, coarse epiclastic debris flows, and assorted subvolcanic feeder dikes are all part of the local stratigraphic package.
- The deposit form is highly variable, including finely laminated stratiform sulfide layers and lenses, large textureless massive sulfide pods, reworked clastic sulfide sedimentary beds, footwall stockwork or stringer-style vein networks, and epithermal-style breccia veins with large vugs, coarse sulfides and chalcedonic silica. All types may coexist in a single deposit.
- Textures range from fine clastic sulfides and "framboid"-like chemical precipitates to very coarse-grained sulfide aggregates in breccia veins. Structural styles include vein stockworks, major breccia veins, and stratabound and stratiform sulfide lenses and layers.
- Principal ore mineralogy typically includes sphalerite, tetrahedrite, boulangerite, bournonite, native gold, native silver, amalgam, galena, chalcopyrite, enargite, pyrite, stibnite, realgar, arsenopyrite and orpiment. Subordinate mineralogy may include cinnabar, marcasite, magnetite, scorodite, jarosite, limonite, anglesite, native sulphur and some rare sulfosalt, telluride and mercury minerals.

- Gangue minerals typically include magnesian chlorite, muscovite (sericite), chalcedonic silica, amorphous silica, calcite, dolomite, pyrobitumen, gypsum, barite, potassium feldspar and alunite with possible minor carbon, graphite, halite and cristobalite.
- Alteration assemblages include massive chlorite-illite-quartz-gypsum-barite rock or quartzmuscovite-pyrite rock associated with the near-footwall stockwork zones. Chlorite-pyrite alteration is associated with the deep-footwall stockwork zones where alteration minerals are restricted to fractures. Stratabound mineralization is accompanied by magnesian chlorite, muscovite, chalcedonic silica, calcite, dolomite and pyrobitumen.
- Deposits are formed by epithermal "hot spring" fluids vented into a shallow water environment. Fluids are magmatic in character, rather than meteoric, which contrasts with some characteristics of the process model for volcanogenic massive sulfides. Lateral and vertical zoning has been recognized within a single lens. Lateral zoning shows changes from Sb, As and Hg-rich mineral suites to Zn, Pb and Cu-rich assemblages. Vertical zoning is expressed as a systematic increase in Au, Ag and base metal content up-section. Fluid conduits are fissures that were generated by seismic shock, aggradation of a volcano over a later expanding magma chamber or fracturing in response to regional compressional tectonics. A near-surface subvolcanic magma body is an essential source of metals, fluids and heat.
- The aerial extent of subaqueous hot-spring deposits is relatively small. Induced polarization surveying should produce a relatively continuous anomaly over surrounding ubiquitous alteration, but the best targets may be local peaks within the broad IP anomaly that are detecting the pyrite and sulfides associated with stockwork mineralization. Airborne magnetometer surveys may help delineate favourable strata and fault offsets.
- The geological deposit model and its regional setting may be the best exploration tools available. Hydrothermal systems marked by widespread sericite-pyrite alteration; evidence of a volcanic crater or caldera setting; accumulations of felsic volcanic strata:

1) in a local subaqueous setting in a regionally subaerial environment,

2) along the near shore zone of a regional subaerial/subaqueous volcanic facies transition (e.g.: the margin of a rift zone or trough). Focus on the sedimentary intervals within the volcanic pile.

The most promising area for possible subaqueous hot-spring or VMS type mineralization is near the Delta and Fairweather showings on the east part of the Property where a "sedex-style" pod containing jamesonite and siderite has been found in sedimentary rocks, and samples of finely disseminated and banded pyrite in argillite and quartzose rocks have returned anomalous gold, silver, lead and zinc values.

9.0 EXPLORATION

Goldstorm has not undertaken exploration on the Property, however, Tudor Gold Corp., which is the parent company of Goldstorm, acquired the Property in 2016, and has conducted exploration, as described below. In 2016 Tudor undertook initial exploration consisting of a magnetotelluric (MT) survey in the Orion area, as well as a program at Electrum that included 1,406 m diamond drilling followed by trenching, rock sampling and a small bulk sample for metallurgical test work. In 2018

Tudor undertook an Induced Polarization (IP) survey at Electrum, as well as environmental test work to support a larger bulk sample extraction plan. Also in 2018, three Tudor personnel undertook 19 man-days of geological reconnaissance and rock sampling in the Orion, Delta and Fairweather areas. Approximately 85 rock samples were collected and analyzed with encouraging results. In 2019 and 2021, follow-up reconnaissance and rock sampling were undertaken within a promising zone in the Orion area, returning numerous anomalous Au and Ag values. In May 2022 an airborne magnetic survey was flown over the Orion area, identifying magnetic anomalies near areas of known mineralization. No exploration was undertaken in 2017 and 2020.

Magnetotelluric surveying uses naturally occurring magnetic and telluric electric fields in the earth's surface to measure magnetic response and electrical resistivity, which can be interpreted to distinguish between different rock types and structures. This method can collect data from near surface to depths of thousands of meters. The survey typically uses several directional electrodes embedded in the ground, as well as magnetic coils, attached to a data logger. For the 2016 survey at Orion, the electrodes were spaced 100 m apart and the assemblage was left to collect readings over a minimum period of twelve hours at each station. Quantec Geophysics collected MT data at 44 sites on six profile lines in the Orion area (Figure 9.1). Two of the profiles were positioned along Orion ridge in a roughly NNW orientation covering the Cat-in-the-Hat showing and a further four profiles were collected on east-west orientations to define the contact zone between Stuhini and Hazelton Group rocks.

The data from the survey was computer processed and interpreted by Simcoe Geoscience Limited in multiple steps to produce an apparent resistivity and phase value for each site, using several frequencies which relate to the depth of measurement. The MT data contains varied information, including the subsurface apparent resistivity and phase, the vertical and horizontal magnetic fields, and induction vector arrows which can be plotted to indicate the potential location of conductors. Simcoe plotted apparent resistivity contours on plan views at various elevations, as well as cross sections along the six profile lines.



Figure 9.1 Orion MT survey plan, resistivity & interpreted Kyba Line and Sulphurets Fault

The areas with lowest resistivity coincide closely with Stuhini Group rocks exposed along the ridge, with higher resistivities on either side of the ridge probably underlain by Hazelton Group, with relatively steeply dipping contacts, although exposures are limited on either side of the ridge. This agrees with the interpretation that the Sulphurets Fault may continue southerly from the KSM property, extending down the east side of the ridge and bringing Stuhini on the ridge into contact with Hazelton Group rocks to the east of the fault. This could have implications for potential fault-related stockwork-style mineralization in this area. The survey also identified a distortion in the shape of the geophysical data in the Cat-in-the-Hat area that suggests possible NW and NE structures at depth. The shape of the low resistivity zones on Profile Section P2S (Figure 9.2) suggest a possible tight anticlinal fold with the hinge located at CR2015. A similar possible fold pattern is seen on Sections P1S and P3S, to the south and north. There were no features that were interpreted as areas of sulfide mineralization. Recommendations in the survey report included geological mapping and an airborne magnetic survey to help define structures. No drill targets were proposed.



Figure 9.2 Orion MT survey Section P2S, resistivity & interpreted geological contacts

Tudor's 2016 drilling program at Electrum consisted of nineteen diamond drill holes, totalling 1,406 m, that tested base- and precious-metal mineralization previously explored in the East Gold mine area as well as an area about 100 m west of the mine workings. This drilling program is further discussed in Section 10.0.

Following the drill program, a trench was blasted on the New Blast Zone, exposing mineralized veining over a strike length of about 15 m and width of 5 m, with a trend of approximately 140°. The central axis of the main quartz vein structure hosts fine-grained, dark grey to black sulfide mineralization and has a northern contact that comprises a 0.5 m wide zone of angular quartz fragments in a foliated sulfide-quartz-carbonate matrix. The sulfides include pyrite and pyrrhotite with thin galena and sphalerite seams. Electrum and pyrargyrite occur locally and account for some of the very high silver values. Twelve grab samples were collected from veins and breccia in the trench, with no dimensions reported. The averaged results of the twelve samples reportedly equaled 3,461.92 g/t (111.30 oz/T) silver and 2.24 g/t gold. A grab from an 8-cm wide galena-rich seam returned 30,200 g/t (1,065.3 oz/T) silver (McCrea, 2017).

A second trench was drilled and blasted about 30 m to the north-northeast on mineralized outcrop within the Shiny Cliff zone, exposing similar mineralization to that within the New Blast Zone.

A 3,846-kilogram bulk sample was collected from the central vein structure and breccias within the New Blast zone in cloth ore bags, which were flown to the access road using a helicopter. The sample was then trucked to a company storage facility in Mission, BC. The sample was later taken to a local quarry in Mission where it was crushed to a fragment size of minus 4 inches and then

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shipped to ALS Global's metallurgical laboratory ('ALS') in Kamloops, BC for metallurgical testing and processing. The metallurgical balance indicated that the 3,846 kg sample averaged 2.82 g/t Au, 539 g/t Ag, 1.96% Pb, 1.97% Zn and 13.8% S (McCrea, 2017). The metallurgical testing procedures carried out on the bulk sample are documented in Section 13 of this report.

There was no work conducted on the Property in 2017.

In 2018 Tudor Gold Corp. undertook an Induced Polarization survey in the Electrum area. Resistivity and Induced Polarization (IP) is an electrical method that uses the injection of current and the measurement of voltage difference, along with its rate of decay, to determine the subsurface resistivity and chargeability respectively. The ground resistivity is related to various geological parameters such as the mineral and fluid content, porosity and degree of water saturation in the rock. The IP technique is mostly concerned with measuring the electrical surface polarization (chargeability) of metallic minerals that occur as disseminations or veins in the host rock.

Four lines, comprising 5.0 line-km of IP data, were surveyed using 'dipole-pole-dipole' configuration with 50 m station spacing on east-west lines spaced 100 m apart (Figure 9.3). Depth of penetration can be 400-600 meters using 50 m stations with a good signal. Strong chargeability responses were mapped in the central and western parts of the section lines where four distinct zones of elevated chargeability are resolved, extending to depths of more than 300 m. Two of the responses are interpreted as fault zones, which could be associated with sulfide bearing veins; one is the potential extension of the Blast zone while the other is on trend from the area of the historical tunnel at the East Gold zone.



Figure 9.3 Electrum geology & IP line locations



Figure 9.4 IP resistivity and chargeability sections – Line 300N

The following is extracted from the Simcoe Geoscience report description of section 300N (Figure 9.4).

"The eastern and central parts of the section are dominated by very low resistivity of less than $500\Omega m$, which corresponds with conductive fault zone, weathered and saturated rock layers. The western half of the section is dominated by moderate to high resistivity of more than $5000\Omega m$, which are potentially unaltered rock units at higher elevations. A number of moderately resistive fault zones are also mapped in the western half. The highly resistive layer is underneath moderate resistivity, which marks the geological boundary between two units. Three vertical to westward dipping faults are resolved, which extend from surface to a depth of more than 300m and the resistivity of faults is ranging from $500\Omega m$ to $2500\Omega m$.

The weakest chargeability is mapped in the eastern extents of the section, where resistivity is very low, and corresponds well with weathered and saturated rock layers and could potentially be sedimentary rocks. The strong chargeability responses are mapped in the central and western parts of the section where four distinct zones of elevated chargeability with chargeability ranging from 15 mV/v to 35+ mV/v are resolved (P1, W1, S1 & S2). These chargeable anomalous zones extend to a depth more than 300m. The low priority P1 anomaly is structurally controlled, while W1 is probably

the response from a major geological contact. The anomalies S1 and S2 are the responses of fault zones, which could potentially be associated with sulfide zones, S1 is in the area of New Blast zone while S2 is in the area of the historical tunnel."

All four IP sections show similar patterns of strong chargeability for targets S1 and S2, indicating northerly continuity of these probable structures for over 300 m of length and strong continuity to depth.

In 2018, Tudor undertook planning for a future bulk sampling program, larger than the initial test, that would help to assess mining and processing techniques, procedures and costs, test suitability of mineralization for off-site processing facilities, and gain a better understanding of the distribution of high-grade zones within the vein structures. As part of the planning process for bulk sample extraction in the Electrum area the company undertook test work that involved metal leaching (ML) and acid rock drainage (ARD) assessment, conducted on 52 samples collected primarily from drill core. As well, water quality baseline sampling and analysis was carried out during the field season in 2018. Further baseline sampling will be required.

Additional work undertaken by Tudor in 2018 included reconnaissance prospecting and rock sampling in the Orion, Delta and Fairweather areas by a team of Tudor geologists. Anomalous precious metals values were returned from quartz-sulfide veins and narrow breccia/ stockwork zones but, most significantly, from a showing of banded pyrite in a siliceous matrix that resembles an exhalative horizon with underlying sulfide-rich feeder veins. The rapid ablation of the icefields in some parts of the Property has provided new bedrock exposures with potential to contain mineralization on surface that was previously unknown. Accordingly, part of the geological reconnaissance and sampling that was undertaken was targeting recently exposed areas at the edges of icefields, near sites that had displayed good geological potential based on results of historical work.

The majority of the samples were collected from the Orion area in the central part of the Property, distributed over about 4 kilometers along the east and west edges of a north-south trending nunatak of rocks that have been mapped as Stuhini Group, but may include faulted slices of Hazelton Group rocks. Descriptions and results from several of the rock samples given below are quoted from a report by Rowe (2019).

The majority of the anomalous rock samples were from an area 800 to 1200 m southeast of the Lake showing (Figure 9.5). Note that the glacier ice cover has receded from that shown on this figure. In this area ten grab samples from bedrock and float returned high Ag values ranging from 13.6 to 778.0 g/t, several with coincident anomalous As, and a few with anomalous Pb, Zn, Cu and/or Au. Eight grab samples returned greater than 100 ppb Au. Two samples with elevated Au correlate most closely with anomalous Cu and Ag values. One of the most strongly anomalous grab samples returned 778.0 g/t Ag, 1200 ppm Pb, 2340 ppm Zn, 645 ppm As, 95 ppm Cu and 8 ppb Au. This sample is described as a 15 by 20 cm, round, massive, white to dark grey, cryptocrystalline

quartz boulder with 2-3% fine grained disseminations and veinlets of pyrite, with a trace of jasperoidal quartz and hematite/ limonite.



Figure 9.5 Orion rock samples Ag values

Another grab sample, nearby to the south, returned 135.0 g/t Ag, 1.29% Cu and 300 ppb Au, with low Pb, Zn and As values. It is described as a green andesite boulder cut by a quartz vein containing chrysocolla and 2% tetrahedrite. The highest Au value of 31.1 g/t Au, with 25.9 g/t Ag, 625 ppm Cu and >10,000 ppm As, was collected near the north end of this anomalous cluster. It is described

as a grab sample of hornfelsed fine grained possibly volcaniclastic rock with 7-10% quartz breccia, containing semi-massive 15cm pods of partially oxidized pyrite and other sulfide minerals.

At the north end of the Orion area, north of the Tribe occurrence, a grab sample returned a strongly anomalous Au value of 1.05 g/t Au, with 26.0 g/t Ag and a slightly elevated 305 ppm Zn value. It is described as chips from a 10-40 cm wide zone of multiple quartz veins situated along a fault trending 152/80°W. Veins contain 7% pyrite and arsenopyrite and trace galena, chalcopyrite and chrysocolla. The sulfides are dominantly in wallrock along the vein selvages.

A single grab sample from the cluster of samples north of the Lake Showing returned a strongly anomalous Ag value of 239.0 g/t, with elevated Pb of 447 ppm, but low values for other elements. It is described as a 30 by 50 cm, sub-angular, quartz boulder with 5-7% very fine-grained disseminations and veinlets of pyrite, 10-15% calcite, and trace disseminated black sphalerite.

Limited reconnaissance sampling in the Delta and Fairweather areas in 2018 focused on freshly exposed outcrops at the edges of the icefield. New mineral showings were discovered, and three rock grab samples returned multi-gram gold values (Figure 9.6). In the area about 400 m north of the Feld showing a grab sample returned 10.2 g/t Au, with 7.7 g/t Ag, 737 ppm Cu, 463 ppm Zn and minimal Pb and As. There is no description for this sample, however, other samples collected within a few meters consisted of silicified siltstone containing 1 to 10% disseminated pyrite with minor arsenopyrite and galena and cut by narrow quartz-sulfide veins. Limited diamond drilling (5 holes) was undertaken in this area in 2011 by Teuton Resources and results, which are discussed above in Section 6.0, include gold values within narrow quartz-calcite veins (Cremonese, 2013).

Two other Ag-Pb-Zn-rich grab samples were collected to the north of the Feld occurrence. A sample from about 300 m northwest of the high gold value returned 23.9 g/t Ag, 0.97% Pb, 5.76% Zn and 147 ppb Au. This sample is described as a 15 cm wide quartz-iron carbonate vein with 8% galena and 7% sphalerite, within greywacke host rock. The other grab sample, 600 m north of the high gold value, returned 37.5 g/t Ag, 1.99% Pb, 5.17% Zn and 233 ppb Au and is described as folded argillite cut by quartz-calcite veins with associated limonite, jarosite and galena clots.

In the Fairweather area, about 750 m west of the Gamma showing, a rock grab sample returned 9.3 g/t Au, 51.2 g/t Ag, 1660 ppm Cu, 766 ppm Pb, 2.43% Zn and >10,000 ppm As. This sample is from talus but appears to be very near the source. It consists of brecciated, angular to sub-rounded siliceous black argillite fragments with 30-35% white drusy, vuggy quartz stockwork, containing 7-10% fine to medium grained disseminations and veinlets of pyrite and trace to <1% disseminated arsenopyrite (Rowe, 2019). This is possible feeder veining underlying a massive, semi-flat pyrite layer in silica matrix that is located in bedrock 5 m directly upslope from this sample. A grab sample collected from the pyritic horizon returned 5.83 g/t Au, 20.5 g/t Ag, 439 ppm Pb, 585 ppm Zn and 2150 ppm As. This layered mineralization may represent a siliceous exhalative horizon consisting of massive to semi-massive pyrite in white to pale grey silica, with 2-3% angular 1-3mm fragments of black argillite. The exposed pyritic horizon is 50 to 70 cm thick and appears to overlie a thin layer

of massive white calcite. The upper contact of the pyrite is altered, intensely limonitic, and possibly in fault contact with overlying unaltered medium green volcaniclastic rock.





Based on the very encouraging results of the 2018 reconnaissance sampling, additional exploration work was recommended, consisting of geological mapping, prospecting, and rock, soil, and stream sediment sampling.

In 2019, 6 man-days were spent by Tudor personnel collecting rock samples in the southern Orion area, within an 800 m by 150 m strip, located 800 m southeast of the Lake showing, to further explore the anomalous area that was defined in the 2018 program (see Figure 9.5). The reconnaissance areas are underlain by rocks mapped as Stuhini Group marine sedimentary and volcanic rocks. These were observed to be fine-grained dark grey volcanic or possibly volcanic sedimentary rocks that have been metamorphosed to a hornfels grade alteration. These rocks are poorly foliated but are well indurated and form a hard and resistant unit that hosts a wide-spaced, fracture-filling set of quartz-sulfide veinlets and stringers, millimeters to several centimeters wide. A number of anomalous gold values were returned from the sampling program. Descriptions and results from several of the rock samples given below are quoted from a report by Konkin and Rowe (2019).

From the 69 rock chip and grab samples collected, 11 samples contained anomalous gold values ranging from 0.108 to 0.577 g/t Au (Figure 9.7). Oddly, only a few samples with elevated gold values correlated with samples having high silver values. However, of the 69 samples collected, ten samples returned highly anomalous silver values ranging from 3.7 to 434.0 g/t silver. Generally, elevated arsenic values correlated well with both gold and silver anomalies. The highest arsenic value was 3,577 ppm and this grab sample of quartz breccia stringer veins containing pods of semi-massive pyrrhotite also returned 0.373 ppm Au, 9.7 ppm Ag and 980 ppm Cu.

Note that grab samples are typically collected from areas of more strongly mineralized rocks and are not necessarily indicative of the grades that may be expected over greater widths. Continuous chip samples provide a more accurate indication of grades over the length of the sample; however, sample lengths may not always be representative of the true width, dependant upon the orientation of the sample relative to the trend of mineralization. The results of the 2019 rock sampling should be viewed as indicative of the presence of mineralization but not representative of grades that may be present over economically significant widths.

The highest gold value of 0.577 ppm came from a 5m-long chip sample along a siliceous tectonic breccia zone partially filled by k-spar-rich monzonite. The exposed width of the zone is 1 m. The highest silver value of 434.0 g/t Ag was from a grab sample of a float boulder of banded microcrystalline to jasperoidal quartz with semi-massive bands of pyrite. An additional float grab sample containing a semi-massive cluster of chalcopyrite with massive pyrrhotite had the highest copper value of 11.4% Cu with 280 ppm Ag and 0.132 ppm Au. This appeared to be a fragment of a larger quartz-sulfide vein.

There were two samples with high zinc values. A grab sample from pods of massive pyrrhotite and semi-massive sphalerite in a quartz-sulfide stringer system yielded 1.5% Zn, 0.39 ppm Au and 4.6 ppm Ag. The second high zinc value came from a 20 cm quartz vein boulder with interstitial pyrite and disseminated fine-grained to medium-grained dark brown to black sphalerite. This sample returned 2.2% Zn with 167 ppm Ag and 1492 ppm As.



Figure 9.7 South Orion 2019 rock samples Au values

This area of mineral showings now extends over an 800 m north-south length, west of and parallel to the Upper Triassic - Lower Jurassic contact, which is postulated to be a thrust fault contact in

this area. Given the proximal location of these samples to that very important contact zone, further geological and geochemical exploration has been recommended, in addition to geophysical surveys over the area of the projected Triassic-Jurassic contact area to test at depth and under ice cover.

In 2021, 56 man-days were spent by Tudor personnel mapping and collecting rock samples in three of the Orion mineral showing areas; Tribe, Cat-in-the-Hat, and Lake, as well as an area of recent mineral discoveries southeast of the Lake Showing (see Figure 9.8).

The reconnaissance areas are underlain by rocks that were previously mapped as Stuhini Group marine sedimentary and volcanic rocks; however, these units have recently been re-interpreted as Betty Creek Formation of the Hazelton Group (Figure 9.9). The area to the southeast of the Tribe showing contains a volcanic sequence of phyllitic andesite lapilli tuff with felsic volcanic breccias, which includes a stratified polymictic volcanic breccia that is bounded by the andesite tuff unit. Farther south, near the Lake showing, there are outcrops of medium-grained, hornblende and plagioclase phyric basalt, which was not observed in the north map area. Weakly to moderately foliated intermediate and felsic volcanic rocks were also mapped adjacent to the basalt.

Veining observed in the mapping area is dominantly parallel to foliation and bedding. A smaller number of veins were measured oblique to foliation. Veins are composed of quartz and lesser carbonate and range in thickness between 1 cm and 50 cm. Typically, veins are barren or weakly mineralized with pyrite. Oxidation products of pyrite and other weathered sulfide minerals were also observed. The quartz-carbonate veins hosted by the mafic units in the southeastern area are strongly mineralized with pyrite and minor arsenopyrite was observed locally.

Several weakly to moderately anomalous gold values were returned from the rock sampling program. Descriptions and results from some of the rock samples given below are quoted from a report by Frye and Rowe (2022). Of the 156 rock chip and grab samples collected, 8 samples returned anomalous gold values ranging from 0.101 to 2.201 g/t Au (Figure 9.8). The samples ranged from selected chips over a few cm to continuous chips over lengths of up to 2 m. Four are from an area about 200 m north of the Tribe Showing, one from the Cat-in-the-Hat Zone, and three from the new showing area 900 m southeast of the Lake Showing. All eight of the samples also have anomalous Ag values, ranging from 1.8 to 29.4 g/t, six have As values between 471.7 and 7962.2 ppm, and four have Cu values between 244.7 and 953.2 ppm.

Note that grab samples are typically collected from areas of more strongly mineralized rocks and are not necessarily indicative of the grades that may be expected over greater widths. Continuous chip samples provide a more accurate indication of grades over the length of the sample; however, sample lengths may not always be representative of the true width, dependant upon the orientation of the sample relative to the trend of mineralization. The results of the 2021 rock sampling should be viewed as indicative of the presence of mineralization but not representative of grades that may be present over economically significant widths.



Figure 9.8 Orion 2021 rock samples Au anomalies

The 8 anomalous samples all contained chips of quartz, or quartz plus carbonate vein material with <1 to 10% pyrite, and in one sample 50% pyrite. Also noted was trace to 3% chalcopyrite, arsenopyrite, and pyrrhotite in four of the samples. Vein thicknesses range from 1 cm stockwork

stringers to 20 cm individual veins. The two highest gold values came from 2 m-long continuous chip samples, collected two meters apart across fine grained siliceous, pyritic volcanic rock that is cut by a 10 cm quartz-sulfide vein. This is in the southeast sampling area and is part of the mineralization discovered in 2019 (see Figure 9.7). It was noted that the area north of the Tribe Showing contains some of the higher abundances of visible sulfides, with pyrite occurring as disseminated to semi-massive veins, and with local vein halos of disseminated arsenopyrite and chalcopyrite.

Recommendations by Frye and Rowe (2022) include continuation of the detailed mapping and sampling, which will help develop the understanding of the geological setting and the controls on mineralization, in conjunction with magnetic geophysical surveying to help identify structures in the area that may have acted as conduits for mineralization.



Figure 9.9 Crown Property updated geology

Lithology

Jurassic	Triassic
Bowser Lake Group	Stuhini Group
mulBss Undivided Sedimentary Rocks	uTrSim Marble
Hazelton Group	uTrSs Undifferentiated Sediments
Iskut River Formation	uTrSsc Andesitic Boulder Conglomerate
mJHIst Thinly Bedded Carbonaceous Sediments	uTrSsf Undifferentiated Marine Sediments
mJHIvb Pillow Lavas, Pillow Breccia, Interbedded Mudstone	uTrSsm Meta-Sandstone, Phyllite
Mt Dilworth Formation	UTrSst Argillite Siltstone
mJHMvr Felsic Volcanic Rocks	
Hazelton Undifferentiated	Undifferentiated Volcanic and Sedimentary Rocks
ImJHsv Undifferentiated Sediments	uTrSva Undifferentiated Intermediate Volcanic Rocks
Spatsizi Formation	uTrSvb Undifferentiated Mafic Volcanic Rocks
IJHSs Undifferentiated Sediments	Intrusivo Pocks
UHSst Turbiditic Mudstone and Siltstone	
Betty Creek Formation	Tertiary
IJHBCva Andesitic Volcanics and Epiclastics	PeNgmz Coast Plutonic Suite - Lee Brant Stock
LIHBCypm Felsic Volcanic Rocks	Jurassic
	EJTCdd Texas Creek Plutonic Suite
UHBCvd.f Rhyolite to Dacite Flows	Triassic
IJHBCvr Felsic Volcanic Rocks	LTrGds Galore Intrusive Suite - Megacrystic Syenite
IJHBCvs Volcaniclastic Rocks	LTrSdd Stikine Plutonic Suite - Diorite
IJHva Andesitic Volcanics and Epiclastics - Unuk River	
Jack Formation	
IJHJs Undifferentiated Sediments	
IJHJsc Clast-Supported Conglomerates	

In May 2022 a helicopter-borne magnetic survey was flown by Terraquest over the Orion area in the central part of the Property. As of the date of this report only preliminary maps of the results are available to the author. The survey covered an area measuring about 5 km by 7 km with lines oriented east-west and spaced at 50 m. A total of 718 line-km was surveyed using a stinger-mounted scalar magnetometer. A colour contoured map of total magnetic intensity was provided, showing a range of values from 55140 to 55470 nT, with "cool" colours representing lower magnetic intensity and "warm" colours representing higher intensity. The author selected certain areas of higher magnetic intensity that appear to be anomalous and outlined those areas on Figures 9.10 and 9.11, superimposed with anomalous Au and Cu values in rock samples.

Three sizeable magnetic highs are located near the Tribe, Cat in the Hat, and Lake mineral occurrences, as well as the new mineral discovery southeast of the Lake Zone. Mineralized samples fall within the outlines of the two southern magnetic highs; however, the strongest part of the northern magnetic high is located to the west of the known mineralization. This northern strong

magnetic high is partly covered by a glacier to the west. It is also noteworthy that the southern magnetic high extends for about 1 km south of the area of known mineralization.



Figure 9.10 Crown Property total magnetic intensity and Au values in rock samples





Note that the author was provided with a preliminary magnetic map and the final version may have variations due to filtering or adjustments to the data. This preliminary data does show a strong correlation of increased magnetic intensity with areas of known mineralization and the author is of

the opinion that use of magnetic data, in conjunction with geological and geochemical information, can be a useful method of targeting areas for further detailed exploration.

The coincidence of magnetic highs with areas of mineralization in surface showings suggests that there is good potential for additional mineralization beneath the showings, as well as to the west of the northern mineralization near the Tribe showing. Follow-up geochemical and ground geophysical surveys are definitely warranted over these favourable areas to better define potential drill targets.

10.0 DRILLING

A summary of drilling statistics for the Crown Project is provided in Table 10.1, reported by year. The bulk of the drilling in the Electrum area was undertaken in 2006-07 by American Creek Resources and 2016 by Tudor, and the drilling data is primarily based on assessment reports by Sanabria (2008) and McCrea (2017). Small drilling programs in the Delta and Orion areas were undertaken by Teuton Resources and results have been referenced from assessment reports and news releases. Exploration results for the earlier drilling are discussed in Section 6.0 (History) while the drilling done by the Tudor in the Electrum area is discussed below. Drill core sampling procedures are described in Section 11.0.

Year	Area	No. of Holes	Meterage (Sfc)	Meterage (UG)	Company
1930	Electrum	?	?		Cominco
1959	Electrum	?	221	380	Dempster Expl
1962	Electrum	?		227	Utica Mines
1986	Delta	5	300		Territorial Petroleum
1987	Electrum	12	800		Sun Valley Gold
2006	Electrum	21	2,794		American Creek
2007	Electrum	44	12,574		American Creek
2007	Orion	5	?		Teuton
2011	Delta	5	1,225		Teuton
2012	Delta	2	728		Teuton
2016	Electrum	19	1,406		Tudor Gold

Table 10.1 Crown Project drilling statistics

Note: Question marks (?) denote lacking or incomplete drilling information in published documents

In 2016 Tudor Gold undertook a diamond drilling program at Electrum consisting of nineteen BTWsize (42.0 mm diameter) holes, totalling 1,406 m drilled from five drill pads (Figure 10.1). Drill hole data is listed in Table 10.2. Drilling tested precious-metal mineralization beneath the East Gold mine area as well as an area of surface showings about 100 m west of the mine workings. The goal of the 2016 drilling was to confirm the dimensions and depth extent of mineralization exposed on surface and intercepted by a drilling program that was undertaken by American Creek Resources in 2006-2007.

Table 10.2 Electrum 2016 drill hole data

Drill Hole	Easting	Northing	Elev	Length	Az	Dip	Start Date	Completion
------------	---------	----------	------	--------	----	-----	------------	------------

TG16-01	433920.0	6238077.9	729.79	50.6	331	-5	16-Jun-16	17-Jun-16
TG16-02	433920.0	6238077.9	729.79	53.65	320	-7	17-Jun-16	18-Jun-16
TG16-03	433940.0	6238094.4	733.23	59.74	290	0	19-Jun-16	20-Jun-16
TG16-04	433941.6	6238092.6	731.24	61.27	290	-15	20-Jun-16	24-Jun-16
TG16-05	433941.6	6238092.6	731.24	66.45	290	-45	24-Jun-16	25-Jun-16
TG16-06	433949.4	6238114.0	732.95	136.25	0	90	26-Jun-16	30-Jun-16
TG16-07	433949.4	6238114.0	732.95	66.45	287	-45	2-Jul-16	3-Jul-16
TG16-08	433949.4	6238114.0	732.95	103.02	287	-10	4-Jul-16	5-Jul-16
TG16-09	433949.4	6238114.0	732.95	127.41	287	-25	5-Jul-16	10-Jul-16
TG16-10	433843.7	6238102.8	754.97	96.01	250	-20	10-Jul-16	12-Jul-16
TG16-11	433843.4	6238103.0	755.49	63.4	250	-30	12-Jul-16	14-Jul-16
TG16-12	433844.5	6238106.4	757.19	90.22	270	0	14-Jul-16	17-Jul-16
TG16-13	433844.5	6238106.4	757.19	73.15	270	-10	17-Jul-16	18-Jul-16
TG16-14	433844.5	6238106.4	757.19	69.19	270	-20	19-Jul-16	20-Jul-16
TG16-15	433844.3	6238107.1	756.53	90.53	280	-20	21-Jul-16	23-Jul-16
TG16-16	433844.3	6238107.1	756.53	60.05	260	-20	23-Jul-16	25-Jul-16
TG16-17	433844.3	6238107.1	756.53	69.5	280	-30	26-Jul-16	28-Jul-16
TG16-18	433844.3	6238107.1	756.53	69.8	270	-40	28-Jul-16	30-Jul-16
TG16-19	433845.5	6238105.9	755.2	11.89	0	-90	30-Jul-16	30-Jul-16

Figure 10.1 Electrum 2016 drill hole and trench plan map



The drilling results beneath the mine workings were generally inconclusive, with narrow intervals of moderate grades such as 23.3 g/t Ag, 0.65 g/t Au, 0.93% Zn and 0.36% Pb over 1.62 m (hole

TG16-03), although hole TG16-04 intersected a wider zone of quartz veining that averaged 22.2 g/t Ag over 12.67 m, which appears to be a separate zone from the main mine structure (Table 10.3).

Of greater significance were the holes drilled to the west of the mine workings, several of which intersected wide zones with variable quartz-sulfide veining that returned moderate Ag values, with elevated Au, such as 7.9 g/t Ag, 0.13 g/t Au over 34.59 m in hole TG16-12 (Figure 10.2, Table 10.3). These intercepts are located beneath the surface exposures that were subsequently blasted, trenched and bulk sampled in the New Blast Zone. The flat angles of several of the drill holes have provided approximate true widths of mineralized intercepts in the moderately to steeply dipping vein systems, with true widths estimated at 80 to 95% of drilled intercepts. Localized veins found within some of the wider stockwork intervals returned significant Ag and Au values such as 427.9 g/t Ag, 2.06 g/t Au, 0.42% Zn and 0.34% Pb over 0.85 m that is within a 4.15 m section that assayed 97.2 g/t Ag, 0.52 g/t Au in hole TG16-13B (Table 10.3). As illustrated on Figure 10.2, the more strongly mineralized sections in drill holes showed only moderate continuity between drill holes that were spaced approximately 10 m apart. Note that small diameter drill core, such as was used for this program, typically is poorly representative of true grades in quartz veins containing sporadically localized high-grade mineralization. Additional close-spaced drilling with larger diameter core is required in this area to better define mineralized zones.

	From	То	Interval	Gold	Silver	Lead	Zinc
Drill Hole	(m)	(m)	(m)	(g/t)	(g/t)	(%)	(%)
TG16-03	24.20	25.82	1.62	0.65	23.3	0.36	0.93
TG16-04	40.54	53.21	12.67	0.12	22.2	0.02	0.05
TG16-08	11.68	12.65	0.97	1.78	10.1	0.12	0.24
TG16-09	17.10	18.07	0.97	1.40	<3.0	0.08	0.50
TG16-11	3.23	55.67	52.44	0.31	<3.0	0.01	0.04
incl.	35.97	36.97	1.00	1.15	<3.0	0.01	0.03
TG16-12	9.91	44.50	34.59	0.13	7.9	0.01	0.02
incl.	36.03	42.63	6.60	0.33	12.0	0.02	0.04
TG16-13	18.29	23.74	5.45	0.46	32.9	0.05	0.06
incl.	21.97	22.56	0.59	1.04	51.3	0.19	0.11
TG16-13B	17.82	21.97	4.15	0.52	97.2	0.08	0.10
incl	18.11	18.96	0.85	2.06	427.9	0.34	0.42
TG16-14	43.61	53.69	10.08	0.43	37.6	0.09	0.15
incl.	47.85	49.33	1.48	1.17	90.0	0.05	0.16
TG16-14B	43.98	46.95	2.97	0.43	76.2	0.71	0.95
TG16-15	69.19	77.40	8.21	0.26	16.2	0.01	0.03
incl.	74.54	75.74	1.20	0.77	34.2	0.04	0.07
TG16-16B	19.12	20.42	1.30	0.63	102.8	0.28	2.16

Table 10.3 Selected results from 2016 Electrum drill holes

Most of the drill testing has been within 60 m of surface and, as discussed in Section 9, Induced Polarization geophysical results have indicated zones of elevated chargeability that extend to

depths of more than 300 m, on trend with both the main mine structure and the New Blast Zone structure. These represent prime targets for drill testing at depth. Narrow feldspar porphyry dykes have been intersected in drill holes near the mine workings, suggesting that a larger intrusive source may underlie the area, which may have implications for more widespread mineralization at depth.

Although there are several areas on the Crown Property where drilling has discovered significant mineralized intercepts, there is insufficient detailed drilling in any of these areas to outline a continuous mineral body. Several of the promising drill results warrant additional drilling, perhaps preceded by geophysical surveying to better define the targets.





11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

Reconnaissance rock samples collected by Tudor at various locations on the Property during programs from 2015 to 2021 were not accompanied by standards, blanks or duplicates because they were intended as indicators of mineralization, or pathfinder minerals, for which precise values were not the objective. These samples typically consisted of grab chips from some of the strongest mineralized areas and are not necessarily representative of overall grades. There were, however,

checks on the accuracy of the analyzing equipment done in-house by the independent commercial laboratories that were used, which routinely re-ran duplicates from sample pulps from each sample batch, as well as inserting blanks and standards to make certain that analytical equipment was properly calibrated.

Results presented by previous companies working in the Project area have not all reported quality assurance test work, however, the considerable amount of drilling done by American Creek in the Electrum area in 2006-2007 did include re-splits, repeats and standards inserted into assay batches for internal quality checks performed by Eco-Tech laboratory. The quality control data is included in the drilling report by Sanabria (2008).

11.1 SAMPLE PREPARATION, TRANSPORTATION AND SECURITY

The diamond drilling undertaken by Tudor in 2016 at Electrum produced BTW-size (42.0 mm diameter) core. Besides geological logging of the core, core recovery was measured and calculated, and sample intervals were marked, with sample lengths typically between 0.7 and 1.0 m, based generally on geological divisions.

Core sample intervals were sawn in half along the long axis and half of the core was placed into a plastic bag with a sample tag designating the sample number. Bags were tied securely and placed into sacks, which were trucked on a regular basis by Company personnel to Terrace, BC.

11.2 LABORATORY ANALYTICAL PROCEDURES

Drill core from the 2016 drilling program was sent to two commercial laboratories (Activation Laboratories and ALS Global Laboratories) that are both independent of the Company, and both have ISO IEC 17025 accreditation. ISO 17025 standard is evaluated by a third party and granted by an authorized accreditation body. It proves that a laboratory has an acceptable quality management system in place, and it has the ability and competence to provide testing and calibration results. The drill core laboratory procedures are summarized from McCrea (2017) as follows:

The diamond drill core samples were direct shipped to either Activation Laboratories' (Actlabs) facilities in Kamloops, B.C. for gold (FA/AA) assaying and 38-element AR-ICP analyses or were sent to ALS Global's (ALS) preparation facilities in Terrace, B.C. for similar gold (FA/ICP) assaying and 35-element AR-ICP analyses.

At the **Actlabs**' processing facilities in Kamloops the drill core samples were logged-in, sorted, dried and crushed to 80% passing 10 mesh. The resultant crushed samples were then riffle split down to 250-gram sub-samples which were then pulverized to 95% passing 150 mesh.

The sub-samples were again riffle spit into 30-gram and 0.25-gram splits. The 30-gram splits were utilized for gold assaying using lead collection fire-assay fusion with AAS finishes. The 0.25-gram splits were digested with two acids (Agua Regia) and analyzed using AR-ICP methodology for 38 additional elements, including silver, copper, lead, zinc and arsenic. Automatic over-limit assays were requested using gravimetric finishes for any of the gold fire assays and ICP silver values that

were over-limits. Copper, lead and zinc over-limits were done by AAS. Actlabs' in-house quality assurance and quality control procedures were utilized during the assaying of the samples including their own blanks, standards and duplicates.

At the **ALS Global** Laboratories' processing facilities in Terrace, the drill core samples were loggedin, sorted, dried and crushed to 70% minus 2 mm. The resultant crushed samples were then riffle split down to 250-gram sub-samples which were then pulverized to 85% passing 200 mesh (-75 μ m). The sub-samples were then air shipped directly to ALS Global's assaying laboratory in North Vancouver.

In North Vancouver the sub-samples were again riffle spit into 30-gram and 0.25-gram splits. The 30-gram splits were utilized for gold assaying using lead collection fire-assay fusion with ICP-AES finishes. The 0.25-gram splits were digested with two acids (Aqua Regia) and analyzed using ARICP methodology for 35 additional elements, including silver, copper, lead, zinc and arsenic. Automatic assays were requested using gravimetric finishes for any of the gold fire assays and silver ICP analyses that were over-limit. Over-limits for copper, lead and zinc were re-analyzed with AAS methodology.

11.3 DUPLICATES, STANDARDS AND BLANKS

Tudor did not include random samples of standards or blanks in the 2016 core shipments; however, internal quality control and quality assurance procedures were utilized at each of the two assay laboratories used for core analyses. For each sample batch the lab performed duplicate analyses on random samples, as well as analyzing standards and blanks to validate the accuracy of the analytical equipment. McCrea (2017) stated that "based upon the reported results, the assay and analytical results were within established industry-standard quality control and quality assurance limits". The author is satisfied that the laboratories performed good quality control tests, however, future use of 2016 drill results for resource calculations may require re-assaying of selected sections of drill core to verify the accuracy of values that have been reported.

12.0 DATA VERIFICATION

DATABASE

Analytical values for samples from the Property that are quoted in this report are, in most cases, substantiated by signed analytical certificates that were issued by an accredited laboratory that performed the work. BC Assessment reports that documented the sampling are required to contain copies of the analytical certificates. Many of the reconnaissance rock samples that have been reported by various authors did not specify the type of sampling or the dimensions of the sample so, in those instances, it has been assumed that the samples probably consisted of selected rock chips from some of the stronger mineralization. Diamond drilling reports for more recent work included hole data such as UTM coordinates of drill collars, downhole surveys and depths, as well as geological logs, sample intervals and analytical results. Some reports also included drill hole plan maps as well as vertical sections with graphical representations of analytical values.

INDEPENDENT VERIFICATION

The author visited the Crown Property on September 22, 2020. Three of the principal target areas and their respective mineral showings were examined and 6 selected samples of mineralization were collected from the Fairweather and Electrum Blast Trench Zones. The author observed several outcrops of altered and locally mineralized rocks, photographed rock types and general vistas of the Property, and viewed sites of previous drilling to verify drill hole locations and determine any possible reclamation requirements. Inclement weather for helicopter flying prohibited access to some of the known mineral zones in the central and western parts of the Property. The author was able to view some of the prospective "Orion trend" area from the air, where veining and sample flagging were visible, and was able to land at the site of a mineralized boulder train where a sizable, massive pyrite boulder was observed and photographed (Figure 12.5). Wooden drill platforms were observed from the air at the Cat-in-the-Hat Zone, however, poor weather prohibited landing to measure the UTM coordinates. As well, drill sites and platforms were observed from a distance near the East Gold mine site in the Electrum area, but the coordinates were not measured.

Some of the historical drill core from the Electrum area of the Project is stored at the private, enclosed yards of More Core Drilling in Stewart, BC. Several of the boxes of core were cursorily examined by the author, however, the labels on the boxes and meterage blocks were in poor condition and often unreadable. The core that was observed contains several areas with abundant quartz veining, some with disseminated sulfide minerals, as well as zones of alteration surrounding the veins (Figure 12.1). It would be possible, although time-consuming, to re-label the core blocks and determine the mineralized intervals, however, for the purposes of the inspection it was sufficient to determine that the reported drilling and sampling appears to have been performed in a professional manner and that there is veining and alteration present.

Figure 12.1 (a) & (b) Stacked boxes of drill core in Stewart, BC, from Electrum 2006-2007 drilling programs by American Creek Resources



The New Blast Zone trench in the Electrum area was examined by the author. The trench is approximately 40 m long with a wall about 5 m high. It has exposed an irregular quartz vein, 80-100 cm wide, that trends about 140°, over more than 10 m of the trench length (Figure 12.2). The main vein is cross-cut, and locally offset, by narrow quartz veins that do not extend far outside the main vein. Host rock is fine grained, siliceous, lithic tuff that is brecciated, with a quartz matrix. Sulfide minerals that include pyrite, arsenopyrite, galena, sphalerite, tetrahedrite and ruby silver form irregular masses and seams in coarse, massive to locally vuggy, white quartz. A 3,846 kg bulk sample was collected from the New Blast Zone trench in 2016.

Grab samples of sulfide-bearing quartz vein material (Figure 12.3) was collected by the author from an 80 cm vein in the New Blast Zone trench, and also from a parallel vein about 15 m to the northeast. The four samples returned precious metal values ranging from 239.0 to 20,334.0 g/t Ag and 1.27 to 101.60 g/t Au, with anomalous lead and zinc (Table 12.1). McCrea (2017) reported that assays of twelve grab samples from the New Blast Zone trench averaged 3,461.9 g/t Ag and 2.24 g/t Au.



Figure 12.2 New Blast Zone trench exposure at Electrum

Figure 12.3 Grab sample of quartz-sulfide vein in the New Blast Zone area



A mineral showing in the Fairweather area was visited by the author. The showing consists of a massive pyrite lens 50 to 70 cm thick that is exposed intermittently over about 8 m (Figures 12.4a and 12.4b). It is hosted by volcaniclastic rocks and is underlain by a thin calcareous bed. This may represent VMS-style massive sulfide mineralization, and although Cu, Pb and Zn values are low in the two pyrite samples collected, there are significant precious metals values of 3.87 and 4.04 g/t Au, and 22.8 and 51.1 g/t Ag, as well as 0.30% As (Table 12.1).

Sample	Property	East_Z9	North_Z9	Au g/t	Ag g/t	Pb %	Zn %	Cu %	As %	Sb %	Fe %
EL-JR1	Electrum	433828	6238102	1.27	588.0	0.95	1.53	0.58	0.05	0.046	11.86
EL-JR2	Electrum	433842	6238134	1.66	254.0	0.40	2.54	0.02	0.16	0.020	3.27
EL-JR3	Electrum	433840	6238142	1.73	239.0	1.48	1.25	0.09	0.08	0.016	9.67
EL-JR4	Electrum	433838	6238148	101.60	20334.0	1.96	0.96	0.03	0.04	0.135	4.20
CR-JR1	Fairweather	429209	6244982	3.87	51.1	0.06	0.07	0.07	0.30	0.004	19.36
CR-JR2	Fairweather	429179	6244990	4.04	22.8	0.05	0.05	0.05	0.22	0.003	18.37

Table 12.1 Author's Verification Samples September 22, 2020

Figure 12.4a Fairweather area gossanous zone (red outline) marks an exposure of a massive pyrite band within volcaniclastic rocks, looking northerly

Figure 12.4b Fairweather area massive pyrite band, grab samples CR-JR1 & CR-JR2





In the eastern part of the Orion area, near the receding edge of the glacier, a train of mineralized boulders appear to have been deposited from the ice and, although the source area has not been discovered, it is assumed to be nearby in an up-ice direction. Angular blocks consist of massive,

stratified pyrite with a siliceous, possibly exhalative matrix, containing fine to coarse-sized shards of rip-up fragments of black mudstone within the massive, layered pyrite. One block, observed by the author (Figure 12-5), was a very tabular rectangle that measured 135 cm in length by 65 cm in width; this boulder has been grab sampled and anomalous values of 1.3 g/t Ag, 425 ppm As and 903 ppm Sb were reported (Rowe, 2019).

Subsequent to the author's Property visit, a program of geological reconnaissance and rock sampling was undertaken in 2021 within the "Orion trend" part of the Property by the Company's parent company (Tudor Gold Corp.). Tudor has submitted an assessment report detailing this work; however, the report is confidential to the public for a period of one year. The author has reviewed all the results of the sampling from 2021 and spoken with the geologist that managed the program, and it is the author's belief that there has been no material change in the geological understanding or economic potential of the Property since the time of the author's visit to the Property in September 2020.



Figure 12.5 Massive pyrite boulder in eastern Orion area (hammer is 35 cm long)

The 2021 reconnaissance rock geochemical program consisted of collection of 156 samples, which is discussed in Section 9.0, with sample results shown on Figure 9.8. Most of the sampling was conducted in areas of known mineralization in an attempt to better define the extent of mineral systems at each target. Some of the samples consisted of continuous rock chips, however, the

majority were grab samples from quartz veins or sulfide-bearing volcanic rocks that commonly contain fine quartz-carbonate veins.

Only three of the samples returned significant gold values of greater than 0.5 g/t Au. Two of the samples were follow-ups of grab samples collected in 2019 from a 10 cm quartz vein containing pyrrhotite, with locally disseminated arsenopyrite and chalcopyrite that returned 0.373 g/t Au (sample X557024) and 0.162 g/t Au (sample X557023). The two 2021 samples were both 2-meter continuous chips across fine grained mafic volcanic rock with narrow quartz veinlets, plus the 10 cm vein sampled previously. These samples returned 2.201 g/t Au (sample X557873) and 1.206 g/t Au (sample X557874), both over 2-meter widths, confirming and better defining the previous results (internal company documentation). The third anomalous gold value came from a grab sample collected from a 40 cm quartz vein with 3-5% disseminated pyrite, which returned 0.828 g/t Au (sample X557987). This vein is located approximately 200 m north from the Tribe Minfile occurrence, which consists of a small quartz stockwork zone measuring 13 by 30 meters. Historical samples from the Tribe area have returned significant values such as 12.5 g/t Au and 3.1 g/t Ag over a 0.4-meter chip sample length (Minfile 104B 201). The 2021 anomalous sample may be part of the Tribe mineralized system; however, it is only a single sample, and more geological evaluation and sampling are required to determine its significance.

Although there were three anomalous gold values over widths of 0.4 to 2.0 m, the samples were from areas of previously known mineralization. Some of the continuous chip sampling has better defined the character of mineralization, providing more representative widths and grades than the previous grab samples, however, the extent of the known mineralized areas has not changed, and no new mineralized areas were discovered. Much more sampling, which may include trenching and diamond drilling, will be required to thoroughly evaluate the mineral showings.

In May 2022 an airborne magnetic survey was flown over the Orion area in the central part of the Property. As of the date of this report only preliminary maps of the results are available to the author. The author selected certain areas of higher magnetic intensity that appear to be anomalous and superimposed those with anomalous Au and Cu values in rock samples. Observations from these results are discussed in Section 9.0 and illustrated on Figures 9.10 and 9.11.

Three sizeable magnetic highs coincide closely with areas of known surface mineralization. The northern magnetic high is partly covered by a glacier to the west. It is also noteworthy that the southern magnetic high extends for about 1 km south of the area of known mineralization. Follow-up geochemical and ground geophysical surveys are definitely warranted over these favourable areas to better define potential drill targets.

The author has searched public records of Tudor Gold's disclosures of exploration work for the Crown Project since the author's visit to the Property and has found no other indication of exploration work besides the geological reconnaissance and rock sampling undertaken in 2021 and the airborne magnetic survey undertaken in 2022, as described in the preceding paragraphs. Upon review and interpretation of the work undertaken in 2021 and 2022, the author is of the
opinion that there is no material change to the scientific and technical information since the time of the author's inspection that would affect the author's evaluation or recommendations for the Property.

The site visit and sample results have satisfied the author that the descriptions of geological units and mineral showings on the Property are accurate, and that substantial drilling has been undertaken in various areas of the Property in the past. Drilling data has been reviewed by the author and is discussed within this report. No deposits have been outlined by the drilling, however, significant results from some of the holes warrant further evaluation through geological and geophysical surveys and additional drilling. Some of the core samples from previous drill programs were not subject to quality assurance check sampling so, if these results were to be used in the future for resource estimation, then re-analysis of some of the core would be required to validate the results. Some of the target areas are located near the edges of glacial ice sheets and may require drilling through ice cover to test bedrock at depth. There is a risk that any deposit discovered under the ice may not be amenable to mining extraction.

The author has had access to reports that described the results of previous geophysical and geochemical programs on the Property but has not had access to some of the raw data from that work, so must rely on the evaluations made by authors of the reports. The author has no reason to question these evaluations, however, additional field work is required to more fully evaluate some of the mineralized zones known on the Property.

The author has offered interpretations or summarized others' evaluations for some of the exploration results in this report. The author has also reviewed the sampling and analytical procedures implemented by operators for the drilling and surface sampling work and is satisfied that the quality of the work was satisfactory, and the results are valid.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Preliminary metallurgical testing was undertaken on a 3,846 kg bulk sample collected by Tudor from trenches in the Electrum area in 2016. The locations of the two trenches that provided the bulk sample are shown on Figure 10.1, as well as the projected trace of the nearby East Gold mine workings. The sample was trucked to a gravel quarry in Mission, BC where initial jaw crushing was undertaken to reduce the material to minus 4 inch, and then it was re-bagged and shipped to ALS Global's metallurgical lab in Kamloops, BC. McCrea (2017) reported the following processing protocol.

"At the ALS metallurgical laboratory, the crushed bulk sample material was again crushed to minus 6 mesh and homogenized in preparation for pilot processing. During preparation, a 24-kilogram subsample was extracted for head analysis and preliminary laboratory testing. Two head samples were extracted and analyzed using a screened metallic fire assay method for gold, copper, and silver by aqua regia digestion and AA, and sulphur by LECO. A single head sample was also submitted to ALS Minerals in North Vancouver, B.C. for a 51-element ICP scan.

The 24-kilogram sub-sample was prepared into 2-kilogram charges for bench scale metallurgical testing. This testing provided a preliminary assessment of metallurgical performance and guide for the pilot processing. Testing included two grind calibrations to target a sizing of approximately 80 percent passing 150 μ m. Two bench scale tests on 4-kilogram charges included gravity concentration using a Knelson concentrator in which the concentrate was hand-panned to a low mass, high-grade concentrate. The gravity tails advanced to rougher flotation in which three timed concentrates were recovered to assess the kinetic recovery. Each test product was assayed for gold, silver, copper and sulphur.

A pilot circuit was assembled to accommodate processing the bulk sample at a rate of approximately 125 kilograms per hour over four operating days. The circuit included rod and ball mill grinding in closed circuit with a hydrocyclone to achieve a flotation feed sizing of approximately 150 µm P80. The cyclone underflow passed through a MD3 Knelson concentrator to recover gravity recoverable gold. The Knelson concentrate was discharged once per hour, upgraded by hand panning, and the pan tails returned to the grinding circuit. The cyclone overflow reported to a flotation circuit to recover the remaining gold into flotation concentrate. The flotation circuit included roughing, regrinding, and two stages of dilution cleaning. Cleaner tails reported back to the rougher feed. The rougher tails were then pumped to thickener, dewatered and bagged for disposal.

Metallurgical balances of the circuit for each operating day were generated by weighing and assaying the gravity concentrate, weighing and assaying duplicate samples of the flotation concentrate, and collecting a composite sample of rougher tails which were also assayed in duplicate. Sufficient fire assays with gravimetric finishes were completed to assay the gravity concentrate to extinction, and the resulting gold beads were returned to Tudor Gold. Each test product was assayed for gold, silver, copper and sulphur. A metallurgical balance of the total processing run was assembled to indicate the total gold, silver, copper and sulphur content of the sample, and recoveries of the respective concentrates."

The results of the ALS metallurgical processing are documented in Table 13.1, taken from McCrea (2017). As shown in the table, the final metallurgical results for the total 3,846 kg bulk sample indicated Feed grades of 2.82 g/t gold, 539 g/t silver, 1.96% lead, 1.97% zinc and 13.8% sulphur. A fairly large percentage of the gold (31.0%) and the silver (16.6%) reported to the Bulk Rougher Tails in this test, indicating that further testing should be undertaken to evaluate methods of increasing the precious metals recoveries.

The relatively small bulk sample was selected from an easily accessible exposure of mineralized rock blasted to a shallow depth. This may not be representative of grades that could be expected at depth, and more drilling is required to make that determination. The sample did, however, test representative types of mineralization and showed that the metals are amenable to recovery by gravity and flotation, with potential to increase recoveries by adjusting the processes. As well, there were no indications of any significant amounts of deleterious elements, such as mercury, arsenic or antimony from the multi-element ICP analyses conducted.

Product	Wei	ight			Assay			Distribution				
	%	Wt	Au	Ag	Pb	Zn	S	Au	Ag	Pb	Zn	S
		(kg)	(gpt)	(gpt)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Pan Con	0.003	0.11	1549	3127	52.0	0.47	29.4	7.3	0.1	0.4	0.0	0.0
Pan Con	0.004	0.15	1985	4136	60.7	0.37	28.6					
Pan Con	0.002	0.08	2099	4220	51.6	0.43	21.4					
Pan Con	0.004	0.16	1008	2883	50.2	0.60	31.8					
Bulk Concentrate	1.92	73.7	19.9	3500	11.3	12.9	40.0	57.5	80.8	66.2	58.5	17.2
Bulk Concentrate	1.62	62.2	23.1	7013	22.5	19.2	30.5					
Bulk Concentrate	2.13	81.8	23.2	5747	15.4	14.1	25.9					
Bulk Concentrate	2.05	78.9	18.2	6472	19.0	14.5	28.0					
Bulk Ro Tail	15.5	597	0.73	80	0.51	0.37	8.8	31.0	16.6	30.9	39.2	78.3
Bulk Ro Tail	25.0	960	1.01	81	0.52	0.75	12.6					
Bulk Ro Tail	27.2	1047	1.13	129	0.93	1.16	13.2					
Bulk Ro Tail	22.0	844	0.92	100	0.66	0.98	12.5					
Mill Pan Con	0.001	0.03	2428	5707	59.5	0.26	16.9	0.8	0.01	0.0	0.0	0.0
Mill Knelson Tails	2.60	100	3.72	520	1.9	1.76	23.8	3.8	2.1	2.2	2.1	4.5
Feed	100	3846	2.82	539	1.96	1.97	13.8	100	100	100	100	100

Table 13.1 Total Bulk Sample Overall Metallurgical Balance

14.0 MINERAL RESOURCE ESTIMATES

The Crown Property currently has no defined Mineral Resources. There is insufficient data to determine such an estimate.

15.0 ADJACENT PROPERTIES

Within the Crown Project area there is potential for discovery of various styles of mineralization such as those found on nearby properties. Large deposits in the area include porphyry-style Au-Cu-Ag systems such as the KSM, Snowfield and Goldstorm deposits, high-grade epithermal Au-Ag vein systems such as the Valley of the Kings deposit, and VMS precious and base metal-rich massive sulfides such as the Eskay Creek and Granduc deposits.

The Kerr, Sulphurets, Mitchell, Iron Cap (KSM), plus Snowfield and Goldstorm mineral deposits, located 3 to 15 km north of Crown, comprise one of the main target types sought on the Property. The Kerr deposit, which is the closest of these deposits to Crown (3 km to the north), is described in Minfile (104B 191) as a major Cu-Au deposit that forms a mostly continuous, north-south trending and westerly dipping, irregular body at least 1700 meters long, and up to 200 meters thick. Higher grades are associated with crackled quartz stockwork, anhydrite veining, and chlorite alteration. It is enveloped by a schistose, pyrite-rich, phyllic alteration zone with low to moderate grades.

The Kerr deposit is largely hosted by assemblages of the Stuhini and Hazelton Groups, whereas the Deep Kerr deposit is largely intrusion-hosted. The Kerr occurrence is reported to lie entirely within a north-trending "tectonic shear zone" measuring 800 to 900 meters wide and 2 kilometers long. This zone is flanked by comparatively unaltered or weakly altered, fine-grained, brownish green clastic sediments and submarine volcanic rocks on the east, and by a thick unit of basaltic andesite, of possible Stuhini Group, on the west. The tectonic zone is typically composed of moderately to strongly altered and sheared rocks, interpreted to be of volcanic, subvolcanic or plutonic origin. Most of the altered zone can be described as sericite schist; however, andesitic tuffs and flows and feldspar porphyry dykes, and possibly flows, can be recognized in less altered areas. A later formed "swarm" of fine-grained, weakly altered andesite dykes cuts across the schistosity.

Quartz-chalcopyrite-pyrite veining is extensive and intimately associated with copper and gold mineralization, forming dense stockworks within the core of the deposit. Extensive quartz-pyrite veining overprints earlier quartz-magnetite veining and is associated with chlorite-sericite and quartz-sericite-pyrite alteration assemblages. Late, white quartz-chalcopyrite-carbonate ± chlorite veins are distributed throughout the deposit, with elevated chalcopyrite content in higher grade areas suggesting local remobilization. A high-sulfidation overprint is visible as bornite, tennantite/enargite and dickite/pyrophyllite overprinting and upgrading core stockwork zones. Copper and gold grades may have also been upgraded due to remobilization of metals during later and/or possibly syn-intrusive deformation.

A recent resource estimate for the Kerr deposit reported Measured plus Indicated Resources of 370 million tonnes grading 0.22 g/t gold, 0.41% copper and 1.1 g/t silver. (Seabridge Gold website, December 2020). The reported total Measured plus Indicated Resources for the five porphyry-style deposits on Seabridge's property contain 76.4 M oz Au, 17.1 B pounds Cu and 345.5 M oz Ag (Seabridge Gold website, December 2020, https://assets.website-files.com/5f8f6760f825687e7c1c6508/5fdb652460559d050e6cd7ef_12172020Reserves-Resources-Dec-2020-withSnowfield.pdf). Conceptual mining plans call for open pit extraction followed by underground mining by block caving.

The **Valley of the Kings** (VOK) (Minfile 104B 199) high-grade gold-silver deposit on the Brucejack property, located 4 km northeast of Crown, is also a primary target type that is sought on the Property. Surface mapping and extensive drilling at VOK have defined a broad syncline in which fragmental volcanic and clastic sedimentary rocks and minor flows of Upper Triassic to Lower Jurassic age appear to plunge moderately to the east. Variably altered volcanic rocks of intermediate composition are interpreted as forming the youngest rocks of the sequence and, along with broadly correlative coarse pyroclastic rocks, may occupy the core of the VOK syncline. Underlying these are interbedded volcanic-derived immature sedimentary rocks, including common pebble and cobble conglomerate and pebbly sandstone, which are considered correlative with the basal Jack Formation of the Hazelton Group. Thin, possibly Upper Triassic rhyolite flows, as well as local siliceous exhalites have been mapped on surface and logged in drill core in the vicinity of this contact. Beneath the rhyolite is a relatively thick and generally poorly stratified sequence of

fine-grained mudstone and siltstone with locally interbedded sandstone and pebble conglomerate. In the vicinity of VOK, contacts and even the unconformity appear to have been folded, commonly tightly.

High-grade gold-silver mineralization within the VOK Zone occurs as electrum, and it is generally hosted within quartz-carbonate and quartz-adularia veins and vein stockworks. While quartz veining and stockworks are common throughout the zone, the majority of gold concentrations are confined to a 75 to 100 m wide zone which closely parallels the axis of the syncline. Within that zone, the mineralization appears to have been concentrated in localized fold noses and along geologic contacts, in particular along the contact between the overlying pyroclastic rocks and the underlying conglomerate, as well as locally along the margins of flow-banded rhyolite. Additional precious metal-bearing minerals found in the VOK Zone, typically in trace quantities, include silver sulfides, acanthite, pyargyrite and tetrahedrite, while base metal-bearing sulfides include sphalerite and galena.

The VOK mineralized zone trends approximately west-northwest mirroring the trend of Electrum Ridge, a pronounced topographic feature near the southern margin of the zone, and drilling to date has extended its strike to over 450 meters. The zone is as much as 150 meters wide and is bound to the west by the Brucejack fault but remains open at depth and to the east. As it is elsewhere on the property, alteration at the Valley of the Kings Zone is believed to be Early Jurassic in age. It consists dominantly of quartz-sericite-pyrite, with lesser sericite-chlorite. The most pervasive of the intense alteration is observed within the sedimentary and fragmental volcanic rocks.

Since start of production in 2017 the Valley of the Kings Zone has produced 1.32 million ounces of gold, and as of January 2021 the Proven plus Probable Mineral Reserve estimate is 11.5 million tonnes grading 8.7 g/t Au and 9.8 g/t Ag, containing 3.2 million ounces of gold (Pretium Resources Inc. website, January 2021, https://www.pretivm.com/brucejack/reserves-and-resources/default.aspx).

A number of significant showings of gold and silver, plus copper, zinc and lead occur along a northnorthwest trend, the "Brucejack Trend", that approximately follows the orientation of the Brucejack fault for about 4.5 km, with most of the showings on the east side of the fault, but a few on the west side. Most of the showings consist of quartz-carbonate plus local barite veins and stockworks cutting variably sericitized, pyritized and silicified tuffs, flows and sedimentary rocks of the lower part of the Hazelton Group. Grab samples from some of the showings have returned bonanza grade gold and silver values, however, drilling in a number of the zones indicated that stockwork areas are relatively small and gold grades are quite variable. Many of the zones are associated with northwest to west-trending faults that may be splays from the Brucejack fault. Most mineralized shoots have vertical extents that are greater than their strike lengths. Crack-seal features shown by most of the veins are evidence of brittle deformation. Localized ductile strain may have generated dilatant structures that served as conduits for hydrothermal fluids, which deposited silica and precious metals. Mineralization has been described as transitional epithermal, located up stratigraphy from porphyritic intrusions that are believed to be the source of the mineralizing fluids. Small mineral resource estimates have been determined for a few of the showings, including the West Zone, Shore and Gossan Hill areas. The Brucejack fault is largely covered by glacial ice to the south of VOK, but the possible extension of the fault would cross the eastern part of the Crown Property, warranting follow up, possibly by geophysical methods.

The **Eskay Creek** deposit (Minfile 104B 008) was, during its operation, one of the world's highest valued gold-silver mines. The ore was comprised of polymetallic sulfide and sulfosalt mineralization that was deposited in a transitional environment between a hot spring and a deeper water volcanogenic massive sulfide (VMS) exhalative system, and includes both feeder veins and massive sulfide bodies. Host rocks are volcanic and sedimentary units of the Lower to Middle Jurassic Hazelton Group. Mining from 1995 to 2008 at Eskay Creek produced 2.1 million tonnes of ore yielding 101.65 tonnes of gold, at an average grade of 48.4 g/t Au, and 4942 tonnes of silver, 2221 (Minfile 008. at an average grade of q/t Aq 104B https://minfile.gov.bc.ca/report.aspx?f=PDF&r=Minfile Detail.rpt&minfilno=104B++008).

The Eskay Creek deposit is an unusual, polymetallic, precious metal-rich, VMS system contained within several stratiform and stockwork vein zones. Two styles of mineralization comprise the Eskay Creek deposit:

stratiform mineralization within argillite at the contact with rhyolite and capped by basalt; and
 discordant vein-style mineralization within the footwall rhyolite.

The bulk of the deposit was hosted within the stratiform zones. The 21B Zone provided most of the ore at Eskay Creek and comprised a stratiform, tabular body of high-grade gold and silver mineralization. Spatially it occupied an approximately 900 m long by 60 to 200 m wide area, locally greater than 20 m in thickness. The ore consisted of beds of laminated sulfides and sulfosalts with variable amounts of rhyolite, mudstone and barite clasts. The sulfide and sulfosalt minerals include sphalerite, tetrahedrite, freibergite, boulangerite, bornite, galena, pyrite, and rare electrum or amalgam. Gold and silver both occur as electrum and amalgam; however, the silver is mainly contained within sulfosalts.

Discordant vein-style mineralization consists of stockworks of crustiform quartz veins hosting coarse-grained, zoned sphalerite, galena, minor pyrite and chalcopyrite within the footwall rhyolite. Gold and silver are found in electrum and sulfosalts. The Pumphouse and Pathfinder zones underlying 21B Zone host relatively lower gold grades than other zones. These veins contain patchy sulfide mineralization comprised of mainly pyrite, sphalerite and galena with lesser tetrahedrite. Sphalerite within the footwall veins is darker in colour than the 21B zone, suggesting a higher iron content. Locally, footwall mineralization is characterized by precious metal enrichment within very fine-grained sulfides. The discordant veins are believed to be associated with the hydrothermal feeder systems that deposited sulfides of the stratiform zones.

Alteration at Eskay Creek consists of strong to intense quartz-sericite-pyrite-potassium feldspar ± chlorite within volcanic rocks beneath the stratiform deposits. These zones of alteration are locally associated with polymetallic sulfide veins in the footwall rhyolite and alteration assemblages vary

significantly over short distances. Distal to the stratiform ore bodies and in deeper parts of the footwall, rhyolite alteration is generally characterized by high K-feldspar and moderate silicification with sparse sericite-pyrite fracture envelopes. The most intense alteration within the footwall rhyolite occurs as a tabular blanket of pervasive chloritization and sericitization directly underlying the stratiform deposits. This tabular zone coincides with a thickened package of fragmental rhyolitic rocks and extensive brecciation in the upper portion of the rhyolite. These fragmental and brecciated textures likely provided greater access to hydrothermal fluids due to their high permeability and surface area for increased fluid-rock interaction.

Based on the abundance of mineral occurrences and drill-defined deposits surrounding the Crown Project, there is good potential for discovery of epithermal-style high-grade Au-Ag, VMS-style Ag-Au-Pb-Zn-Cu or porphyry-style Au-Cu mineralization within the Property area. Distinctive characteristics of the nearby occurrences described above will help to guide further exploration at Crown.

The author has been unable to verify the information on adjacent properties, and the information is not necessarily indicative of the mineralization on the Property that is the subject of this technical report.

16.0 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data or information required for disclosure in this NI 43-101 technical report.

17.0 INTERPRETATION AND CONCLUSIONS

Previous exploration programs within the Crown Project area have focused on discovery of highgrade precious metal veins, VMS/ subaqueous hotspring mineralization, or porphyry-style Au-Cu mineralization, similar to some of the deposits found on nearby properties. Work has been undertaken primarily in four areas of the Property where significant mineralization of each of these types has been revealed. Historical work has primarily been concentrated in these four areas, leaving extensive regions of this large property under-explored. Recent geological reconnaissance and rock sampling have been concentrated in areas near the edges of retreating glacial ice sheets and have successfully discovered freshly exposed mineralization.

Of the four main targets, the **<u>Electrum</u>** area in the southeast part of the Property has received the greatest amount of drilling to date. This work has primarily tested for extensions of epithermal vein systems that have returned a number of high silver and gold values from limited underground mining and trench exposures. Several holes intersected relatively wide zones containing variable quartz-sulfide veining that returned moderate precious metal values. These intercepts are located beneath surface exposures that were subsequently blasted, trenched and bulk sampled in the New Blast Zone. The 3.8 tonne bulk sample collected from this 5-m-wide zone averaged 2.82 g/t gold, 539 g/t silver, 1.96% lead and 1.97% zinc. Localized veins, found within some of the wider drill

intervals, contain electrum and silver sulfosalt minerals that have returned significant silver and gold values over narrow widths.

Although drilling to date has revealed some encouraging grades over narrow widths, the continuity of these vein zones and grades is not well demonstrated between drill holes, even as close as 10 m apart. As well, the areas of low to moderate grade, stockwork veining intersected over widths of several meters, to tens of meters, have lacked continuity between holes, though it is recognized that drill information in some areas is widely spaced, or lacking. Fault offset complications have been noted by previous authors and a better understanding of structural complexities will help guide exploration; 3D drill hole modelling may prove useful. Further drilling, utilizing a larger core size and more systematic grid spacing of holes, is required to better define the known mineralized areas. Additional bulk sampling and metallurgical test work are warranted to better understand the grades and distribution of mineralization and to refine the beneficiation processes to maximize mineral recoveries. Limited IP surveys over the main showing areas at Electrum have revealed conductive targets at depth that appear to be continuations of the main mineralized structures, and these targets warrant drill testing at depths of up to 300 m.

The epithermal style of mineralization sought at Electrum may contain high precious metal values, however, mineralization commonly occurs within relatively narrow vein or breccia zones that may have limited extent. There is a risk at Electrum that mineralized zones may be too small or erratic to extract economically.

In the southern part of the Electrum area a granodiorite stock contains silicified zones with quartz veining carrying arsenopyrite, pyrite and minor chalcopyrite. The only hole drilled in this area, which tested an electromagnetic anomaly, intersected quartz veins 1 to 15 centimeters wide containing pyrite and arsenopyrite that returned spotty anomalous gold and silver values. This area warrants additional geophysical surveying and follow-up diamond drilling to test for porphyry-style Au-Cu-Ag mineralization.

In the central part of the Property, the **Orion** area contains numerous mineral showings distributed over about 4 kilometers along the east and west edges of a north-south trending nunatak of rocks that have been mapped as Stuhini Group, but may include faulted slices of Hazelton Group rocks. This area is about 10 km south from the Kerr Au-Cu deposit on the KSM property and is situated along the projected trend of the Sulphurets Thrust Fault, which has implications for possible fault-related stockwork-style mineralization. Although the nearby known mineral deposits are hosted by similar geological features to those of the Crown Property that is not necessarily indicative of the tenure of mineralization that may be present on the Crown Property.

Several rock samples spread over a distance of about 800 m, from within the north-south mineralized Orion trend, have returned strongly anomalous silver values, with coincident anomalous arsenic and lesser lead, zinc and gold. These samples have been mostly described as quartz veins or breccia in andesite or volcaniclastic rocks that contain pyrite, arsenopyrite and tetrahedrite. A significant discovery was a lengthy boulder train of angular blocks of massive,

stratified pyrite with a siliceous, possibly exhalative, matrix containing rip-up fragments of black mudstone within the massive, layered pyrite. The source of the boulders has not been discovered but is assumed to be nearby due to their angularity.

Also within the Orion trend, the Cat-in-the-Hat showing has mineralized stockwork veining over widths of 2 to 15 meters and has returned anomalous values of gold and arsenic. A trench exposure of hornfelsed fine grained possibly volcaniclastic rock with 7-10% quartz breccia, contains semimassive 15 cm pods of partially oxidized pyrite and sulfide minerals. A few shallow holes that were drilled in 2007 at the Cat-in-the-Hat showing intersected fracture-controlled pyrite and local quartz veins in rhyolite breccia, with several anomalous Au-As sections. Further geological evaluation and interpretation of this showing area is required.

The Orion area lies just west of the important Upper Triassic - Lower Jurassic contact zone. Localized geophysical surveys in the Orion area have revealed several subparallel conductive zones, as well as resistivity contrasts that are believed to distinguish the Upper Triassic Stuhini Group rocks from Lower Jurassic Hazelton Group rocks. Geophysical interpretations may prove useful in identifying the potential extension of the Sulphurets Fault zone, which is spatially associated with mineralization in the region. A recent airborne magnetic survey over the Orion area has defined moderately strong magnetic anomalies associated with surface mineral showings that may be indicative of continuing mineralization at depth.

There are abundant small exposures of mineral showings in the Orion trend, however, to date, exploration has primarily consisted of collecting grab samples and some local continuous chip samples over narrow widths. Five short holes have been drilled at one showing intersecting brecciated felsic volcanics over 31 m, with a few anomalous gold values. Exposures are limited in some of the prospective areas due to glacial moraine or ice cover, requiring additional methods of evaluating the underlying potential.

The porphyry-related stockwork vein style of mineralization has potential for large low-grade bodies of Cu-Au mineralization. To date, sampling in the Orion area has indicated relatively narrow stockwork zones but there is a risk that there has been insufficient faulting and brecciation of the rock units in this area to host a sizeable mineralized body. As well, much of the area is covered by glacial ice that could hinder exploration.

Locally focussed geochemical and geophysical surveys are recommended to help evaluate areas beneath overburden and ice cover. Mapping of the Orion trend will aid in interpreting the stratigraphic and structural settings and to produce geological models that will help identify the most favourable areas for hosting mineralization. Diamond drilling should test the most promising targets.

In the **Fairweather** area, located about 6 km east of Orion, several very significant anomalous samples were collected from rocks that may be of exhalative origin, suggestive of a possible VMS or sub aqueous hotspring environment of deposition. These include a 70 cm-thick band of semi-massive pyrite in layered silica matrix that returned anomalous Au, Ag and As values, as well as

underlying brecciated siliceous argillite with white drusy, vuggy quartz stockwork, containing fine disseminations and veinlets of pyrite and arsenopyrite with significant Au, Ag, Cu, Zn Pb and As values that may represent footwall feeder veining to the exhalative horizon.

Additional mineral showings in the Fairweather area have been described as quartz-calcite veins and breccias that host pyrite, galena, sphalerite, tetrahedrite and chalcopyrite. The Ptuck showing is comprised of a 15 to 20-meter-wide mineralized zone within iron carbonate altered sedimentary rocks hosting stockwork quartz-carbonate veins that have returned anomalous Ag, Cu, Pb and Zn values. The Gamma showing, 1500 m northeast of Ptuck, includes a 60 cm-wide quartz-pyrite-sphalerite-tetrahedrite vein within a 5-15 m wide shear zone, from which samples returned anomalous Au and Ag. Near the Gamma zone a 200-meter-long gold-silver-arsenic-copper anomaly in soils has been defined.

In the **Delta** area, about 3 km north of Fairweather, stream sediment surveys, rock sampling, and hand trenching discovered showings with high gold and silver values, some of which had indications of stratiform mineralization in argillite. Soil geochemistry defined a multi-element anomaly and rock samples of silicified tuff from within the anomalous area returned anomalous Au values. Five holes were drilled in the Delta area in 1986, however, there were no significant results. Airborne and ground geophysical surveys defined several targets including two prominent IP-resistivity anomalies (with coincident Mag/VLF trends) that partly coincide with a combined gold-silver-lead-zinc geochemical anomaly. High gold values in float samples were followed up, revealing anomalous Ag, Pb and Zn values in outcrop, but not the source of the high gold.

In the western Delta area, about 400 m north of the Feld Minfile showing, samples consisting of silicified siltstone containing 1 to 10% disseminated pyrite with minor arsenopyrite and galena and cut by narrow quartz-sulfide veins returned notable Au and Ag values. In 2011-12 seven diamond drill holes, totalling 1,953 meters, were drilled in the western Delta area from two pads, targeted two gold-mineralized zones previously discovered by surface rock sampling. Gold enrichment in drill core appears to be concentrated near the contacts between diorite dykes and siltstone, or hematite-altered volcanic rocks and in narrow discordant stockwork stringers in volcaniclastic rocks.

The area encompassing Fairweather and Delta is underlain by Hazelton Group rocks that include clastic and volcaniclastic rocks, as well as felsic volcanics. Some of the mineral showings in the area show VMS characteristics such as laminated sulfides in sedimentary rocks, however, the majority of the mineral occurrences are quartz-carbonate veins or breccias containing Ag-rich sulfide minerals, with variable Au values. These are potentially feeder-style veins that commonly underlie stratiform bodies, however, they could also represent porphyry-style stockwork mineralization. The presence of mineralized diorite dykes in the area suggests the possibility of a buried stock that could be the source of related porphyry or epithermal-style mineralization.

There are abundant small exposures of mineral showings in the Fairweather and Delta areas, however, to date, exploration has primarily consisted of collecting grab samples and some local

continuous chip samples over narrow widths. Twelve short holes have been drilled at three showings with limited success, returning a few anomalous gold values over narrow sections of veining. These drilled areas may have benefitted from geophysical surveying that could have helped determine the potential presence of mineralization at depth and guided drill targeting. There has been no geophysical testing or drilling of the stratiform sulfide at the Fairweather Zone, which is a priority target. Exposures are limited in some of the prospective areas that are located at the edges of ice sheets, and these require geochemical and geophysical methods of evaluating the underlying potential. Parts of the Fairweather and Delta areas have been soil sampled in the past, revealing some strong multi-element anomalies. Additional soil sampling should be conducted in these areas, as well as in areas of other mineral showings, or prospective geologic settings.

The geological model provides the possibility for various styles of mineralization in the Fairweather and Delta areas but, to better define the modelling, this part of the Property requires more detailed geological mapping in addition to the suggested ground surveys. VMS-style mineralization typically has a small footprint, with sulfide bodies often less than a few hundred meters in length, requiring detailed sampling and geophysical testing for exploration. There is a risk that buried VMS mineralization may be missed due to these limitations. All previous and future exploration data should be compiled into a GIS database to allow merging of the anomalous results and accurate positioning of targets defined by the results. The most promising targets should be drill tested.

18.0 RECOMMENDATIONS

On the Crown Property there has been a relative lack of concentrated exploration beyond the limits of the historically worked vein structures, both on surface and at depth. In addition, there appears to have been a lack of a coherent property-scale stratigraphic and structural modelling that might help guide exploration and develop drill targets, as well as a relative lack of geochemical and geophysical work, which again may help in guiding exploration and developing targets.

Based on reconnaissance rock sampling undertaken by Tudor in the last four years on the Crown Property it appears that the more encouraging results have come from the 800 m-long zone of veining and possible exhalative mineralization on the east side of the Orion trend and, secondly, the similar styles of mineralization that have been discovered near the edges of receding glaciers in the Fairweather and Delta areas. The Electrum area has been more thoroughly explored, but has untested geophysical targets at depth beneath the main vein zones, as well as an area at the south end of Electrum that should be further evaluated for porphyry-style mineralization.

The following recommendations are made by the author:

- GIS Database: All historical exploration data, as well as topographic and geologic data, should be compiled in a GIS database to help determine the most prospective areas for concentration of further work.
- Geological Mapping: Mapping should be undertaken over the entire Property to outline the geological framework, with more detailed mapping in the four primary mineralized zones. Emphasis should be placed on defining the Stuhini-Hazelton contact zone, the upper Hazelton

Eskay Creek-equivalent stratigraphy, the projection of the Sulphurets Thrust Fault, the possible projection of the Brucejack Fault or any other major structures; especially on the east side of the Property, and the location of intrusive bodies; including dykes and stocks. Gossanous or altered zones should be mapped and categorized as to type of alteration. Mineralized zones should be mapped in detail to determine trends and possible mineral controls.

- Soil Geochemical Sampling: Soil sample lines should be established, spaced about 200 m apart with 50 m stations, primarily oriented across the slopes along elevation contour lines to test for downslope dispersed anomalous values that may be traced upslope to their mineralization sources. Soil sampling should be considered for areas that have known mineral showings or gossan zones, such as Orion, Fairweather, Delta and south Electrum. Soil sampling has been completed in some of these areas in the past and the information from that sampling should be compiled in GIS to determine areas requiring additional sampling, and to prevent duplication of previous work.
- Stream Sediment Geochemical Sampling: Property-wide stream sediment sampling can
 effectively evaluate large swaths of the rugged terrain by collecting samples from the many
 small, fast-flowing streams that occupy channels that cut into the steep slopes. Sample
 collection traverses, in many cases, can follow the breaks in slope along the moraines that flank
 several of the glaciers. Although it may be difficult to obtain silt-size material in these channels,
 over-bank sediments could be selectively sieved in the field to collect enough fine material for
 lab analyses. Anomalies defined by sediment samples should be followed-up by prospecting
 and focused soil sampling, targeting the upper parts of anomalous drainages.
- Prospecting: Areas of recent ablation of glacial ice should be prospected for possible mineral showings in freshly exposed bedrock. Areas of anomalous soils or stream sediments also require prospecting, geological evaluation, and rock sampling.
- Airborne magnetic survey: An airborne magnetic survey was recently flown over the Orion area. Additional magnetic surveying should be considered for the mineralized areas on the eastern part of the Crown Property to provide a magnetic framework that will aid in delineation of host lithologic units during geologic mapping and to help identify key geological structures, particularly those that may host or offset gold systems.
- Induced Polarization (IP) geophysical survey: A program of ground-based IP is recommended as a targeting tool to help identify mineral-controlling structures, disseminated or stockwork sulfide mineralization, or alteration zones that commonly surround mineral bodies. Lines should initially be spaced at 200 meters, with in-fill lines at spacings as close as 50 meters over areas showing strong chargeability and low to high resistivity responses (these responses might be expected in areas containing sulfide mineralization, with silicification causing high resistivity or certain clay alteration minerals causing low resistivity). IP has already identified targets at the main vein areas at Electrum but may be considered for testing potential porphyry mineralization at south Electrum, as well as stockwork zones and VMS massive sulfides found at Orion, Fairweather and Delta. Areas of abundant carbonaceous sedimentary rocks are not

recommended for IP since these rocks can have very high chargeability, thereby masking responses from mineralization.

 Diamond Drilling: Two deep geophysical targets underlying the main vein structures at Electrum have been recommended for drilling based on previous exploration work. GIS compilation of historical data may also reveal promising targets that warrant drill testing in other areas of the Property. Geological models developed in conjunction with exploration results from geochemical and geophysical programs are also expected to define favourable drill targets. Based on the currently known targets in four areas of the Property, preliminary drilling, as a phase 2 program, could total as much as 7500 m in 25 to 30 holes.

Activity	Scope	Cost (\$CDN)	
Geological Mapping	2 geologists, 30 field days, 5 office days	\$41,000	
Prospecting	1 prospector, field reconnaissance, 30 days	\$14,000	
Geochemical Sampling	800 soils, 100 silts, 30 field man-days	\$12,000	
IP Survey	20 line-km various test grids @ \$3000/km	\$60,000	
Assaying	1200 samples @ \$35/sample	\$42,000	
Helicopter Rental	100 hours @ \$2000/hr	\$200,000	
Shipping and Transport	samples and supplies	\$1,000	
Travel, Mob-demob	8 personnel and gear	\$5,000	
Room & Board	200md @ \$200/md	\$40,000	
Claims and Permitting	administration	\$2,000	
Data Compilation & Report	1 geologist 40 office days	\$20,000	
	Total Estimated Cost:	\$437,000	

Table 18.1 Estimated Budget for Recommended Phase 1 Work

The Company's parent, Tudor Gold Corp., holds 5-year exploration permits for both the Electrum area and for the remainder of the Crown Property area. These permits can be transferred to Goldstorm and will allow the Company to undertake the proposed Phase 1 work program, as well as possible Phase 2 drilling at up to 40 drill sites.

In summary, the presence in at least four areas of the Crown property of geochemically anomalous rock samples containing precious metal-bearing stockwork veins and exhalative-type silica-pyrite bands suggest the possibility of significant mineralization. Further geological, geochemical, and geophysical exploration is warranted at an estimated cost of \$437,000 as outlined above in Table 18.1, and if further compelling evidence is found then diamond drilling should be conducted to test areas at depth and under ice cover.

19.0 REFERENCES

Alldrick, D.J. 2006. Eskay Rift Project (NTS 103O, P, 104A, B, G, H), Northwestern British Columbia; British Columbia Ministry of Energy and Mines, Geological Fieldwork 2005, Paper 2006-1, pages 1-3.

Alldrick, D.J., Britton, J.M., Webster, I.C.L. and Russell, C.W.P. 1989. Geology and mineral deposits of the Unuk area; British Columbia Ministry of Energy, Mines and Petroleum Resources, Open File 1989-10.

Alldrick, D.J., Stewart, M.L., Nelson, J.L. and Simpson, K.A. 2004. Tracking the Eskay Rift through northern British Columbia - geology and mineral occurrences of the Upper Iskut River area; British Columbia Ministry of Energy and Mines, Geological Fieldwork 2003, Paper 2004-1, pages 1-18.

Alldrick, D.J., Nelson, J.L., and Barresi, T. 2005. Geology and mineral occurrences of the Upper Iskut River Area: tracking the Eskay rift through northern British Columbia (Telegraph Creek NTS 104G/1, 2; Iskut River NTS 104B/9, 10, 15, 16); in Geological Fieldwork 2004. British Columbia Ministry of Energy, Mines and Petroleum Resources, Paper 2005-1, pp. 1– 30.

Alldrick, D.J., Nelson, J.L., Barresi, T., Stewart, M.L. and Simpson, K.A. 2006. Geology of upper Iskut River area, northwestern British Columbia; BC Ministry of Energy and Mines, Open File Map 2006-2, Scale 1:100 000.

Anderson, R.G. 1993. A Mesozoic stratigraphic and plutonic framework for northwestern Stikinia (Iskut River area), northwestern British Columbia, Canada; in Mesozoic Paleogeography of the Western United States--II, (ed.), G. Dunne and K. McDougall; Society of Economic Palaeontologists and Mineralogists, Pacific Section, vol. 71, p. 477-494.

Barresi, T., Dostal, J. and Nelson, J. 2008. Metallogenic and Tectonic Significance of mafic volcanism in the Early to Middle Jurassic Hazelton Group, northwestern British Columbia; Atlantic Geology, vol. 44, p. 3-4.

Bartsch, R.D. 1993. A rhyolite flow dome in the upper Hazelton Group, Eskay Creek area (104B/9, 10), British Columbia; British Columbia Ministry of Energy and Mines, Geological Fieldwork 1992. Ministry of Energy, Mines and Petroleum Resources, Paper 1993-1, p. 331–334.

Branson, T.K. 2010. 2010 Geological, Geochemical and Geophysical Report on the Eskay Project, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 31747.

Coates, B. 2017. Assessment Report on a Magnetotelluric Geophysical Survey Conducted in the Orion Area (Minfile: 104B-671) of the Mackie Property; unpublished Assessment Report for Tudor Gold Corp., British Columbia Ministry of Energy and Mines, Assessment Report No. 36681.

Cremonese, D.M. 1985. Assessment Report on Geological and Geochemical Work on the Following Claims, Alpha..#3619(11), Delta..#3622(11), British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 14607.

Cremonese, D.M. 1987. Assessment Report on Geochemical Work on the Following Claims, Eta..#5323(4), Theta..#5324(4), Iota..#5325(4), British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 16156.

Cremonese, D.M. 1988. Assessment Report on Geochemical Work on the Following Claim, Delta..#3622(11), British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 16911.

Cremonese, D. 1995. Assessment Report on Geochemical Work on the Following Claims, Orion 9, 323739, Orion 10, 323740, Weasle, 331438, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 23885.

Cremonese, D.M. 2008. Assessment Report on Diamond Drilling Work "Tenure # 508810" Orion Property, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 29524.

Cremonese, D.M. 2013. Geochemical and Diamond Drilling Report on the Following Claims -Delta 2 #394820, High Property, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 33956.

Cremonese, D.M. and Mullin, A. 2013. Assessment Report on Diamond Drilling Work on the Following Claims - Delta 2 #394820 High C1 #509565, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 34246.

Dandy, L. and Grunenberg, P. 2006. Summary Report on the Electrum Property; American Creek Resources Ltd. files.

Evenchick, C.A. 1991. Structural Relationships of the Skeena Fold Belt West of the Bowser Basin, Northwest British Columbia; Canadian Journal of Earth Sciences, Volume 28, pages 973-983.

Febbo, G.E., Kennedy, L.A., Savell, M., Creaser, R.A., and Friedman, R.M., 2015. Geology of the Mitchell Au-Cu-Ag-Mo porphyry deposit, northwestern British Columbia, Canada. In: Geological Fieldwork 2014, British Columbia Ministry of Energy and Mines, British Columbia Geological Survey Paper 2015-1, pp. 59-86.

Frye, M.L. and Rowe, J.D. 2022. 2021 Geochemical & Geological Reconnaissance on the Crown Project, British Columbia Ministry of Energy, Mines and Low Carbon Innovation, Assessment Report (unpublished).

Gagnon, J.F., Barresi, T., Waldron, J.W.F., Nelson, J.L., Poulton, T.P. and Cordey, F. 2012. Stratigraphy of the upper Hazelton Group and the Jurassic evolution of the Stikine terrane, British Columbia, Canadian Journal of Earth Sciences, vol.49, p. 1027-1052.

Ghaffari H. et al. (Tetra Tech). 2016. 2016 KSM (Kerr-Sulphurets-Mitchell) Prefeasibility Study Update and Preliminary Economic Assessment; private report for Seabridge Gold Inc.

Grove, E.W. 1986. Geology and Mineral Deposits of the Unuk River – Salmon River – Anyox Area, British Columbia Ministry of Energy, Mines and Petroleum Resources, Bulletin 63.

Harris, S. 2009. 2009 Geological, Geochemical and Geophysical Report on the Eskay Project, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 31162a.

Henley, R.W. and Ellis, A.J. 1983. Geothermal systems ancient and modern: a geochemical review, in Earth-Science Reviews, Volume 19, Issue 1, pp 1-50.

Hutter, J. 2015. Geological and Geochemical Report on the Mackie Property, NI 43-101 Qualifying Report for Kaizen Res., and filed as assessment with British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 35763.

John, D.A., Vikre, P.G., du Bray, E.A., Blakely, R.J., Fey, D.L., Rockwell, B.W., Mauk, J.L., Anderson, E.D., and Graybeal, F.T. 2018. Descriptive Models for Epithermal Gold-Silver Deposits, US Geological Survey Scientific Investigations Report 2010-5070-Q, 247 p.

Kirkham, R.V. and Sinclair, W.D. 1995. Porphyry copper, gold, molybdenum, tungsten, tin, silver, in Eckstrand, O.R., Sinclair, W.D., and Thorpe, R.I. (eds.) Geology of Canadian Mineral Deposit Types: Geological Survey of Canada, Geology of Canada, no. 8, p. 421-446.

Konkin, K.J. and Rowe, J.D. 2019. 2019 Geochemical and Geological Reconnaissance on the Crown Project, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 38639.

Kruchkowski, E.R. and Konkin, K. 1988. Report on the Gamma Claim, Stewart, British Columbia, BCMM Assessment Report 17028.

Lindgren, W. 1933. Mineral Deposits, 4th ed. New York: McGraw-Hill, 930p.

Lowell, J.D. and Guilbert, J.M. 1970. Lateral and Vertical Alteration-Mineralization Zoning in Porphyry Ore Deposits. Economic Geology, 65, 373-408.

McKinley, S.D. 2008. Assessment Report: 2007 Exploration on the Corey Property; unpublished Assessment Report for Kenrich-Eskay Mining Corp., British Columbia Ministry of Energy and Mines, Assessment Report No. 30131.

McCrea, J.A. 2017. Assessment Report on the Electrum Property, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 36693.

MacLeod, J.W. 1986. Diamond Drill Report on Tide Joint Venture, 1986 Program, Bere Group, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 15626.

Massey, N.W.D., D.G. MacIntyre, P.J. Desjardins and R.T. Cooney, 2005. Geology of British Columbia, BC Ministry of Energy, Mines and Petroleum Resources, Geoscience Map 2005-3, North Sheet, scale 1:1,000,000.

Nelson, J., and Kyba, J., 2014. Structural and stratigraphic control of porphyry and related mineralization in the Treaty Glacier-KSM-Brucejack-Stewart trend of western Stikinia: Geological Fieldwork 2013, British Columbia Ministry of Energy and Mines, British Columbia Geological Survey Paper 2014-1, pp. 111-140.

Roth, T. 2002. Physical and chemical constraints on mineralization in the Eskay Creek Deposit, northwestern British Columbia; evidence from petrography, mineral chemistry, and sulfur isotopes. Ph.D. thesis, Department of Earth and Ocean Sciences, University of British Columbia, Vancouver.

Rowe, J.D. 2019. 2018 Geochemical and Geological Reconnaissance on the Crown Project, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 38101.

Sanabria, O.R. 2008. Drilling Report on the Electrum Property, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No.30206.

Souther, J.G. 1972. Telegraph Creek Map Area, British Columbia; Geological Survey of Canada Paper 71-4.

Tribe, N.L. 1987. Assessment Report, The Hat Group of Mineral Claims, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No.16479.

Wares, R. 1987. Drilling Report, East Gold Property, British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report No.16198.

*All Assessment Reports are available on-line at http://aris.empr.gov.bc.ca/

BC Geological Survey Minfile descriptions are available on-line at

http://minfile.gov.bc.ca/searchbasic.aspx

BC Ministry of Energy and Mines, Exploration Assistant is available online at

http://webmap.em.gov.bc.ca/mapplace/minpot/ex_assist.cfm

All BC GSB publications are available on-line at

http://www.empr.gov.bc.ca/MINING/GEOSCIENCE/PUBLICATIONSCATALOGUE/Pages/default.aspx

20.0 DATE AND SIGNATURE PAGE

The undersigned prepared this Technical Report, titled "NI 43-101 Technical Report on the Crown Project", with an effective date of July 28, 2022, and revised August 11, 2022, in support of the public disclosure of technical aspects of the Crown Property owned by Goldstorm Metals Corp. The format and content of the report are intended to conform to Form 43-101F1 of National Instrument 43-101 (NI 43-101) of the Canadian Securities Administrators.

Effective Date: July 28, 2022

Signed by

(signed) "Jeffrey D. Rowe" Jeffrey D. Rowe, B.Sc., P.Geo. Dated this 28th day of July 2022

21.0 CERTIFICATE OF QUALIFIED PERSON

I, Jeffrey D. Rowe, am a professional geologist residing at 111-6109 Boundary Drive W, Surrey, British Columbia, Canada and do hereby certify that:

- I am the author of "NI 43-101 Technical Report on the Crown Project", dated July 28, 2022, and revised August 11, 2022;
- I am a Registered Professional Geoscientist (P. Geo.), Practising, with the Engineers and Geoscientists, British Columbia, (License # 19950);
- I graduated from the University of British Columbia, Canada, with a B.Sc. (Geological Sciences, 1975);
- I have worked as a geoscientist in the minerals industry for over 35 years, I have been directly involved in the exploration, evaluation and mining of mineral properties, mainly in Canada and Mexico, for gold, silver, tungsten, molybdenum and base metals;
- I have visited and examined parts of the Crown Property on September 22, 2020;
- I have been previously involved with writing of assessment reports for the Crown Property in 2018, 2019 and 2021;
- I am responsible as author for all sections of "NI 43-101 Technical Report on the Crown Project", dated July 28, 2022, and revised August 11, 2022;
- I am independent of Goldstorm Metals Corp., as independence is described in Section 1.5 of NI 43-101;
- I am independent of the vendor of the Property, Tudor Gold Corp., as independence is described in Section 1.5 of NI 43-101;
- I was retained by Goldstorm Metals Corp. to prepare an exploration summary on the Crown Property, northwest British Columbia, in accordance with National Instrument 43-101. The report is based on my review of Project files and information provided by Goldstorm Metals Corp. personnel and publicly available data;
- I have read National Instrument 43-101 and Form 43-101F1 and, by reason of education and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of this Instrument, and this report which has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- As of the date of this certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Signed this 28th day of July 2022 in Surrey, British Columbia:

(signed) "Jeffrey D. Rowe"

Jeffrey D. Rowe, B.Sc., P.Geo. (PGBC license no. 19950)