BRITISH COLUMBIA
The Best Place on Earth

BC Geological Survey
Assessment Report
38823

Ministry of Energy and Mines BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]:

Rock, Talus Fines and Stream Sediment Sampling

TOTAL COST: $13,459.73

AUTHOR(S): Mitchell, A and Prowse, N and Albano, A

SIGNATURE(S): A. Mitchell Neil Prowse

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):

YEAR OF WORK: 2019

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5754385/ September 7, 2019

PROPERTY NAME: Sheelagh

CLAIM NAME(S) (on which the work was done): MACKIE ESKAY (1041376),SHEELAGH 2 (1040402) & SHEELAGH (1039253)

COMMODITIES SOUGHT: Gold, Silver

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 104B-389 (Sheelagh)

MINING DIVISION: Cariboo Mining Division

NTS/BCGS: 093A/11

LATITUDE: 56 o 23 ' 33 " **LONGITUDE:** 130 o 26 ' 46 " (at centre of work)

OWNER(S):

1) Richard H Mill

2)

MAILING ADDRESS:

20071 37th Ave, Langley, B.C. V3A 6K3

OPERATOR(S) [who paid for the work]:

1) Orogenic Gold Corp.

2)

MAILING ADDRESS:

12 Edelwiss Crescent, Calgary Alberta, T3A3R9

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Sheelagh property is underlain by Upper Triassic Stuhini Group volcanic and sedimentary rocks. The Sheelagh property hosts the Sheelagh Creek Showing, which comprises a quartz vein hosting disseminated to clotty pyrite that historically returned up to 15.77 g/t Au and 41.83 g/t Ag over 3.0 m, with select grab sample assaying up to 61.37 g/t Au and 109.4 g/t Ag.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 23805, 24965, 36395

Next Page

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for...)			
Soil	2 Samples	1039253	$2,243.29
Silt	4 Samples	1039253	$4,486.58
Rock	6 Samples	1039253	$6,729.87
Biogeochemistry			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	$13,459.73

ASSESSMENT REPORT

on

Rock, Talus Fines and Stream Sediment Sampling

at the

Sheelagh Property

Northwest British Columbia

Skeena Mining Division

(N.T.S. 104B/08)

Latitude 56°23'33"N, Longitude 130°26'46"W

Prepared for

Orogenic Gold Corp.

by

Arron M. Albano, B.Sc., GIT,

Andrew J. Mitchell, B.Sc., P. Geo

Neil D. Prowse, M.Sc.

of

C.J. Greig & Associates Ltd.

Penticton, British Columbia

Date: January 31, 2020

Table of Contents

List of Figures

List of Tables

1.0 Summary and Introduction

The Sheelagh property is located in northwestern British Columbia within the Skeena Mining Division, approximately 56 kilometres northwest of the town of Stewart BC (Figure 1). Current access to the Sheelagh property is by helicopter from a base in Stewart BC. The property lies about 17 kilometres northwest of the past producing Granduc Cu-Au-Ag mine.

The 2019 work program on the Sheelagh property took place over one day by two geologists from CJ Greig & Associates. The work program consisted of 1) re-locating the Sheelagh Creek Showing, 2) potentially increasing the known strike length of the Sheelagh Creek vein, 3) prospecting and 4) stream sediment and talus fines sampling. Statements of qualifications for all three authors of this report are located in Appendix A. while a table detailing the costs of exploration work applied to the Sheelagh property is located in Appendix B.

The 2019 field work program on the Sheelagh property was successful in re-locating and sampling the Sheelagh Creek Showing, as well as prospecting several other areas within the Sheelagh Creek drainage. Talus fines and stream sediment samples collected from the Sheelagh Creek drainage returned encouraging results for gold and, in the opinion of the authors, make a compelling case for future follow up work on the Sheelagh property.

Highlights from the work program include a chip sample (Y738096) which was collected from the Sheelagh Creek Showing that returned 9.20 g/t Au and 16.7 g/t Ag over 1.7m, while a high grade grab sample from the same vein returned 12.6 g/t and 23.7 g/t Ag (Y738097). Stream sediment and talus fine sampling also returned encouraging results in and around the Sheelagh Creek showing. A stream sediment sample collected northeast of the Sheelagh Creek Showing returned 34 ppb Au, while a talus fine sample collected from the gulch which hosts the Sheelagh Creek Showing returned 74 ppb Au.

Future work on the Sheelagh property should include a high resolution airborne magnetic survey over the entire Sheelagh 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 which may host or offset high-grade gold veins. Once the magnetic survey is complete, and the data is interpreted, it is recommended that a soil and stream sediment geochemical sampling, and prospecting program be carried out to follow up prospective features identified by the magnetic survey, as well as in areas of encouraging historical stream sediment geochemistry. Once the most promising targets are identified, ground based Induced Polarization surveys may be recommended in areas of glacial and/or colluvial cover.

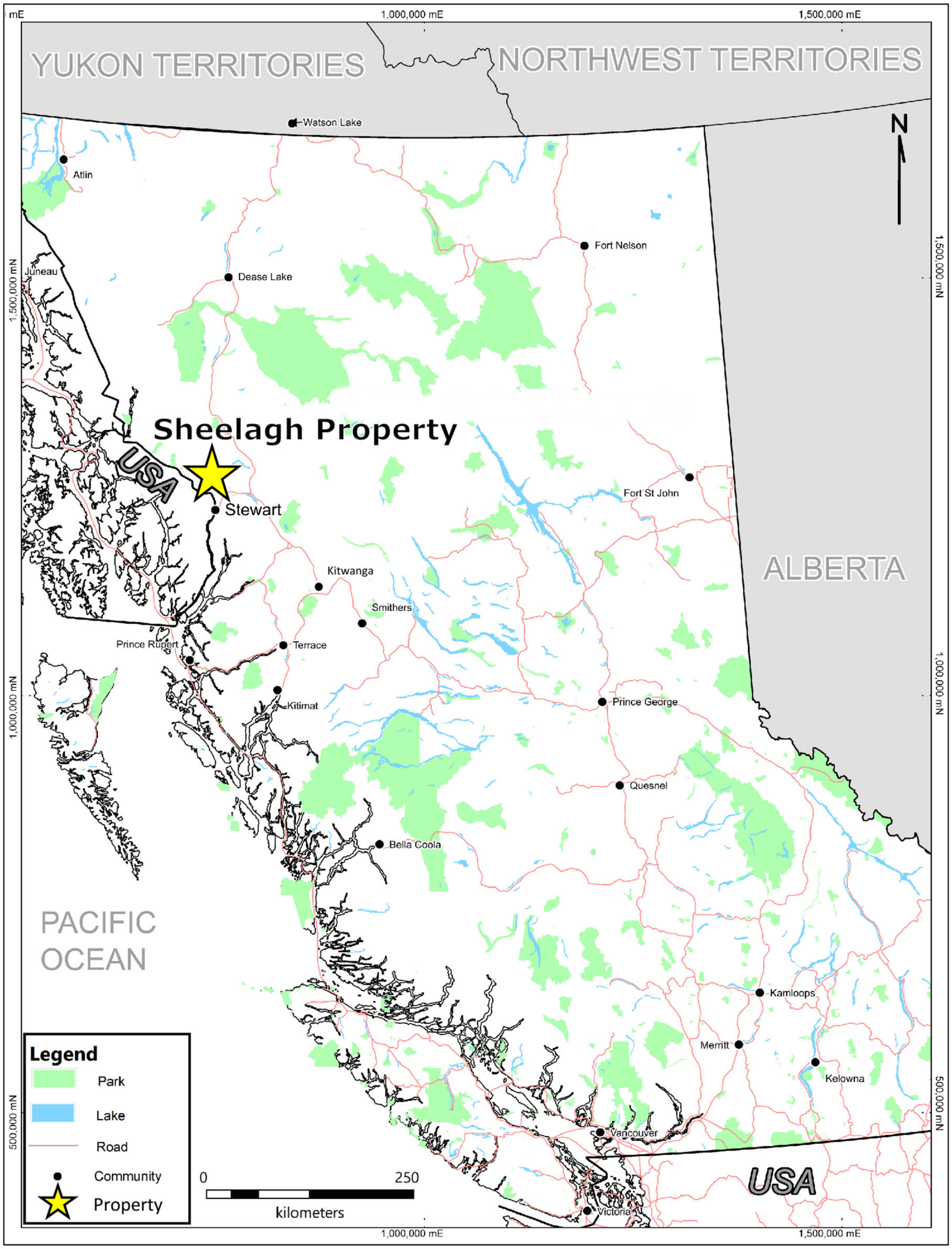

Figure 1. Sheelagh property location in northwestern British Columbia

2.0 Location, Access, Physiography, Climate and Vegetation

The Sheelagh property is located in northwestern British Columbia within the Skeena Mining Division, approximately 56 kilometres northwest of the town of Stewart BC (Figure 1). The property lies about 17 kilometres northwest of the past producing Granduc Cu-Au-Ag mine. The mineral tenures occupy a north-south trending package of land approximately 2.2 km wide by 8.7 km long and are centered on 56°23'33"N latitude and 130°26'46"W longitude (Figure 2).

Current access to the Sheelagh property is by helicopter from a base in Stewart BC. Supplies can be driven to Troy Flats, approximately 40 kilometres by road northwest of Stewart, where a large staging area can be used to mobilize personnel and supplies. From there, a 33 kilometre helicopter flight accesses the property, however, few helicopter landing spots are readily available due to rugged terrain and thick vegetation. Alternatively, the Sheelagh property can be accessed via helicopter from a staging area (kilometre 54) on the Eskay Creek mine road, approximately 26 kilometres north of the claims.

The Northwest Transmission powerline, which extends along highway 37 to a substation near Bob Quinn Lake, could provide a potential future supply of readily accessible power. The powerline is approximately 45 kilometres northeast of the Sheelagh property.

The property lies within the Boundary Ranges of the Coast Mountains, approximately 2 km southwest of Unuk Finger Mountain. The claims cover a rugged and mountainous area typical of the Coast Range. The property is transected by two glacially derived drainages, centred by a northwest trending ridge. The South Unuk river crosses the south portion of the property. Elevations on the property range from nearly 1800 metres in the northeast part of the property, down to 300 metres on the northwest part of the property.

The climate on the Sheelagh property is generally that of a northern coastal rainforest, with subarctic conditions at high elevations. Precipitation is high, with an annual total precipitation (rainfall and snow equivalents) estimated to be somewhere between the historical averages for the Eskay Creek mine and Stewart, BC. These range from 801 to 1,295 mm of rain and 572 to 1,098 cm of snow, respectively (data to 2005) (Ghaffari et al. 2016).The area has a humid continental climate, with mild summers and cold winters. Summer temperatures range from about 15 degrees to a high of 20 degrees Celsius and winter temperatures range from about -3 degrees to as low as -10 degrees Celsius. Average precipitation for the area is approximately 530 mm.

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 restricted to the East-Central part of the property, at high elevations). Treeline in the area is about 1250 metres ASL. Vegetation in areas above tree line is heather and grasses with pockets of scrub brush, as well as stunted black spruce and balsam fir. The highest elevations, particularly in the central and northernmost parts of Sheelagh property, are typically devoid of any vegetation, except lichens. Vegetation in the valley bottom is characterized primarily by thick stands of mature hemlock, spruce, fir, aspen and alder with a thick understory of ferns, devil's club, huckleberry and salmonberry.

3.0 Claim Location and Description

The Sheelagh property consists of 3 mineral tenures covering a total area of 2131.37 hectares (ha). The tenures are all currently held by Richard H. Mill (Client Number: 118474), who holds them in trust for Orogenic Gold Corp. The cost of the 2019 work program, which is described in this report, was applied to all 3 mineral tenures. Specifics concerning the mineral tenures are tabulated below (Table 1), while the locations of individual tenures are shown on Figure 2.

Table 1. Sheelagh property mineral tenure list

Tenure No.	Claim Name	Owner Name	Client Number	Issue Date	Expiry Date	Area (Hectares)
1039253	SHEELAGH	MILL, RICHARD H	118474	2015-10-12	2021-11-01	143.3574
1040402	SHEELAGH 2	MILL, RICHARD H	118474	2015-12-05	2021-11-01	842.2894
1041376	MACKIE ESKAY	MILL, RICHARD H	118474	2016-01-18	2021-11-01	1145.7211
					Total:	**2131.37**

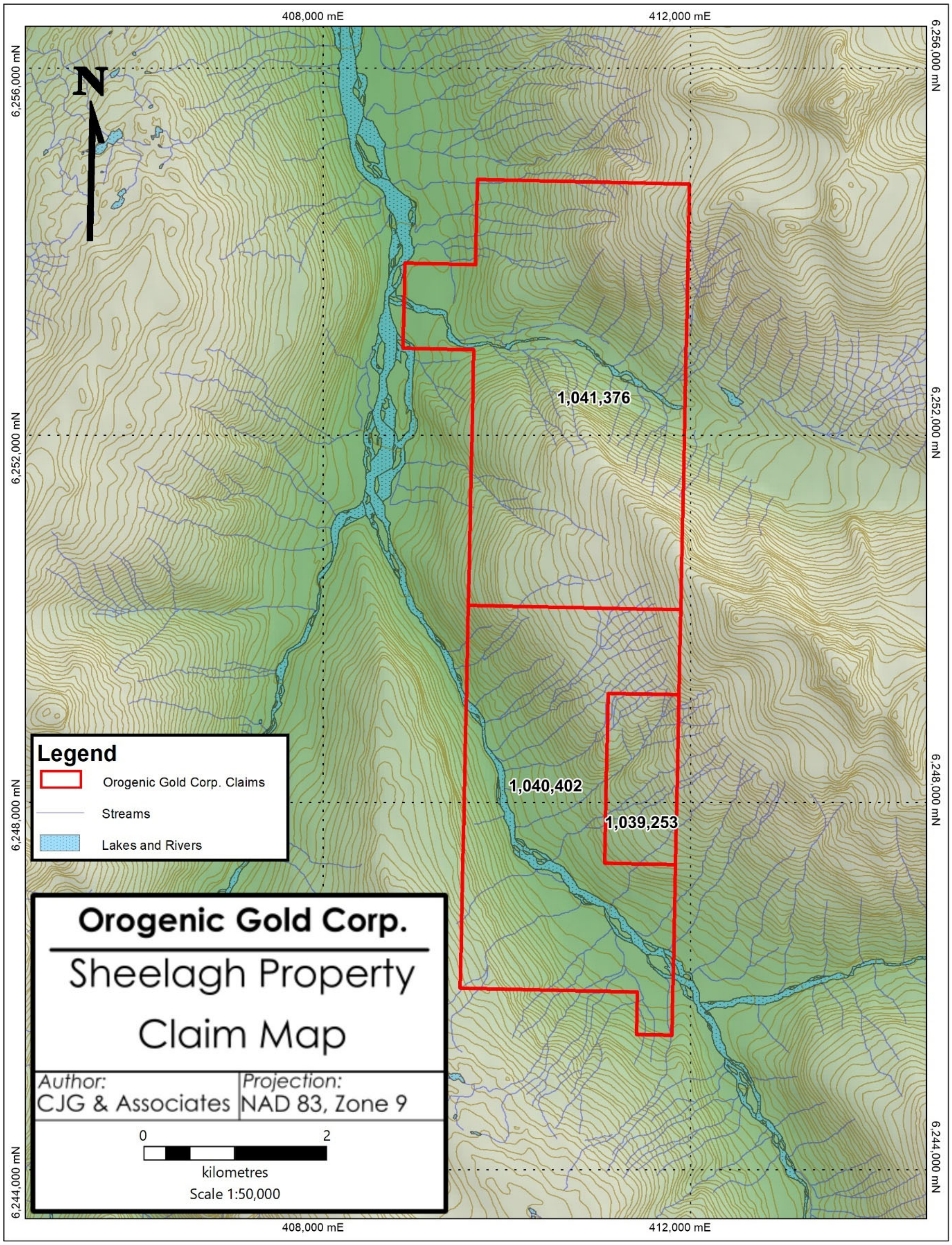

Figure 2. Sheelagh property mineral tenure locations

4.0 History

The earliest work reported in the area was to the south of the Sheelagh property, circa 1900, and included exploration of two veins containing sulphide mineralization and gold values at the Globe Showing. This work included trenching and driving four adits (Minister of Mines, 1901). Also developed during this time was a small stamp mill that included a concentrating table and copper plates, and had a capacity of three tons per twenty-four hours (Minister of Mines, 1901). High-grade ore was stockpiled but no shipments were made (Freeze et al. 1989 – BC Assessment Report: 18622A).

The earliest recorded work on the Sheelagh Creek property was in 1993 by Kenrich Mining, when 2 rock samples were collected from the northern tip of the property which returned no significant values for all elements of interest (Assessment Report: 23805).

In 1996, Kenrich Mining commenced regional exploration work in the area that covered the Sheelagh property (Assessment Report: 24965). During this time Kenrich Mining collected a total of 40 rock samples, 23 moss mat samples, 119 stream sediment samples along with four diamond drill holes to test the Sheelagh Creek Showing. Six silt samples returned over 50 ppb Au with a high of 295 ppb. Three moss mat samples returned 30 ppb or higher with a high of 40 ppb. Highlights from the rock sampling program includes the discovery of the 2.5 to 3.5 metre wide Sheelagh Creek quartz vein (Minfile Number: 104B 389) which strikes approximately 45 degrees and dips about 75 degrees to the northwest. Three one metre chip samples were taken across the face of the vein that returned an average of 15.63 g/t Au and 41.83 g/t Ag over 3 metres, while a select high grade grab sample returned 61.40 g/t Au and 109.5 g/t Ag. Four diamond drill holes testing the Sheelagh Creek vein were attempted, but failed to intersect the vein.

In 1998, Kenrich Mining collected 1 rock sample over the east-central part of the property which returned no significant values for all elements of interest.

In 2016, Tudor Gold undertook a small work program to evaluate the Sheelagh Creek mineral occurrence for diamond drilling potential. Rock chip samples over 1.85 metres returned weighted average values of 4.33 g/t Au and 15.23 g/t Ag, while a select grab sample returned 36.7 g/t Au and 101.0 g/t Ag. Tudor Gold reported that there were no indications of any potential strike length past the original outcrop and that further work on this target should have low priority (Assessment Report: 36395).

In 2019, a compilation study of historical geochemical work done by the previous operators listed above was brought into a database by employees of CJ Greig & Associates. This database was then used to produce maps to guide future exploration efforts on the Sheelagh property. A thematic map illustrating rock and stream sediment samples along with colours for specific gold ranges are displayed on Figure 3.

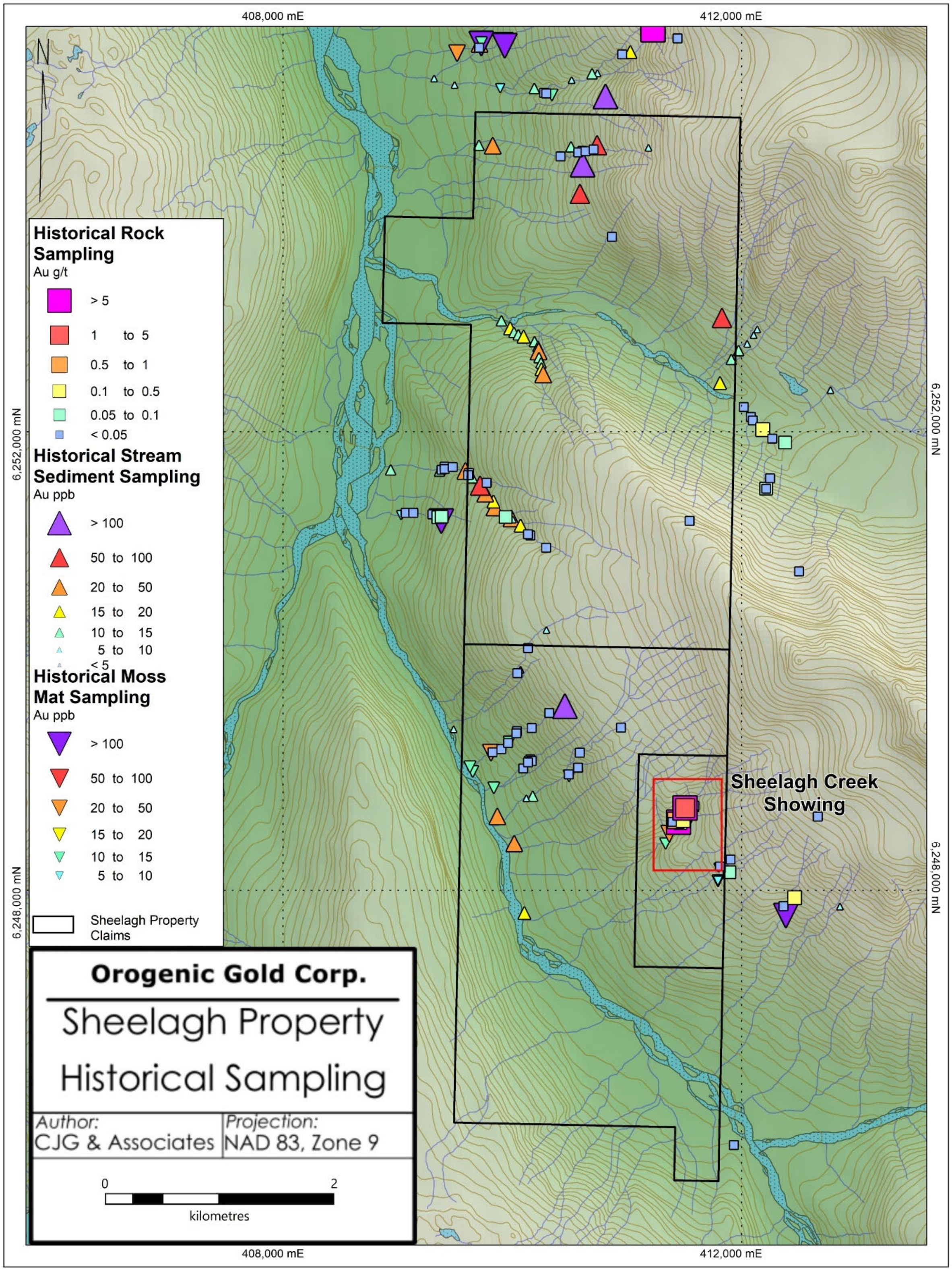

Figure 3. Compiled historical stream sediment and rock sample geochemistry at Sheelagh

5.0 Regional and Property Geology

5.1 Regional Geology

The Sheelagh property lies within a mineral-rich belt that extends over 200 km north from the town of Stewart, along the western part of the Stikine terrane (Figure 4). Stikinia makes up a large part of the northern Intermontane Belt in this part of the northern Cordillera, and is bound by rocks of the largely plutonic Coast Complex, which lie immediately to the west. Rocks making up Stikinia 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 known as the Stikine Arch, which hosts prolific porphyry, high-grade vein and VMS deposits.

The oldest rocks in Stikinia are Devonian to Mississippian arc-related volcanic and plutonic bodies and accompanying sedimentary strata of the upper Paleozoic Stikine assemblage. These are unconformably overlain by Triassic arc and marine sedimentary strata of the Stuhini Group. Above a Late Triassic-Early Jurassic unconformity, the Hazelton Group and its intrusive sources (latest Triassic to Middle Jurassic) represent the final stage of island arc magmatism and related events. Unconformably to conformably above the Hazelton Group is Bowser Lake Group (Middle Jurassic to Lower Cretaceous), which is a northeasterly-sourced, southwestward-younging clastic overlap sequence derived from the collision of the Intermontane terranes and the edge of ancestral North America.

Stratified Rocks

The oldest rocks in the area consist of Upper Triassic Stuhini Group composed of a lower volcanic package with lesser amounts of intercalated sedimentary rocks, overlain by a thick upper package of primarily sedimentary rocks with some interlayered volcanic rocks (Figure 5 – dark green). Alldrick et al. (2004b) 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 a regional angular unconformity that is overlain by Hazelton Group strata. It has been noted by the BC Geological Survey that this unconformity may be key to the localization of many of the mineral deposits in the Golden Triangle (Nelson and Kyba, 2014). Total thickness of the Stuhini Group cannot be determined due to this truncation, but minimum thickness is 3,000 metres (Alldrick et al. 2004b).

Gagnon et al. (2012) reported 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 5 – light green) show strong lateral and vertical variability as a result of the limited connectivity between sub-basins plus 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 sulphides (Alldrick et al. 2004). It has also been noted that felsic volcanism is commonly closely associated with mudstone intervals containing sulphide mineralization (Gagnon et al. 2012).

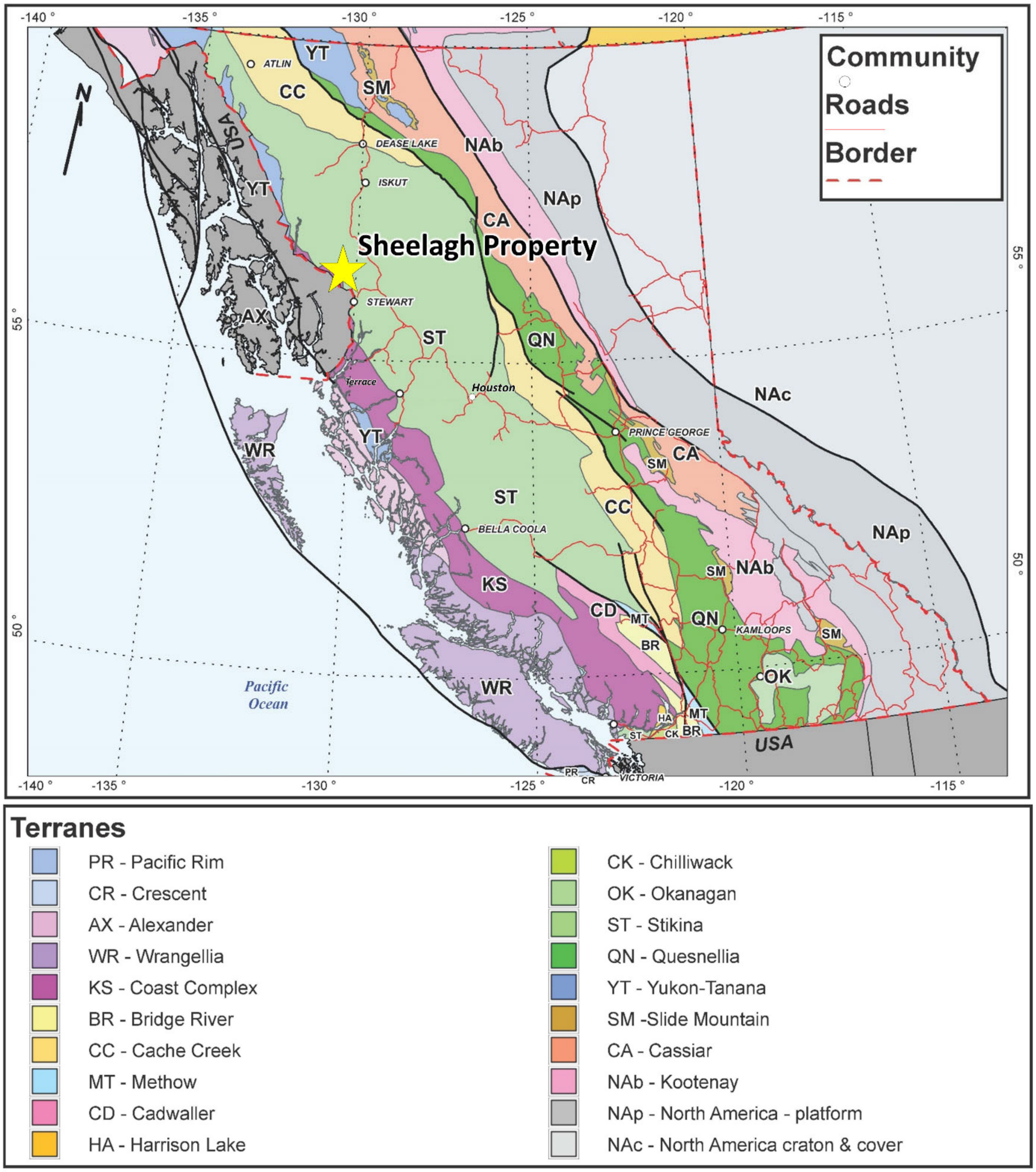

Figure 4. British Columbia Cordillera terrane map after Nelson & Colpron, 2017

Within the Eskay rift, the lower part of the Hazelton Group comprises the Jack and Betty Creek formations, which consists predominantly of arc related intermediate volcanic 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). The lower Hazelton Group rocks mostly lie unconformably on Triassic volcanic rocks of the Stuhini Group, and locally over 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 east of the Sheelagh Project has been defined by Gagnon et al. (2012) to include their newly proposed Iskut River Formation (previously called Salmon River Formation), which splits the lower Salmon River rhyolites (footwall rhyolite hosts discordant mineralization at the Eskay Creek deposit) from the overlying Salmon River "contact mudstone" and overlying intercalated mafic volcanic rocks and sedimentary rocks (now termed the Quock Formation). At the Eskay Creek type section described by Gagnon et al. (2012), rhyolite of the Iskut River Formation disconformably overlies andesitic breccia, volcaniclastic, and dacitic volcanic rocks of the Betty Creek Formation. This 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 flow-dome 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 sulphides and sulphosalts (Roth 2002). The Eskay Creek deposit comprised stratiform volcanogenic massive-sulphide bodies at the base of the mudstone interval that were mined between 1995 and 2008, producing 2.18 million tonnes of ore with an average grade of 46 g/t Au and 2267 g/t Ag (Minfile No. 104B 008).

In excess of 150 metres of massive basalt sills and pillowed basalt flows and breccia, with thin (centimetre to metre-scale) 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 metres 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 5 – beige) 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 metres thick, sourced mostly from uplifted Cache Creek Group rocks in the northeast. These are overlain by several thousand metres of low energy fluvial deposits and sedimentary rocks of alluvial fan and braided stream systems.

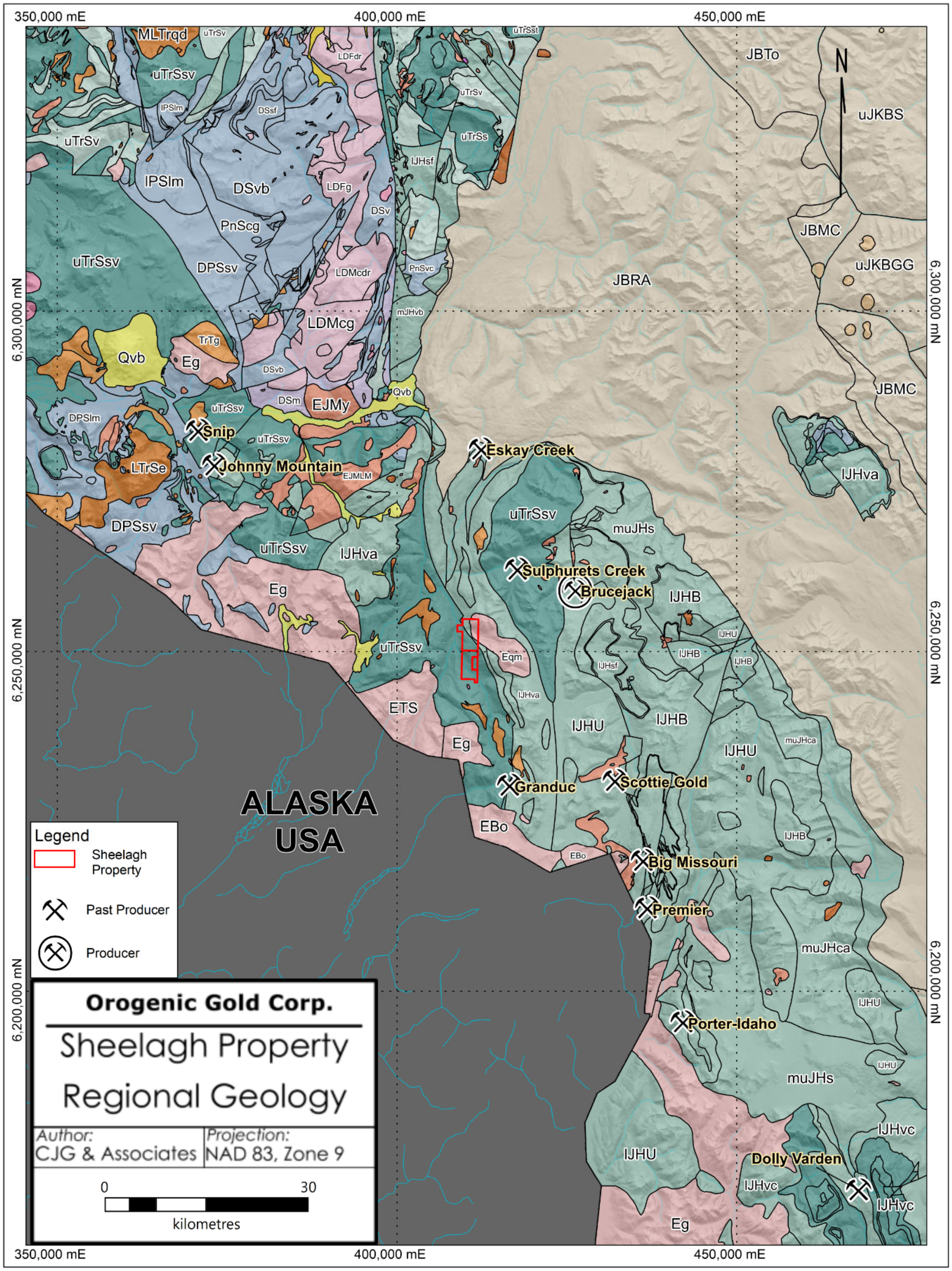

Figure 5. Regional geology (Massey et al., 2005)

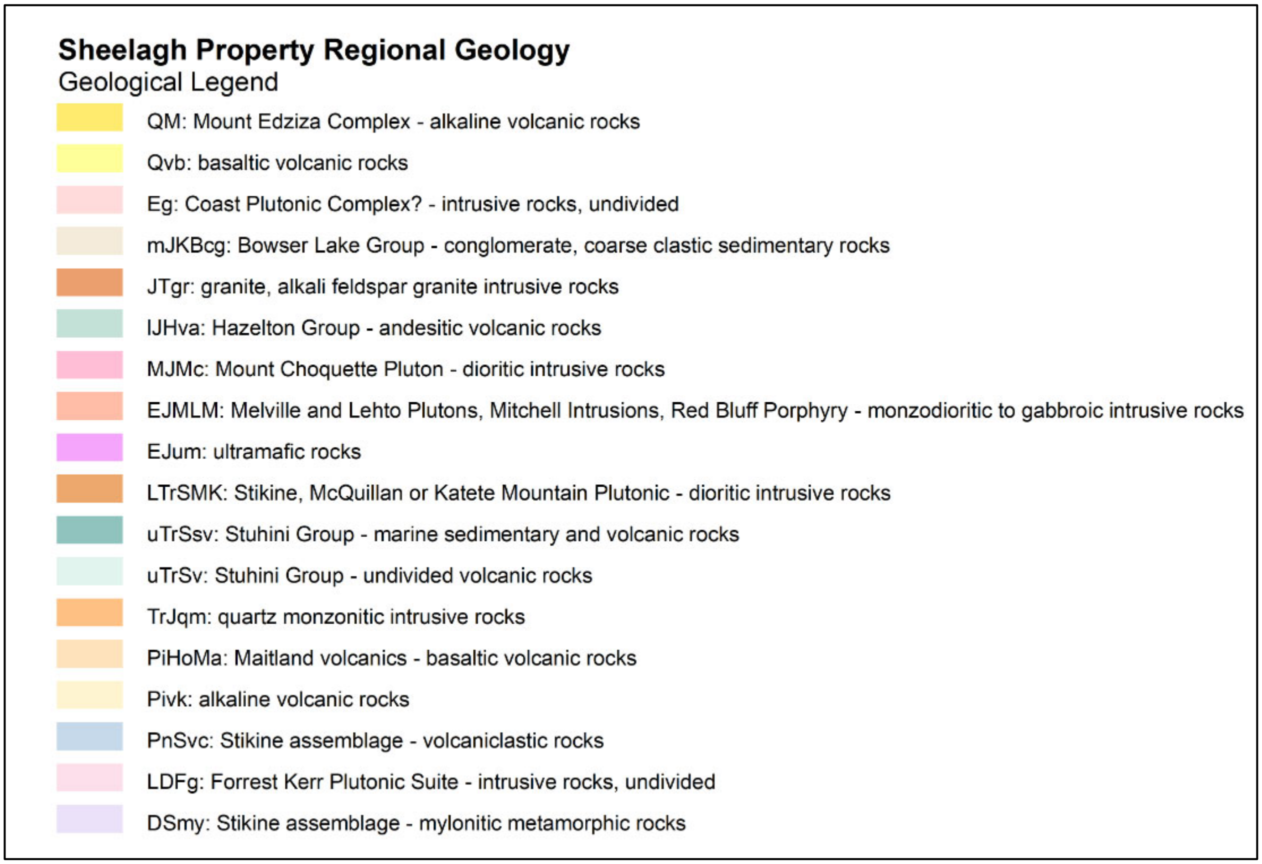

Figure 6. Geological Legend to accompany Figure 5

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, with one intrusive body transecting the northernmost part of the property (Figure 5). The oldest intrusions in the area form a belt trending north from a point about 40 km northwest of the Property (Figure 5 – light pink). They are Late Devonian in age and together form one of the larger intrusive bodies in the region. The intrusions vary in composition from granite to hornblende diorite to local hornblendite. Other large intrusions consisting of Middle to Late Triassic hornblende quartz diorite to granodiorite (Figure 5 – 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 5 – medium orange) are located 30 to 45 km northwest of the Sheelagh Creek Project, 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 (KSM), 18 to 25 km northeast of the Property, and the Red Chris porphyry copper-gold deposit, 155 km to the 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 Sheelagh Creek, including two diorite stocks within the Sheelagh Claims. Other intrusions in the area belong to the Copper Mountain Plutonic Suite and John Peaks Stock or Unuk Metadiorite and many may be coeval with their host volcanic rocks.

Located in the southwest part of the map area shown on Figure 5, Paleocene to Eocene granitoid stocks (Figure 5 – dark pink) are probable outliers of the more massive Coast Plutonic Complex located farther to the west.

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 8. Additionally, the majority of 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 5).

The main structural feature near the Sheelagh property is the north-south trending South Unuk River fault, which transects the northern part of the property. The fault comprises a regional-scale shear zone that separates the Stuhini Group (west) from the Hazelton Group (east). The Granduc deposit straddles this structure and mineralization is mostly bound to sheared rocks of the Stuhini Group.

5.2 Property Geology

The Sheelagh property has been geologically mapped at various scales by the BC Geological Survey (1:250,000), the Mineral Deposit Research Unit (MDRU) in 2013 (1:50,000), and Kenrich Mining in 1996 (1:10,000). The BC Geological Survey geologically mapped the province at a scale of 1:250,000 while Kenrich Mining did first pass, early-stage drainage outcrop mapping in 1996 at a scale of 1:10,000. Lewis et al., 2013 (MDRU) mapped the area at a scale of 1:50,000 in 2013, and is the most complete map of the Sheelagh property to date. The author has selected the MDRU geology map to be featured and described in this report and is illustrated on Figure 6.

The property is predominantly underlain by Upper Triassic Stuhini Group which is comprised of undifferentiated basaltic volcanic lavas, tuffs and volcanic breccia (TrSm); white to grey coarsely crystalline marble (TrSs6m); undifferentiated sandstone, mudstone, conglomerate and limestone (TrSs); and andesitic clinopyroxene/hornblende+plagioclase-phyric block tuff, volcanic breccia (TrSsi1). The Triassic Units are in fault contact with Lower Jurassic mafic volcanic rocks (JrH5M) in the northeast of the property along the South Unuk River Fault (Figure 6).

Two intrusive units are mapped on the southernmost and northernmost ends of the property. The southernmost intrusive consists of the Triassic Bronson stock diorite of the Stikine Plutonic Suite (TrB), while the northernmost intrusive unit consists of the Tertiary hornblende-biotite quartz monzonite Lee Brant stock (TL).

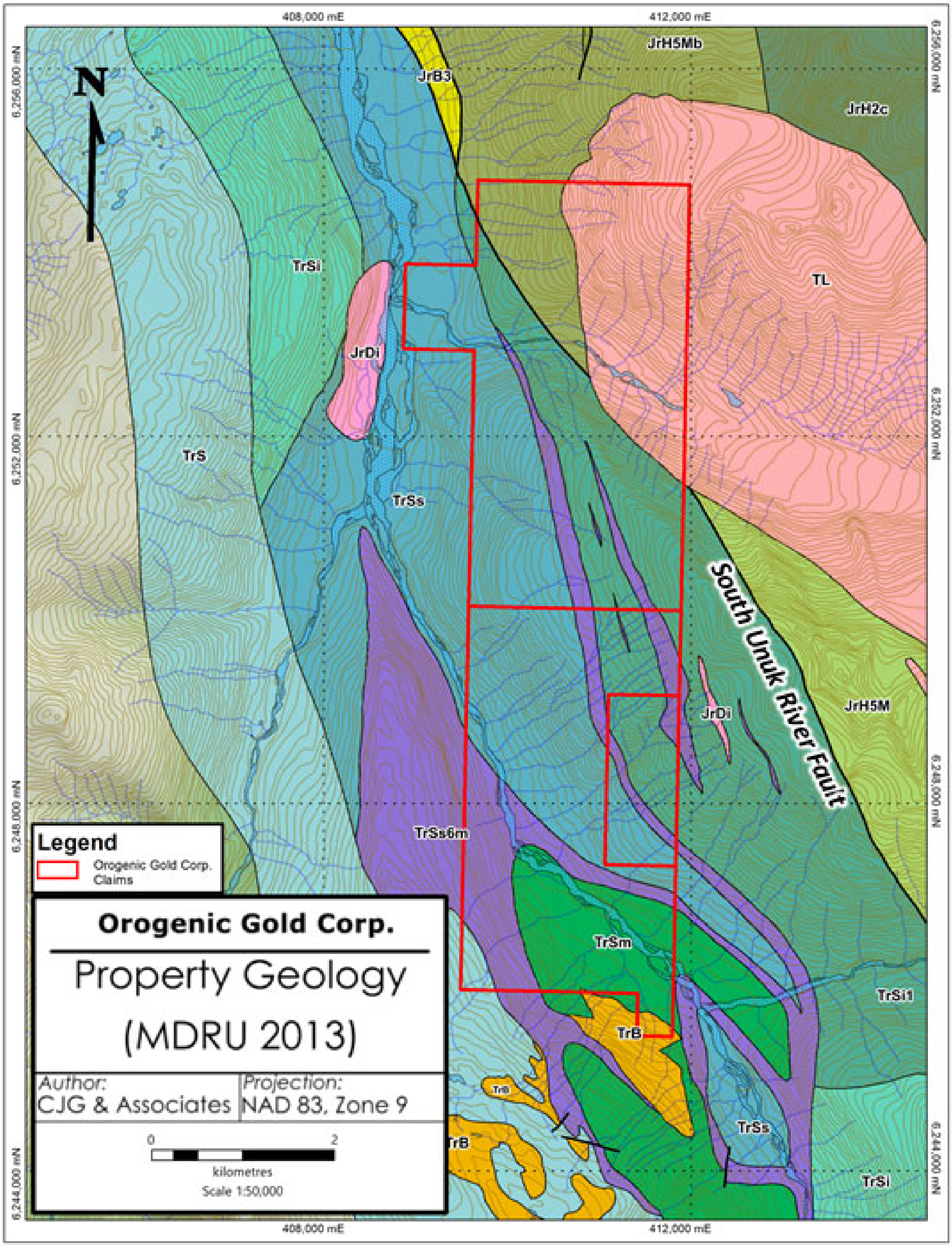

Figure 7. Sheelagh property and surrounding area geology at 1:50,000 scale after Lewis et al., 2013

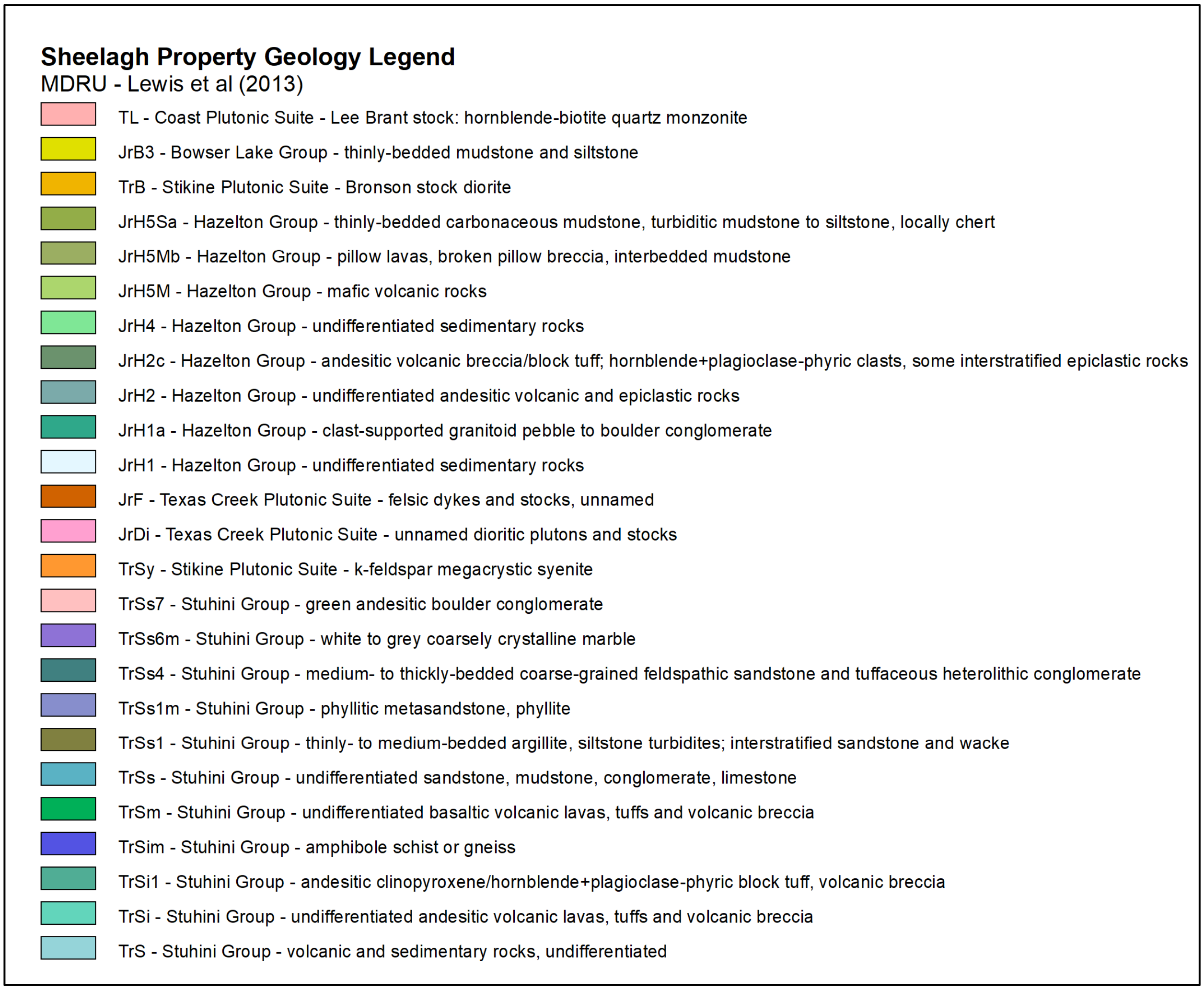

Figure 8. Geological Legend to accompany Figure 7

6.0 Regional Exploration & Mining History

Note: The author has been unable to verify the information concerning the regional mineral deposits and mines discussed in the following section. Readers should be aware that the information presented is not necessarily indicative of the mineralization on the Sheelagh property that is the subject of this Technical Report. It is, however, believed by the author to provide relevant geological context.

The Sheelagh property lies within an important mineral trend of northwestern British Columbia, at the heart of the region informally named the "Golden Triangle" in the Stikine terrane (Figure 7). This region extends over 200 kilometres north from near the town of Stewart, along the western part of the Stikine Arch and hosts porphyry-style, VMS and precious metal-rich deposits associated with Late Triassic and Early to Middle Jurassic intrusions. Several of these structurally controlled high-grade gold-silver deposits are potentially analogous to mineralization present at Sheelagh Creek. The section below is adapted from Rowes 2018 Assessment Report on the nearby Crown Project (Assessment Report: 38639).

The recently commissioned **Brucejack** mine has been developed within the Valley of the Kings (VOK) Zone, which hosts high-grade gold-silver mineralization as electrum, within quartz-carbonate and quartz-adularia veins and vein stockworks. Mineralization is both structurally and stratigraphically controlled where the majority of gold intersections are confined to a 75 to 100 metre-wide zone that closely parallels the axis of a synclinal structure. Alteration at the VOK Zone is predominantly quartz-sericite-pyrite, with lesser sericite-chlorite. Alteration is most pervasive and intense within sedimentary and fragmental volcanic rocks. A number of significant showings of gold-silver, plus copper, zinc and lead occur along a north-northwest trend, informally named the "Brucejack Trend", which mostly parallels the regional Brucejack fault for about 4.5 kilometres north from VOK. Most of the showings consist of quartz-carbonate and local barite veins and stockworks associated with northwest to west-trending faults, thought to be splays of the Brucejack fault. Mineralization has been described as transitional epithermal, occurring up-stratigraphy from porphyritic intrusions, potentially sourcing the mineralizing fluids.

An updated April 4, 2019, NI 43-101 compliant mineral resource estimate for the VOK deposit, combining Measured plus Indicated categories, quantified 18.7 million tonnes grading 14.18 g/t gold and 81.6 g/t silver for contained totals of 8.5 million ounces of gold and 48.7 million ounces of silver (Pretium Resources Inc. news release, April 4, 2019). The Brucejack mine was commissioned in mid-2017 and is currently ramping up to mining at a targeted rate of 2,700 tonnes per day, utilizing long-hole stoping methods.

Production at the **Silbak-Premier** mine began in about 1918 and continued intermittently until 1968. Open pit mining commenced in 1989, through to 1996. The operations have milled nearly 5.9 million tonnes of ore, recovering approximately 62 tonnes of gold and 1,333 tonnes of silver, with associated lead, zinc, copper and cadmium (BC Minfile No. 104B 054). As of January 1997, diluted Proven plus Probable Reserves were reported to be 350,140 tonnes grading 7.2 g/t gold, 37.7 g/t silver and 1.6% zinc (George Cross newsletter No. 26, February 6, 1997).

Figure 9. Map of northwestern British Columbia displaying the Golden Triangle outlined in red

The Silbak-Premier orebody is hosted in andesite flows, andesite breccia and lapilli tuff of the Unuk River Formation (a sub-set of the Hazelton Group). The volcanic rocks have been intruded by potassium feldspar porphyry dykes of the Early Jurassic Texas Creek Plutonic Suite. The dykes, spatially associated with the deposit, are historically known as “Premier Porphyry”, and they are believed to be Lower Jurassic in age.

Hydrothermal alteration zones related to the mineralizing system are represented by a proximal silicification/quartz stockwork with potassium feldspar and/or sericite-dominated alteration. Peripheral to the mineralization is characterized by a propylitic alteration assemblage comprising carbonate, chlorite and pyrite. The variable intensity and type of alteration is partially controlled by host lithology and fracture intensity, as well as the position along strike and the elevation in the hydrothermal system. The most distinct characteristic of the volcanic rocks surrounding the deposit is the pervasive carbonate, chlorite and clay alteration.

The mineralized bodies are predominantly discordant, but locally concordant with the moderately northwest-dipping andesite flows, breccias and dacite flows. Mineralization occurs along two trends; a steeply northwest dipping Main Zone and a steep to vertical West Zone. These trends appear to represent structural controls to the mineralization and the emplacement of the dacite porphyry intrusions. Most production came from an area within 500 metres of the intersection of these two zones.

There are at least four styles of mineralization, comprising textures of stockwork and siliceous breccia, to locally layered and massive sulphide-rich mineralization. Sulphide content ranges from less than 5% up to 75% and sulphides consists of pyrite, sphalerite and galena, with minor tetrahedrite, chalcopyrite, arsenopyrite and local pyrrhotite. Bonanza ore was reported to comprise native gold, electrum, pyrargyrite, polybasite, argentite and native silver. Gangue minerals include potassium feldspar , quartz, chlorite and carbonates. A hybrid genesis model combining epigenetic vein and porphyry copper characteristics compliments mineralization and alteration observed.

The **Snip** mine was developed on another high-grade auriferous-vein deposit in the area. The mineralization occurs within a southwest-dipping shear vein system within Upper Triassic Stuhini Group sedimentary rocks, which are intruded by Early Jurassic age stocks and plutons. The Snip deposit occurs within the southeast trending “Bronson Structural Corridor”, which appears to be associated with a number of significant deposits within the Iskut River area. The mine produced approximately 1 million ounces of gold between 1991 and 1999 at an average grade of 25 g/t. Approximately 60% of production was obtained from the Twin Zone, a 0.5 to 15 metre-wide sheared quartz-carbonate-sulphide vein system that cuts massive bedded greywacke and siltstone. Sub-parallel structures in the footwall of the Twin Zone accounted for the remainder of production. Total sulphide content in the veins seldom exceeded two percent, and was represented by minor pyrrhotite, arsenopyrite, sphalerite, chalcopyrite and rare galena (BC Minfile No. 104B 004).

The **Red Mountain** deposit comprises gold-silver mineralization in several discrete zones within Middle to Late Triassic sedimentary rocks and Early Jurassic volcaniclastic rocks that are intruded by the Early Jurassic Goldslide Stock, which Grove (1986) correlates with the Texas Creek Plutonic Suite (BC Assessment Report: 20971). Features associated with the irregular bodies of monzodiorite, such as contact breccias, igneous breccia dykes and the existence of intrusive clasts in volcanic rocks, suggest that the intrusions were feeders to overlying volcanic units.

A wide contact breccia zone between the volcano-sedimentary package and porphyritic monzodiorite stock is characterized by argillite and/or pyroclastic rock fragments within an intrusive matrix. Quartz stockwork is locally developed in the zone, and accompanied by weak to intense silicification, sericitization and propylitization. An extensive halo of pyrite-sericite alteration surrounds the intrusion.

Anomalous gold mineralization (>0.3 g/t) occurs at the transition from pyrite to overlying pyrrhotite dominant alteration zones over an area of more than one square kilometre. Within this anomalous zone, high-grade gold-silver mineralization grading between 3 and 20 g/t Au, lies within 5 to 29 metre-thick, semi-tabular, pyrite-pyrrhotite stockwork zones, accompanied by intense sericitic alteration and encompassed by an area of disseminated sphalerite and pyrrhotite.

Observed lithologies and alteration zoning indicates that mineralization formed in a subvolcanic environment at the top of the Goldslide intrusions and at the base of the Early Jurassic volcanic pile. The Goldslide porphyry is interpreted to be the mineralizing intrusion and the relationships with the mineral zones show similarities common to many porphyry systems (Rhys, 1995).

A NI 43-101 compliant resource estimate for Red Mountain calculated in November, 2019 (Arseneau, 2019) reported Measured resources of 1,919,600 tonnes grading 8.81 g/t Au and 28.31 g/t Ag at a cut-off grade of 3.0 g/t Au and Indicated Resources of 1,270,500 tonnes grading 5.85 g/t Au and 10.01 g/t Ag, also with a cut-off grade of 3.0 g/t Au. The Red Mountain calculated Measured plus Indicated resources includes 782,600 oz of gold and 2,162,200 oz of silver at a 3.0 g/t Au cut-off grade.

Scottie Gold comprises a precious metals-enriched vein type deposit. Veins are hosted by andesitic volcaniclastic rocks of the Lower-Middle Jurassic Unuk River Formation of the Hazelton Group, near the contact with a large stock. These strata are cut by mineralized veins and faults, as well as lamprophyre, microdiorite and porphyry dykes.

An Early Jurassic stock, consisting of hornblende quartz monzonite to hornblende granodiorite, lies to the northwest of the deposit. A wide, irregular aureole within and around the stock is characterized by an inner envelope containing a pervasively silicified contact zone hosting fine disseminated pyrrhotite and pyrite, decreasing outwardly to less altered volcanic breccias. The intrusive rocks are locally sheared and chloritized, particularly where transected by the Morris Summit fault.

Structurally, the Scottie property is dominated by a set of north-trending faults, the most prevalent of which is the west dipping Morris Summit fault. West of the Morris Summit fault, east-west striking faults and lineations are common, while areas to the east of it is cut by a suite of north-trending microdiorite dykes.

The Scottie deposit consists of several flat-lying mineralized quartz-carbonate veins, each forming an en echelon or "ladder" vein pattern across widths of tens of metres, between pairs of northwest-trending steeply dipping veins, and extending to depths of up to 300 metres. The veins are components of secondary shears along the Morris Summit fault and are up to 7 metres wide, averaging 2 metres in width. The Main zone is northwest striking and three mineralized splays from this structure strike east-west and dip steeply north. The overall mineralized area measures about 400 by 250 by 300 metres.

The main veins of the "ladders" occur within near-vertical fracture zones bordered by siliceous alteration envelopes with poorly defined borders. The veins contain variable sulphide content, with common lenses of massive sulphide consisting largely of pyrrhotite and pyrite, as well as subordinate sphalerite, chalcopyrite, galena, arsenopyrite, tetrahedrite and gold.

Exploration work was undertaken periodically on the Scottie Gold property commencing in the 1930s. Scottie Gold Mines put the property into production in 1981 through to 1984, and they mined 2.98 tonnes of gold and 1.6 tonnes of silver from 160,000 tonnes of ore, with an average grade of 18.6 g/t Au. Non-compliant historical resource estimates suggest underground mineable Measured Reserves of approximately 29,000 tonnes grading 18.5 g/t Au, as well as Indicated plus Inferred Resources of 223,000 tonnes grading 8.5 g/t Au and 4.3 g/t Ag (BC Minfile No. 104B 034).

The region surrounding the Sheelagh property also contains several large Au-Cu porphyry systems associated with Late Triassic to Early Jurassic intrusions which are likely the main sources for much of the mineralization in the area. Below are brief summaries of some of the porphyry deposits in the area.

Comprehensive drilling programs by Seabridge Gold Inc. on the **KSM** property have outlined four potentially mineable deposits along a 12 kilometre-long northeasterly trend. On March 12, 2019, Seabridge announced independent updated resource estimates for the KSM deposits (Kerr, Sulphurets, Mitchell & Iron Cap) as follows: Proven and Probable Mineral Reserves of 2,198 million tonnes averaging 0.55 g/t gold, 0.21% copper, 2.6 g/t silver, and 42.6 ppm molybdenum; and Measured plus Indicated Mineral Resources totalling 2.98 billion tonnes averaging 0.52 g/t gold, 0.21% copper and 2.8 g/t silver. An additional 4.56 billion tonnes are estimated in the Inferred Resource category grading 0.38 g/t gold, 0.32% copper and 2.4 g/t silver.

The mineral bodies at KSM are associated with the Early Jurassic “Mitchell Intrusions”, high level diorite to monzonite plugs and dykes that intrude volcanic and sedimentary rocks of the Stuhini and Hazelton groups. The Iron Cap deposit, the northernmost of the four deposits, displays similar alteration to the others, with pervasive silicification, lesser sericitization and chloritization, and containing typically 3-5% disseminated pyrite. The intense silicification overprints earlier potassic and chloritic alteration, while phyllic alteration is present, is less pervasive than at the nearby Mitchell deposit. Copper bearing zones at Iron Cap demonstrate higher-grades and more extensive potassic alteration than some of the other deposits, and this is believed to be consistent with its deposition primarily within intrusive host rocks that presented a deeper and hotter environment. Associated with the silicification at Iron Cap are wide zones of hydrothermal brecciation, sporadic metre-scale quartz-pyrite-chalcopyrite veins and later centimetre-scale quartz-carbonate-pyrite-chalcopyrite-sphalerite-galena-tetrahedrite veins, providing evidence of multi-stage mineralizing events.

At KSM, Ghaffari et al. (2016), envisage a combined open-pit and underground block caving mining operation projected to operate for 53 years. During the initial 33 years, open pit production would average 130,000 tonnes per day, thereafter reducing to 95,000 tonnes per day from underground operations. Flotation concentrate would be produced on site and trucked to Stewart, for shipment to smelters.

The **Red Chris** porphyry copper-gold deposit, previously owned by Imperial Metals (now 70% owned by Newcrest Mining as of August 15, 2019), commenced commercial production in 2015. The deposit is hosted by a Late Triassic diorite to monzonite body that has intruded Late Triassic Stuhini Group volcanic and sedimentary rocks. As of September 30, 2015, combined open pit and underground block cave Measured plus Indicated resources at Red Chris totalled 1.035 billion tonnes averaging 0.35% copper, 0.35

g/t gold and 1.14 g/t silver (Gillstrom et al. 2015). The open pit resources are somewhat lower grade, but still

847.9 million tonnes averaging 0.31% copper, 0.27 g/t gold and 1.01 g/t silver. Production is currently from two pits (Main and East) at an average of about 30,000 tonnes per day, with plans for a future increase in mining capacity. Concentrate is produced on site and trucked to Stewart for shipping overseas.

At **Schaft Creek**, porphyry copper-gold-molybdenum-silver mineralization consisting of pyrite, chalcopyrite, bornite and molybdenite occur predominantly in fractured to brecciated andesitic volcanic rocks of the Stuhini Group, which are intruded by augite porphyry basalt and quartz diorite dykes emanating from the nearby Late Triassic Hickman batholith. Less than ten percent of the mineralization occurs in intrusive rocks. The main deposit occurs within the bornite zone, with pyrite on the periphery.

Two phases of mineralization are present. The first phase comprises hydrothermal veins and breccias, and minor disseminations consisting of bornite, chalcopyrite, molybdenite, and pyrite, with accompanied potassic and sericite-chlorite alteration. The second phase is less extensive, and consists of veins of molybdenite and local specularite, as well as copper-lead-zinc sulphide veins with little associated alteration.

Mineralization is predominantly fracture-controlled and occur in dry fractures or combined with quartz and/or quartz-calcite veinlets within the andesitic volcanic rocks. The sulphide minerals within the intrusive rocks are usually disseminated, seemingly replacing mafic minerals. Trace amounts of covellite, chalcocite, tetrahedrite and native copper have been identified. Minor galena and sphalerite occupy breccia zones and in small calcite veins. Gold and silver are associated with the sulphide minerals.

A January 2013, NI 43-101 compliant feasibility study for the Schaft Creek project proposed a 130,000 tonne per day open pit mine, with Proven plus Probable Reserves of 940.8 million tonnes grading 0.27% copper, 0.19 g/t gold, 0.018% molybdenum and 1.72 g/t silver containing 5.6 billion pounds of copper, 5.7 million ounces of gold, 363.5 million pounds of molybdenum and 51.7 million ounces of silver and annual production of 105,000 tonnes copper, 201,000 ounces gold, 1.2 million ounces silver and 10.2 million pounds molybdenum (Copper Fox website). The feasibility study contemplated a 21-year mine life. The owners are continuing exploration and collection of geotechnical data prior to making a production decision.

The **Galore Creek** deposit contains at least twelve alkalic porphyry copper-gold deposits within the Galore Creek syenite complex, which is roughly 5 by 2.5 kilometres in area. This complex comprises a series of Late Triassic to Early Jurassic orthoclase-porphyry syenitic bodies, which have intruded coeval Upper Triassic Stuhini Group volcanic rocks and related sedimentary rocks.

The deposits are hosted primarily by highly altered volcanic rocks and pipe-like breccias adjacent to syenite dykes and stocks. Typically, the deposits are manto-shaped and have a north to northeast trend related to the syenite contacts and zones of structural weakness. Host rocks have commonly been skarnified, and original rock types are unclear. The term "hornfels" was frequently applied to these meta-volcanic rocks in the early stages of exploration.

An extensive hydrothermal alteration system led to the formation of large gossans. Potassic alteration has turned the syenites and volcanic rocks to pink, white and orange, and are composed mostly of orthoclase. Propylitic alteration, best developed in the syenitic rocks, consists of chlorite and calcite +/- albite and epidote alteration assemblages. Overprinted calc-silicate alteration, consisting of abundant garnet, diopside, epidote, albite and anhydrite is found locally.

As of September 2011, the Galore Creek deposit had reported Proven plus Probable Reserves of 528 million tonnes grading 0.59% copper, 0.32 g/t gold and 6.02 g/t silver containing 8.8 billion pounds of copper, 5.45 million ounces of gold and 102.1 million ounces of silver (Gill, et al. 2011). A prefeasibility study published in 2011 envisaged a large-scale open-pit mine providing ore to a process plant at a nominal rate of 95,000 tonnes per day over an approximate 18-year mine life. Concentrate would be produced and transported to the port of Stewart for shipment to various international destinations. The owners are undertaking environmental studies and seeking ways to optimize the economics of the project.

The area near the Sheelagh property has also been explored for volcanogenic massive sulphide (VMS) mineral occurrences since the discovery of the nearby Eskay Creek and Granduc deposits.

Eskay Creek was, during its operation, among the world's richest gold-silver mines. Host rocks are volcano-sedimentary rocks of the Middle Jurassic Unuk River Formation of the Upper Hazelton Group. Two styles of mineralization occur at Eskay Creek deposit: 1) stratiform polymetallic sulphide and sulfosalt mineralization deposited in a transitional environment between a hot spring and deeper water VMS exhalative system; and 2) high-grade gold and silver discordant stockwork feeder zones. Mineral bodies have diverse geochemical signatures dominated by Au, Ag, Cu and Zn and often accompanied by elevated As, Sb, Pb, Te and Hg. Mineralization displays both lateral and vertical zoning. Antimony, arsenic and mercury-rich mineral assemblages in the south part of the deposit grade into zinc, lead and copper-rich assemblages in the north. Vertical zoning is expressed as a systematic increase in gold, silver and base metal content up-section.

Mudstone host rocks are overprinted with varying amounts of chlorite, muscovite, chalcedonic silica, calcite and dolomite, with ubiquitous pyrobitumen. Beneath the stratiform mineralization within the "contact" mudstone unit, the footwall rhyolite unit is highly fractured and intensely chlorite and sericite altered. Fracturing, alteration intensity and metal tenor appear to increase toward the upper contact. Within 3 to 4 metres of the upper contact, rhyolite-hosted mineralization is characterized either by massive chlorite-gypsum-barite rock or by quartz-muscovite-sulphide breccia. Mineralization in footwall rocks commonly occurs as semi-massive to disseminated, crystalline pyrite, sphalerite, tetrahedrite, galena and chalcopyrite, with rare native gold.

The most important zone is the 21, which hosts most of the mined reserves and consists of a stratabound sheet within carbonaceous mudstones and underlying rhyolite-mudstone breccia. In the north, sulphide layers also occur in the hanging wall andesite unit. As traced by diamond drilling the entire zone extends 1400 metres along strike, 250 metres downdip and is from 5 to 45 metres thick.

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, as well as 4,942 tonnes of silver, at an average grade of 2,221 g/t Ag (BC Minfile No. 104B 008).

The **Granduc** deposit straddles the South Unuk shear zone, along the South Unuk River fault, which forms the contact between Upper Triassic Stuhini metavolcanic rocks and metasedimentary rocks to the west, and the mainly volcanic rocks of the Lower to Middle Jurassic Hazelton Group to the east. The deposit is mostly bound to sheared rocks of the Stuhini Group, and it has been interpreted as a Besshi-type VMS copper deposit.

The Granduc ore deposit consists of a series of strataform massive sulphide lenses, localized within a complex sequence of volcano-sedimentary rocks that have been deformed by cataclasis. Recrystallization of rocks hosting the ore horizon has converted the fine grained laminated rocks to compositionally banded, brown to pale grey quartz-rich biotite and sericite schists, quartzites and metacherts. Feldspathic and andesitic tuffs are metamorphosed into massive, or banded biotite, and biotite-epidote-actinolite schists. Massive rocks are more common in the lower half of the ore horizon, while the upper part of it consists of finely laminated quartz-rich brown biotite schists which are derived from silty argillites.

Several ore zones make up the Granduc deposit and feature pancake-like, overlapping, and commonly merging lenses, which extends vertically for 760 metres, laterally for 1200 metres and over a 120 to 240 metre lenticular width. Several steep north trending faults cut the orebodies, which have been offset by apparent right-hand strike-slip movement. The orebodies, designated as A to F, consist mainly of pyrite, chalcopyrite, pyrrhotite, magnetite, sphalerite, galena, arsenopyrite, bornite and cobaltite. Gangue includes blocks of brecciated country rock, quartz as lenses, stringers and blebs, recrystallized coarse-grained calcite as lenses and stringers, and apatite. Minor alteration minerals comprise calc-silicate lenses and tourmaline.

Total production at the Granduc mine from 1971 to 1978 and 1981 to 1984 was 15.5 million tonnes of ore from which 124,048,961 grams of silver, 2,000,061 grams of gold and 190,143,710 kilograms of copper were recovered. Ore reserves before production began in 1971 were 39,316,435 tonnes grading 1.73 per cent copper. Inventory in 1986 was reported as 9.89 million tonnes grading 1.79 per cent copper with minor gold and silver (Minfile No. 104B 021).

Many mineral occurrences found near the Sheelagh property are related to large regional structures, including the South Unuk/Harrymel Fault, which transects the northern part of the property. The top of the Stuhini Group is a regional angular unconformity, overlain by Hazelton Group strata, the so-called BCGS "Red Line" interpreted by the BC Geological survey to be a key to the localization of many of the mineral deposits in the Golden Triangle.

7.0 Mineralization

The only known mineralization on the property was discovered in 1996 by Kenrich Mining and consists of the Sheelagh Creek quartz vein (Minfile Number: 104B 389).

Sheelagh Creek Occurrence

The Sheelagh Creek occurrence is located on the southeast part of the property within the west side of Sheelagh Creek, exposed on the northeast wall of a northwest-southeast trending gulch (Figures 8 and 9). The showing consists of a 2.5 to 3.5 m wide quartz vein striking approximately 45 degrees and dipping 75 degrees to the northwest. Mineralization comprises disseminated to semi-massive pods of pyrite. Three 1.0 m chip samples were taken across the face of vein and produced assay results of 15.77 g/t Au and 41.83 g/t Ag over 3.0 m (Assessment Report: 24965). A selected grab sample yielded values of 61.37 g/t Au and 109.4 g/t Ag (Assessment Report: 24965). In 2016, samples across the showing reported a much more modest weighted average: 4.33 g/t Au and 15.23 g/t Ag over 1.85 m with a selected grab containing 36.7 g/t Au and 101.0 g/t Ag (Assessment Report: 36395).

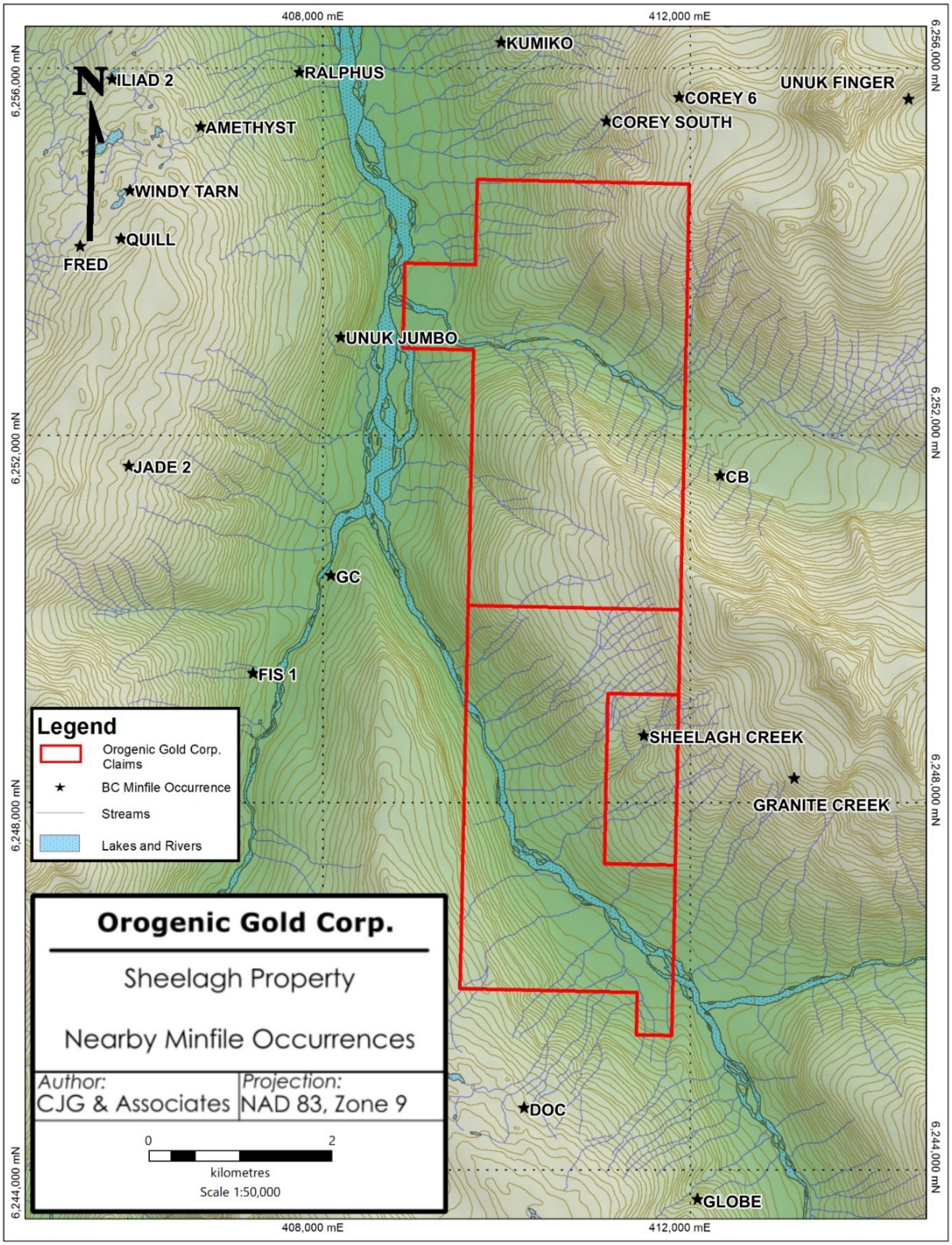

Figure 10. Sheelagh property and surrounding mineral occurrences

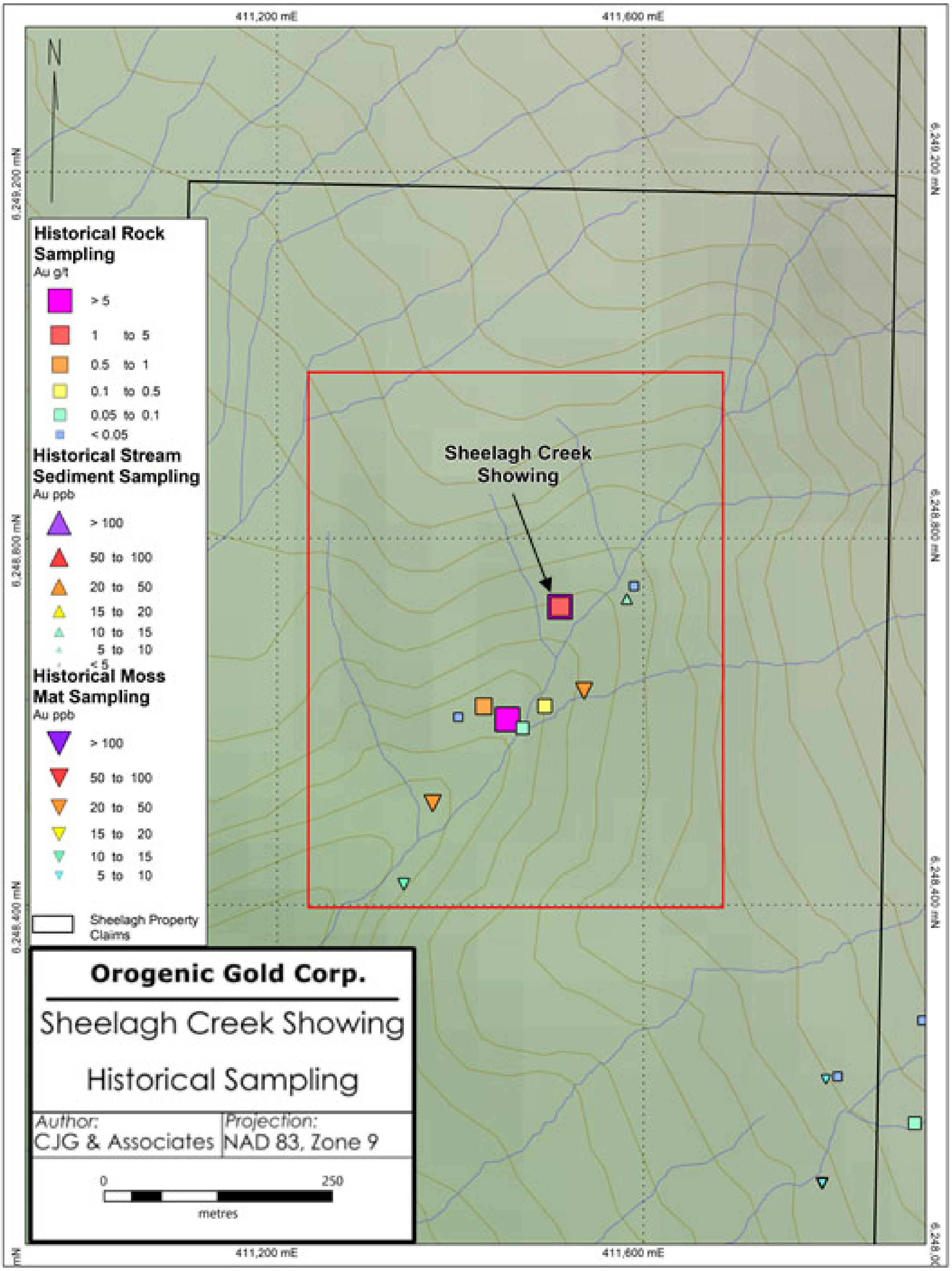

Figure 11. Sheelagh Creek Showing and historical rock and stream sediment geochemistry

8.0 2019 Rock Sampling Program

The 2019 rock sampling program took place over 1 day on August 5th and occurred in the vicinity of the Sheelagh Creek Showing. The purpose of the program was to evaluate and potentially extend the strike length of the Sheelagh Creek quartz vein and to determine its economic potential.

8.1 Rock Sampling Procedures & Analytical Techniques

On August 5th, 2019, two geologists from CJ Greig & Associates conducted a rock sampling and prospecting program on the southeast part of the Sheelagh property surrounding the Sheelagh Creek Showing. A total of 6 rock samples were collected, 3 of which were collected from the Sheelagh Creek Showing, while the other 3 were collected from vein or fault material found along outcrop exposures within the Sheelagh Creek drainage. Rock samples typically consists of grabs with the exception of two chip samples. For each sample the geological details were described, including host rock type, any alteration observed, sulphide minerals recognized, style of mineralization, structure types and orientations, as well as comments providing more detailed information. This data, as well as UTM coordinates for each sample, is listed in Appendix C. All field measurements and figures use NAD83, UTM Zone 9 datum.

Rock samples were placed into heavy plastic bags which included a waterproof, barcoded and numbered sample tag provided by ALS Global Geochemistry. The heavy plastic bags were then sealed with flagging tape and then packed into sacks and transported to an ALS preparation lab in Terrace. Once received at the preparation lab in Terrace the samples were finely crushed to better than 70% passing -2mm. The samples were then split using a riffle splitter. The split was then pulverized up to 250g to better than 85% passing minus 75 micron. The crushed material was then weighed to 0.5g and digested by aqua-regia acid digestion and then analyzed for 35 elements by ICP-AES. Gold results were obtained by fire assaying 30g of the same pulverized material and then analyzed by ICP-AES. ALS analytical certificates are located in Appendix D.

8.2 Evaluation of Rock Geochemical Results

A total of 6 rock samples were collected over the course of 1 day, all within the Sheelagh Creek and tributary drainages. The first part of sampling was done over the Sheelagh Creek Showing, to confirm the style of mineralization and potentially extend the vein along strike. The second part of the sampling was prospecting-based, with samples collected directly south and northeast of the Sheelagh Creek Showing. Rock sample locations and their respective sample identifications are located on Figure 10, while results for gold and silver are located on Figures 11 and 12, respectively.

Two rock samples were collected over the mineralized Sheelagh Creek vein, one as a 1.7m wide chip and another was collected as a high grade grab. Sample material from the Sheelagh vein consisted of white quartz hosting 10 to 15% clotty to disseminated pyrite. Highlights from the sampling produced 9.20 g/t Au and 16.7 g/t Ag over 1.7m (Y738096), while a high grade grab sample returned 12.6 g/t and 23.7 g/t Ag (Y738097). One 0.25m chip sample collected close to the Sheelagh Creek Showing over a 0.25m wide, rusty weathered quartz vein that pinched out over 1m returned 2.4 g/t Au and 6.3 g/t Ag (Y738098).

Two rock samples collected approximately 200m south of the Sheelagh Creek Showing returned low values for all elements of interest (Y738099 and Y738100), while a rock sample collected 200 m northeast of the Sheelagh Creek vein returned elevated gold (0.172 g/t) from an approximately 5 cm wide rusty weathered white to grey quartz vein hosting medium grained subhedral to euhedral pyrite (1-2%) along vein selvages, hosted within a gneissic outcrop. The vein appeared to have a 5 m long strike length before pinching out.

9.0 2019 Talus Fines and Stream Sediment Sampling Program

Talus fines and stream sediment sampling also took place in conjunction with the rock sampling program described in the prior section. Three stream sediment samples were collected from tributary drainages while one sample was collected from Sheelagh Creek. Two talus fines were collected from gulches with a thick accumulation of sediment shed from higher elevations.

9.1 Talus and Stream Sediment Sampling Procedures and Analytical Techniques

Stream sediment samples were collected from a minimum of 500 grams of silt trapped within roots underneath moss mats. The silt material was then placed into pre-labelled semi-waterproof kraft paper bags and allowed to dry on aerated racks for a week. Talus fines samples were collected from fine sediment accumulations within gulches. The drying procedure for the silt samples noted above was identical to the drying procedure for the talus fine samples.

Once the samples were allowed to dry for a week, they were then organized and packed into pre-labelled poly-bags. The poly-bags were then placed into durable sacks that were then sealed with flagging tape.

The sacks filled with talus fines and stream sediment samples were then shipped to ALS Geochemistry in North Vancouver. Once received at the lab, the samples were dry screened to 180 microns (80 mesh), saving both plus and minus fractions. Approximately 0.50g of the 80 mesh material was then digested by aqua-regia acid and then analyzed for 35 elements by ICP-AES. Approximately 30g of the same material was then analyzed by fire assay and ICP-AES to obtain precise gold values. Sample locations are located in Appendix E, while Analytical certificates are located in Appendix F.

9.2 Evaluation of Talus and Stream Sediment Sample Results

A total of 4 stream sediment and 2 talus fine samples were collected within and around the Sheelagh Creek drainage. Stream sediment and talus fine sample locations along with their respective identifications are located on Figure 10, while results for gold and silver are located on Figures 11 and 12, respectively.

Two stream sediment samples, SCAA19-005 and SCAA19-006, collected northeast of the Sheelagh Creek vein, returned anomalous values of gold of 34 and 23 ppb, respectively. Stream sediment sample SCAA19-005 was collected along trend of the Sheelagh Creek vein, in a small drainage to the northeast, and may represent a down stream dispersion of sediment shedding from an extension of the vein. Two talus fine samples were collected in small gulches or talus slopes. One of the samples was collected within the gulch that hosts the Sheelagh Creek Showing (SCAA19-001) and returned a strongly anomalous value for gold (74 ppb) and can be used a baseline for future soil or talus sampling in the Sheelagh Creek area.

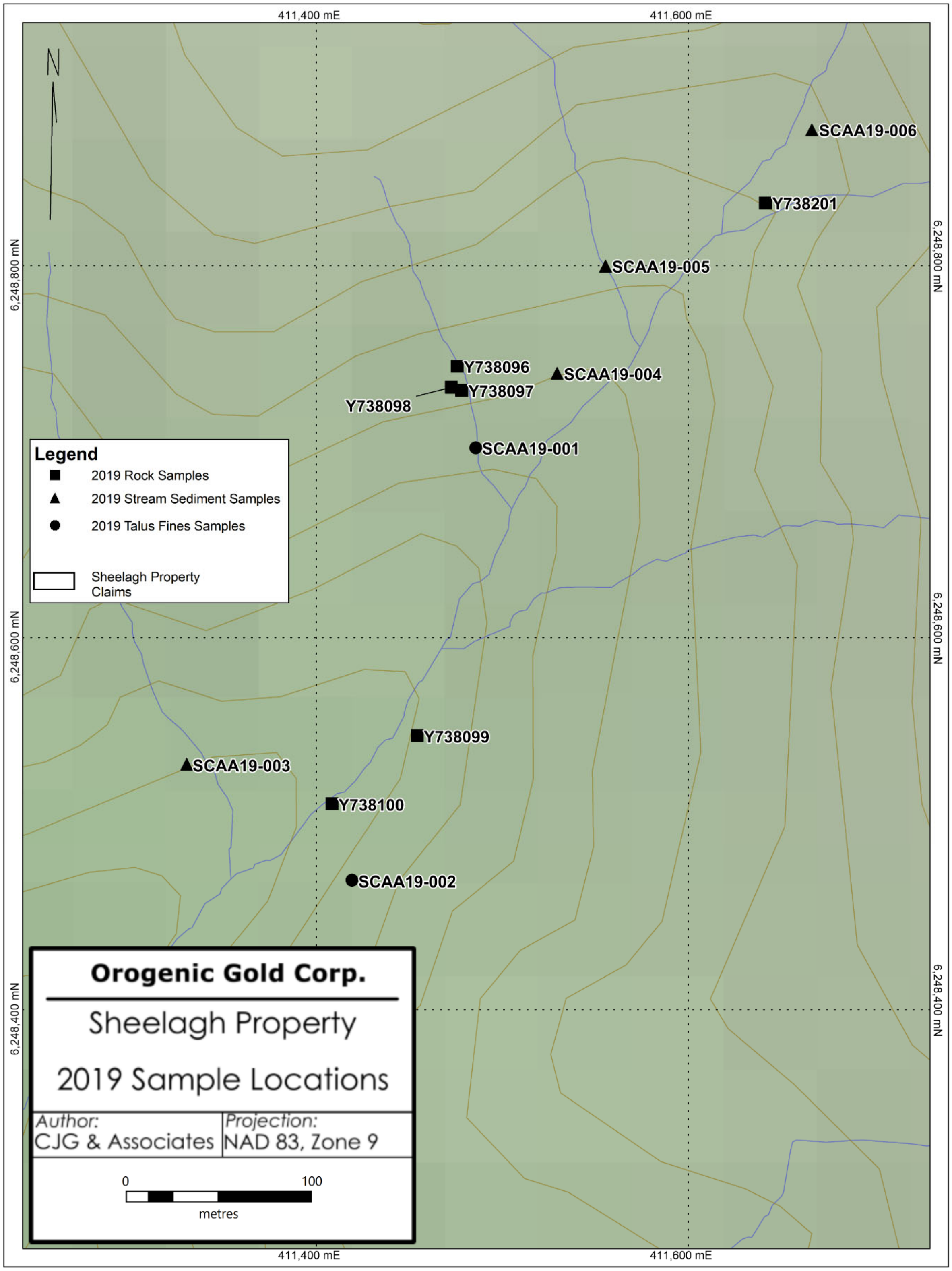

Figure 12. Sample locations and identifications from the 2019 field work program

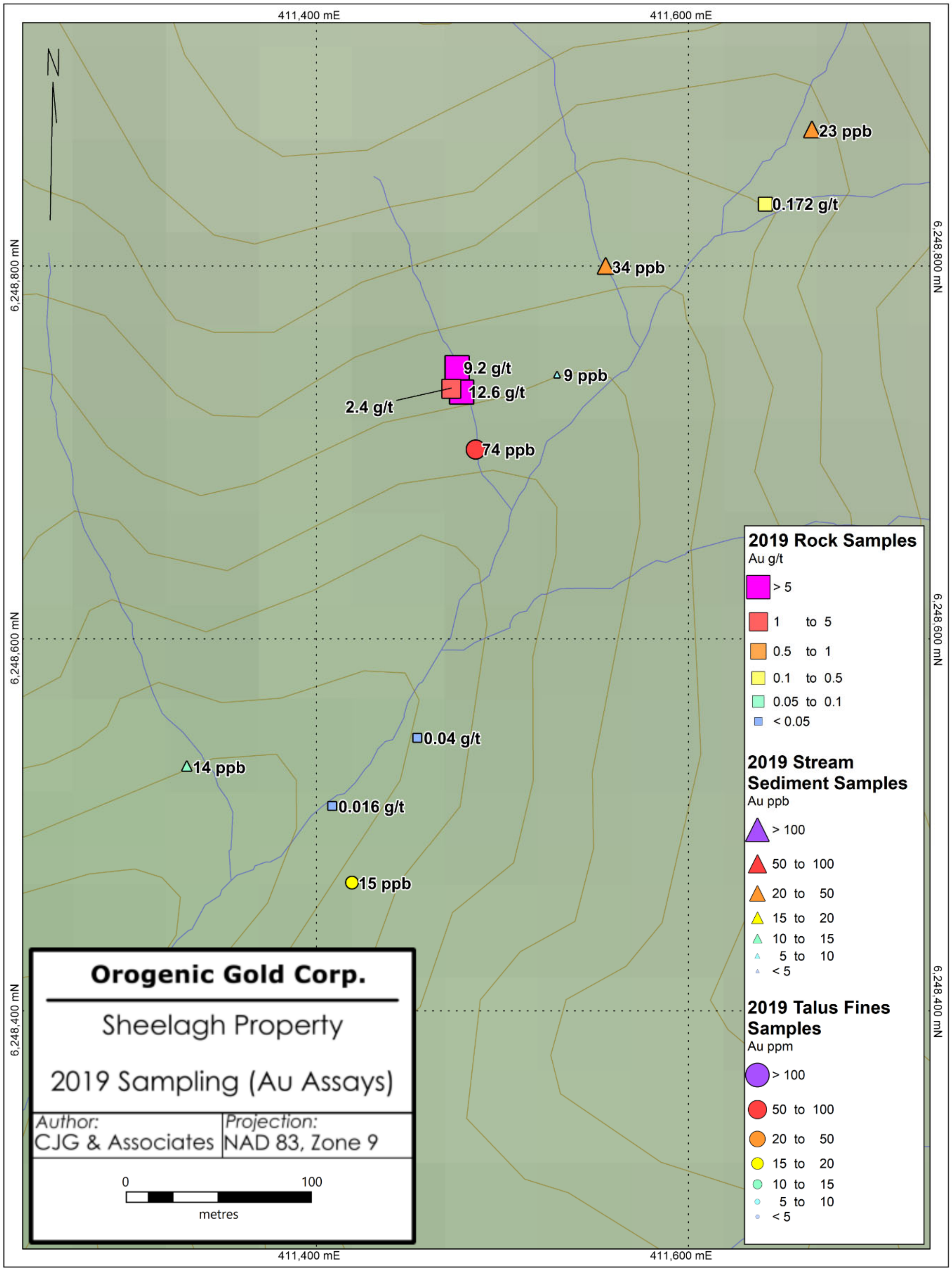

Figure 13. Sample locations with thematic display for gold.

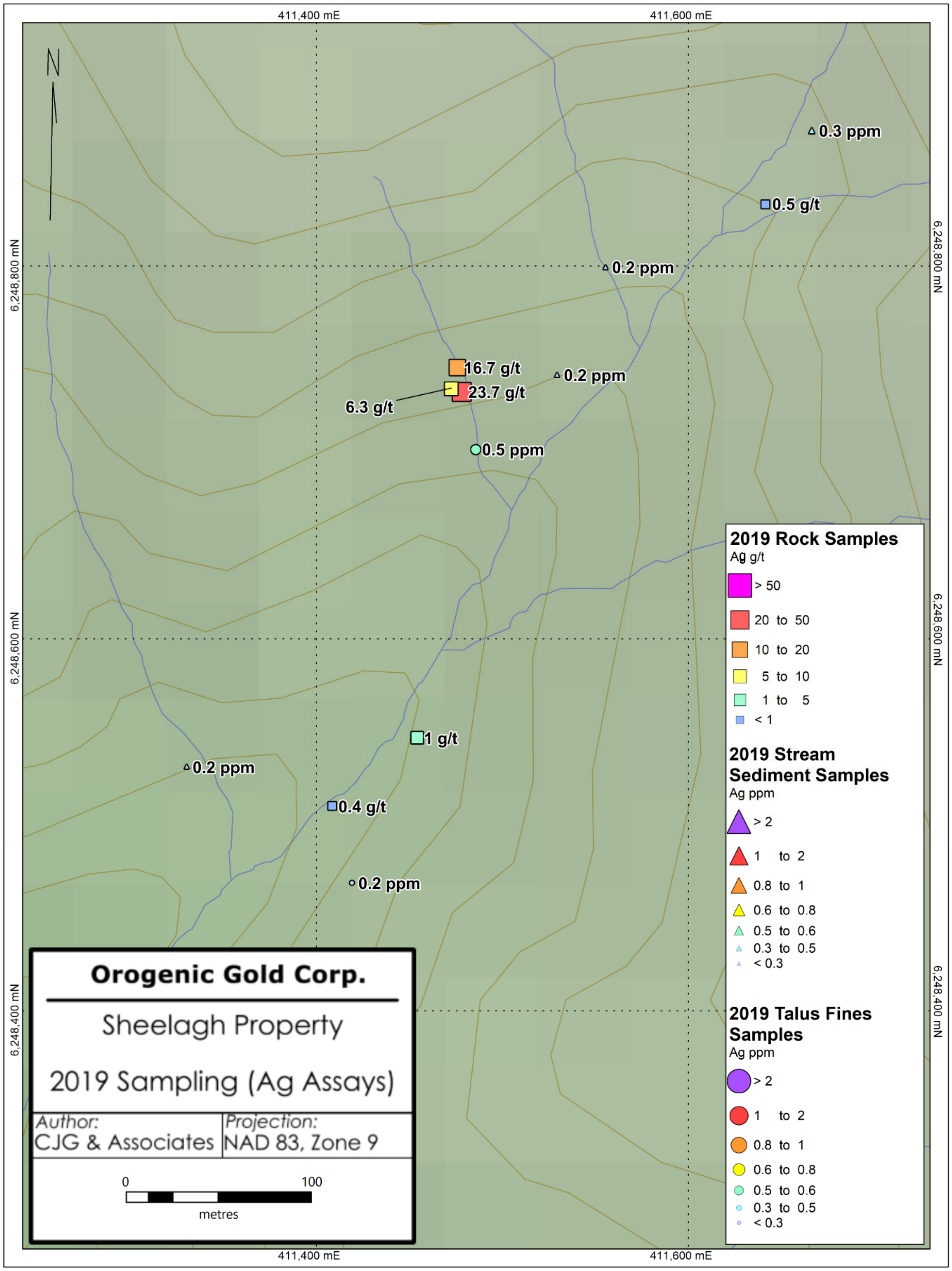

Figure 14. Sample locations with thematic display for silver.

10.0 Conclusions

The 2019 field work program on the Sheelagh property was successful in re-locating and re-sampling the Sheelagh Creek Showing, as well as prospecting several other areas within the Sheelagh Creek drainage. Talus fines and stream sediment samples collected returned encouraging results for gold and should be considered as a strong candidate for future follow up work on the Sheelagh property.

Highlights from the work program include a rock sample (Y738096) which was collected from the Sheelagh Creek Showing that returned 9.20 g/t Au and 16.7 g/t Ag over 1.7m, while a high grade grab sample from the same vein returned 12.6 g/t and 23.7 g/t Ag (rock sample: Y738097). Stream sediment and talus fine sampling also returned encouraging results in and around the Sheelagh Creek Showing. A stream sediment sample collected northeast of the Sheelagh Creek Showing returned 34 ppb Au, while a talus fine sample collected from the gulch which hosts the Sheelagh Creek Showing returned 74 ppb Au.

Future work on the Sheelagh property should include a high resolution airborne magnetic survey over the entire Sheelagh 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 which may host or offset high-grade gold veins. Once the magnetic survey is complete, and the data is interpreted, it is recommended that a soil and stream sediment geochemical sampling, and prospecting program be carried out to follow up prospective features identified by the magnetic survey, as well as in areas of encouraging historical stream sediment geochemistry. Once the most promising targets are identified, ground based Induced Polarization surveys may be recommended in areas of glacial and/or colluvial cover.

Respectfully submitted,

C.J Greig & Associates Ltd.

A. Albano, B.Sc., GIT,

A. Mitchell, B.Sc., P.Geo.,

N. Prowse, B.Sc., M.Sc.

11.0 References

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.

Arseneau, G.D. 2019. Mineral Resource Update for the Red Mountain Gold Project, Northwestern BC, Canada.; https://ascotgold.com/site/assets/files/4743/acs_ascot_redmtn_2019_final_report.pdf 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.

Freeze, A.C., Glover, K.J., Scott, B.M. 1989. Assessment Report on the Doc Property for Echo Bary Mines, Magna Ventures and Silver Princess; British Columba Ministry of Energy and Mines, Assessment Report No. 18622.

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. 2016. 2016 KSM (Kerr-Sulphurets-Mitchell) prefeasibility study update and preliminary economic assessment; private report for Seabridge Gold Inc., on Sedar website, https://www.sedar.com/GetFile.do?lang=EN&docClass=24&issuerNo=00007531&issuerType=0
3&projectNo=02548688&docId=4006854

Gill, R., Kulla, G, Wortman, G., Melnyk, J., Rogers, D. 2011. Galore Creek Project British Columbia NI 43-101 Technical Report on Pre-Feasibility Study; found at: https://www.gcmc.ca/wp-content/uploads/2018/06/NI-43-101-Prefeasibility-Study-Galore-Creek-2011-07-27.pdf

Gillstrom, G., Anand, R., Roberston, S., Sterling, P. 2015. 2012 Technical Report on the Red Chris Copper-Gold Project for Imperial Metals Corporation., in Imperial Metals website: https://www.imperialmetals.com/assets/docs/red-chris-43-101-report-sept-30-2015.pdf

Grove, E.W. 1986. Geology and Mineral Deposits of the Unuk River-Salmon River-Anyox Area; BCMEMPR, Bulletin 63, 434p

Lewis, P.D. 2013. Geological Maps of the Iskut River Area; Metallogenesis of the Iskut River Area, Northwestern B.C. published by MDRU.

Massey, N.W.D, MacIntyre, D.G., Desjardins, P.J. and Cooney, R.T. (2005) Digital geology map of British Columbia: whole province; BC Ministry of Energy and Mines, GeoFile 2005-1.

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. In: Geological Fieldwork 2013, British Columbia Ministry of Energy and Mines, British Columbia Geological Survey Paper 2014-1, pp. 111-140.

Rhys, D.A., Siebe, M., Frostad, S.R., Swanson, C.L., Prefontaine, M.A., Mortensen, J.K., and Smit, H.Q. 1995. Geology and setting of the Red Mountain gold-silver deposits, northwestern British Columbia, *in* Schroeter, T.G., ed., Porphyry Deposits of the Northwestern Cordillera of North America: Canadian Institute of Mining and Metallurgy, and Petroleum, Special Volume 46, p. 811-828.

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.

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

* BC Ministry of Energy, Mines and Petroleum Resources Exploration Assistant available online at http://webmap.em.gov.bc.ca/mapplace/minpot/ex_assist.cfm

* Minfile descriptions are available on-line at http://minfile.gov.bc.ca/searchbasic.aspx

* All BC GSB publications are available on-line at

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

Appendix A: Statements of Qualifications

I, Arron M. Albano, of 950 Tillar Road, Naramata, British Columbia, Canada, hereby certify that:

1. I am a graduate of the University of British Columbia with a B.Sc. (Geological Sciences, 2017) and have practiced my profession continuously from 2014 to present.

2. I have been employed in the geoscience industry for 6 years and have explored for gold and base metals in British Columbia, Canada and Tigray, Ethiopia for junior exploration companies as well as one mid-tier mining company.

3. I am a Geoscientist in Training from the Association of Professional Engineers and Geoscientists of British Columbia (license #202310).

4. I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the technical report, the omission to disclose which makes the technical report misleading.

5. I have no direct or indirect interest in the property described herein, nor do I expect to receive any.

6. I am an author of the report entitled; "Rock, Talus Fines and Stream Sediment Sampling at the Sheelagh Property" dated January 31, 2020.

Dated at Penticton, British Columbia, this 31st day of January, 2020

Respectfully submitted,

"*A M Albano*"

Arron M. Albano, B.Sc., G.I.T.

I, Andrew Mitchell of 1090 Lacombe Road, Kelowna, British Columbia, Canada, hereby certify that:

1. I graduated from the University of British Columbia in 2010 with a B.Sc. in Earth and Environmental Sciences

2. From 2010 to present, I have been actively engaged in mineral exploration in Yukon Territory and British Columbia.

3. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (license #46211)

4. I have personally participated in the field work reported herein and have interpreted all data resulting from this work.

5. I am a co-author of the report entitled: “Rock, Talus Fines and Stream Sediment Sampling at the Sheelagh Property,” dated January 31, 2020.

Dated at Penticton, British Columbia, this 31st day of January, 2020.

Respectfully submitted,

“Andrew James Mitchell”

Andrew J. Mitchell, B.Sc., P.Geo.

I, Neil Prowse, of 1116 Jonathan Drive, Penticton, British Columbia, hereby certify that:

1. I graduated from Carleton University with a B.Sc. in Earth Sciences in 2014, and an M.Sc. in Earth Sciences in 2017.

2. From 2017 to present, I have been actively engaged in mineral exploration in British Columbia.

3. I have personally participated in the field work reported herein and have interpreted all data resulting from this work.

4. I am a co-author of the report entitled: “Rock, Talus Fines and Stream Sediment Sampling at the Sheelagh Property,” dated January 31, 2020.

Dated at Penticton, British Columbia, this 31st day of January, 2020.

Respectfully submitted,

“Neil David Prowse”

Neil D. Prowse, M.Sc.

Appendix B: Statement of Costs

Sheelagh Property - Orogenic Gold Corp.							
Work Invoices							
	July 30 and August 5, 2019	Sheelagh	Arron Albano	1 travel and 1 field day	$1,200.00	Senior Geologist	$600/day (Senior Geologist)
	July 30 and August 5, 2019	Sheelagh	Andrew Mitchell	1 travel and 1 field day	$1,250.00	Project Geologist	$625/day (Managing Geologist)
	August 11 to 15, 2019	Sheelagh	Charles Greig	0.375 days	$300.00	Supervising Geologist	800/day (Supervising Geologist
Pre-field planning	August 8, 2019	Sheelagh	Jeff Rowe	0.5 day	$325.00	Project Geologist - 0 field days	$650/day (Geologist)
Total Pre-field and field labour					**$3,075.00**		
Total labour for report writing and draughting (4 x $625)					**$2,500.00**		
Transportation, Food, Accommodation							
Fuel, accommodation, food	$1,844.78		Camp set-up, food for travel and camp, accommodation at King Edward and camp				
Truck and Trailer Rentals	$241.00		July 30 and August 5, 1 truck @ $95/day and, $0.20/km for 255 km (Terrace to Stewart to Troy Flats).				
Field Equipment charges							
Consumables	$582.60						
Helicopter	$4,600.00						
Geochemistry costs							
Rock Geochemistry	$245.90		6 Rocks				
Soil and Stream Sediment Geochemistry	$210.45		2 talus fines and 4 silt samples				
Miscellaneous							
Field rentals (GPS, radios, sat phone)	$60						
Office equipment , GIS software, Field Gear	$100						
	$7,884.73				**$7,884.73**		
				Grand Total	**$13,459.73**		

Appendix C: Rock Sample Locations and Descriptions

Project	Date	Sampler	Sample_ID	UTM_NAD83E	UTM_NAD83N	Sample_Type (chip, grab, float)	Sample_Width (if applicable)	Sample Material and Type (Vein, Fault, Dyke, Fracture and Host Rock Lithology)	Mineralization_Mineral_%	Mineralization_Texture (fine grained, massive, disseminated, etc.)	Measurement_Type (Vein, Dyke, Bedding, Mineralization, Fault, Fracture)	Strike (RHR)	Dip	Confidence (0-5)	Detailed Notes (location, outcrop, mineralization and alteration description)
Sheelagh	2019-08-05	Andrew Mitchell	Y738096	411475.6505	6248745.92	Vein	1.7 m	Vein	Py 10-15%	clotty disseminations	Vein	260	78	4	1.7 m wide chip sample taken across the Sheelagh Showing. Sheelagh Showing consists of rusty to yellow (sulphur) stained milky white quartz vein hosting clotty disseminations and fracture fillings of fine to medium grained euhedral pyrite. Pyrite represents about 10-15% of vein, but variable across its width.
Sheelagh	2019-08-05	Andrew Mitchell	Y738097	411478.0964	6248732.842	Vein	N/A	Vein	Py 15%	clotty disseminations	N/A	N/A	N/A	N/A	High grade grab sample of the Sheelagh Showing. Same as Y738096 with 15% Pyrite
Sheelagh	2019-08-05	Andrew Mitchell	Y738098	411472.4474	6248734.519	Vein	25 cm	Vein	Py 5%	clotty disseminations	Vein	344	87	3	Up to 25 cm wide rusty weathering quartz vein that pinches out over its 1 m strike length. This vein is separated from the Sheelagh Showing vein.
Sheelagh	2019-08-05	Andrew Mitchell	Y738099	411454.1528	6248547.405	Vein	10 cm	Fault	N/A	N/A	N/A	N/A	N/A	N/A	Rusty to deep purple to pale yellow/green fault zone comprising quartz fragments up to 10 cm with vuggy textures/boxwork textures where it appears sulphides have weathered out. A continuous chip sample was collected along its 1.6 m exposure in a hand trench. Appears to trend SE.
Sheelagh	2019-08-05	Andrew Mitchell	Y738100	411408.3494	6248510.838	Vein	10 cm	Vein	Py 1%	Disseminated	N/A	N/A	N/A	N/A	4 piece composite chip sample of float in talus comprising rusty weathering calcite vein hosting clotty to disseminated fine grained pyrite (1%). Sample represents approximately 1% of the talus within this drainage.
Sheelagh	2019-08-05	Andrew Mitchell	Y738201	411641.3181	6248833.546	Vein	5 cm	Vein	Py 1-2%	Stringers	Vein	85	45	4	Approximately 5 cm wide rusty weathering white to grey quartz vein hosting medium grained subhedral to euhedral pyrite (1-2%) along vein selvages. Taken from outcrop within gneiss. Appears to have about a 5 m long strike length before pinching out.

Appendix D: Rock Sample Analysis Certificates

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

Finalized Date: 28-AUG-2019
Account: ORGOLD

CERTIFICATE TR19197485

Project: Albino Lake

This report is for 6 Rock samples submitted to our lab in Terrace, BC, Canada on 8-AUG-2019.

The following have access to data associated with this certificate:

ARRON ALBANO RICK MILL	ANDREA DEMOSKOFF ANDREW MITCHELL	CHARLES GREIG

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

Finalized Date: 28-AUG-2019
Account: ORGOLD

Project: Albino Lake

CERTIFICATE OF ANALYSIS TR19197485

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	Au-GRA21 Au ppm 0.05	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1
Y738096		1.76	9.20		16.7	0.15	<2	<10	70	<0.5	<2	0.04	<0.5	4	9	3
Y738097		2.42	>10.0	12.60	23.7	0.11	<2	<10	50	<0.5	<2	0.02	<0.5	9	12	4
Y738098		1.19	2.40		6.3	0.10	2	<10	50	<0.5	<2	0.01	<0.5	5	11	5
Y738099		2.63	0.040		1.0	0.30	<2	<10	250	<0.5	2	0.50	<0.5	7	5	2
Y738100		0.79	0.016		0.4	0.65	<2	<10	120	<0.5	<2	3.01	<0.5	12	19	29
Y738201		0.54	0.172		0.5	0.30	7	<10	60	<0.5	<2	0.05	<0.5	5	14	145

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

Finalized Date: 28-AUG-2019
Account: ORGOLD

Project: Albino Lake

CERTIFICATE OF ANALYSIS TR19197485

Sample Description	Method Analyte Units LOD	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1
Y738096		3.29	<10	<1	0.10	110	0.03	50	72	0.02	10	110	28	3.17	<2	<1
Y738097		4.18	<10	<1	0.07	80	0.01	39	55	0.02	14	70	19	4.39	2	<1
Y738098		2.19	<10	<1	0.06	50	0.03	46	17	<0.01	7	70	11	1.76	<2	<1
Y738099		3.57	<10	1	0.19	<10	0.14	42	7	0.02	1	30	5	0.80	<2	<1
Y738100		1.88	<10	1	0.23	<10	0.66	51	1	0.07	39	1130	2	0.79	<2	2
Y738201		1.70	<10	<1	0.08	10	0.13	69	12	0.01	4	120	5	0.94	<2	1

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

Finalized Date: 28-AUG-2019
Account: ORGOLD

Project: Albino Lake

CERTIFICATE OF ANALYSIS TR19197485

Sample Description	Method / Analyte / Units / LOD	ME-ICP41 Sr ppm 1	ME-ICP41 Th ppm 20	ME-ICP41 Ti % 0.01	ME-ICP41 Tl ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2
Y738096		43	<20	<0.01	<10	<10	4	<10	5
Y738097		22	<20	<0.01	<10	<10	2	<10	3
Y738098		6	<20	<0.01	<10	<10	2	<10	3
Y738099		8	<20	<0.01	<10	<10	2	60	2
Y738100		28	<20	0.20	<10	<10	26	<10	12
Y738201		3	<20	0.01	<10	<10	4	<10	6

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

Project: Albino Lake

CERTIFICATE OF ANALYSIS TR19197485

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

	Processed at ALS Terrace located at 2912 Molitor Street, Terrace, BC, Canada.			
Applies to Method:	CRU-31	CRU-QC	LOG-21	PUL-31
	PUL-QC	SPL-21	WEI-21	
	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.			
Applies to Method:	Au-GRA21	Au-ICP21	ME-ICP41	

Appendix E: Talus Fines and Stream Sediment Sample Locations

Project	Date	Sample Type	Sample Identity	UTMZ9_NAD83E	UTMZ9_NAD83N	Elevation (m)
Sheelagh Creek	2019/08/05	Talus Fines	SCAA19-001	411485.5488	6248702.069	972.029907
Sheelagh Creek	2019/08/05	Talus Fines	SCAA19-002	411419.0398	6248469.42	870.162231

Project	Date	Sample Type	Sample Identity	UTMZ9_NAD83E	UTMZ9_NAD83N	Elevation (m)
Sheelagh Creek	2019/08/05	Stream Sediment	SCAA19-003	411330.135	6248531.843	863.442383
Sheelagh Creek	2019/08/05	Stream Sediment	SCAA19-004	411529.3812	6248742.017	904.104065
Sheelagh Creek	2019/08/05	Stream Sediment	SCAA19-005	411555.3566	6248799.706	952.787964
Sheelagh Creek	2019/08/05	Stream Sediment	SCAA19-006	411666.3539	6248872.885	1037.721069

Appendix F: Talus Fines and Stream Sediment Sample Analysis Certificates

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

Finalized Date: 29-AUG-2019
Account: ORGOLD

CERTIFICATE TR19197479

Project: Albino Lake

This report is for 6 Soil samples submitted to our lab in Terrace, BC, Canada on 8-AUG-2019.

The following have access to data associated with this certificate:

ARRON ALBANO	CHARLES GREIG	ANDREW MITCHELL

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

Finalized Date: 29-AUG-2019
Account: ORGOLD

Project: Albino Lake

CERTIFICATE OF ANALYSIS TR19197479

Sample Description	Method Analyte Units LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01
SCAA19-001		2.38	0.074	0.5	2.39	5	<10	640	<0.5	<2	4.14	1.0	25	46	138	4.52
SCAA19-002		1.88	0.015	0.2	2.93	6	<10	380	<0.5	<2	6.98	0.8	34	41	104	4.66
SCAA19-003		1.14	0.014	0.2	0.95	9	<10	130	<0.5	<2	1.27	0.6	13	25	48	2.41
SCAA19-004		1.06	0.009	0.2	1.46	8	<10	150	<0.5	<2	0.75	0.9	18	36	105	4.06
SCAA19-005		0.80	0.034	0.2	1.91	5	<10	180	<0.5	<2	0.89	0.5	18	40	74	3.61
SCAA19-006		1.80	0.023	0.3	1.82	11	<10	190	<0.5	<2	0.98	1.0	20	44	108	4.42

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

Finalized Date: 29-AUG-2019
Account: ORGOLD

Project: Albino Lake

CERTIFICATE OF ANALYSIS TR19197479

Sample Description	Method Analyte Units LOD	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1
SCAA19-001		10	<1	0.40	10	2.40	1360	2	0.02	36	1130	21	0.19	<2	7	52
SCAA19-002		10	<1	0.35	<10	3.30	594	1	0.03	41	670	8	0.06	<2	23	118
SCAA19-003		<10	<1	0.16	10	0.62	400	<1	0.04	20	1160	7	0.07	<2	3	39
SCAA19-004		10	<1	0.30	<10	0.90	489	2	0.06	34	1310	5	0.13	<2	5	58
SCAA19-005		10	<1	0.37	10	1.32	586	1	0.04	28	1140	5	0.03	<2	6	63
SCAA19-006		10	<1	0.38	<10	1.20	659	2	0.07	39	1380	8	0.17	<2	6	63

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **OROGENIC GOLD CORP.**
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

Finalized Date: 29-AUG-2019
Account: ORGOLD

Project: Albino Lake

CERTIFICATE OF ANALYSIS TR19197479

Sample Description	Method Analyte Units LOD	ME-ICP41 Th ppm 20	ME-ICP41 Ti % 0.01	ME-ICP41 Tl ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2
SCAA19-001		<20	0.11	10	<10	109	<10	91
SCAA19-002		<20	0.19	10	<10	196	<10	44
SCAA19-003		<20	0.07	<10	<10	57	<10	42
SCAA19-004		<20	0.12	<10	<10	104	<10	81
SCAA19-005		<20	0.14	<10	<10	108	<10	64
SCAA19-006		<20	0.16	<10	<10	121	<10	100

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: OROGENIC GOLD CORP.
12 EDELWEISS CRESENT
CALGARY AB T3A 3R9

Finalized Date: 29-AUG-2019
Account: ORGOLD

Project: Albino Lake

CERTIFICATE OF ANALYSIS TR19197479

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	Au-ICP21	LOG-22	ME-ICP41	SCR-41
	WEI-21			