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BC Geological Survey
Assessment Report
38222

Ministry of Energy and Mines
BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Lidar Survey and Orthographic Base Mapping

TOTAL COST: $6,599.41

AUTHOR(S): Adrian Newton, P.Geo.

SIGNATURE(S): Adrian Newton

PROFESSIONAL
PROVINCE OF
A. C. B. NEWTON
39299
BRITISH COLUMBIA
GEOSCIENTIST

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

YEAR OF WORK: 2018

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5736677 / April 3, 2019

PROPERTY NAME: Eskay Creek - Mine No: 0100073

CLAIM NAME(S) (on which the work was done): 252976

COMMODITIES SOUGHT: Gold, Silver

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 104B 008

MINING DIVISION: Skeena

NTS/BCGS: 104B09 & 104B10

LATITUDE: 56 ° 39 ' 13.996 " **LONGITUDE:** -130 ° 25 ' 0004 " **(at centre of work)**

OWNER(S):

1) Barrick Gold Inc.

2)

MAILING ADDRESS:

161 Bay Street, Suite 3700
Toronto, Ontario, M5J 0C3

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

1) Skeena Resources Ltd.

2)

MAILING ADDRESS:

650 - 1021 West Hastings Street
Vancouver, B.C., V6E 0C3

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

Commodities: Gold, Silver, Zinc, Copper, Lead Alteration: Magnesian chlorite, muscovite, chalcedonic silica, calcite, dolomite

Deposit Types: G07 - Subaqueous hot springs Ag-Au, G06 - Noranda/Kuroko massive sulphide Cu-Pb-Zn

Lithology: Lower-middle Jurassic Hazelton Group - dacite; rhyolite; andesite; mudstone

Mineralization: Stratabound within the Contact mudstone unit; discordant and irregular in feeder zones through rhyolite

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

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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			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)	1 m contours - 5 sq. km	252976	CAD $6,599.41
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	$6,599.41

SKEENA

Assessment Report

for the

2018 LiDAR Topographic Survey & Orthophotograph Base Mapping on the Eskay Creek Property

in the

Skeena Mining Division
British Columbia, Canada

NTS Map Sheets 104B09 & 104B10

Centre of Work Area:

Latitude: 56° 39' 13.9968" N; **Longitude:** 130° 25' 44.0004" W

owned by:

Barrick Gold Inc.
161 Bay Street, Suite 3700
Toronto, Ontario
M5J 2S1

Operator:

Skeena Resources Ltd.
Suite #650 – 1021 West Hastings Street
Vancouver, B.C.
V6E 0C3

Report Author:

Adrian Newton, B.Sc., P.Geo., Skeena Resources Ltd.

Original Report Submitted April 5, 2019
Amended Report Submitted October 21, 2019

Filed for Assessment Credit on Mineral Claim Number: 252976

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1.0 Executive Summary

The Eskay Creek precious and base metal-rich volcanogenic massive sulphide (VMS) deposit is located 83 km northwest of Stewart, British Columbia. The property consists of forty (40) mineral claims and eight (8) mineral leases covering 5,093.81 hectares. This report is filed for assessment credit on mineral claim number 252976 (IKS 2).

LiDAR and photo acquisition over the 100 square kilometer area of interest (AOI) was completed during two flights, on October 1st and 2nd, 2018. Both datasets were collected simultaneously, and equipment was co-mounted in the same aircraft. Weather conditions were clear over the project area during the time of data capture.

The mean density of the LiDAR point cloud (all points) was determined to be 4.95 points per square metre while the mean bare-earth point density was measured to be 1.39 points per square meter. The final topographic map was compiled to one (1) metre accuracy.

2.0 Introduction

2.1 Terms of Reference

In April 2018, Skeena Resources Ltd. ("Skeena") contacted McElhanney Consulting Services Ltd. (McElhanney) of Vancouver, B.C. to submit a proposal to fly a LiDAR and photography survey over the Eskay Creek property. McElhanney had previously completed a LiDAR survey in the area in 2008 and had pre-established control points in place.

LiDAR and photo acquisition was completed during two flights, on October 1st and 2nd, 2018. Both datasets were collected simultaneously, and equipment was co-mounted in the same aircraft. Weather conditions were clear over the project area of interest (AOI) during the time of data capture. Collection occurred late in the morning, resulting in only minimal shading of topographic landforms due to the angle of the sun at the time.

60 flight lines comprising 539-line kilometers covered the 100 square kilometer survey area. Details of the survey and the resulting processing and analysis are fully described in the report submitted by McElhanney, which is wholly included in this report as Appendix II.

Deliverable for the projects included classified LiDAR (bare earth/non-bare earth) LAS files, a 20 cm-pixel colour orthophoto in geotiff and ecw formats, raster DEM, bare earth hillshade imagery files, contour elevation files, and a survey report.

Paul Geddes, P.Geo, Vice President of Exploration and Resource Development, represented Skeena during the data acquisition and data processing phases of this project.

The work was conducted under work approval for Mines Act Permit MX-1-11.

2.2 Property Location and Description

The Eskay Creek Project is located in the Golden Triangle region of British Columbia, Canada, 83 km northwest of Stewart, in the eastern flanks of the Coast Mountain ranges. The mine is located at an elevation of 800 m above sea level at 56° 39' 13.9968" N and 130° 25' 44.0004" W.

The historic Eskay Creek mine is located near the Unuk River, and is accessible by a 58.5 km, all-weather road, which departs from the Stewart-Cassiar Highway (Highway 37) just south of the Bob Quinn airstrip. This road travels along the eastern side of the Iskut River for a distance of 38 km to its junction with the Volcano Creek drainage system. The road then follows Volcano Creek to its headwaters and then down Tom Mackay Creek to the historic mine site (Figure 1).

There are no known federal, provincial or regional parks, wilderness or conservancy areas, ecological reserves, or recreational areas near the Eskay Creek Property. The area is within the Traditional Territory assertions of the Tahltan Nation and Skii km Lax Ha.

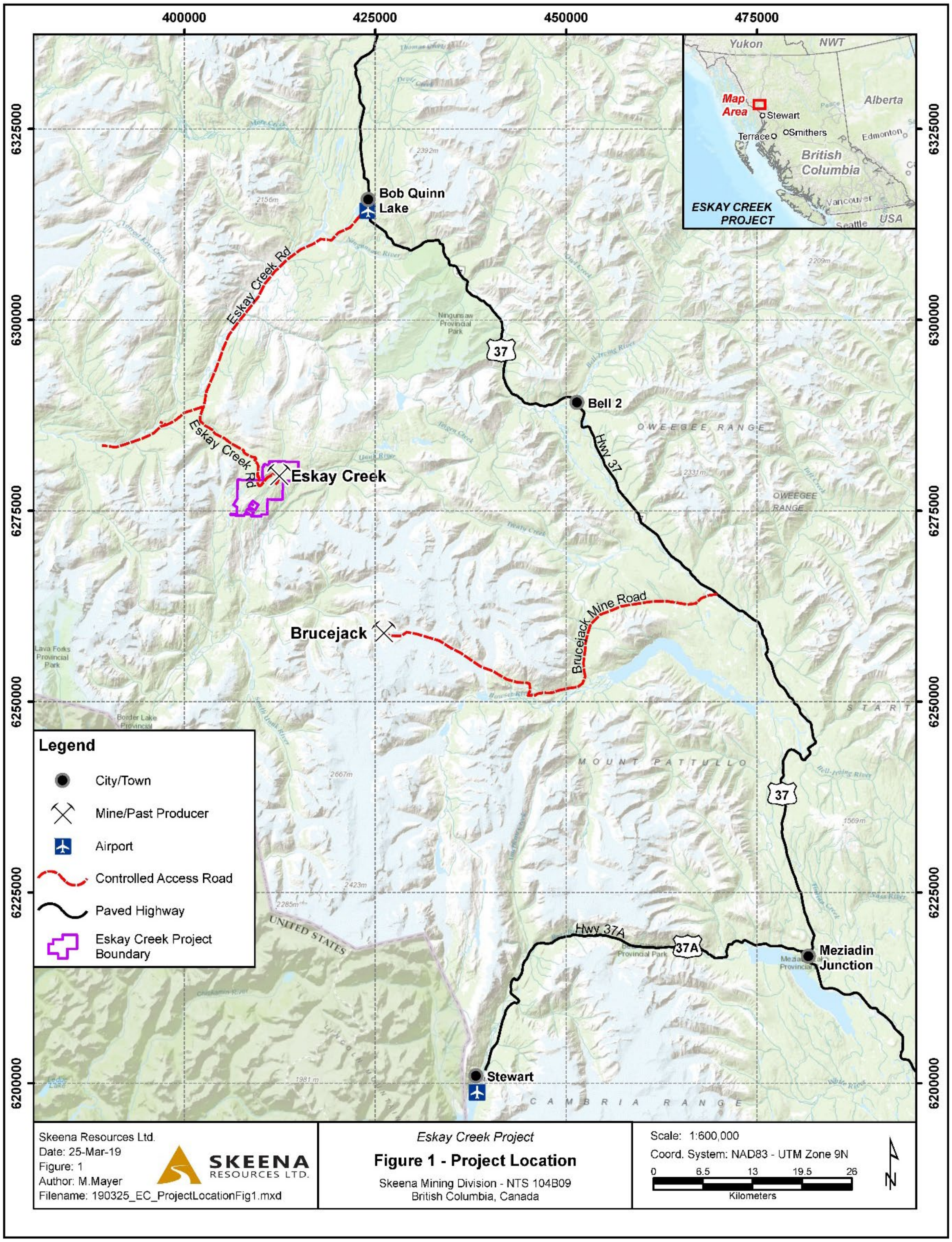

Figure 1. Eskay Creek project location map.

2.3 Access

Access to the Eskay Creek Project is via Highway 37 (Stewart Cassiar Highway). The Eskay Mine Road is an all-season gravel road that connects to Highway 37 approximately 135 km north of Meziadin Junction (Figure 2). The Eskay Mine Road is a 58.5 km private industrial road that is operated by AltaGas Ltd. (0 km to 43.5 km) and Skeena Resources Ltd. (43.5 km to 58.5 km).

There are two nearby gravel air strips; Bronson Strip which is about 40 km west of the mine site and Bob Quinn, roughly 37 km northeast of the Eskay Creek Project. Bronson Strip is a private air strip operated by Snip Gold Corporation. It is 1500 m long and in fair condition. The Bob Quinn Strip is managed by the Bob Quinn Lake Airport Society, a not-for-profit organization comprised of residents and local business interests. The airstrip is about 1300 m long and in good condition.

2.4 Local Resources and Infrastructure

The Eskay Creek Project is located in the Pacific northwest region of British Columbia, Canada. Support services for mining and other resource sector industries in the region are provided primarily by the communities of Smithers (pop. 5,400) and Terrace (pop. 11,500). Both communities are accessible by commercial airlines with daily flights to and from Vancouver. Volume freight service in the region is supported by rail connections that extend from tidewater ports in Prince Rupert and Vancouver. The closest tidewater port to the project is located in Stewart, approximately 260 km from the Project. Stewart is an ice-free shipping location and provides access for bulk shipping 365 days/year.

Road infrastructure in the region is well developed. Highway 16 (Yellowhead Highway) extends from Prince George in central British Columbia, through several communities including Smithers and Terrace, and terminates at the Port of Prince Rupert. Highway 37 (Stewart Cassiar Highway) connects to Highway 16 at Kitwanga and extends to the Alaska Highway in the Yukon. The Eskay Mine Road connects to Highway 37 roughly 293 km from Kitwanga. Driving time from either Smithers or Terrace to the Eskay Creek Project is approximately five hours.

The region is supported by the Provincial power grid. A 287 kV transmission line extends from a grid connection at Terrace to Bob Quinn, primarily following Highway 37. Power supply opportunities exist close to the Eskay Creek Project. The Forest Kerr, McLymont, and Volcano Creek hydroelectric plants are within 20 km and collectively produce up to 277 MW which is fed to the provincial grid via transmission lines that extend along the Eskay Mine Road.

Services, workforce, supply chains, and infrastructure are all well established in the region to support mining operations.

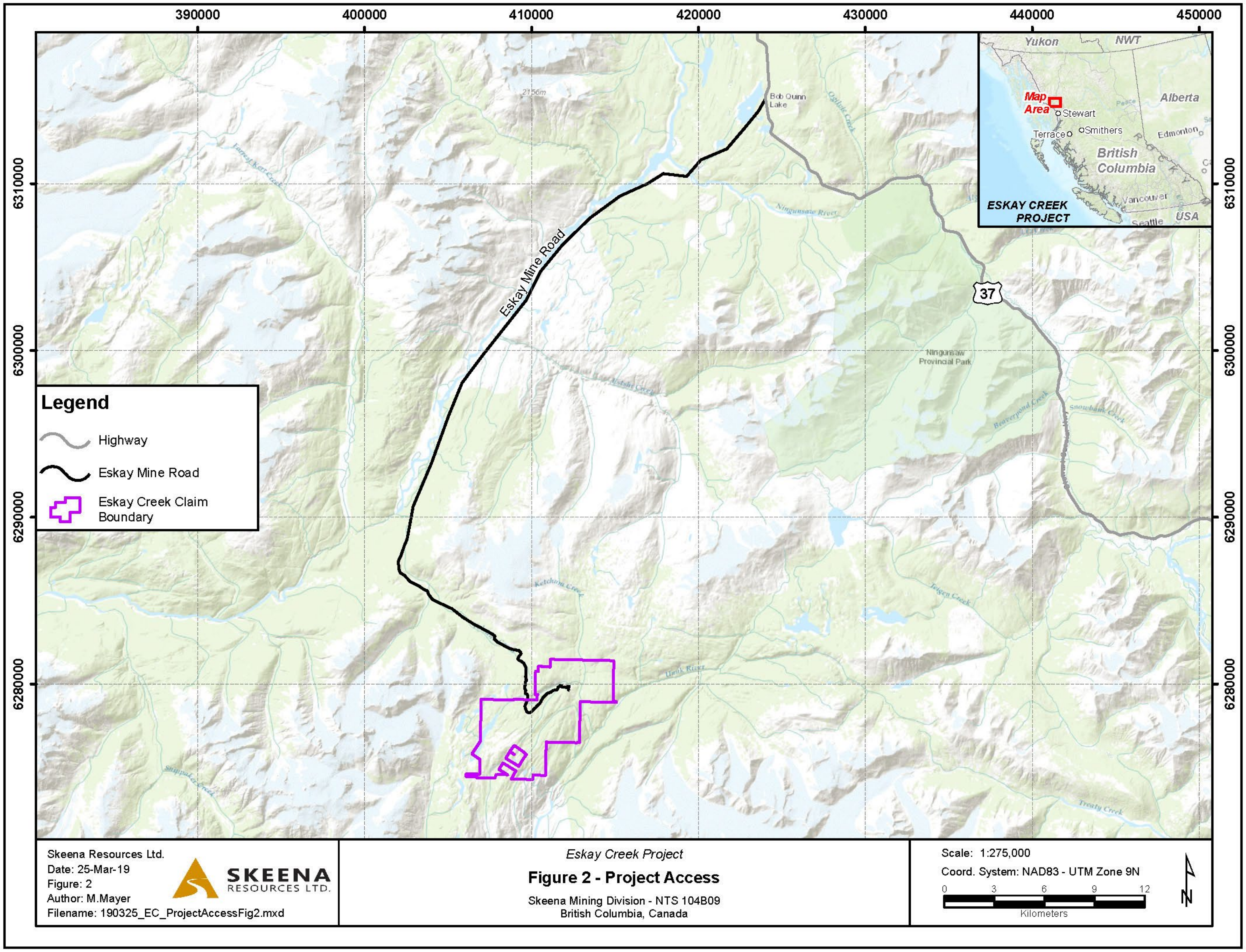

Figure 2. Eskay Creek project access map.

2.5 Climate

Climate conditions in this mountainous region are highly variable and location dependent (Hallam Knight Piesold Ltd, 1993). During the initial environmental baseline studies and permitting efforts for the Eskay Creek mine (1989-93), regional data was collected from all major weather reporting stations including Telegraph Creek, Todagin Ranch, Bob Quinn, Forrest Kerr, Stewart, Alice Arm, Snip Project, Sulphurets Project, and Snippaker Creek.

The expected mean annual temperature at the historic mine site (El. 750 m) is 1 ± 0.9 °C, with mean monthly temperatures ranging from -10.4 °C in January to +15 °C in July (EC 2013b). Expected extreme temperatures range from -40 °C to +30 °C.

The estimated mean annual total precipitation at the historic mine site is estimated to be 2500 ± 500 mm. Data collection at the site between 1989 and 1993 indicated between 55% and 71% of precipitation falls as snow.

Regional snowpack data is available but is highly variable and location dependent. Snowpack data collected at the Eskay Creek Project between 1990 and 1993 indicated peak snowpack (April) of 1425 ± 567 mm. Cumulative snowfall data at the mine site collected between 1999 and 2006 indicates a range of roughly 7.5 to 17.5 m of snow fall between September and May. Although annual snowfall is high, the snow avalanche hazard for the area is low, except in the Volcano Creek region.

2.6 Physiography

The Eskay Creek Project lies in the Prout Plateau, a rolling subalpine upland with an average elevation of 1100 m (amsl), located on the eastern flank of the Boundary Ranges. The Plateau is characterized by northeast trending ridges with gently sloping meadows occupying valleys between the ridges (Figure 3). Relief over the Plateau ranges from 500 m in the Tom MacKay Lake area to over 1000 m in the Unuk River and Ketchum Creek valleys. Mountain slopes are heavily forested, and scenic features of glacial origin, such as cirques, hanging valleys and over-steepened slopes are present throughout. The Plateau is surrounded by high serrate peaks containing cirque and mountain glaciers.

The surficial geology in the area is varied. Typical features include: glacial till deposits, talus at the base of bedrock outcrops, colluvium on steep slopes, organics in poorly drained depressions and kettle holes, alluvial deposits along streams and alluvial fan deposits along the lake shorelines.

The Prout Plateau is drained by the tributaries of two major river systems including the Stikine - Iskut Rivers, and the Unuk River. Volcano Creek drains to the north into the Iskut River, a major tributary to the Stikine River system. The remainder of the Plateau is drained almost exclusively by the Unuk River and its tributaries: Tom MacKay, Argillite, Ketchum, Eskay and Coulter Creeks. The gradient of these drainages increases dramatically as they descend from the moderate relief of the Prout Plateau into the deeply incised Unuk River valley. The Plateau is occupied by Tom MacKay, Little Tom MacKay and several smaller lakes and Argillite Creek which form the headwaters of the Tom MacKay Creek drainage system.

Figure 3. View of Eskay Creek valley looking northeast.

3.0 Property Ownership

3.1 Mineral Tenure

The Eskay Creek Project covers a total of 5,093.81 hectares (12,587.08 acres) and is comprised of the following (Figure 4):

• Forty (40) mineral claims totaling 3,263.55 hectares (8,064.41 acres) (Table 1);

• Eight (8) mineral leases totaling 1,830.26 hectares (4,522.66 acres) (Table 2).

One (1) mineral claim is 100% registered to Skeena Resources Limited, thirty-seven (37) mineral claims are 100% held by Barrick Gold Inc.("Barrick"), and two (2) mineral claims are held 66.67% Barrick Gold Inc. and 33.33% Canarc Resource Corp. Five (5) mineral leases are 100% held by Barrick Gold Inc. and three (3) mineral leases are held 66.67% Barrick Gold Inc. and 33.33% Canarc Resource Corp.

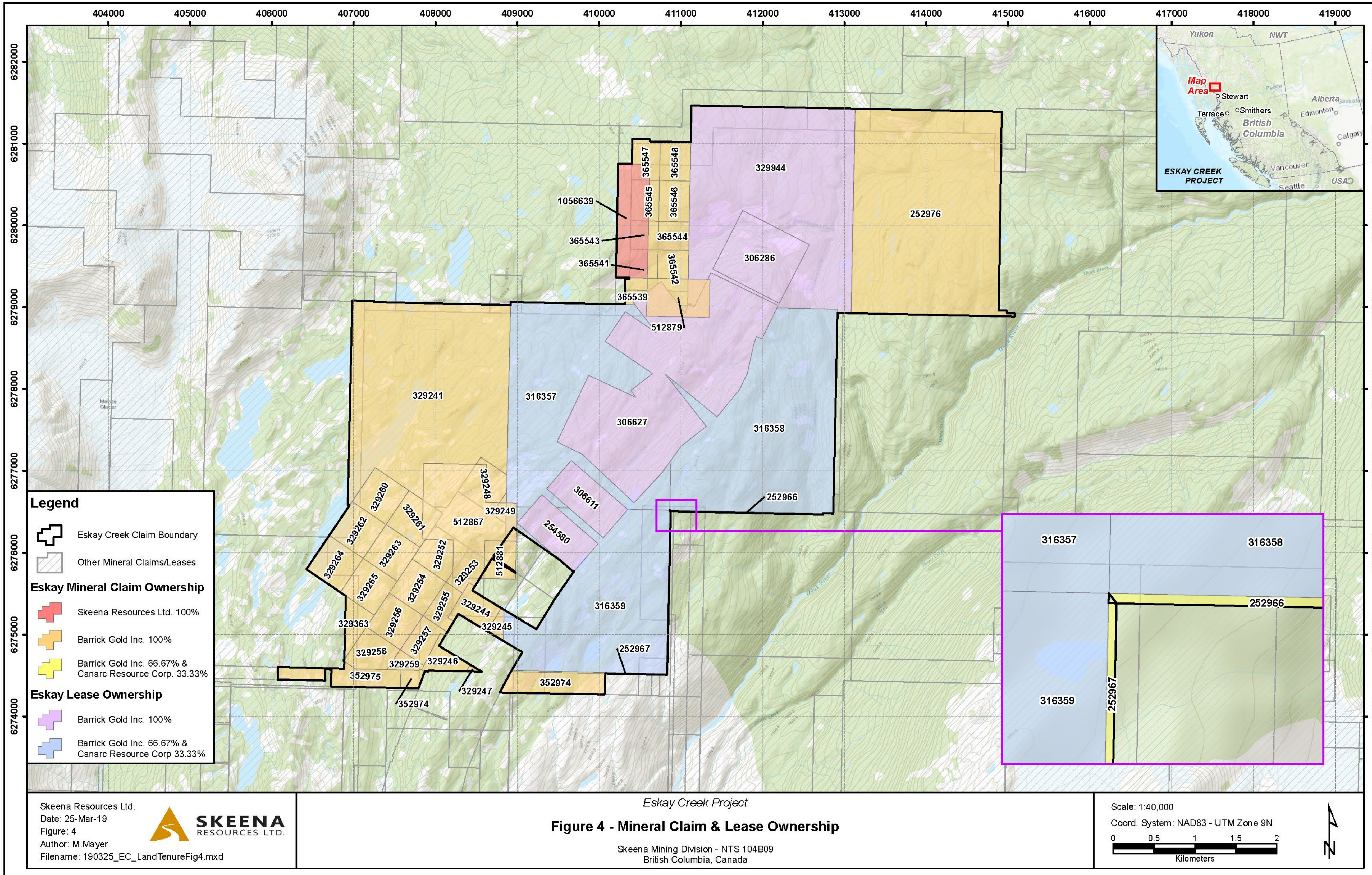

Figure 4. Eskay Creek property Mineral Claim and Lease Ownership.

Table 1. Mineral claim information.

Tenure	Claim Name	Type	Description	Issue Date	Good to Date	Area (Hectares)	Tag Number	Owner Name	Percent	Owner Name	Percent
252966	Cal #2	MC4	Four Post Claim	5-Aug-1989	5-Aug-2019	500.00	53274	Canarc Resource Corp.	33.33	Barrick Gold Inc.	66.67
252967	Cal #3	MC4	Four Post Claim	6-Aug-1989	6-Aug-2019	400.00	111599	Canarc Resource Corp.	33.33	Barrick Gold Inc.	66.67
329241	Mack 23	MC4	Four Post Claim	21-Jul-1994	21-Jul-2019	500.00	225674	Barrick Gold Inc.	100		
329244	Mack 1	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654620M	Barrick Gold Inc.	100		
329245	Mack 2	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654619M	Barrick Gold Inc.	100		
329246	Mack 3	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654617M	Barrick Gold Inc.	100		
329247	Mack 4	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654618M	Barrick Gold Inc.	100		
329248	Mack 5	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654621M	Barrick Gold Inc.	100		
329249	Mack 6	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654622M	Barrick Gold Inc.	100		
329252	Mack 9	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654625M	Barrick Gold Inc.	100		
329253	Mack 10	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654626M	Barrick Gold Inc.	100		
329254	Mack 11	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654627M	Barrick Gold Inc.	100		
329255	Mack 12	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654628M	Barrick Gold Inc.	100		
329256	Mack 13	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654629M	Barrick Gold Inc.	100		
329257	Mack 14	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654630M	Barrick Gold Inc.	100		
329258	Mack 15	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654631M	Barrick Gold Inc.	100		
329259	Mack 16	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654632M	Barrick Gold Inc.	100		
329260	Mack 17	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654513M	Barrick Gold Inc.	100		
329261	Mack 18	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654514M	Barrick Gold Inc.	100		
329262	Mack 19	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654515M	Barrick Gold Inc.	100		
329263	Mack 20	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654516M	Barrick Gold Inc.	100		
329264	Mack 21	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654517M	Barrick Gold Inc.	100		
329265	Mack 22	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654518M	Barrick Gold Inc.	100		
329363	Mack 26 FR.	MCF	Fractional Claim	3-Aug-1994	3-Aug-2019	25.00	225683	Barrick Gold Inc.	100		
352974	Star 21	MC4	Four Post Claim	7-Dec-1996	7-Jun-2019	250.00	229671	Barrick Gold Inc.	100		
352975	Star 22	MC4	Four Post Claim	7-Dec-1996	7-Jun-2019	150.00	229672	Barrick Gold Inc.	100		
365539	Kay 1	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681963M	Barrick Gold Inc.	100		
365541	Kay 3	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681965M	Barrick Gold Inc.	100		
365542	Kay 4	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681966M	Barrick Gold Inc.	100		
365543	Kay 5	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681967M	Barrick Gold Inc.	100		
365544	Kay 6	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681968M	Barrick Gold Inc.	100		
365545	Kay 7	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681969M	Barrick Gold Inc.	100		
365546	Kay 8	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681970M	Barrick Gold Inc.	100		
365547	Kay 9	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681971M	Barrick Gold Inc.	100		
365548	Kay 10	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681972M	Barrick Gold Inc.	100		
512867	<Null>	MCX	Mineral Cell Title Submission	17-May-2005	21-Jul-2019	106.81	<Null>	Barrick Gold Inc.	100		
512879	<Null>	MCX	Mineral Cell Title Submission	18-May-2005	12-Sep-2019	35.58	<Null>	Barrick Gold Inc.	100		
512881	<Null>	MCX	Mineral Cell Title Submission	18-May-2005	21-Jul-2019	17.80	<Null>	Barrick Gold Inc.	100		
1056639	Melissa	MCX	Mineral Cell Title Submission	24-Nov-2017	3-Jun-2019	53.36	<Null>	Skeena Resources Ltd.	100		
252976	IKS 2	MC4	Four Post Claim	2-Aug-1989	2-Aug-2019	500.00	97944	Barrick Gold Inc.	100		

Table 2. Mineral tenure information.

Tenure #	Issue Date	Good to Date	Term Expiry Date	Area (Hectares)	Owner	Percent	Owner	Percent
329944	6-Dec-1994	6-Dec-2019	6-Dec-2024	395.00	Barrick Gold Inc.	100		
254580	17-Dec-1990	17-Dec-2019	17-Dec-2020	41.80	Barrick Gold Inc.	100		
316357	30-Apr-1994	30-Apr-2020	30-Apr-2024	276.70	Canarc Resource Corp.	33.33	Barrick Gold Inc.	66.67
316358	30-Apr-1994	30-Apr-2020	30-Apr-2024	367.70	Canarc Resource Corp.	33.33	Barrick Gold Inc.	66.67
316359	30-Apr-1994	30-Apr-2020	30-Apr-2024	278.70	Canarc Resource Corp.	33.33	Barrick Gold Inc.	66.67
306611	1-Jun-1992	1-Jun-2019	1-Jun-2022	41.80	Barrick Gold Inc.	100		
306627	1-Jun-1992	1-Jun-2019	1-Jun-2022	355.00	Barrick Gold Inc.	100		
306286	13-Aug-1991	13-Aug-2019	13-Aug-2021	73.56	Barrick Gold Inc.	100		

3.2 Royalty Obligations

The Eskay Creek Project has net smelter return (NSR) royalty obligations on four properties payable to third parties as shown in Table 3. A map of the claims with royalty obligations is presented in Figure 5.

Table 3. Summary of Eskay Creek project royalty obligations.

Parcel	Royalty
Kay-Tok Property • Kay Mining Leases • Tok Mining Leases	1% NSR in favour of Franco-Nevada Corp. (1) w/o duplication of the following and depending on the handling of the Product: 1% Net Smelter Returns, 1% Net Ore Returns, 1% Net Returns payable from the disposition of the beneficiated product of all metals, minerals and mineral substances. Barrick has the right of first refusal to purchase the royalty. No cap or buyout provision of this royalty.
IKS Property • IKS 1 Mining Lease • IKS 2 Mining Claim	2% NSR in favour of ARC Resource Corporation (2) Royalty also includes the area known as the IKS Gap. No cap on royalty payments. No buyout provision or rights of first refusal on the sale of the royalty.
GNC Property • GNC 1-3 Mining Leases	2% NSR in favour of ARC Resource Corporation (3) Interest: Barrick 66.67%; Canarc 33.33% No cap on royalty payments. No buyout provision or rights of first refusal on the sale of the royalty.
Star Property • Star 21, 22 • Sliver West Mining Claims	1% NSR in favour of David A. Javorsky (4) No cap on royalty payments. The Option to Purchase the Royalty has expired.

1. Amended and Restated Eskay Creek Royalty Agreement, dated May 5, 1995 between Prime Resources Group Inc. (now Barrick) and Euro-Nevada Mining Corporation Limited (now Franco-Nevada Corp.).

2. Transfer and Assignment Agreement dated December 22, 1994 between Prime Resources Group Inc. and Stikine Resources Ltd. (both now Barrick) and Adrian Resources Ltd.

   This agreement references the Royalty Deed dated August 1, 1990 between ARC Resource Group Ltd. and Adrian Resources Ltd.

3. Option and Joint Venture Agreement dated November 4, 1988 between Canarc Resources Corp. and Calpine Resources Incorporated (now Barrick).

   This agreement is subject to the royalty provisions of an Option Agreement dated November 4, 1988 between Canarc Resources Corp. and Arc Resources Group Ltd.

4. NSR Royalty Agreement w/ Option to Purchase dated November 3, 2004 between Homestake Canada Inc. (now Barrick) and David A. Javorsky.

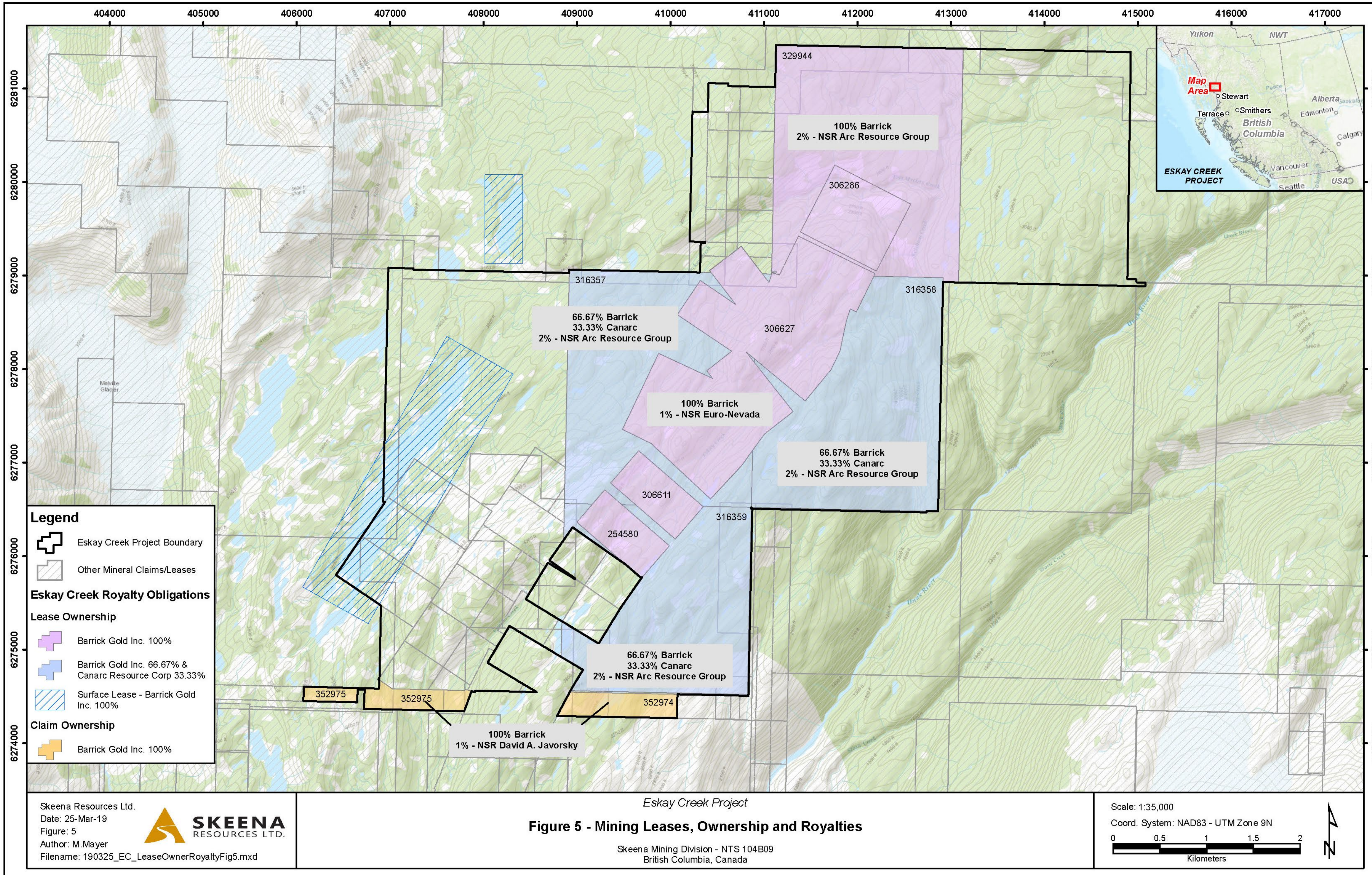

Figure 5. Eskay Creek property Mining Leases, Ownership and Royalties.

3.3 Agreement with Barrick Gold Inc.

On December 18, 2017, Skeena and Barrick entered into an Option Agreement on the Eskay Creek Property. This agreement affects all mineral claims and mineral leases that comprise the Eskay Creek Property, except for the one (1) mineral claim registered to Skeena Resources Ltd. Skeena has the option to acquire all of Barrick's rights, title and interest in and to the Eskay Creek Assets (Property and all Facilities, the Coast Road and the Barrick/Coast Road Use Agreement, the Permits (including the Barrick Road Special Use Permit), and the Eskay Creek Contracts) by completing $3,500,000 in Expenditures by December 18, 2020. Skeena shall pay Barrick the aggregate amount of Barrick Expenditures during the Option Period plus $10,000,000 (assuming the environmental bond is estimated at $7,700,000, with a closing payment not exceeding $17,700,000).

4.0 Exploration History

The Eskay Creek Property has undergone exploration activity dating back to 1932 when prospectors looking for precious metals were first attracted by the gossanous bluffs extending for over seven kilometers beside Eskay and Coulter Creeks. The Tom Mackay Syndicate undertook the first staking in 1932 near the southern end of the claim group. During the period from 1935 to 1938, Premier Gold Mining Company Ltd. held the property under option and were responsible for the definition of 30 zones of surface mineralization including the 21 Zone. This was followed in 1939 by the driving of the 85 m Mackay Adit into the hillside three kilometers south of the current 21A/B Zones by the Tom Mackay Syndicate.

During World War II, from 1940 to 1945, exploration was halted and from 1946 through to 1963 only minor work was done on the property. This work included some minor re-staking along with various changes in claim title.

Western Resources Ltd. drove the Emma Adit in 1963 with drifting and crosscuts totaling 146 m. In 1964, the property was registered under Stikine Silver Limited.

Seven different options were undertaken on the property between 1964 and 1987. Exploration continued with geological mapping, geochemical and geophysical surveys, trenching and diamond drilling looking for precious metal and VMS-style targets. During this period, in 1986, the company was renamed Consolidated Stikine Silver.

In 1988, Calpine Resources Inc. signed an option agreement to earn a 50% beneficial interest in the TOK and KAY claims by spending $900,000 over a three-year period. Six diamond drill holes were undertaken in the fall of 1988 near the old 21 Zone trenches. The 21A Zone was discovered with an intercept of 25.78 g/t Au and 38.74 g/t Ag over 29.4 m in drill hole DDH CA88-6. Continued drilling in 1988 and 1989 outlined the 21A Zone and defined the 21B Zone, some 200 meters to the north. Prime Resources acquired a controlling interest in Calpine in 1989 and took over managing the Eskay Creek project. Once their obligations were complete, Prime merged with Calpine in April 1990. At the same time, Homestake Canada Inc. acquired an equity position in Consolidated Stikine Silver and eventually acquired the property. 21B Zone underground development began in 1990-91, a feasibility study was undertaken in 1993 and the Eskay Creek Mine was officially opened in 1995.

From 1995 through 2001, Homestake Canada operated the mine and continued exploration on the surrounding claims with geological mapping, geochemical and geophysical surveys and diamond drilling.

In 2002 Barrick assumed control of the Eskay Creek Mine, continuing with mining operations and exploration until the mine closure in 2008. From 2008 to 2018 the property has been under a state of reclamation, care and maintenance. Skeena entered into an option agreement with Barrick in 2017 and completed a Phase 1 surface drill program centered on the 21A, 21C and 22 Zones in 2018.

Table 4 is a summary of the work that had been completed on the Eskay Creek Project by various operators since 1932.

Table 4. Summary of exploration in the Eskay Creek project.

Year	Owner	Work Area	Description
1932	Unuk Gold/Unuk Valley Gold Syndicate	Unuk & Barbara Group claims (Core Property)	Prospecting
1933	Mackay Syndicate	Unuk & Barbara Claims	Trenching
1934	Mackay Syndicate/Unuk Valley Gold Syndicate	Unuk, Barbara & Verna D. Group Claims	Prospecting Diamond drilling (261.21 m)
1935-1938	Premier Gold Mining Co. Ltd.	Core Property	Optioned property and conducted prospecting Trenching Diamond drilling (1,825.95 m) Defined and named over 30 mineralised showings. Names are still in use (e.g. the 21, 22 zones, etc.)
1939	MacKay Gold Mines Ltd.	#13 O.C./Mackay Adit	Financed by Selukwe Gold Mining and Finance Company Ltd. and acquired property. Conducted data review Underground development of the MacKay Adit (84.12m)
1940-1945			No activity due to World War II
1946	Canadian Exploration Ltd.	Mackay Adit	Optioned property Mapping Trenching Underground development - extended the Mackay Adit to 109.73 m & put raise to surface at 46 m)

Year	Owner	Work Area	Description
1947-1952	American Standard Mines Ltd. / Pioneer Gold Mines of B.C. Ltd. / New York-Alaska Gold Dredging Corp.	Canab Group (36 claims of the Mackay Group)	Optioned and conducted Property Examination.
1953	American Standard et al	Canab Group / Mackay Group 36 claims (No. 21, No. 22 & No. 5 areas)	Trenching (2655.32 m) Open cutting in the 5, 21 and 22 zones Diamond Drilling (22 boreholes)
1954-1962	Western Resources Ltd.	Kay 1-18	Unknown – no work reported
1963	Western Resources Ltd.	Kay 1-18 Kay 19-36 Emma Adit	Underground development of the Emma Adit (111.25m) Road building (13 km) from Tom Mackay Lake to property
1964	Stikine Silver Ltd. / Canex Aerial Exploration Ltd.	Kay Group Emma Adit	Optioned from Western Resources Ltd. Mapping Rock, stream, sediment, and soil sampling Underground diamond drilling (224.64m)
1965	Stikine Silver Ltd.	Kay Group (40 claims) Emma Adit	Trenching (1457.20m in 18 trenches) Diamond drilling (15.85 m) Underground development (extended Emma adit to 178.61m)
1966	Stikine Silver Ltd.		No activity
1967	Mount Washington Copper Co. / Stikine Silver Ltd.	Kay 1-36 (Core Property)	EM 16 and magnetometer surveys Petrography
1968-1970	Newmont Mining Corp.	Kay 1-8 Au 1-4 Kay 3-4	Surface and underground geological mapping Trenching (137.16 m)
1971-1972	Stikine Silver Ltd.	22 Zone	Trenching Surface bulk sample (1515 kg grading 6.06 g/t Au, 4451.56 g/t Ag, 2.8% Zn, 1.9% Pb)
1973	Kalco Valley Mines Ltd.	22 Zone	Surface geological mapping Diamond drilling (299.62 m)
1974			No activity
1975-1976	Texasgulf Canada Ltd.	#5 O.C. #6 O.C. (Kay 11-18, Tok 1-22 & Sib 1-16 claims)	Mapping (1:5,000, Donnelly, 1976 B.Sc. Thesis, UBC) Line cutting Rock sampling EM Mag Diamond drilling (373.38 m)
1977-1978			No activity

Year	Owner	Work Area	Description
1979	May-Ralph Resources Ltd.	22 Zone	Hand-cobbed bulk sample (1,263 grams Au, 25,490 grams Ag, 412 kg Pb and 1,008 kg Zn – no tonnage reported)
1980-1982	Ryan Exploration Ltd. (U.S. Borax)	22 Zone #6 Zone Mackay Adit	Mapping Rock, stream sediment and soil sampling Diamond drilling (452.32 m)
1983-1984			No activity
1985	Kerrisdale Resources Ltd.	#5 Zone 21 Zone 22 Zone	Mapping Rock and soil sampling Diamond drilling (622.10 m)
1986			No activity
1987	Consolidated Stikine Silver	#3 Bluff 5, 21 and 23 Zones	Stream sediment and soil sampling Core (all Kerrisdale) sampling Trench sampling
1988	Calpine Resources Inc. / Consolidated Stikine Silver	21A/21B Zones	Mapping, Rock Sampling, Soil Sampling, Diamond Drilling (2,875.5 m) Discovery hole CA88-6 for 21A Zone
1989	Calpine Resources Inc. / Consolidated Stikine Silver	21A/21B Zones 22 Zone	Mapping Rock and soil sampling Airborne Mag/EM/VLF Ground Mag/VLF-EM, I.P. Diamond drilling (44,338.9 m) Legal surveys
1990	Calpine Resources Inc. / Consolidated Stikine Silver	21B/21C Zones Pumphouse Mack Proposed Mill Site Proposed Mine Site GNC Adrian	Mapping Rock and soil sampling UTEM Survey Diamond drilling (141,412.86 m) Environmental and terrane studies Geotechnical and metallurgical studies Underground development (21B Zone) Bulk Sample
1991	International Corona Corp.	21B Zone GNC	Mapping Rock and soil sampling UTEM, seismic refraction and borehole FEM Diamond drilling (2,791 m) Relogging core program Start of underground diamond drilling
1992	International Corona Corp.	21B Zone GNC	Mapping Rock and soil sampling Seismic refraction / Gradient / I.P. / Transient EM / Borehole FEM Diamond drilling (3,342 m)
1993	Homestake Canada Inc.	21B Zone GNC	Mapping Rock sampling Resistivity/Borehole FEM Diamond drilling (1,606.6 m) Completion of Eskay mine road T. Roth - MSc. thesis completed R. Bartsch - MSc. thesis completed

Year	Owner	Work Area	Description
1994	Homestake Canada Inc.	21B Zone Adrian Albino Lake	Mapping, Rock sampling Borehole EM Diamond drilling (4,080.95 m)
1995	Homestake Canada Inc.	21B Zone/NEX Bonsai	Mapping Rock sampling Diamond drilling (3,468.1 m) Start of production on 21B Zone Production: 6,113 kg Au, 309,480 kg Ag
1996	Homestake Canada Inc.	21B Zone/NEX/HW Adrian Bonsai	Mapping Rock sampling Trenching Diamond drilling (21,280.8 m) Orthophoto Survey Production: 6,570 kg Au, 375,000 kg Ag
1997	Homestake Canada Inc.	21B Zone/21C/21E Adrian GNC Mack Star	Prospecting Silt Sampling Diamond Drilling (16,220.47 m) Production: 7,612 kg Au, 367,000 kg Ag
1998	Homestake Canada Inc.	21C/21A/Pumphouse 5/23/22/28/Mackay Adit GNC Mack SIB Gaps Star/Coulter	Mapping and prospecting Test gravity survey Diamond drilling (21,909.63 m) Orthophoto survey Production: 8,774 kg Au, 364,638 kg Ag
1999	Homestake Canada Inc.	21C/21A/Pumphouse Deep Adrian West Limb East Limb	Mapping and prospecting Structural study Geophysical compilation Diamond drilling (17,363.96 m) Production: 9,934 kg Au, 422,627 kg Ag
2000	Homestake Canada Inc.	21C/21A/Pumphouse Deep Adrian West Limb East Limb	Mapping Prospecting Diamond Drilling (25,893.93 m) Production: 10,363 kg Au, 458,408 kg Ag
2001	Homestake Canada Inc.	21C/21A/Pumphouse Deep Adrian West Limb East Limb Felsite Bluffs Sib Gaps Pillow Basalt Ridge	Mapping and prospecting Diamond drilling (22,035.48 m) Production: 9,977 kg Au, 480,685 kg Ag
2002	Barrick Gold Corp.	21C/21A/Pumphouse Deep Adrian West Limb 22 Zone Mackay Adit	Mapping and prospecting Diamond drilling (15,115.69 m) Production: 11,157 kg Au, 552,487 kg Ag T. Roth - PhD. thesis completed

Year	Owner	Work Area	Description
2003	Barrick Gold Corp.	21C/21A/Pumphouse Deep Adrian West Limb 22 Zone Mackay Adit	Mapping and prospecting Diamond drilling (18,323.28 m) I.P. and gravity surveys Linecutting Production: 10,951 kg Au, 527,775 kg Ag
2004	Barrick Gold Corp.	22 Zone Deep Adrian West Limb Ridge Block Footwall	Mapping and prospecting Rock, soil, silt and vegetation sampling Topographic survey Borehole TEM Diamond drilling (18,404.88 m) Production: 8,825 kg Au, 504,602 kg Ag
2005	Barrick Gold Corp.		Diamond drilling (16,000 m) Production: 5,917 kg Au, 323,350 kg Ag
2006	Barrick Gold Corp.		Production: 3,324 kg Au, 216,235 kg Ag
2007	Barrick Gold Corp.		Production: 2,115 kg Au, 108,978 kg Ag
2008	Barrick Gold Corp.		Production: 480 kg Au, 27,800 kg Ag Mine Closed – April Reclamation ongoing
2009-2016	Barrick Gold Corp..		Mine reclaimed Continuous care and maintenance
2017	Barrick Gold Corp. / Skeena Resources Ltd.		Continuous care and maintenance Skeena secures option
2018	Barrick Gold Corp. / Skeena Resources Ltd.		Skeena files Notice of Work, commences diamond drill program on the 21A, 21C and 22 Zones

4.1 Past Production

The Eskay Creek mine was in production from 1994 until April 2008. Homestake Canada Inc. acquired Prime Resources and developed the mine, at a nominal rate of 270 tonnes per day, with the first shipment of direct-to-smelter ore from the 21B Zone made in January 1995. Planning for an on-site mill started almost immediately and was permitted in 1996. It began commercial production on January 1, 1998 at 150 tonnes per day; increasing incrementally over the next six years. The mill treated metallurgically simpler ore which primarily came from the 109 footwall Zone below 21B, and subsequently the NEX stratiform Zone which was discovered in 1995.

The trackless, drift-and-fill underground mine produced more than 3.3 million ounces of gold and 160 million ounces of silver from less than 2.3 million tonnes of ore during its 14 year mine life. Historical production from Eskay Creek is shown below in Table 5.

Table 5. Historical gold and silver production during the mine life at Eskay Creek.

Year	Gold Produced (oz)	Gold Produced (kg)	Silver Produced (kg)	Silver Produced (oz)	Ore Tonnes Milled	Ore Tonnes shipped direct
1995	196,550	6,113	309,480	9,950,401	0	100,470
1996	211,276	6,570	375,000	12,057,000	0	102,395
1997	244,722	7,612	367,000	11,799,784	0	110,191
1998	282,088	8,774	364,638	11,723,841	55,690	91,660
1999	308,985	9,934	422,627	13,588,303	71,867	102,853
2000	333,167	10,363	458,408	14,738,734	87,527	105,150
2001	320,784	9,977	480,685	15,454,984	98,080	109,949
2002	358,718	11,157	552,487	17,763,562	116,013	116,581
2003	352,069	10,951	527,775	16,969,022	115,032	134,850
2004	283,738	8,825	504,602	16,223,964	110,000	135,000
2005	190,221	5,917	323,350	10,396,349	103,492	78,377
2006	106,880	3,324	216,235	6,952,388	123,649	18,128
2007	68,000	2,115	108,978	3,503,861	138,772	0
2008	15,430	480	27,800	893,826	31,750	0
TOTAL	**3,272,628**	**102,112**	**5,039,065**	**162,016,018**	**1,051,892**	**1,205,604**

5.0 Geological Setting

5.1 Regional Geology

The Iskut River region is located along the western margin of the Stikine Terrane, within the Intermontane Tectonic Belt of the Northern Cordillera (Appendix III). Anderson (1989) divides this area of the Stikine Terrane into four unconformity bounded, tectonostratigraphic elements. Deformed and metamorphosed sedimentary and volcanic rocks of the Paleozoic Stikine Assemblage are overlain by volcano-sedimentary arc complexes of the Stikinia Assemblage (Triassic Stuhini Group and Lower to Middle Jurassic Hazelton Group). These units are subsequently overlain by Upper Jurassic to Lower Cretaceous siliciclastic sedimentary rocks of the Bowser Lake Group that formed an overlap assemblage following the amalgamation of the Stikine and Cache Creek Terranes (Table 6). Six distinct plutonic suites have been recognized in the area and commonly intrude all assemblages (Table 7).

Table 6. Regional stratigraphy of the Iskut River region (after Anderson, 1989 and Nelson et al., 2018).

Assemblage	Age	Rock Units
Coast Plutonic Complex	Tertiary	Post tectonic, felsic plutons
"Bowser Overlap" Assemblage (includes Bowser Lake Group)	Late Jurassic to Early Cretaceous	Deformed, siliciclastic sediments
"Stikinia" Assemblage (includes Stuhini & Hazelton Groups)	Triassic to Middle Jurassic	Deformed volcanics, intrusives and basinal sediments
Stikine Assemblage	Early Devonian to Early Permian	Highly deformed limestone and volcanics

Table 7. Iskut River region plutonic rock suite (After MDRU, 1992).

Suite Name	Lithologies	Age
Coast Plutonic Complex	Lamprophyres, gabbro-syenite	Tertiary (13-25 Ma)
Hyder	Monzogranite, monzonite, granodiorite	Tertiary (36-57 Ma)
Eskay Creek	Monzodiorite	Middle Jurassic (185 ± 2 Ma)
Sulphurets	Felsic intrusives/extrusives	Middle Jurassic (185.9 Ma)
Texas Creek	Calc alkaline granodiorite and quartz monzodiorite commonly cut by andesite dikes	Early Jurassic (189-195 Ma)
Stikine	Clinopyroxene-gabbro, diorite, monzodiorite and monzonite. Co-spatial with the Stuhini volcanics	Late Triassic (210 Ma)

Lower greenschist facies metamorphism is common throughout the area and is likely related to the Cretaceous deformation that formed the Skeena fold and thrust belt (Rubin et al., 1990; Evenchick, 1991). Deformation in the Iskut River area is characterized by regional upright anticlinoria and synclinoria, related thrust faults, mesoscopic folds and normal faults, and cleavage development. The regional-scale McTagg anticlinorium is the dominant structural feature, located in the eastern part of the Iskut River area.

Given the important relationship of the Hazelton Group to mineral deposits throughout the area, there have been many local mapping campaigns through the years, completed by different workers and at different scales. The resulting stratigraphic framework, although detailed in parts, contained numerous inconsistencies, and resulted in a poor ability to correlate stratigraphy and units on a regional scale. Working to resolve many of these issues, Nelson et al. (2018) completed a comprehensive regional investigation of the Hazelton Group, resulting in a new stratigraphic framework that contains six formations, detailed in Table 8.

Table 8. Stratigraphic framework for the Hazelton Group in the Eskay Creek-Harrymel Creek area (after Nelson et al., 2018).

Formation	Lithologies	Sub-units	Age
Quock Fm. (Hazelton Group)	The highest unit in the Hazelton Group, consisting of 50-100 m of thinly bedded, dark grey siliceous argillite with pale felsic tuff laminae, and radiolarian chert. Commonly identifiable by presence of alternating dark and light coloured beds. Located in areas proximal to, but outside of the Eskay rift.		~164-170 Ma
Mt. Dilworth Fm. (Hazelton Group)	Dacite and rhyolite that form laterally continuous exposures; distinguished from felsic units of the Iskut River Fm. by its regional extent and lack of interfingering with mafic units. Located in areas proximal to, but outside of the Eskay rift.		174 Ma
Iskut River Fm. (Hazelton Group)	A several kilometre thick succession of interlayered basalt, rhyolite, and sedimentary rocks that occupy a narrow, fault-bounded north-trending belt known as the Eskay Rift. It consists of a highly variable succession of mafic and felsic volcanic and sedimentary units in differing stratigraphic sequences, often with multiple stratigraphic repetitions.	**Willow Ridge mafic unit** - Voluminous basalts located at varying stratigraphic levels; present in the hanging wall to the Eskay Creek deposit.	170-173 Ma
		Mount Madge sedimentary unit - Thinly bedded black argillaceous mudstone and felsic tuff (host to the stratiform mineralization at Eskay Creek in the Contact Mudstone); similar thin, discontinuous lenses enclosed within volcanics occur elsewhere in the Iskut River Fm.	171-175 Ma
		Eskay Rhyolite Member - A linear flow dome complex of coherent to brecciated flows that show peperitic contacts with the overlying argillites; distinct geochemical signature compared to other felsic bodies in the area (Al/Ti>100). Associated with the mineralizing event at Eskay Creek.	175 Ma
		Bruce Glacier felsic unit - Non-welded to welded lapilli tuff, felsic volcanic breccia and coherent flows, and volcanic conglomerates. Located in the footwall of the Eskay Creek deposit.	173-179 Ma
Spatsizi Fm. (Hazelton Group)	Volcanic sandstone, conglomerate, and local bioclastic sandy limestone, mudstone-siltstone rhythmites, and limestone.		~174-187 Ma
Betty Creek Fm. (Hazelton Group)	Can be subdivided into three informal units which have been observed as multiple bodies at different stratigraphic levels.	**Brucejack Lake felsic unit** - Flow dome complex believed to represent the extrusive and high-level intrusive products of a local magmatic centre; consists of k-spar, plagioclase and hornblende phyric flows, breccias and bedded welded to non-welded felsic tuffs that are intruded by flow-banded coherent plagioclase phyric bodies (grade upward into flows).	183-188 Ma
		Johnny Mountain dacite unit - Generally located upsection of the Unuk River andesite consisting of bedded dacite lapilli tuff and breccia.	~194 Ma
		Unuk River andesite unit - Pyroclastic and epiclastic deposits often located unconformably overtop of the Jack Fm.	187-197 Ma
Jack Fm. (Hazelton Group)	Basal siliciclastic unit characterized by cobble-boulder granitoid-clast conglomerates, quartz-bearing arkosic sandstone, greywackes, and thinly bedded siltstones and mudstones, units sometimes weather to an orange colour. Some sections contain interbedded andesitic volcaniclastics.		196-203 Ma

5.2 Property Geology

5.2.1 Stratigraphy

The Eskay Creek deposit is located near the northern margin of the Eskay Anticline, just below the stratigraphic transition from volcanic rocks of the uppermost Hazelton Group to marine sediments of the Bowser Lake Group (Figure 6 and Appendix IV). Descriptions of units from the local mine stratigraphy have been compiled from Roth et al. (1999) with stratigraphic nomenclature taken from Nelson et al. (2018).

The lowest stratigraphic unit encountered at Eskay Creek is the Unuk River andesite unit (Betty Creek Formation), which is exposed in the core of the Eskay Anticline. It is characterized by a thick sequence of coarse, monolithic andesite breccias and heterolithic volcaniclastic rocks. The andesites are overlain by marine shales and interbedded coarse clastic sedimentary, volcaniclastic, and calcareous rocks of the Spatsizi Formation. Bartsch (1993) suggests that the observed shift from sandstone and conglomerate to shale dominated facies indicates a shift from shallow to deeper marine settings.

The base of the Iskut River Formation is marked by a sequence of volcaniclastic rocks with compositions ranging from dacite to basalt and are likely part of the Bruce Glacier felsic unit. This unit is characterized by pumice-rich block and lapilli tuffs and heterogeneous epiclastic rocks that are locally fossiliferous. Near the top of the sequence, a distinct dacite amygdaloidal, aphanitic flow or sill forms a marker horizon referred to by Roth et al. (1999) as the Datum Dacite. This unit is capped by a thin (<3 m thick) distinctive black mudstone horizon, referred to as the Datum Mudstone.

Up stratigraphy, the Eskay Rhyolite member is represented by a linear set of flow-dome complexes through the property. Locally preserved flow bands, flow lobes, breccias, hyaloclastite, spherulites, and perlitic textures allowed Bartsch (1993) to identify several distinct facies. Identified facies include basal and peripheral fragmental felsic rocks containing pumiceous clasts, outer zones dominated by chaotic autobrecciated flow-banded rhyolite, and central zones of massive to flow-banded rhyolite. The entire rhyolite sequence is up to 200 m thick. U-Pb zircon dating by Childe (1996) shows an age for the unit of 175 ± 2 Ma. The Eskay Rhyolite member sits in the immediate footwall to the economically significant stratiform mineralized bodies, and also hosts stringer-style discordant mineralization.

The contact between the rhyolite and overlying Contact Mudstone (Mount Madge Sedimentary unit) is locally marked by a black-matrix breccia, consisting of matrix-supported white rhyolite fragments set in a siliceous black matrix (Bartsch, 1993). Peperitic textures, represented by irregular concave surfaces and jigsaw fit texture of the rhyolite fragments, suggests in-situ fragmentation of rhyolites as they intruded wet sediments. This hints that rhyolite volcanism was at least partly synchronous with argillaceous sedimentation. Overlying the rhyolite and black matrix breccia are black mudstone and intercalated graded volcaniclastic sedimentary rocks (Roth et al., 1999). Rhyolite fragments contained within the volcaniclastic beds suggest an extrusive component to the rhyolite flow domes (Roth, 1995). Within these volcaniclastic intervals, the presence of coarser rhyolite breccia fragments is interpreted to represent debris flows. The thickest accumulations of these rhyolitic fragments are located in the immediate footwall to the 21B clastic ore Zone, which suggests that a basin developed in the area prior to mineralization (Roth, 1995).

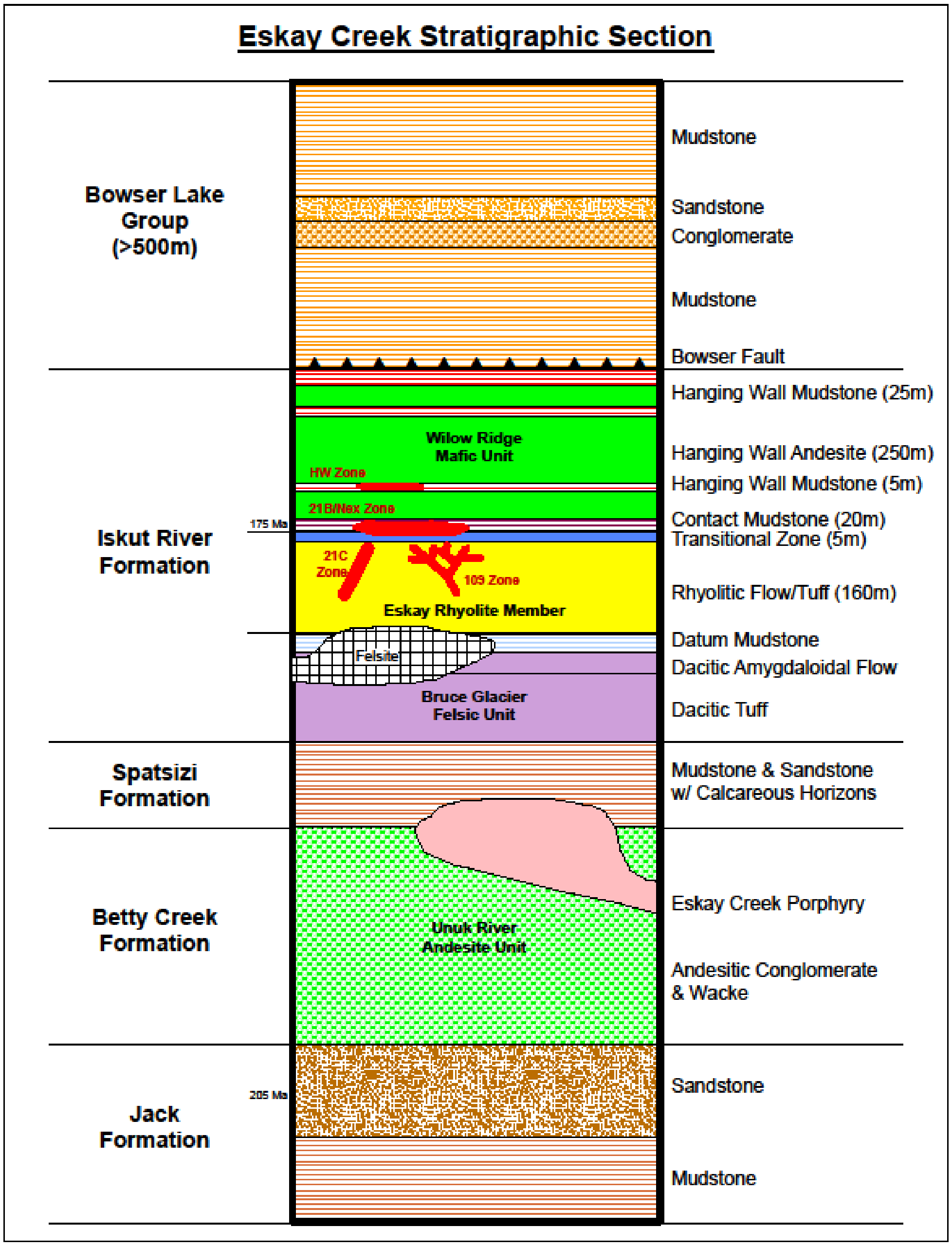

Figure 6. Eskay Creek stratigraphic section (modified after Gale et al., 2004).

The Contact Mudstone (Mount Madge sedimentary unit) at Eskay Creek lies above the Eskay Rhyolite member and below the Willow Ridge basalt unit. The Contact Mudstone is the host unit for stratiform mineralization in the 21A, B, C, E, NEX and Hanging Wall Zones. It is characterized by laterally extensive, well-laminated, carbonaceous mudstone that is variably calcareous and siliceous and ranges from less than 1 m to more than 60 m in thickness. Thin siltstone, sandstone and ash beds, and pyritic laminae are common through the unit. Within certain beds, radiating porphyroblasts of prehnite, variably altered to sericite, calcite, and barite have been noted (Ettlinger, 1992). They may be a result of contact metamorphism due to the emplacement of basaltic dikes and sills.

The uppermost unit of the Iskut River Formation at Eskay Creek is the hangingwall basalt (Willow Ridge mafic unit). The basalt occurs as both extrusive and intrusive phases, ranges from aphanitic to medium-grained with local feldspar phenocrysts, and in places exceeds 150 m thickness. Near the top of the sequence, well-preserved pillow flows and breccias, hyaloclastite, and basaltic debris flows containing minor mudstone and rhyolite clasts interspersed with thin argillite beds have been reported (Roth et al., 1999). Basalt flows near the top of the sequence commonly contain chlorite and quartz-filled amygdules.

Capping the entire sequence are thick accumulations of Bowser Lake Group mudstones and conglomerates, covered locally by a thin veneer of in-situ soils and transported tills.

5.2.2 Intrusive Rocks

Intrusive units are common through the stratigraphic sequence. The 184 +5/-1 Ma (MacDonald et al., 1992; Childe, 1996) Eskay monzodiorite porphyry is perhaps the most voluminous intrusive on the property and is exposed in the core of the Eskay Anticline just south of the 21 Zone deposits. It predates the Eskay Rhyolite and mineralization located in the 21 Zone deposits by 6-16 million years.

On the West Limb of the Eskay Anticline, a series of north-northeast trending felsic intrusive rocks form a series of prominent gossanous bluffs which extend for 7 km to the southwest of the Eskay Creek deposit. These felsic intrusives are chemically indistinguishable from the Eskay Rhyolite (Bartsch, 1993, Roth, 1993) and display strong quartz, pyrite, and potassium feldspar alteration with minor sericite. Bartsch (1993) and Edmunds et al. (1994) believe these intrusives represent sub-volcanic portions, or feeders, to the Eskay Rhyolite.

Basaltic dikes and sills linked to the hangingwall basalt (Willow Ridge mafic unit) are also observed throughout the Eskay Creek stratigraphic section. Where they cut the Contact Mudstone, their contacts are frequently brecciated and peperitic, suggesting the mudstone was still wet at the time of intrusion (Roth et al., 1999).

5.2.3 Structure

The Eskay Creek deposit area has been deformed by at least two tectonic events (Edmunds and Kuran, 1992). The earliest deformation (D1) is likely related to a mid-Cretaceous north-northwest compression event that formed the northeast trending, syncline-anticline couples and a spaced pressure solution cleavage. The cleavage is axial planar to the bedding-defined Eskay Creek Anticline and is pervasive within the phyllosilicate-rich lithologies and even through the massive sulphide horizons. Faulting late in the D1 event resulted in the development of east-dipping thrust sheets, such as the Coulter Creek Fault, south of Eskay Creek. Regional metamorphism during the D1 event also resulted in the formation of porphyroblastic prehnite and calcite.

A second deformation (D2) event, related to a north-northeast directed compression event, locally re-oriented the D1 cleavage planes and formed prominent north and northeast trending, steeply dipping faults. Crosscutting relationships suggest that the north set of faults are early with apparently consistent sinistral displacement (Edmunds and Kuran, 1992). The later northeast trending set of faults commonly display oblique normal displacement. These faults form strong topographic lineaments and displace both stratigraphic contacts and mineralized zones.

5.2.4 Alteration

Alteration in the footwall volcanic units at Eskay Creek is characterized by a combination of pervasive quartz-sericite-pyrite, potassium feldspar, chlorite and silica. Zones of most intense alteration are associated locally with sulphide veins that contain pyrite, sphalerite, galena, and chalcopyrite (Roth et al., 1999).

Alteration zonation is perhaps most apparent in the Eskay Rhyolite member (Roth et al., 1999), closely associated with the 21 Zone deposits. Rhyolite located lateral to and at deeper levels beneath the area of stratiform mineralization is commonly moderately silicified and potassium feldspar altered. Silica alteration occurs as extremely fine-grained quartz flooding and densely developed quartz-filled micro veinlets. Potassium feldspar occurs cryptically as fine-grained replacement of plagioclase phenocrysts (Gale et al., 2004). Fractures that cut potassium feldspar-silica altered rhyolite typically have sericitic alteration envelopes and contain very fine-grained pyrite. Where alteration is most intense, chlorite replaces sericite in these fracture envelopes.

An intense tabular shaped blanket of chlorite-sericite alteration, up to 20 m thick, occurs in the Eskay Rhyolite member, immediately below the contact with the main stratiform sulphide mineralization. In these areas, Mg-chlorite has completely replaced the rhyolite to form a dark green, waxy rock consisting of clinochlore (Roth et al., 1999). This blanket coincides spatially with an area of greater rhyolite thickness and where extensive brecciation has developed in the upper part of the rhyolite unit. This zone of increased brecciation likely created more pathways for hydrothermal fluids, and therefore greater surface area for fluid-rock interaction, resulting in development of the stronger alteration zone.

5.2.5 Mineralization

Two types of mineralization are found: 1) stratiform, mudstone-hosted, clastic to massive lenses of sulphide and sulfosalts; and 2) discordant, rhyolite hosted, crustiform stockwork zones of base and precious metal veins.

The stratiform mineralization is hosted in black, carbonaceous mudstone and sericitic tuffaceous mudstones at the contact between the Eskay rhyolite and the overlying basaltic flows (hanging wall andesite). The main zone of mineralization, the 21B Zone, consists of stratiform clastic sulphide sulfosalt beds. These beds contain fragments of coarse-grained sphalerite, tetrahedrite, Pb sulfosalts with lesser freibergite, galena, pyrite, electrum, amalgam and minor arsenopyrite. Stibnite occurs locally in late veins and as a replacement of clastic sulphides. Rare cinnabar is associated with the most abundant accumulations of stibnite. At the same stratigraphic horizon as the 21B Zone are the 21A, 21C, 21Be, 21E and NEX Zones. The 21A Zone is characterized by high concentrations of stibnite-realgar, cinnabar and arsenopyrite.

Stratigraphically above the 21B Zone, and usually above the first basaltic sill, the mudstones also host a localized body of base metal rich, relatively precious metal poor mineralization referred to as the HW Zone.

Stockwork and discordant mineralization is hosted in the rhyolite footwall in the PMP, 109, 21A, 21C, and 22 Zones. The PMP Zone is characterized by base metal rich veins and veinlets in strongly sericitized and chloritized rhyolite. The 109 Zone comprises gold-rich veins of quartz, sphalerite, galena and pyrite associated with silica flooding and fine-grained carbon. The 21C rhyolite consists of very fine cryptic pyrite with rare sphalerite and galena in sericitized rhyolite. The 21A rhyolite hosted mineralization contains disseminated stibnite, arsenopyrite, tetrahedrite and base-metal rich veinlets.

6.0 LiDAR Survey

6.1 Objectives and Description of Work

In April 2018, Skeena requested a proposal from McElhanney Consulting Services Ltd. to submit a survey and cost schedule to collect aerial LiDAR and photography over the Eskay Creek Property. As per McElhanney's minimum survey size requirement, the area of interest for the project covered 100 square kilometers.

LiDAR and photo acquisition was completed during two flights on October 1st and 2nd, 2018. Both datasets were collected simultaneously, and equipment was co-mounted in the same aircraft. Weather conditions were clear over the project area of interest during the time of data collection.

6.2 Survey Parameters

The LiDAR data was collected using a Leica ALS70 500kHz laser scanner mounted in a twin-engine Piper Navajo aircraft. The photography was completed using a Leica RCD30 60MP digital camera. Data acquisition speed was approximately 140 nautical miles per hour.

For both photo and LiDAR acquisition, there was one pilot and one survey technician present in the aircraft.

All GPS data was processed by the survey technician using GrafNav software v.8.7. IMU data was processed using the Leica IPAS Pro v.1.3 and the laser data was extracted using CloudPro. Post-processing was completed in McElhanney's Vancouver office by Azadeh Koozare. Initial LiDAR classification work was subcontracted to Impulsions Laser Consulting PVT Ltd. Subsequent classification and all QC work was performed at McElhanney's Vancouver office by staff Nick Copithorne, Anthony Tam, Vesna Knesevic, Jorge Labbe and Andrew McIntosh.

LiDAR bare-earth point density (points on the ground) varied through the survey area according to the tree canopy density, understory density and topographic features. The mean point density of the full-feature point cloud (all points) was 4.95 points per square meter. The mean bare-earth point density was measured to be 1.39 points per square meter. The resulting topography map was compiled to 1 meter accuracy.

Figure 7 shows the ground control points that were used to complete the surveys. A commonly used method of quality control regarding the spatial accuracy of LiDAR data involves the comparison of bare-earth LiDAR data points to surveyed ground control points. This would preferably use ground control points collected using RTK GPS equipment along roadways or other features not covered by forest canopy or other obstructions. As the survey area was partially covered by a LiDAR survey flown in 2008, it was agreed that overlapping LiDAR data acquired in 2008 would be used in place of RTK GPS ground control. It was noted that accuracy values stated for the 2018 data would be relative to the 2008 data. Upon comparing building footprint locations, the 2018 data was shifted -1.5 m in easting in order to match the position of the building footprints seen in the 2008 data. No shift in northing was required. Once the horizontal shift was applied, the vertical offset of the two datasets was compared using the 127 control points. A mean vertical offset of -0.014 m was determined using the Data Statistics tool in Datamine-Discover software.

Figure 7. Location and distribution of control points used to compare 2018 data and 2008 data.

6.3 Survey Results

LiDAR and image deliverables were received on January 17th, 2019. LiDAR survey data was immediately used by Skeena staff to aid in surface control for the mineral resource estimate underway at the time. Digital copies of the orthophotograph have been made available to Skeena staff to assist with planning aspects of future exploration and drilling programs.

The resulting topography product has been used to update drilling cross sections, refine mineral resource estimates, as well as aid in planning for future exploration and drilling programs.

6.3.1 Orthophotograph

Appendix V contains the Eskay Creek orthophotograph product at 1:50,000 scale.

6.3.2 LiDAR Topography

Appendix VI contains the 1:50,000 scale, 50-meter contour topography of the Eskay Creek property with bare earth hillshade imagery background. Although contours were delivered at one (1) meter intervals, 50 m intervals have been chosen for display purposes due to the scale of the map.

7.0 Conclusions

The orthophotography flown on October 1st and 2nd, 2018 has provided up to date imagery to support exploration work on the Eskay Creek property.

Detailed LiDAR topography has provided the required control to assist with resource modelling work and future exploration and drill program planning on the property.

8.0 References

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9.0 Statement of Costs

Exploration Work Type	Comment	Subtotal	Totals
Remote Sensing	**Area in Hectares / Enter total invoiced amount or list personnel**		
LiDAR and Orthophoto-Entire Survey Area	10,000 ha (100 km^2)	$43,075.00	
LiDAR and Orthophoto-Event 5736677	500 ha (5 km^2)	$6,599.41	
		$6,599.41	**$6,599.41**
TOTAL Expenditures			**$6,599.41**

10.0 Statement of Qualifications

I, Adrian Newton, P.Geo., do hereby certify that:

1) I am currently employed as an Exploration Manager by:

   Skeena Resources Ltd.
   650 – 1021 West Hastings Street
   Vancouver, British Columbia
   V6E 0C3

2) I graduated with a degree of Bachelor of Science with specialization in Earth Sciences from Simon Fraser University in 2004.

3) I am a member of the Association of Professional Engineers and Geoscientists of British Columbia, licence # 39299.

4) I have worked continuously as a geologist for 15 years since my graduation from university.

5) I am responsible for the preparation of this assessment report.

Dated this 21st day of October 2019.

PROFESSIONAL PROVINCE OF A. C. B. NEWTON # 39299 BRITISH COLUMBIA GEOSCIENTIST

Adrian Newton

Signature

APPENDIX I:

Mineral Titles Online - Event 5736677

BRITISH COLUMBIA

Print and Close Cancel

Mineral Titles Online

Mineral Claim Exploration and Development Work/Expiry Date Change

Confirmation

Recorder: DEVEAU, STUART WILLIAM (282199) **Submitter:** DEVEAU, STUART WILLIAM (282199)

Recorded: 2019/APR/03 **Effective:** 2019/APR/03

D/E Date: 2019/APR/03

Confirmation

If you have not yet submitted your report for this work program, your technical work report is due in 90 days. The Exploration and Development Work/Expiry Date Change event number is required with your report submission. **Please attach a copy of this confirmation page to your report.** Contact Mineral Titles Branch for more information.

Event Number: **5736677**

Work Type: Technical Work
Technical Items: Geophysical, PAC Withdrawal (up to 30% of technical work required)

Work Start Date: 2018/OCT/01
Work Stop Date: 2018/OCT/02
Total Value of Work: $ 6599.41
Mine Permit No:

Summary of the work value:

Title Number	Claim Name/Property	Issue Date	Good To Date	New Good To Date	# of Days For-ward	Area in Ha	Applied Work Value	Sub-mission Fee
252976	IKS 2	1989/AUG/02	2019/AUG/02	2020/Jul/12	345	500.00	$ 9426.23	$ 0.00

Financial Summary:

Total applied work value: $ 9426.23

PAC name: Skeena Resources Ltd.
Debited PAC amount: $ 2826.82
Credited PAC amount: $ 0

Total Submission Fees: $ 0.0
Total Paid: **$ 0.0**

Please print this page for your records.

The event was successfully saved.

Click here to return to the Main Menu.

APPENDIX II:

McElhanney Consulting Services Ltd.

Survey Report

Eskay Creek Property, BC

2018 LiDAR Survey

Our File:

2611-19309-01

Submitted to:
Skeena Resources Ltd.
650, 1021 West Hastings Street
Vancouver, BC
V6E 0C3
604-684-8725

Attention:
Mike Mayer

Submitted By:
McElhanney Consulting Services Ltd.
100-780 Beatty Street
Vancouver, BC,
V6B 2M1
Tel: 604-683-8521
Contact: Andrew McIntosh, B.Sc., GISP

March 22, 2019

Table of Contents

List of Figures and Tables

1. Introduction

McElhanney Consulting Services Ltd. (MCSL) performed LiDAR and aerial photo acquisition for the Eskay Creek property in BC, as shown in Figure 1.

The 100 km² project area was flown over two missions on October 1st and 2nd, 2018. This report describes the acquisition and quality control method used to produce the final elevation data.

2. Mission Plan

MCSL Project: Skeena Eskay LiDAR, 2611-19309-01

Date: October 1st and 2nd, 2018. Two flights were required due to the remoteness, size and mountainous nature of the project area.

Personnel: The flight crew consisted of a pilot and one survey technician.

Location: Northwest BC

Topography: Mountainous

Flight Lines: Sixty flight lines (Figure 2, Table 1) comprising 539 line-km, excluding turns, were flown over the project area. Flight lines were oriented NE 025 degrees and SW 205 degrees. Flight line elevations varied with local topography and ranged between 2250 m and 3230 m above mean sea level.

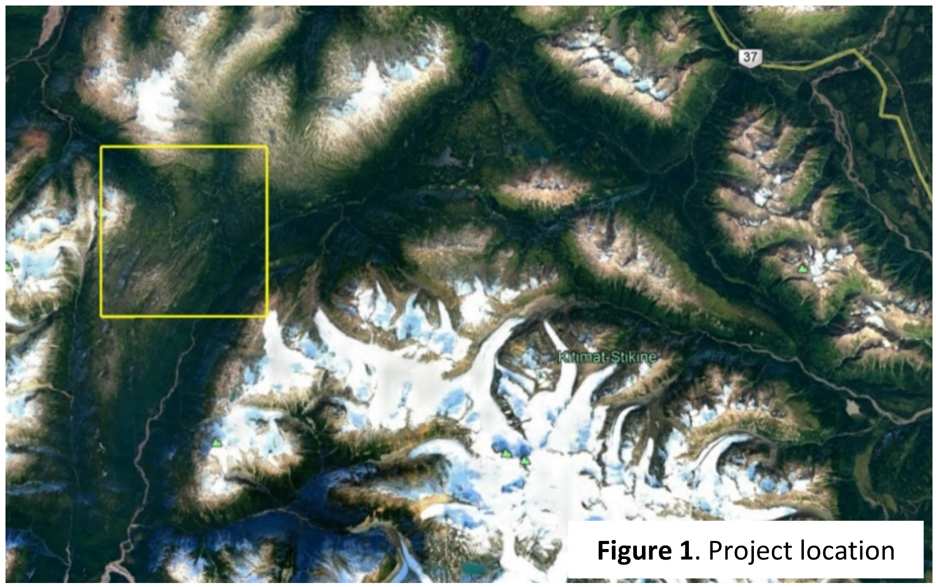


Figure 1. Project location

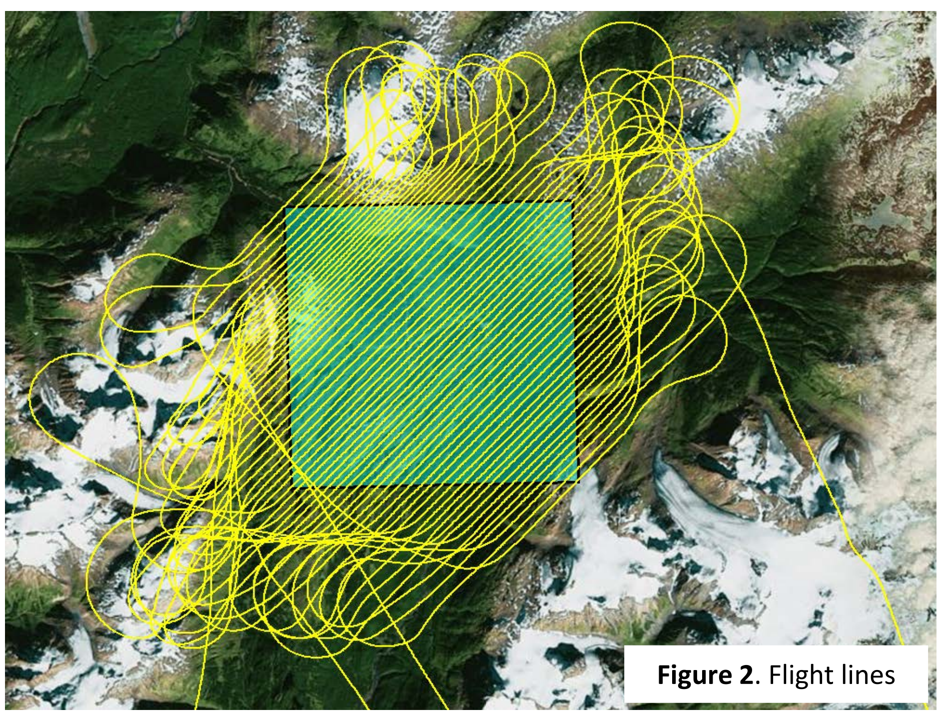


Figure 2. Flight lines

3. LiDAR and Photo Acquisition

Digital airphoto was acquired using the Leica RCD30 60mp camera. LiDAR data was collected using the Leica ALS70 scanner. LiDAR data and photo were collected simultaneously using a twin-engine Piper Navaho N44RL. Data acquisition speed was approximately 140 nautical miles per hour. For LiDAR unit production specifications please see https://w3.leica-geosystems.com/downloads123/zz/airborne/ALS70/brochures/Leica_ALS70_6P_BRO_en.pdf

Figure 3. Leica ALS70 LiDAR Scanner

4. Point Density

Bare-earth point density (points on the ground) varies throughout the survey area according to tree canopy density, understory density and topographic features. The mean density of the full-feature point cloud (all points) was determined to be 4.95 points/m². The mean bare-earth point density was measured to be 1.39 points/m².

5. Data Processing

All GPS data was processed using GrafNav software v.8.7. IMU data was processed using the Leica IPAS Pro v.1.3 and the laser data was extracted using Cloud Pro. The GPS antenna position in the airplane was calculated by post–processing the raw data at 1 second intervals for the entire flight using the Precise Point Positioning method. The airborne positions were combined with the post–processed platform attitude information to generate a time tagged position and orientation solution. The standard deviation of the airborne GPS solution for using KAR (Kinematics Ambiguity Resolution) was estimated to be 0.03, 0.04 and 0.05m in East, North and height directions, respectively. The estimated values for the GPS antenna position were used with the laser ranges and platform angles to compute all the individual X, Y, and Z coordinates for each laser return in each flight line. The result is a processed point cloud containing all measured points.

Post-processing was done in McElhanney's Vancouver, BC office by Azadeh Koozare. Initial LiDAR classification work was subcontracted to Impulsions Laser Consulting PVT Ltd. Subsequent classification and all QC work was performed by McElhanney staff in Vancouver, BC by Nick Copithorne, Antony Tam, Vesna Knesevic, Jorge Labbe and Andrew McIntosh.

6. Quality Control

A commonly used method of quality control regarding the spatial accuracy of LiDAR data involves the comparison of bare-earth LiDAR data points to surveyed ground control points. This would preferably use ground control points collected using RTK GPS equipment along roadways or other features not covered by forest canopy or other obstructions. An RTK GPS survey may be carried out after LiDAR data is acquired, though it is imperative that in the interim no changes have occurred to the surfaces on which the ground control point data are collected.
As per ASPRS guidelines the vertical accuracy of LiDAR data would then be stated as an RMSE value calculated using the formula

$$RMSE_z = Sqrt[\sum (Z_{Lidar(i)} - Z_{check(i)})^2 / n]$$

where the check values use the surveyed ground control point elevations. As the project area was partially covered by a LiDAR survey flown in 2008, and there was insufficient time to establish ground control within the survey area, it was agreed that overlapping LiDAR data acquired in 2008 would be used in place of RTK GPS ground control. It was noted that accuracy values stated for 2018 data would be relative to the 2008 data. Compared to RTK GPS ground

control accuracy statistics for **2008** LiDAR data are as follows:

Average dZ	-0.225 m
Min dZ	-0.691
Max dZ	0.170
RMSE	0.269
Std Dev	0.148

An assessment of the horizontal offset between the 2018 and 2008 data involved a comparison of bare-earth points at the location of the Eskay mine mill site, where the position of building footprints could be compared in the two sets of data. Upon comparing building footprint locations, the 2018 data was shifted -1.5 m in easting in order to match the position of the building footprints see in 2008 data. No shift in northing was required. Once the horizontal shift was applied to the 2018 data, the vertical offset (dZ) of the two sets of data could then be compared. This was accomplished by calculating the vertical offset of 2018 and 2008 bare-earth digital surface models, both with 1-metre pixels, at 127 points along roads and in the immediate vicinity of the mill site. Offsets were determined using the formula

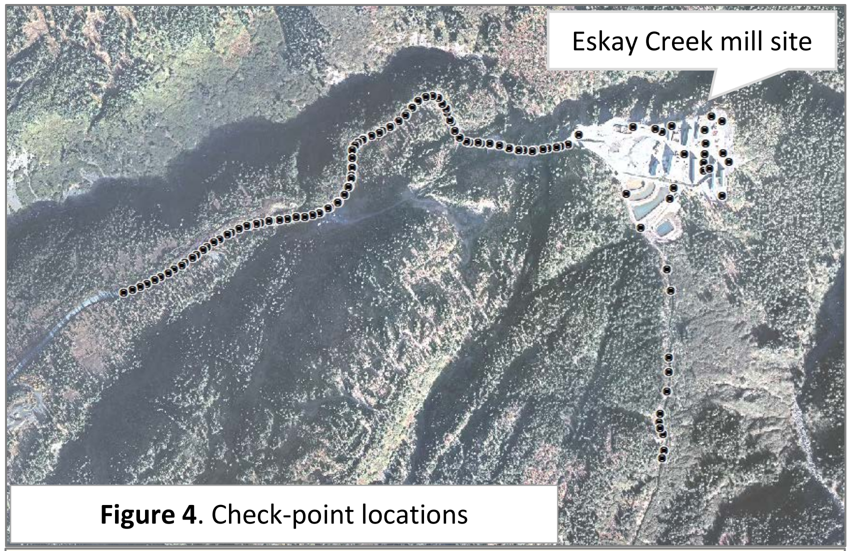
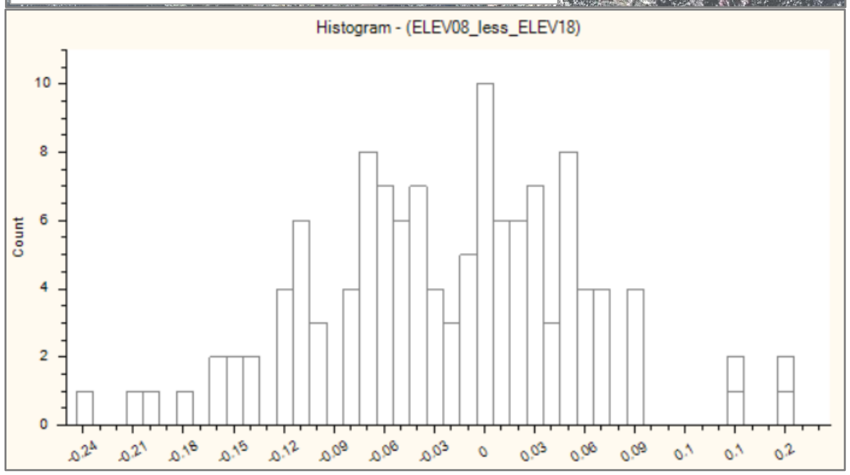


Figure 4. Check-point locations



$$dZ = Z_{2008} - Z_{2018}$$

Statistics for the 127 dZ values were then calculated using the Data Statistics tool in Datamine-Discover software. The following statistics were determined:

dZ min	-0.242 m
dZ max	0.209 m
dZ mean	-0.014 m
dZ Std Dev	0.085 m
dZ Percentile95	0.106 m

These dZ values can be considered as representing the relative vertical accuracy of the 2018 elevation surface compared to the 2008 elevation surface, after 2018 data had been horizontally adjusted. Based on these values it was determined that no vertical adjustment was required in the 2018 data.

Given that more than ten years had elapsed between the two LiDAR surveys it is possible that some offset can be attributed to changes in the road surface. It should also be noted that the mean bare-earth point density of 2008 data is approximately 0.5 points/m², for about 36% of that achieved in 2018, meaning that some offset may be attributed to the 2008 digital surface having a less accurate representation of the ground shape.

The map and probabililty plot to the right (Figure 5) show how the statistical distribution of offset values relates to locations on the ground. Colour divisions are by quartiles for visual purposes only – they are not intended to categorize offset values of any particular significance. The apparent non-random geographic clustering of positive vs. negative offset values suggests that minor changes to the road surface over time may be contributing to some of the offset values, though 95% of these values are within ±10.6 cm.

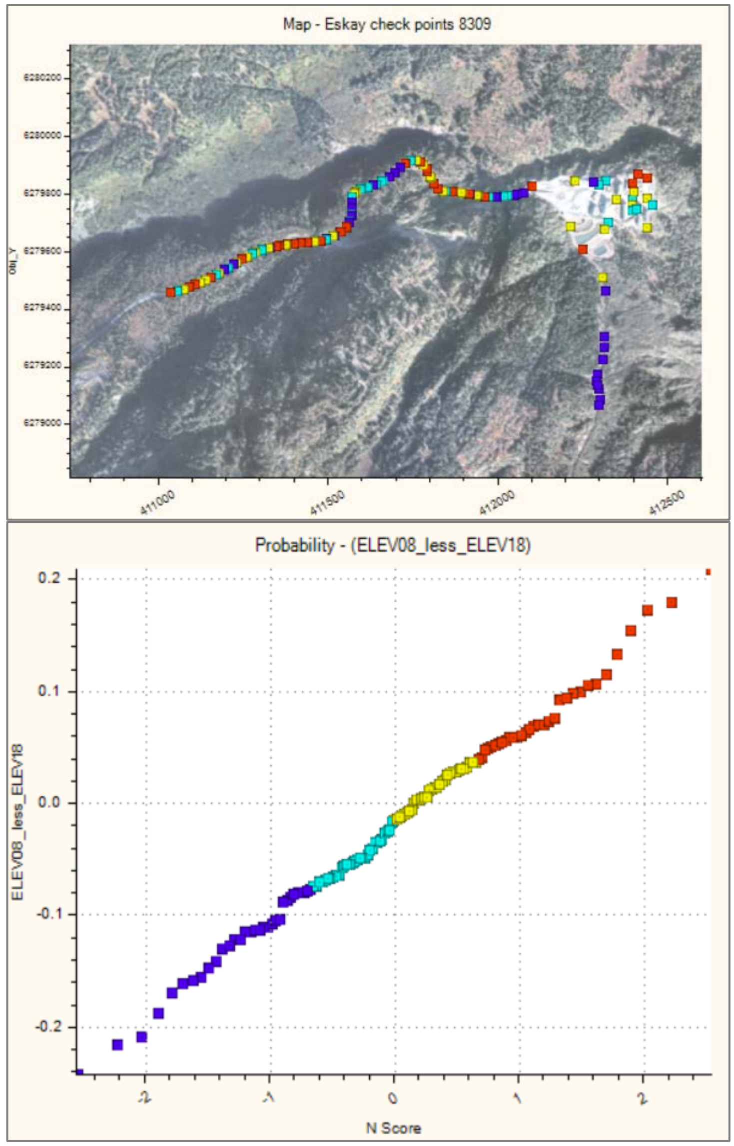


Figure 5. Statistical and geographic distribution of check-point vertical offset.

7. Deliverables

In order to match historical survey data all deliverables utilize the coordinate system
NAD83 UTM Zone 9
Vertical datum: Hv2 geoid model.
These deliverables comprise:

- Classified LiDAR (bare earth/non-bare earth) LAS files
- 20 cm-pixel, colour orthophoto in geotiff and ecw formats
- Raster DEM, bare-earth hill-shade imagery files (for geological interpretation) formatted for use in MapInfo-Discover, ArcMap or other GIS software.
- LiDAR survey report

8. Recommendations

As no RTK GPS data was known to exist within the project area or within a useable distance of the project area, and time did not allow for a ground survey, the vertical accuracy of 2018 LiDAR data was established by comparison of digital terrane models generated from 2018 and 2008 bare-earth LiDAR data. Statistical values resulting from the comparison are noted above and are relative to the 2008 data – they are not representative of an absolute accuracy value, as would be the case if RTK GPS data were used. The horizontal accuracy of the 2018 data cannot be stated statistically as 2018 LiDAR data were shifted based on a visual comparison of building footprints evident in 2008 and 2018 data. It can only be stated that after 2018 data was shifted -1.5 metres in easting (1.5 metres westward) there is no visually observable horizontal offset between features seen in the 2018 data vs the same features seen in the 2008 data.

If an absolute vertical accuracy value for the 2018 LiDAR data is required it is recommended that the client obtain ground survey services to establish a minimum of 150 RTK GPS points along roadway centerlines within the project area. These data may then be used to report absolute accuracy values and to decide if 2018 LiDAR data requires additional adjustment. It is imperative that RTK GPS data be collected along parts of the road that have not physically changed between the time of the ground survey and the time of the LiDAR survey. If a more rigorous method of establishing horizontal accuracy is desired it is recommended that ground survey data be acquired for fixed vertical features such as building corners.

Table 1. Flight Lines

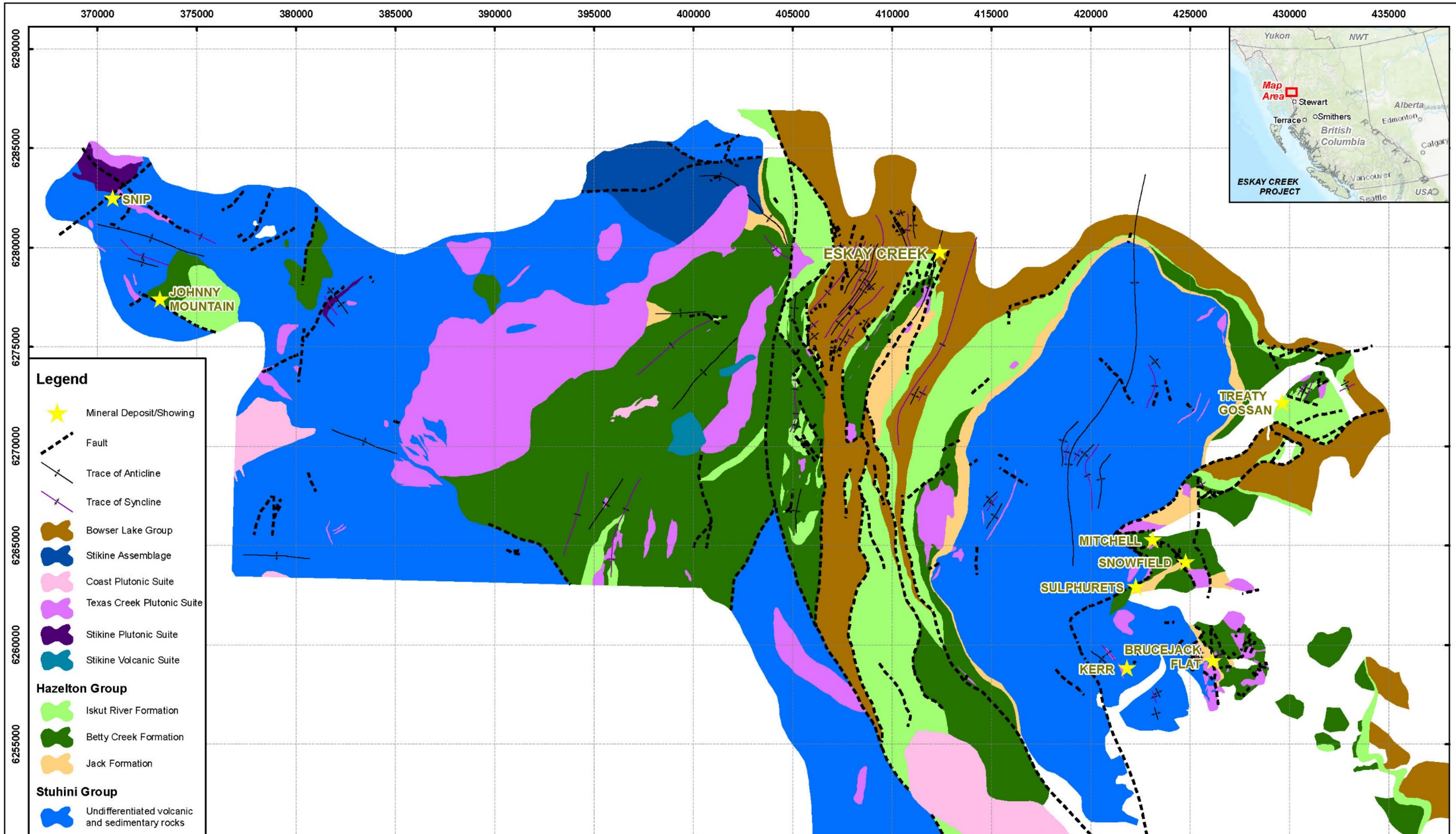
Flight Line Label	Length [m]	Alt MSL [m]	Min Alt AGL [m]	Max Alt AGL [m]	FOV [deg]	Used Scan Rate [Hz]	Used Laser Pulse Rate [Hz]	Begin WGS84 Lat [deg]	Begin WGS84 Long [deg]	End WGS84 Lat [deg]	End WGS84 Long [deg]
001	1206	2574	1823	1933	20	54.7	147200	56.6889	-130.5492	56.6955	-130.538
002	1894	2579	1674	1933	20	54.7	147200	56.6957	-130.5303	56.6847	-130.5493
003	2466	2587	1479	1933	20	54.7	147200	56.6809	-130.5489	56.6957	-130.5236
004	3059	2592	1369	1933	20	54.7	147200	56.6958	-130.517	56.6772	-130.549
005	3540	2595	1311	1933	20	54.7	147200	56.674	-130.5486	56.6958	-130.5113
006	4051	2599	1212	1933	20	54.7	147200	56.696	-130.5056	56.6709	-130.5487
007	4446	2605	1095	1933	20	54.7	147200	56.6682	-130.5484	56.6959	-130.5009
008	4871	2611	1026	1933	20	54.7	147200	56.6961	-130.4962	56.6656	-130.5485
009	5219	2622	966	1933	20	54.7	147200	56.6633	-130.5482	56.696	-130.492
010	5632	2633	848	1933	20	54.7	147200	56.6962	-130.4875	56.6608	-130.5483
011	5950	2633	825	1933	20	54.7	147200	56.6586	-130.548	56.6961	-130.4836
012	6297	2641	833	1933	20	54.7	147200	56.6963	-130.4798	56.6565	-130.5481
013	6571	2657	849	1933	20	54.7	147200	56.6546	-130.5478	56.6962	-130.4765
014	6922	2658	850	1933	20	54.7	147200	56.6964	-130.4727	56.6525	-130.5479
015	7213	2677	869	1933	20	54.7	147200	56.6505	-130.5477	56.6963	-130.4692
016	7585	2692	900	1933	20	54.7	147200	56.6964	-130.4651	56.6483	-130.5478
017	7904	2707	932	1933	20	54.7	147200	56.6461	-130.5475	56.6964	-130.4612
018	8293	2716	959	1933	20	54.7	147200	56.6965	-130.457	56.6437	-130.5476
019	8627	2747	994	1933	20	54.7	147200	56.6415	-130.5473	56.6965	-130.453
020	9071	2775	1047	1933	20	54.7	147200	56.6966	-130.4481	56.6388	-130.5474
021	9506	2804	1187	1933	20	54.7	147200	56.6359	-130.5471	56.6966	-130.4429
022	10083	2834	1451	1933	20	54.7	147200	56.6968	-130.4365	56.6323	-130.5471
023	10636	2862	1613	1933	20	54.7	147200	56.6287	-130.5468	56.6968	-130.43
024	11254	2831	1609	1933	20	54.7	147200	56.6969	-130.4231	56.6248	-130.5468
025	11814	2815	1596	1933	20	54.7	147200	56.6211	-130.5465	56.6969	-130.4165
026	12436	2793	1586	1933	20	54.7	147200	56.6971	-130.4095	56.6172	-130.5465
027	12974	2766	1501	1933	20	54.7	147200	56.6137	-130.5462	56.6971	-130.4032
028	13543	2714	1353	1933	20	54.7	147200	56.6972	-130.3969	56.6102	-130.5462
029	14002	2714	1294	1933	20	54.7	147200	56.6071	-130.5459	56.6972	-130.3914
030	14503	2706	1272	1933	20	54.7	147200	56.6974	-130.3859	56.604	-130.546
031	14565	2692	1275	1933	20	54.7	147200	56.6022	-130.5438	56.696	-130.383
032	14567	2689	1290	1933	20	54.7	147200	56.6945	-130.3802	56.6008	-130.5409
033	14568	2655	1250	1933	20	54.7	147200	56.5993	-130.5383	56.693	-130.3775
034	14522	2635	1248	1933	20	54.7	147200	56.6914	-130.3751	56.5979	-130.5354
035	14092	2631	1254	1933	20	54.7	147200	56.5979	-130.5303	56.6885	-130.3749
036	13588	2601	1271	1933	20	54.7	147200	56.6854	-130.3749	56.598	-130.5247
037	13137	2587	1274	1933	20	54.7	147200	56.598	-130.5194	56.6824	-130.3746
038	12610	2580	1339	1933	20	54.7	147200	56.6791	-130.3747	56.5982	-130.5135
039	12126	2579	1358	1933	20	54.7	147200	56.5981	-130.5078	56.6759	-130.3744
040	11591	2570	1356	1933	20	54.7	147200	56.6726	-130.3745	56.5983	-130.5019
041	11131	2553	1339	1933	20	54.7	147200	56.5983	-130.4964	56.6696	-130.3742
042	10601	2536	1336	1933	20	54.7	147200	56.6663	-130.3742	56.5984	-130.4906
043	10116	2484	1395	1933	20	54.7	147200	56.5984	-130.4848	56.6631	-130.3739

044	9565	2424	1359	1933	20	54.7	147200	56.6597	-130.374	56.5986	-130.4787
045	9083	2367	1380	1933	20	54.7	147200	56.5985	-130.473	56.6565	-130.3737
046	8520	2339	1406	1933	20	54.7	147200	56.653	-130.3737	56.5987	-130.4668
047	8028	2282	1407	1933	20	54.7	147200	56.5987	-130.461	56.6497	-130.3734
048	7460	2250	1288	1933	20	54.7	147200	56.6462	-130.3735	56.5989	-130.4547
049	6998	2250	1258	1933	20	54.7	147200	56.5988	-130.4492	56.6432	-130.3732
050	6495	2250	1229	1933	20	54.7	147200	56.64	-130.3733	56.599	-130.4436
051	6069	2250	1202	1933	20	54.7	147200	56.5989	-130.4386	56.6372	-130.373
052	5570	2330	1308	1933	20	54.7	147200	56.6341	-130.3731	56.5991	-130.4331
053	5061	2351	1291	1933	20	54.7	147200	56.5991	-130.4271	56.6308	-130.3727
054	4503	2407	1197	1933	20	54.7	147200	56.6273	-130.3728	56.5992	-130.4209
055	4077	2534	1236	1933	20	54.7	147200	56.5992	-130.4158	56.6245	-130.3725
056	3577	2653	1300	1933	20	54.7	147200	56.6214	-130.3726	56.5994	-130.4103
057	3126	2774	1340	1933	20	54.7	147200	56.5993	-130.405	56.6184	-130.3723
058	2580	3031	1556	1933	20	54.7	147200	56.615	-130.3724	56.5995	-130.3989
059	2034	3150	1611	1933	20	54.7	147200	56.5995	-130.3925	56.6114	-130.372
060	1387	3229	1719	1933	20	54.7	147200	56.6074	-130.3721	56.5997	-130.3853

APPENDIX III:

Regional Geology of the Iskut River Area

1:175,000 Scale



Skeena Resources Ltd.
Date: 21-Oct-19
Author: M.Mayer
Filename: 191021_EC_GeologyIskutRiverApdx3.mxd

SKEENA RESOURCES LTD.

Eskay Creek Project

Appendix III: Geology of the Iskut River Area

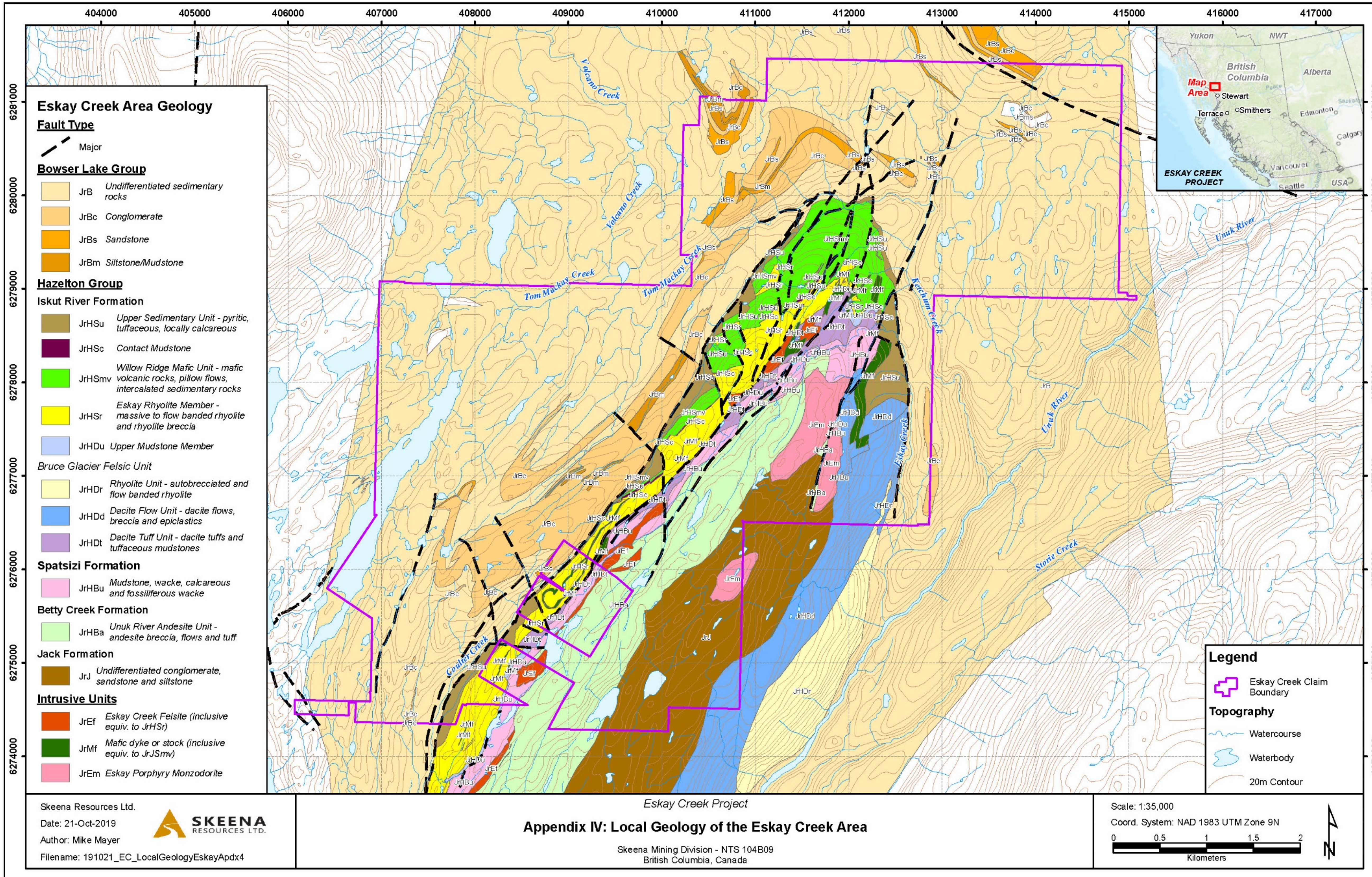
Skeena Mining Division - NTS 104B09
British Columbia, Canada

Scale: 1:175,000
Coord. System: NAD83 - UTM Zone 9N
0 2 4 6 8
Kilometers
N

APPENDIX IV

Eskay Creek Property Scale Geology

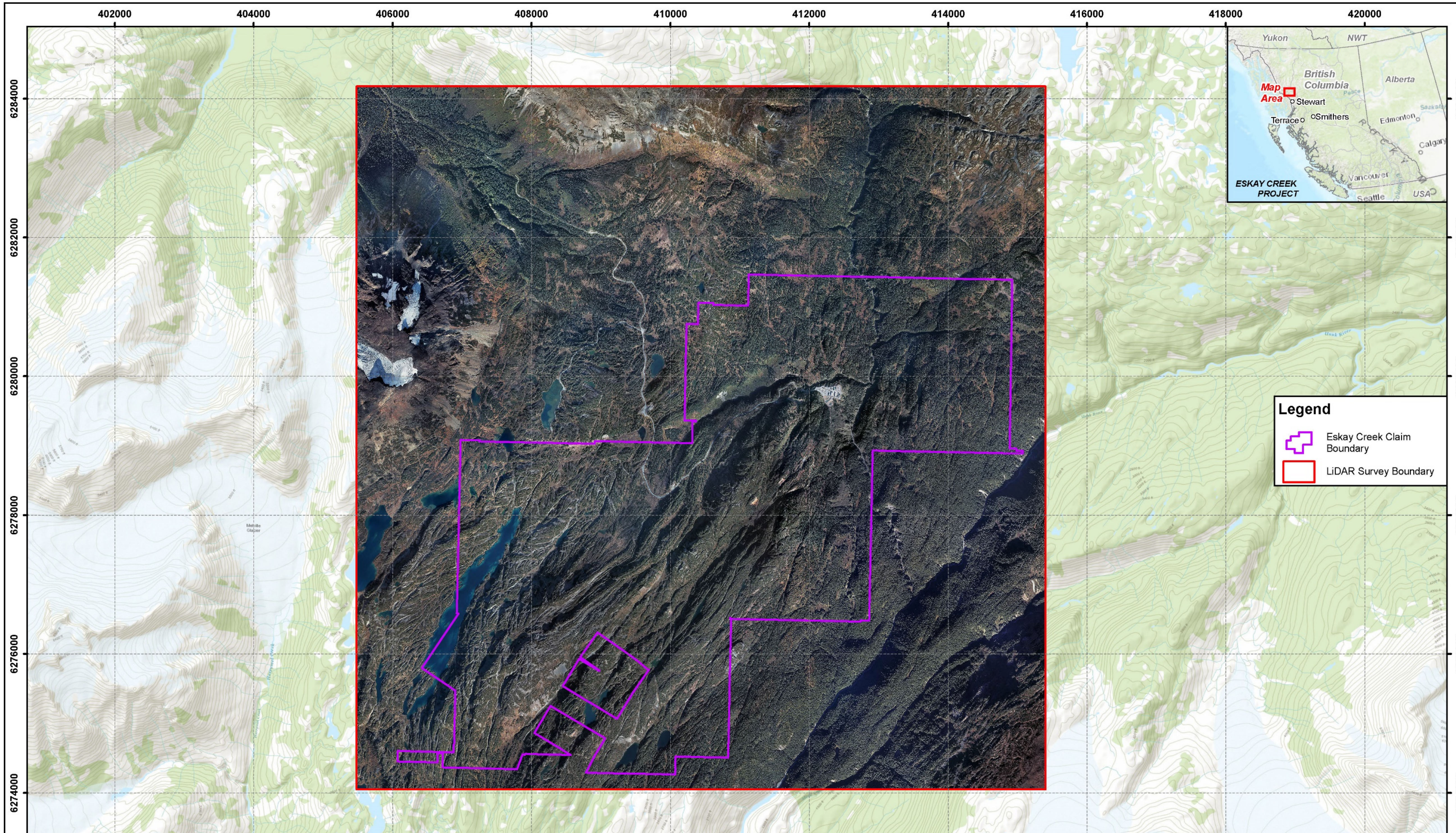
1:35,000 Scale


Eskay Creek Area Geology
Fault Type
Major
Bowser Lake Group
JrB Undifferentiated sedimentary rocks
JrBc Conglomerate
JrBs Sandstone
JrBm Siltstone/Mudstone
Hazelton Group
Iskut River Formation
JrHSu Upper Sedimentary Unit - pyritic, tuffaceous, locally calcareous
JrHSc Contact Mudstone
JrHSmv Willow Ridge Mafic Unit - mafic volcanic rocks, pillow flows, intercalated sedimentary rocks
JrHSr Eskay Rhyolite Member - massive to flow banded rhyolite and rhyolite breccia
JrHDu Upper Mudstone Member
Bruce Glacier Felsic Unit
JrHDr Rhyolite Unit - autobrecciated and flow banded rhyolite
JrHDd Dacite Flow Unit - dacite flows, breccia and epiclastics
JrHDt Dacite Tuff Unit - dacite tuffs and tuffaceous mudstones
Spatsizi Formation
JrHBu Mudstone, wacke, calcareous and fossiliferous wacke
Betty Creek Formation
JrHBa Unuk River Andesite Unit - andesite breccia, flows and tuff
Jack Formation
JrJ Undifferentiated conglomerate, sandstone and siltstone
Intrusive Units
JrEf Eskay Creek Felsite (inclusive equiv. to JrHSr)
JrMf Mafic dyke or stock (inclusive equiv. to JrJSmv)
JrEm Eskay Porphyry Monzodorite
Legend
Eskay Creek Claim Boundary
Topography
Watercourse
Waterbody
20m Contour
Yukon
NWT
British Columbia
Alberta
Map Area
Stewart
Terrace
Smithers
ESKAY CREEK PROJECT
Volcano Creek
Tom Mackay Creek
Ketchum Creek
Eskay Creek
Unuk River
Coulter Creek
Storie Creek
Skeena Resources Ltd.
Date: 21-Oct-2019
Author: Mike Mayer
Filename: 191021_EC_LocalGeologyEskayApdx4
Eskay Creek Project
Appendix IV: Local Geology of the Eskay Creek Area
Skeena Mining Division - NTS 104B09
British Columbia, Canada
Scale: 1:35,000
Coord. System: NAD 1983 UTM Zone 9N
Kilometers

APPENDIX V:

Eskay Creek Property - Orthophotograph

1:50,000 Scale

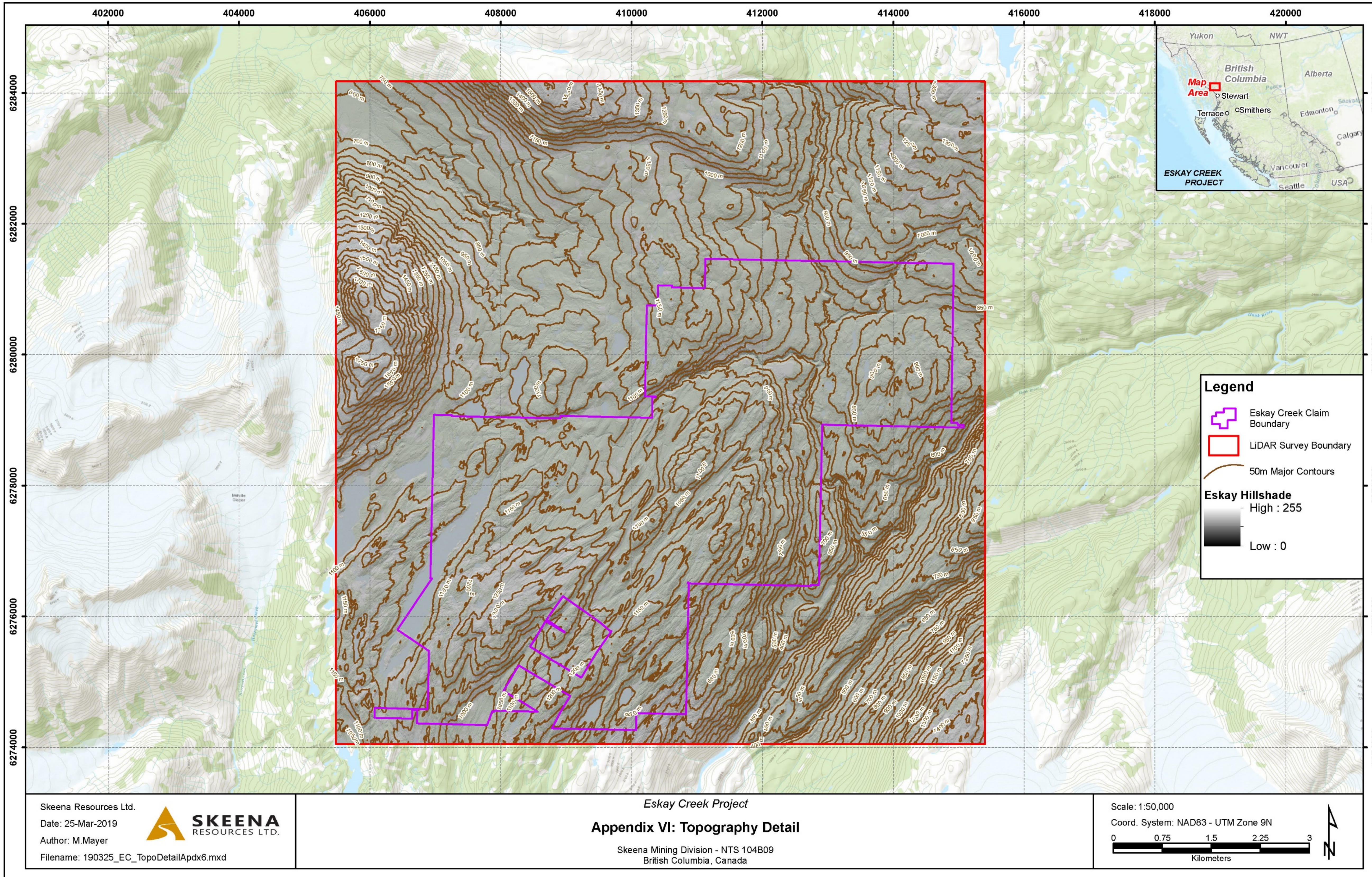


Skeena Resources Ltd. Date: 25-Mar-2019 Author: M.Mayer Filename: 190325_EC_OrthophotoApdx5.mxd	*Eskay Creek Project* **Appendix V: Orthophotograph** Skeena Mining Division - NTS 104B09 British Columbia, Canada	Scale: 1:50,000 Coord. System: NAD83 - UTM Zone 9N 0 0.75 1.5 2.25 3 Kilometers

APPENDIX VI:

Eskay Creek Property - Topography Detail

1:50,000 Scale



Legend
Eskay Creek Claim Boundary
LiDAR Survey Boundary
50m Major Contours
Eskay Hillshade
High : 255
Low : 0
Map Area
Stewart
Terrace
Smithers
British Columbia
Alberta
Yukon
NWT
ESKAY CREEK PROJECT
Skeena Resources Ltd.
Date: 25-Mar-2019
Author: M.Mayer
Filename: 190325_EC_TopoDetailApdx6.mxd
SKEENA RESOURCES LTD.
Eskay Creek Project
Appendix VI: Topography Detail
Skeena Mining Division - NTS 104B09
British Columbia, Canada
Scale: 1:50,000
Coord. System: NAD83 - UTM Zone 9N
0 0.75 1.5 2.25 3
Kilometers
N