# TECHNICAL REPORT on the RUDE CREEK GOLD PROJECT in the Dawson Range Gold District, Yukon Territory

(Royal, Ann and Poker claims)

NTS: 115J/10

Latitude 62°40'N Longitude 138°35'W

**Whitehorse Mining District** 

Site visit on January 17, 2019

# For

Michelin Mining Corp.
Chief Financial Officer

c/o Pacific Opportunity Capital Ltd.
Suite 410-325 Howe St.
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# By

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# 1.0 Executive Summary

The 4,157 hectare Rude Creek Gold Project (the "Project") is located at latitude 62°40'N and longitude 138°35'W on NTS map sheet 115J/10, west-central Yukon. It lies approximately 160 km south of Dawson City and 135 km northwest of Carmacks, which are 538 km and 177 km, respectively, by paved highway north of Whitehorse, Yukon Territory. Access is by helicopter, but fixed wing aircraft access can be utilized to the Rude Creek airstrip on the Project for staging purposes and the Casino winter road passes through the Project. The Project, which comprises 204 Royal, Ann and Poker claims within the Whitehorse Mining district, is bisected by Rude Creek within the Dawson Range of the unglaciated portion of the Yukon Plateau. The claims are 100% owned by 0890763 BC Ltd., subject to an option agreement with Michelin Mining Corp. ("Michelin") and two separate underlying net smelter return royalties. This report was prepared to support listing requirements of the Canadian Securities Exchange by Michelin.

Regionally the Project is located within the Dawson Range gold district, 45 km southeast of Goldcorp Inc.'s Coffee orogenic type gold deposit and 80 km south-southeast of the recent Vertigo discovery and 72 km southeast of the Golden Saddle deposit, both orogenic type gold systems owned by White Gold Corp. Orogenic gold mineralization within both districts is preferentially hosted in competent lithologies (e.g. Paleozoic metamorphic basement rocks and younger intrusions) with a strong structural control. Gold mineralization within the White Gold district, which lies just to the north of the Dawson Range gold district, typically exhibits an older, Jurassic age compared to the Cretaceous ages typical within the Dawson Range. The orogenic type gold mineralization at Coffee has recently been dated at 97 to 92 Ma slightly younger than the Mid Cretaceous (99.5 ±0.9 Ma) Coffee Creek pluton (Whitehorse plutonic suite of the Dawson Range batholith), which hosts some of the mineralization.

The Rude Creek Gold Project is almost entirely underlain by generally equigranular granitic rocks of the Dawson Range phase of the Mid Cretaceous Whitehorse plutonic suite, which is intruded by a plug and related dykes and/or sills of the early Late Cretaceous Casino plutonic suite, at the headwaters of Rude and Trombley Creeks, and by part of the late Late Cretaceous Mt. Cockfield stock of the Prospector Mountain suite in the southeastern property area.

The northeast trending apparent sinistral strike slip Dip Creek fault lies just west of the Project and a northerly trending normal fault, east side down, borders the eastern property boundary. A number of northwest trending faults appear to dissect the Project with some east-northeast to northeast trending cross structures. The Northwest trending Koe shear zone, which hosts gold-silver-antimony-arsenic bearing chalcedonic, drusy and massive quartz veins and clay-sericite-pyrite alteration approximately 8 km to the southeast, may also extend through the Project.

Documented historical exploration on the Project area, undertaken from 1922 to 1995, concentrated on base metal bearing veins (the Rude Creek silver-lead-zinc fissure vein showing) and porphyry copper exploration. Exploration has included a 22m adit and minor trenching on the Rude Creek showing, minor prospecting, mapping, and stream sediment, with minor soil and rock, geochemistry.

Following the discovery of Fort Knox and then Pogo in Alaska in the 1990's, exploration in the region focused on gold. The Geological Survey of Canada released results from a stream sediment survey in 1986 indicating highly anomalous gold (300 ppb) accompanied by anomalous arsenic, tungsten and antimony from Trombley Creek, a tributary of Rude Creek. The headwaters was staked in 1999 by Prime Properties Syndicate and optioned to Prospector International Resources Inc. Exploration on the area of the Rude Creek Gold Project from 1999 to 2011 by various owners and operators consisted of a property wide helicopter-borne magnetic and radiometric geophysical survey, the collection of 587, primarily contour, soils, and minor prospecting and mapping.

The current Rude Creek Gold Project was acquired in 2010 to 2014 by 0890763 BC Ltd., which has completed: a property wide high resolution fixed wing aerial photographic survey; 496 grid and lesser contour soil samples; and 2.49 km of IP geophysics, 219.5m of rotary air blast drilling in 3 holes and 504.5m of reverse circulation drilling in 5 holes on the Trombley soil anomaly. Total soil coverage across the property is only about 15%.

Two significant gold soil anomalies were delineated on the Project with associated anomalous bismuth, ±tellurium, and peripheral arsenic, silver, ±antimony and lead. The Trombley anomaly covers an apparently easterly trending 150m by 350m, discontinuous to 550m (due to talus cover), >38 ppb Au soil anomaly underlain by locally tourmaline bearing and chloritized, biotite-hornblende granodiorite. Drilling of the soil anomaly, with a total of 723.9m of percussion drilling in 8 holes intersected two north trending structures returning 0.53 g/t Au over 13.4m including 0.63 g/t Au over 6.1m and 2.14 g/t Au over 1.5m in hole ROYRC17-05 and 0.52 g/t Au over 4.57m including 1.17 g/t Au over 1.5m in ROYRC18-07.

The best gold grades are coincident with sericite altered granodiorite with about 5 to 10% limonite after pyrite, ±pyrite and arsenopyrite, and minor fine quartz ±carbonate veining. Both the soil grid and most of the drilling were not favourably oriented or positioned to intersect north trending structures. The gold soil anomaly and gold bearing structures remain open to the north, south and somewhat to the east, as well as down dip.

Multiple northerly gold in soil anomalous trends are evident in the Northeast zone, with at least five distinct, linear, 800m long gold anomalies over the 1.5 km wide grid, open in all directions. The Northeast zone also appears to be underlain by biotite-hornblende granodiorite, intruded by a variety of dykes of the Casino and Prospector Mountain

suites. Extensive pyrite (up to 15%) and trace chalcopyrite were noted associated with dykes in an outcrop at the western end of the zone.

The deposit model for the Rude Creek Gold Project is the orogenic type, such as at Goldcorp's Coffee deposit, and at the Golden Saddle and VG deposits and the newly discovered Vertigo zone of White Gold Corp. The Coffee deposit is hosted by metamorphosed Paleozoic basement rocks of the Yukon-Tanana terrane and the mid Cretaceous Coffee Creek pluton, of the Whitehorse plutonic suite, with a strong structural control. Northerly and easterly trends dominate. Strong similarities exist between the Rude Creek Gold Project and the Coffee deposit as follows: both are located within the Dawson Range gold district and are, at least in part, hosted by phases of the Whitehorse plutonic suite; north trends dominate at the Supremo zone within the Coffee deposit and have been intersected in drilling at the Trombley zone and are suggested by trends within the Northeast gold soil anomaly on the Rude Creek Gold Project; a strong structural control is indicated at both; and there is a similarity in the size, shape and tenor of the gold in soil anomalies.

The Rude Creek Gold Project constitutes a property of merit based on: favourable geological setting (Dawson Range gold district); competent host rocks (Whitehorse plutonic suite of the Dawson Range batholith); structural complexity (evident within the airborne magnetic data, resistivity/induced polarization data and presence of linear younger dykes); significant gold soil anomalies with associated bismuth, ±tellurium, and peripheral arsenic, silver, ±antimony and lead; significant initial drill intercepts on the Trombley zone despite limited drilling, and similarities and proximity to Goldcorp's Coffee deposit and other significant gold discoveries within the Dawson Range and White gold districts.

A two phase exploration program is recommended with a Phase 1 budget of \$120,000, consisting of: additional grid soil sampling in the Northeast and Trombley areas; and detailed mapping, prospecting and structural analysis including a detailed integration and interpretation of the airborne geophysical data. Contingent on results from Phase 1, a \$275,000 Phase 2 RC drill budget is proposed to follow up significant anomalies with 1000m of RC drilling in 5 to 6 holes.

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#### 2.0 INTRODUCTION AND TERMS OF REFERENCE

# 2.1 Qualified Person, Participating Personnel and Scope

Ms. Jean M. Pautler, P.Geo. of JP Exploration Services Inc. ("JPEx"), was commissioned by Michelin Mining Corp., a company duly incorporated under the laws of the Province of British Columbia, to examine and evaluate the geology and mineral potential of the Rude Creek Gold Project (consisting of the Royal, Ann and Poker claims) and to make recommendations for the next phase of exploration work in order to test the resource potential of the property. Based on the literature review and property examination recommendations are made for the next phase of exploration work. An estimate of costs has been made based on current rates for trenching, soil and geophysical surveys, drilling and professional fees in the Yukon Territory. This report describes the geology, history, mineral potential of the Rude Creek Gold Project and recent exploration by 0890763 BC Ltd., and was prepared to support listing requirements of the Canadian Securities Exchange by Michelin Mining Corp.

Regional geological data and current exploration information have been reviewed to determine the geological setting of the mineralization and to obtain an indication of the level of industry activity in the area.

The report describes the property in accordance with the guidelines specified in National Instrument 43-101 and is based on historical information, a review of recent exploration in the area, a site visit on the property by the author on January 17, 2019 on behalf of Michelin at which time most drill sites and select induced polarization lines were examined and a review of the RC chips on February 14, 2019, which are stored at the Bostock core library in Whitehorse. Work by 0890763 BC Ltd. consisted of: a property wide high resolution fixed wing aerial photographic survey; 496 grid and lesser contour soil samples; and 2.49 km of IP geophysics, 219.5m of rotary air blast ("RAB") drilling in 3 holes and 504.5m of RC drilling in 5 holes on the Trombley soil anomaly.

The soil geochemical, ground geophysical, aerial photography and RAB drill surveys, between 2014 and 2016 were completed by GroundTruth Exploration Inc. ("GroundTruth"), a highly experienced private mineral exploration consulting firm based in Dawson City, Yukon.

# 2.2 Terms, Definitions and Units

All costs contained in this report are denominated in Canadian dollars. Distances are reported in metres (m) and kilometres (km). GPS refers to global positioning system with co-ordinates reported in UTM grid, Zone 7, Nad 83 projection. Minfile showing refers to documented mineral occurrences on file with the Yukon Geological Survey. The annotation 020°/55°E refers to an azimuth of 020°, dipping 55° to the east. Ma refers to a million years in geological time.

RAB refers to rotary air blast, a type of percussion drilling and RC to reverse circulation, another type of percussion drilling in which the cuttings are returned to surface inside the rods as opposed to outside as in RAB drilling. RC drilling utilizes much larger rigs and machinery and is capable of reaching greater depths (500m) than RAB drilling (about 100m). TMI refers to total magnetic intensity and CVG to calculated vertical gradient which is also referred to as first vertical derivative with respect to magnetic geophysical surveys. IP refers to an induced polarization type of geophysical survey useful in detecting disseminated sulphides.

The term ppm refers to parts per million, which is equivalent to grams per metric tonne (g/t) and ppb refers to parts per billion. The abbreviation oz/ton and oz/t refers to troy ounces per imperial short ton. The symbol % refers to weight percent unless otherwise stated.

Elemental abbreviations used in this report include gold (Au), silver (Ag), copper (Cu), lead (Pb), zinc (Zn), arsenic (As), antimony (Sb), tellurium (Te), bismuth (Bi), tungsten (W), tin (Sn) and mercury (Hg). Minerals found on the property include pyrite (iron sulphide), limonite (hydrated iron oxide), arsenopyrite (iron, arsenic sulphide), magnetite and hematite (iron oxides), galena (lead sulphide), sphalerite (zinc sulphide), malachite (hydrated copper carbonate), chalcopyrite (copper sulphide) and molybdenite (molybdenum sulphide).

# 2.3 Source Documents

Sources of information are detailed below and include available public domain information and private company data. Individual reports are identified under Section 27.0, "References".

- Research of the Minfile data available for the area at <a href="http://data.geology.gov.yk.ca">http://data.geology.gov.yk.ca</a> on January 3, 2019.
- Research of mineral titles at <a href="http://www.yukonminingrecorder.ca">http://mapservices</a>.

   gov.yk.ca/YGS/
   and <a href="http://apps.gov.yk.ca/ymcs">http://apps.gov.yk.ca/ymcs</a> on January 3 and February 15, 2019.
- Review of company reports and annual assessment reports filed with the government at http://virtua.gov.yk.ca:8080/?theme=emr.
- Review of geological maps and reports completed by the Yukon Geological Survey or its predecessors.
- Review of published scientific papers on the geology and mineral deposits of the region and on mineral deposit types.
- Review of pertinent news, and publicly available data, on 0890763 BC Ltd. and Michelin Mining Corp.
- Company data of 0890763 BC Ltd., including a review of all exploration programs, and the option agreement and amendment. The option agreement and amendment are discussed in Section 4.2, "Land Tenure".
- A site visit on January 17, 2019, following the latest exploration program on the property, and a review of the RC chips on February 14, 2019, which are stored at the Bostock core library in Whitehorse.

• The author has conducted recent exploration, including property examinations, within the Dawson Range between 2005 and 2018, exploration through the area in the 1990's for Teck Exploration Ltd. and prior experience conducting regional and property exploration with Kerr Addison Mines in the area from 1983 to 1988. The author has examined the Coffee, Golden Saddle, Casino, Revenue-Nucleus and Klaza deposits, the Mount Nansen mine and the Sonora Gulch, Mariposa and Vertigo occurrences.

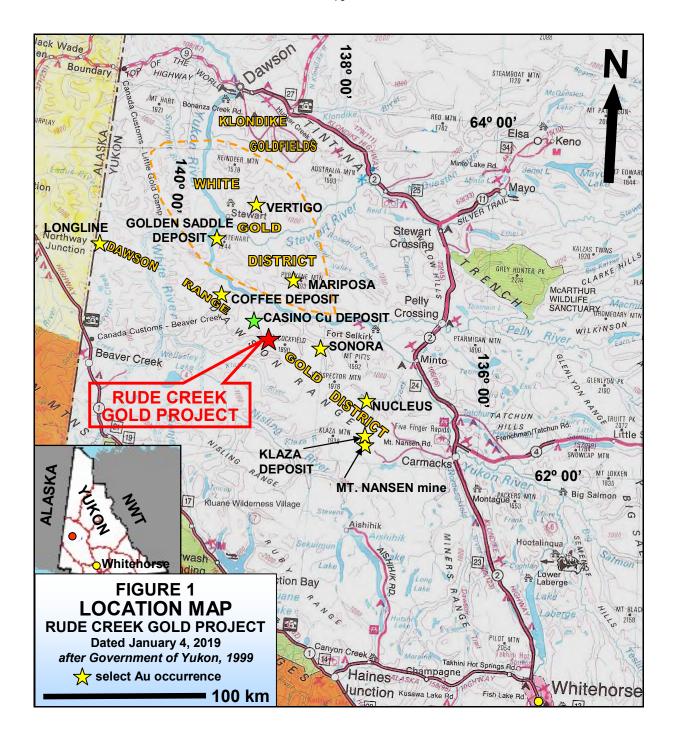
### 3.0 RELIANCE ON OTHER EXPERTS

The author has not relied upon other experts in regards to legal, environmental, political or other issues relevant to this report. Mineral title data was researched by the author at <a href="http://www.yukonminingrecorder.ca">http://www.yukonminingrecorder.ca</a>, <a href="http://mapservices.gov.yk.ca/YGS/">http://mapservices.gov.yk.ca/YGS/</a> and <a href="http://apps.gov.yk.ca/ymcs">http://apps.gov.yk.ca/ymcs</a> on January 3 and February 15, 2019. The signed option agreement and amendment were provided by 0890763 BC Ltd. The title and option information was relied upon to describe the ownership of the property, claim summary and option agreement summary in Section 4.2, "Land Tenure".

#### 4.0 PROPERTY DESCRIPTION AND LOCATION

# 4.1 Location (Figure 1)

The Rude Creek Gold Project is located in west-central Yukon at latitude 62°40'N and longitude 138°35'W on NTS map sheet 115J/10. It lies approximately 160 km south of Dawson City, 135 km northwest of Carmacks and 120 km northeast of Beaver Creek, Yukon Territory, which are 538 km and 175 km north and 446 km northwest, respectively, by paved highway from Whitehorse, Yukon Territory (*Figure 1*). Although Beaver Creek is the closest community it is the smallest, with a population of about 100 people, fewer facilities and no helicopter base.



# 4.2 Land Tenure (Figures 2 and 15)

The Rude Creek Gold Project consists of 204 Yukon Quartz Mining claims covering an area of approximately 4,157 hectares in the Whitehorse Mining District (*Figure 2*). The area is approximate since claim boundaries have not been legally surveyed. The mineral claims were located by GPS and staked in accordance with the Yukon Quartz Mining Act on claim sheet 115J/10, available for viewing in the Whitehorse Mining Recorder's Office. A table summarizing pertinent claim data follows.

**TABLE 1: Claim data** 

Claim Name	Grant No.	No. of Claims	Expiry Date
Royal 1-12	YC60328-39	12	04/19/2035
Ann 1-32, 41-72	YD109321-352, 361-392	64	11/21/2033
Ann 81-107, 120-140	YD109401-427, 440-60	48	11/21/2033
Ann 187-190, 192	YD109507-510, 512	5	11/21/2033
Poker 1-16	YD19001-16	16	11/21/2032
Poker 21-56	YD19021-040, 18941-956	36	11/21/2032
Poker 65-68, 70-76	YD18965-968, 970-976	11	11/21/2032
Poker 77	YD18977	1	11/21/2034
Poker 79-89	YD18979-89	11	11/21/2032
TOTAL		204	

All claims are 100% owned by 0890763 BC Ltd. (website at <a href="http://gysde.gov.yk.ca">http://gysde.gov.yk.ca</a>), subject to two 2.0% net smelter returns royalties ("NSR") due on the Royal and on the Poker claims upon commencement of commercial production, of which 1.0% of each may be purchased for \$2,500,000.

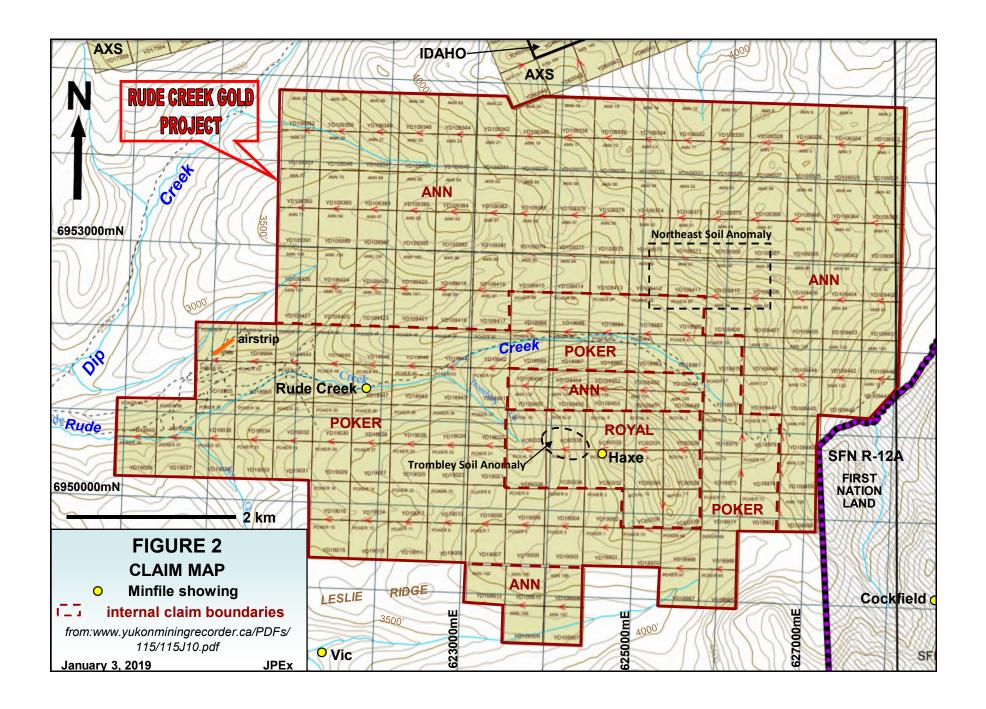
All claims are subject to an option agreement with Michelin Mining Corp. in a letter of agreement dated November 16, 2018 (Effective Date), and amended January 17, 2019 whereby Michelin can earn a 70% interest in the claims through a series of staged payments and issuance of shares to 0890763 BC Ltd. and completion of exploration expenditures over a 4 year term, totaling \$2,500,001 cash, 3,950,000 common shares, and \$4,120,000 in exploration expenditures. The Option date in the agreement is 60 days from the Effective Date, being January 15, 2019. Michelin must complete a Going Public Transaction by January 15, 2020. The operator of the Project will be 0890763 BC Ltd. during the option term.

**TABLE 2: Option agreement summary** 

Timing	\$ Cash (*Jan. 15)	Shares (*Jan. 15)	\$ Expenditures (*Jan. 15)					
Effective Date	1							
Year 1, * 2020	200,000	200,000	120,000ŧ					
Year 2, * 2021	300,000	500,000	500,000					
Year 3, * 2022	500,000	750,000	1,000,000					
Year 4, * 2023	1,500,000	2,500,000	2,500,000					
TOTAL	2,500,001	3,950,000	4,120,000					

t due on the Option Date as a nonrefundable deposit to be applied to Year 1 expenditures

Michelin and 0890763 BC Ltd. will enter into a 70/30 joint venture agreement following exercise of the option. A 3.0% NSR will be retained by 0890763 BC Ltd., of which 1.0% may be purchased for \$2,000,000. This 3.0% NSR will be reduced by any amounts owing (i.e. the 2.0% NSR) on both the Royal and Poker claims. Annual cash advance payments of \$10,000, deductible against the royalty, are payable starting on the Option Exercise date until commencement of commercial production.



The Rude Creek Gold Project is located within the Traditional Territory of the Selkirk First Nation. The First Nation has settled their land claims, with no First Nation settlement land within the Project area. A large parcel of First Nations surveyed Category A land (SFN R-12A), with surface and subsurface rights, adjoins the southeastern Project area, covering Mt. Cockfield. No significant First Nation or other concerns are anticipated. The land in which the mineral claims are situated is Crown Land and the mineral claims fall under the jurisdiction of the Yukon Government. Surface rights would have to be obtained from the government if the property were to go into development.

A mineral claim holder is required to perform assessment work and is required to document this work to maintain the title as outlined in the regulations of the Yukon Quartz Mining Act. The amount of work required is equivalent to \$100.00 of assessment work per quartz claim unit per year. Alternatively, the claim holder may pay the equivalent amount per claim unit per year to the Yukon Government as "Cash in Lieu" to maintain title to the claims.

Preliminary exploration activities do not require permitting, but significant drilling, trenching, blasting, cut lines, and excavating may require a Mining Land Use Permit that must be approved under the Yukon Environmental Socioeconomic Assessment Act (YESSA). A Class I notification (number C1Q00086) is currently in place for the Project and valid to June 7, 2019, but is not required within the Project area. Additional notification and permits will be applied for as needed. To the author's knowledge, the Rude Creek Gold Project area is not subject to any environmental liability.

Active placer claims, owned by Andre Fournier, extend along Rude Creek (*Figure 15*), but do not impact exploration on the mineral claims.

# 5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY (Figures 1 to 2)

# 5.1 Access, Local Resources and Infrastructure (Figures 1 to 2)

The Project is accessible via helicopter from Dawson City, 160 km to the north, or seasonally from Carmacks, 135 km to the southeast (*Figure 1*). Dawson City and Carmacks are accessed by year-round highway approximately 538 km and 175 km, respectively, north of Whitehorse, Yukon. Daily flight service is available from Whitehorse to Dawson City. The Minto airstrip, 75 km north of Carmacks lies 87 km to the east-southeast of the property.

The Project also lies 75 km northwest of the Nucleus deposit, which lies near the end of the Freegold road, about 82 km by road from Carmacks. The 126 km long Casino winter road extends from here through the Sonora Gulch property to the Casino deposit, passing through the Project area, along Rude Creek. The Sonora Gulch - Casino portion was reportedly used in 2010 by Western Copper. An upgrade of the Casino winter road and Freegold road is part of the Yukon Resource Gateway project designed

to provide infrastructure to resources and is being funded by the Yukon and Federal governments, scheduled to be completed by 2025.

Access is also available by fixed wing aircraft to the 650m long Rude Creek airstrip on the Poker 56 claim at approximately 620150mE, 6951750mN, Nad 83, Zone 7 (Figure 2). A local road connects the airstrip, which is being maintained by the local placer miner, to the placer camp, about 1.3 km upstream.

Water is primarily available from Rude Creek, which bisects the property, and its tributaries, as well as from other westerly flowing tributaries of Dip Creek. The creeks generally flow from May until October.

Dawson City is the closest town of significant size, with a population of approximately 2020, but draws some 60,000 visitors each year. Facilities include an airport (with regular air service from Whitehorse, Yukon Territory and Fairbanks, Alaska), fixed wing aircraft bases, two helicopter bases, a hospital, police station, service stations, two grocery stores, accommodation and restaurants. Industrial services include tire repair, propane sales, welding and machine shops, heavy equipment repair and rental, a lumber mill, and freight and trucking companies. Heavy equipment and a mining oriented labour force are available for contract exploration and mining work. Main industries are tourism and gold mining. More complete facilities and a larger mining oriented labour force are available in Whitehorse.

Carmacks has a population of approximately 500, a seasonal helicopter base (Trans North Helicopters), and a gravel airstrip suitable for medium sized aircraft, but no aircraft base. Facilities include a grocery store, nursing station, police station, two service stations, accommodation, a restaurant and a café. Some heavy equipment is available for contract mining work. Whitehorse lies less than two hours by paved highway to the south.

# 5.2 Physiography, Climate and Infrastructure (Figures 1 to 2)

The Project is situated near the eastern margin, but within, the unglaciated portion of the Yukon Plateau in the Dawson Range of west-central Yukon (Figures 1 to 2). Local alpine glaciation occurred at Mt. Cockfield with evidence of a lobe, having extended along upper Victor Creek, at the southern margin of the Project. The topography is characterized by broad ridges, convex slopes and v-shaped valleys. The soil is dominated by colluvium, with weathered bedrock locally on the ridges, and permafrost is widespread but discontinuous, primarily on north facing slopes (Bond and Lipovsky, 2012).

The Project area is drained by westerly flowing tributaries of Dip Creek, including Rude Creek, which bisects the property, and Victor Creek. Dip Creek flows into the Klotassin River to the Donjek, White, then into the Yukon River. The north and eastern Project area is drained by Battle Creek, which flows northerly into the Selwyn River and thence into the Yukon River. Elevation ranges from about 2,480 feet along Rude Creek to just over 5,400 feet above sea level on peaks in the northeastern property area (*Figure 2*).

Vegetation is typical boreal forest consisting of white spruce, birch and poplar on well-drained slopes and black spruce on poorly drained frozen north facing slopes with moss, talus and felsenmeer at higher elevations. Outcrop is commonly found as tors on ridgetops and as local exposures along creeks.

The area has a northern interior climate characterized by a wide temperature range with warm summers, long cold winters and moderate precipitation. Summers are warm, with daily averages in July of about 20°C dropping to 8°C at night. Winters are cold, with January temperatures of -20°C during the day, dropping to -30°C overnight and -45°C is not uncommon. Annual precipitation is moderate with much of it as snow. The exploration season lasts from late May until October.

Although there do not appear to be any topographic or physiographic impediments, and suitable lands appear to be available for a potential mine, including mill, tailings storage, heap leach and waste disposal sites, engineering studies have not been undertaken and there is no guarantee that areas for potential mine waste disposal, heap leach pads, or areas for processing plants will be available within the subject property. The nearest source of hydro-electric power is Minto.

# 6.0 **HISTORY** (Figures 2, 3 and 15)

The Rude Creek Gold Project covers the Haxe anomaly and Rude Creek showing, both documented as silver-lead-zinc+/-gold polymetallic vein occurrences (Minfile Numbers 115J 020 and 021) by the Yukon Geological Survey (Deklerk, 2009 and <a href="http://data.geology.gov.yk.ca/">http://data.geology.gov.yk.ca/</a>) (Figures 2 and 15).

Documented historical exploration on the Project area, undertaken from 1922 to 1995, focused on base metal bearing veins and copper porphyry exploration and has included a 22m adit, minor trenching, prospecting, mapping and stream sediment, with minor soil and rock geochemistry. One old cat trench (1981) was found along the ridge, about 2 km west of the Trombley zone.

Placer mining on Rude Creek has been sporadic. It commenced in 1915 until the 1920's, recommenced in 1933 to 1954, during 1980 and 1981, again from 1987 to 1991 and once more in 2010, generally continuing to present. Reported placer gold production from 1978 to 2017 on Rude Creek is 5,286 crude ounces (*Jeffrey Bond, personal communication, 2019*). Current placer claims are shown on Figure 15. Gold in Rude Creek is reported to be flaky and bright with small nuggets, and a purity of 840 to 860 fine (*Kreft, 1994*). Minor amounts of bismuth and scheelite (calcium tungstate), and significant amounts of magnetite and galena are also reported.

A summary of the historical work completed by various operators on the Rude Creek Project (unless stated otherwise) as documented in Yukon Minfile (Government of Yukon, 2018), various government publications of the Yukon Geological Survey or its predecessor (Mineral Industry Reports and Yukon Exploration and Geology) and the Geological Survey of Canada, and company publications (primarily available as assessment reports filed with the government), is tabulated below. The locations of the

occurrences, known mineralized zones and important natural features are shown in Figures 2, 3, and 15 in relation to the outside property boundaries.

### Rude Creek showing:

- An outcrop containing galena was discovered along Rude Creek during placer activity, but no work is documented at this time (*Deklerk*, 2009).
- 1921-4 The showing was restaked and explored by hand trenching and a 21.9m adit on the south side of the creek in 1922 to 1924. The showing consists of a 4.26m long and up to 1m wide, easterly trending carbonate (possible siderite) fissure vein mineralized with galena-sphalerite-pyrite returning, 0.34 g/t Au, 4198 g/t Ag and 37% Pb over 11 cm (Cockfield, 1927).
- 1947-53 The showing was restaked and explored by trenching but no results are documented (*Deklerk, 2009*). Four long trenches were later observed above the adit on the south side of the creek by Nordex Explorations Ltd. ("Nordex").
- 1965-6 Nordex visited and confirmed the grade of mineralization at the showing by sampling the dump (following restaking by prospectors Meloy and Proctor) and acquired the claims due to the discovery of significant silver-lead-zinc polymetallic veins at the Bomber showing (about 2 km south of Casino). Nordex subsequently staked additional claims and explored by silt sampling with about 66 samples (analyzed for Cu, Pb and Zn) on or draining the current Project area (*Taylor*, 1966). No significant silt results were obtained, but a northwest trending fault (*Figure 4*), thought to be associated with veins further northwest, was interpreted from airborne geophysical data to follow Jens Creek (*Taylor*, 1966). Polymetallic veins commonly occur peripheral to porphyry copper ±molybdenum-gold deposits.

This appears to be the origin of the Haxe Minfile anomaly, but no lead and zinc anomalies were found and the actual polymetallic vein exposures mentioned refer to the Rude Creek and Vic showings. The Haxe Minfile area was actually staked as a porphyry copper target as discussed below.

1980-1 W.J. Crawford performed stripping and trenching in 1980 and 1981 on claims staked over the Rude Creek showing area, in conjunction with nearby gold placer mining (*Deklerk*, 2009). A bulldozer trench, observed along the ridge at 621667mE, 6950428mN by Boomerang in 2011, was probably completed at this time to explore for the southern extent of the silver-lead-zinc fissure vein. A point silver soil anomaly occurs here, but no anomalous rock geochemistry was obtained (*Andersen*, 2011).

Following the discovery of the Casino porphyry copper deposit in the late 1960's, 15 km northwest of the Project, work in the Dawson Range was aimed at porphyry copper exploration, with a small and poorly mineralized porphyry copper-molybdenum showing found 5 km southeast of the central Rude Creek Project (Mt. Cockfield, Minfile Number 115J 017). Drilling of 1479.5m in 6 holes in 1970 averaged about 0.03% Cu and 0.013% Mo, associated with the Mt. Cockfield stock (*Deklerk, 2009*). Consequently a number of porphyry copper directed programs were completed over the Project area.

1969-70 The current Trombley zone (Haxe Minfile area) was staked as the Axe and the headwaters to the east as the Hill claims by Montana Mines Ltd., which collected minor reconnaissance rock and 28 soil samples, analyzed for Cu, Pb, Zn, and Mo (Fulcher, 1971). They reported anomalous peak values of 384 ppm Cu and 10 ppm Mo in soil

- associated with pyritic fractures in granite over a 250m length in the extreme eastern Project area, bordering SFN R-12A (*Figure 2*).
- 1969-72 Newmont Mining Corporation completed stream sediment sampling in the Project area (analyzed for Cu, Mo and Zn) and staked the Co claims to the east of the current Project area. Follow up soils, a ground magnetic survey (*Dolan and Costin, 1970*) and drilling led to the discovery of the Mt. Cockfield porphyry copper-molybdenum showing which is covered by SFN R-12A (*Figure 2*).
- 1970 A stream sediment survey conducted for Nickel Hill Mines Ltd., and Pathfinder Resources Ltd. by Alrae Engineering Ltd., the southeastern portion of which covered the current Project area, indicated anomalous copper along Rude Creek (*Trowsdale, 1970*).
- A reconnaissance grid soil survey, to follow up anomalous Cu and Mo in silts in Victor Creek, was conducted for Great Horn Mining Syndicate Inc., by International Mine Services Ltd., the northern portion of which covered the very southern current Project area. Samples were analyzed for Cu, Mo and Pb and identified a copper anomaly in the headwaters of Victor Creek, just south of the southeast Project area (Waugh, 1970).
- The very western part of Walhalla Explorations Ltd.'s Battle Creek property extended onto the eastern Project area but no work was conducted on the current Project (Doherty, 1992).
- The Battle claims were restaked by Cominco Ltd., including more ground to the west than previous, which covered the current Trombley zone as well as the headwaters of Rude Creek. About 82 contour soil samples were collected from the Project area at a 100m spacing and analyzed for Cu, Pb, Zn, Ag and Au, but no significant results were obtained. Prospecting/mapping indicated trace chalcopyrite, malachite and molybdenite in a pyritic zone on the hilltop above the Haxe Minfile location and Trombley zone ("Hilltop" plug, now mapped as Casino suite). Disseminated molybdenite, chalcopyrite, magnetite ±malachite also occurs with pyrite on the ridge between Rude and Battle Creeks, associated with aplitic dykes. Strong disseminated pyrite (10-15%) with rare chalcopyrite was found at the western end of the current Northeast gold soil anomaly, associated with what appears to be Casino and Prospector Mountain suite dykes.

In the 1980's, the emphasis generally switched to precious metal exploration through the Dawson Range due to the discovery of the Mt. Skukum mine and activity at the Mt. Nansen mine. There was a resurgence in gold exploration in the late 1990's with emphasis on intrusion related gold targets following the discovery of Fort Knox and then Pogo (originally thought to be of this type) in Alaska. Gold exploration was renewed and rocketed in 2009 with the discovery of the Golden Saddle deposit at White Gold by Underworld Resources Ltd. (now owned by White Gold Corp.) and subsequent discovery of the Coffee deposit in 2011 by Kaminak Gold Corp. (now owned and being developed by Goldcorp Inc.; there is currently a proposed transaction between Newmont and Goldcorp to merge as Newmont Goldcorp (Goldcorp Inc., 2019)). The recent discovery in 2018 of high grade gold at the Vertigo showing of White Gold Corp. has intensified exploration in the region. The above deposits will be discussed in more detail under section 8.0, "Deposit Type". Gold exploration on the Project is summarized below.

- 1985-6 Archer, Cathro & Associates (1981) Ltd. added the Hen & Oke claims to their Mt. Cockfield property, which extended it into the southeastern portion of the current Project. It was sold to Nordac Mining Corporation, which explored for gold-silver mineralization, but no work was conducted on the Project area (Carne, 1987). This work is related to the Mt. Cockfield Minfile copper-molybdenum porphyry showing just southeast of the Project. Further southeast, gold-silver bearing veins, associated with a northwest trending shear zone (Koe Shear), were being explored by Kerr Addison Mines from 1983 to 1986 (Arscott, 1986). The area is now covered by SFN R-12A (Figure 2), but the shear zone may extend about 8 km to the northwest along trend to the vicinity of the Northeast zone.
- 1999-2000 Prime Properties Syndicate staked the EIO claims within the current Project to cover the headwaters of Trombley Creek from which a 300 ppb Au in silt anomaly was obtained in a stream sediment survey by the Geological Survey of Canada ("GSC") with anomalous As, W, Sb, moderate Mo and lesser Sn; Bi and Te were not analyzed (GSC, 1986). It was optioned to Prospector International Resources Inc. ("Prospector International "), which conducted geochemical sampling (91 soil, 1 silt and 4 rock samples) and prospecting, outlining a discontinuous 150 by 550m east trending Au-As-Bi-Ag anomaly (Trombley soil anomaly) with peak values of 1254 ppb Au, 3.07 g/t Ag, 163.1 ppm As and 17.84 ppm Bi (Jaworski and Meyer, 2000 & Jaworski and Vanwemeskerken, 2001).

A fluid inclusion analysis by Cadence Mineral Resources Inc. on potassically altered, tourmaline bearing granodiorite from the Trombley area indicated high temperature alteration from a relatively shallow deposit (< 1 kbar depth) and/or the top of a system and was consistent with vein and intrusion related gold systems (*Jaworski and Meyer*, 2000). The claims expired in 2004 to 2005.

- 2007-8 The Royal 1-12 claims were staked by Shawn Ryan in 2007 to cover the Trombley soil anomaly and proximal magnetic high anomaly. About 74 ridge and spur soil samples were collected in 2008 from the current Project area at a 100m spacing, returning low level anomalies with peak values of 32 ppb Au, 62.5 ppm As and 2.3 ppm Bi (Ryan, 2008). It should be noted that ridge and spur sampling over the Latte zone at the Coffee deposit would only have returned a point >50 ppb Au soil anomaly.
- A program of reconnaissance geochemical sampling (224 soil, 13 rock and 2 bulk stream samples) and mapping was conducted on the Poker claims by Boomerang Exploration Ltd. ("Boomerang"). It was successful in relocating the Rude Creek polymetallic vein showing and returning anomalous soil results with a notable Cu, Mo, Bi, Sb, Sn, W, Ag ±Au anomaly at the boundary of Poker 79 and 81, about 500m south of the current Northeast soil anomaly. A bulk stream sample from near the mouth of Trombley Creek yielded 3.16 g/t Au (Andersen, 2011). The 2010 program was funded by Silver Quest Resources Ltd. (now Independence Gold Corp.) which optioned the claims later in the year.
- 2010-11 The Ann claims were staked by 0890763 BC Ltd. in 2010, surrounding the Poker claims, and were also optioned to Silver Quest Resources Ltd. A program consisting of a 1351 line km helicopter-borne magnetic and radiometric geophysical survey over a larger area including the entire Project and a reconnaissance soil survey, with about 133 samples at a 100m spacing on the current Project, was conducted by Silver Quest Resources Ltd. in 2011 under option. The geophysics survey confirmed a magnetic high anomaly centred around the headwaters of Rude Creek (*Congdon, 2011*) and the soil survey identified a roughly 2 by 3 km Au-Bi-As-W-Sn anomaly in the northeast property area (Northeast soil anomaly) with a peak value of 87 ppb Au (98<sup>th</sup> percentile was 18.6 ppb Au) (*Cote, 2015a*).

2011 Ethos Gold Corp. (formerly Ethos Capital Corp.) undertook a reconnaissance geological evaluation and a small 65 soil sampling program on the Royal claims under option from Ryan. More detailed sampling was recommended based on anomalous gold in soil results spatially associated with the mapped quartz feldspar porphyry plug on the hilltop (Hilltop plug) above the Trombley soil anomaly (Tallman, 2012).

The Royal and Poker claims were optioned by 0890763 BC Ltd. in 2014 and together with its Ann claims form the current Rude Creek Gold Project. Work conducted on the Project by 0890763 BC Ltd. consisted of the collection of 496 grid and lesser contour soil samples, 2.49 km of IP geophysics, a property wide high resolution fixed wing aerial photographic survey, 219.5m of RAB drilling in 3 holes and 504.5m of RC drilling in 5 holes as follows.

### Work by 0890763 BC Ltd.:

- A program consisting of a 172 sample soil geochemical survey, to validate and infill previous geochemical surveys, and 2.49 km of IP geophysics was conducted all on the Trombley soil anomaly area (Cote, 2015a). The surveys identified strong anomalies with a northwest trend.
- A program consisting of 129.8m of RAB drilling in 2 holes and a 166 sample soil geochemical survey to extend the Trombley anomaly to the west and to infill previous reconnaissance soil lines in the northeast was conducted. Additional anomalous soils were identified at the Northeast soil anomaly, but the drill program did not return significant results (Cote, 2015c).
- A program consisting of a high resolution fixed wing aerial photographic survey over the entire property, one RAB drill hole on the Trombley soil anomaly and a 158 sample soil grid over the Northeast soil anomaly resulted in the delineation of a 600m long and 300 to 400m wide strong gold in soil anomaly within a broader anomaly about 2 km northeast of the Trombley soil anomaly (*Fage, 2016*). The RAB hole encountered weak gold mineralization of 0.2 g/t over 7.6m (*Fage, 2016*).
- 2017-18 Follow up with 504.5m of RC drilling in 5 holes on the Trombley soil anomaly returned 0.53 g/t Au over 13.4m including 0.63g/t Au over 6.1m and 2.14 g/t Au over 1.53m in hole ROYRC17-05 and 0.52 g/t Au over 4.57m including 1.17 g/t Au over 1.52m in ROYRC18-07 (Fage, 2017 and 2018).

The details and results of the more recent exploration programs will be discussed under their respective sections below. The drill programs will be discussed in detail under Section 10.0, "Drilling". The exploration work from 2014 to 2016 and on the Royal claims in 2008 and 2011 was completed by GroundTruth Exploration Inc. or their predecessor, a private mineral exploration consulting firm based in Dawson City, Yukon Territory.

# 6.1 Geochemistry (Figures 3 to 7)

At least 1,393 soil samples have been collected from the Rude Creek Gold Project, covering only about 15% of the property, of which only 1165 soils have been analyzed for gold. Recent soil surveys that were analyzed for gold include 357 samples for Silver Quest by Boomerang in 2010 and by Silver Quest in 2011, and 496 by 0892762 BC Ltd.

between 2014 and 2016 (*Figure 3*). In addition, the 139 soils collected by Shawn Ryan in 2008 and Ethos in 2011, and the 91 soils collected by Prospector International in 1999 and 2000 were also analyzed for gold.

Ridge and spur soil samples were collected at a 100m sample spacing, with a 50m spacing on contour lines in the Northeast Anomaly area. Grid soils were collected from two separate grids (Trombley and Northeast) at a 25m sample spacing along north-south lines spaced 100m apart at the Trombley zone and at a 50m sample spacing along east-west lines spaced 200m apart at the Northeast zone.

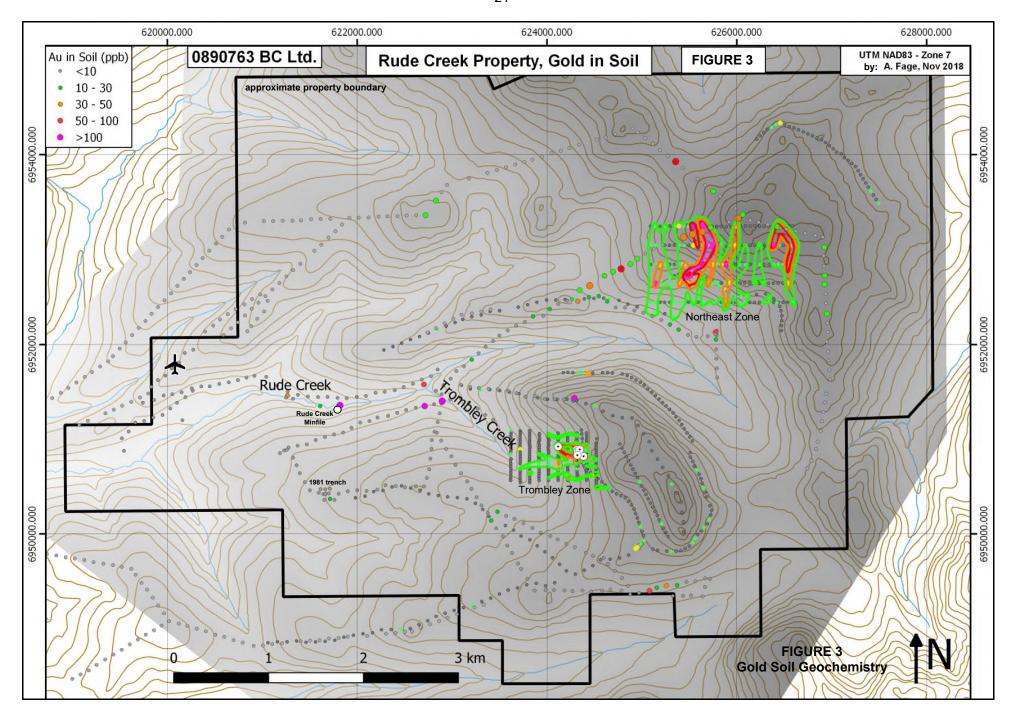
All GroundTruth soil samples were collected from the C-B horizons with one meter soil augers, or with a mattock where necessary, depending on vegetative cover and the thickness of the organic horizon. Approximately 400-500 grams of soil were collected and placed in well marked pre-numbered Kraft soil bags. Sample stations were marked on the ground with an aluminum metal tag in 2011 and a plastic bar coded tag in 2014 to 2016, along with pink flagging. Sample locations were recorded by GPS in the field using UTM coordinates, Nad 83 datum, Zone 7 projection and pictures taken of each sample and sample site. Field soil duplicates (collected from the same site, but separate holes) were collected every 25 samples for quality control from 2011 to 2016.

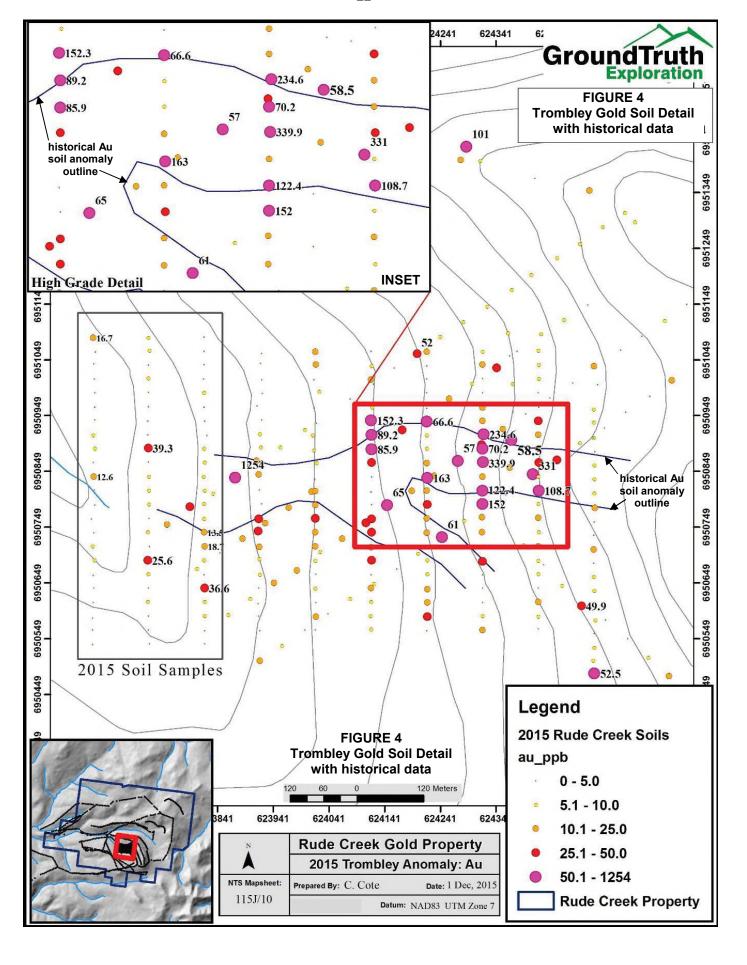
In Boomerang's 2010 program soil about 280g of material was collected with one meter soil augers, primarily from the B horizon at an average depth of 30 cm and locations were recorded by GPS in the field. In the 2011 Silver Quest program, soils were primarily collected from the B horizon at a depth of 10 to 40 cm. In the 1999 to 2000 Prospector International programs, the 91 soils collected were primarily from the C horizon from pits at a depth of 30 to 60 cm, with the 75 Trombley grid samples collected along northeast trending lines at a 50m sample spacing on lines 100m apart.

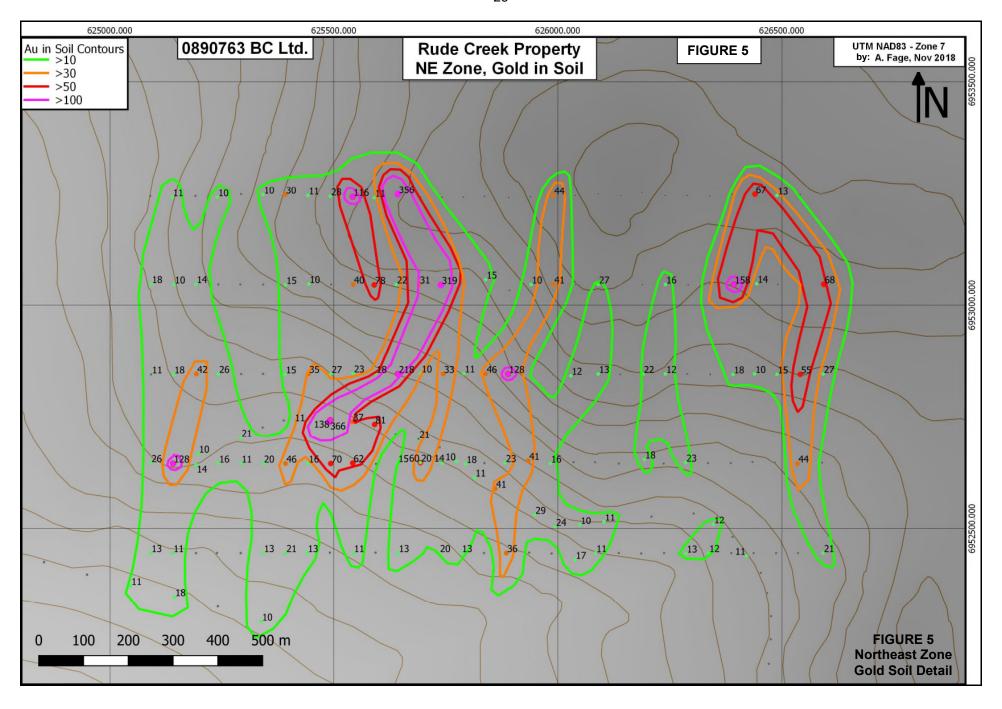
Two significant gold soil anomalies have been delineated on the Project. There is a good correlation of anomalous gold with anomalous bismuth ± tellurium, and peripheral arsenic, silver, ± antimony and lead. Gold in soil anomalies are shown in Figure 3, gold results from the detailed grids in Figures 4 and 5 and gold anomalies draped over the aerial photographic image in Figures 6 and 7.

The Trombley anomaly (*Figure 4*), first identified in 1999 and 2000, covers a discontinuous (due to talus cover) easterly trending, 150m by 550m soil anomaly, defined by the 90<sup>th</sup> percentile value of 38 ppb Au (*historical outline in Figure 4*), with peak values of 1254 ppb and 331 ppb Au, 39.35 ppm Bi, 157 ppm As and 3.07 ppm Ag. Subsequent sampling outlined a 150m by 350m more west-northwest trend with peak values of 339.9 ppb Au, 19.5 ppm Bi, 275.9 ppm As and 2 ppm Ag, and two northerly gold bearing structural zones are indicated by drilling. Consequently, the grid is not favourably oriented to detect the structures and anomalies remain open to the north and south and somewhat to the east.

Multiple northerly anomalous trends are evident in the Northeast zone, with at least five distinct, linear, 800m long (limited by grid extent) gold anomalies over the 1.5 km wide grid, remaining open in all directions (*Figure 5*). Peak values of 366.9 ppb Au, 43.9 ppm Bi, 597 ppm As, 3.1 ppm Ag, 30.2 Sb and 167 ppm Pb were obtained.







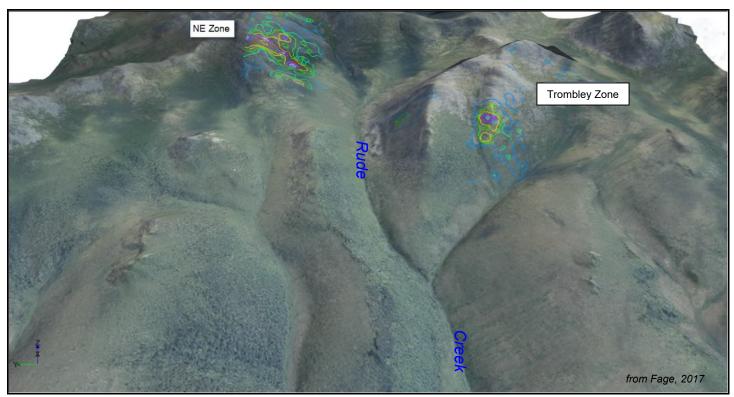


Figure 6: View looking east of soil anomalies over aerial image

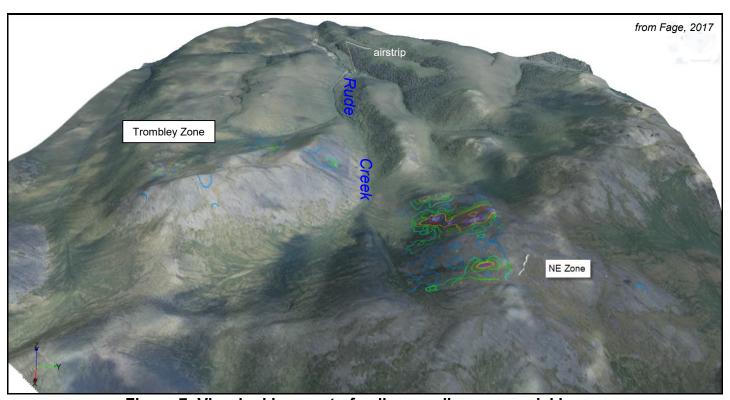


Figure 7: View looking west of soil anomalies over aerial image

# 6.2 Aerial Photographic Survey (Figures 6 and 7)

A high resolution fixed wing aerial photographic survey using an XCAM sensor was completed over the Rude Creek Gold Project on June 25, 2016 for 0890763 BC Ltd. by GroundTruth Exploration Inc. of Dawson City, Yukon. The survey was flown to aid in geological, structural and surficial interpretations, mapping, survey planning, geomorphology and infrastructure analysis, and to provide a baseline for environmental impact assessment, up to date high resolution imagery and digital elevation models for control. The contoured soil geochemistry is draped over the image in Figures 6 and 7.

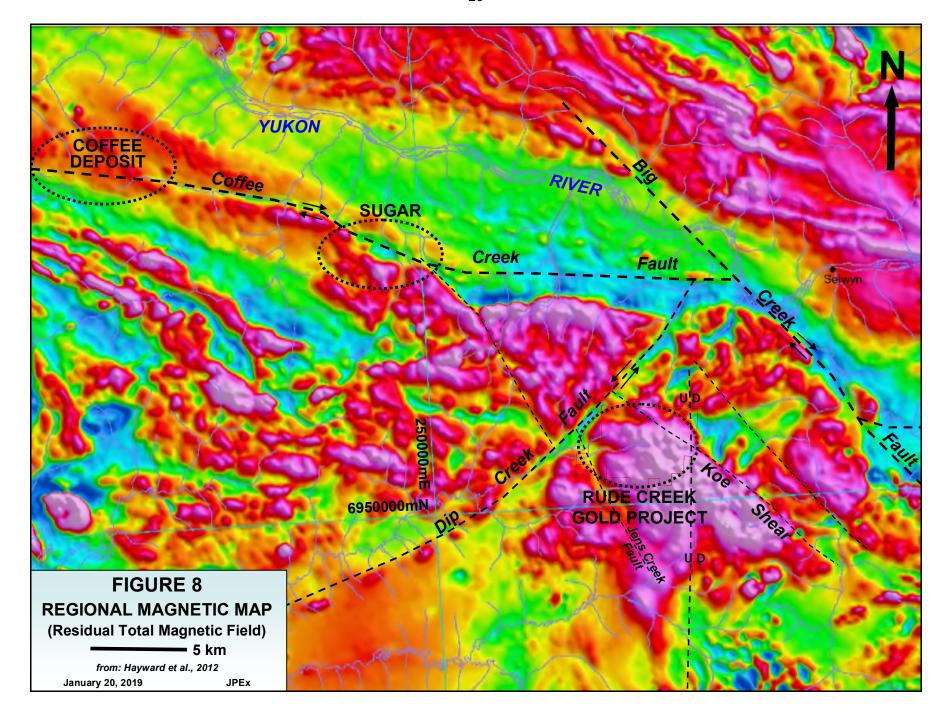
# 6.3 Geophysics (Figures 8 to 13 and 16)

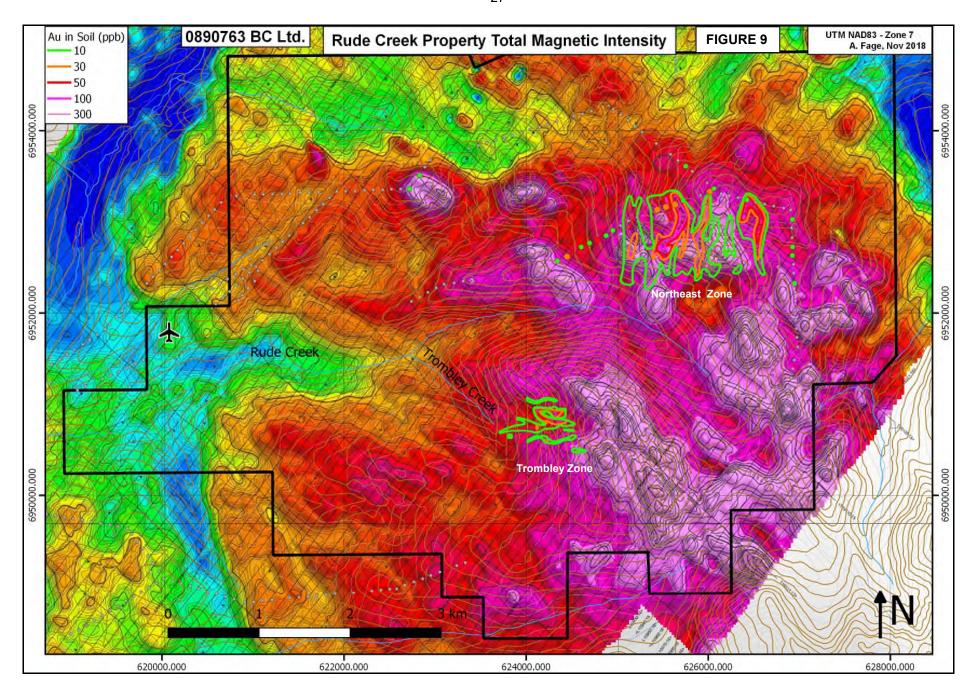
A reconnaissance high resolution airborne magnetic, radiometric and VLF-EM geophysical survey was flown by Sander Geophysics Limited for the Geological Survey of Canada in 1993 over the Selwyn River area, including the Rude Creek Project, to aid in geological interpretation through this largely unglaciated region (*Shives and Carson, 1994*). An oval shaped, northwest trending, magnetic high anomaly, within a large area of elevated magnetic signature, and a strong potassium anomaly were found to occur in the headwaters of Rude and Trombley Creeks, drained by the 300 ppb Au in stream sediment sample obtained by the GSC (*GSC, 1986*).

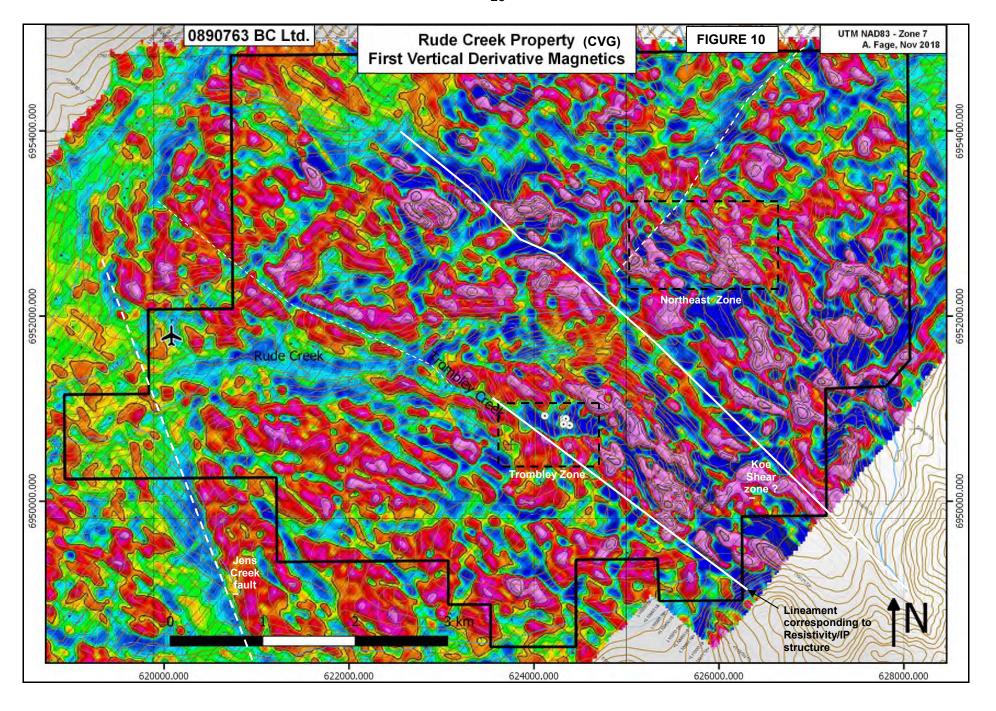
A compilation of the geophysics of the Yukon Plateau was subsequently undertaken by Hayward et al. (2012) and is used to illustrate some of the major structures in the region. The Koe shear zone and Jens Creek fault are extrapolated from mapping and geophysical interpretation, respectively, from Arscott (1986), Carnes (1987) and Taylor (1966). The regional and property scale structures will be discussed in more detail under their respective sections within section 7.0, "Geological Setting and Mineralization".

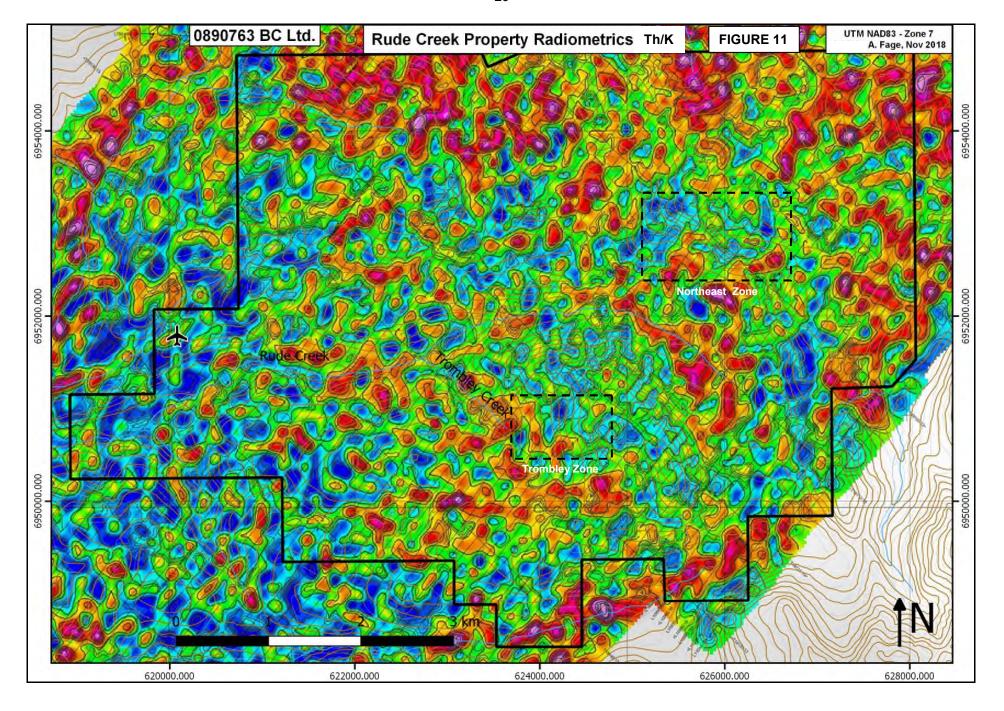
A 1,351 line km high resolution airborne magnetic and radiometric geophysical survey was completed over a larger area, but including the entire Rude Creek Project, in 2011 by Aeroquest Airborne of Mississauga, Ontario for Silver Quest Resources Ltd. to help identify regional scale structures, lithological contacts and zones of alteration. The survey block was flown in a 040°/220° direction with a line spacing of 100m and a nominal helicopter stinger terrain clearance of 30m utilizing a helicopter stinger mounted caesium vapour magnetometer sensor and Aeroquest's Airborne Gamma Ray Spectrometer (AGRS) system which was installed in the helicopter's cabin (*Areoquest Airborne, 2011*).

The 2011 survey was successful in producing higher resolution of the magnetic and radiometric data. The anomalous gold in soil geochemistry at the Trombley and Northeast soil anomalies is associated with lower magnetic signatures at the margin of the magnetic high anomalies (*Figure 9*), structural intersections (*Figure 10*) and Th/K lows (*Figure 11*). The magnetic lows are likely due to magnetite destruction caused by alteration and the Th/K lows related to potassic alteration (probably sericite and possibly potassium feldspar).









A detailed 2.49 line km high resolution direct current ground resistivity/induced polarization survey was completed on the Trombley zone in 2014, which is summarized from Cote (2015a). The survey was conducted along six 415m long north trending lines at a 100m line spacing (*Figure 16*) using a 5m electrode spacing, which provides an optimal horizontal resolution of 2.5m and a maximum reading depth of 90m. Dipole-dipole (optimal for vertical structures) and inverse Schlumberger (optimal for horizontal structures) arrays were used, merged and inverted. The purpose of the survey was to define the underlying structural controls and horizontal extent of mineralization and detect any significant conductors and resistive or chargeability features that may be related to mineralization or lithology.

The terrain in the eastern quadrant of the survey is overlain by coarse talus, in which it is difficult to obtain good electrical contact. Resistivity data obtained for all lines is of good quality and the IP data is of moderate to good quality; the latter is more sensitive, with noise most apparent in lines 05 and 06 in the east, although there is a reasonable correlation with trends found on the western portion of the survey.

The survey outlined a resistivity high feature, suggestive of the presence of a younger silicified or potassic altered plug possibly of the Casino plutonic suite, a small body of which has been mapped, but not dated, on the hilltop above the Trombley zone (Ryan et al., 2013a).

The resistivity inversions show a large circular, near vertical resistivity high anomaly with the highest values centered over lines ROYIP14-02 and -03 (*Figure 12*). Line ROYIP14-02 shows a prominent vertical resistivity low structure (between 200 and 240m) corresponding with a bordering chargeability high, indicating a favourable conductive, chargeable zone. The IP inversions also show a general northwest trending zone of chargeability characterized by a broad zone of high chargeability in the west, branching into two smaller lineaments to the east (*Figure 12*).

Three dimensional resistivity and IP chargeability models are shown in Figure 13, illustrating a major break in the resistivity, which corresponds to a vertical chargeability low feature, an airborne magnetic lineament (*Figure 10*) and break in the anomalous gold geochemistry (*Figure 16*). The main gold in soil anomaly is associated with a resistivity low and generally a chargeability high anomaly (*Figure 12*). The feature is suggestive of a significant, possible controlling, structure.

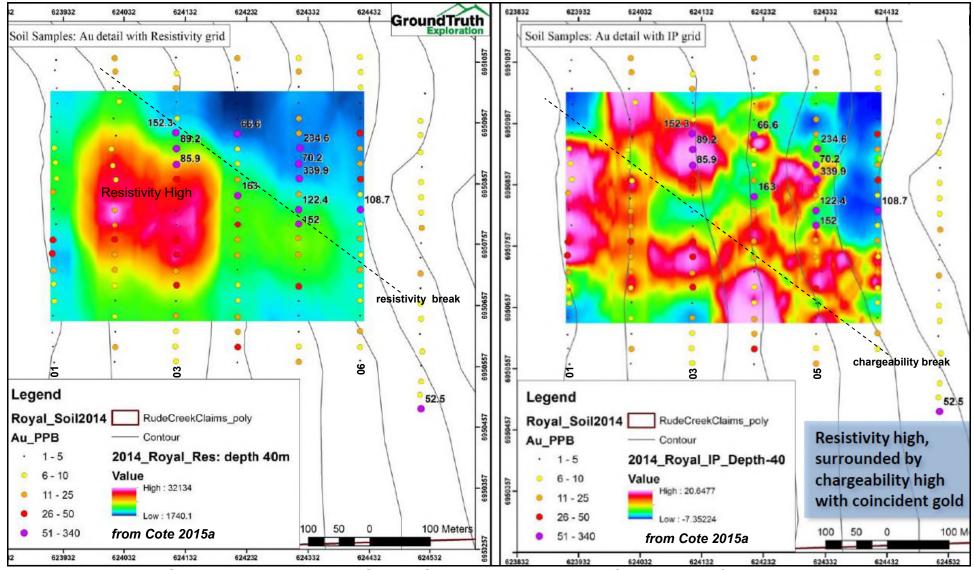


FIGURE 12: Trombley Zone Gold in Soil over Resistivity and Chargeability Contour Plans

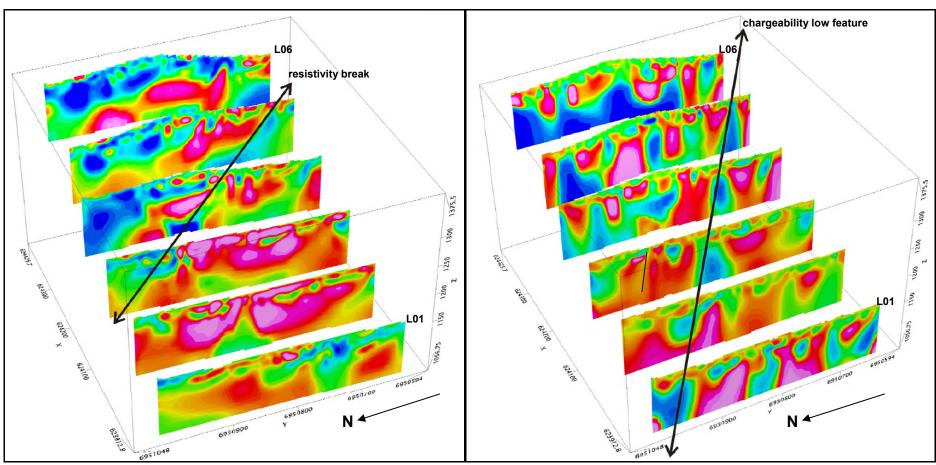


FIGURE 13: Trombley Zone 3D Resistivity and IP Chargeability Profiles

#### 7.0 GEOLOGICAL SETTING AND MINERALIZATION

# 7.1 Regional Geology (Figure 14)

The Rude Creek Gold Project lies within Yukon-Tanana terrane, a continental arc that developed along the ancient Pacific margin of North America from Late Devonian to Permian time, and is situated between the Tintina Fault, about 150 km to the northeast, and the Denali Fault, 100 km to the southwest. Both faults are steeply dipping transcurrent structures with hundreds of kilometres of dextral strike slip offset.

The Stevenson Ridge (formerly Snag) map sheet (NTS 115J) was mapped at 1:253,440 scale by the Geological Survey of Canada in the early 1970's (*Tempelman-Kluit*, 1974) and the Colorado Creek map sheet (115 J/10) at 1:50,000 in 1986 by Payne et al. (1987). Gordey and Makepeace produced a Yukon-wide geological compilation in 1999, with a revision in 2003. In 2011 to 2012 the MDRU investigated projects within the Dawson Range and released their findings in 2013 (*Allan et al., 2013 and 2012*). The Geological Survey of Canada completed 1:100,000 scale mapping through the area in 2012 (*Ryan et al., 2013a & b*). The Yukon Geological Survey ("YGS") released an update of the Yukon compilation map with revised nomenclature (*Colpron et al., 2016*), recently updated in April, 2018 (*YGS, 2018*). The regional geology of the area is primarily summarized from Ryan et al. (2013), Allan et al. (2013) and YGS (2018).

Yukon-Tanana terrane is dominated in the regional area by Devonian and older metasiliciclastic rocks of the Snowcap assemblage (**PDS**), which interfinger with, and are stratigraphically overlain by, Devonian to Mississippian intermediate to mafic metavolcanic rocks of the Finlayson assemblage and lesser felsic metavolcanic rocks (**DMF**). The metasiliciclastic rocks include metamorphosed fine clastic rocks, quartzite and conglomerate. The above lithologies include marble horizons and are metamorphosed to amphibolite grade.

Abundant orthogneiss bodies of the Mississippian Simpson Range plutonic suite (MgSR) and Permian Sulphur Creek orthogneiss (PqS) occur throughout the region. The Mississippian orthogneiss compositions range from granite to potassium feldspar augen bearing to tonalite and diorite. The Sulphur Creek orthogneiss includes granitic and potassium feldspar augen orthogneiss and highly strained, mafic poor orthogneiss. Narrow bodies of Paleozoic ultramafic rocks, commonly serpentinized, also occur within the area.

The above units are interpreted to represent two arcs: an older Devonian to Mississippian arc consisting of amphibolite (**DMF**) and associated subvolcanic intrusions (**MgSR**) built on a siliciclastic basement (**PDS**); and a Permian arc of granitic orthogneiss (**PgS**) and coeval metavolcanic rocks (**PKs**) built on the Devono-Mississippian arc.

The above lithologies are intruded by intermediate granitoid batholiths, plutons and stocks of the Early Jurassic to Late Triassic Minto suite (**LTREJM**) and Early Jurassic Long Lake suite (**EJL**), and generally equigranular granitic rocks of the Mid Cretaceous Whitehorse suite (**mKW**), which include the Coffee Creek (**mKW1**) and the Dawson Range phases (**mKW2**). These intrusive bodies and metamorphic basement rocks are

unconformably overlain by intermediate to felsic flows, breccia and tuff of the Mid Cretaceous Mount Nansen Group (**mKN**).

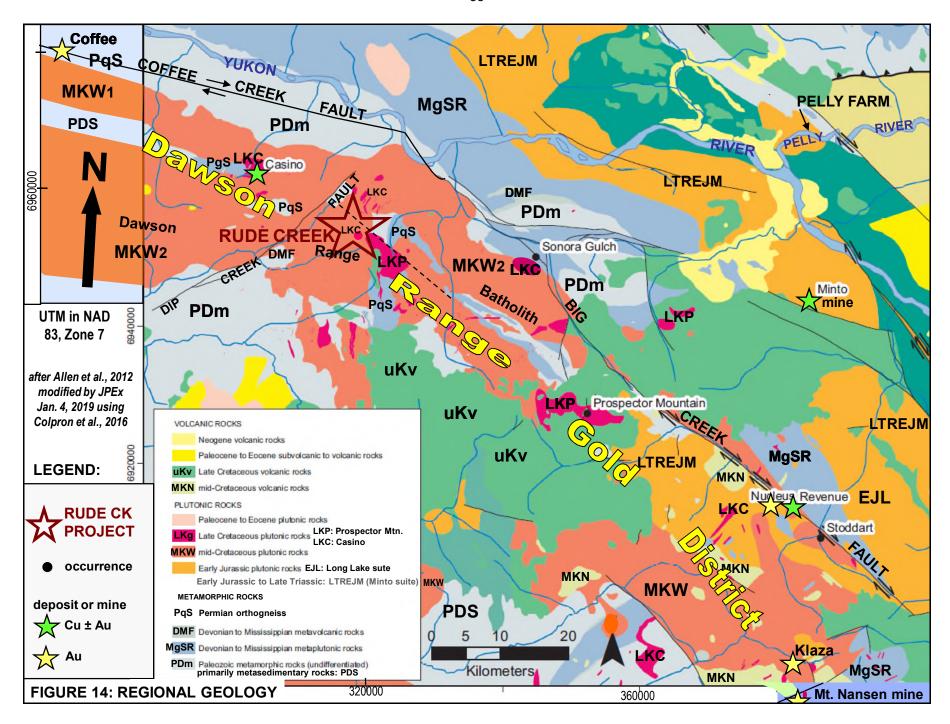
The early Late Cretaceous Casino plutonic suite (**LKC**) was then emplaced at 79 to 74 Ma and typically consist of generally small intermediate stocks and related felsic quartz porphyry, quartz-feldspar porphyry or feldspar porphyry dykes, sills and small plugs. The Casino suite is intimately associated with porphyry copper deposits and many precious metal vein deposits in the Dawson Range. Most intrusions of this suite were previously assigned to the Prospector Mountain suite (**LKP**) or the Mount Nansen Group (**mKN**) and have not all been reclassified.

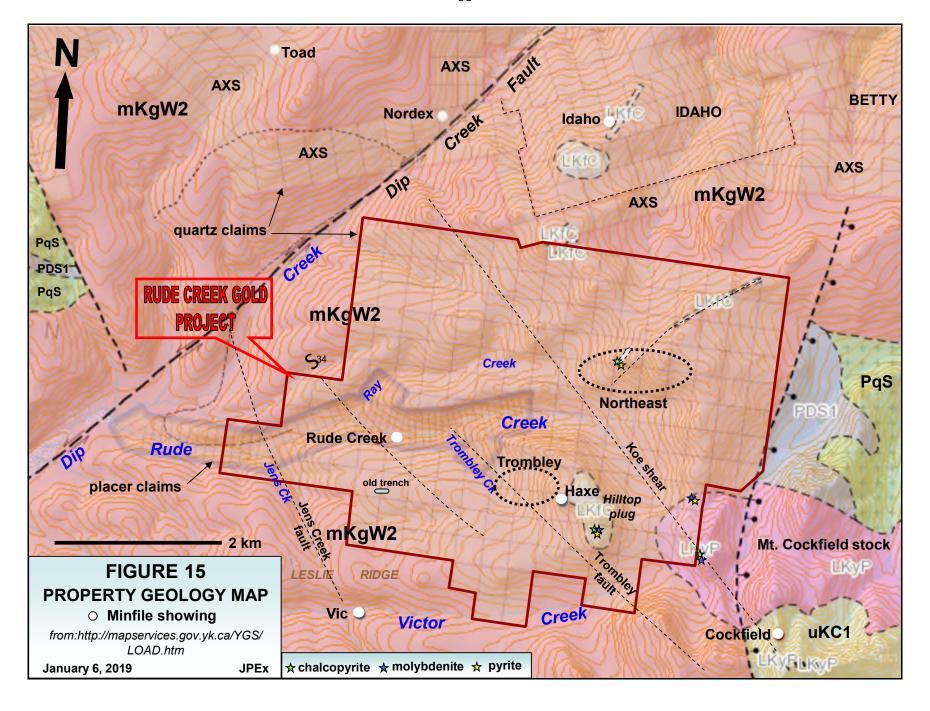
All the above lithologies are locally intruded by late Late Cretaceous (72 to 68 Ma), primarily felsic to intermediate stocks and related felsic feldspar ±quartz porphyry dykes, sills and small plugs of the Prospector Mountain suite (**LKP**) and overlain by related massive, primarily mafic (with lesser intermediate to felsic), flows and breccias of the Carmacks Group (**uKv**), which includes localized coarse clastic sedimentary rocks at the base of the sequence (**IKs**).

The Cretaceous aged, northwest trending, dextral strike slip Big Creek fault approximately borders the northeastern margin of the southern Dawson Range gold and copper belt, while the Coffee Creek fault lies proximal to this boundary further to the northwest (Figure 14). The Coffee Creek fault appears to be a sinistral strike slip Jurassic aged fault that was reactivated in the Cretaceous with dextral strike slip movement. It appears to be offset by the Big Creek fault system. The Dip Creek fault is a northeast trending fault just west of the Project with about 370m of sinistral strike slip offset in this area.

The Rude Creek Gold Project is situated within the northwest trending Dawson Range gold and copper belt, historically considered to extend 250 km from the Mount Nansen area into Alaska, but recently extended another 100 km to the south into the Aishihik Lake area, where age dating has identified similar age intrusions and mineralization. The belt hosts several deposits and mineralized showings of various deposit models including calc-alkalic porphyry copper-gold±molybdenum, associated adjacent epithermal vein and breccia systems, and peripheral polymetallic veins, as well as orogenic gold and intrusion related gold. Many occur proximal to the Big Creek and Coffee Creek faults and splays.

Significant deposits include Casino Mining Corporation's Casino porphyry copper-gold-molybdenum deposit, the Klaza deposit of Rockhaven Resources (a transitional variant of an epithermal system), and Goldcorp's Coffee orogenic gold deposit. Mineralization is commonly associated with Late Cretaceous intrusions (primarily small plugs and breccia bodies of the Late Cretaceous Casino suite and, to a lesser extent, the Prospector Mountain suite), and is usually hosted by the Late Cretaceous intrusions, the older metamorphosed basement complex of the Yukon-Tanana terrane, and/or the Mid Cretaceous Dawson Range batholith (Whitehorse suite). The Rude Creek Gold Project lies 14.5 km to the southeast of the Casino deposit, 45 km to the southeast of the Coffee deposit and 75 km to the northwest of the Nucleus and Revenue deposits of Triumph Resources' Freegold Mountain project (Figure 14).





## 7.2 Property Geology (Figure 15)

Property scale mapping has not been undertaken across the Rude Creek Gold Project, but some mapping was conducted in 1990 and 1996 by Cominco in the eastern half of the Project (Denton, 1980 and Wagner, 1996), and local prospecting with geological observations was conducted in the Haxe Minfile area by Prospector International (Jaworski and Meyer, 2000 & Jaworski and Vanwemeskerken, 2001) and on the Poker claims by Boomerang (Andersen, 2011). The Yukon Geological Survey digital geology has been used as a base in Figure 15 (website at <a href="http://mapservices.gov.yk.ca/YGS/Load.htm">http://mapservices.gov.yk.ca/YGS/Load.htm</a>). Outcrop is limited on the property, comprising 1 to 2 percent, and generally confined to ridge tops and creek exposures. Talus and felsenmeer is fairly common in the eastern property area, but can mask the underlying rock.

The Project is shown by the YGS to be almost entirely underlain by generally equigranular granitic rocks of the Dawson Range phase of the Mid Cretaceous Whitehorse plutonic suite (**mKW2**), which is intruded by a small plug and related dykes and/or sills of the early Late Cretaceous Casino plutonic suite on the hilltop in the headwaters of Rude and Trombley Creeks (Hilltop plug), and by part of the late Late Cretaceous Mt. Cockfield stock of the Prospector Mountain suite (**LKP**) in the southeastern property area, and probable related dykes and sills (*Figure 15*). Variably micaceous quartzite and siliciclastic schistose metasedimentary rocks of the Devonian to Neoproterozoic Snowcap assemblage (**PDS1**) are exposed just east of the Project, and possibly along the eastern margin.

The Hilltop plug consists of medium grained, hypabyssal, porphyritic hornblende rhyodacite with abundant, large, smoky quartz phenocrysts (*Ryan et al., 2013a*) and has not been dated. It is unknown at this point if it belongs to the Casino or Prospector Mountain suite due to strong similarities between the two.

#### A table of Formations follows:

## **Upper Cretaceous**

**LKyP:** *Prospector Mountain suite: Mt. Cockfield stock:* intermediate syenite to monzonite (72 to 68 Ma)

**LKyP:** Casino suite: fine to medium grained quartz-feldspar porphyry monzonite, dacite (79 to 74 Ma)

#### Middle Cretaceous

**mKgW2:** Whitehorse suite: Dawson Range phase: white to beige, medium to coarse grained, unfoliated to weakly foliated, generally equigranular biotite-hornblende granodiorite, lesser granite, tonalite, quartz diorite and diorite

## Devonian to Neoproterozoic

**PDS1:** Snowcap assemblage: quartzite, micaceous quartzite, quartz-muscovite-biotite schist (±garnet and aluminosilicates), and minor metaconglomerate

The Dip Creek fault, just west of the Project, is a northeast trending fault with about 370m of sinistral strike slip offset in this area. A northerly trending normal fault, east side down, borders the eastern property boundary. A number of northwest trending faults appear to dissect the Project, which are primarily seen in the property airborne CVG magnetic map (Figure 10). The Jens Creek fault was initially interpreted from airborne geophysics (Taylor, 1966) and is evident in the airborne CVG magnetic map. A vertical,

northwest trending fault (Trombley fault) is interpreted from the Resistivity/IP survey on the Trombley zone (*Figures 10, 12 and 13*). This fault shows a similar strike to a 25m wide shear zone, trending 130/34°NE, mapped in the Rude Creek canyon near the junction with Ray Creek (*Andersen, 2011*). East-northeast trending cross-structures were noted in the area with slickensides at 077°/69°S, noted 400m downstream and the Rude Creek fissure vein-fault was found to have an orientation of 060°/26°S (*Andersen, 2011*).

The Northwest trending Koe shear zone could trend through upper Battle and Rude Creeks, proximal to the western Northeast soil anomaly, which appears to be supported by the airborne CVG magnetic map (*Figure 10*). The Koe shear zone hosts gold-silver-antimony-arsenic bearing chalcedonic, drusy and massive quartz veins and clay-sericite-pyrite alteration approximately 8 km southeast of the Northeast zone.

A northeast trending fault, also evident in the airborne CVG magnetic map (*Figure 10*), appears to divert the central, northerly trending gold soil anomalies at the Northeast zone. A northeast trending dyke of the Casino suite appears to follow this structure further to the northeast (*Figure 15*).

## 7.3 Mineralization (Figures 3 and 15)

The Rude Creek Gold Project covers the Haxe anomaly and Rude Creek showing, both documented as silver-lead-zinc±gold polymetallic vein occurrences (Minfile Numbers 115J 020 and 021) by the Yukon Geological Survey (*Deklerk, 2009 and http://data.geology.gov.yk.ca/*) (*Figure 15*). The Rude Creek showing consists of a 4.26m long and up to 1m wide, easterly (or possibly more north-northeasterly) trending carbonate (possible siderite) fissure vein, mineralized with galena, sphalerite and pyrite returning 0.34 g/t Au, 4198 g/t Ag and 37% Pb over 11 cm (*Cockfield, 1927*) and was explored by a 21.9m adit and trenching between 1922 and 1953. Other polymetallic vein occurrences are known in the general area, including the Victor (Minfile Number 115J 021), just to the south of the Project, and the Idaho (115J 099) and Nordex (115J 023), both about 2 km to the north (*Figure 15*). No information is known about the Toad (115J 024) occurrence.

The Rude Creek showing was re-located in 2010, approximately 250m upstream of its plotted location, at 621818mE, 6951357mN, Nad 83, Zone 7. An 8 cm wide representative sample of the 060°/26°S trending sulphide bearing fissure vein returned 0.38 g/t Au, 1780 g/t Ag, >20% Pb, 0.15% Zn, 0.123% Cu, 140 ppm Mo, with >10,000 ppm As, 1875 ppm Sb, 19.5 ppm Bi, and 10 ppm Hg and the wallrock yielded 3.77% Pb with 9.7 g/t Ag (*Andersen, 2011*). Tourmaline breccia float was observed just downstream, but did not contain significant results. Tourmaline and tourmaline breccias are commonly associated with porphyry copper deposits and can be associated with gold mineralization. This mineralization lies proximal to a northwest trending shear zone, with a similar trend to the Trombley fault.

Two significant gold soil anomalies have been delineated on the Project (Figure 3) with a good correlation of anomalous gold with anomalous bismuth, ±tellurium, and

peripheral arsenic, silver, ±antimony and lead. The Trombley anomaly covers an easterly trending 150m by 350m, discontinuous to 550m (due to talus cover), >38 ppb Au soil anomaly (Figure 4) underlain by locally tourmaline bearing and chloritized, biotite-hornblende granodiorite. Multiple northerly gold anomalous trends are evident in the Northeast zone, with at least five distinct linear, 800m long gold anomalies over the 1.5 km wide grid, and remain open in all directions (Figure 5). The area also appears to be underlain by biotite-hornblende granodiorite, intruded by a variety of dykes of the Casino and Prospector Mountain suites. Extensive pyrite (up to 15%) and trace chalcopyrite were noted associated with dykes in an outcrop in the western portion of the zone (Wagner, 1996).

Only the Trombley soil anomaly has been drilled, with a total of 723.9m of RAB and RC drilling in 8 holes. Two north trending structures were intercepted returning 0.53 g/t Au over 13.4m including 0.63g/t Au over 6.1m and 2.14 g/t Au over 1.53m in hole ROYRC17-05 and 0.52 g/t Au over 4.57m including 1.17 g/t Au over 1.52m in ROYRC18-07 (Figures 17 and 18 and Table 3). A low grade intercept near the bottom of ROYRC18-07 correlates vertically down dip from the mineralized intercept in ROYRC17-05. The best gold grades are coincident with sericite altered granodiorite, with about 5 to 10% limonite after pyrite, ±pyrite and arsenopyrite, with minor (to 5%) fine quartz ±carbonate veining.

The north trends obtained for the gold bearing structures in drilling indicate that the Trombley grid is not favourably oriented to detect the structures and anomalies remain open to the north and south and somewhat to the east. In addition, three of the drill holes (RAB16-03, RC17-06 and RC18-08) were drilled parallel to the direction of the gold bearing structures. Two additional holes (RAB15-01 and -02) were drilled away from the gold soil anomaly.

Pyrite, minor molybdenite and chalcopyrite ±malachite mineralization occurs within the southern end of the Hilltop plug above the Trombley zone and within the Mt. Cockfield stock in the southeastern Project area where sheeted magnetite veins have also been noted (*Figure 15*). This mineralization and alteration may be associated with the Cockfield porphyry showing, about 1.5 km southeast of the southeastern Project area.

#### 8.0 DEPOSIT TYPE

The Rude Creek Gold Project lies within the Dawson Range gold district, about 45 km southeast of Goldcorp's Coffee deposit where mid Cretaceous aged gold mineralization (dated at 97 to 92 Ma) is hosted by metamorphosed Paleozoic basement rocks of the Yukon-Tanana terrane (primarily a felsic orthogneiss) and the mid Cretaceous (99.5 ±0.9 Ma) Coffee Creek pluton, part of the Dawson Range Batholith. There is a strong structural control to the mineralization with northerly and easterly structures predominating (*Figure 19*). Gold mineralization is typically associated with pyrite or limonite (after pyrite) and occurs in brittle structures, breccias, ± with quartz, fracture fillings, quartz vein stockworks, silicified flooded zones and quartz-sericite-pyrite altered granite. Dolomite and illite alteration, hematite, arsenopyrite and stibnite also occur and

there is some association of gold with arsenian pyrite. The mineralization has been classified as orogenic (*Makarenko et al., 2014*).

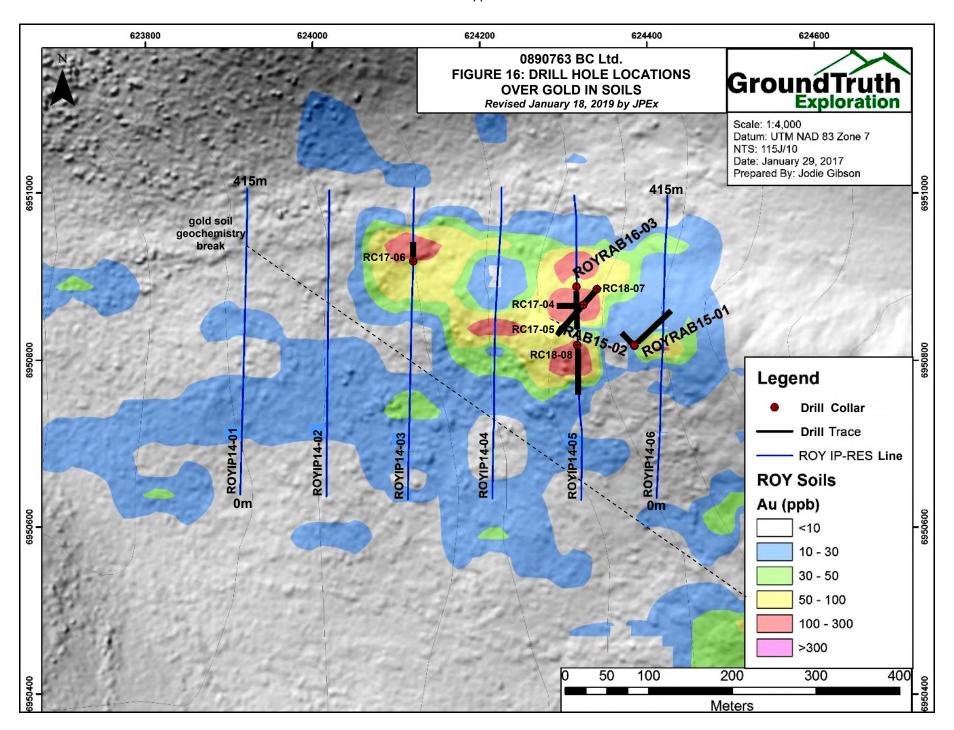
The Rude Creek Gold Project is also situated 80 km south-southeast of the recent Vertigo discovery and 72 km southeast of the Golden Saddle deposit, both orogenic type gold systems owned by White Gold Corp. They occur just to the north of the Dawson Range gold district within the White Gold district, where gold mineralization typically exhibits an older Jurassic age compared to the Cretaceous ages typical within the Dawson Range. The author has not been able to independently verify the above information and it is not necessarily indicative of the mineralization on the Rude Creek Gold Project which is the subject of this report.

Gold mineralization within the White Gold district is characterized by the orogenic type. Mineralization is controlled by a brittle to brittle-ductile D4 deformation event dated as Middle to Late Jurassic (155-160 Ma), which corresponds to the age of regional exhumation and cooling in the region (Allan et al., 2013). Epizonal features (breccias, rapid crystallization textures) are prevalent (Allen et al., 2013) and gold is commonly associated with oxidized cubic pyrite. A common host rock is the felsic orthogneiss, due to its competency. The alteration assemblage includes sericite, silicification, carbonate, pervasive potassium feldspar and hematite (typical in the footwall zone). Most gold prospects in the White Gold district share a common relationship with small-displacement, easterly trending, sinistral strike-slip faults (Allen et al., 2013).

Drilling on the Trombley zone at the Rude Creek Gold Project indicated that the best gold grades are coincident with sericite altered granodiorite, with about 5 to 10% limonite after pyrite, ±pyrite and arsenopyrite, with minor (to 5%) fine quartz ±carbonate veining. Structural control is strongly indicated by mapped and interpreted structures from airborne magnetic and ground resistivity/IP geophysics, dykes and long, linear gold soil anomalies. Mineralization on the property appears to be of the orogenic deposit type.

## 9.0 EXPLORATION

No exploration has been conducted by Michelin on the Rude Creek Gold Project. At least \$316,000 (filed for assessment) was spent in exploration within the last three years on the Project by 0890763 BC Ltd. from 2016 to 2018. Exploration by 0890763 BC Ltd., completed from 2014 to 2018, consisted of the collection of 496 grid and lesser contour soil samples, 2.49 km of IP geophysics, a property wide high resolution fixed wing aerial photographic survey, 219.5m of RAB drilling in 3 holes and 504.5m of RC drilling in 5 holes. This work has been discussed under the respective sections under section 6.0, "History".



## 10.0 DRILLING (Figures 16-18)

A total of 723.9m of drilling in 8 holes was completed on the Rude Creek Gold Project between 2015 and 2018 by 0890763 BC Ltd., including 219.5m of RAB drilling in 3 holes and 504.4m of RC drilling in 5 holes. All drilling targeted the Trombley soil anomaly and was directed by Bart Jaworski of 0890763 BC Ltd. The RAB drilling was executed by GroundTruth of Dawson City, Yukon and the RC drilling by Midnight Sun Drilling Inc. ("Midnight Sun"). The following discussion of the drill programs are primarily summarized from Cote (2015c), and Fage (2017 and 2018a & b).

The RAB drilling was performed by GroundTruth in 2015 and 2016, using their remote controlled, tracked, air/hydraulically operated RAB drill with a 60 hp turbo charged Kubota diesel engine. The drill uses a stationary 300/200 air compressor and a 90 mm COP32 hammer. Drill rods are 1.5m long, drill hole diameter is 8.88 cm and rock chips range in size from 1/4 to 3/8". The RC drilling was conducted by Midnight Sun of Whitehorse, Yukon in 2017 and 2018 using their Grasshopper helicopter portable RC rig using 2<sup>7</sup>/<sub>8</sub>" dual wall RC rods (90 mm hole size) and a center sample hammer. Both the RAB and RC drills were mobilized and demobilized to/from the site by helicopter from a staging area at the Rude Creek airstrip.

RAB chip trays are stored at the premises of GroundTruth Exploration Inc., Dawson City, Yukon Territory and RC chip trays are now stored at the Yukon Geological Survey core library, Alaska Highway, Whitehorse. Most of the drill sites were inspected by the author during the site examination on January 17, 2019 and the RC chips were reviewed on February 14, 2019 at the core library.

Drill hole specifications are summarized in Table 3 below with drill hole locations shown in Figure 16 and cross sections in Figures 17 and 18. In the drill tables "Elev." denotes elevation and "Az." azimuth.

Az. No. of **Nad 83** Zone 7 Elev. Dip Length Hole Samples Number Easting **Northing** (m) (m) (°) (°) 624386 6950817 045 100.58 63 ROYRAB15-01 1337 -55 ROYRAB15-02 624385 6950818 315 20 1337 -55 30.48 ROYRAB16-03 624316 6950888 1302 180 -55 88.39 58 ROYRC17-04 624322 6950871 275 -70 102.41 65 1306 ROYRC17-05 624322 6950871 1306 230 -60 102.41 65 6950921 000 103.02 67 ROYRC17-06 624117 1218 -75 97.54 63 ROYRC18-07 624345 6950890 1309 230 -60 ROYRC18-08 624320 6950830 1297 180 -50 99.06 65 **TOTAL** 723.89 466

Table 3: Drill hole specifications

Recovery appears to have been good, except in the very top, up to 3m, of some holes. The author is not aware of any drilling, sampling or recovery factors that could materially impact the accuracy and reliability of the results.

All holes encountered granodiorite throughout their entire lengths, except for a possible fine grained dyke at 62.5 to 64m in ROYRC17-08, which was associated with elevated gold and arsenic. Drill results are summarized in Table 4 below and are graphically shown on select sections (*Figures 17 and 18*).

**Table 4: Significant drill results** 

1 3.0.10 11 0.19 3 1 0.0 3						
Hole	From	То	Length	Au		
No.	(m)	(m)	(m) *	(g/t)		
ROYRAB16-03	41.15	48.77	7.62	0.207		
including	45.72	47.24	1.52	0.750		
ROYRC17-05	5.18	18.59	13.41	0.530		
including	5.18	6.71	1.52	2.140		
ROYRC18-07	15.24	19.81	4.57	0.520		
including	16.76	18.29	1.52	1.176		

<sup>\*</sup> Insufficient information is available to estimate the true thickness of these intercepts and, as such, the true thickness may be less than the down-hole length intercept reported above.

ROYRAB15-01 and -02 targeted the strongest soil geochemical anomaly in the Trombley zone, deliberately irrespective of IP geophysical data; however part of the soil anomaly relies on historical data from 1999 to 2000, the exact location of which is suspect. ROYRAB15-02, also did not reach target depth due to slow drilling attributed to hard ground. ROYRAB16-03 targeted coincident recent soil geochemical and IP geophysical anomalies and yielded the best gold intercept from the RAB drill program, which is 0.21 g/t Au over 7.6m, including 0.75 g/t over 1.5m. The IP anomaly consists of a chargeability high/low contact with a coincident resistivity high, interpreted to represent a fault.

The best gold intercept from the RC drilling is 0.53 g/t Au over 13.4m in hole ROYRC17-05, accompanied by anomalous copper, lead, zinc, arsenic, and silver and including 2.14 g/t Au over 1.5m. Hole ROYRC18-07 was drilled as a 30m step out behind ROYRC17-05 to test its down dip extent, and returned similar values of 0.52 g/t Au over 4.57m including 1.17 g/t Au over 1.52m near surface (<19.8m) within a 21.3m interval of elevated arsenic (>50 ppm) from surface. A low grade intercept near the bottom of ROYRC18-07 correlates vertically down dip from the 0.53 g/t over 13.41m intercept from ROYRC17-05. The near-surface intercept in ROYRC18-07 is interpreted as a second, near vertical gold bearing structure (*Figure 17*). The best gold grades are coincident with sericite altered granodiorite, with about 5 to 10% limonite after pyrite, ±pyrite and arsenopyrite, with minor fine quartz ±carbonate veining.

The north trends obtained for the gold bearing structures indicate that the Trombley drilling was not favourably oriented to detect the structures and soil anomalies remain open to the north and south and somewhat to the east. Three of the drill holes (RAB16-03, RC17-06 and RC18-08) were drilled parallel to the gold bearing structures and two additional holes (RAB15-01 and -02) were drilled away from the soil anomaly.

Drill sampling methods are discussed under Section 11.0, "Sample Preparation, Analyses and Security", below.

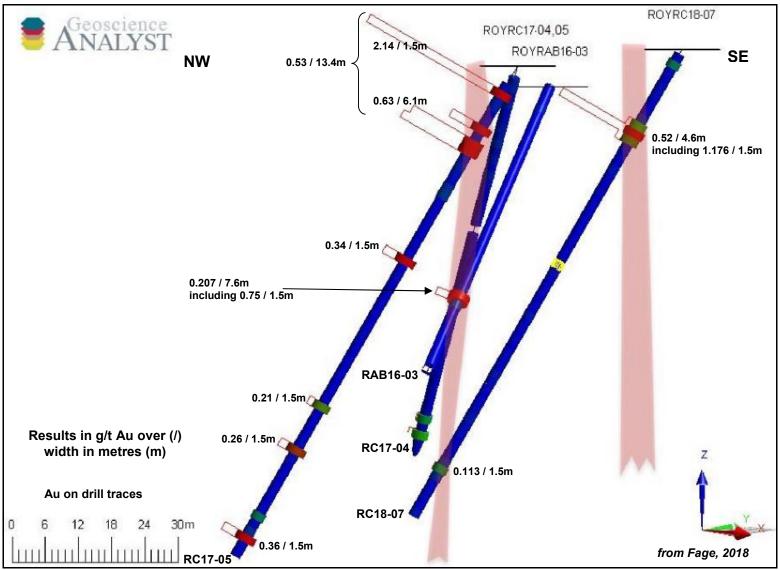


FIGURE 17: Drill section through RC17-05 and RC18-07, looking northeast

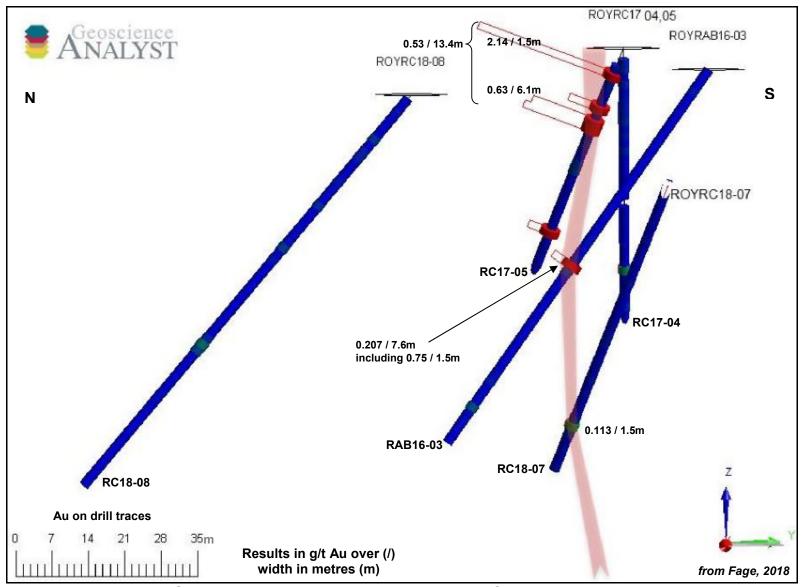


FIGURE 18: Drill section 624320E through RC18-08, looking east

## 11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

All RAB samples from the 2015 and 2016 programs and almost all samples from the 2017 and 2018 RC programs were collected at 1.5m intervals, and representative chips catalogued in chip trays, which were photographed, logged and stored for future reference. Cuttings are deposited from the cyclone into a 20 litre bucket, which is dumped into an 8:1 splitter, with approximately 2.25 kg bagged as a sample and the remainder deposited into a retention bucket from which another 2.25 kg is bagged and labelled as a duplicate for retention. A small plastic container of chips is collected, dry and then wet sieved, and washed chips catalogued in chip trays with hole and sample number and interval marked. The remainder in the retention bucket is discarded and buckets and splitter are cleaned with pressurized air. The analytical sample is bagged in a 12"x20" ore bag, sample number barcode inserted into bag and sealed with zip tie with external barcode sample number attached. The analytical sample is placed into a rice bag marked with client, project code, bag series and number of samples, with generally 10 samples per bag. The rice bag is sealed with a zip tie and security zip tie.

The RAB samples were logged by Al Doherty, P.Geo. of Aurum Geological Consultants Inc., Whitehorse, Yukon Territory, in Whitehorse in 2015 and by Adam Fage in 2016. RC logging was completed by geologists Kel Sax in 2017 and Linda Lewis in 2018. All sample intervals, primarily 1.5m long, in each drill hole were sampled resulting in a total of 466 samples.

The only record of quality assurance and quality control ("QAQC") is in the 2018 program with a total of 12 samples, consisting of 4 blanks and 4 standards inserted by the geologist and 4 duplicates, which were requested of specific sample rejects at the laboratory. The blank used was CDN-BL-10 (<0.01 g/t Au), consisting of granitic CDN-GS-P7L material and the standard was (0.709)0.072 a/t) (http://www.cdnlabs.com/Certificates.htm). The standards and blanks returned results within acceptable limits. This indicates that the analytical results had an acceptable degree of precision and were free from contamination during sample preparation.

All RAB drill samples were delivered by GroundTruth to the sample preparation facility of Bureau Veritas Mineral Laboratories ("BVML") in Whitehorse, Yukon via Kluane Freight Lines Ltd. All RC drill samples were delivered by Midnight Sun to their shop in Whitehorse, where they were logged and then transported to BVML's facility in Whitehorse.

Samples were prepared at BVML's Whitehorse facility, then internally sent to BVML's Vancouver, British Columbia facility for analysis. All drill and rock sample preparation from 1999 to present involved crushing 1 kg to 70% passing through 10 mesh, split 250g and pulverize to 85% passing through 200 mesh (PRP70-250). Gold in the RAB drill samples was analyzed by BVML's Group FA430 analysis, which involves a fire assay pre-concentration with an atomic absorption spectrometry ("AAS") finish on a 30g sample. Over limit gold values were assayed by fire assay with a gravimetric finish. The samples were additionally analyzed for 36 elements, including gold, by BVML's Group AQ200 analysis, a multi-element inductively coupled plasma ("ICP") package which involves an aqua regia digestion with a mass spectrometry ("MS") finish on a 0.5g

sample. All 2017 and 2018 drill samples were analyzed for 36 elements, including gold, by BVML's Group AQ202 analysis, a multi-element ICP package which involves a modified aqua regia digestion with a mass spectrometry finish on a 30g sample.

All soil sample preparation from 1999 to 2016 involved drying at 60°C and sieving to -80 mesh and all rock sample preparation was completed as discussed under drill samples (PRP70-250).

The 2014 to 2016 soil samples were sent to BVML's sample preparation facility in Whitehorse where they were prepared, then internally sent to their Vancouver, British Columbia facility for analysis. The samples were analyzed for 36 elements, including gold, by BVML's Group AQ201 analysis, a multi-element ICP package which involves an aqua regia digestion with an MS finish on a 15g sample. Ryan's 2007 and Ethos' 2011 soils were analyzed as above but in 2007 they were sent direct to Acme Analytical Laboratories Ltd. ("Acme", now BVML) in Vancouver, British Columbia and the 2011 samples were delivered by GroundTruth to Acme's preparation facility in Dawson City where they were prepared, then internally sent to their Vancouver, British Columbia facility for analysis.

The 2010 samples by Boomerang and 2011 samples by Silver Quest were submitted to ALS Minerals ("ALS") in Whitehorse for preparation and internally sent to their North Vancouver facility for analysis. All samples were analyzed for gold by fire assay using an atomic absorption finish on a 30g sample and for 51 elements by the ME-MS41 technique using aqua-regia digestion with an ICP-MS finish on a 0.5g sample.

Prospector International's 1999 and 2000 samples were shipped to Acme (now BVML) in Vancouver, British Columbia. Silt samples were sieved to two fractions, -150 +230 mesh and -230 mesh. Gold was analyzed using an aqua regia digestion with an ICP-MS finish on a 30g sample.

Quality control procedures were also implemented at the laboratory, involving the regular insertion of blanks and standards and check repeat analyses and resplits (re-analyses on the original sample prior to splitting). There is no evidence of any tampering with or contamination of the samples during collection, shipping, analytical preparation or analysis. All sample preparation was conducted by the laboratory. The laboratory is entirely independent from the issuer. All samples since 1999, except for the 2010 and 2011 samples were analyzed by Bureau Veritas Mineral Laboratories or Acme Analytical Laboratories Ltd. (now BVML) of Vancouver, British Columbia. The 2010 Boomerang and 2011 Silver Quest samples were analyzed by ALS in North Vancouver. BVML and ALS are, and Acme was, ISO 9001 accredited facilities and their preparation facilities were accredited for the procedures performed. In the author's opinion the sample preparation, security, and analytical procedures were entirely adequate.

A sampling protocol should be implemented by Michelin, involving the routine and regular insertion of blanks, standards and duplicates sent to the primary laboratory, and reassaying of selected mineralized pulps at a second independent laboratory in future drill programs on the project.

## 12.0 DATA VERIFICATION

The current geochemical data was verified by sourcing original analytical certificates and digital data. Analytical data quality assurance and quality control was indicated by the favourable reproducibility obtained in laboratory and company inserted standards, blanks and duplicates (repeats). Quality control procedures are documented in Section 11.0, "Sample Preparation, Analysis and Security".

There does not appear to have been any tampering with or contamination of the samples during collection, shipping, analytical preparation or analysis. In the author's opinion, the data provided in this technical report is adequately reliable for its purposes.

#### 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The Rude Creek Gold Project is at an early exploration stage and no metallurgical testing has been carried out.

## 14.0 MINERAL RESOURCE ESTIMATES

There has not been sufficient work on the Rude Creek Gold Project to undertake a resource calculation.

## 23.0 ADJACENT PROPERTIES (Figures 2 and 15)

An abutment of one claim width of the AXS claims of Casino Mining Corp. adjoins the Rude Creek Gold Project in one location along the northern property boundary (Figures 2 and 15, and <a href="http://mapservices.gov.yk.ca/YGS/Load.htm">http://mapservices.gov.yk.ca/YGS/Load.htm</a>). The claims appear to have been staked to protect access to the Casino deposit, located 15 km northwest of the Project.

The AXS claims are adjoined to the north by the approximate 1200 ha Idaho property of ATAC Resources Ltd. where limited drilling, not deep enough to test the main IP anomalies, and airborne radiometric data indicate the potential for a high level porphyry system (website at <a href="http://www.atacresources.com/for-option/idaho-creek">http://www.atacresources.com/for-option/idaho-creek</a>). Polymetallic veins also occur at the Idaho property, which are probably distally related to the porphyry system. Mineralization consists of limonite, pyrite, arsenopyrite, galena and sphalerite with peak gold and silver values of 15 g/t Au and 1,389 g/t Ag (Deklerk, 2009).

The author has not been able to independently verify the above information and it is not necessarily indicative of the mineralization on the Rude Creek Gold Project which is the subject of this report.

(Refer to Figures 2 and 15, and website at http://gysde.gov.yk.ca.)

#### 24.0 OTHER RELEVANT DATA AND INFORMATION

To the author's knowledge, there is no additional information or explanation necessary to make this technical report understandable and not misleading.

## 25.0 INTERPRETATION AND CONCLUSIONS

Two significant gold soil anomalies have been delineated on the Project with associated anomalous bismuth, ±tellurium, and peripheral arsenic, silver, ±antimony and lead. The Trombley anomaly covers an apparently easterly trending 150m by 350m, discontinuous to 550m (due to talus cover), >38 ppb Au soil anomaly underlain by locally tourmaline bearing and chloritized biotite-hornblende granodiorite. Drilling of the soil anomaly, with a total of 723.9m of percussion drilling in 8 holes intersected two north trending structures returning 0.53 g/t Au over 13.4m including 0.63 g/t Au over 6.1m and 2.14 g/t Au over 1.5m in hole ROYRC17-05 and 0.52 g/t Au over 4.57m including 1.17 g/t Au over 1.5m in ROYRC17-07.

The best gold grades are coincident with sericite altered granodiorite, with about 5 to 10% limonite after pyrite, ±pyrite and arsenopyrite, with minor fine quartz ±carbonate veining. Both the soil grid and most of the drilling were not favourably oriented or positioned to intersect north trending structures. The anomaly and gold bearing structures remain open to the north, south and somewhat to the east, as well as down dip.

Multiple northerly gold anomalous trends are evident in the Northeast zone, with at least five distinct, linear, 800m long gold anomalies over the 1.5 km wide grid, open in all directions. The Northeast zone also appears to be underlain by biotite-hornblende granodiorite, intruded by a variety of dykes of the Casino and Prospector Mountain suites. Extensive pyrite (up to 15%) and trace chalcopyrite were noted associated with dykes in an outcrop in the western portion of the zone.

The deposit model for the Rude Creek Gold Project is the orogenic type, such as at Goldcorp's Coffee deposit, and at the Golden Saddle and VG deposits and the newly discovered Vertigo zone of White Gold Corp. The Coffee deposit is hosted by metamorphosed Paleozoic basement rocks of the Yukon-Tanana terrane and the Mid Cretaceous Coffee Creek pluton, of the Whitehorse plutonic suite in the Dawson Range batholith, with a strong structural control. Northerly and easterly trends dominate (*Figure 19*). Strong similarities exist between the Rude Creek Gold Project and the Coffee

deposit as follows: both are located within the Dawson Range gold district and are, at least in part, hosted by phases of the Whitehorse plutonic suite; steeply dipping, north trending structures dominate at the Supremo zone within the Coffee deposit and have been intersected in drilling at the Trombley zone and are suggested by trends within the Northeast gold soil anomaly on the Rude Creek Gold Project; a strong structural control is indicated at both; and there is a similarity in the size, shape and tenor of the gold in soil anomalies (Figure 19). The author has shown the data from the Coffee deposit for comparison only and it is not necessarily indicative of the mineralization on the Rude Creek Gold Project which is the subject of this report, and does not suggest that similar results will be obtained on the Rude Creek Gold Project.

Similarities in the soil anomalies include the presence of multiple, long, linear >30 ppb Au soil anomalies. Many are >300m long and some reach 800m long in the Northeast zone at Rude Creek, limited by the extent of the grid. The Trombley grid is, and some of the drill holes were, oriented parallel to the gold bearing structures intersected in the drilling. The Kona zone at Coffee and the Rude Creek Gold Project are both underlain by phases of the Whitehorse plutonic suite, which provide good competent host rocks. This allows for the development of persistent, continuous structures. Dacite to rhyodacite dykes occur on both properties and an association of increased gold grade proximal to the dykes was noted in trenches and drill holes at the Coffee deposit. However, the mineralization at Coffee has been dated at 97-92 Ma, just slightly younger than the 99.5 Ma date on the Coffee Creek pluton part of the Dawson Range batholith. The dykes appear to be younger, probably following the same structures that are related to the mineralization. Therefore, mapping the dykes may be useful in delineating the controlling structures.

The orientation of mineralization related to the gold soil anomaly at the Supremo zone of the Coffee deposit was difficult to determine and trenches were originally excavated parallel to the structural trends. A cross trench at T3, aerial lineaments, detailed soil sampling, and detailed prospecting were useful in providing a more accurate understanding of the underlying source and structural orientations. Consequently structural analysis, geophysical interpretation and detailed soil sampling are initially recommended prior to further drilling as discussed in the following section, "Recommendations".

The Rude Creek Gold Project is at an early stage of exploration, and as such considered a high risk. The above interpretations and the following recommendations for work are based on the results of geochemical and geophysical surveys, which are subject to a wide range of interpretation, with limited percussion drilling. There are no specific risks that the author foresees that would impact continued exploration and development of the property. Although the author believes that the surveys on the property are scientifically valid, evaluating the geological controls on mineralization is hampered by a lack of rock exposure. At the present time and for the foreseeable future, the project is not generating any cash flow.

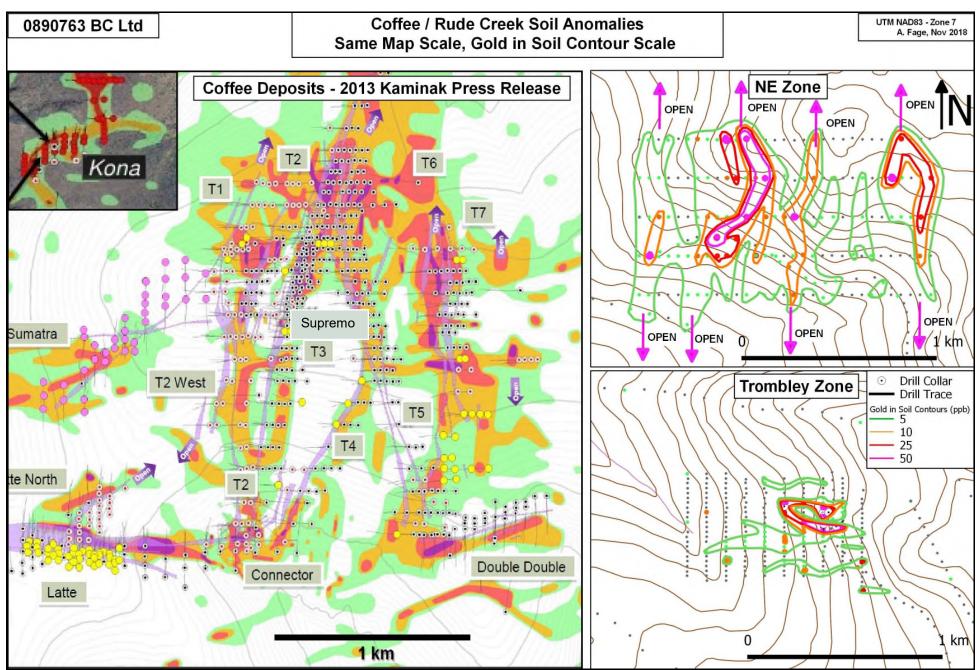


Figure 19: Comparison of Soils at Coffee and Rude Creek

#### 26.0 RECOMMENDATIONS AND BUDGET

Based on: favourable geological setting (Dawson Range gold district); competent host rocks (Dawson Range batholith); structural complexity (evident within the airborne magnetic data, resistivity/induced polarization data and presence of linear younger dykes); significant gold soil anomalies with associated bismuth, ±tellurium, and peripheral arsenic, silver, ±antimony and lead; significant initial drill intercepts on the Trombley zone despite limited drilling; and similarities and proximity to Goldcorp's Coffee deposit and other significant gold discoveries within the Dawson Range and White gold districts, further work is recommended on the Rude Creek Gold Project.

A two phase exploration program is recommended with Phase 1 consisting of: additional grid soil sampling in the Northeast and Trombley areas; and detailed mapping, prospecting and structural analysis including a detailed integration and interpretation of the airborne geophysical data.

Sample density on the Northeast soil grid is only at 50m stations along 200m spaced lines. Infill east-west trending lines at a 100m spacing is initially recommended with 25m sample stations and extension of the grid to the north, west, east and somewhat to the south to delineate the extent, and better constrain the orientation, of the gold soil anomalies. Additional grid soil sampling is also recommended on the Trombley soil grid. Infill sampling is recommended along 7 infill lines in the eastern grid area and can continue along north trending lines with a 50m sample spacing. Additional east-west lines are recommended to the north (2 lines) and south (1 line) at a 25m sample spacing on lines 100m apart.

Detailed mapping and prospecting is recommended across the property with emphasis on the two grids and a structural and airborne geophysical analysis.

An initial Phase 2 drill program, contingent on results from Phase 1, is recommended with 1,000m of RC drilling in about 5 to 6 holes with a helicopter supported rig to test the gold mineralization intersected in the RAB and RC drilling on the Trombley zone and the multiple northerly trending gold in soil anomalies at the Northeast zone, and/or additional soil anomalies generated in Phase 1.

# 26.1 Budget

Based on the above recommendations, the following two phase exploration program with corresponding budget is proposed. Phase 2 is entirely contingent on results from Phase 1.

## Phase 1

•	soil grids (1000 samples - labour, assays, incl. QAQC)	\$ 65,000
•	detailed mapping, prospecting, structural analysis, assays	15,000
•	camp, accommodation, food, communication	10,000
•	helicopter	12,000
•	preparation, compilation, report and drafting	5,000
•	communication, supplies, travel & expediting	3,000
•	contingency	10,000
TOTAL:		\$120,000

# Phase 2 (contingent on results from Phase 1)

•	RC drilling (1000m in 5-6 holes, all in)	\$200,000
•	logging, sampling, supervision	5,000
•	assays (600 Au, ICP @35/each)	21,000
•	camp, accommodation, food, communication	10,000
•	helicopter	15,000
•	preparation, compilation, report and drafting	5,000
•	communication, supplies, travel & expediting	4,000
•	contingency	<u>15,000</u>
TOTAL:		\$275,000

# **SIGNATURE PAGE**

Respectfully submitted,	Effective Date: February 15, 2019		
"Jean Pautler"	Signing Date: April 17, 2019		
Jean Pautler P Geo			

The signed and sealed copy of this Signature page has been delivered to Michelin Mining Corp.

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## CERTIFICATE, DATE AND SIGNATURE

- 1) I, Jean Marie Pautler of 103-108 Elliott Street, Whitehorse, Yukon Territory am selfemployed as a consultant geologist, authored and am responsible for all sections of this report entitled "Technical report on the Rude Creek Gold Project, Dawson Range gold district, Yukon Territory", dated February 15, 2019.
- 2) I am a graduate of Laurentian University, Sudbury, Ontario with an Honours B.Sc. degree in geology (May, 1980) with over 35 years mineral exploration experience in the North American Cordillera. Pertinent experience includes the acquisition and delineation of the Tsacha epithermal gold deposit, British Columbia for Teck Exploration Ltd. and exploration and property examinations for Teck Exploration Ltd. in 1993 and 1998 to 2000, and with Kerr Addison Mines from 1983 to 1988 within the Dawson Range, White Gold and Klondike Gold districts of the Yukon. I have recent previous independent experience and knowledge of the area having conducted exploration, including property examinations, within the Dawson Range gold-copper belt between 2005 and 2018. I have examined the Coffee, Golden Saddle, Casino, Revenue-Nucleus and Klaza deposits, the Mount Nansen mine and the Mt. Cockfield, Sonora Gulch, Mariposa and Vertigo occurrences.
- 3) I am a registered member of the Association of Professional Engineers and Geoscientists of British Columbia, registration number 19804.
- 4) I have visited the subject mining property of this report and am a "Qualified Person" in the context of and have read and understand National Instrument 43-101 and the Companion Policy to NI 43-101. This report was prepared in compliance with NI 43-101.
- 5) This report is based on a site visit by the author on January 17, 2019, and a review of pertinent data. I have no prior experience working on the Rude Creek Gold Project.
- 6) At the effective date of the technical report, to the best of my knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
- 7) I am entirely independent, as defined in section 1.5 of National Instrument 43-101, of 0890763 BC Ltd., Michelin Mining Corp., and the Rude Creek Gold property.

This report, with an effective date of February 15, 2019, has been signed at Carcross, Yukon Territory this 17<sup>th</sup> day of April, 2019,

"Signed and Sealed"

## "Jean Pautler"

Jean Pautler, P.Geo. (APEGBC Reg. No. 19804) JP Exploration Services Inc. #103-108 Elliott St. Whitehorse, Yukon Y1A 6C4

The signed and sealed copy of this Certificate, Date and Signature page has been delivered to Michelin Mining Corp.