Higher Ground Exploration Services

YMEP 2018

Final Technical Report

on the Diamond Tooth Resources Gold Project

Dawson City Area; NTS 116B 03

Location: Latitude of 64°4'23"N, and Longitude 139°11'20"W

Mining District: Dawson

Yukon Territory

Prepared for

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Ву

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November 05, 2018

Summary

The Diamond Tooth Resources 2018 exploration program consisted of prospecting, ground geophysics, rock and soil sampling.

Prospecting was carried out by Leia Ezerza and Charlie Brown at the beginning of the project on June 4th and 5th. Soil sampling was carried out in five different designated areas also by Leia Ezerza and Charlie Brown from June till early August for 16 days. A total of 753 Soils were taken during the 2018 exploration program and sent to Bureau Veritas Labs for assay (assays still pending). A geophysical survey with a GSM 19 Overhauser Magnetometer was carried out by Leia Ezerza on 6 different designated areas on the claim block. Additional prospecting by Nicolai Goeppel and Peter Schwenk starting June 28 for 6 days, included rock and chip sampling with assays submitted to Bureau Veritas (Sheet#, Appendix II).

The 2018 work program was successful in locating new bedrock exposures on Bradley and Shovel creeks and in producing several geophysical and geochemical anomalies. Future work consisting of geochemical sampling and prospecting is recommended to further evaluate the property and delineate mineralized zones.

Table of Contents

2 UMMARY
ABLE OF CONTENTS
NTRODUCTION4
OCATION AND ACCESS
REVIOUS WORK HISTORY
Early Work
Academic and Government Work
RECENT WORK
EDROCK GEOLOGY
018 WORK PROGRAM
2018 Results and Interpretation
Prospecting 2018
Ground Magnetometer Survey 2018
Soil Sampling 2018
XPENDITURES
ONCLUSION AND RECOMMENDATIONS
TATEMENT OF QUALIFICATIONS
REFERENCES
APPENDIX I15
APPENDIX II

Introduction

In 1896 gold was discovered on Rabbit Creek, by Skookum Jim, George Carmack and aided by Tagish Charlie. This set-in motion the greatest gold rush in Canadian history; over 100,000 people are estimated to have attempted to reach the Klondike region between 1896 and 1899. This chance discovery by Skookum Jim and George Carmack would result in the production of over 13 million recorded ounces of gold from the Klondike area in the years to follow. In addition, many notable mineral discoveries were made across the Yukon during this time; many recently and currently explored or developed projects owe their original discovery to this era in Yukon's history.

Many veteran hard rock and placer miners from the California gold rush were among those who answered the call to the Yukon. These miners and prospectors who experienced the California rush would have been familiarized with Mother Lode District orogenic gold mineralization. As these early prospectors diligently tested up the creeks they examined the hillsides for potential lode sources. Several notable placer camps and lode gold occurrences through BC discovered in the later 1800s including Bralorne-Pioneer, Erickson lode mining camps and the Cariboo-Bakerville and Atlin placer mining camps display this strong relationship with ophiolite packages and associated orogenic mineralization. As the early pioneers drove farther north similar correlation was noted and pursued on Fortymile and subsequent Dawson area.

The Diamond Tooth Resources Gold Project (DTRGP) composes of 520 contiguous quartz mineral claims located immediately east of Dawson City (Figure 1+2). This property is in good standing which is held by Diamond Tooth Resources owner Charlie Brown. During the time of discovery in the Yukon much of the Diamond Tooth Resources Gold Project, western portion of the claim block was held in a hydraulic concession by Joseph Boyle; Figure 3 displays how the concession was fringed by mineral grants in 1911. Records from this time are scarce; however, research conducted by Charlie Brown and local artist and historian Jim Robb uncovered two articles in reference to the surrounding historic patented claims. The two articles refer to the area west of Thomas Gulch and the north end of the hydraulic concession respectively near Thomas Gulch and Fire Tower respectively (Figure 4 & 5). Under the headline "Good Showing of Quartz Ledges" reads, "Thirty prospect holes have been put down on different leads to locate the walls of ledges... There are six leads running parallel with a general trend of northwest and southeast" and continues to say, "A dyke of bird's eye porphyry of feet in width ... surface assay go \$2.92. The center lead gives an assay of \$85.40 in gold"; The article continues to mention "A body of talc 75 feet in width has been located between two slate walls, which assay \$2 to \$7.48 gold from surface croppings" and "30 tonnes" are ready for the mill.

Gold prices at 1902 averaged around \$18.92 per ounce; \$85.40 would be equivalent to 4.5 ounces per ton (140 g/t) and \$3.10 is equivalent to \$0.16 ounces per ton (5.10 g/t). Another article under the header "Quartz Miners Are Becoming Active" and reads, "An incline of 106 feet in length will be extended for another fifty feet or more on the Matilda Claim" and concludes with "Millions of tons of low-grade gold-bearing quartz and porphyry are now in sight on the Dawson City group". Fascinatingly, prospecting efforts in 2015 uncovered an area scoured with early 1900 test pits which coincide with the fore mentioned report near Thomas Gulch.

The DTRGP claim block overlies accreted Slide Mountain terrane; consisting of an ophiolite oceanic sequence of ultramafic, mafic, volcanic and sedimentary rocks at varying degrees of metamorphism which were intruded by later plutons. Strong indication of Mother Lode orogenic mineralization has been observed on DTRGP. Several notable zones of mineralization have been identified and include the low lying basal thrust contact of a serpentinite unit. Listwanite alteration was observed in outcrop for over 3 meters in width and localized float for over 1.5km along Shovel Creek. Alternate occurrences include a large gossan identified on a Yukon Geological Survey heli-supported property visit in 2015, and a malachite stained and sulfide bearing quartz vein hosted in gabbro with widths of greater than one meter and traceable for approximately 750ft. Highest sample values from DTRGP conducted in recent work by Diamond Tooth Resources Inc. include 782 ppb Au, 1200 ppm As, 0.5 ppm Ag, over 1% Cu, and 8.2 ppm Sb; Figure 6 to 10 shows an overview of the property and several highlighted areas.

Location and Access

The Diamond Tooth Resources Gold Project is located in the Dawson Mining District, Yukon. The DTRGP is located on map sheet 116B 03 and centered Latitude of 64°4'23"N, and Longitude 139°11'20"W, immediately east of Dawson City. The property is very accessible with good infrastructure and entry by the Klondike Highway, on site three phase power, and close proximity to the Dawson City Airport (Figure 2). In addition, the project area is dissected with old exploration trails and roads that provide access to all corners of the claim block ensuring cost effective exploration. The northern margin of the claim block is bordered with Tr'ondëk Hwëch'in category A and B settlement lands.

Previous Work History

Early Work

The earliest evidence of exploration on the property is observed in the numerous prospecting pits and turn of the century cabins at sites across the claim block; old workings likely date back to the late 1800s into the early 1900s. Many pits clearly indicate the prospecting for lode Au sources. Such pits have been observed below the Dome Look Out, along the left limit of Thomas Gulch, and Bradley Creek on the northeast part of the claim block.

The earliest recorded mineral occurrences are Boyle (Minfile,116B009) and Fibre (Minfile,116B011). Boyle was Staked as the Golden Lion claim, in May 1901 by W. Forster who put in numerous shallow shafts and trenches in 1901-05. Fibre (Minfile,116B011) staked as Asbestos and Platinum claims in September 1900, Ophir claim in November 1900 by G.B. Erwin and was restaked as Crow and Platinum claims in December 1900. The west side was extensively staked in 1900-1902 as the Dawson City Group explored with trenching and prospecting and later surveyed as claims in 1908. Figure 3 and 4 are newspaper clippings from the early 1900s recording some activity of quartz miners near Dawson within the TRGP and to the "Dawson City Group". These articles allude to the origin of some of the observed workings and indicate that several potential lode sources were explored outside of Dawson and yielded up to 4.5 ounces per ton

gold. Alternate test pits and shafts have evidently been placed to test underlying placers near drainages and on the benches. In the surrounding area, early hard rock exploration ranged from basic prospects to underground workings and production attempts. Some examples include the Lone Star, Violet, Pioneer, Roach, Robin Egg, Parnell, and others.

Academic and Government Work

Academically the property has been incorporated in several academic studies as a geological reference on a regional scale. Two regional government geological maps cover the KGRP including a 1927 GSC compilation map and R. L. Dibicki 1984 and is the extent of geological mapping on the property. A recent 2014 aeromagnetic survey was carried out on behalf of the GSC in the Dawson area and included the DTRGP claims (Figure 10). The aeromagnetic survey clearly displays the distribution of ophiolite bodies and larger fault structures previously inferred from previous government bedrock mapping.

Recent Work

This section summarises and highlights the work carried out by the claim owner over the last several years of exploration. The first claim staked was by Charlie Brown during a minus-30-day in November 2004, the property has in the last 14 years accumulated to 520 quartz claims. Figures 6 to 9 show the geology, regional geophysics, as well as exploration highlights in the different areas. Assay results as well as other relevant data from the various years of exploration are also attached in the Appendix.

A 2012 exploration program focused on areas south of the Klondike river including around the historic Golden Age claim where a two ounces per ton sample was presumed to be taken from a short adit (Mortensen, 1984). In 2012 a total of 17 trenches were dug; 62 soil samples taken on either side of Foster Gulch on 100m sample intervals; and 72 rocks samples from trenches were collected with 17 sent for assay. Two soil samples returned over 100 ppb Au (159 and 179 ppb), three samples with over 10 ppb Au; other soils samples produced strong Ag (0.85ppm), As (192.1 ppm), Cu (534 ppm), Co (48 ppm), Sb (4.2ppm), Pb and Zn. The sample with the highest Au in soil corresponds to high As, Sb, Cr, Ni (745 ppm), and Co. The most notable rock sample was taken from below the soil lines in Foster Gulch, assays yielded 35.6 ppb Au, 0.5 ppm Ag, 681 ppm Cu, and 74 ppm Co. Work carried out was partially supported by the government Yukon Mineral Incentive Program (YMIP). Based off of findings and positive results around Foster Gulch further work was carried out on this area in 2013.

Diamond Tooth Resources was able to secure additional YMIP funding in 2013, which assisted in follow up work on the Foster Gulch soil anomalies and to further prospect and explore the property. The 2013 work program consisted of prospecting, soil sampling, and trenching resulting in 53 days of prospecting and sampling, excavation of eight test pits and trenches, and submittal of 59 soil samples and 84 rock samples. Follow up trenching on the north side of Foster Gulch resulted in the unearthing of the Kormendy showing. 2015 site visit by the author noted the 60 m long trench exposes a mineralized fold hinge within quartz-chlorite-schist consisting of pyrite, chalcopyrite, galena, limonite with quartz and bladed calcite. Mineralizing fluids likely intrusive in origin migrated along foliation were the hinge provided the embayment and site for mineralization. Strongest values from the Kormendy showing include; 272 ppb Au, 0.4 ppm Ag, 5118 ppm Cu, 259 ppm As, 2.0 ppm Sb, and 2339 ppm Zn. During the 2013 season, 59 soil samples were taken to infill previous sampling on the northeast end of Foster Gulch. Several outstanding results from 2013 soil samples include; 35.8 ppb Au, 1.87 ppm Ag, 231.4 ppm As, 264.8 ppm Cu, 41.52 ppm Mo, 2.42 ppm Sb, and 774.8 ppm Zn. Seven pits were dug on the northeast side of Foster Gulch; pits are in proximity to previously elevated soils and near the basal contact between overlaying serpentinite and quartz-muscovite-schist. Several samples from hydrothermally altered serpentinite encountered in the excavations (Foster Child Showing) include; 782 ppb Au, 0.36 ppm Ag, 12400 ppm As, 237 ppm Cu, 154 ppm Co, 1.9 ppm Hg, and 6.27 ppm Sb. Furthermore, regional prospecting on the DTRGP in 2013 resulted in the finding of the "Breccia Zone"; revealing a greater than 100m zone where float samples consisting of sulphide bearing quartz vein breccia yielded up to 139 ppb Au, 0.14 ppm Ag, 346 ppm As, 8.2 ppm Sb, and 531 ppm Zn.

In 2014 no work was recorded, yet additional claims were staked. In early 2015 adjacent claims had come open and were staked to a total of 520 quartz claims and in turn consolidating any available ground on the north side of the Klondike River. Exploration activity for 2015 consisted of approximately two weeks of prospecting by the author and follow up trenching. Prospecting in 2015 investigated regionally mapped contacts and faults as well as magnetic anomalies displayed in the regional geophysics. Prospecting the three-way contact between gabbro and serpentinite and quartz muscovite schist on the western margin of the claim block resulted in discovering a series of old shafts and trenches along the right fork of Thomas Gulch that corresponds to the 1902 newspaper article under the headlined "Good Showing of Quartz Ledges". Further up slope east of the Dome Lookout revealed two areas of localized quartz boulders with three possible in-situ exposures with evidence of old workings. Majority of quartz bared a "bull" appearance but local samples contained sericite and minor limonite. Samples from this region on Thomas Gulch yielded; 0.19 ppm Ag, 14.8 ppm As, 660 ppm Ba, 50.8 ppm Cu, 3.68 ppm Mo, and 57.5 ppm Zn. An intensively talc and listwanite altered fault which corresponds with a regional geophysics anomaly was located on the historic Matilda Patented claim where a 106ft incline was drove in the early 1900s.

Several alternate zones of mineralization identified on the property include the low lying basal thrust contact of a serpentinite unit were listwanite alteration was observed in outcrop and localized float for over 1.5 km and wider than 3 m in one outcrop near Shovel Creek on the northeast end of the property. Listwanite alteration consists of fuchsite and magnesite occurring with comb and banded chalcedonic quartz; other samples in the 1.5 km stretch displayed clay alteration and minor brecciation with quartz and bladed calcite. Two rock samples were taken from the zone and returned 5.47 ppm Sb, 52.6 ppm As and 1.27 ppm Mo. In the adjacent area a large gossan greater than 100m across with signs of old workings was discovered during a heli-supported property visit by Yukon Geological Survey (YGS) geologist Derek Torgerson and prospected shortly after. Another discovery in 2015 included the "Smoke Stack" quartz vein hosted in gabbro with minor malachite staining and sulfide with widths of greater than one meter and traceable for approximately 750ft, located in the central part of the claim. The gabbro host contains pyrite and is locally stained with malachite: an ideal chemical trigger for gold deposition in any nearby veins. Rock samples from the "Smoke Stack" and gabbro host returned up to 74 ppb Au, 0.45 ppm Ag,

over 1% Cu, 51.5 ppm Li, 0.92 ppm Sb and 7.48 ppm Mo. Accessible sites were trenched: 13 representative samples were sent for initial assay and a second batch of 10 samples were submitted on behalf of the YGS. Despite low Au results, several new sizable targets were identified and has outlined the greater potential across the property.

Bedrock Geology

The Diamond Tooth Resources Gold Project is underlain by bedrock comprising of medium-grade metamorphic rocks of the Upper Permian Klondike Schist, middle to late Paleozoic carbonaceous schist of the Finlayson Nasina assemblage, and low-grade metamorphosed greenstone and ultramafic rocks of the Slide Mountain terrane. Lithological units are juxtaposed by regional-scale thrust faults (Mortensen, 2007). These units were emplaced in the Jurassic as a series of kilometre-scale stacked thrust slices that are locally separated by additional ultramafic slices and later unconformably overlain by locally derived sedimentary and volcanic rocks in the Late Cretaceous (Mortensen, 1996). Regional extension and normal faulting continued from Late Cretaceous to early Eocene with initiation of strike-slip movement of proximal Tintina fault, along which rocks of the Klondike District were displaced by approximately 450 km from the rest of the Yukon-Tanana terrane (Gabrielse et al., 2006). A distinctive set of post-metamorphic compressional structures related to thrusting, ductile recumbent folds and associated spaced cleavage is preserved in all thrust slices and is well developed near bounding faults (Mortensen, 2007). This complexly folded and faulted succession of metamorphosed continental margin sediments and ophiolitic rocks are intruded by later Mississippian and Permian plutons.

2018 Work Program

The Diamond Tooth Resources 2018 exploration program consisted of prospecting, ground geophysics, rock and soil sampling. Prospecting was carried out by Leia Ezerza and Charlie Brown at the beginning of the project on June 4 and 5. Additional prospecting by Nicolai Goeppel and Peter Schwenk was completed from June 28 to July 4th for a total of 6 days. Soil sampling followed in designated areas and also carried out by Leia Ezerza and Charlie Brown from June till early August for 16 days. A total of 753 Soils were taken at 5 different areas and sent for assaying to Bureau Veritas. A ground magnetometer geophysical survey was carried out by Leia Ezerza on 6 different designated grids on the claim block, with a GSM 19 Overhauser backpack Magnetometer.

2018 Results and Interpretation

Prospecting 2018

2018 prospecting by Leia Ezerza and Charlie Brown at the beginning of the project on June 4th and 5th; lead to the discovery of abundant quartz float along the fire tower road. The area was followed up after with a soil geochemical survey and a ground magnetometer survey (Grid E). Prospecting completed by Nicolai Goeppel and Peter Schwenk focused on following up on the Smoke Stack vein, Bradley Creek gossan, Shovel Creek listwanites, and Breccia zone.

This resulted in new exposures of listwanite alteration with quartz-calcite stockwork on Shovel Creek. The total length of the zone is 1.6km and remains open in all directions. Listwanite alteration occurs along a low angle thrust fault that separates underlying quartz-chlorite-schist and the overlying serpentinite. The 1.6 km zone is evident in localized float and in various bedrock exposures occurring along and on both sides of Shovel creek. Only 3 samples were taken from the zone in 2018; assay produced high Ni, Co and Cr values.

In addition, 2018 prospecting identified sulfide mineralization in the Bradley Creek area in 3 locations (Figures 71 - 98). Four rock samples were taken at the Bradley creek gossan and yielded values up to 6 ppb Au, 285ppm Cu, 22ppm Pb and 11ppm As. The gossanous zone is orange-red and highly weathered, oxidized, pitted and clay altered. The gossan is encompassed by quartz-sericite-pyrite alteration with locally highly silicified zones. The zone is approximately 250 x 350m in dimension and limited by lack of bedrock exposure. Approximately 2km west on Bradley creek disseminated pyrite in quartz-chlorite-muscovite schist was found in float adjacent to a collapsed pingo. One sample was taken and returned 15ppb Au and 33ppm As.

In the Breccia zone, samples of chalcedonic quartz matrix with banding, display indications of epithermal boiling textures. Abundant limonitic quartz breccia with fragments of carbonaceous shale was found along a road cut, one sample was taken and returned 29ppb Au and 27ppm As. 2018 geophysics highlighted a significant anomaly in the same area. 2018 soil sampling also highlighted several elevated Au-Ag-As sites in the area. Based on limited exposure the Breccia zone lies on the contact zone between carbonaceous shales and serpentinite, a favourable setting for gold mineralization.

Several chip samples of the upper Smoke Stack vein identified chalcopyrite globules locally occurring in the 1-2m wide quartz vein. Samples returned 3786ppm Cu, 1.5ppm Ag, 39ppm As and 27ppb Au. A total of 11 rock samples were taken in 2018. Samples returned elevated Au, Ag and other base metals values. Analytical results, coordinates and descriptions are located in Appendix II of this report.

Ground Magnetometer Survey 2018

In 2018, a total of approximately 30-line km of ground magnetics was done in 6 different grids by geologist Leia Ezerza. Readings were taken every 12.5 meters with 50-meter line spacings. Grid A (Figure 14 & 15) was placed to survey an area with abundant 'turn of the century' trenches and short shafts (Figure 4 & 5). The area is underlain by quartz-chlorite-muscovite-schist, based on the low range of values (nT) in the magnetics there is likely no major contacts or lithological changes through the grid area. Missing data through the center of the grid would also affect results.

The location of grid B (Figure 16 &17) was determined by abundant quartz boulders and float that was observed in previous exploration, several 'turn of the century' trenches were also noted in the area. The preliminary magnetics data illustrates the distribution of the more magnetically susceptible ultramafic units to the west and less susceptible quartz-chlorite-muscovite-schist to the east. The contact area is inferred as a fault contact and appears to have the lowest magnetic susceptiblity; this is likely due to hydrothermal alteration and magnetite destruction and offers a potential source of abundant quartz

float. It should be noted that one partial line in the center of the grid is missing in the data and would affect results.

Geophysical survey grid C (Figure 18 & 19) was placed near the approximate inferred location of the Matilda showing and where previous exploratory trenching revealed a strongly talc altered structure within a fuchsite-muscovite-schist. Preliminary results indicate a linear magnetic anomaly trending north east. The anomaly corresponds with a thrust fault from regional mapping and likely representative of a faulted mafic or ultramafic sliver. The different response to the east and west displays the change of lithology across the contact.

The area designated for grid D (Figure 20 & 21) encompassed several notable airborne geophysical anomalies from a 2014 government funded survey and the Breccia zone area. The response in grid D indicates a prominent contact between the ultramafic units and carbonaceous shales. The very low response generated in this contact area may be representative of a high degree of hydrothermal alteration and potential source of quartz breccia float that is observed in the vicinity. Another contact may exist towards the south west fringe of the survey area. Several isolated lows may display smaller areas of localized hydrothermal activity, but should be checked to ensure confidence value of the readings. It should be noted that a partial survey line was not completed or data was lost.

Survey grid E (Figure 22 & 23) was placed based on prospecting results from Charlie Brown and Leia Ezerza that located abundant quartz float in the area. This grid indicates minimal variation in readings and the region is likely underlain by a single unit, likely a quartz-chlorite-muscovite-schist that has been observed in the vicinity. Two isolated magnetic lows may represent more silicified sections; however, the northern low is at the edge of the survey grid and is likely exaggerated and stretched.

The final grid F (Figure 24 & 25), was not completed with majority of the readings missing. There is not an appropriate number of stations to delineate geological features. However, the higher magnetic response to the south compared to lower magnetic response to the north would suggest a possible contact exists in the survey area.

Soil Sampling 2018

In 2018, a total of 753 soil samples where taken from 5 different designated locations, grids were set at a 50m by 50m grid with line oriented perpendicular to the strike of the geology or regional structures. Soils were taken using a hand soil auger to the "C" horizon and maximum obtainable depth. When "C" horizon material was not obtained "B" horizon material was taken instead. All soil samples have been sent to Bureau Veritas prep facility in Whitehorse for analytical testing. All soil sample grids were also covered with a ground magnetometer survey.

Soil grid A (Figures 27 – 33) soil consisted of 81 soils taken at 50x50m interval and returned elevated Au, As, Ni, and Pb values. Steep topography would suggest a higher degree of downslope dispersion. The data displays a northwest trending arsenic anomaly with values that include 109.6, 63.8 and 57.9 ppm. Gold is also elevated with As in the northeast trend with values ranging up to 10.6 ppb. Soil data displays a secondary northwest anomaly towards the southern margin of the grid with values up to 15 ppb Au.

Elevated gold is likely attributed to discontinuous quartz veins that range up to 1 m in width and occur locally in bedrock. Turn of the century workings consisting of hand dug trenches and shafts have also been observed in the area often with quartz in the dump piles or nearby exposed bedrock. Elevated Ni up to 2540.9 ppm occurs in the northwest corner of the soil grid and likely represents mafic to ultramafic underlying geology. Elevated Ni values correlate to a magnetic high displayed in the 2018 magnetometer survey.

Soil grid B (Figures 34 – 40) consisted of 103 soils in a 50x50m grid and returned elevated Au, As and Ni. Elevated Ni was returned in the western quadrant of the soil grid likely indicating the boundary of serpentinite bedrock and can be observed at the Midnight Dome in outcrop. Ni values range up to 1552.6 ppm and correspond with a high and abrupt low in 2018 geophysics. Since Ni values have also been returned from the magnetic low, this would suggest the contact ultramafics have undergone a higher degree of hydrothermal alteration or serpentinization. Along the boundary of this northwest trending magnetic high and low, As is elevated in a similar north west direction up to 213.8 ppm. Gold values range up to 31.8 ppb and have a more sporadic distribution. The Au values concentrate proximal to the eastern margin of the grid. The complied soil and magnetics data suggest a prominent contact with potential mineralization proximal to the contact and likely hosted in the quartz+/-chlorite+/- muscovite schist. This is further evident, based on the proximity of quartz float and old workings that also occur locally in the grid area.

Soil grid C (Figures 41 – 47) consisted of 60 soils taken at 50x50m interval and returned elevated Au, As and Ni. The grid covers a northeast trending magnetic high that corresponds with a thrust contact. Elevated Ni occurs over the central magnetic high and proximal where a moderate to weak magnetic response was returned. One soil with 25.6 ppm As was returned from the core magnetic high; whereas, gold ranges up to 21.6 ppb with elevated values enveloping the central magnetic high. Elevated gold forms a northeast trending anomaly that occurs close to previous trenching that uncovered an extensively talc altered fault and fuchsite-muscovite schist. This likely indicates the presence of an off shooting or paralleling structure and may be more mineralized than the primary structure.

Soil grid D (Figures 48 – 63) is the largest grid completed in 2018 consisting of 388 soils. Results returned elevated Au, Ag, As, Cu, Mo, Ni and Pb. Magnetic results from the 2018 magnetometer survey indicates a prominent magnetic high with a magnetic low envelope 200m x 400m in the Breccia zone; soil survey results from the zone returned elevated Au up to 16 ppb, Ag up to 2 ppm and As up to 115.8 ppm. A prominent 200m x 300m polymetallic anomaly with elevated Au-Ag-As-Pb-Mo occurs in the eastern margin of the grid area covering a localized magnetic low. Values ranged up to 11.9 ppb Au, 87.5 ppm As, up to 31.7 ppm Mo, up to 24.9 ppm Pb and 1.3 ppm Ag. The northeast quadrant returned high Ni corresponding with a high magnetic response. Several elevated Au-As values were returned from area of high Ni corresponding areas with lower magnetic response.

Soil grid E (Figures 64 – 70) consisted of 117 soil samples. Soil sampling results yielded only slight localized sporadic elevations in Au, Ag, As and Pb. Geochemical results for grid E produced up to 12.1 ppb Au, 143.5 ppm As and 1.3 ppm Ag from different sample locations.

Expenditures

YMEP Expense Claim Form - Client Copy



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YMEP no:	18-039	project Dia name:	mond Tooth	Resources Gol	applicant Di name:	amond Tooth Resources Inc	
expense claim no:	final	al program hard rock			program target evaluation		
date 778 submitted: phone:			778 232	2 3154 diamondsinyukon@ email:		ondsinyukon@hotmail.com	
address:			P.O. Box	596, Dawson Cit	ty, YT, YOB 1G	0	
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this claim:					days/this		
eligible Plagge refer to rete qui			start	end	claim:		
expenses	Fleasere	er to rate gu	idennes. Fro	nde photocopy of	recerpts.		
item				unit/days	rate	total	
daily field expenses	no persons: 2			71	\$100/day	\$7,100.00	
personnel	Name (sup	Name (supply statement of qualificati					
	Charlie Brown			36	350	\$12,600.00	
	Leia Edzerza			400	25	\$10,000.00	
	Leia Edzerza			450	19	\$8,550.00	
equipment (rental)			private or commercial	unit/days	rate	total	
Truck			pri∨ate	36	50	\$1,800.00	
Truck			pri∨ate	35	50	\$1,750.00	
Quad			pri∨ate	36	40	\$1,440.00	
Quad			pri∨ate	35	40	\$1,400.00	
Support trailer			pri∨ate	36	16	\$576.00	
Chainsaw			pri∨ate	35	10	\$350.00	
Generator			pri∨ate	43	13	\$559.00	
Tub trailer			private	35	10	\$350.00	
Truck			pri∨ate	1200 km	0.6	\$720.00	
			private				
			pri∨ate				
other			Please provi	ide details.			
fuel					a.p. receipt	\$2,049.75	
Higher Ground Exploration Services					a.p. invoice	\$25,035.23	
Bureau Veritas					a.p. receipt	\$12,617.44	
				То	tal this claim:	\$86,897.42	

Table 1. Expenses 2018.

Conclusion and Recommendations

In 2018 Diamond Tooth Resources completed soil geochemical sampling, ground magnetometer surveys, and limited prospecting on it's Gold Project. Based on prospecting, geochemical and geophysical results further work is warranted. The bedrock geology forms a suitable geological setting for orogenic "Motherlode" style gold mineralization. Soil geochemical results produced vales elevated with Au, Ag, As, Cu, Ni, Co, Mo and Pb. Values ranged from detection up to 31.8ppb Au, 2.1ppm Ag, 231.8ppm As, 112ppm Cu, 43.1 ppm Pb, 31.7ppm Mo, 13.2ppm Sb and 2540ppm Ni. The 2018 ground magnetometer survey identified several anomalies in grids B, C and D. Future in fill soil sampling and hand or mechanical test pitting is recommended for geochemical anomalies in Grids B, C and D that also correspond to magnetic lows produced in the 2018 ground magnetometer survey. Of particular interest the geophysical and polymetallic soil anomalies produced in Grid D. Specifically, this would include follow up on Au-As-Ag-Pb anomalies produced in 2018 soil sampling. Mo anomalies in grid D is of particular interest and may suggest presence of intrusive geology and not present in any other grid.

Geophysical anomalies produced in grids B, C, and D offer targets for future hand or mechanical trenching. Further magnetic surveys should be completed to extend the strike on these grids, based on positive geochemical soil results. Any future ground magnetics should be done at a 25m line interval rather than the 50m to improve resolution of results. Soil grids or contour intervals are recommended in the Bradley creek gossan region and the Shovel creek listwanite area to determine mineralized zones in the large alteration zone. Listwanite alteration typically forms an envelope or along one side prospective mineralized veins. Hand trenching should be conducted in the Shovel Creek area around observed listwanite alteration to expose the primary fault zone and possible veins adjacent to the alteration.

Statement of Qualifications

I Nicolai Goeppel am a local Yukon prospector/geologist and owner to Higher Ground Exploration Services. I'm born and raised in the Yukon with placer roots in the Freegold Mountain area near Carmacks. Earliest involvement in geology includes two field seasons with the Yukon Geological Survey and three years as senior project manager at All-In Explorations. More recently includes managing multiple placer and hard rock projects for Midnight Mining Services and alternate exploration companies. In the last seven field season I've encountered and worked in skarn, porphyry, epithermal and intrusive related vein systems, vms, magmatic Cu-Ni mineralization, and Carlin as well other types of mineralization for various commodities. In terms of orogenic lode Au/Ag mineralization, I worked on number of project in the Cache Creek terrane in southern Yukon and northern BC. This includes work in Newfoundland, where I recently completed a BSc in Earth Sciences at Memorial University in January 2015.

References

Ash, C. H., and R. L. Arksey. "British Columbia Geological Survey Geological Fieldwork 1989." (1989).

Ash, Christopher Henry, Robert William MacDonald, and P. R. Reynolds. *Relationship Between Ophiolites and Gold-Quartz Veins in the North American Cordillera*. British Columbia, Ministry of Energy and Mines, 2001.

Ash, C.H., 2001: Relationship between ophiolites and gold quartz veins in the North American Cordillera: *British Columbia Ministry of Energy and Mines*, Bulletin 108, 140 p.

Ash, C.H., 2006: Setting of the gold-quartz vein lode source for placers within the Klondike goldfields, westcentral Yukon, Canada; *Society of Economic Geologists (SEG)*, Keystone Conference

Debicki, R.L., 1985: Bedrock geology and mineralization of the Klondike area (west), 115/9, 10, 11, 14, 15, 16 and 116B/2&3: *Yukon, Indian and Northern Affairs Canada, Exploration and Geological Services Division*, Open File Map with marginal notes (1:50,000 scale).

Gabrielse, H., Murphy, D.C. and Mortensen, J.K., 2006. Cretaceous and Cenozoic dextral orogen-parallel displacements, magmatism, and paleogeography, north-central Canadian Cordillera. *In:* Paleogeography of the North American Cordillera: Evidence For and Against Large-Scale Displacements, J.W. Haggart, R.J. Enkin and J.W.H Monger (eds.), Geological Association of Canada, Special Paper 46, p. 255-276.

Green, L.H., 1972: Geology of Nash Creek, Larsen Creek and Dawson map areas, Yukon Territory: Geological Survey of Canada, Memoir 364, 157 p.

Hart, C. J. R., and R. J. Goldfarb. "Distinguishing intrusion-related from orogenic gold systems." *New Zealand Minerals Conference Proceedings*. 2005.

Lowey, G.W. 1998: White channel gravels, Klondike goldfields Yukon, Canada; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1998-2, 1:100,000 scale map and notes.

MacKenzie, Doug, Dave Craw, and Jim K. Mortensen. "Thrust slices and associated deformation in the Klondike goldfield, Yukon." *Yukon Exploration and Geology* (2007): 199-213.

Moores, Eldridge M., Doris Sloan, and Dorothy L. Stout, eds. *Classic Cordilleran concepts: a view from California*. Vol. 338. Geological Society of America, 1999.

Mortensen, J.K., 1984: Assessment Report on Klean 1-12 Claims: *Yukon Energy, Mines and Resources*, Assessment Report No 091560.

Mortensen, J.K., 1990: Geology and U-Pb geochronology of the Klondike District, west-central Yukon Territory: *Canadian Journal of Earth Sciences*, v. 27, p. 903-914.

Mortensen, J.K., 1996: Geological compilation maps of the Northern Stewart River map area Klondike and Sixtymile districts (115N/15,16; 115O/13,14 and parts of 115O/15,16): *Indian and Northern Affairs Canada*, Yukon Region, Open File 1996-1(G), Report, 43 p., 1:50,000 scale maps (6).

Appendix I



Figure 1. Location



Figure 2. Location and Access Location and access (solid black lines are paved or chip seal roads, grey lines are dirt roads and dashed lines are atv tracks.



Figure 3. 1911 map of quartz mining activity around Dawson City and showing Boyle Hydraulic Concession.

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Figure 4 & 5. Old newspaper articles.



Figure 6. Total magnetic field, faults, and described highlights, west side.



Figure 7. Total magnetic field, faults, and described highlights, southeast side.



Figure 8. Total magnetic field, faults, and described highlights, northeast side.



Figure 9. Overview with regional areomagnetics



Figure 10. Highlights overlain on recent 2014 Residual Total Magnetic Field aeromagnetic survey.



Figure 11. Claim Map



Figure 12. Overview of Geology (beige: quartzite/qt-ms-cl schist/gneiss/amphibolite; blue: quartzite/grquartzite/qt-ms-cl-schist; green: basalt/diorite/gabbro/greenstone; purple: dunite/peridotite/harzburgite/diabase/serpentinite).



Figure 13. Magnetometer Survey Overview



Figure 14. Magnetometer Survey – Grid A – with measurement locations



Figure 15. Magnetometer Survey – Grid A



Figure 16. Magnetometer Survey – Grid B with measurement locations



Figure 17. Magnetometer Survey – Grid B



Figure 18. Magnetometer Survey – Grid C – with measurement locations



Figure 19. Magnetometer Survey – Grid C



Figure 20. Magnetometer Survey – Grid D – with measurement locations



Figure 21. Magnetometer Survey – Grid D



Figure 22. Magnetometer Survey – Grid E – with measurement locations



Figure 23. Magnetometer Survey – Grid E



Figure 24. Magnetometer Survey – Grid F – with measurement locations



Figure 25. Magnetometer Survey – Grid F



Figure 26. Soil Location overview


Figure 27. Soil Grid A



Figure 28. Soil Geochemistry Grid A – Ag



Figure 29. Soil Geochemistry Grid A – As



Figure 30. Soil Geochemistry Grid A – Au



Figure 31. Soil Geochemistry Grid A – Cu



Figure 32. Soil Geochemistry Grid A – Ni



Figure 33. Soil Geochemistry Grid A – Pb



Figure 34. Soil Grid B



Figure 35. Soil Geochemistry Grid B – Ag



Figure 36. Soil Geochemistry Grid B – As



Figure 37. Soil Geochemistry Grid B – Au



Figure 38. Soil Geochemistry Grid B – Cu



Figure 39. Soil Geochemistry Grid B – Ni



Figure 40. Soil Geochemistry Grid B – Pb





Figure 42. Soil Geochemistry Grid C – Ag



Figure 43. Soil Geochemistry Grid C – As



Figure 44. Soil Geochemistry Grid C – Au



Figure 45. Soil Geochemistry Grid C – Cu



Figure 46. Soil Geochemistry Grid C – Ni



Figure 47. Soil Geochemistry Grid C – Pb





Figure 49. Soil Geochemistry Grid D Part 1 – Ag



Figure 50. Soil Geochemistry Grid D Part 1 – As



Figure 51. Soil Geochemistry Grid D Part 1 – Au



Figure 52. Soil Geochemistry Grid D Part 1 – Cu



Figure 53. Soil Geochemistry Grid D Part 1 – Mo



Figure 54. Soil Geochemistry Grid D Part 1 – Ni



Figure 55. Soil Geochemistry Grid D Part 1 – Pb





Figure 57. Soil Geochemistry Grid D Part 2 – Ag



Figure 58. Soil Geochemistry Grid D Part 2 – As



Figure 59. Soil Geochemistry Grid D Part 2 – Au



Figure 60. Soil Geochemistry Grid D Part 2 – Cu



Figure 61. Soil Geochemistry Grid D Part 2 – Mo



Figure 62. Soil Geochemistry Grid D Part 2 – Ni


Figure 63. Soil Geochemistry Grid D Part 2 – Pb





Figure 65. Soil Geochemistry Grid E – Ag



Figure 66. Soil Geochemistry Grid E – As



Figure 67. Soil Geochemistry Grid E – Au



Figure 68. Soil Geochemistry Grid E – Cu



Figure 69. Soil Geochemistry Grid E – Ni



Figure 70. Soil Geochemistry Grid E – Pb



Figure 71. Rock Sample Locations



Figure 72. Rock Samples – Ag_ppm



Figure 73. Rock Samples – As_ppm



Figure 74. Rock Samples – Au_ppm



Figure 75. Rock Samples – Cu_ppm



Figure 76. Rock Samples – Ni_ppm



Figure 77. Rock Samples – Pb_ppm



Figure 78 & 79. Rock sample 18SS01



Figure 80 & 81. Rock sample 18SS02



Figure 82 & 83. Rock sample 18GZ01



Figure 84 & 85. Rock sample 18GZ02



Figure 86 & 87. Rock sample 18GZ03



Figure 88 & 89. Rock sample 18BC01



Figure 90 & 91. Rock sample 18BC02



Figure 92 & 93. Rock sample 18BZ01



Figure 94 & 95. Rock sample 18LZ01



Figure 96. Rock sample 18LZ02





Figure 97 & 98. Rock sample 18LZ03

Appendix II