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EXPLORATION REPORT CAU PROPERTY QUAD 115 0/15 DAWSON MINING DISTRICT

2009 SEASON

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Claims for grouping into the CAu project

Coarse Gold Creek CAu

CAu 1-10 (Lion Creek) CAu 11-22 (Caribou Creek) CAu 23-52 (Coarse Gold Creek)-(53-56 missing) CAu 57-66 with CAu 69-70 (Hi Mag Hill & Dominion Creek) CAu 67-68 (East Ridge) **66** Hard rock claims

Dominion Creek between Caribou & Paris

HRS 1-13-(6 missing) 12 claims

> Paris 1-10 10 claims

Paris P-I 4 claims 26 Hard rock claims

Portland Creek

P1-P15 GR Group 1-4 AuR 1-10 **29** claims

Robinson Creek

AuR 11-16 6 claims

132 claims total (new claims pending)

Introduction

The Coarse Gold (CAu) property comprises 132 claims encompassing 2,572 hectares near Dawson in west central Yukon, Canada. This block of claims was the focus of an exploration program during 2009 funded, staked and worked by Sylvain Montreuil and Erini Petroutsas.

These claims lie over placer leases that have been heavy gold producers, but very little hard rock exploration has been done over the last century even though the location is central to where the "mother lode" of Dominion, Sulphur and Gold Run Creeks is presumed to exist. This report is a compilation of previously reported work on the claims and a detailed description of the 2009 work program.

Location, Access & Vegetation

The property encompasses all of Lion, Caribou and Coarse Gold creeks as well as portions of Portland and Robinson creeks. All creeks are tributaries of Dominion Creek, which is known globally as one of the largest placer gold producing areas in North America.¹

The entire block is easily accessed by road, being 34 km up the Hunker Creek Road, which is a government-maintained access road to the goldfields and continues to Indian River & beyond. The turnoff for Hunker Creek lies less than 20 km from Dawson City. The property begins 4 kms south-east of Hunker Summit and roughly 5 km south-east of King Solomon's Dome, reaching to within 1.5 km of the summit of Dominion Mountain.

Virtually the entire Klondike District lies below treeline. Vegetation on south and southwest facing slopes consists of aspen or mixed aspen and birch, with varying amounts of underbrush that becomes denser at higher elevations. Permafrost is commonly absent on south facing slopes, but is widespread on north facing slopes. Such north facing slopes are characterized by scrub spruce mixed with aspen. The ground is normally covered by a thick moss.

Regional Geology

The Klondike District lies within the unglaciated portion of the Northern Cordillera and experienced strong surface weathering during the early and mid-Tertiary. Regional Quaternary glacial limit compilations have been completed along the margins of the Dominion Creek drainage by Bostock (1942, 1946), Hughes (1969), and most recently by Duk-Rodkin (1999).

¹ Pg 159. Placer depositional settings and their ages along Dominion Creek, Klondike Yukon. Duane Froese *University of Calgary*, R.J. Enkin *Geological survey of Canada* and D.G. Smith *University of Calgary*. Yukon Exploration & Geology 2000.

These studies indicate that late Pliocene glaciers advanced in Tintina Trench slightly north of Dominion, depositing a coeval melt water discharge southward with the climate change.

The goldfields originated from the weathering and erosion of early Cretaceous, discordant mesothermal quartz veins, and the light grey color of the matrix of the White Channel Gravel is due mainly to weathering and diagenetic alteration by groundwater flow. (*Endnote*.)

The White Channel strath is interpreted as an erosional 'tectonic' terrace that formed during isostatic uplift and under conditions of dynamic equilibrium. The high-level White Channel Gravel and Klondike Gravel are interpreted as a depositional 'climatic' terrace that formed during a reversal in the tectonically induced down-cutting, which is attributed to the initial and most extensive of the pre-Reid glaciations (~3 Ma) in the Yukon. The intermediate-level gravel is interpreted as minor erosional 'complex response' terraces that formed during static equilibrium when there were pauses in valley-floor degradation, which are attributed to the subsequent and less extensive pre-Reid glaciations.

Hence, the dominant forcing mechanisms controlling the evolution of the goldfields were isostatically compensated exhumation and climatic change related to the repeated glaciation of the Yukon. In addition, the lowering of base-level from high-level, to intermediate-level and finally to low-level gravel was accompanied by a decrease in accommodation space (as indicated by a decrease in gravel thickness), which resulted in an increase in the concentration of the placer gold.²

The Dominion Creek basin is located within the Yukon-Tanana Terrane and consists largely of meta-sedimentary and meta-volcanic rocks at chlorite-biotite to garnet metamorphic grade. (Mortensen 1990, 1996). The erosion of mesothermal quartz veins appears to be the main source of the Klondike placer deposits based upon elemental similarities (microprobe geochemistry) between placer and lode gold (Knight et al., 1999b). Erosion of bedrock sources and transport by fluvial processes is supported on Dominion creek by hydraulic equivalence data amongst gravelly depositional unit grain size and weight of gold grains recovered from placer gravel.³

Gold within Dominion Creek deposits is largely flat, rounded and well traveled, suggesting the main source was likely somewhere near King Solomon Dome in the headwaters of the basin. (See footnote 1)

The property lies in an area consisting mostly of Klondike Schist (B), which is regionally metamorphosed, massive serific rock containing much quartz and chlorite, commonly in corrugated lenses crosscut with discordant quartz veins. It grades through feldspathic quartz

² The origin and evolution of the Klondike goldfields, Yukon, Canada. Grant W. Lowey. Yukon Geological Survey, Energy, Mines and Resources, Government of Yukon, 2005.

³ Depositional processes of a placer gold deposit, Dominion Creek, Klondike, Yukon. University of British Columbia Thesis by T. Christie 1996.

mica schist to augen-gneiss. The Klondike Schist truncates strata of the Yukon Group, holds inclusions of these rocks, and otherwise exhibits characteristics of an intrusive rock.⁴

Sampling of veins throughout the Klondike has shown that gold is confined almost exclusively to the discordant veins.⁵

Property Exploration History

Claims CAu 69, 21, 22, 23, 24, 49 and 50 as well as HRS 1, 3, 4, 5, Paris 1,2,3,4 and Paris P,A,R,I, all straddle Dominion Creek between the historic towns of Caribou and Paris. These towns were set up to accommodate the influx of workers that worked the creek at this location and to have two somewhat sizeable town sites within such a close vicinity indicate the abundance of placer gold that existed here of which there are no exact records available, (that I've found,) except for the royalty reports that will be detailed further down.

Though it seems rudimentary, the first indication that there would be something on the CAu claims would be that it was called then as now Coarse Gold Creek, indicating that coarse gold was found there and hence had not traveled far from its source.

Favron Enterprises are the only recorded previous claim holders on Coarse Gold, there have been no hard-rock claims staked on this creek before. The placer claims they held there for 20 years lapsed at the end of 2003.

During exploration in 2009, the stripping done by Favron on Coarse Gold Creek was located along with two of their drill holes by the exploration team. A shaft was dug to further explore this location and as assessment for a placer lease on the same creek. Though dug in February, the shaft filled with water 10 feet below frozen ground and roughly 5 feet above creek level indicating that the ground is "hot" due to major fault action underneath. This can also be an explanation for why the old timers were not able to shaft as well as why Favron was able to do so little. It is only specially equipped and modern drills that can get recovery from thawed wet ground. There is also a spring that runs through the winter, indicating hydrothermal activity, approximately half-way up to the head of this creek.

A magnetometer survey was also conducted, which indicated a sharp spike in magnetics in the same area.

⁴ Department of Mines & Resources Geology Branch, Geological Survey Map by H.S. Bostock, 1935, 1936 and 1937.

⁵ Regional Geology for Klondike Assessment Reports. J.K. Mortensen PhD for Archer, Cathro & Associates, 1981.

Discovery Narrative:

For this project, Erini Petroutsas and Sylvain Montreuil used an airborne multisensor geophysical survey in the Stewart River area in 2001. We also used a magnofinder (Sylvain's terminology), to find systems that are under the organic soils, and some geo tools to reach the soil.

We always backfill our diggings and replace the organics on the surface, you can see the results once we are finished in one location. We are very polite with all animals that we encounter. Sylvain has been chasing quartz veins for a long time now in the Klondike drainage and Indian River, also 60 Mile, Stewart, Peel and Porcupine rivers. Sylvain came here in 1985, attracted by the geology, nature, and has never tired of it.

This year, more magnetic surveys, more sampling to introduce the project to others with the means to carry out further exploration in the area.

All the systems shown on the hand-annotated map of February, 2010 have good potential for lode mining so far as I can see. In the the Red Zone (RZ) on Paris 4, the calcite vein is operating still and is bringing minerals with gold. The RZ system is oozing from the west.

From HRS to Paris I the system alters like I have never seen before from the calcite vein to manganese oxide and iron, a very good sign for lode mining.

The quartz system appeared when the earth was located closer to the sun, when the earth was located near around where Venus is now. As the earth rotates around the sun, the centrifugal force takes it further from the sun all the time, Mars was once where earth is today. But when the earth was closer to the sun, in Precambrian times, the crust cracked and liquid quartz came out filling the cracks, and today we have a quartz vein that brings minerals with it. The least massive materials like biotite came to the top, later heavier materials followed such as chalcopyrite, and further down is arsenic and finally gold.

In the system trench No. 1 we found Precambrian rock on Caribou Creek. In the system end of Caribou, we later saw that a crack happened in quartz and another system came up bringing arsenic with gold as found in Rock 18.

Rock 19/049 (galena) was found as an intrusion on the right limit, half-way up on CAu, Coarse Gold Creek. This intrusion came later in time, the quartz rocks are all broken, maybe also because of hydrothermal influences. Water rich in minerals but not much iron. It was an exciting day when this system was found and better understood in mid-September, 2009. All spring and summer, I had no luck with Coarse Gold Creek

even with the trenching with the hoe and shafting by hand last winter.

When I was there last September, at the first snowfall, two ravens followed me from tree to tree, and I asked the ravens "Where Shiny?" Quak quak said one, Crouk crouk said the other, and one flew away and the other kept pointing towards the flying raven. The smart bird was flying in a circle in the same location 500 to 700 metres across the creek from where I was. I was still trying to find the big quartz system at the head of the creek with my magnofinder, or magnetometer if you like, I was lucky I found it on my way back.

I asked my dog Ti-Loup to take me where the raven was flying in a circle, there were big trees I could see below, near the creek, I followed Ti-Loup as I could see he was going toward that general direction. Sure enough he took me at that location where a BIG quartz vein was sticking out, I hit it with the hammer and saw the shiny. I said thank you to Ti-Loup, and the ravens.

The total value of the work performed in 2009 amounts to more than \$100,000 based on approved government rates. Work to a total of \$57,000 was recorded as assessment work on part of the claims, in one grouping, in February, 2010.

When Erini Petroutsas, partner on this project, returns in March, the report will be completed to include information for the Robinson Creek area. The rest of the rocks will be sent to the lab, a grant has been organized with Mike Burke. Thank you.

Sylvain Montreuil February 1, 2010

Rock of Dominion

The rock of Dominion varies more than that of the other creeks in the district, the upper part cut through grayish sericite schist of the Klondike series alternating with bands of greenish chlorite schist. The latter is fairly massive, in places is often filled with pyrite and magnetite in the central right limit. The Klondike schists are the same or sometimes replaced by biotite bearing schist, greenish schists and hard quartzose schists. Bands of dark graphite schists are also present.

Source: Bostock, H.S. (R.G. McConnell, *Report on the Klondike Gold Fields*, 1903), Memoir 284, Geological Survey of Canada, Ottawa, 1957.

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Trenching August,Sept. 2009

Caribou Creek	10' de	eep 10'	wide 20' long	1 (At hole)
Caribou Creek	20	10	20	2 (chicken coop)
Caribou Creek	8	15	15	3 (End of Caribou, EC)
Caribou Creek	5	5	15	4 (Where road ends)
Coarse Gold Creek	4' de	eep 3'v	vide 100' long	030 (Green Ox & Q)
Coarse Gold Creek	3	3	10	031 (Frozen)
Coarse Gold Creek	10	3	3050	033 (At shaft location)
Coarse Gold Creek	5	5	10	034
Coarse Gold Creek	8	5	100	032 (White channel & Q)
Hard Rock Shaft	Entrance of shaft cleaned.			035 (Calcite vein, green schist)
Hard Rock Shaft	4' de	ep 3' wic	le 150' long.	036 (Red Iron Ox & Q)
				- Magmatic segregation
Dominion at Portland	3	4	75'	037
Portland Creek	10	5	140	038 (Left ridge road)
Portland Creek	15	4	8	092 (Bottom of hill)
Portland Creek	8	8	30	060 (Looking for contact)
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Robinson Creek.	Test Scraping			RS (Pictures 108,132,137)
Robinson Creek	6	6	45	R1 (Barrel leads) – Magm. Segr.
Robinson Creek	8	4	30	R2 (Southeasterly Quartz)
Robinson Creek	8	6	30	R3 (Southeast striking vein)
Robinson Creek	10	15	45	R4 (AuR13) North Side of
				outcrop
Robinson Creek	6	6	8	(South Side of R4 hill peak)
Dominion	6	6	8	042 (Mouth of Robinson at
				Dominion)
Dominion	6	6	8	043 (Mouth of Portland at
				Dominion)