

120321

AW47049

Geophysical and Geological Assessment Report on

**Summit Creek Placer Property
Whitehorse Mining District, Yukon Territory**

Placer Claims

MAX 1-18 (P510859-P510876)

By

William LeBarge, P. Geo.

Geoplacer Exploration Ltd.

for

Kryotek Arctic Innovation Inc.



Location of property: 61°20'55"N to 61°22'28"N and 134°21'02"W to 134°22'19"W
NTS map sheet: 105E/08
Mining District: Whitehorse
Date: December 15, 2016

Table of Contents

Executive Summary	1
Introduction	2
Location and Access	2
Personnel and Dates of Work	2
Placer Tenure	4
History of Exploration and Mining.....	8
Regional Bedrock Geology	9
Local Bedrock Geology and Mineral Occurrences.....	9
Regional Surficial Geology and Glacial History	12
Placer Geology and Stratigraphy.....	13
Placer Gold and Heavy Mineral Characteristics.....	14
Rationale for Exploration Program	16
2016 Placer Exploration Program, Summit Creek.....	17
Test pits.....	17
Ground Penetrating Radar Surveys.....	23
Conclusions and Recommendations	31
Statement of Costs for 2016 Summit Creek Placer Exploration Program	32
Statement of Qualifications	33
William LeBarge	33
Boris Logutov	33
References	34
Appendix A - Receipts.....	36

List of Figures

Figure 1 - General Location of the Livingstone Project, Yukon.....	3
Figure 2 - Location of Livingstone Placer Project, 90 km northwest of Whitehorse. Detailed location map in Figure 3, following.....	6
Figure 3 – Summit Creek/Livingstone Area placer claims including the Geoplacer Exploration Ltd. and Kryotek Arctic Innovation Inc. placer properties.	7
Figure 4 -Yukon Terrane Map, showing location of Livingstone Project Area. Yukon Geological Survey, 2014.	10
Figure 5 - Bedrock Geology and mineral occurrences of Livingstone District, modified after Colpron, (2005) and Yukon Geological Survey, (2014).	11
Figure 6 - Surficial geology and glacial features, Livingstone Creek area; after Klassen and Morison, (1987); and Bond and Church, (2006).	15
Figure 7 - Location of test pits and ground penetrating radar surveys, Summit Creek.....	22
Figure 8 - Ground penetrating radar line L-1 appeared to have a paleochannel on the west with bedrock interpreted at 16 m.....	24
Figure 9 - Ground penetrating radar line L-2 had several possible paleochannels with bedrock at up to 15 m below surface.....	25
Figure 10 - Ground penetrating radar line L-3 had two possible paleochannels with bedrock interpreted at 11 m.	25
Figure 11 - Ground penetrating radar line L-4 had a possible paleochannel at 175 m, approximately 10 m below surface.....	26
Figure 12 - Ground penetrating radar line L-5 had an undulating bedrock surface with a possible paleochannel at 175 m, approximately 14 m below surface.....	27
Figure 13 - Ground penetrating radar line L-6 had a possible paleochannel at 260 m, approximately 10 m below surface.....	28
Figure 14 - Ground penetrating radar line L-7 had a possible paleochannel at 275 m, approximately 15 m below surface.....	28
Figure 15 - Ground penetrating radar line L-8 had a possible paleochannel at 350 m, approximately 11 m below surface.....	29
Figure 16 - Ground penetrating radar line L-9 had a possible paleochannel at 300 m, approximately 10 m below surface.....	29
Figure 17 - Ground penetrating radar line L-10 had a possible paleochannel at 260 m, approximately 11 m below surface.....	30

List of Tables

Table 1 – Placer Claim Status, Summit Creek 4
Table 2 - Mineral Occurrences (MINFILE) of the Livingstone Creek area. 9
Table 3 - Coordinates of ground penetrating radar survey endpoints, Summit Creek. 23
Table 4 – Statement of Costs for 2016 Placer Exploration Program, Summit Creek..... 32

List of Plates

Plate 1 - View of Summit Creek in the vicinity of placer claims Summit 1-13 (formerly placer lease IW00484) and Max 1-18 (formerly placer lease IW00485), looking north-northwest. Photo taken October 8, 2015. 5
Plate 2 - Placer gold from Livingstone Creek, mined in 2000 by M. Fuerstner Jr. The smaller piece weighed 5 ounces. The other half is likely over 20 ounce 14
Plate 3 - Test Pit Max #1 was located on claim Max 3, and encountered a muddy gravel with a sandy bottom contact. 18
Plate 4 - Test Pit Max #2 encountered a sand layer with gravel at the bottom. 19
Plate 5 - Test Pit Max #3 encountered an organic rich sand overlying a sandy gravel..... 20
Plate 6 - Test Pit Max #4 encountered a sandy gravel under a thin layer of moss..... 21

Executive Summary

The following is an assessment report on the Max 1-18 placer claims owned by Kryotek Arctic Innovation Inc. in the Livingstone Creek placer district.

The Livingstone Creek project area is in the south-central part of the Yukon, and lies approximately 90 km by air northeast of Whitehorse and 50 km east of Lake Laberge. Although Yukon Government royalty records show only about 18,000 ounces credited from Livingstone area creeks to 2014, the actual production is estimated to be at least 60,000 ounces. The Livingstone Creek area was first prospected in 1894 and mined shortly after. Mining has been intermittent since then, with the majority of activity taking place between 1898 and 1920.

The Livingstone District is underlain primarily by metasedimentary and meta-igneous rocks of Yukon-Tanana Terrane, and is bounded on the west with late Paleozoic volcanic and sedimentary rocks (Semenof Formation) along the Big Salmon Fault. Several bedrock mineral occurrences are noted in the area. The placer gold-bearing creeks in the Livingstone area are characterized by a sequence of interglacial stream gravels which are overlain by McConnell-age glaciolacustrine silts, glaciofluvial deltaic sandy gravel and boulder-rich glacial till.

Placer gold in the Livingstone district is characteristically coarse, with the largest reported nugget weighing over 39 ounces. A third of the gold mined from the Discovery claim on Livingstone Creek was comprised of nuggets over an ounce in weight. The fineness of placer gold on Livingstone Creek has been reported to be 880 and higher.

Most of the Livingstone area has not seen methodical exploration for placer deposits using modern technology, and it is likely that there is more than one mineral deposit type which may serve as a potential source for placer gold. Many or most of these mineral occurrences remain undiscovered, due to a lack of outcrop and the presence of thick glacial overburden.

The exploration program in October 2016 on the Max claims consisted of ground-penetrating radar surveys and hand test-pitting. The depths indicated in the ground penetrating radar surveys were consistent with earlier resistivity geophysical surveys which were done on the Max property prior to the conversion of the placer prospecting leases to claims.

Although the test pitting was very limited in scope and size, there are indications of fine gold values and associated magnetite.

The ground penetrating radar surveys appeared to indicate paleochannels which were incised into bedrock at depths from 11 m to 16 m below surface. These are relatively shallow targets which are promising locations to test.

The association of magnetite with placer gold values indicates that a ground magnetometer survey would be useful in identifying paleochannels along the valley, so this is recommended. This should be followed up by excavator test-pitting or drilling of magnetic anomalies, especially where these may coincide with paleochannels that have been indicated by the ground penetrating radar surveys. Samples processed should be at least 10 cubic metres in volume each, and taken progressively deeper intervals until reaching the bedrock contact.

Introduction

The following is an assessment report on the Max 1-18 placer claims owned by Kryotek Arctic Innovation Inc. in the Livingstone Creek placer district. An earlier program of resistivity geophysical surveys was conducted on the Max property prior to the conversion of the placer prospecting lease to claims.

Location and Access

Livingstone Creek placer district lies in the south-central part of the Yukon, approximately 90 km by air northeast of Whitehorse and 50 km east of Lake Laberge (Figure 1, Figure 2).

The extent of the current property is 61°20'55"N to 61°22'28"N and 134°21'02"W to 134°22'19"W; on NTS map sheet 105E/08, in the Whitehorse Mining District. Livingstone Creek and Summit Creek are both right limit tributaries of the South Big Salmon River (Figure 3).

Access to the property from Whitehorse can be gained by fixed-wing, helicopter or winter road. The winter road crosses the Teslin River and is available usually only at the height of the winter season.

There are several intermittently-maintained bush airstrips in the area. Several all-terrain vehicle suitable trails traverse the field area and connect Livingstone Creek to the local airstrips. A 1700 metre airstrip is situated in the South Big Salmon river valley near Lake Creek. The geographic coordinates of that airstrip are 61°21'58"N and 134°22'19"W. Another, unknown quality airstrip approximately 1 km in length is located at the mouth of Martin Creek at geographic coordinates 61°18'14"N and 134°19'42"W. Finally, a 700-metre-long airstrip of unknown condition is located at the mouth of May Creek, at geographic coordinates 61°16'19"N and 134°10'16"W.

Personnel and Dates of Work

The test pitting was conducted by Kryotek Arctic Innovation Inc. on October 4 and 5, 2016. The ground penetrating radar surveys were conducted by Boris Logutov of 47129 Yukon Inc. on October 4 and 5, 2016. The assessment report was completed by William LeBarge of Geoplacer Exploration Ltd.

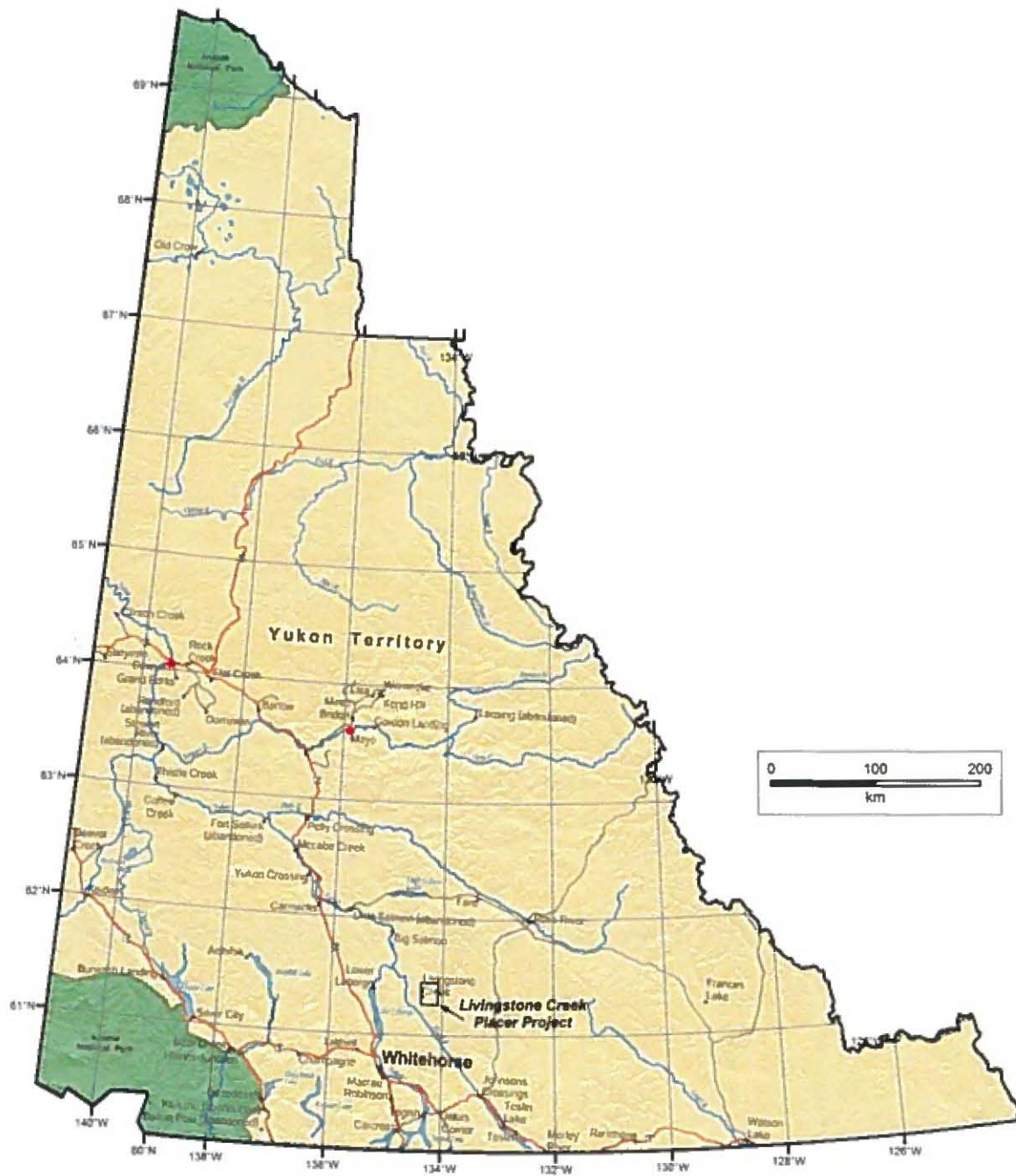


Figure 1 - General Location of the Livingstone Project, Yukon.

Placer Tenure

On October 8, 2015, placer prospecting lease IW00485 was staked in the name of Kryotek Arctic Innovation Inc. After completion of the first year of assessment requirements, the lease was staked into the Max 1-18 claims on October 2, 2016.

Table 1 details the current claim status of the Summit Creek property owned by Kryotek Arctic Innovation Inc.

Table 1 – Placer Claim Status, Summit Creek

Grant Number	Claim Name	Claim Owner	Staking Date	Recording Date	Expiry Date	Status	Former Lease Number	NTS Map Number
P 510859	MAX 1	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510860	MAX 2	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510861	MAX 3	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510862	MAX 4	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510863	MAX 5	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510864	MAX 6	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510865	MAX 7	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510866	MAX 8	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510867	MAX 9	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510868	MAX 10	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510869	MAX 11	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510870	MAX 12	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510871	MAX 13	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510872	MAX 14	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510873	MAX 15	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510874	MAX 16	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510875	MAX 17	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08
P 510876	MAX 18	Kryotek Arctic Innovation Inc. - 100%	10/2/2016	10/3/2016	10/3/2017	Active	IW00485	105E/08

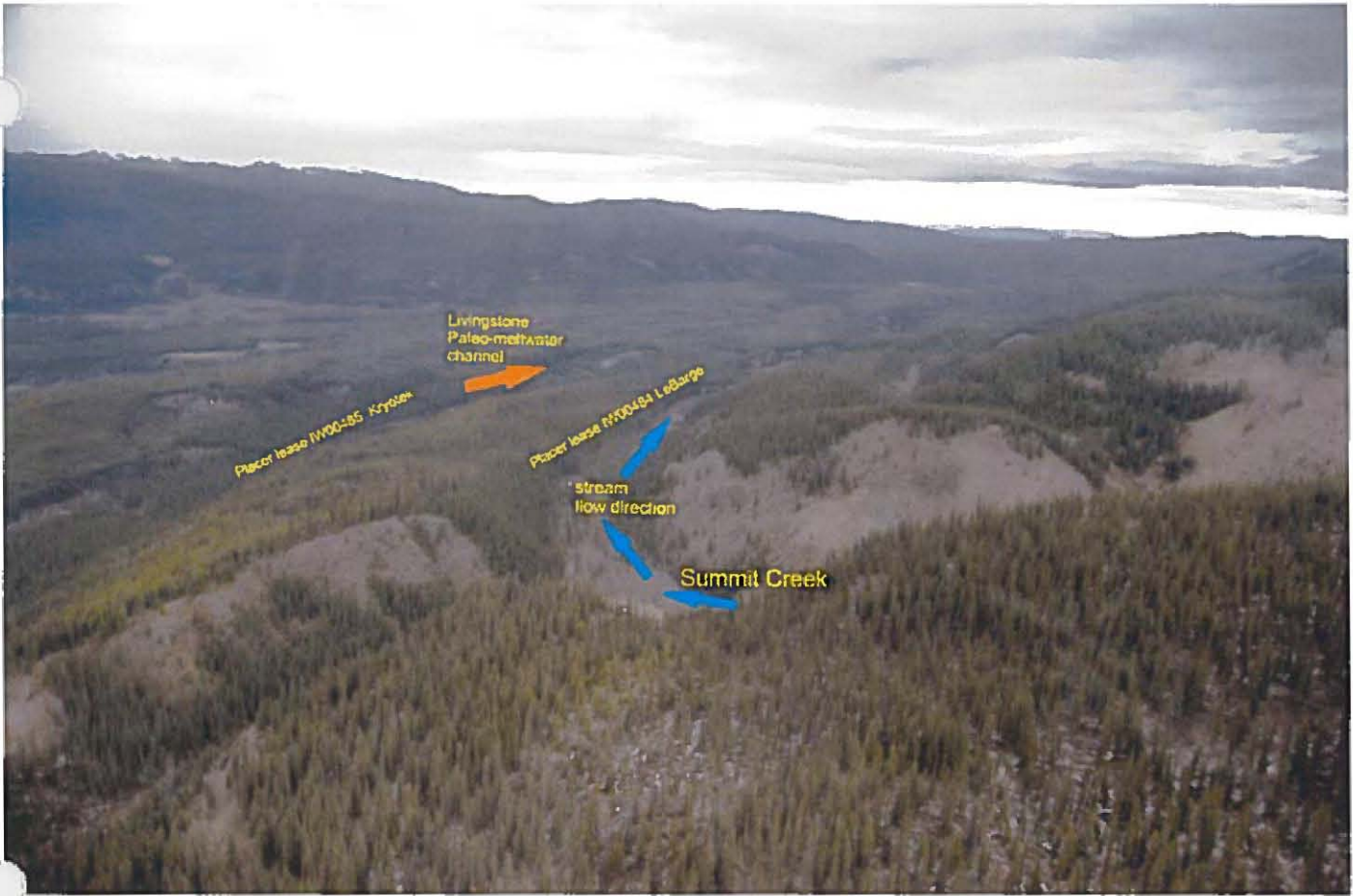


Plate 1 - View of Summit Creek in the vicinity of placer claims Summit 1-13 (formerly placer lease IW00484) and Max 1-18 (formerly placer lease IW00485), looking north-northwest. Photo taken October 8, 2015.

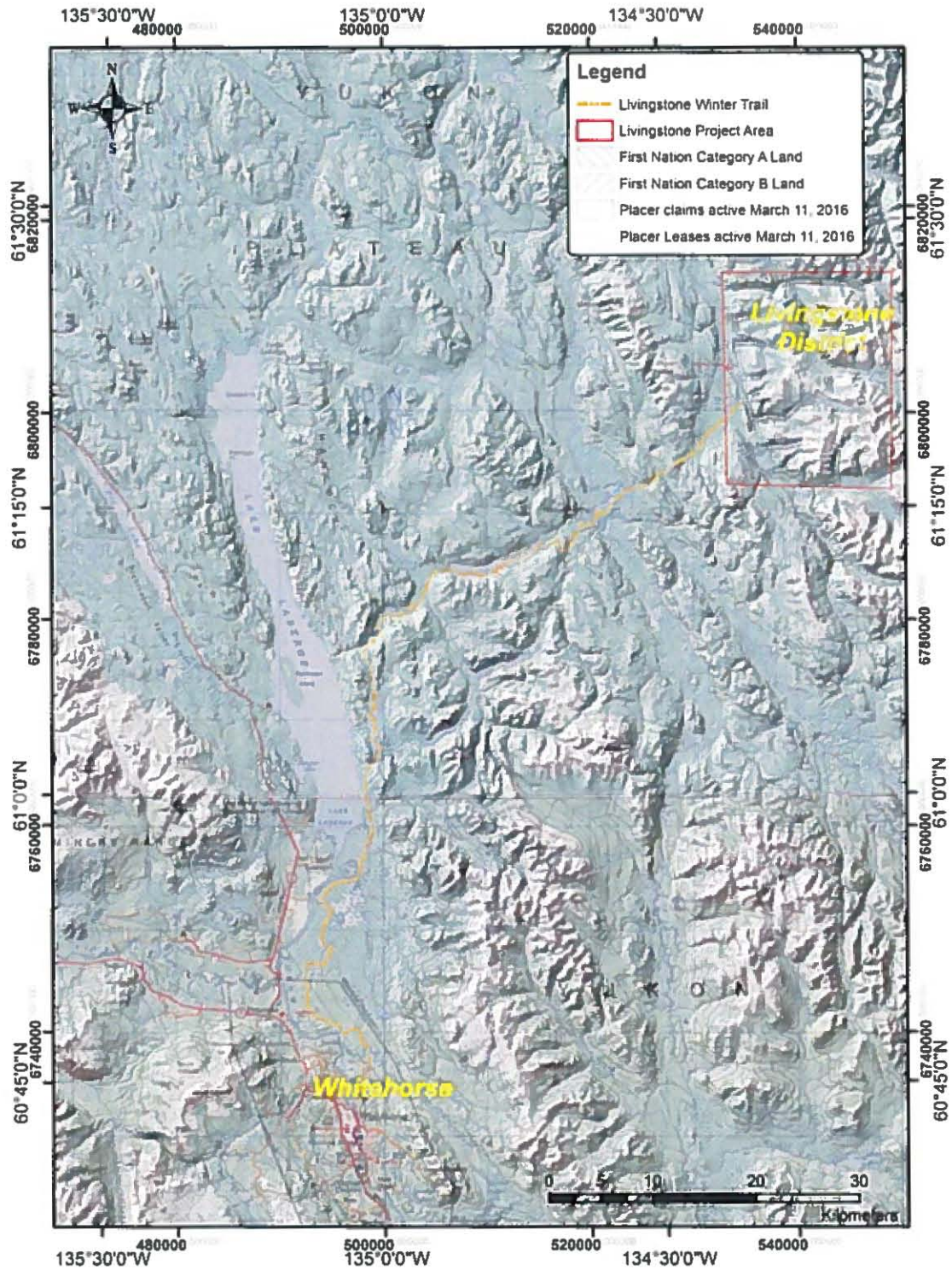
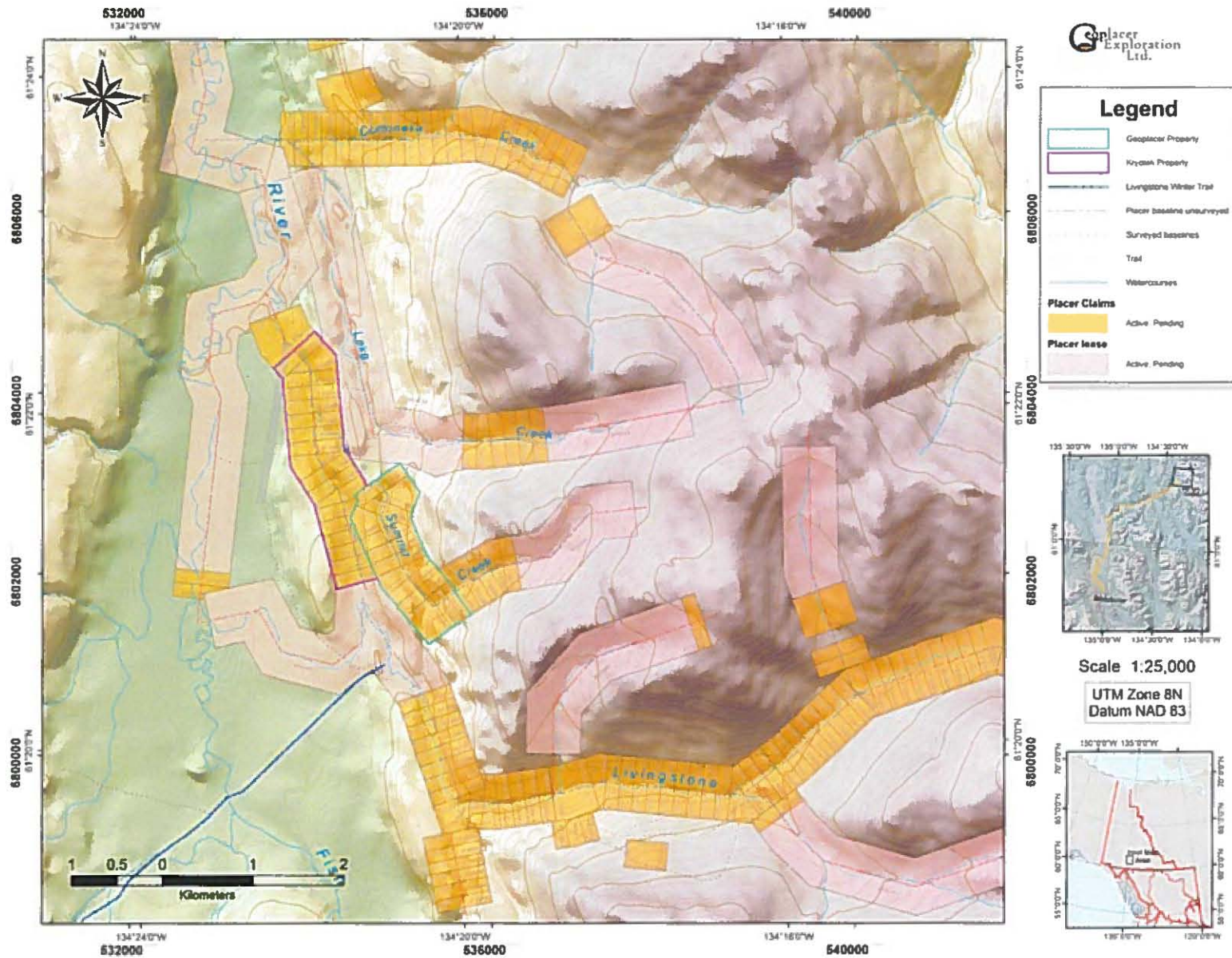


Figure 2 - Location of Livingstone Placer Project, 90 km northwest of Whitehorse. Detailed location map in Figure 3, following.



History of Exploration and Mining

Although Yukon Government royalty records show only about 18,000 ounces credited from Livingstone area creeks to 2014 (Yukon Mining Recorder, 2014), the actual production is known to be several times higher. One of the reasons is that since most of the gold from Livingstone creeks is coarse, the modern market is mainly local jewelers and collectors, who would not be intending to export the raw gold out of the Yukon. Since placer gold which is sold for use within the Yukon is not required to have royalties paid, it is often not recorded in any government ledgers.

The Livingstone Creek area was first prospected in 1894 by Joseph E. Peters (LeBarge, 2007). In 1898, Mr. Peters returned to the area with Mr. George Black and together they discovered gold on the Livingstone Creek itself, naming it after Black's friend M. Livingstone. That year, in the four weeks before freeze-up, they mined about 200 ounces. Bostock (1957) mentions that that production between 1898 and 1920 produced over \$1,000,000 in placer gold, which roughly calculates to 46,000 troy crude ounces using a gold price of \$19/ounce and a fineness of 880. Cairnes (1910) stated that the claims on the "old channel" on Livingstone Creek had produced, on the average, about \$25,000 (1157 troy crude ounces) each. The total production in 1906 was about \$90,000 (4168 troy crude ounces). Discovery Claim is stated to have yielded \$11,000 (509 troy crude ounces) in 1900.

Interest in the Livingstone area was revived by T. Kerruish's new discovery on Lake Creek in 1930; and during the 1930's there were 10 to 15 men on Livingstone Creek each year involved in mining a buried left limit channel and "sniping" on the worked over ground in the canyon (Bostock and Lees, 1938).

During the 1940's, J. Stenbraten held much ground on Livingstone Creek, but most of his work was preparatory in nature and little gold was produced (LeBarge, 2007).

During the late 1950s and early 1960s L. Engle and C. Emminger prospected on Livingstone's Discovery Claim. In 1961 G. Murdock and J. Ballentine prospected on the creek. In 1967 M. Fuerstner and E. Kreft staked a one mile lease. Max Fuerstner Jr. took over the mining from Max Sr. in the 1980's. Mining has been intermittent since then, with the most recent mining activity on Livingstone Creek taking place in the late 1990's. Seismic refraction was attempted on some placer leases upstream of the canyon in 1981, but was unsuccessful due to attenuation by permafrost (LeBarge, 2007).

Summit Creek was probably discovered in 1898 at the same time as the other area creeks (LeBarge, 2007). McConnell states that in 1900, gold valued at more than \$1,200 was taken from Summit Creek; overall the creek is reported to have yielded more than \$30,000 in gold. In August 1905, a nugget weighing approximately 39 oz was reportedly found there. Miners during the 1930's reportedly found and worked a right limit channel, and production to 1938 was estimated at 1500 oz. During the late 1940's and early 1950's L. Engle and J. Geary worked on Summit Creek. In 1960, G. Murdoch and J. Ballentine were active, and in 1973 G. Asuchak did small amounts of stripping. Ron Asuchak mined intermittently on a small scale including underground in the 1990's on Summit Creek, and reported royalties on 43 oz in 1993.

Regional Bedrock Geology

Yukon-Tanana terrane is an accreted pericratonic sequence that covers a large part of the northern Cordillera from northern British Columbia to east-central Alaska (Colpron and Nelson, 2006; Figure 4). The Livingstone District is underlain primarily by metasedimentary and meta-igneous rocks of Yukon-Tanana Terrane, and is bounded on the west with late Paleozoic volcanic and sedimentary rocks (Semenof Formation) along the Big Salmon Fault. The Semenov block is assigned to Quesnellia Terrane, and those units are bounded on the west by metasedimentary rocks of the Stikinia terrane (Colpron, 2005, 2006). The eastern part of the Livingstone Creek area is dissected by the north-striking d'Abbadie fault zone. Metasedimentary rocks in the east and northeast part of the area were previously assigned to Cassiar Terrane; however Colpron (2006) has assigned them to Yukon Tanana Terrane.

Local Bedrock Geology and Mineral Occurrences

East and north of the South Big Salmon River lie five successions of metasedimentary and metavolcanic rocks: the Snowcap complex, and the Livingstone Creek, Mendocina, Last Peak and Dycer Creek successions (Colpron, 2005, 2006; Figure 5). These occur in two structural domains separated by d'Abbadie fault. The Dycer Creek succession occurs east of the fault while all other successions occur west of the fault (Figure 5; Colpron, 2006).

Figure 5 shows that the area between the upper reaches of Livingstone Creek and the middle reaches of May Creek is dominated by metasedimentary rocks of the Snowcap complex; which are in turn intruded by strongly foliated and locally gneissic Early Mississippian tonalite to granodiorite. Along a north-south trend between the upper-most reaches of Livingstone Creek and the South Big Salmon River, lays metavolcanics, metasediments and marble of the Livingstone Creek succession; and serpentinized peridotite and greenstone of the Mendocina succession (Colpron, 2006).

Several bedrock mineral occurrences are noted in the area (Yukon Minfile, 2014). These are given in Table 2, below.

Table 2 - Mineral Occurrences (MINFILE) of the Livingstone Creek area.

MINFILE NUMBER	NAME	DEPOSIT TYPE	STATUS	PRODUCE R	COMMODITY
105E 001	LIVINGSTON	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing	N	Copper, Silver, Lead, Gold
105E 020	SYLVIA	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing	N	Copper, Gold, Zinc, Silver, Lead
105E 042	LAKE	Vein Au-Quartz	Showing	N	Gold
105E 043	GERM	Unknown	Anomaly	N	Gold
105E 047	MAYBE	Unknown	Anomaly	N	Gold, Lead
105E 053	DEET	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing	N	Antimony, Gold, Arsenic, Lead, Silver, Zinc
105E 049	LITTLE VIOLET	Unknown	Unknown	N	
105E 063	NICKELINE	Ultramafic - Nickel	Showing	N	Antimony, Cobalt, Nickel, Arsenic
105E 054	TRERICE	Unknown	Unknown	N	
105E 056	BRENDA	Unknown	Unknown	N	

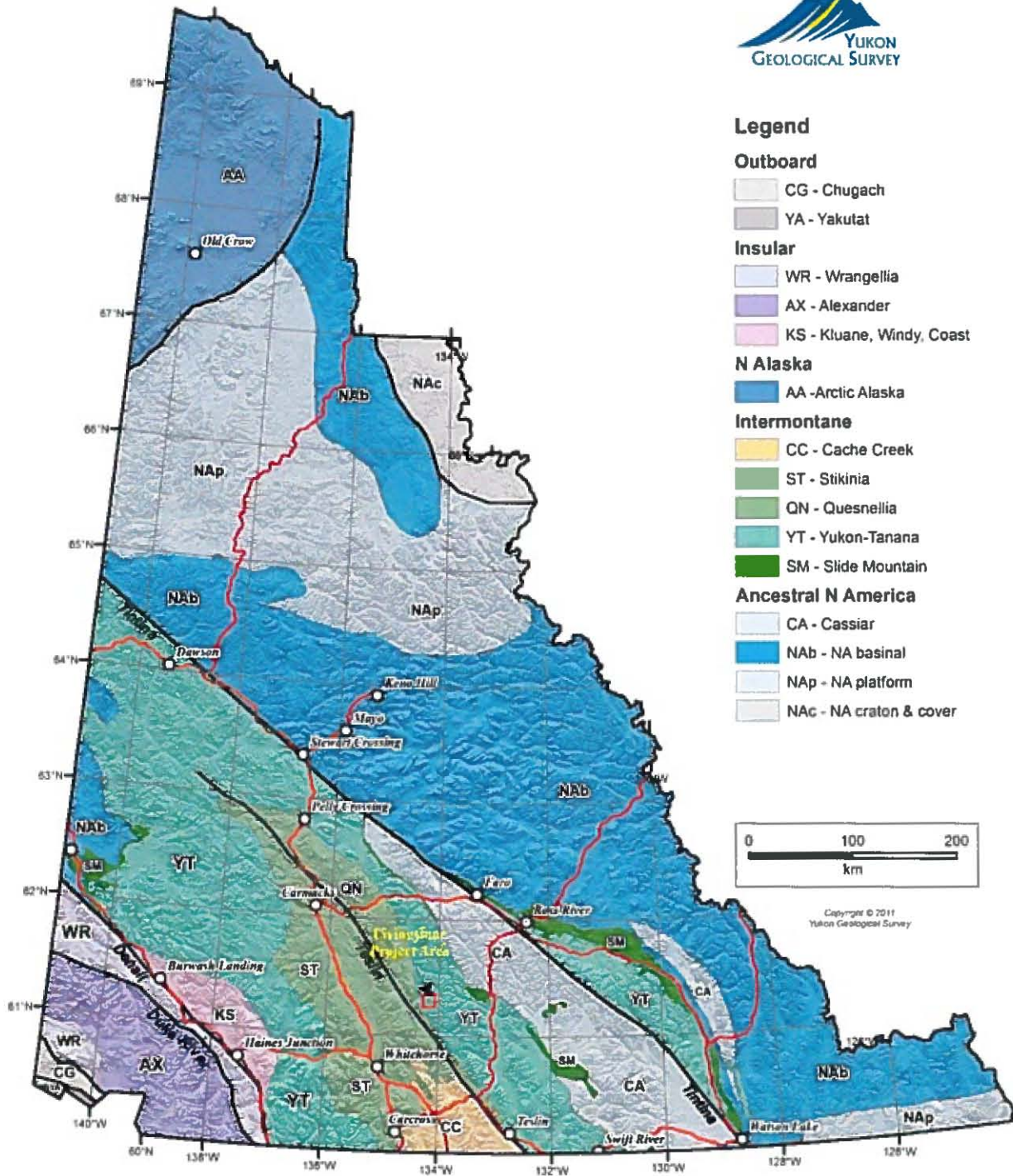


Figure 4 -Yukon Terrane Map, showing location of Livingstone Project Area. Yukon Geological Survey, 2014.

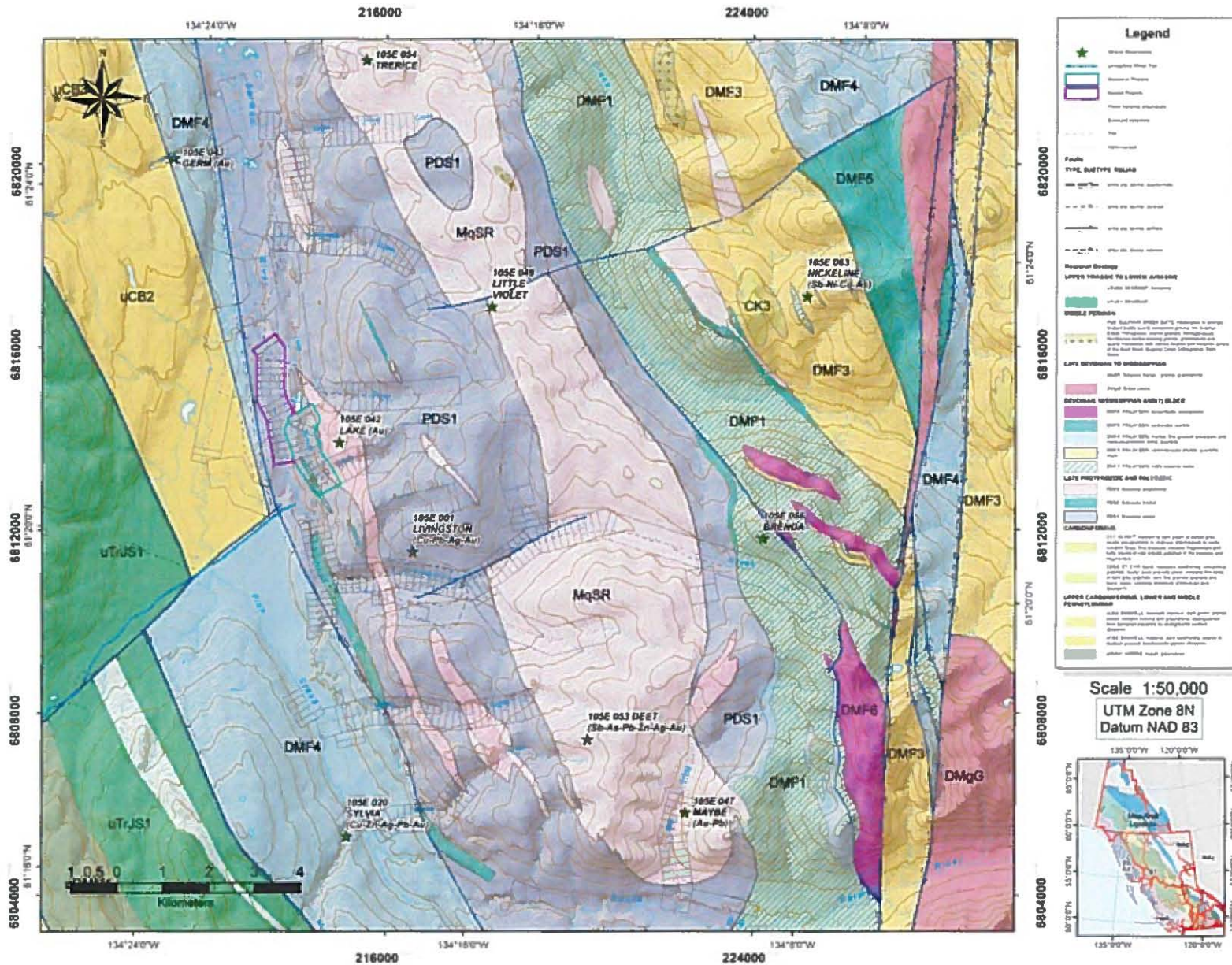


Figure 5 - Bedrock Geology and mineral occurrences of Livingstone District, modified after Colpron, (2005) and Yukon Geological Survey, (2014).

Regional Surficial Geology and Glacial History

The Livingstone District lies within the late Wisconsinan McConnell glaciation (Duk-Rodkin, 1999) and the most obvious glacial features are of that age. Older glaciations certainly would have blanketed the area, however all features of those earlier episodes have been overprinted by the most recent glacial advance.

Glacial features and surficial deposits in the Livingstone District were mapped by Hughes et al (1969) and Klassen and Morison (1987). Surficial deposits in the area are mainly till and colluvium, while an irregular glaciofluvial complex occurs in the South Big Salmon Valley near the mouth of Martin Creek (Klassen and Morison, 1987). The prominent valley that diverts the westerly flow of Livingstone and Summit Creeks is an ice-marginal channel (Hughes et al, 1969).

Indicators of former ice flow direction, mapped by Hughes et al (1969) and Klassen and Morison (1987) suggest that glaciers flowed north along the low valleys that cross the Semenof Hills into the South Big Salmon River Valley in the Livingstone Creek area.

Bond and Church (2006) proposed a four-phase ice-flow history for the Big Salmon Range (Figure 6). This is briefly summarized as following:

Phase 1, a locally derived ice advance, marks the initial accumulation of ice at the onset of glaciation. Geological evidence of this phase is either eroded or buried by later glacial phases. General zones of ice accumulation are inferred from well-developed cirques.

Phase 2 occurred when Cordilleran ice advanced northwest and overtopped the Big Salmon Range at its glacial maximum. High-elevation ice-flow indicators suggest the Cassiar lobe of the Cordilleran ice sheet moved across the range virtually unobstructed by the underlying topography.

Phase 3 occurred when the Cassiar lobe retreated from the Big Salmon Range. With reduced ice thickness during glacial recession the Cassiar lobe became increasingly directed by underlying topography. East-flowing drainages in the Big Salmon Range experienced up-valley ice-flow as the Cassiar lobe maintained a regional northwest flow, while westward-oriented drainages would have been glaciated by down-valley flowing ice. Retreat of the Cassiar lobe to the east of the north-south trending drainage divide resulted in ponding of meltwater in the eastern drainages. This meltwater drained westward across mountain passes and flowed down the western drainages shortly after these were deglaciated. Meltwater erosion was significant enough in some valleys to erode through the surficial deposits and into bedrock, which would have completely reworked pre-existing placer deposits.

A late glacial re-advance of local alpine glaciers (Phase 4) was mapped in the Pelly Mountains further east, however in the Big Salmon Range; the glaciers are less abundant and generally restricted to less than 1 km in extent.

Placer Geology and Stratigraphy

Overall, the placer gold-bearing creeks in the Livingstone area are characterized by a sequence of interglacial stream gravels which are overlain by McConnell-age glaciolacustrine silts, glaciofluvial deltaic sandy gravel and boulder-rich glacial till (Levson, 1992). Within the interglacial gravels, concentrated fluvial and debris flow sedimentation likely occurred in response to unusually high storm or spring runoff events. The advance of a glacier down the South Big Salmon River valley resulted in damming of the channelized flows that deposited the underlying gravels. Ice-marginal lakes formed in each of the tributary valleys, and parallel-laminated clays, silts and sands were deposited in the ice-dammed lakes along with debris flow deposits derived mainly from the ice margin. At Summit Creek, a thick glaciofluvial delta complex developed in the lake ponded in that valley.

As the glacier in the South Big Salmon River valley expanded, the lakes diminished in size and debris flow sedimentation increased until the area was overridden by ice. Subsequently, a thick till was deposited at the base of the glacier. During deglaciation, a glaciofluvial complex developed along the ice margin. The series of meltwater channels that extend from south of Martin Creek to well north of Summit Creek, formed along the side of the South Big Salmon Valley in association with the ice-marginal deposits. Post-glacial river erosion incised through all of the overlying glacial deposits and re-exposed the placer gold bearing interglacial gravels.

The stratigraphy of Livingstone Creek in the lower reaches as described by Levson (1992) consists of approximately 5 metres (15 feet) locally-derived, coarse-grained, crudely-stratified, poorly-sorted and clast-supported gravels immediately overlying the bedrock. This is the main pay unit, and is interpreted as an interglacial (pre-McConnell) high energy stream channel and gulch sediments deposited by channelized fluvial flows and gravelly debris flows. This unit is overlain by up to 5 metres (15 feet) of parallel-laminated silts and clays with numerous erratic dropstones and pebble trabeds. This unit is interpreted as proximal glaciolacustrine sediment, which would have formed when a glacier, flowing down the South Big Salmon River valley, blocked Livingstone Creek and other tributaries, causing small ice-marginal lakes to form. A thick, 15 metre (50 feet) matrix-supported diamicton with numerous striated clasts caps the sequence. This is interpreted as a glacial till, deposited directly by ice during the glacial maximum.

Early workers (Cairnes, 1910; Bostock and Lees, 1938) describe an "old boulder channel" on the south side of Livingstone creek, which was quite rich in placer gold. The "old channel" is described as being lower in gradient than the present channel, and within "half a mile" upstream of the canyon (800 m) is about 40 feet (12 metres) lower than the present channel and 1000 feet (300 metres) to the south. The present channel and the paleochannel are separated by a reef of bedrock which was tunneled through by the old timers. The placer gold was reported to lie on bedrock and in the crevices in it.

Cairnes (1910) reported that at some distance up the present creek channel, at a point across from the higher workings in the old, buried channel, a second buried channel is reported to have been discovered on the north side of the creek. An adit was run along it, but the results of that work were not known.

Subsequent placer miners are believed to have worked various parts of the south paleochannel, and gravels adjacent and north of the present creek by sniping under the overburden on the north bank.

Placer Gold and Heavy Mineral Characteristics

Cairnes (1910) reported that a third of the gold mined from the Discovery claim on Livingstone Creek was comprised of nuggets over an ounce in weight. The largest nugget reported at that time was said to be 39 troy ounces, recovered from Summit Creek. A few nuggets had rough surfaces and included fragments of quartz, but as a rule they were smooth. Magnetite was abundant and occurred as "grains and coarse lumps", along with native copper, garnet, and cinnabar. LeBarge (2007) mentions that other heavy minerals include galena, pyrite, hematite and cassiterite.

The fineness on Livingstone Creek has been reported to be 880, although some miners (Max Fuerstner Jr., pers. comm.) have said that it is usually over 900. Very few other details have been reported about the nature, grade or distribution of the placer gold mined by modern placer miners on Livingstone Creek.



Plate 2 - Placer gold from Livingstone Creek, mined in 2000 by M. Fuerstner Jr. The smaller piece weighed 5 ounces. The other half is likely over 20 ounce

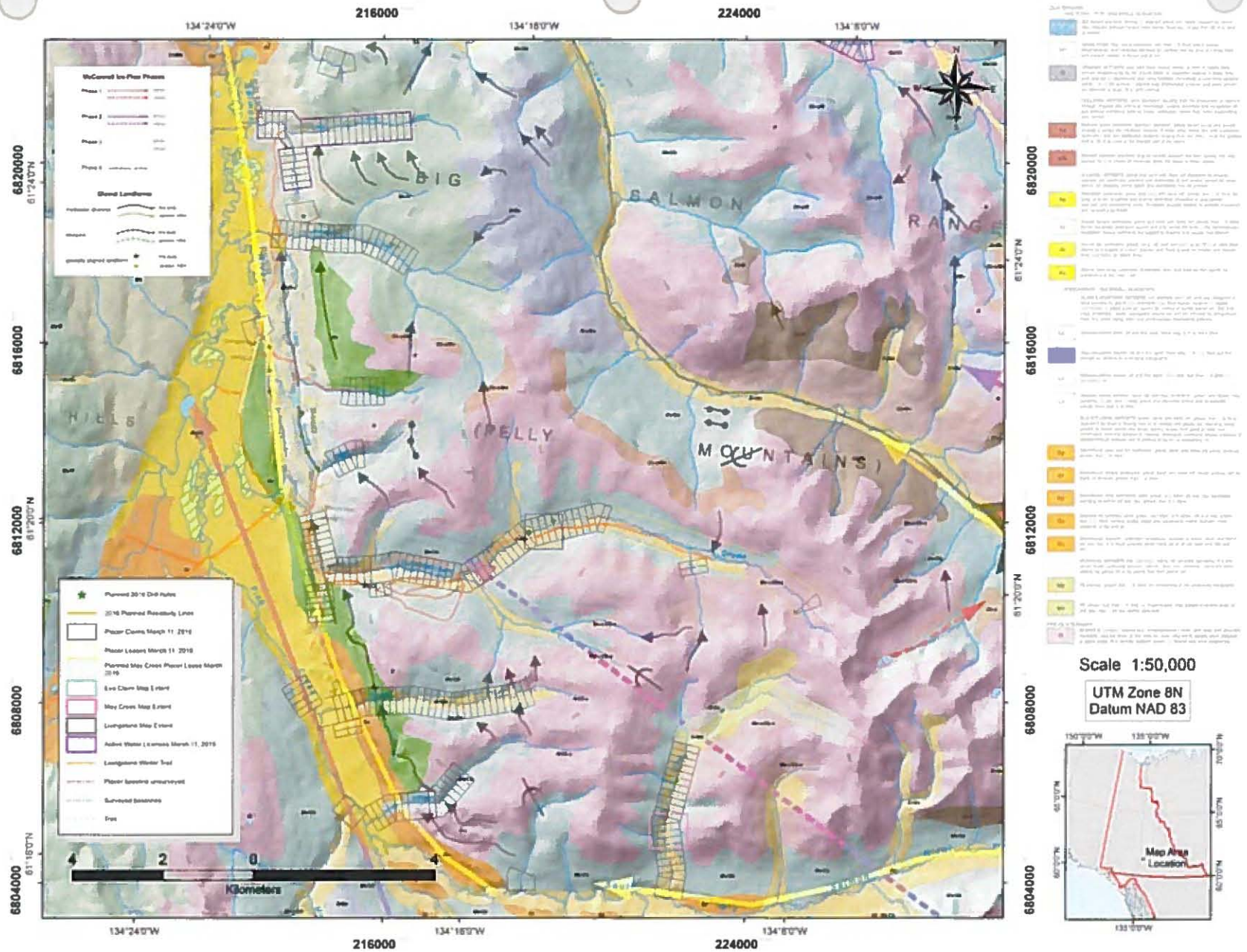


Figure 6 - Surficial geology and glacial features, Livingstone Creek area; after Klassen and Morison, (1987); and Bond and Church, (2006).

Rationale for Exploration Program

Although over 60,000 ounces of gold has been recovered from placers of the Livingstone Creek area since 1898 (LeBarge, 2007; Bostock and Lees, 1938); the bedrock source of gold has not been definitively identified. In addition, most of the Livingstone area has not seen methodical exploration for placer deposits using modern technology. It is likely that there is more than one mineral deposit type which may serve as a potential source for placer gold in Livingstone Creek and other area drainages.

Placer gold in Livingstone Creek typically occurs as coarse (>1 cm) nuggets and is commonly associated with magnetite. A nearby source is likely, and may be a skarn style of mineralization (Colpron, 2006). Stroink and Friedrich (1992) noted that quartz veins containing disseminated sulphide minerals occur as foliaform veins at the headwaters of the Livingstone district streams. They considered the veins as a potential source for some of the gold, however Colpron (2006) notes that the lack of magnetite and coarse gold in the veins argues against them being the major source for the placer gold. Colpron (2006) also offers that placer streams in the Livingstone camp generally occur around the large Early Mississippian metatonalite body that intrudes Snowcap complex in the western part of the area, which supports the skarn theory as a potential for a lode source for the placer gold. The high fineness (880 and over) and associated copper minerals (LeBarge, 2007) supports an intrusion-related bedrock source as described by Dumala and Mortensen (2002). This intrusive body subcrops beneath the upstream reaches of Livingstone Creek in the area of the five-mile prospecting lease of Geoplacer Exploration Ltd., and in the mid-reaches of May Creek beneath the five-mile prospecting lease of James Coates.

Bostock and Lees (1938) mention that the southern (left-limit) paleochannel in on the lower reaches of Livingstone lies about 1000 feet south of the modern creek as it tracks upstream, separated by a reef of bedrock. They also note that a northern (right-limit) paleochannel occurs on the upstream end of the workings of the time above the canyon. This demonstrates the potential for the existence of further paleochannels in the upstream reaches of Livingstone Creek.

Colpron (2006) notes that there is mineralization on D'Abbadie Creek; new showings were discovered there during the 2005 mapping season including a Pb-Ag vein occurrence and a pyrrhotite skarn. Bostock and Lees (1938) mention the presence of "old, pre-Glacial" gravels on upper D'Abbadie Creek; and that placer gold had been recovered by old timers working there. This further evidence demonstrates the potential for undiscovered bedrock mineralization and placer gold in the eastern part of the Livingstone district, outside of the traditionally-mined areas.

Bond and Church (2006) hypothesize four-phases of the last (McConnell) glaciation in the Big Salmon Range. It is apparent that although the upper part of the Livingstone drainage was parallel to sub-parallel to the regional ice-flow during Phase 2 glacial maximum (Figure 6), it is still possible that ice-marginal lake and deltaic sediments offered some protection from scouring of the deep, pre-glacial paleochannels. In addition, ice-flow during the Phase 3 advance, which followed valley topography and likely had a more erosive effect, is not mapped as having a trajectory along upper Livingstone Creek (Figure 6).

2016 Placer Exploration Program, Summit Creek

Figure 7 shows the location of the 2016 Test Pits and Ground Penetrating Radar lines on Summit Creek. The summaries below list the geographic coordinates of the test pits, and Table 3 lists the coordinates of the endpoints of the Ground Penetrating Radar Geophysical Lines.

Test pits

Max #1 Location: 61° 22' 9.7" N, 134° 21'48.9" W

This pit was located on placer claim Max 3, shown on Figure 7. Materials consisted of a 20 cm layer of organic matter overlying a muddy gravel with a sandy bottom. The pit was 0.95 m long, 1 m wide and 1 m deep. Twenty (20) buckets of material equivalent to 0.4 m cubic meters was sluiced through a Keene Engineering long tom. The concentrates were panned with a Garret pan. Significant magnetite black sand was recovered along with 21 fine colours of gold.

Max #2 Location: 61° 22' 11.5" N, 134° 21'50.3" W

This pit was located on placer claim Max 3, shown on Figure 7. Materials consisted of a 10 cm layer of moss overlying a light brown sand with gravel at the bottom. The pit was 1 m long, 1 m wide and .95 m deep. Twenty (20) buckets of material equivalent to 0.4 m cubic meters was sluiced through a Keene Engineering long tom. The concentrates were panned with a Garret pan. A moderate amount of magnetite black sand was recovered along with 70 to 100 fine colours of gold.

Max #3 Location: 61° 22' 12.1" N, 134° 21'49.2" W

This pit was located on placer claim Max 3, shown on Figure 7. Materials consisted of a 10 cm layer of moss overlying 45 cm of organic rich sand and 45 cm of sandy gravel. The pit was 1 m long, 1 m wide and 1 m deep. Twenty (20) buckets of material equivalent to 0.4 m cubic meters was sluiced through a Keene Engineering long tom. The concentrates were panned with a Garret pan. A small amount of magnetite black sand was recovered along with 10 medium colours of gold.

Max #4 Location: 61° 22' 11.1" N, 134° 21'52.4" W

This pit was located on placer claim Max 3, shown on Figure 7. Materials consisted of a 20 cm layer of moss and organic soil overlying 50 cm of sandy gravel. The pit was 1.1 m long, 1 m wide and 0.70 m deep. Twenty (20) buckets of material equivalent to 0.4 m cubic meters was sluiced through a Keene Engineering long tom. The concentrates were panned with a Garret pan. A large amount of magnetite black sand was recovered along with 70 fine colours of angular, orange coloured gold.



Plate 3 - Test Pit Max #1 was located on claim Max 3, and encountered a muddy gravel with a sandy bottom contact.



Plate 4 - Test Pit Max #2 encountered a sand layer with gravel at the bottom.



Plate 5 - Test Pit Max #3 encountered an organic rich sand overlying a sandy gravel.



Plate 6 - Test Pit Max #4 encountered a sandy gravel under a thin layer of moss.

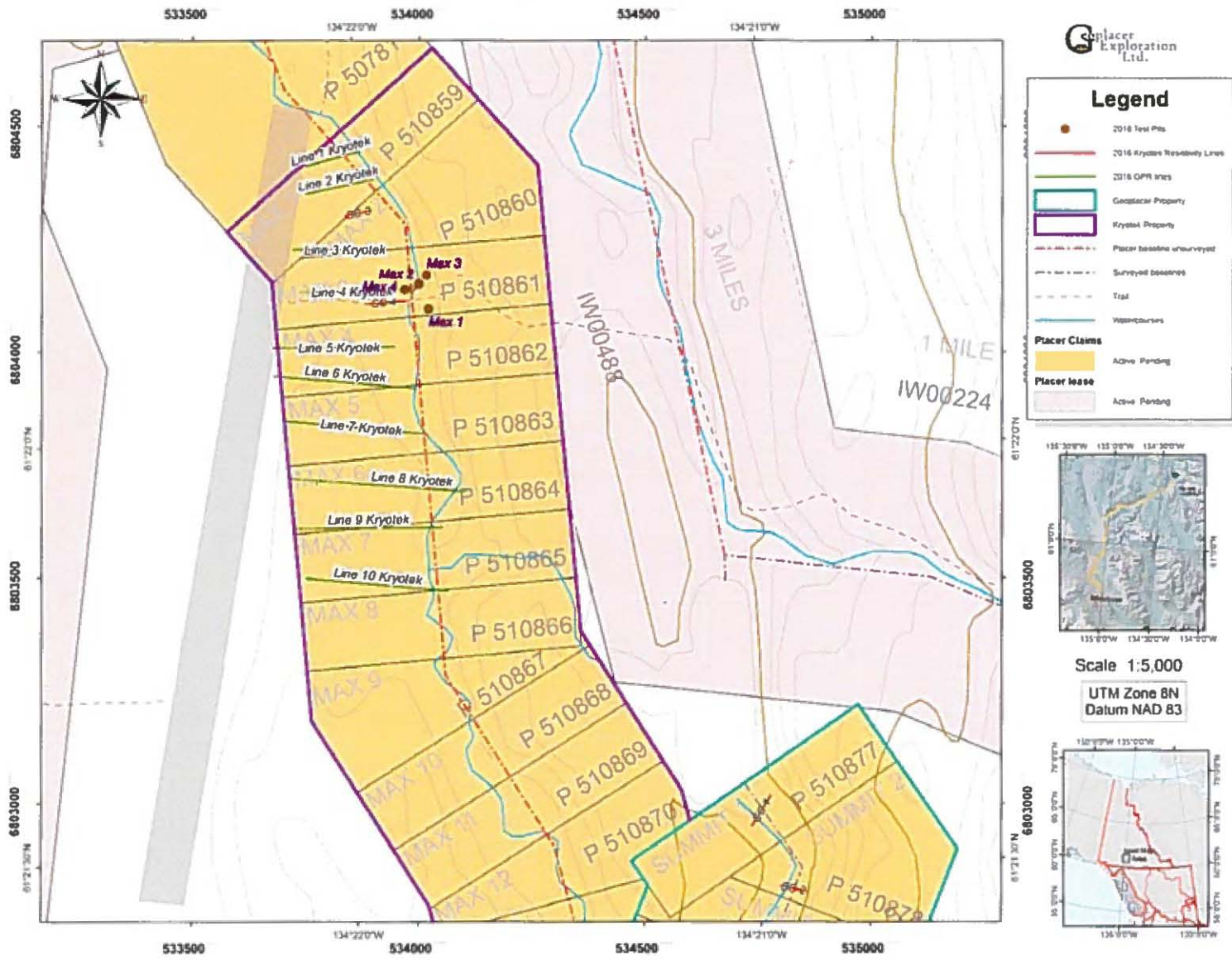


Figure 7 - Location of test pits and ground penetrating radar surveys, Summit Creek.

Ground Penetrating Radar Surveys

The contractor that conducted the ground penetrating radar surveys was Boris Logutov of 47129 Yukon Inc., a Yukon-registered company.

Ten (10) lines were surveyed on Summit Creek. The total length of the 10 lines is 2120 m; the distances between lines varied from 80 to 150 m. The location of the surveyed lines is shown on the map on Figure 7. The coordinates of the surveyed lines are shown in Table 3.

Table 3 - Coordinates of ground penetrating radar survey endpoints, Summit Creek.

Line #	Points of survey	Coordinates of the "start" and "end" points		Elevation of the points (m)
1	Start	61 22 20	134 22 07	808
	End	61 22 21	134 21 59	816
2	Start	61 22 18	134 22 07	809
	End	61 22 19	134 21 57	812
3	Start	61 22 14	134 22 09	813
	End	61 22 14	134 21 55	813
4	Start	61 22 11	134 22 08	818
	End	61 22 11	134 21 54	812
5	Start	61 22 07	134 22 12	819
	End	61 22 07	134 21 54	814
6	Start	61 22 05	134 22 12	819
	End	61 22 04	134 21 51	815
7	Start	61 22 02	134 22 13	820
	End	61 22 01	134 21 52	820
8	Start	61 21 58	134 22 14	820
	End	61 21 57	134 21 48	819
9	Start	61 21 54	134 22 16	820
	End	61 21 54	134 21 54	822
10	Start	61 21 51	134 22 17	819
	End	61 21 50	134 21 56	822

The electro-magnetic survey was conducted by using the GPR "EasyRad PRO+" equipped with antenna by working frequency 100 MHz with resolution 0.2m; the results of the survey were analyzed using software «Prism 2.5». The actual depth of the effective survey is estimated up to 19 m.

The results of the conducted surveys showed the main lithological units as:

«Overburden»- thickness 1.2-8.3 m;

«Alluvial»- thickness 1.0-4.3 m;

«Bedrock surface» – at the depth of up to 16 m.

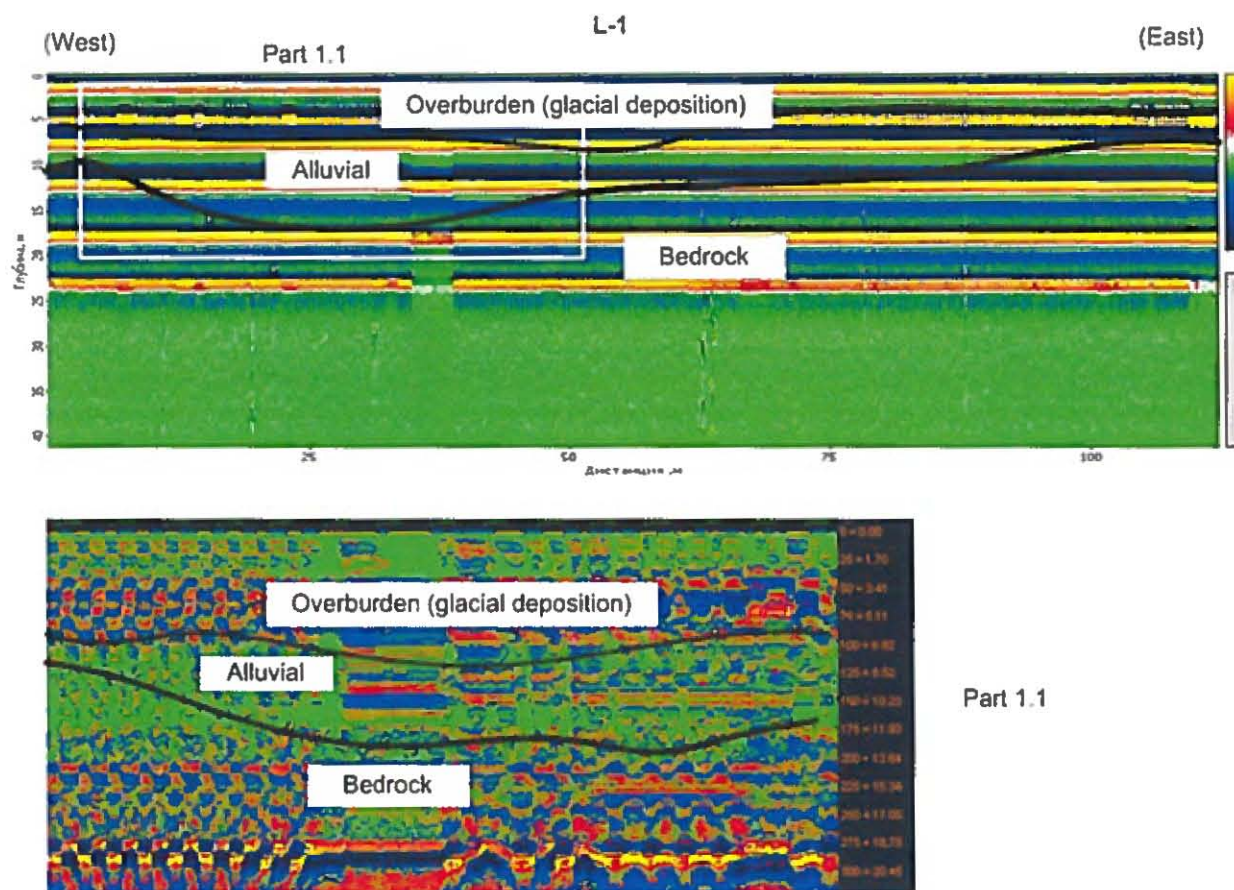


Figure 8 - Ground penetrating radar line L-1 appeared to have a paleochannel on the west with bedrock interpreted at 16 m.

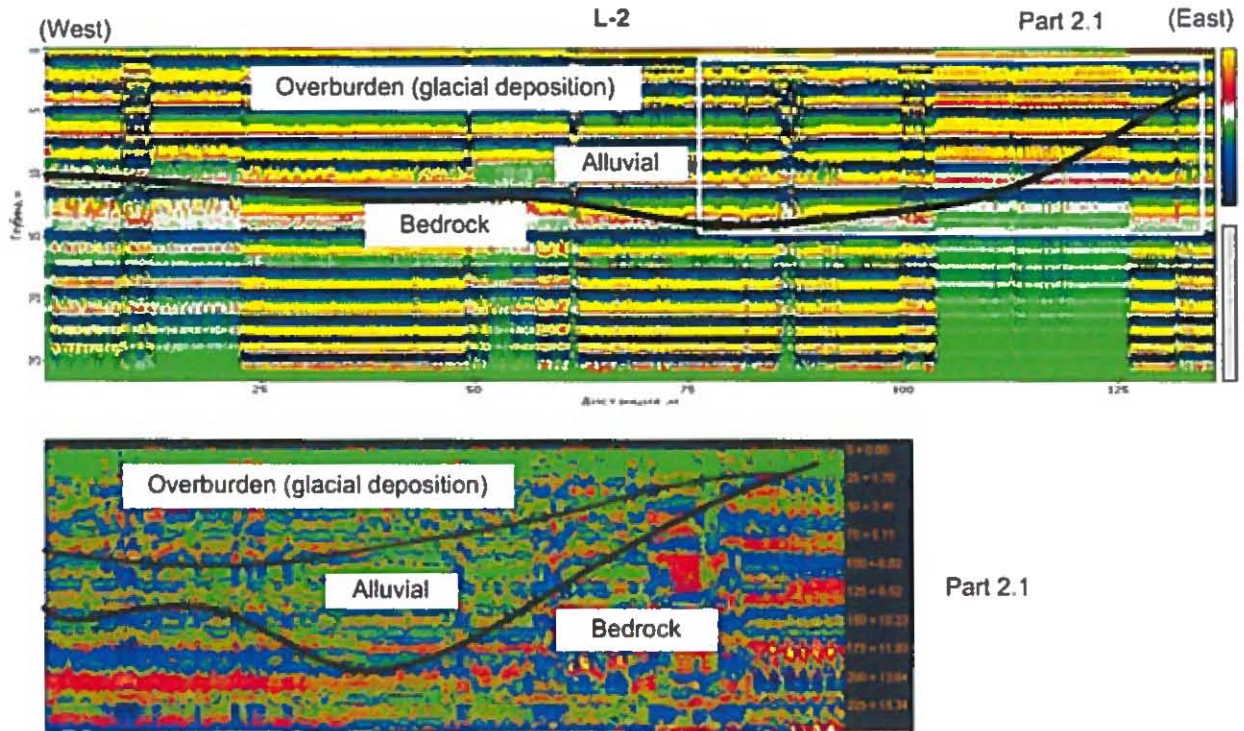


Figure 9 - Ground penetrating radar line L-2 had several possible paleochannels with bedrock at up to 15 m below surface.

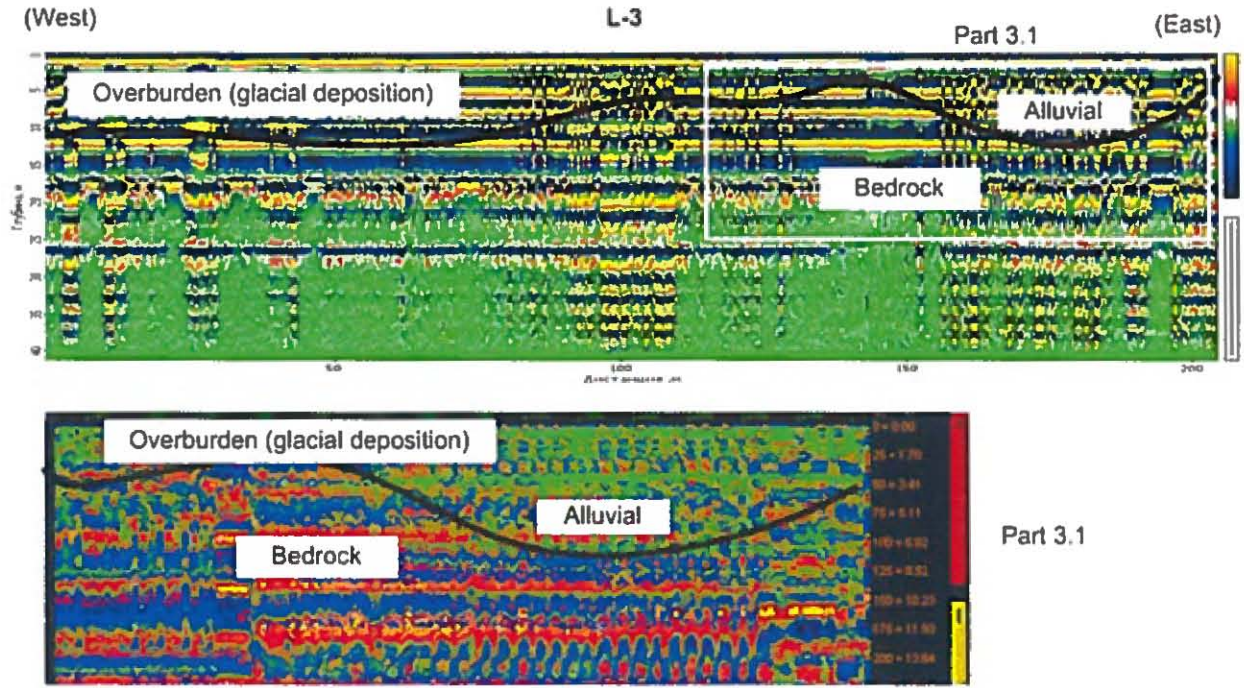


Figure 10 - Ground penetrating radar line L-3 had two possible paleochannels with bedrock interpreted at 11 m.

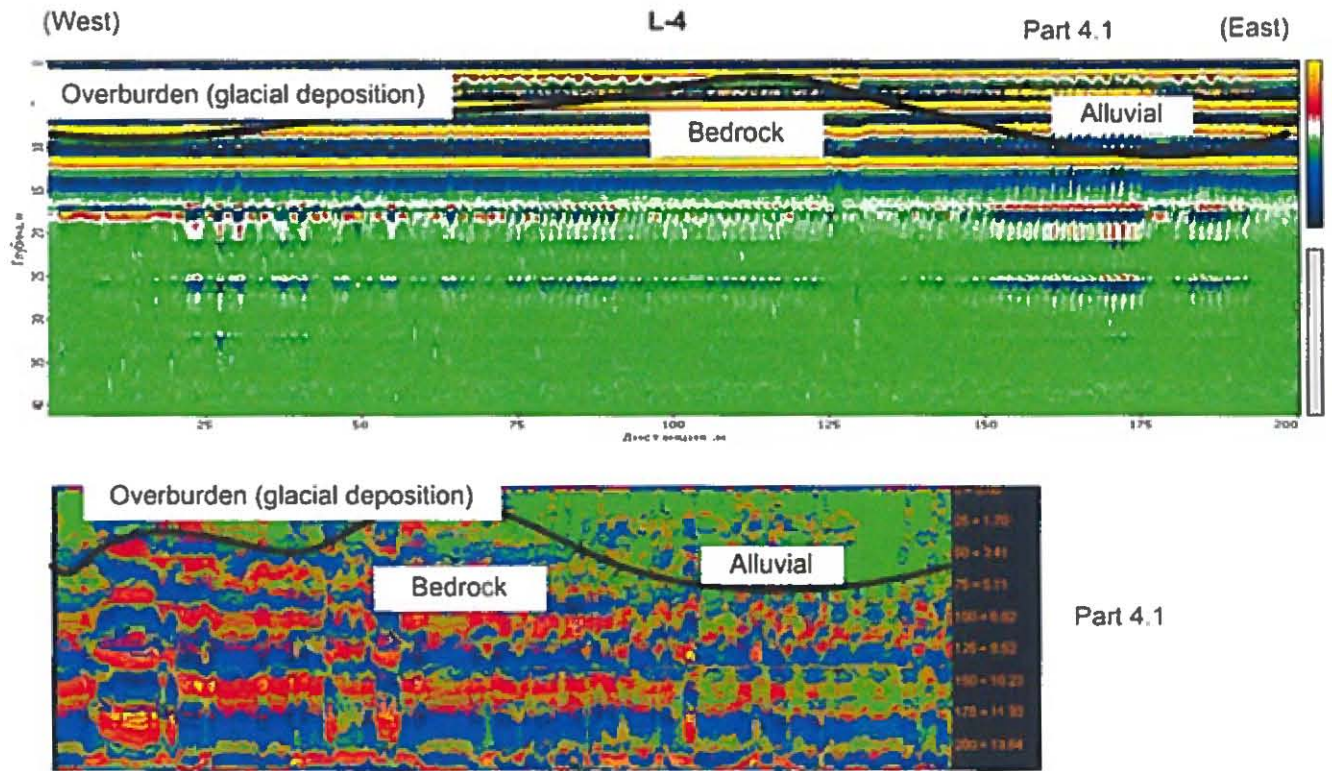
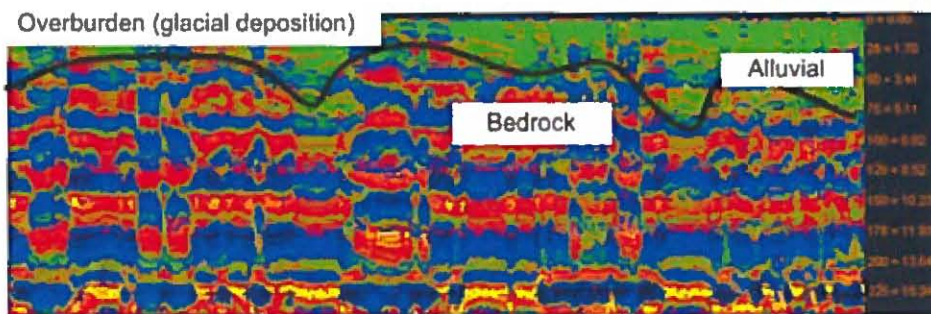
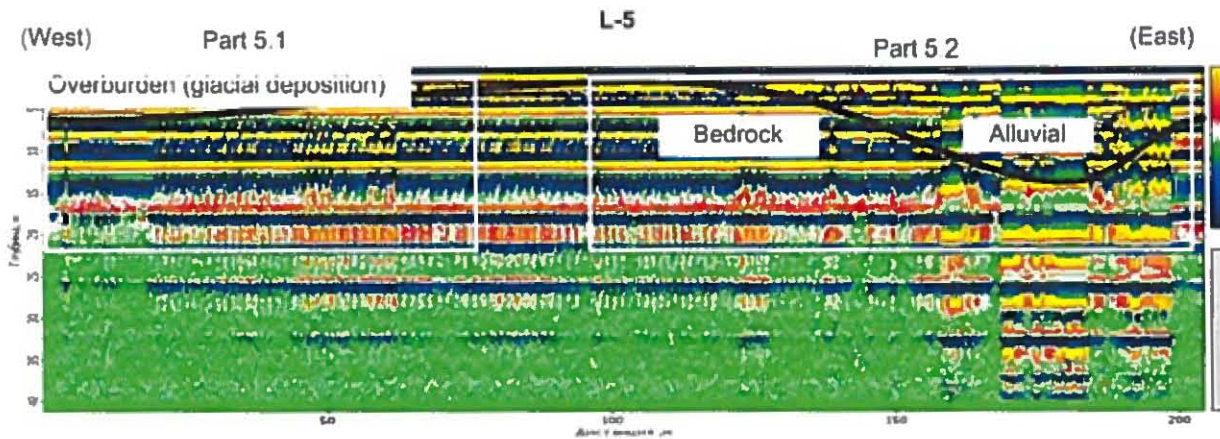
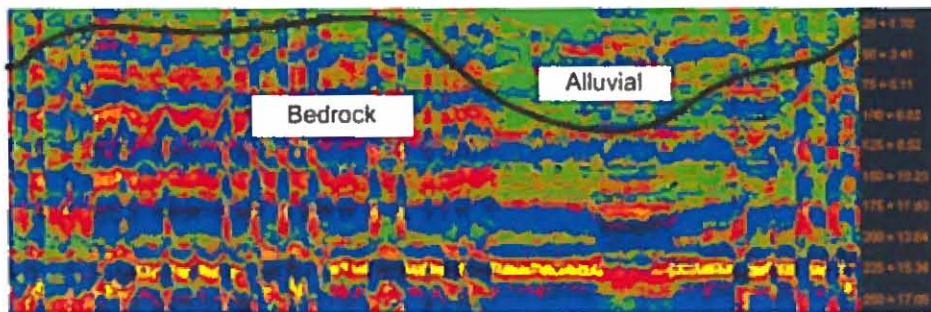


Figure 11 - Ground penetrating radar line L-4 had a possible paleochannel at 175 m, approximately 10 m below surface.



Part 5.1



Part 5.2

Figure 12 - Ground penetrating radar line L-5 had an undulating bedrock surface with a possible paleochannel at 175 m, approximately 14 m below surface.

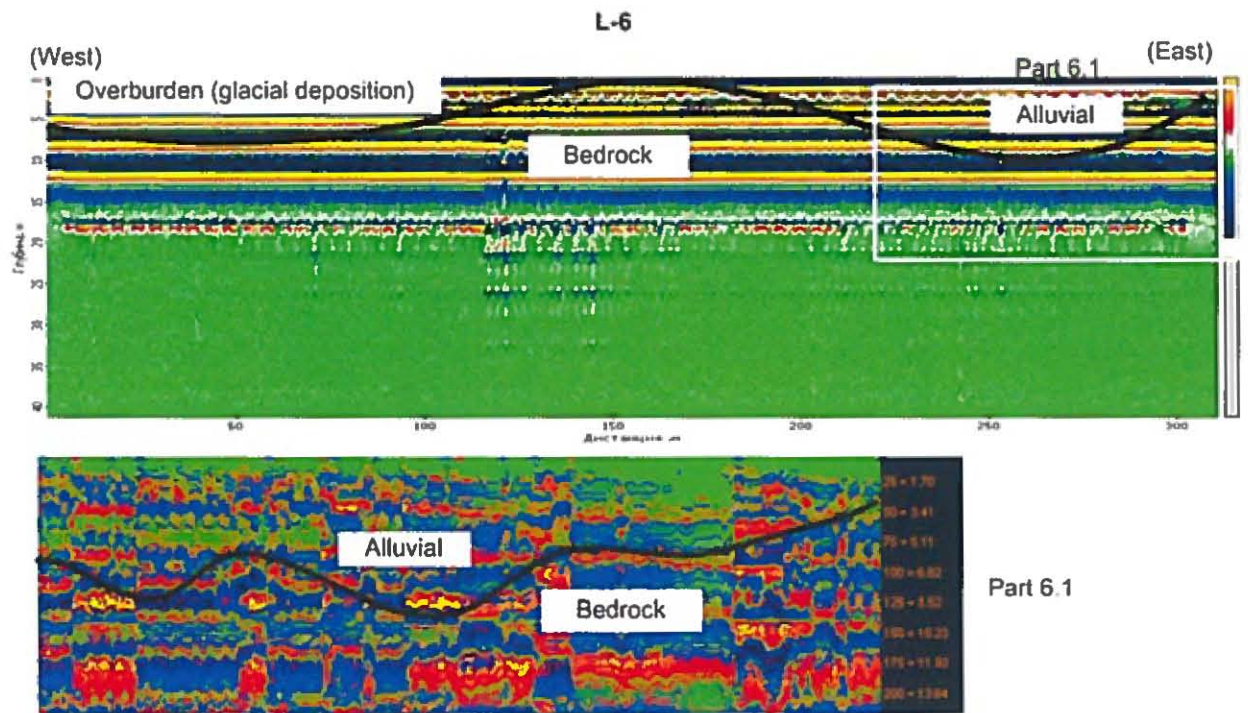


Figure 13 - Ground penetrating radar line L-6 had a possible paleochannel at 260 m, approximately 10 m below surface.

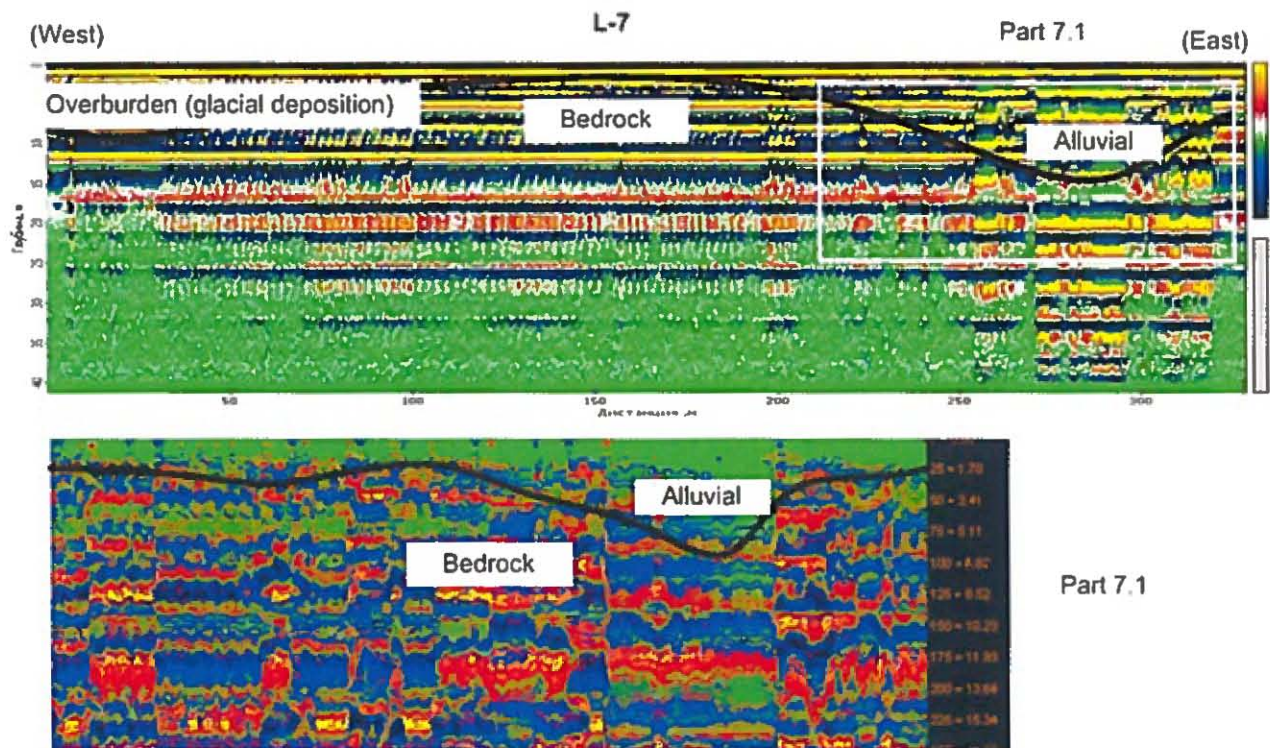


Figure 14 - Ground penetrating radar line L-7 had a possible paleochannel at 275 m, approximately 15 m below surface.

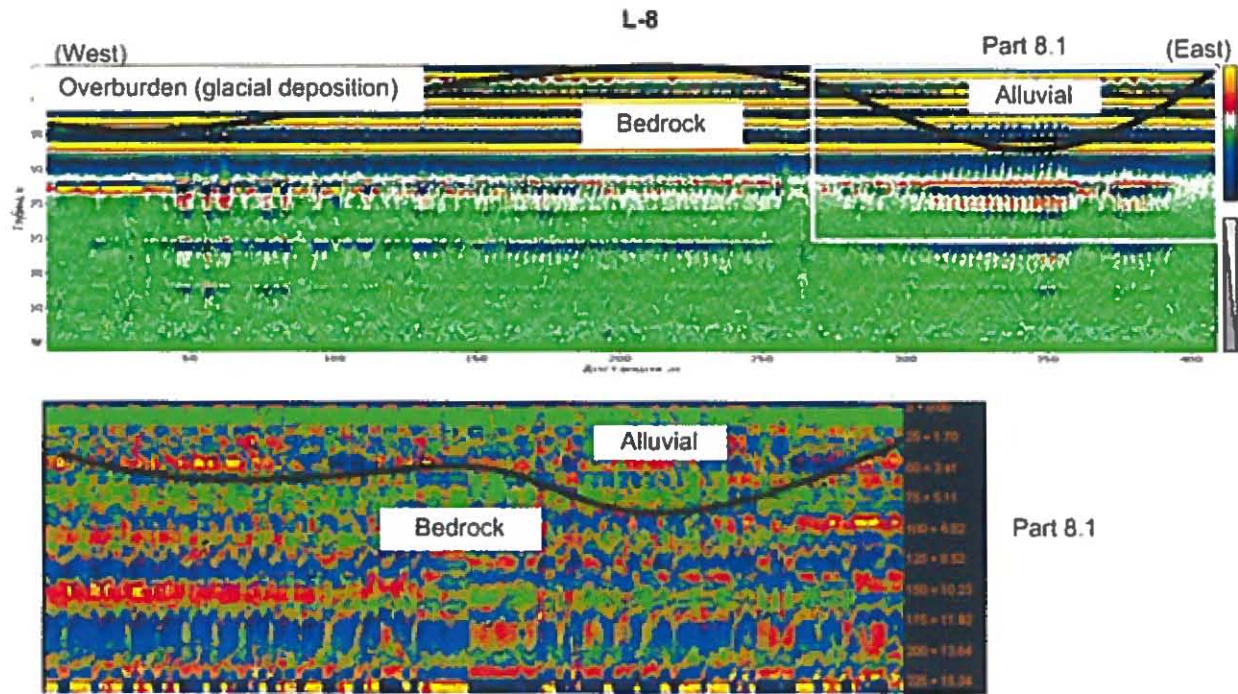


Figure 15 - Ground penetrating radar line L-8 had a possible paleochannel at 350 m, approximately 11 m below surface.

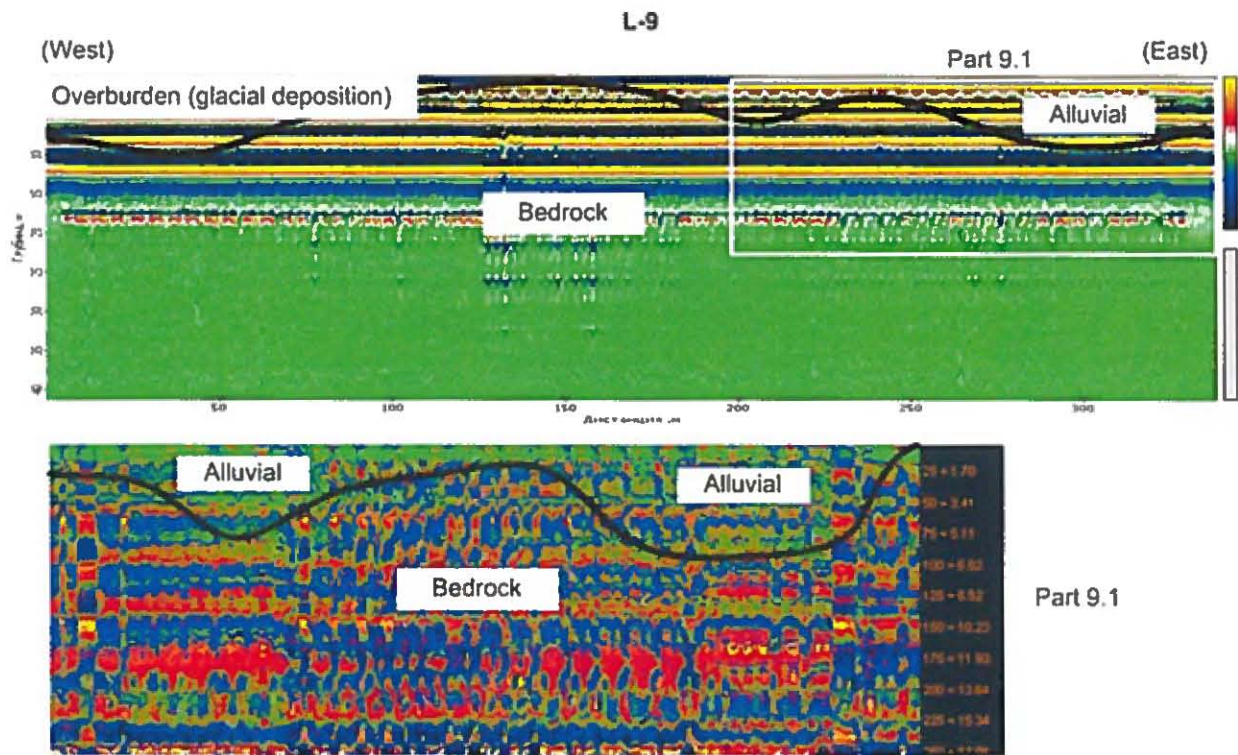


Figure 16 - Ground penetrating radar line L-9 had a possible paleochannel at 300 m, approximately 10 m below surface.

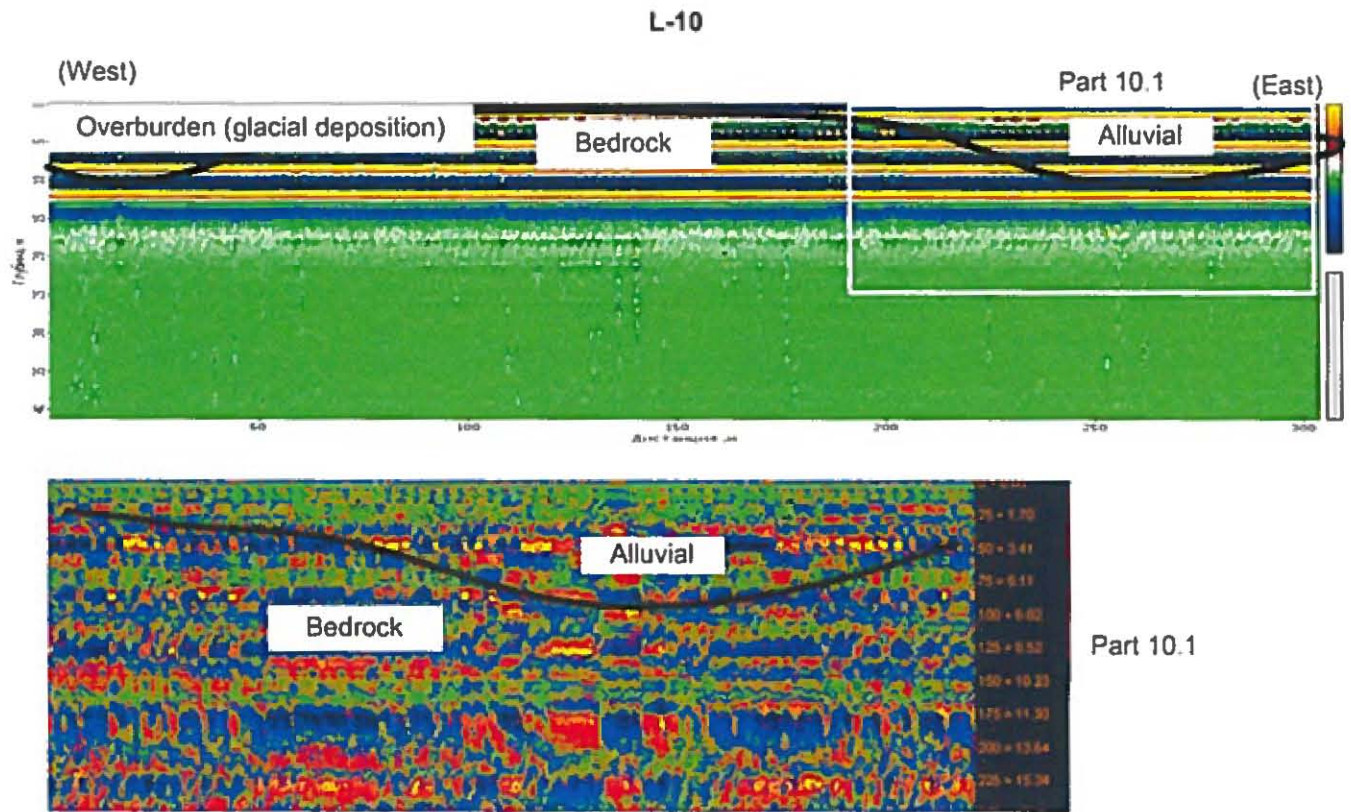


Figure 17 - Ground penetrating radar line L-10 had a possible paleochannel at 260 m, approximately 11 m below surface.

Conclusions and Recommendations

Although the test pitting was very limited in scope and size, there were indications of fine gold values and associated magnetite.

The ground penetrating radar surveys appeared to indicate paleochannels which were incised into bedrock at depths from 11 m to 16 m below surface. These are relatively shallow targets which are promising locations to test.

The association of magnetite with placer gold values indicates that a ground magnetometer survey would be useful in identifying paleochannels along the valley, so this is recommended. This should be followed up by excavator test-pitting or drilling of magnetic anomalies, especially where these may coincide with paleochannels that have been indicated by the ground penetrating radar surveys. Samples processed should be at least 10 cubic metres in volume each, and taken at progressively deeper intervals until reaching the bedrock contact.

Statement of Costs for 2016 Summit Creek Placer Exploration Program

Table 4 – Statement of Costs for 2016 Placer Exploration Program, Summit Creek

2016 Placer Exploration Program Summit Creek	Rate	Subtotal	GST	Total
Kryotek Arctic Innovation Inc. – Test Pitting	As per invoice KR2016C	\$2050.00	\$102.50	\$2152.50
47129 Yukon Inc. Ground penetrating radar surveys	As per invoice #6	\$2000.00	\$100.00	\$2100.00
Geoplacer Exploration Ltd. – Data compilation and Assessment Report	As per invoice #2016-13	\$1500.00	\$75.00	\$1575.00
Total				\$5827.50

Statement of Qualifications

William LeBarge

I, William LeBarge, of 13 Tigereye Crescent, Whitehorse, Yukon, Canada, DO HEREBY CERTIFY THAT:

1. I am a Consulting Geologist with current address at 13 Tigereye Crescent, Whitehorse, Yukon, Canada, Y1A 6G6.
2. I am a graduate of the University of Alberta (B.Sc., 1985, Geology) and the University of Calgary (M.Sc., 1993, Geology – Sedimentology)
3. I am a Practicing Member in Good Standing (#37932) of the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC).
4. I have practiced my Profession as a Geologist continuously since 1985.
5. I am President and sole shareholder of Geoplacer Exploration Ltd., a Yukon Registered Company.

Dated this 15th day of December, 2016

William LeBarge, P. Geo.



Boris Logutov

Mr. Boris Logutov (born in Perm, Russia, in 1966) is a geophysicist/geologist post-graduate (Master) at Perm State University (Russia). Since 2012 he has been the president of 47129 Yukon Inc., an exploration company based in Whitehorse and operating throughout the Yukon. His geophysical work has been utilized by several placer mining companies operating in the Klondike.



References

Bond, J.D. and Church, A. 2006. McConnell ice-flow and placer activity map, Big Salmon Range, Yukon (1:100 000 scale). Yukon Geological Survey, Open File 2006-20.

Bostock, H.S., 1957. Selected field reports from the Geological Survey of Canada, 1898 to 1933; Geological Survey of Canada Memoir 284, 650 p.

Bostock, H.S., and Lees, E.J., 1938. Laberge map area, Yukon. Geological Survey of Canada Memoir 217, 37 p.

Cairnes, D. D., 1910. Preliminary memoir on the Lewes and Nordelskiold rivers coal district, Geological Survey of Canada Memoir 5, 70 p.

Colpron, M., 2005. Geological map of Livingstone Creek area (NTS 105E/8), Yukon (1:50 000 scale). Yukon Geological Survey, Open File 2005-9.

Colpron, M., 2006. Geology and mineral potential of Yukon-Tanana Terrane in the Livingstone Creek area (NTS 105E/8), south-central Yukon. In: Yukon Exploration and Geology 2005, D.S. Emond, G.D. Bradshaw, L.L. Lewis and L.H. Weston (eds.), Yukon Geological Survey, p. 93-107.

Colpron, M. and Nelson, J.L. (eds.), 2006. Paleozoic evolution and metallogeny of pericratonic terranes at the ancient Pacific margin of North America, Canadian and Alaskan Cordillera. Geological Association of Canada, Special Paper 45, 523 p.

Duk-Rodkin, A., 1999. Glacial Limits Map of Yukon Territory. Geological Survey of Canada, Open File 3694, Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Geoscience Map 1999-2, 1:1 000 000 scale.

Dumula, M.R., and Mortensen, J.K. (2002). Composition of placer and lode gold as an exploration tool in the Stewart River map area, western Yukon. In: Emond DS, Weston LH, Lewis LL (eds) Yukon Exploration and Geology 2001, Exploration and Geological Services Division. Indian and Northern Affairs Canada, Yukon Region, pp 87–102

Hughes, O.L., Campbell, R.B., Muller, J. and Wheeler, J.D., 1969. Glacial limits and flow patterns, Yukon Territory south of 65° N latitude. Geological Survey of Canada, Paper 68-34, 9 p.

Klassen, R.W., and Morison, S.R., 1987. Surficial Geology, Laberge, Yukon Territory; Geological Survey of Canada, Map 8-1985, scale 1:250 000.

LeBarge, W.P., 2007. Yukon Placer Database—Geology and mining activity of placer occurrences, Yukon Geological Survey, 2 CD-ROMs.

Levson, V., 1992. The sedimentology of Pleistocene deposits associated with placer gold bearing gravels in the Livingstone Creek area, Yukon Territory. In: Yukon Geology, Vol. 3; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p.99-132

Stroink, L. and Friedrich, G., 1992. Gold-sulphide quartz veins in metamorphic rocks as a possible source for placer gold in the Livingstone Creek area, Yukon Territory, Canada. In: Yukon Geology, Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, vol. 3, p. 87-98.

Yukon Geological Survey, 2014. Update of the Yukon Bedrock Geology Digital Map, release date November 2014.

Yukon Minfile, 2014. Digital Database of mineral occurrences, Yukon Geological Survey.

Yukon Mining Recorder, 2014. Northern Mineral Record System (NMRS). Database of mining records.



Appendix A - Receipts



Kryotek Arctic Innovation Inc.

173-108 Elliott Street
Whitehorse YT Y1A6C4
8673361597

agrawehr@kryotekinc.com
<http://www.darksidedrilling.ca>
GST Registration No.: 817746712



INVOICE

INVOICE TO

Kryotek Inc.
Whitehorse YT

INVOICE # KR2016C

DATE 17-10-2016

DUE DATE 16-11-2016

TERMS Net 30

DETAILS

Assessment Work

LOCATION

Max Claims, Livingstone

PROJECT NAME

Placer Investigations

ACTIVITY	QTY	RATE	TAX	AMOUNT
Prospecting & Soil Sampling	1	1,000.00	GST	1,000.00
Aircraft	1	500.00	GST	500.00
Camp Fees	1	100.00	GST	100.00
Truck Fuel	1	50.00	GST	50.00
Sampling Equipment	1	200.00	GST	200.00
Reporting	1	200.00	GST	200.00

Payment is due November 16, 2016. 2% interest will be charged on accounts later than 30 days.

SUBTOTAL	2,050.00
GST @ 5%	102.50
TOTAL	2,152.50
BALANCE DUE	\$2,152.50

Invoice # 6

Date October 5, 2016

Whitehorse, Yukon

47129 Yukon Inc
2-1908 Centennial Street
Whitehorse, YT, Y1A 3Z5
Tel. 867-333-9928
E-mail: perm193xp@gmail.com

Sold to : Kryotek Arctic Innovation Inc.

Date Shipped October 5, 2016

Terms: Due to pay November 5, 2016

<u>Name of goods / services</u>	<u>Quantity of the Units/ Services</u>	<u>Price at unit</u>	<u>Amount</u>
1. Geophysical penetration radar survey including geological report	10 geophysical lines	200.00	2000.00
GST 5%			100.00
Total:			2100.00

Director 47129 Yukon Inc

Boris Logutov

13 Tigereye Crescent, Whitehorse, Yukon Y1A 6G6

Date: December 15, 2016
 Invoice #: 2016-013
 Customer ID: Kryotek Arctic Innovation Inc.

To: Kryotek Arctic Innovation Inc.
 173-108 Elliott Street
 Whitehorse, Yukon
 Canada Y1A 6C4
 T: (867) 336-1597

Payment Terms	Date
Amount due on receipt: Interest after 30 days	2% December 15, 2016

Description	Item type	Amount	Rate Per Item	Subtotal	GST	Totals
data compilation, production of assessment report for Max 1-18 claims	Days	3.0	\$500.00	\$ 1,500.00	\$ 75.00	\$ 1,575.00
Subtotal						\$ 1,575.00
Total due						\$ 1,575.00

Please pay in Canadian Funds to Geoplacer Exploration Ltd.
 13 Tigereye Crescent, Whitehorse, YK Y1A 6G6 (867) 334-1461 wlebarge@gmail.com
 GST #829278712RT0001
 Bank Wiring Information:
 Bank customer: Geoplacer Exploration Ltd.
 Account number 99010-310-99015003619
 Swift Code CUCXCATTAL
 First Nations Bank of Canada
 103-9016 Quartz Road
 Whitehorse, Yukon Y1A 2Z5
 bank email: fnbcservice@fnbc.ca
 bank phone: 1-888-456-3622