CANDACE CREEK PLACER PROPERTY

DAWSON MINING DISTRICT, YUKON TERRITORY

GEOLOGICAL & GEOPHYSICAL ASSESSMENT REPORT

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for

CANDACE CREEK MINING LTD.

PLACER CLAIM GRANTS VAN 1 – 42

P 508833 – P508842, P 515264 – P 515295

Location: 63°18’36”N to 63°21’11”N and 138° 53°36”W to 138°56’39” W
NTS: 115O/07

Date: March 07, 2014
Date of Geophysical Work: June 2013
Date of Geological Work, Drilling & Excavation: July & August 2013

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Executive Summary

This is a Geophysical and Geological 2013 Assessment Report for Candace Creek Mining Ltd. Candace Creek (officially an un-named left limit tributary of Maisy May Creek), is located 145 km from Dawson City via secondary gravel roads. The property consists of the Van 1 to Van 10 (P508833 to P508842), and Van 11-42 (P515264 to P515295) placer claims.

Government royalty records show that Maisy May Creek produced at least 25,926 crude ounces of gold between 1980 and 2010, the majority of which (19,202 crude ounces) was produced by Queenstake Resources in the period 1984 to 1989.

The majority of historic gold production by Queenstake on Maisy May Creek is coincident with the trace of a thrust fault mapped by MacKenzie and Craw (2012); this may be evidence of structural control to the bedrock (and spatially-related placer) gold mineralization. Since the thrust fault transects the lower Candace Creek property and the bedrock types are identical, there is a strong possibility of significant placer and bedrock gold values in Candace Creek.

This promising mining history and geology led to a decision by Candace Creek Mining Ltd. to conduct a program of access road rehabilitation, claim staking, resistivity geophysical surveys, sonic drilling, excavator test pitting and sample processing in 2013.

Overall, results were inconclusive. The resistivity surveys confirmed that bedrock is shallow (4 to 5 m), and the method proved to be reasonably accurate, although verification by drilling was essential. The track-mounted sonic drill was not very mobile on the uneven ground; as a result some targets identified in the previously-proposed program were not drilled due to access problems. In addition, the Caterpillar 345 excavator was not available onsite regularly enough to progressively dig through the permafrost as it thawed; as a result it was not able to dig the test pits effectively.

Placer gold was not found in any sonic drill samples. However, one excavator test pit sample contained medium-sized (~1 mm) “chunky” gold colours. No fine or very fine gold was observed, implying that the placer gold may be of a coarser nature which is difficult to statistically sample effectively by drilling.

Despite the ambiguous results, significant placer gold potential remains on the property which has not been thoroughly tested. The small sample size of the sonic drill and the difficulties encountered by the excavator with the permafrost resulted in an inadequate test on just a small fraction of the alluvial material.

To solve the permafrost issue and obtain a more comprehensive test, it is recommended that an area on the lower Van claims be stripped by bulldozer and allowed to progressively thaw, with regular stripping of the thawed material. A cross-valley trench should then be excavated with an excavator (Caterpillar 345 or larger) and the alluvial material sampled down to bedrock in order to intersect any narrow paystreaks. In addition, since it was targeted but not sampled during the 2013 program, an area should be stripped and excavated to bedrock on the lower reach of the left-limit tributary at approximately the Van 33 claim.

Introduction

This report documents the final results of a placer exploration program conducted in summer 2013 on placer claims owned by Candace Creek Mining Ltd. The program was funded in part under the Yukon Mining Incentives Program (YMIP), Grant number YMIP13-051. Candace Creek Mining Ltd. is a company registered for business in the Yukon Territory, Canada.

Location and Access

Maisy May Creek is a right limit tributary of the lower Stewart River, located in central Yukon approximately 100 km by air south of Dawson City, Yukon (Figure 1).

The Candace Creek Property is located on an un-named left limit tributary of Maisy May Creek, which is locally known and will heretofore be referred to in this document as Candace Creek. The placer claims of the Candace Creek Property are all adjoining.

The extent of the current property has geographic coordinates from 63°18'36"N to 63°21'11"N and 138° 53°36"W to 138°56'39" W, on NTS map sheet 115O/07, in the Dawson Mining District. Figures 2 and 3 illustrate the property boundaries relative to other creeks and claims in the South Dawson area.

Access to the property can be gained via secondary gravel roads, with the usual route along Hunker Creek to King Solomon Dome, down Sulfur Creek to Indian River, up Eureka Creek to Eureka Dome, down Black Hills Creek to the Henderson road turnoff towards Henderson Dome. At Henderson Dome a south-fork turn leads down Maisy May Creek road towards the property. The total road distance from Dawson City to the Candace Creek placer claims is approximately 145 kilometres. Two "bush" airstrips are located along Maisy May Creek; one is located on a bench within 1 km of the Candace Creek Property, and one is located in the valley of Maisy May Creek approximately 4 km upstream.

Figure 1 - General Location of Candace Creek Project, Yukon.

Placer Tenure

Prospecting Lease ID00933 was staked by Edward C. Long Jr. on July 7, 2011. It was staked to the Van 1-10 claims (P508833 to P508842) on July 7, 2012. The Van 1-10 claims are in good standing to July 9, 2014. Prospecting lease ID00934 was staked by La Tierra Resources Inc. on July 7, 2011 and transferred in 2012 to Candace Creek Mining Ltd. It was staked to the Van 32-42 claims (P515285-P515295) on July 3, 2013 and the claims are in good standing until July 4, 2014. Prospecting lease ID01050 was staked by Bud D.R. Davis on July 8, 2012; transferred to Candace Creek Mining Ltd. and staked to the Van 22-31 claims (P515275-P515284) on July 3, 2013. The Van 22-31 claims are in good standing until July 4, 2014. Prospecting lease ID01054 was staked by E. Charles Long on July 31, 2012; transferred to Candace Creek Mining Ltd. and staked to the Van11-21 claims (P515264-P515274) on July 3, 2013. The Van 11-21 claims are in good standing until July 4, 2014. Table 1 illustrates the current claim status of the Candace Creek property.

Plate 1 - View looking north (upstream) on Maisy May Creek at the confluence with Candace Creek, August 2009. Candace Creek in mid-foreground joins Maisy May Creek from the right side of photo.

Table 1 - Claim Status, Candace Creek Property

Grant Number	Claim Name	Claim Owner	Recording Date	Staking Date	Claim Expiry Date	Status	Lease	Total Excess Credit	NTS Map Number
P 508833	Van 1	Candace Creek Mining Ltd. - 100%	09/07/2012	07/07/2012	09/07/2014	Active	ID00933	1	115O07
P 508834	Van 2	Candace Creek Mining Ltd. - 100%	09/07/2012	07/07/2012	09/07/2014	Active	ID00933	0	115O07
P 508835	Van 3	Candace Creek Mining Ltd. - 100%	09/07/2012	07/07/2012	09/07/2014	Active	ID00933	0	115O07
P 508836	Van 4	Candace Creek Mining Ltd. - 100%	09/07/2012	07/07/2012	09/07/2014	Active	ID00933	0	115O07
P 508837	Van 5	Candace Creek Mining Ltd. - 100%	09/07/2012	07/07/2012	09/07/2014	Active	ID00933	0	115O07
P 508838	Van 6	Candace Creek Mining Ltd. - 100%	09/07/2012	07/07/2012	09/07/2014	Active	ID00933	0	115O07
P 508839	Van 7	Candace Creek Mining Ltd. - 100%	09/07/2012	07/07/2012	09/07/2014	Active	ID00933	0	115O07
P 508840	Van 8	Candace Creek Mining Ltd. - 100%	09/07/2012	07/07/2012	09/07/2014	Active	ID00933	0	115O07
P 508841	Van 9	Candace Creek Mining Ltd. - 100%	09/07/2012	07/07/2012	09/07/2014	Active	ID00933	0	115O07
P 508842	Van 10	Candace Creek Mining Ltd. - 100%	09/07/2012	07/07/2012	09/07/2014	Active	ID00933	0	115O07
P 515264	Van 11	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01054	0	115O07
P 515265	Van 12	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01054	0	115O07
P 515266	Van 13	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01054	0	115O07
P 515267	Van 14	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01054	0	115O07
P 515268	Van 15	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01054	0	115O07
P 515269	Van 16	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01054	0	115O07
P 515270	Van 17	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01054	0	115O07
P 515271	Van 18	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01054	0	115O07
P 515272	Van 19	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01054	0	115O07
P 515273	Van 20	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01054	0	115O07
P 515274	Van 21	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01054	0	115O07
P 515275	Van 22	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01050	0	115O07
P 515276	Van 23	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01050	0	115O07
P 515277	Van 24	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01050	0	115O07
P 515278	Van 25	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01050	0	115O07

Grant Number	Claim Name	Claim Owner	Recording Date	Staking Date	Claim Expiry Date	Status	Lease	Total Excess Credit	NTS Map Number
P 515279	Van 26	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01050	0	115O07
P 515280	Van 27	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01050	0	115O07
P 515281	Van 28	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01050	0	115O07
P 515282	Van 29	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01050	0	115O07
P 515283	Van 30	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01050	0	115O07
P 515284	Van 31	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID01050	0	115O07
P 515285	Van 32	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active		0	115O07
P 515286	Van 33	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID00934	0	115O07
P 515287	Van 34	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID00934	0	115O07
P 515288	Van 35	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID00934	0	115O07
P 515289	Van 36	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID00934	0	115O07
P 515290	Van 37	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID00934	0	115O07
P 515291	Van 38	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID00934	0	115O07
P 515292	Van 39	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID00934	0	115O07
P 515293	Van 40	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID00934	0	115O07
P 515294	Van 41	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID00934	0	115O07
P 515295	Van 42	Candace Creek Mining Ltd. - 100%	04/07/2013	03/07/2013	04/07/2014	Active	ID00934	0	115O07

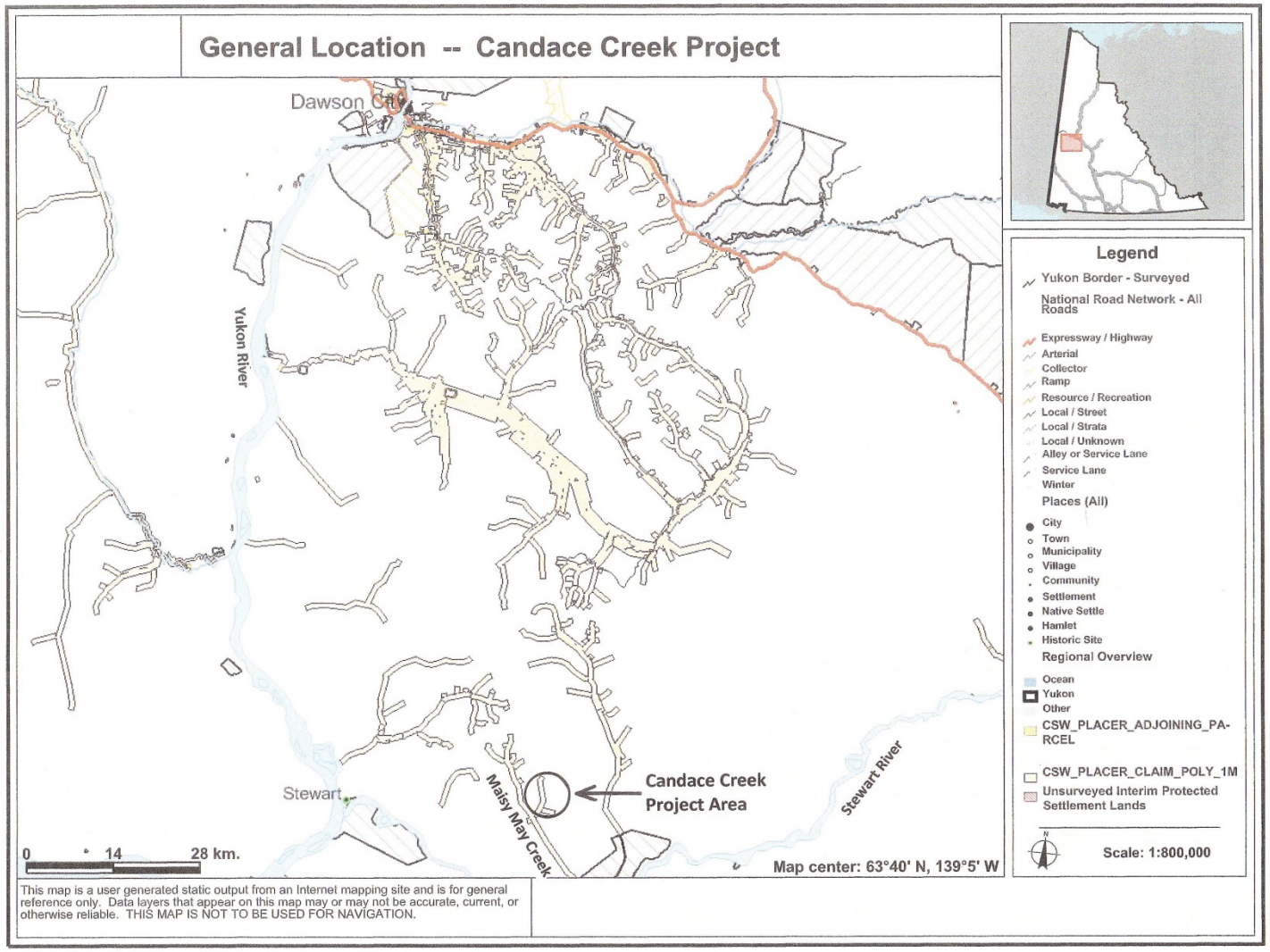

Figure 2– Location of Candace Creek Placer Project and South Dawson region placer tenures.

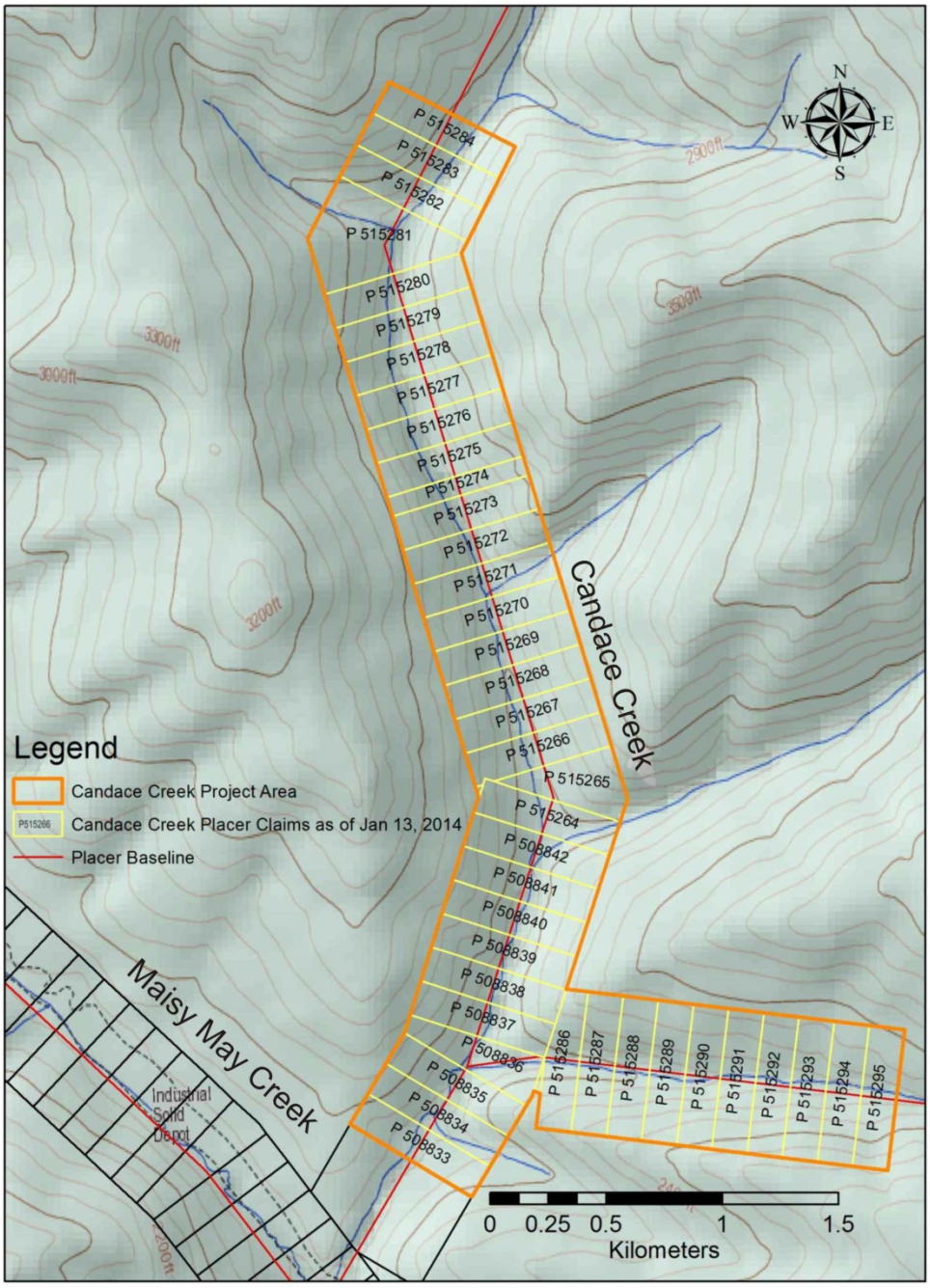

Figure 3 - Candace Creek Project Area Claims.

Permitting

A Type B Water Use Licence (PM12-070) for Placer Mining and a Class 4 Mining Land Use Permit (AP12070) are in place for the Candace Creek placer project. The Water License and Mining Land Use Permits are valid until June 4, 2023 and are included in Appendix D.

Quartz Tenure

The area of the Candace Creek placer project is coincident with the southern extent of the JP Ross property owned by Kinross Gold Corporation. The quartz claims which overlap include Maisy 125, 127; 153-158; 179, 181-184; 207-212; 235-240; and Maisy 257- 268. A Quartz Mining Land Use permit (LQ00293) is in good standing until June 17, 2015. There is no perceived conflict between the placer exploration and mining activities of Candace Creek Mining Ltd. and the past or future quartz exploration activities of Kinross Gold Corporation.

History of Exploration and Mining – Maisy May Creek

Anecdotal evidence suggests some exploration and hand-mining was conducted on Maisy May Creek in the 1920's (Queenstake Resources, 1987), but the first documented mining activity on Maisy May Creek was by Maisy May Mines Ltd. They operated from 1980 to 1983 at a location about 11.7 km upstream of the confluence with the Stewart River (Figure 4).

According to Government royalty records, Maisy May Creek produced at least 25,926 crude ounces of gold between 1980 and 2010 (LeBarge, 2007; LeBarge and Nordling, 2011). The majority of that gold (19,202 crude ounces) was produced by Queenstake Resources in the period 1984 to 1989 (LeBarge, 2007). The area that Queenstake Resources mined is outlined in Figure 4.

Based on the work done during the 1984 season, Queenstake estimated that with selective mining, there were (pre NI43-101, non "compliant") "reserves" of 200,000 cubic yards (152, 911 cubic metres) of gravel with a recoverable grade of 0.012 ounces of fine gold per cubic yard (0.488 grams per cubic metre) at the property (LeBarge, 2007).

From 1990-1993, Jasper Equipment continued mining upstream from where Queenstake had finished mining in 1989 (Figure 4), recovering approximately 2,650 ounces (LeBarge, 2007).

From 1993 to 1998, John VanEvery and Richard Fitch intermittently mined under VanEvery Inc. upstream near the headwaters of Maisy May Creek (Figure 4; LeBarge, 2007). Art Christiansen operated a small mine in the same area from 2007 to 2009 (LeBarge and Nordling, 2011).

35249 Yukon Inc. mined Maisy May Creek approximately 3.5 miles (5 km) upstream from its confluence with the Stewart River from 2001 until 2003 (Figure 4). Maisy Mae Mining Inc. bought the operation in 2006 and processed a mine cut in 2007 and 2008 located about 4 miles (7 km) upstream of the confluence (Figure 4; LeBarge and Nordling, 2011).

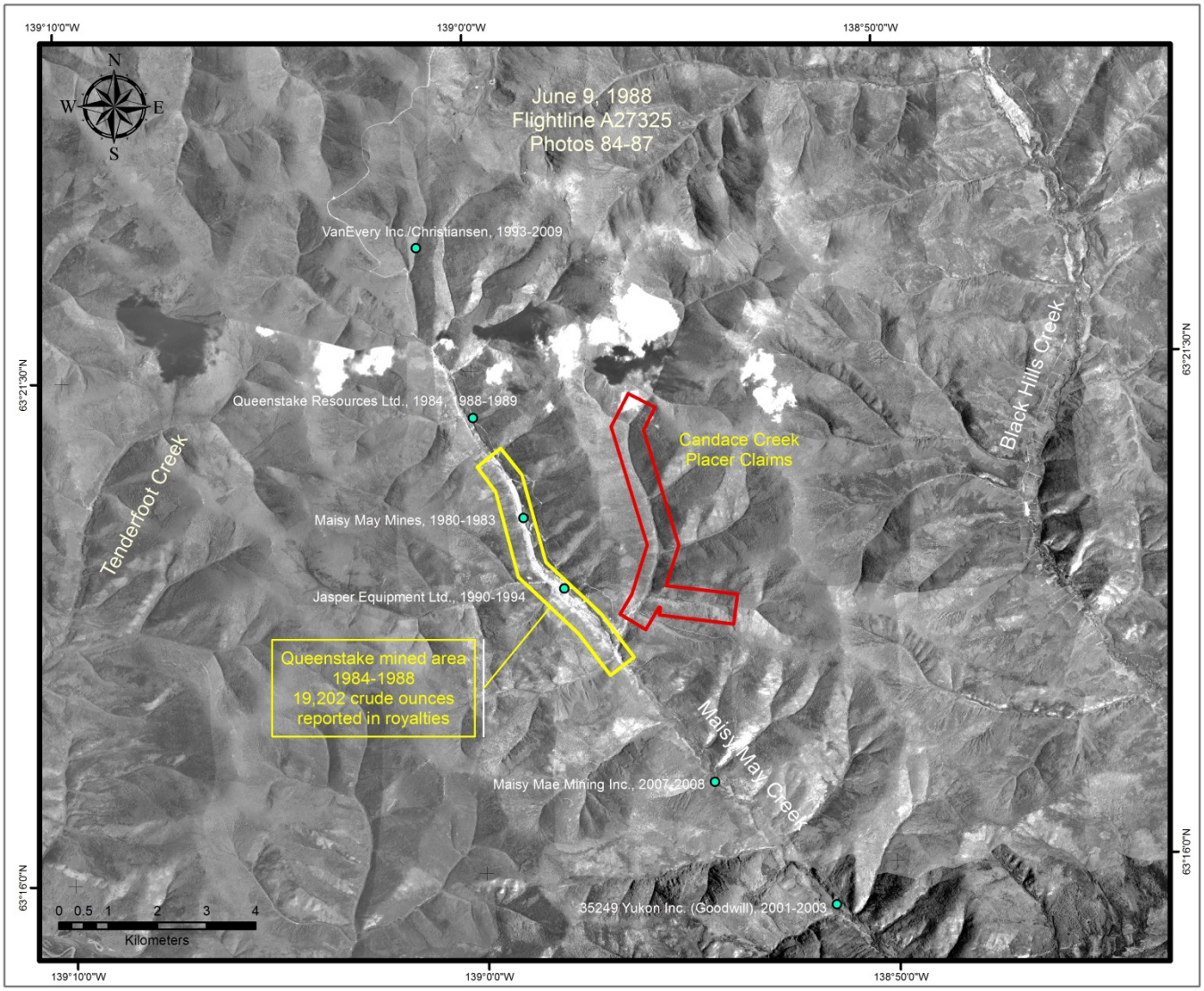

Figure 4 - Maisy May Creek and Tributaries - Location of claims and historical mining operations.

Previous Exploration History – Candace Creek

A detailed examination of Airphoto number 86 from Flight Line A27325 (Figure 4) appears to show a test pit approximately 120 feet upstream from Post #1 on Placer Claim Van 1. This pit has approximate dimensions of 90 feet by 40 feet. This pit was undoubtedly excavated by Queenstake Resources Ltd. during their activity in the area from 1984 to 1988, as a Prospecting Lease was held by them at this location during that time (Queenstake Resources, 1987). No results are known from this pit, and Queenstake left the Yukon in 1989 for reasons unrelated to their mining and exploration activities in the Yukon.

In 2012, Candace Creek Mining Ltd. commissioned Arctic Geophysics Inc. to conduct three lines of Resistivity & induced polarization on the property. These included: a) 237 metre line on Placer Claim Van 2; b) 94.5 metre line on Prospecting Lease ID 00934; and c) 146 metre line on Prospecting Lease ID 01054. These surveys interpreted bedrock to be relatively shallow, although follow-up physical testing is needed to determine their accuracy. For reference, these surveys are included as Appendix C.

Regional Bedrock Geology

The project area is situated within the Yukon-Tanana terrane, an accreted pericratonic sequence that covers a large part of the northern Cordillera from northern British Columbia to east-central Alaska (Gordey and Ryan, 2005; Colpron and Nelson, 2006). The Yukon Tanana Terrane consists of Paleozoic schist and gneiss that were deformed and metamorphosed in the late Paleozoic, and intruded by several suites of Mesozoic intrusions that range in age from Jurassic to Eocene (Colpron and Nelson, 2006). The Paleozoic rocks are pervasively foliated with at least two overprinting fabrics (Mackenzie and Craw, 2010; MacKenzie et al, 2008). During Late Permian to Early Jurassic time these rocks were tectonically-stacked along thrust faults which were parallel to regional foliation. Later tensional-extensional tectonics occurred during the mid-Cretaceous, and this resulted in brittle fracture of the Paleozoic rocks, which is likely responsible for structurally-controlled gold mineralization in the south Klondike area including the White Gold exploration camp (Mackenzie et al, 2008; Mackenzie and Craw, 2010; Mackenzie and Craw, 2012).

Regional Geophysics and Major Structures

Regional total field aeromagnetic geophysics is shown in Figure 5, and regional first vertical derivative aeromagnetic geophysics is shown in Figure 6. The maps show several northwest-trending anomalies which may coincide with major structures and lineaments. One at the lower reaches of Candace Creek appears to follow the thrust fault mapped by MacKenzie and Craw (2012) – for reference this fault trace is overlain on the maps. These structures and their associated cross-faults are thought to be related to structurally-controlled gold mineralization in brittle units of the Yukon Tanana Terrane including orthogneiss, amphibolite and quartzite (MacKenzie and Craw, 2010) and have been linked to the gold occurrences in the Coffee Creek area to the south (Wainwright et al., 2011).

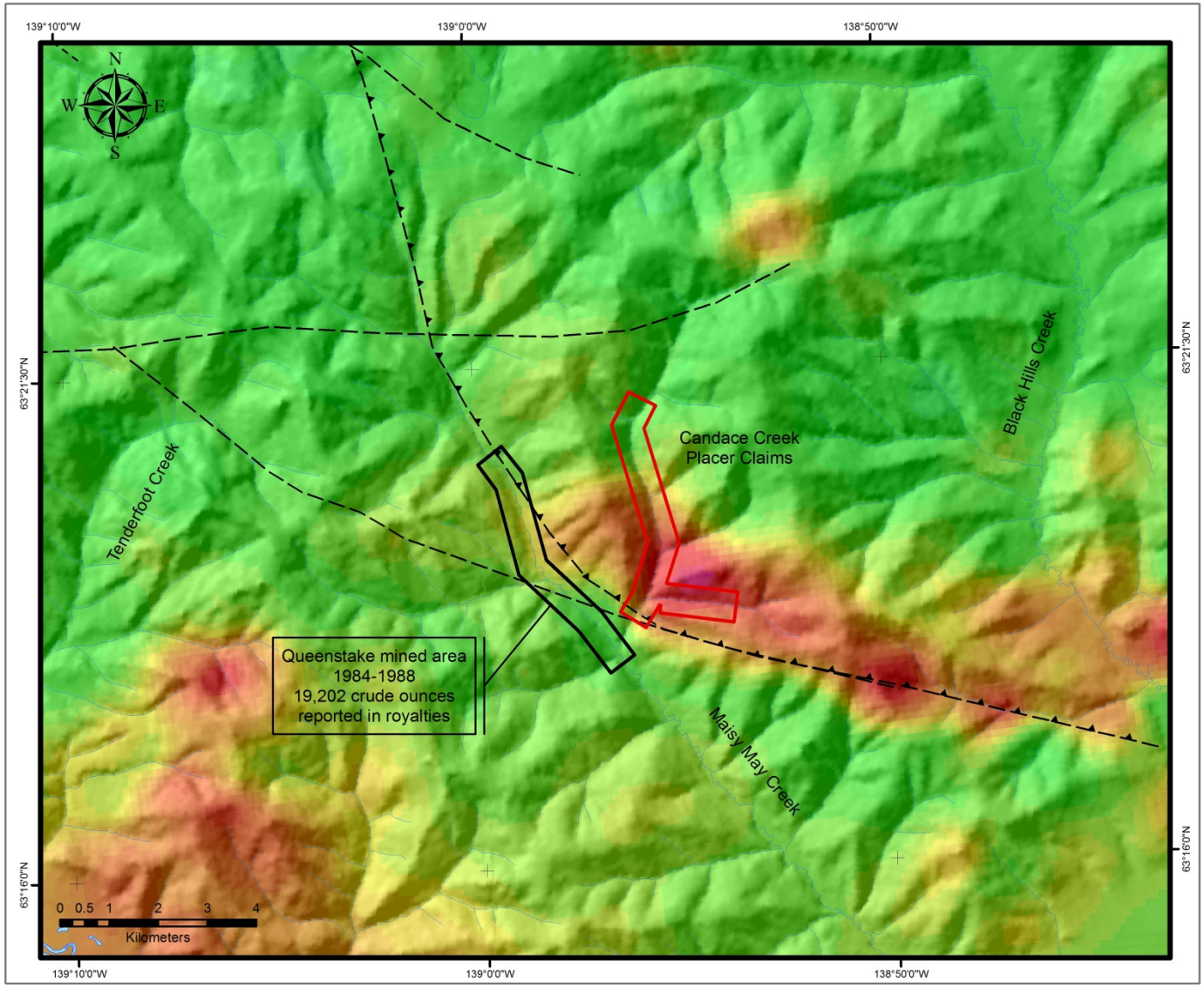

Figure 5 - Regional Total Field Aeromagnetics, Maisy May Creek area. Fault traces overlain from MacKenzie and Craw, (2012).

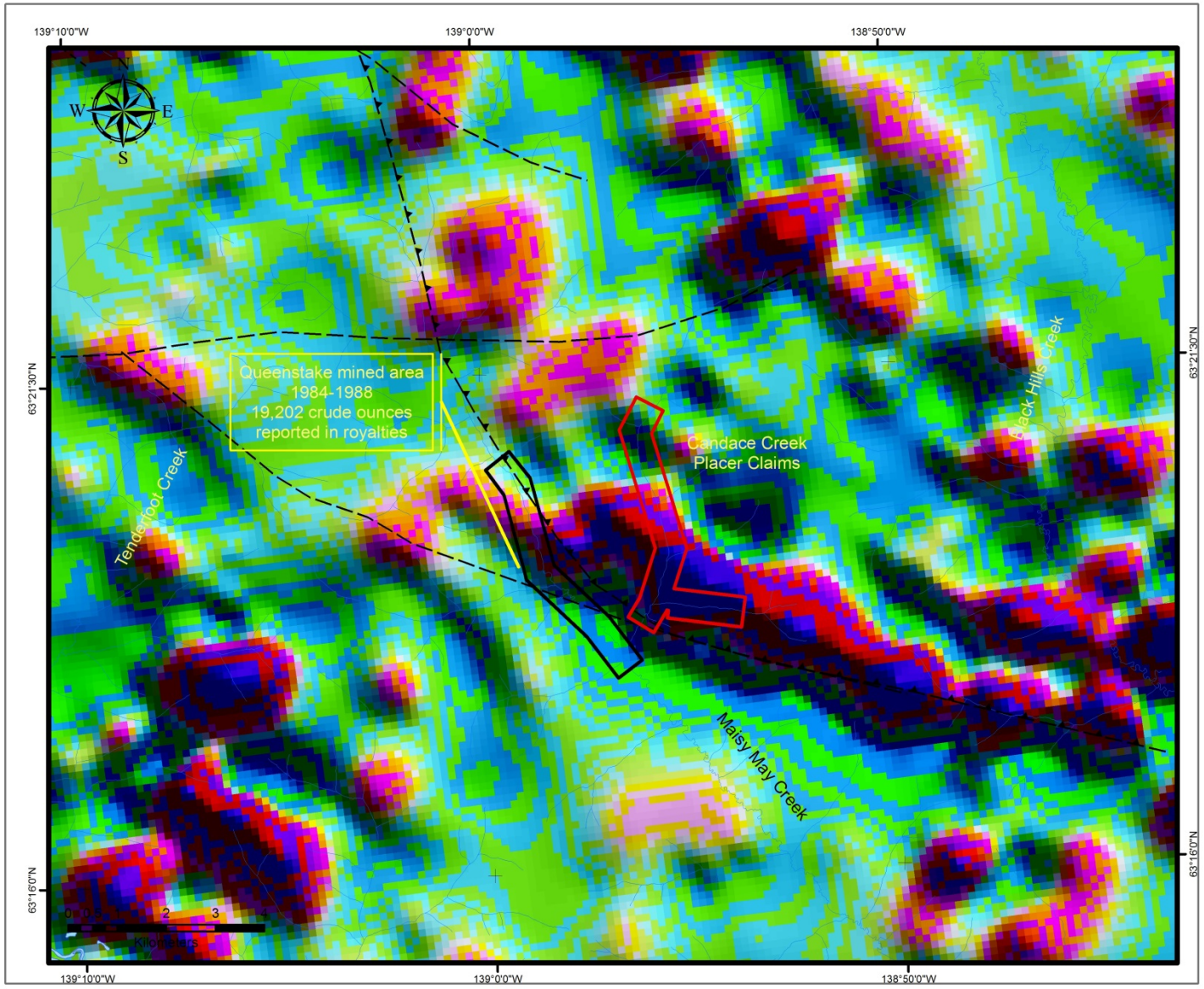

Figure 6 – Regional First Vertical Derivative Aeromagnetics, Maisy May Creek area. Fault traces overlain from MacKenzie and Craw, (2012).

Regional Surficial Geology

Most of the south Klondike region has not been glaciated (Duk-Rodkin, 1999) and in fact strong evidence exists that all of Maisy May creek and most of Black Hills Creek escaped glaciation altogether (Jackson et al., 2001). As such, the south Klondike region is dominated by colluvium on the upper slopes and ridges, variably-buried Tertiary to Late Pleistocene alluvial terraces in mid-slope reaches and Late Pleistocene to modern alluvial fans, stream complexes and gulch deposits in the lowermost points of valleys (Jackson, 2005a; Jackson, 2005b). Major trunk valleys such as the Stewart River were the locale for meltwater channels during the Pleistocene glaciations and contain glaciofluvial terraces well beyond the maximum extent of the Cordilleran ice, however these did not affect most major tributaries (such as Black Hills, Maisy May and Henderson creeks) except at their confluence.

Property Bedrock Geology

Maisy May Creek area bedrock is mapped as several metamorphic, plutonic and volcanic bedrock types (Figure 7). These include Devonian-Mississippian quartz-mica schist (map unit DMps), orthogneiss (map units DMt, DMag, DPg), marble (map unit DMc), amphibolite (map unit DMa), Paleozoic ultramafic-gabbro (map unit mPum) and Upper Cretaceous Carmacks volcanics (map unit uKCv). Gordey and Ryan (2005) show that the Candace Creek project area includes quartz-mica schist (DMps) as well as amphibolite (DMa), bedrock units that are contiguous with the upper reaches of the mined portions of Maisy May Creek. More recent mapping by MacKenzie and Craw (2012) shows numerous faults transecting the region between Maisy May and Black Hills creeks; this includes an east-dipping thrust fault which trends north along the mid-to upper reaches of Maisy May Creek before turning east to cross the lower reaches of Candace Creek.

Plate 2 - View looking north on Maisy May Creek at the confluence with Candace Creek, July 2008. Candace Creek is the drainage on the right side of the photo.

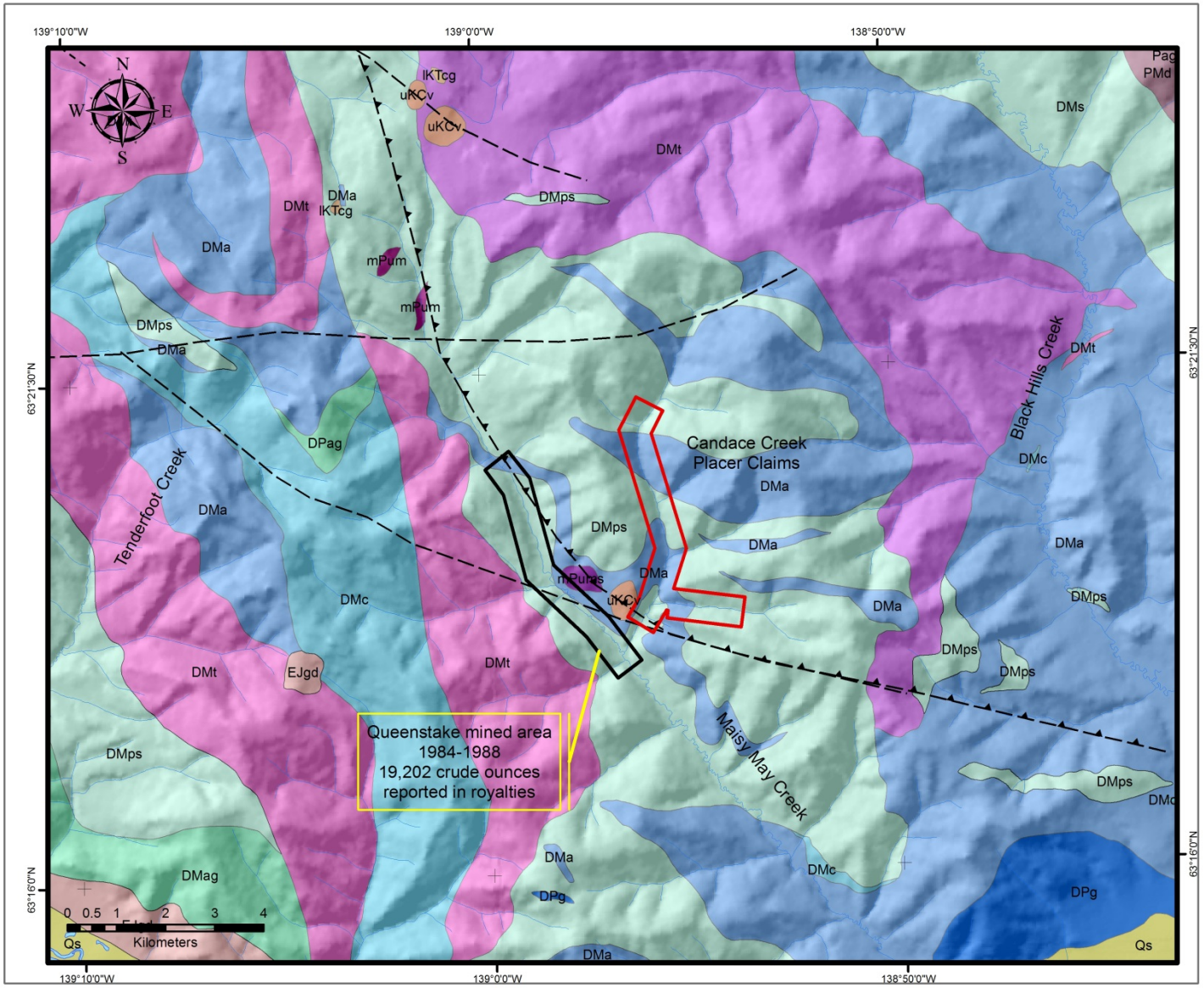

Figure 7 - Bedrock Geology, Maisy May and Candace Creeks, after Gordey and Ryan (2005) and MacKenzie and Craw (2012).

Property Surficial Geology

Along Candace Creek lie surficial units of several ages and types, including CEaP/AtT (Pleistocene Colluvial-Aeolian sediments overlying Tertiary Alluvial Terrace sediments) at the confluence with Maisy May Creek; CEaP (Pleistocene Colluvial-Aeolian sediments) along the eastern slope (left limit); and ACxP (Pleistocene Alluvial Complex sediments) along the centre of the valley and within the major tributaries on both limits. Higher parts of the slope above the creek consist of Cb-v (Colluvial blanket-veneer) and in one location, Cl (Colluvial landslide). A prominent left-limit tributary, the location of the Van 32-42 claims, is mapped as having some placer tailings present (unit m), although an examination of the airphotos of the creek is not convincing for that interpretation. No history of this mining activity exists in the available data. Exposed bedrock (unit R) is mapped on the high points along the ridges. These surficial units are shown on Figure 8.

Rationale for Exploration Program

The three Resistivity geophysical surveys carried out in 2012 (Figure 8, Appendix C) helped to define cross-valley bedrock profiles, potential gravel thicknesses and depths to bedrock. All three survey lines indicated bedrock paleochannel depressions that warrant future auger drillhole drilling and/or trenching to quantify gold content in the alluvial gravels.

A thrust fault mapped by MacKenzie and Craw (2012) trends NNE/SSE along Maisy May Creek before veering east and transecting the lower Van claims to run parallel to the tributary stream through the Van 32-42 claims. The majority of historic mining and production by Queenstake on Maisy May Creek is coincident with the location of this thrust fault (19,202 crude ounces – LeBarge, 2007) which points towards a component of structural control to the gold mineralization. In addition, the mapped bedrock types along Candace Creek are the same as those mapped on the upper mined portions of Maisy May Creek (Figure 7).

Since the continuation of this mapped thrust fault transects the lower Candace Creek property and the bedrock types are the same as those in the upper, mined portions of Maisy May Creek, there is a strong possibility of significant placer and bedrock gold values in Candace Creek, especially in the lower reaches.

There are numerous other structural features crossing through Candace and Maisy May Creek as well as nearby Henderson and Black Hills creeks – these may evidence of structurally-controlled gold mineralization in the bedrock which forms locally-derived placer deposits in this unglaciated area. Many of these structural features appear to be coincident with linear magnetic anomalies, and this may be a useful prospecting tool in searching for both bedrock and placer gold deposits in the southern Klondike region (Wainwright et al., 2011; Figures 5-7)

Therefore, a program which defines and confirms bedrock depths, subsurface valley profiles, gravel thicknesses and characteristics, bedrock characteristics and placer gold content was recommended. This included access construction, further resistivity geophysics, sonic drilling, excavator test-pitting, geological descriptions and sampling of gravel for placer gold content. The program results are discussed in detail in the sections following.

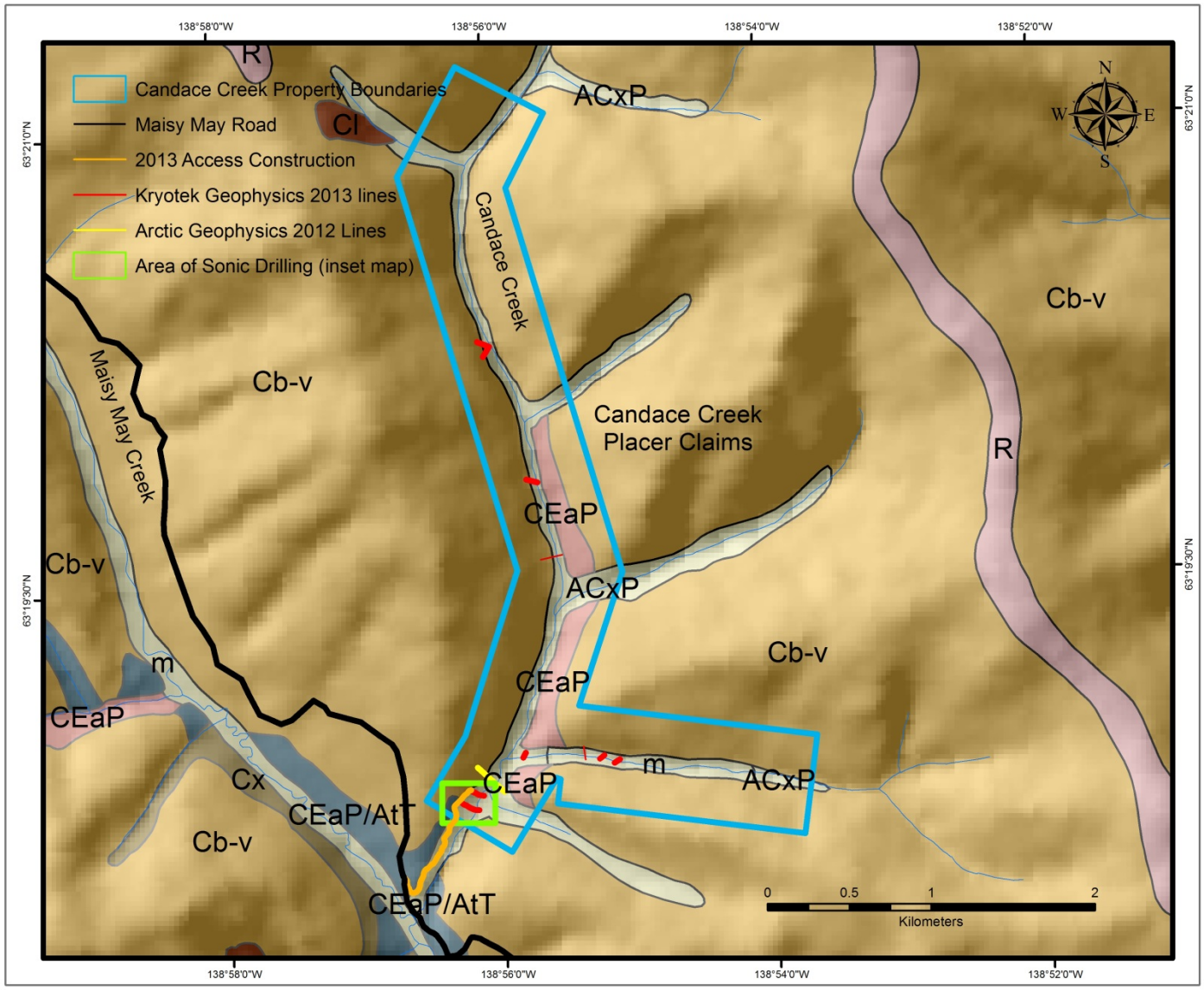

Figure 8 - Location of Resistivity Surveys and Sonic Drill holes, Candace Creek. Surficial Geology after Jackson (2005a, 2005b).

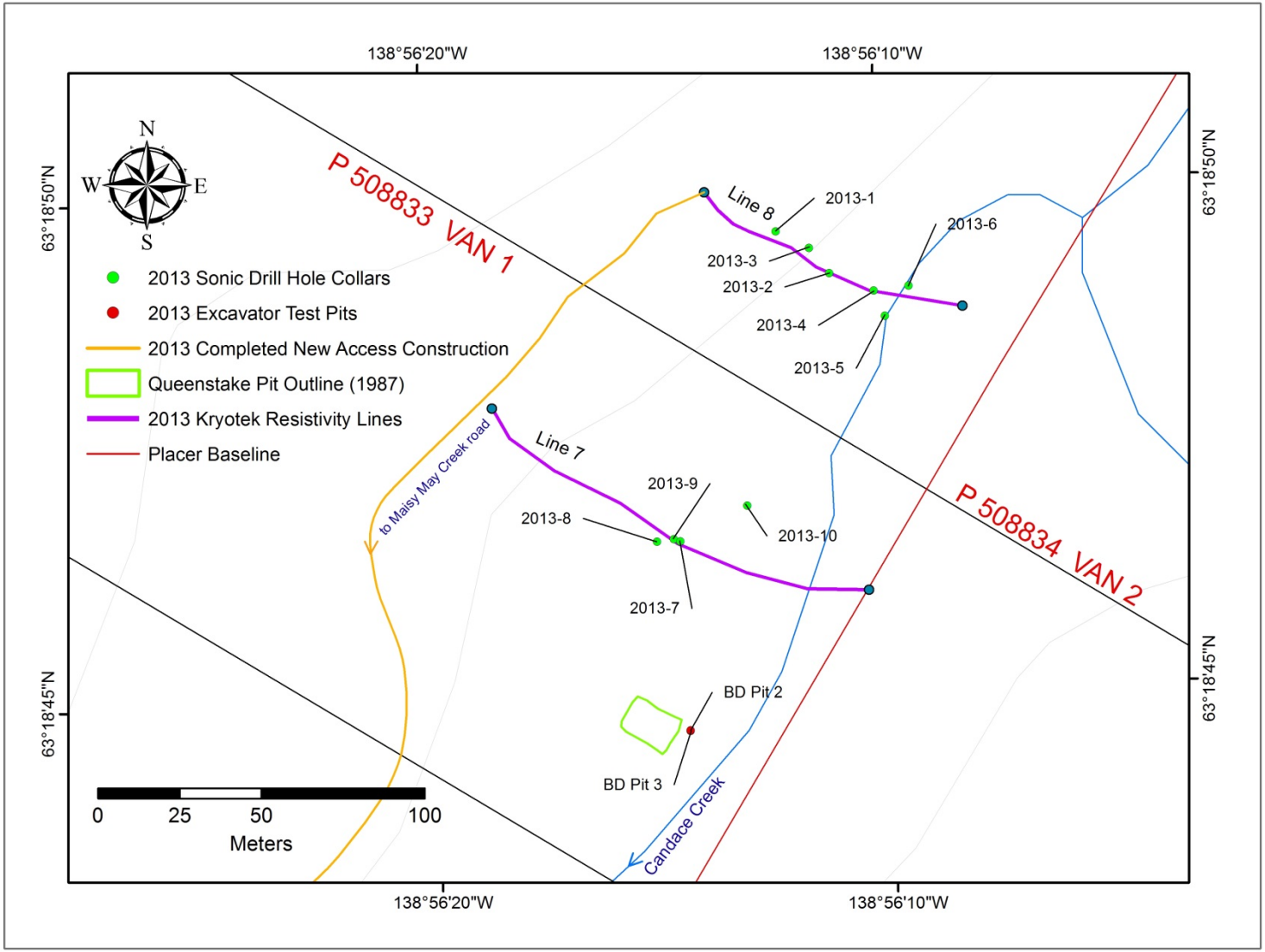

Figure 9- Inset map showing Sonic Drill Collars, Resistivity Lines, excavator pits and new access construction, Candace Creek.

2013 Exploration Program

The 2013 exploration program included staking the leases to claims, access construction, 2D resistivity geophysics, sonic drilling, excavator test-pitting, geological descriptions and gravel sampling for gold and heavy mineral content.

Personnel

Personnel on site included Bud Davis (La Tierra Resources), William LeBarge (Geoplacer Exploration Ltd.), Edward Long (All-In Exploration Services Ltd.), James Coates and Astrid Grawehr (Kryotek Inc.) and Michael Friesen (Bedrock Mining Ltd.)

Claim Staking

Prospecting leases ID00050, ID00054 and ID00934 were staked into claims on July 3, 2013 by All-In Exploration Services, after the initial 7 lines of resistivity surveys were conducted by Kryotek Inc. and filed for assessment credit.

Access Construction

A Case 36B excavator (rented from Mario Ley Contracting) was used to rehabilitate an old trail leading from the Maisy May road up the right limit of Candace Creek. The trail had been constructed around 1987 by Queenstake or other parties and was grown-in with willows and small trees. After rehabilitation, the road was sufficient for mobilizing the Sonic Drill, 4X4 pickups and the Caterpillar 345 excavator to the Van 1 and Van 2 claims.

Resistivity Surveys

Methodology and Background

The geophysical contractor was Kryotek Inc. of Whitehorse. The start and end points of each survey line were measured in the field using a Garmin 60CSx GPS. A total of 551 metres of surveys were completed. Initially, seven survey lines were conducted on the property; on the Van1 claim and on Prospecting Leases ID00934, ID01050 and ID01054. A geophysical report was generated for assessment credit (contained herein as Appendix A) and the prospecting leases were subsequently staked to claims. During the sonic drill program, additional resistivity lines were measured along the proposed drill lines and these were used to estimate the depths to which the drill could expect to encounter bedrock.

Summary of Geophysical Results

The start and endpoints of the lines are compiled in Table 2 below, and the geophysical lines are plotted on Figures 8 and 9. As they were the locale for the sonic drilling, the profiles for Line 7 and Line 8 are shown below; other lines are included in Appendix A and are therefore not shown here.

The geophysical response was reasonably good, with the exception of Lines CC1 and CC2 which were uninterpretable due to interference from surface ice. For the remainder of the resistivity surveys, bedrock was interpreted to be between 3 and 5 metres below the surface, with the exception of Line CC7, in which bedrock was originally interpreted to be 10 metres in depth. Drill results later proved that to be inaccurate, as sonic drill holes 2013-7 and 2013-9 encountered bedrock immediately beneath muck at 4.5 metres, with no gravel present (Figure10). This interpretation is reinforced by nearby Line CC8, where bedrock is noted at 4.5 metres. This is reinforced by the results from sonic drill holes 2013-2 and 2013-4 (Figure 11).

Table 2 - Start and End Points of Resistivity Lines, Candace Creek

Line points	Latitude	Longitude	Elevation (m)
Cc1START	63° 18' 56.00" N	138° 55' 50.59" W	552.16
Cc1END	63° 18' 56.97" N	138° 55' 49.47" W	550.48
Cc2START	63° 18' 55.31" N	138° 55' 16.99" W	589.41
Cc2END	63° 18' 56.01" N	138° 55' 15.00" W	587.97
Cc3START	63° 18' 54.44" N	138° 55' 10.58" W	592.77
Cc3END	63° 18' 55.11" N	138° 55' 8.13" W	591.33
Cc4START	63° 20' 17.31" N	138° 55' 59.75" W	643.72
Cc4END	63° 20' 18.34" N	138° 56' 5.01" W	648.05
Cc5START	63° 20' 17.25" N	138° 55' 59.91" W	641.56
Cc5END	63° 20' 15.32" N	138° 56' 2.75" W	647.09
Cc6START	63° 19' 50.87" N	138° 55' 45.40" W	609.84
Cc6END	63° 19' 50.23" N	138° 55' 40.58" W	610.56
Cc7START	63° 18' 47.89" N	138° 56' 18.75" W	542.07
Cc7END	63° 18' 45.98" N	138° 56' 10.59" W	534.13
Cc8START	63° 18' 49.96" N	138° 56' 13.93" W	536.06
Cc8END	63° 18' 48.75" N	138° 56' 8.34" W	534.61

Plate 3- Resistivity results were plotted in real time in the field to aid in drillhole targeting.

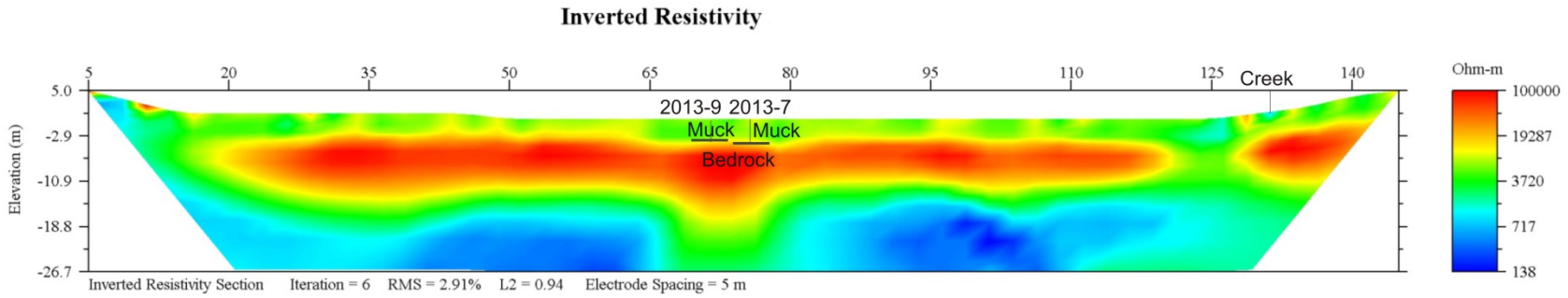

Figure 10 - Resistivity Line 7 with Sonic Drill holes overlain. Lithologies are from placer drill log. Line is plotted on Figure 9.

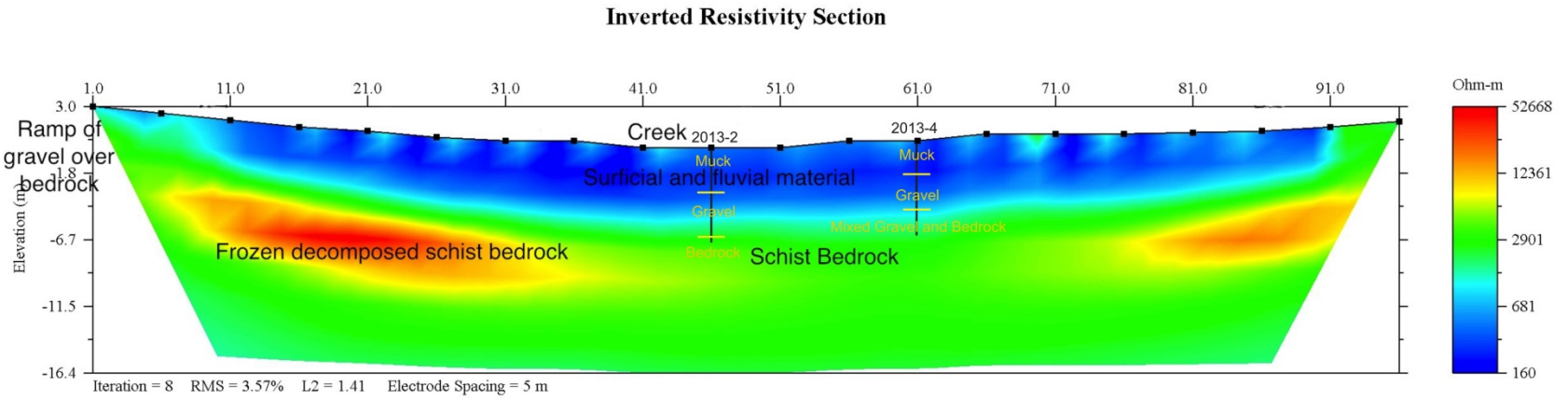

Figure 11 - Resistivity Line 8 with Sonic Drill holes overlain. Lithologies are from placer drill log. Line is plotted on Figure 9.

Sonic Drilling

Methodology

The contractor, Kryotek Inc. /Dark Side Drilling, used a track-mounted Sonic Drill Corporation SDC 150 sonic drill with a power plant upgraded to 85 hp from the standard 35hp. The borehole size used was 85mm. Samples were recovered in 1.5 metre increments, which correspond with the length of the drill rods. Samples were recovered into a plastic sleeve and put into wooden PQ- sized core boxes for photographing and logging. Drillhole locations were positioned with a Garmin 60CSx GPS. The location of the drillhole collars are shown in Figure 9 and in Table 3.

Drill results

Ten sonic drill holes were completed totalling 46 metres (150 feet). Placer drill logs are included in Appendix B. The sonic drill reached a maximum depth of 5 metres but most of the holes averaged 4.5 metres in depth. Bedrock was apparently reached in nine out of ten of the drill holes, mainly in the range of 4 to 4.5 metres. For the most part, bedrock appeared to coincide with the interpreted depth from the resistivity surveys. The exception was Line CC7, which was interpreted to have bedrock at 10 metres in depth while actual drill results showed bedrock at 4.5 metres. Recovery was variable from 46% to 100%, and the drill was usually unable to penetrate more than several centimetres into frozen bedrock when encountered. The track-mounted drill was not very mobile on the swampy ground and the compressor was separately mounted on the 4X4 truck, so it was not accessible during the drilling program.

Plate 4 - Sonic drill core was recovered into plastic sleeves and put into core boxes for logging.

Excavator test-pitting

In addition to the Case 36B excavator which was used for access construction, a Caterpillar 345LC excavator was hired from local Maisy May miner Bedrock Mining Ltd. (Paul Friesen) to dig test pits. The first test pit (BD Pit 1) encountered very hard permafrost and was abandoned. The second test pit (BD Pit 2) was started on the edge of the old Queenstake pit. This area was partially thawed due to the previous activity and the fact the pit had become in-filled with water over time. The excavator was able to reach about 1.6 metres into the ground and some gravel was obtained for a sample. Immediately adjacent to this, test pit BD Pit 3 was excavated. This pit reached apparent bedrock at an approximate depth of 5 metres, although since it was under water the stratigraphic details were not visible. Bedrock consisted of a clay-altered mafic schist with abundant fresh pyrite. The gravel was a subangular mixture of mafic schist, quartzite, muscovite schist and vein quartz. Several excavator buckets were stock-piled adjacent to the pit for later sampling.

Plate 5 - Excavator test pit BD Pit 3 reached clay-altered bedrock at a depth of 5 metres adjacent to the Queenstake pit. Material was stockpiled for sampling.

Sample Processing

Methods

Both drill and excavator test pit samples were washed into a Keene A52 sluicebox with a wet hopper, fed by a 1 ½ inch Honda pump. The sluicebox was lined with angle iron and expanded metal riffles and ribbed rubber matting. A gold pan was used at the outflow of the sluicebox to recover any gold which was not caught in the sluice. Samples were hand-panned on-site and examined for heavy minerals and gold. The heavy minerals were archived into medium size freezer bags.

Gold and Heavy Mineral Results

Table 3 documents the gold and heavy mineral results from the drill sampling and excavator test pits. Overall, results were disappointing, with no visible gold encountered in any of the drill holes. Only one excavator test pit returned gold, BD Pit 3 which did reach bedrock adjacent to the old Queenstake Mining pit. Two medium colours and one small colour of "chunky" gold were recovered from approximately 50 litres of material scoured from the clay-altered, pyrite-rich bedrock. The heavy minerals appeared to be bi-modal in size range; fine pyrite and magnetite accompanied by significantly coarser garnet, ilmenite, rutile and cassiterite (wood tin).

Plate 6 - Drill samples were processed in the field using a Keene A52 sluicebox.

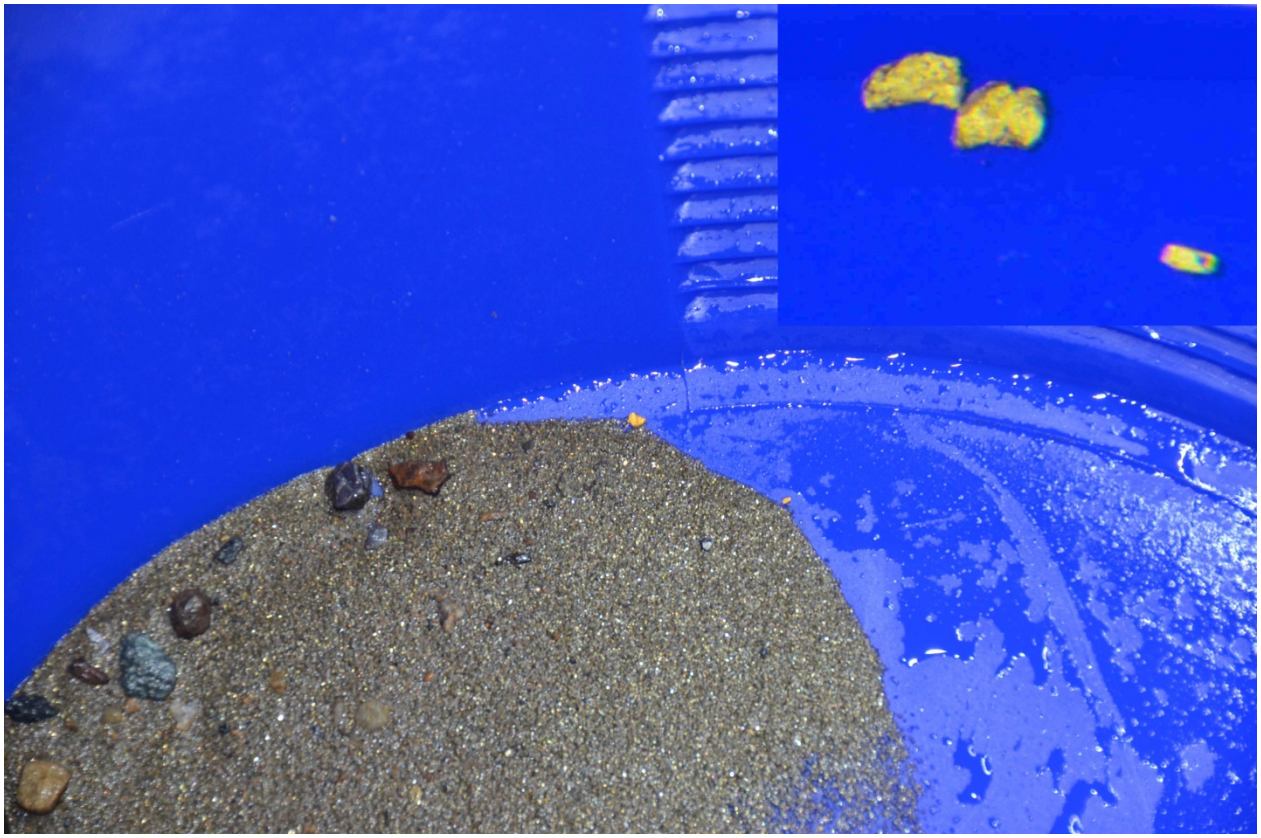

Plate 7 - Concentrates from BD Pit 3 consisted of fine pyrite and coarse garnet and ilmenite. Inset photo - gold colours were "chunky" and not flat. The larger grains are approximately 1.2 mm across.

Table 3 - Sample processing results, drill holes and test pits

Sample number	Drillhole or Pit number	Gold	Heavy minerals	Latitude	Longitude	Elevation metres	Comments
CCM P2-1 20 cm	BD Pit 2	none visible	Fine pyrite, magnetite	63° 18' 45" N	138° 56' 15" W	524	15 litres from pit near Queenstake workings
CCM P2-2 40 cm	BD Pit 2	none visible	Fine pyrite, coarse garnet, wood tin	63° 18' 45" N	138° 56' 15" W	524	15 litres from pit near Queenstake workings
CCM P2-3 1m	BD Pit 2	none visible	Fine pyrite, coarse garnet, rutile	63° 18' 45" N	138° 56' 15" W	524	15 litres from pit near Queenstake workings
CCM P3-1	BD Pit 3	none visible	Fine pyrite, coarse garnet	63° 18' 45" N	138° 56' 15" W	523	15 litres from pit near Queenstake workings
CCM P3-2	BD Pit 3	none visible	Fine pyrite, minor magnetite	63° 18' 45" N	138° 56' 15" W	523	15 litres from pit near Queenstake workings
WL Pit 1	BD Pit 3	Chunky gold: 2 medium, 1 small colour	Fine pyrite, coarse magnetite, garnet, scheelite	63° 18' 45" N	138° 56' 15" W	523	50 litres (3 pails) ~12 mg gold; pit near Queenstake workings
Hole 1: 3-4.5m	2013-1	none visible	Fine pyrite, magnetite, garnet	63° 18' 50" N	138° 56' 12" W	540	
Hole 2: 0-1.8m	2013-2	none visible	Fine pyrite, magnetite, garnet	63° 18' 49" N	138° 56' 11" W	539	
Hole 2: 1.8-3.2m	2013-2	none visible	Fine pyrite, magnetite, garnet	63° 18' 49" N	138° 56' 11" W	539	
Hole 3: 3-4.5m	2013-3	none visible	Fine pyrite, magnetite, garnet	63° 18' 49" N	138° 56' 12" W	542	
Hole 4: 1.5-4.5m	2013-4	none visible	Fine pyrite, magnetite, garnet	63° 18' 49" N	138° 56' 10" W	540	
Hole 5: 3-4.5m	2013-5	none visible	Fine pyrite, magnetite, garnet	63° 18' 49" N	138° 56' 10" W	538	
Hole 6: 3-4.5m	2013-6	none visible	Fine pyrite, magnetite, coarse garnet	63° 18' 49" N	138° 56' 10" W	539	
Hole 7: 3-4.5m	2013-7	none visible	Fine pyrite, magnetite, coarse garnet	63° 18' 47" N	138° 56' 15" W	536	
Hole 8: 3-4.5m	2013-8	none visible	Fine pyrite, magnetite, coarse garnet	63° 18' 47" N	138° 56' 15" W	541	
Hole 9: 3-4.0m	2013-9	none visible	Fine pyrite, magnetite, coarse garnet	63° 18' 47" N	138° 56' 15" W	540	
Hole 10: 1.5-4.5m	2013-10	none visible	Fine pyrite, magnetite, garnet, ilmenite	63° 18' 47" N	138° 56' 13" W	541	

Conclusions and Recommendations

The resistivity surveys proved to be reasonably accurate with one notable exception (Line CC7), where a 10 metre depth to bedrock interpretation was proven later to be 4.5 metres by the drilling. This reinforces the necessity for drilling to calibrate the geophysical interpretation of contacts.

The sonic drill proved to be somewhat problematic overall - the track-mounted system was not very well-suited to the swampy ground. The compressor unit, which would have aided in deeper penetration, was mounted on the 4X4 pickup some distance away and not within reach for any of the holes. As a result, some targets identified in the proposed program were not drilled.

Permafrost was a problem even for the Caterpillar 345 excavator, which did not have the capacity to rip the hard frozen ground. Test pits thawed very slowly and filled with water which prevented further thaw if they were not regularly drained.

The fine pyrite found in the concentrates is likely derived from the local mineralized fault zone in bedrock as it was observed in clay-altered pieces from the bedrock contact. The coarser heavy minerals which accompany the fine pyrite are likely genetically different, probably a placer lag deposit resulting from numerous episodes of reworking of material on bedrock.

The gold colours which were recovered (although small) were “chunky”, and no fine or very fine gold was observed in any of the concentrates. Such material is notoriously difficult to sample and the small size of the drill bore is a detriment to obtaining a representative indication of gold content in the gravels. The fact that the only gold recovered in the program was from an excavator test pit which reached bedrock is an indication of the effectiveness of that testing method.

Despite the initially disappointing results, the Candace Creek property still has significant gold potential which has not been thoroughly tested. The small sample size of the sonic drill and the difficulties with the permafrost resulted in a poor test which only scratched a minute fraction of the ground.

To solve the permafrost issue and obtain a more comprehensive test, it is recommended that an area on the lower Van claims be stripped by bulldozer and allowed to progressively thaw, with regular stripping of the thawed material. A cross-valley trench should then be excavated with an excavator (Caterpillar 345 or larger) and the alluvial material sampled down to bedrock in order to intersect any possible narrow paystreaks. In addition, since it was targeted but not sampled during the 2013 program, an area should be stripped and excavated to bedrock on the lower reach of the left-limit tributary at approximately the Van 33 claim.

Statement of Costs for Assessment – 2013 Placer Exploration Program

2013 Placer Exploration Program	Invoice#	Subtotal	GST	Total
Kryotek Innovation Inc. -- Sonic Drilling	#BD2013A	$5,730.00	$286.50	$6,016.50
Geoplacer Exploration Ltd.- Project management, core logging, sample processing	#2013-006	$10,259.81	$300.00	$10,559.81
Geoplacer Exploration Ltd.- Report Production	#2014-001	$2,500.00	$125.00	$2,625.00
La Tierra Resources Ltd. - Excavator operation, sample processing	La Tierra #2013-01	$4,942.34	$217.00	$5,159.34
La Tierra Resources Ltd. - Sample collection and processing	La Tierra #2013-03	$2,585.87	$122.50	$2,708.37
Bedrock Mining Ltd. - Caterpillar 345 excavator rental with operator 6 hours @$330/hr	#397857	$1,980.00	$99.00	$2,079.00
Bonanza Mining Services Ltd. - Mobilization of Case 36B excavator	#1727	$3,120.00	$156.00	$3,276.00
Mario Ley Contracting Ltd. - Mobilization and Rental of Case 36B excavator	#111604	$5,600.00	$280.00	$5,880.00
Mario Ley Contracting Ltd. - Demobilization of Case 36B excavator	#111605	$700.00	$0.00	$700.00
Total North Communications - Rental of Emergency Sat Phone	#13-4714	$867.50	$43.38	$910.88
Totals		$38,285.52	$1,629.38	$39,914.90

Statement of Qualifications

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 author of the report entitled: "CANDACE CREEK PLACER PROPERTY, DAWSON MINING DISTRICT, YUKON TERRITORY, GEOLOGICAL & GEOPHYSICAL ASSESSMENT REPORT"
6. I am President and a Shareholder of Candace Creek Mining Ltd., a Yukon Registered Company.
7. The aforementioned report is based on my personal observations and interpretation and compilation of previously existing data.

Dated this 7th day of March, 2014

William LeBarge, P. Geo.

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Appendix A – Kryotek Geophysics Resistivity Program – Candace Creek 2013

KRYOTEK

Geophysical Survey of Subsurface Conditions for Placer Exploration

Candace Creek
Yukon

Submitted to:

Bud Davis
Candace Creek Mining Inc

Submitted by:

James Coates
Kryotek Arctic Innovation
#272-108 Elliot Street
Whitehorse, Yukon
Y1A 6C4

Date:

June 20, 2013

KRYOTEK

Table of Contents

1.0 General

1.1 Introduction

The following report has been prepared by Kryotek Arctic Innovation Inc. (Kryotek Inc.) for Bud Davis of Candace Creek Mining Inc. The objective of the surveys was to use resistivity geophysics to determine the likely locations of gold-bearing gravels, depths to bedrock and thicknesses of overburden.

Fieldwork took place from June 7 to 10, 2013. Personnel on site included James Coates and Astrid Grawehr of Kryotek Inc.

A total of seven (7) sites were selected for the study of which six (6) are included in this report. Survey CC2 on Lease 01054 requires more data cleanup and interpretation due to thick surface ice presence.

1.2 Setting

The local geography consists of rolling hills extending to alpine ridges, cut by v-shaped, erosion-formed valleys. The area is un-glaciated except for isolated local valley glaciers and is underlain by extensive discontinuous permafrost. Hill slopes are covered in one to two meters of colluvium over degraded schist bedrock. Valley bottoms are infilled with fluvial gravels and windblown loess deposits. Often there is a significant organic percentage to the loess, and valley deposits may be covered with a colluvial apron at the base of steeper slopes. Gold is located at the base of the fluvial gravels and may extend several meters into bedrock. Abandoned creek channels containing alluvial gold may be found perched on hill slopes several hundred meters upslope of the current stream level.

2.0 Methodology

2.1 Overview

Geophysics

Resistivity was selected for this area as the electrical properties of silt, gravel and schist bedrock are distinct and easily definable.

A Lippmann 4-point Resistivity System was used. This system allowed up to 20 m of depth penetration. Data was collected and inverted using AGI Earth Imager 2D software. Noisy data points and electrodes with poor contact resistance were removed and data was filtered for spikes or depressions in resistivity. The software produced two-dimensional tomograms using a smoothed, least squares damped and robust inversion parameters. Preliminary interpretations were conducted.

DC Electrical Resistivity Tomography

This technique injects a direct electrical current into the ground surface, and then measures the voltage that remains at a number of distances from the injection point. As different soils have different resistances to electrical current, a tomogram (subsurface diagram) of resistivities can be produced. This technique is useful for displaying the high-resistance regions of bedrock and ground-ice.

Earth Imager 2D Software

Earth Imager 2D software by Advanced Geosciences Inc. was used to invert and process the geophysics data. This software produced two-dimensional tomograms of resistivity data. The images were processed using both smoothed and robust inversion parameters in order to clarify transitions between material types as well as resistivity properties of those materials.

The images were interpreted by James Coates and features such as thawed regions, ice-rich permafrost, competent schist bedrock, degraded schist bedrock and top of bedrock contours were identified.

The images are included in this report (refer to section 3.0). Rough text interpretation is also included.

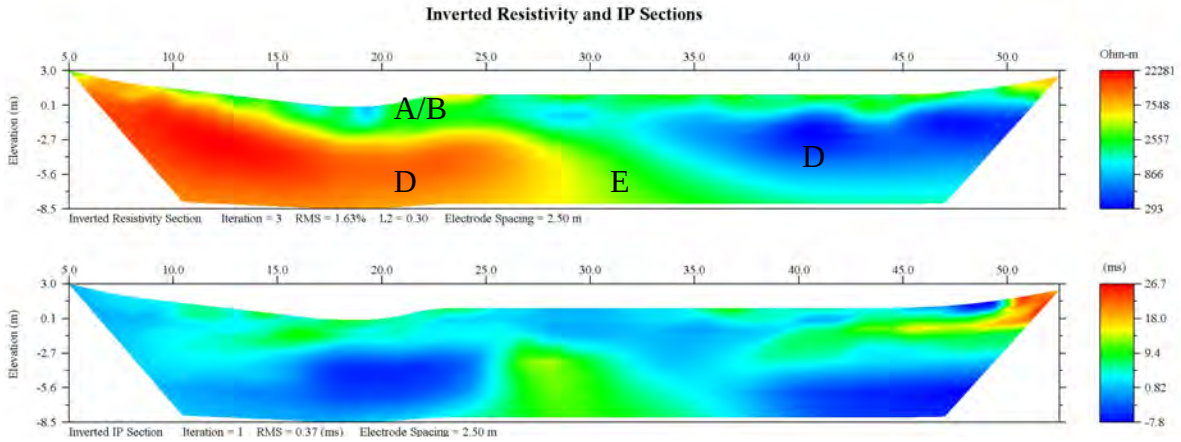
2.2 Geophysical Disclaimer

Subsurface information shown on these drawings was obtained solely for use in establishing design controls for the project. The accuracy of this information is not guaranteed and it is not to be construed as part of the plans governing construction of the project. It is the bidder's responsibility to inquire of the owner if additional information is available, to make arrangements to review the same prior to bidding, to conduct whatever site investigation or testing may be required, and to make his own determinations as to all subsurface conditions. James Coates and Kryotek Arctic Innovation Inc. accept no liability whatsoever for any use or application of this information by any and all authorized or unauthorized parties.
This is a preliminary report with limited analysis. A more detailed report will be forthcoming once borehole or test pit data is available to ground-truth geophysics data.

3.0 Interpreted Resistivity Tomograms

3.1 Placer Lease 00934

Line CC3

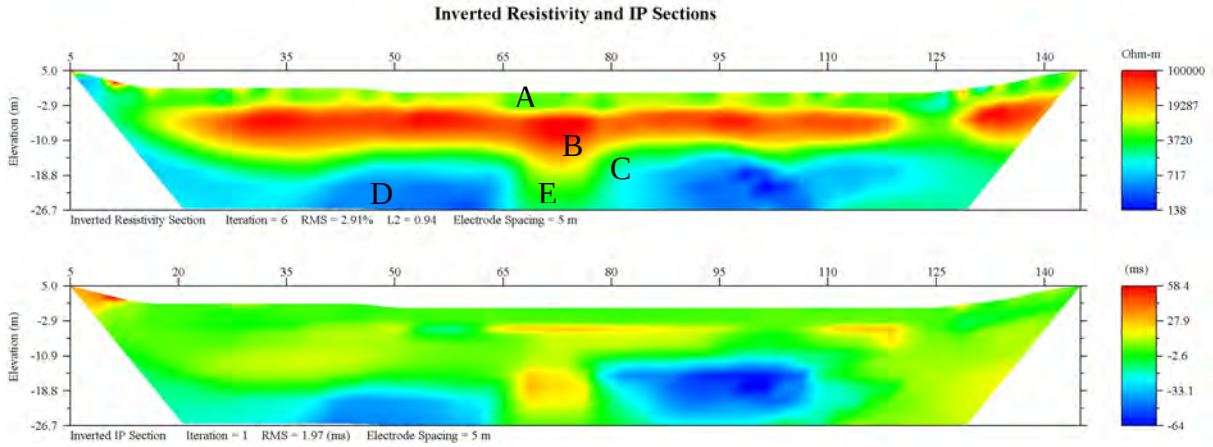


A- Frozen silt and organics
B- Frozen sands and gravels
C- Decayed and fractured bedrock
D- Bedrock
E- Fault material

This image shows gravel to approximately 3.0 m depth. Permafrost and a fault structure obscure some of the detail in this image. However, a significant difference in the bedrock resistivity appears to exist, as well as an IP and resistivity signature consistent with faulting at (E). In this location, depths to bedrock may be up to 5.0 m deep. As this may be deep weathering of fault material, the location is a good drill target.

3.2 Van 1 Claim, Candace Creek

Line CC7

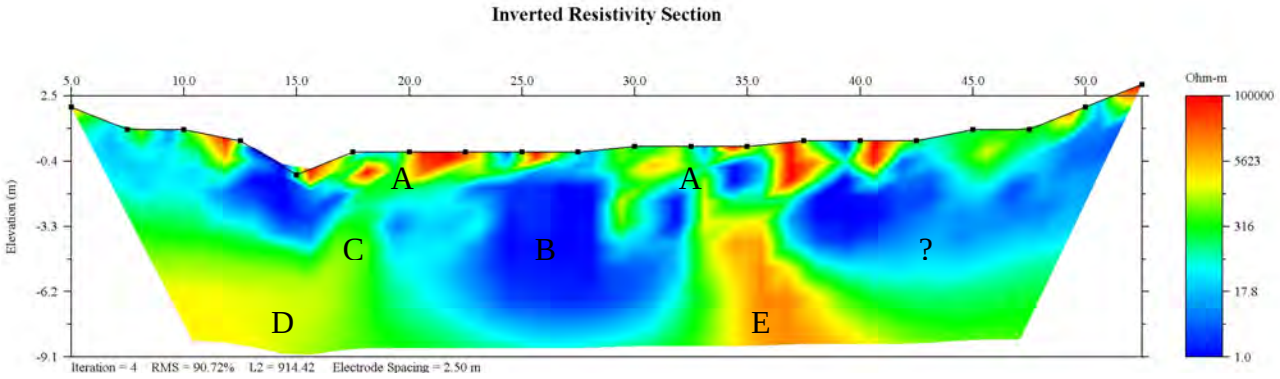


A- Frozen silt and organics
B- Frozen sands and gravels
C- Decayed and fractured bedrock
D- Bedrock
E- Fault material

This cross-valley image shows decomposed bedrock at 10 m depths, gravel at 3.0 m depths and a possible fault structure at 70 m horizontal that corresponds with a deepening of the gravel. Low RMS error and clear, continuous boundaries give this image a high degree of confidence. A drill target at 75 m horizontal is suggested.

3.2 Van 4 Claim

Line CC1

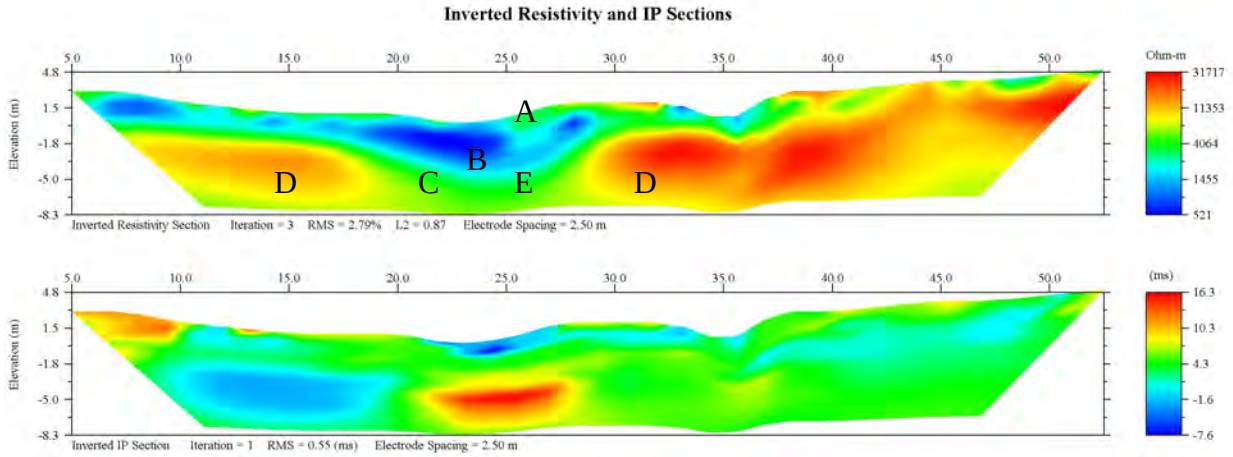


A- Frozen silt and organics
B- Thawed sands and gravels
C- Decayed and fractured bedrock
D- Bedrock
E- Fault material

This image was taken through thick surface icing, and the data needs to be verified before an analysis can be conclusively conducted. A deep channel of thawed material to 9.0 m appears to be present. However, a high RMS error makes this data unreliable. Further geophysics and drilling are required.

3.3 Lease 01050

Line CC4

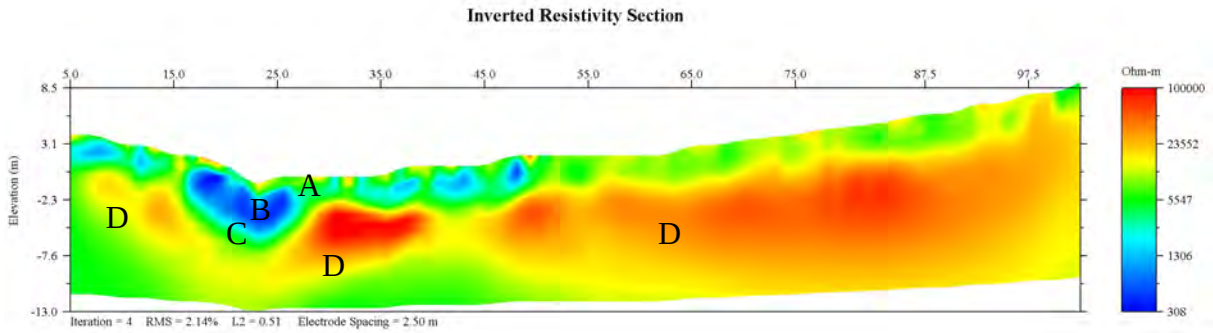


A- Frozen silt and organics
B- Frozen sands and gravels
C- Decayed and fractured bedrock
D- Bedrock
E- Fault

This image crosses the Candace Creek valley at the lower end of Lease 01050. The transect cuts diagonally across the valley. At (B), an area of sands and gravels appears to extend to 4-5.0 m depth, overlain by up to one meter of silt and sand. There may be a fault structure in the valley bottom at (E).

Lease 10050

Line CC5



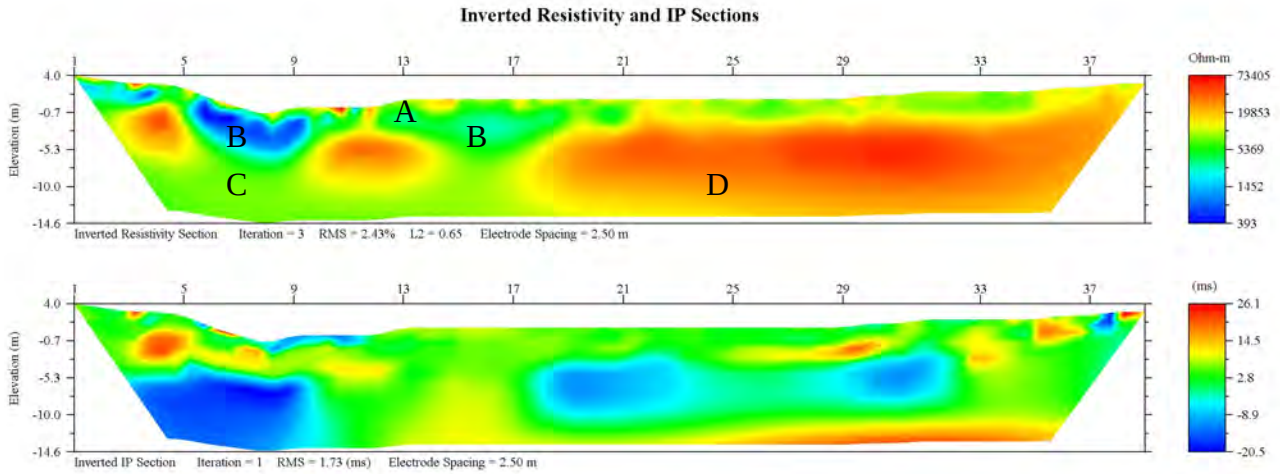
A- Frozen silt and organics
B- Frozen/thawed sands and gravels
C- Decayed and fractured bedrock
D- Bedrock

This image extends across the valley diagonally downstream of the previous image, but extends further up the hillslope to determine the presence or absence of perched bench

deposits, none of which were apparent. As with the previous image, gravels appear to be present at (B) to 4-5.0 m depths. Scales are different between the two images.

Lease 01054

Line CC6



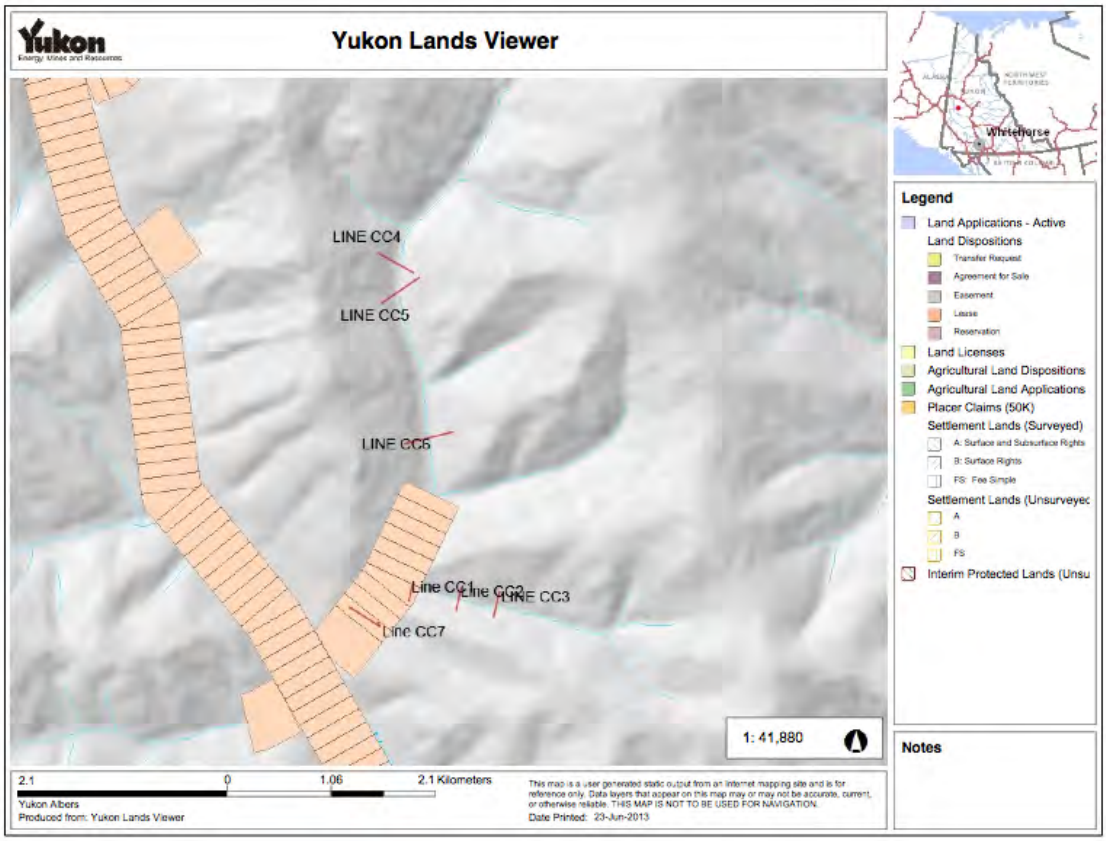
A- Frozen silt and organics
B- Frozen sands and gravels
C- Decayed and fractured bedrock
D- Bedrock
E- Fault

This image extends perpendicularly across the valley bottom on Lease 01054. Two potential channels with gravel infill likely occur at (B), which extend to 5.0 m depth. The channel to the left of the image is the most promising drill target.

4.1 Line Locations

Geophysical surveys were conducted by Kryotek Inc. using a Lippmann 4-point Resistivity System, for Bud Davis of Candace Creek Mining.

Geophysics Survey Line	UTM (start of line)	UTM (end of line)	Notes
CC1	N 63.18.56.0 W 138.55.50.6	N 63.18.57.0 W 138.55.49.5	
CC2	N 63.18.55.3 W 138.55.17.0	N 63.18.56.0 W 138.55.15.0	
CC3	N 63.18.54.4 W 138.55.10.6	N 63.18.55.1 W 138.55.08.1	
CC4	N 63.20.17.3 W 138.55.59.7	N 63.20.18.3 W 138.56.05.0	
CC5	N 63.20.17.2 W 138.55.59.9	N 63.20.15.3 W 138.56.02.8	
CC6	N 68.19.50.2 W 138.55.40.6	N 68.19.50.2 W 138.55.45.4	
CC7	N 63.18.47.9 W 138.56.18.7	N 63.18.46.0 W 138.56.10.6	


Yukon
Energy, Mines and Resources
Yukon Lands Viewer
LINE CC4
LINE CC5
LINE CC6
Line CC1
Line CC2
LINE CC3
Line CC7
1: 41,880
2.1
0
1.06
2.1 Kilometers
Yukon Albers
Produced from: Yukon Lands Viewer
This map is a user generated static output from an internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.
Date Printed: 23-Jun-2013
Whitehorse
Legend
Land Applications - Active
Land Dispositions
Transfer Request
Agreement for Sale
Easement
Lease
Reservation
Land Licenses
Agricultural Land Dispositions
Agricultural Land Applications
Placer Claims (50K)
Settlement Lands (Surveyed)
A: Surface and Subsurface Rights
B: Surface Rights
FS: Fee Simple
Settlement Lands (Unsurveyed
A
B
FS
Interim Protected Lands (Unsu
Notes

Appendix B – Placer Drill Logs, 2013 Sonic Drill Program

Yukon
Energy, Mines and Resources

Date Stamp

Placer Drill Log

Date: July 15, 2013 **Driller:** Dark Side Drilling

Type of Drill: SDC150 Sonic drill/85hp **Inside Diameter of Drill:** 85 mm (3.3 inch)

Location: Candace Creek/UNLL Trib Maisy May **Lease or Grant Numbers:** Van 2 P 508834

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
2013-1	0-1.5 metres	1.5 m	Modern organic layer/rocky silt	60% core recovery
2013-1	1.5-3.0 metres	1.5 m	Organic muck with angular rocks	46% core recovery
2013-1	3.0-4.0 metres	1.0 m	Muddy subrounded pebble gravel	83% core recovery
2013-1	4.0-4.5 metres	0.5 m	Muddy gravel and angular bedrock	83% core recovery
	Total thickness 4.5 m or 14.8 feet			

Date: _____ **Signature (Driller or Representative):** _____

Yukon
Energy, Mines and Resources

Date Stamp

Placer Drill Log

Date: July 15, 2013 **Driller:** Dark Side Drilling

Type of Drill: SDC150 Sonic drill/85hp **Inside Diameter of Drill:** 85 mm (3.3 inch)

Location: Candace Creek/UNLL Trib Maisy May **Lease or Grant Numbers:** Van 2 P 508834

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
2013-2	0-1.5 metres	1.5 m	Modern organic layer/rocky silt	73% core recovery
2013-2	1.5-2.0 metres	0.5 m	Organic muck	80% core recovery
2013-2	2.0-4.3 metres	2.3 m	Muddy subangular to subrounded pebble gravel	90% core recovery
2013-2	4.3-4.5 metres	0.2 m	Decomposed schist bedrock	100% core recovery
	Total thickness 4.5 m or 14.8 feet			

Date: _____ **Signature (Driller or Representative):** _____

Yukon
Energy, Mines and Resources

Date Stamp

Placer Drill Log

Date: July 15, 2013 **Driller:** Dark Side Drilling

Type of Drill: SDC150 Sonic drill/85hp **Inside Diameter of Drill:** 85 mm (3.3 inch)

Location: Candace Creek/UNLL Trib Maisy May **Lease or Grant Numbers:** Van 2 P 508834

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
2013-3	0-1.5 metres	1.5 m	Organic silt	80% core recovery
2013-3	1.5-3.0 metres	1.5 m	Organic silt	80% core recovery
2013-3	3.0-3.5 metres	0.5 m	Silty sand	80% core recovery
2013-3	3.5-4.5 metres	1.0 m	Sandy decomposed schist bedrock	80% core recovery
	Total thickness 4.5 m or 14.8 feet			

Date: _____ **Signature (Driller or Representative):** _____

Yukon
Energy, Mines and Resources

Date Stamp

Placer Drill Log

Date: July 16, 2013 **Driller:** Dark Side Drilling

Type of Drill: SDC150 Sonic drill/85hp **Inside Diameter of Drill:** 85 mm (3.3 inch)

Location: Candace Creek/UNLL Trib Maisy May **Lease or Grant Numbers:** Van 2 P 508834

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
2013-4	0-1.5 metres	1.5 m	Tree, silt	10% core recovery
2013-4	1.5-3.2 metres	1.7 m	Organic silt	73% core recovery
2013-4	3.2-4.5 metres	1.3 m	Mixed sandy angular gravel and bedrock	60% core recovery
	Total thickness 4.5 m or 14.8 feet			

Date: _____ **Signature (Driller or Representative):** _____

Yukon
Energy, Mines and Resources

Date Stamp

Placer Drill Log

Date: July 16, 2013 **Driller:** Dark Side Drilling

Type of Drill: SDC150 Sonic drill/85hp **Inside Diameter of Drill:** 85 mm (3.3 inch)

Location: Candace Creek/UNLL Trib Maisy May **Lease or Grant Numbers:** Van 2 P 508834

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
2013-5	0-1.5 metres	1.5 m	Organic silt	86% core recovery
2013-5	1.5-3.2 metres	1.6 m	Organic silt and sand	60% core recovery
2013-5	3.2-4.2 metres	1.0 m	Sandy subangular gravel	100% core recovery
2013-5	4.2-4.5 metres	0.3 m	Angular broken schist bedrock	100% core recovery
	Total thickness 4.5 m or 14.8 feet			

Date: _____ **Signature (Driller or Representative):** _____

Yukon
Energy, Mines and Resources

Date Stamp

Placer Drill Log

Date: July 16, 2013 **Driller:** Dark Side Drilling

Type of Drill: SDC150 Sonic drill/85hp **Inside Diameter of Drill:** 85 mm (3.3 inch)

Location: Candace Creek/UNLL Trib Maisy May **Lease or Grant Numbers:** Van 2 P 508834

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
2013-6	0-1.5 metres	1.5 m	Organic silt	86% core recovery
2013-6	1.5-3.0 metres	1.5 m	Organic silt and sand	53% core recovery
2013-6	3.0-3.9 metres	0.9 m	Sandy angular gravel	80% core recovery
2013-6	3.9-4.5 metres	0.6 m	Angular broken schist bedrock	100% core recovery
	Total thickness 4.5 m or 14.8 feet			

Date: _____ **Signature (Driller or Representative):** _____

Yukon
Energy, Mines and Resources

Date Stamp

Placer Drill Log

Date: July 16, 2013 **Driller:** Dark Side Drilling

Type of Drill: SDC150 Sonic drill/85hp **Inside Diameter of Drill:** 85 mm (3.3 inch)

Location: Candace Creek/UNLL Trib Maisy May **Lease or Grant Numbers:** Van 1 P 508833

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
2013-7	0-1.5 metres	1.5 m	Organic silt	80% core recovery
2013-7	1.5-3.0 metres	1.5 m	Organic silt	80% core recovery
2013-7	3.0-4.0 metres	1.0 m	Organic silt	100% core recovery
2013-7	4.0-4.5 metres	0.5 m	Angular broken schist bedrock	100% core recovery
	Total thickness 4.5 m or 14.8 feet			

Date: _____ **Signature (Driller or Representative):** _____

Yukon
Energy, Mines and Resources

Date Stamp

Placer Drill Log

Date: July 16, 2013 **Driller:** Dark Side Drilling

Type of Drill: SDC150 Sonic drill/85hp **Inside Diameter of Drill:** 85 mm (3.3 inch)

Location: Candace Creek/UNLL Trib Maisy May **Lease or Grant Numbers:** Van 1 P 508833

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
2013-8	0-1.5 metres	1.5 m	Organic silt	70% core recovery
2013-8	1.5-3.0 metres	1.5 m	Organic silt	70% core recovery
2013-8	3.0-4.5 metres	1.5 m	Silty sand	70% core recovery
2013-8	4.5-5.0 metres	0.5 m	Angular gravel and minor broken schist bedrock	80% core recovery
	Total thickness 5 m or 16.4 feet			

Date: _____ **Signature (Driller or Representative):** _____

Yukon
Energy, Mines and Resources

Date Stamp

Placer Drill Log

Date: July 16, 2013 **Driller:** Dark Side Drilling

Type of Drill: SDC150 Sonic drill/85hp **Inside Diameter of Drill:** 85 mm (3.3 inch)

Location: Candace Creek/UNLL Trib Maisy May **Lease or Grant Numbers:** Van 1 P 508833

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
2013-9	0-1.5 metres	1.5 m	Organic silt	95% core recovery
2013-9	1.5-2.5 metres	1.0 m	Organic silt and sand	95% core recovery
2013-9	2.5-2.7 metres	0.2 m	Ice lense	100% core recovery
2013-9	2.7-3.7 metres	1.0 m	Organic silt	100% core recovery
2013-9	3.7-4.0 metres	0.3 m	Broken schist bedrock	100% core recovery
	Total thickness 4 m or 13.1 feet			

Date: _____ **Signature (Driller or Representative):** _____

Yukon
Energy, Mines and Resources

Date Stamp

Placer Drill Log

Date: July 16, 2013 **Driller:** Dark Side Drilling

Type of Drill: SDC150 Sonic drill/85hp **Inside Diameter of Drill:** 85 mm (3.3 inch)

Location: Candace Creek/UNLL Trib Maisy May **Lease or Grant Numbers:** Van 1 P 508833

Drill Hole Number	Interval	Thickness	Materials Encountered	Remarks: Samples/Results
2013-10	0-1.5 metres	1.5 m	Organic silt	95% core recovery
2013-10	1.5-3.0 metres	1.5 m	Organic silt with angular pebbles	95% core recovery
2013-10	3.0-3.7 metres	0.7 m	Pebbly sand	90% core recovery
2013-10	3.7-4.0 metres	0.3 m	Sandy pebble gravel	90% core recovery
2013-10	4.0-4.3 metres	0.3 m	Pebbly gravel	90% core recovery
2013-10	4.3-4.5 metres	0.2 m	Silty gravel	90% core recovery
	Total thickness 4.5 m or 14.8 feet			

Date: _____ **Signature (Driller or Representative):** _____

Appendix C – Arctic Geophysics Resistivity Program – Candace Creek 2012

Arctic Geophysics Inc.

Geophysical Surveys • Prospecting • Consulting

www.arctic-geophysics.com
Box 747, Dawson City, Yukon Territory, Y0B 1G0, Canada
Phone: 867-993-3671 (Cell), info@arctic-geophysics.com

Geophysical Survey with 2D Resistivity/IP
Maisy May Creek, Yukon 2012
Line_01

N63 18 51.4 W138 56 06.3

Lease ID00633

FOR

All-In Exploration Solutions Inc.
Edward Long
11 Redwood St.
Whitehorse, YK
Y1A 5W1
Phone, 867-332-4437
elong@northwestel.net

AUTHORS

Philipp Moll

WORK PERFORMED
July 5th 2010

DATE OF REPORT
January 15th August 2011

Index

1. Introduction

This geophysical investigation was done for La All-In Exploration Solutions Inc., Edward Long.

The survey, using 2D Resistivity/IP, was conducted to prospect the ground for placer - and mineral mining interests.

The ground was tested with one 237m-measuring line, depth 42m.

2. Prospecting Lease

Grant Number	Claim Name	Owner
ID00633	–	Edward Long

3. Location

The placer prospecting lease ID00633 is located on a left tributary of Maisy May Creek. Maisy May Creek flows into the Stewart River about 55 River-km upstream from the confluence with the Yukon River.

4. Access

The prospecting lease ID00633 was accessed via mining road. However, the last 2km of the way to the measuring line had to be hiked.

5. Goal

The survey was focussed on measuring and interpreting following **subsurface characteristics**:

Placer Prospecting

1. Depth and topography of bedrock
    - Paleochannels
    - Bedrock benches
2. Sedimentary stratification
3. Permafrost conditions
4. Groundwater table
5. Mining/prospecting history

6. Methods

The **Resistivity profile** is the foundation for the interpretation of the subsurface conditions for the **placer** prospection. It usually allows for good interpretation of bedrock and overburden for finding secondary deposits.

The **IP model** serves as basis for the interpretation of the mineral and petrologic conditions in **hardrock**. IP is an industry proven standard method for the detection of primary mineral deposits. The IP data support the interpretation of the Resistivity profile.

Resistivity

In this **placer** survey 2D Resistivity was used. Resistivity is a reliable geophysical method for the detection of very shallow and deep layer interfaces in nearly all surface and subsurface conditions in the Yukon. Measuring shallow interfaces for a long distance is more economic than with seismic. The depth penetration is much higher than with ground penetrating radar. Resistivity data taken in discontinuously frozen ground often provide a plausible interpretation since the profile matrix is consistently filled with data representing a material property. There are no "blind zones" in a resistivity profile like they appear in other geophysical methods purely based on signal reflection. A lightweight system is available for flexible use with a small crew.

Induced Polarization (IP)

IP data are simultaneously taken when measuring Resistivity, with the same equipment and staking. So these data are automatically at hand when using Resistivity.

7. Use of Geophysical Methods

7.1. Instrumentation

For this survey a lightweight, custom-built 2D RESISTIVITY and INDUCED POLARIZATION (IP) imaging system with rapid automatic data acquisition was used. The system includes:

- "4 POINT LIGHT" EARTH RESISTIVITY METER[1]
- 96 ELECTRODE CONTROL MODULES[2]
- 96 STAINLESS STEEL ELECTRODES[3]
- 480m MULTICORE CABLE 96x5m[4]

This system weighs approximately 90 kg. It can be run with a 12V lead battery charged by 60 Watt solar panels. The equipment facilitates high mobility and rapid data acquisition.

[1] Constructed and produced by LGM (Germany)

[2] Ditto

[3] Constructed and produced by GEOANALYSIS.COM (Germany)

[4] Ditto

7.2. Data Acquisition

The **data acquisition** is carried out by the automatic activation of 4-point-electrodes. Thus several thousand measurements are taken, one every 1-2 seconds. The AC transmitter current of 0.26 to 30 Hz is amplified by the electrode control modules, up to a maximum of 100mA and 400V peak to peak. The voltage measured at the receiver electrodes (M, N) is also amplified.

In this geoelectrical survey the **Schlumberger-array** was used. This array is appropriate to image horizontally running layers as is needed for placer prospecting.

7.3. Processing

The measured Resistivity/IP data were processed with the **RES2DINV** inversion program[5].

7.4. Interpretation

The interpretation of the measured data is supported by:

Experience - measuring practice with Resistivity/IP in Yukon/BC since 2005
Discussion - with the customer, and placer geologist William Lebarge.[6]
Comparison - between geophysical and technogenic information found in other surveys
Observation - of surficial conditions in the field
Sources - Bedrock Geology Map[7]

7.5. Profile image

In the **Resistivity profile** the interpreted layer interfaces are marked with a black line. Please be aware: The profiles show **ground-layers approximately 15% thicker** than they are in reality. The thickening of the model layers is caused by the inversion software. The correction factor of 0.85 for the determination of the true layer thickness has been established by the Arctic Geophysics Inc. team on the basis of numerous geoelectrical profiles verified by drilling, trenching, and mining done by our customers.

The **graphical markings** showing the interpreted layer interfaces in the profiles (using the black lines) are done accordingly to the data structure in the profile itself. This means: the layers there will also show up approximately

[5] Produced by GEOTOMO SOFTWARE (Malaysia)

[6] Lebarge, William; Placer Geologist, Yukon Geological Survey

[7] Gordey, S.P. and Makepeace, A.J. (comp.) 1999: Yukon bedrock geology in Yukon digital geology, S.P. Gordey and A.J. Makepeace (comp.); Geological Survey of Canada Open File D3826 and Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1999-1(D)

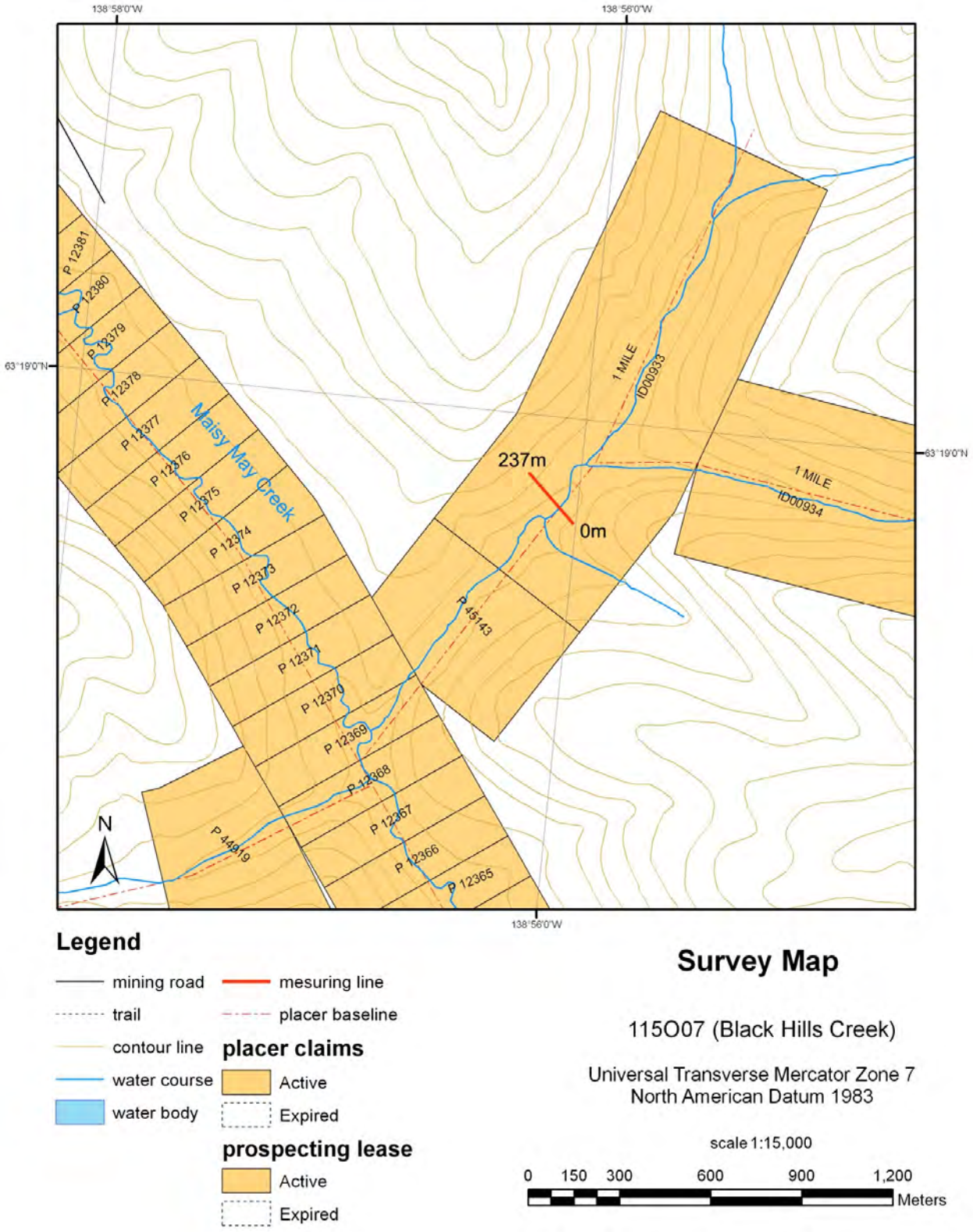
15% thicker than they are in reality. In the interpretation text the layer thicknesses and depths have been recalculated to the expected real values.

8. Resistivity/IP Survey at Maisy May Creek

Preliminary Note!

The subsurface information of this study is an interpretation based on measured geophysical data. We recommend the verification of the interpretation using physical prospecting methods such as drilling, test pitting, trenching, or shafting.

Survey Map[8]



[8] http://www.yukonminingrecorder.ca/PDFs: 115O/07

Maisy May Creek Line 01
2D Resistivity/IP, Schlumberger array
80 Electrodes: spacing 3m, Horizontal resolution 1.5m
Horizontal and vertical measure in [meter], Iteration error in [%]
Vertical exaggeration in model section display = 1.00
Data acquisition: Stefan Ostermaier, Franz Piechotta 5th July 2012
Processing: Franz Piechotta, 5th July 2012
Arctic Geophysics Inc., Yukon

Arctic Geophysics Inc.
Geophysical Surveys • Prospecting • Consulting
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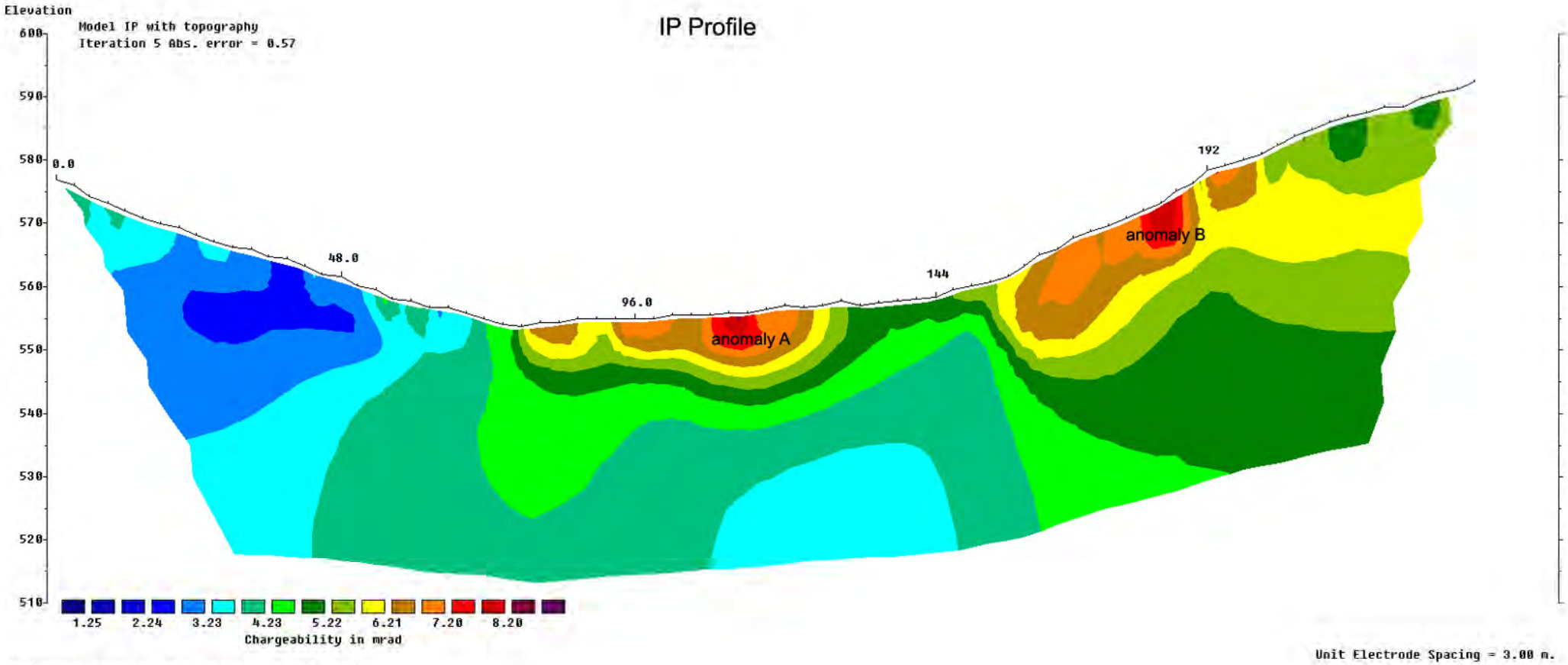
Box 747, Dawson City Y.T., Y0B-1G0, Canada
Phone: 867-993-3671 (Cell), info@arctic-geophysics.com

IP Profile



Horizontal scale is 20.24 pixels per unit spacing
Vertical exaggeration in model section display = 1.00
First electrode is located at 0.0 m.
Last electrode is located at 237.0 m.

The profile might show the ground-layers up to approximately 15% thicker than they are in reality.

This 2D Resistivity measuring result is an interpretation of geophysical data. We recommend the verification of the profile by drilling or trenching

Maisy May Creek Line 01
2D Resistivity/IP, Schlumberger array
80 Electrodes: spacing 3m, Horizontal resolution 1.5m
Horizontal and vertical measure in [meter], Iteration error in [%]
Vertical exaggeration in model section display = 1.00
Data acquisition: Stefan Ostermaier, Franz Piechotta 5th July 2012
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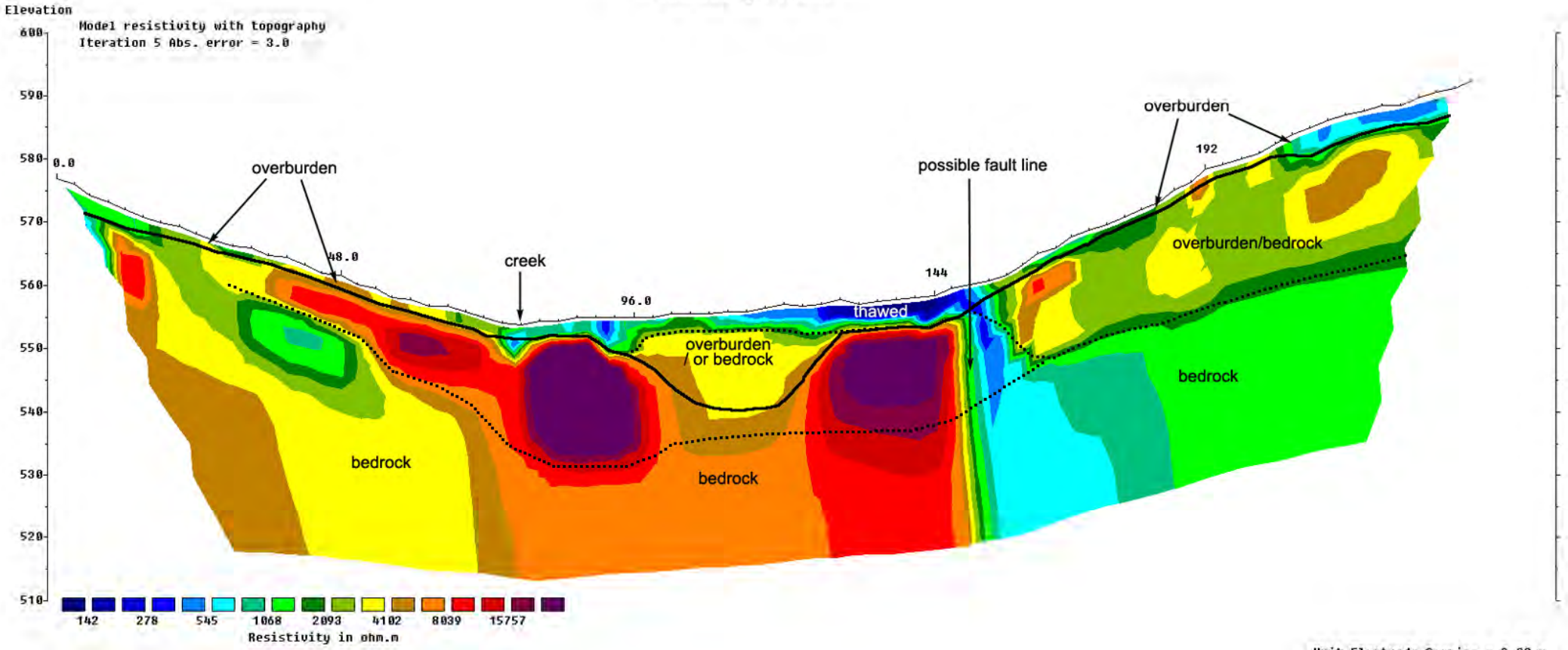
Resistivity Profile



bedrock interface
alternative bedrock interface

The profile might show the ground-layers up to approximately 15% thicker than they are in reality.

This 2D Resistivity measuring result is an interpretation of geophysical data. We recommend the verification of the profile by drilling or trenching

Profile Interpretation

This resistivity profile seems to show a thin layer of discontinuously water-saturated overburden (1-4m thick) on top of at least two different bedrock types. In the middle of the valley bottom a paleo-channel (main channel) could be located.

On the left slope, at 0-80m, the overburden likely dominated by colluvium might be just 1-2m thick.

At 80-144m, on the valley bottom, the bedrock seems to be covered with 2-4m of overburden. This overburden is moist and is likely consisting of 1/3 of muck on top of 2/3 of gravel. This would be the typical overburden in this area.[9] The hypothetic muck and the gravel cannot be differentiated in the resistivity profile since both materials seem to be similarly saturated with water. However, the IP model indicates the existence of muck in the topmost overburden: The higher chargeability could be a sign for muck.[10]

At 102-120m there could be a paleo-channel, 13m deep, filled with frozen gravel below (mostly) thawed muck. - Alternatively, the bedrock interface could run just 1-3m below the surface. If this is true the 13m-deep channel would not exist. In this case there could be two small channels: one at 93m, approx. 5m deep; another at around 134m, approx. 3m deep.

After 150m, the overburden seems to consist of just about 1m of collvium on top of discontinuously weathered and frozen bedrock. - Alternatively, at a low chance, the overburden could be 12-20m thick; the material would likely be a mélange of discontinuous frozen/water-saturated colluvium on top of old river-gravel.

- Alternative to the interpretation scenario above, the overburden could be much thicker. In this case the lower dashed line in the profile would mark the bedrock interface. The (violet) high resistivity zones would be frozen gravel. The main channel would be located between 78m and 99m and could be approx. 19m deep. This interpretation scenario is supported by resistivity line_02 about 1.5km upstream![11]

“The bedrock is mapped as the Nasina Subterrane which consists of metamorphosed early to mid-Paleozoic continental margin with superimposed late-Devonian and Early Mississippian arc volcanic and plutonic rocks”.[12] In the resistivity profile, the high resistivity zones (violet/red/orange) could be plutonic rock, possibly granite or granodiorite. The low resistivity zones could represent a volcanic host rock or schist influenced by contact metamorphism. This scenario might have produced the heterogeneous resistivity data in the bedrock.

In the IP model the chargeability high at anomaly A could indicate clay in the overburden. Anomaly B seems to be caused by a low concentrated mineralization in the bedrock.

[9] Yukon Placer Database

[10] IP models show the zones in the subsurface much rougher than the resistivity profile. In reality the muck layer is expected to be much thinner than the high chargeability zone in the center of the valley.

[11] See AG report “Geophysical Survey with 2D Resistivity/IP, Maisy May Creek, Yukon 2012, Line_02”

[12] Yukon Placer Database

Recommendations

We recommend the verification of the hypothetic main channel in the center of the valley. This could be done by:

1. Drilling: When drilling at 111m, the bedrock should be reached at approx. 13m. This result would be a strong indication for the existence of the channel. Additional drill holes into the violet resistivity bodies on both sides (at 84m and at 138m) would verify the existence of the main channel: if these two drill holes would reach bedrock at approx. 2m and 4m depth the main channel exists.

2. Test Pitting: When digging at 111m and not hitting bedrock up to 5-6m depth, the existence of the channel would be strongly assumed.

If the interpreted main channel will be falsified, the possible existence of the two shallow channels could be tested. In this case we recommend digging or drilling at 93m and at 134m; the bedrock might be reached at approx. 5m and 3m depth. The channel would be verified if another hole at 105m would show bedrock shallower than at 3m.

The alternative interpretation scenario of deep bedrock (lower dashed line in the profile image) could be checked by deepening the drill hole at 84m (see above). If the bedrock is found at approx. 19m depth, the main channel might be located at this location, and the hypothesis must be true. At this test hole, a very good sample is expected even with an auger drill since the overburden on top of the bedrock seems to be frozen.

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Yukon Placer Database

Maps

http://www.yukonminingrecorder.ca/PDFs: 115O/07

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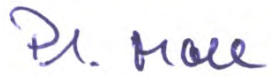
10. Qualification

Philipp Moll

- Study of geology, University of Freiburg, Germany
- Visit of geophysical field courses, University of Karlsruhe and University of Stuttgart, Germany
- Geological Prospecting for precious metals and minerals in the Yukon, NWTs, and Alaska since 1989
- Geophysical surveying for Mining Exploration in the Yukon since 2005
- Study of biology and German language and literature, University of Freiburg, Germany
- Apprenticeship of precision mechanic, Tools Factory Hermann Bilz, Zell, Germany



Philipp Moll

Stefan Ostermaier

- Study of geology, University of Tübingen, Germany
- Visit of geophysical field courses, University of Karlsruhe and U
  Stuttgart, Germany
- Geological prospecting for precious metals and minerals in the
  since 2001
- Geophysical Surveying for Mining Exploration in the Yukon sin
- Study of computer science, University of Stuttgart, Germany

Stefan Ostermaier

11. GPS-Data

Maisy May Creek Line 01

Electrode No.	Location in Profile [m]	GPS-Coordinates Latitude/ Longitude hddd° mm' ss.s"	GPS-Accuracy [m]	Post [*]
1	0.0	N63 18 48.8 W138 56 00.5	3	*
2	3.0	N63 18 48.9 W138 56 00.7	3	
3	6.0	N63 18 48.9 W138 56 00.8	3	
4	9.0	N63 18 49.0 W138 56 01.0	3	
5	12.0	N63 18 49.1 W138 56 01.1	3	
6	15.0	N63 18 49.1 W138 56 01.2	3	
7	18.0	N63 18 49.2 W138 56 01.4	3	
8	21.0	N63 18 49.3 W138 56 01.6	3	
9	24.0	N63 18 49.4 W138 56 01.7	3	
10	27.0	N63 18 49.4 W138 56 01.9	3	
11	30.0	N63 18 49.5 W138 56 02.1	3	
12	33.0	N63 18 49.5 W138 56 02.2	3	
13	36.0	N63 18 49.6 W138 56 02.3	3	
14	39.0	N63 18 49.7 W138 56 02.5	3	
15	42.0	N63 18 49.7 W138 56 02.5	3	
16	45.0	N63 18 49.8 W138 56 02.7	3	
17	48.0	N63 18 49.9 W138 56 02.9	3	
18	51.0	N63 18 49.9 W138 56 03.0	3	
19	54.0	N63 18 50.0 W138 56 03.1	3	
20	57.0	N63 18 50.1 W138 56 03.3	3	
21	60.0	N63 18 50.2 W138 56 03.5	3	
22	63.0	N63 18 50.2 W138 56 03.6	3	
23	66.0	N63 18 50.3 W138 56 03.8	3	
24	69.0	N63 18 50.3 W138 56 03.9	3	
25	72.0	N63 18 50.4 W138 56 04.0	3	
26	75.0	N63 18 50.4 W138 56 04.1	3	
27	78.0	N63 18 50.5 W138 56 04.2	3	
28	81.0	N63 18 50.5 W138 56 04.3	3	
29	84.0	N63 18 50.6 W138 56 04.4	3	
30	87.0	N63 18 50.7 W138 56 04.6	3	
31	90.0	N63 18 50.8 W138 56 04.8	3	
32	93.0	N63 18 50.8 W138 56 05.0	3	
33	96.0	N63 18 50.9 W138 56 05.2	3	
34	99.0	N63 18 51.0 W138 56 05.3	3	
35	102.0	N63 18 51.1 W138 56 05.5	3	
36	105.0	N63 18 51.2 W138 56 05.7	3	
37	108.0	N63 18 51.2 W138 56 05.8	3	
38	111.0	N63 18 51.3 W138 56 06.1	3	

Electrode No.	Location in Profile [m]	GPS-Coordinates Latitude/ Longitude hddd° mm' ss.s"	GPS-Accuracy [m]	Post [*]
39	114.0	N63 18 51.3 W138 56 06.3	3	
40	117.0	N63 18 51.4 W138 56 06.3	3	*
41	120.0	N63 18 51.5 W138 56 06.5	3	
42	123.0	N63 18 51.5 W138 56 06.6	3	
43	126.0	N63 18 51.6 W138 56 06.8	3	
44	129.0	N63 18 51.7 W138 56 07.0	3	
45	132.0	N63 18 51.7 W138 56 07.1	3	
46	135.0	N63 18 51.8 W138 56 07.3	3	
47	138.0	N63 18 51.8 W138 56 07.5	3	
48	141.0	N63 18 51.9 W138 56 07.7	3	
49	144.0	N63 18 52.0 W138 56 07.8	3	
50	147.0	N63 18 52.0 W138 56 07.9	3	
51	150.0	N63 18 52.1 W138 56 08.0	3	
52	153.0	N63 18 52.2 W138 56 08.2	3	
53	156.0	N63 18 52.2 W138 56 08.3	3	
54	159.0	N63 18 52.2 W138 56 08.3	3	
55	162.0	N63 18 52.3 W138 56 08.5	3	
56	165.0	N63 18 52.4 W138 56 08.7	3	
57	168.0	N63 18 52.4 W138 56 08.8	3	
58	171.0	N63 18 52.5 W138 56 09.0	3	
59	174.0	N63 18 52.5 W138 56 09.1	3	
60	177.0	N63 18 52.6 W138 56 09.3	3	
61	180.0	N63 18 52.7 W138 56 09.5	3	
62	183.0	N63 18 52.7 W138 56 09.7	3	
63	186.0	N63 18 52.8 W138 56 09.8	3	
64	189.0	N63 18 52.8 W138 56 09.8	3	
65	192.0	N63 18 52.9 W138 56 10.0	3	
66	195.0	N63 18 53.0 W138 56 10.1	3	
67	198.0	N63 18 53.0 W138 56 10.3	3	
68	201.0	N63 18 53.1 W138 56 10.5	3	
69	204.0	N63 18 53.1 W138 56 10.7	3	
70	207.0	N63 18 53.2 W138 56 10.8	3	
71	210.0	N63 18 53.3 W138 56 10.9	3	
72	213.0	N63 18 53.3 W138 56 11.0	3	
73	216.0	N63 18 53.4 W138 56 11.2	3	
74	219.0	N63 18 53.4 W138 56 11.4	3	
75	222.0	N63 18 53.5 W138 56 11.5	3	
76	225.0	N63 18 53.6 W138 56 11.7	3	
77	228.0	N63 18 53.7 W138 56 11.8	3	
78	231.0	N63 18 53.7 W138 56 12.0	3	
79	234.0	N63 18 53.8 W138 56 12.2	3	
80	237.0	N63 18 53.8 W138 56 12.3	3	*

12. Cost

Arctic Geophysics Inc.
Geophysical Surveys • Prospecting • Consulting

All-In Exploration Solutions Inc.
Edward Long
11 Redwood St.
Whitehorse, YK
Y1A 5W1

Invoice ID00633_1

Date: 6th July, 2012

Geophysical Survey for Placer Investigation 6th July 2012

Target: Inspection of sedimentary stratigraphy and bedrock depth/topography
Method: 2D Resistivity: **Measuring Line_01**
Location: Maisy May Creek drainage system, Dawson Mining District, 115O/07P
on Placer **Lease ID 00933**

Quantity	Description	Amount $CAN
Mob/Demob		
1 1/3 days	Vehicle $ 70.-- / day	93.33
306 Km	$ 0.55 / km (1/3 share)	56.10
1 day	Access + Inspection of ground $ 350.-- / day, operator + $ 250.--/Day field assistant (1/3 share)	200.--
Geophysical Survey		
1 day	Geoelectrical 2D-Resistivity imaging system + Survey leader $ 880.-- / day	880.--
1 day	Field Assistant $ 250.--	250.--
1/3 day	Data Processing, First Documentation $ 350.-- / day	116.66
1 day	Writing report , $ 350.-- / day	350.--
	Printing / Binding /Shipping	60.--
	NET Amount	$ 2006.09
GST Number 846363216RT0001	**G.S.T. (5%)**	$ 100.30
Total Due		**$ 2 106.39**

Arctic Geophysics Inc.

Geophysical Surveys • Prospecting • Consulting

www.arctic-geophysics.com
Box 747, Dawson City, Yukon Territory, Y0B 1G0, Canada
Phone: 867-993-3671 (Cell), info@arctic-geophysics.com

Geophysical Survey with 2D Resistivity
Maisy May Creek, Yukon 2012
Line_02

N63 19 34.2 W138 55 35.9

Lease ID00633

FOR

All-In Exploration Solutions Inc.
Edward Long
11 Redwood St.
Whitehorse, YK
Y1A 5W1
Phone, 867-332-4437
elong@northwestel.net

AUTHORS

Philipp Moll

WORK PERFORMED

July 7th 2010

DATE OF REPORT

January 15th August 2011

Index

1. Introduction

This geophysical investigation was done for La All-In Exploration Solutions Inc., Edward Long.

The survey, using 2D Resistivity, was conducted to prospect the ground for placer - and mineral mining interests.

The ground was tested with one 146m-measuring line, depth 29m.

2. Prospecting Lease

Grant Number	Claim Name	Owner
ID00633	–	Edward Long

3. Location

The placer prospecting lease ID00633 is located on a left tributary of Maisy May Creek. Maisy May Creek flows into the Stewart River about 55 River-km upstream from the confluence with the Yukon River.

4. Access

The prospecting lease ID00633 was accessed via mining road. However, the last 2km of the way to the measuring line had to be hiked.

5. Goal

The survey was focussed on measuring and interpreting following **subsurface characteristics**:

Placer Prospecting

1. Depth and topography of bedrock
    - Paleochannels
    - Bedrock benches
2. Sedimentary stratification
3. Permafrost conditions
4. Groundwater table

5. Mining/prospecting history

6. Method

The **Resistivity profile** is the foundation for the interpretation of the subsurface conditions for the **placer** prospection. It usually allows for good interpretation of bedrock and overburden for finding secondary deposits.

In this **placer** survey 2D Resistivity was used. Resistivity is a reliable geophysical method for the detection of very shallow and deep layer interfaces in nearly all surface and subsurface conditions in the Yukon. Measuring shallow interfaces for a long distance is more economic than with seismic. The depth penetration is much higher than with ground penetrating radar. Resistivity data taken in discontinuously frozen ground often provide a plausible interpretation since the profile matrix is consistently filled with data representing a material property. There are no "blind zones" in a resistivity profile like they appear in other geophysical methods purely based on signal reflection. A lightweight system is available for flexible use with a small crew.

7. Use of Geophysical Methods

7.1. Instrumentation

For this survey a lightweight, custom-built 2D RESISTIVITY and INDUCED POLARIZATION (IP) imaging system with rapid automatic data acquisition was used. The system includes:

- "4 POINT LIGHT" EARTH RESISTIVITY METER[1]
- 96 ELECTRODE CONTROL MODULES[2]
- 96 STAINLESS STEEL ELECTRODES[3]
- 480m MULTICORE CABLE 96x5m[4]

This system weighs approximately 90 kg. It can be run with a 12V lead battery charged by 60 Watt solar panels. The equipment facilitates high mobility and rapid data acquisition.

7.2. Data Acquisition

The **data acquisition** is carried out by the automatic activation of 4-point-electrodes. Thus several thousand measurements are taken, one every 1-2 seconds. The AC transmitter current of 0.26 to 30 Hz is amplified by the

[1] Constructed and produced by LGM (Germany)
[2] Ditto
[3] Constructed and produced by GEOANALYSIS.COM (Germany)
[4] Ditto

electrode control modules, up to a maximum of 100mA and 400V peak to peak. The voltage measured at the receiver electrodes (M, N) is also amplified.

In this geoelectrical survey the **Schlumberger-array** was used. This array is appropriate to image horizontally running layers as is needed for placer prospecting.

7.3. Processing

The measured Resistivity/IP data were processed with the **RES2DINV** inversion program[5].

7.4. Interpretation

The interpretation of the measured data is supported by:

Experience - measuring practice with Resistivity/IP in Yukon/BC since 2005
Discussion - with the customer, and placer geologist William Lebarge.[6]
Comparison - between geophysical and technogenic information found in other surveys
Observation - of surficial conditions in the field
Sources - Bedrock Geology Map[7]

7.5. Profile image

In the **Resistivity profile** the interpreted layer interfaces are marked with a black line. Please be aware: The profiles show **ground-layers approximately 15% thicker** than they are in reality. The thickening of the model layers is caused by the inversion software. The correction factor of 0.85 for the determination of the true layer thickness has been established by the Arctic Geophysics Inc. team on the basis of numerous geoelectrical profiles verified by drilling, trenching, and mining done by our customers.

The **graphical markings** showing the interpreted layer interfaces in the profiles (using the black lines) are done accordingly to the data structure in the profile itself. This means: the layers there will also show up approximately 15% thicker than they are in reality. In the interpretation text the layer thicknesses and depths have been recalculated to the expected real values.

[5] Produced by GEOTOMO SOFTWARE (Malaysia)

[6] Lebarge, William; Placer Geologist, Yukon Geological Survey

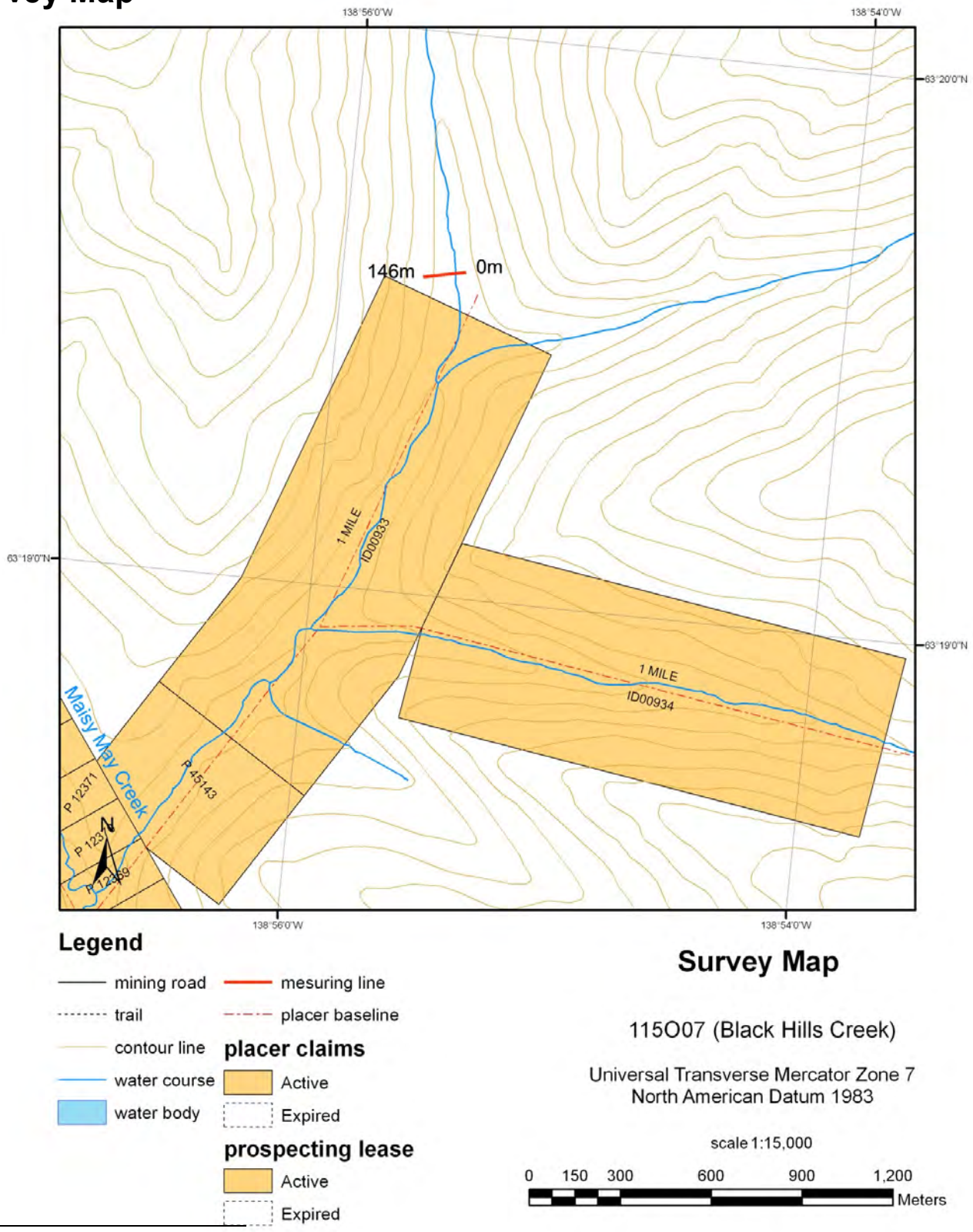
[7] Gordey, S.P. and Makepeace, A.J. (comp.) 1999: Yukon bedrock geology in Yukon digital geology, S.P. Gordey and A.J. Makepeace (comp.); Geological Survey of Canada Open File D3826 and Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1999-1(D)

8. Resistivity Survey – Maisy May Creek

Preliminary Note!

The subsurface information of this study is an interpretation based on measured geophysical data. We recommend the verification of the interpretation using physical prospecting methods such as drilling, test pitting, trenching, or shafting.

Survey Map[8]



[8] http://www.yukonminingrecorder.ca/PDFs: 115O/07

Maisy May Creek Line 02
2D Resistivity/IP, Schlumberger array
74 Electrodes: spacing 2m, Horizontal resolution 1m
Horizontal and vertical measure in [meter], Iteration error in [%]
Vertical exaggeration in model section display = 1.00
Data acquisition: Stefan Ostermaier, Franz Piechotta 7th July 2012
Processing: Franz Piechotta, 7th July 2012
Arctic Geophysics Inc., Yukon

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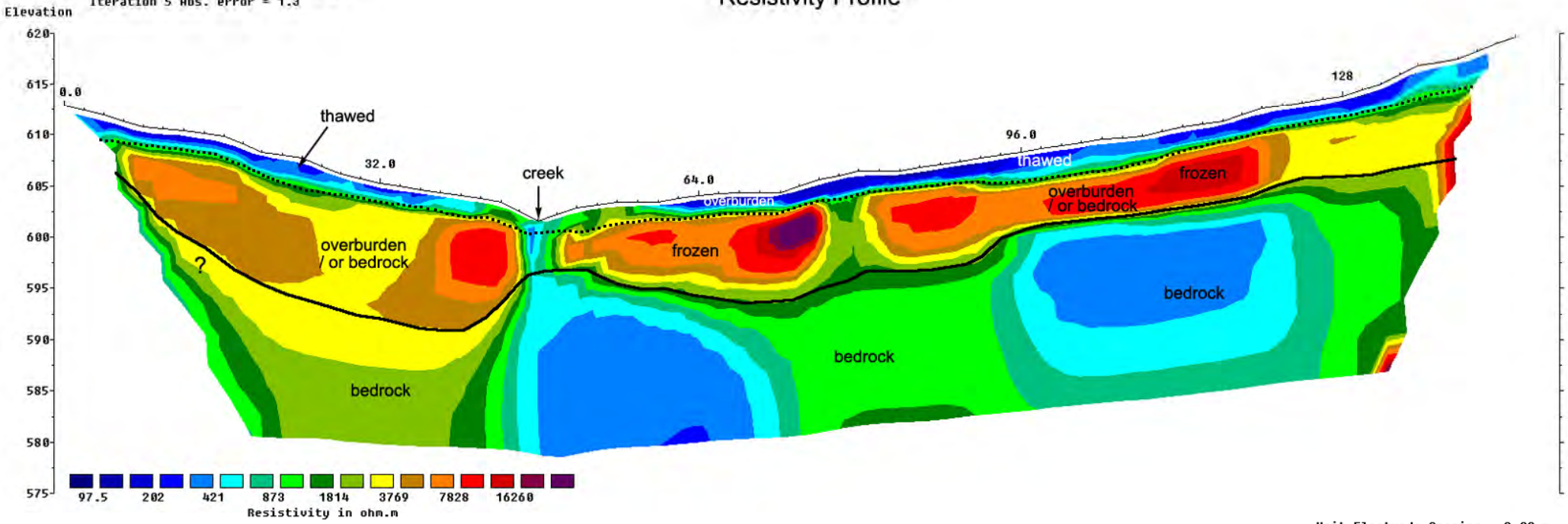
Model resistivity with topography
Iteration 5 Abs. error = 1.3

Resistivity Profile



Unit Electrode Spacing = 2.00 m.

——— bedrock interface
····· alternative bedrock interface

The profile might show the ground-layers up to approximately 15% thicker than they are in reality.

This 2D Resistivity measuring result is an interpretation of geophysical data. We recommend the verification of the profile by drilling or trenching

Profile Interpretation

This resistivity profile seems to show 8-11m of overburden, mostly frozen, on top of a soft bedrock type. Two paleo-channels and a bedrock bench could be located.

On the left slope, at 0-46m, a large paleo-channel, filled with 1-2m of thawed muck and 9-10m of frozen gravel could be located.

Around 48m the overburden is thawed by the current stream.

At 52-78m another channel, filled with 1-2m of thawed muck and 7-8m of frozen gravel could be detected.

At 80-94m a bedrock bench, covered with approx. 9m of overburden, dominated by gravel, could be measured.

After 94m the overburden, 6-7m thick, could still have an alluvial origin.

Alternatively and less likely, the overburden could be significantly eroded showing just 1-2.5m of thawed muck on top of thawed gravel. This interpretation is weakened by the alternative interpretation scenario of profile_01 about 1.5 km downstream.[9]

"The bedrock is mapped as the Nasina Subterrane which consists of metamorphosed early to mid-Paleozoic continental margin with superimposed late-Devonian and Early Mississippian arc volcanic and plutonic rocks".[10] In the resistivity profile, the bedrock could be represented by discontinuously weathered volcanic rock or schist.

[9] See AG report "Geophysical Survey with 2D Resistivity/IP, Maisy May Creek, Yukon 2012, Line_01"

[10] Yukon Placer Database

Recommendations

It is recommended to dig or drill to find our which interpretation scenario is true: the deep-bedrock-hypothesis or the shallow-bedrock-hypothesis.

We recommend drilling or digging at 36m, 70m, and 86m. If the bedrock would not be reached within 5m depth at these locations, the interpretation of the deeper bedrock must be true.

In this case the interpreted channel at 36m would likely show bedrock at approx. 11m depth.

The channel at 70m would show bedrock at approx. 9m depth.

The possible bedrock bench would likely show bedrock at 9m depth.

At these tree test holes, very good samples are expected even with an auger drill since the overburden on top of the bedrock seems to be frozen.

9. References

Literature

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Maps

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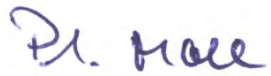
10. Qualification

Philipp Moll

- Study of geology, University of Freiburg, Germany
- Visit of geophysical field courses, University of Karlsruhe and University of Stuttgart, Germany
- Geological Prospecting for precious metals and minerals in the Yukon, NWTs, and Alaska since 1989
- Geophysical surveying for Mining Exploration in the Yukon since 2005
- Study of biology and German language and literature, University of Freiburg, Germany
- Apprenticeship of precision mechanic, Tools Factory Hermann Bilz, Zell, Germany



Philipp Moll

Stefan Ostermaier

- Study of geology, University of Tübingen, Germany
- Visit of geophysical field courses, University of Karlsruhe and U
  Stuttgart, Germany
- Geological prospecting for precious metals and minerals in the
  since 2001
- Geophysical Surveying for Mining Exploration in the Yukon sin
- Study of computer science, University of Stuttgart, Germany

Stefan Ostermaier

11. GPS-Data

Maisy May Creek Line 02

Electrode No.	Location in Profile [m]	GPS-Coordinates Latitude/ Longitude hddd° mm' ss.s"	GPS-Accuracy [m]	Post [*]
1	0.0	N63 19 34.7 W138 55 30.8	3	*
2	4.0	N63 19 34.7 W138 55 31.0	3	
3	8.0	N63 19 34.8 W138 55 31.2	3	
4	12.0	N63 19 34.7 W138 55 31.6	3	
5	16.0	N63 19 34.7 W138 55 31.9	3	
6	20.0	N63 19 34.6 W138 55 32.3	3	
7	24.0	N63 19 34.6 W138 55 32.6	3	
8	28.0	N63 19 34.5 W138 55 32.9	3	
9	32.0	N63 19 34.6 W138 55 33.1	3	
10	36.0	N63 19 34.5 W138 55 33.4	3	
11	40.0	N63 19 34.5 W138 55 33.5	3	
12	44.0	N63 19 34.4 W138 55 33.8	3	
13	48.0	N63 19 34.4 W138 55 34.2	3	
14	52.0	N63 19 34.4 W138 55 34.4	3	
15	56.0	N63 19 34.4 W138 55 34.7	3	
16	60.0	N63 19 34.4 W138 55 34.9	3	
17	64.0	N63 19 34.3 W138 55 35.2	3	
18	68.0	N63 19 34.3 W138 55 35.6	3	
19	72.0	N63 19 34.2 W138 55 35.9	3	
20	76.0	N63 19 34.2 W138 55 36.1	3	
21	80.0	N63 19 34.2 W138 55 36.3	3	
22	84.0	N63 19 34.1 W138 55 36.7	3	
23	88.0	N63 19 34.1 W138 55 36.9	3	
24	92.0	N63 19 34.1 W138 55 37.2	3	
25	96.0	N63 19 34.1 W138 55 37.3	3	
26	100.0	N63 19 34.0 W138 55 37.7	3	
27	104.0	N63 19 34.0 W138 55 37.9	3	
28	108.0	N63 19 34.0 W138 55 38.3	3	
29	112.0	N63 19 33.9 W138 55 38.6	3	
30	116.0	N63 19 33.9 W138 55 38.9	3	
31	120.0	N63 19 33.9 W138 55 39.1	3	
32	124.0	N63 19 33.9 W138 55 39.2	3	
33	128.0	N63 19 33.9 W138 55 39.4	3	
34	132.0	N63 19 33.9 W138 55 39.8	3	
35	136.0	N63 19 33.8 W138 55 40.1	3	
36	140.0	N63 19 33.8 W138 55 40.5	3	
37	144.0	N63 19 33.8 W138 55 40.7	3	
38	146.0	N63 19 33.8 W138 55 40.9	3	*

12. Cost

Arctic Geophysics Inc.
Geophysical Surveys • Prospecting • Consulting

All-In Exploration Solutions Inc.
Edward Long
11 Redwood St.
Whitehorse, YK
Y1A 5W1
elong@northwestel.net

Invoice ID00633_2

Date: 7th July, 2012

Geophysical Survey for Placer Investigation 7th July 2012

Target: Inspection of sedimentary stratigraphy and bedrock depth/topography
Method: 2D Resistivity: **Measuring Line_02**
Location: Maisy May Creek drainage system, Dawson Mining District, 115O/07P
on Placer **Lease ID 00933**

Quantity	Description	Amount $CAN
Mob/Demob		
1 1/3 days	Vehicle $ 70.-- / day	93.33
306 Km	$ 0.55 / km (1/3 share)	56.10
1 day	Access + Inspection of ground $ 350.-- / day, operator + $ 250.--/Day field assistant (1/3 share)	200.--
Geophysical Survey		
1 day	Geoelectrical 2D-Resistivity imaging system + Survey leader $ 880.-- / day	880.--
1 day	Field Assistant $ 250.--	250.--
1/3 day	Data Processing, First Documentation $ 350.-- / day	116.66
1 day	Writing report , $ 350.-- / day	350.--
	Printing / Binding /Shipping	60.--
	NET Amount	$ 2006.09
GST Number 846363216RT0001	**G.S.T. (5%)**	$ 100.30
Total Due		**$ 2 106.39**

Arctic Geophysics Inc.

Geophysical Surveys • Prospecting • Consulting

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Box 747, Dawson City, Yukon Territory, Y0B 1G0, Canada
Phone: 867-993-3671 (Cell), info@arctic-geophysics.com

Geophysical Survey with 2D Resistivity/IP
Maisy May Creek, Yukon 2012

N63 18 55.7 W138 55 24.4

Lease ID00634

FOR
La Tierra Resources Ltd.
Box 304-211 Elliott St
Whitehorse, YT, Y1A2A1

AUTHORS
Philipp Moll

WORK PERFORMED
July 5th 2010

DATE OF REPORT
January 15th August 2011

Index

1. Introduction

This geophysical investigation was done for La All-In Exploration Solutions Inc., Bud Davis.

The survey, using 2D Resistivity/IP, was conducted to prospect the ground for placer - and mineral mining interests.

The ground was tested with one 94.5m-measuring line, depth 19m.

2. Prospecting Lease

Grant Number	Claim Name	Owner
ID00634	–	Bud Davis

3. Location

The placer prospecting lease ID00634 is located on a left tributary of Maisy May Creek. Maisy May Creek flows into the Stewart River about 55 River-km upstream from the confluence with the Yukon River.

4. Access

The prospecting lease ID00634 was accessed via mining road. However, the last 2km of the way to the measuring line had to be hiked.

5. Goal

The survey was focussed on measuring and interpreting following **subsurface characteristics**:

Placer Prospecting

1. Depth and topography of bedrock
    - Paleochannels
    - Bedrock benches
2. Sedimentary stratification
3. Permafrost conditions
4. Groundwater table
5. Mining/prospecting history

6. Methods

The **Resistivity profile** is the foundation for the interpretation of the subsurface conditions for the **placer** prospection. It usually allows for good interpretation of bedrock and overburden for finding secondary deposits.

The **IP model** serves as basis for the interpretation of the mineral and petrologic conditions in **hardrock**. IP is an industry proven standard method for the detection of primary mineral deposits. The IP data support the interpretation of the Resistivity profile.

Resistivity

In this **placer** survey 2D Resistivity was used. Resistivity is a reliable geophysical method for the detection of very shallow and deep layer interfaces in nearly all surface and subsurface conditions in the Yukon. Measuring shallow interfaces for a long distance is more economic than with seismic. The depth penetration is much higher than with ground penetrating radar. Resistivity data taken in discontinuously frozen ground often provide a plausible interpretation since the profile matrix is consistently filled with data representing a material property. There are no "blind zones" in a resistivity profile like they appear in other geophysical methods purely based on signal reflection. A lightweight system is available for flexible use with a small crew.

Induced Polarization (IP)

IP data are simultaneously taken when measuring Resistivity, with the same equipment and staking. So these data are automatically at hand when using Resistivity.

7. Use of Geophysical Methods

7.1. Instrumentation

For this survey a lightweight, custom-built 2D RESISTIVITY and INDUCED POLARIZATION (IP) imaging system with rapid automatic data acquisition was used. The system includes:

- "4 POINT LIGHT" EARTH RESISTIVITY METER[1]
- 96 ELECTRODE CONTROL MODULES[2]
- 96 STAINLESS STEEL ELECTRODES[3]
- 480m MULTICORE CABLE 96x5m[4]

This system weighs approximately 90 kg. It can be run with a 12V lead battery charged by 60 Watt solar panels. The equipment facilitates high mobility and rapid data acquisition.

[1] Constructed and produced by LGM (Germany)

[2] Ditto

[3] Constructed and produced by GEOANALYSIS.COM (Germany)

[4] Ditto

7.2. Data Acquisition

The **data acquisition** is carried out by the automatic activation of 4-point-electrodes. Thus several thousand measurements are taken, one every 1-2 seconds. The AC transmitter current of 0.26 to 30 Hz is amplified by the electrode control modules, up to a maximum of 100mA and 400V peak to peak. The voltage measured at the receiver electrodes (M, N) is also amplified.

In this geoelectrical survey the **Schlumberger-array** was used. This array is appropriate to image horizontally running layers as is needed for placer prospecting.

7.3. Processing

The measured Resistivity/IP data were processed with the **RES2DINV** inversion program[5].

7.4. Interpretation

The interpretation of the measured data is supported by:

Experience - measuring practice with Resistivity/IP in Yukon/BC since 2005
Discussion - with the customer, and placer geologist William Lebarge.[6]
Comparison - between geophysical and technogenic information found in other surveys
Observation - of surficial conditions in the field
Sources - Bedrock Geology Map[7]

7.5. Profile image

In the **Resistivity profile** the interpreted layer interfaces are marked with a black line. Please be aware: The profiles show **ground-layers approximately 15% thicker** than they are in reality. The thickening of the model layers is caused by the inversion software. The correction factor of 0.85 for the determination of the true layer thickness has been established by the Arctic Geophysics Inc. team on the basis of numerous geoelectrical profiles verified by drilling, trenching, and mining done by our customers.

The **graphical markings** showing the interpreted layer interfaces in the profiles (using the black lines) are done accordingly to the data structure in the profile itself. This means: the layers there will also show up approximately

[5] Produced by GEOTOMO SOFTWARE (Malaysia)

[6] Lebarge, William; Placer Geologist, Yukon Geological Survey

[7] Gordey, S.P. and Makepeace, A.J. (comp.) 1999: Yukon bedrock geology in Yukon digital geology, S.P. Gordey and A.J. Makepeace (comp.); Geological Survey of Canada Open File D3826 and Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1999-1(D)

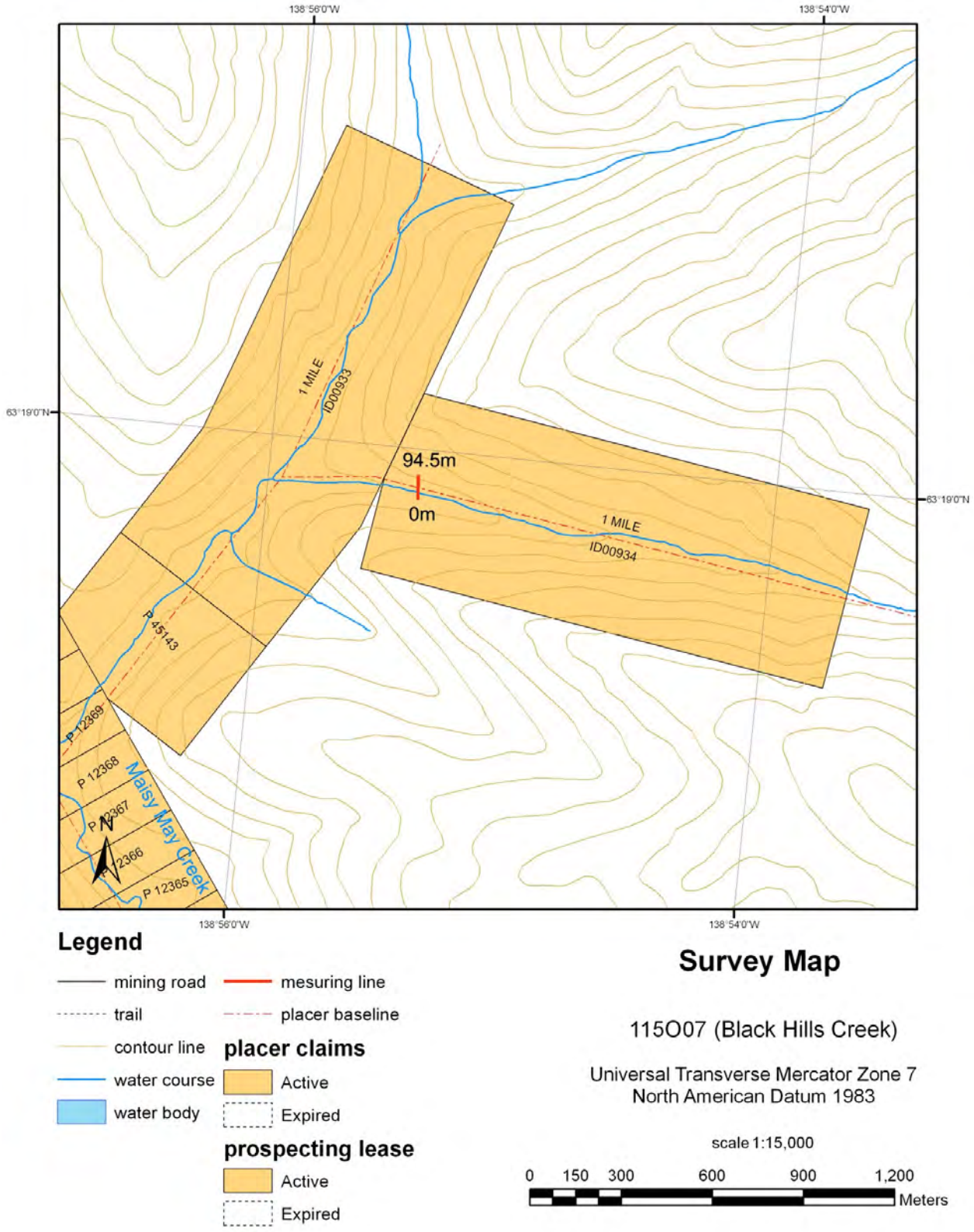
15% thicker than they are in reality. In the interpretation text the layer thicknesses and depths have been recalculated to the expected real values.

8. Resistivity/IP Survey at Maisy May Creek

Preliminary Note!

The subsurface information of this study is an interpretation based on measured geophysical data. We recommend the verification of the interpretation using physical prospecting methods such as drilling, test pitting, trenching, or shafting.

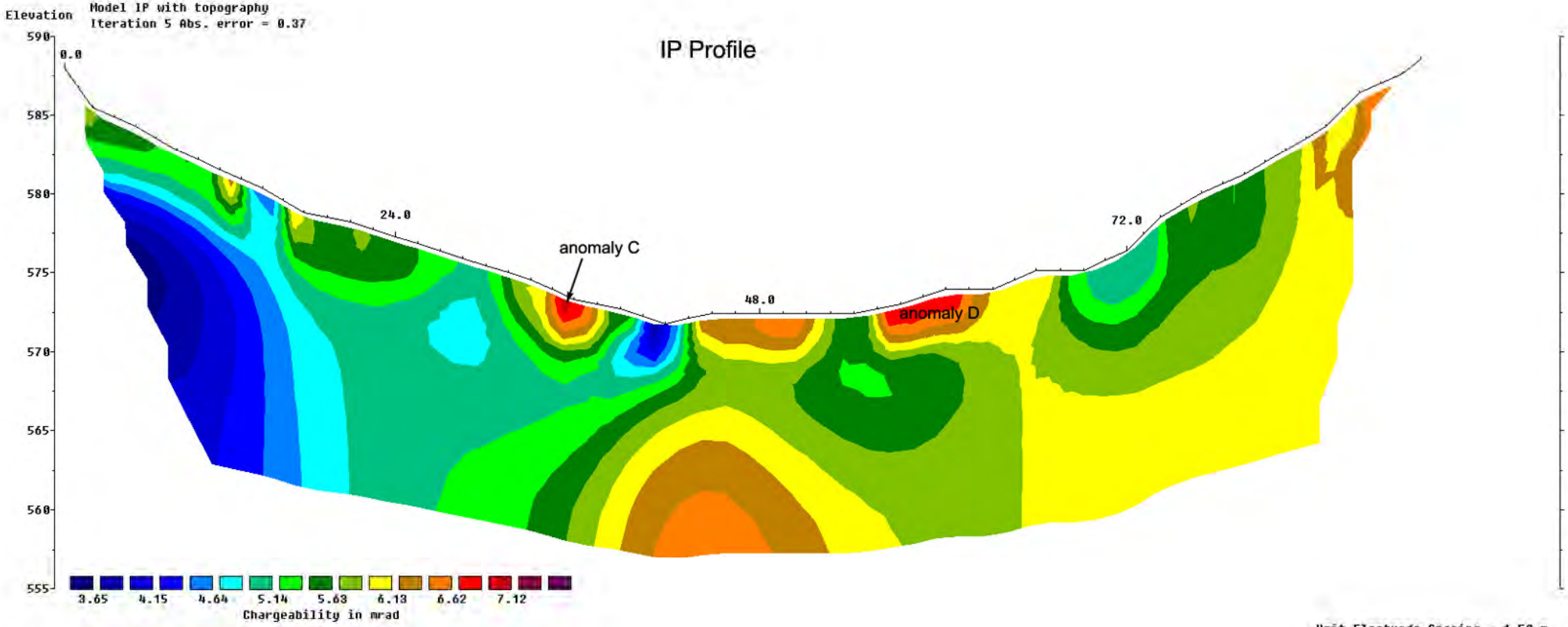
Survey Map[8]



[8] http://www.yukonminingrecorder.ca/PDFs: 115O/07

Maisy May Creek
2D Resistivity/IP, Schlumberger array
64 Electrodes: spacing 1.5m, Horizontal resolution 0.75m
Horizontal and vertical measure in [meter], Iteration error in [%]
Vertical exaggeration in model section display = 1.00
Data acquisition: Stefan Ostermaier, Franz Piechotta 6th July 2012
Processing: Franz Piechotta, 6th July 2012
Arctic Geophysics Inc., Yukon

Arctic Geophysics Inc.
Geophysical Surveys • Prospecting • Consulting
www.arctic-geophysics.com
Box 747, Dawson City Y.T., Y0B-1G0, Canada
Phone: 867-993-3671 (Cell), info@arctic-geophysics.com



Unit Electrode Spacing = 1.50 m.

Horizontal scale is 25.37 pixels per unit spacing
Vertical exaggeration in model section display = 1.00
First electrode is located at 0.0 m.
Last electrode is located at 94.5 m.

The profile might show the ground-layers up to approximately 15% thicker than they are in reality.

This 2D Resistivity measuring result is an interpretation of geophysical data. We recommend the verification of the profile by drilling or trenching

Maisy May Creek
2D Resistivity/IP, Schlumberger array
64 Electrodes: spacing 1.5m, Horizontal resolution 0.75m
Horizontal and vertical measure in [meter], Iteration error in [%]
Vertical exaggeration in model section display = 1.00
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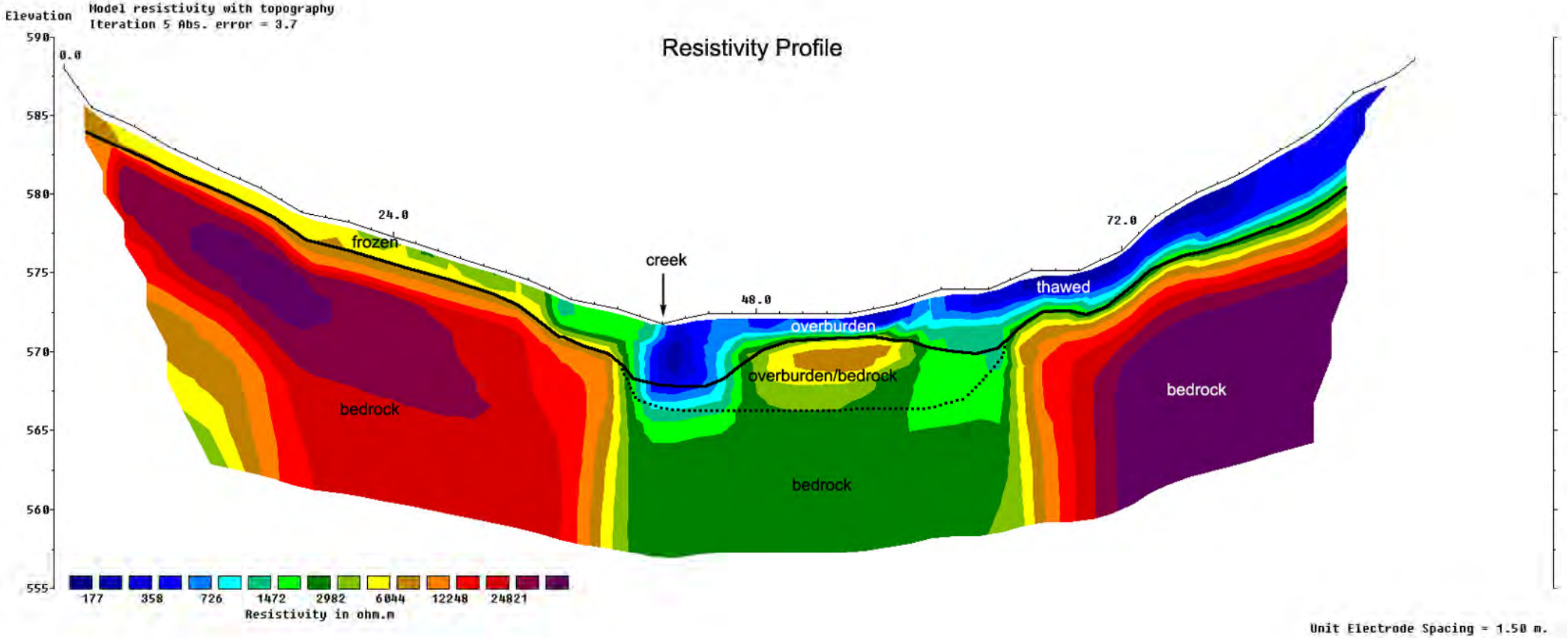

bedrock interface
alternative bedrock interface

The profile might show the ground-layers up to approximately 15% thicker than they are in reality.

This 2D Resistivity measuring result is an interpretation of geophysical data. We recommend the verification of the profile by drilling or trenching

Profile Interpretation

This resistivity profile seems to show a thin layer of water-saturated overburden (1-4m thick) on top of at least two different bedrock types. On the left side of the valley bottom a paleo-channel (main channel) could be located.

On the left slope, at 0-40.5m, the overburden, likely dominated by colluvium, might be just 1m thick.

At 40.5-46.5m, on the valley floor, there could be a paleo-channel, 4m deep, filled with thawed gravel. There seems to be the main channel. The IP model suggests just a small amount of muck on top of the channel gravel.

At 46.5-57m the bedrock seems to be covered with about 1-2m of overburden. This overburden is moist and is likely consisting of 1/3 of muck on top of 2/3 of gravel. This would be the typical overburden in this area.[9] The hypothetic muck and the gravel cannot be differentiated in the resistivity profile since both materials seem to be similarly saturated with water. However, the IP model indicates the existence of muck in the topmost overburden: The higher chargeability could be a sign for muck.[10]

At 57-64.5m the bedrock seems to drop into another channel, about 3m deep at 61.5m, filled with gravel below muck.

Alternatively and less likely, the whole valley bottom could be deposited with approx. 5m of overburden, dominated by gravel, mostly thawed, showing a permafrost lense in the middle of the valley (brown zone), and forming an U-shaped channel.

At -66-70.5m a small bedrock bench, 2m deep, covered with gravel, could be located.

After 70.5m the overburden seems to consist of just about 2-4m of colluvium likely containing a matrix of fine sediments such as silt and mud. This material is thawed and moist.

“The bedrock is mapped as the Nasina Subterrane which consists of metamorphosed early to mid-Paleozoic continental margin with superimposed late-Devonian and Early Mississippian arc volcanic and plutonic rocks”.[11] In the resistivity profile, the high resistivity zones (violet/red/orange) could be plutonic rock, possibly granite or granodiorite. The low resistivity zones could represent a volcanic rock or schist influenced by contact metamorphism.

In the IP model the chargeability high at anomalies C and D could indicate clay or a low concentrated mineralization in the overburden.

[9] Yukon Placer Database

[10] IP models show the zones in the subsurface much rougher than the resistivity profile. In reality the muck layer is expected to be much thinner than the high chargeability zone in the center of the valley.

[11] Yukon Placer Database

Recommendations

We recommend the verification of the two hypothetic channels by test pitting or drilling.

At 43.5m the bedrock could be 4m deep.

At 52.5m the bedrock could be 1.5m deep.

At 61.5m the bedrock could be 3m deep.

If these bedrock depths are not reached at these spots, we recommend digging/drilling deeper: Possibly the bedrock appears at approx 5m at all test locations. In this case the (less likely) hypothesis of the U-shaped channel would be verified.

We recommend the verification of the hypothetic bedrock bench by drilling or test pitting.

At 69m the bedrock should be 2m deep.

9. References

Literature

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Robb L. Introducing to Ore-Forming Processes, Backwell Science Ltd., 2005

Maps

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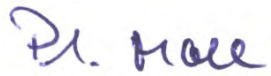
10. Qualification

Philipp Moll

- Study of geology, University of Freiburg, Germany
- Visit of geophysical field courses, University of Karlsruhe and University of Stuttgart, Germany
- Geological Prospecting for precious metals and minerals in the Yukon, NWTs, and Alaska since 1989
- Geophysical surveying for Mining Exploration in the Yukon since 2005
- Study of biology and German language and literature, University of Freiburg, Germany
- Apprenticeship of precision mechanic, Tools Factory Hermann Bilz, Zell, Germany



Philipp Moll

Stefan Ostermaier

- Study of geology, University of Tübingen, Germany
- Visit of geophysical field courses, University of Karlsruhe and U
  Stuttgart, Germany
- Geological prospecting for precious metals and minerals in the
  since 2001
- Geophysical Surveying for Mining Exploration in the Yukon sin
- Study of computer science, University of Stuttgart, Germany

Stefan Ostermaier

11. GPS-Data

Maisy May Creek

Electrode No.	Location in Profile [m]	GPS-Coordinates Latitude/ Longitude hddd° mm' ss.s"	GPS-Accuracy [m]	Post [*]
1	0.0	N63 18 54.6 W138 55 24.3	3	*
2	3.0	N63 18 54.7 W138 55 24.3	3	
3	6.0	N63 18 54.7 W138 55 24.3	3	
4	9.0	N63 18 54.8 W138 55 24.3	3	
5	12.0	N63 18 54.9 W138 55 24.3	3	
6	15.0	N63 18 55.0 W138 55 24.4	3	
7	18.0	N63 18 55.1 W138 55 24.4	3	
8	21.0	N63 18 55.2 W138 55 24.4	3	
9	24.0	N63 18 55.3 W138 55 24.4	3	
10	27.0	N63 18 55.4 W138 55 24.4	3	
11	30.0	N63 18 55.5 W138 55 24.4	3	
12	33.0	N63 18 55.4 W138 55 24.4	3	
13	36.0	N63 18 55.5 W138 55 24.4	3	
14	39.0	N63 18 55.6 W138 55 24.5	3	
15	42.0	N63 18 55.6 W138 55 24.5	3	
16	45.0	N63 18 55.7 W138 55 24.4	3	*
17	48.0	N63 18 55.8 W138 55 24.5	3	
18	51.0	N63 18 55.9 W138 55 24.5	3	
19	54.0	N63 18 56.0 W138 55 24.5	3	
20	57.0	N63 18 56.1 W138 55 24.5	3	
21	60.0	N63 18 56.2 W138 55 24.5	3	
22	63.0	N63 18 56.3 W138 55 24.5	3	
23	66.0	N63 18 56.5 W138 55 24.6	3	
24	69.0	N63 18 56.6 W138 55 24.6	3	
25	72.0	N63 18 56.6 W138 55 24.7	3	
26	75.0	N63 18 56.6 W138 55 24.7	3	
27	78.0	N63 18 56.8 W138 55 24.8	3	
28	81.0	N63 18 56.8 W138 55 24.8	3	
29	84.0	N63 18 56.9 W138 55 24.8	3	
30	87.0	N63 18 57.0 W138 55 24.8	3	
31	90.0	N63 18 57.1 W138 55 24.7	3	
32	93.0	N63 18 57.2 W138 55 24.7	3	
33	94.5	N63 18 57.3 W138 55 24.7	3	*

12. Cost

Arctic Geophysics Inc.
Geophysical Surveys • Prospecting • Consulting

La Tierra Resources Limited
Box 304
Whitehorse, YT
Y1A 2A1

Invoice ID00634_1

Date: 5th July, 2012

Geophysical Survey for Placer Investigation 5th July 2012

Target: Inspection of sedimentary stratigraphy and bedrock depth/topography
Method: 2D Resistivity: **Measuring Line_01**
Location: Maisy May Creek drainage system, Dawson Mining District, 115O/07P
on Placer **Lease ID 00934**

Quantity	Description	Amount $CAN
Mob/Demob		
1 1/3 days	Vehicle $ 70.-- / day	93.33
306 Km	$ 0.55 / km (1/3 share)	56.10
1 day	Access + Inspection of ground $ 350.-- / day, operator + $ 250.--/Day field assistant (1/3 share)	200.--
Geophysical Survey		
1 day	Geoelectrical 2D-Resistivity imaging system + Survey leader $ 880.-- / day	880.--
1 day	Field Assistant $ 250.--	250.--
1/3 day	Data Processing, First Documentation $ 350.-- / day	116.66
1 day	Writing report , $ 350.-- / day	350.--
	Printing / Binding /Shipping	60.--
	NET Amount	$ 2006.09
GST Number 846363216RT0001	**G.S.T. (5%)**	$ 100.30
Total Due		**$ 2 106.39**

Appendix D – Water License PM12-070 – Candace Creek Mining Ltd.

YUKON WATER BOARD

Pursuant to the *Waters Act* and *Waters Regulation*, the Yukon Water Board hereby grants a Type B water use licence for a placer mining undertaking to:

Candace Creek Mining Ltd.
13 Tigereye Crescent
Whitehorse YT Y1A 6G6

LICENCE NUMBER: PM12-070

LICENCE TYPE: B **UNDERTAKING:** PLACER MINING

WATERSHED: Stewart River **WATER MANAGEMENT AREA:** 2

HABITAT CLASSIFICATION: Moderate-Low and Low

LOCATION: Latitude: 63° 19' 43''N Longitude: 138° 55' 39'' W

WATER SOURCE: The unnamed left limit tributary of Candace Creek and Candace Creek, a tributary of Maisy May Creek

MAXIMUM QUANTITY: 5,000 cubic metres of water per day

EFFECTIVE DATE: The effective date of this licence shall be the date on which the signature of the Chairperson of the Yukon Water Board is affixed.

EXPIRY DATE: June 4, 2023

This licence shall be subject to the restrictions and conditions contained herein, and to the restrictions and conditions contained in the *Waters Act* and the *Waters Regulation* made thereunder.

Dated this 12th day of June, 2013.

Witness

Approved by:

Chairperson
YUKON WATER BOARD

PART A DEFINITIONS

"Act" means *Waters Act* and any amendments thereto.

"Action Level" means the end-of-pipe sediment concentrations that must not be exceeded, on average, for the life of the mining operation.

"Application" means application for water use licence PM12-070 and placer mining land use approval AP12070 and any subsequent information presented to the Yukon Water Board up to the date of the Board's decision.

"Board" means the Yukon Water Board.

"Compliance Level" means a maximum end-of-pipe concentration that shall never be exceeded.

"Design Target" means the best settling facility that can be established at a placer mining operation, given the prevailing site characteristics.

"Inspector" means any person designated as an Inspector under the Act.

"In-stream Reservoir" means any water impoundment structure, where water is collected and retained for use, which is constructed in a natural channel or in a diversion, and through which the entire creek flow may be directed at any time.

"Natural Boundary" means the visible high water mark of any lake, river, stream or other body of water where the presence and action of the water is so common and usual, and so long continued, as to mark upon the soil of the bed of the lake, stream or other body of water, a character distinct from that of the banks thereof, both in respect to vegetation and in respect to the nature of the soil itself. In addition, the best estimates of the edge of dormant or old side channels and marsh areas are considered to be natural boundaries.

"Permanent Diversion" means any direct or indirect alteration of a portion, or all, of the water flowing in the route, bed, bank or boundaries of a river, stream, lake or watercourse and is in place for a period of over 5 years.

"Regulation" means the *Waters Regulation.*

"Riparian Zone" means a portion of the stream bank, either vegetated or not, immediately adjacent to the stream channel and is measured from the high water mark on each bank of the watercourse and follows the shape of the channel.

"Spill Contingency Plan" means the *Fuel Spill Contingency Plan* that was submitted as part of the Application and included in water use register PM12-070 as exhibit 1.3, and any subsequent revisions.

"Spring Freshet" means the sudden increase in flow carried by a stream as snowmelt occurs at higher elevations in the watershed.

"Temporary Diversion" means any direct or indirect alteration of a portion, or all, of the water flowing in the route, bed, bank or boundaries of a river, stream, lake or Watercourse and is in place for a period of 1 to 5 years.

"Waste" means any substance as defined in the Act.

"Watercourse" means any stream, lake, pond, river, creek, spring, ravine or swamp, whether ordinarily containing the water or not.

"Wetted Perimeter" means the horizontal extent of the present water level while the work is taking place.

"Work Areas" means any area disturbed or altered by mining activities, excluding any stable diversion channel.

PART B DESCRIPTION OF WATER USE AND DEPOSIT OF WASTE

1. The Licensee is hereby authorized to:

   a) obtain water from Candace Creek and the unnamed left limit tributary of Candace Creek at a maximum combined quantity of 5,000 cubic metres per day;

   b) use this water for a placer mining undertaking on grant numbers P 508833, P 508834, P 508835, P 508836, P 508837, P 508838, P 508839, P 508840, P 508841, P 508842 and converted lease numbers ID 01054, ID 01050, and ID 00934 in accordance with clauses 34 and 35,

   c) store water in out-of-stream reservoirs and out-of-stream settling ponds;

   d) return a flow of water to Candace Creek and the unnamed left limit tributary of Candace Creek, and to deposit Waste into Candace Creek and the unnamed left limit tributary of Candace Creek;

   e) construct, maintain and decommission an intake ditch to out-of-stream reservoirs;

   f) construct and maintain Temporary and Permanent Diversions on Candace Creek and the unnamed left limit tributary of Candace Creek;

   g) construct, maintain and decommission In-stream Reservoirs on Candace Creek and the unnamed left limit tributary of Candace Creek;

   h) use, maintain and decommission existing ford crossings on Candace Creek and the unnamed left limit tributary of Candace Creek; and

   i) construct, maintain and decommission new ford crossings on Candace Creek and the unnamed left limit tributary of Candace Creek,

as described in the Application and subject to the conditions of this licence. Where there is a discrepancy between the Application and the conditions of this licence, then the conditions of this licence shall prevail.

2. All works associated with the storage or conveyance of water and effluent shall be constructed to withstand flood events and maintained in good repair.

3. The Licensee shall comply with the Riparian Zone requirements for Low and Moderate-Low habitat suitability for Candace Creek and the unnamed left limit tributary of Candace Creek for all original (un-modified) channels, previously reclaimed channels, and Permanent Diversion channels.

4. The Licensee shall not deposit, or permit the deposit of Waste containing:

   a) anything toxic to fish;

   b) floating solids;

   c) visible oil or grease; or

   d) mercury

   into a receiving Watercourse, or in any place, under conditions where such Waste, or any other Waste results from the deposit of such Waste. If resulting Waste contains any of the items prohibited by this paragraph, it may not enter the receiving Watercourse.

5. Except as authorized by this licence, no Waste shall enter any Watercourse as a result of any activity carried out by the Licensee.

Effluent Quality Standard

6. The Licensee shall comply with Low and Moderate-Low habitat suitability effluent discharge standards for any grab sample taken at the point in the effluent flow immediately before it enters the natural stream flow, as follows:

Low

   a) The Design Target for effluent discharge shall be 0.2 ml/L;

   b) The Action Level for effluent discharge shall be 1.0 ml/L;

   c) The Compliance Level for effluent discharge shall be 1.5 ml/L;

Moderate-Low

   d) The Design Target for effluent discharge shall be 0.2 ml/L;

   e) The Action Level for effluent discharge shall be 0.8 ml/L;

   f) The Compliance Level for effluent discharge shall be 1.2 ml/L.

7. All effluent discharge levels included in this licence are identified in excess of natural background concentrations in the Watercourse at the time of sampling.

PART C MINING ACTIVITIES AND OPERATING CONDITIONS

Storage and Conveyance Structures

8. Settling facilities shall be provided for all mining wastewater.

9. All storage and settling facilities and associated spillways, drains and water supply ditches located outside the Watercourse channel shall be of adequate capacity and construction.

10. Armouring shall be installed at the confluence of any intake ditch and the Watercourse.

11. All water storage structures shall be constructed and maintained in a condition that prevents wildlife entrapment and does not impede the movement of wildlife.

Water Acquisition

12. The Licensee shall provide barriers consisting of fish guards, screens, coverings or nets on all water intakes as follows:

    a) Screens or nets shall have a minimum of 3.5 openings per centimeter and openings no greater than 3.2 millimetres along any given side;

    b) If a punch plate or similar material is used, openings shall be no greater than 3.2 millimetres in length or width;

    c) There shall be no less than 929 square centimeters of open screen for every 205 litres per minute being withdrawn;

    d) The barriers shall be monitored and maintained to ensure that they function effectively at all times when water is being withdrawn;

    e) The barriers shall be designed and installed in such a manner that the screen is submerged and a uniform flow is maintained through the total screen area;

    f) Water shall not be withdrawn when the barrier is removed for renewal, repair or inspection; and

    g) The Licensee shall cease pumping or decanting and take remedial action if there is alteration to the Riparian Zone or the bed or bank of the Watercourse resulting from any activity undertaken by the Licensee.

Progressive Reclamation

13. Overburden shall be stockpiled and located where it will not adversely affect water quality in any Watercourse.

14. Reclamation shall be progressive over the life of this licence.

Watercourse Crossings –Fords

15. The Licensee may modify the bed or banks of streams to allow fording of the Watercourse as per the most recent version of the *Fish Habitat Design, Operation and Reclamation Workbook and Worksheets for Placer Mining in the Yukon Territory.*

16. When constructing new fords, the distance between fords shall be limited to the following:

    a) In areas of Moderate-Low habitat suitability, every 800 metres, or shall not exceed more than 3 fords every 2000 metres; and

    b) In areas of Low habitat suitability, every 400 metres, or shall not exceed more than 4 fords every 1000 metres.

17. The Licensee shall adhere to the following conditions when constructing and maintaining new and existing fords:

    a) The width of the approach to the ford shall be a maximum of 10 metres;

    b) All crossings shall be at a right angle to the Watercourse;

    c) Removal of vegetation adjacent to the crossings shall be minimized;

    d) Non-erodible materials shall be placed up the bank on both sides of the crossing to stabilize the banks;

    e) The Watercourse crossings approaches shall be low and stable enough to support the vehicles and equipment;

    f) The Watercourse shall be crossed on either a firm rock bottom or a coarse gravel bottom;

    g) Equipment crossing the Watercourse shall be mechanically sound and free of leaks; and

    h) The blade or bucket on equipment shall be raised above the Wetted Perimeter while crossing any Watercourse.

Diversion Construction and Restoration

18. The Licensee shall adhere to the channel design and restoration requirements of the most recent edition of the *Fish Habitat Design, Operation and Reclamation Workbook and Worksheets for Placer Mining in the Yukon Territory* for the construction of all diversions, redirection of the Watercourse, and restoration activities.

19. The bed and banks of the Permanent and Temporary Diversion channels shall be stable to prevent erosion.

20. A protective berm shall be constructed and maintained along any Watercourse channel diversion, if space allows or as determined by an Inspector.

21. Armouring shall be installed at both the upstream and downstream ends of any diversion.

22. When constructing a diversion, a plug shall be left in place at the upstream end and the downstream end until the diversion is completed.

23. Prior to the opening of any diversion channel, a sump shall be constructed at the downstream end of the diversion for dewatering purposes.

24. The Licensee shall construct all diversion channels so as to avoid the stranding of fish.

25. Upon completion of the construction of any diversion, the Licensee shall first remove the plug at the downstream end of the diversion and then gradually remove the plug at the upstream end of the diversion.

26. The bed and banks of any tributary (gulch or pup) of Candace Creek and the unnamed left limit tributary of Candace Creek shall be left in a stable condition and shall be left in such a manner so that erosion is controlled and revegetation is possible.

PART D SEASONAL CLOSURE

27. The Licensee shall contact an Inspector not less than 2 weeks prior to seasonal closure.

28. All mined or otherwise disturbed ground surfaces, including cut banks, fill slopes and tailings piles shall be stabilized annually to prevent erosion and surface runoff from carrying sediment into any Watercourse.

29. To prevent flood damage of out-of-stream structures during freshet, the Licensee shall:

    a) block all intakes that connect the Watercourse to out-of-stream structures; and

    b) provide freeboard on all out-of-stream water reservoirs and settling facilities prior to seasonal closure.

PART E DECOMMISSIONING

30. Prior to final decommissioning or expiry of this licence, the Licensee shall:

    a) contact an Inspector not less than 2 weeks prior to final decommissioning;

    b) ensure that the final creek channel approximates its pre-licence condition in length, gradient and stability, except as may otherwise be required in this licence;

PART F GENERAL CONDITIONS

Other Laws

31. No condition of the water use licence limits the applicability of any statutory authority.

32. All work authorized by this licence shall occur on the property that the Licensee has the right to enter upon and use for that purpose.

33. Where there is a discrepancy between this licence and the Stewart River Watershed Authorization, as attached as Appendix B, then the conditions of the Watershed Authorization shall prevail.

Placer Leases

34. Prior to the commencement of mining of the areas identified as leases in the Application, the Licensee shall:

a) convert placer leases or portions of the placer leases, which are included in this licence, into placer mining claims and obtain a grant of placer mining claims, before beginning active mining; and

b) notify the Board, in writing, by providing a copy of:

i) the mining recorders claim status report listing the converted placer mining grant numbers;

ii) claims map illustrating the placer lease number or a portion of the placer lease number, from which the grant or placer mining claims was created;

iii) claims map illustrating the claims and grant numbers which were converted from the placer lease.

35. Where the Licensee provides the information required by 34 of this licence, the grant of placer mining claims shall be deemed to be included in this licence.

Correspondence

36. Where any direction, notice, order or report under this licence is required to be in writing, it shall be given:

a) To the Licensee, if delivered or mailed by registered mail, to the following address:

Candace Creek Mining Ltd.
13 Tigereye Crescent
Whitehorse YT Y1A 6G6

and shall be deemed to have been given to the Licensee on the day it was delivered, or 7 days after the day it was mailed, as the case may be; or

b) To the Board, if delivered, faxed or mailed by registered mail, to the following address:

Yukon Water Board
Suite 106, 419 Range Road
Whitehorse YT Y1A 3V1

Fax#: (867) 456-3890

and shall be deemed to have been given to the Board on the day it was delivered or faxed, or 7 days after the day it was mailed, as the case may be.

c) The Board or the Licensee may, by notice in writing, change its address for delivery.

Camps

37. Sewage, including all human excreta and wastewater associated with daily camp operations, shall be deposited of in accordance with the *Public Health and Safety Act* of the Yukon.

38. The location of subsurface grey water pits or privies shall be not less than 30 metres from the Natural Boundary of any Watercourse, and at least 1.2 metres above bedrock or the water table.

39. If very permeable soils are encountered, the pit privy or grey water pit shall be lined with 0.6 metres of sand or silt.

40. All garbage and refuse shall be kept in a covered container until removed from the site or, where appropriate, incinerated and buried under not less than 1 metre of compacted soil in pits located not less than 30 metres from the Natural Boundary of any Watercourse.

Fuel Storage and Transfer

41. Fuel, lubricants, hydraulic fluids, coolants and similar substances, with the exception of liquids associated with any water pump engine, shall be stored and transferred a minimum of 30 metres from the Natural Boundary of any Watercourse, in such a way that said substances are not deposited in or allowed to be deposited in waters.

Spills and Unauthorized Discharges

42. Where a spill or an unauthorized discharge occurs, that is of a reportable quantity under the Yukon *Spills Regulations,* the Licensee shall immediately contact the 24-hour Yukon Spill Report number, (867) 667-7244 and implement the Spill Contingency Plan. A detailed written report on any such event including, but not limited to, dates, quantities, parameters, causes and other relevant details and explanations, shall be submitted to the Board not later than 10 days after the occurrence.

43. The Licensee shall apply the relevant procedures in the Spill Contingency Plan. The Licensee shall review the Spill Contingency Plan annually and shall provide a summary of that review, including any revisions to the plan, as a component of the annual report.

44. The Licensee shall maintain a log book of all spill or unauthorized discharge occurrences, including spills that are less than the reportable quantities under the Yukon *Spills Regulations*. The log book shall be made available at the request of an Inspector. The log book shall include, but not necessarily be limited to the:

a) date and time of the spill;

b) substance spilt or discharged;

c) approximate amount spilt or discharged;

d) location of the spill;

e) distance between the spill or discharge and the nearest Watercourse; and

f) remedial measures taken to contain and clean-up the spill area or to cease the unauthorized discharge.

45. All personnel shall be trained in procedures to be followed and the equipment to be used in the containment of a spill.

46. The Spill Contingency Plan shall be posted on site for the duration of the works.

Non-Compliance

47. In the event that the Licensee fails to comply with any provision or condition of this licence, the Board may, subject to the Act, cancel the licence.

Minor Modifications

48. Where site conditions require modifications to any drawings for water use or Waste related structures previously submitted to the Board, the Licensee shall submit to the Board a minimum of 10 days prior to the commencement of the construction schedule:

a) written details of the modifications proposed to be made to the specifications and quality assurance/quality control procedures previously submitted to the Board as part of the Application,

b) a written detailed construction schedule and the name and contact number(s) of the operator; and

c) an explanation for the change, including an assessment of the potential impact on the performance of the works.

Sampling

49. Where there is a surface discharge from the settling facilities, the Licensee shall take weekly samples at a point upstream of the water supply and intake and at a point in the effluent flow immediately before it enters the natural stream flow, and shall analyze

these samples for settleable solids using the Imhoff cone 1 hour test or laboratory analysis.

50. Where no discharge from the settling facility to a Watercourse occurs, whether by surface discharge or seepage, no sampling is required.

Reporting

51. On or before the anniversary date of issuance of this licence, and for each year during which this licence is in effect, the Licensee shall submit an annual report to the Board.

52. Annual reports during the year reported shall include the information required by this licence and by the Regulation including, but not necessarily limited to:

a) the quantity of water used under this licence;

b) the quantity, concentration and type of any Waste deposited under this licence;

c) all data collected which is required by this licence;

d) a description of the reclamation that has taken place;

e) a list of grant numbers of claims where any reclamation has taken place;

f) details pertaining to the Spill Contingency Plan review and any updating information, as per clause 43 of this licence; and

g) a summary of any spills or unauthorized discharges that occurred during the year reported.

Fisheries and Oceans Canada | Pêches et Océans Canada

STEWART RIVER WATERSHED

AUTHORIZATION FOR WORKS OR UNDERTAKINGS AFFECTING FISH HABITAT FOR SPECIFIED STREAMS IN THE YUKON TERRITORY

Pursuant to Section 35(2) of the Federal *Fisheries Act*;

The Minister of Fisheries and Oceans Canada (the "Minister") hereby rescinds the conditions of the Stewart River Watershed Authorization (08-HPAC-PA5-00044, April 11, 2008) pertaining to placer mining works or undertakings and sediment discharge standards in the Stewart River watershed.

The Minister hereby authorizes the "*harmful alteration, disruption or destruction of fish habitat*" resulting from placer mining works or undertakings and discharge of sediment at concentrations specified in this authorization, uncontaminated by deleterious substances, within certain streams or portions of streams in the Stewart River watershed as identified on the ***Yukon Placer Fish Habitat Suitability Map - Stewart River Watershed*** (Schedule 1).

Authorization issued to:

Individuals or companies conducting placer mining in certain streams or portion of streams within the Stewart River watershed, Yukon Territory that hold a valid Water Use License pursuant to the *Waters Act* (Yukon) for placer mining activities.

Location of Project

The works and undertakings are located within the drainage basin of the Stewart River watershed, in the Yukon Territory. This authorization applies to certain streams or portions of streams classified on the ***Yukon Placer Fish Habitat Suitability Map - Stewart River Watershed*** (Schedule 1). Larger-scale maps may be available from the Yukon Placer Secretariat or Fisheries and Oceans Canada.

Valid Authorization Period

The valid authorization period for the harmful alteration, disruption and destruction of fish habitat resulting from placer mining works or undertakings is from November 1, 2010 until such time as this authorization is revoked, rescinded, amended or replaced by the Minister.

Amendments or revisions to the terms and conditions identified in this authorization may be required if placer mining activities result in an unforeseen risk to fish or fish habitat resources as demonstrated through monitoring of management parameters (water quality, aquatic health, and physical habitat compensation or rehabilitation). An annual and 5-year review will be conducted to review results of monitoring activities and should amendments be recommended, the process will be guided by the ***Adaptive Management Framework for Yukon Placer Mining***, available from the Yukon Placer Secretariat or Fisheries and Oceans Canada.

Description of Works or Undertakings

This authorization permits the harmful alteration, disruption or destruction of fish habitat, in certain streams or portions of streams in the Stewart River watershed resulting from placer mining works or undertakings: Those undertakings covered by this authorization are limited to:

- The construction of diversion channels,
- In-stream works,
- Water acquisition, and;
- Discharge of sediment from settling facilities.

Works or undertakings are completed in accordance with methods identified in the ***Fish Habitat Design, Operation and Reclamation Workbook*** available from the Yukon Placer Secretariat and Fisheries and Oceans Canada.

Conditions of Authorization

1. The general watershed conditions of this authorization notwithstanding, should any specific works, undertakings, or activities authorized by this authorization, due to weather conditions, different soil, local topography, updated fisheries information or other natural conditions, appear in the opinion of the Fisheries and Oceans Canada, likely to cause greater adverse environmental effect than was contemplated by this watershed authorization, then Fisheries and Oceans Canada may direct the specific Placer Mining operation to suspend or alter works and activities to avoid or mitigate adverse effects with respect to fisheries resources. In circumstances where DFO holds the view that greater adverse environmental effects will occur at a specific site than were contemplated by this watershed authorization Fisheries and Oceans Canada may also modify the application of this authorization to that specific site. Should Fisheries and Oceans Canada propose such modification Fisheries and Oceans Canada will give the Placer Mining operation the opportunity to discuss and respond to the proposed modification.

2. All works or undertakings will be conducted in accordance with:

   2.1. The measures identified in the ***Fish Habitat Design, Operation and Reclamation Workbook*** as per the fish habitat suitability classification of streams or portions of streams identified on the ***Yukon Placer Fish Habitat Suitability Map - Stewart River Watershed*** (Schedule 1).

   2.2. Discharge standards for placer mine effluent identified in the ***Sediment Discharge Standards for Placer Mine Effluent – Stewart River Watershed*** (Schedule 2).

      2.2.1. Sediment discharge standards will be phased in as identified in Schedule 2.

3. Prior to proceeding with placer mining works or undertakings that are likely to result in the harmful alteration, disruption or destruction of fish habitat, the proponent will complete the applicable ***Fish Habitat Design, Operation and Reclamation Worksheets*** (all required appendices

.../3

of the ***Fish Habitat Design, Operation and Reclamation Workbook***) and include these worksheets as a component of their submission for project review to the Yukon Environmental and Socio-economic Assessment Board and the Yukon Water Board.

4. Fish habitat reclamation measures will be identified in the ***Fish Habitat Design, Operation and Reclamation Worksheets*** in accordance with the measures identified in ***Fish Habitat Design, Operation and Reclamation Workbook***. These worksheets are to be included in the submission for project review to the Yukon Environmental and Socio-economic Assessment Board and the Yukon Water Board.

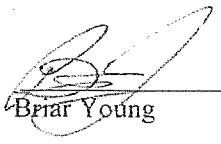
5. The proponent must ensure that all plans developed pursuant to this authorization have been duly prepared and acknowledges sole responsibility for all design, safety and workmanship aspects of all the works associated with this authorization.

6. In the event that any of the forgoing conditions cannot be met, the provisions of this authorization do not apply and the proponent will apply to Fisheries and Oceans Canada for review prior to proceeding.

The holder of this authorization is hereby authorized under the authority of section 35(2) of the Federal *Fisheries Act*. R.S.C., 1985, c.F. 14, to carry out the work or undertaking described herein. This authorization is valid only with respect to fish habitat and for no other purposes. It does not purport to release the applicant from any obligation to obtain permission from or to comply with the requirements of any other regulatory agencies. Failure to comply with any condition of this authorization may result in charges being laid under the Federal *Fisheries Act*.

Authorization #: 08-HPAC-PA5-00044-2

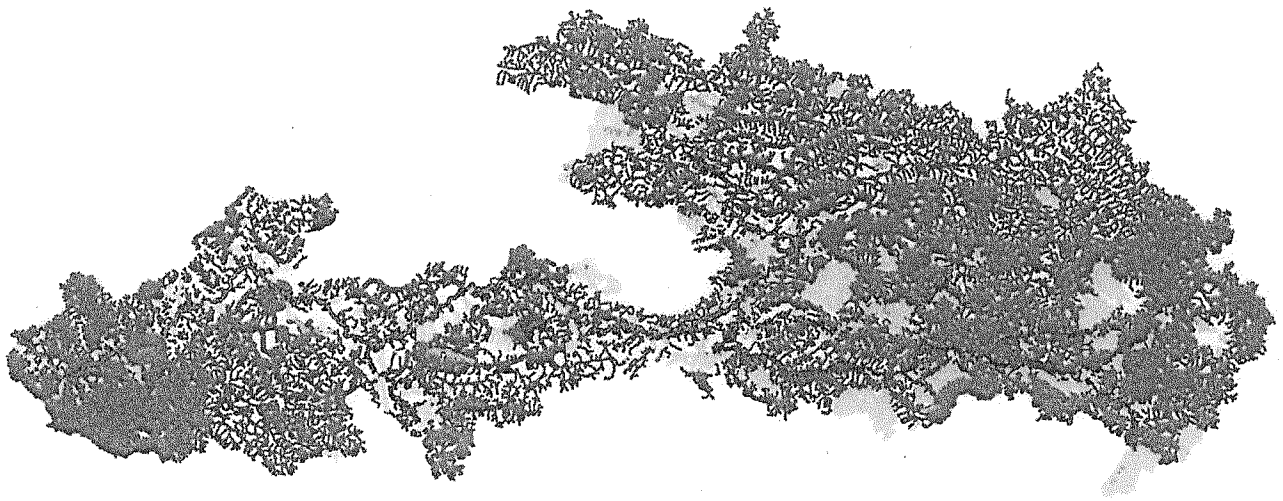
Date of Issuance: November 1, 2010

Approved by: 

Briar Young

Title: Manager, Oceans Habitat and Enhancement Branch
Yukon / Transboundary Rivers Area
Fisheries and Oceans Canada

Yukon Placer Fish Habitat Suitability Map - Stewart River Watershed (Category A)



Watercourse Classification, Habitat Suitability Types

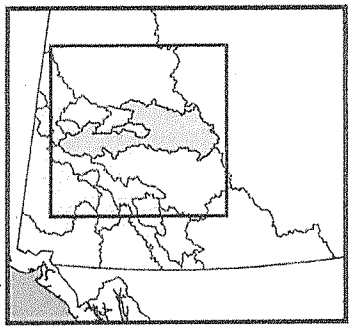
- Water Quality
- Low Suitability
- Moderate-Low Suitability
- Moderate-Moderate Suitability
- Moderate-High Suitability
- High Suitability
- Areas of Special Consideration - Ecological
- Areas of Special Consideration - Cultural

Development

- Current
- Historical
- Extensive

Lakes

The Stewart River is classified as High Suitability unless otherwise shown.



N

0 20 40 60 80 100 km

Map Compiled: September, 2010

Fisheries and Oceans Canada / Pêches et Océans Canada

Appendix A

Fisheries and Oceans Canada | Pêches et Océans Canada

Schedule 2

Sediment Discharge Standards for Placer Mine Effluent – Stewart River Watershed (Category A)

Habitat Suitability	Water Quality Objective[1]	Sediment Discharge Standard for Mine Discharge
High	<25 mg/L[1]	Compliance Level: <0 mg/L
Moderate-High	<25 mg/L[1]	Compliance Level: <200 mg/L
Moderate-Moderate	<50 mg/L[1]	Compliance Level: <200 mg/L
Moderate Moderate (Tributary to Small Lakes)	<50 mg/L[1]	Compliance Level: <200 mg/L
Moderate-Low	<80 mg/L[1]	Design Target: 0.2 ml/L Action Level: 0.8 ml/L Compliance Level: 1.2 ml/L
Moderate Low (Tributary to Large Lakes)	<80 mg/L[1]	Design Target: 0.2 ml/L Action Level: 0.8 ml/L Compliance Level: 1.2 ml/L
Low	<200 mg/L[1]	Design Target: 0.2 ml/L Action Level: 1.0 ml/L Compliance Level: 1.5 ml/L
Water Quality Zones	Downstream WQO mg/L[1]	None identified to date. Consult Fisheries and Oceans Canada for guidance where you believe a natural barrier to fish exists
Areas of Special Consideration		To be determined by Fisheries and Oceans Canada if locations are identified other than those listed below
Stewart River (main stem from Valley Creek to Rosebute Creek)	<25 mg/L[1]	Compliance Level: <0 mg/L
Diversion Creek	<25 mg/L[1]	Compliance Level: <200 mg/L
Stewart River (main stem at McQuesten River)	<25 mg/L[1]	Compliance Level: <200 mg/L

[1] The water quality objective is established for management and effectiveness monitoring purposes. The placer mine operator is not required to monitor or report on this objective for compliance purposes.

General Notes Regarding Sediment Discharge Standards

- The point at which the above-listed Sediment Discharge Standards for Mine discharge will be measured will be a point in the effluent flow immediately before it enters the natural stream flow.
- Sediment Discharge Standards for Mine discharge include all releases of effluent (both point and non-point sources) into the natural stream flow of a watercourse.
- All effluent discharge levels are identified in excess of natural background concentrations at the time of sampling.
- When the sediment discharge standard is a settleable solids standard (ml/l), measurement will either involve laboratory analysis, or utilizing an Imhoff cone.
- When the sediment discharge standard is a suspended solids standard (mg/l), measurement will either involve laboratory analysis, or utilizing a portable digital turbidity/suspended solids correlation meter.
- Samples collected for the purpose of determining compliance with the above-listed Sediment Discharge Standards for Mine discharge will be analysed via laboratory analysis.

YUKON WATER BOARD
REASONS FOR DECISION

Water Use Application PM12-070, Candace Creek Mining Ltd.

The Yukon Water Board ("the Board") has made licensing decisions with respect to water use application PM12-070, for a type B licence on Candace Creek and an unnamed left limit tributary of Candace Creek for a placer mining undertaking.

Notice of the application was provided in accordance with the requirements of the *Waters Act*. In response, the Board received interventions from the following parties:

- Tr'ondëk Hwëch'in (TH)
- Government of Yukon (GY), Energy, Mines and Resources, Client Services and Inspections; and
- GY, Energy, Mines and Resources, Mining Land Use.

No party requested a public hearing. The Applicant did not respond to the interventions.

In making licensing decisions pertaining to this application, the Board also took into account the *Waters Act*, *Waters Regulation*, the application, recommendations from the interveners, the *Yukon Environmental and Socio-economic Assessment Act* ("YESAA") Decision Document2012-0230, the Board's standard licence requirements, Yukon Placer Mining Fish Habitat Suitability Map, Mining Map 115 O/07, Chapter 14 of the Umbrella Final Agreement ("UFA") and Board policies.

Environmental Assessment

This application required an environmental assessment under the YESAA.

Prior to making licensing decisions, the Board reviewed the YESAA Decision Document ("Decision Document") that is included in the water use register. As per section 86 of YESAA, the Board is satisfied that the issuance of water use licence PM12-070 is not contrary to the terms and conditions included in the Decision Document.

Regarding the conditions of the Decision Document, the Board only reflects those conditions that are deemed to be within the jurisdiction of the *Waters Act*. In the case of this project, the Decision Document conditions were reflected in the Class 4 Mining Land Use Approval.

Tr'ondëk Hwëch'in

The Tr'ondëk Hwëch'in reiterated their support for the Decision Document condition requirement to complete a heritage resources inventory and assessment. The Board included this requirement in clause 69 of the Class 4 Mining Land Use Approval AP12070.

GY, Client Services and Inspections

GY confirmed for the Board that the project is located within the Stewart River Watershed and provided the applicable compliance standards under Department of Fisheries and Oceans Canada Stewart River Watershed Authorization ("authorization"), which are included in clause 6 of the water use licence. GY also recommended that the point of compliance should be at the point immediately before it enters the natural stream flow. The Board included the standard clause for the effluent and point of compliance to satisfy the authorization.

GY, Mining Land Use:

In their intervention, Mining Land Use made the following suggestions and observations:

- Suggestion to update the *Fuel Spill Contingency Plan* to include the Client Services and Inspection Dawson District central phone number.
- Explanation of the requirements and limitation of the mining leases.
- Explanation of the requirement to register fuel tanks when the capacity exceeds 4000L.
- Emphasis provided that the application only includes areas that are within a grant or a lease.

The Board included its typical requirements for mining leases in clauses 34 and 35 of the water use licence. Once the leases are converted to grants, only notification is required to the Board, not an amendment. The Board is satisfied that the laws highlighted in this intervention are covered by clause 31 of the water use licence.

Expiry Date

The Licensee proposed a10 year mining plan and an expiry date of 2023. The Board approved the proposed term and the licence expiry date is based on the date of the Board's meeting upon which this decision was made. The expiry date was determined to be June 4, 2023.

Chapter 14 of the UFA

The Board examined the proposed use of water as it relates to Chapter 14 of the Umbrella Final Agreement, as to quantity, quality, or rate of flow of water flowing on, through or adjacent to Settlement Land, including seasonal rate of flow.

The closest parcel of Settlement Land is TH R-82A. Settlement Land TH R-82A is located approximately 9km down-gradient of the proposed operations adjacent to Maisy May Creek. This map was reviewed by Board members to understand the location of the proposed undertaking relative to Settlement Land.

According to the estimates provided in the application, the requested quantity of water to be used for the mining operations represents approximately 3% of the Candace Creek's total flow during mining season. Candace Creek flows into Maisy May along with several other tributaries upstream of TH R-82A.

In terms of water quality, the Department of Fisheries and Oceans has issued an Authorization for the Stewart River Watershed. The Authorization includes sediment discharge standards for placer mine effluent.

The effluent standard values for Low and Moderate-Low habitat suitabilities have been included in clause 6 of the licence.

Given the above considerations of geography, flow rate estimates, and water quality, the Board concluded that the proposed operation will not substantially alter the quantity, quality, or rate of flow of water flowing on, through, or adjacent to Settlement Land, including seasonal rate of flow.

Conclusion

The Board has relied on the representations, warranties and undertakings provided by the Licensee in the material filed in the application. The Board has approved the issuance of water use licence PM12-070.

R Mc Johnson
Chairperson
Yukon Water Board

June 12, 2013
Date

PLACER LAND USE APPROVAL FOR A CLASS 4 OPERATING PLAN

Pursuant to the *Placer Mining Act* and the *Placer Mining Land Use Regulation* made thereunder, the Yukon Water Board hereby approves the Class 4 Placer Land Use Operating Plan as submitted by:

Candace Creek Mining Ltd.
13 Tigereye Crescent
Whitehorse YT Y1A 6G6

APPROVAL NUMBER: AP12070 **WATER LICENCE:** PM12-070

WATERSHED: Stewart River

HABITAT CLASSIFICATION: Moderate-Low and Low

LOCATION: Latitude: 63° 19' 43''N Longitude: 138° 55' 39'' W

EFFECTIVE DATE: The effective date of this approval shall be the date on which the signature of the Chairperson of the Yukon Water Board is affixed.

EXPIRY DATE: June 4, 2023

The operating plan shall be subject to the restrictions and conditions contained herein, and to the restrictions and conditions contained in the *Placer Mining Act* and the *Placer Mining Land Use Regulation* made thereunder.

Dated this 12th day of June, 2013.

Approved by:

Witness

Chairperson
YUKON WATER BOARD

PART A DEFINITIONS

"Act" means the *Placer Mining Act.*

"Application" means application for water use licence PM12-070 and placer land use approval AP12070, and any subsequent information presented to the Yukon Water Board up to the date of the Board's decision.

"Board" means the Yukon Water Board.

"Claims" means any parcel of land located or granted for placer mining; and "Mining Property" includes, besides claims, any ditches or water rights used for mining thereon, and all other things belonging thereto or used in the working thereof, for mining purposes.

"Inspector" means any person designated as an Inspector under the Act.

"Operation" means a placer land use operation.

"Operator" means a person who engages in a placer mining land use operation.

"Regulation" means *Placer Mining Land Use Regulation.*

"Road" means a pathway for vehicular traffic, the construction of which requires the movement of rock or earth.

"Special Waste Management Facility" means an operation which handles or disposes of special wastes generated by other persons or operations, and which is approved in accordance with the provisions of the *Special Waste Regulations* of the *Environment Act* of the Yukon Territory.

"Stripping" means excavation, undertaken as part of an operation, that is limited to the removal of trees, brush and vegetative mat.

"Trail" means an access to a site within a claim or lease that is constructed with little or no movement of rock or earth.

"Trenching" means excavation that extends below the vegetative mat, undertaken as part of an operation.

"Vegetative Mat" means the organic surface of soil characterized by the accumulation of organic matter, or partly decomposed organic matter, derived mainly from leaves, twigs and woody materials and includes the root mass of living vegetation.

PART B GENERAL CONDITIONS

1. This approval applies to those grant (claim) numbers that are included in water use licence PM12-070, including any amendments thereto.

2. All operating activities must comply with the operating conditions contained in Schedule 1 of the *Placer Mining Land Use Regulation* and with the operating plan AP12070 submitted. Where there is a discrepancy between the operating plan submitted and this approval, the terms of this approval shall prevail.

3. The Operator must contact Department of Energy, Mines and Resources, Client Services and Inspections Branch, every year before beginning operations and at least 2 weeks prior to leaving the site at the end of every season.

4. All risk of fire hazards must be avoided.

5. All solid waste, debris, equipment, fuel barrels and other waste on the Mining Property must be safely stored and disposed of in accordance with the *Solid Waste Regulation* when the Operation ceases.

6. No condition of this approval limits applicability of any statutory authority.

PART C WILDLIFE

7. All incidents with wildlife must be reported to the District Conservation Officer in Dawson City.

8. Brush removed during the Operation must not be piled so that it blocks movement of wildlife or people.

9. At seasonal closure, any materials that may result in injury to wildlife including, but not necessarily limited to, wire, steel, glass or plastic must be removed or safely stored.

PART D INVASIVE PLANT SPECIES

10. The Operator shall implement best management practice for the management of invasive plant species. The Operator shall refer to the most current version of the *Best Practices for Managing Invasive Plants on Roadsides*.

PART E RESTORATION PRACTICES

11. If the Vegetative Mat is disturbed during the mining operation, it must be removed so as to protect the seed and root stock contained within the Vegetative Mat.

12. The seed and root stock must be stored separately from any overburden or bedrock removed for use in re-establishing the Vegetative Mat when the Operation ceases.

13. All areas disturbed during the mining operation including, but not limited to, fuel and waste storage areas, clearings, corridors, camps, supporting infrastructure, trenches and drill sites, must be left in a condition conducive to re-vegetation by native plant species comparable to similar, naturally occurring, environments in the area.

14. Conditions conducive to re-vegetation include provisions of an adequate soil layer with moisture retaining ability, no soil contamination by hydrocarbons or other hazardous substances, provision of adequate seed or root stock and contoured or otherwise stable slopes.

15. If adequate seed stock or root stock is not naturally available, re-seeding or transplanting of vegetation is required. Only non-invasive species may be used for re-seeding or transplanting.

16. All areas disturbed during the mining operation must be re-sloped, contoured or otherwise stabilized to prevent long-term soil erosion, slumping and subsidence.

17. All mining operations must be carried out to avoid or minimize damage to, and loss of, permafrost.

18. Available overburden must be stockpiled for use in future site restoration, and such stockpiles must be located where they will not adversely affect the water quality in any watercourse.

19. Tailings and overburden, or other relocated materials, must be levelled and contoured into low relief piles. The slope of these low relief piles must be no steeper than 2 horizontal to 1 vertical. Any such slope over 15 metres in height must be benched.

20. The following conditions apply to Stripping:
    a) trees and brush must be cleared first;
    b) topsoil and organic material must be stockpiled separately;
    c) overburden must be located no closer than 5 metres from any standing trees; and
    d) overburden may be stacked along the valley wall, but must be contoured to blend with the natural topography.

21. All Trenching carried out by hand or with hand-held tools must be methodical. The trenches must be stabilized and marked in such a way as to minimize risk to the public.

22. Trenches constructed with mechanized equipment must be backfilled by first depositing any removed overburden and bedrock and then replacing any vegetative mat that was removed to construct the trench.

23. Trenches shall be maintained in a condition that prevents wildlife entrapment and public safety hazards.

24. The Operator must ensure that all employees and contractors using equipment at trench sites are aware of these operating conditions for trenches.

25. Reclamation shall be progressive over the term of this Placer Land Use Approval for a Class 4 Operating Plan.

PART F HERITAGE RESOURCES AND ARCHAEOLOGICAL AND PALAEONTOLOGICAL SITES

26. All heritage resources and archaeological and palaeontological sites must be avoided.

27. If any heritage resources, archaeological objects or palaeontological objects are encountered, the Operator must:

    a) immediately mark and protect the area from further disturbance;

    b) contact the Chief of Placer Land Use at (867) 456-3822;

    c) in the case of archaeological sites, human remains, grave sites, burial sites and all other abandoned, man-made structures older than 45 years old, immediately contact Heritage Resources and contact the Tr'ondëk Hwëch'in First Nation (867) 993-7100;

    d) set aside and protect fossils that are unearthed, and at the end of each season the Operator shall contact Yukon Palaeontology at (867) 667-8089 and contact the Tr'ondëk Hwëch'in First Nation;

    e) immediately contact Yukon Palaeontology and contact Tr'ondëk Hwëch'in First Nation if any mummified fossil remains with intact flesh are discovered; and

    f) prevent any further disturbances from being carried out within 30 metres of an archaeological or palaeontological site until the Chief of Placer Land Use indicates in writing that the activities may proceed.

PART G ACCESS ROADS AND/OR TRAILS

28. Off-Road and Trail routes must be reconnoitred and must be used in a way that minimizes

ground disturbances, damage to permafrost and sensitive wildlife habitat. Trail routes must be flagged.

29. Vehicles must be operated in a manner which avoids rutting or gouging of a Road or Trail.

30. If rutting, gouging, ponding or permafrost degradation occurs off-Road or Trail, vehicle use must be suspended or relocated to ground that is capable of bearing the weight of the vehicle without causing such damage, and the former routes must be restored in compliance with Part E of this approval.

31. If there is no Road or Trail, the Operator must comply with the following conditions when mobilizing heavy equipment to a site:
    a) Tracked vehicles with blades should be provided with mushroom pads to minimize terrain damage;
    b) Dozers should travel with the blade raised, so as not to rip up the Vegetative Mat;
    c) Vehicles may only be mobilized in ice-rich permafrost areas when the active layer is frozen, or when the surface is strong enough to support the vehicle without excessive permafrost degradation; and
    d) Use of skids on permafrost or wet ground is only allowed outside of winter, where it is not possible to use other means of equipment transportation.

32. At abandonment of a Road, compacted Road surfaces must be scarified to promote re-vegetation.

PART H CAMPS

33. All campsites must be kept clean and tidy.

34. All buildings and other facilities must be on well-drained soil.

35. Combustible and odorous kitchen waste must not be permitted to accumulate.

36. All wood debris, empty drums, junked equipment and metal waste must be kept in a secure area for final disposal.

37. Compacted soil must be loosened to allow for natural re-vegetation. Areas not likely to re-vegetate naturally must be spread with topsoil.

PART I FUEL HANDLING AND TRANSPORTATION

38. A spill contingency plan for petroleum products and other hazardous substances must be in place, and a copy posted in the camp and at all fuel handling locations.

39. All petroleum products, hazardous waste and chemicals must be transferred and handled in such a manner so as to prevent spillage.

40. All petroleum products, hazardous waste and chemicals, with the exception of liquids associated with any water pump engine, must be stored in a secure manner no less than 30 metres from the ordinary high water mark of any water body.

41. All fuel tanks that exceed 4,000 litres must be registered with Government of Yukon Mining Recorder's Office.

42. When the fuel storage capacity exceeds 4,000 litres, secondary containment must be provided.

43. The secondary containment facility must be constructed of material impervious to petroleum products; and:

    a) in the case of a single storage tank, be of sufficient size to accommodate at least 110% of the capacity of the storage tank; or

    b) if there is more than one storage tank, be of sufficient size to accommodate 110% of the capacity of the largest tank or 10% of the total capacity of all the tanks, whichever size is greater.

44. All vehicles must be maintained and operated in a manner designed to prevent spills of fuel, lubricants, coolants or oil.

45. All waste petroleum products must be safely stored on site, be removed to a Special Waste Management Facility or disposed of in accordance with the Special Waste Regulation.

46. Sufficient spill clean-up equipment and materials must be in a state of readiness in order to clean-up all fuel spills.

47. If a spill or unauthorized discharge occurs, the Operator shall immediately implement the Spill Contingency Plan, and:

    a) contain and clean up the spill;

    b) contact the 24-hour Yukon Spill Report number, (867) 667-7244; and

    c) contact an Inspector.

48. A detailed written report on any spills or unauthorized discharges including, but not limited to, dates, quantities, parameters, causes and other relevant details and explanations shall be submitted to the Board, and a copy to the Chief of Placer Land Use, no later than 10 days after its occurrence.

49. All fuel drums must be stored in an upright position.

50. All fuel and chemical containers must be sealed when not in use.

51. All containers of petroleum products with a capacity of 200 litres or greater must be clearly marked with the Operator's name and the contents.

PART J DRILLING

52. Vegetation other than within a drill sump must not be covered with drill cuttings.

53. Drill mud must be re-circulated when possible.

54. All drill fluids must be contained within a small (natural or artificial) sump in a suitable manner.

55. All drill holes that pose a hazard or that lead to ground water must be plugged in a suitable manner.

56. All drilling must be done in a way that minimizes its impact on wildlife and the public.

57. The location of drill holes must be marked on the ground by flagging or other suitable means.

58. There shall be no direct discharge from the drilling site to a watercourse.

PART K SEASONAL CLOSURE

59. The mine site must be left in a stable condition at the end of each mining season.

60. All mined or otherwise disturbed ground surfaces, including cut banks, fill slopes and tailings piles, must be stabilized annually.

PART L DECOMMISSIONING

61. At final decommissioning of the site everything must be removed including but not necessarily limited to, all buildings, machinery, materials, fuel drums, used hydrocarbons, solid waste and metal waste, including junked vehicles.

62. The Operator must contact an Inspector not less than 2 weeks prior to final decommissioning.

63. The Operator may apply for a certificate of completion at the termination of the Operation, when all reclamation has been achieved.

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64. The Operator shall ensure that annual reclamation efforts are successful in re-establishing the vegetative mat and community; a variety of sloping, contouring, scarifying and spreading of fines, silt and/or vegetative mat would prepare the ground to achieve these ends and encourage natural re-vegetation.

65. In the event of slope failure or the indication that slope failure might occur, EMR - Client Services and Inspections, shall be notified immediately.

66. The Operator shall follow the *Guidelines for Industrial Activity in Bear Country.*

67. In the event that land clearing activities occur between the core breeding period of May 1st and July 31st, prior to clearing the Operator must plan to avoid disturbing or destroying nests of birds listed under the Migratory Birds Convention Act. Contact the Canadian Wildlife Service, Whitehorse, for information on considerations related to determining the presence of nest.

68. During the moose hunting season, the Operator shall bar new access trails and routes within the claim block.

69. A heritage resources inventory and assessment shall be complete in locations with elevated potential for the presence of heritage resources such as archaeological sites before ground stripping or road construction is initiated at these locations.