MELBA CREEK PLACER PROPERTY

2018 Final Technical Report

GRANT NUMBER	CLAIM NAME
MEL 1 - 53	P520896 – P5208948
MEL L 1 - 53	P520843 – P520895
MEL LL 1 - 42	P520271 – P520312

Melba Creek Area, Dawson Mining District

Location of property: 63°39'42.97"N; 138°32'45.35"W

NTS map sheets: 115O/09 and 115O/10 Mining District: Dawson

Date: March 31, 2019

By Nicolai Goeppel and Chris Arsenault on Behalf of Metallic Minerals Corporation Submitted to:

Derek Torgerson, Mineral Development Geologist
Yukon Geological Survey

Abstract

In 2018 and early 2019 a placer exploration program was carried out on Melba Creek, a tributary of Australia Creek, in the Dawson Mining District, Yukon. The program consisted of 1000 meters of resistivity geophysical surveying, 51 ft of shafting in two shafts and 150.5 ft of drilling in 5 holes. The Program was in part funded by the Yukon Mining Exploration Program (YMEP). The program was initiated in mid July with a resistivity geophysical survey. The existing leases were staked into claims after satisfying the assessment requirements. The second phase of exploration began in March 2019 with auger drilling and shafting. The total exploration expenditures for the Melba creek project is $97,065.00.

Results from resistivity survey indicate bedrock depths between 8 and 18m. Shafting completed two shafts in the downstream end of the property, one in the Australia creek valley and a second on a bench on the mouth of Melba creek; the shafts were 30 and 21 ft respectively. Drilling on the downstream end of the property in Australia creek drainage indicated 13-17 ft of black organic, clayey overburden, 10-12 ft of medium gravels and quartz-chlorite-muscovite-schist bedrock at 25.5-27 ft. A secondary set of 3 holes and 89 ft was drilled 5 miles up Melba creek near the 2017 resistivity survey to ground truth geophysical results. Drilling on the upstream side of Melba creek indicates overburden is between 15 and 17 ft thick with gravels 8-9 ft in thickness, and bedrock ranges from 23-26 ft depth.

Based on 2018 exploration results further work is warranted on the Melba Creek Property. A future program consisting of drilling, shafting, and a drone survey is recommended. Drilling should be carried out to delineate economic areas expanding from the shaft, to test resistivity targets and explore the remainder of the creek. Drone imagery and digital DEM may serve well in detecting bedrock exposures subtle topographical features and potential drilling targets. Follow up shafting on prospective drill results provides larger sample volume and a visual section through the stratigraphy.

Table of Contents

Introduction

The project is located on Melba Creek the right-limit tributary of Australia Creek, upstream of the confluence with Dominion Creek. Access to the lower reaches of the property (on Australia Creek) can be gained by summer road from Dawson City via Hunker Creek and either Dominion Creek or Sulphur Creek, a total distance from Dawson City of approximately 68 kilometres. Alternate access exists to Melba creek from above the confluence of Australia creek and Dominion Creek for approximately 15 kilometers following the ridge between melba and Dominion creeks; majority of the road is in passible condition with only minor areas requiring upgrading.

Australia Creek and its tributary Melba is part of the historic Klondike gold district; estimated to have produced over 20 million ounces of gold since discovery in 1896. Large-scale placer mining on the Indian River began in the late 1970s, and over 250,000 crude ounces has been produced since that time. The Indian River drainage is presently the largest placer gold producing area in the Yukon, with 31,796 crude ounces (49% of the total Yukon production) recorded in royalties in 2016. Preliminary figures for 2017 show that production specifically along the Indian River downstream of Australia Creek totals 13,914 crude ounces, accounting for 20% of Yukon's total placer gold production (Bond and van Loon, 2018).

Despite extensive mining activity nearby, Australia Creek and its tributaries were never historically mined, due to their importance as a source of water and hydro-electric power for supporting the dredge operations of the Yukon Consolidated Gold Company (YCGC), which operated in the Klondike Region between 1920s and 1960s. YCGC held the water rights on Australia Creek and Melba Creek for their Australia-Sulphur Ditch (Grant #9162) from September 21, 1936 to September 21, 1956 (YCGC text records, Yukon Geological Survey). YCGC did limited exploration churn drilling at the mouth of Australia Creek, but no further exploration up the drainage.

The bedrock geology and geologic history of Melba Creek and Australia Creek are comparable to the gold-bearing Indian River downstream, with similarly wide valleys and a thin layer of pre-Reid outwash gravels covering Tertiary White Channel Gravel benches (Froese and Jackson, 2005 a, b). Indeed, previous placer exploration programs, although limited, have indicated that there exists significant alluvial gold potential in the Australia Creek and Melba Creek drainages.

More recent exploration downstream of the project area includes auger drilling on Australia Creek in 1988 and 1989 by Hughes Lang Corp. returned significant gold values, including Drill hole #88-11 (0.60 g/m3) and Drill hole #88-15 (0.648 g/m3) on Melba Creek. On Australia Creek, grades of 21.68 g/m3 (Drill hole #88-03) and 11.0 g/m3 (Drill hole #88-04) were encountered (Tomlinson, 1989). Test pits were excavated in the high-grade area on Australia Creek in 2015, and significant fine colours of gold were recovered. In the Discovery Outcrop area, bulk sampling recovered up to 1.2 grams of gold per cubic yard (Harris, 2016).

The 2018 and early 2019 program entailed the completion of two placer shafts, total of 51 ft and 150.5 ft of drilling. Drilling on the downstream end of the property in Australia creek drainage indicated 13-17 ft of black organic, clayey overburden, 10-12 ft of medium gravels and quartz-chlorite-muscovite-schist bedrock at 25.5-27 ft. A secondary set of 3 holes and 89 ft was drilled 5 miles up Melba creek near the 2017 resistivity survey to ground truth geophysical results. Drilling on the upstream side of Melba creek indicates overburden is between 15 and 17 ft thick with gravels 8-9 ft in thickness, and bedrock ranges from 23-26 ft depth. Results from 2018 resistivity survey indicate bedrock depths between 8 and 18m. The purpose of this report is to summarize and detail the 2018 YMEP program and results. The total expenditures of the 2018 YMEP exploration program on the Gold Run Placer project is $97,065.00.

Location and Access

Melba Creek is a right limit tributary to Australia Creek, which is a left limit tributary of the Indian River. It is located in central Yukon approximately 70 km by air south of Dawson City, Yukon (Figure 1). The extent of the current property is 63°36'54.5"N to 63°39'42.97"N; 138°16'9.82"W to 138°32'45.35"W; on NTS map sheets 115O/09 and 115O/10, in the Dawson Mining District (Figure 1 & 2). Access to the property can be gained by summer road from Dawson City. The route runs from Dawson City along the Klondike Highway, then along Hunker Creek to King Solomon Dome, and down Sulphur Creek near its confluence with Indian River (approximately 68 kilometres), followed by an additional 5 km along secondary roads to the camp on Australia Creek (Figure 2). From there, ATV trails and various old exploration trails lead to the lower part of the property. Alternate access exists to Melba creek from above the confluence of Australia creek and Dominion Creek for approximately 15 kilometers following the ridge between melba and Dominion creeks; majority of the road is in passible condition with only minor areas requiring upgrading. Claim status is in Appendix II

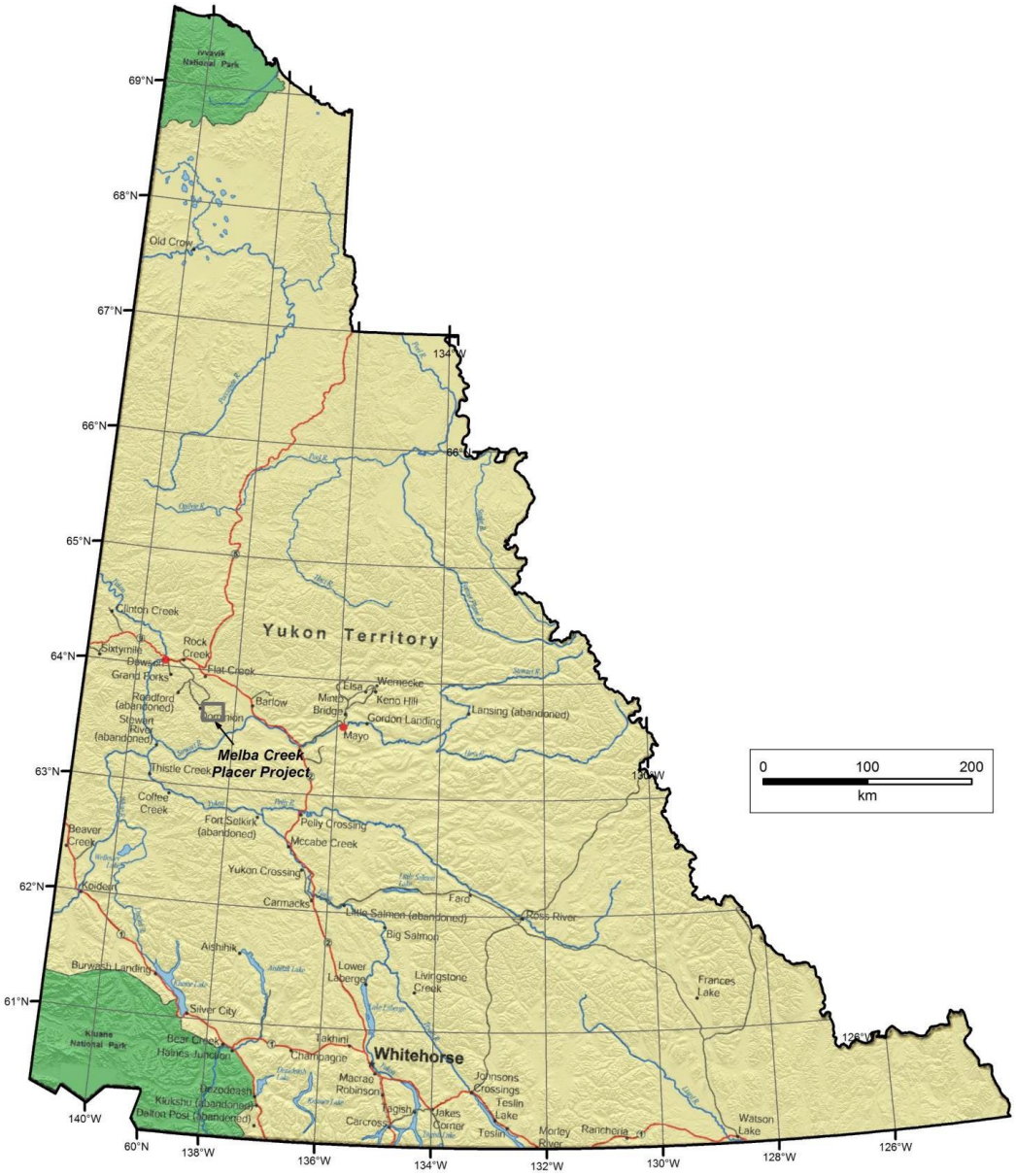

Figure 1 - General Location of Melba Creek Placer Project, Yukon.

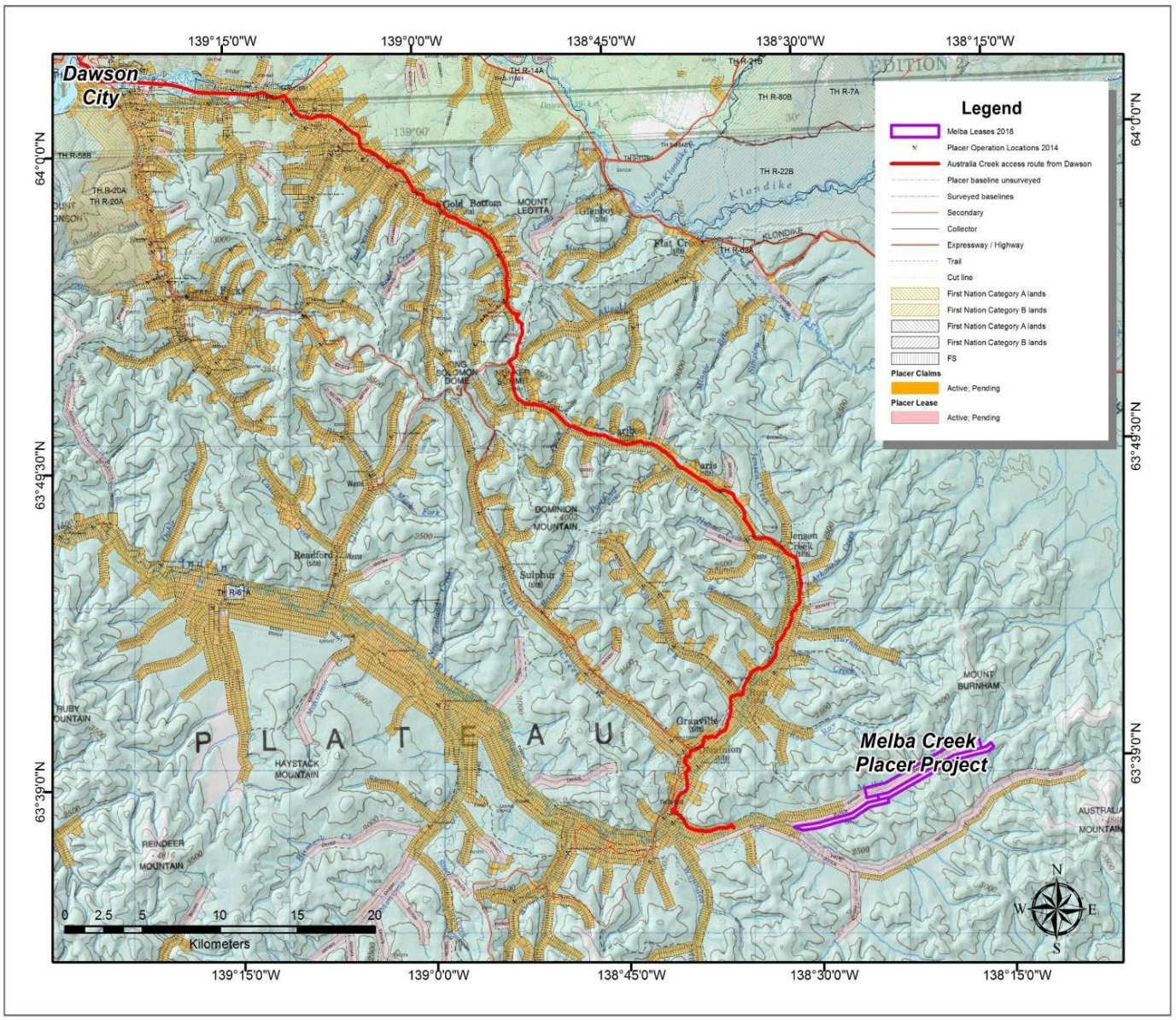

Figure 2- Location of the Melba Creek Placer project with reference to Dawson City. Access route via Dominion Creek is indicated with a red line.

Placer Tenure

The Melba Creek placer property is currently held by Metallic Minerals Corporation, with the details of tenure shown below in Table 1.

Table 1 – Placer tenure and status, Melba Creek property.

GRANT NUMBER	CLAIM NAME	TENURE	STATUS	OWNER	EXPIRY DATE
MEL 1 - 53	P520896 – P5208948	Placer Claim	Active	Metallic Minerals Corp. - 100%	2019/08/27
MEL L 1 - 53	P520843 – P520895	Placer Claim	Active	Metallic Minerals Corp. - 100%	2019/08/27
MEL LL 1 - 42	P520271 – P520312	Placer Claim	Active	Metallic Minerals Corp. - 100%	2019/04/13

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).

Local Bedrock Geology and Mineral Occurrences

There are five major units in the Klondike area; the Nasina Series, the Klondike Series, the Moosehide Assemblage, early Tertiary volcanics/volcanoclastics, and Tertiary intrusives (Figure 3). The basement unit is the Nasina Series, consisting of metamorphosed schist and quartzite. It is overlain by the Klondike Series, a dominantly quartzofeldspathic schist of Early Permian (280 m.y.) age. Significant lode gold has been found throughout the Klondike and south Dawson areas (Chapman et. al., 2011). In the south and west portions of the project area, the Klondike Series is in contact with a Late Devonian to Mississippian orthogneiss. Structurally overlying the Klondike and Nasina Series are greenstone and altered ultramafic of the Moosehide Assemblage. In the east and south, early Tertiary andesitic volcanics and clastic sediments occur. These units are intruded by diabase to rhyolite Tertiary dykes and sills.

The nearest mineral occurrence documented in the area is MINFILE #115O 125, MELBA. It is described

as being underlain by granitic orthogneiss and fine-grained quartz-biotite-muscovite-feldspar schist with minor garnet porphyroblasts. Trench samples in 1990 returned low gold values, the highest being 39 ppb Au (YGS, 2016).

Quaternary History

Australia Creek is a mature tributary to the Indian River, situated in a broad valley within the unglaciated Klondike Plateau. Most of the Klondike region has not been glaciated (Duk-Rodkin, 1999; Jackson et al., 2001). However, the Australia Creek drainage was subjected to the marginal effects of a pre-Reid glaciation, which deposited glaciofluvial gravel sourced from meltwater channels which breached the divide in the headwaters to the east. There is no evidence that glacial ice advanced into the drainage, although the pre-Reid glaciofluvial terraces covered pre-existing Tertiary White Channel gravels. These are especially evident in downstream reaches above Indian River (Froese and Jackson, 2005 a, b).

Surficial Geology

The Australia Creek drainage 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 the valley (Froese and Jackson, 2005a, b). Recent stream action has reworked and redeposited the Tertiary (White Channel) bench gravels which lie along both the sides of the main valley (LeBarge, 2007). Figure 4 shows the surficial geology in the Australia Creek/Melba Creek drainages.

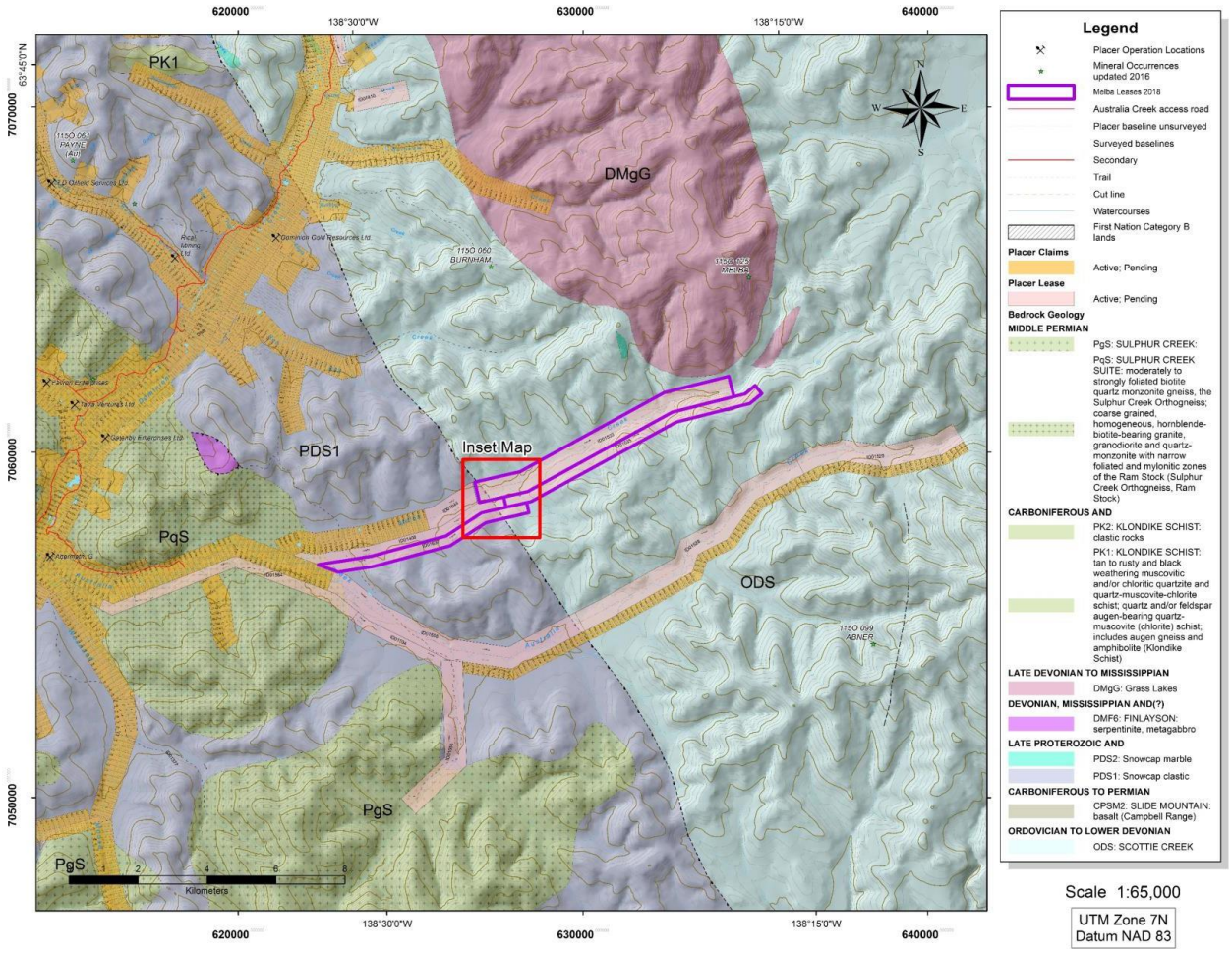

Figure 3- Bedrock geology of the Australia Creek & Melba Creek area (modified from YGS 2016). The property leases are outlined in purple. Inset map is the area of 2017 geophysical surveys.

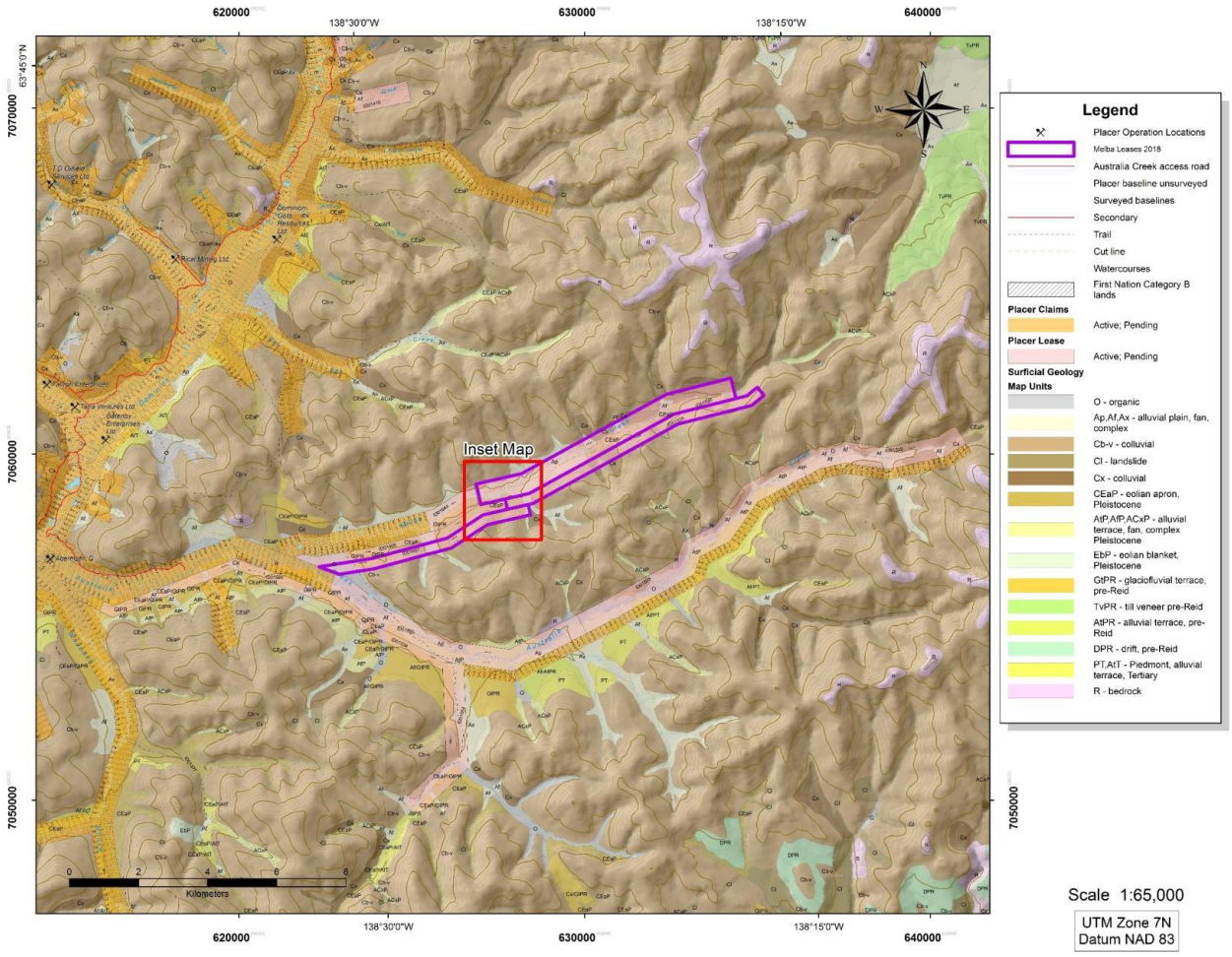

Figure 4- Surficial geology of the Australia Creek & Melba Creek area (modified from Froese and Jackson, 2005a, b). The property leases are outlined in purple. Inset map is the area of 2017 geophysical surveys.

Recent Exploration History

2017 Placer Exploration Program

A total of 16 resistivity lines were conducted in the Australia Creek & Melba Creek areas from October 8 to October 13, 2017. Six of the surveys were conducted on Melba Creek. The locations are plotted on the map in Figure 5. Very good contact resistance was obtained during the surveys, so few data points were filtered and removed during processing. The excellent contact resistance was attributed to moist ground conditions and soft silt on the ground surface. Extensive permafrost in the survey area make results of the resistivity surveys uncertain. The permafrost is expected to be more continuous on north facing slopes, and discontinuous on south facing slopes and valleys with high water saturation.

Low resistivity values corresponded with thawed, water-saturated material in valley bottoms, while high resistivity areas corresponded with permafrost on north-facing slopes. Dry gravel benches on thawed mid- to upper south-facing slopes also gave a high resistivity response. The deepest interpreted bedrock was encountered at >30m. Most of the resistivity profiles including RES17-MEL-

01, RES17-MEL_LL-01, RES17-MEL_LL-02 and RES17-MEL_LL2-01 showed distinctive bedrock features in the form of depressions. Comparison of these features to the surficial geology (Figure 5) indicates they may be a remnant buried paleochannels, possibly originating in the left limit tributary valley immediately upstream of these surveys.

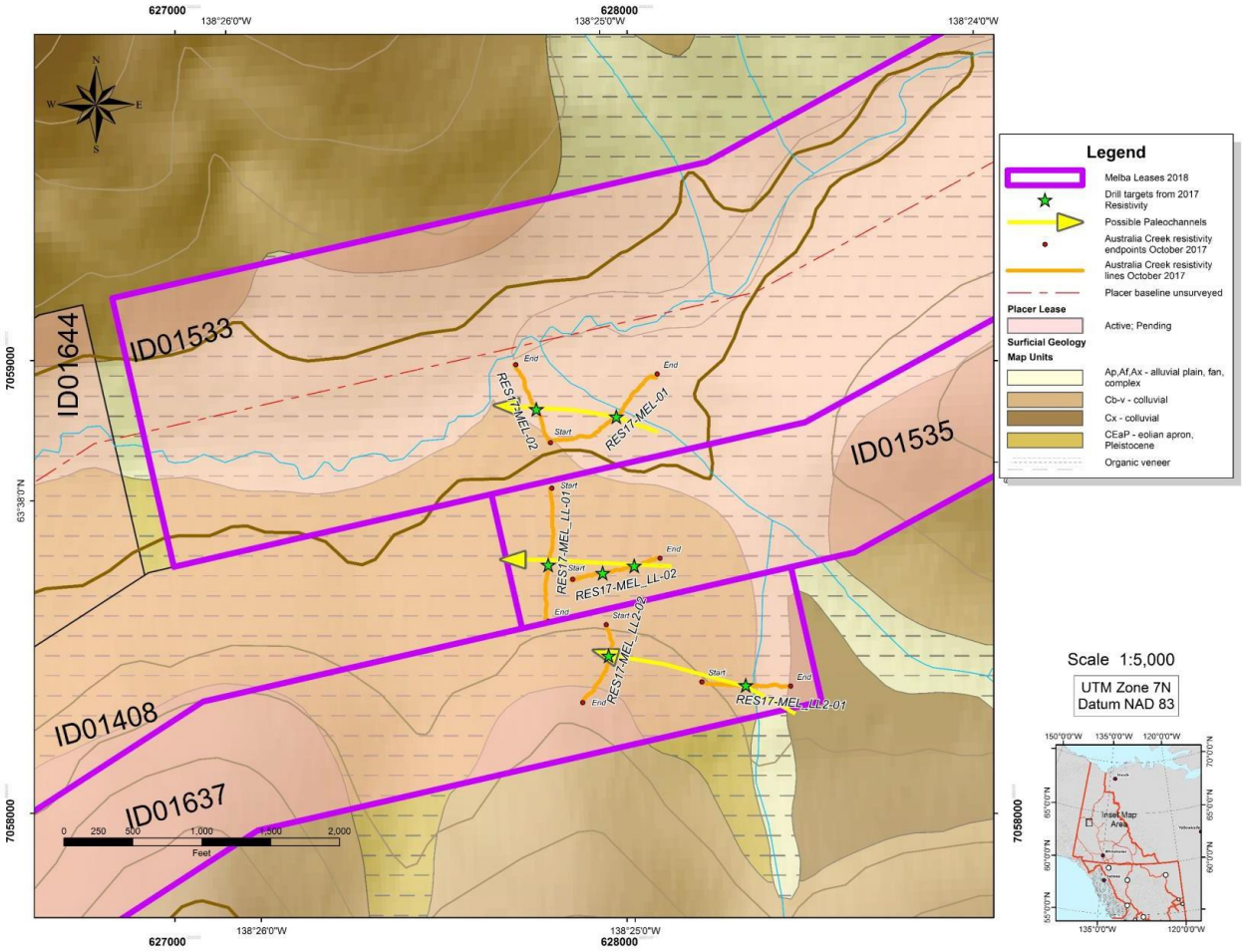

Figure 5- Inset map. Local surficial geology map (adapted from Froese and Jackson 2005b) showing locations of resistivity lines surveyed in 2017. Drill targets and possible paleochannels shown.

2018 Exploration Program

2018 Geophysical Placer Exploration Program

A total of 4 resistivity lines were conducted and interpreted for Metallic Minerals Corp. by Allegra Webb, Selena Magel and William LeBarge. The surveys were conducted by helicopter on July 17, 2018 on the Melba Creek leases in Dawson Mining District, YT. Figures 5, 10 and 13 show the location of the surveys. The Lippmann 4-Point Light Resistivity System was used to conduct the surveys, and the software program RES2INV was used to invert the data and for processing.

Methodology

The resistivity technique injects an electrical current into the subsurface through stainless steel spikes and then measures the remaining voltage at various distances away from the injection point. Ground materials have different resistances to the current and give data points in a cross section of the subsurface. With the data points, a tomogram or pseudo section can be created representing changes of resistivity in the ground. Data was collected using Geotest software, while the inversion and data filtering was completed with RES2DINV software. Data points with poor contact resistance were exterminated and noisy data was filtered statistically with root mean squared data trimming. Two dimensional tomograms were produced using least squares damped inversion parameters to display the resistivity properties and to display potential contacts.

The two-dimensional images are used for preliminary interpretations of bedrock structure. The images were interpreted by Selena Magel, Allegra Webb and William LeBarge.

General principles and assumptions of electrical resistivity are:

1. Low resistivity can indicate thawed and water saturated areas, as well as fine grained material.

2. Very high resistivity values can be due to ice rich material and frozen or highly disturbed ground.

3. Dry gravels, cobbles and boulders generally have high resistivity values.

4. The contrasts between values is more important in determining contacts than the absolute values found with resistivity data.

General Results

Table 2 outlines the lengths and location of the 4 resistivity surveys which were conducted on the Melba Creek prospecting leases. Good contact resistance was obtained during the surveys, so few data points were filtered and removed during processing. The good contact resistance was attributed to adding saltwater to each electrode to improve the conductivity to the ground. A total of eleven preliminary drill targets have been chosen in the study area and their locations are outlined in Table 3, and plotted in Figures 5, 10 and 13 along with the traces of the resistivity profiles. The profiles are given as Figures 6-9, 11-12 and 14.

Table 2 - Resistivity line names, lengths and start and end locations of resistivity lines conducted in the Australia and Melba Creek placer leases.

Melba and Australia Creek Resistivity surveys - July 2018

Date	Line Name	Length (m)	Start Point UTM Zone 7N		End Point UTM Zone 7N	
			N	E	N	E
7/17/2018	RES18-MELBA5L-01	300	7060135	629781	7059859	629902
7/17/2018	RES18-MELBA5L-02	200	7059784	629980	7059961	629892
7/17/2018	RES18-MELBA5B-01	255	7059762	630092	7059846	630333
7/17/2018	RES18-MELBA5B-02	250	7059755	630092	7059540	630199

Table 3 - Drill targets chosen from the resistivity survey profiles. Location and approximate depth to bedrock is outlined.

Australia and Melba Drill Targets -July 2018

Name	Approx. depth to bedrock (m)	Resistivity Line Name	Location (UTM, Zone 7N)	
			N	E
Melba Target 1	16	RES18-MELBA5B-01	7059813	630212
Melba Target 2	10	RES18-MELBA5B-02	7059674	630136
Melba Target 3	13	RES18-MELBA5B-02	7059639	630147
Melba Target 4	15	RES18-MELBA5L-01	7060077	629808
Melba Target 5	18	RES18-MELBA5L-01	7059967	629853
Melba Target 6	8	RES18-MELBA5L-02	7059892	629924

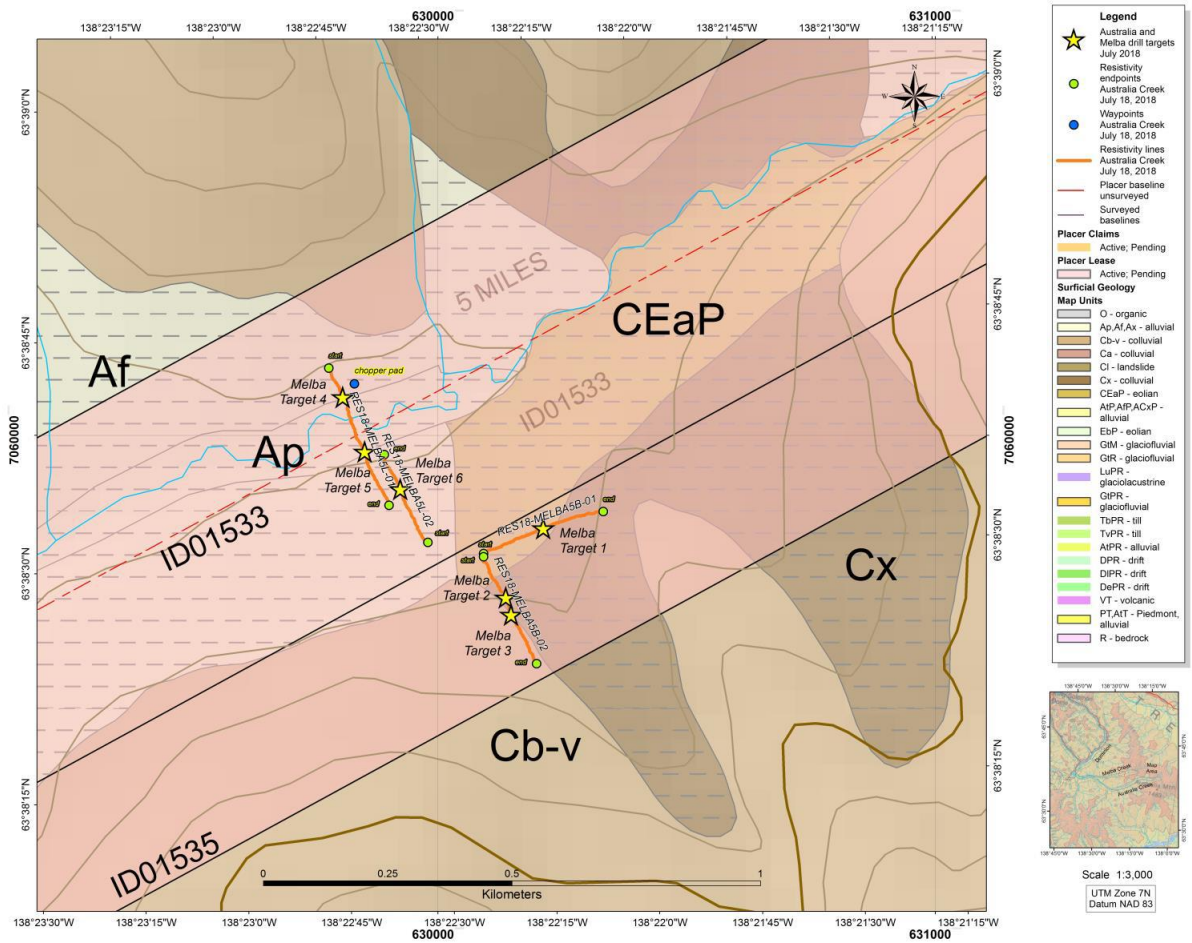

Figure 5 – Surficial geology map (after Froese and Jackson, 2005a) showing the survey locations and drill targets on the 5 mile Melba creek lease, and 5 mile Melba bench lease.

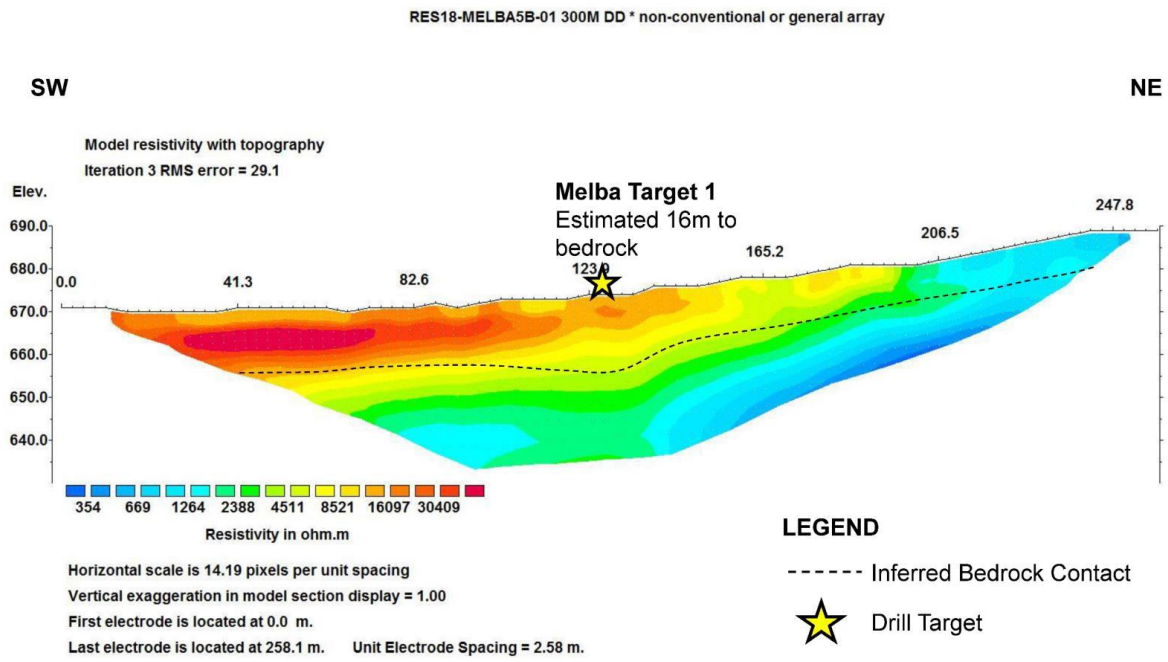

Figure 6 - Resistivity line RES18-MELBA5B-01 is surveyed from SW to NE and displays an inclined undulating bedrock contact. One drill target is indicated.

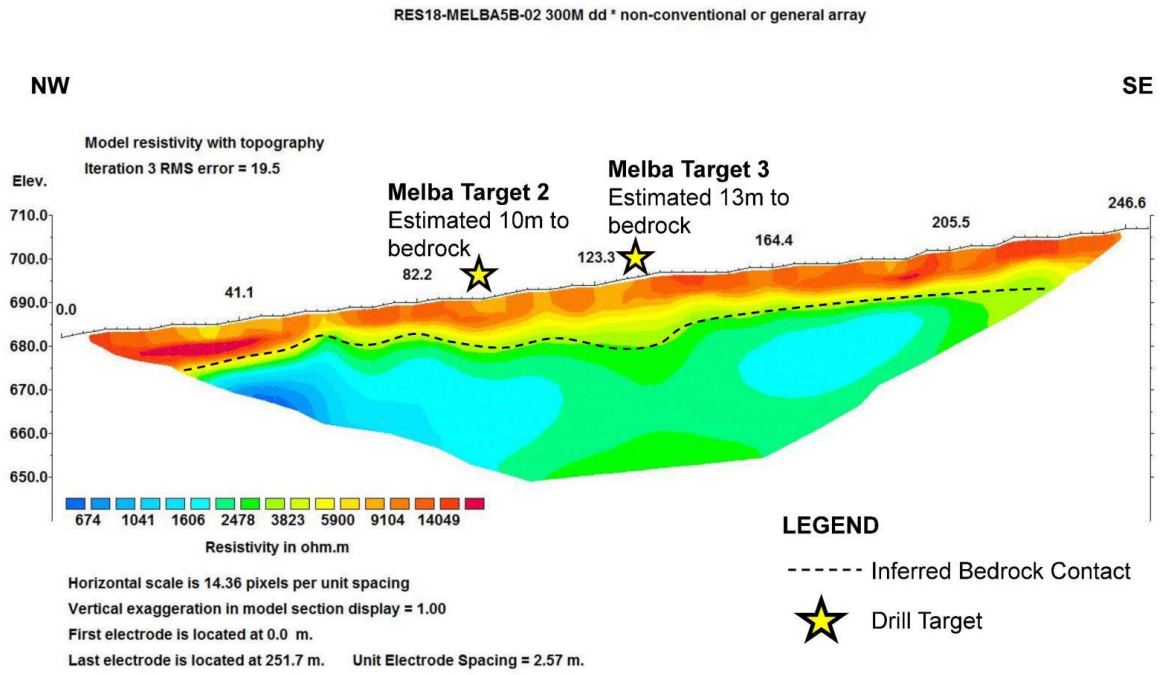

Figure 7 - Resistivity line RES18-MELBA5B-02 is surveyed from NW to SE and displays an inclined undulating bedrock contact. Two drill targets have been chosen.

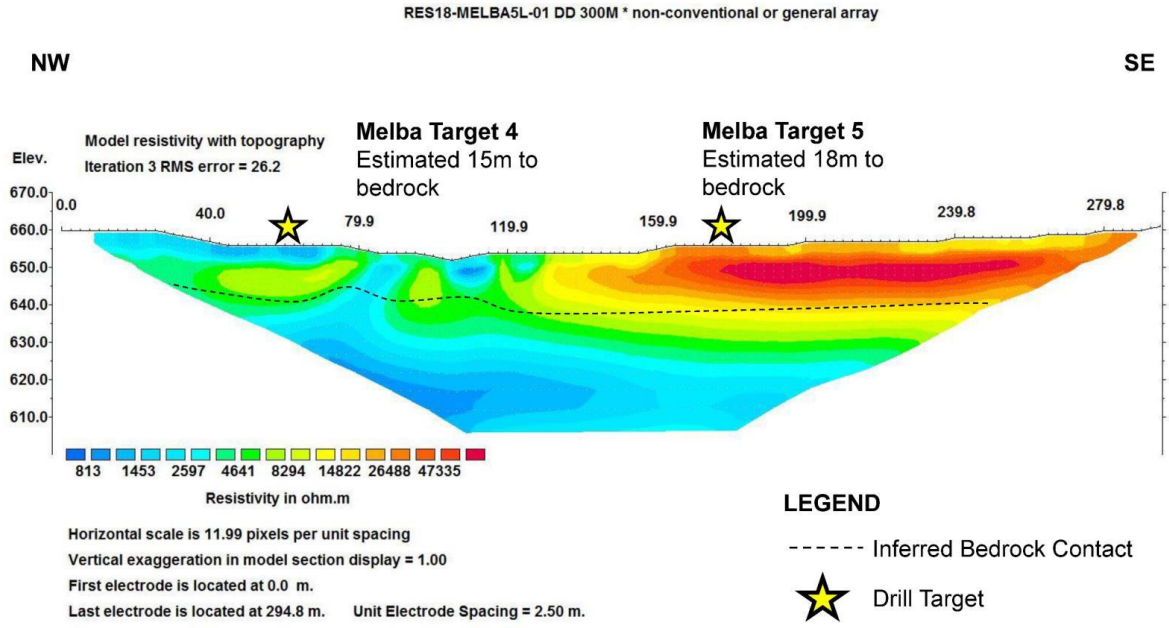

Figure 8 - Resistivity line RES18-MELBA5L-01 is surveyed from NW to SE and displays a slightly undulating bedrock contact. Two drill targets have been chosen.

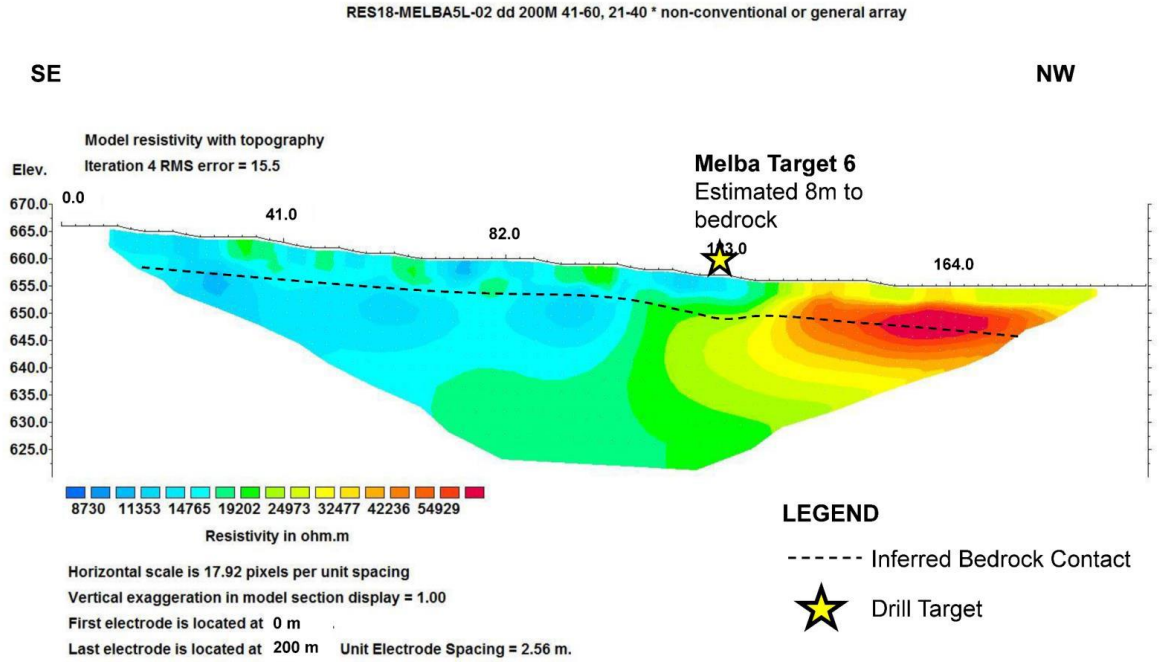

Figure 9 - Resistivity line RES18-MELBA5L-02 is surveyed from SE to NW and displays an inclined undulating bedrock contact. One shallow drill target has been chosen.

2018 Shafting Results

Two shafting crews of two began work on two shafts on the downstream end of the property March 21st, 2019 for a duration of 9 days. The crew and gear were mobilized to the site via nodwell. Excavations were completed by hand using generator powered electric jackhammers with shovels, picks and sledge hammers to break up the frozen alluvium. A hand-crank windlass was used for lowering and raising of gear and material excavated from the shaft. Personal protective equipment was used while working in the shaft. The shaft 1 located on the left limit bench by the mouth of Melba creek and shaft two is located on the down stream side of the bench in Australia creek valley (Figure xx). Shaft details are described below. A total of 51 ft of shafting was completed in two shaft one reached 30 ft and the other upper shaft was 21 ft.

Valley shaft: UTM 07 V 0623363, 7056726

0-1 ft: Black muck fine sands and clay with organics
1-6 ft: Darker brown clay with chunks of black muck throughout
6-11.5ft: Start of fine dark brown gravels
13ft: Round baseball sized cobbles appearing
13-19ft: Brown gravels. not very many large rocks and lots of sand. Color changes every few feet
19-26ft: Extremely hard gray gravels. Lots of heavies throughout. No gold in any pans.
26-30ft: Same hard gray gravels, only with clumps of darker brown gravel and round rocks appearing. A few larger, soccer ball sized quartz boulders

Total Depth was 30ft.

Bench shaft: UTM 07 V 0623573, 7056849

0-5.5 ft: Black organic and fine sand overburden
5.5-6.5 ft: white volcanic ash
6.5-11 ft: sand/gravel with large angular rocks
11-12.5 ft: fine sand - silt
12.5-14.5: fine well-rounded gravels
14.5-21 ft: sandy gravel with occasional larger angular rocks

Total depth was 21ft.

2018 Auger Drilling Results

6-inch auger drill mounted on a FN160 nodwell was mobilized to the site March 23rd, 2019. Initial drilling was conducted by the mouth of Melba creek in Australia creek valley on the downstream end of the property, consisting of two holes and 61.5 ft of drilling. Drilling indicated 13-17 ft of black organic, clayey overburden, 10-12 ft of medium gravels and quartz-chlorite-muscovite-schist bedrock at 25.5-27 ft. A secondary set of 3 holes and 89 ft was drilled 5 miles up Melba creek near the 2017 resistivity survey to ground truth geophysical results. Drilling on the upstream side of Melba creek indicates overburden is between 15 and 17 ft thick with gravels 8-9 ft in thickness, and bedrock ranges from 23-26 ft depth. This suggests that 2017 resistivity lines had indicated much deeper depths. The table below summarizes the 2019 drilling logs which are located in Appendix I of this report.

Hole Number	Interval (ft)	Description	Total Footage
19MEL01	0-11	frozen ice lens	Australia Creek Valley
	11-13.5	sandy gravel	
	13.5-25.5	hard drilling medium grey-green gravel	
	25.5-30.5	hard bedrock green	30.5 ft total on hole 19MEL01
19MEL02	0-17	frozen black organics fine sand, clay overburden	Australia Creek Valley
	17-27	hard drilling grey medium gravels	
	27-31	hard drilling green bedrock	31 ft total on hole 19MEL02
19MEL03	0-15	frozen black organics fine sand, clay overburden	Melba Creek Valley
	15-23	hard drilling medium-fine brown gravels	
	23-28	hard green bedrock	28 ft total on hole 19MEL03
19MEL04	0-15	frozen black organics fine sand, clay overburden	Melba Creek Valley
	15-24	brown well rounded medium gravels	
	24-28	soft bedrock dark brown	28 ft total on hole 19MEL04
19MEL05	0-17	frozen black organics fine sand, clay overburden	Melba Creek Valley
	17-26	brown medium gravels	
	26-33	hard green bedrock	33 ft total on hole 19MEL05

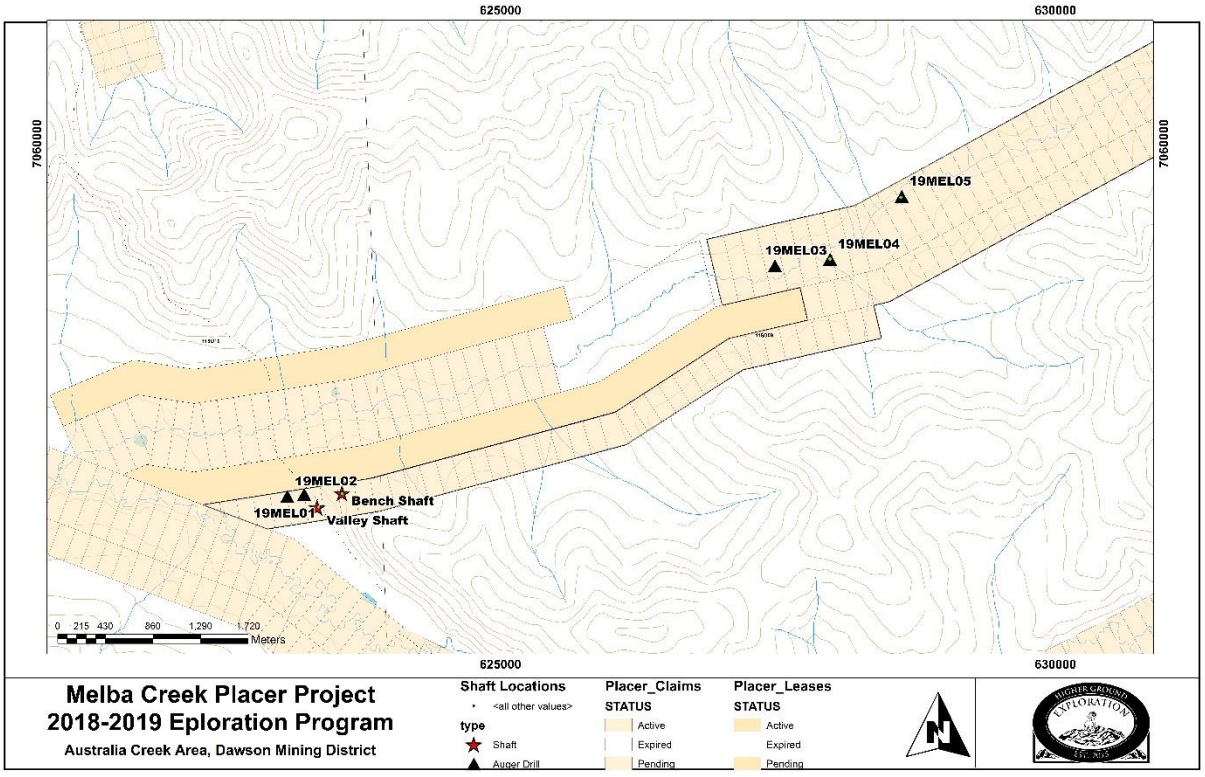

Figure 9. Shaft and Drill locations

2018 Exploration Expenditures

Melba Creek Statement of Costs **2018-009**

Description		Amount
Geophysics Resistivity Program (July 17)		
Geoplacer Exploration	1.0 km of 2D Resistivity	$ 12,600.00
Staking Program (Mel 1-53 and Mel L 1-53) and Site Visit (Aug 15-31)		
Lead staker	5 days @ $400/day	$ 2,000.00
second staker	5 days @ $350/day	$ 1,750.00
Prospector/Management	2 days @ $500/day	$ 1,000.00
Daily Field Expenses	12 day @ $100/day	$ 1,200.00
Expenses	Fireweed Helicopter	$ 4,094.32
		$ 10,044.32
Preparation for Shafting/Drilling Program (Dec 12-15)		
Labour (delivering fuel to site)	2 days @ $350/day	$ 700.00
Prospector/Management	2 days @ $500/day	$ 1,000.00
Expenses		$ 4,821.24
		$ 6,521.24
Shafting/Drilling Program (March 15-30, 2019)		
Shafter (#1)	14 days @ $450/day	$ 6,300.00
Shafting Helper (#1)	13 days @ $350/day	$ 4,550.00
Shafter (#2)	10 days @ $450/day	$ 4,500.00
Shafting Helper (#2)	7 days @ $350/day	$ 2,450.00
Driller	6 days @ $500/day	$ 3,000.00
Drillers' helper/Field Assistant	13 days @ $350/day	$ 4,550.00
Camp cook/Field Helper	9 days @ $350/day	$ 3,150.00

Prospector/Management	4 days @ $500/day	$ 2,000.00
Miner/Consultant	2 days @$500/day	$ 1,000.00
Genset	13 days @$15/day	$ 195.00
Genset #2	13 days @$15/day	$ 195.00
Trucks (4)	52 days @$100/day	$ 5,200.00
Daily Field Expenses	78 days @ $100/day	$ 7,800.00
Snowmobiles (3)	39 days @$75/day	$ 2,925.00
Mob/Demob of Nodwell with Auger	3 days @ $960/day	$ 2,880.00
FN60 Nodwell	13 days @ $400/day	$ 5,200.00
FN60 Nodwell & auger drill	6 days @ $960/day	$ 5,760.00
Trailers (2)	2 month @$600/month	$ 1,200.00
Shafting Equipment (jackhammer windless, headframe, safety gear)	13 days @ $50/day	$ 650.00
Expenses	fuel, etc.	$ 1,894.44
		$ 65,399.44
Report Writing		
Geologist	5 days @ $500/day	$ 2,500.00
	Total	$ 97,065.00

The total expenditures for the 2018-2019 placer exploration YMEP program is $97,065.00.

Conclusion and Recommendations

The project is located on Melba Creek a right-limit tributary of Australia Creek, upstream of the confluence with Dominion Creek and a total distance of 68 kilometers from Dawson City. Australia Creek is part of the historic Klondike gold district; estimated to have produced over 20 million ounces of gold since discovery in 1896. Large-scale placer mining on the Indian River began in the late 1970s, and over 250,000 crude ounces has been produced since that time. The Indian River drainage is presently the largest placer

gold producing area in the Yukon, with 31,796 crude ounces (49% of the total Yukon production) recorded in royalties in 2016. Preliminary figures for 2017 show that production specifically along the Indian River downstream of Australia Creek totals 13,914 crude ounces, accounting for 20% of Yukon's total placer gold production (Bond and van Loon, 2018).

Despite extensive mining activity nearby, Australia Creek and Melba was never historically mined, due to its importance as a source of water and hydro-electric power for supporting the dredge operations of the Yukon Consolidated Gold Company (YCGC), which operated in the Klondike Region between 1920s and 1960s. YCGC did limited exploration churn drilling at the mouth of Australia Creek, but no further exploration up the drainage.

The bedrock geology and geologic history of Melba Creek and Australia Creek are comparable to the gold-bearing Indian River downstream, with similarly wide valleys and a thin layer of pre-Reid outwash gravels covering Tertiary White Channel Gravel benches (Froese and Jackson, 2005 a, b). Indeed, previous placer exploration programs, although limited, have indicated that there exists significant alluvial gold potential in the Australia Creek and Melba Creek drainages.

The 2108-2019 program consisted of 1000 meters of resistivity geophysical surveying, 51 ft of shafting in two shafts and 150.5 ft of drilling in 5 holes. Results from 2018 resistivity survey indicate bedrock depths between 8 and 18m. Based on 2018 exploration results further work is warranted on the Melba Creek Property. A future program consisting of drilling, shafting, and a drone survey is recommended. Drilling should be carried out to delineate economic areas expanding from the shaft, to test resistivity targets and explore the remainder of the creek. Drone imagery and digital DEM may serve well in detecting bedrock exposures subtle topographical features and potential drilling targets. Follow up shafting on prospective drill results provides larger sample volume and a visual section through the stratigraphy.

Statement of Qualifications

Nicolai Goeppel

I Nicolai Goeppel, of the city of Whitehorse, Yukon, certify that:

1. I worked and carried out work on the Gold Run Property in 2018 and 2019
2. I have completed an Earth Sciences B.Sc. at Memorial University of St. John's, Newfoundland in 2014
3. I have worked in the mineral exploration industry in the Yukon, Newfoundland, and British Columbia since 2009
4. I have been involved in the placer industry my whole life and engaged in placer gold exploration in the Yukon since 2009
5. Owner and founder of Higher Ground Exploration Services since 2015

Chris Arsenault

I, Chris Arsenault, of 105 Granite St, Whitehorse, Yukon, Canada, DO HEREBY CERTIFY THAT:

1. I am a Consulting Geologist with the current address at 105 Granite St. Whitehorse, Yukon, Canada, Y1A 2V8.
2. I am a graduate of the Acadia University (B.Sc., 2014, Geology)
3. I have practiced my Profession as a Geologist continuously since 2014.

Dated this 29th day of March 2019

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Appendix I

2019 Melba Creek Placer Drill Log

Date: March 24&26, 2019 **Driller:** Jeff Dubois **Drill Helper:** Jordan Lord

Type of Drill: FN160 Nodwell Mounted Auger Drill **Total Footage for Assessment:** 150.5ft

Inside Diameter of Drill: 6 inch

Location: Melba Creek, Dawson Mining District **Grants Numbers:**

Hole Number	Interval (ft)	Description	Total Footage
19MEL01	0-11	frozen ice lense	
	11-13.5	sandy gravel	
	13.5-25.5	hard drilling medium grey-green gravel	
	25.5-30.5	hard bedrock green	30.5 ft total on hole 19MEL01

19MEL02	0-17	frozen black organics fine sand, clay overburden	
	17-27	hard drilling grey medium gravels	
	27-31	hard drilling green bedrock	31 ft total on hole 19MEL02
19MEL03	0-15	frozen black organics fine sand, clay overburden	
	15-23	hard drilling medium-fine brown gravels	
	23-28	hard green bedrock	28 ft total on hole 19MEL03
19MEL04	0-15	frozen black organics fine sand, clay overburden	
	15-24	brown well rounded medium gravels	
	24-28	soft bedrock dark brown	28 ft total on hole 19MEL04
19MEL05	0-17	frozen black organics fine sand, clay overburden	
	17-26	brown medium gravels	
	26-33	hard green bedrock	33 ft total on hole 19MEL05

Figure 1. 2019 Placer Drill Log