

**2022 YMEP FINAL TECHNICAL
REPORT
CALIFORNIA CREEK PLACER
22-061**

Claims FOX 1-13

&

Leases ID02035 (3 MILES), ID02034 (2 MILES)

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for
Metallic Minerals Corp.



Location of property: 64°04'28"N; 140°22'00"W
NTS map sheet: 116C/01
Mining District: Dawson
Date: February 7, 2023

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Executive Summary

This is a technical report describing work done under a 2022 YMEP grant on the California Creek placer property, comprising 13 placer claims and two placer prospecting leases. The claims are owned by Metallic Minerals Corp. The leases, staked in 2023 to replace leases that expired, are in the names of Lauren Blackburn (ID02034) and Granite Creek Copper (ID02035). Work consisted of an airborne LiDAR survey, a 19ft shaft, three test pits, prospecting, and staking. The fieldwork was undertaken by a 3-person crew from Sept 26th to Oct 6th.

The property has an active water license with the Yukon Water Board (PM18-070) and placer land use approval for a class 4 operating plan (AP18070).

California Creek is a left limit tributary of the Sixtymile River, located in central Yukon approximately 45 km due west of Dawson City, Yukon. The California Creek Placer Property is located in the main valley and right limit bench of California Creek, approximately 4.5 km-upstream of its confluence with the Sixtymile River.

California Creek has been subjected to intermittent exploration since the time of the Klondike Gold Rush, with the earliest documented hand exploration taking place at the mouth in 1918. Various operators explored in the 1970s and 1980s, but subsequent activity was sparse until 2008, when a consortium of prospectors explored by hand trenching and sampling on the right fork. Placer gold values of up to 1 gram per ton were recovered in hand-dug samples. Several kilometres upstream of the project area, on the left fork of California Creek, a mining operation has been active (Clayton Contracting and Yukon Exploration Green Gold Inc.) since 2016. (LeBarge, 2019)

In 2015, four geophysical (ground-penetrating radar) surveys and 3 test pits were conducted on the Fox claims by previous owner Boris Logutov. The stratigraphy interpreted from the GPR surveys included overburden (muck) from 1.0 to 1.8 metres, alluvium from 1.5 to 7.0 metres, and weathered bedrock from 0.5 to 1.1 metres. Bedrock depths were interpreted as up to 8 metres below surface. The stratigraphy of the pits was described as muck from 1.0 to 1.4 m, overlying alluvium from 1.5-1.8 m, over a bedrock of quartz-sandstone. Hand-washed samples showed grades of 0.5 to 1.2 grams of gold per cubic metre. (LeBarge, 2019)

With the support of a YMEP grant, the property witnessed further exploration in 2019-2020, including UAV-MAG and ground magnetics. Additionally, two shafts were dug with the aim of identifying the depth to bedrock, provide an understanding of the sedimentary geology and to test the sediments for the gold grade. The program was successful in discovering shallow gravels at 6ft on the right limit bench of California Creek through shafting, while delineating potential pay streaks and favorable sites for alluvial gold accumulations through the geophysical surveys.

The 2022 placer exploration program was successful in reaching gold-bearing bedrock at 19 ft (5.8m) through hand shafting. Four feet (15-19ft) of gravel and bedrock was processed, with gold throughout and at least one piece of gold in each pan. Further, 2 of the 3 test pits produced gold when a pan was taken at 3 ft. Based on these results and the results of previous placer exploration further work is warranted.

A future program consisting of prospecting, shafting, mechanical test pitting, drilling and bulk sampling is recommended. The California creek property offers numerous bedrock exposures that offer excellent sites

for prospecting and hand dug test pitting. Mechanical test pitting or during the winter months shafting, would be effective to test magnetic anomalies, map out the bedrock thrust fault, and test areas of known shallow bedrock. The LiDAR products collected in 2022 will be analysed in partnership with the geophysical information to map the surficial geology and geomorphology of the creek, abandoned channels, benches and active and inactive tributaries. The LiDAR products will also be used to plan access routes onto the claims from the south to avoid crossing the Settlement Block that is currently the best route.

California Creek has not been subjected to the same level of historic placer exploration as other drainages in the Sixtymile River drainage, and there has been only minimal exploration using modern methodologies such as geophysics. However, with historic placer mining operations downstream, and an active mining operation upstream, the California Creek property is bracketed by gold-bearing gravels on both sides. Additionally, limited sampling of the gravels on the property have indicated potentially economic quantities of placer gold, and initial geophysical surveys appear to indicate that bedrock is at mineable depths. (LeBarge, 2019)

Introduction

This is a technical report describing work done under a 2022 YMEP grant on the California Creek placer property, comprising 13 placer claims and two placer prospecting leases. The claims are owned by Metallic Minerals Corp. The leases, staked in 2023 to replace leases that expired, are in the names of Lauren Blackburn (ID02034) and Granite Creek Copper (ID02035). Work consisted of an airborne LiDAR survey, a 19ft shaft, three test pits, prospecting, and staking. The fieldwork was undertaken by a 3-person crew from Sept 26th to Oct 6th.

Several sections of this report have been taken from the 2019 YMEP Exploration Proposal on California Creek, written by William Lebarge.

Location and Access

California Creek is a left limit tributary of the Sixtymile River, located in central Yukon approximately 45 km by air due west of Dawson City, Yukon (Figure 1). The California Creek Placer Property is located in the main valley and right limit bench of California Creek, approximately 4.5 km upstream of its confluence with the Sixtymile River.

The centre of the property is 64°04'28"N and 140°22'00"W, on NTS map sheet 116C/01, in the Dawson Mining District (Figures 1 and 2).

Access to the property can be gained by summer road from Dawson City. The route runs from Dawson City west along the Top of the World Highway, then at the 87 km point there is a left (south) turnoff. A 4WD road at this point runs east-southeast a distance of 13 km to the top of the claim group on California Creek. As of October 2022 a rough section of the road approx. 3 km from the claim group had been upgraded. This section of road had caused difficulties with access since 2012. The total distance from Dawson City is approximately 100 kilometers.

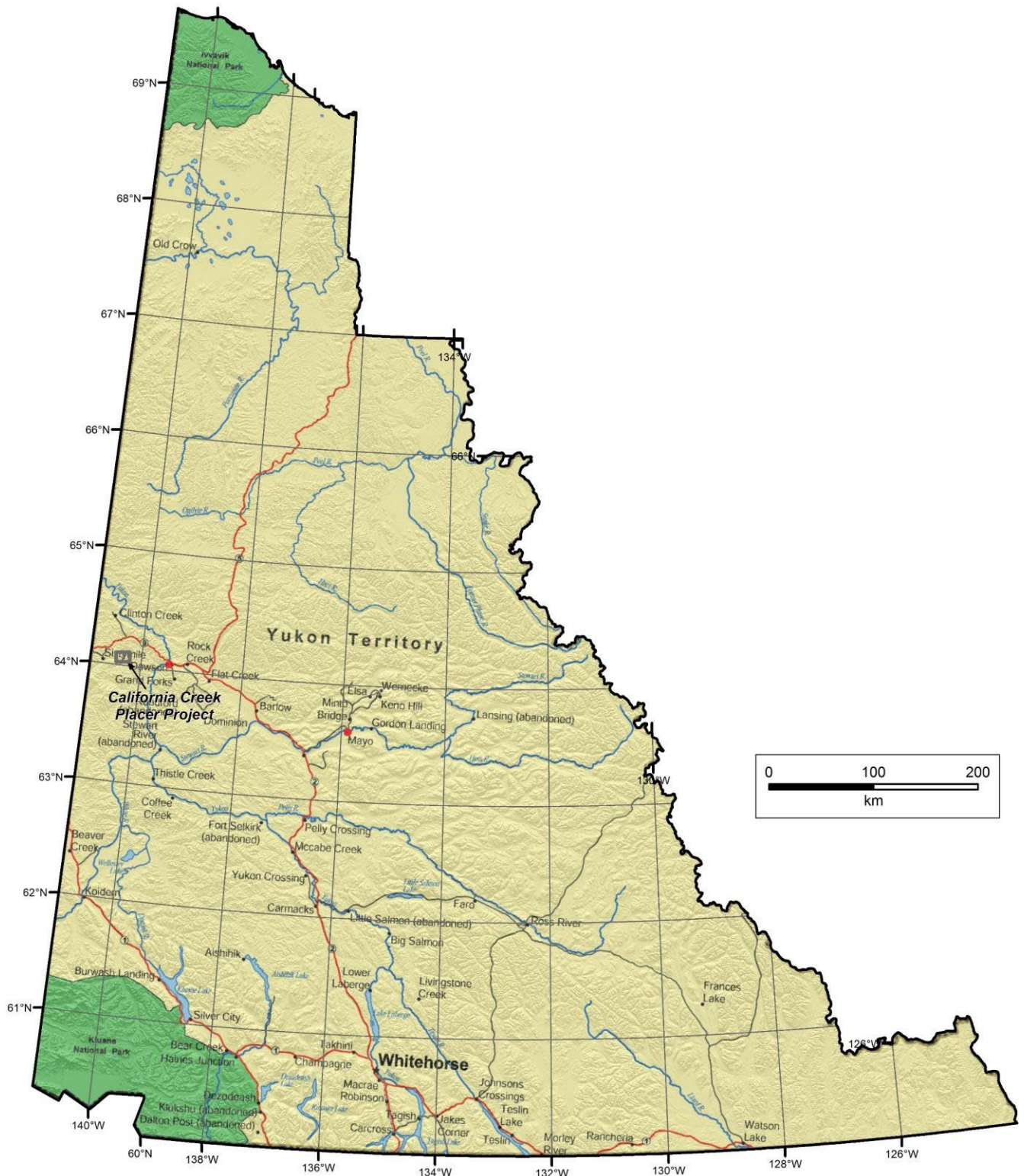


Figure 1. General Location of California Creek Project, Yukon.

Placer Tenure

Table 1 shows the current placer claim and prospecting lease status for the California Creek property.

Table 1. Placer Claim and Prospecting Lease status, California Creek Property, California Creek.

Grant Number	Status	Claim Name	Owner Name	Staking Date	Recorded Date	Expiry Date
P 516225	Active	Fox 1	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2024-12-03
P 516226	Active	Fox 2	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2023-12-03
P 516227	Active	Fox 3	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2023-12-03
P 516228	Active	Fox 4	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2023-12-03
P 516229	Active	Fox 5	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2023-12-03
P 516230	Active	Fox 6	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2023-12-03
P 516231	Active	Fox 7	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2023-12-03
P 516232	Active	Fox 8	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2024-12-03
P 516233	Active	Fox 9	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2024-12-03
P 516234	Active	Fox 10	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2024-12-03
P 516235	Active	Fox 11	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2024-12-03
P 516236	Active	Fox 12	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2024-12-03
P 516237	Active	Fox 13	Metallic Minerals Corp. - 100%	2014-07-23	2014-07-24	2024-12-03

Grant Number	Status	Owner Name	Staking Date	Recorded Date	Expiry Date	Lease Length
ID02034	Active	Lauren Blackburn - 100%	2022-09-30	2022-10-07	2023-11-28	2 MILES
ID02035	Active	Granite Creek Copper Ltd. - 100%	2022-09-30	2022-10-07	2023-11-28	3 MILES

Permitting and Land Claims

The property holds an active water license with the Yukon Water Board (PM18-070) and placer land use approval for a class 4 operating plan (AP18070). Tr'ondek Hwech'in Settlement Land TH S- 14B1 lies adjacent to the north boundary of the Fox 1 claim and along the eastern boundary of prospecting lease ID01732.

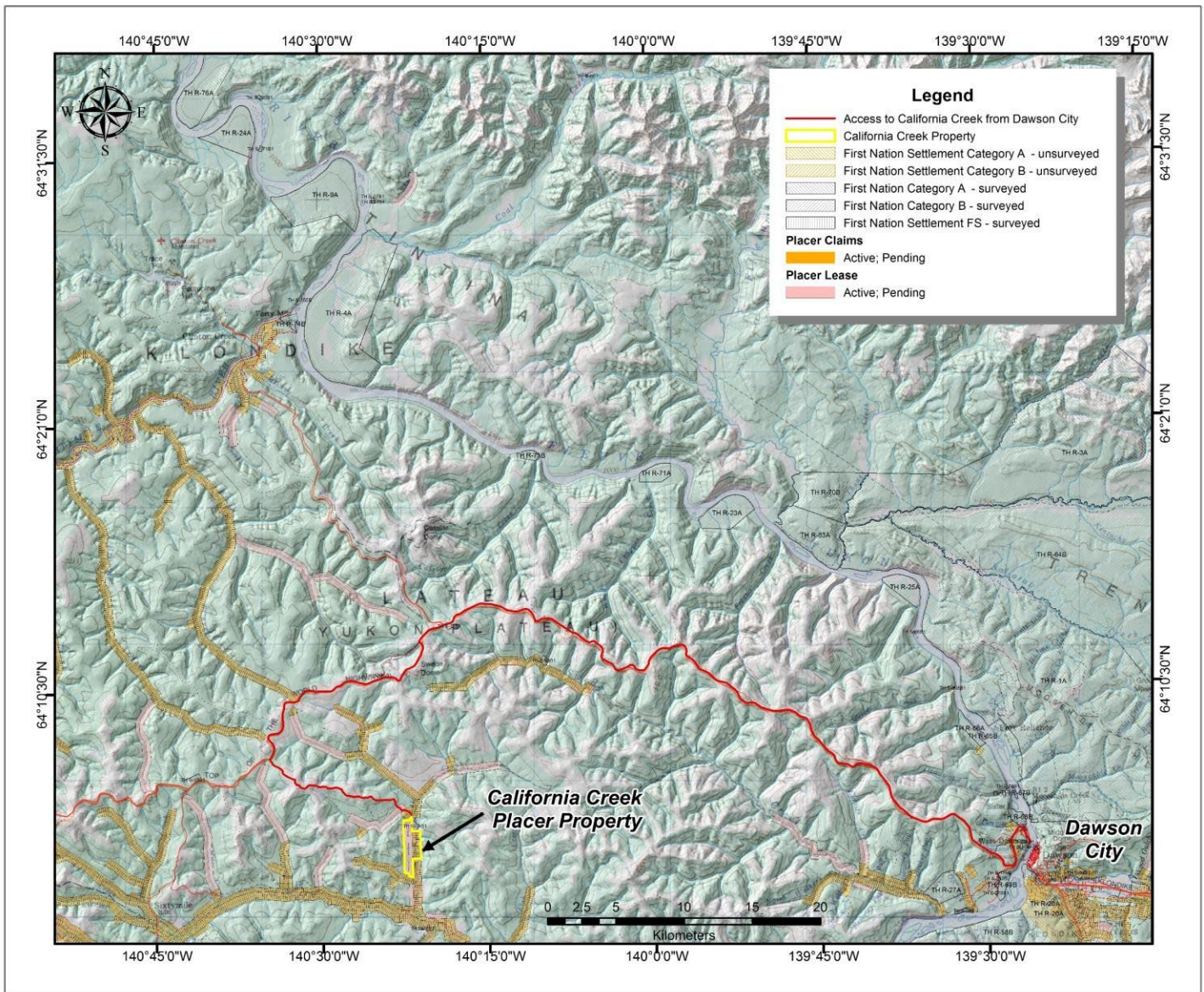


Figure 2. Location of California Creek Placer Project and Dawson region placer tenures. The property lies 100 km by road from Dawson City.

History of Exploration and Mining – California Creek

California Creek has been subjected to intermittent exploration since the time of the Klondike Gold Rush, with the earliest documented hand exploration taking place at the mouth in 1918 (LeBarge, 2007). Various operators explored in the 1970s and 1980s. This included Cogasa Mining Corp. Ltd., who held a 5-mile placer prospecting lease at the bottom of California Creek in 1977.

Panterra Resources mined near the mouth in 1981 and 1982, however little was documented about their

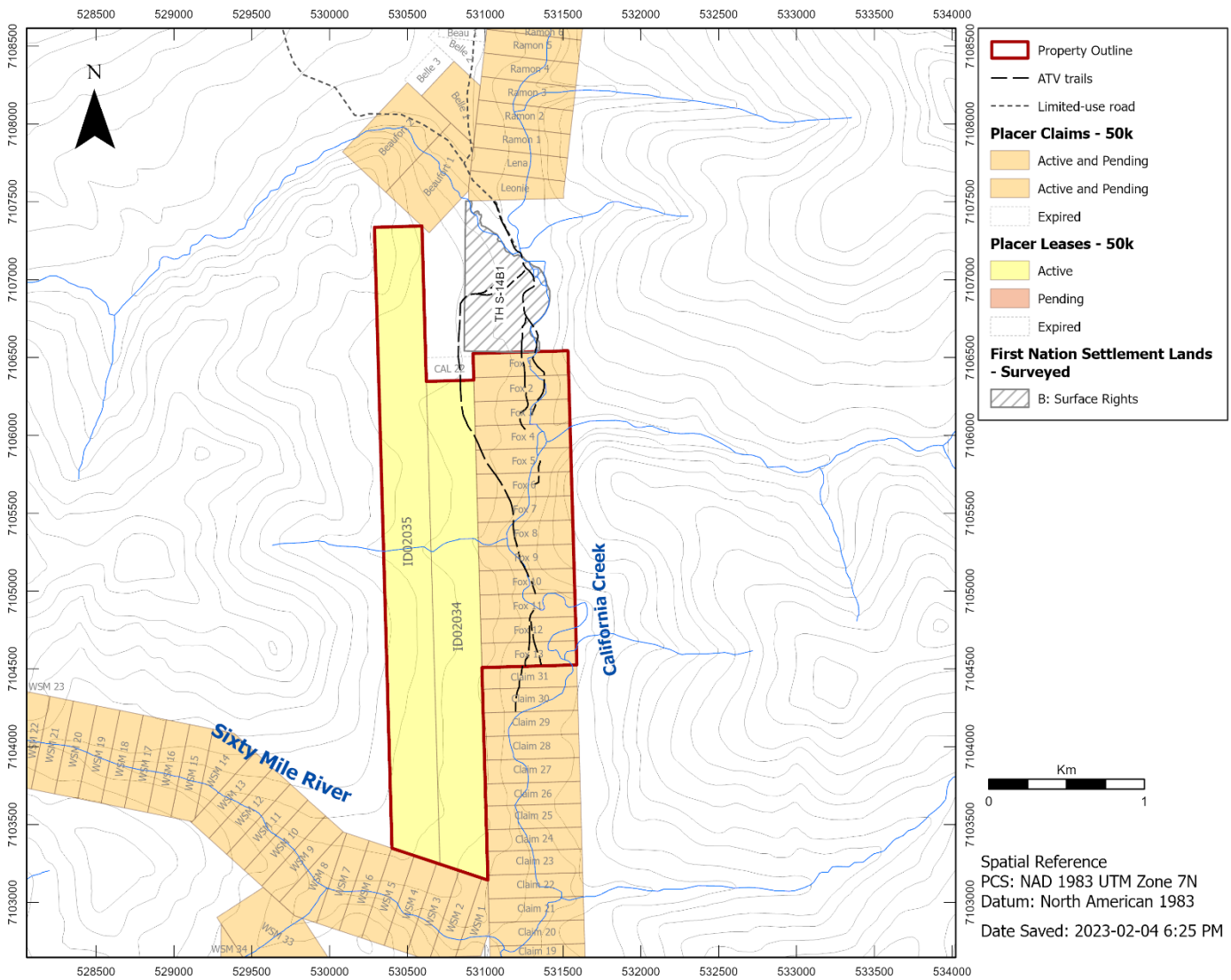


Figure 3: California Creek tenure map.

activity (LeBarge, 2007). In 1985, George Karens and partners reported values of 0.02 to 0.12 ounces per cubic yard in trench testing in the vicinity of the current Fox 1 and Fox 2 claims (LeBarge and Morison, 1990; LeBarge, 2007).

Also in 1985, a 61-hole, 1215 ft. (370 m) rotary drill program was undertaken by Wilshire Mortgage north of the present-day Fox claims on the right fork of California Creek. The highest values in the drill holes (according to LeBarge and Morison, 1990) were 0.0229 oz./t, which is approximately 0.7851 g/t or 1.6 grams per cubic metre. Nuggets up to 2 mesh in size were also recovered in six of the drill holes.

Activity on the creek was sparse until 2008, when a consortium of prospectors explored by hand trenching and sampling on the right fork (Reshetov, 2008). Values of up to 1 g/t were recovered in hand-dug samples.

Several kilometres upstream of the project area, on the left fork of California Creek, a mining operation has been active (Clayton Contracting and Yukon Exploration Green Gold Inc.) since 2016.

In 2015, four lines (1297m) of geophysical (ground-penetrating radar) surveys and test pits were conducted on the Fox claims by then-owner Boris Logutov. The stratigraphy interpreted from the GPR surveys included overburden (muck) from 1.0 to 1.8 metres, which was overlying alluvium from 1.5 to 7.0 metres-thick, and weathered bedrock from 0.5 to 1.1 metres thick. Bedrock depths were interpreted as up to 8 metres below surface.

In addition, three test pits were hand-dug along three of the geophysical lines. Stratigraphy of the pits was described as muck from 1.0 to 1.4 m, overlying alluvium from 1.5-1.8 m, over a bedrock of quartz-sandstone. Hand-washed samples showed grades of 0.5 to 1.2 grams of gold per cubic metre.

The most recent work was conducted in 2019-2020, when UAV-MAG and ground magnetic surveys were conducted on the property, in addition to two shafts.

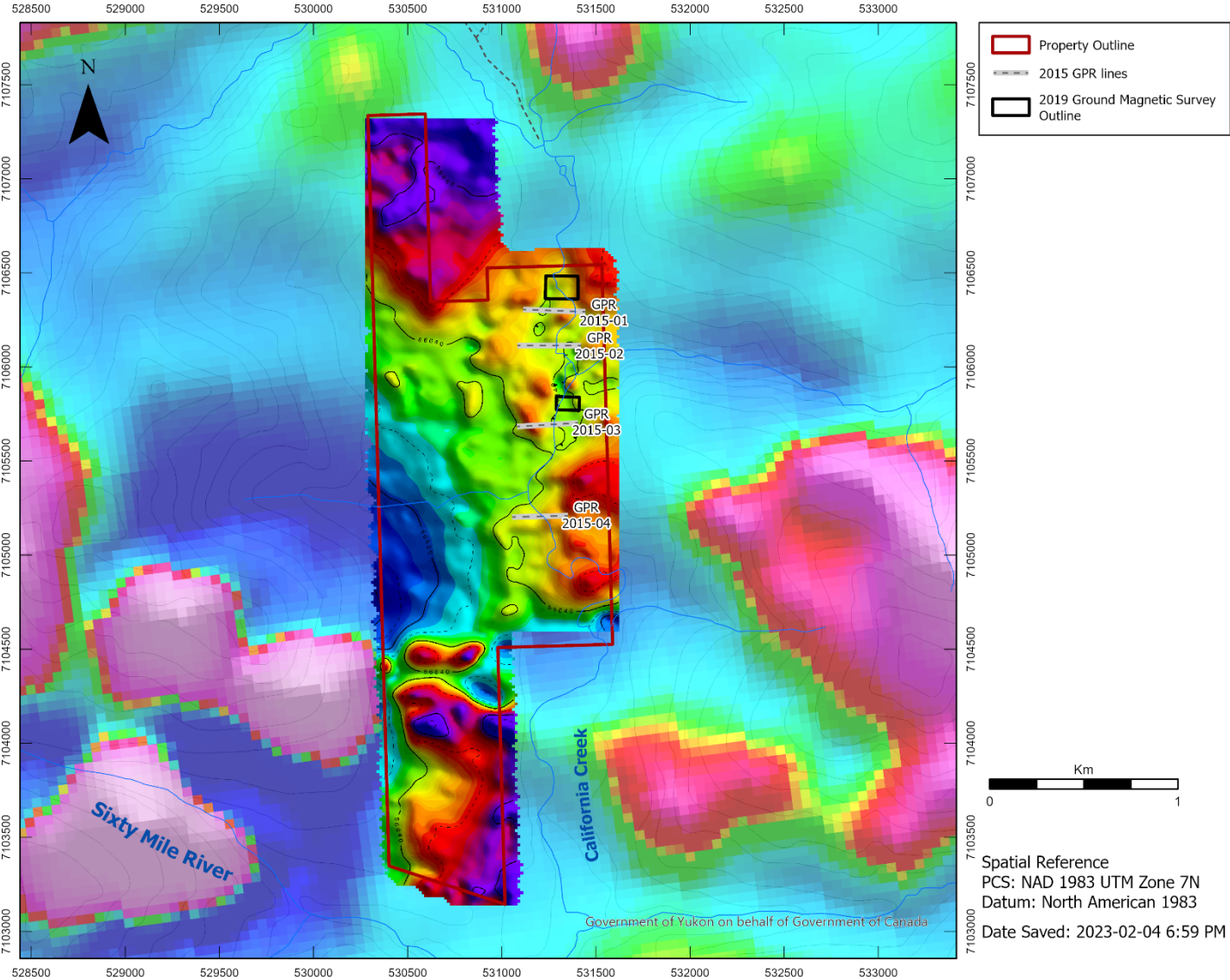


Figure 4: Geophysical Surveys on California Creek. 2015 GPR and 2019 Ground Magnetic survey lines are overlain on the 2020 UAV Total Magnetic Intensity which is overlain over the regional Residual Magnetic Total Field.

In 2019 a total of 1.57 line-kilometers of ground magnetometer survey was surveyed on the California Creek property; consisting of two grids- Survey A on the upstream end that was 1.54 line-kilometer and Survey B that was 0.414 line-kilometers. Survey A results indicate higher magnetic response at the edge of the bench and immediately east of the creek where a north – south trending high corresponds with recent fluvial incision that is observable in high resolution satellite imagery.

Survey B was conducted downstream to the south 500m from Survey A. The survey appears to have detected more of a bedrock response but pinpoints the location of a thrust fault mapped in the regional bedrock maps for the area. This is illustrated in the broad magnetic high in the southern part of the area and the broad low to the north. This contact would serve a potential ledge or ‘gold trap’ for any fluvial activity. Bedrock was observed along the western side of the survey area, suggesting shallow bedrock in the area which would account for the survey response. The low magnetic response from the schist unit which occupies Survey A area would suggest that magnetic anomalies from Survey A are likely more a result of fluvial activity and concentrating of heavy minerals. See Figure 4 for survey locations.

In March 2020 an Unmanned Aerial Vehicle (UAV or drone) flew an 85.7 line-kilometre magnetic survey over the entire property at 50m line spacing. Lines were flown at an azimuth of 090° and the flying height was 35m above ground level.

The survey was used to delineate magnetically susceptible gravels that could be related to placer gold deposits and the 2022 shafts and pits were dug in the Area 3 potential paystreak. The most prospective areas are numbers 2-5 as shown in *Figure 5*. Area 2 is a north-south trending anomaly that runs through the right-limit bench at a favorable elevation. Areas 3-5 outline a potential paystreak that corresponds with shallow bedrock overlain by gravels observed during the ground magnetic survey. It lies approximately 3-5m above the creek level and is marked by a change in vegetation (caribou lichen verse sphagnum moss, mature well grown trees verse stunted conifers) suggesting well drained soils or soils forming over gravels. At the southeastern extent the potential paystreak corresponds with 4 large point bars along the creek (5). The 3-5 anomalies have been dissected by recent fluvial action, but together form a similar feature to the intact linear feature 2. The results are shown over Analytical Signal as this data presentation highlights edges and sharp magnetic features. The first vertical derivative is similar to the analytic signal but not as clearly and the total magnetic intensity (TMI) best displays changes in bedrock.

On the west side of California Creek and in the southern part of survey, the TMI displays more of a bedrock response with a broad low to the west and a higher magnetic response to the south, suggesting a change in underlying rock type.

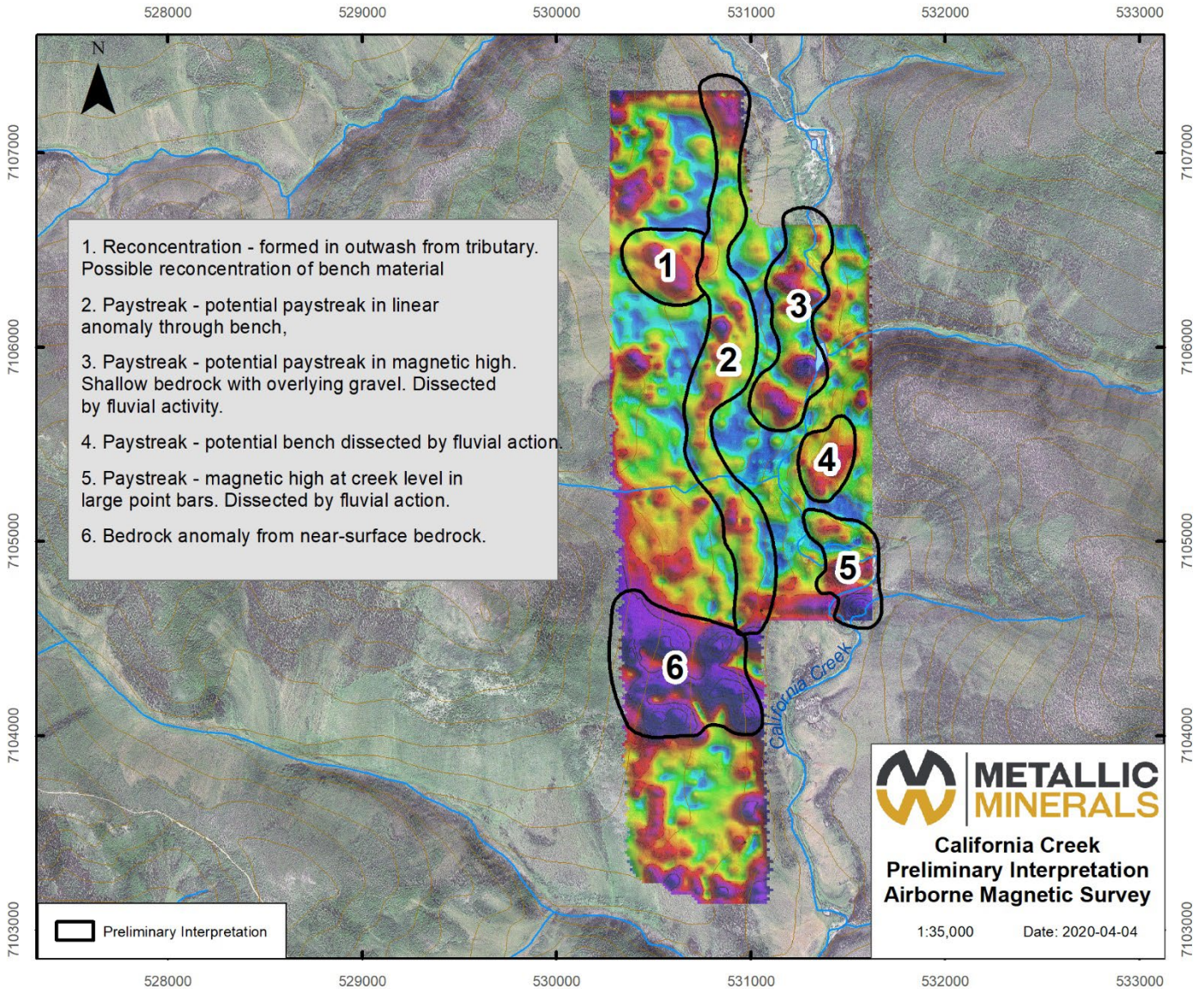


Figure 5. Interpretation of magnetic features from Analytical Signal geophysics survey.

Shafting was completed on California Creek in the winter of 2019. Two shafts were dug using a crew of 2-3 laborers while using fire and pickaxe as methods to thaw the ground and advance to bedrock. Due to the poor weather at the time and the amount of snow present, a generator was not able to be used to operate an electric jack hammer to dig the shafts, thus fire was used instead.

The first-tier shaft advanced to a total of 7 feet with gravel being reached at 6 feet. And the second-tier shaft was dug to a depth of 8 feet, with all material being fine silt. Neither shaft hit bedrock.

Geology

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).

Significant lode gold has been found throughout the central Yukon and Klondike regions, where it is spatially associated with world-class placer gold deposits (Chapman *et. al*, 2011 and others). The precise genetic relationship between lode gold sources and local placer gold deposits is enigmatic and

Local Bedrock Geology and Mineral Occurrences

Figure 6 shows the bedrock underlying the California Creek property as Devonian-Mississippian carbonaceous metasedimentary rocks of the Finlayson group (map unit DMF1), which is intruded along its southern extent by Mississippian Simpson Range Suite metagranodiorite, metadiorite and metatonalite (map unit MgSR). The Simpson Range Suite is the most extensive within the property boundaries. The Reindeer Fault, an inferred thrust fault is mapped across Fox 1-5 and was a target for testing in 2022. Places the Upper Devonian Finlayson over the Mississippian Simpson Range

There is one known nearby mineral occurrence, MINFILE #116C 017 (ANACORTES). It is mapped as occurring within the Mississippian Simpson Range Suite (MgSR) but described in the Yukon MINFILE as a vein gold occurrence hosted in Nasina Series quartzite and schist (YGS, 2018). Diamond drilling was conducted in 1983, consisting of 29 holes totaling 70.7 metres, but the results are not available.

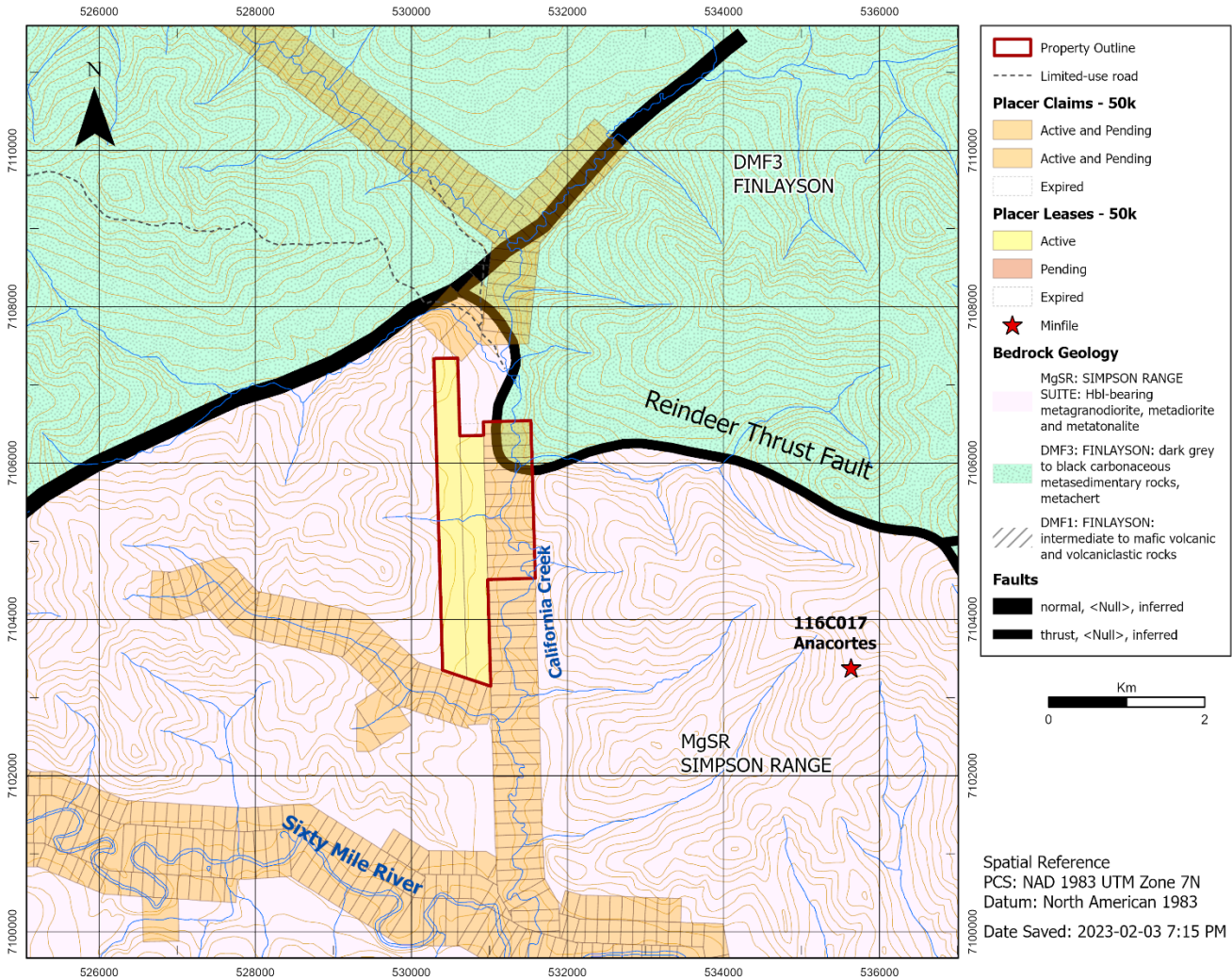


Figure 6: Bedrock Geology of California Creek area, from Yukon Geological Survey digital files.

Quaternary History

Most of the Klondike region has not been glaciated (Duk-Rodkin, 1999; Jackson *et. al*, 2001). However, a terminal moraine was interpreted and mapped approximately 5 km west of the confluence of California Creek and Sixtymile River (Duk-Rodkin, 1996). This feature (moraine) may be a remnant of a pre-Reid glaciation, which also deposited glaciofluvial gravel on low to mid-level terraces along the Sixtymile River (Duk-Rodkin, 1996). Despite this interpretation, there remains some contention as to the Quaternary history of the Sixtymile drainage. For example, Lowey (2004) shows the Sixtymile river drainage to be unglaciated, while Jackson (2005) mapped several glaciofluvial terraces along the Sixtymile river valley, upstream of Bedrock Creek, and on the left limit of Mosquito Creek.

It is likely however, that the California Creek drainage escaped glaciation, although several right limit tributaries of the Sixtymile River were subjected to alpine ice advances during the pre-Reid glaciation (Lowey, 2004). Additionally, climatic influences and associated base level changes brought on by local

and regional glaciations would have had significant effects on the weathering and erosion of local bedrock, as well as the deposition of the alluvial and colluvial materials into the valleys. It was during these periods that the broad alluvial terraces along California Creek were formed.

Surficial Geology

The surficial geology of the California Creek and Sixtymile River area was mapped at 1:250,000-scale by Duk-Rodkin (1996). *Figure 7* shows that the entire California Creek valley is mapped as an alluvial complex (map unit Ax), with an extensive terrace (bench) dominating the right limit of the drainage along the main stem and right fork. The slopes above the creek are mapped as a colluvial veneer (map unit Cv). At the confluence of California Creek and the Sixtymile River, several re-Reid age glaciofluvial terraces (map unit GPRtv) are mapped above the modern river valley.

Placer Geology

The placer geology of the Sixtymile River drainage was first described in detail by Hughes (1986); but more recently described by LeBarge (2006), who subdivided the local alluvial deposits based on age and physiographic setting. Four types of alluvium were proposed: modern (Holocene); interglacial (prior to the McConnell glacial episode); pre-Reid and older; and technogenic (man-made) deposits. The extensive right-limit terrace on California Creek is mapped by Duk-Rodkin (1996) as an alluvial complex and is likely comprised of a combination of both pre-McConnell-age interglacial (and possibly periglacial) gravels and older, pre-Reid age periglacial alluvial deposits such as those described by LeBarge (2006). These types of deposits are placer gold bearing in other nearby Sixtymile River drainages.

The stratigraphy of a deposit mined by Englefield Resources Ltd. in 1987 at the mouth of California Creek is described by LeBarge (2007) as a one metre of moderately sorted, imbricate sandy boulder-cobble gravel which fines upward into one metre of a rusty weathering gravel. The underlying bedrock is described as quartzite.

On the left fork of California Creek, a mining operation has been active (Clayton Contracting and Yukon Exploration Green Gold Inc.) since 2016. Bond and van Loon (2018) describe the stratigraphy there as including marble and shale bedrock where the marble has formed resistant “reefs” of high bedrock with a rough surface and accumulations of large marble boulders. Silt-rich, poorly-sorted, 0-0.6 m (0-2 ft.) thick pay gravel is packed into depressions, fractures and void space between the bedrock blocks. Overlying the silty pay gravel is a moderately sorted gravel 0.6 to 2 m-thick (2-6.6 ft) which represents the modern creek gravel. The two gravel units are overlain by 0.3 to 2.4 m (1-8 ft) of frozen muck and weathered bedrock colluvium. The placer gold includes small nuggets with iron and manganese-staining

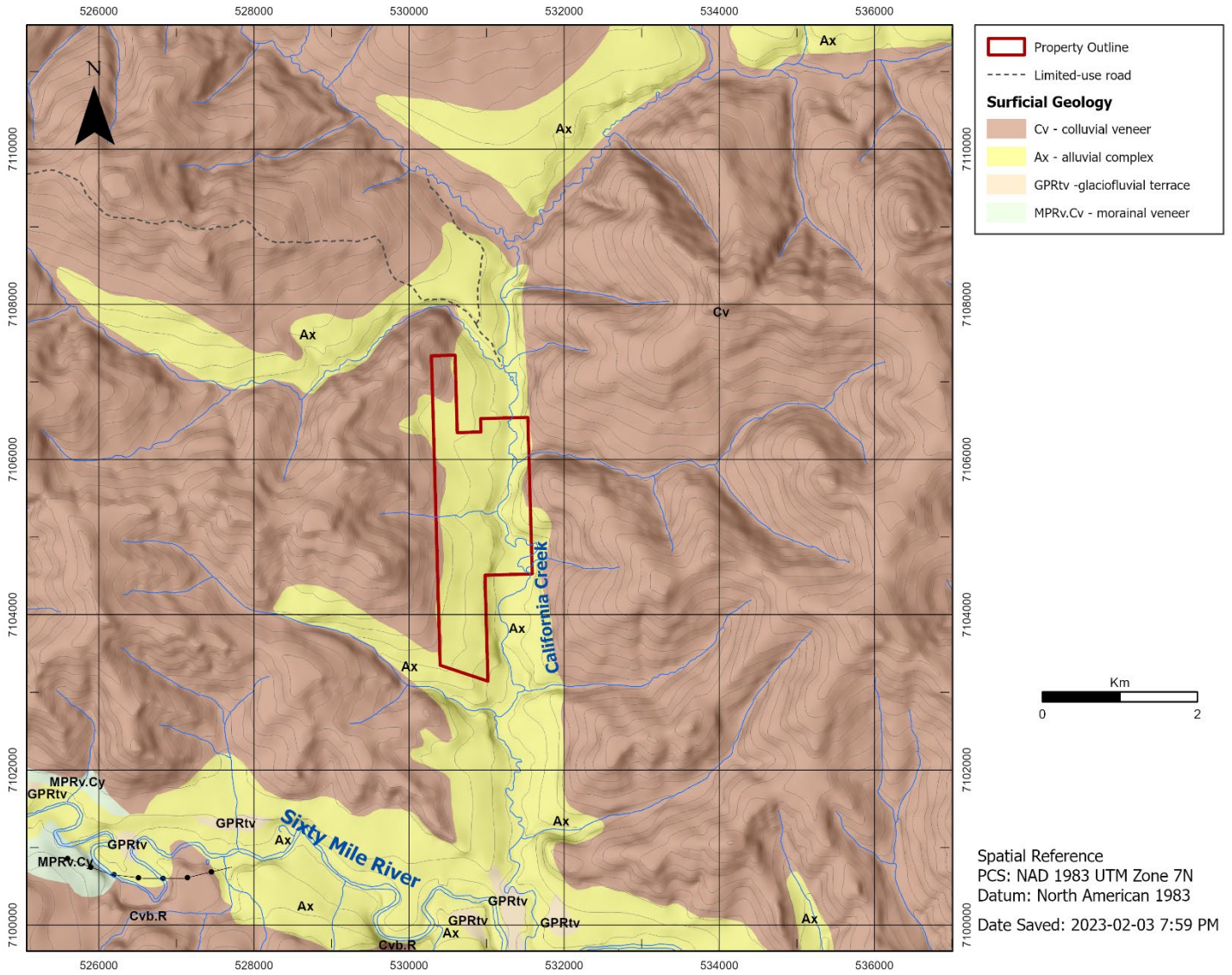


Figure 7: Surficial Geology, California Creek, after Yukon Geological Survey (2018) and Duk-Rodkin (1996).

2022 Exploration Work

Introduction

The original YMEP proposal for California Creek laid out a program of shafting, staking and seismic geophysics, leading to sonic drilling if feasible and then bulk sampling if drill results warranted. Of the 4 proposed shafts 2 were to be dug on the leases and the work used to stake the leases to claims. Shafting locations had to be modified when the leases expired before work could start and all work had to be undertaken on the claims. The seismic lines were replaced with an entire property LiDAR survey and the shafting work was undertaken over 11 days between September 26th and October 6th.

LiDAR Survey

On June 16, 2022 McElhanney Ltd collected LiDAR and aerial photography for the California Creek property. Four north south flight lines were flown covering the entire property for a total of 37.8 line-km of See appendix A for digital files of the LiDAR report and deliverables and Figure 8. *Note that MMG also had another placer property flown on the same day and that it is included in the report but the deliverables for the other property are not included.*

Deliverables from the LiDAR survey include:

- Bare-earth (BE) 1km² LiDAR tiles in LAZ format
- Model key points (mkpts) 1km² LiDAR tiles in XYZ and LAZ formats
- Non bare-earth (NBE) 1km² LiDAR tiles in LAS format
- Shaded-relief (LiDAR interpretation imagery) 1m pixel – geotiff format
- DTM Surface 1m grid files in ArcGrid format
- 1m contours in ESRI shape format
- 15cm-pixel colour orthophoto in 1km² tif /tfw tiles
- 15cm Orthophoto mosaic files in ecw file format
- Project Report

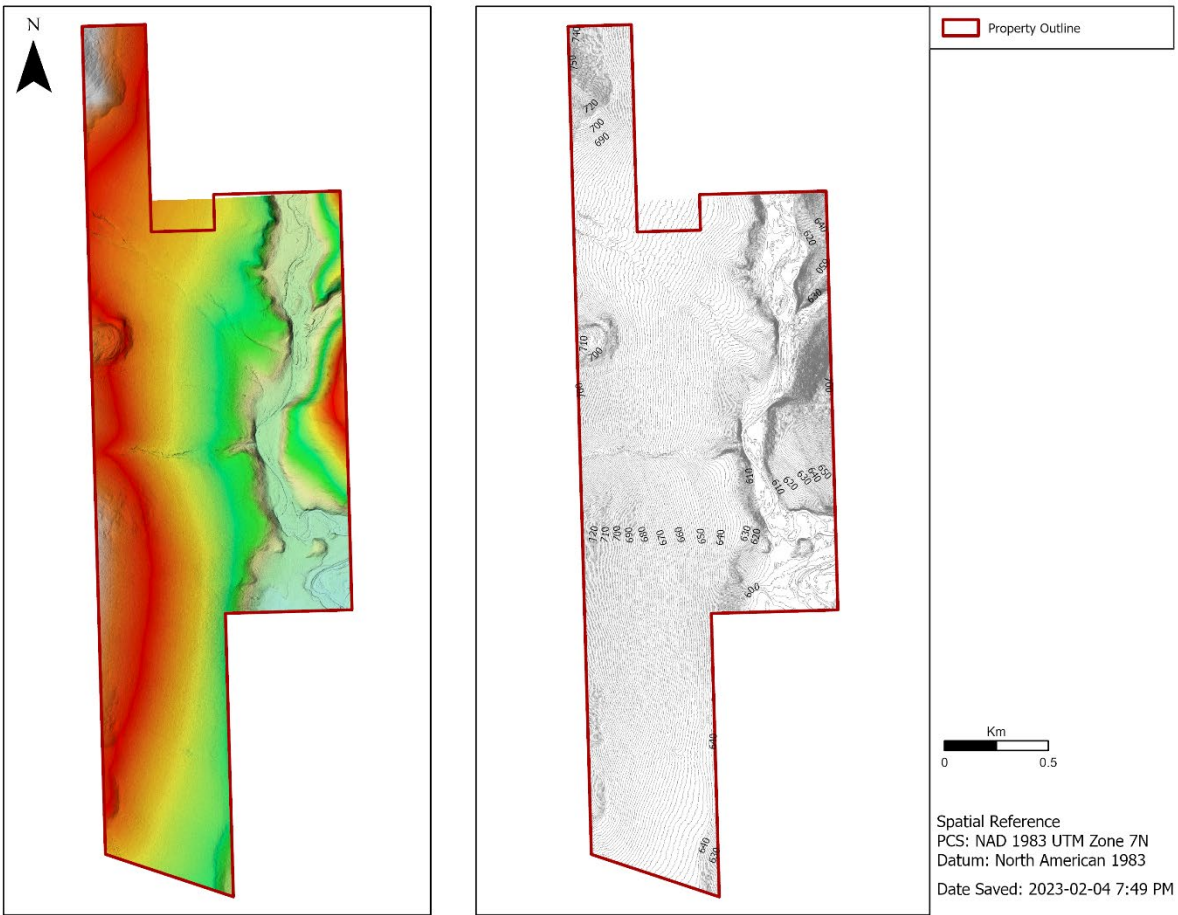


Figure 8: LiDAR Digital Terrain Model (DEM) displayed in hillshade colours on the left and 1m contours derived from the DTM on the right.

Test Shafting

Between Sept 26th and Oct 6th a 3-person crew dug one 19 ft (5.8m) shaft to bedrock at 19ft and three 3 ft deep (1m) pits. Work was carried out from a temporary camp set up at the shaft site. The first attempt at digging the shaft encountered heavy ground water seepage so it was used to provide sample processing water for the 2nd shaft a short distance away. See figure 9 for shaft and pit locations.

Other related work included brushing out and putting corduroy on a trail to the work site, upgrading existing trails, logging timber for the shaft and cutting a heli pad



Figure 9: View down the shaft.

next to the shaft. After completion the shaft was covered with logs to prevent entry.

The shaft passed through: 0-15 ft overburden and muck; 15-18 ft sand and gravel – peridotites and quartz cobbles; 18-19 bedrock garnet-hematite-pyrite.

In the pan that was taken from bedrock, heavies consisted of garnet-hematite-pyrite. Garnets were up to 1cm wide, purple hematite up to 1.5cm wide and pyrite was very fine. A coarse gold colour and 2 fine gold colours were recovered from the pan. Three buckets of frozen gravel and bedrock were thawed and screened down to one ¾ full, 5-gallon pail and taken back to Dawson for processing. The gravel was processed first and the last material screened into the sample pail was the bedrock bucket. The entire sample was panned starting with bedrock material at the top of the bucket. The first few pans yielded most of the gold but there was fine gold in the gravel concentrate as well. Most of the gold is flat, rounded flakes but some are less rounded and tougher. Some of the gold flakes are darker than the others. There was gold throughout and a piece in every pan.



Figure 10: Gold recovered from panning the material taken to Dawson.

Three test pits were started on Fox #2 claim near a test pit from 2015. All 3 hit the water table around 2ft down so were turned into hand trenches and 5 yards of in-place creek gravels were excavated. A sample was panned from each trench from below the water level. Gold was recovered from 2 out of 3 trenches, at 3ft deep, along with a heavy concentration of garnet-hematite-pyrite. The pits were reclaimed.



Figure 11: Test pit 2022 Pit 1

Prospecting

Prospecting occurred along the lower claims along California Creek to collect information from an area where knowledge is slim. There was old timer activity in the form of multiple shafts on the left limit of claim Fox #8, where a tributary cuts the bench. The abundance of diggings suggests they shafted the whole thing from top to bottom, starting way upstream. There was also more modern mining, about 30 to 40 years old or so, from the left limit of claim Fox #4, running downstream to Fox #9. They kept fairly close to the creek and seemed to have mined out the mouth of the tributary that comes into Fox #4 on the left limit.

Staking

Two leases were restaked during the program as they could not be staked prior to expiry due to forest fires in the area earlier in the season. No work was done on the leases under this YMEP proposal.

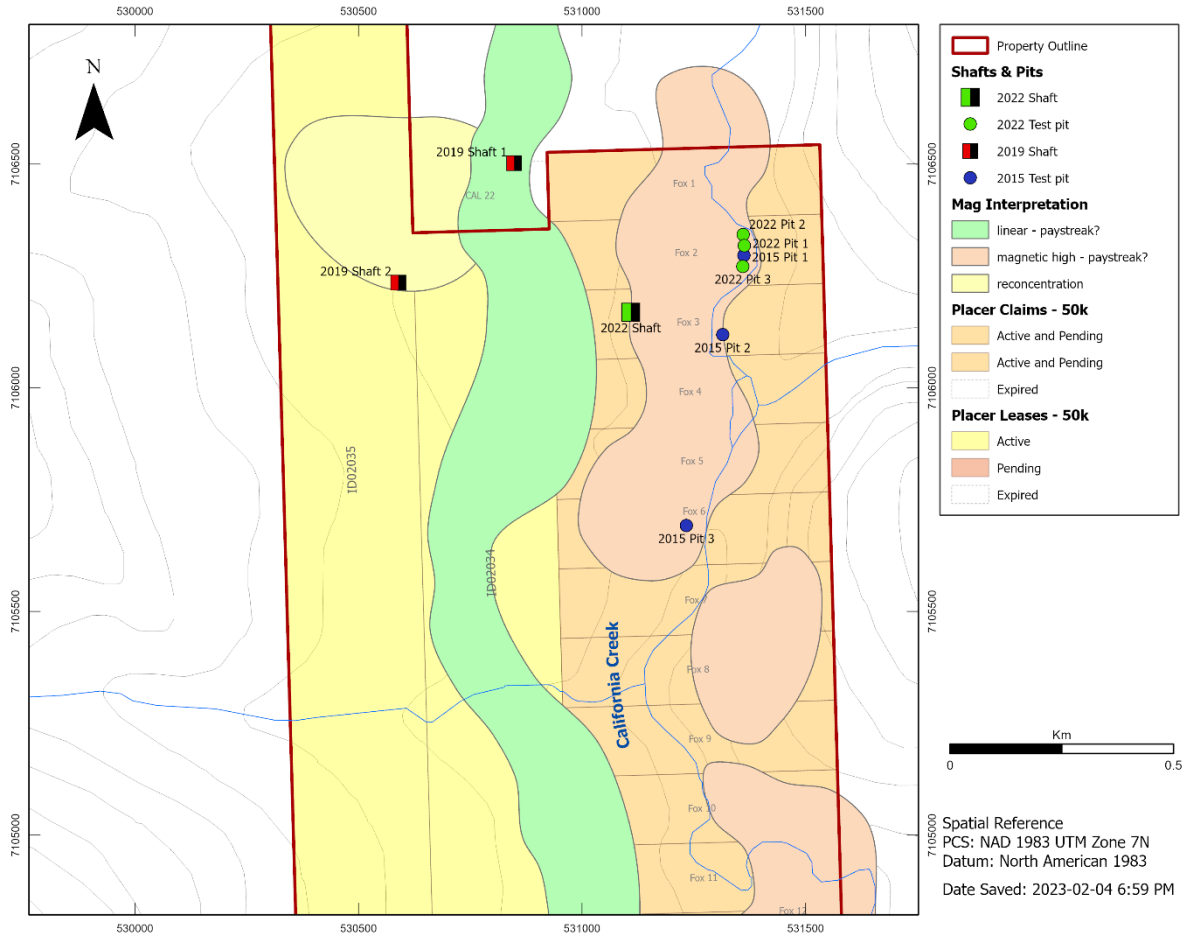


Figure 12: Shaft and Test Pit locations overlain on the interpretation of the Analytical Signal magnetic survey.

Work Schedule & Expenditures

Table 2. Summary of field activities and associated expenses.

Dates	Activity	Field days	Cost (incl GST)	personnel	Man-days	Field expenses	Invoices
June 16	LiDAR	1 flight day	\$6962.93	McElhanney	2		Record of Payments
Sept 25	Field prep (3 @ 4 hrs each)	0	\$420	Kane Morgan, Jay Gagnon Frederick Paquin	1		2252285
Sept 26 – Oct 6	Travel, Shafting, test pits, staking	11	\$14,100	Kane Morgan, Jay Gagnon Frederick Paquin	33	\$3300 \$1291.90*	2252285
Oct 7	Paperwork, recording, panning	0	\$350	Kane Morgan and helper	1	0	2252285
Nov 6-7	Processing samples	0	\$700	Kane Morgan	1		2252291
Nov 18	Sample transport hardware carpentry	0	\$250*	Kane Morgan	1		2252291
Jan 26-Feb 5	report	0	\$2500	Debbie James	5		
Totals			\$25,282.93		45	\$4591.90	\$29,874.83

*not included in YMEP amount as not approved expense or included in daily rate

Conclusions and Recommendations

The 2022 placer exploration program was successful in reaching gold-bearing bedrock at 19 ft (5.8m) through hand shafting. Four feet (15-19ft) of gravel and bedrock was processed producing gold throughout and at least one piece of gold in each pan. Further, 2 of the 3 test pits produced gold when a pan was taken at 3 ft. Based on these results and the results of previous placer exploration further work is warranted.

A future program consisting of prospecting, shafting, mechanical test pitting, drilling and bulk sampling is recommended. The California creek property offers numerous bedrock exposures that offer excellent sites for prospecting and hand dug test pitting. Mechanical test pitting or during the winter months shafting, would be effective to test magnetic anomalies, map out the bedrock thrust fault, and test areas of known shallow bedrock. The LiDAR products collected in 2022 will be analysed in partnership with the geophysical information to map the surficial geology and geomorphology of the creek, abandoned channels, benches and active and inactive tributaries. The LiDAR products will also be used to plan access routes onto the claims from the south to avoid crossing the Settlement Block that is currently the best route.

As described by LeBarge (2006), considerable placer potential remains in the Sixtymile River drainage and its tributaries, including California Creek. This includes alluvial settings such as 1) pre-Reid and older buried abandoned channels; 2) interglacial buried and/or abandoned alluvial terraces; 3) modern (Holocene) alluvial channels and gulches; and 4) technogenic deposits.

Work Journal – Kane Morgan

- Sep 25- Prepared gear, groceries and fuel. 4 hours x 3men
- Sep 26- Travel day, set up camp, cut firewood.
- Sep 27- Scouted a route to claim Fox #3. Cut out brush and corduroyed an ATV trail, upgraded existing trails. Mobilized gear to shaft site and set up equipment. Dug 2ft on 2nd attempt, after 1st shaft location resulted in too much ground water seepage. Will use 1st shaft for sample processing water.
- Sep 28- Dug to 6ft. Hauled more gear to site.
- Sep 29- Dug to 9ft, after setting up sump pump system, to be used daily, to keep up to ground water seepage. Cut helicopter pad by shaft site. Logged timbers for shaft development. Cut fire wood.
- Sep 30- Staked leases. Constructed a log rim around the edge of the shaft. Set up a tripod and pulley for hauling material out. Set up the chain ladder. Dug to 12.5 ft.
- Oct 1- Rained heavy all day. Had to build shelters for the shaft, generator, and our gear. Dug to 15ft. Hit the start of sand-gravels. Set up work lights in the shaft.
- Oct 2- Added more ladder. Dug to 17ft. Logged timbers for windlass frame. Material is too heavy now, to safely remove with the pulley system.
- Oct 3- Constructed the windlass frame, set up windlass drum and basket system. Built a panning/sample processing area. Scouted a location on claim Fox #2, to follow up on previous property owners' results/findings.
- Oct 4- Dug to 19ft. Hit bedrock at 18ft. Gravel layer here is 3.5ft thick, and consists mainly of peridotites and quartz cobbles. A pan was taken from bedrock, heavies consisted of garnet-hematite-pyrite. Garnets were up to cm wide and purple hematite up to 1.5cm wide. Pyrite was extremely small. A coarse gold colour and 2 fine gold colours were recovered from the pan.
- Started 3 shafts on Fox #2, hit a water table around 2ft down on all 3.
- Oct 5- Turned the 3 shafts into hand trenches and excavated 5 yards of in place creek gravels. Dug a foot into the water table and panned a sample from all 3. Gold was recovered from 2 out of 3 trenches, at 3ft deep, along with a heavy concentration of garnet-hematite-pyrite. Started to reclaim trenches. Upgraded soft spots on trail for demobilization tomorrow.
- Oct 6- Finished reclaiming trenches. Demobilized camp and the shaft site. Thawed and screened down 3 buckets of frozen gravel and bedrock. Two buckets of gravel and 1 of bedrock screened down to 1, ¾ full, 5-gallon pail. Returned to Dawson.
- Oct 7- Assessment and staking paperwork. Data entry and work journal compilation. Panning of screened material. Recording of leases.

Statement of Qualifications

I, Deborah Ann Rachel James of 11-3194 Gibbins Road, Duncan, British Columbia, do hereby certify the following:

- I am a Professional Geoscientist in good standing with Engineers and Geoscientists of B.C.
- I graduated from the University of British Columbia with a B.Sc. degree in Geological Sciences in 1988
- I have been employed continuously in the mineral exploration and mining industry since 2006 and have been practicing my profession as a geologist continuously since 2006.
- I have worked in the Yukon Territory in 1988-1989 and from 2006-present. During that time I have worked in the field on the Mt. Skukum Au-Ag vein deposit near Carcross, YT, the Nucleus and Revenue Cu-Au Porphyry deposits at the Freegold Mountain Property in the Dawson Range, Ni-Cu-PGE occurrences in the Kluane Ranges in southwest YT, Ag-Pb veins in the Keno Hill District, and the Carmacks Copper Cu-Ag-Au metamorphosed porphyry deposit northwest of Carmacks.
- I have visited California Creek but not during this program. My role was to act as offsite project manager, compile the program expenses, and to write and submit this report.

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Appendix A LiDAR

Digital files include:

- Bare-earth (BE) 1km² LiDAR tiles in LAZ format
- Model key points (mkpts) 1km² LiDAR tiles in XYZ and LAZ formats
- Non bare-earth (NBE) 1km² LiDAR tiles in LAS format
- Shaded-relief (LiDAR interpretation imagery) 1m pixel – geotiff format
- DTM Surface 1m grid files in ArcGrid format
- 5m contours in ESRI shape format
- 15cm-pixel colour orthophoto in 1km² tif /tfw tiles
- 15cm Orthophoto mosaic files in ecw file format
- Project Report