Geophysical and Drilling Report

Yukon Mineral Exploration Program (YMEP)

Shovel Creek Placer Property

Whitehorse Mining District

NTS: 115J/14 Latitude: 62° 46.44' N Longitude: -139° 23.41' W

Claim List:

Coffee 127-130P511739-742Coffee 133P511745Coffee 167-168P511779-780Coffee 173P511785 Coffee 173

P511785

Work Performed: Resistivity/IP Survey:22-30 September, 2017RAB Drilling:2-10 October, 2017

> Prepared for Shawn Ryan. By GroundTruth Exploration Inc.

Written by: Chad Cote January 24, 2018





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1 Introduction

This unnamed creek, dubbed 'Shovel Creek,' has been targeted based on the discovery of the Coffee Gold hard rock deposit. Shawn Ryan reviewed the various placer camps (outside the Klondike gold fields) in the Yukon and noticed a general theme: Creeks flowing from major gold deposits contain placer gold. Proven examples include Dublin Gulch deposit, Sheelite Dome, Clear Creek, Freegold Area, Moose Horn range, Mt Nansen, White Gold Deposit, and the closest analogy: Casino Deposit with Canadian Creek having placer gold.

This theory was the driving force behind a staking program that encompassed all of the creeks around the Coffee Deposit, but what created this particular target amongst the 100+ miles of staked leases is the following story, as told by Shawn Ryan in the YMEP application:

"Mark Lindsay another Yukon prospector was talking to some local first nation about mining experience, and an old native told mark that they were hand mining a small creek south of the Coffee Road house by hand every spring when there was enough water in the creek. They gave only 2 real clues, one that it was draining opposite from what one would think in the area (meaning most likely south) and two they left all there tools pick and shovels under a big spruce tree. Well I hear of a lot of rumors and I left it to hear say, but as the Coffee deposit started being outlined I wondered about this rumor, now thinking it might be from independence creek side. I was wrong and when we were staking the large lease parcels a staker found what appears to be the old tool cache right under a large spruce tree and the creek is draining south."



Based on this evidence, Shawn Ryan hired GroundTruth Exploration Inc. to conduct an 11 profile Resistivity and Induced Polarization survey between the 22-30 of September, 2017, and a follow up 21 hole drilling program on the 2-10 of October, 2017.

The geophysics work was intended to measure the depth to bedrock to determine if any paleochannels favorable to gold deposition could be detected. The drilling immediately tested the the geophysics. A live, in the field, iterative process was then used to update the geophysical interpretation as information from the drilling was incoming, and then use this to target the next drill holes.



Property Description

The prospecting leases are located approximately 145km South of Dawson City within the Yukon River drainage system in west-central Yukon Territory. The target is centered at 62° 46.44' N, Longitude: -139 ° 23.41' W, and located on NTS mapsheet 115J/14 (Figure 1). It is accessible by helicopter year round. The adjacent Coffee Gold Camp has an airstrip 20 km away that is accessible year round and located at the mouth of Coffee Creek.

The landscape is composed broad valleys bordered by moderately sloped, tree covered hills ranging in elevations from 1200 to 5000 feet. The area experiences typical climatic conditions for central Yukon Territory with short, warm and dry summers and cold winters. Temperatures range from 0°C to -50°C in the winter and 0°C to +30°C in the summer. The property lies within Canadas discontinuous permafrost zone. All of the valley bottoms in this area are completely filled with permafrost.

Geology

1.1 Regional Geology

Shovel Creek is located in the Yukon-Tenana Terrane. Shovel Creek itself is entirely underlain by a felsic Klondike Schist (PK1), consisting of quartz-muscovite-chlorite schist (Figure 2). The section of Coffee Creek that lies within our area of study is also underlain by PK1. 150 m upstream from the creek junction, the Moose Creek Fault is trending east-west and is a significant feature at the contact between the Klondike Shist and the Mount Baker suites, as well as the boundary between the Yukon-Tanana terrane to the north and the Laurentia Terrane to the south. The Moose Creek Fault is mapped to biscet resistvity traverse 17INP-04. The Mount Baker suite is composed of felsic metamorphic rocks such as strongly foliated to gneissic granodiorite, diorite and monzogranite

The property has not undergone glaciation in the past, so gold should be well accumulated and located near its hard-rock sources.



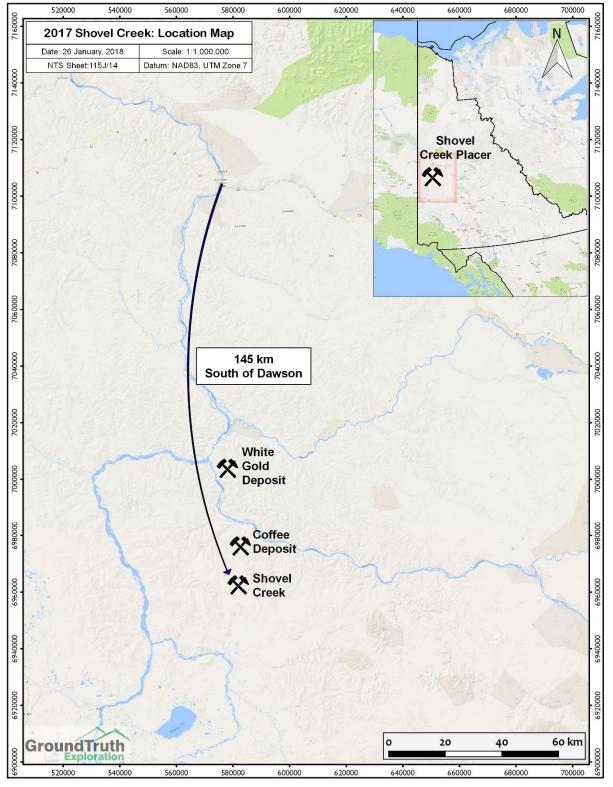
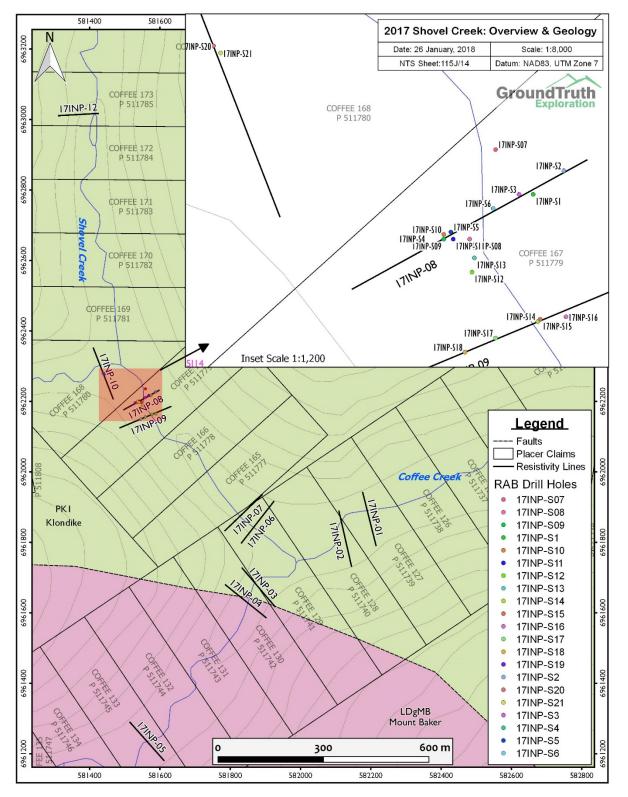
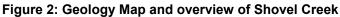


Figure 1: Property Location









2 Resistivity and Induced Polarization Survey

2.1 Work Performed

The DC Resistivity and Induced Polarization (RES/IP) survey was conducted from 22-30 of September, 2017 on placer claims Coffee 127-130, Coffee 133, Coffee 167-168, and Coffee 173. The goal of these traverses is to define the fluvial deposits such as muck, sand, and gravel, and define important contacts such as the permafrost table and bedrock surface.

Each survey traverse is composed of 84 electrodes spaced at 2m. This electrode spacing results in a total line length of 166 ground meters, a horizontal resolution of 1 m, and a potential depth of investigation as deep as 18m between electrodes 25 and 58 (Figure 3).

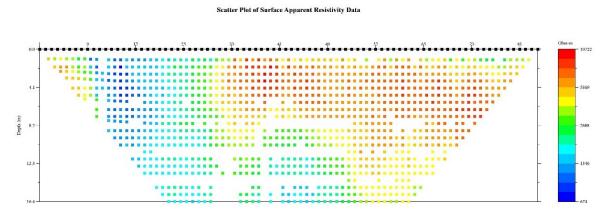


Figure 3: Resistivity data from line 17INP-06 as an example of the array geometry.

The Res/IP surveys are done using Advanced Geoscience's SuperSting high resolution resistivity meter and passive cables. A modified Schlumberger Inverse array was used on all survey lines. This array is a sounding array optimized to delineate horizontal structures such as bedrock contacts and lithological units, has the best overall signal-to-noise ratio and the most lateral coverage. It is an ideal array for finding depths to stratigraphic layers such as muck, sand, gravel and bedrock.

A total of eleven traverses were completed on the Shovel Creek study: 17INP-01 to -10, & -12 (Figure 2). Lines 01 and 02 lie within Coffee Creek valley downstream of its junction with Shovel Creek. Lines 03 – 05 lie within Coffee Creek valley upstream of its junction with Shovel Creek. These lines are designed to act as a baseline on Coffee Creek and can be compared to lines 01-02 to see the potential effects on sediment thicknesses and distribution caused by Shovel Creek joining Coffee Creek. Lines 06-10 and 12 directly test Shovel Creek and were used to guide and target this year's drilling program.



The traverse location was surveyed with a differential GPS unit capable of sub-meter accuracy. This data was used to both map the traverses and to create the terrain file that models elevation within the resistivity processing.

The crews camped on site and walked out to the survey lines from camp. A helicopter was used to mobilize and support the camp with supplies.

2.2 Working Procedure:

- A crew of 5 is deployed to run survey.
- The midpoint of a traverse is located and the line is sighted-in using a DGPS.
- Minimal brush is cut along line to sight pickets and lay cables
- Crew places electrode at 2 to 5 m spacing with measuring tape
- Electrodes are hammered to a depth of up to 50cm (10% of electrode spacing)
- Cables are laid and attached to the electrodes
- Contact resistance test is conducted
- Calcium Chloride (25% solution) added to all electrodes >2k ohms. CRT reread.
- Extra electrodes added to high CR electrodes. CRT reread.
- With satisfactory Contact Resistance, Resistivity survey is Read.
- Operator surveys the traverse using DGPS and marks the traverse with pickets every 10 electrodes.

Data Processing:

The collected data is downloaded in the field after every array and checked for integrity. This allows any field errors to be identified before moving the equipment. The RES data is processed daily by the lead operator using EarthImager2D software provided by Advanced Geosciences Inc. Resistivity data-misfits are removed and the cleaned data-set is inverted. The same process is done with the IP data. Terrain corrections collected using a differential GPS are applied to the inversions. The DGPS data is processed using GNSS Solutions software. A .csv is created containing the DGPS traverse points collected. All instrument raw data from the DGPS and SuperSting are archived. An ESRI shape file is created containing the traverse points collected.



2.3 Results

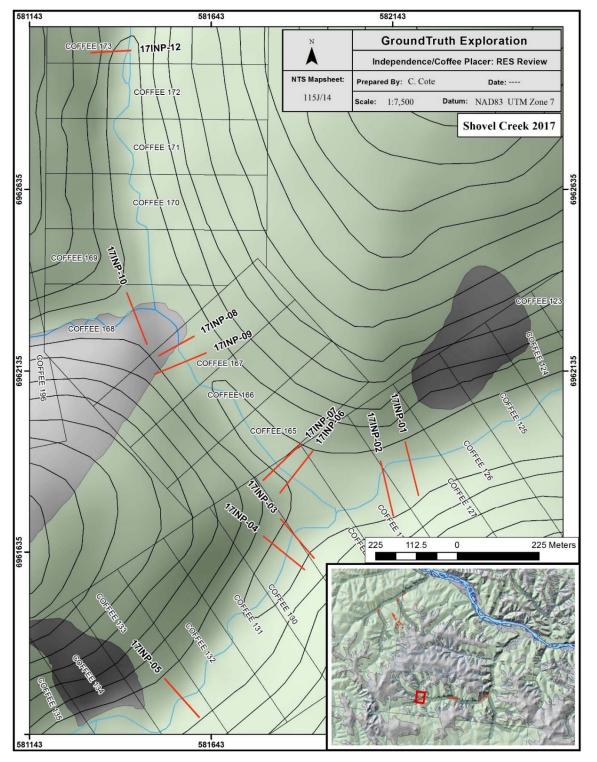


Figure 4: Location of RES/IP lines



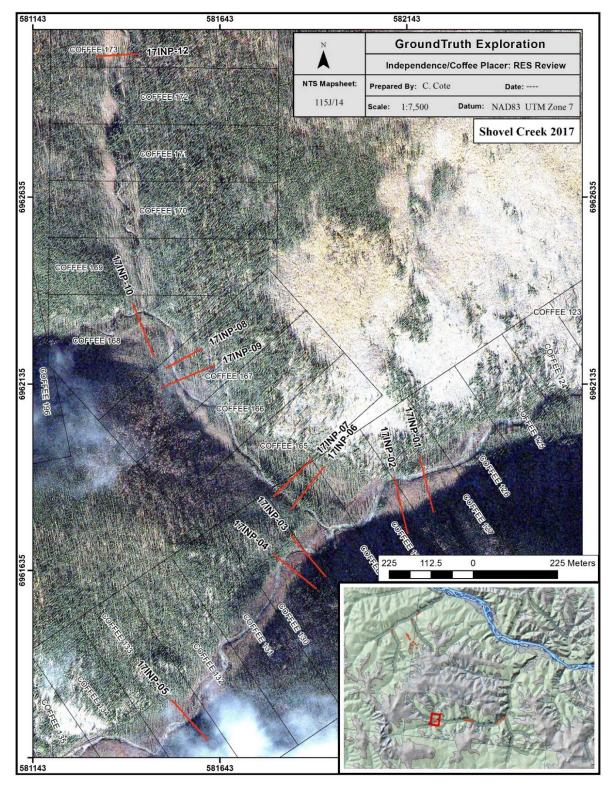


Figure 5: Location of RES/IP lines with imagery



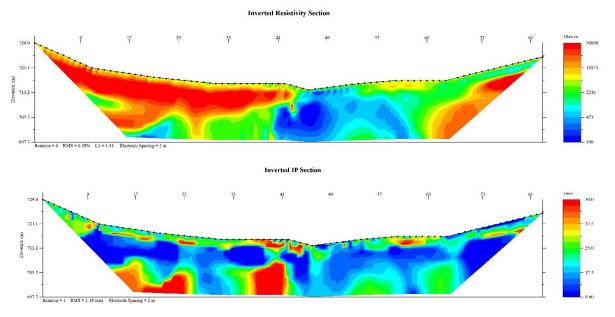


Figure 6: Resistivity and IP profiles of line 17INP-01

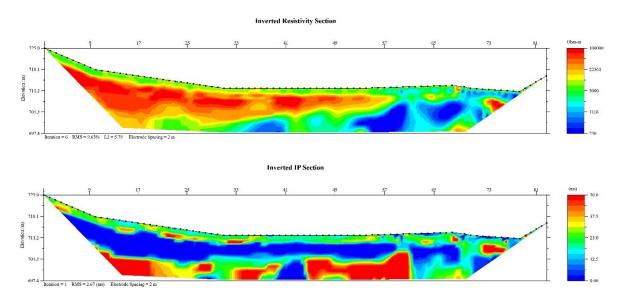


Figure 7: Resistivity and IP profiles of line 17INP-02



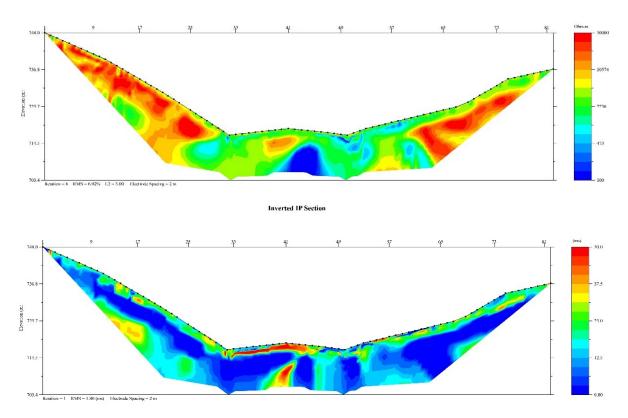


Figure 8: Resistivity and IP profiles of line 17INP-03





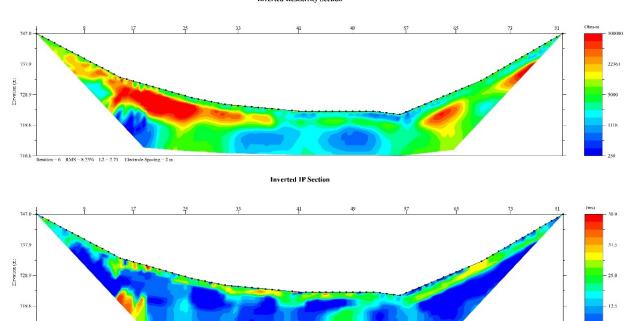


Figure 9:: Resistivity and IP profiles of line 17INP-04

m = 1 RMS = 3.24 (ms) Electrode Spacing = 2 m

Inverted Resistivity Section

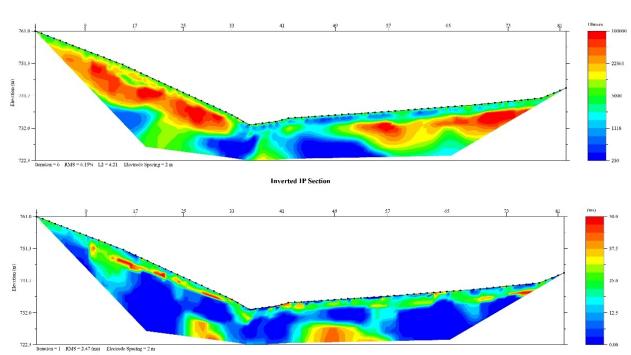


Figure 10: Resistivity and IP profiles of line 17INP-05

710.8



Inverted Resistivity Section

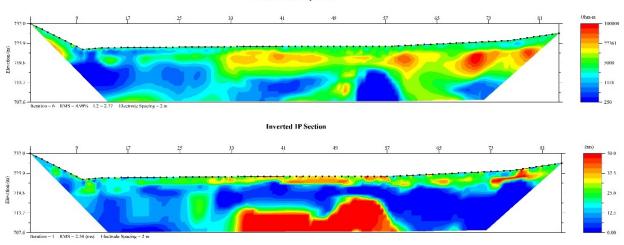


Figure 11: Resistivity and IP profiles of line 17INP-06

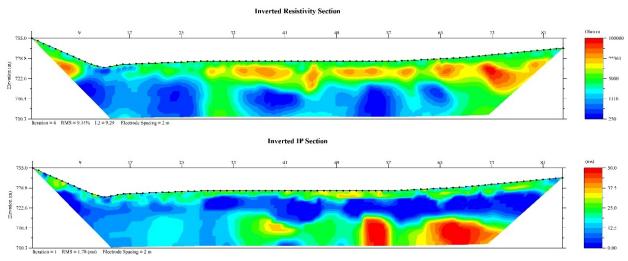


Figure 12: Resistivity and IP profiles of line 17INP-07



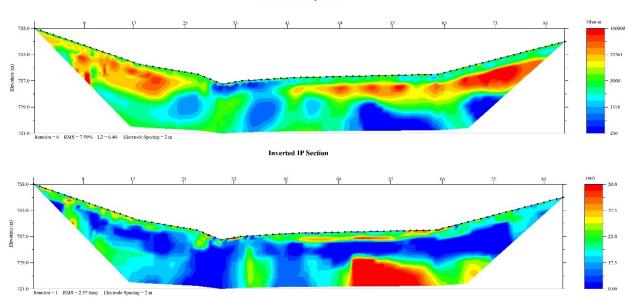


Figure 13: Resistivity and IP profiles of line 17INP-08

Inverted Resistivity Section

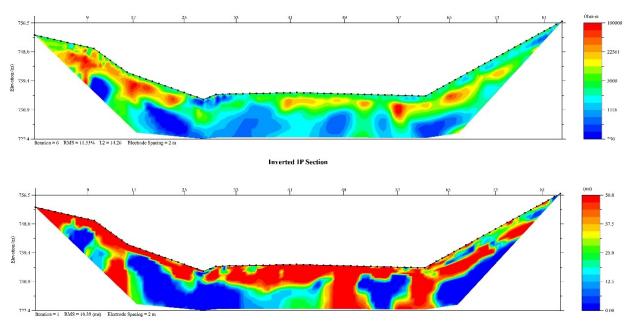


Figure 14: Resistivity and IP profiles of line 17INP-09



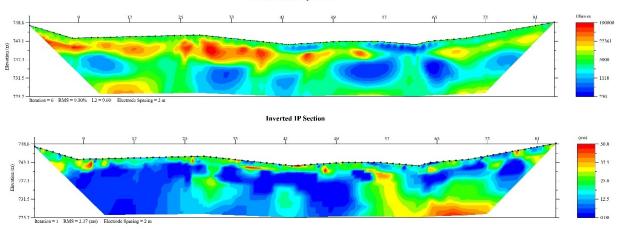


Figure 15: Resistivity and IP profiles of line 17INP-10

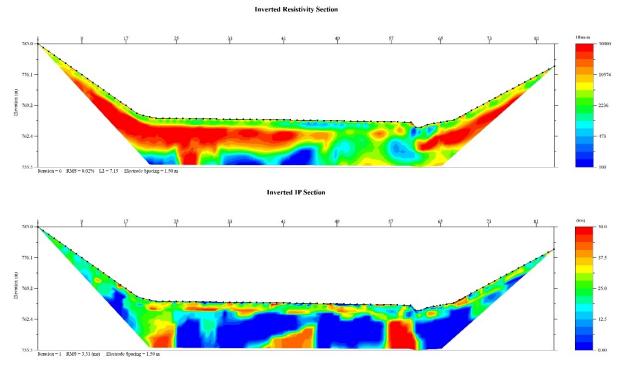


Figure 16: Resistivity and IP profiles of line 17INP-12



3 Rotary Air Blast (RAB) Drilling

3.1 Work Performed

The 2017 RAB Drill program on Shovel Creek consisted of twenty-one holes: 17INP-S1 to S21. A total of 117 m was drilled between the 2-10 of October, 2017.

17INP-S1 to -S13 were positioned to investigate resistivity targets on traverse 17INP-08 (Figure 17). 17INP-S14 to -S18 were positioned to investigate resistivity



targets on traverse 17INP-09. 17INP-S19 to -S21 were positioned to investigate resistivity targets on traverse 17INP-10.

3.2 Field Survey Operating Procedures:

The GT RAB Drill is a light weight rotary percussion drill rig mounted on a set of rubber tracks. The drill itself is powered by a 44.2 hp turbo charged Kubota diesel engine. The placer RAB drives a cased hole 4.5" in diameter and and uses 5' drill rods. The GT RAB Drill is equipped with a wireless remote control system used to drive it between drill sites. There are 4 hydraulically operated vertical outriggers on the drill for self-leveling on drill sites. The rubber tracked platform on the GT RAB Drill has 2400sq inches of track coverage area giving it 1.8psi ground pressure allowing it to be extremely versatile and low impact in the field.

The GT RAB Drill is a lightweight exploration drill rig that involves the use of DTH rotary percussion drilling equipment using compressed air from a stationary air compressor which is connected to the rubber tracked drill using air hose. The drill uses a pneumatic reciprocating piston driven 'hammer' to energetically drive a tungsten carbide tipped drill bit into overburden and rock. Compressed air is fed through the drill rod string to the DTH hammer and with rotation from the top drive; cuttings are then returned to the surface through the annulus under pressurized exhaust air. Cuttings then pass through the diverter/BOP and continue to the cyclone and are collected in the 20L container at the bottom of the cyclone. Drill cuttings were logged and sampled at 2.5 feet intervals. Prospective gravel samples were isolated and processed in a long tom to test for gold.





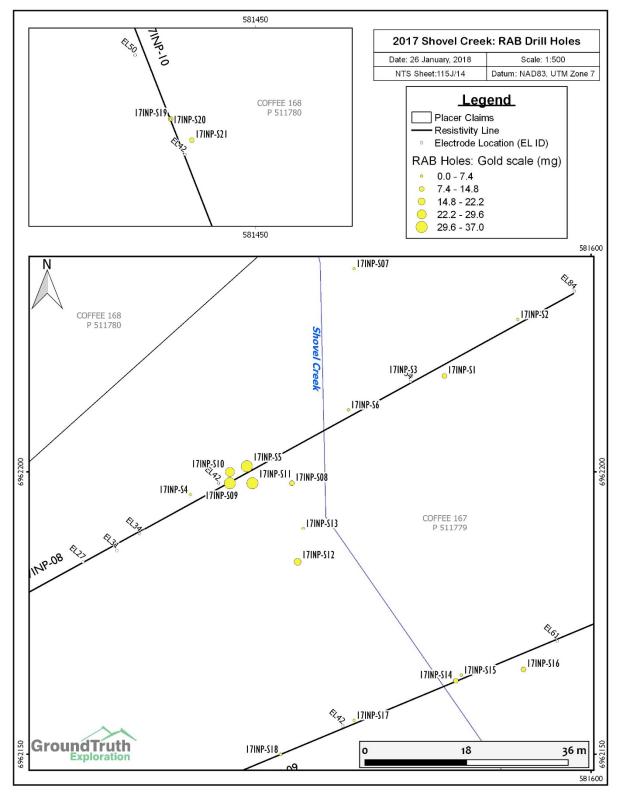


Figure 17: Drill Hole Overview



3.3 Drill Results

Table one outlines the location and summary data of the drill holes. The detailed downhole results of each hole are found in the accompanying data package and Appendix B.

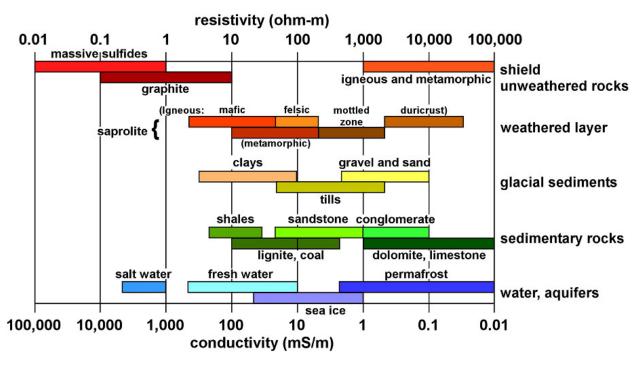
HoleID	X	Y	BR_Depth_m	TotDepth_m	DrillDate	Au_mg
17INP-S1	581574	6962217	6.553	7.6	2 October, 2017	9
17INP-S2	581587	6962227	4.572	5.334	2 October, 2017	0
17INP-S3	581568	6962217	5.486	6.096	2 October, 2017	11
17INP-S4	581529	6962196	8.38	9.91	3 October, 2017	7
17INP-S5	581539	6962201	3.81	4.57	3 October, 2017	37
17INP-S6	581557	6962211	2.44	3.05	3 October, 2017	0
17INP-S07	581558	6962236	3.35	3.81	4 October, 2017	0
17INP-S08	581547	6962198	4.87	5.33	4 October, 2017	9
17INP-S09	581536	6962198	4.87	5.33	5 October, 2017	34
17INP-S10	581536	6962200	4.572	5.33	5 October, 2017	24
17INP-S11	581540	6962198	3.352	3.81	5 October, 2017	30
17INP-S12	581548	6962184	3.962	4.572	6 October, 2017	16
17INP-S13	581549	6962190	4.876	5.33	6 October, 2017	0
17INP-S14	581576	6962163	6.7	8.38	6 October, 2017	14
17INP-S15	581577	6962164	4.876	6.858	7 October, 2017	5
17INP-S16	581588	6962165	4.876	5.33	7 October, 2017	14
17INP-S17	581558	6962156	3.35	3.81	8 October, 2017	3
17INP-S18	581545	6962150	4.876	6.858	8 October, 2017	0
17INP-S19	581438	6962280	4.876	5.33	9 October, 2017	11
17INP-S20	581438	6962280	4.572	5.334	9 October, 2017	0
17INP-S21	581441	6962277	3.96	4.572	10 October, 2017	10

Table 1: Collar Table and summary statistics for drill holes



4 Discussion and Interpretation

Resistivity and IP surveys work on the principle that different materials have different ranges of resistivity of IP effect (Figure 18). Once measured, a profile can be interpreted and classified into various materials present based on the absolute value of the resistivity and IP effect, however resistivity is one of the most variable attributes with ranges of a 100 orders of magnitude. Thus, the survey only works when the data is high quality and the target materials have significant contrasts in resistivity.



Typical ranges of resistivities of earth materials

(from Palacky, 1988)

Figure 18: Ranges in resistivity of various earth materials

The field crew did a very good job ensuring that the resistivity data throughout this project is very clean, with RMS of inversions ranging between 4.95% and 9.63%. There is good correlation between drill depths, where gold was found, and interpreted feature identified in the resistivity profiles (Figures 20-22).

The IP profiles show reasonable to limited correlation with both the resistivity and drill data. The correlation is inversely proportional to the RMS, with an observable decline in accuracy as the RMS increases. In addition, more data is removed due to misfits and difficult ground conditions resulting in poorer quality then the resistivity data. Overall, the



IP data from this survey have minimal use helping locate the zones of permafrost and bedrock interface, so will be minimally utilized except to help confirm contacts in circumstances that are unclear from the resistivity data.

In general, there are four zones and two contacts we are detecting using the geophysics:

- 1. Active zone: Thawed layer of fluvial deposits overlying the permafrost
- 2. Permafrost Ice rich fluvial deposits and chemically weathered bedrock
- 3. Permafrost Competent bedrock
- 4. Thawed zone around the active creek
- 5. Permafrost table: located at the top of the permafrost
- 6. Bedrock contact: located at top of competent bedrock and is likely still within the permafrost zone

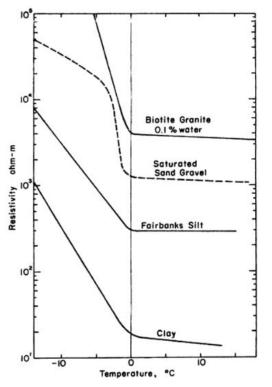


Figure 19: Effect of temperature on resistivity of materials

The common primary controlling factors of resistivity, all of which are inversely proportional to the absolute value, are porosity and pore connectivity, saturation of pores, salinity of fluid, fractures (if solid rock), clay minerals, graphite minerals. Of special interest to this site due to the presence of permafrost is the temperature of materials and phase of the water. Liquid water will greatly reduce the resistivity of a unit, while frozen water will greatly increase the resistivity of a unit (Figure 19). Water can remain liquid in material well below freezing point due to salinity and pore pressure.

With these controlling factors in mind, the idealized resistivity and IP signature of these targets are explained below:

The active zone consists of water rich, often saturated, fluvial deposits of muck, sand, clays and gravels overlying the permafrost. This is

characterized by a resistivity low due to the highly conductive nature of water and the composition of the deposit. It will generally have a medium to high IP effect due to the presence of clays within the muck and sediment deposits. This near surface zone is very well defined down to the permafrost table by both the resistivity and IP data. I theorize that the active zone will be interpreted deeper than reality by the resistivity survey due to



the strong effect on resistivity the phase of water exerts. There will be a zone of partial thaw, or liquid pore water mixed with the ice, on the upper reaches of the fluvial permafrost that will have the same resistive and IP features as the thawed active zone above, but will have the same physical characteristics of the ice rich permafrost unit it is physically categorized as.

The permafrost zone is split into two distinct zones: The ice rich fluvial deposits and the more competent bedrock.

The ice rich frozen fluvial deposits are well defined and characterized by very high resistivity ranging from 10,000 to 100,000 ohm-m, and a very low IP effect (figure 18). This is due to the high resistance of frozen earth materials and frozen water that is saturating this material. The geophysical expression of this physical feature is indistinguishable from that of saturated, chemically weathered bedrock, thus the lower contact defined is the one present at the competent bedrock interface.

The competent bedrock zone should be defined as bedrock with little chemical weathering and can be characterized by any combination of resistivity and IP effects based on the mineral composition and structure of the bedrock itself. The underlying bedrock here has has variable but comparatively low resistivity values. This is ideal for identifying the fluvial/bedrock interface. If the bedrock is some material with resistivity values more similar to frozen water, such as granite, the technique would not work as well, and ambiguity would be present. Table two shows resistivity values from various materials to illustrate this point.

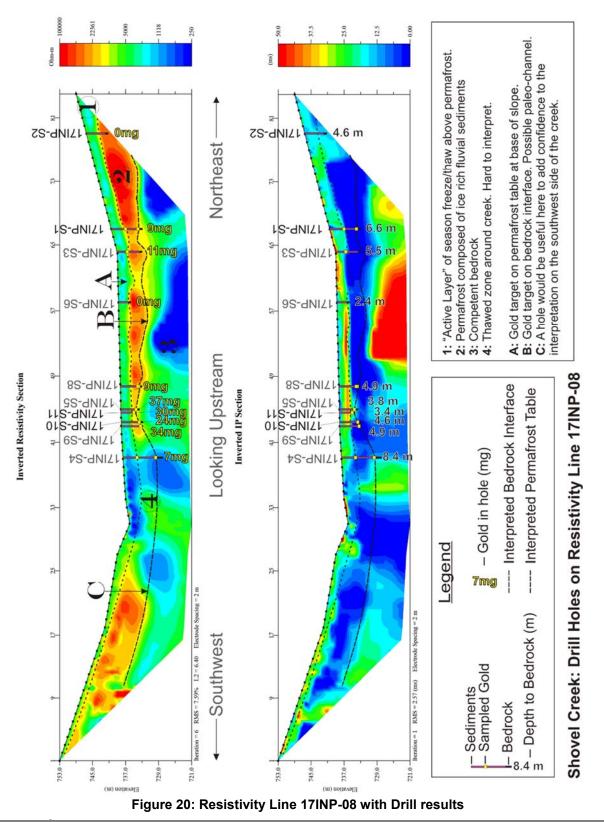
The location of the placer gold found in the drill holes have amazing correlation on all resistivity lines and indicate two deposit mechanisms resulting in distinct zones of gold enrichment within the creek drainage (Figures 20 - 22, and Appendix A). There is a deep deposit located at the bedrock interface. This gold was deposited when the creek was actively eroding the bedrock, and is evident in drill holes S1, S4-5, S8-11, and S14-15 in the interpretation figures. All of these drill holes show the gold sampled on the indicated bedrock interface in both the drill log and the resistivity interpretation.

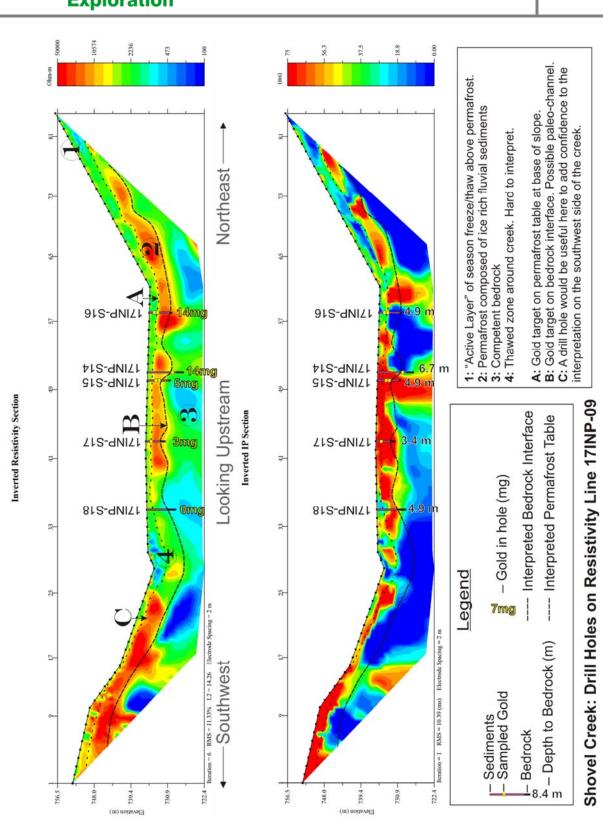
The remaining gold was found at variable depths within the drill holes, and generally near the surface. When mapped as in figures 20 to 22, we see that this gold lines up with the permafrost table. This indicates a second, and possibly current, depositional regime within the creek that happened after the formation of the permafrost within the fluvial material. This second and maybe continuing pulse of near surface gold may explain why it was so easy for those old timers from the story to hand mine gold here with simple hand tools.

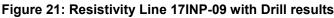


It was difficult for the drillers to determine when they were truly at bedrock due to the nature of the material returned from the drill: mainly dust and very small chips. It is possible that there was significant error in estimating bedrock penetration that resulted in premature stoppage on some holes. This could be due to confusion from either a highly compacted or cemented false bottom, or from striking a large boulder. Drill holes S3, S6 and S19-21 do not extend into the interpreted bedrock. All these holes were in favourable locations to identify paleochannel placer gold on bedrock, so should not be discounted in the overall interpretation of the gold capacity of the creek.



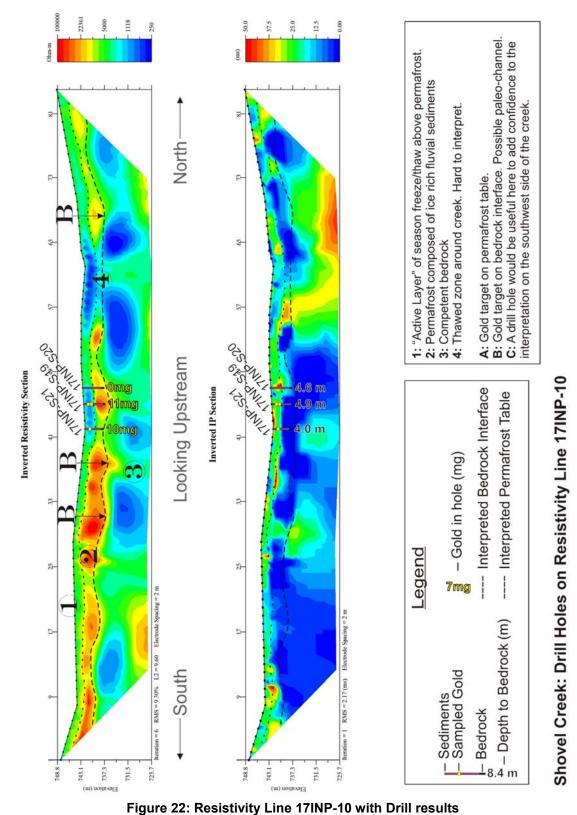






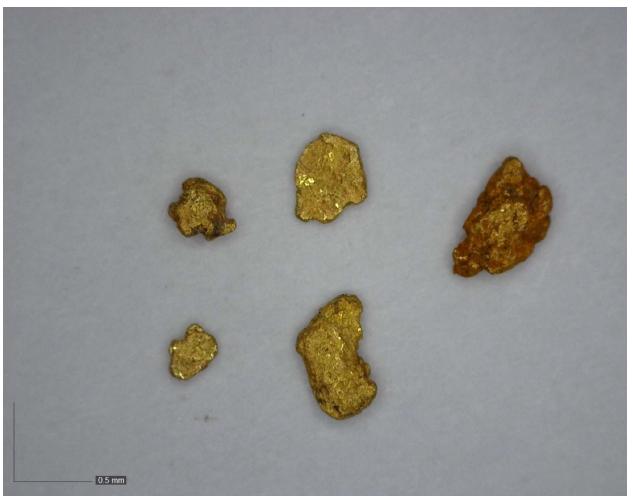


GroundTruth









Shovel Creek: 17INP-S05 15ft to Bedrock, Interval Sampled: 5ft-15ft





5 **Recommendations**

Shafting or further drilling is needed to confirm and expand the interpretation set forth. Specifically, the interpreted gold targets indicated in figures 20-22 should be tested to confirm the two zone theory of gold deposition, while drilling new features such as the thawed zones around the creek and targets on Coffee Creek would allow us to expand our interpretations with more confidence.

The remaining resistivity lines should be interpreted in order to find drilling targets for future work. Once evidence is collected on these lines, the same iterative process of refining the interpretation and continued drilling can be employed to develop an accurate and expansive model of the gold deposit at this location.

A test pit should be dug and processed in the area of the discovery drill hole in order to determine the grade of the gold deposit. This can then be used in conjunction with the creek model to start estimating a gold resource and finally determine the economics of mining this creek.



6 Expenditures:

DC Resistivity/IP: 11 profiles GroundTruth Exploration Inc. Invoice: GT-SHP2017-01	\$35,370.00
Placer RAB Drilling: 21 drill holes GroundTruth Exploration Inc. Invoice: GT-SHP2017-01	\$51,040.00
Fixed Wing Support Great River Air 6 Trips to Thistle Airstrip @ \$1,200/trip	\$ 7,200.00
Report: GroundTruth Exploration:	\$ 1,000.00
Helicopter: Trans North Astar D2, 12.5 hours @ \$1,850/hr	\$23,125.00
Grand total	<u>\$117,735.00</u>

Box 70, DAWSON, YT Y0B 1G0



7 Qualification

I, Isaac Fage have been president and operations manager of GroundTruth Exploration in Dawson City since May 2010. I have overseen the planning and collection of 300,000 + soil samples across numerous projects in Yukon Territory, Nunavut and Eastern Canada. I have worked continuously in Mineral Exploration since 2004. I hold an advanced diploma in Remote Sensing from the Centre of Geographic Sciences in Lawrencetown, Nova Scotia.

I have overseen the survey work described in this report on Shovel Creek and have reviewed the report prepared by Chad Cote.

Dated this 31st day of January, 2018 in Dawson, YT.

Respectfully submitted

Isaac Fage



References

Regional Geology: Colpron, M., Israel, S., Murphy, D.C., Pigage, L.C., and Moynihan, D., 2016. Yukon Bedrock Geology Map. Yukon Geological Survey, Open File 2016-1

Mineral Titles: Yukon Mining Recorder, Mining Claims Database – www.yukonminingrecorder.ca

Topographic data: NR Canada, CanVec Topographic Database- www.geogratis.ca

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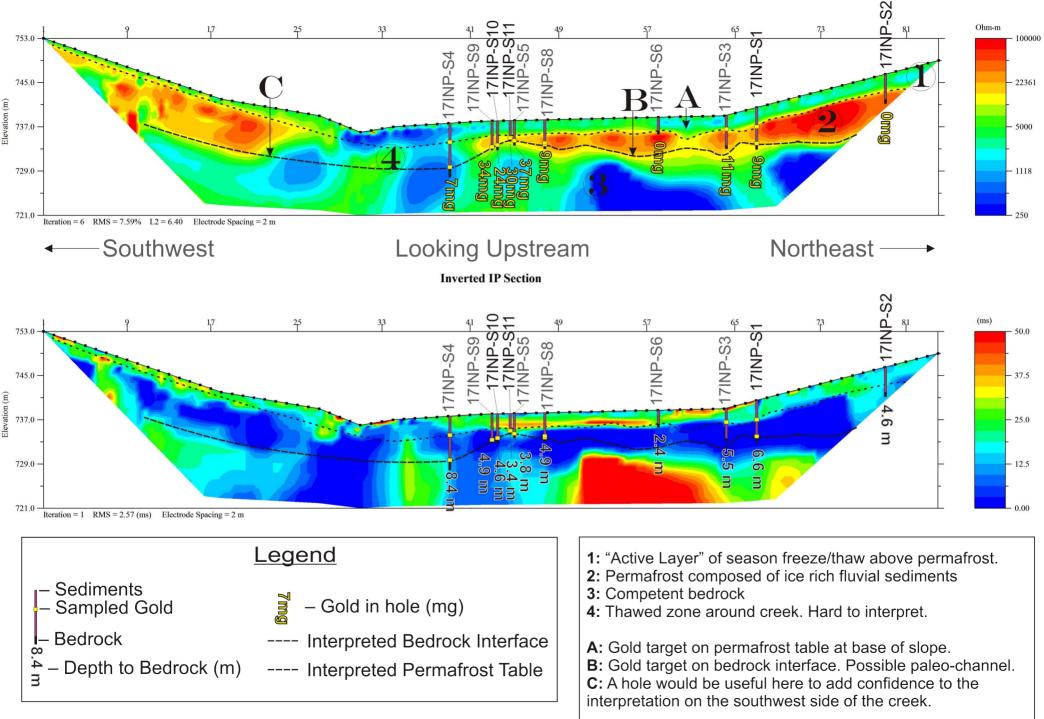
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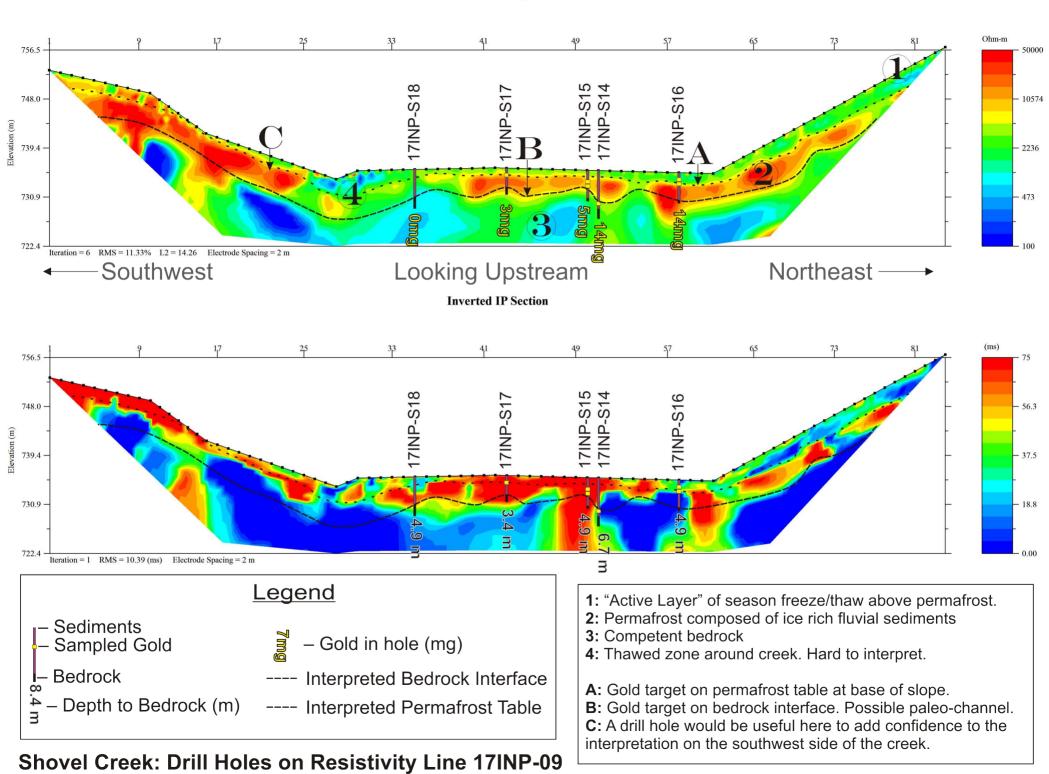
Additional review of various published scientific and reporting papers on the geology and mineral deposits of the region for indirect reference.



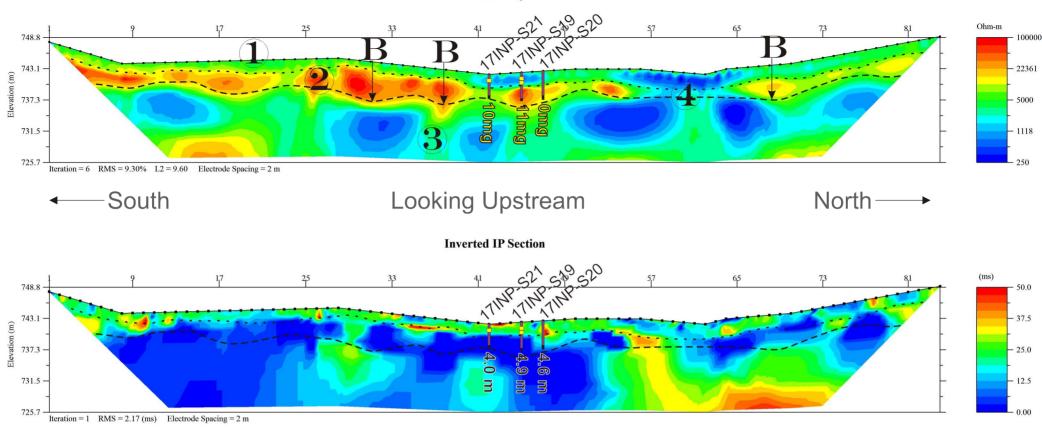
Appendix A: Interpretation Figures

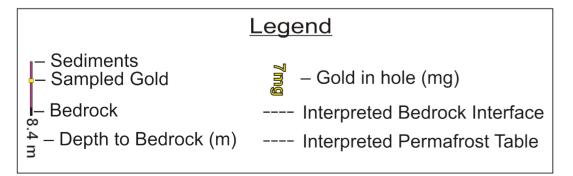


Shovel Creek: Drill Holes on Resistivity Line 17INP-08



Inverted Resistivity Section





- **1:** "Active Layer" of season freeze/thaw above permafrost.
- 2: Permafrost composed of ice rich fluvial sediments
- 3: Competent bedrock
- 4: Thawed zone around creek. Hard to interpret.
- A: Gold target on permafrost table.
- **B**: Gold target on bedrock interface. Possible paleo-channel.

C: A drill hole would be useful here to add confidence to the interpretation on the southwest side of the creek.

Shovel Creek: Drill Holes on Resistivity Line 17INP-10



Appendix B: Drill Results

HoleID	Х	Y	BRDepth_m	TotDepth_m	DrillDate	Au_mg	BRDepth_ft	TotDepth_ft
17INP-S1	581574	6962217	6.553	7.6	2 Oct, 2017	9	21.5	25
17INP-S2	581587	6962227	4.572	5.334	2 Oct, 2017	0	15	17.5
17INP-S3	581568	6962217	5.486	6.096	2 Oct, 2017	11	18	20
17INP-S4	581529	6962196	8.38	9.91	3 Oct, 2017	7	27.5	32.5
17INP-S5	581539	6962201	3.81	4.57	3 Oct, 2017	37	12.5	15
17INP-S6	581557	6962211	2.44	3.05	3 Oct, 2017	0	8	10
17INP-S07	581558	6962236	3.35	3.81	4 Oct, 2017	0	11	12.5
17INP-S08	581547	6962198	4.87	5.33	4 Oct, 2017	9	16	17.5
17INP-S09	581536	6962198	4.87	5.33	5 Oct, 2017	34	16	17.5
17INP-S10	581536	6962200	4.572	5.33	5 Oct, 2017	24	15	17.5
17INP-S11	581540	6962198	3.352	3.81	5 Oct, 2017	30	11	12.5
17INP-S12	581548	6962184	3.962	4.572	6 Oct, 2017	16	13	15
17INP-S13	581549	6962190	4.876	5.33	6 Oct, 2017	0	16	17.5
17INP-S14	581576	6962163	6.7	8.38	6 Oct, 2017	14	22	27.5
17INP-S15	581577	6962164	4.876	6.858	7 Oct, 2017	5	16	22.5
17INP-S16	581588	6962165	4.876	5.33	7 Oct, 2017	14	16	17.5
17INP-S17	581558	6962156	3.35	3.81	8 Oct, 2017	3	11	12.5
17INP-S18	581545	6962150	4.876	6.858	8 Oct, 2017	0	16	22.5
17INP-S19	581438	6962280	4.876	5.33	9 Oct, 2017	11	16	17.5
17INP-S20	581438	6962280	4.572	5.334	9 Oct, 2017	0	15	17.5
17INP-S21	581441	6962277	3.96	4.572	10 Oct, 2017	10	13	15

17INP-S1 0 2.5 0 0.762 Organic Black 17INP-S1 2.5 5 0.762 1.524 Organic Black 17INP-S1 5 7.5 1.524 2.286 Fines Green 17INP-S1 10 12.5 3.048 3.81 Fines Green 17INP-S1 10 12.5 3.648 A.572 Clay Grey weathered/GVLS 17INP-S1 15 17.5 4.572 S.334 Fines L.brown weathered/GVLS 17INP-S1 10 2.2.5 6.096 6.858 Fines L Brown meta-seds 17INP-S2 0 7.5 0 2.286 Fines Green good mix 17INP-S2 10 12.5 3.048 S.81 Clay Greev very little 17INP-S2 10 12.5 3.048 Fines LBrown basic+seds+qtz 17INP-S3 5 7.5 1.524	6mg NG 3mg NG
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17INP-S4 22.5 27.5 6.858 8.382 Fines Green clear qtz 17INP-S4 27.5 32.5 8.382 9.906 Fines Green meta-seds 17INP-S4 27.5 32.5 8.382 9.906 Fines Green meta-seds 17INP-S5 0 5 0 1.524 Fines Green fluvials/greens 17INP-S5 5 7.5 1.524 2.286 Organic D.Brown good qtz 17INP-S5 7.5 10 2.286 3.048 Organic D.Brown qtz 17INP-S5 7.5 10 2.286 3.048 Organic D.Brown qtz 17INP-S5 10 12.5 3.048 3.81 Fines L.brown few 17INP-S5 12.5 15 3.81 4.572 Clay Grey dark greens 17INP-S6 0 5 0 1.524 Organic D.Brown No qtz <td></td>	
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17INP-S5 0 5 0 1.524 Fines Green fluvials/greens 17INP-S5 5 7.5 1.524 2.286 Organic D.Brown good qtz 1 17INP-S5 7.5 10 2.286 3.048 Organic D.Brown qtz 1 17INP-S5 10 12.5 3.048 3.81 Fines L.brown few 17INP-S5 10 12.5 3.048 3.81 Fines L.brown few 17INP-S5 12.5 15 3.81 4.572 Clay Grey dark greens 17INP-S6 0 5 0 1.524 Organic D.Brown No qtz	0
17INP-S5 5 7.5 1.524 2.286 Organic D.Brown good qtz 17INP-S5 7.5 10 2.286 3.048 Organic D.Brown qtz 17INP-S5 7.5 10 2.286 3.048 Organic D.Brown qtz 17INP-S5 10 12.5 3.048 3.81 Fines L.brown few 17INP-S5 12.5 15 3.81 4.572 Clay Grey dark greens 17INP-S6 0 5 0 1.524 Organic D.Brown No qtz	
17INP-S5 7.5 10 2.286 3.048 Organic D.Brown qtz 17INP-S5 10 12.5 3.048 3.81 Fines L.brown few 17INP-S5 10 12.5 3.048 3.81 Fines L.brown few 17INP-S5 12.5 15 3.81 4.572 Clay Grey dark greens 17INP-S6 0 5 0 1.524 Organic D.Brown No qtz	
17INP-S5 10 12.5 3.048 3.81 Fines L.brown few 17INP-S5 12.5 15 3.81 4.572 Clay Grey dark greens 17INP-S6 0 5 0 1.524 Organic D.Brown No qtz	
17INP-S5 12.5 15 3.81 4.572 Clay Grey dark greens 17INP-S6 0 5 0 1.524 Organic D.Brown No qtz	
17INP-S6 0 5 0 1.524 Organic D.Brown No qtz	37mg
	0
17INP-S6 7.5 10 2.286 3.048 Fines L.brown gran+qtz	
17INP-S7 0 5 0 1.524 Organic D.Brown few	
17INP-S757.51.5242.286OrganicD.brownfew quartz	
17INP-S7 7.5 10 2.286 3.048 Fines Green few	
17INP-S7 10 12.5 3.048 3.81 Fines Green meta-seds	
17INP-S8 0 5 0 1.524 Organic D.Brown weakly rusty	
17INP-S8 5 7.5 1.524 2.286 Organic D.Brown few	
17INP-S8 7.5 10 2.286 3.048 Organic D.Brown some qtz	
17INP-S8 10 12.5 3.048 3.81 Fines Green some qtz	
17INP-S8 12.5 15 3.81 4.572 Clay Grey meta-seds bttm.	4mg
17INP-S8 15 17.5 4.572 5.334 Fines Green meta-seds	5mg
17INP-S9 0 5 0 1.524 Organic D.Brown mixed	0
17INP-S9 5 7.5 1.524 2.286 Fines L.brown mixed	
17INP-S9 7.5 10 2.286 3.048 Clay Grey mixed	
17INP-S9 10 12.5 3.048 3.81 Clay Grey mixed	
17INP-S9 12.5 15 3.81 4.572 Clay Grey good qtz	

HoleID	From_ft	To_ft	From_m	To_m	Material	Color	Rock Chips	Gold (mg)
17INP-S9	15	17.5	4.572	5.334	Fines	L.brown	seds at btm.	34mg
17INP-S10	0	5	0	1.524	Fines	L.Brown	good mix + qtz	
17INP-S10	5	7.5	1.524	2.286	Fines	L.Brown	large bolder	
17INP-S10	7.5	10	2.286	3.048	Fines	L.Brown	as above	
17INP-S10	10	12.5	3.048	3.81	Fines	L.Brown	No qtz	
17INP-S10	12.5	15	3.81	4.572	Fines	L.Brown	little to no qtz	
17INP-S10	15	17.5	4.572	5.334	Bedrock	Black	meta-seds	24mg
17INP-S11	0	5	0	1.524	Fines	L.Brown	Good mix	0
17INP-S11	5	7.5	1.524	2.286	Fines	L.Brown	Good mix	
17INP-S11	7.5	10	2.286	3.048	Fines	L.Brown	Good mix	
17INP-S11	10	12.5	3.048	3.81	Bedrock	D.Green	metaseds at -11	30mg
17INP-S12	0	5	0	1.524	Fines	L.Brown	Good Mix	
17INP-S12	5	7.5	1.524	2.286	Fines	L.Brown	Good Mix	
17INP-S12	7.5	10	2.286	3.048	Fines	L.Brown	dark greens	
17INP-S12	10	12.5	3.048	3.81	Fines	L.Brown	metaseds	
17INP-S12	12.5	15	3.81	4.572	Fines	L.Brown	mostly seds	16mg
17INP-S12	15	17.5	4.572	5.334	Bedrock	D.Green	metaseds	
17INP-S13	0	5	0	1.524	Organic	D.Brown	Good Mix	
17INP-S13	5	7.5	1.524	2.286	Fines	L.Brown	Good Mix	
17INP-S13	7.5	10	2.286	3.048	Fines	L.Brown	All D.Greens	
17INP-S13	10	12.5	3.048	3.81	Fines	L.Brown	Variations	
17INP-S13	12.5	15	3.81	4.572	Gravel	Orange	weathered	
17INP-S13	15	17.5	4.572	5.334	Bedrock	Black	meta-seds	
17INP-S14	0	5	0	1.524	Gravel	Pink	Good Mix	
17INP-S14	5	7.5	1.524	2.286	Gravel	Pink	Good Mix	
17INP-S14	7.5	10	2.286	3.048	Fines	L.brown	Few	
17INP-S14	10	12.5	3.048	3.81	Fines	L.brown	Few	
17INP-S14	12.5	15	3.81	4.572	Fines	L.brown	mixed	
17INP-S14	15	17.5	4.572	5.334	Fines	L.brown	Good Many	
17INP-S14	17.5	20	5.334	6.096	Fines	L.brown	metaseds	14mg
17INP-S14	20	22.5	6.096	6.858	Fines	L.brown	metaseds	0
17INP-S14	22.5	25	6.858	7.62	Fines	L.brown	metaseds	
17INP-S14	25	27.5	7.62	8.382	Fines	L.brown	metaseds	
17INP-S15	0	5	0	1.524	Fines	L.Brown	Good Mix	
17INP-S15	5	7.5	1.524	2.286	Fines	L.Brown	meta-seds mostly	3mg
17INP-S15	7.5	10	2.286	3.048	Fines	Green	metaseds(weathered)	2mg
17INP-S15	10	12.5	3.048	3.81	Fines	Green	metaseds	
17INP-S15	12.5	15	3.81	4.572	Fines	Green	metaseds	
17INP-S15	15	17.5	4.572	5.334	Fines	Green	metaseds	
17INP-S15	17.5	20	5.334	6.096	Fines	Green	metaseds	
17INP-S15	20	22.5	6.096	6.858	Fines	Green	metaseds	
17INIP-S16	0	5	0	1.524	Fines	L.Brown	meta-seds mostly	5mg
17INIP-S16	5	7.5	1.524	2.286	Fines	L.Brown	Good Many	9mg
17INIP-S16	7.5	10	2.286	3.048	Fines	Green	Good Many	
17INIP-S16	10	12.5	3.048	3.81	Fines	Green	Good Many	
17INIP-S16	12.5	15	3.81	4.572	Fines	Green	metaseds	
17INIP-S16	15	17.5	4.572	5.334	Fines	Green	metaseds	
17INIP-S17	0	5	0	1.524	Fines	Green	Good Mix	3mg
17INIP-S17	5	7.5	1.524	2.286	Fines	Green	meta-seds/rust	
17INIP-S17	7.5	10	2.286	3.048	Bedrock	Grey	metaseds	
17INIP-S17	10	12.5	3.048	3.81	Fines	Green	metaseds	
17INIP-S17	12.5	27.5	3.81	8.382	Fines	Green	metaseds	
471212 212	-	-	-	4 50.4		Crear	moto code mostly	
17INP-S18	0	5	0	1.524	Fines	Green	meta-seds mostly	

HoleID	From_ft	To_ft	From_m	To_m	Material	Color	Rock Chips	Gold (mg)
17INP-S18	7.5	10	2.286	3.048	Fines	Green	meta-seds mostly	
17INP-S18	10	12.5	3.048	3.81	Fines	Green	metaseds	
17INP-S18	12.5	15	3.81	4.572	Fines	Green	metaseds	
17INP-S18	15	22.5	4.572	6.858	Fines	Green	metaseds	
17INIP-S19	0	5	0	1.524	Fines	Green	Good mix	5mg
17INIP-S19	5	7.5	1.524	2.286	Fines	Green	few	6mg
17INIP-S19	7.5	10	2.286	3.048	Fines	Green	good amount	
17INIP-S19	10	12.5	3.048	3.81	Fines	Green	meta-seds weathered	
17INIP-S19	12.5	15	3.81	4.572	Fines	Green	meta-seds weathered	
17INIP-S19	15	17.5	4.572	5.334	Fines	Green	meta-seds weathered	
17INP-S20	0	5	0	1.524	Fines	D.Brown	Grey Chips	
17INP-S20	5	7.5	1.524	2.286	Clay	Brown	Grey Chips	
17INP-S20	7.5	10	2.286	3.048	Fines	Green	Grey Chips	
17INP-S20	10	12.5	3.048	3.81	Fines	beige	L.Grey Chips	
17INP-S20	12.5	15	3.81	4.572	Fines	beige	L.Grey Chips	
17INP-S20	15	17.5	4.572	5.334	Fines	beige	L.Grey Chips	
17INP-S21	0	5	0	1.524	Fines	D.Brown	good qtz	10mg
17INP-S21	5	7.5	1.524	2.286	Clay	Brown	small sample	
17INP-S21	7.5	10	2.286	3.048	Clay	L.Brown	few	
17INP-S21	10	12.5	3.048	3.81	Fines	Green	L.Grey Chips	
17INP-S21	12.5	15	3.81	4.572	Fines	Green	L.Grey Chips	



Appendix C: Invoices

GroundTruth

Box 70, Dawson, YT Y0B 1G0 Phone (867) 993-5612 Fax: (867) 993-5617

Invoice

Date	Invoice #
Nov 7/17	GT-SHP2017-01
Terms	Due
Net 21	Nov 28/17

Invoice To:

Shawn Ryan Box 213 Dawson, YT YOB 1G0 867-993-2499

Description					Amount
Property: Shovel Creek					
High Resolution DC Resistivity/IP Survey w	vith a crew of 5 on Shovel Cr	eek.		¢35	370.00
Survey Date: Sept 22-30, 2017	11 profiles surveyed			, <u>,</u>	570.00
Placer RAB Drilling with a crew of 4 on Sho	ovel Creek				
Drilling Dates: Oct 1 - Oct 10, 2017	21 drillholes			\$51 <i>,</i>	040.00
Fixed Wing Support: Crew/Gear to Thistle Airstrip					
6 x Great River Air Islander Flights @ \$1,200/flight				\$7,2	00.00
YMEP/Assessment Report Prepared by GroundTruth				\$1,0	00.00
Helicopter Support Trans North Astar D2 at \$1,850/h	wet- Paid Direct by Client				
DC Resistisivity/IP- mobe crew/camp 1.8h, resupply 0.5	5h, demobe 1.5h	\$ 7,030.00			
RAB Drilling - mobe crew/camp/gear/fuel 4.2, Resuppl	es 2.0, Demobe Crew/Gear 2.5	\$16,095.00			
See attached breakdown					
GST # 811084268 RT0001			Subtotal	\$	94,610.00
Thank you for your	business!		GST 5%	\$	4,730.50
			Total Due	\$	99,340.50
		YMEP Applicable To	otal before GST:	\$	117,735.00

Overview: Shovel Creek DC Resistivity/IP Survey

Invoice: GT-SHP2017-01

Invoice breakdown for DC Resistivity/IP Survey on Shovel Creek placer project. Crew mobilized on Sept 22, camped onsite, and demobilized on Oct 1/17. Richard Daigle was foreman.

Survey Date: Sept 22-30, 2017

GEOPHYSICAL SURVEYS - IP -DC RESISTIVITY BREAKDOWN	Cha	rge out	Units	Costs		22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	1-Oct
Wages						Sat	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed
1 Geophysical Operator	\$	550.00	10	\$ 5,500.00		1	1	1	1	1	1	1	1	1	1
1 Assistant Operator/DGPS Surveyor	\$	440.00	10	\$ 4,400.00		1	1	1	1	1	1	1	1	1	1
Field Assistant(s)	\$	385.00	30	\$ 11,550.00 \$	21,450.00	3	3	3	3	3	3	3	3	3	3
IP-Res Survey Equipment															
IP/Resistivity Meter: Supersting 8 Channel meter w/cables, 84 electrodes	\$	600.00	9	\$ 5,400.00		0.5	1	1	1	1	1	1	1	1	0.5
Additional Cables/Switchboxes for 168 electrode survey configuration	\$	300.00	0	\$ -											
Precision GPS: Ashtech Promark 100 differential GPS	\$	50.00	8	\$ 400.00			1	1	1	1	1	1	1	1	
Field Laptop/Software for nightly download	\$	75.00	8	\$ 600.00			1	1	1	1	1	1	1	1	
Iridium Sat Phone (per day)	\$	50.00	8	\$ 400.00			1	1	1	1	1	1	1	1	
Chainsaw for helipads/camp (per day)	\$	50.00	8	\$ 400.00			1	1	1	1	1	1	1	1	
Radios (per man-day)	\$	6.00	40	\$ 240.00 \$	7,440.00		5	5	5	5	5	5	5	5	
Consumable Supplies															
Stainless Electrodes: wear & tear- 2 per profile, \$6 ea *2 profiles/day	\$	24.00	8	\$ 192.00			1	1	1	1	1	1	1	1	
Calcium Chloride: 4kg per profile, \$2/kg*2 profiles/day	\$	16.00	8	\$ 128.00			1	1	1	1	1	1	1	1	
Pickets, 9 per profile, \$1/picket*2 profiles/day	\$	10.00	8	\$ 80.00			1	1	1	1	1	1	1	1	
Spray paint: 1/2 can per profile, \$10/can*2 profiles/day	\$	10.00	2	\$ 20.00 \$	420.00					1		1			
Additional Supplies and Support															
Remote Camp Setup for Soil Crew (per man-day)	\$	50.00	45	\$ 2,250.00		5	5	5	5	5	5	5	5	5	
Food (per man-day)	\$	60.00	50	\$ 3,000.00		5	5	5	5	5	5	5	5	5	5
Satellite Internet - per day (connected by Staff)	\$	45.00	8	\$ 360.00			1	1	1	1	1	1	1	1	
Mapping/Daily plotting - Final inversions and Summary Report (1h per survey day)	\$	75.00	6	\$ 450.00 \$	6,060.00			1	1	1	1	1	1		

DC IP-Resistivity Survey Expense: \$ 35,370.00

Overview: RAB Drilling on Shovel Creek Target

Invoice:

GT-SHP2017-01

Invoice breakdown for RAB Drilling on Shovel Creek placer project. Crew mobilized on Sept 30, camped onsite, and demobilized on Oct 11/17.

Survey Date: Sept 30-Oct 11, 2017

GEOPHYSICAL SURVEYS - IP -DC RESISTIVITY BREAKDOWN	Per Shift	Units	Costs		30-Sep	1-Oct	2-Oct	3-Oct	4-Oct	5-Oct	6-Oct	7-Oct	8-Oct	9-Oct	10-Oct	11-Oct
Placer RAB Drilling Services					Sat		Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
4 man drilling/sampling crew	\$ 2,200.00	12	\$26,400.00	\$ 26,400.00	1	1	1	1	1	1	1	1	1	1	1	1
Program Prep, Mobe/Demobe Rate, Expediting																
Program Prep (per 25 man-days)	\$ 250.00		\$-				1									
Expediting (Grocery, gear resupply, sample shipping, etc per hr)	\$ 75.00		\$-				4	1	1	1	1	1	1	4	4	4
IP-Res Survey Equipment			_													
GT RAB Drill - Outfitted for cased 4.5" Placer RAB Drilling	\$ 1,200.00	10	\$12,000.00			1	1	1	1	1	1	1	1	1	1	
Iridium Sat Phone (per day)	\$ 50.00	12	\$ 600.00		1	1	1	1	1	1	1	1	1	1	1	1
Chainsaw for helipads/camp (per day)	\$ 50.00	12	\$ 600.00		1	1	1	1	1	1	1	1	1	1	1	1
VHF Radios/GPS at \$5/person per day	\$ 20.00	12	\$ 240.00	\$ 17,440.00	1	1	1	1	1	1	1	1	1	1	1	1
Consumable Supplies																
Diesel Fuel: 200l per day @ \$1.40	\$ 280.00	10	\$ 2,800.00			1	1	1	1	1	1	1	1	1	1	i – – – – – – – – – – – – – – – – – – –
Remote Camp Setup for Soil Crew (per man-day) \$50/person/day	\$ 200.00	11	\$ 2,200.00		1	1	1	1	1	1	1	1	1	1	1	1
Food (per man-day) \$50/person/day	\$ 200.00	11	\$ 2,200.00	\$ 7,200.00	1	1	1	1	1	1	1	1	1	1	1	1

RAB Drilling Expense: \$	51,040.00

YM9P Expense Claim Form - Client 7 opy



		project			applicant					
YMEP no:		name:			name:					
expense		program			program					
claim no:		type:			module:					
		-51								
date		in house i			omoil:					
submitted:		phone:			email:					
address:										
start/end da	ates of field	work for			no. of field					
this claim:					days/this					
	51	F ()	start	end	claim:					
eligible	Please re	eter to rate gu	Idelines. Prov	vide photocopy of	receipts.					
expenses				······································		tetel				
item				unit/days	rate	total				
daily field										
expenses					\$100/day					
	Name (sup	oply statemen	t of qualificat	ions)						
		, ,		, í						
personnel										
equipment			private or							
			commercial	unit/days	rate	total				
(rental)			commercial	unit/days	rate	total				
			commercial	unit/days	rate	total				
			commercial	unit/days	rate	total				
			commercial	unit/days	rate	total				
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(rental)					rate	total				
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(rental)					rate	total				
(rental)				de details.	rate					



			Date submitted:					
Submit by January 31 st to:	YMEP - I	EMR/YG						
	Street a	ddress: 102-300 I	Main Street	ymep@gov.yk.ca				
(winter placer projects may	Mailing	address: Box 270	3, K-102	phone: 867-456-3828				
submit at pre-approved date)	Whiteho	orse, YT, Y1A 2B5	I	fax: 867-667-3198				
CONTACT INFO			PROJECT INFO					
Name:			YMEP no:					
Address:			Project name:					
			Project type:					
Email:			Project module:					
Phone:								
Is the final report enclosed?		yes	hard copy					
		_no	pdf copy					
			digital spreadshe	eet of station lo	ocation data			
Comment:								
PROJECT SUMMARY								
Total project expenditures:	- · · ·							
Number of new claims since March								
Has an option resulted since March	1 31 st ?	yes	no	in ne	gotiation			
Number of calendar field days:								
Number of person-days of employr	nent:	paid		_days of unpai	d work			
Total no. of samples:	rocks	silts		soils	other			
Total length/volume of trenching/s	hafting:							
Total number of line-km of geophy	sics:							
Total metres drilled:		diamond drill	RC drill	auge	r/percussion drill			
Other products (provide details):								
FINANCIAL SUMMARY			im form. To reque detailed expense		ent of expenses,			
Total daily field allowance:			Total contractor	costs:				
Total field air transportation costs			Total excavating	/heavy				
(helicopter/plane):			equipment costs	:				
Total truck/mileage costs:		Total assay/analyses costs:						
Total wages paid:			Total reclamatio	n costs:				
Total light equipment rental costs:			Total report writ	ing cost:				
Other (please specify):			Total staking cos	its:				
Other (please specify):			-					



Your feedback on any aspect of the program:

	ry, Mines and Resources may verify all statements related to, and made on this form, ed reports, interim claims and in the Summary or Technical Report which accompanies
l certify that;	
•	erson, or the representative of the company or partnership, named in the Application and in the Contribution Agreement under the Yukon Mineral Exploration Program.
	son who is nineteen years of age or older, and I have complied with all the said program.
3. I hereby ap	oply for the final payment of a contribution under the Yukon Mineral Exploration
÷ .	IEP) and declare the information contained within the Summary or Technical Report In to be true and accurate.
Date	
Signature of Applicant	
Name (print)	