Sampling Report On The Hunker Placer Project

Work Period June 1<sup>st</sup> to October 15<sup>th</sup>, 2012

Located In Dawson Mining District On NTS 115-O-14g 63° 59' 09" Latitude, 139° 01' 20" Longitude

> By Bernie Kreft

December 26, 2012

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Location – The Hunker Placer Project ("Project") is located in the Dawson Mining District on NTS mapsheet 115-O-14g centred at approximately 63° 59' 09" north and 139° 01' 20" west. The Project consists of three areas: Jajuna Bench (self named) located on a right limit bench of Hunker opposite Paradise Hill, Trilby Bench located on a right limit bench of Hunker directly on-strike of Williams Hill and Independence Hill which is a left limit bench of Hunker southeast, and directly on-strike, of Nugget Hill.

Access – Access was achieved by truck from Dawson City via the Hunker Creek road. The distance from Dawson is approximately 22 kilometres resulting in a 15 minute driving time. The various exploration sites were accessed via old exploration roads/trails which are scattered throughout the area.

**Topography And Vegetation** – The project lies within the Hunker Creek drainage basin, which is a 26 kilometre long stream system heading on King Solomon's Dome and draining into the Klondike River. Valley bottom width varies from approximately 10 metres near the headwaters to over 350 metres near the mouth.

Bordering the creek are gravel benches which represent ancient creek deposits laid down in the wide, flatbottomed valleys which characterized the region prior to the most recent uplift. This uplift resulted in increased stream gradients which enabled streams to cut down through their old gravel beds into the bed-rock beneath, and to excavate the steep-sided trough-like valley in which they now run. The old gravels now occur on wide bedrock benches bordering the present valleys at elevations of from 15 to 100 metres above them, with the elevation generally increasing in a downstream direction. Their distribution along the valleys is irregular, as large portions of the benches were destroyed during the deepening of the drainage system.

These bedrock benches are covered by a mixture of regular stream gravels "Klondike Gravels" and white channel gravels both of which contain a large proportion of quartz cobbles. Depth of alluvial material on the benches ranges from several metres to as much as 105 metres with depths generally increasing in a downstream direction. The placer mined width of these benches varies from several tens of metres along the upper portion of Hunker Creek to as much as 1.2 kilometres on Paradise Hill.

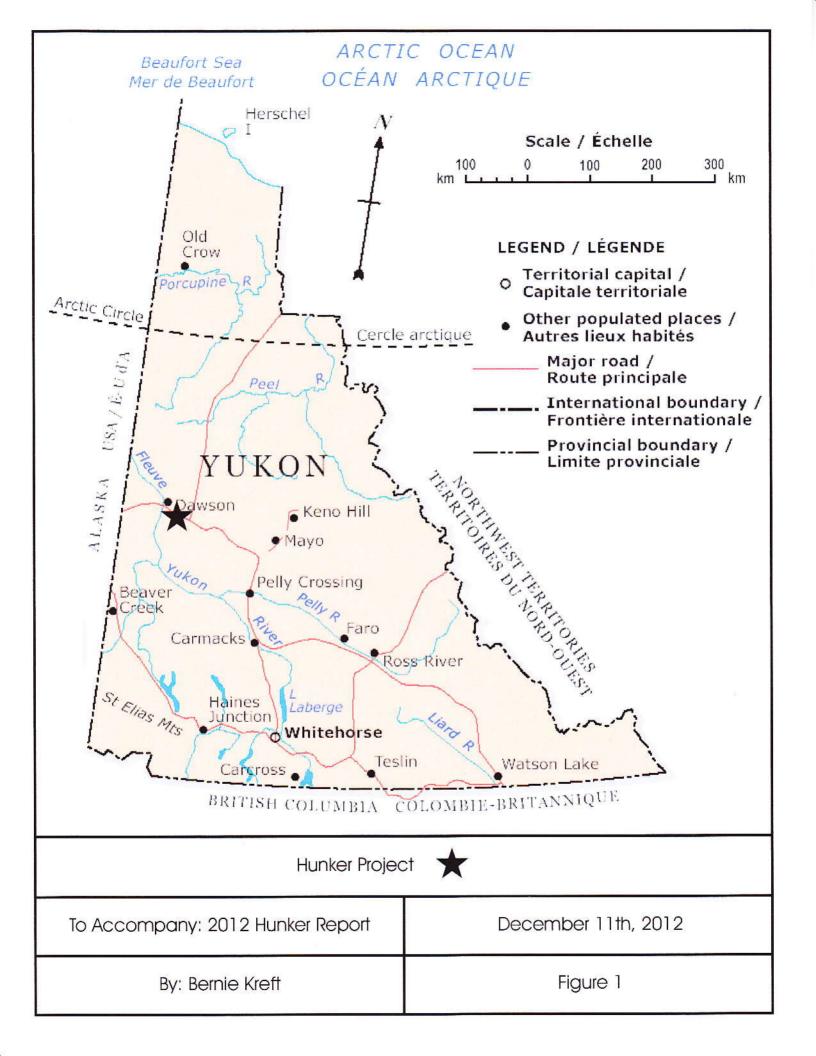
Vegetation consists of stunted spruce trees and brush on frozen north facing slopes, with more mature stands of spruce and limited poplar along valley bottoms and south facing slopes. Bench surfaces are covered by open forest consisting of near equal amounts of mature spruce and poplar. Mined or otherwise disturbed areas are covered by thick brush with smaller amounts of poplar and spruce.

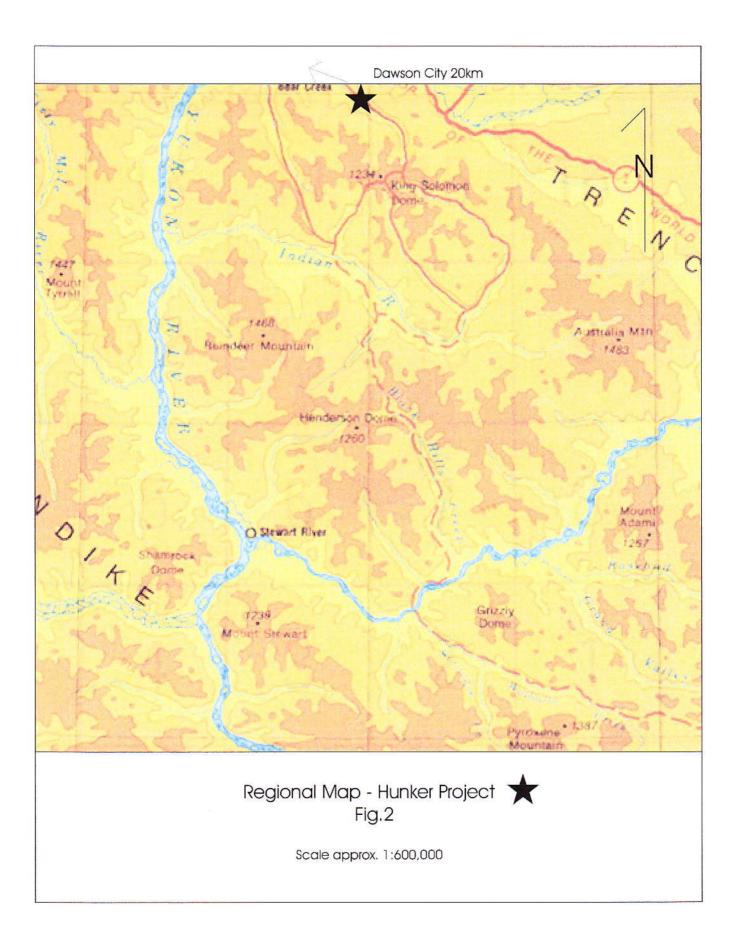
History And Target Description - High level bench gravel deposit. White channel gravel deposit.

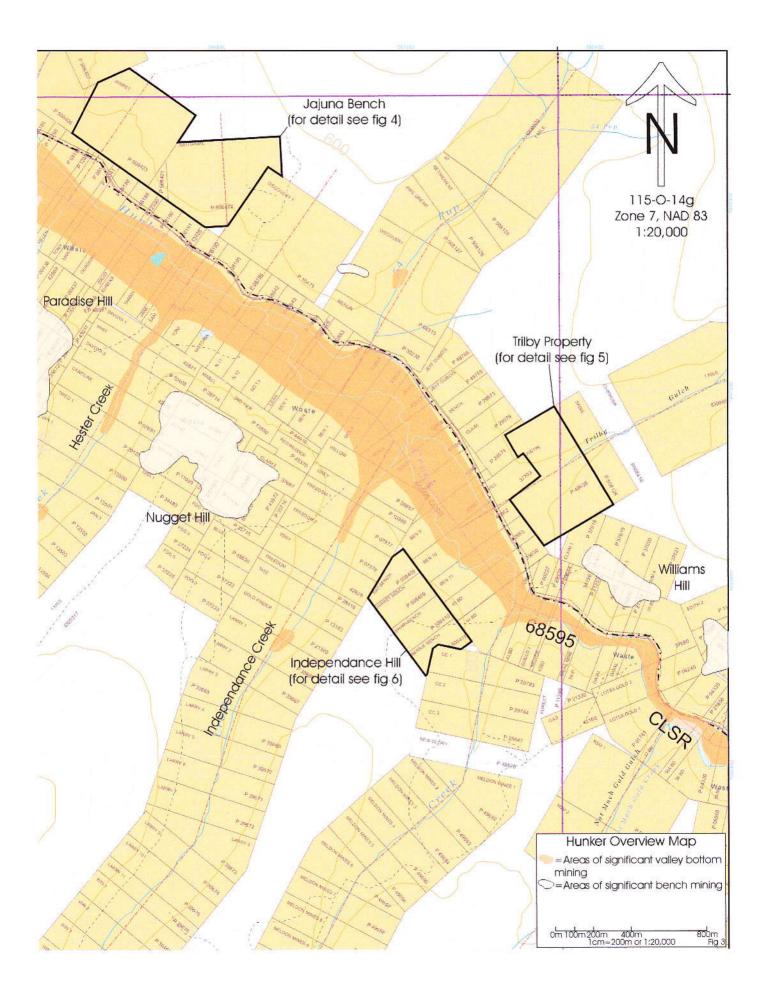
The initial discoveries in the Klondike were made on valley bottom gravel deposits. Once all of the valley bottom claims were acquired, "greenhorns" who were looking for ground of their own were told to look for gold on the un-staked hillsides and benches paralleling the creeks. Subsequently significant amounts of gold were found on these benches, much to the surprise of the local "experts". Although gold was now known to occur on the benches and hills, developmental work on them was often stymied by a lack of water which hindered hand mining methods and precluded large-scale dredging, thereby leaving large swaths of bench gravels relatively untouched to this day.

The project is located on Hunker Creek within the immediate vicinity of numerous large-scale placer gold bench deposits, brief descriptions of which are provided below. These descriptions are thought to provide a guide towards what can be expected on the benches subject to this application.

Paradise Hill: The deposit consists of a thin layer of overburden on top of a layer of yellow-brown Klondike







gravel overlying white channel gravel, with total deposit depth varying from 3 metres at the front of the bench to as much as 37 metres at the back of the bench. Paystreak width appears to be about 1.2 kilometres with mining concentrated along both the front and back of the bench with an un-mined area in between. Up to 12.1 metres of gravel is sluiced, with no gold found in the graphitic to chlorite schist bedrock. Gold is predominantly fine-grained with a purity of approximately 83%. Domes and depressions in the bedrock result in a great variation in deposit thickness, with the depressions typically containing significantly higher than average gold grades.

Nugget Hill: The deposit consists of a thin layer of overburden overlying a layer of yellow-brown Klondike gravel on top of white channel gravel, with total deposit depth varying from 3 metres at the front of the bench to as much as 10 metres at the back of the bench. Paystreak width is at least 520 metres with mining concentrated along the front of the bench. Up to 5 metres of gravel is sluiced, with no gold found in the graphitic schist bedrock. Gold is coarse and angular generally 16 mesh in size with a purity of approximately 90%. Nuggets weighing up to 15 grams have reportedly been recovered from Nugget Hill (Renee Brickner pers comm).

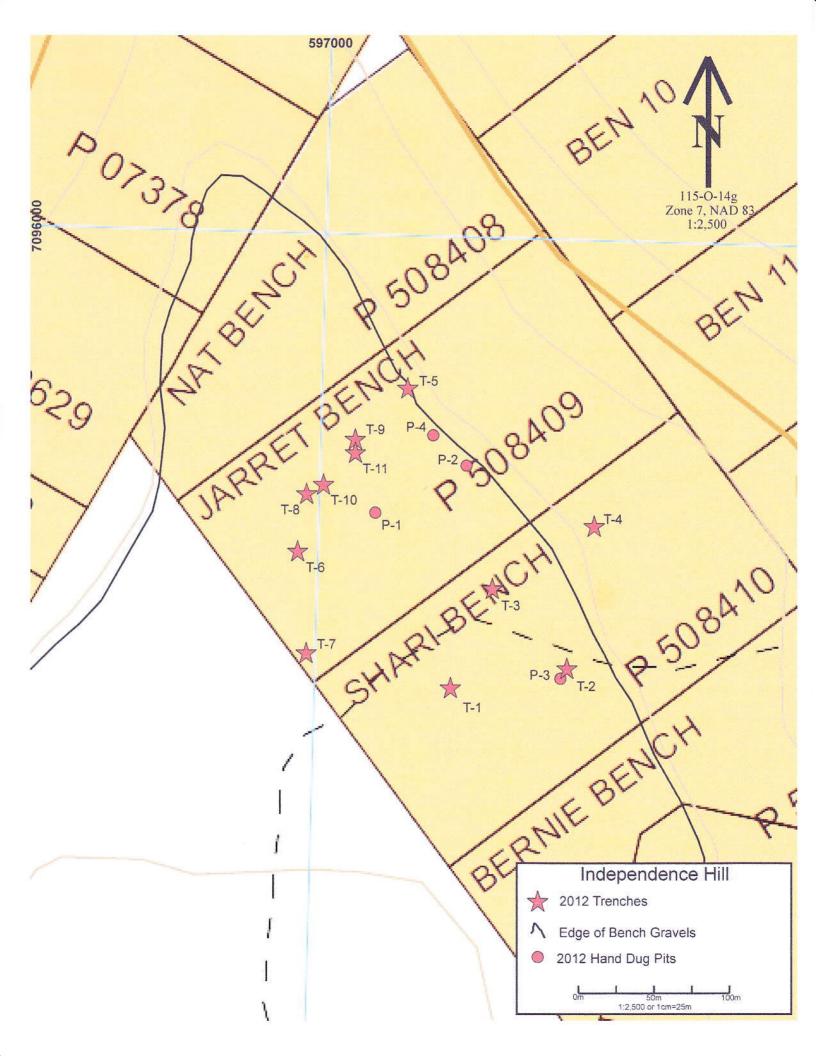
Williams Hill West: The deposit consists of a thin layer of overburden overlying a layer of yellow-brown gravel on top of white channel gravel, with total deposit thickness varying from 2 metres at the front of the bench to as much as 10.6 metres at the back of the bench. Paystreak width is at least 120 metres with mining concentrated along the front of the bench. Up to 4.8 metres of gravel is sluiced, along with 0.4 metres of bedrock. Gold is predominantly fine and flat with a purity of approximately 82%. Wire gold and small nuggets with quartz attached have been found in this area.

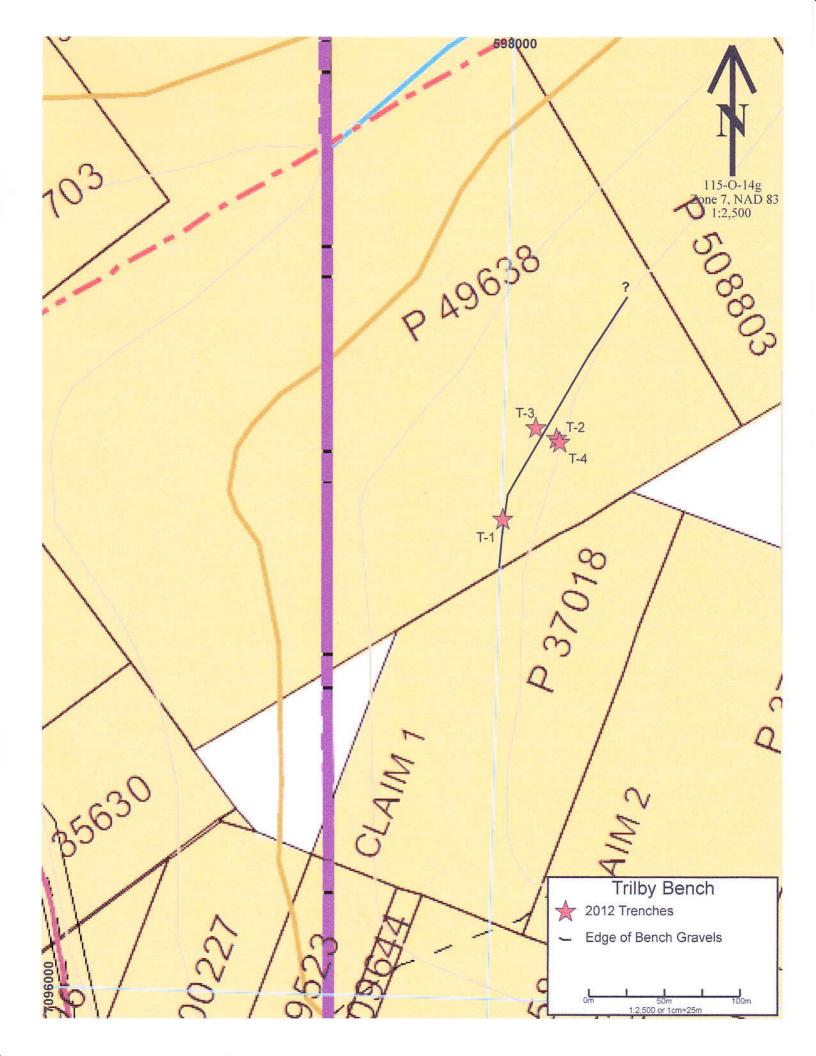
The following descriptions of the placer benches subject to this application have been compiled from information gained from limited test work completed by the author during the 2011 field season. For details on location see figures 3 through 6.

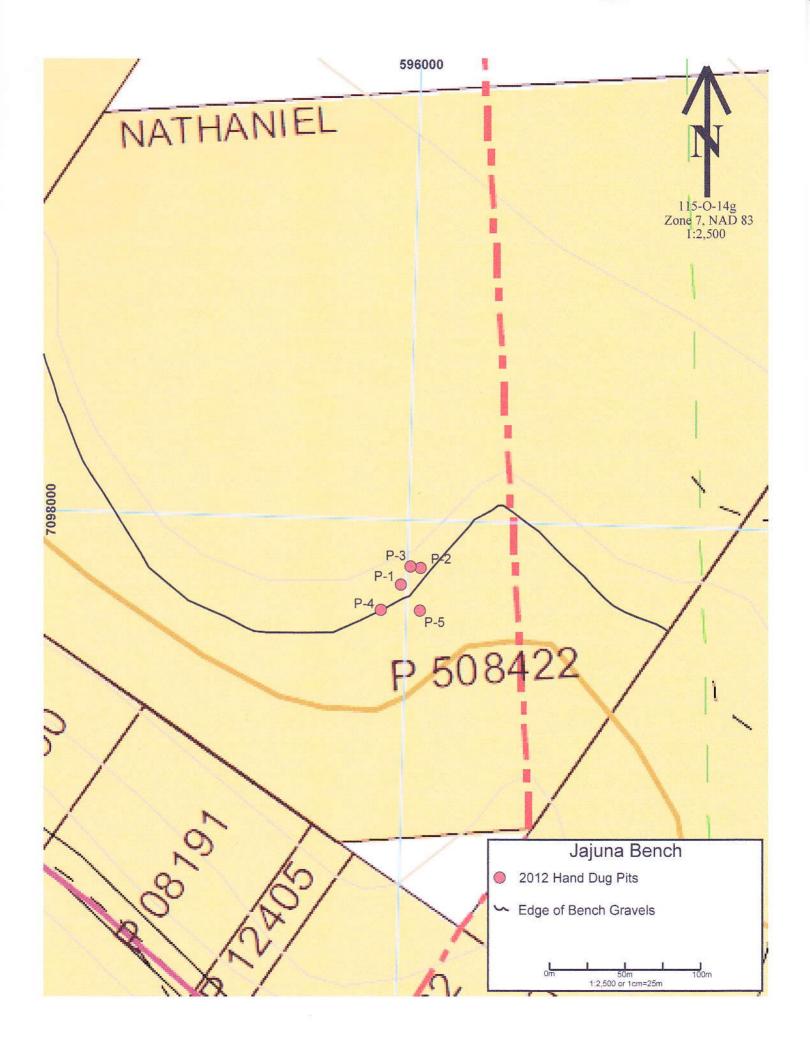
Jajuna Bench: The deposit consists of a 0.5 metre layer of overburden overlying approximately 7-9 (depth quoted is an estimate only) metres of chlorite schist gravel containing a large proportion of quartz cobbles and boulders, with the amount of quartz increasing with depth. Several pits were dug in an unsuccessful attempt to reach bedrock. Material from the bottom of these pits was carried down to Hunker Creek and panned, returning between 1 and 2 specks per pan. Surficial mapping and prospecting outlined the general shape of the bench and noted the presence of numerous hand pits and trenches along the front face of the bench. The mapping work defined a minimum 155,000 square metre area of gravel bench within the subject claims. Based on a sluice thickness of 5.0 metres the potential exists for a placer gold reserve (grade to be determined) of 775,000 cubic metres.

Trilby Property: Based on prospecting and limited auger drilling this deposit consists of up to 2 metres of overburden overlying 1-3 metres of rusty gravel overlying 1-5 metres of quartz rich channel gravel. Pan sampling of material excavated from hand dug pits failed to return any gold. Subsequent auger drilling consisted of 5 holes, 2 of which were collared in bedrock, with the remaining 3 returning an average of 15 specks of gold per hole (6 inch auger drill operated by Henry Reinink). Surficial mapping and prospecting outlined the general shape of the bench and noted the presence of numerous hand pits along the front face of the bench. The mapping work defined a minimum 12,400 square metre area of gravel bench within the subject claims. Based on a sluice thickness of 5.0 metres the potential exists for a placer gold reserve (grade to be determined) of 62,000 cubic metres.

Independence Hill: The deposit consists of a 0.5 metre layer of overburden overlying 1-3 metres of rusty gravel overlying 1-5 metres of quartz rich channel gravel (depth quoted is an estimate only). Several pits







were dug in an unsuccessful attempt to reach bedrock. Material from the bottom of these pits was carried down to Hunker Creek and hand panned, returning one small nugget and two fine specks from a total of 15 pans. Surficial mapping and prospecting outlined the general shape of the bench and noted the presence of numerous hand pits and trenches along the front face of the bench. The mapping work defined a minimum 205,000 square metre area of gravel bench within the subject claims. Based on a sluice thickness of 5.0 metres the potential exists for a placer gold reserve (grade to be determined) of 1,025,000 cubic metres.

**Current Work And Results** – Work consisted of prospecting, mapping, and the digging of 9 hand-dug pits (4 on Independence and 5 on Jajuna), followed later in the summer by the excavation of 15 trenches (11 on Independence and 4 on Trilby) with a total excavation volume of approximately 573.4 cubic metres. A total of 19 bulk samples were taken from these excavations, with each bulk sample consisting of approximately 4 cubic feet of material sourced from the lowermost 45 centimetres of gravel and the top 15 centimetres of bedrock in the case of trenches, while the bulk sample material from the hand dug pits was sourced from all levels of these excavations. This material was placed into 11x17 poly sample bags and hand panned in Hunker Creek to test the placer gold potential of the various excavations. Prospecting and surficial mapping was used to define deposit characteristics such as gradient, the extent of bench gravels, and to locate the presence of old workings or any other items that may have a bearing on future development. Of the 3 properties which were planned to be trenched and auger drilled, only two were subsequently trenched (Independence Hill and Trilby Bench) and no auger drilling was done due to the unavailability of drillers in Dawson. The following is a summary of the work completed on each of the 3 areas comprising the Project.

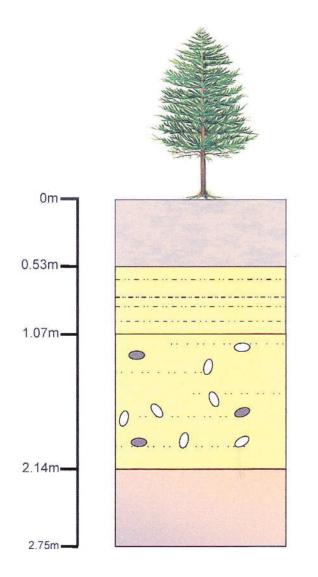
**Independence Hill** - A total of 11 trenches and 4 pits were excavated on this hill in an effort to test for the potential of the hill to host a gold bearing channel trending NW or parallel to Hunker Creek. Of the 11 trenches, 9 encountered gravel on bedrock while the other 2 penetrated to bedrock but failed to encounter gravel. Hand dug pits were approximately 3.0 metres in depth and although encountering gravel they failed to hit bedrock. Trenching encountered bedrock at an average depth of 3.88 metres (1.22m to 6.09m) with surficial material consisting of an average of 2.07 metres (0.81m to 4.27m) of silty to rocky overburden and organics, overlying an average of 1.81 metres (0.31m to 3.82m) of quartz rich limonitic gravel. The gravels are deepest along the Hunker Creek edge of the bench (NE edge) with depths to bedrock decreasing towards the back of the bench. No permafrost was encountered.

A 4 cubic foot bulk sample was taken from each of the 9 trenches that encountered gravel on bedrock as well as all 4 of the hand dug pits. Panning of the material from the hand dug pits failed to encounter any gold which is understandable given that the pits generally stopped well short of bedrock, but can be considered a disappointment due to their failure to duplicate 2011 sampling results which encountered 3 pieces of gold from 15 pans. Of the trench bulk samples, Trench #1 yielded 1 fine colour of gold, Trench #9 yielded 2 fine colours of gold, and Trench #7 had 1 fine colour of gold, while the remainder of trenches were barren. These results can be considered very disappointing given the amount of gravel tested (52 cubic feet).

**Trilby Bench** – A total of 4 trenches were excavated on this bench in an effort to test for the potential of the bench to host a gold bearing channel trending NW, or parallel to Hunker Creek. Of the 4 trenches, only 1 encountered gravel on bedrock while the other 3 were terminated short of bedrock due to the presence of frozen gravels which could not be penetrated with the excavator. Bedrock was encountered at a depth of 3.7 metres with surficial material consisting of an average of 0.91 metres of silty to rocky overburden and organics, overlying 2.79 metres of gravel, with the bottom 0.76 metres of this gravel section consisting of silvery-yellow limonitic quartz boulder (White Channel) gravel.

A 4 cubic foot bulk sample was taken from the bottom 45 centimetres of gravel and top 15 centimetres of bedrock. Panning of this material encountered abundant extremely fine-grained gold, with a total of 83 pieces

Trench #1 Zone 7, NAD 83 597088/7095701 Scale: 1:30 or 1cm=0.30m L 4.57m x W 3.05m x D 2.74m Volume: 38.19m^3 Trench Orientation: NE



Rocky soil and roots 0.53m.

Bedded sandy silt 0.54m.

Poorly to moderately sorted rusty and sandy Qtz rich gravel. Moderate Graphitic schist component 1.07m.

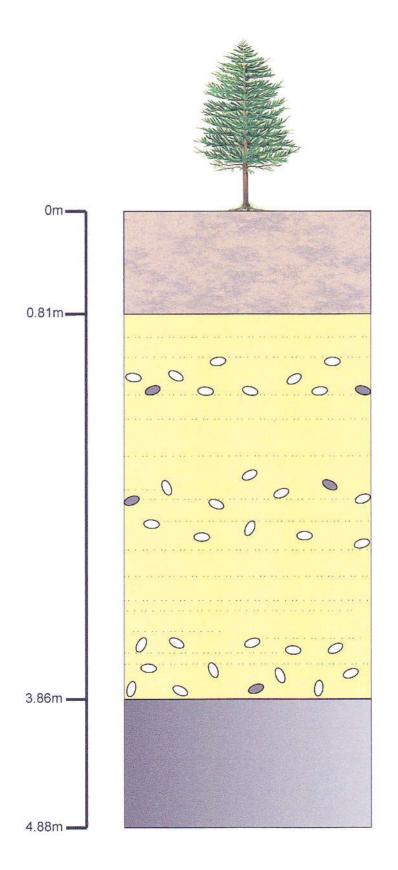
Decomposed black-orange bedrock with some white 0.61m.

Trench #2 Zone 7, NAD 83 597165/7095717 Scale: 1:30 or 1cm=0.30m L 9.14m x W 1.52m x D 4.88m Volume: 67.8m^3 Trench Orientation: NE

Mixed sand-gravel-organics-roots-dirt 0.81m.

Well bedded and well sorted Qtz rich gravel and limonitic (Very similar to T-1 but more sorting and less graphitic schist) 3.05m.

Black graphitic schist with numerous Qtz boudins 1.02m.

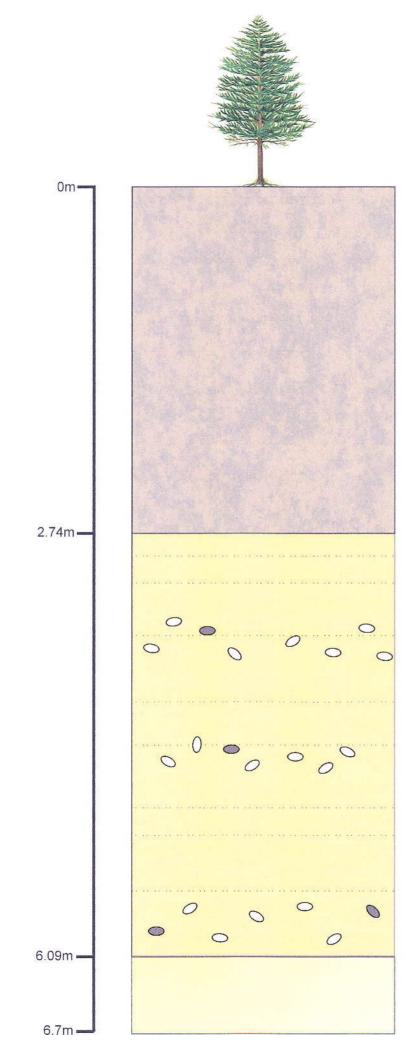


Trench #3 Zone 7, NAD 83 597116/7095768 Scale: 1:30 or 1cm=0.30m L 10.67m x W 1.52m x D 6.7m Volume: 108.66m^3 Trench Orientation: NE

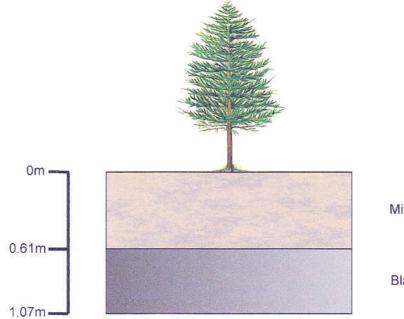
Mixed clay-sand-organics-roots-dirt 2.74m.

Well bedded and well sorted Qtz rich gravel and limonitic (Same as T-2) 3.35m.

Creamy to beige, hydrothermally altered bedrock 0.61m.



Trench #4 Zone 7, NAD 83 597181/7095811 Scale: 1:30 or 1cm=0.30m L 1.83m x W 1.22m x D 1.07m Volume: 2.39m^3 Trench Orientation: NE



Mixed sand-clay-organics.

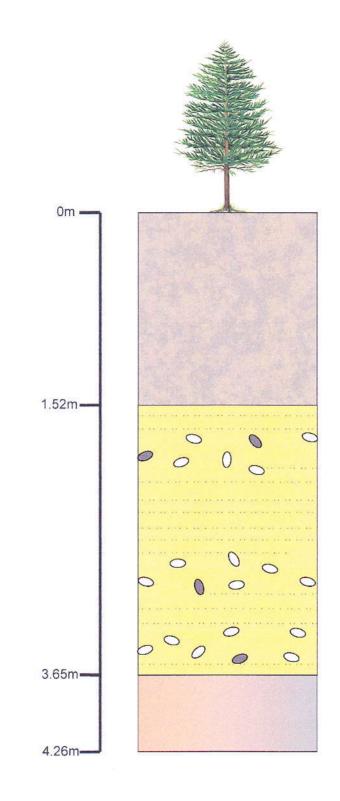
Black graphitic schist bedrock.

Trench #5 Zone 7, NAD 83 597056/7095899 Scale: 1:30 or 1cm=0.30m L 7.62m x W 1.52m x 4.26m Volume: 49.34m^3 Trench Orientation: NE

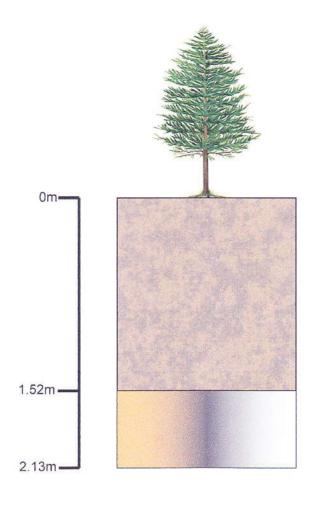
Mixed sand-silt-clay-organics 1.52m

Well bedded and well sorted Qtz rich gravel and limonitic (Very similar to T-1 but more sorting and less graphitic schist) 2.13m.

Rusty graphitic schist 0.61m.



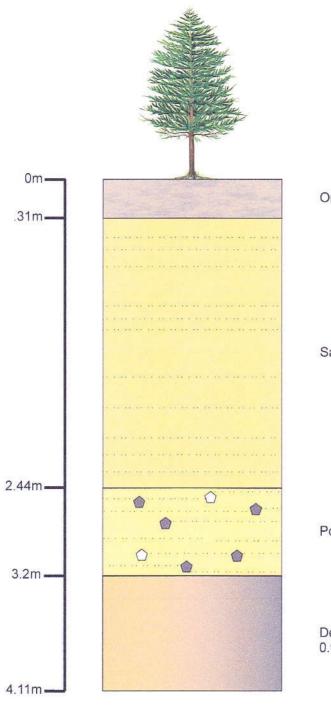
Trench #6 Zone 7, NAD 83 596986/7095789 Scale: 1:30 or 1cm=0.30m L 3.66m x W 1.22m x D 2.13m Volume: 9.51m^3 Trench Orientation: NW



Mixed sand-clay-rocks-organics 1.52m.

White, limonitic, black clay altered bedrock 0.61m.

Trench #7 Zone 7, NAD 83 596994/7095723 Scale: 1:30 or 1cm=0.30m L 3.66m x W 1.52m x D 4.11m Volume: 22.87m^3 Trench Orientation: N-S



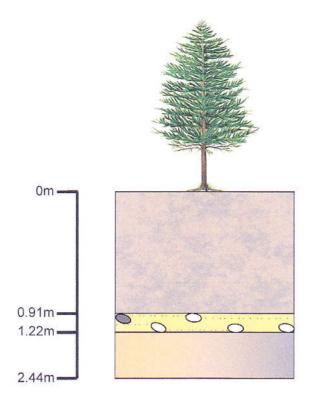
Organics and roots 0.31m.

Sand, silt and clay 2.13m.

Poorly sorted gravel (angular) 0.76m.

Decomposed bedrock, limonitic and black graphitic 0.91m.

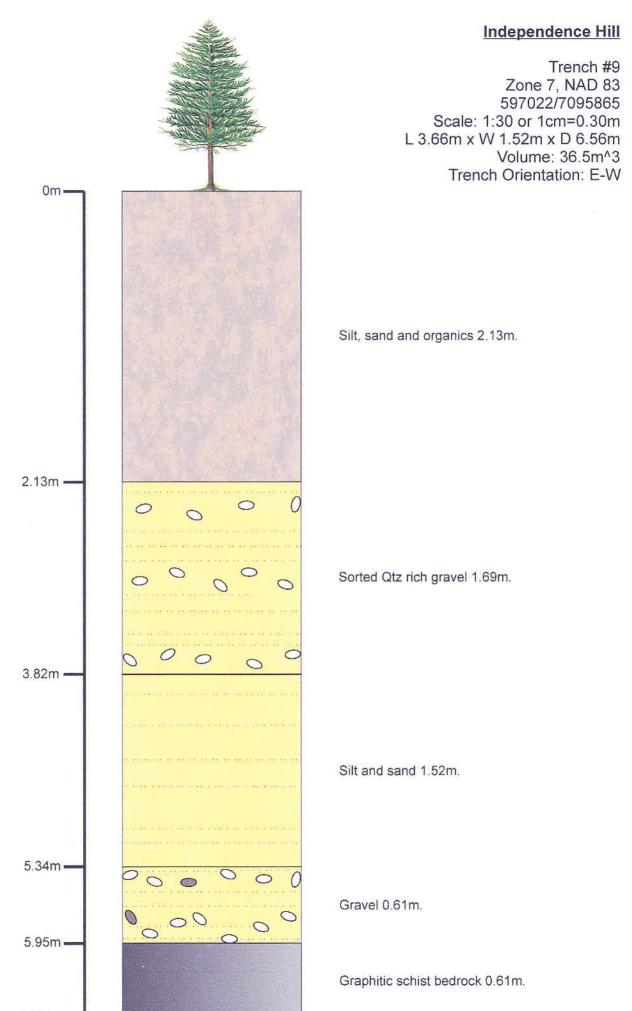
Trench #8 Zone 7, NAD 83 597009/7095829 Scale: 1:30 or 1cm=0.30m L 2.44m x W 1.52m x D 2.44m Volume: 9.05m^3 Trench Orientation: N-S



Organics, angular rocks, sand and silt 0.91m

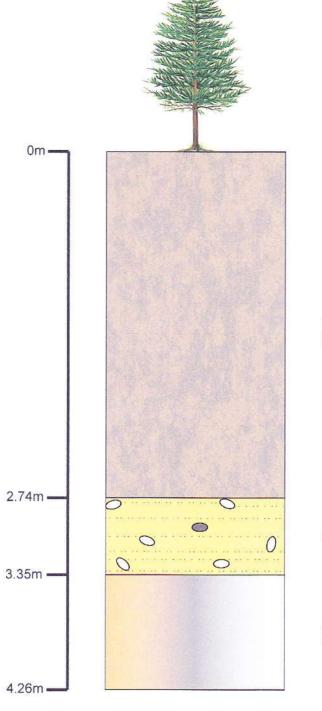
Gravel as per T-7 0.31m.

Graphitic and limonitic bedrock (As per T-7) 1.22m.



6.56m

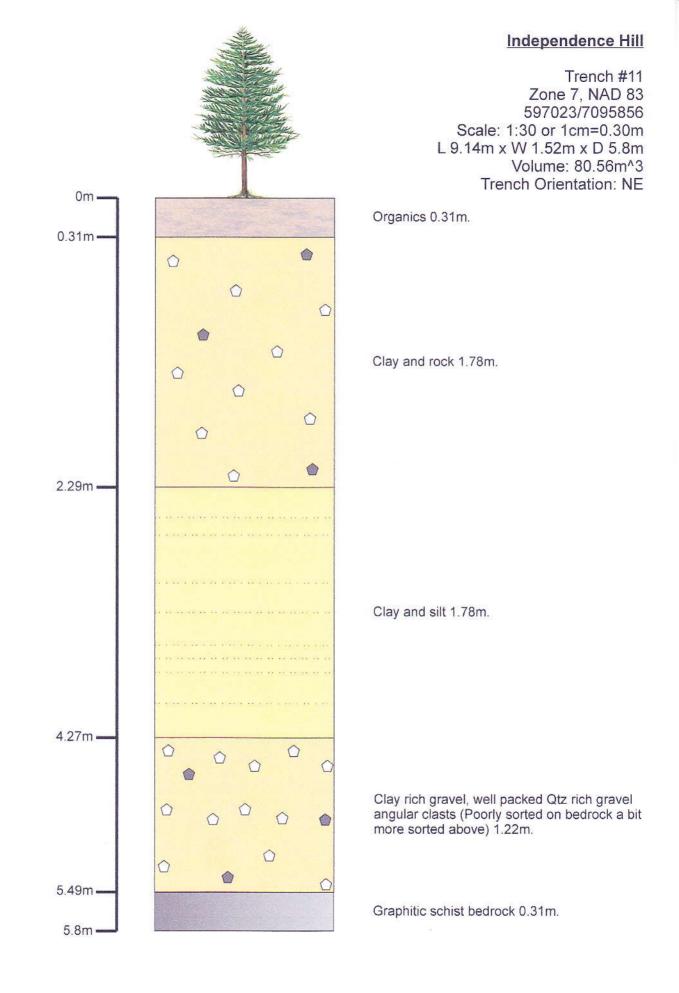
Trench #10 Zone 7, NAD 83 597002/7095834 Scale: 1:30 or 1cm=0.30m L 7.62m x W 1.52m x D 4.26m Volume: 49.34m^3 Trench Orientation: NE

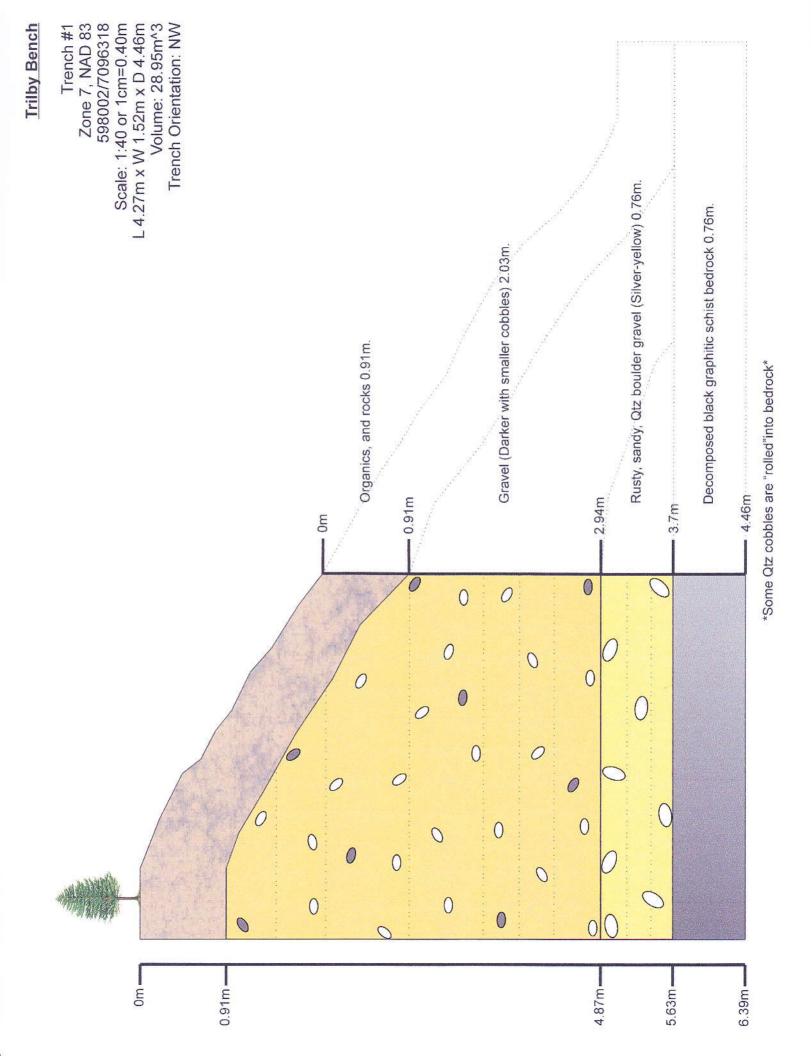


Mixed clay, silt, sand, rocks and organics  $2.74\mbox{m}.$ 

Poorly sorted gravel 0.61m.

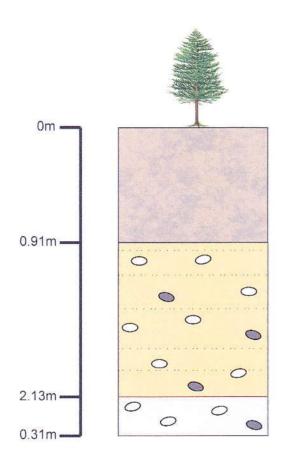
Argilite, limonitic schist, Qtz porphry dyke bedrock (Decomposed) 0.91m.





#### **Trilby Bench**

Trench #2 Zone 7, NAD 83 598035/7096371 Scale: 1:30 or 1cm=0.30m L 3.66m x W 1.52m x D 2.44m Volume: 13.57m^3 Trench Orientation: NW



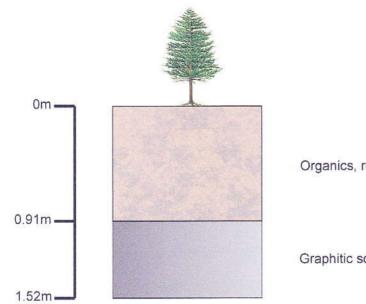
Organics, rocks and roots 0.91m.

Gravel (Darker with smaller cobbles) 1.22m..

Gravel (Darker with smaller cobbles, frozen) 0.31m.

# **Trilby Bench**

Trench #3 Zone 7, NAD 83 598021/7096377 Scale: 1:30 or 1cm=0.30m L 2.13m x W 1.52m x D 1.83m Volume: 5.93m^3 Trench Orientation: NW

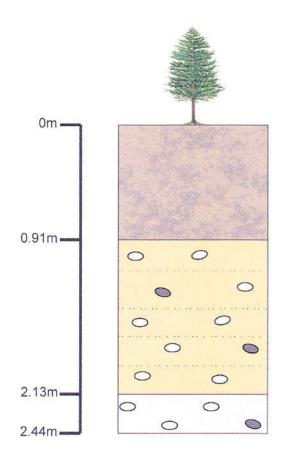


Organics, roots and rocks 0.91m.

Graphitic schist bedrock 0.61m.

## **Trilby Bench**

Trench #4 Zone 7, NAD 83 598037/7096368 Scale: 1:30 or 1cm=0.30m L 3.96m x W 1.52m x D 2.44m Volume: 14.69m^3 Trench Orientation: NW



Organics, rocks and roots 0.91m.

Gravel (Darker with smaller cobbles) 1.22m..

Gravel (Darker with smaller cobbles, frozen) 0.31m.

of gold from the entire sample. The gold weighed 79 milligrams which when extrapolated out from the 4 cubic foot sample size would equal an average of 533 milligrams per cubic yard or 1 ounce every 58.35 cubic yards.

Jajuna Bench - A total of 5 hand-dug pits were completed on this bench in an effort to test for the potential of the bench to host a gold bearing channel trending NW or parallel to Hunker Creek. Hand dug pits were approximately 3.0 metres in depth and although encountering gravel they failed to hit bedrock. Gravels are gradational from a quartz, chlorite, graphitic schist pea-gravel near surface to a quartz and graphitic schist cobble to boulder gravel at the bottom of the holes. This cobble to boulder gravel is very similar in nature to the auriferous gravel layer encountered at the bottom of the trench on Trilby Bench. A 4 cubic foot bulk sample was taken from each of the 5 hand pits, with the sampled material consisting of a mix of all gravels exposed irregardless of their depth in the pit. Samples taken from pits 2, 4 and 5 returned no gold, this can be explained by the pits location on sloping bedrock and the material sampled consisting of sluff from the bank above. Samples taken from pits 1 and 3 returned a total of 5 and 6 specks of gold respectively. These results were considered encouraging due to the presence of gold, but somewhat disappointing due to significantly fewer specks per pan than the 2011 results. In 2011 care was taken to sample only the lowermost quartz boulder gravel layer while 2012 consisted of a mix of all gravels exposed. The reduction in specks per pan on a year to year basis was attributed to the failure of 2012 sampling to concentrate on the deepest and most prospective gravel layer, therefore a follow up trip later in the year was conducted. This second trip concentrated on sampling the deepest and most prospective gravel layer from pits 1 and 3 and resulted in the collection of 9 pans, panning of which vielded 11 specks of gold which is very similar to the results from 2011.

**Conclusions** – Results from the work completed on Independence Hill were very disappointing. Very little gold was encountered in the testing and sampling completed, with these poor results eliminating the potential for the hill to host a sizeable placer gold deposit running parallel to Hunker Creek. Remaining potential lies in the northwest corner of the property where a section of ground with potential to host a deposit running parallel to Independence Creek remains untested. Work completed on Trilby Bench was very encouraging. Sampling returned a significant amount of fine-grained gold from the one trench that managed to penetrate to bedrock, while the remainder of trenches were stopped well short of bedrock, due to the presence of permafrost, and were therefore not sampled. Further work will be necessary to define the full extent and economic potential of the auriferous gravel layer on Trilby Bench. Although only hand pitting was completed on Jajuna Bench, results were encouraging. The hand pits on Jajuna returned significantly more gold, and encountered bigger quartz boulders, than the hand pits at Independence. Material sourced from the bottom of the hand pits on Jajuna is very similar to the auriferous quartz boulder gravel layer located on Trilby Bench. Jajuna Bench is approximately 7-8 meters thick, and likely frozen based on experiences at Trilby, therefore auger drilling will be required to fully explore this site. Jajuna Bench has potential to host a significant sized placer gold deposit. Due to the presence of permafrost auger drilling will be required to further test Trilby and Jajuna, given that the current "Gold Rush" has resulted in a significant demand for auger drilling, a drill contract will need to be signed well in advance of the proposed work.

**Recommendations** – Trenching, auger drilling and bulk sampling is highly recommended for Jajuna and Trilby. Trenching should be completed in two phases, with the pits started in mid-June and left open to thaw until their completion in late September. Upon completion of the pits, a series of 1-2 cubic yard bulk samples should be taken and processed for gold content. Due to deposit characteristics drilling will be needed to guarantee a full test of the properties, with this work preferably taking the form of a series of lines running perpendicular to Hunker Creek.

Reclamation - Prior to conducting the excavator trenching portion of the program, advice and

recommendations were received from the Dawson Land Use officer. Following these recommendations, all trenches were backfilled, trees that were broken or damaged were cut down, bucked up and spread out onto the backfilled trenches or excavator access route, while the hand dug pits were left open and marked. All garbage and waste created during the course of the program was removed from the area and deposited in the Dawson landfill.

#### **Statement Of Qualifications**

I, Bernie Kreft, directed and participated in the exploration work described herein.

I have over 23 years prospecting experience in the Yukon.

This report is based on fieldwork directed and completed by myself, and includes information from various publicly available placer mining industry handbooks.

This report is based on fieldwork completed during the 2012 field season.

This report is based on fieldwork completed in the Hunker Creek area.

Respectfully Submitted,

in Kut

Bernie Kreft

# Project Budget (hand digging portion)

- Kevin Macdonald and Sean Macdonald	= \$4797.64
Total	= \$4797.64
Project Budget (excavator pitting portion)	
Food and camp 21 man days x \$100/day (6 work; 1 travel)	= \$2100.00
- Whitehorse-Dawson 1 round trip (1024km)	= \$609.28
- Daily round trips to property 6 x 80km	= \$285.60
<ul> <li>Excavator trucking to and from staging area</li> </ul>	= \$1010.63
Excavator 38 hours x \$120/hr wet but no operator	= \$4560.00
Report preparation and duplication	= \$1500.00
- Wages Bernie Kreft (7 days x \$300/day)	= \$2100.00
<ul> <li>Wages Jarret Kreft (7 days x \$230/day)</li> </ul>	= \$1610.00
<ul> <li>Wages kyle Eide (7 days)</li> </ul>	= <u>\$1365.00</u>
Total	= \$15140.51

**Grand Total** = \$19938.15

Trench #1 Trench #2 Trench #3 Trench #4 Trench #5	10'x15'x9' 30'x16'x5' 35'x22'x5' 6'x4'x3.5' 25'x5'x14' 12'x4'x7'	597088 597165 597116 597181 597056	7095701 7095717 7095768 7095811 7095899	Independence Independence Independence Independence Independence
Trench #3 Trench #4	35'x22'x5' 6'x4'x3.5' 25'x5'x14'	597116 597181	7095768 7095811	Independence Independence
Trench #4	6'x4'x3.5' 25'x5'x14'	597181	7095811	Independence
	25'x5'x14'			
Trench #5		597056	7095899	Indonondonco
	12'x4'x7'			muependence
Trench #6		596986	7095789	Independence
Trench #7	12'x5'x13.5'	596994	7095723	Independence
Trench #8	8'x5'x8'	597009	7095829	Independence
Trench #9		597022	7095865	Independence
Trench #10	25'x5'x14'	597002	7095834	Independence
Trench #11	30'x5'x18'	597023	7095856	Independence
Trench #1	14'x5'x14'8"	598002	7096318	Trilby
Trench #2	12'x5'x8'	598035	7096371	Trilby
Trench #3	7'x5'x6'	598021	7096377	Trilby
Trench #4	13'x5'x8'	598037	7096368	Trilby