

**2016 Sulphur Creek
Auger Drilling Assessment Report**

**Placer Claims Land 1 to 11
P517947 to P517957**

**Klondike Area
Dawson Mining District**

**NTS Mapsheet 115-O-10h
Latitude 63° 41' and Longitude 138° 43'**

**By
Bernie Kreft
January 14th, 2017**

Table Of Contents

Location	Page 1
Claim Status Table	Page 1
Access	Page 1
Topography And Vegetation	Page 1
Claim And Land Status	Page 1
Claim Status Table	Page 1
Target Description	Page 1
Yukon Map (figure 1)	Page 2
Regional Map (figure 2)	Page 3
Nearby Mines (figure 3)	Page 4
Current Work And Results	Page 6
Work Detail Map (figure 4)	Page 7
Conclusions	Page 8
Recommendations	Page 8
Reclamation	Page 8
Statement of Qualifications	Page 9
Statement of Costs	Page 10
Drill Sections	At Back

Location – The Sulphur Creek Project is located in the Dawson Mining District on NTS mapsheet 115-O-10h centred at approximately 63° 41' 10" north and 138° 43' 45" west. The target is located on the left limit of Sulphur Creek approximately 4.5 kilometres upstream from its confluence with Dominion Creek. A total of 11 placer claims comprise the property with current claim information found on the following table.

Grant Number	Claim Name	Number	Owner	Expiry Date	Banked Credits	NTS Map
P 517947	Land	1	Bernard Kreft - 100%	11/10/2018	3	115O10h
P 517948	Land	2	Bernard Kreft - 100%	11/10/2018	3	115O10h
P 517949	Land	3	Bernard Kreft - 100%	11/10/2018	3	115O10h
P 517950	Land	4	Bernard Kreft - 100%	11/10/2018	3	115O10h
P 517951	Land	5	Bernard Kreft - 100%	11/10/2018	3	115O10h
P 517952	Land	6	Bernard Kreft - 100%	11/10/2018	3	115O10h
P 517953	Land	7	Bernard Kreft - 100%	11/10/2018	3	115O10h
P 517954	Land	8	Bernard Kreft - 100%	11/10/2018	3	115O10h
P 517955	Land	9	Bernard Kreft - 100%	11/10/2018	3	115O10h
P 517956	Land	10	Bernard Kreft - 100%	11/10/2018	3	115O10h
P 517957	Land	11	Bernard Kreft - 100%	11/10/2018	2	115O10h

Access – Access was achieved by truck from Dawson City via the Sulphur Creek road a total one-way distance of approximately 69 kilometres resulting in a 50 minute one-way drive time. Access from the Sulphur Creek road to the exploration sites was via a series of old bush roads which leave the Sulphur Creek road in the immediate vicinity of the subject lease.

Topography And Vegetation – The project lies within the Sulphur Creek drainage basin, which is a 30 kilometre long stream system heading on King Solomon's Dome and draining into Dominion Creek. Valley bottom width varies from approximately 10 metres near the headwaters to as much as 500 metres or more near the mouth. The valley slopes are gentle and uniform and are somewhat steeper on the right limit than the left limit. Stream gradient in the area of the subject lease is very shallow, averaging about 7 metres per kilometre.

Sulphur Creek valley bottom is floored with tailings from dredging and more recent heavy equipment operations bound by unmined stretches of ground paralleling the previously mined areas. Dredges typically exploited shallow ground with flat bedrock found in the approximate centre of the valley while recent mechanized operations have focused on exploiting deeper ground and low level benches found along the margins of the dredge tailings as well as scattered areas among the dredge tailings where bedrock was incompletely cleaned.

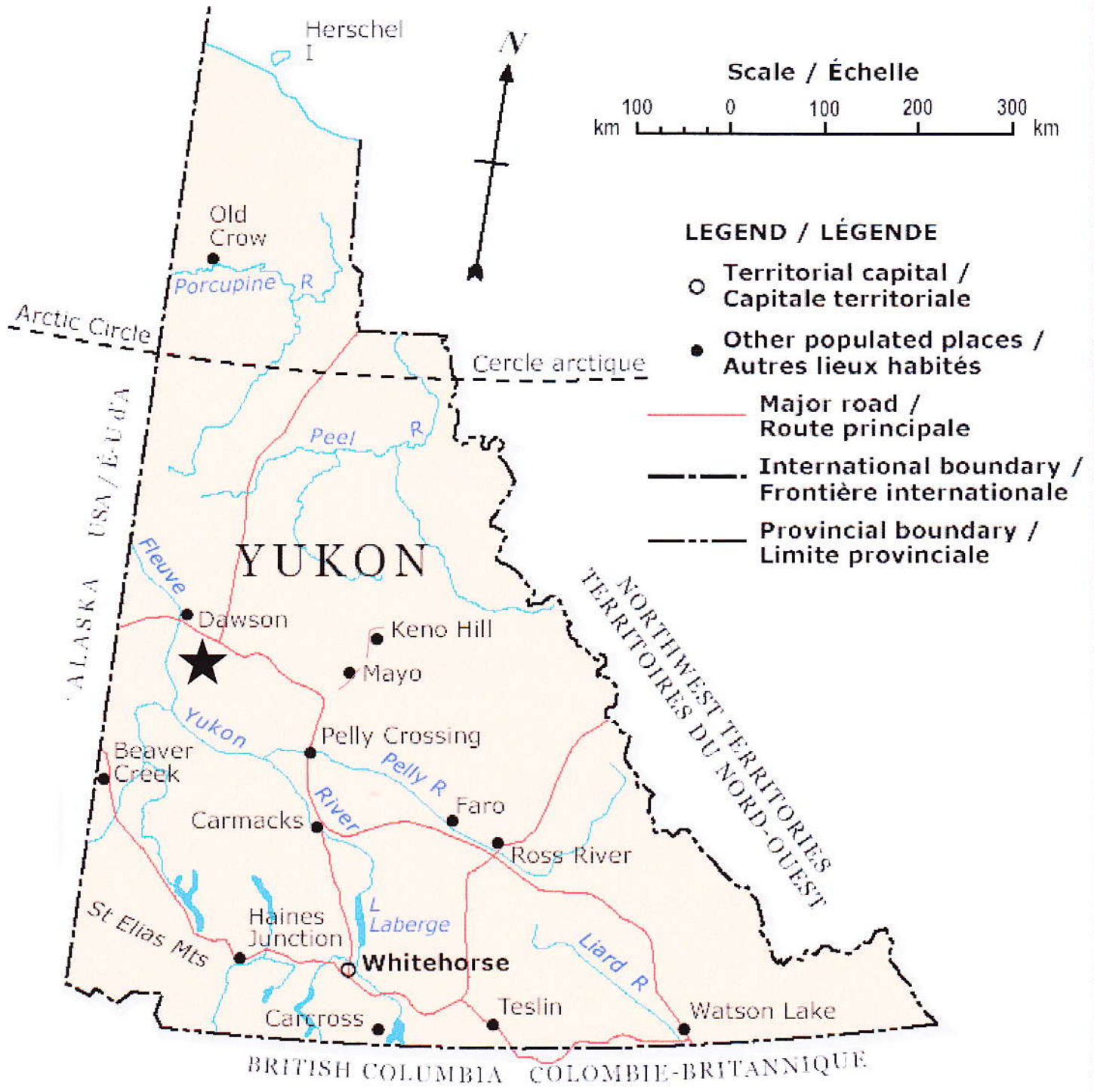
Vegetation consists of stunted spruce trees and brush on the right limit of the creek, with more mature stands of spruce and limited poplar along valley bottoms and the left limit of the creek. Recently mined or otherwise disturbed areas are generally covered by thick brush with smaller amounts of poplar, birch and limited spruce while dredge tailings have a generally sparse covering of small spruce, poplar, birch and brush.

Claims And Land Status – Active placer claims are ubiquitous throughout the project area, with staking dates for these claims ranging from the fall of 1973 to the present day. The project is within Trondek Hwechin traditional territory with no land claim blocks in the vicinity of the project area. The project consists of a 1-mile placer lease staked by the author on March 16th 2016 and recorded in the Dawson Mining Recorders office on the 24th of March 2016.

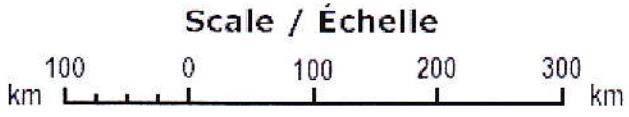
Target Description – Placer gold deposit within Sulphur Creek valley bottom gravels and potential low-

ARCTIC OCEAN
Océan Arctique

Beaufort Sea
Mer de Beaufort



LEGEND / LÉGENDE



- Territorial capital / Capitale territoriale
- Other populated places / Autres lieux habités
- Major road / Route principale
- - - International boundary / Frontière internationale
- · - · - Provincial boundary / Limite provinciale

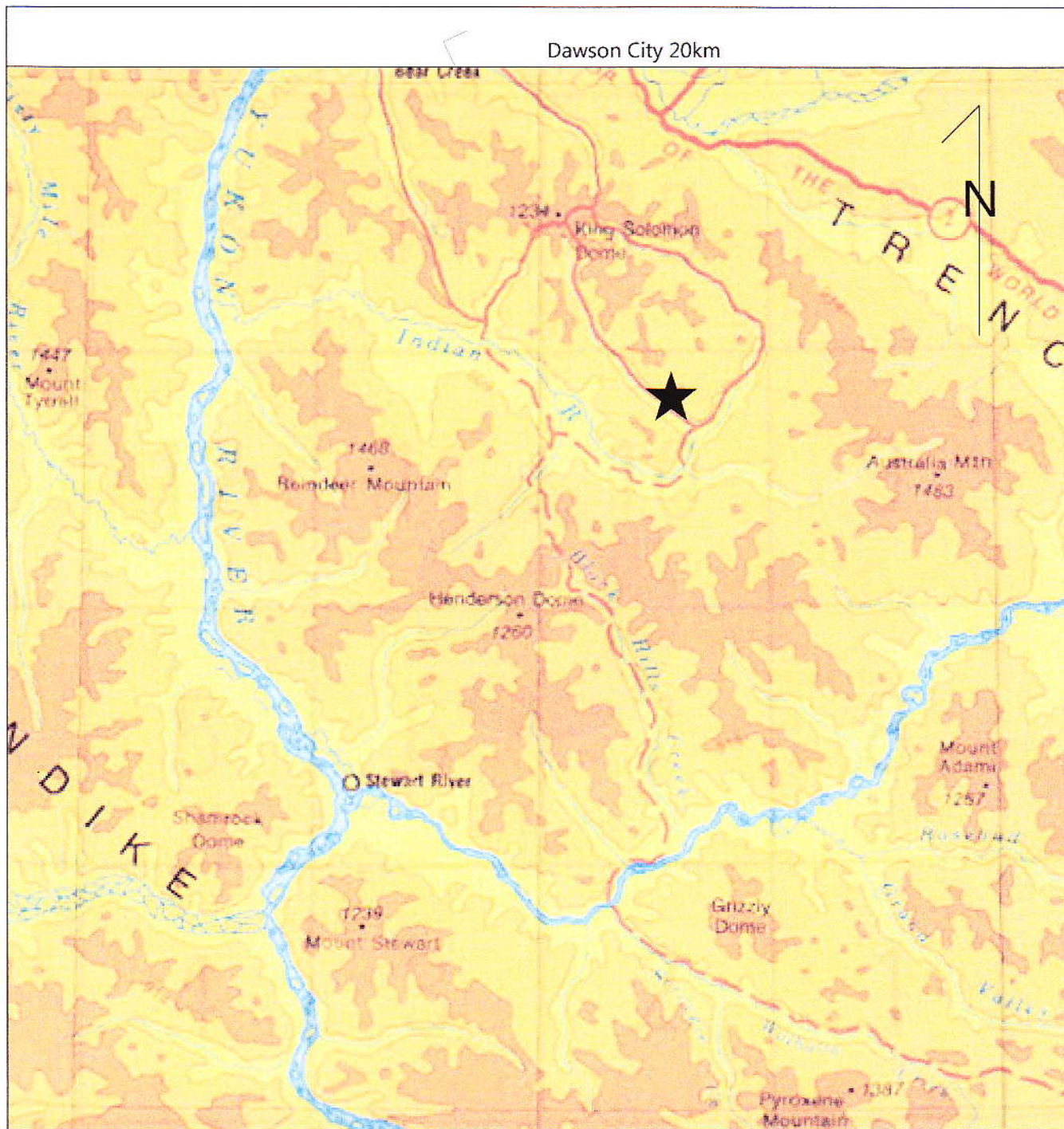
Sulphur Creek Project ★

To Accompany: 2016 Sulphur Final

December 6th, 2016

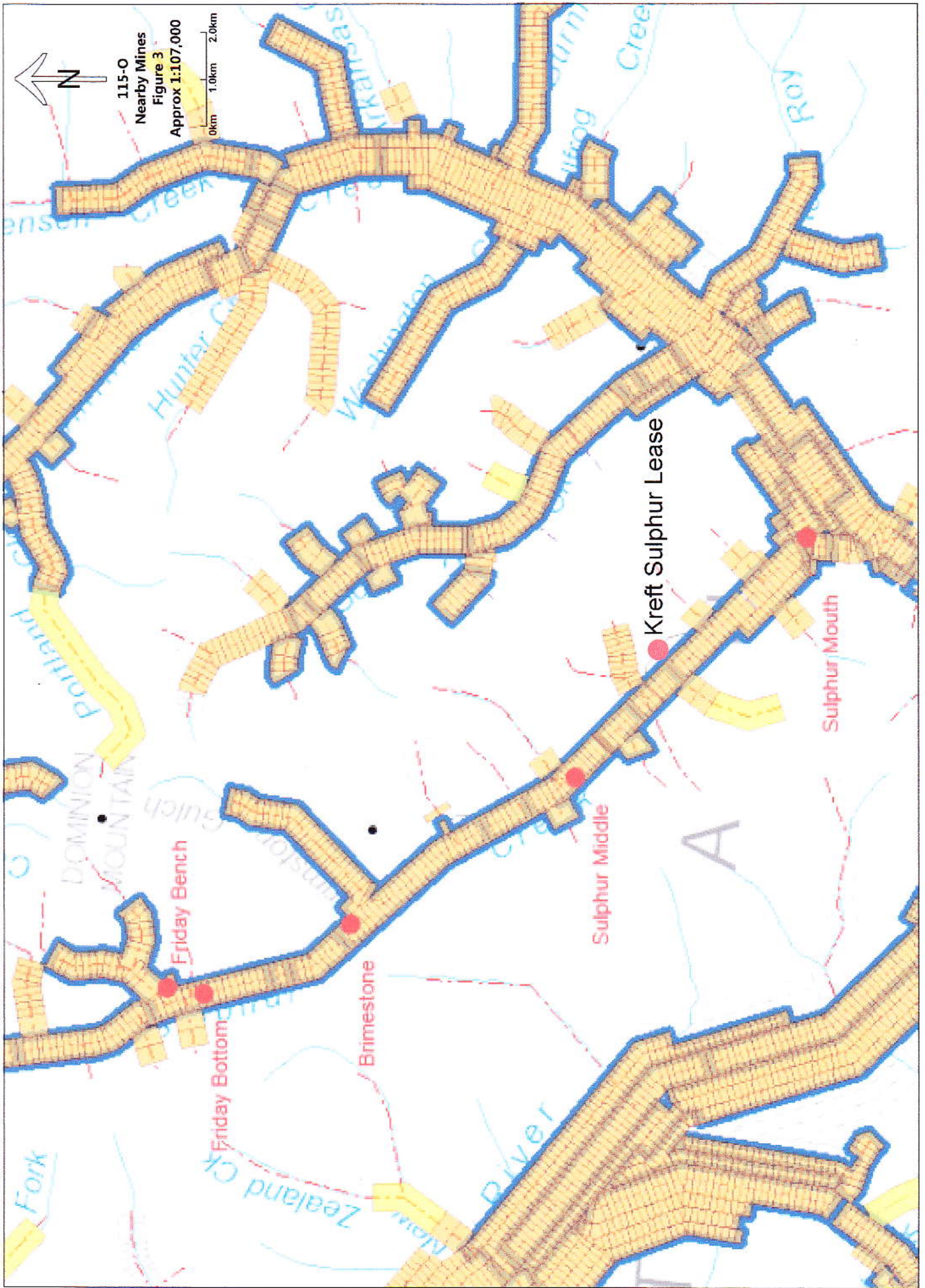
By: Jarret Kreft

Figure 1



Regional Map - Sulphur Project ★
 Fig.2

Scale approx. 1:600,000



lying benches, both adjacent to historic dredge tailings. Placer gold was discovered on Sulphur Creek in August of 1897 after which a stampede ensued and the creek was rapidly staked from the mouth to the headwaters. The creek has been mined nearly continuously since discovery and has been host to two dredges, numerous mechanized operations starting in the early 1960's and a host of small-scale hand miners. Gold production during the period 1978-2013 totals 132,673.3 raw ozs of gold, with Sulphur Creek easily placing within the top ten gold producers in the entire Yukon during that period.

Peculiar to other significant producers within the Klondike is the lack of pronounced benches or high level gravels along the creek. On Sulphur the valley bottom flats are bound by a gently rising slope, with a total elevation rise of approximately 15 metres, extending to the base of the hills bordering the creek. This feature is particularly prominent on the left limit of the creek, with gold rush era shafting showing that the slope is composed of a thick accumulation of muck, underlain by gravels and bedrock at roughly the same level as the valley bottom, but which may also be hiding low lying gravel covered bedrock benches.

Bedrock geology underlying the subject lease consists of Sulphur Creek orthogneiss with rafts of quartz chlorite (Klondike) schist. Based on mineral exploration experiences, the author is of the opinion that a fault or faults roughly follow Sulphur Creek valley bottom from the mouth nearly to the headwaters. This theory is borne out by the presence of numerous, extensive, nearly valley parallel, gouge zones found in various placer mine cuts located along the creek. Sampling of these zones has returned highly anomalous arsenic values along with occasional gold values in the sub 1.0 g/t range.

The project is located on Sulphur Creek within the immediate vicinity of several active or recently active placer gold mines, brief descriptions of which are provided below. These descriptions are thought to provide a guide towards the target style and deposit characteristics that can be expected on the Sulphur lease which is the subject of this application.

Friday Gulch Bench: Work by TD Oilfield Services on a low lying left limit gravel covered bedrock bench of Sulphur Creek encountered 2 to 5 metres of loess, black muck and organics overlying up to 2 metres of rusty orange-brown crudely stratified gravel with numerous rounded quartz cobbles.

Friday Gulch Valley Bottom: Work by TD Oilfield Services in the Sulphur Creek valley bottom encountered up to 3.65 metres of sand, loess and organics overlying up to 1.15 metres of slightly imbricated gravel comprised of sub-angular schist and rounded quartz cobbles.

Brimestone: Work by Lucky Lady Placers occurred in the Sulphur Creek valley bottom and on a low lying left limit bench adjacent to dredge tailings. Deposit profile consists of a 3 to 7.1 metre thick layer of black muck, sand, loess and organics overlying 1 to 3.6 metres of variably oxidized pebble-cobble gravel consisting of sub-rounded schist and gneiss and rounded quartz cobbles. Deposit depth increased towards the valley margins. Variably sized bright coloured gold with a purity of 810 was recovered.

Sulphur Creek Middle: Henry Kruger mined on the right limit of Sulphur Creek adjacent to dredge tailings. The deposit profile at this site consisted of about 5 metres of muck and organics overlying 5-6 metres of gravel. Fine-grained bright yellow gold with a purity of 790-820 was recovered.

Sulphur Creek Mouth: Tatra Ventures mined a large cut adjacent to dredge tailings with their target consisting of un-mined valley bottom gravels and low lying left limit benches. Total depth to bedrock is from 8 to 12 metres and consists of 1.5 to 4.9 metres of muck, sand and loess overlying 4.9 to 7.6 metres of imbricated, variably oxidized, and poorly stratified rounded to sub-rounded quartz clast rich pebble to boulder gravel. Fine-grained gold with a purity of 840 was recovered.

Current Work And Results – Work during 2016 consisted of 2-days of prospecting designed to locate claim boundaries, define potential auger drill sites, check for gravel exposures along the edge of the old dredge cut and locate and flag out access points for the auger drill. This work was followed by 5 days of auger drilling (8 holes total) sample processing and subsequent reclamation which included the removal of all garbage generated, as well as the bucking and scattering of all vegetation damaged, over the course of the program. Samples were processed by hand panning while on site with the drill and at the completion of each day of drilling. Once the first day of auger drilling was completed and the presence of placer gold on the property was confirmed, one day was spent staking the subject lease into claims.

A total of 16 auger drill sites consisting of 4 lines of 4 holes oriented perpendicular to Sulphur Creek were partially de-bushed and marked with flagging. The edge of the old dredge cut was prospected and no gravel exposures were noted, while the presence of widespread near surface permafrost precluded using hand digging to expose gravels at the base of the old working face. Several roads extending from the Sulphur Creek road and running parallel along the edge of the old dredge cut were noted along with an old telegraph line. The road closest to the edge of the dredge cut was flagged and partially de-bushed to facilitate auger drill access.

Auger drilling was conducted by Henry Reinink and consisted of 8 holes of 6” auger totaling approximately 83.83 metres or 275 feet during the period July 8th to July 12th 2016. Significant problems were encountered when trying to get the driller to conform to the drill plan, these issues resulted in a reduction in the amount of drilling completed as well as significant changes to the location of the holes. Results of the drilling will be discussed on a hole by hole basis.

Hole #1 – This hole was located near the edge of the dredge cut and encountered 37 feet of frozen black muck overlying 4 feet of quartz cobble gravel on bedrock consisting of decomposed Sulphur Creek orthogneiss. Actual gravel thickness is likely a bit more than reported as the last section of drill stem with black muck contained numerous quartz cobbles and fragments which the author collected and panned and which yielded 1 speck of gold. All gravels were hand panned, yielding a total of 6 fine pieces of gold which weighed approximately 12 mg.

Hole #2 – This hole was designed as an approximate 165 foot step out from Hole #1 and encountered approximately 32 feet of frozen black muck before the hole was terminated by the driller due to swampy ground conditions causing the drill to sink.

Hole #3 – This hole was spotted approximately 550 feet north of Hole #1 near the edge of the dredge cut. It encountered 37 feet of frozen black muck overlying 5 feet of quartz cobble gravel on bedrock consisting of decomposed pyritic grey schist common to the Sulphur Creek valley bottom. Actual gravel thickness is likely a bit more than reported as the last section of drill stem with black muck contained numerous quartz cobbles and fragments which the author collected and panned and which yielded 2 specks of gold. All gravels were hand panned, yielding a total of 3 coarse pieces and 7 fine pieces of gold together weighing approximately 48 mg.

Hole #4 – This hole was designed as an approximate 165 foot step out from Hole #3 and encountered approximately 20 feet of frozen black muck to silty and mucky slide-rock before the hole was terminated by the driller due to thinking he had penetrated bedrock with no gravel encountered. It is the author’s opinion that the driller had failed to penetrate to bedrock, but the driller refused to continue the hole and it was abandoned.

Hole #5 – This hole was designed as an approximate 165 foot step out from Hole #4 and encountered approximately 35 feet of frozen black muck to silty and mucky slide-rock before the hole was terminated by

the driller due to thinking he had penetrated bedrock with no gravel encountered. It is the author's opinion that the driller had failed to penetrate to bedrock, but the driller refused to continue the hole and it was abandoned.

Hole #6 – This hole was spotted approximately 400 feet north of Hole #3 near the edge of the dredge cut. It encountered 29 feet of frozen black muck overlying 3 feet of quartz cobble gravel on bedrock consisting of weakly decomposed and weakly pyritic grey to green schist common to the Sulphur Creek valley bottom. Actual gravel thickness is likely 2 feet more than reported by the driller as the last section of drill stem with black muck contained abundant quartz cobbles and fragments which the author collected and panned and which yielded 1 speck of gold. All gravels were hand panned, yielding a total of 1 coarse piece and 2 fine pieces of gold, together weighing approximately 12 mg.

Hole #7 – This hole was spotted approximately 225 feet north of Hole #6 near the edge of the dredge cut. It encountered 21 feet of frozen black muck overlying 3.5 feet of quartz cobble gravel on bedrock consisting of weakly decomposed Sulphur Creek orthogneiss. Actual gravel thickness is certainly a bit more than reported by the driller as the last section of drill stem with black muck contained numerous quartz cobbles and fragments which the author collected and panned and which yielded 1 speck of gold. All gravels were hand panned, yielding a total of 2 coarse pieces and 3 fine pieces of gold together weighing approximately 22 mg.

Hole #8 – This hole was spotted close to the left limit Sulphur Creek valley wall occurring as a steep outcrop of limonitic brown schist. It encountered 21 feet of mud and silt overlying 3.5 feet of quartz rich gravel on limonitic brown schist bedrock. All gravels were panned and no gold was encountered.

Conclusions – Interesting amounts of placer gold was encountered over a strike length of 1150 feet as defined by Hole numbers 1-3-6-7, all of which were adjacent to the edge of the old dredge cut. The depth to bedrock decreases in an upstream direction, from 42 feet in Hole #3 to 24.5 feet in Hole #7. This decreased depth to bedrock is positive from a developmental standpoint as the stripping ratio decreases and the depths are almost shallow enough to allow for an excavator pit to bedrock and subsequent bulk-sampling. Due to problems with the driller only Hole #8 provided a test of the potential for a left limit bench or terrace with the other holes ending well short of bedrock. Hole #8 encountered quartz rich gravels on bedrock but no gold was recovered. Further work will be required to fully define the placer gold potential of the subject claims, particularly their potential to host gold on low-lying benches.

Recommendations – Further work is recommended. The initial phase should consist of an auger drilling campaign with holes spaced every 100 metres or 330 feet along the edge of the old dredge workings both upstream and downstream of the 2016 drill area. Should results of this work be sufficiently encouraging a second tier of holes at the same 100 metre spacing and paralleling the first tier but approximately 50 metres or 165 feet away should be contemplated. An excavator trenching program could also be contemplated with potential trench sites including the base of the dredge working face close to hole Y01 and Y03 as well as areas indicated to be shallow enough by the proposed auger drilling campaign.

Reclamation And Permitting – Prior to commencing the exploration work detailed herein, placer land use permit LP01118 was applied for and received. This permit allows for all exploration work conducted during the course of the program. Conditions and guidelines attached to the permit were followed and all reclamation required due to the activities detailed in this report has been completed.

Statement Of Qualifications

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

I have over 30 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 2016 field season.

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

Respectfully Submitted,



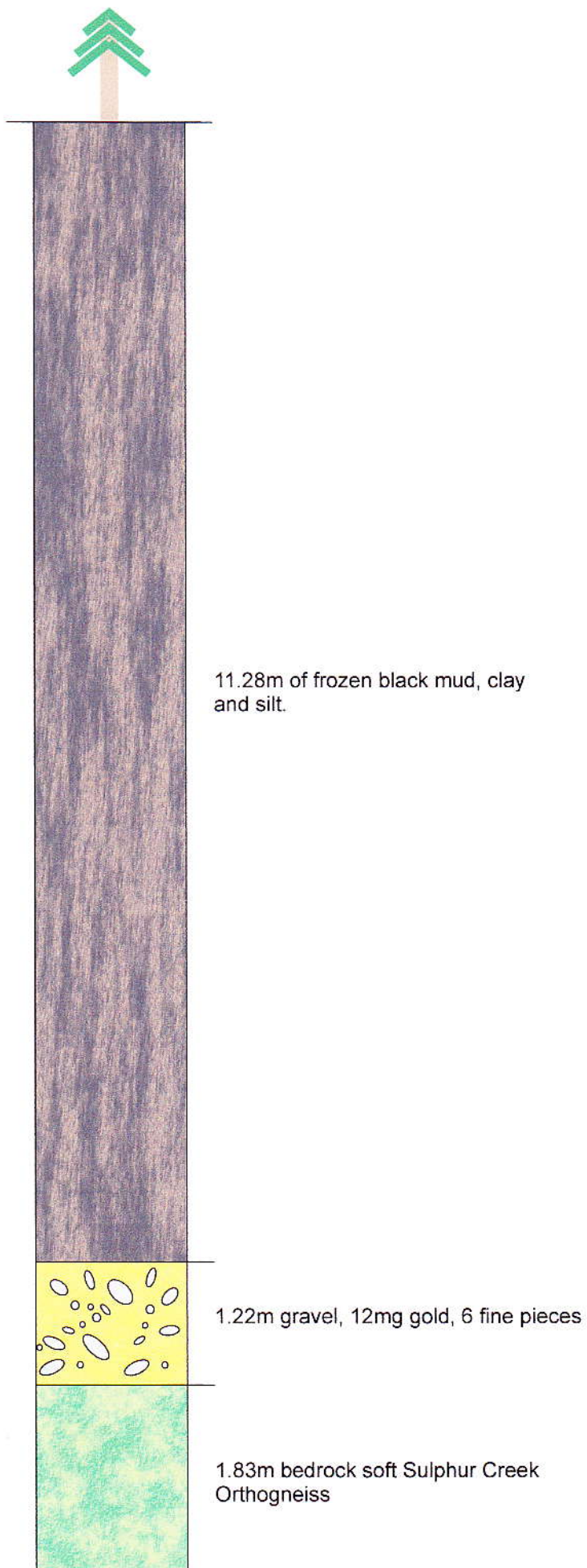
Bernie Kreft

Project Costs

Wages Prospecting 2 people x 2 days (Bernie and Justin Kreft)	= ✓ \$1,300.00 ✓
Wages drilling, reclamation and sample panning 2 people x 5 days (as above)	= ✓ \$3,250.00 ✓
Wages claim staking 2 people x 1 day (Jarret Kreft and Kyle Eide)	= ✓ \$600.00 ✓
Food and camp 16 man days x \$100/day	= ✓ \$1,600.00 ✓
Whitehorse-Dawson 2 round trips (2048 km x \$0.60/km)	= \$1,228.80 ✓
Daily round trips to property 7 x 138km x \$0.60/km	= \$579.60 ✓
Trucking drill to and from staging area in Dawson	= \$950.00 ✓
Auger drill charges 275 feet each x \$16/foot	= \$4,982.25 ✓
Report writing	= <u>\$2,000.00</u> ✓
Total	= \$16,490.65

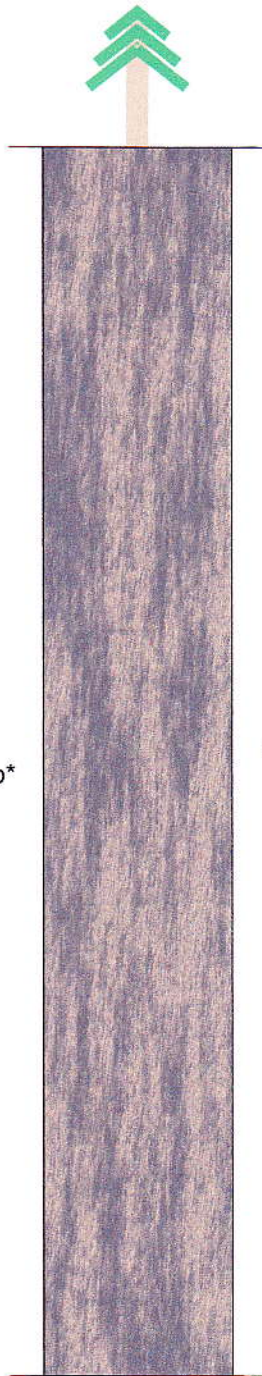
Drill Hole #1
Y01
East: 612483
North: 7063849
NAD 83, Zone 7
115-O-10h
Scale: 1:60 or 1cm = 0.6m

****Width not to Scale****



Drill Hole #2
Y02
East: 612521
North: 7063877
NAD 83, Zone 7
115-O-10h
Scale: 1:60 or 1cm = 0.6m

****Width not to Scale****

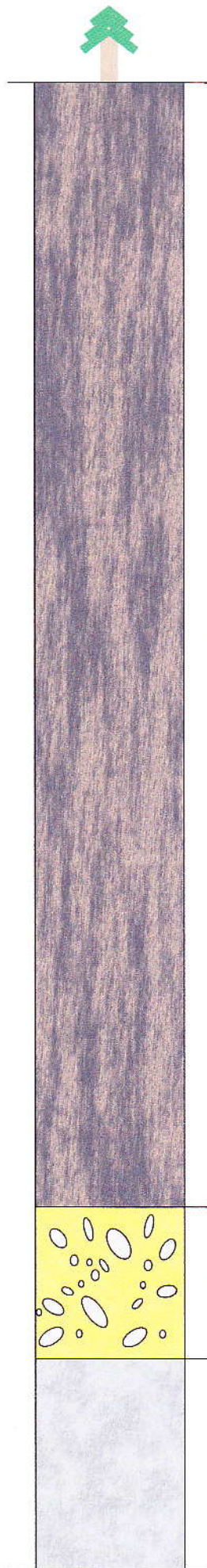


9.75m total depth
auger hole incomplete, sinking in swamp

9.75m black mud, clay and silt.

Drill Hole #3
Y03
East: 612365
North: 7063963
NAD 83, Zone 7
115-O-10h
Scale: 1:60 or 1cm = 0.6m

****Width not to Scale****



11.28m black mud, clay and silt.

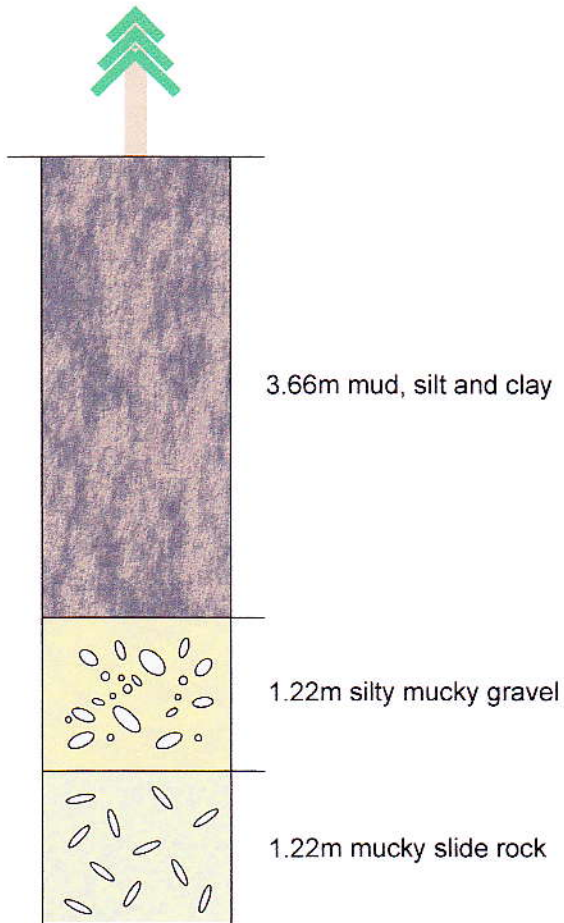
1.52m gravel, 48mg Au, 3 coarse and 7 fine pieces

1.83m grey schist bedrock

Drill Hole #4
Y04
East: 612397
North: 7064015
NAD 83, Zone 7
115-O-10h
Scale: 1:60 or 1cm = 0.6m

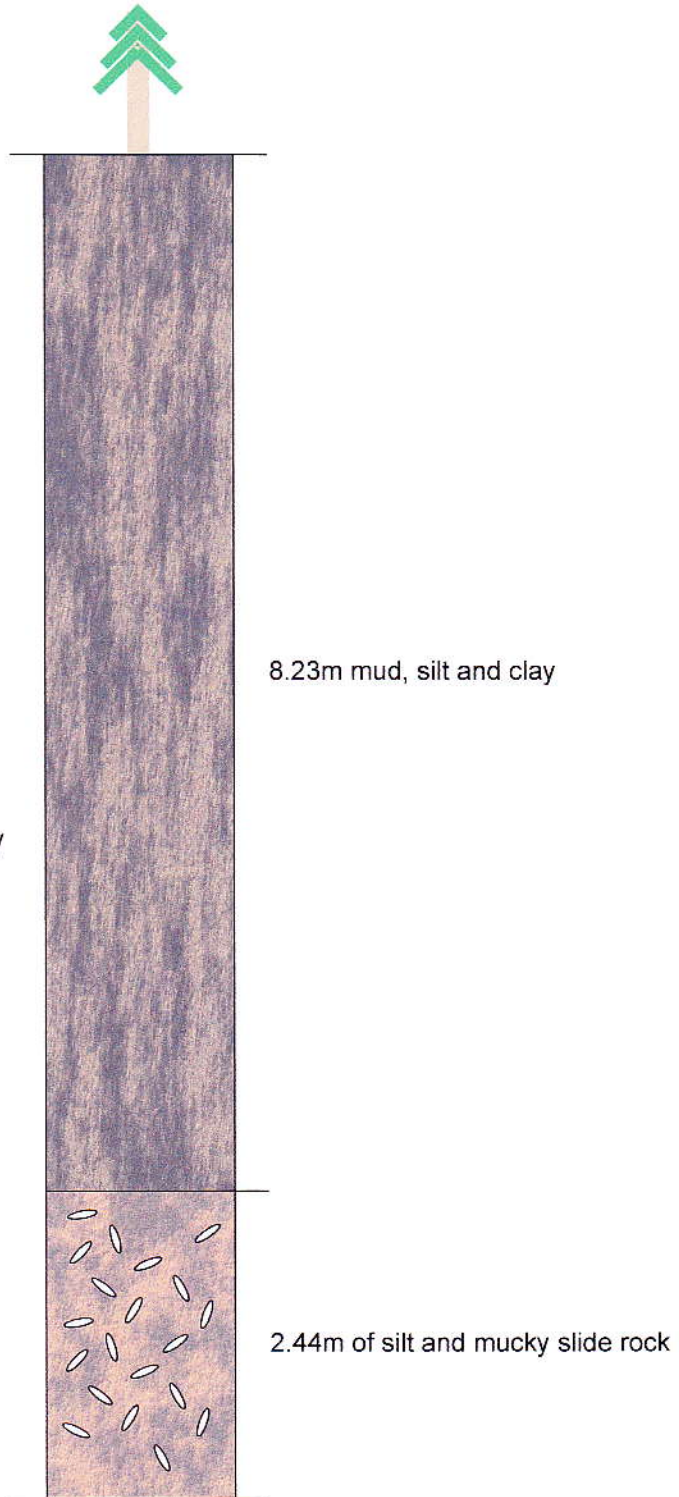
****Width not to Scale****

6.1m total depth
*hole stopped prematurely before
bedrock encountered by driller*



Drill Hole #5
Y05
East: 612424
North: 7064040
NAD 83, Zone 7
115-O-10h
Scale: 1:60 or 1cm = 0.6m

****Width not to Scale****



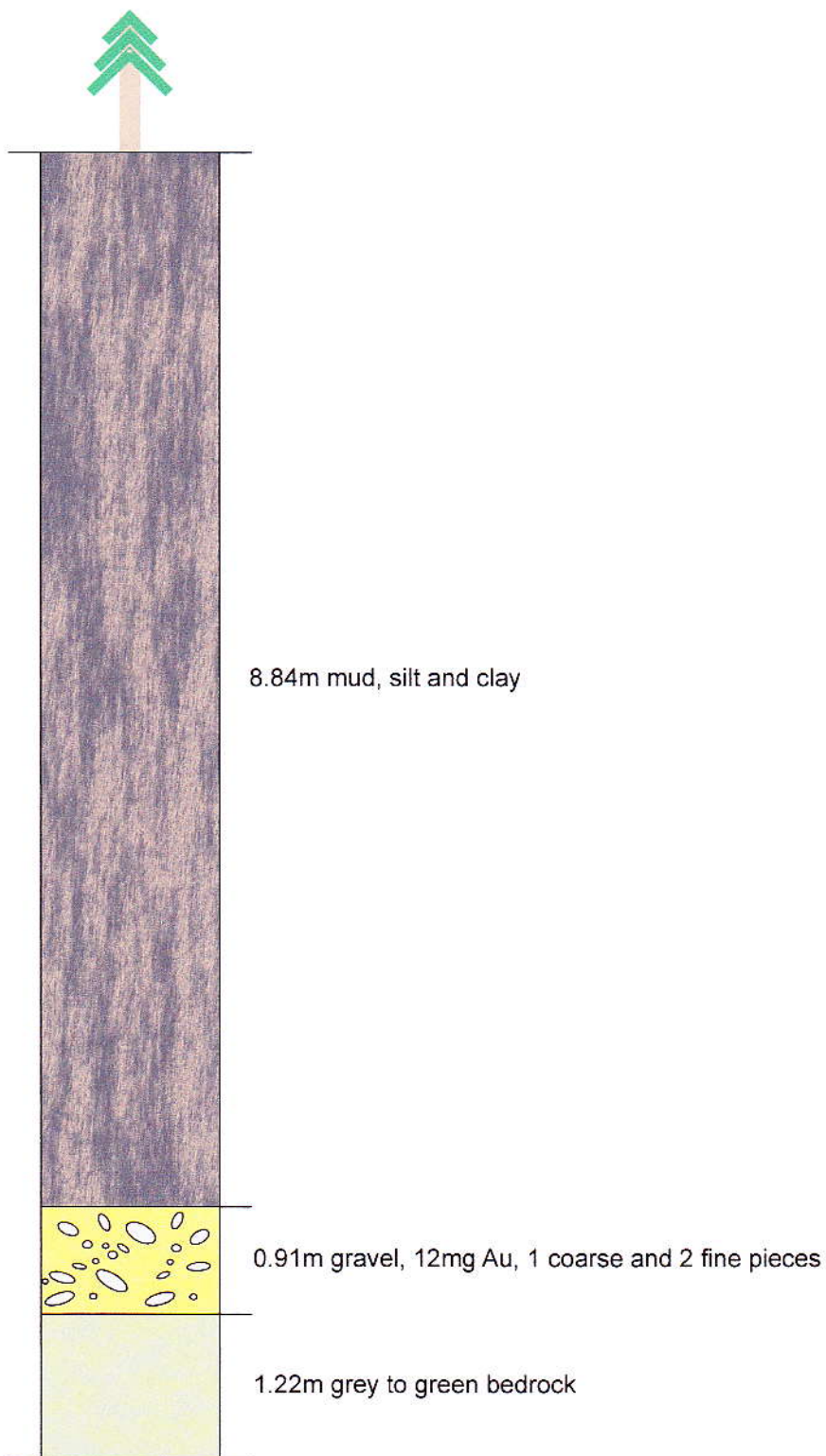
8.23m mud, silt and clay

10.67m total depth
*hole stopped prematurely
by the driller*

2.44m of silt and mucky slide rock

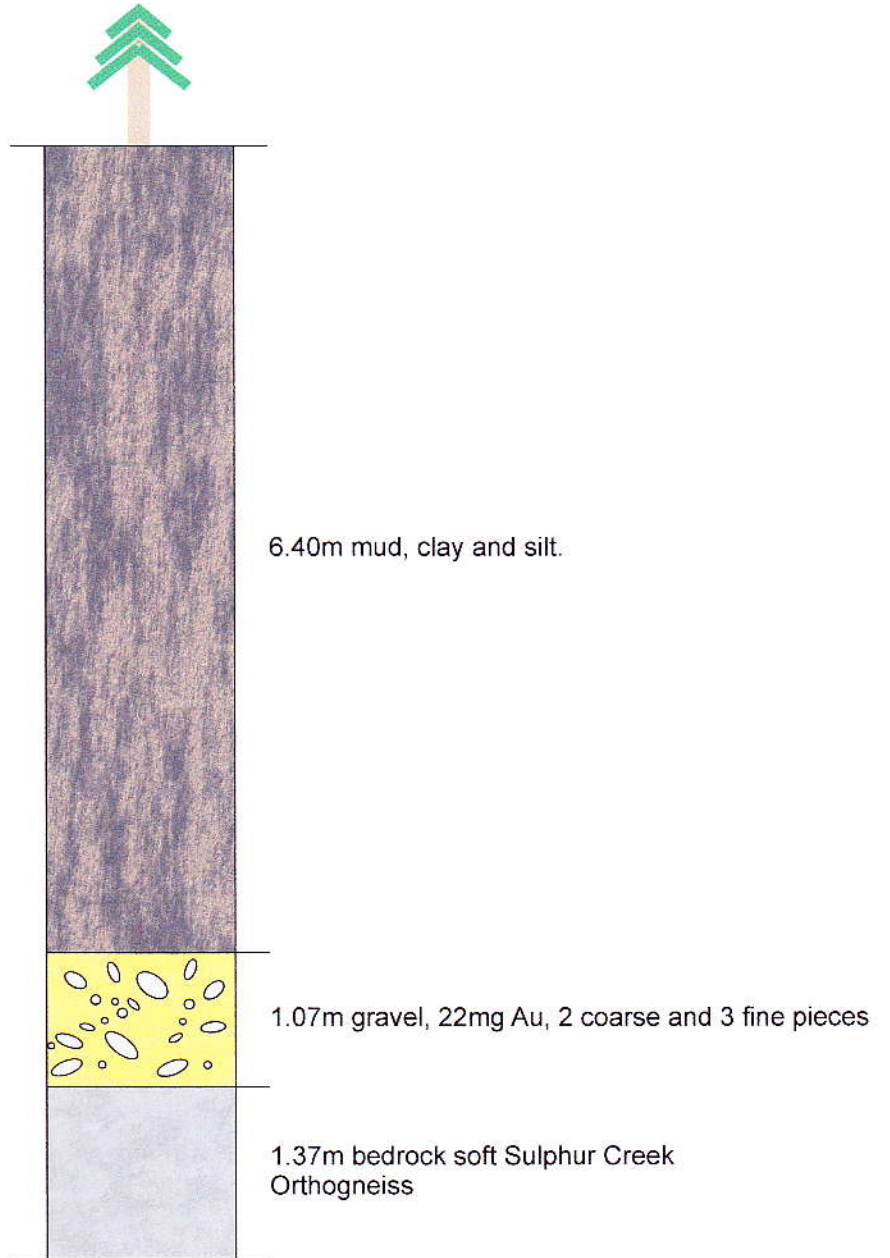
Drill Hole #6
Y06
East: 612266
North: 7064047
NAD 83, Zone 7
115-O-10h
Scale: 1:60 or 1cm = 0.6m

****Width not to Scale****



Drill Hole #7
Y07
East: 612206
North: 7064081
NAD 83, Zone 7
115-O-10h
Scale: 1:60 or 1cm = 0.6m

****Width not to Scale****



Drill Hole #8
Y08
East: 612910
North: 7063550
NAD 83, Zone 7
115-O-10h
Scale: 1:60 or 1cm = 0.6m

****Width not to Scale****

