YUKON MINERAL EXPLORATION PROGRAM (YMEP)

FINAL REPORT

TARGET EVALUATION PROGRAM ON GOODMAN CREEK

YMEP Number: 14-087

Claims Steph 1-14 (P 16741 – P16757)
Bryon 1-9 (P 16540-P 16546, P 48151-P 48152)

NTS 115 P 16

Latitude 63°55' N
Longitude 136° 12'W

Mayo Mining District

Prepared By:

Gimlex Enterprises Ltd.
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James S. Christie, Ph.D.
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January 30, 2015

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1.0 SUMMARY OF EXPLORATION WORK COMPLETED IN 2014

The Goodman / Gimlex YMEP exploration work was carried out in September 2014 and included 28 - 8 inch and 14 - 6 inch auger drill holes (some as deep as 62 feet) with a total of 1545 feet (471 m) drilled, and 39 test pits about 10 feet deep dug with a PC60 excavator. All appropriate materials were sampled and processed through a Long Tom to recover heavy minerals from which gold was separated and weighed. Auger drilling was not entirely satisfactory as very hard un-drillable boulders were encountered in most holes and only 9 of 42 holes reached bedrock. Information from these drill holes was sufficient to form a preliminary interpretation of the stratigraphy and glacial history at Goodman.

Low grade placer gold was found to be common and widespread. One hole (M-6) intersected high grade nugget gold demonstrating that economic grades are possible on lower Goodman. A more robust deeper drilling and sampling technique will be required to fully evaluate lower Goodman.

Drilling on middle Goodman was less successful because the boulders were more prevalent there. This part of the creek is in a narrow well defined valley which was probably a meltwater channel and could also have a buried pre-Reid paloechannel. It could potentially be explored with a large excavator but a more robust drill would be a better tool.

Test pit results have demonstrated the occurrence of gold bearing boulder cobble outwash gravel near surface over a significant area south and west of lower Goodman. Sample results were marginal to sub-economic and as these gravels are thawed boulder gravel they are not amenable to testing with an auger drill. Testing these gravels with a large excavator would be a good next step. The physical setting is such that low cost bulk mining might be possible if grade and gold price are right.

A follow up program is recommended to further evaluate Goodman and to understand the glacial history of the creek.

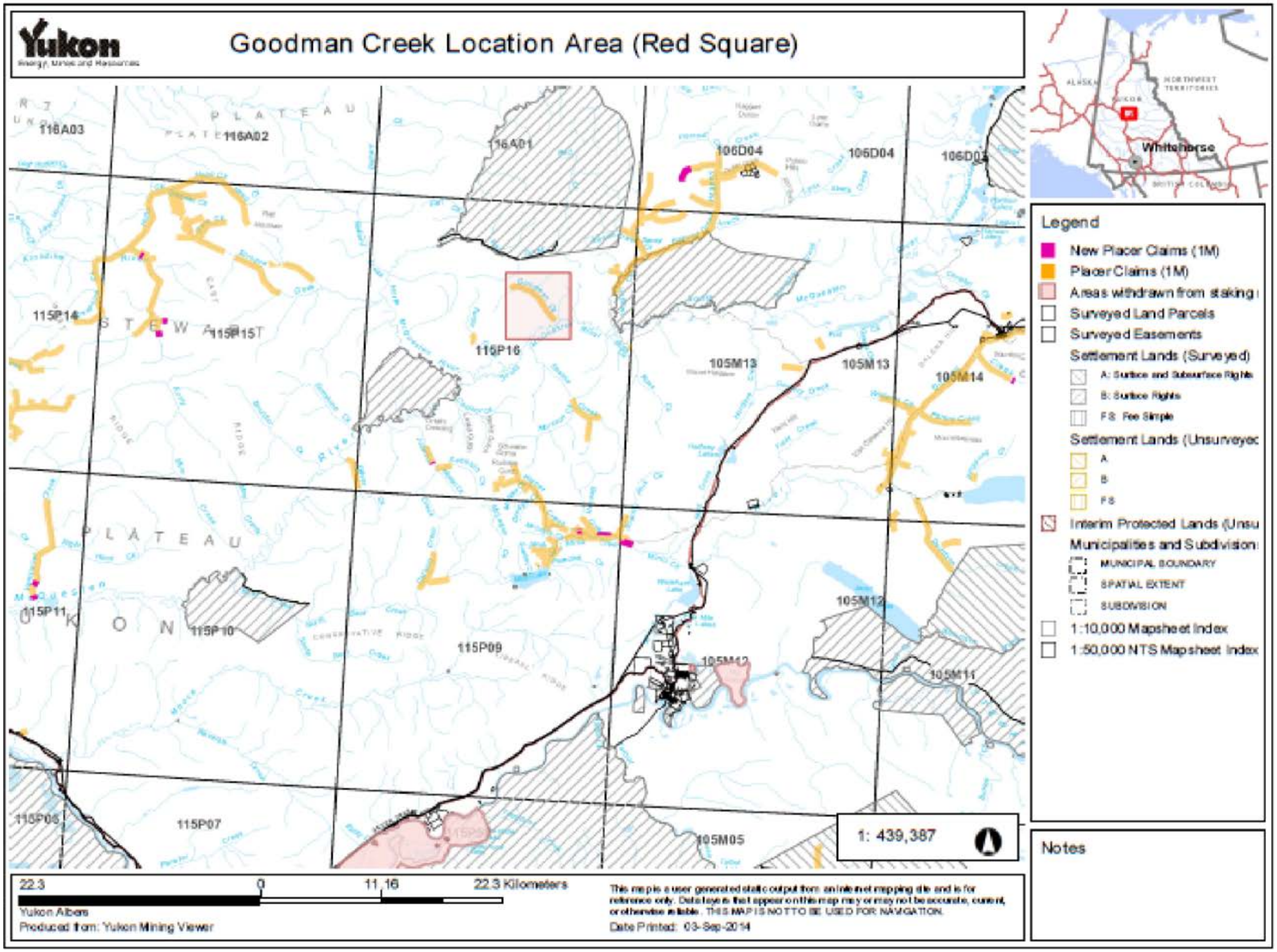
2.0 LOCATION – ACCESS

The claims are located in Mayo Mining District on Goodman Creek (Figure 1) accessible by a 1.5 hour drive from Mayo by the Silver Trail Highway north of Mayo (to km 86.5), travel the South McQuesten Road (25.5 km of government maintained gravel road) and then a further 6 km of secondary gravel road into the property. The detailed location map (Figure 2) is also shows the other nearby creeks with known placer resources (shown in yellow.

Figure 1. Property Location Map

Figure 2: Detailed location map, showing other placer creeks in yellow and First Nation settlement land.

Goodman Creek Location Area (Red Square)



Produced from: Yukon Mining Viewer

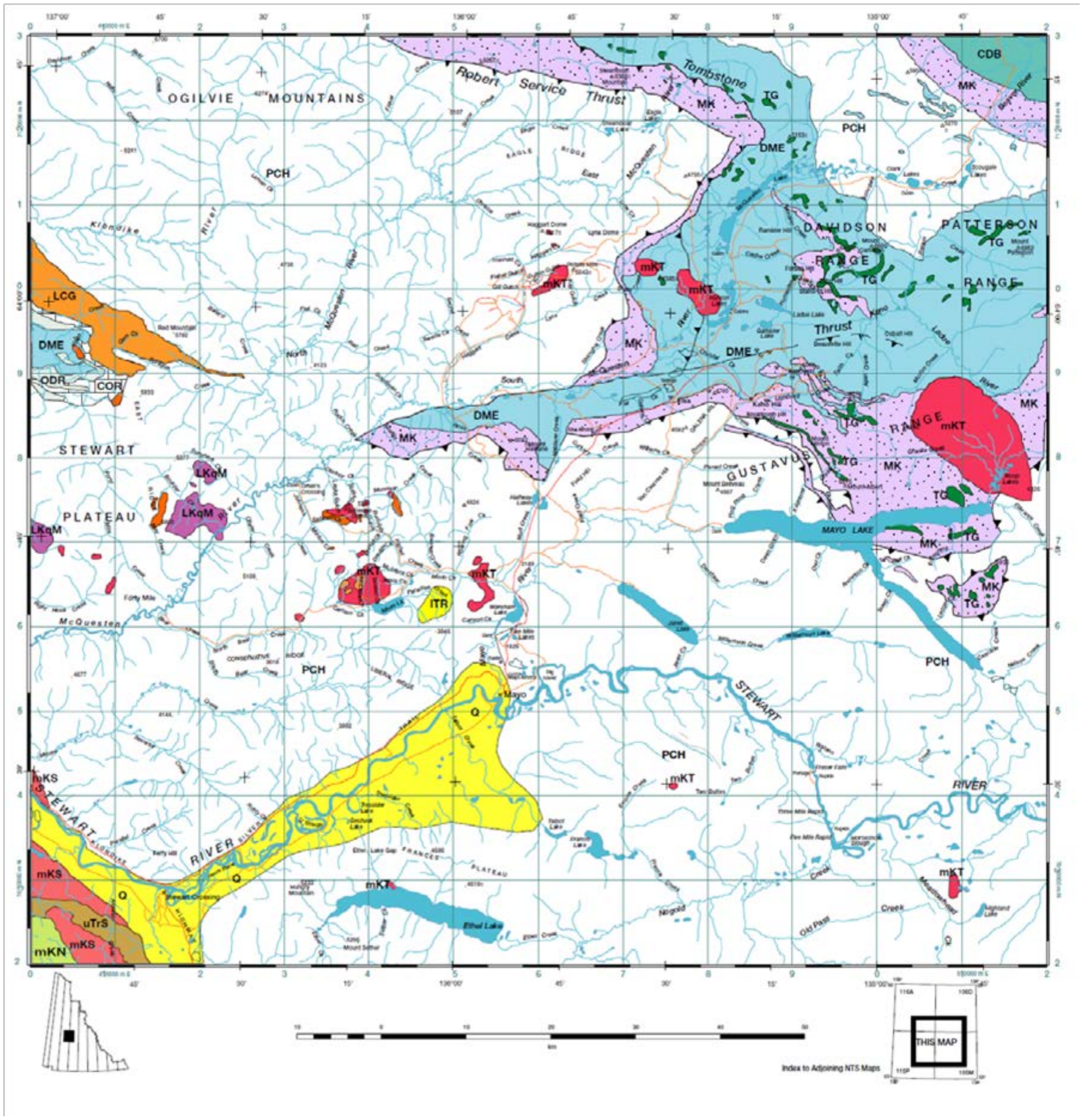
This map is a user generated static output from an internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

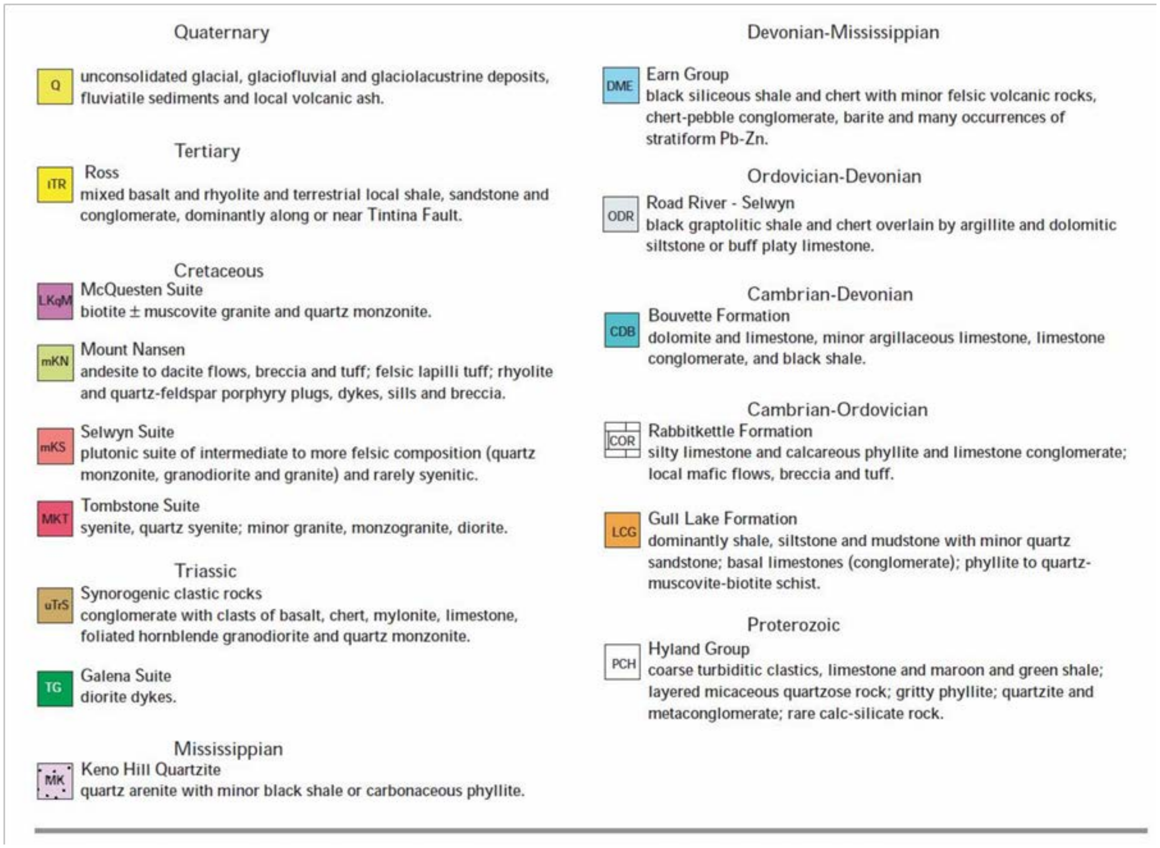
Date Printed: 03-Sep-2014

3.0 GEOLOGY - PHYSIOGRAPHY

The bedrock geology of the Mayo area is shown in the generalized geology map in Figure 3.

Figure 3: Generalized Geology map of Mayo area, *from LeBarge et al., 2002 after Roots and Murphy 2002; legend on next page.)*





Quaternary

Q unconsolidated glacial, glaciofluvial and glaciolacustrine deposits, fluviatile sediments and local volcanic ash.

Tertiary

tTR Ross
mixed basalt and rhyolite and terrestrial local shale, sandstone and conglomerate, dominantly along or near Tintina Fault.

Cretaceous

LKqM McQuesten Suite
biotite ± muscovite granite and quartz monzonite.

mKN Mount Nansen
andesite to dacite flows, breccia and tuff; felsic lapilli tuff; rhyolite and quartz-feldspar porphyry plugs, dykes, sills and breccia.

mKS Selwyn Suite
plutonic suite of intermediate to more felsic composition (quartz monzonite, granodiorite and granite) and rarely syenitic.

MKT Tombstone Suite
syenite, quartz syenite; minor granite, monzogranite, diorite.

Triassic

uTrS Synorogenic clastic rocks
conglomerate with clasts of basalt, chert, mylonite, limestone, foliated hornblende granodiorite and quartz monzonite.

TG Galena Suite
diorite dykes.

Mississippian

MK Keno Hill Quartzite
quartz arenite with minor black shale or carbonaceous phyllite.

Devonian-Mississippian

DME Earn Group
black siliceous shale and chert with minor felsic volcanic rocks, chert-pebble conglomerate, barite and many occurrences of stratiform Pb-Zn.

Ordovician-Devonian

ODR Road River - Selwyn
black graptolitic shale and chert overlain by argillite and dolomitic siltstone or buff platy limestone.

Cambrian-Devonian

CDB Bouvette Formation
dolomite and limestone, minor argillaceous limestone, limestone conglomerate, and black shale.

Cambrian-Ordovician

COR Rabbitkettle Formation
silty limestone and calcareous phyllite and limestone conglomerate; local mafic flows, breccia and tuff.

LCG Gull Lake Formation
dominantly shale, siltstone and mudstone with minor quartz sandstone; basal limestones (conglomerate); phyllite to quartz-muscovite-biotite schist.

Proterozoic

PCH Hyland Group
coarse turbiditic clastics, limestone and maroon and green shale; layered micaceous quartzose rock; gritty phyllite; quartzite and metaconglomerate; rare calc-silicate rock.

Bedrock geology in Goodman Creek is mapped as upper Proterozoic to lower Cambrian Hyland Group metasediments. Outcrops exposed along the road and bench west of lower Goodman and in test pits are mica semi schist and schistose quartzite. Rocks seen in the drill holes which reached bedrock are similar and also included impure chloritic schist and chips of vein quartz material.

Boulders found in Goodman Creek vary in composition and include a high proportion of hard siliceous rocks with strong quartz and carbonate veining. The veined rock float may have a source in Goodman drainage or it could be entirely from the till.

Known hard rock mineral deposits nearby Goodman Creek include, Scheelite Dome (gold-tungsten at the headwaters of Highet Creek) to the south, Dublin Gulch (Victoria Gold) and the Keno –Galena Hill area (more than 65 known mineral deposits) further west.

Placer deposits in the Mayo area are highly influenced by the glacial history of the area and are best described by LeBarge et.al 2002, as:

> *“occur(ing) in a wide variety of geomorphic settings, including alluvial fans, gulch gravel, valley-bottoms (alluvial plains), and bedrock terraces (bench*

gravel), which have been variably buried and reworked by glaciofluvial processes. Placer gold also occurs in glacial till and glaciofluvial gravel, especially where these sediment types have intersected pre-existing placer deposits, resulting in the reconcentration of gold in a zone close to bedrock.

The Yukon has been subjected to several major episodes of glaciation, which are generally referred to as the pre-Reid (oldest), the Reid (intermediate), and the McConnell (youngest) glaciations. (Figure 3a). The pre-Reid glaciation consisted of multiple episodes, the earliest being at least 2.58 Ma. Although the Mayo area was heavily glaciated during the pre-Reid episodes, limited surficial deposits remain, and evidence mainly consists of erosional features and erratics at higher elevations. The subsequent Reid (approximately 300 000 years ago) and the McConnell (approximately 20 000 years ago) glaciations reworked and buried pre-existing glacial drift and alluvium, and left extensive surficial deposits. (Figure 3b)

While the timing of the interglacial prior to the Reid is uncertain, the Koy-Yukon interglacial prior to the McConnell glaciation lasted approximately 170 000 years. The modern (Holocene) interglacial began approximately 11 000 years ago. These three interglacials have been the main placer forming periods in the Mayo area.

The complex stratigraphy of placer deposits in the Mayo area reflects its glacial and periglacial history. Within the glacial limit, placer deposits are best preserved near the maximum limit or terminus, where the scouring of pre-existing sediment was minimal and depositional processes were dominant. Beyond the glacial limit, periglacial climatic conditions resulted in increased slope and alluvial sedimentation that buried and reworked paleoplacers."

Figure 3a: Extent of Pleistocene Glaciations and placer mining areas in Yukon, from LeBarge, et. al. 2002 after Duk-Rodkin, 1998.

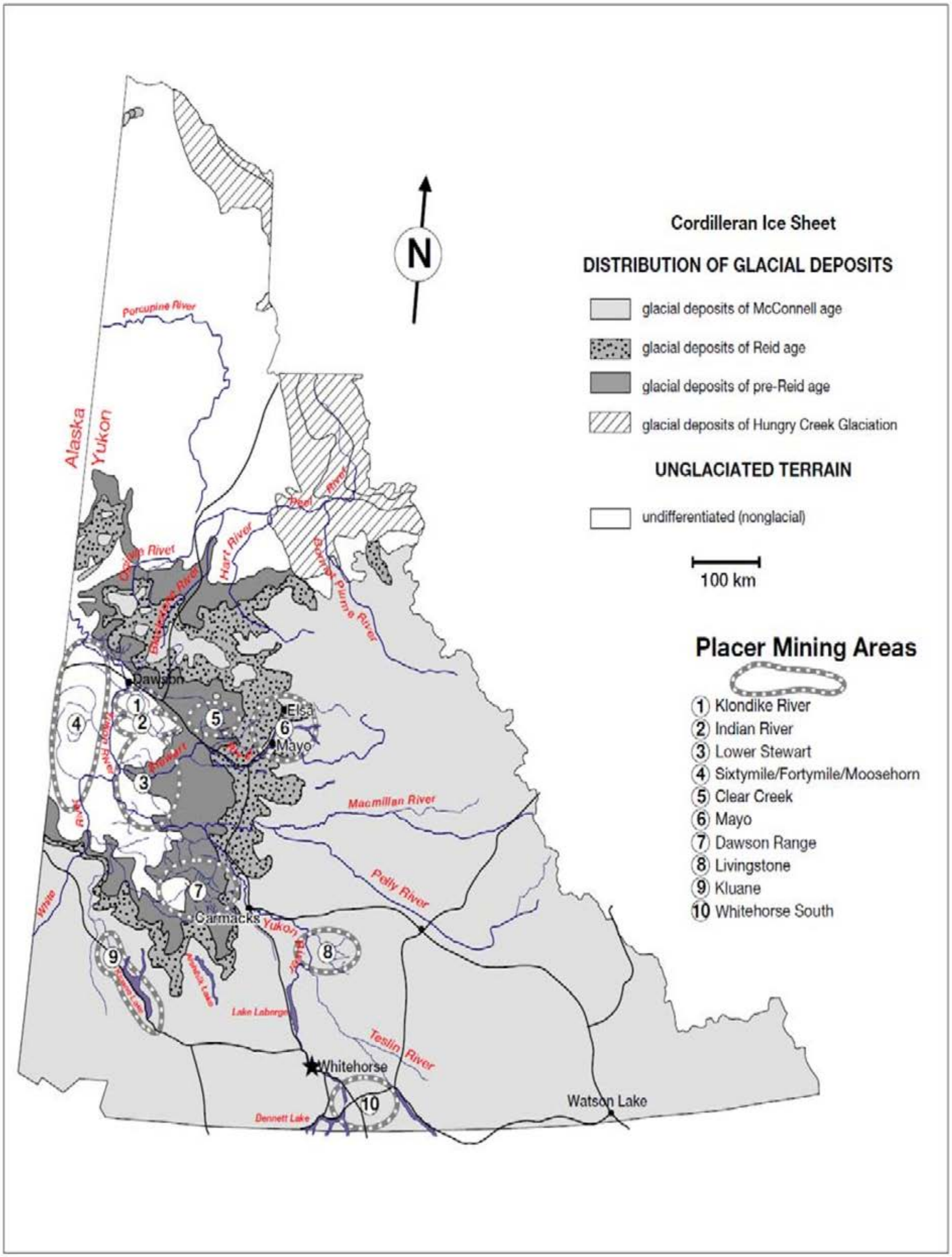
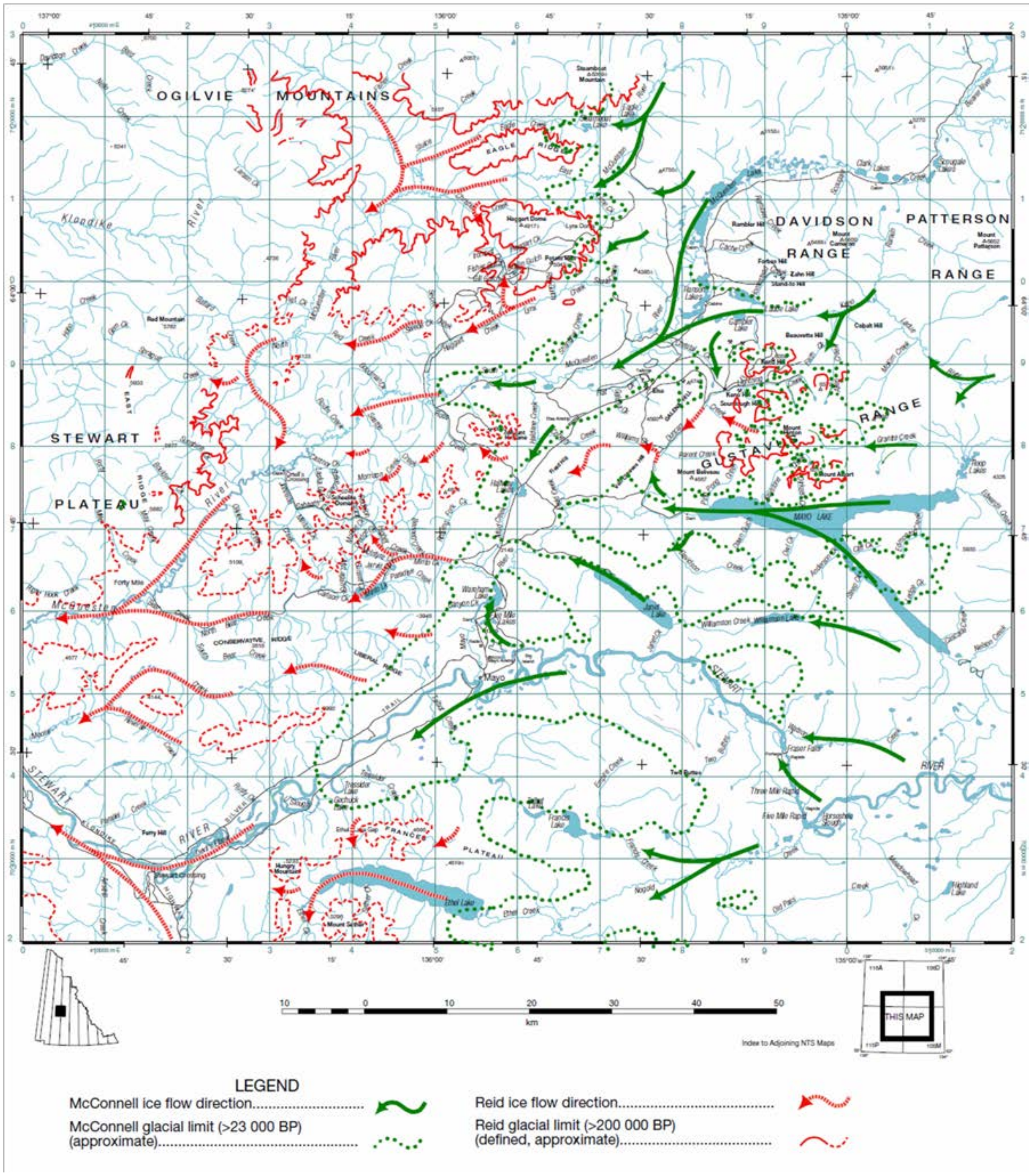


Figure 1. Extent of Pleistocene glaciations and placer gold mining areas in Yukon (modified after Duk-Rodkin, 1998).

Figure 3b: Glacial limits and ice flow patterns, Mayo area, from LeBarge, et.al, 2002, after Bond, 1999.



In the South McQuesten area, McConnell and Reid Cordilleran glacial deposits and South McQuesten River alluvial deposits dominate the surficial geology. Landforms around Goodman, Seattle and Rodin Creek, are primarily periglacial alluvial fans.

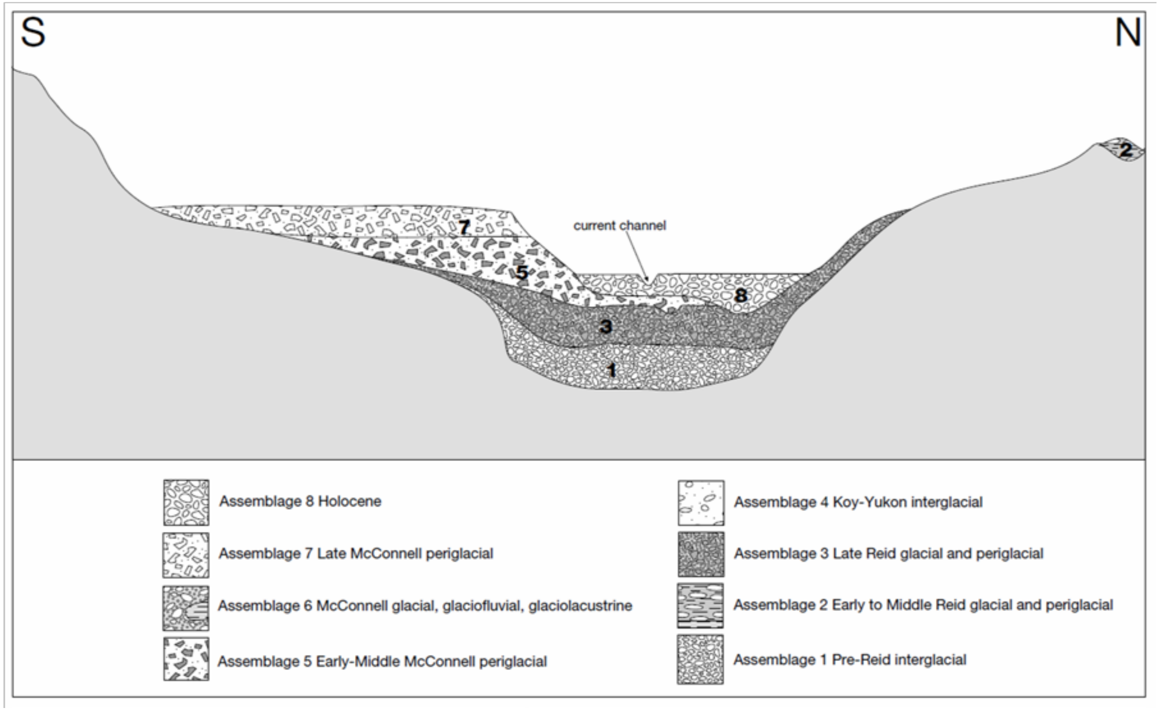
The Mayo placer activity map by Lipovsky, P., Bond, J., and LeBarge, W., 2001, shows the detailed glacial flow directions and extent of glaciations near Goodman Creek. Glacial outwash flowed from the west to the east.

Goodman Creek is outside of the McConnell glacial limits but within the limits of the Reid glaciation.

Bond et al. work defined eight (8) Lithostratigraphic assemblages in the South McQuesten area, which are also showing graphically in Figure 4.

- Assemblage 1 – Pre-Reid interglacial Sediments;
- Assemblage 2 – Early and Middle Reid glaciofluvial, glacial and periglacial sediments;
- Assemblage 3 – Late Reid glacial and periglacial sediments;
- Assemblage 5 – Early and Middle McConnell periglacial Sediments;
- Assemblage 7 – Late McConnell periglacial sediments; and
- Assemblage 8 – Holocene alluvial Sediments.

Figure 4: Schematic cross valley profile of Seattle Creek showing relations between lithostragraphic assemblages from Lebarge, et. al., 2002.



In Figure 5, the picture shows the various periglacial, and graciofluvial sediments. Placer gold is found mainly in the early McConnell periglacially derived diamict, with minor amounts in the Reid glaciofluvial gravel and pre-Reid alluvial gravel.

Figure 5: Panel diagram from cut bank at nearby Seattle Creek.

Copies of the Goodman Creek sections produced Lebarge, et al, 2002 (Bulletin 13) are included in Appendix II and the sample locations are shown in Figure 6 below.

Figure 6: Locations of measured sections from LeBarge et al., 2002.

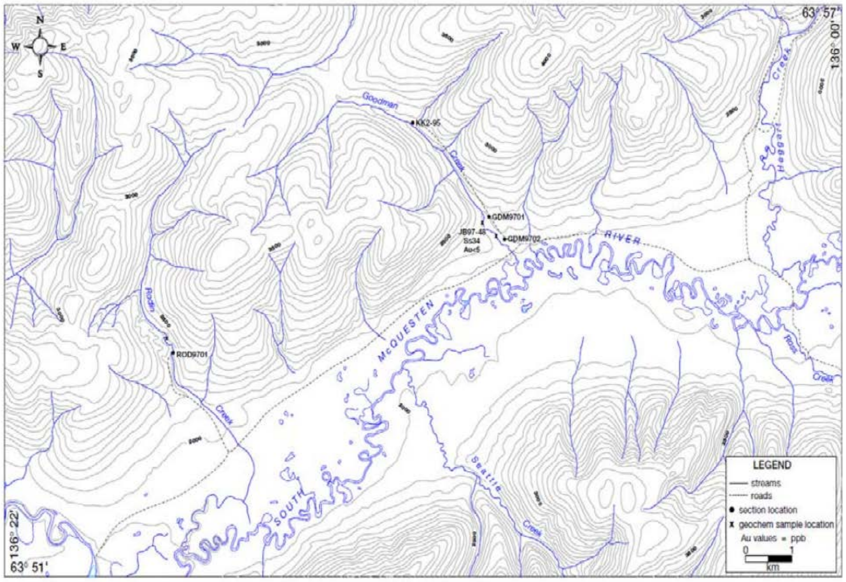


Figure 51. Location of measured sections on Goodman and Rodin creeks.

Understanding the glacial history will be important for future exploration programs on Goodman Creek.

4.0 OBSERVATIONS 2014

Some observations were made in the test pits and in the course of drilling that indicate the area was strongly impacted by glaciation and had a complex glacial history. Large bedrock exposures were found on a bench and slope immediately west of lower Goodman Creek. These outcrops have been heavily eroded by ice movement and show elongation, fluting and rounding at about 115 – 295 degrees (compass bearing) a trend almost parallel to lower Goodman. The direction of ice movement whether up or down Goodman could not be determined but it seems most likely that the ice flow was up Goodman and covered all of lower Goodman and at least part of middle Goodman Creek. The valley does not have the classic “U” shape of a glaciated valley.

Photo 1:
Large ice sculpted outcrop west of Goodman Creek, looking upstream.

Test pits and drill holes in this bench/outcrop area intersected substantial boulder till and in one test pit (B-13) a 3 foot thick lense/layer of sandy cobble gravel was present, with till above and below. Small amounts of gold was recovered form this gravel and from other samples of gravelly colluvium in the general area including near Yukon Geological Survey geologist Jeff Bonds sample 14-JB-93.

The gold bearing unit that has been identified to date on Goodman Creek, consists of coarse boulder-cobble gravel that is probably Reid glacial fluvial outwash. This placer deposit is buried by a McConnell age periglacial fan.

From previous industry reports, the depth to bedrock varies from 4 to 16 feet and anecdotally there are reported areas of up to 35 feet deep. The section tested in the early 1990’s had three to four feet of frozen mud on top of four to 14 feet of coarse gravel. The sections completed by LeBarge et. al., 2002, varied from 8 to 28 feet.

Photo 2: Bedded silt overlaying outwash gravel of McConnell age (?) on Lower Goodman.

During the current 2014 auger drilling season, surficial deposits were encountered up to 60 feet deep above bedrock on lower Goodman. Downslope closer to the present day channel depth to bedrock is about 40 feet.

On middle Goodman above the 1994 workings, 6 holes were drilled as deep as 27 feet. None of these drill holes reached bedrock because this part of Goodman is full of boulders and is very difficult and inefficient to drill with augers.

Gold and Heavy Minerals:

Gold from the property is reported by previous miners to have a fineness of 820 and is comprised mostly of fine, potentially glacially flattened gold, with some coarser gold and nuggets upstream (up to ¼ ounce).

Heavy mineral concentrates on the property were found to contain hematite and pyrite. Other minerals that were observed in quantity in the concentrate include: garnet, and fine pyrite.

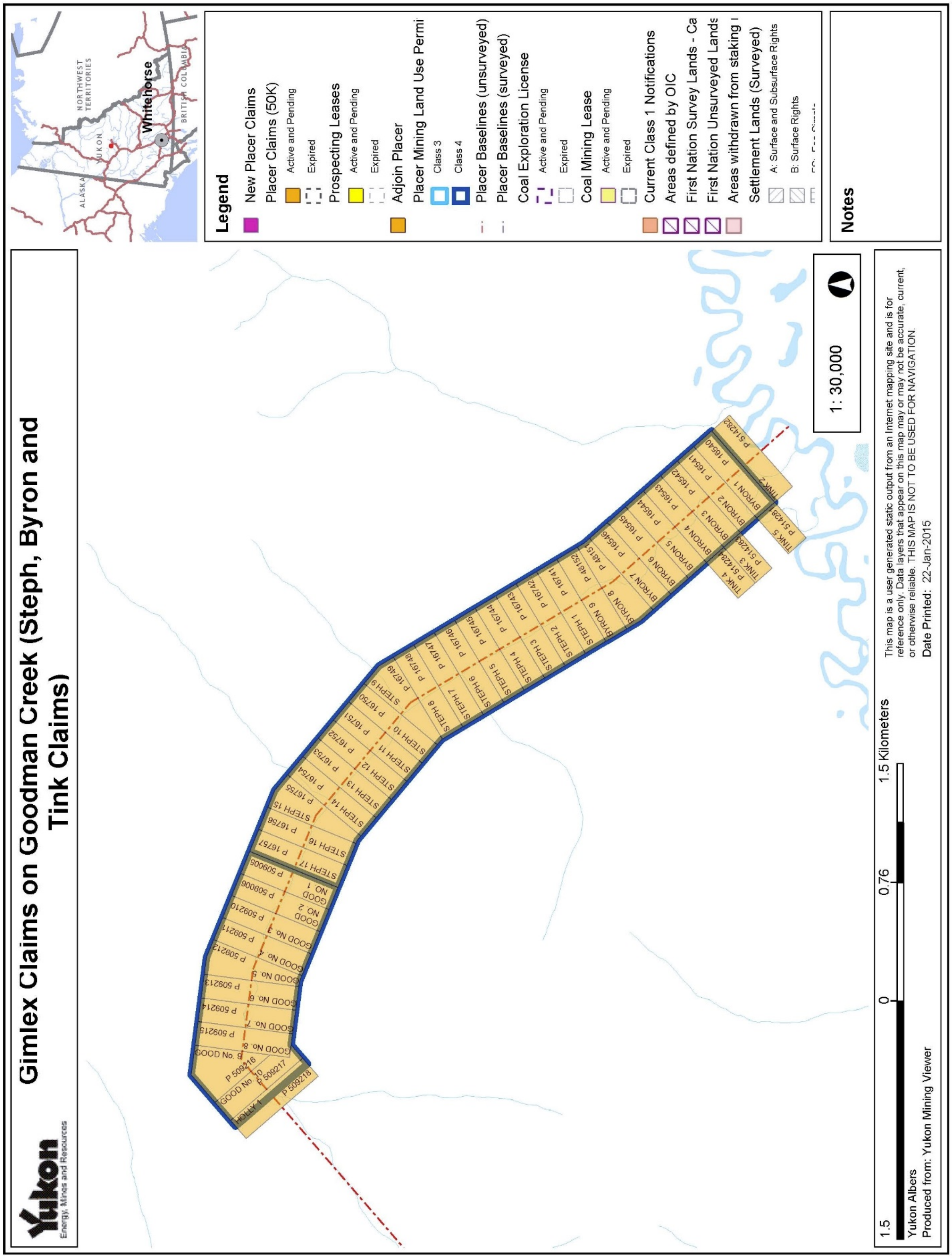
5.0 PROPERTY HISTORY

The Byron and Steph Claims (Table 1) were originally staked by Kim Klippert in 1991 and 1993 respectively and shown on claim map Figure 7.

Table 1: Steph and Byron Claims

Grant Number	Claim Name	Claim Number	Claim Owner	Staking Date	Claim Expiry Date
P 48151	Byron	8	Gimlex Enterprises Ltd	11/8/2010	9/8/2016
P48152	Byron	9	Gimlex Enterprises Ltd	11/8/2010	9/8/2016
P 16540	Byron	1	Gimlex Enterprises Ltd	9/22/1991	9/8/2016
P 16541	Byron	2	Gimlex Enterprises Ltd	9/22/1991	9/8/2016
P 16542	Byron	3	Gimlex Enterprises Ltd	9/22/1991	9/8/2016
P 16543	Byron	4	Gimlex Enterprises Ltd	9/22/1991	9/8/2016
P 16544	Byron	5	Gimlex Enterprises Ltd	9/22/1991	9/8/2016
P 16545	Byron	6	Gimlex Enterprises Ltd	9/22/1991	9/8/2016
P 16546	Byron	7	Gimlex Enterprises Ltd	9/22/1991	9/8/2016
P 16741	Steph	1	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16742	Steph	2	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16743	Steph	3	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16744	Steph	4	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16745	Steph	5	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16746	Steph	6	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16747	Steph	7	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16748	Steph	8	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16749	Steph	9	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16750	Steph	10	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16751	Steph	11	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16752	Steph	12	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16753	Steph	13	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16754	Steph	14	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16755	Steph	15	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16756	Steph	16	Gimlex Enterprises Ltd	10/19/1993	9/8/2016
P 16757	Steph	17	Gimlex Enterprises Ltd	10/19/1993	9/8/2016

Figure 7: Claim map showing Steph and Byron and Tink claims on Goodman Creek



In the early 1990's, Kim Klippert and his family tested two locations on ground on Goodman Creek. The first area was on lower Goodman Creek approximately 1 mile up from the confluence with the South McQuesten and then later approximately two miles upstream. At the upstream location a D8 bulldozer, a loader and excavator were used to sample gravels using a sluice plant with a 4 x 8 screen. The plant processed about 90 cubic yards per hour. Fine gold and some nuggets were recovered at this location, but the exact details of the testing and results from either of these test sites are not available.

Figure 8: Looking downstream on Goodman Creek towards the McQuesten River (photo credit: Jeff Bond)

In 2003, Kim was on site and did some limited testing and then in 2004 he optioned the property to Don Ruman. Ruman brought is an excavator and D355A bulldozer, along with a sluice box with Derocker, for limited testing and “hot Spotting” at two locations. One location was approximately 1 mile from the confluence of McQuesten River and the other was on a left limit tributary approximately 8 miles (5km) from the McQuesten River. While the results are not known, the equipment was removed and reclamation work was completed in the fall of the same year.

In 2014, Cheryl Klippert (successor to Kim Klippert) and Gimlex completed a purchase agreement for the claims, with an enduring royalty to Cheryl Klippert.

The claims were transferred to Gimlex in September and 4 additional; claims were staked on lower Goodman in late September 2015 (Tink Claims).

Table 2: Additional Claims staked as part of this YMEP

Grant Number	Claim Name	Claim Number	Owner	Expiry Date
P 514284	Tink	4	Gimlex Enterprises Ltd. - 100%	10/2/2019
P 514283	Tink	3	James Christie - 100%	10/2/2019
P 514281	Tink	5	Dagmar Christie - 100%	10/6/2019
P 514282	Tink	2	Gimlex Gold Mines Ltd. - 100%	10/2/2019

Figure 9: Looking upstream on Goodman Creek at previous work areas (photo credit: Jeff Bond). Ruman 2004 work lower center and Klippert work area, upper center photo. 2014 on lower Goodman was between these two areas. Middle Goodman was upstream of the 1994 work area (top of photo).

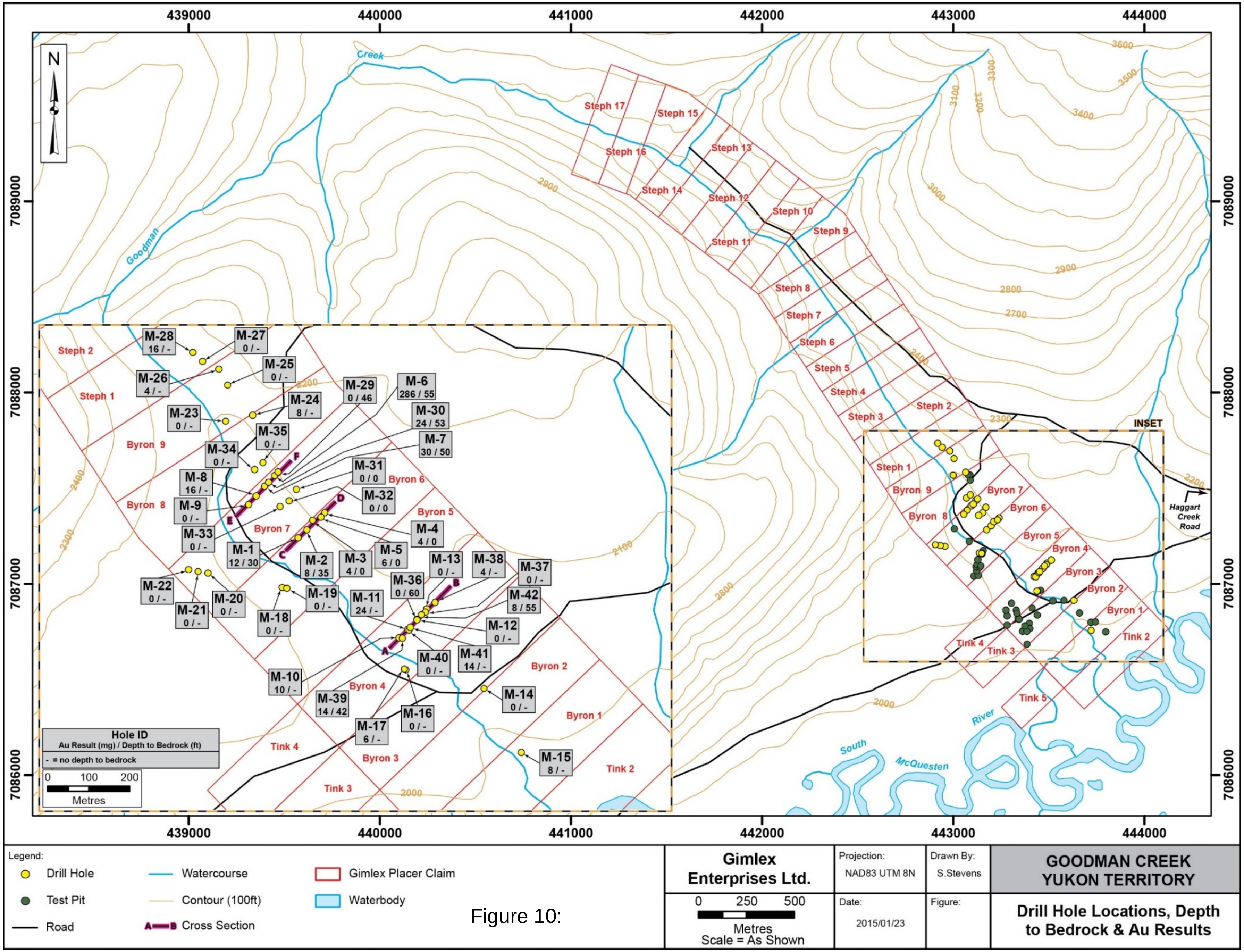
6.0 2014 EXPLORATION PROGRAM

Work on Goodman was done between September 8 and October 3, 2015. At Goodman, a 3 man trailer/camper facility was set up on a pre-existing gravel flat area on lower Goodman. Auger drilling completed a total of 471 m in 42 holes (1545 feet) and 39 excavator trenches were completed as shown on the accompanying maps (Figure 10 and 11 respectively). The equipment used included a Mobile B31 auger drill mounted on a FN110 Nodwell tracked carrier, Bombardier carrier and PC60 excavator.

Photo 3: Donjek Upton operating the drill on Goodman Creek

Jim Christie, Justin Libby and Donjek Upton (see Photo 3) were on site for the full program. Field support, assistance with mobilization, camp set up and demobilization, expediting, equipment repair and maintenance; and final sample processing at Indian River camp was provided by Tara Christie, Dagmar Christie, Sheamus Christie and Curtis Gendron.

The 42 drill holes and 39 excavator trenches completed are shown on the accompanying maps. Figure 10 shows Drill Hole locations, gold values (mg) and depth to bedrock (ft) and Figure 11 shows Test Pit locations and gold recovered.


GOODMAN CREEK
YUKON TERRITORY
Drill Hole Locations, Depth to Bedrock & Au Results
Gimlex Enterprises Ltd.
Projection: NAD83 UTM 8N
Drawn By: S.Stevens
Date: 2015/01/23
Figure:
0 250 500
Metres
Scale = As Shown
Legend:
Drill Hole
Test Pit
Road
Watercourse
Contour (100ft)
A—B Cross Section
Gimlex Placer Claim
Waterbody
N
INSET
Haggart Creek Road
Goodman Creek
South McQuesten River
Hole ID
Au Result (mg) / Depth to Bedrock (ft)
- = no depth to bedrock
0 100 200
Metres
M-1 12 / 30
M-2 8 / 35
M-3 4 / 0
M-4 4 / 0
M-5 6 / 0
M-6 286 / 55
M-7 30 / 50
M-8 16 / -
M-9 0 / -
M-10 10 / -
M-11 24 / -
M-12 0 / -
M-13 0 / -
M-14 0 / -
M-15 8 / -
M-16 0 / -
M-17 6 / -
M-18 0 / -
M-19 0 / -
M-20 0 / -
M-21 0 / -
M-22 0 / -
M-23 0 / -
M-24 8 / -
M-25 0 / -
M-26 4 / -
M-27 0 / -
M-28 16 / -
M-29 0 / 46
M-30 24 / 53
M-31 0 / 0
M-32 0 / 0
M-33 0 / -
M-34 0 / -
M-35 0 / -
M-36 0 / 60
M-37 0 / -
M-38 4 / -
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M-40 0 / -
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M-42 8 / 55
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Steph 7
Steph 8
Steph 9
Steph 10
Steph 11
Steph 12
Steph 13
Steph 14
Steph 15
Steph 16
Steph 17
Byron 1
Byron 2
Byron 3
Byron 4
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Byron 6
Byron 7
Byron 8
Byron 9
Tink 2
Tink 3
Tink 4
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7087000
7088000
7089000

Figure 10:

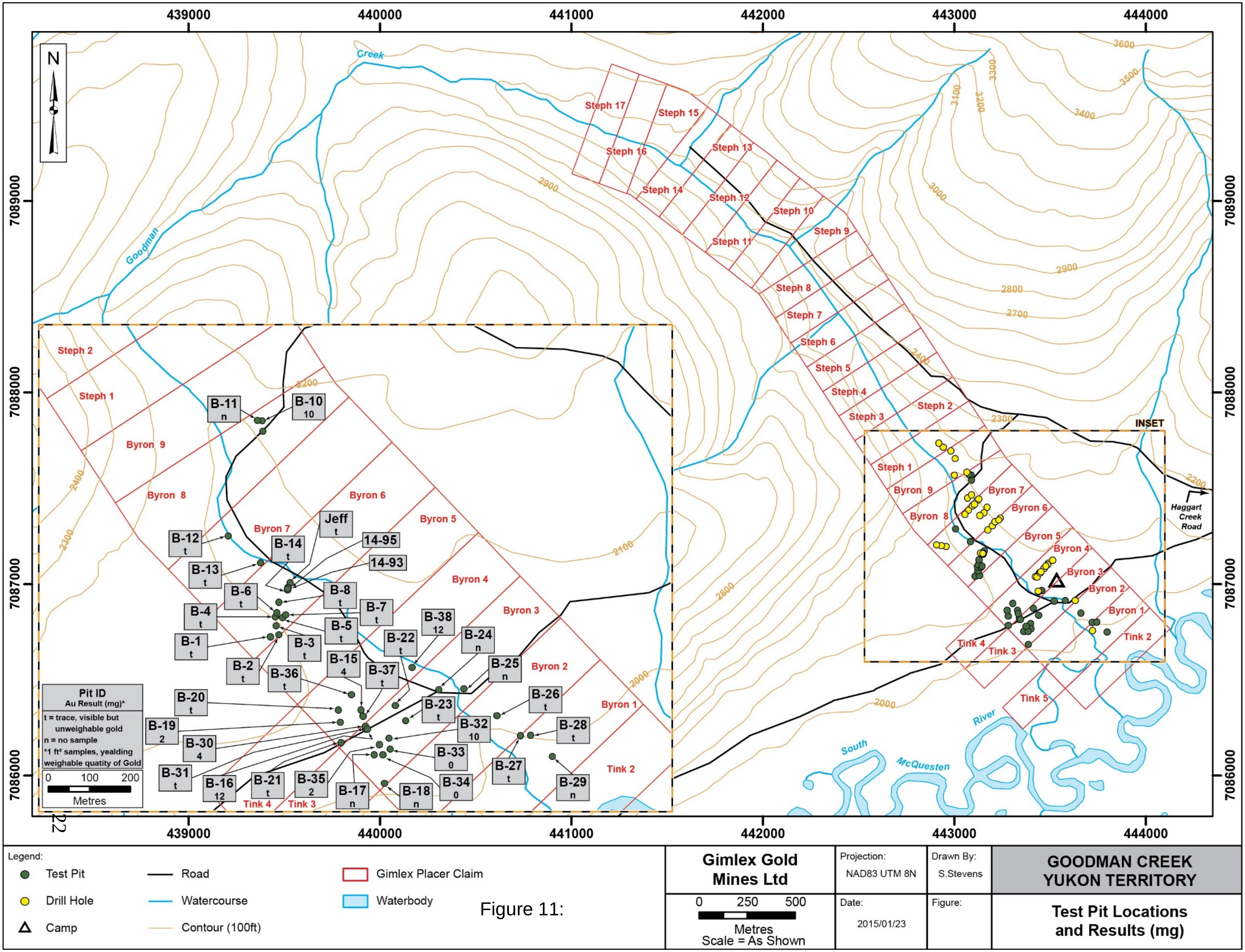

N
439000
440000
441000
442000
443000
444000
7089000
7088000
7087000
7086000
Creek
Goodman
South McQuesten River
Haggart Creek Road
INSET
Steph 1
Steph 2
Steph 3
Steph 4
Steph 5
Steph 6
Steph 7
Steph 8
Steph 9
Steph 10
Steph 11
Steph 12
Steph 13
Steph 14
Steph 15
Steph 16
Steph 17
Byron 1
Byron 2
Byron 3
Byron 4
Byron 5
Byron 6
Byron 7
Byron 8
Byron 9
Tink 2
Tink 3
Tink 4
Tink 5
2000
2100
2200
2300
2400
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
B-11 n
B-10 10
B-12 t
B-13 t
B-14 t
Jeff t
14-95
14-93
B-6 t
B-8 t
B-7 t
B-4 t
B-5 t
B-38 12
B-24 n
B-1 t
B-3 t
B-22 t
B-2 t
B-15 4
B-37 t
B-25 n
B-36 t
B-20 t
B-23 t
B-26 t
B-19 2
B-32 10
B-28 t
B-30 4
B-33 0
B-31 t
B-27 t
B-16 12
B-21 t
B-35 2
B-17 n
B-18 n
B-34 0
B-29 n
Pit ID
Au Result (mg)*
t = trace, visible but unweighable gold
n = no sample
*1 ft² samples, yealding weighable quatity of Gold
0 100 200
Metres
Legend:
Test Pit
Drill Hole
Camp
Road
Watercourse
Contour (100ft)
Gimlex Placer Claim
Waterbody
Gimlex Gold Mines Ltd
0 250 500
Metres
Scale = As Shown
Projection:
NAD83 UTM 8N
Date:
2015/01/23
Drawn By:
S.Stevens
Figure:
GOODMAN CREEK YUKON TERRITORY
Test Pit Locations and Results (mg)

Figure 11:

On the ground it proved difficult to drill on a perfect grid because of surface irregularities and water. Three (3) lines of holes spaced at 1000 and 500 feet apart were drilled on the east side of lower Goodman between the two areas that were tested by Kim Klippert in 1994 and Don Ruman in 2004. None of the lines could be extended to or across the creek because the terrain was too rough for the Nodwell and a trail would have to be constructed. An interesting result from hole M-6 prompted some infill drilling and short lines of holes upstream and downstream of M-6.

On a right limit bench of middle Goodman 5 holes were drilled to explore an area where Jeff Bond had panned gold from gravelly colluvium in a shallow pit and an adjacent area that appeared to a glacial outwash channel/bench possibly linked to Goodman Creek.

On middle Goodman, just above Klipperts' 1994 test mining area, the valley narrows abruptly, the creek is somewhat incised and the valley floor is rough and difficult to navigate with the Nodwell. Drilling on lines would require trail and drill site construction beyond the scope of the current project. The lower 1000 feet of this middle Goodman area was explored with 6 auger holes drilled at random in areas accessible to the Nodwell without trail construction.

Downstream of the 2004 Klippert/Ruman test mining area 2 auger holes were drilled, the first just south of the main road and the second near the creek about 600 feet downstream.

After completing 28 – 8 inch auger holes the remaining 14 holes were drilled with 6 – inch augers which being lighter and easier to rotate, could potentially drill deeper and better penetrate boulders. Sample processing was also changed in that the sample interval for each hole was divided into an upper and lower half and processed separately to try and determine where the gold occurred.

The 39 test pits were dug with a Komatsu PC 60 excavator and 1 cu. ft. samples were collected and processed where gravel was found (Figure 11).

Auger and test pit samples were processed in a custom made 7 foot Long Tom that Gimlex has used for processing samples for many years. Samples were processed by the crew and then hand panned by Christie to about half a cup of concentrate. The smaller samples of concentrate were then transported to Indian River for finishing on a Miller Table and weighing of the gold recovered.

Photo 4: Justin Libby processing drill sample with long tom at the camp set up on lower Goodman.

7.0 RESULTS

After a few auger drill holes it became apparent that boulders would be a problem for the auger drill. Three (3) of the first five (5) holes were stopped short of bedrock by extremely hard boulders. It was confusing at first because none of the crew had experience drilling and identifying till in auger holes. Fortunately Jeff Bond arrived for a visit and provided some guidelines for determination of till versus frozen gravel and as drilling proceeded we were able to become more certain about identifying till in auger holes. Later on some deeper holes squeezing of the augers by clay rich till became a problem sapping the rotary power of the drill. Several holes were abandoned for fear of getting stuck in the squeezing till which apparently was not frozen in these areas. Making drilling even more difficult, was a persistent deep boulder layer that was present almost everywhere in the lower till and on bedrock.

During the initial period 28 – 8 inch diameter holes were drilled and the entire gravel/till interval was sampled and processed as a unit in a single sample. The goal was to determine presence or absence of potentially economic placer gold without concern about the exact location. After 28 holes and consideration of gold results and the boulder / till squeezing problems it was decided to try drilling some holes with 6 inch augers which are lighter and easier to rotate thus delivering more power to the bit. The downside was a smaller sample volume. It was also decided to process samples in two intervals, the upper and lower halves of the entire gravel / till / bedrock section.

7.1 Drill Results

Gold grades from the 42 auger holes drilled were mostly marginal to sub-economic in light of the 40-+50 foot depth to bedrock. The best hole M-6 yielded 286 mg and nearby holes M-7 was 30 mg and M-30 , M-31 (6 inch) were interesting. Overall 21 of 42 holes drilled contained weighable gold (over 2 mg). In the 6 inch drill holes that were processed in upper and lower halves, no consistent patterns were recognized (see Table 3). Eight (8) holes that did not reach bedrock contained over 10 mg of gold and a few holes had very little or no gold. Tables 4 and 5 show gold values from drill holes that reached bedrock and a rough calculation of grade and value at current gold prices, per square foot. From these figures the value of square yard or cubic yard can easily be calculated.

Photo 5: Gold from Drill Hole GM 6 which returned 286 mg

Interpretation of the genesis of the placer gold concentrations on Goodman Creek is far from simple and would include several possibilities as follows

1 Gold occurs within the till complex and when eroded became concentrated in surface gravels and/or on erosional surfaces in the till.
2 Gold generated from eroding till and other sources became concentrated in glacial meltwater or subsequent stream channels that may be on or within the till complex or on underlying bedrock.
3 Gold was concentrated in pre-Reid channels and portions or remnants of these paleochannels remain in place under the till complex

Table 3: Gold Values (mg) from drill holes.

Drill Hole	Bedrock Depth (ft)	Hole Depth (ft)	Diam. of drill auger	Au (mg)
M-1	30	30	8"	12
M-2	35	38	8"	8
M-3		28	8"	4
M-4		32	8"	4
M-5		47	8"	6
M-6	55	55	8"	286
M-7	50	50	8"	30
M-8		42.5	8"	16
M-9		42	8"	0
M-10		46	8"	10
M-11		40	8"	24
M-12		39	8"	0
M-13		39	8"	0
M-14		25	8"	t
M-15		33	8"	8
M-16		27	8"	t
M-17		32	8"	6
M-18		9	8"	t
M-19		12.5	8"	t
M-20		25	8"	t
M-21		28	8"	
M-22		38	8"	t
M-23		22.5	8"	t
M-24		27	8"	8
M-25		14	8"	t
M-26		23	8"	4
M-27		9	8"	t
M-28		23	8"	16
M-29	46	54	6"	t
M-30		53	6"	12, 24
M-31		56	6"	8, 20
M-32		51	6"	t, 6
M-33		31	6"	n
M-34		30	6"	n
M-35		27.5	6"	n
M-36	60	68	6"	4, 4
M-37		45	6"	0
M-38		42	6"	4
M-39	42	42	6"	14
M-40		36	6"	t
M-41		40	6"	14
M-42	55	58	6"	8

Table 4: Gold Values from drill holes that Reached Bedrock

Drill Hole	Bedrock Depth (ft)	Hole Depth (ft)	Diam. of drill auger	Au (mg)
M-1	30	30	8"	12
M-2	35	38	8"	8
M-6	55	55	8"	286
M-7	50	50	8"	30
M-29	46	54	6"	t
M-30	53?	53	6"	12, 24
M-36	60	68	6"	4, 4
M-39	42	42	6"	14
M-42	55	58	6"	8

Table 5: Gold Values from drill holes which reached bedrock, with rough calculations of grade and value for illustrative purposes.

Drill Hole	Bedrock Depth (ft)	Hole Depth (ft)	Diam. of drill auger	Au (mg)	Rough Grade Calculation - mg/ sq. ft	Estimate of Value per bedrock square ft @ Au $1400 cdn, 820 fineness
M-1	30	30	8"	12	40	$ 1.49
M-2	35	38	8"	8	27	$ 1.00
M-6	55	55	8"	286	964	$ 35.58
M-7	50	50	8"	30	101	$ 3.73
M-29	46	54	6"	t	-	-
M-30	?	53	6"	4, 24	145	$ 5.37
M-36	60	68	6"	4	24	$ 0.89
M-39	42	42	6"	14	85	$ 3.13
M-42	55	58	6"	8	48	$ 1.79

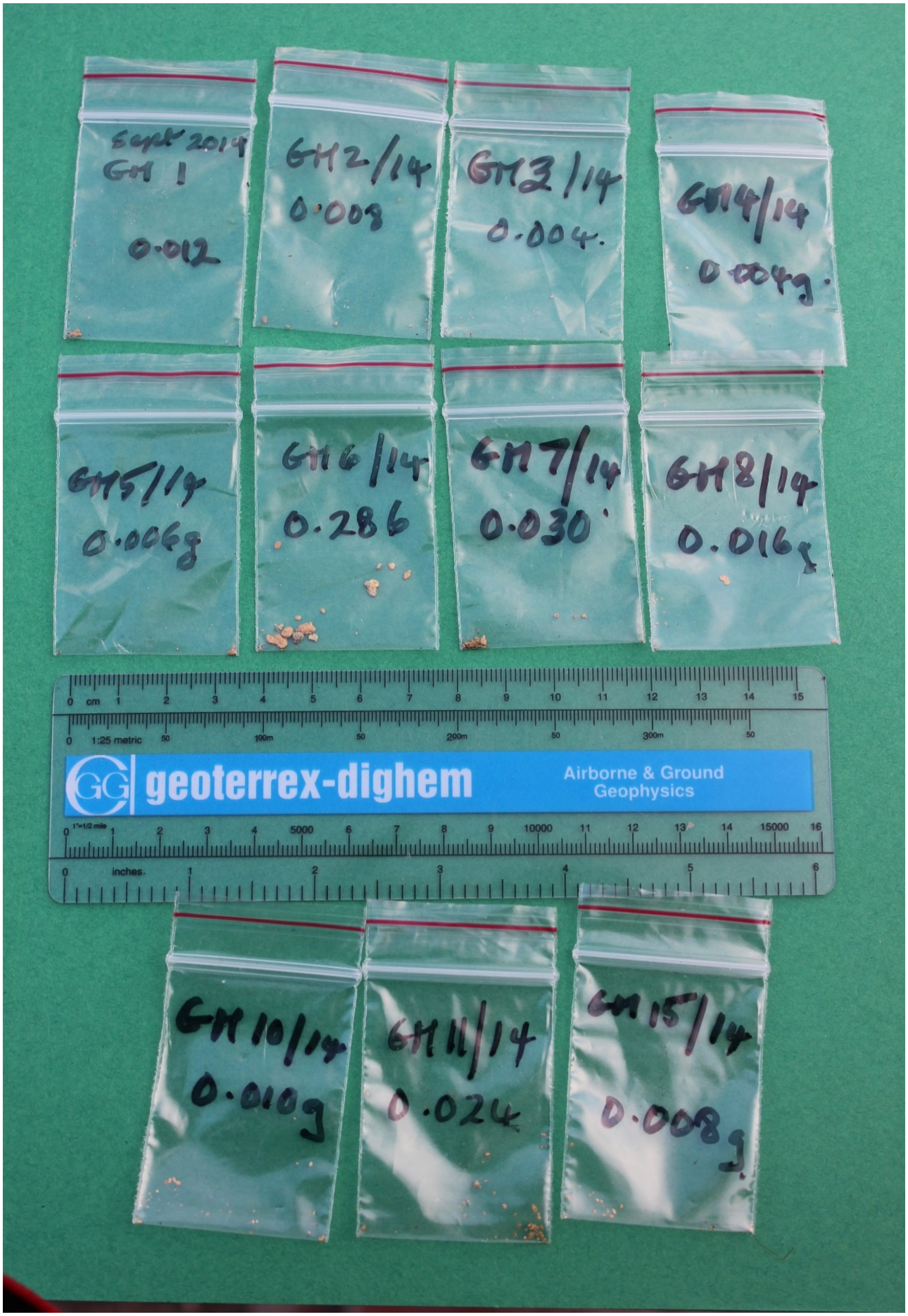


Photo 6: Selection of drill hole samples.

7.2 Test Pit Results

Test pits were dug with a Komatsu PC60 excavator to depths of 8-12 feet by 6 feet wide and were sampled wherever gravel was found. On lower Goodman many samples were of coarse boulder/cobble gravel that appears to be part of a glacial fluvial outwash deposit on the left limit of lower Goodman. In a series of test pits extending south for about 500 feet from the road to a steep drop-off into McQuesten valley, the surface deposits transition from coarse gravel to sandy gravel, sand and sandy silt. The coarse gravels may extend further south at depths beneath the finer grained sediments near surface. All of the test pits were thawed and could be simply and inexpensively mined if economic grades could be proven over a large enough area. There appears to be enough room to host such a deposit in this area.

Test pits were dug in other parts of the work area (see map Figure 11). Many test pits had trace amounts of gold (a few colours). East of Kliperts' 1994 test area samples B-9 and 10 taken from the bank of the disturbed area both contained 10 mg of gold and some follow-up work in this area is warranted. Trenching with a larger excavator and more sampling would be the next step.

Photo 7: Justin Libby digging a sample of gravel in the bottom of test pit B-13. Shown is a thin surface layer of gravelly colluvium on top of massive till, a 3ft gravel layer is being sampled. The gravel lies on top of more till not shown in the photo.

Photo 8: PC60 excavator used for digging test pits on Goodman Creek at B-35.

Photo 9: Pile of boudery gravel excavated from test pit B-16 on Goodman Creek.

From 39 Test pits - 10 samples contained weighable gold (2 mg and over) although almost all contained colours (see tables 6 & 7). The best grade samples being right at surface and thawed could be significant if enough were found to allow bulk mining. Higher gold prices in the future could also change the economic outlook.

Table 6: Results from test pits (1 cu. ft samples, with coarse removed).

Test Pit	Au (mg) or t= trace or n= no sample	Result notes
B-1	t	4 vs + some v. fine
B-2	t	2 s, 4 vs, lot of fs
B-3	t	1 sm, 4 vs, lot of fs
B-4	t	fs
B-5	t	6 vs,
B-6	t	4 vs
B-7	t	1 s, 3 vs
B-8	t	4 vs
B-9	10	1m, 3 s, - many vs.
B-10	10	2 lg, 10 small
B-11	n	no sample
B-12	t	5 s, numerous vs
B-13	t	1 s, 4 vs
B-14	t	2 s, numerous vs
B-15	4	2 s, numerous vs
B-16	12	numerous s and vs
B-17	n	no sample
B-18	n	no sample
B-19	2	3 vs, fs
B-20	t	f/s?
B-21	t	5 s
B-22	t	1 s, 3 vs
B-23	t	2 s, 2 vs
B-24	n	no sample
B-25	n	no sample
B-26	t	fs
B-27	t	fs
B-28	t	fs
B-29	n	no sample
B-30	4	5s, numerous vs
B-31	t	5 s
B-32	10	
B-33	0	
B-34	0	
B-35	2	3 s, + fines
B-36	t	about 30 vs
B-37	t	5 s
B-38	12	> 30 vs
Jeff	6	2 s, numerous vs

Table 7: Au results (mg) from only the test pits where a weighable quantity of gold was recovered.

Test Pit	Au (mg)
B-19	2
B-35	2
B-15	4
B-30	4
Jeff	6
B-9	10
B-10	10
B-32	10
B-16	12
B-38	12

Test Pit results are the weight of gold (mg) recovered from 1 cu. ft. of gravel. Boulders and cobbles over 6 inches were excluded which creates a significant volumetric error and the results cannot be used directly to estimate grade. For some samples boulders and cobbles could be as much as half the volume. Grain size analysis by LeBarge et al at the measured section site (GDM 9702 indicated a gravel/matrix ratio of about 70/30% so our samples would contain a significant portion of the gravel component. For first pass estimate of value per cu. yd. the 1 cu. ft samples have been considered to represent 2 cu. ft. to allow for the cobbles and boulders not included in the samples

Table 8 shows a rough calculation of potential value of gold found in test pits using assumption of $1400 cdn Gold price and 820 fineness of gold. This table only shows the minimum and maximum and average of the test pits that had weighable gold, so cannot be used as an average all of the test pits and is purely for illustrative purposes. Further testing needs to be done to establish grades prior to developing any mining plans.

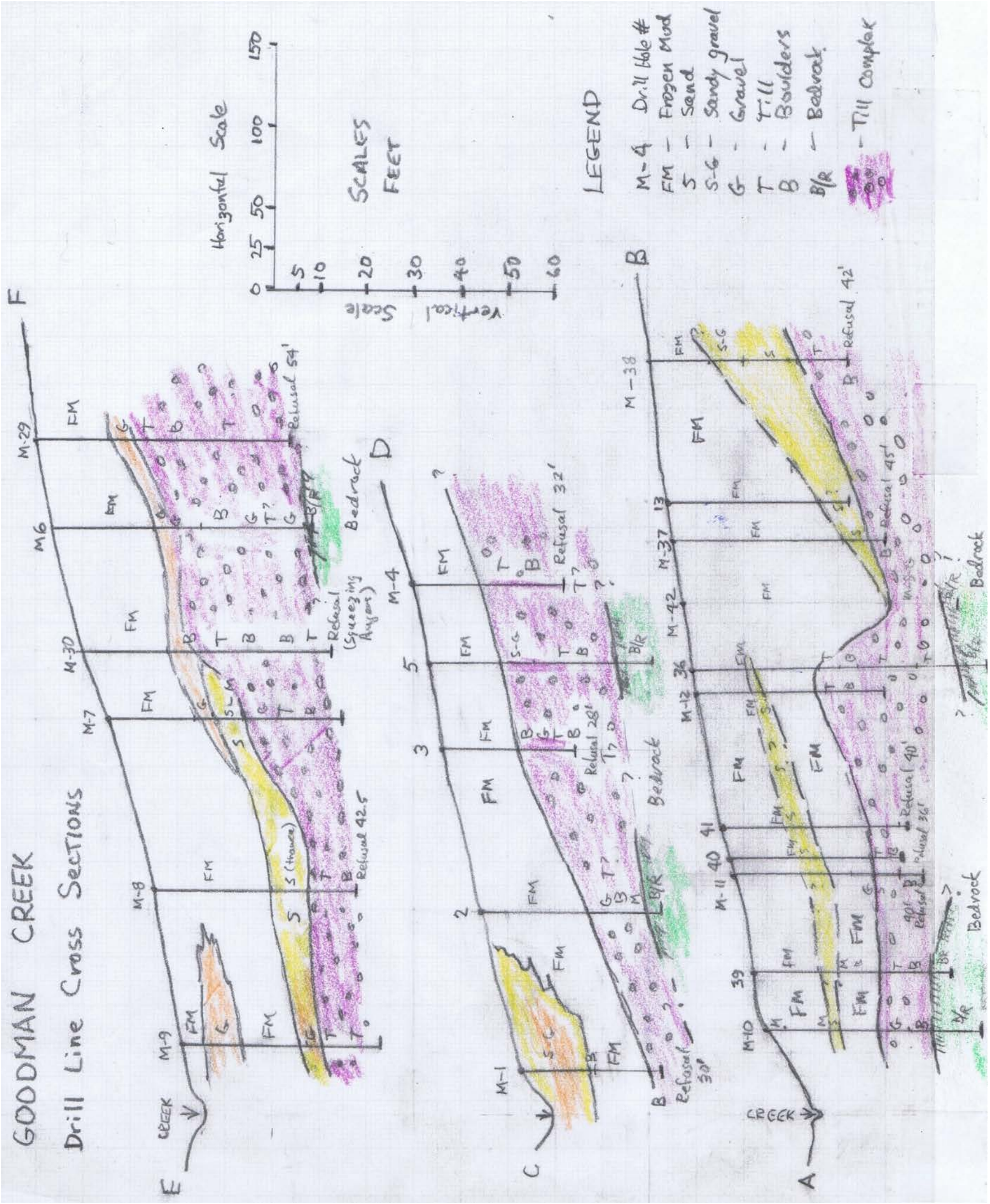
Table 8: Rough calculation of potential value of gold found in test pits

	Au (mg)	Rough Value per yard
Average	7.2	$ 3.50
Min	2	$ 0.97
Max	12	$ 5.83

Schematic Cross Sections A-B, C-D, E-F (Figure 12) were constructed along the three main drill lines. The section lines are shown on Figure 10. These cross sections have vertically exaggerated scales and hole collar elevations are estimates since the GPS elevations were erattic. The purpose of the sections is to illustrate the stratigraphic relationships from drill log data that exist on lower Goodman.

Photo 10 and 11 (below) Shallow test pits near sample called Jeff (Figure 11) and 14- JB-93 sample taken by Jeff Bond. Bedrock visible in bottom of test pit and in piles of material excavated from pits.

Figure 12: Goodman Creek drill line cross sections. Sections show on map in Figure 11.



An upper unit consisting of frozen peat and mud (FM) is shown. It ranges from 15-40 feet in thickness and contains discontinuous layers of sand and sandy gravel. Near the present day creek channel gravel is more abundant in some holes and probably represents post glacial deposition as the present channel developed.

Beneath the frozen peat/mud layer is a mostly frozen boulder-till complex that also includes gravel sand and occasional mud layers. It was not possible to exactly determine what materials were being drilled but the driller can sense changes in the action of the machine and penetration rate and infer what may be happening at the bit Gravel, sand, boulders and bedrock sometimes have distinctive signals but can also be misleading. For example different types of bedrock can drill like gravel or boulders and by the time cuttings reach surface they can be well mixed. Careful examination of material on the bottom auger when the string is pulled usually allows identification of the material at the bottom of the hole. The till complex appears to thicken upstream and along the east side of the valley and there is a persistent concentration of boulders in the lower part of the unit that stopped many holes. There may be remnants of older pre-Reid alluvial channels below the till complex in some areas but they cannot be identified as such by the auger drill. Sample results, such as the nugget gold in hole M-6, suggests that older remnants are present in some areas.

Bedrock was found beneath the till complex in 6 out of 21 holes drilled on or near the cross sections and consisted of a variety of quartz mica semi-schist and schistose quartzite. Bedrock was intersected on all 3 drill sections and there were enough points to give a rough idea of where bedrock could be expected. It could be seen that most of the auger holes stopped by boulders or squeezy till were probably almost through the till complex and near bedrock. The cross sections and hole collar elevations are not accurate enough to judge whether or not any deeper channel is indicated by the bedrock penetrations. A level survey of the hole collars would allow more accurate sections to be constructed. There is enough room between drill holes that reached bedrock such that a paleochannel beneath the till complex could still be possible and Hole M-6 could be on part of it. Hole M-6 contained 44 mg of fine gold and 5 nuggets weighing 58, 52, 44, 44, 42 mg (Photograph 6) , very different than any other hole.

8.0 INTERPRETATION

It is clear that the Reid glaciation strongly impacted Goodman Creek. Thick till was drilled along the east side of lower Goodman and on a higher bench west of Goodman where it was also seen in test pits. The orientation of ice sculpted outcrops in this area west of Goodman implies that lower Goodman valley was full of ice and flow was mostly directly upstream. Whether or not the ice entirely destroyed any pre-existing placer deposits in Goodman is unknown and cannot be ruled out by the current work. On lower Goodman the presence of remnants of a paleochannel is suspected, but will require additional drilling with a more robust drilling/sampling system to determine if and where it may be preserved beneath a boulder layer at depths in the 50-70 foot range. Drilling is the only way to go because the ground is too deep for large excavators and test mining would be too expensive.

Another area with untested potential to host a paleochannel is middle Goodman between the Klippert 1994 test area and the 2004 Ruman test area about 1.5 miles upstream. Immediately above the Klippert 1994 test area, Goodman valley narrows dramatically and downstream of this point the creek veers sharply west to the right limit of the valley. It is probable that these two changes result from either a change in the bedrock geology or from some effect of the Reid glaciation or retreat of Reid ice. Six holes drilled in the upstream 700 feet of this area were all stopped by boulders which seem to be even more abundant than downstream. The uppermost hole M-28 (16 mg of gold) was stopped by a boulder at 23 feet after intersecting frozen mud and 4 feet of muddy gravel. There has been no known exploration of this part of Goodman but there are two exploration ideas which could be pursued as follows:

1. Reid ice over rode this narrow part of Goodman valley and pre-Reid placers may be present under the surface boulder layer. Post –Reid flow in the channel may have further enhanced the older deposits.

2. Reid ice scoured the valley floor and all paleochannels were destroyed. Subsequently this narrow part of the channel became a meltwater channel and evolved to the present day creek. Gold became concentrated forming new placer deposits from erosion of till and other gold sources.

Middle Goodman is known to be frozen and bouldery and depth to bedrock is unknown. It could be too deep and hard digging for even a large excavator. A robust drilling system capable of drilling and sampling frozen bouldery ground would be a good and simple way to sample this part of the creek.

The right limit of lower Goodman immediately west of the 2004 Klippert/Ruman test mining area, has been shown to be of interest. The results of 4 test pit sampled contained 10-12 mg gold from 1 cu.ft. samples of near surface coarse outwash gravels which could be part of a large outwash channel or alluvial fan. There is room for this deposit to be large and deep. At surface these gravels are thawed but could be frozen at depths or where moss and tree cover has not been disturbed.

This right limit area of lower Goodman could be further evaluated by grid sampling using a large excavator and then drilling if warranted. It is a good target for a low cost bulk mining scenario.

9.0 RECOMMENDATIONS

More work needs to be done at Goodman in several stages.

Initially a few geological traverses should be made to map and better understand lower and middle Goodman. There are probably numerous bedrock exposures that could help understand the glacial history and bedrock geology and to direct future work. There could be bedrock exposures in middle Goodman or even lower Goodman that are not known. A level survey should be run to better determine drill hole collar elevations, and then more accurate larger scale drill line cross sections can be drawn.

A larger Komatsu PC 400 excavator with ripper and frost bucket should be used to further explore the potentially large outwash channel/fan west of lower Goodman. It could also do some work on the middle Goodman to further explore some anomalous test pits and explore the depth of the boulder layer and possibly bedrock further upstream.

To drill this property, a drilling method that can drill boulder ground to depths of at least 100 feet is required. A small rotary-percussion drill light enough to be carried by a Nodwell and capable of drilling a 6 or 8 inch hole assisted by a down the hole hammer and a large air compressor might work. A second Nodwell might be needed to carry the drill string, compressor and sampling apparatus. This might be a good combination considering the terrain and ground conditions and would minimize impact from drilling. This should be researched more fully for some innovative drilling technology that would be applicable.

Another option is the truck mounted dual rotary rig locally available in Whitehorse which is more than capable of drilling boulders. It is a large heavy unit and requires a second large truck to haul drill pipe and requires a large level constructed pad to set up on. It could drill a few useful holes at Goodman on existing roads and pads but would be a very difficult moving up the creek and contrition of roads would result in disturbance that would require reclamation. It also requires a 5 man sampling team because it drills fast and generates a lot of sample material. Overall, using a dual rotatory would be very expensive.

10.0 SUMMARY OF EXPENDITURES

The total program cost was $116,611.00. Table 9 details the exploration program particulars.

Table 9: Summary of Expenditures

Item	No. items	Type	Rate	Unit	No. Units	Cost	Person-days
Field Crew							
Project Manager / Senior Geologist - J.S Christie	1	person	$ 500	day	25	$12,500.0	25
Drill assistant / sample processing/Justin Libby	1	persons	$ 350	day	24	$8,400.0	24
Driller - Donjek Upton - Contractor Snow Mountain Air Exploration	1			day	28	$15,000.0	28
Final Sample processing - Dagmar Christie and Tara Christie	1	person	$ 400	day	13	$5,200.0	13
WCB - 5.23% Estimate						$2,086.8	
Travel for Justin Libby						$462.0	
Travel for Donjek Upton						$1,006.9	
Travel Tara Christie to Goodman return to Dawson						$465.0	
Equipment							
Vehicles - crew and equipment - 2 vehicles with trailer + vehicle with camper - transport - 4 days	2	4WD ccab	$ 50	day	52	$2,600.0	
Service truck with tools and welder	1	4WD ccab	$ 100		24	$2,400.0	
ATV	1		$ 40	day	24	$960.0	
Horse trailer + Equipment Trailer	1		$ 64		24	$1,536.0	
12 kVa generator	1	generator	$ 40	day	24	$960.0	
Heavy equipment and Support - Wet Rates including operator							
Mobile B31 Drill on FN110 Nodwell	1	Ft	$ 24	per ft	1545	$37,080.0	
Bombardier Carrier - sample and supply transport	1		$ 75	day	24	$1,800.0	
Kenworth T800 + Lowboy	1		$ 158	hour	30	$4,725.0	
Long tom sample equipment and 2" pump	1		$ 20	day	24	$480.0	
Pc60 Excavator/ with blade and spare bucket	1	month	$ 7,500	hr		$7,500.0	
Report Preparation							
Project Manager / J.S Christie	1	Person	$ 500	day	4	$2,000.0	
Gis Specialist - Shane Stevens	1		$ 650		1	$650.0	
T. Christie	1		$ 500	day	1	$500.0	
Total camp person days						$0.0	83
Daily Field Expenses	1	pers days	$ 100	day	83	$8,300.0	
Total Person days of work	95						
Total						$116,611.7	

11.0 REFERENCES

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12.0 STATEMENT OF QUALIFICATIONS

I, **James Stanley Christie,** of Dawson City, in Yukon Territory, Canada

Hereby certify:

1. That my address is P.O. Box 660, Dawson City, YT, Y0B 1G0;
2. That I am a graduate of the University of British Columbia:
    a) Ph.D., Geology. 1973,
    b) B.Sc., Honors, Geology, 1965;
3. That I have been practicing my profession in geology, placer mining and mining exploration continuously since 1965 and since 1984 in the Yukon;

Dated this **30th** day of **January, 2015** at Vancouver, B.C..

James S. Christie

STATEMENT OF QUALIFICATIONS

I, **Tara M. Christie,** of Dawson City, in Yukon Territory, Canada

Hereby certify:

1. That my address is P.O. Box 660, Dawson City, YT, Y0B 1G0;

2. That I am a graduate of the University of British Columbia:

    a) M.A.Sc., Specialization in Geotechinical Engineering, sub-specialty Geochemistry
    b) B.A.Sc., Specialization in Geotechinical Engineering, sub-specialty Geochemistry;

3. That I am a Professional Engineer (Geological) registered in Yukon and British Columbia;

4. That I have been practicing geology and placer mining in the Yukon from 1996 to Present;

Dated this **30**th day of **January, 2015** at Vancouver, B.C..

Tara M. Christie

Appendix I

Photos

Photo 12: Large ice sculpted outcrop west of Goodman.

Photo 13: Jim Christie, Tara Christie and Katherine McConnell at drill site on Goodman Creek.

Photo 14: Bombardier carrier with drill sample buckets and PC 60 Excavator.

Photo 15: Drilling on lower Goodman Creek, hole M-38.

Photo 16: 6” Augers brining up clumps of till into sample pan, hole M-38.

APPENDIX- II

Excerpts for Yukon Placer Industry Reports Stratigraphic Sections of Goodman Creek from Bulletin 13

1996 10,300 cubic yards were sluiced and 21,800 cubic yards were stripped. In 1997 the ground was stripped in preparation for mining the following season.

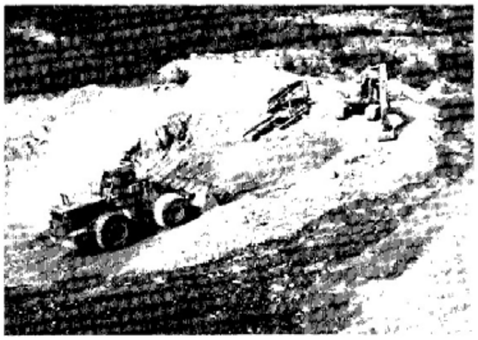
Water Supply and Treatment: Water was supplied from a diversion ditch and effluent was treated in a series of small instream settling ponds

Gold: Seventy percent of the gold recovered was coarse gold. Fineness varied from 840 to 860.

SEATTLE CREEK	**115 P/16**
Dan Klippert	**63°44'N 136°04'W**
Water Licence: PM95-025	**1995, 1996, 1997**
Mayo Placer Area	**Site No. 146**

Operation/Location: Dan Klippert and family continued mining on Seattle Creek, upstream of Morrison Creek, during 1995, 1996 and 1997.

Equipment/Function: Equipment used in the mining operation consisted of two 992 Caterpillar loaders, a 275 Michigan loader, a 235 Caterpillar excavator, a D6 Caterpillar bulldozer and a D8K Caterpillar bulldozer.



A 922 Caterpillar loader operated on Seattle Creek by Dan Klippert

Wash Plant: A 10 square foot grizzly classified material to 4 inch minus. A single run sluice box 3 feet wide by 20 feet long was lined with 18 feet of angle iron riffles.

Mining Cuts: Ground was sluiced during the 1995 and 1996 seasons. No information is available on the mining cuts. The 1997 program consisted of stripping and testing the ground.

Water Supply and Treatment: Water was pumped out of a tributary of Seattle Creek and effluent was settled in out of stream ponds in the Seattle Creek valley.

Gold: Gold recovered consisted of a mixture of coarse and fine.

GOODMAN CREEK	**115 P/16**
Kim Klippert	**63°55'N 136°12'W**
Water Licence: PM94-060	**1995**
Mayo Placer Area	**Site No. 147**

Operation/Location: Kim Klippert and his family tested ground in the Goodman Creek area, approximately two miles upstream from its confluence with the South McQuesten River.

Equipment/Function: A Caterpillar D8H bulldozer with ripper and U-blade was used to strip and push up gravels. A 266 Koering excavator was used to feed the sluice plant. A 275B Michigan loader removed tailings.

Wash Plant: A 4 by 8 foot screen deck classified material to ½ inch minus. Two sluice runs, 3 feet wide by 8 feet long, processed about 70 cubic yards per hour.

Ground Description: Depth to bedrock varied from 4 feet to 16 feet deep. Three to 4 feet of frozen mud lay on top of 4 to 14 feet of coarse gravel.

Mining Cuts: In 1995, 10,000 cubic yards were stripped and 2,500 cubic yards were sluiced for testing purposes.

Water Supply and Treatment: Due to a shortage of water, a recycling system was used. Water was pumped with an 8 by 6 inch Ford pump at a rate of 1000 igpm. Settling was instream.

Gold: Some ¼ ounce gold nuggets were recovered. The gold appears to be coarser at this location than the previous test site downstream. Fineness was 820.

Comments: Hematite and pyrite were found in the concentrate.

GOODMAN CREEK, a tributary of South McQuesten River

115P/16 2005: 63°54'16"N, 136°08'56"W 2003: 63°54'48"N, 136°09'52"W

Kim Klippert, Don Ruman
Water license: PM01-248 (2006)
Active producer (2003-2004) **Operation no. 145**

LOCATION Two separate areas of the creek have been mined; one area was approximately 1 mile (2 km) upstream from Goodman Creek's confluence with the McQuesten River, and a second area was on a left-limit tributary approximately 8 miles (5 km) from the McQuesten River. **WORK HISTORY AND MINING CUTS** Kim Klippert began testing this area in 1993. Some testing was also conducted in 2003. In 2004, under an agreement with Kim Klippert, Don Ruman brought in equipment to do testing and hot spotting on the lower claims. No deal options were completed, and restoration and equipment removal was completed late in 2004.

EQUIPMENT AND WATER TREATMENT Equipment brought in by Don Ruman in 2004 included a Hitachi EX-16 excavator and a Komatsu D355A bulldozer.

The wash plant was a Derocker over a dump box with two 20-foot sluice runs and a nugget trap, and water was supplied by a diesel 6- by 6-inch pump. His processing rate was 150 loose cubic yards per hour. Effluent was settled in a 160- by 80-foot (50- x 20-m) out-of-stream pond. **BEDROCK GEOLOGY** Bedrock is mapped as upper Proterozoic to lower Cambrian limestone, shale, sandstone, quartz-pebble conglomerate and minor marble.

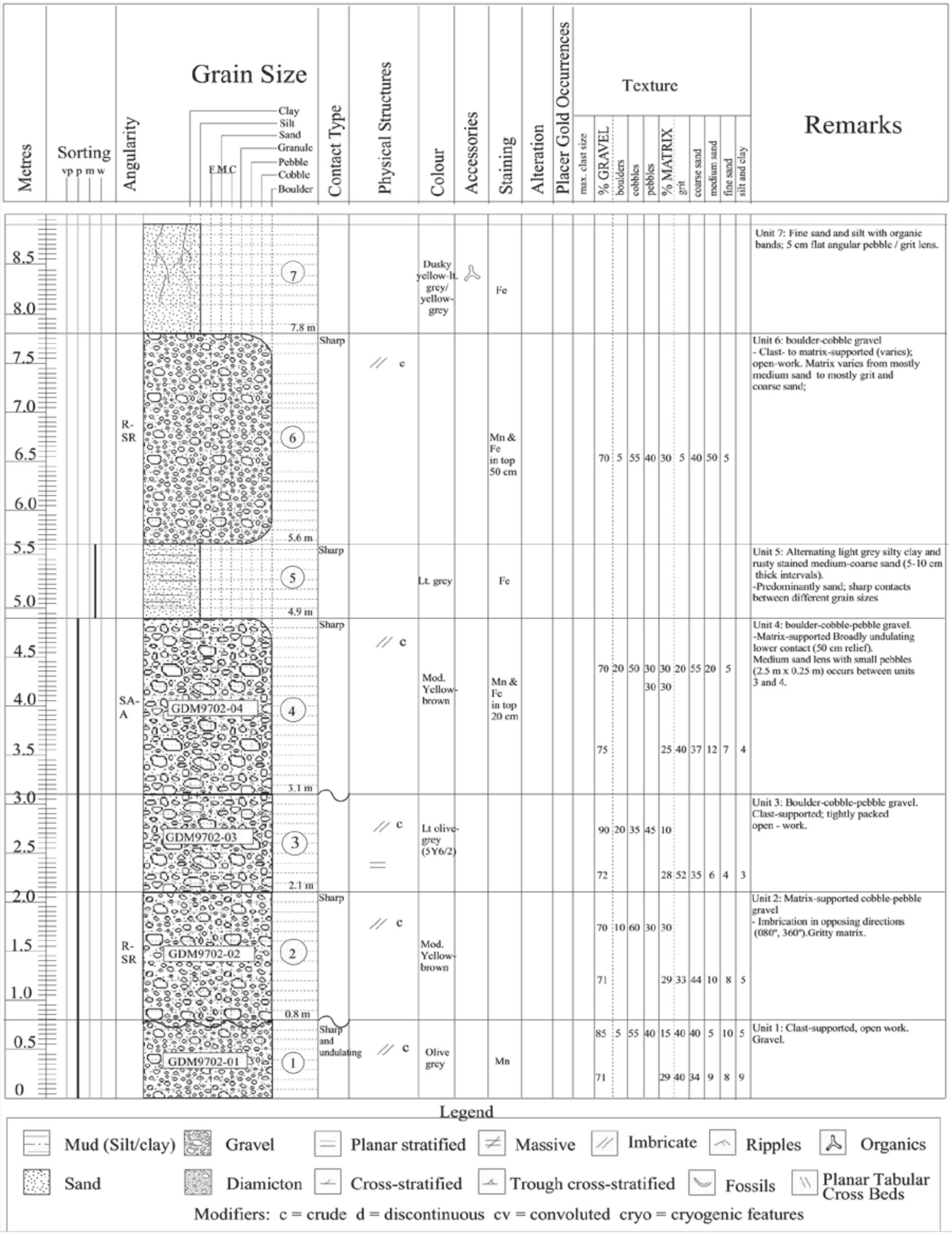
GOLD CHARACTERISTICS The gold was fine grained with a fineness of 820. Gold in 2004 was flattened 'glacial' gold, locally with nuggets.

:

Kim Klippert's operation on Goodman Creek, Date: 12/08/97 Section number: GDM9702 Measured by: TA, DP Creek or River: Goodman Creek NTS: 115P/16

Latitude: 63°54'21.7" Longitude: 136°08'57.1" UTM: 443596E, 7086881N Elevation: 2050 ft

Orientation: 080 (ds) ⟷ 260 (us) Geomorphic landform:



Unit 7: Fine sand and silt with organic bands; 5 cm flat angular pebble / grit lens.

Unit 6: boulder-cobble gravel
- Clast- to matrix-supported (varies); open-work. Matrix varies from mostly medium sand to mostly grit and coarse sand;

Unit 5: Alternating light grey silty clay and rusty stained medium-coarse sand (5-10 cm thick intervals).
-Predominantly sand; sharp contacts between different grain sizes

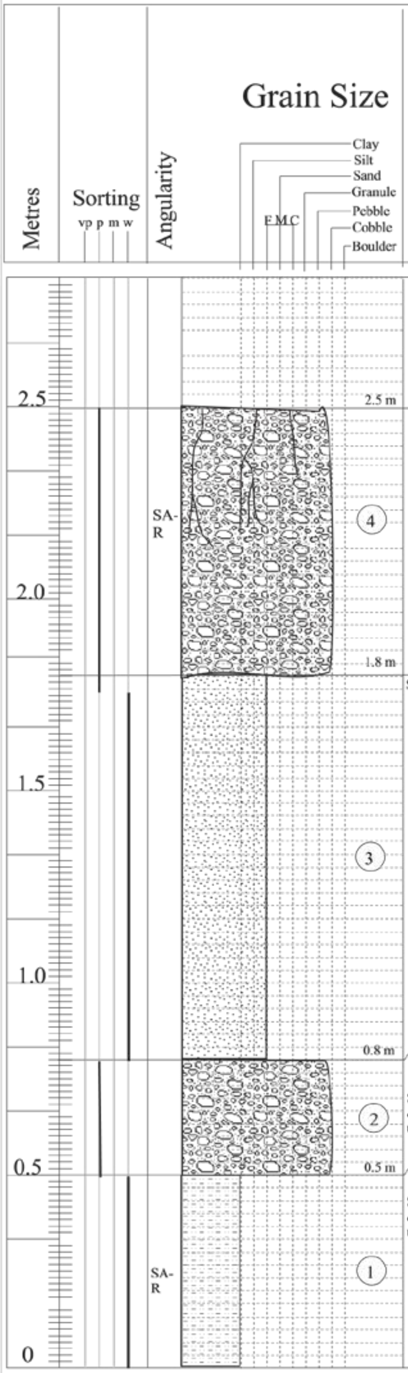
Unit 4: boulder-cobble-pebble gravel.
-Matrix-supported Broadly undulating lower contact (50 cm relief).
Medium sand lens with small pebbles (2.5 m x 0.25 m) occurs between units 3 and 4.

Unit 3: Boulder-cobble-pebble gravel. Clast-supported; tightly packed open - work.

Unit 2: Matrix-supported cobble-pebble gravel
- Imbrication in opposing directions (080°, 360°).Gritty matrix.

Unit 1: Clast-supported, open work. Gravel.

Date: 12/08/97 Section number: GDM9701 Measured by: TA, DP Creek or River: Goodman Creek NTS: 115P/16
Latitude: Longitude: UTM: 443231E, 7087331N Elevation: 2200 ft
Orientation: 180 (ds) ⟵⟶ 360 (us) Geomorphic landform:



Unit	Contact Type	Physical Structures	Colour	Accessories	Staining	Alteration	Placer Gold Occurrences	max. clast size	% GRAVEL	boulders	cobbles	pebbles	% MATRIX	grit	coarse sand	medium sand	fine sand	silt and clay	Remarks
④		// c	Lt.olive grey		Fe				80	-	20	80	20	35	50	10	5		Unit 4: Clast-supported cobble-pebble gravel. -Open work.
③	Sharp	=	Lt. olive grey (5Y6/1)																Unit 3: Parallel lamination; fine sand.
②	Sharp & undulating		Mod. Yellow-brown						60	-	25	75	40	15	10	30	40	5	Unit 2: Matrix supported; matrix is Fe stained.
①	Sharp & undulating	=	Medium grey		Fe														Unit 1: Silty clay; faint parallel laminations.

Legend

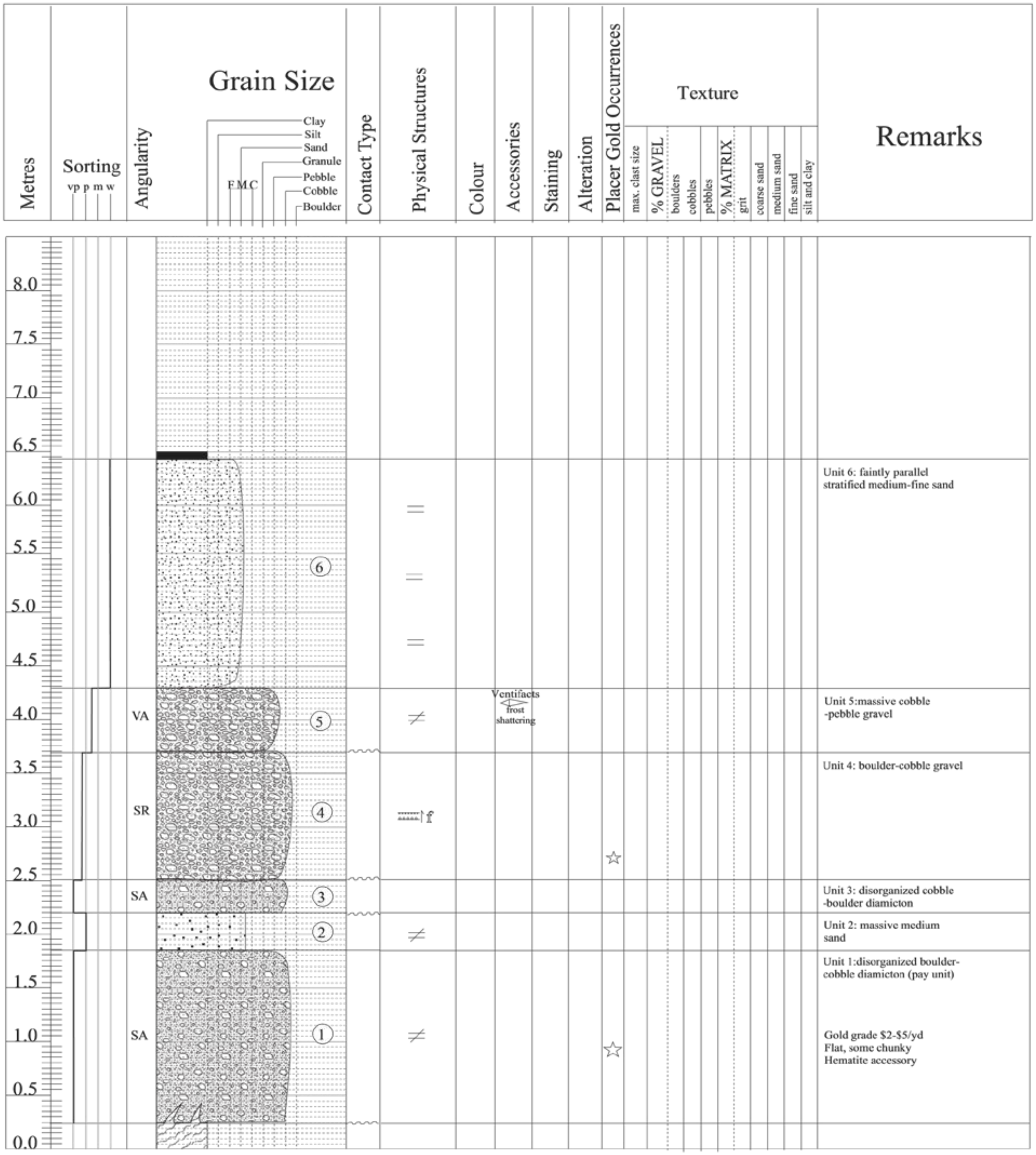
☰ Mud (Silt/clay)	▨ Gravel	═ Planar stratified	≠ Massive	// Imbricate	⌒ Ripples	⅄ Organics
⁘ Sand	▩ Diamicton	⊥ Cross-stratified	⊥ Trough cross-stratified	◡ Fossils	\\ Planar Tabular Cross Beds	

Modifiers: c = crude d = discontinuous cv = convoluted cryo = cryogenic features

Date: 08/08/95 Section number: GD1-95 Measured by: WPL Creek or River: Goodman Creek NTS: 115P16

Latitude: 63°55'36"N Longitude: 136°11'33"W Elevation: 2380 UTM: 0441450E,7089250N

Orientation: 285 ⇐⇒ 105 upstream Geomorphic landform: Periglacial Fan



Unit 6: faintly parallel stratified medium-fine sand

Unit 5:massive cobble -pebble gravel

Unit 4: boulder-cobble gravel

Unit 3: disorganized cobble -boulder diamicton

Unit 2: massive medium sand

Unit 1:disorganized boulder-cobble diamicton (pay unit)

Gold grade $2-$5/yd
Flat, some chunky
Hematite accessory

Legend

- Mud (Silt/clay)
- Gravel
- Planar stratified
- Massive
- Imbricate
- Ripples
- Organics
- Sand
- Diamicton
- Cross-stratified
- Trough cross-stratified
- Fossils

Modifiers: c = crude d = discontinuous

APPENDIX- III

Drill Logs

Drill Logs for Goodman Creek YMEP 14-087

Septembre 8 -October 3, 2014

Field Personel: Geologists: Jim Christie, Ph.D. Driller: Donjek Upton Helper: Justin Libby

Sample processing/Geology: Tara Christie and Dagmar Christie, Trucking: Sheamus Christie

Drill Hole Number	Easting	Northing	Zone	Elevation	Drilled to Bedrock	Bedrock depth	Total Footage Drilled	Diam. of drill auger	Breakdown in feet (of materials encountered)	Notes: (i. not drillable, problem, water)	Au (mg)	Result notes	Map Label
GM 1	443176.8	7087280	8	2011.03	?	30	30	8"	0-14 sandy gravel, 14-15 gravel - changed bits, 15-18 boulders, 16-28 mud layer, 28-30 very hard drilling, 30 ft B/R	not sampled	12		M-1
GM 2	443198.7	7087301	8	2011.03	y	35	38	8"	0-14 Frozen mud 14-18 change bits, 22.5-28 gravels, 28-29 hard, 29-34 muddy bredrock? 35 B/R, 38 ft total depth		8		M-2
GM 3	443213.4	7087324	8	2037.838	N		28	8"	0-16 frozen mud, 16 gravel, 22 boulder (Hard drilling), 28 cannot drill, boulders"	Change bit at 22.5 ft	4		M-3
GM 4	443242.1	7087342	8	2011.03	N		32	8"	0-14 loam frozen mud, 14-22.5 gravel, 22.5 very hard, 27.5 b/K? total depth 32		4		M-4
GM 5	443232.7	7087331	8	2037.838	Y		47	8"	0-15 mud, 15-18 Sandy Gravel,change to rock at 15, 18-20 some rocks then smooth at 20, 22.5 gravel and sample, 26 extremely tough going to 27.5 then easy to 32 - hard again at 32, 37.5 B/R contact? In bedrock at 47 ft		6		M-5
GM 5a					N		20	8"	0-5 Mud, 5-20 gravel.cobbles	Abandoned	n	no sample	
GM 5b					N		15	8"	0-3 gravel/cobbles, 3-15 water	Abandoned	n	no sample	
GM 6	443119.9	7087433	8	2054.396	y	55	55	8"	0-21 frozen mud, 22-31 gravel/cobbles, 31 B/R?, 32.5 hard still rock/gravel at 41', 55 B/R		286	0.036 fines, nuggests, 0.052, 0.046, 0.044, 0.058. 0.042	M-6
GM 7	443095.4	7087407	8	2048.875	?	50	50	8"	0-18 Frozen mud, 18-22 gravel, 22-28 sand seam/mud, 28 harder, 34-50 B/R	24' changed bits	30		M-7
GM 8	443074.5	7087383	8	2061.493	N		42.5	8"	0-3 Loam, 3-4 gravel approx. 1' thick, 4-25 frozen mud, 25 thawed sand, 32.5 rock/till and rock at 38, till at 40 then rock, 42.5 T/D	boulder samples off last 30' augers	16		M-8
GM 9	443055.8	7087362	8	2055.971	N		42	8"	0-4 frozen mud, 4-12.5 gravel, 1' boulders, 12.5 mud layer with organics framents, change augers for frozen mud to 25', 25-27 rock gravel or boulders for 2', 27 easy drilling, 30-32 glacial till? Gravel as well, almost all till		0	no gold	M-9
GM 10	443424.1	7087037	8	2039.413	Y		46	8"	0-3 Mud, 3-12 sand, 12-17 sand (easy drilling up till now)17 brown to grey mud, 23 gravel, 30 rock bit hard, 35 - 45 smooth drilling, bedrock		10		M-10
GM 11	443445.1	7087057	8	2017.336	N		40	8"	0-25 frozen mud, sand to 34 change to sandy gravel, last 20' looks like creek gravel, didn't notice change during drilling, 34 feels like gravel rock at 34.5, 35.5 hard drilling boulders?, 40' can't drill		24		M-11
GM 12	443468	7087081	8	2018.127	N		39	8"	0-25 grey mud, 26 hit gravel (easy drilling), 27.5 rock bounce, 35-39 easy drilling, till		0	no gold	M-12
GM 13	443491.1	7087107	8	2036.26	N		39	8"	0-32.5 loam/frozen mud, 32.5 some rock, 35 easy drilling to 39' t/d		0	no gold	M-13
GM 14	443631.9	7086912	8	2009.452	N		25	8"	0-22 light loamy material, unconsolidated rock and dirt , 22.5 gravel/rock, 23 cobbles, 25 very hard/smooth		t	few small colors	M-14
GM 15	443723.4	7086756	8	1975.548	N		33	8"	0-7.5 gravel/cobble, 7.5-13 loose cobbles and gravel, dirt- hole collapsing, 33 t/d. Hole in outwash gravels and silts	dirt all the way - flooded at last auger	8		M-15
GM 16	443441.1	7086957	8	2028.376			27	8"	0-10 loam, 10-13 loose unconsolidated dirt/gravel/rocks, dry till? Very powdery dirt, 18 start sample/ cobbles 27 ' running off auger, hole in outwash gravels and silt.		t	3 cls	M-16
GM 17	443437.2	7086960	8	2030.741			32	8"	0-14 loam/dirt thawed, 14 rock/gravel, 32 extremely hard drilling	auger stuck in boulders at 32'	6	1 s, 6 vs	M-17
GM 18	443137.9	7087159	8				9	8"	0-1 organic, 1-7 rocks/gravel, 7-9 bedrock hard at 9'		t	1 s, 2 vs	M-18
GM 19	443149	7087157	8				12.5	8"	0-8 round rock gravel, 8 b/r? Yest then hard at 10-12.5 b/r		t	1 s, 5 vs	M-19

Drill Hole Number		Easting	Northing	Zone	Elevation	Drilled to Bedrock	Bedrock depth	Total Footage Drilled	Diam. of drill auger	Breakdown in feet (of materials encountered)	Notes: (i. not drillable, problem, water)	Au (mg)	Result notes	Map Label
GM	20	442956.4	7087194	8				25	8"	0-17.5 frozen mud/till, 17.5 gravel/rock, 20' hard drilling, 25 cannot drill		t	1 s, 1 vs	M-20
GM	21	442933.1	7087198	8				28	8"	0-28 frozen mud/frozen till, 28 cannot drill too much rotation pressure-frozen		n	no sample	M-21
GM	22	442908.8	7087203	8				38	8"	0-36 frozen mud, 37 rock/boulder in till		t	1 s, 2 vs/fs	M-22
GM	23	443000.7	7087565	8				22.5	8"	0-2 slide rock, 2-18 sand/mud, 18 gravel, 20-22.5 easy drilling, 22.5 boulders		t	3 s	M-23
GM	24	443065.8	7087581	8				27	8"	0-8 sand, 8-15 gravel, 15 frozen sand, 22 gravel/rock, 27 rocks stop hole		8	1 m, 2 s, 2-3 vs	M-24
GM	25	443004.7	7087654	8	2082.782			14	8"	0-8 Mud, 8-14 gravel, 14 impenatrable rock		t	1 ss + fine no wt	M-25
GM	26	442982.9	7087693	8	2095.397			23	8"	0-12.5 bad frozen mud /sand, 12.5 gravel, 15 boulder layer got through to glacial till then very hard at 23'	changed to rock bit at 15'	4	2 s , 0.004	M-26
GM	27	442943.1	7087712	8	2108.799			9	8"	0-4 mud, 4 gravel (easy), 6 mud, 9 rock (boulder)		t	2 vs	M-27
GM	28	442919.6	7087734	8	2087.51			23	8"	0-7.5 mud, 7.5-8 gravel, 8-19 frozen mud, 19-23 muddy gravel, 23 extremely hard (boulder)		16	4 s, numerous vs	M-28
GM	29	443128.2	7087442	8	2058.337	y	46	54	6"	0-13 Frozen mud, 13 some rock, 15 boulder, 18-30 good gravel, 30 very hard, 32 smooth steady drilling, 38 rock, 46 B/R ? light contact with rock, boulder at 54, will not drill, very hard boulder	Potentially bedrock or colluvium	t	1 cls, 20 fine (top buckets had trace)	M-29
GM	30	443104.3	7087416	8	2044.934			53	6"	0-16 mud (easy drilling)16 hit rock, 17 very easy, seems like mud, 25 hit rock difficult , 26 easy, 30 rock - difficult, 31 rock bit, 33 easy, a little slow, 42 hit rock scouring slow and steady, 45 very rocky and slow, 53 won't go deeper getting stuck on mud (squeezing augers)		12, 24	top of hole 0.012 (6-26 ft) 1m, 3s, several vs, bottom of hole 0.004 (26-end) 1 s, 15 vs lots of heavy pyrite conc.	M-30
GM	31	443172.8	7087399	8	2043.356			56	6"	0-10 mud frozen sand, 10-22.5 gravel, 22.5 till? With lots of rocks, 40 looks like good gravel/ whatever this is, lots of round rocks, 56 still hitting rocks, in till		8, 20	Top of hole 0.008 - 1m, several vs, bottom of hole 0.02, 1L, 2 m, several s and vs	M-31
GM	32	443155.4	7087371	8	2036.26			51	6"	0-15 frozen mud, 15-16 gravel, 16-24 frozen mud, 24 gravel, 27-30 boulders, 34 to 45 heavy drilling, sandy sticky material small rocks-larger round rock till?51 t/d won't drill		t, 6	Top of hole trace, 1s, 5 vs, bottom 1L, 4 s, vs	M-32
GM	33	443133.5	7087357	8	2039.413			31	6"	0-1 mud, 1-2 frozen, 2-30 unfrozen mud, 30 rock switch bit, 31 stopped by rock (boulder)	no sample	n	No sample	M-33
GM	34	443070.3	7087448	8	2070.955			30	6"	0-20 mud, 20 hit rock, switch bit, 22 boulder, 25 smooth drilling, 30 hit rock (boulder)	no sample	n	No sample	M-34
GM	35	443091.4	7087465	8	2061.493			27.5	6"	0-21 frizen mud, 21-24 rock/gravel, change bit at 24, 24 boulders, 26 hard going, 27.5 stopped (boulder)	no sample	n	No sample	M-35
GM	36	443468	7087081	8	2018.127	y	60	68	6"	0-27 frozen mud, 27 gravel or till, 31-35 boulders, 35 to 40 gravel then easy drilling to 45, occassional rock mostly easy going to 47.5, 56 B/R?, 62.5 B/R on auger, 68 t/d		4, 4	Top 0.004, 6 s, numerous vs, BR, bottom, 4 s, numerous vs, mica schist	M-36
GM	37	443488.8	7087099	8	2070.955			45	6"	0-41 frozen mud, changed bit at 41, 41-42.5 rock/gravel, 42.5 changed bits, bad boulders, 45 boulders very hard and cannot drill, 45 t/d (boulder till)		0	No Au seen panning	M-37
GM	38	443512.6	7087123	8	2067.011			42	6"	0-13 frozen mud, 13 boulder/sandy gravel, 20-31 sand layer, 31 rock/gravel, 42 cannot drill		4		M-38
GM	39	443432.6	7087035	8	2030.741	y	42	42	6"	0-14 mud, 14-15.5 rock/gravel, 15.5-28 mud, 28 boulder then mud with rock, 35 boulder, cannot drill37.5 through boulders smoothes out 42 B/R	Broke bit at 35, hole flooded at bottom (near creek)	14	1l, 1m, 3s, numreous vs, panned fine pyrite from last auger	M-39
GM	40	443448.4	7087055	8	2023.645			36	6"	0-18 easy drilling, 18 hit rock, 19 -30 easy drilling sand, 30 mild rock chatter, 35 rock bit hard, 36 t/d (boulders)		t	1 vs	M-40

Drill Hole Number		Easting	Northing	Zone	Elevation	Drilled to Bedrock	Bedrock depth	Total Footage Drilled	Diam. of drill auger	Breakdown in feet (of materials encountered)	Notes: (i. not drillable, problem, water)	Au (mg)	Result notes	Map Label
GM	41	443451.5	7087062	8	2048.875			40	6"	0-30 Frozen mud/sand, 30-37.5 mud, 38 gravel/rock, 40 extremely rough, 40 t/d (boulders)		14	1 m, 6 s, several vs	M-41
GM	42	443479.2	7087092	8	2078.839	y	55	58	6"	0-44 frozen mud, 44 rock/boulders, 46 easy drilling, 50-55 rocks/gravel in mud, 55-58 B/R hard at 57, 58 t/d		8	numerous s and vs, to bedrock	M-42