DRILLING REPORT ON YUKON PLACER

PROPERTY ON MILLS CREEK

YUKON TERRITORY

YMIP #93-063

BY

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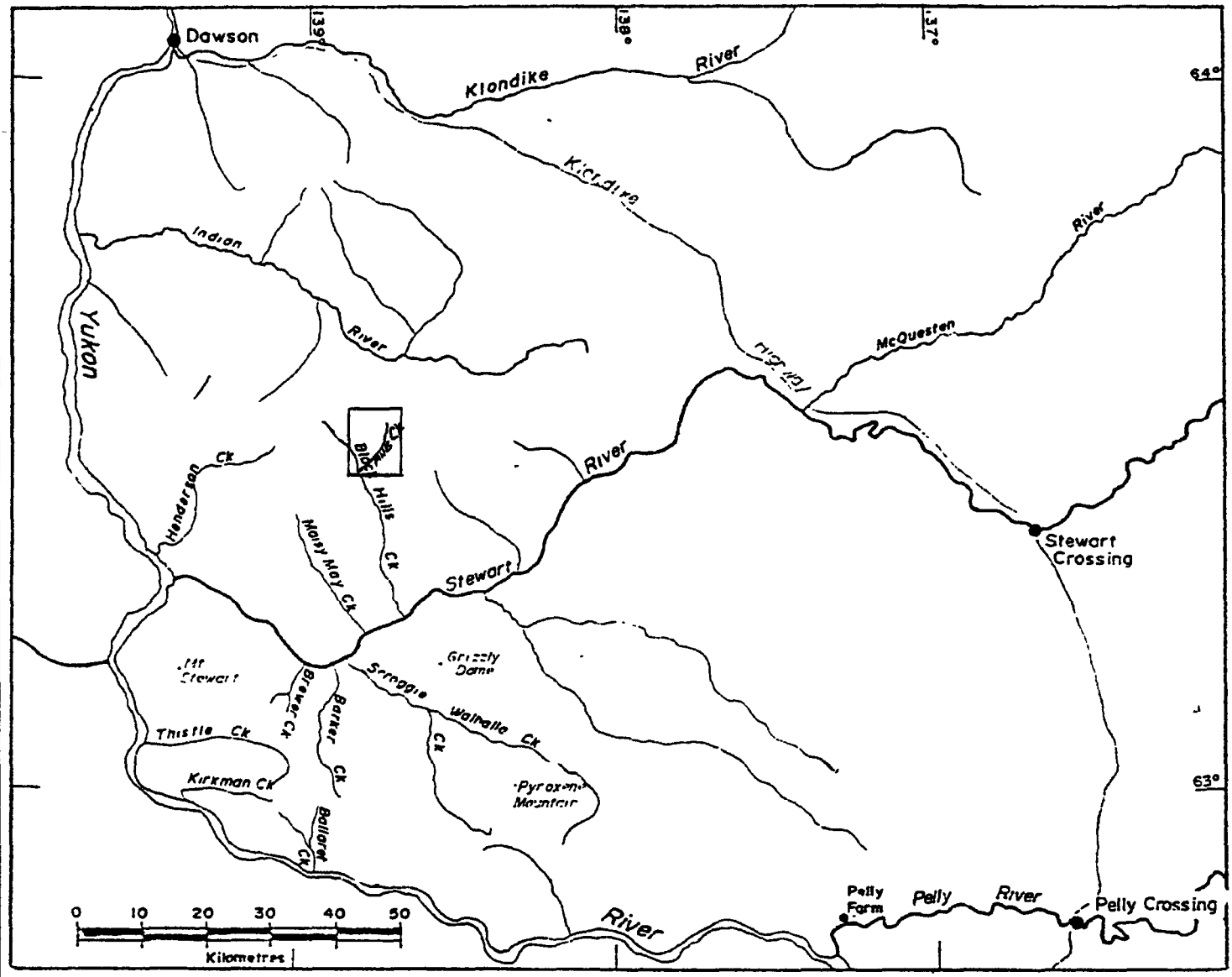
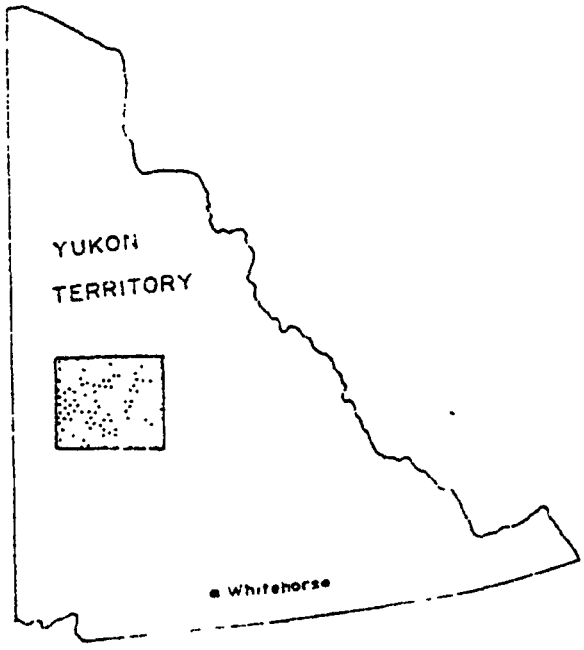
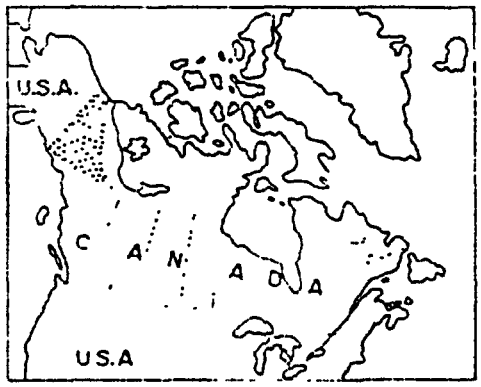






MILLS CREEK	
LOCATION MAP	
YMIP #93-063	
DATE: FEB 1994	DRAWN BY: LJP
SHEET# 1150-07	FIG# 1

2.0 INTRODUCTION

The following report summarizes information concerning the placer gold distribution determined from drillholes on Mills Creek. This report is based on work completed in October, 1993 on this creek as well as a consolidation of historical material obtained pertaining to the region by the 1930's Yukon Cons. Gold Churn Hole drilling, previous mining by Queenstake Resources Ltd. along Black Hills Creek at the mouth of Mills Creek and data accumulated by Coulee Resources in their 1993 exploration program on Black Hills Creek.

The 1993 Exploration drilling program on Mills Creek extended from October 5 through October 8, 1993. Twenty six holes totalling 307' were drilled across Mills Creek in three lines 1000' apart. In addition to the drilling, approximately 6 hours of "Cat" time was utilized for access using a D8L Dozer.

2.1 Location and Access

Mills Creek, a tributary of the Black Hills Creek, latitude 63° 28'N and longitude 138° 48' W, is located approximately 80 kilometres southeast of Dawson City, Yukon (Figure 1) and 345 kilometres northwest of Whitehorse.

Access is available using a year round government maintained road through Hunker and Dominion Creeks, and then by secondary road over Henderson Dome into Black Hills Creek Road. The route was originally used as a stage line in the early stages of the Klondikes history. The route through the Black Hills Creek is still used as a leg in the Yukon Quest dog race. An airstrip was built at the confluence of Mills Creek along Black Hills Creek.

2.2 Topography and Vegetation

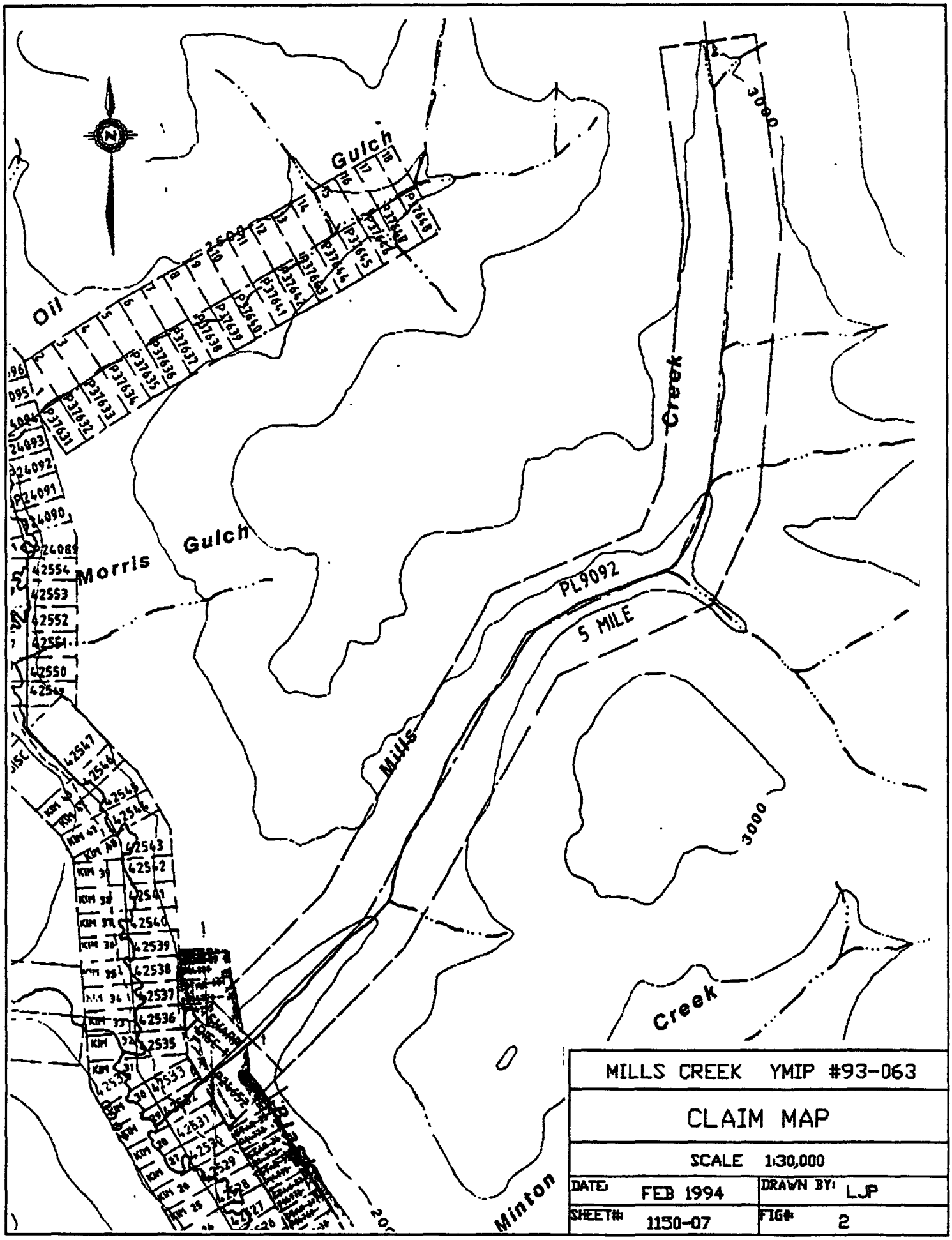
The project area lies entirely within the Klondike Plateau, a minor subdivision of the Yukon Plateau (Figure 2). It is marked by long, twisted, irregular main and spur ridges produced by a highly developed, dendritic stream pattern. The crests of most of the ridges are between 3,000' to 4,000' (900 to 1,200 metres) elevation with broad domes, probably representing an old uplifted erosion surface. The main streams and rivers have gentle gradients and are slow-flowing whereas tributary streams occupy narrow "V-shaped" valleys with steep gradients, particularly at the upper ends.

The original uplift was followed by a second, more recent one, resulting in the deepening of valleys by a further 500' to 750' (150 to 225 metres). Thus portions of old valley bottoms, still covered with heavy accumulations of gravel, occur at many points forming terraces and benches of varying width bordering the newer valleys.

The Klondike district has not been glaciated and surface rocks are, therefore, deeply weathered. A thick covering of decomposed schist, usually intermingled with slide rock, covers the side hills. The covering is less on ridges and outcrops are commonly seen.

The region is in the discontinuous perma-frost zone. Generally all northern exposures are deeply frozen, with ridges and southern exposures less so. Perma-frost is generally found about 15" (30 cm) below the moss surface. The frost level exists to depths from 60' to 200' (18 to 60 metres).

Mills Creek flows into the south flowing Black Hills Creek, fed by its numerous tributaries, drains into the Stewart River and subsequently the Yukon River.



MILLS CREEK YMIP #93-063	
CLAIM MAP	
SCALE 1:30,000	
DATE: FEB 1994	DRAWN BY: LJP
SHEET# 1150-07	FIG# 2

Ground cover in addition to the mosses, lichens, ground birch, willow, rosehip, and blueberry, consists of white and black spruce, Aspen and Balsam poplar, and white birch. The forest cover was heavily cut during the early Klondike era and has been replaced mainly with the faster growing willows although there are good stands of spruce still available even in the valley.

2.3 Property Holdings

Placer mineral rights along Mills Creek are held and controlled as a five mile lease owned by Joel White (assigned from Sylvain Montreuil). Claim plotted on DIAND Placer Sheet 115 0/7 (See Figure 2).

Claim	Grant Numbers	Expiry Date
Mills Cr 1150-07	PL 9092	13 Oct, 1994

3.0 EXPLORATION/PRODUCTION HISTORY

The principle creeks of the Stewart River Placer Gold District were staked two years after the 1896 discovery of gold in the Dawson City area, as the prospectors methodically worked their way south. Prospecting consisted of sinking a shaft to bedrock and drifting along the gravel/bedrock contact. This work was undertaken during the winter to keep solid walls and backs and to avoid flooding. The gravels were hoisted to the surface, stockpiled and sluiced during the summer, while the shafts and drifts filled with water. With encouraging results a new shaft system had to be sunk each season. A concentration of old shafts is a strong indicator of potential gold-bearing gravels.

Mining along the Black Hills Creek began in the early 1900's, however, significant mining did not commence until 1970. With the integration of heavy machinery, mining of this lower grade creek became profitable. Production records for Black Hills Creek and tributaries are as follows:

YEAR	RAW Oz Au	LOCATION	REFERENCE
1938	23		GSC Memoir 220
1976	1955	Larsen	DIAND Paper 77-1
1978	2234		DIAND 1978-1982
1979	1732	Near	DIAND 1978-1982
1980	3181	Dome	DIAND 1978-1982
1981	3068	BHC	DIAND 1978-1982
1982	3812	BHC	DIAND 1978-1982
1983	3823	Dome	DIAND 1983-1984
	707	Oil G.	DIAND 1983-1984
1984	4646	Dome	DIAND 1983-1984
	1928	Oil G.	DIAND 1983-1984
	864	Creek	Queestake Prod.
1985	1894	Dome	DIAND 1985-1988
	1935	Oil G.	DIAND 1985-1988
	361	BHC	Queestake Prod.
1986	2460	Dome	DIAND 1985-1988
	2370	Oil G.	DIAND 1985-1988
	2654	BHC	Queestake Prod.
1987	1764	Dome	DIAND 1985-1988
	5093	Oil G.	DIAND 1985-1988
	850	BHC	Queestake Prod.
1988	3767	Oil G.	DIAND 1985-1988

1989	2843	Childs G.	DIAND 1989-1990
1990	2695	Childs G.	DIAND 1989-1990
1991-1993	?	Childs G.	
1991-1993	?	BHC	
TOTAL	**56,659**		

Production on Black Hills Creek and its tributaries during the 1970's through to 1990 was conducted predominately by Territorial, Queenstake, and Paydirt. Production in 1992 and 1993 on Black Hills Creek by Steve van Bibber and on Childs Gulch is noted, however, no production figures are available. No recorded mining has been done on Mills Creek, however, evidence of historical shafting is in evidence.

Prior to 1945, production consisted of shafts and drifts in the valley bottoms and hydraulicking on the benches. Drill results taken in the 1930's by Yukon Cons. Gold Churn were intended to prove up ground for dredging. Small scale modern production equipment began to work some of the creeks in the district by 1950, mining method consisting of stripping the overburden by bulldozers for natural thawing and then pushing pay gravels to the processing plant.

There has been a marked increase in gold production from the Stewart River/Indian River Districts since the mid-1980's. Principle gold production in the Yukon has been moving steadily south from the Klondike River drainage. Production from these drainages has increased to 50.5% of the Yukon's total, while Klondike production has fallen to 17.1% of the total.

4.0 PROPERTY GEOLOGY

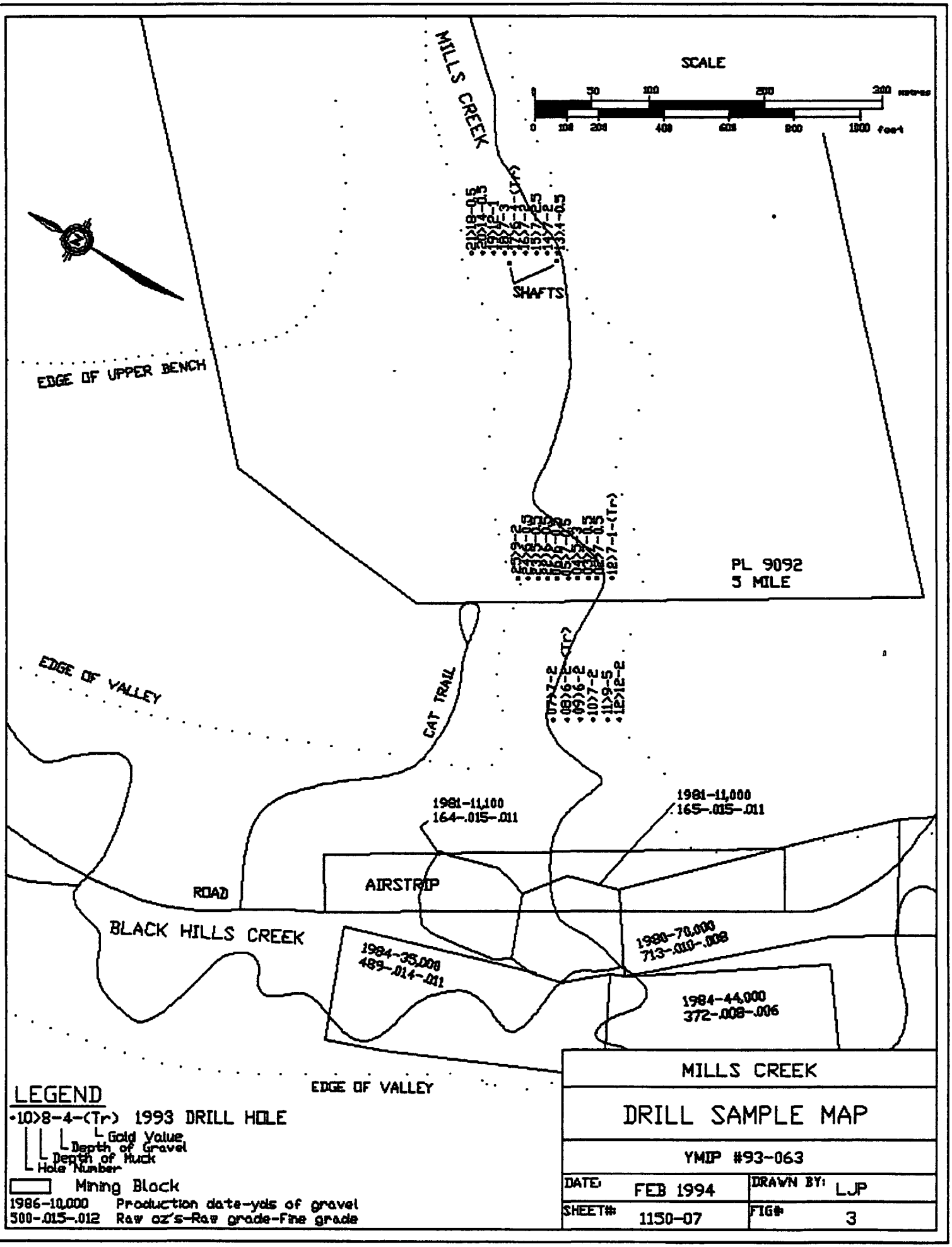
The property is underlain by metasedimentary rocks of Proterozoic and Paleozoic age (The Yukon Group assemblage of the Yukon Metamorphic Complex). Permian, Triassic and Tertiary intrusions cut the sequence. The oldest rocks in the District, the Schist Gneiss of the Yukon Group assemblage, underlie the entire Black Hills Creek. The Schist Gneiss unit consists largely of nondistinctive and monotonous muscovite-biotite quartzite and quartz mica schist with a well developed schistosity.

One or more geological uplifts took place towards the end of the Tertiary Period. These uplifts were not of universal vertical rise over the whole area, resulting in a tilting effect in some areas. Where this occurred along an existing drainage way, the existing stream was thrown to one side of the valley leaving its old stream bed free and above as a terrace.

The uplift took place at two different time periods in some areas, creating two separate and distinct terraces above the present stream course. In cases where the uplift created moderate tilting the new stream cut the old stream bed at frequent intervals and created more or less homogeneous pay streaks in the new stream. Where the ancient stream bed is cut by side streams (pups or gulches) the new stream could have paying gold deposits below the pup for some distance.

Placer gold is confined for the most part to creek bottoms and benches. The gold occurs as grains and flakes, much actually lying in cracks and broken rock at the gravel/bedrock contact.

The gravel deposits are overlain by a brown to black earth material, locally called 'muck', varying in depth from 3' to 20' (1 to 6 metres). The muck consists of wind-borne silt, humus, vegetation, sand, clay and rock fragments. The muck contains no gold, although lenses of gravels may occur and may contain gold.


MILLS CREEK
SCALE
0 50 100 200 300 meters
0 100 200 400 600 800 1000 feet
SHAFTS
EDGE OF UPPER BENCH
PL 9092
5 MILE
EDGE OF VALLEY
CAT TRAIL
1981-11,100
164-.015-.011
1981-11,000
165-.015-.011
ROAD
AIRSTRIP
BLACK HILLS CREEK
1984-35,000
489-.014-.011
1980-70,000
713-.010-.008
1984-44,000
372-.008-.006
EDGE OF VALLEY
LEGEND
•10>8-4-(Tr) 1993 DRILL HOLE
Gold Value
Depth of Gravel
Depth of Muck
Hole Number
Mining Block
1986-10,000 Production date-yds of gravel
500-.015-.012 Raw oz's-Raw grade-Fine grade
MILLS CREEK
DRILL SAMPLE MAP
YMIP #93-063
DATE: FEB 1994
DRAWN BY: LJP
SHEET#: 1150-07
FIG#: 3

The surface of the muck is covered by a dense mat of moss and vegetation, preventing thawing, erosion and removal of the muck by natural means. Except for areas where the vegetation has been stripped the muck and gravel are solidly frozen.

The bedrock has generally been subject to weathering over a long period of time and is composed of a predominately narrow (1' - 3'), decomposed zone underlain by a more competent schist.

In general, gold found in a stream is finer as one mines downstream and coarser as one mines upstream. This is not always the case as in the Black Hills Creek. Several 'Left-limit' feeders found along the extent of Black Hills Creek contribute to the deposition of the gold in the main channel.

5.0 1993 EXPLORATION PROGRAM

5.1 Introduction

The 1993 Exploration drilling program on Mills Creek extended from October 5 through October 8, 1993. Twenty five holes totalling 292.5' were drilled across Mills Creek in three lines approximately 1000' apart. In addition to the drilling, approximately 6 hours of "Cat" time was utilized for access using a D8L Dozer. Sample descriptions are found in Appendix A.

Drilling was carried out using a Bombardier Track-mounted 6" King Auger Drill, owned and operated by Henry Rienink of Dawson City, Yukon. Auger samples were collected in buckets 11" wide x 15" high. Drill sample "per-foot recovery" was measured and sample loss was compensated for on each hole drilled, assuming a 30% expansion factor of sample from in situ.

Samples were sluiced on a 8" x 48" sluicebox and panned to a concentrate. The gold was weighed on a balance scale, minimal measurement to 0.1 grains.

Drill holes were placed cross-secting Mills Creek along three lines. Hole locations were placed predominately equidistant at 30' spacing as well as where dowsing efforts appeared favourable.

5.2 Drill Results

Mills Creek is a shallow, flat bottomed valley. Two shafts and an old pit carved out by a Cat were located in the vicinity of the northernmost drill test line.

The uppermost layer of "muck", composed predominately of mud, silt, and sand ranges from 4' to 18' in depth, the layer thinnest with its proximity with the creek. This layer was not sampled because of its historical incompatibility with gold association. The layer of gravels beneath the muck ranged from 4' to almost negligible in width. As with the muck, the gravels are narrowest near the creek. The bedrock is composed of a hard, foliated schist, allowing poor penetration with the drill. Observed in the drilling program, the average depth of muck drilled was 7.75' and the average width of gravels encountered was 1.5'.

Reducing the samples to concentrate resulted in determinate amounts of black sand, hematite, and garnets in almost every drill hole. As encouraging as this is, only three samples produced any gold, and then only in trace amounts.

6.0 SUMMARY AND RECOMMENDATIONS

Drill results were discouraging, only three of the holes drilled yielding trace amounts of gold. Reliability of the sampling procedure was confirmed before the project started. Results using the same drill and sampling procedure earlier in the season on a different project along Black Hills Creek, produced results consistent with earlier drilling results by YCGC in the late 1930's. Sample recovery was calculated with only an average 10% loss of sample. Sample treatment method, via the sluicebox, was tested earlier in the season and proved reliable.

Any additional testing of the creek could be conducting by bulk sampling or trenching to ascertain any economic viability of the property. Also, the creek may be tested upstream as well as farther up the valley limits. At the present time, Mills Creek appears subeconomic and no further work is recommended.

7.0 REFERENCES

BOSTOCK, H.S. (1942). Ogilvie Map Sheet. Geological Survey of Canada Map 711A.

COPELAND, D.J. (1986). Report on Yukon Placer Projects. Private Report for Havilah Gold Mines Ltd.

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APPENDIX A

SAMPLE DESCRIPTION

MILLS CREEK GRID

93-DH-01

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-3	Sand		
0	3-7	Mud + Ice		
0	7-9	Bedrock	No Sample	

93-DH-01A

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-7	Sand + mud (frozen)		
0.25	7-10	Bedrock (Hard, thawed)	1 F, 1 VF	Trace

93-DH-02

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-7	Mud + sand		
0.25	7-12	Bedrock (Hard, thawed)	No Trace	0

93-DH-03

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-7	Mud + sand		
1	7-9	Bedrock (Hard, frozen)	No Trace	0

93-DH-04

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-5	Sand + mud		
"	5-8	Gravel		
1.75	8-10	Bedrock (Hard, frozen)	No Trace	0

93-DH-05

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-7	Sand		
1	7-10	Bedrock + Gravel (Hard)	No Trace	0

93-DH-06

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-6	Sand		
0.75	6-9	Bedrock + Gravel (Hard)	No Trace	0

93-DH-07

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-7	Overburden		
"	7-9	Mud + gravel		
2	9-12.5	Bedrock (Decomp, frozen)	No Trace	0

93-DH-08

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-6	Mud		
"	6-8	Mud + Gravel		
1.5	8-9.5	Bedrock (Hard, thaw)	2 VF	Trace

93-DH-09

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-6	Mud		
"	6-8	Gravel		
1	8-9	Bedrock (frozen, hard)	No Trace	0

93-DH-10

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-4	Mud		
0	4-7	Ice		
"	7-9	Gravel		
1.66	9-11.5	Bedrock (hard, frozen)	No Trace	0

93-DH-11

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-7	Mud		
"	7-9	Sand		
"	9-14	Gravel		
3	14-15.5	Bedrock (hard, frozen)	No Trace	0

93-DH-12

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-5	Mud		
"	5-12	Sand		
"	12-14	Gravel		
2.75	14-16	Bedrock (hard, frozen)	No Trace	0

93-DH-13

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-4	Sand		
0.25	4-6	Gravel/Bedrock (thaw)	No Trace	0

93-DH-14

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-3	Mud		
"	3-7	Sand		
"	7-9	Gravel		
1.75	9-11	Bedrock (hard, frozen)	No Trace	0

93-DH-15

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-7	Mud + sand		
"	7-9.5	Gravel		
1.5	9.5-11	Bedrock (hard, frozen)	No Trace	0

93-DH-16

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-7	Mud + sand		
"	7-9	Gravel		
1	9-11	Bedrock (hard, frozen)	No Trace	0

93-DH-17

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-6	Mud		
"	6-10	Gravel		
2	10-12	Bedrock (hard, frozen)	1 M	Trace

93-DH-18

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-6	Mud		
0	6-7	Sand		
"	7-10	Gravel		
1.66	10-13	Bedrock (hard, frozen)	No Trace	0

93-DH-19

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-9	Mud		
0	9-12	Sand		
"	12-13	Gravel		
1.75	13-14.5	Bedrock (hard, frozen)	No Trace	0

93-DH-20

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-14	Mud + silt		
0.66	14-15.5	Bedrock (hard, frozen)	No Trace	0

93-DH-21

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-18	Mud + silt		
0.75	18-20	Bedrock (hard)	No Trace	0

93-DH-22

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-6	Sand + silt		
0.33	6-7	Bedrock (hard)	No Trace	0

93-DH-23

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-5	Sand + silt		
0.25	5-6	Bedrock (hard)	No Trace	0

93-DH-24

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-6	Silt + mud		
0.5	6-8	Bedrock (hard)	No Trace	0

93-DH-25

RECOVERY (Buckets)	DEPTH (Feet)	DESCRIPTION	GOLD RECOVERED (Au)	(Grains)
0	0-9	Mud, slides + ice		
"	9-11	Muddy gravel		
2.5	11-14.5	Bedrock (decomp)	No Trace	0
