REPORT ON THE

BLACK HILLS CREEK

PLACER CLAIMS WW 1 - 29

120080

BEMA
Industries Ltd.

REPORT ON THE

BLACK HILLS CREEK

PLACER CLAIMS WW 1 - 29

Dawson Mining Division

Yukon Territories

N.T.S. 1150/10
Latitude 63°30'
Longitude 138°30'

120080

For

AMIR MINES LTD.
38 - 566 Cardero Street
Vancouver, B. C.
V6G 2W6

By

BEMA INDUSTRIES LTD.
203, 19945 - 56th Avenue
Langley, B. C.
V3A 3Y2

March 31, 1983

Mike Philpot, B.Sc.
Gary D. Nordin, B.Sc.

BEMA
Industries Ltd.

1.0 INTRODUCTION

Bema Industries was contracted by Amir Mines Ltd. to conduct a preliminary placer evaluation program on the WW 1 - 29 claims held under option from Mr. Wallace Wing of Vancouver, B.C.

During the period August 31, - September 14, 1982, Messrs. Philpot and M. Beley conducted an evaluation program consisting of mapping geomorphic features, panning old working and processing a quantitative measure of bench gravel through a long-tom.

This report describes the history, physiography, results, conclusions and recommendations of further work on the property.

1.1 PROPERTY

Mr. Wallace Wing of Vancouver, British Columbia, holds title to the WW 1 - 29 placer claims in the Dawson Mining Division Yukon Territory. The property encompasses an area of 727 acres, along a 3 mile section on Upper Black Hills Creek.

Amir Mines Ltd. entered into a lease option of the property under terms of an agreement signed on November 23, 1982. The terms of the option agreement are as follows:

1. Payment of sum of $3,500.00 which gives Amir Mines option on or before November 23, 1983 to:

    a) acquire 100% by eight payments of $32,500.00 aggregating $260,000; each payment made at 3 month intervals.

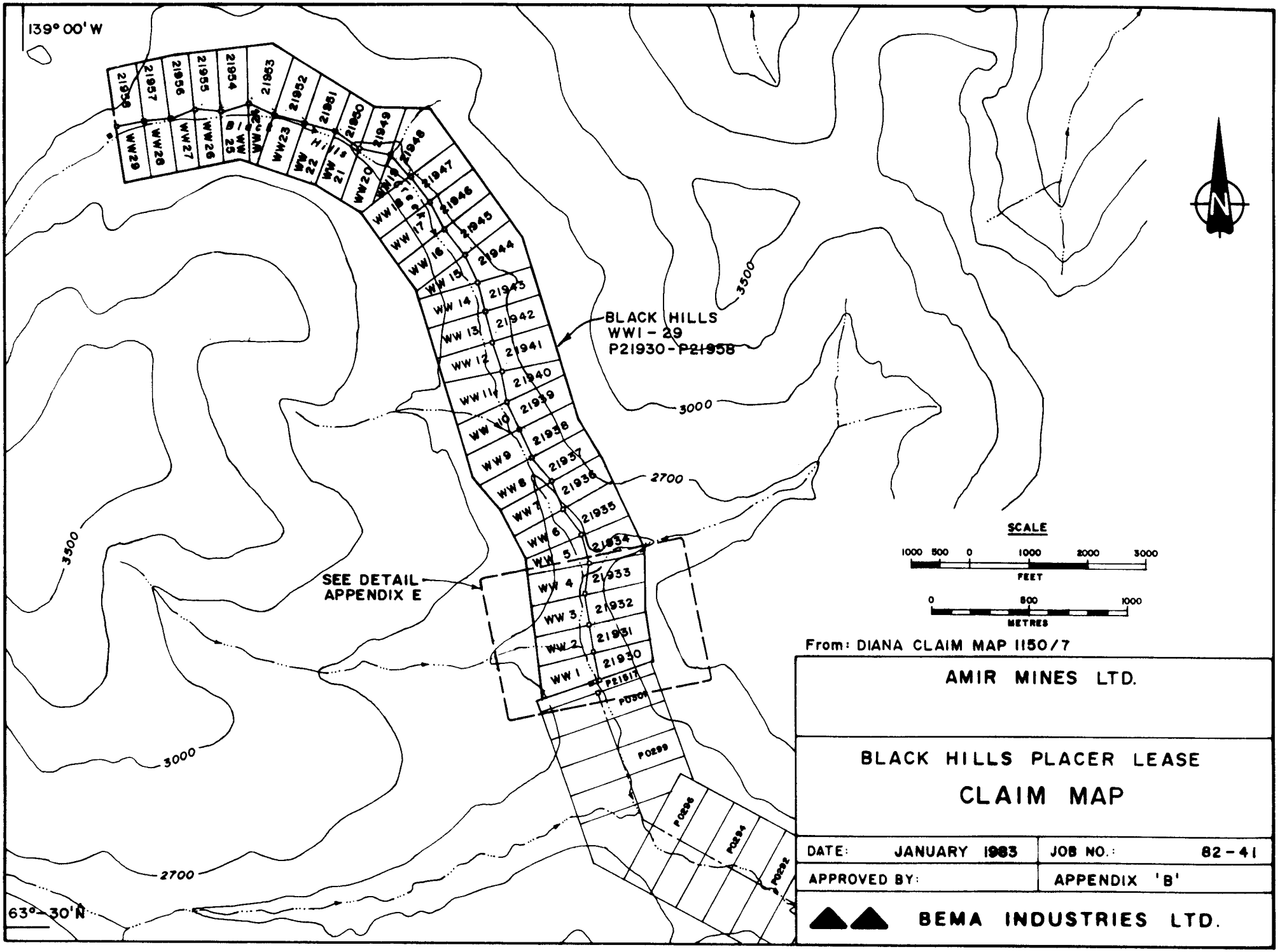
    b) enter into a two year lease agreement with further two year lease agreement renewals which have the following alternatives:

        i) Amir pays $10,000 to Wing and 12% royalty on production.

APPENDIX "A"

TABULATION OF CLAIM DATA

CLAIM NAME	GRANT NUMBER	EXPIRY DATE
WW 1 - 29	P21930 to P21958	Sept. 22, 1983


139° 00' W
63° 30' N
BLACK HILLS
WW1 - 29
P21930 - P21958
SEE DETAIL
APPENDIX E
3500
3000
2700
SCALE
1000 500 0 1000 2000 3000
FEET
0 500 1000
METRES
From: DIANA CLAIM MAP 1150/7
AMIR MINES LTD.
BLACK HILLS PLACER LEASE
CLAIM MAP
DATE: JANUARY 1983
JOB NO.: 82-41
APPROVED BY:
APPENDIX 'B'
BEMA INDUSTRIES LTD.

ii) Amir pays $20,000 to Wing and 11% royalty on production.

iii) Amir pays $30,000 to Wing and 10% royalty on production.

The attachment marked Appendix "A" provides a tabulation of the data pertinent to the mineral claims. The attachment marked Appendix "B" shows the outline of the claim block and its relation to topographic features and latitude.

1.2 LOCATION AND ACCESS

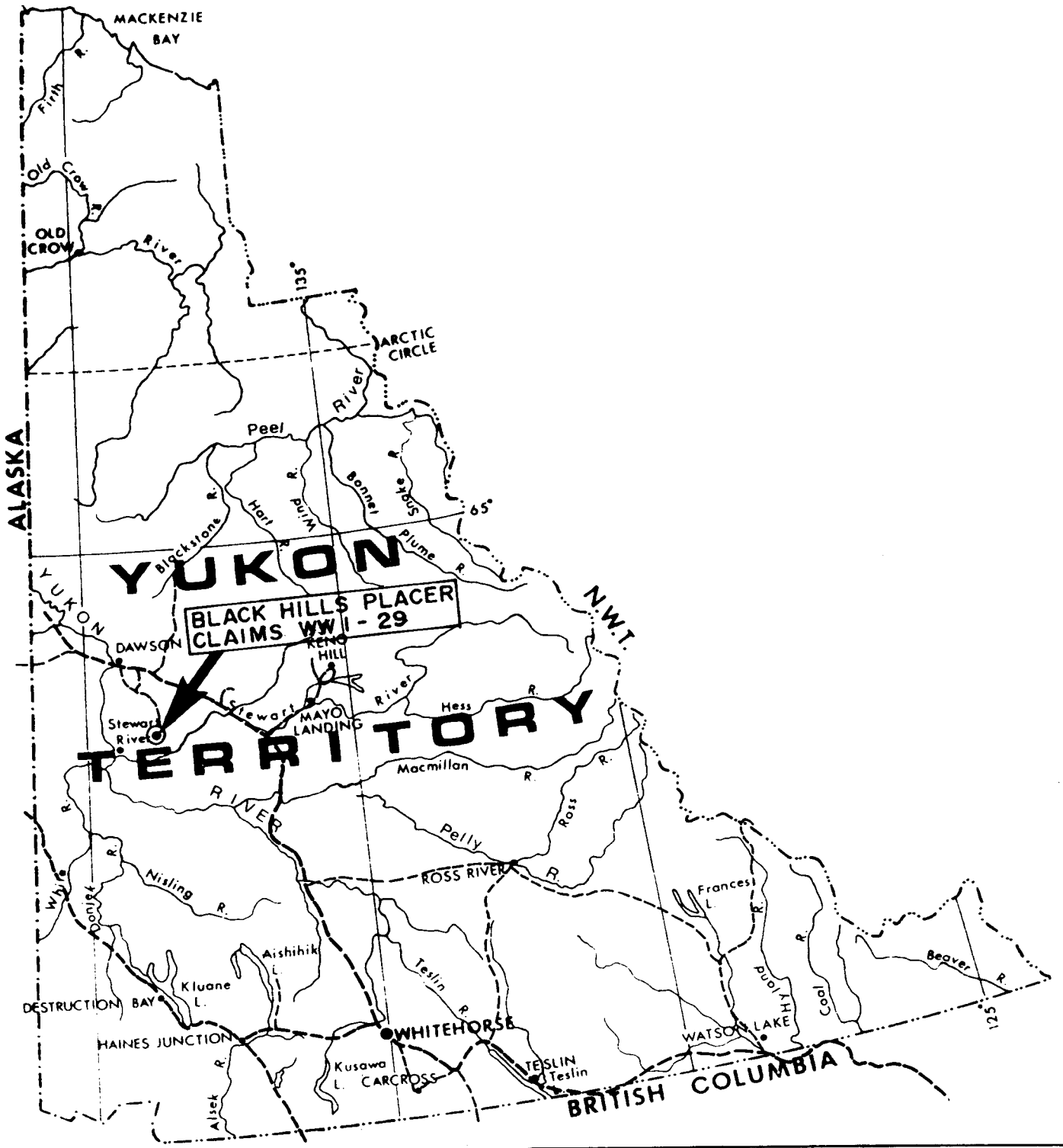
The Black Hills Placer Lease 6280 is located in the Dawson Mining Division, seventy-two kilometres southeast of Dawson, Yukon Territory on the upper reaches of Black Hills Creek, (Latitude 63°30' N and Longitude 138°30' W) at an elevation of 2,500 feet.

Access can be gained from Dawson, Y.T., 15 kilometres east to the Hunker Road, thence south for approximately 100 kilometres via Dominion Creek, Wounded Moose Creek and Eureka Creek to the divide between Eureka and Black Hills Creek. From this location there is a rough four wheel drive road which branches to the west toward Black Hills Creek and meets the old Whitehorse-Dawson Trail which follows Black Hills Creek. Road access along this road is good for approximately three kilometres in the downstream direction, however any further access is by foot.

The attached map marked Appendix "C" and Appendix "D" shows the location of the property and means of access.

1.3 HISTORY

The property is located with the Dawson Mining Division on the upper reaches of Black Hills Creek. The lower portion of Black Hills Creek has seen considerable exploration in the period



SCALE 0 20 40 60 80 100 miles

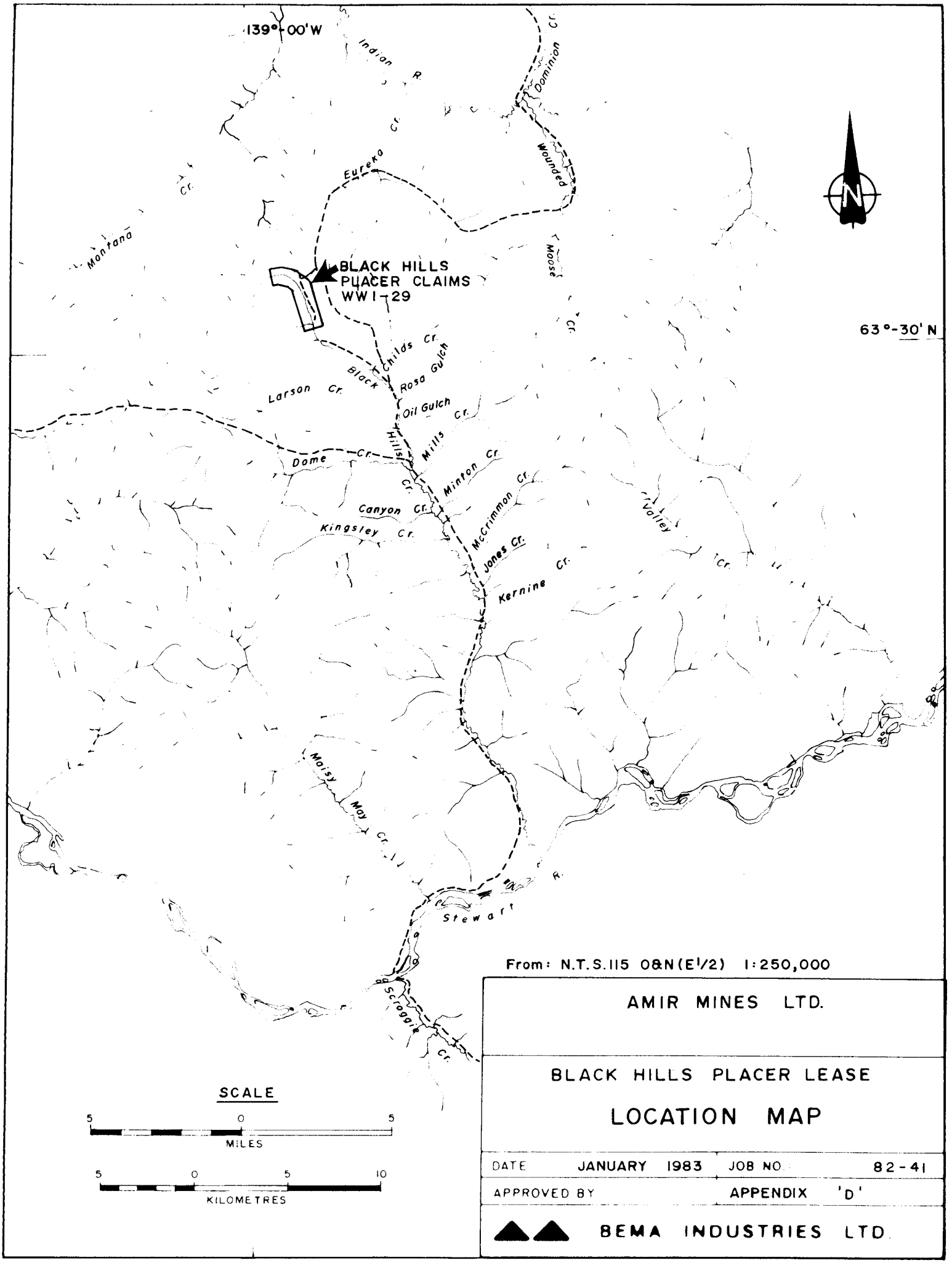
From: YUKON TERRITORIAL GOVERNMENT ROAD MAP

AMIR MINES LTD.

YUKON KEY MAP

DATE: JANUARY 1983	JOB NO.: 82 - 41
APPROVED BY:	APPENDIX 'C'

BEMA INDUSTRIES LTD.



From: N.T.S. 115 O&N(E½) 1:250,000

AMIR MINES LTD.

BLACK HILLS PLACER LEASE

LOCATION MAP

DATE	JANUARY 1983	JOB NO.	82-41
APPROVED BY		APPENDIX	'D'

BEMA INDUSTRIES LTD.

1935 - 1936 and production during the period 1974 - 1981. Henderson Creek, 10 kilometres to the west has also seen considerable production. Very little production has been reported from the area east of Black Hills Creek. See attached Appendix "D".

The original gold discovery on the Black Hills Creek was made in 1898 south of Larsen Gulch. Between 1898 and 1920 there was sporadic exploration and no records of significant production.

In 1920 there was renewed interest in the area with the staking of 80 claims above Larsen Gulch and 40 claims below. A large portion of the claims were owned by Messrs. J. Carpenter and A. March who operated a small placer sluicing operation on the left bench formation of the Discovery claim, south of Larsen Gulch.

In 1935, Yukon Consolidated Gold Corporation (Y.C.G.C.) optioned the property for a sum of $120,000. Y.C.G.C. drilled 327 churn drill holes on the lower portion of Black Hills Creek from Mills Creek to Childs Creek and calculated proven dredgeable reserves of 15,000,000 cubic yards gravel, averaging $10.00/cubic yard. The distance from Y.C.G.C.'s other dredging operation, lack of hydroelectric power for the dredge and lower values compared to their other operations on Klondike, Bonanza, Quartz, Dominion, Sulphur and Hunker resulted in a decision not to install a dredge and subsequently the property was dropped in 1936.

Further activity of Black Hills Creek was not evident until 1973 when property to the south of Placer Lease 6280 was staked near Childs Gulch by R. G. Hilker. This property was then transferred to Kelmount Exploration Ltd. and then to Goldmark Minerals and subsequently to Territorial Gold Placers Ltd. Between 1974 and 1979, Territorial accumulated the majority of the placer ground on Black Hills Creek. In all Territorial owned 187 claims and 6 six mile placer leases. Production by them on Black Hills Creek commenced in 1975 and continued until 1981 on the lower section of Black Hills Creek drilled by Y.C.G.C. in the Dome Creek, Larsen Gulch area. Between 1975 and 1979 Territorial Gold Placers produced approximately 19,800 oz. raw gold from a sluicing operation employing 3 - 5 caterpillar D-8 tractors and 1 to 2 sluice boxes. Gross production in the last year of production was 2,963 ounces raw gold from 140,000 cubic yards of gravel or .021 ounces/cubic yard, or $10/yard at $500 Canadian per ounce gold. There has been no recorded production from the Upper Black Hills, WW 1 - 29 placer claims section, however old workings suggest the area was partially evaluated and possibly hand mined on a small scale.

2.0 PHYSIOGRAPHY

Placer lease 6280 is located in the upper reaches of Black Hills Creek. The average gradient of the creek is approximately 5% and is contained in a relatively narrow valley floor which varies from 15 to 50 metres in width. There is a prominent bench formation on the right bank (looking downstream) This bench formation is generally elevated several metres above the present creek and averages 20 metres in width to the break in the slope. There are only a few isolated bench formations on the left bank.

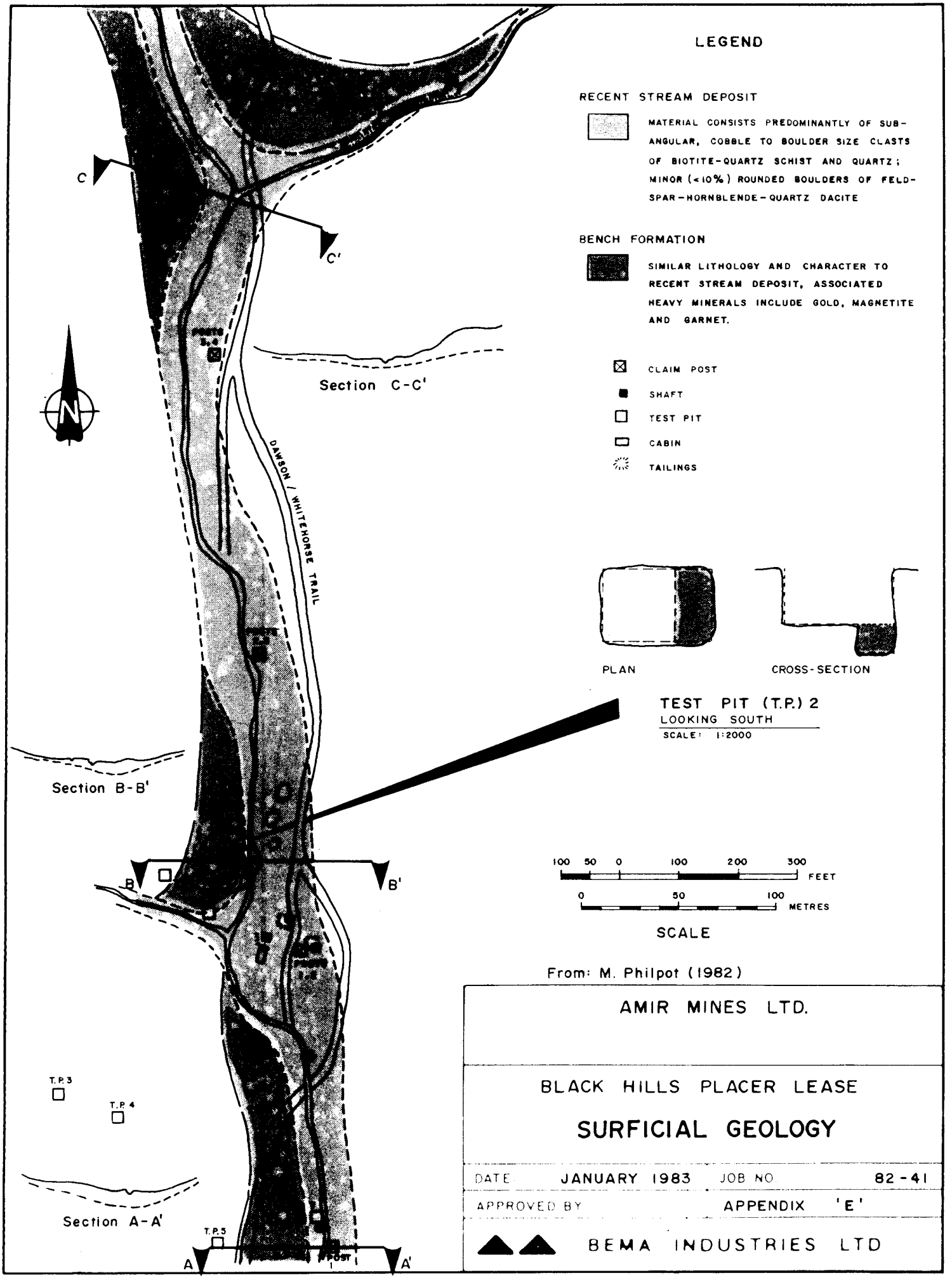
The mountain slopes to the valley are moderately steep, approximately 20 degrees, and are typically covered by a thick layer of moss and sparse stunted spruce trees. In areas that are well drained, such as a residual soil overlying bedrock or certain portions of a bench formation, the vegetation consists of prominent poplar groves. The entire region is underlain by permafrost except in the main creek, local tributaries and well drained areas.

2.1 SURFICIAL GEOLOGY

The WW 1 - 29 placer claims are located on the upper reaches of Black Hills Creek between elevations 2,400 feet and 3,400 feet. A placer evaluation program of Placer Lease 6280 was conducted by Mr. Philpot of Bema Industries with the prime objective to determine the types of gravel deposits present and their gold content. The exploration was concentrated in the lower 1.5 kilometre section of the lease with a brief reconnaissance made of the upper 3.3 kilometre section. The following discussions refers to the lower 1.5 kilometre section of the property on claims WW 1 - 5. (See Appendix "E".)

Two types of suficial gravel deposits were observed:

1. Recent stream gravel deposits immediately adjacent to the creek and at 1 metre above the present creek with a width of 25 to 40 metres.


LEGEND
RECENT STREAM DEPOSIT
MATERIAL CONSISTS PREDOMINANTLY OF SUB-ANGULAR, COBBLE TO BOULDER SIZE CLASTS OF BIOTITE-QUARTZ SCHIST AND QUARTZ; MINOR (<10%) ROUNDED BOULDERS OF FELDSPAR-HORNBLENDE-QUARTZ DACITE
BENCH FORMATION
SIMILAR LITHOLOGY AND CHARACTER TO RECENT STREAM DEPOSIT, ASSOCIATED HEAVY MINERALS INCLUDE GOLD, MAGNETITE AND GARNET.
CLAIM POST
SHAFT
TEST PIT
CABIN
TAILINGS
C
C'
Section C-C'
DAWSON / WHITEHORSE TRAIL
PLAN
CROSS-SECTION
TEST PIT (T.P.) 2
LOOKING SOUTH
SCALE: 1:2000
Section B-B'
B
B'
100 50 0 100 200 300 FEET
0 50 100 METRES
SCALE
T.P.3
T.P.4
Section A-A'
T.P.5
A
A'
From: M. Philpot (1982)
AMIR MINES LTD.
BLACK HILLS PLACER LEASE
SURFICIAL GEOLOGY
DATE JANUARY 1983
JOB NO 82-41
APPROVED BY
APPENDIX 'E'
BEMA INDUSTRIES LTD

2. Bench gravel deposits located adjacent to the recent stream gravel deposits and elevated 1 - 3 metres above the present creek valley with a width of 20 to 50 metres.

2.2 RECENT STREAM GRAVEL DEPOSITS

The recent stream gravel deposits are reworked bench gravels and are well defined between a prominent bench formation on the right bank looking downstream and steep valley slopes on the left bank. The present creek meanders between these limits with a gradient of 5 - 6%. The stream gravels consist of cobble to boulder size clasts of schist, gneiss and quartzite. These are probably locally derived from rocks of the underlying Yukon Schist formation.

The stratigraphic section observed was 1 - 1.5 metres of frozen organic muck overlying 1 - 1.5 metres of gravel in the active creek bank. This is a similar sequence to the stratigraphic sections 3 kilometres downstream where 1 to 3 metres of frozen organic muck overlie 2 to 5 metres of poorly sorted gravel resting on schist bedrock. The gold bearing gravels are usually confined to the lower 1 to 2 metres of gravel overlying bedrock.

Bema dug two shallow pits, No. 7 and 12, in the recent creek valley from which two gold pans of material was excavated. Both samples yielded a heavy mineral concentrate containing gold, magnetite and garnet. Pit 7 contained a minor amount of magnetite while five pans from pit 12 contained 6 very fine colours per pan. The frozen nature of the overburden prevented extensive sampling in this area.

2.3 BENCH GRAVEL DEPOSITS

A prominent bench formation exists on the right bank of Black Hills Creek and on the north side of a tributary, .6 kilometres north of the southern claim boundary. The benches are from 1 to 3 metres above the creek valley and average 20 metres in width. The depth to bedrock is unknown but from bench formation to the south can be up to 10 metres.

The stratigraphic section consists of 1 metre organic cover, and an upper, poorly sorted sequence of silt, sand and gravel overlying a poorly sorted cobble to boulder gravel. The gold bearing gravels are usually confined to the lower 1 to 3 metre section of the cobble-boulder gravel overlying bedrock.

Ten shallow pits, No. 1 - 6, 8 - 11, from 0.3 to 0.7 metres deep were dug from which two or three pans of material was washed and concentrated. Material from test pits 2, 6, 7 and 12 yield a heavy mineral concentrate containing gold, magnetite and garnet. Pit 6 contained a minor amount of magnetite.

On a well drained right bench, a quantitative 1/2 cubic yard sample was excavated from pit No. 2 to a depth of 1.7 metres. The gravel was thoroughly washed and screened to -4 mesh and run through a longtom. This 1/2 yard of material contained 0.33 grams of gold which is equivalent to 0.66 grams/cubic yard or $10/cubic yard at $500 gold.

3.0 CONCLUSIONS

The following conclusions reached are:

1. Early production records, drilling by Y.C.G.C. and recent mining operations indicate that the gold on Black Hills Creek has been fairly uniformly distributed over the length of the deposit. It is natural to expect that the upper reaches of the creek should be equal to the average grade of Black Hills which was 0.66 - 0.75 grams/cubic yard or at $500 gold - $10 - $12/cubic yard.

2. It is known that most of the gold recovered came from the Dome-Larsen Gulch areas. Both these streams enter Black Hills from the west and would indicate the source of gold. Very little production has been reported from the area east of Black Hills.

3. Test pitting by Bema Industries indicate the recent creek gravels and bench gravels are gold bearing and one quantitative sample had a value of 0.021 ounces/cubic yard. This is similar to the average grade on lower Black Hills Creek.

4. Two gravel deposits are present:

   a) Recent gravel deposits which are 20 - 30 metres wide.

   b) Elevated gravel bench deposits mainly on the right creek side which are 20 - 30 metres wide.

5. Other favourable factors:

   a) Relatively easy access.

   b) Area is relatively free from environmental restrictions.

   c) Good production history with Queenstake Resources planning large scale operation in 1983 on adjoining downstream areas.

4.0 RECOMMENDATIONS

1. A program of rotary overburden drilling and sampling of both the recent gravels and bench gravels. This program should test for the presence of gold bearing gravels, determine their grade and block out gravel reserves.

2. Depending on the results of this study apply for production permits and initiate production.

COST ESTIMATE OF THE PROPOSED PROGRAM

PHASE I

1.	Overburden rotary drilling of 30 holes to an average depth of 25 - 30 feet along 6 section lines of 5 holes per line at 50 feet spacing	
	1,000 feet drilling at $25.00/foot	$ 25,000
	Mobilization and demobilization	10,000
2.	Supervision	
	2 men for one month @ $400/day	12,000
3.	Food and lodging	
	5 men @ $30/day x 30 days	4,500
4.	Drafting and Report Compilation	
	Drafting 5 days @ $160/day	800
	Report writing 5 days @ $300/day	1,500
5.	Administration @ 10%	5,000
		$ 58,800

PHASE II Contingent on results of first phase — $300,000

Initial production at 500 - 800 cubic yards/day.

Purchase sluicing equipment and dozer rental.

Continue testing upstream to block out additional reserves.