

MAP No.

115-0-10

ASSESSMENT REPORT  
N. M. E. A. P.  
CONFIDENTIAL  
OPEN FILETYPE OF  
WORK:DND  
Prospectus  
Geology

REPORT FILED UNDER	Amir Mines Ltd.	DOCUMENT NO. 062169
DATE PERFORMED	March 2, 1983.	DATE FILED: Sept. 28, 1983.
LOCATION - LAT. LONG.	63° 30' 35" N	AREA Black Hills Creek, Yukon.
	138° 56' 18" W	
CLAIM NO.	NW 1-29	
VALUE \$		
WORK DONE BY	J.E. Lumsby	
WORK DONE FOR	Amir Mines Ltd.	
REMARKS	<p>Surficial mapping of the lower 1.5 km of placer claims and reconnaissance mapping of the upper 3.3 km section located recent and bench gravel deposits. Six test pits were dug of which two yielded a concentrate containing gold, magnetite and garnet. Pit #2 contained 0.66 g/yd<sup>3</sup> or 0.021 oz/ yd<sup>3</sup> of gold.</p>	

PROSPECT 143  
Sept 28, 1983.  
062169

REPORT ON THE  
BLACK HILLS CREEK  
PLACER CLAIMS WW 1 - 29

Dawson Mining Division  
Yukon Territories

N.T.S. 1150/10  
Latitude 63°30' 35" N  
Longitude 138° 56' 18" W

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

March 2, 1985

John E. Lusney, P.Eng.

In December, 1982 Amir Mines signed an option agreement on the WW 1 - 29 placer claims with Mr. Wallace Wing of Vancouver. Amir Mines Ltd. contracted Bema Industries to complete an exploration program on the property. During the period September 11 to 19, 1982 Messrs. Michael D. Philpot, geologist and Michael J. Beley, geologist, of Bema Industries conducted an exploration program consisting of mapping the surficial geology, excavation of hand dug pits and determination of gold content by hand panning or sluicing, and survey of the claim locations.

The writer was contracted by Amir Mines Ltd. to participate with Bema Industries in assessing the mineral potential of the property and design of a program of exploration to test its potential.

I have examined the Upper Black Hills property and have reviewed the exploration program. Mr. Philpot and Mr. Nordin have prepared a report dated February 24, 1983 titled, "Black Hill Creek Placer Evaluation, WW 1 - 29 Claims" which has been used extensively in the compilation of this report combined with my knowledge of other placer creeks in the Dawson area.

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

Amir Mines entered into a lease option of the property under terms of an agreement in December, 1982 which requires yearly payments and a production royalty to the vendor out of production.

I have not reviewed the data retained in the Dawson Mining Division. However I have reviewed the option agreement and based on this and discussions with Messrs. Nordin and Mr. Brian Abraham, the attorney acting with Amir, I am of the opinion that title to the mineral rights within the subject property have been properly acquired by Amir Mines.

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

## 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.

APPENDIX "A"

TABULATION OF CLAIM DATA

CLAIM NAME

GRANT NUMBER

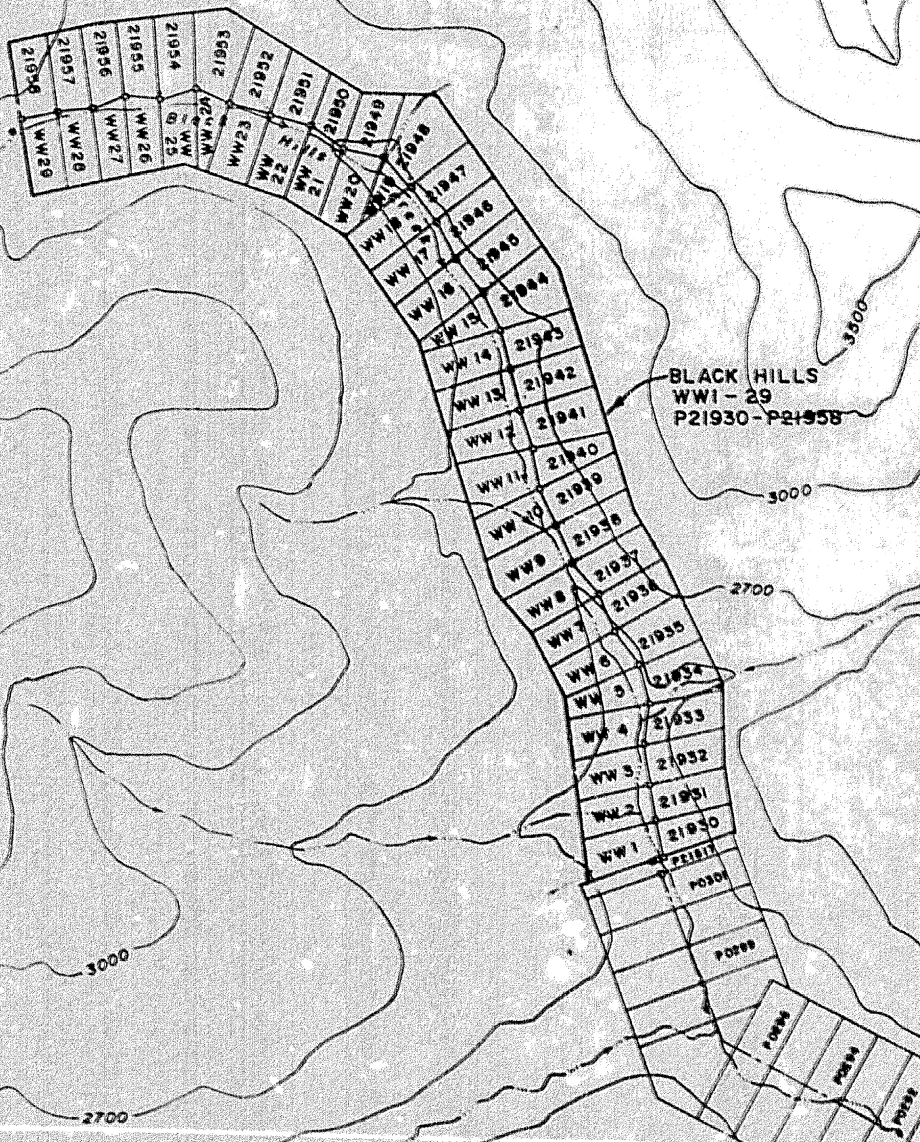
EXPIRY DATE

WW 1 - 29

P21930 to P21958

Sept. 22, 1983

35° 00' W



BLACK HILLS  
 WW1 - 29  
 P21930 - P21958

SCALE

1000 800 0 1000 2000 3000

FEET

0 500 1000

METRES

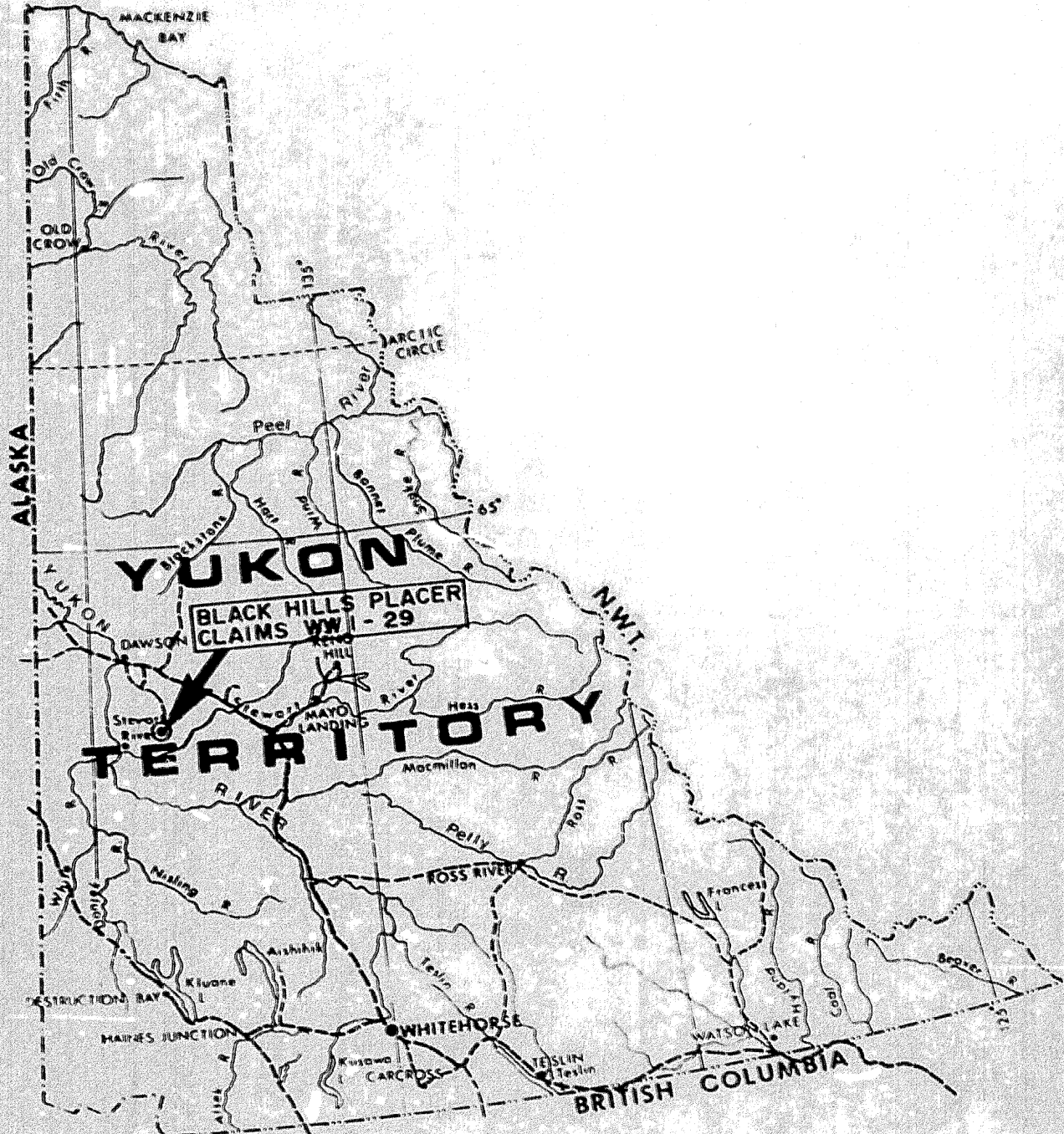
From: DIANA CLAIM MAP 1150/7, 10

AMIR MINES LTD.


BLACK HILLS PLACER LEASE  
 CLAIM MAP

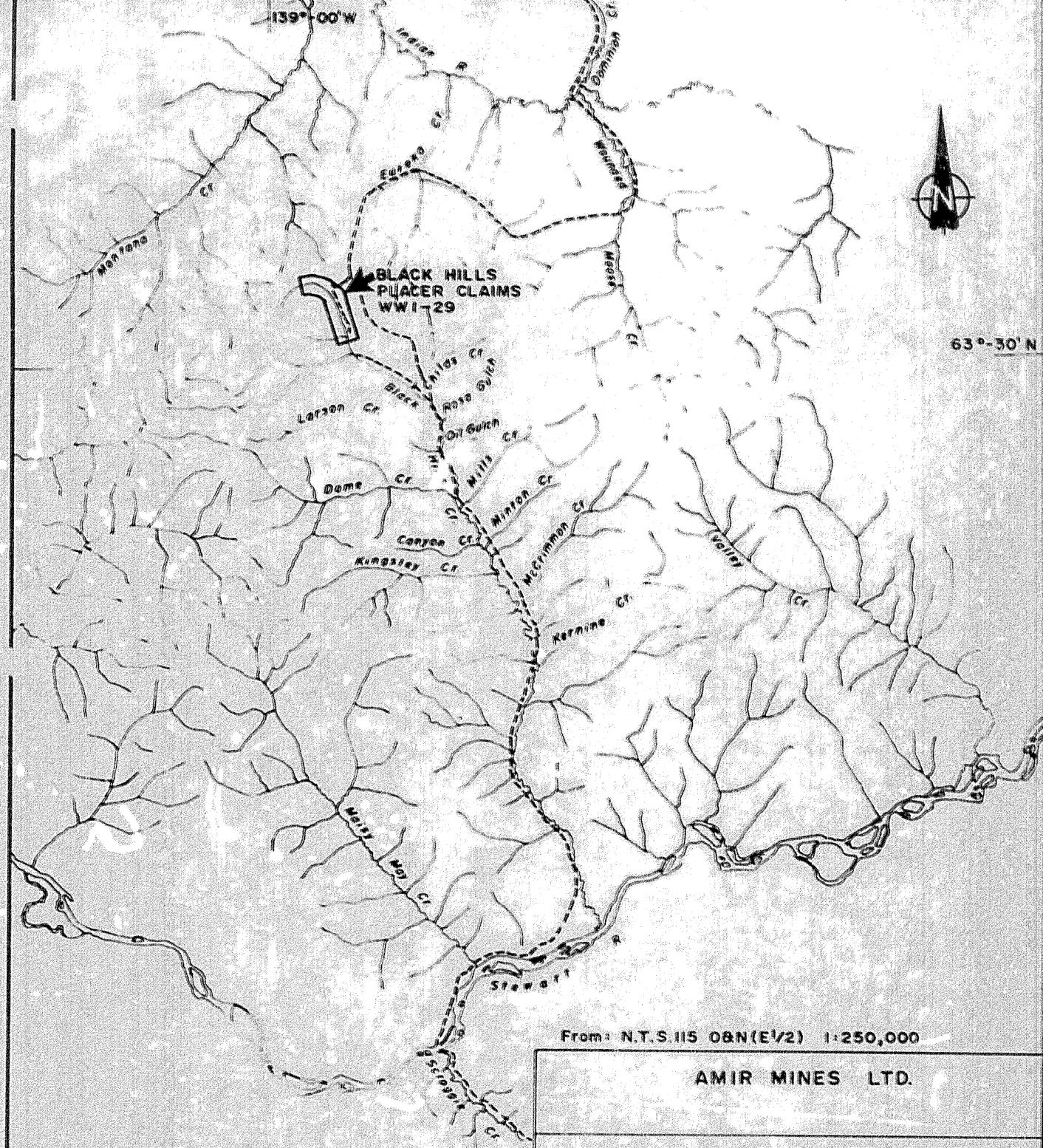
DATE: JANUARY 1983      JOB NO.: 82-41

APPROVED BY:      APPENDIX 'B'



From - YUKON TERRITORIAL GOVERNMENT ROAD MAP

AMIR MINES LTD			
YUKON KEY MAP			
DATE	JANUARY 1983	JOB NO	82 - 41
APPROVED BY		APPENDIX	'C'
 <b>BEMA INDUSTRIES LTD.</b>			



**BLACK HILLS  
PLACER CLAIMS  
WW1-29**

63°-30' N


From: N.T.S. 115 08N(E1/2) 1:250,000

AMIR MINES LTD.

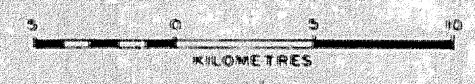
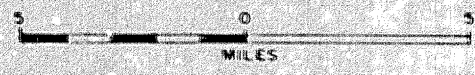
**BLACK HILLS PLACER LEASE  
LOCATION MAP**

DATE JANUARY 1983 JOB NO 82-41

APPROVED BY APPENDIX 'D'

 **BEMA INDUSTRIES LTD.**

**SCALE**



### 1.3 HISTORY

The property is located within 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 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. Marsh 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. 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 1956.

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 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 discussion refers to the lower 1.5 kilometre section of the property on claims WW 1 - 5. (See Appendix "E".)

Two types of surficial gravel deposits were observed:

1. Recent stream gravel deposits immediately adjacent to the creek and at 1 to 10 feet above the present creek with a width of 25 to 40 metres.
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.

### 2.1 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 overlies 2 to 5 metres of poorly sorted gravel resting

LEGEND

RECENT STREAM DEPOSIT



MATERIAL CONSISTS PREDOMINANTLY OF SUB-ANGULAR, CUBBLE TO BOULDER SIZE CLASTS OF BIOTITE-QUARTZ SCHIST AND QUARTZ; MINOR (<10%) ROUNDED BOULDERS OF FELDSPAR-MONZONITE-QUARTZ DATITE

BENCH FORMATION



SIMILAR LITHOLOGY AND CHARACTER TO RECENT STREAM DEPOSIT, ASSOCIATED HEAVY MINERALS INCLUDE GOLD, MAGNETITE AND GARNET



CLAIM POST



SHAFT



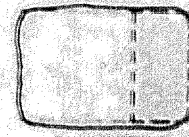
TEST PIT



CABIN



TAILINGS

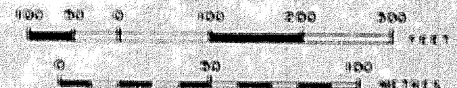


PLAN



CROSS-SECTION

TEST PIT (TP) 2  
LOOKING SOUTH  
SCALE 1:2000



SCALE

From M Philpot (1982)

AMIR MINES LTD.

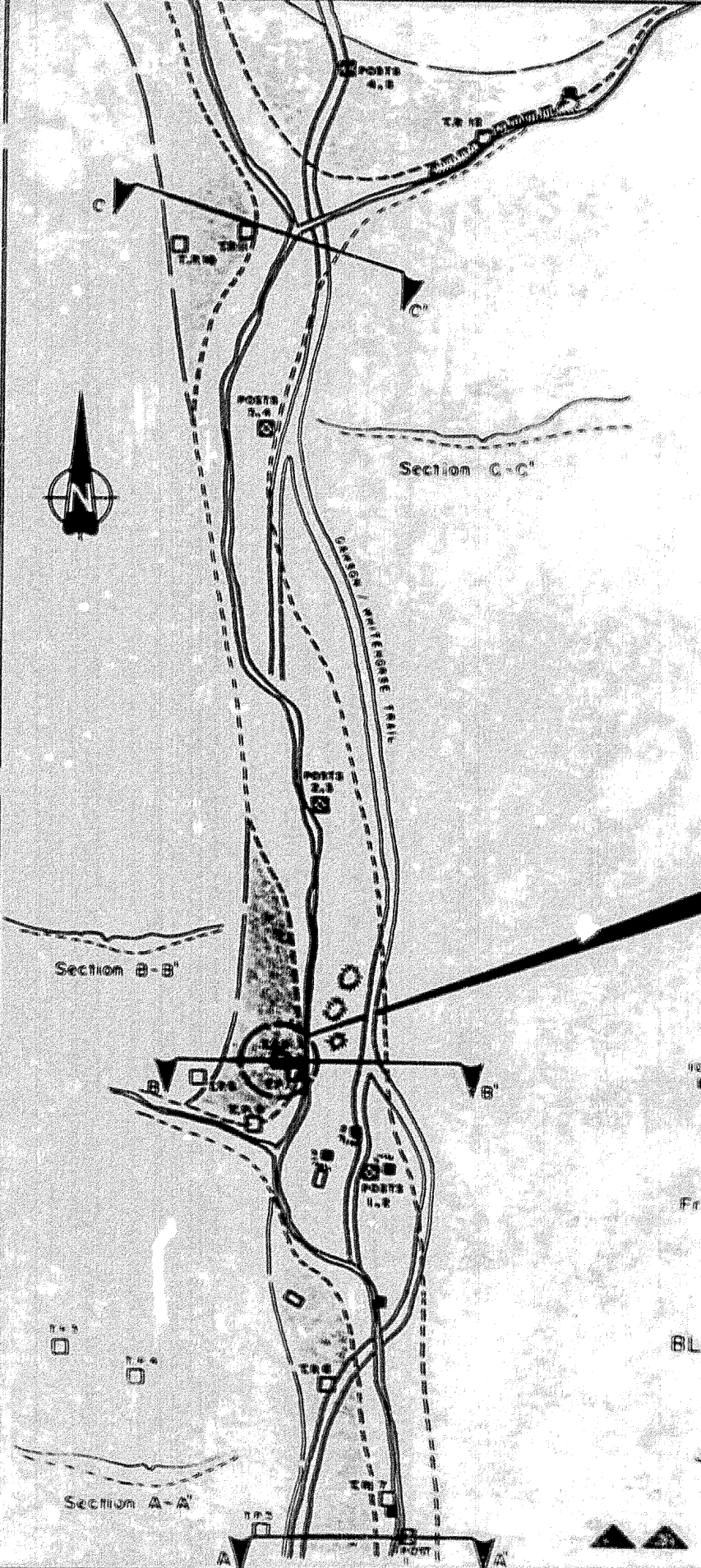
BLACK HILLS PLACER LEASE  
SURFICIAL GEOLOGY

JANUARY 1983

32-41

APPENDIX 'E'

BEMA INDUSTRIES LTD



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 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. The frozen nature of the overburden prevented extensive sampling in this area.

## 2.2 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.

Bema dug 6 shallow pits from .3 to .7 metres deep and from which two or three pans were concentrated. Two of these pits yielded a concentrate containing gold, magnetite and garnet. From one of these pits (No. 2) a quantitative volume of gravel was excavated and processed in a small test sluice. From Pit 2 -  $\frac{1}{4}$  cubic yard of material contained .53 grams gold, which is equivalent to .66 grams/cubic yard or 0.021 ounces/cubic yard.

### 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 above average grade of Black Hills which was 0.021 oz/cubic yard Au, or at \$500 gold - \$10/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 cat trenching and backhoe trenching, mapping 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. Dozer and/or backhoe trenching, pitting	\$ 60,000.00
2. Supervision	30,000.00
3. Contingencies at 20%	18,000.00
	<hr/>
TOTAL PHASE I	<u>\$108,000.00</u>

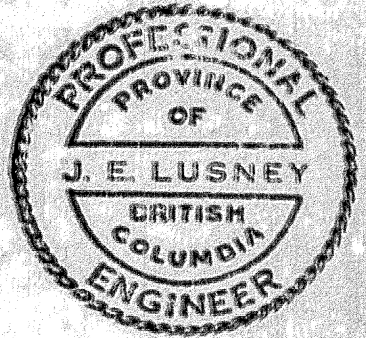
PHASE II

Contingent on the results of  
first phase of exploration \$400,000.00

Initial production at rate of  
500 - 800 cubic yards gravel/day.

Purchase sluicing equipment and  
dozer rental.

Continue testing upstream to  
block out additional reserves.



Signed John E. Lusney  
John E. Lusney, P.Eng.

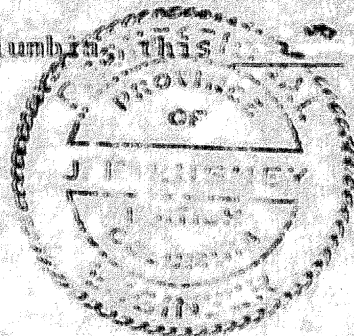
Date MAR. 2, 1983

CERTIFICATE

I, JOHN EDWARD LUSNEY, of the City of Vancouver in the Province of British Columbia, hereby certify as follows:

1. I am a Placer Mining Consultant, residing at 201, 2430 Point Grey Road, Vancouver, B. C.
2. I am a registered Professional Engineer in the Province of British Columbia.
3. I am a graduate from the University of Manitoba with a degree of Bachelor of Science.
4. I have practiced my profession for thirty-five years.
5. I have no direct or indirect interest in the securities of Amir Mines Ltd., nor do I intend to receive any interest.
6. This report is based on personal knowledge of the area.

DATED at Vancouver, British Columbia, this \_\_\_\_\_ day of March, 1983.



*John E. Lusney*  
JOHN E. LUSNEY, P. ENG.