

**GEAREX ENGINEERING  
GEAREX MANAGEMENT LTD.**

ASSESSMENT

GEOLOGICAL

REPORT

ON

RECONNAISSANCE STREAM HEAVY-METAL ANALYSIS

ON THE

PLACER LEASES:

10078.10082.10083

10079.10080.10081

10065.10067.10068.10069.10070.10071.10072

10066.10073.10074.10075.10076

Thibert Creek, Dease Lake Area

LIARD MINING DIVISION

104J16W

FOR

STEPHEN SCHNEIDERMAN

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

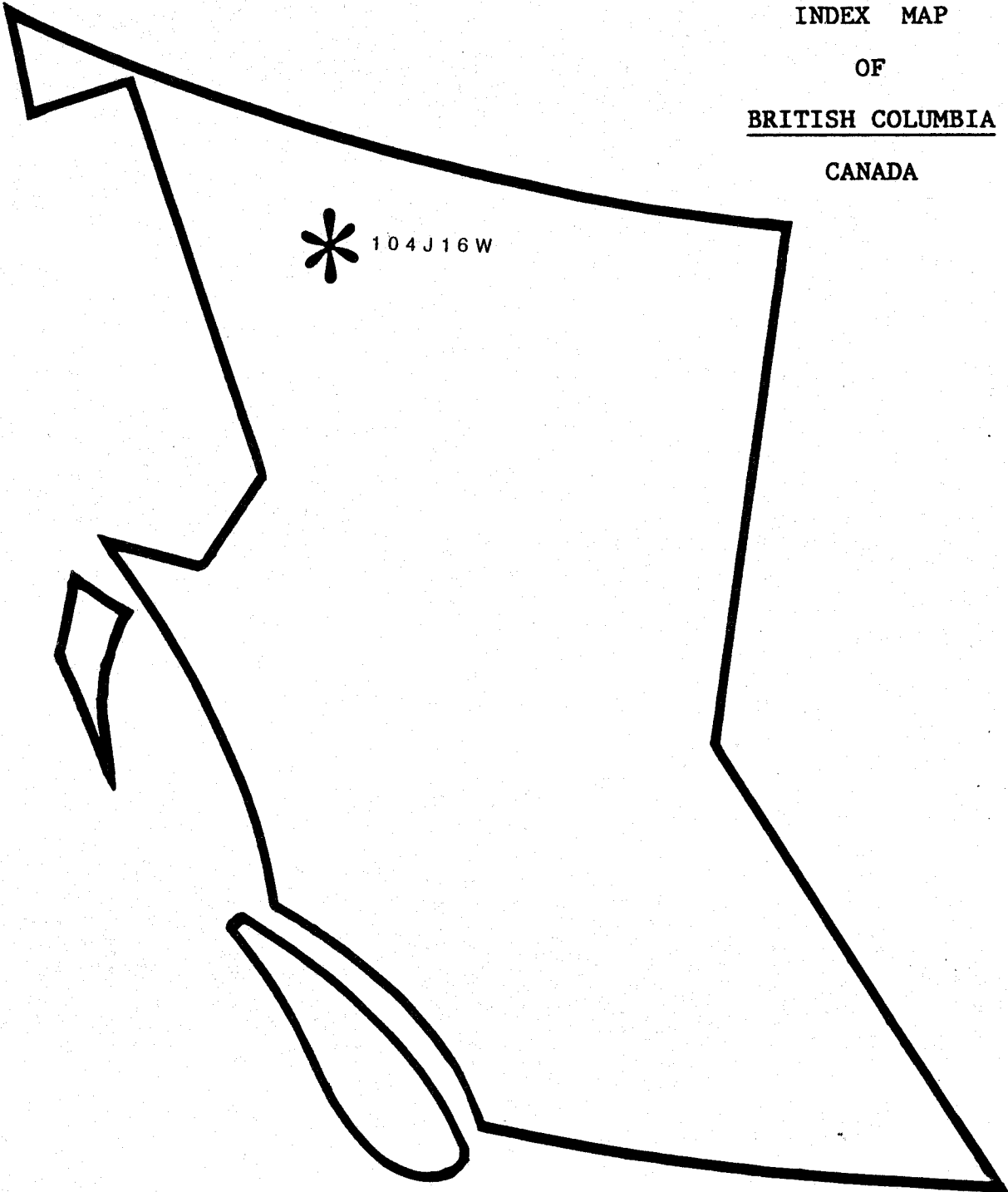
**13,914**

July 31, 1985

Gerhard von Rosen, P.Eng.

**FIGURE "A"**

INDEX MAP  
OF  
BRITISH COLUMBIA  
CANADA



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## INTRODUCTION

The writer visited certain areas of the extensive placer lease holdings on Thibert creek and performed a reconnaissance exploration program consisting of concentration of heavy mineral grains carried within stream gravel samples, and extraction of the gold particles therefrom.

The subject report presents the results of these hand-pan extractions and microscopic determinations, describes the airphoto (surficial) geology, and summarizes historic information to-date.

The writer was accompanied by Ernest von Rosen. Work was performed between June 26th and July 7, 1985.

## PROPERTY HOLDINGS

There are 18 placer leases in the holdings, with an additional three added by location. These start at Berry Creek and cover nearly all of the available channel up Thibert creek to Quartz creek. The extent of the leases covers the full width of Placer Titles Map P104J/16W.

The placer leases have been arranged in four groups of claims, most of which adjoin end to end along the main valley. One group of three have been staked to cover the mouth of Vowel and Spring creeks, including the intervening benches.

Following is a listing of the four groups. Upon acceptance of the assessment work filed based on this report, the holdings are in good standing until **July 05, 1986**.

<u>GROUP "A"</u>	<u>GROUP "B"</u>	<u>GROUP "C"</u>	<u>GROUP "D"</u>
PL10078	PL10079	PL10065	PL10066
PL10082	PL10080	PL10067	PL10073
PL10083	PL10081	PL10068	PL10074
		PL10069	PL10075
		PL10070	PL10076
		PL10071	
		PL10072	

Work was performed on the highlighted claims shown in the foregoing listing of placer claims.

Any legal aspects, as for example ownership of the holdings, lie beyond the scope of this report.

### LOCATION & ACCESS

58 48'N

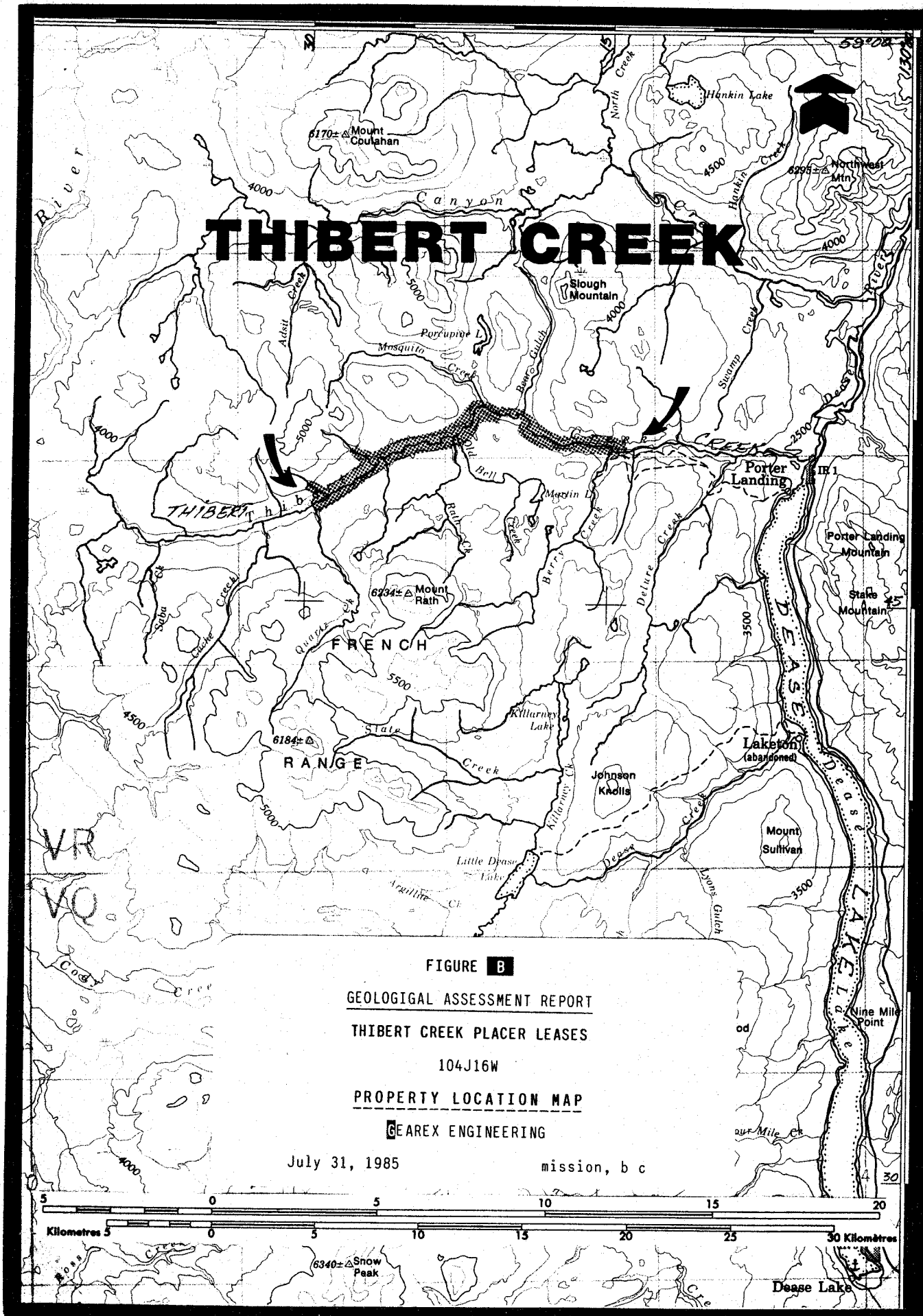
130 20'W

104J16W

Thibert creek flows east into Dease river which it joins at the north tip of Dease lake at the settlement called Porter Landing, British Columbia.

The subject holdings can be reached by driving along the Dease-Cassiar highway to the north tip of Dease lake, by fording Dease river towards the west, driving a circuitous route across various channels of Thibert creek, driving south-westerly along a mine road across Delure creek, following this road in a general north-westerly direction across Boulder and Berry creeks, until it crosses Thibert creek valley opposite the confluence of Vowel creek, - a total distance of about 24 kilometers of 4x4 road on the south side of Thibert creek.

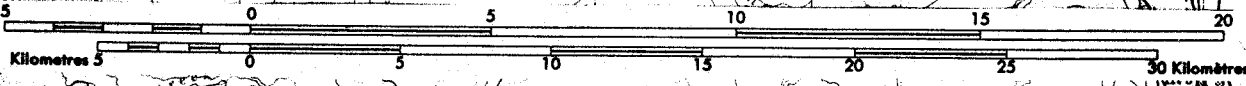
It is a simple matter to provide access within the broad valley of the upper Thibert creek because there is only brush cover to remove, and except for some swampy sections the



# THIBERT CREEK

THIBERT h, b

**FIGURE B**  
 GEOLOGICAL ASSESSMENT REPORT  
 THIBERT CREEK PLACER LEASES  
 104J16W  
 PROPERTY LOCATION MAP  
 GEAREX ENGINEERING  
 July 31, 1985 mission, b c



6340± Snow Peak  
 Dease Lake

remainder of the valley bottom contains gravel fill. Some cat trails already exist. The nearby operation of Troy Ventures was being established at the time of the visit by the writer. Their upgrading of the trails will be beneficial to any vehicular-based exploration of this portion of the Thibert creek.

The author was flown by helicopter into the work area from Dease Lake, B.C. The first fly-camp was established at the mouth of Vowel creek, while the second one was near the mouth of Bear Gulch.

An old trail services this side of the valley. It may provide foot access for future explorations of this sector of the creek.

### PHYSIOGRAPHY, VEGETATION & CLIMATE

The extent of Thibert creek starting at the upper (west) end, at the confluence of Quartz creek, down to about the mouth of Grizzly Bear creek, is a wide, flat bottomed valley through which the stream meanders. The altitude of the subject area lies somewhere between 3500' and 3000' above sea level.

Vegetation here consists of brush. The sides of the valleys tend to be steep, mostly consisting of gravel deposits, and vegetated by open stands of aspen and conifers. Downstream of Grizzly Bear creek Thibert creek enters a deeply incised valley with steep-sided walls, which often consist of shallowly-covered bedrock.

Open stands of short timber can be found along with the ubiquitous aspen trees. The placer mining season varies in length, but should generally be considered to start around the end of May, and to end around the start of October. The arrival and departure of the wintry weather has been known to vary from year to year.

An already established operation can conceivably commence earlier in the season because the question of the height of water in the ford does not affect the mobilization-in of materials, supplies, and personnel.

In 1985, large-clearance vehicles (front end loader and bulldozer of Troy Ventures working at Defot creek) were able to ford the river towards the end of June, at a time

when most of the snow had melted in the mountains. The initiation of next working season is expected to fall on a much earlier date, as the camp and equipment are already in place, and the necessity of waiting for low water at the ford is thereby inconsequential.

## HISTORY

It is advantageous, in the writer's opinion to compile into one report the recorded history for this creek, which at one time was reported to have been the second greatest placer gold producer in British Columbia, next to the Barkerville area.

Numerous references are at hand regarding past operation of placer mines on Thibert creek. A summary of this information follows:

**1876** - B.C. Minister of Mines, Annual Report, page 413:

"...Prospecting is now being carried on in the deep ground on Thibert Creek...Silver has been found in all its native purity; and but a short time since a piece of pure copper, weighing some fifteen pounds, was picked up in a claim on Boulder Gulch, a tributary of Thibert Creek...Although, on the whole, the mining on Thibert Creek has not been remunerative this year, yet I cannot say it has been unsuccessful, as, in addition to those claims that have paid fairly, there has been discovered in the benches what is considered to be the old channel or bed of the creek, and all interested therein are very sanguine as to their success in 1877. Many good size nuggets have been taken from there, the highest weighing something over 18 oz.. The gold obtained seems to have been a good deal washed, which is a very favourable indication..."

**1902** - B.C. Minister of Mines, Annual Report, pages 987:

"...THIBERT CREEK MINING COMPANY...The property consists of 7 hydraulic mining leases of 80 acres each, consolidated and having a total frontage on Thibert creek of 10,500 feet...The actual time that washing can be carried out will vary with the season, but it is safe to count on from June 1st to



October 10th, or about 100 days for actual washing and 30 days for cleaning up..."

1903 - B.C. Minister of Mines, Annual Report, pages H43:

"...THIBERT CREEK MINING CO...A very unfortunate accident occurred to this company, the workings being completely buried by a large landslide... Though this accident was unfortunate in delaying operations, it has effectively disposed of the most difficult ground to be mined...It is safe to say that the first two boxes (24 feet) gave 85% to 90% of the total gold recovered in the sluices, and this is due to an exceptionally good and heavy quality of gold which is easy to save...this same quality of gold has, on the other hand, a tendency to "rob the sluices", so that a very large percentage settles in the rock-cuts and in all the crevices on the bed-rock and is not recovered til the latter is "picked up" and cleaned...it proves that the rich paystreak continues all down the channel. The width of the channel has been shown to be much greater than was expected, and this increased width has given an increased height of bank to wash...it is shown that the value of the gravels is from 12 to 25 cents per cubic yard...Rich paystreak in the bottom gravels proved to be continuous wherever the channel has been opened up. Some of top gravels as high as 80 to 120 feet above bedrock run off and shown to pay for taking down...a small sample of platinum sand which he had collected from the undercurrents, and from the black sands in the sluice boxes. This sample was, of course a concentrate, and it was analyzed by the Provincial Assayer, Mr. Carmichael, who reports as follows:-

No. 2,923-Concentrates from Thibert Creek:

Platinum=	12,864.5 oz. troy/t	=44.1%
Osmiridium=	3,475.5 oz. troy/t	=11.9%
Total.....	16,340	=56.0%

1904 - B.C. Minister of Mines, Annual Report, pages H48

"...The Thibert Creek Mine is on an old river channel on the south side of the modern creek, following the same general direction west to east. From the junction of Berry creek for about two miles it has not been touched by the

present stream...estimate it to have an average width of 400 feet, and a height ... of something over 100 feet...it would be quite possible, when pipeline and machines are in place, to commence washing not later than May 20th. It will always be necessary to have the final clean-up October 1st, as, on account of cold weather, bedrock and cuts cannot be be picked or cleaned to advantage after this date, but there is nothing to prevent the washing of gravel to continue until the 20th of November...No saving was attempted of the osmiridium of which there is a certain amount present. This could easily be remedied if the mine were put in a better working shape...

1905 - Progress of Mining, pages G23:

"PLATINUM -...In the Thibert creek hydraulic workings, platinum has previously been noted, but his company did no sluicing this past season...The manager, Mr. Hamfield, in his report, speaking of work planned for the next season, says:-"since definite measures are to be taken towards the saving of the osmiridium which is known to exist in the deposit to an appreciable amount."..."

1907 - Report of the Minister of Mines, pages H59:

"This stream has been yet a good producer of gold, and on it are the large holdings, comprising ten hydraulic leases, of the BERRY CREEK MINING COMPANY...By the middle and lower gravels is meant here the lower 70 feet of the bank - the bottom gravel and cement average 6 feet in thickness. No accurate estimate was made of yardage moved, but the manager makes the following approximate estimate of the values to the cubic yard of the various strata:-

Bottom gravel and cement, 6 feet thick	= 25 cents/cubic yd
Lower gravel	70 feet thick = 14 cents/cubic yd
Upper gravel	..... = 8 cents/cubic yd

...In places the bottom gravel runs much richer, as high as several dollars per cubic yard...a succession of slides from the bank above as the gravels of the old channel are covered with a capping of boulder clay..."

- 1908** - "THIBERT CREEK - This stream is so well known...Although this company (Berry Creek Mining) was in thorough shape to operate on a large scale...owing to several caves or land-slides from the hills overhanging the workings completely filling the diggings...From all indications the ground is quite rich enough to pay well if these mishaps could only be avoided..."
- 1909** - Report by the Minister of Mines, pages J53:  
"I regret to say that the Berry Creek Mining Co., owing to sundry mishaps, such as mudslides, etc., in the pits, did not continue regular work this season..."
- 1912** - Report of the Minister of Mines, pages K62:  
"Thibert creek was the scene of considerable activity this year. The BOULDER CREEK COMPANY has taken a lease of the old Thibert Creek Mining Company's property..."
- 1913** - Report of the Minister of Mines, pages K77:  
"BOULDER CREEK MINING COMPANY--...The old pit has now been abandoned owing to these slides. It was opened up for a length of about 1,100 feet along Thibert creek, with a width in places of 250 feet, the dirtface being, at the highest point, about 200 feet above the pit, from the top of which hill continued to rise for many hundreds of feet higher, at a slope of about 20 degrees, being chiefly composed of clay, with no solid rim-rock in sight; it was really the repeated sliding of this hillside into the pit that necessitated its final abandonment. The bed-rock is a shale or slate on edge, cut by a number of soft dykes. The deposit next to the bed-rock is a coarse gravel, composed of granite, greenstone, jasper, porphyry, and a dark-blue rock, with very few large boulders.  
The gold is fairly coarse and flat and is valued at about \$16 an ounce..."
- 1916** - Report of the Minister of Mines, page K21:  
"...the Boulder Creek Hydraulic Mining Company had a successful season, taking out about \$20,000 from its ground on Thibert Creek..."
- 1917** - Report of the Minister of Mines, page F81:  
"...On Thibert creek the Dease Syndicate, handicapped by labour shortage..."

**1919 - Report of the Minister of Mines, pages N84:**

"On Thibert creek the most important work of the season was carried on...This spring George Adams, an Atlin operator, secured an option...This entailed a lot of work in moving a bank of gravel 200 or 300 feet high; however, in twenty-two days a strip about 150 feet long and 20 feet wide had been stripped and cleaned up, yielding about \$14,000 in coarse, well-worn gold. There was appreciable platinum with the gold...

On Mosquito creek...George Adsit has held and worked a lease for a number of years. Good "pay" has been found...Some platinum has also been found there..."

**1920 - Report of the Minister of Mines, pages N84:**

"...The success of this year's operations on Thibert creek has revived interest in this section...Many of the old leases on the three principal creeks...have been cancelled...and the ground again made available for new blood..."

**1921 - Report of the Minister of Mines, pages N69:**

"Adams is working under the serious handicap of lack of sufficient water to handle the excessive amount of overburden...On Mosquito creek...George Adsit has been working...bed-rock is yet about 20 feet deep, which means a lot of dead work..."

**1925 - Report of the Minister of mines, pages B76:**

"DEASE SYNDICATE- This syndicate holds thirteen leases...the ground was worked by George Adams, of Atlin, unprofitably because of lack of water, but successfully in demonstrating the values and extent of paygravel and the proper system for handling the whole undertaking...I have been over the ground several times and I am greatly impressed by the possibilities of the property. I would strongly recommend its investigation by any one interested in hydraulicking..."

**1926 - Report of the Minister of Mines, pages C119:**

"...The most important operation in the Thibert Creek section is that of Gibson's, or the Hydraulic Corporation's, on Mosquito creek. The lower part of the creek was worked years ago, but because of a rock "lip" at the lower

end of the creek the main part of the creek was never worked...Columbia Northern Mines Ltd...the holdings consist of leases on Vowel creek...nothing was being done on it..."

**1929** - Report of the Minister of Mines, pages C116:

"...drilling operations on dredging lease No. 145 at the mouth of Thibert creek...eleven holes had been drilled...results were promising, with some holes showing up to 60 cents a cubic yard...it was estimated by the operators that ground carrying 30 cents per cubic yard could be worked profitably...Providing the exploratory work being carried out is sufficiently extensive, an accurate criterion should be available to the operators regarding the possibility of working the ground by dredging at a profit or not...MOSQUITO CREEK - The Mosquito Creek Hydraulic Association has conducted efficient and extensive preparatory work to reach the "pay" that occurs north of the northerly-sloping reef-rim in the canyon. This has necessitated extensive solid rock- work to shoot away the reef at the end of the Adsit lease..."

**1931** - Report of the Minister of Mines, pages A54:

"L. Holensee, shovelling below Berry creek, on Thibert creek, took out about 20 oz. of gold in six weeks. The Gibson Hydraulic Association on Mosquito creek has continued preparatory work, taking out about 10 oz. of gold. Further drilling of this ground is planned for the coming season..."

## SURFACE GEOLOGY

Utilizing airphoto interpretation, (note that the airphoto centers are also shown on figure C) as shown on copies of overlays for airphotos: BC5623 #59 & #61, figures D & G, the writer endeavoured to trace the various surficial formations found on the valley floor, as well as on valley benches. The traces of these formations are mostly shown as arrow-lines. Details of surficial geology relating to the Thibert creek valley floor are difficult to display on the scale of these photos, however, the writer has attempted to

indicate the general nature of deposits in the following manner: the broad valley of the upper Thibert leases has been designated as "potential placer ground", while other deposits which eventually should be inspected, have been designated as "areas of sediment deposition". Stippling of differing density has been used to differentiate between these areas of interest shown on figures F & I.

Upper benches, as well as the upstream reaches of Thibert creek, show the results of glacial action. It is conceivable that much of the gravel in the area is of fluvioglacial origins, although most of the clasts are rounded in shape and would therefore reflect a longer fluvial history.

There exist benches, possibly 20 feet higher than the present grade of the creek, which show remarkably straight scarps that basically parallel the flow of the stream. From airphoto interpretation it appears that there are successive ages of these, indicating stages in the downcutting of the creek.

One bucketful of such material, (fluvial gravel) was tested as sample A2.

There exist shapes, seen on the airphotos, that are reminiscent of kettle holes, which would indicate glacial activity right in the Thibert creek valley. On the upper valley benches there are channels that appear to be outwash channels; again indicating glacial activity.

### POTENTIAL PLACER GROUND

Those areas designated "areas of sediment deposition" include large expanses of upper bench areas, along with 'perched' benches remaining on the valley walls of the lower Thibert creek claimed area. These should eventually be investigated.

However the sector from about Grizzly Bear creek to the end of the claimed area at Quartz creek, is in the writer's opinion very interesting "potential placer ground". This latter zone of interest comprises about 8 full-sized placer claims in area, or about 400 hectares (just short of 1000 acres). It includes active, or recently-active bars on Thibert creek, older, higher benches, and fan deposits at the confluence of other streams. The depth to bedrock has not been established.

### HISTORIC PLACER GOLD PRODUCTION

<u>YEARS</u>	<u>OZ GOLD</u>	<u>VALUE</u>
1874-75	8,596	\$150,000
1876-80	29,107	507,920
1881-85	7,982	139,300
1886-90	2,391	41,725
1891-95	980	17,109
1896-1900	76	1,326
1901-05	---	----
1906-10	134	2,336
1911-15	778	13,336
1916-20	97	1,693
1921-25	320	5,584
1926-30	4	70
1931-35	20	396
1936-40	---	---
1941-45	---	---
<u>TOTALS</u>	<u>50,485</u>	<u>\$880,795</u>

This information was obtained from Table XXXIX - Bulletin #28, 1950. Most of the gold production was derived by hydraulicking from below the mouth of Berry creek.

### LOCAL CONDITIONS

The vendors of the property, having made their own assessment of the Thibert creek placer property, offered their summary report, which is here quoted verbatim:

"The Thibert Creek Group of twenty placer claims situated in the Cassiar District of British Columbia is noted as being the only known placer gold area in northern British Columbia which remains undeveloped past hand-working methods.

All of the claims could be worked by equipment with the possible exception of three

claims that are "red-coded". These three would require substantial work to establish settling ponds.

There are seven claims above Rath Creek including one each on Spring and Vowel Creeks. This upper valley is broad and flat and ideal for equipment, consisting of gold-bearing glacial drift. Bedrock is located anywhere between 0 and 100 feet below surface with a probable average of 25 feet on Thibert Creek itself. Testing along these eleven claims has produced gold in most of the overburden. The recovery is estimated at 1 gram per cubic yard in the overburden.

Downstream from Rath Creek to Bear Gulch the depth to bedrock varies between 2 and 10 feet. There are four claims on this stretch of the creek. Concentrations of glacial drift (that possibly buried the old creek channel) are deposited in five places between Rath and Mosquito Creeks.

We also found pockets of glacial debris behind larger bedrock outcrops and intrusions. At the point where Mosquito Creek drops into Thibert there is an underwater rock ledge, which drops an indefinite depth to bedrock. Attempts to wing-dam and alter the course of the creek to clear the overburden produced 1/4 ounce of gold per cubic yard. Depth to bedrock remains unknown.

Downstream from Mosquito Creek is a rock intrusion forcing the creek to the south of itself. This portion of the creek is not in the group of claims. However, to the north of this intrusion is a saddle representing the old creek channel, which is part of our group of claims.

Between Bear Gulch and Berry Creek there are five claims. The old channel is preserved in two obvious places and in many smaller sections along the south bank of Thibert Creek. Testing has produced some good colour along this entire stretch of creek. Access to these claims is excellent.

The access to the upper claims is good as a result of a cat trail established to Spring and Vowell Creeks."



Y - DENOTES YELLOW COLOUR CODED STREAM  
 G - DENOTES GREEN COLOUR CODED STREAM  
 R - DENOTES RED COLOUR CODED STREAM

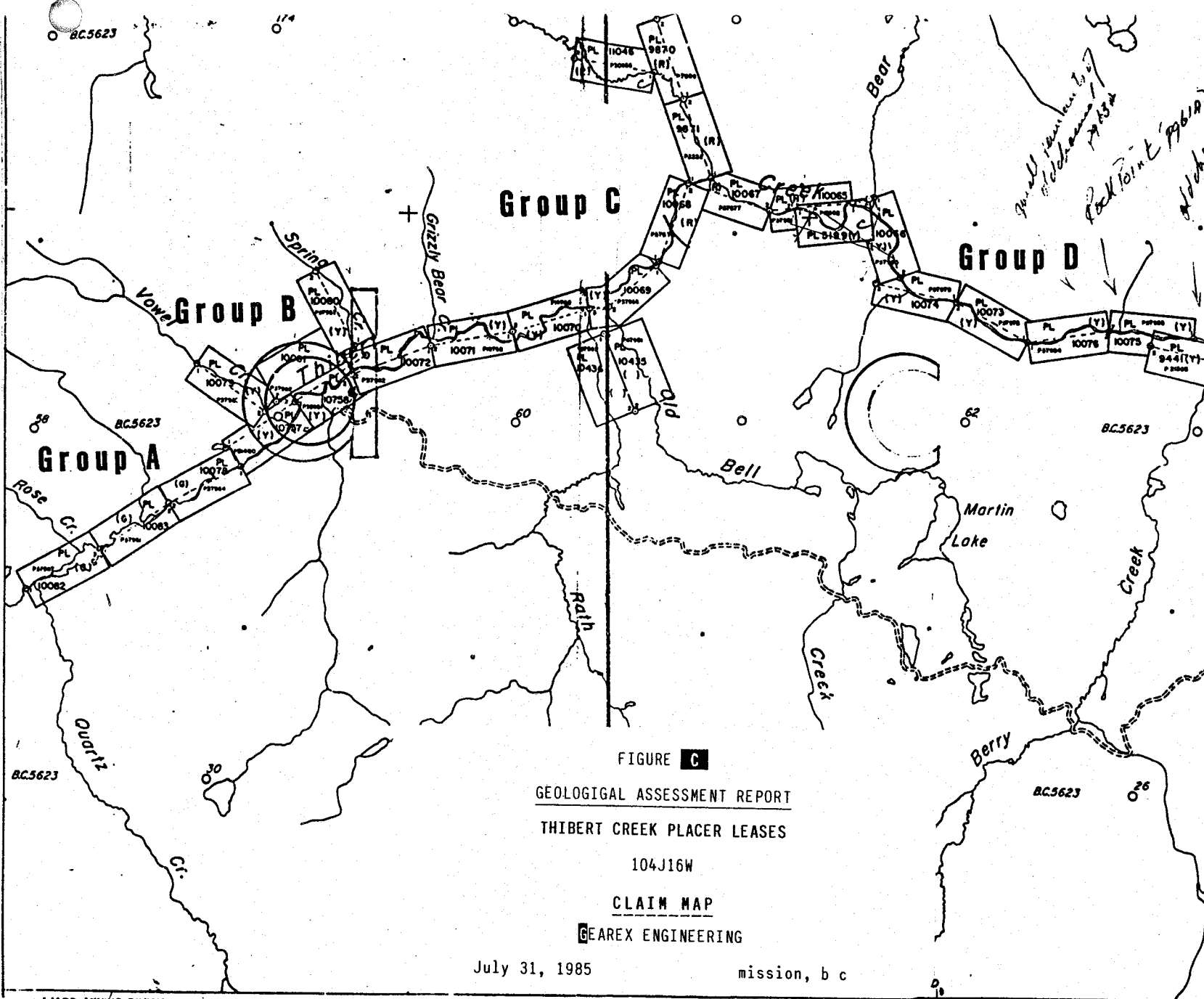


FIGURE C  
 GEOLOGICAL ASSESSMENT REPORT  
 THIBERT CREEK PLACER LEASES  
 104J16W  
 CLAIM MAP  
 GEAREX ENGINEERING

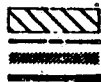
July 31, 1985

mission, b c

58°45' 130°30' LIARD MINING DIVISION

58°45' 130°15'

NON DESIGNATED AREA  
 Mining Division Boundary  
 Indian Reservation  
 Mineral and Placer Reserve

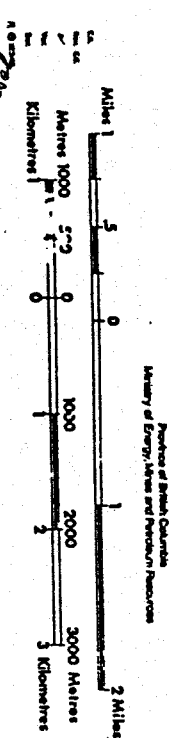


Verified Legal Post  
 Stream...NO PLACER STAKING  
 perennial  
 indefinite



TO SOUTH SEE MAP 104-J-9-W

DEASE DESIGNATED AREA  
 PLACER TITLES REFERENCE MAP 104 J / 16 W



UNLES VERIFIED OR SURVEYED, THE MAP POSITION OF A  
 LEGAL CORNER POST IS BASED ON THE LOCATOR'S SKETCH FOR SUB-  
 TIER INFORMATION, APPLY TO THE OFFICE OF THE MINING DIVISION  
 CONCERNED.  
 DATE OF MICROFILM: 83.09.22

10

NOTE: OLD CHANNELS & BENCHES

AIRPHOTO  
BC 5623 #059



THIBERT  
FEDN

ASSESSMENT REPORT : THIBERT PLACER : DEASE LAKE

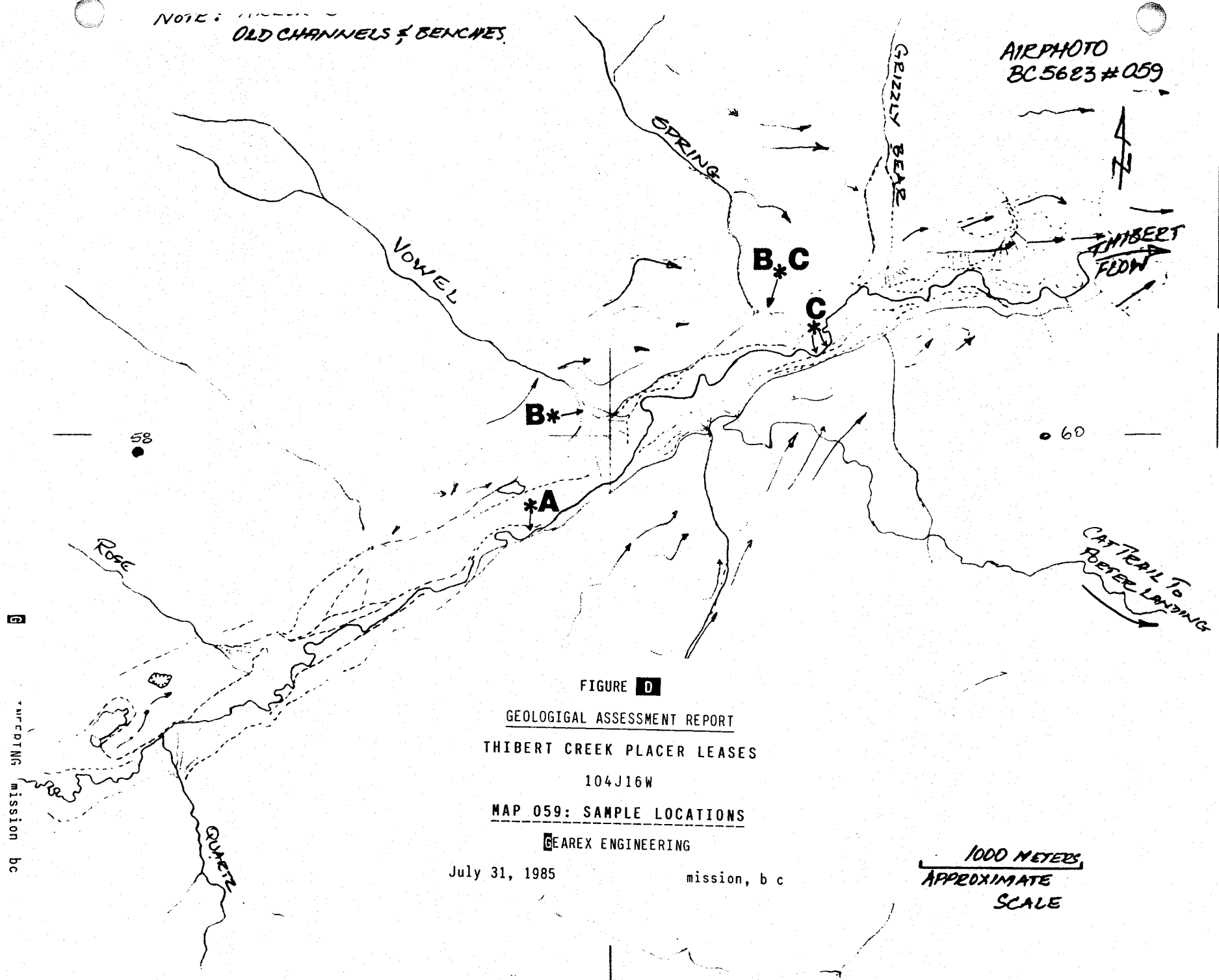


FIGURE **D**

GEOLOGICAL ASSESSMENT REPORT  
THIBERT CREEK PLACER LEASES

104J16W

MAP 059: SAMPLE LOCATIONS

GEAREX ENGINEERING

July 31, 1985

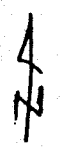
mission, b c

1000 METERS  
APPROXIMATE  
SCALE

MISSION bc

NOTE: ~~MINOR~~  
OLD CHANNELS & BENCHES.

AIRPHOTO  
BC 5623 # 059



ASSESSMENT REPORT : THIBERT PLACER : DEASE LAKE

GEAREX ENGINEERING mission bc

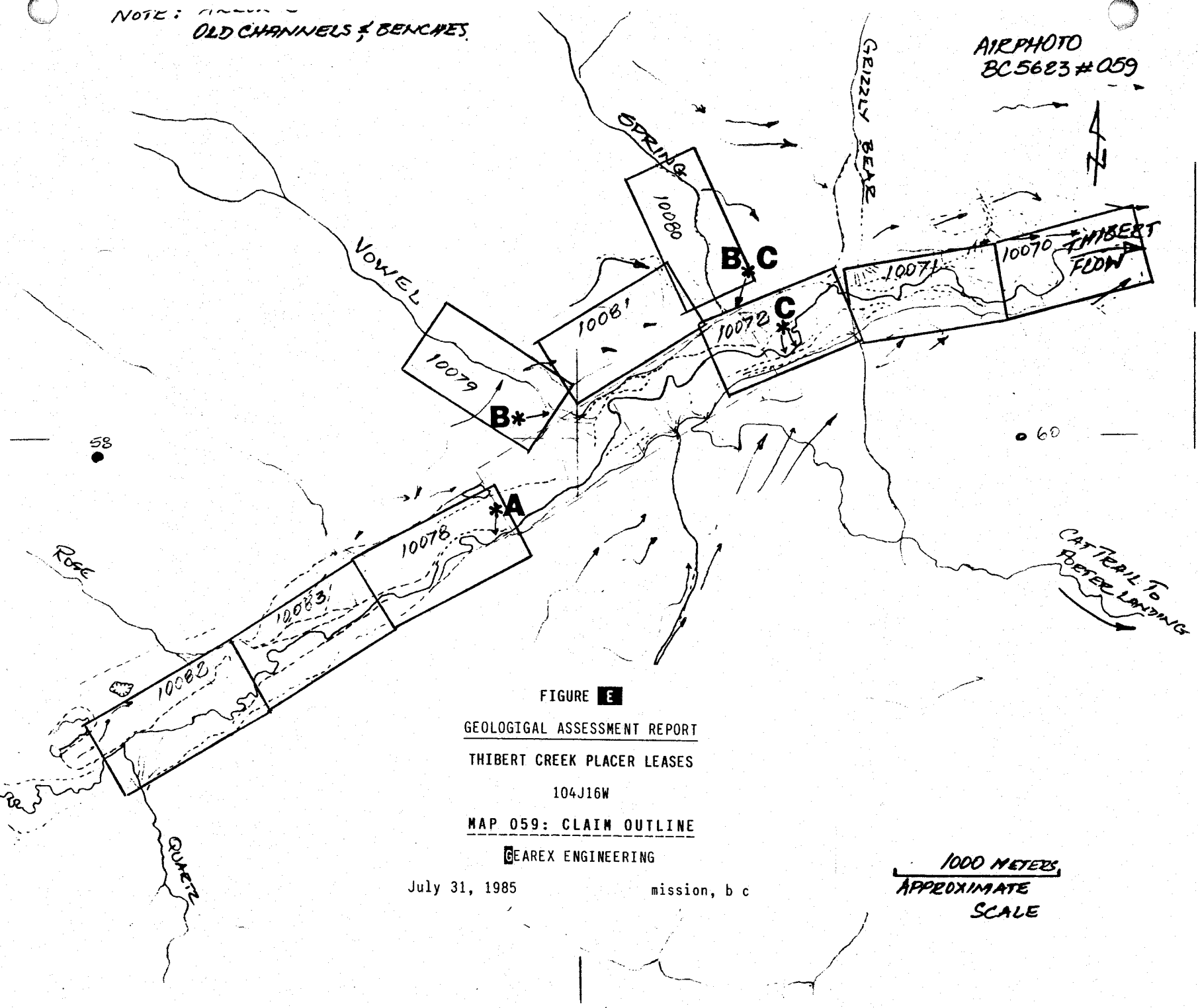


FIGURE **E**  
 GEOLOGICAL ASSESSMENT REPORT  
 THIBERT CREEK PLACER LEASES  
 104J16W  
 MAP 059: CLAIM OUTLINE

GEAREX ENGINEERING

July 31, 1985

mission, b c

1000 METERS  
APPROXIMATE  
SCALE

NOTE: ARROW LINES SHOW  
OLD CHANNELS & BENCHES.

AIRPHOTO  
BC 5623 # 059



THIBERT  
FLOW

60

CATERPILLAR  
ROPEE LANDING

GRIZZLY BEAR

SPRING

VOWEL

B\* C

B\*

A

58

ROSE

QUARTZ

FIGURE F

GEOLOGICAL ASSESSMENT REPORT

THIBERT CREEK PLACER LEASES

104J16W

MAP 059: INTERPRETATION

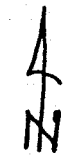
GEAREX ENGINEERING

mission, b c

POTENTIAL  
PLACER  
GROUND

1000 METERS  
APPROXIMATE  
SCALE

AIRPHOTO  
BC 5623#061



NOTE: ARROW LINES SHOW  
OLD CHANNELS & BENCHES

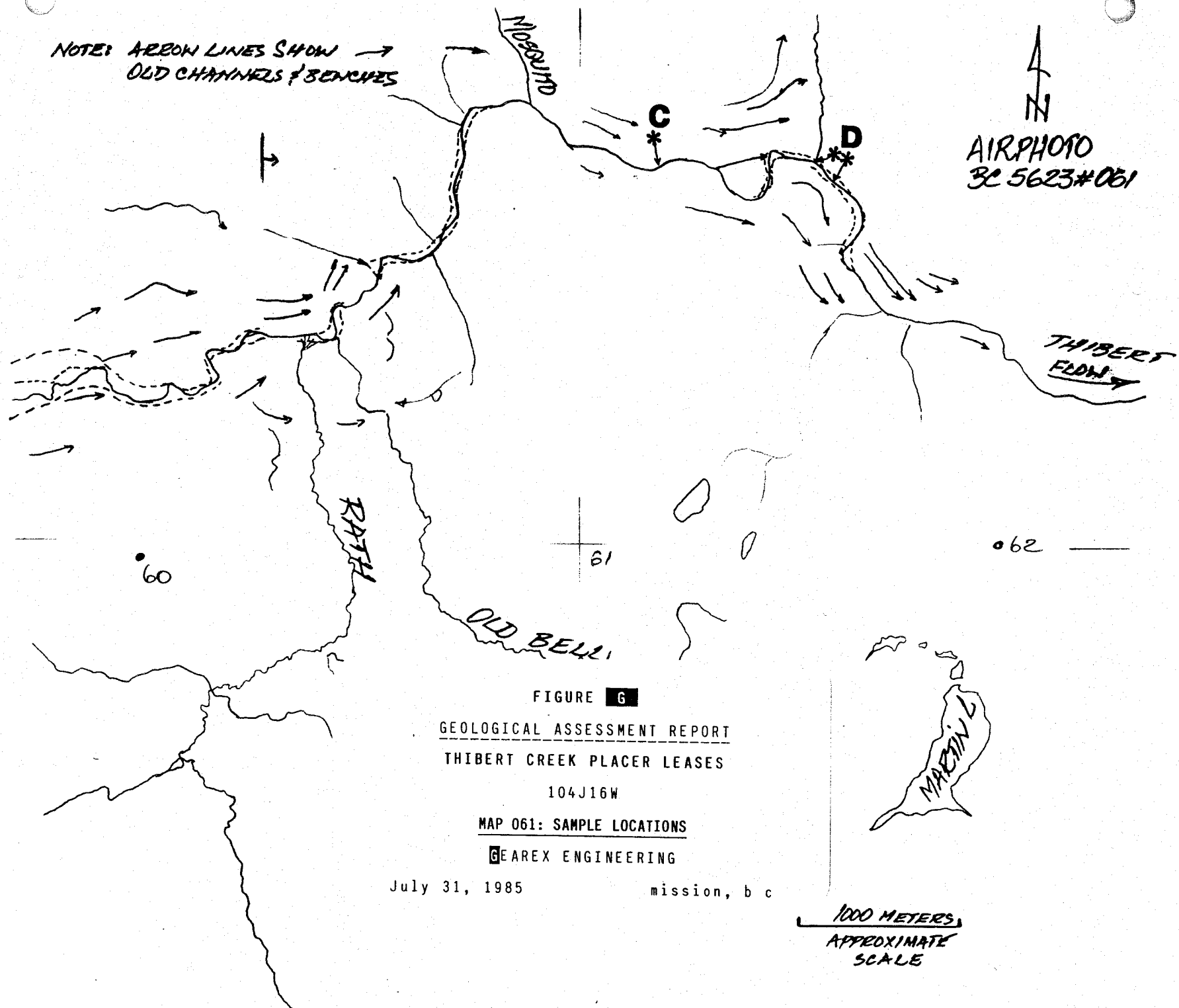


FIGURE G

GEOLOGICAL ASSESSMENT REPORT  
THIBERT CREEK PLACER LEASES

104J16W

MAP 061: SAMPLE LOCATIONS

GEAREX ENGINEERING

July 31, 1985

mission, b c

1000 METERS  
APPROXIMATE  
SCALE

NOTE: ARROW LINES SHOW  
 OLD CHANNELS & BENCHES

AIRPHOTO  
 BC 5623#061

ASSESSMENT REPORT : THIBERT PLACER : DEASE LAKE

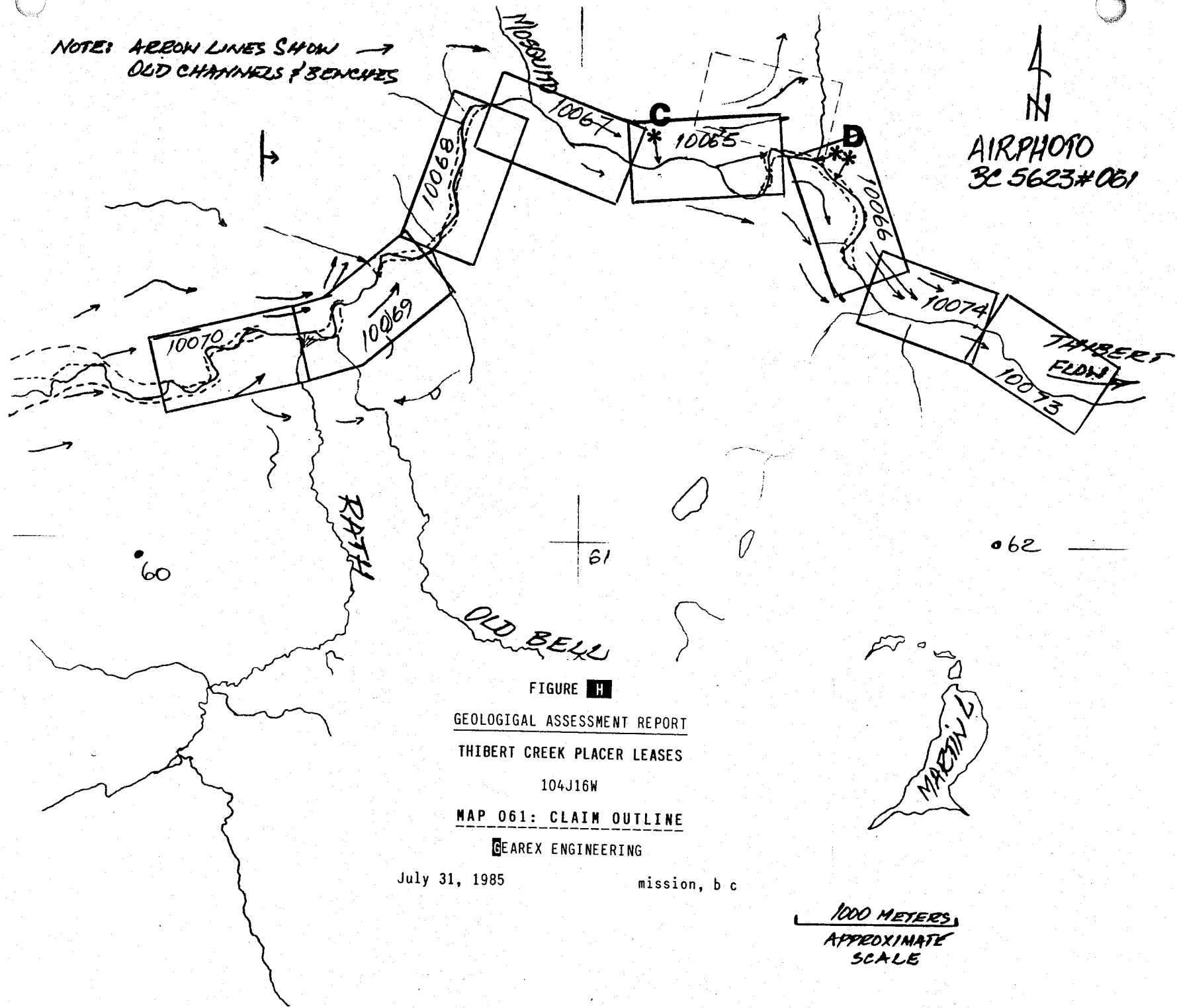


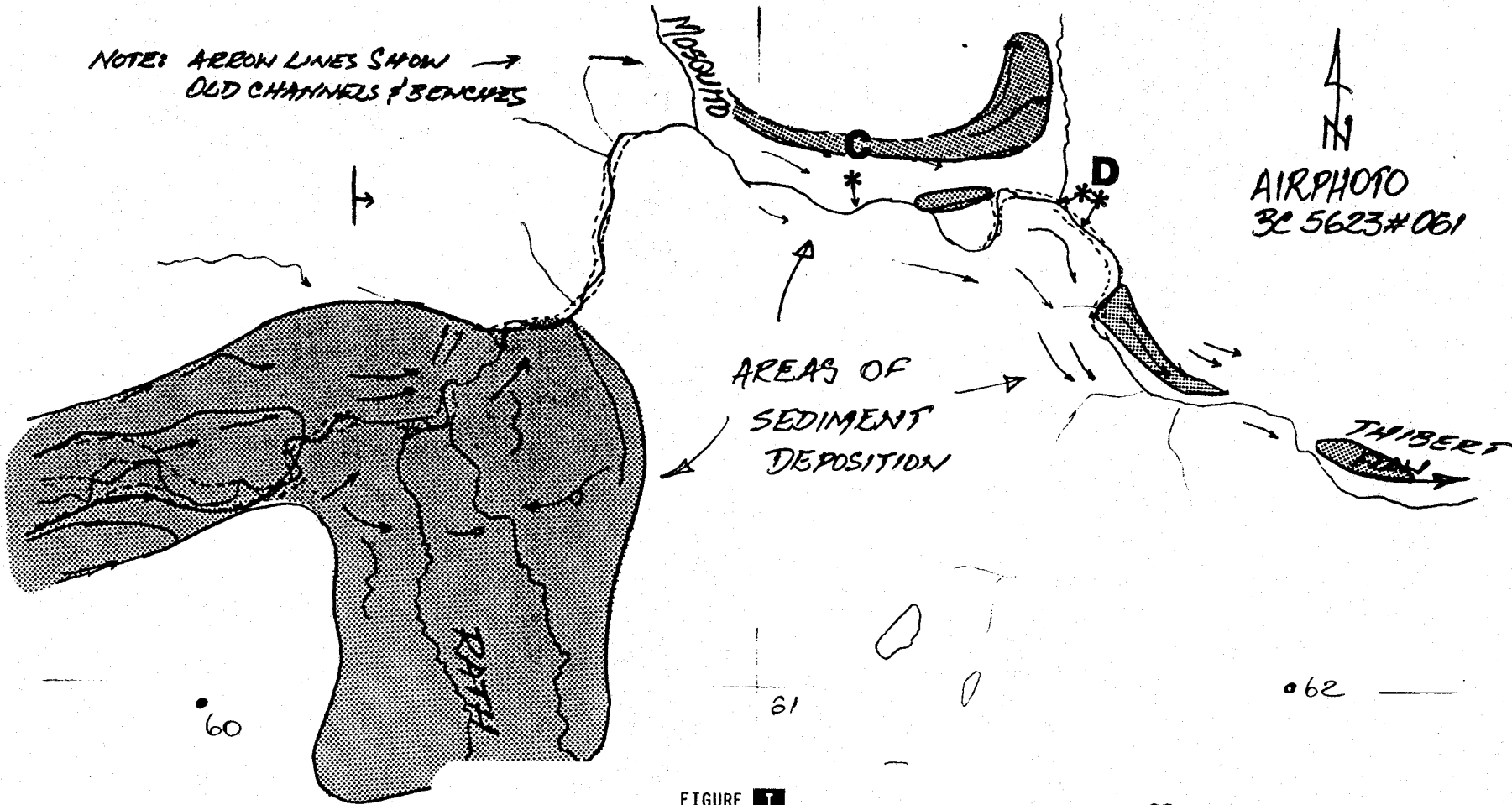
FIGURE H  
 GEOLOGICAL ASSESSMENT REPORT  
 THIBERT CREEK PLACER LEASES  
 104J16W  
 MAP 061: CLAIM OUTLINE  
 GEAREX ENGINEERING

July 31, 1985

mission, b c

1000 METERS  
 APPROXIMATE  
 SCALE

GEAREX ENGINEERING mission bc



NOTE: ARROW LINES SHOW →  
OLD CHANNELS & BENCHES

AIRPHOTO  
3C 5623#061

AREAS OF  
SEDIMENT  
DEPOSITION

FIGURE 1

GEOLOGICAL ASSESSMENT REPORT  
THIBERT CREEK PLACER LEASES  
104J16W  
MAP 061: INTERPRETATION

EAREX ENGINEERING

July 31, 1985

mission, b c



1000 METERS  
APPROXIMATE  
SCALE

### HISTORIC RECORDS FROM ARCHIVES AND OLD PLACER MINERS OF LOCAL AREA

- 1948 - Adit placed at the mouth of Mosquito Creek at the level of the old Thibert Creek channel produced one ounce to the yard. One man producing 30 ounces a year.
  - Two adits put in one mile to three miles above Berry Creek produced near one ounce per yard.
  - French or Rath Creek 103 ounces hand method recorded.
  - Spring Creek 124 ounces.
  - Vowel Creek 106 ounces.
  - Bear Gulch 45 ounces.
  - Quartz Creek 212 ounces.
  - Rose Creek 14 ounces.
  - Old Bell Creek 29 ounces.
  - Stretch of river below Bear Gulch produced 37 ounces by dredging in 1981.
  - 46 ounces by dredging below old Bell Creek in small canyon.
  - Production between 1861 to 1906 plus 1929 to 1930 was 12,000 ozs. gold recovered from Mosquito Creek by hydraulicking."
- ((end quote)).



## RECONNAISSANCE EXPLORATION 1985 ASSESSMENT PROGRAM

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### INTRODUCTION

The purpose of the trip was to perform a reconnaissance testing program by hand working of pan-size gravel samples obtained from selected inside bars on Thibert creek. Such a venture would provide on-the-ground information relative to the possibility of operating a placer extraction project on the leased ground, as well as providing data that could be filed for assessment work purposes.

Due to the small scope of the testing program little can be mentioned about the placer gold content of the gravels, other than the documented occurrence of fine grained gold, however as will be noted later in the report, large volumes of gravel, the possibility of shallow depth to bedrock, and the advantageous width of the valley, provide an exceptional target for placer heavy metal oriented explorations.

### DURATION

The writer, accompanied by his helper, Ernest von Rosen, left Mission, B.C. on June 26, arriving at Dease Lake, B.C. on June 28. Contrary to expectations, the helicopter could not be chartered on that Friday because the funds had not yet arrived at the helicopter company before the long weekend. This turned out to be a blessing as a spell of rainy weather cooled down the country. The next days were spent in researching the logistics of fording the Dease River at Porter Landing, obtaining transportation across the ford (courtesy of Toy Ventures), and in travelling on the cat road up to the Delure creek-crossing by bulldozer, and in generally researching the area.

The finances to pay for helicopter transport were received after the long week end on July 2, and the crew was flown to Thibert creek, where the fly-camp was set up at the mouth of Vowel creek. The weather was perfect. From this location claim group A, B, and C were visited on foot, and sampling operations were carried out. The camp was moved on July 3 downstream to the mouth of Bear Gulch. From this location claim groups C and D were visited. The mobilization-out was the night of July 5. It had rained most of the afternoon. Arrival at home-base in Mission, B.C. was on July 7, 1985.

## TRANSPORTATION

The road vehicle used was a Toyota Landcruiser, and the Hughes 500 helicopter was chartered from Yukon Airways Ltd., from their Dease Lake base.

## TEST LOCATIONS

The locations at which samples were obtained are shown on the enclosed map (figure xx)

The river bar sampled for Group A consisted of an "inside" bar where sample #A1 was taken from placer lease #10078. Sample #A2 was dug from a higher, and older bench, located in the same vicinity. Sample #A3 originates from about 200 feet farther up stream than A1, still on the same claim.

Group B was sampled around the point of disgorgement of Vowel creek, on placer lease #10079, where several points were tested in the vicinity of a relatively recent workings, the remnants of which consisted of a sluice box. Sample #B1 was taken at this site. Another sample was taken from the vicinity of this group of claims, on placer lease #10080, from a hill-side gravel cut made by a road near the mouth of Spring creek. This sample was called #B2.

On placer claim #10072, belonging to group C, an inside bar was used for testing where samples #C1 & #C2 were concentrated.

Placer lease #10065 of group C was visited where samples #C4, C5, and C6 were concentrated.

Placer lease #10066 of group D covers an area around the mouth of Bear Gulch. Samples D1 & D2 were obtained from a straight bar downstream from this confluence, while sample D3 was taken right at the confluence.

## SAMPLE PROCUREMENT & HANDLING

Samples were taken in three different manners.

One method was to dig with a shovel, filling a plastic 25L bucket, weighing this with fish scales, screening this material through a ten-mesh screen, panning the undersize down in several stages, screening the remainder through a thirty-mesh screen, and panning the remainant to, generally, a small amount of black sand.

Another method utilized was to dig up individual panfuls, screening these through the ten-mesh screen, panning further, screening through thirty-mesh, panning down to a small quantity of heavy minerals, and combining several such pan-concentrates into one final sample.

A third method, normally used in those localities where it was too difficult (using a shovel) to obtain meaningful samples, entailed the ripping of moss, and roots out of the edges of river banks, placing these in the 25L buckets, agitating the mass in water, picking all the moss clumps apart, carefully washing all the organic fragments, screening the remainant sediment, panning, screening, and combining concentrates obtained in this manner.

The pans used to measure the quantity of material have a 14 inch diameter, with a bottom of about 6 inches, and a height of about 3 inches. In many of the mossy samples it is difficult to use the number of "panfuls" for yardage calculations because the pans were never full of gravel, and the moss is known to be an extraordinary carrier for fine grained gold, thus overemphasizing the actual gold content. Moss was used, however, to provide an indication of gold occurrence in the high-water load of the stream.

All concentrates were taken to the Mission facilities for further reconcentration, extraction, sizing, describing and counting of the gold colours, utilizing a microscope.

#### DESCRIPTION OF SAMPLES & GOLD CONTENT

##### SAMPLE A1

Sample from left side, and 20 feet north of creek, about 100 feet upstream from point where upper bench meets creek. (the lower end of an inside bar)

Net weight of damp sample = 96 lbs = about 25L of material.

Extraction by panning: 2 colours at 114 microns (145 mesh)

1 colour at 250 microns ( 60 mesh)

##### SAMPLE A2

Sample from left side, from older 20 foot high bench to north.

Net weight of dry damp sample = 100 lbs = about 25L of material.

Extraction by panning: 2 colours at 74 microns (200 mesh).

##### SAMPLE A3

Sample from left side, and on creek shore, about 50 feet higher upstream than old camp located at bend in creek, which is about 150 farther upstream from A1.

This sample is a combination of seven panfuls consisting in part of

moss, and roots.

Extraction by panning: much larger amount of black sand.

17 colours at 33 microns (350 mesh)

17 colours at 68 microns (225 mesh)

13 colours at 228 microns ( 60 mesh)

#### SAMPLE B1

Sample from various places around bulldozer trench in Vowel creek, near recently built sluice box, took 14 pans of various materials, however found it difficult to get proper pan sample due to coarse nature of material in the creek bed, some very fine-grained gold came out of roots and moss.

Extraction by panning: 2 colours at 40 microns (350 mesh)

2 colours at 105 microns (150 mesh)

#### SAMPLE B2

Sample from road bank cut in valley slope near the mouth of Spring creek, took two one half bucket fulls, about 25L.

Extraction by panning: 2 colours at 40 microns (350 mesh)

#### SAMPLE C1a

Sample from near active, inside bar in creek, close to south side of valley. Took six panfuls by wading into shallow portion of bar and digging gravel from below water level.

Extraction by panning: 9 colours at 40 microns (350 mesh)

23 colours at 69 microns (225 mesh)

9 colours at 250 microns ( 60 mesh)

#### SAMPLE C1b

Sample from same area as C1a but from dry bar.

Extraction by panning: 24 colours at 46 microns (300 mesh)

12 colours at 69 microns (225 mesh)

#### SAMPLE C2

Left side of creek, farther upstream along present inside bar, near active cut point of upstream shoulder.

Extraction by panning: 10 colours at 69 microns (225 mesh)

12 colours at 228 microns ( 60 mesh)

**SAMPLE C3**

Took two buckets full from road cut near mouth of Spring creek, total dry weight of 130 lbs = about 38L of material.

Extraction by panning: 1 colour at 40 microns (350 mesh)

**SAMPLE C4**

Left side of Thibert creek in steep-walled valley, found overgrown inside bar. Took seven pans of mostly mossy, and rooted material, with little black sand in concentrate.

Extraction by panning: NO colours of gold.

**SAMPLE C5**

Same bar as above. Slightly farther upstream. Dug holes below large cobbles, partly into water table. Took ten pans of material.

Extraction by panning: 10 colours at 114 microns (130 mesh)

16 colours at 228 microns ( 65 mesh)

9 colours at 273 microns ( 55 mesh)

**SAMPLE C6**

Same bar as above. Took two buckets full weighing wet at 105 lbs = 25L of material. This sample showed the biggest splinter of gold yet found.

Extraction by panning: 15 colours at 62 microns (250 mesh)

7 colours at 160 microns ( 90 mesh)

3 colours at 228 microns ( 65 mesh)

1 colour at 342 microns ( 44 mesh)

Native mercury was noted, and possibly one grain of platinum.

**SAMPLE D1**

Left side of creek, about 700 feet below confluence of Bear Gulch, straightline bar, not recently active but edge of older, now overgrown, midstream bar, worked ten pans of roots, and moss.

Extraction by panning: 6 colours at 69 microns (225 mesh)

4 colours at 114 microns (180 mesh)

Found one grain of cinnabar.

**SAMPLE D2**

Same place along bar as above. Taking shovelfuls from underneath rocks submerged in water. Poor way of taking sample as most of fines are carried away by water. Took about one half pailful, or five large heaping panfuls.

Extraction by panning: 9 colours at 69 microns (225 mesh)  
5 colours at 137 microns (110 mesh)  
4 colours at 228 microns ( 65 mesh)

**SAMPLE D3**

Obtained samples from Bear Gulch at confluence with Thibert creek. Sample consists of combination of concentrates from five panfuls obtained from material located under larger rocks.

Extraction by panning: 2 colours at 69 microns (225 mesh)  
4 colours at 114 microns (130 mesh)  
2 colours at 160 microns ( 90 mesh)  
5 colours at 228 microns ( 65 mesh)

**RESULTS OF RECONNAISSANCE PROGRAM**

1. Fine and very fine grained gold was found to occur in most of the situations tested in this reconnaissance program
2. Clay-size gold was not recovered, partly due to the method used in hand panning, but also because the sampled material was derived from sites which did not lend themselves to the quiet settlement of muddy waters.
3. Most of the gold, larger than about 200 mesh occurs in flakes, while the smaller particles are generally shaped like rice-grains.
3. Gold that would be coarser than about 60 mesh was seldomly recovered because the surface of the active bars, where many of the samples were taken, are not the settling environment for this size of material. The larger sized gold particles would conceivably be located on bedrock, or false bedrock, which lies an unknown depth below the present surface of the bars.

## DISCUSSION

Gold production amounting to sizeable quantities has been recorded for the famous Thibert creek. Along with the gold are reported values in silver, native copper, and some platinum and osmiridium. Most of the gold production quoted in the Minister of Mines Reports was obtained by hydraulicking, and dredging from the old, elevated channel of Thibert Creek. The placer miners were troubled with boulder clay banks, reaching far uphill, covering the paleochannel, which would slough in, thereby destroying equipment and a whole season's work.

As the present Thibert Creek bed had less grade above Berry Creek, and because the paleochannel was less continuous, the miners kept to the lower reaches of the creek. Single-handed methods by George Adsit, and more concerted efforts later, also focussed on the Mosquito creek area, which is located farther upstream.

However, most of the recorded gold production stems from below Berry creek. The present claim holdings comprise placer leases upstream from Berry creek to Quartz creek, from which sector local information reports various creeks with gold production of varying, but sizeable amounts.

The subject reconnaissance gold exploration program has at least indicated to the writer that gold can be detected in many of the active bars of the upper reaches of Thibert creek.

There is no question that the Thibert creek valley starting at about Grizzly Bear creek and stretching upstream the remaining claimed distance of about 6 kilometers constitutes ideal terrain for a placer mining operation, considering the wide ( and flat valley floor which is essentially devoid of troublesome vegetation, apparently having little 'overburden'. Almost 1000 acres of such potential valley bottom are estimated to exist, as shown as the darkly stippled zone, designated "potential placer ground" on figure F.

The remainder of the downstream holdings, of course, will contain deposits with higher concentrations of gold, both in the present valley gorges and in some of the remaining hanging benches. These areas, in the eyes of the writer, will need to be mined with careful planning for the establishment of settling ponds and operating room, due to the generally constricting space. These sectors of the Thibert creek

environs, designated as "areas of sediment deposition" on figure I, should be investigated.

In order to ascertain the viability of a commercial placer gold extraction facility, working the upper valley sediments, a program of exploration will be necessary to accurately define the depth to bedrock, and other possible false- bedrock layers, in addition to carrying out a well-designed program to establish the heavy metal content of the deposits.

### RECOMMENDATIONS

A program consisting of backhoe trenching, sample procurement, and precious metal extraction, along with bedrock depthing is recommended for the upstream portion of the holdings.

Considering the fact that most of the leases are coded to allow modern-day equipment mining, added to the fact that with the refined large-volume techniques more of the fine-sized gold can be extracted, one can surmise that it is prudent to reinspect the subject section of Thibert Creek for its placer mining potential.

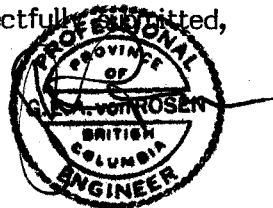
### ESTIMATED COSTS OF RECOMMENDED PROGRAM

Depending on the logistics at hand, and the testing methods agreed upon to be utilized, it appears appropriate that a budget between \$40,000 to \$50,000 should be committed for the project.

The writer has been made aware of the availability of testing equipment available at this time in the environs of the property, which may be hired for testing purposes.

Respectfully submitted,

Gerhard von Rosen, P.Eng.



July 31, 1985



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CERTIFICATE OF QUALIFICATIONS

I, Gerhard von Rosen, reside in Mission, British Columbia, at 33176 Richards Avenue.

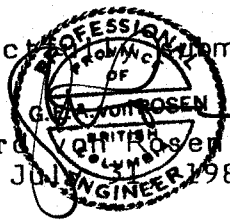
I have been practicing my profession of consulting geologist since my graduation from the University of British Columbia in 1962 with a Bachelor of Science, and in 1966, with a Master of Science degree in Honours Geology.

I have prepared the subject report from information gained during my visits to the claimed area during the period of August 2 to 5, 1985, from personal extraction and microscopic inspection of the separated gold, from airphoto study, and from references cited.

Respectfully submitted,

Gerhard von Rosen, P.Eng.

JULY ENGINEER 1985



ITEMIZED COST STATEMENT

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TRAVEL: 4 DAYS  
 RECONNAISSANCE: 1 DAY  
 WAITING: 2 DAYS  
 FIELD: 4 DAYS  
 LABORATORY: 1 DAY  
 TOTAL: 12 DAYS  
 TIME CHARGED: 9 DAYS

ROOMS		72.33
GROCERIES		226.31
SUNDRY		140.95
MAPS ETC.		43.89
PHOTOS		61.25
DIESEL FUEL		269.70
AIR FILTER		29.10
TOYOTA PER KM	4829 @ \$000.15	504.35
TOYOTA PER DIEM	11 @ \$050.00	550.00
TOYOTA PER DIEM INSUR	11 @ \$005.00	55.00
HUGHES 500 HELICOPTER		1040.00
FEES	9 @ \$300.00	2700.00
HELPER	7 @ \$100.00	700.00
REPORTING		1600.00
TOTAL COSTS INCURRED.....		<b>\$7992.88</b>

GROUP A: 3 CLAIMS x \$200 = \$ 600  
 GROUP B: 3 CLAIMS x \$200 = \$ 600  
 GROUP C: 7 CLAIMS x \$200 = \$1400  
 GROUP D: 5 CLAIMS x \$200 = \$1000  
 TOTAL ASSESSMENT..one year..\$3600  
 TOTAL AVAILABLE.....\$7993