

Report on the

MAR 1-20 MINERAL CLAIMS

McLEESE LAKE. B.C.  
CARIBOO M.D.

For:  
GALVESTON MINES LTD. (N.P.L.)  
101 - 535 Thurlow Street  
Vancouver 1, B.C.

By:  
ALLEN GEOLOGICAL ENGINEERING LTD.  
303 - 325 Howe Street  
Vancouver 1, B.C.

October 15, 1971

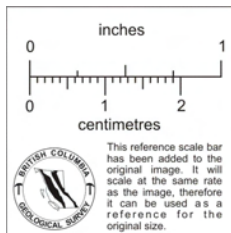
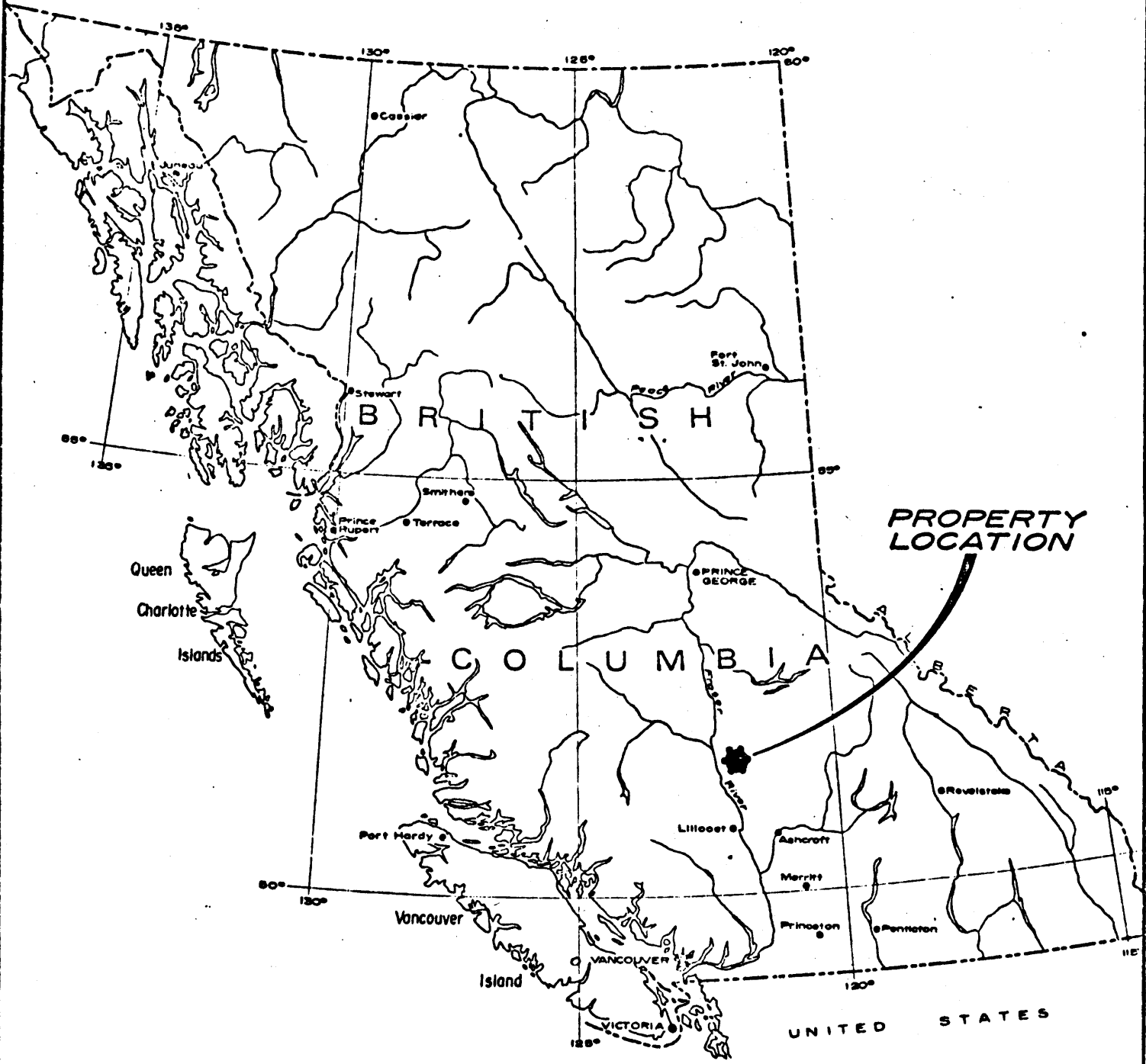
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(E)

Not an occurrence  
PROPERTY FILE



GALVESTON MINES LTD. (N.P.L.)

**LOCATION MAP**

SCALE : 1" = 136 Mls.

Drawn by ALTAIR	Date DEC 1970	ALLEN GEOLOGICAL ENGINEERING LTD.
Checked by A.A.	Org no. 2	

## **INTRODUCTION**

The Mar group of mineral claims is located about one and one-half miles southeast of McLeese Lake, B.C., within easy access to Highway 97.

The writer examined the Mar 1-20 claims area May 6th and September 19th, 1971.

This report is intended to provide a brief description of the McLeese Lake area, the general geology, and details of an exploration programme for the Mar Claims of Galveston Mines Ltd. (N.P.L.).

## **LOCATION AND ACCESSIBILITY**

The Mar property of Galveston Mines is located on the east side of Duckworth Lake between McLeese Lake and Soda Creek in south central British Columbia.

Geographic location is 52°-20' north latitude and 122°-15' west longitude.

Access is via Highway No. 97 from Williams Lake or Quesnel, and by secondary road southeast from McLeese Lake.

## **PROPERTY**

The property comprises the Mar 1-20 adjoining located mineral claims.

These were recorded May 7, 1971.

Record Numbers 62360 to 62379 inclusive.

The lines and posts have been examined by the writer and are in accordance with the requirements of the B.C. Mineral Act.

## **TOPOGRAPHY**

The claims are located east of the Fraser River on a terraced area. There is a steep 500-foot gradient from the terrace down to the valley of McLeese creek. Small intermittent creeks drain westerly into McLeese creek and southerly into Soda creek.

## **GEOLOGY**

The area between Soda creek and McLeese Lake, although almost completely covered with overburden, is underlain by sedimentary rocks of the Cache Creek formation. About 5 miles to the northeast of the Mar claims area there are intermittent exposures of granitic rocks measuring 12 miles long and 6 to 8 miles wide. Tertiary lavas and minor sediments overlie the Cache Creek and igneous rocks in scattered erosional remnants.

The Cache Creek group is composed mainly of argillite, chert, limestone, tuff and greenstone. Deposits of copper, iron and other minerals have been discovered in the Cache Creek rocks.

The large body of igneous rocks, known as the Granite Mountain batholith, is composed chiefly of granite, granodiorite, quartz diorite with minor veins of quartz, aplite and lamprophyre dykes. The large Gibraltar deposits of copper-molybdenum mineralization occur within this igneous complex. Alteration is chiefly silicification, sericitization and pyritization in and around the mineralized zones.

## **SUMMARY AND CONCLUSIONS**

The Mar group of mineral claims is located in the McLeese Lake area of the Cariboo Mining Division, where exploration programmes are being carried out on numerous properties. This is largely because of the favourable geological environment as evidenced by the nearby Gibraltar, Gunn, Cariboo Bell and other copper-molybdenum deposits.

It is concluded that a thorough investigation of the Mar claims area is warranted.

## **RECOMMENDATIONS**

A field programme on the Mar property of Galveston mines is herewith outlined in three phases. Details of the last two phases may be varied somewhat, depending upon results of the previous phase.

**PHASE No. 1.****Estimated Costs**

1. Establish a surveyed grid over the claims area, with parallel lines spaced at 400 feet and stations staked every 100 feet along each line,	\$ 3,000.00
2. Conduct a geochemical survey over the property,	4,000.00
3. Strip selected areas for bedrock geological information,	1,500.00
4. Office, overhead and supervision	1,000.00
5. Contingencies,	<u>500.00</u>
Total estimated costs,	\$10,000.00

**PHASE No. 2.**

1. Conduct a magnetometer survey over the property,	\$ 2,500.00
2. Strip and trench to provide additional bedrock information,	2,500.00
3. Drill "scout" holes with percussion equipment to 300 feet of depth to test anomalous zones, a total of 4,000 feet of hole,	13,000.00
4. Log all drilling results and sample assays therefrom in detail and map the geology of the property,	1,500.00
5. Office, overhead and supervision	3,000.00
6. Contingencies,	<u>2,500.00</u>
Total estimated costs	\$25,000.00

**PHASE No. 3.**

1. Conduct an induced polarization survey over the property,	\$14,000.00
2. Strip anomalous zones and excavate rock trenches where necessary to provide detailed geological information,	4,000.00
3. Core drill to check zones of mineralization to at least 300 feet of depth, 1000 feet,	10,000.00
4. Office overhead and supervision,	7,000.00
5. Contingencies,	<u>5,000.00</u>
Total estimated costs	\$40,000.00

The total estimated cost of the above programme amounts to \$75,000.00, and should require not more than six months field time.

Respectfully submitted,

**ALLEN GEOLOGICAL ENGINEERING LTD.**

Per "ALFRED R. ALLEN" P. Eng.

Alfred R. Allen

Vancouver, B.C.  
October 15, 1971

**REFERENCES**

Annual Reports, B.C. Minister of Mines, '57-'66  
Geological Survey of Canada, Paper 1533, Sheet 93 B/9  
Geological Survey of Canada, Maps 12-1959, 3-1961  
Keevil Mining, Maps and Reports, 1960-62  
A.R. Allen, Reports, Gibraltar Mines, 1964-67  
Cominco, Reports and Maps, 1966-67

**CERTIFICATE**

I, Alfred R. Allen, certify that:

I am a graduate of the University of British Columbia and hold the following degrees therefrom:

BASC Geological Engineering 1939

MASc Geological Engineering 1941

I am a member of the Association of Professional Engineers of the Province of British Columbia.

I have practised my profession for the past twenty-eight years.

I hold no interest in the properties or securities of Galveston Mines Ltd. (N.P.L.), or affiliates thereof, nor do I expect to receive any, directly or indirectly.

My report of October 15th, 1971, entitled "Report on the Mar 1-20 Mineral Claims", McLeese Lake, B.C., Cariboo, M.D., is based upon field examination by the writer on May 6th and September 19th, 1971.

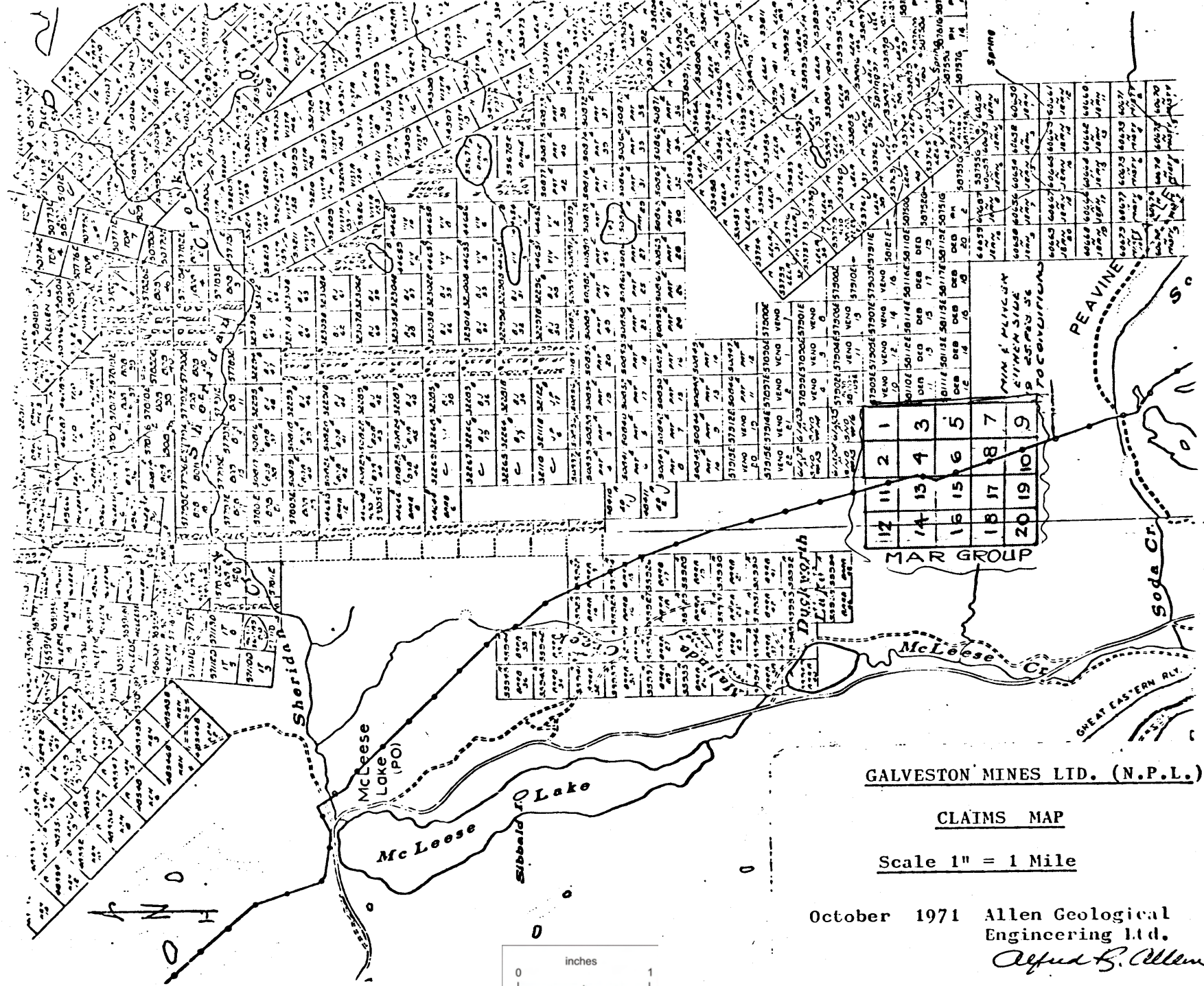
I consent to this report being filed with the British Columbia Securities Commission.

I have examined the claim posts and lines and am of the opinion that they are staked in accordance with the British Columbia Mineral Act.

**"ALFRED R. ALLEN" P. Eng.**

Alfred R. Allen

October 15, 1971

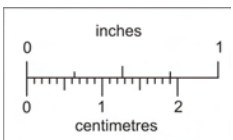


**GALVESTON MINES LTD. (N.P.L.)**

**CLAIMS MAP**

**Scale 1" = 1 Mile**

October 1971 Allen Geological Engineering Ltd.  
*Alfred B. Allen*



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93B/8E&W

PHONE 688-2305

**Western Geological Services Ltd.**

Suite 1015 - 470 Granville Street  
VANCOUVER 2, B.C.

November 29, 1971

British Columbia Securities Commission  
Victoria, British Columbia

Dear Sirs:

Re: Galveston Mines Ltd. (N.P.L.)

The writer herewith consents to the inclusion of "Report ON: 'Bill' and 'NW' claims, Taseko Lake Area, B.C. Prepared For: Granite Mountain Mines Ltd. (N.P.L.) - Galveston Mines Ltd. (N.P.L.) Joint Venture," dated November 29, 1971 in the Prospectus of Galveston Mines Ltd. (N.P.L.).

Yours truly,

WESTERN GEOLOGICAL SERVICES LTD.

"WM. MEYER"

W. Meyer, B.Sc.

WM:ro



93B/9E

REPORT ON THE McLEESE LAKE PROPERTY OF  
ROKON MINES LTD.

BY

J.W. Hogan, B.App.Sc., P.Eng.

L.J. Manning & Associates Ltd.  
610 - 890 West Pender Street  
Vancouver, B.C.

August 26, 1970

X

The President  
Rokon Mines Ltd.  
305 - 540 Burrard Street  
Vancouver, B.C.

Dear Sir:

The following report on the Rokon Mines Ltd. McLeese Lake property is based on personal knowledge of the areal geology resulting from work on a nearby property; on personal knowledge of the Gibraltar Mines property; and on a study of all available data on the area.

SUMMARY AND RECOMMENDATIONS

Rokon Mines Ltd. holds 48 claims in the McLeese Lake Area, Williams Lake, B.C. These claims are located in a geologically favourable host for copper mineralization and cover a possible fault structure.

A two phase program is recommended as follows:

Phase I

Geological, geochemical and magnetic surveys \$33,000

Phase II

I.P. Survey \$ 6,000

4

(1)

CLAIMS

Rokon Mines Ltd. hold 48 claims in the McLeese Lake area (See attached plan).

<u>Location</u>	<u>Claims</u>	<u>Record Nos.</u>	<u>Expiry Date</u>	<u>Recorded Owner</u>
McLeese Lake (Cariboo M.D.)	TOP 1-48	57173-57220D	April 6/71	Doug Scott

LOCATION AND ACCESSIBILITY

The claim block (52°-35' - 122°10', 93-99E½) is located 10 miles east of Alexandria, B.C. and eight miles northeast of the Gibraltar showings which are indicated to have large tonnage - low-grade copper mineralization.

A dirt road comes to within 3½ miles of the southwest corner of the property and another dirt road to within 3½ miles of the northeast corner of the property.

HISTORY

Available information does not indicate that any previous exploration work has been done on the property.

GEOLOGY

G.S.C. Map 12-1959 indicates that the claim block is underlain by Mesozoic granodiorites and diorites. The Gibraltar showings are in this general host rock unit. A possible northwest fault structure (interpreted from Geophysics Paper 1538 - Alexandria) and mapped by the author to the southwest may pass through the claim group and provide some structural control for mineralization.

NOT AN OCCURRENCE  
PROPERTY FILE

93B/9E

## CONCLUSIONS

The claim group appears to overly the same rock type as that hosting the Gibraltar showings, and this factor coupled with the possibility of a control fault presents a favourable target for exploration.

## RECOMMENDATIONS

A two phase program is recommended as follows:

### Phase I

It is recommended that this phase consist of line cutting to be followed by geological, geochemical and magnetic surveys. The grid is to be laid out on 400' line spacings. The magnetic survey may outline areas of magnetic lows which may be indicative of alteration phenomena possibly associated with copper mineralization.

Claim Boundary Survey – chain and Compass	\$ 500
Road Work – 5 miles @ \$2,000/mile	10,000
Picket Lines & Baseline – 50 miles @ \$120/mile	6,000
Mapping – Prospecting	3,000
Soil Sampling – 48 miles @ \$100/mile	4,800
Magnetic Survey – 48 miles @ \$70/mile	3,360
Transportation, Room & Board, Miscellaneous Assays, etc.	1,500
Engineering & Supervision	2,000
Contingencies	1,840
	<hr/>
	\$33,000

### Phase II

This phase is dependent upon the results of Phase I and it is to consist of induced polarization surveys of areas of interest outlined by Phase I.

Allow 10 line miles of I.P. @ \$500/mile	\$ 5,000
Engineering & Supervision	1,000
	<hr/>
	\$ 6,000

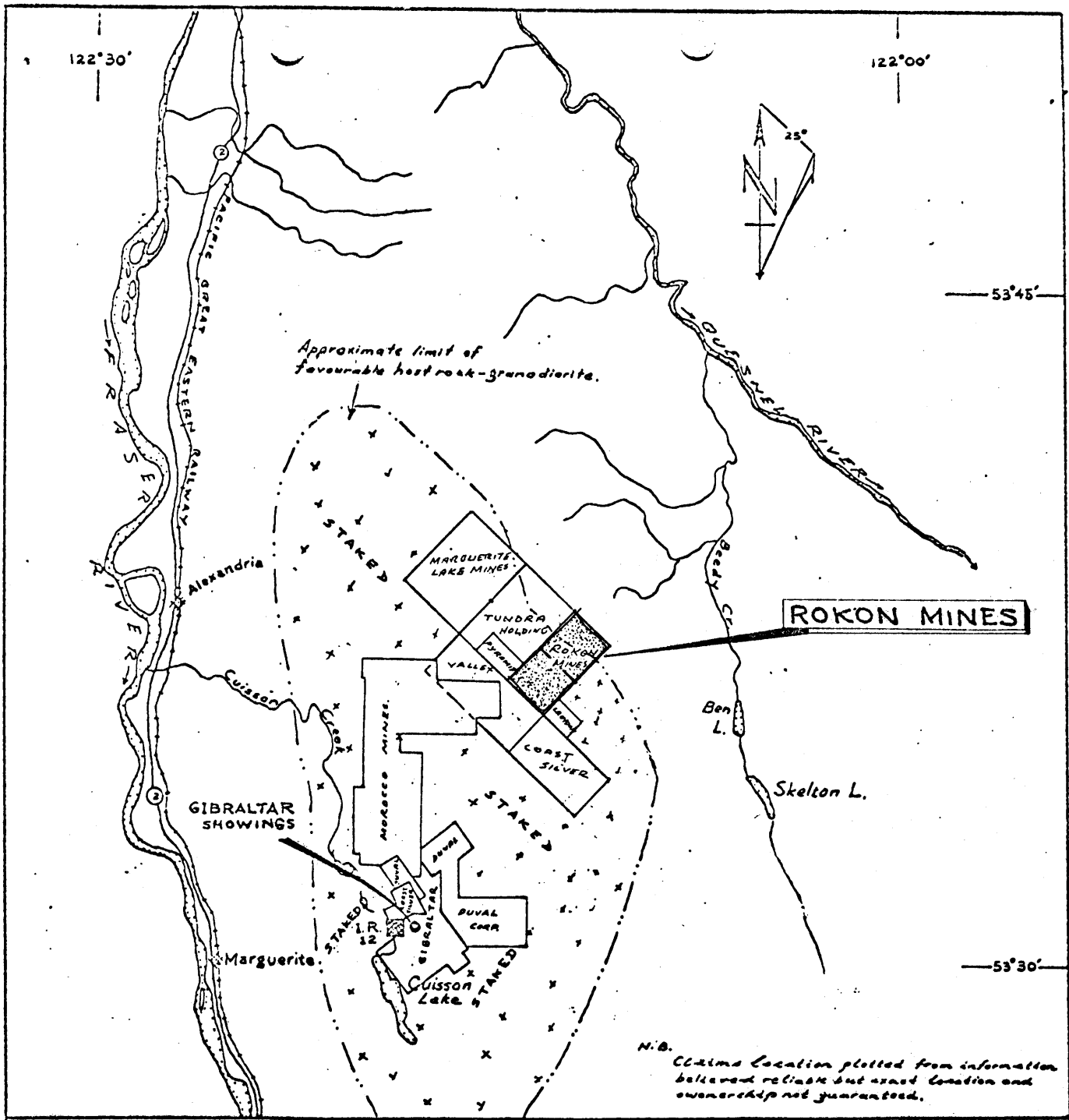
Respectfully submitted,

L.J. MANNING & ASSOCIATES LTD.

“J.W. HOGAN”

John W. Hogan, P.Eng.

JWH:mbh



*N.B. Claims location plotted from information believed reliable but exact location and ownership not guaranteed.*

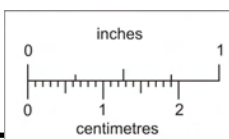
*Property Location Map:-*  
**ROKON MINES LTD. (N.A.L.)**  
**TOP CLAIMS**  
**MCLEESE LAKE AREA**  
**CARIBOO MINING DIVISION, B.C.**

**L.J. MANNING & ASSOCIATES LTD.**  
**CONSULTING ENGINEERS**  
**VANCOUVER - B.C.**



*File No. 9349, 70-2*  
*Dr. No. 1*

*Apr. 30th 1970.*



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*S.T.M.*

112°15'

112°10'

Topographic lineament.....  
Fault - Mag. interp. ....  
Magnetic depression.....

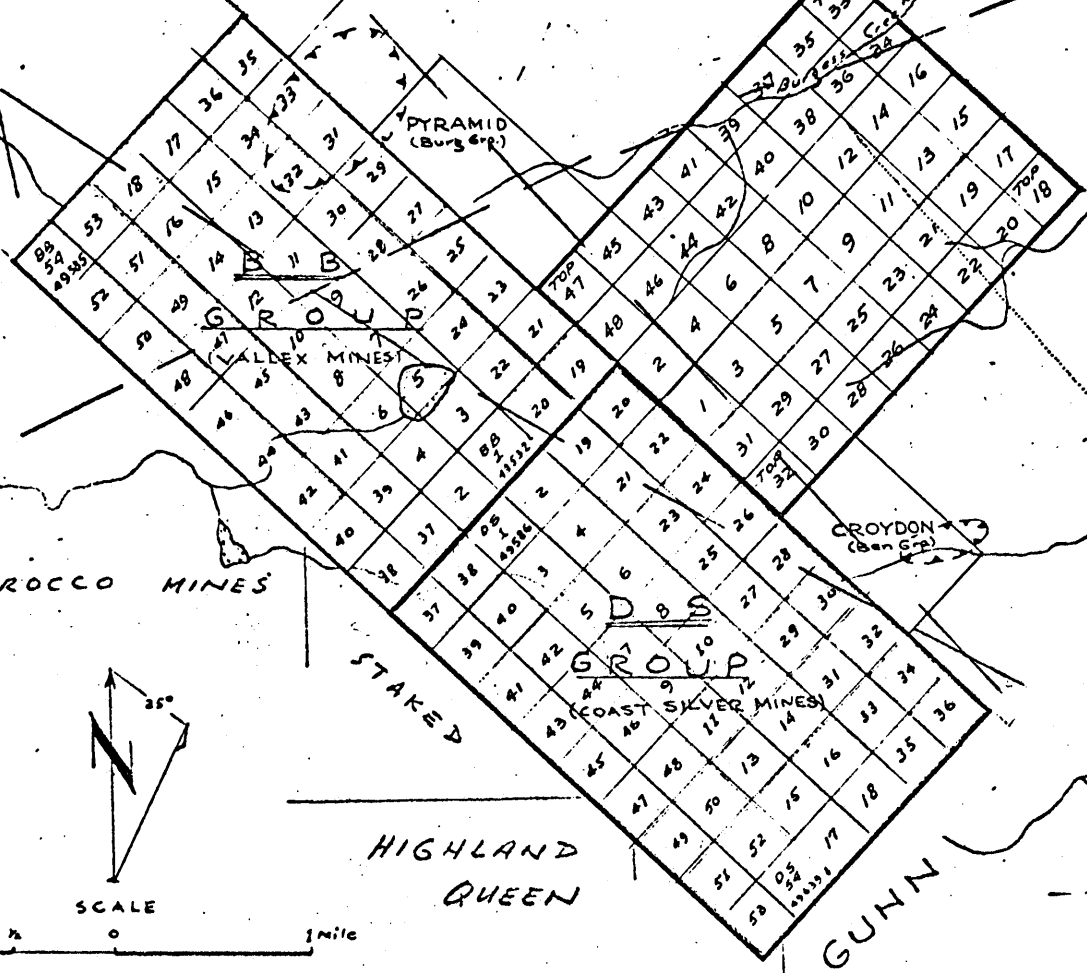
N.B.:  
Map after locators sketch and D.C.D.M.  
aerial map - locations of claims followed  
reliable but not guaranteed.

MARGUERITE  
LAKE MINES  
R.O.J. GROUP.

ROKON MINES LTD  
TOP CLAIMS

52°37'

TUNDRA HOLDINGS



MOROCCO MINES

CROYDON  
(COAST GRP)

HIGHLAND  
QUEEN

GUNN



SCALE



52°33'

*Claims Location Map:-*  
ROKON MINES LTD. (N.P.L.)

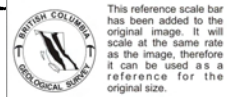
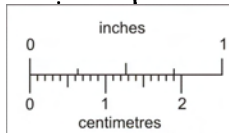
TOP CLAIMS

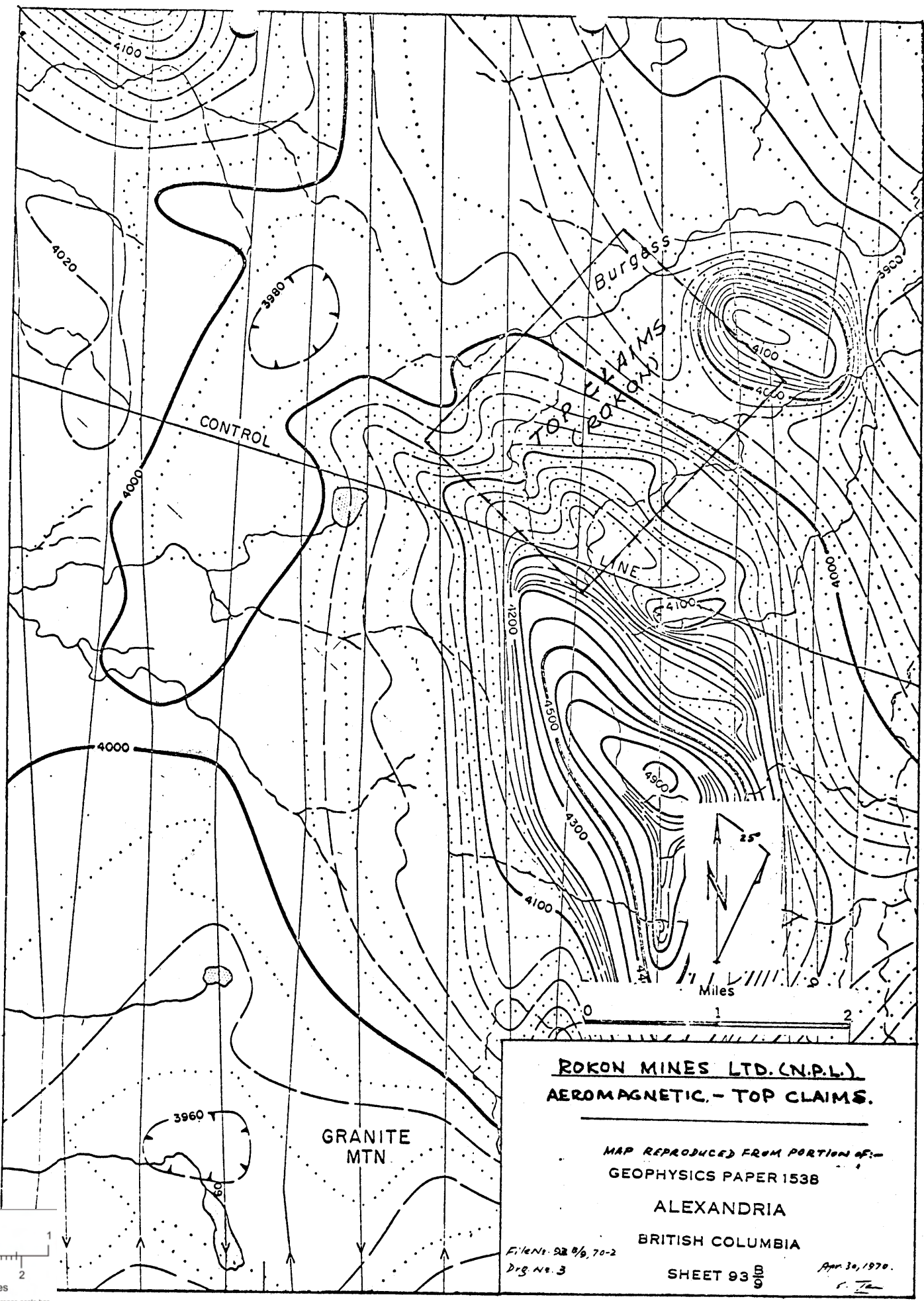
- CONSULTING ENGINEERS -  
L.J. MANNING & ASSOCIATES LTD.  
VANCOUVER - B.C.

MCLEESE LAKE AREA  
CARIBOO MINING DIVISION, B.C.

Apr. 30, 1970  
File No. 93 B/970-2

S. Tam  
Dy. No. 2





**ROKON MINES LTD. (N.P.L.)**  
**AEROMAGNETIC. - TOP CLAIMS.**

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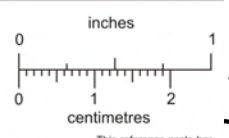
MAP REPRODUCED FROM PORTION OF:-  
 GEOPHYSICS PAPER 1538

ALEXANDRIA  
 BRITISH COLUMBIA

File No. 92 8/9, 70-2  
 Drg. No. 3

SHEET 93  $\frac{B}{9}$

Apr 30, 1970.



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SANKAR V. RAMANI, M.Sc., P.Eng.  
Consulting Geological Engineer

GEOLOGICAL REPORT

ON THE

ELLEN CLAIMS

MCLEESE LAKE AREA, BRITISH COLUMBIA

FOR

KEITH COPPER MINES LTD. (N.P.L.)

BY

S. VENKATARAMANI, M.Sc., P.Eng.

VANCOUVER, B. C.    OCTOBER 1, 1971

Not an occurrence  
93B/8E  
**PROPERTY FILE**

October 1, 1971

INTRODUCTION

Keith Copper Mines Ltd. (N.P.L.) has acquired a substantial block of claims in the McLeese Lake area adjoining some active exploration companies, and in the close vicinity of a producing mine.

Preliminary exploration work has been carried out on this property. This claim group appears to overlie in an area favourable to host mineralization of economic interest.

Detailed exploration work has to be carried out to assess the property's economic potential.

The author has visited this property on various occasions during the past ten months.

.....2

PROPERTY

The property consists of 38 contiguously located mineral claims as outlined below:

<u>Name of Claim</u>	<u>Record Number</u>
Ellen 73 to 110	58552 to 58589

These claims are recorded at the Mine Recorders Office in Quesnel, British Columbia.

During the visit to the property, several claim posts were located and they appear to have been staked as per the Mineral Act of British Columbia. The exact boundaries of these claims were not located, and this has to be carried out at a future time by legal survey.

LOCATION AND ACCESS

The property is located about 10 miles northeast of the town of McLeese Lake in the Cariboo Mining Division, British Columbia. These claims are situated to the east of Citex Mines Ltd. (N.P.L.) and south of Ardo Mines Ltd. (N.P.L.). The access to the property is good by means of all weather gravel roads from McLeese Lake. This McLeese Lake-Likely road passes through the centre of this claim group. The property is situated about 3000 to 3500 feet above sea level. The area is forest covered with underbrush and frequent open areas.

.....3



GEOLOGY

The area around Granite Mountain is underlain by granitoid rocks with minor occurrences of tuffs, limestone, and their metamorphic equivalents. The sedimentary metamorphosed rocks are believed to be of Permo-Pennsylvanian Cache Creek Group. The area is entirely underlain by granodiorite of Granite Mountain batholith and the schists derived from it.

Geological Survey of Canada Map #12-159 on a scale of 1" to 4 miles, shows the geology of this area. The nearest mapping outcrop belongs to the Permian-Cache Creek Group of sediments, metasediments, and volcanics. Acidic intrusive rocks of the Granite Mountain batholith are seen to intrude the Cache Creek Group of rocks northwest of this property.

Geological Survey of Canada Map #1538G, on a scale of 1" to 4 miles, shows the result of an airborne magnetometer survey flown at a normal terrain clearance of 1000 feet. This map indicates very little magnetic relief on the claim area and there are no pronounced structural lineaments, and it also shows similar magnetic environment for the acidic intrusive rocks surrounding the Gibraltar deposit.

The most promising target for exploration on this property would be a disseminated copper sulphide deposit in the acidic intrusive rocks such as that under development at Gibraltar Mines.

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WORK PERFORMED

In early spring of this year about 12 miles of lines were cut and the magnetometer survey using MF1 Fluxgate magnetometer was carried out over the claim group. The results were tabulated and given to Mr. Richard O. Crosby, P.Eng., Geophysicist, of Seigel Associates Limited for interpretation, and his comments are as follows:

"Vertical component magnetic field intensities were recorded at 100 foot along claim lines oriented N 45°E. A Scintrex MF-1 fluxgate magnetometer was used to complete about 12 miles of survey.

Because of the distance between traverses data are plotted in profile form rather than as a contoured map, on a horizontal scale of 1 inch = 400 feet and a vertical scale of 1 inch = 400 gammas.

Baselines A and B exhibit a gentle gradient decreasing north-easterly. The inflexion point of the gradient is located about 1 mile from the southwest end of the profiles.

Since the area is totally underlain by granodiorite or schists derived from granodiorite, the lower magnetic values could represent the presence of altered granitic rocks or alternatively the higher magnetic values may indicate a more basic type of intrusive rock. The high frequency anomalies recorded on ~~all profiles probably are due to susceptibility contrasts within the overburden and do not reflect bedrock geology.~~

The uniformity of magnetic values recorded along all traverses except Baselines A and B suggest that the underlying rocks are relatively homogeneous.

Since sulphide mineralization has been observed on the claim group, it is recommended that an induced polarization survey be completed along lines separated by no greater than 800 feet and that observations be recorded at 200 foot intervals using a three electrode array and electrode spacings of 200 feet and 400 feet."

#### CONCLUSIONS AND RECOMMENDATIONS

1. The property appears to be situated in an area which is favourable to host mineralization of economic interest.
2. The limited number of outcrops on this property indicates favourable geology to carry out further detailed exploration work on this group of claims.
3. The reconnaissance ground magnetometer survey has indicated several anomalous zones of varying intensity and further work is necessary to assess the property's economic potential.
4. A detailed prospecting is necessary on this property to locate outcrops containing copper mineralization.

It is recommended to carry out detailed exploration work on this property as indicated below:

1. It is recommended to carry out further line cutting with a north-south base line and cross lines at every 400 foot

intervals totalling about 18 miles of lines.

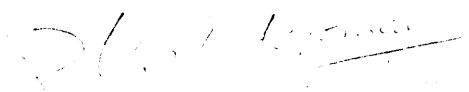
2. A geochemical survey should be initiated on these grid lines.
3. An induced polarization survey should be conducted on this property which could reveal possible areas of interest as the mineralization in this area is known to be of disseminated nature.

Depending upon the results of these surveys, diamond drilling can be carried out to test the anomalous areas, if any, present within this property.

A cost estimate for the above mentioned program would be as follows:

Line cutting - 18 miles @ \$150. per mile	\$2700.
Geochemical survey - 18 miles @ \$100. per mile	1800.
Induced polarization survey - 18 miles @ \$450. per mile	8100.
Bulldozer trenching & road building - 150 hours @ \$45. per hour	4500.
Legal survey to exactly outline the property boundary	2000.
Prospecting & geological mapping	3000.
Transportation & communication & Engineering Supervision	3000.
	\$25,100
	\$25,100

Respectfully submitted,



S. Venkataramani, M.Sc., P.Eng.



Sankar V. Ramani M.Sc., P.Eng., Consulting Geological Engineer

June 23rd 1931.

Robert Dunn, Esq.,  
Deputy Minister of Mines,  
VICTORIA, B.C.

Sir,

re Placer Leases, Beavermouth Flats,  
Quesnel Mining Division.

I beg to acknowledge receipt of your letter of the 15th inst., together with enclosures, which reached me today, being forwarded from Quesnel.

I beg to express my thanks for your forwarding the copies of Mr Wildman's letter and of Mr Robt. W. Jones's report.

It will be necessary for me to return to the Cariboo and Quesnel Mining Divisions about July 10th next, and I will make a point of inspecting the leases in question about that date or if that is not practicable then during the month of October, when I shall be in the Cariboo and Quesnel Mining Divisions for the entire month.

I find it well nigh impossible to keep abreast with the very heavy office mail unless I return to my office at intervals of about two weeks. My car is quite invaluable and a most important factor in the mobility element.

I am, Sir,

Yours faithfully,

Resident Engineer.

93B/9E

L. A. WILDMAN CO., LTD.  
112 Commercial Bldg.  
Edmonton, Alta.

REPORT ON PLACER LEASES  
BEAVERMOUTH FLATS, QUESNEL, B. C.

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BY

R. W. JONES,  
636 Tegler Bldg.,  
Edmonton, Alberta.

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(3)

(1)

April 2nd, 1931.

93B/9E  
**PROPERTY FILE**  
Not a mineral occurrence

**REPORT ON PLACER LEASES**  
**BEAVERMOUTH FLATS, QUESNEL, B. C.**

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During our recent investigations for hydraulic propositions in the Cariboo district of British Columbia, we learned of vacant placer ground on the Quesnel River that might have good possibilities for gold production from a Pre-Glacial Channel at a reasonable cost of development. To reach this district some 32 miles of roads up the Quesnel River were negotiated - 25 miles by automobile and the balance by team - to a point designated on the map as Beavermouth, at the junction of the Beaver with the Quesnel River. We found that over five miles of ditch and flume had at one time been constructed from up the Beaver River to work this property, and that two pits had been worked where between four hundred and five hundred thousand cubic yards of material had been hydraulicked from the edge of flats about 150 feet above the Quesnel River. The upper pit showed a rim rock 90 feet above water level, between the Quesnel River and the bottom of the pit 500 feet south. From this old pit an outlet tunnel 4 x 7 feet had been driven down a six per cent (5%) grade from bed-rock of the old river channel, 60 feet above the present Quesnel River, under the rim rock to the river bank about 20 feet above water level. While this tunnel was caved at its outlet it was evident that over 200,000 cubic yards of gravel must have been sluiced through it from the pit to the river.

An old timer in Quesnel, who had worked on the flume and in the tunnel, gave interesting details as to history, construction,

operation, etc., but could give no authentic information as to values obtained during the hydraulic operations.

The surface was prospected between 1905 and 1907, and a shaft of 90 feet sunk to bed-rock 100 yards south from the top of the tunnel built several years later. The average gold values, it was stated by Mr. Otto Early of Quesnel, who helped to sink this shaft, were 42 cents per cubic yard. Presumably it was gold values obtained in this shaft that formed the basis for financing the development referred to.

No reason was ascribed for the abandonment of the project, although from the number of men reported to have been employed in the operation of the plant one would infer that the operations may have been more expensive than necessary for that method of mining.

From the workings of this pit it was evident that, at this point, there was an old channel 60 feet higher than the present channel of the Quesnel River, with a separating rim-rock between 30 feet higher than the old channel and 90 feet above the Quesnel River, as shown in the attached section, and narrow enough to permit of sluicing by tunnel from the old, or Pre-Glacial channel for disposal of the tailings. The south top edge of the pit is 85 feet above bed-rock of the old channel, and the portion of the bench hydraulicked is about 15 feet lower than the main flat. The top river deposited gravel above the glacial drift, which probably bears good values is some eight to ten feet in depth, below which is glacial drift carrying lesser values until near bed-rock.



The lower pit, some 1500 feet westerly down stream, showed about 150,000 to 200,000 cubic yards to have been sluiced, with two parallel sluices still in place at its lower end, but no bed-rock or rim-rock showing.

It would appear that the upper values have been taken, and it was later intended to lower the outlet to bed-rock if the operations had been continued.

Examination was made of the upper end of the water line at a falls in the Beaver River some five miles above the upper end of the flats. The intake would require little expense if the water line were to be re-built. The three miles of flume has no recovery value and the ditches, approximately two miles in length, would require probably half the original cost of construction to put in repair. A fairly safe estimate to replace the entire hydraulic plant would be \$50,000.00.

The minimum flow of the Beaver River at the intake, assuming the flow of March 1st this year as the probable minimum during the working season, would be about fifteen second feet. The hydraulic head from the old penstock opposite the upper pit would be about 120 feet. Portions of the old pipe in place above the top of the pit measured 18 inches in diameter.

The character of all the material showing in the pit being free from large boulders would indicate that it could be very economically handled. The largest boulders would not exceed two feet in diameter and those of that size were very exceptional.

The bed-rock of the old channel, as shown in the upper pit and tunnel, is a hard, black rock with the stratifications dipping at a steep angle to the surface and at right angles to the channel, forming an ideal riffle for holding whatever gold may have been originally deposited.

As an alternative to putting in an hydraulic plant at the outset at least I would suggest putting in Diesel Engines and Centrifugal Pumps. As an illustration of a single unit, a 100 H.P. Diesel Engine and a Pump with 12-inch intake and 10-inch discharge is rated to pump about seven second feet of water to a height of 100 feet. The cost of this unit installed should not exceed \$10,000.00, with fuel cost about \$1.50 per hour. For handling boulders of any size a small dragline would be advisable.

Independent of hydraulic methods for handling the material, it could be delivered for a distance of 1,000 feet to the top of a sluice for about 15 cents per cu.yard, by use of caterpillar dragline and cars and track, and at a rate of about 1500 cu.yards per day for each dragline employed.

Trapping methods combined with sluicing would remove 75% to 90% of this material still more cheaply, but I would consider 15 cents per cubic yard a safe estimate for handling without gravity hydraulic installation.

I could not learn of any attempt having been made by the former owners of this property to test for bed-rock values other than at the upper pit where the 90-ft. shaft and

about one acre of bed-rock hydraulicked would, of course, test that one spot. As it is generally conceded that the large prospective gold values of any property containing a Pre-Glacial Channel lie near bed-rock, I would not consider this property to have had a fair test for values. Fabulously rich areas have been obtained on bed-rock in gold channels in this district and there have been very few locations where tests can be made more thoroughly and cheaply than on this property, or on which there is better prospect of the values in the over-burden paying the cost of its own removal. The total quantity of material in the leases amount to over fifty million cubic yards, and even if only a small percentage of the area should prove to have profitable average values the possibilities of large profits are excellent.

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(Sgd.)

"R. W. Jones"

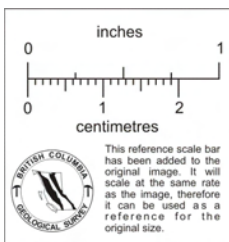
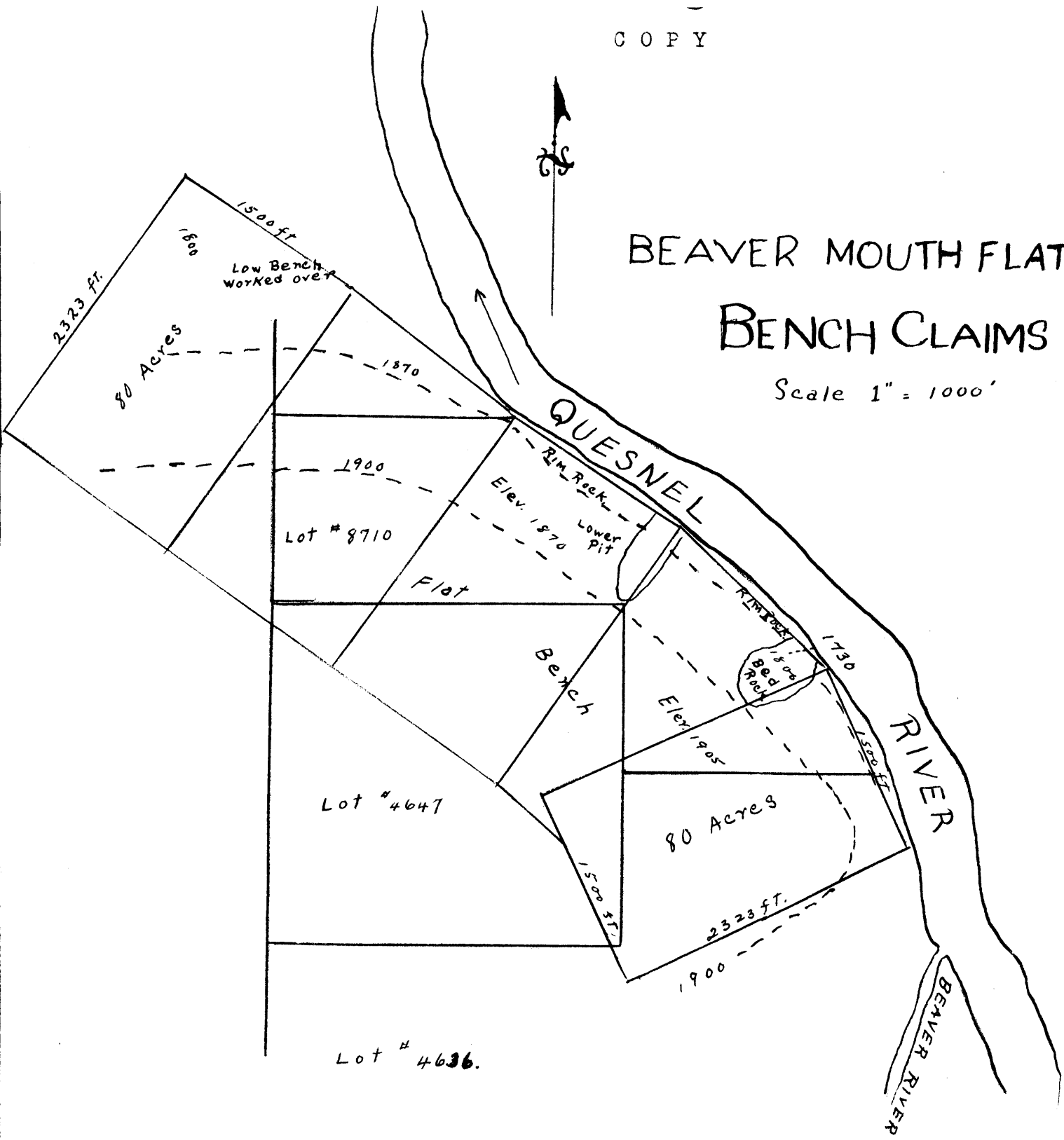
Edmonton, Alberta,  
April 2nd, 1931.

COPY

# BEAVER MOUTH FLATS

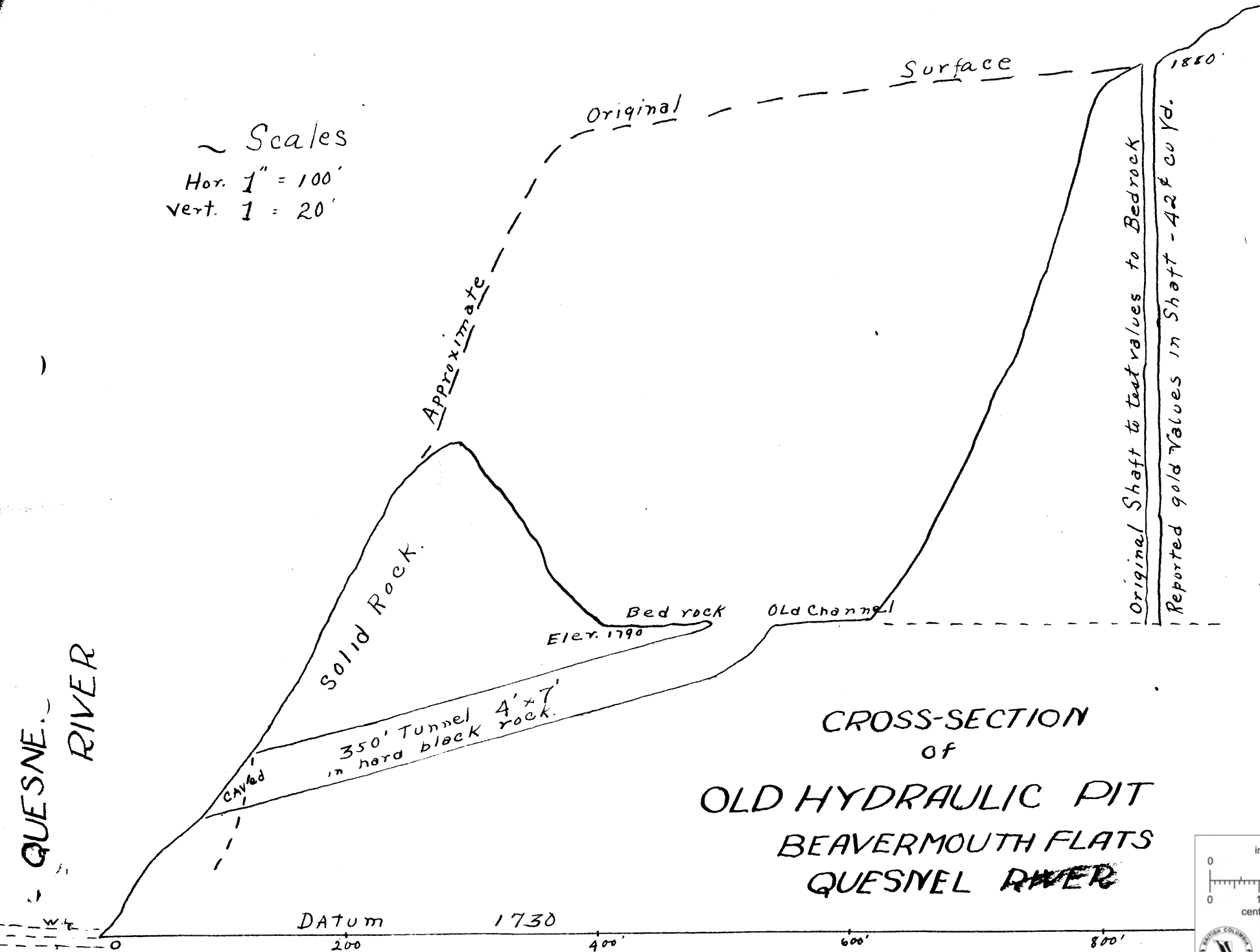
## BENCH CLAIMS

Scale 1" = 1000'



~ Scales  
 Hor. 1" = 100'  
 vert. 1 = 20'

QUESNEL RIVER



CROSS-SECTION  
 of  
 OLD HYDRAULIC PIT  
 BEAVERMOUTH FLATS  
 QUESNEL RIVER

