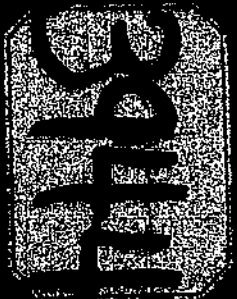


GEOCHEMICAL REPORT
ON
B.G. CLAIMS NR. LIKELY, B. C.
52° 121' NE 93A/11W
BY
R. B. STOKES, P.ENG /
FOR
D. G. LEIGHTON

Work done between
August 1, 1972 and October 31, 1972

October 31, 1972



39444

GEOCHEMICAL REPORT

ON

B. G. CLAIMS

NR. LIKELY, B. C.

52° 121' NE

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. <u>39444</u> MAP _____

BY

R. B. STOKES, P. ENG

FOR

D. G. LEIGHTON

Work done between
August 1, 1972 and October 31, 1972

October 31, 1972

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B.G. CLAIM GROUP
LIKELY, B. C.
CARIBOO MINING DIVISION

SUMMARY AND CONCLUSIONS

1. The B.G. group of mineral claims lie on China Mountain near Likely, B.C. 64 miles NE of 150 Mile House in the Cariboo Mining Division. At the time of this work the group numbered 37 claims. It is now 32 claims.
2. This old silver-lead prospect area has been mined by high grading. In 1951 H.G. Miller of Likely shipped 7 tons of hand picked ore yielding 1 oz Au, 683 oz Ag, 6401 lbs of Pb and 15 lbs Zn. This was extracted from shallow diggings on the Main (No. 2) vein.
3. Gently dipping quartz veins in a host rock of phyllite and argillite contain galena and associated silver mineralization. The most prominent of the veins is traceable on surface for 600 feet; it strikes northwesterly and dips between 15° and 20° to the north.

Underground exploration work (tunnelling) was carried out in 1957-68 but was unsuccessful in locating the downdip extension of the principal vein. Follow-up diamond drilling disclosed the presence of three silver bearing veins; one intersection approached commercial width and grade (5.0% of 5.35% Pb and 12.10 oz. Ag). An exploration raise was partially completed when work was suspended in late 1968.

Other quartz veins have been found in the area but little is known of their potential.

4. Following encouragement from a test line of geochemical soil samples across the main showing, an exploration grid was cut over the three areas currently showing mineralization. These grids were sampled and tested for lead and silver.

Strongly anomalous values were indicated with samples up to 7500 ppm lead and 66 ppm silver (over 2 oz/ton) in the extension of the Main (5000 ft.) zone.

Summary and Conclusions (Cont'd)

Anomalous extensions were indicated on all three mineralized zones with some areas warranting special attention.

There is no question that geochemistry works on this property.

5. A program of detailing the key zones by geochemistry coupled with an airphoto study to detect possible faulting is warranted.

This should be followed by prospecting and hand trenching and then by bulldozing.

A reconnaissance grid for geochemistry and geological mapping should cover the whole claims area.

The massive quartz showing reported on the northern part of the claims should be found and the 'Pentola' showings examined along Slack Bear Creek.

6. A budget of \$30,000 would be adequate for the first phase of the program.

Respectfully submitted:

STOKES EXPLORATION
MANAGEMENT CO. LTD.



R. B. Stokes, P. Eng.

October 31, 1972

NAME

THE CHINA MOUNTAIN SILVER PROSPECT

B. G. CLAIM GROUP

NEAR LIKELY, CARIBOO MINING DIVISION, B.C.

PROPERTY

B.G. Claims. Cariboo M.D.
B.G. 1-20, B.G. 22-38 (37 claims)
Tags 199621M-199640M & 199642M-199658M
Staked October 17, 1971; F. B. Stokes, Agent for
D. C. Leighton
Recorded November 2, 1971
Record Nos. 64955 - 64991

LOCATION

This silver lead prospect is on China Mountain, 64 miles northeast of 150 Mile House in the Cariboo District of Central British Columbia. Access by pickup truck is quite easy. The Spanish Lake road about 1½ miles north of Likely provides a ready access turning along the Weldwood Road and a crossing of Spanish Creek. The property is approximately 10 miles from Likely.

At one time a well equipped camp with bunkhouse, office, machine shops, etc. was established on the property, but since then they have been stripped bare.

HISTORY

"Little is known of the early history of the showings but the B.C. Department of Mines Annual Report for 1951 states that a Mr. H.G. Miller of Likely shipped 7 tons of hand-picked ore yielding 1 oz. Au, 683 oz. Ag, 6401 pounds of Pb and 15 lbs. of Zn. This obviously was extracted from shallow diggings on the principal (No. 2) vein. The property was apparently dormant between 1951 and 1967 when silver prices made the prospect attractive once again.

"McMartin Explorations Co. Ltd. held the ground in 1967 and carried out exploratory work under the name of Plutus Mines Ltd. Under the direction of president N. Pentecost and mining consultant

History
(Cont'd)

V. Bjorkman, underground development was carried out during the winter of 1967-68. A total of 825 feet of tunnel was completed in an attempt to explore the downdip extensions of three lead-silver bearing quartz veins exposed on surface. The work was done on the mistaken assumption that the veins dip steeply (about 60°) and would be intersected within two hundred feet of the portal. No surface diamond drilling had been carried out.

"As the principal, on No. 2, vein strikes slightly north of west, the portal was collared 140' south of the central part of the vein and the adit driven for 430' on a bearing of $N 15^{\circ} E$. At 265' from the portal this working intersected a two foot wide quartz vein containing a few specks of galena and sphalerite; it is probably the No. 1 vein. An attempt was made to drift on this vein to the west but the quartz disappeared within a few feet. The drift was driven 140' but no additional mineralization was encountered.

"The main crosscut was continued for 160' north of the No. 1 vein and an exploratory drift was put out to the east for 120'. No significant quartz veining or galena was encountered.

"In early 1968, because the underground development was unsuccessful in locating the veins, it was decided to carry out some underground diamond drilling.

"Between June and August of 1968 eleven BQ wireline holes were completed, totalling 2217 feet. Overall recovery was about 75%, with no appreciable difference in the quartz vein material. The drilling underground located the three quartz veins.

"Subsequent to the diamond drilling, a 50° raise was driven from the adit for the purpose of opening up the three quartz veins. It is reported that this raise was terminated at 60', no significant amounts of quartz or mineralization having been encountered."

Reference:
F.W. Phendler, B.Sc., P.Eng.

GEOLOGY AND
MINEFALIZATION

"The area in which the China Mountain silver prospect is situated is underlain by interbedded black phyllites and grey argillites of the Midas Formation, which is part of the Cariboo group of Lower Cambrian age. The rocks strike north-westerly and dip between 10° and 35° to the northeast.

"The argillites are medium grained, light to medium gray in colour and are moderately competent. Silicification of the argillites has occurred locally, creating generally favourable conditions for the emplacement of quartz veins of considerable size.

"The phyllites are fissile, crumpled and distorted, and are a less favourable host.

"A perusal of the vertical section shows that the formations dip northerly about 25° whereas the quartz veins vary in dip, about 5-10°, crossing through the different rock types. Invariably the quartz veins are stronger within the more competent argillites.

"The silver-bearing quartz veins were found on surface and the principal one has been traced for 600 feet along strike. Width of this gently-dipping vein varies between a few inches and 15 feet, averaging about five feet.

The galena mineralization is mainly in the hangingwall part of the vein, but galena has also been observed close to the middle of the vein, associated with vuggy openings partially filled with well formed quartz crystals.

"Two parallel veins occur within a few tens of feet of the principal vein. The footwall vein has been designated the No. 1 vein, the principal vein the No. 2 vein, and the hangingwall vein the No. 3 vein. All three contain some silver-bearing galena.

Geology and
Mineralization-
(Cont'd)

"A few miles southwest of the three veins, close to Blackbear Creek, another galena-bearing quartz vein system has been exposed. It has been traced along strike for 130' and has been designated the "Falls" showing. Mineralization is sporadic in this vein which averages about two feet in width.

"Other quartz veins have been found on the claim group but little is known of their potential. It is reported that large exposures of quartz have been discovered one mile north of the camp and that quantities of galena-bearing quartz has been uncovered a mile or so to the southeast."

Reference:
R.W. Phendler, B.Sc., P.Eng.

1972 PROGRAM

It was apparent by examination of the old records that the work in the last 4 years had focused on the main showing at 5000 feet close to the camp. A large amount of money had been spent in an area surrounding the known showings.

The writer had seen impressive quantities of galena in quartz material exposed by the bulldozer during the earlier operations. Most of this had been stock piled by Plutus Mines but had since been high-graded by local 'entrepreneurs' as has most of the camp and mine equipment. The adit portal is now caved and water filled. The diamond drill core has been tipped from its boxes and strewn around the camp.

At the suggestion of the writer 4 years ago, a test line of geochemical soil samples was run across the main showings. Eleven samples gave the background for lead of 20 - 50 ppm and a background for silver of 0.5 ppm. The highest value right on the No. 2 vein was 870 ppm lead and 1.5 ppm silver. Both veins kicked markedly to the 800 ppm lead range and dropped away to approximately 100 - 200 ppm immediately on either side. These results were encouraging enough to suggest that the whole property should

1972 Program
(Cont'd)

be covered with a geochemical grid to look for similar vein structures or extensions to the existing ones. Test grids were cut over the main showings (5000 feet), the 3500 foot showings and the Falls showings.

410 samples were taken and processed for silver and lead by Bondar-Clegg in Vancouver. Baselines were cut approximately parallel to the estimated strike of the veins and lines at 400 foot spacing cut at right angles to the baseline. Samples were taken at 100 foot spacing along the lines dropping to 50 foot spacing in areas of special interest. The accompanying maps illustrate their distribution.

Some prospecting was also carried during the year but outcrop is sparse with heavy soil coverage in most areas.

SOIL SAMPLING
PROGRAM 1972

ANALYSIS OF
RESULTS

5000 ft. Zone

This is the main area on which most work has been done in the past. The veins containing high grade galena bearing silver values, lie around the adit below the base line.

There is no question of the highly anomalous values in the lead and silver samples taken in this area. Values go up to 7500 ppm lead and silver values of 66 ppm (in excess of 2 oz/ton).

The highly anomalous values cover an area 400 by 300 feet with extensions in the anomalous zone over a total area of 1000 feet by 200 feet.

There appears to be an offset of high values on line 8W and it is possible the zone has been faulted off to the south.

Analysis of
Results (Cont'd)

Of special interest are the apparent lower values around the main adit near line 4E. The zones containing the veins that have been bulldozed cross the base line around this point. The erratic 'low' values may be due to debris bulldozed around the showings area and samples were taken therefore, other than from the best soil horizon. The best values lie around line 0 to the west of the main exposures. This area should be opened by bulldozing after checking the actual ground location.

Similarly, the extension on line 4W should be prospected and bulldozed.

The apparently offset values on line 8W are of especial interest as they extend the potential length of the zone substantially. Further geochemistry should be done on the extensions of lines 8W, 12W and 16W to the south and also some closer spaced sampling along the lines and between the present 400 foot lines.

Erratic high values should all be investigated as a 2 - 5 foot vein kicks markedly over one sample as indicated by the first test line run across the main veins by Roy Phendler, P.Eng.

An example is the 106 ppm values at 12W 10N.

Silver Values

There is a marked relationship of the higher silver values with the lead values as would be expected. With this in mind, it would be more economic to run lead values first in future geochemical programs, then select higher areas to test for silver.

In the main zone around line 0 the silver values reach 66 ppm (over 2 oz/ton). Taking 3 ppm as anomalous it is curious to note that on either side of the main zone that the silver values are more continuous. This can be seen on 12W, 8W, 3L between 4E and 6E, 12E and 20E.

Analysis of
Results (Cont'd)

There is a consistent trend diagonally across the base line in a south of Ξ direction. The higher lead values do not reach out this far. It is therefore possible that the silver values are more definitive but this should be checked in the field.

Falls Showing

The lead and silver values here are of much lesser magnitude, although the showing of mineralization in the Falls zone is impressive.

The anomalous trend brackets the showing itself over a 1100 foot length with a possible extension on line 12 Ξ to 1800 feet. The strike is very similar to that on the main showing which is to be expected.

Overburden is likely to be heavier in the area.

Detailing by closer geochemical grid spacing and prospecting along the indicated strike is definitely warranted.

3500' Showings

The best values revealed here are close to the known showings of galena in quartz and calcite. However, the highest values is across the Black-bear Creek which has not been exposed. This area should be examined for vein extensions.

The extension of the values from the known showings along the road was to be expected, however, on the east and westerly lines values do not line up, possibly due to faulting in a N-S direction. This could be checked by an airphoto study.

In summary, geochemistry definitely works in defining mineralization on the B.G. Claims area.

**GEOCHEMICAL
ASSAY
PROCEDURE**

These samples were collected from the B horizon where possible, and placed in the standard soil sample brown kraft paper bags.

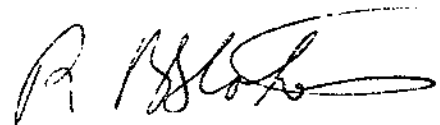
They were processed by Bondar-Clegg Laboratories in North Vancouver. They used the -80 mesh fraction for a hot Aqua Regia extraction followed by testing by Atomic Absorption.

CERTIFICATION

I, RONALD B. STOKES, do hereby certify that:

1. I am a practicing Professional Mining Engineer with offices at Suite 713 - 744 West Hastings Street, Vancouver 1, British Columbia and resident of Vancouver.
2. I am a graduate of the Camborne School of Mines, Cornwall, England, 1952 in Mining Engineering.
3. I have practised Mining Engineering and Mining Exploration for twenty years, seventeen of which were based in British Columbia.
4. I am a Member, in good standing, of the Association of Professional Engineers of the Province of British Columbia.
5. I am a Member of the Canadian Institute of Mining Metallurgy, Australasian Institute of Mining & Metallurgy and the Institution of Mining & Metallurgy, England.
6. I am president of Stokes Exploration Management Co. Ltd. which carried out the program of exploration.

This report is based on study and interpretation of data assembled by personal examination of the property.



R. B. STOKES, F.ENG.

SEMCO

PAY ROLL JOB CLASSIFICATION

Name

Sep 30 to
 Pay Period Oct 7/72 Project D.G. CLAIMS Client RBS-LIKELY (317) Code

Name/Job	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total	Rate	Amount			
Bilquist, R.																																	SEPT	x	1 D	35.	35.00
																																	OCTOBER		7 D	35.	245.00
																																					280.00
CARNEY, Fred																																	SEPT	x	1 D	35.	35.00
																																	OCT		6 D	35.	210.00
																																					525.00
STOKES, R.B. P. Eng																																	SEPT		3 D	150.	450.00
																																	OCTOBER		3 D	150.	450.00
																																					1425.00

JOB CLASSIFICATION

- | | |
|---------------------------------|--------------------------|
| A Line Cutting | P Property Evaluation |
| B Physical Work | Q General Supervision |
| C Geological Surveys | R Exploration Planning |
| D Geochemical Surveys | S Drafting |
| E Geophysical Surveys | T Photogrammetry |
| F Claims Surveys | U Property Research |
| G Claim Staking | V Compilation |
| H Prospecting | W Report Writing |
| I Drilling Sampling/Supervision | X Consultation |
| J Core Logging | Y Non-Chargeable — Semco |
| K Cooking | Z |
| L Expediting | 1. Secretarial |
| M Moving Camp | 2. Accounting |
| N Travelling | 3. Colouring Maps |
| O Primary | 4. |

REMARKS:

PREPARED BY:

APPROVED:

R. Stokes

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
To Wit:

In the Matter of Application for Certificates of
Work on the "B. G." Claim Group,
Likely Area, British Columbia.

I, R. B. Stokes, P. Eng.,

of 713 - 744 West Hastings St., Vancouver, B. C.

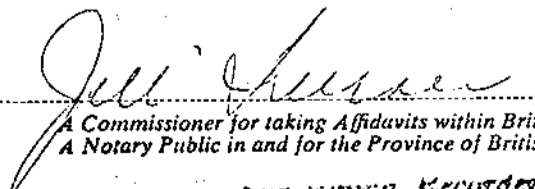
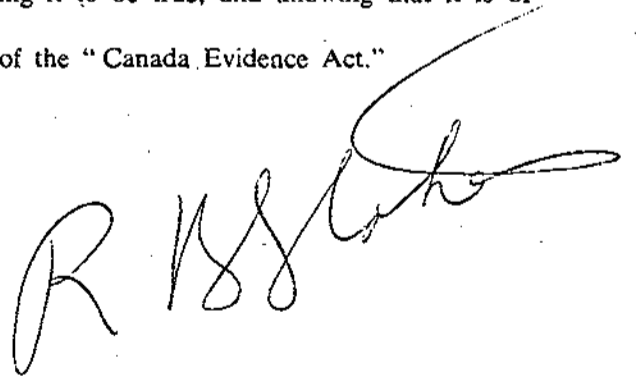
in the Province of British Columbia, do solemnly declare that the underlisted expenditures were made on behalf of D. G. Leighton on the "B. G." Claim Group - (Geochemical Survey).

COSTS:

R. Bilquist	7 days @ \$60 - Wages, benefits, overhead -	\$420.00
F. Carney	6 days @ \$60 - "	360.00
R. B. Stokes, P. Eng.,	- Field, 3 days @ \$150	
	Report preparation, 3 days @ \$150	900.00
Sample Analysis		691.90
Drafting, typing, printing		90.00
Flagging		20.00
Camp rental & expenses		70.00
4 W.D. Truck - mileage & rental		267.50
Car mileage		288.00
Groceries, gas & Motels		210.00
		<hr/>
		\$3,317.40
		<hr/> <hr/>

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this
day of Nov 1972, A.D.



A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.

Notary Recorder

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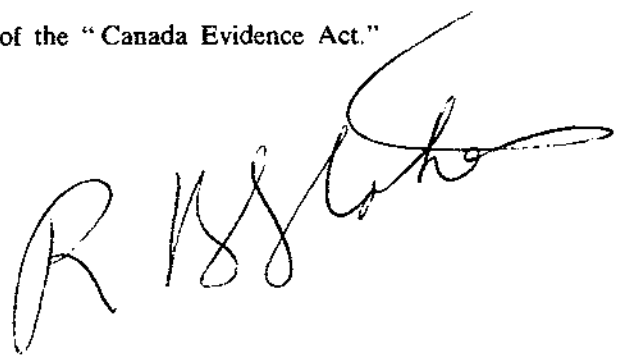
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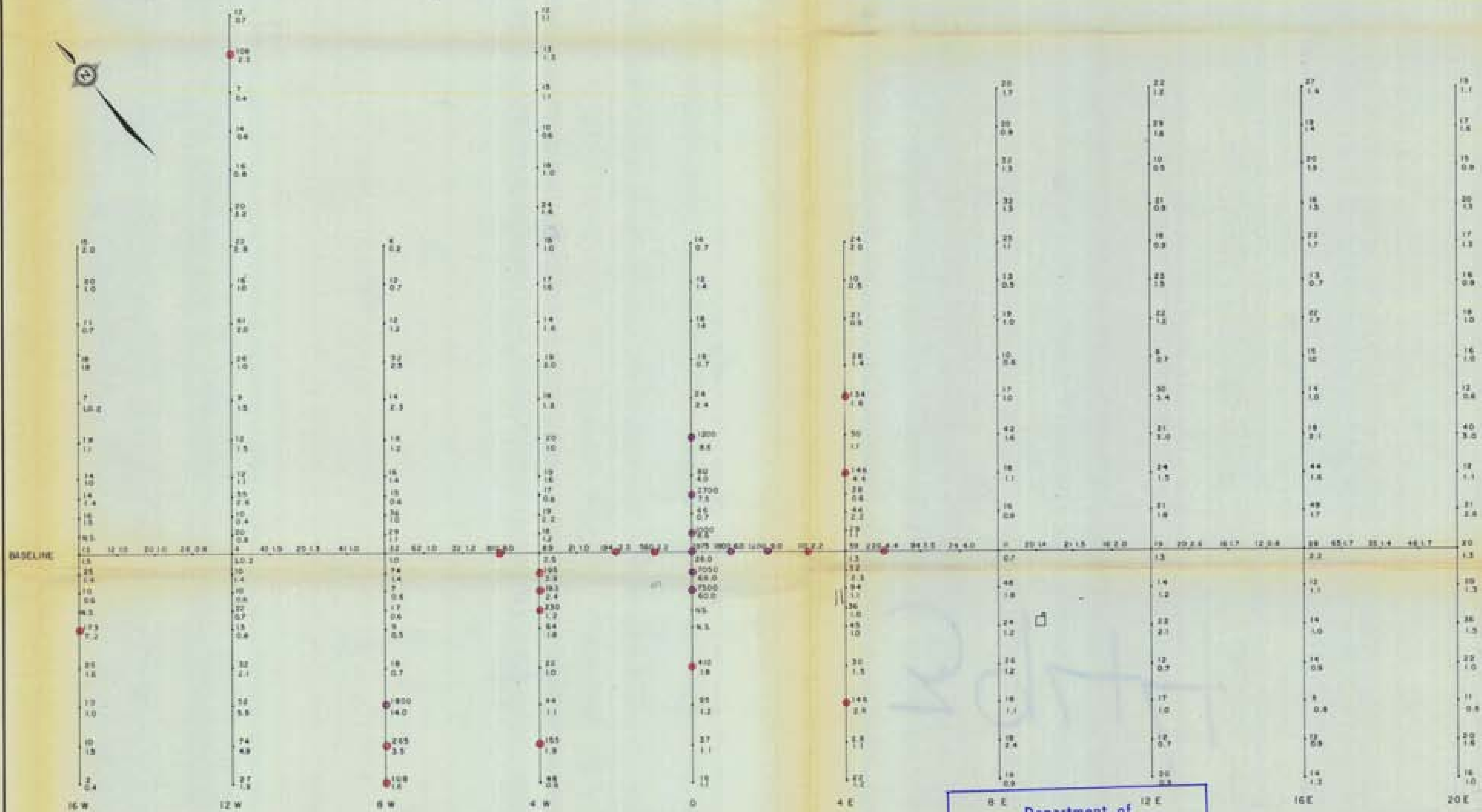
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 Province of British Columbia, this *1*
 day of *Nov.* 197*2*, A.D.



Jill Surran
 A Commissioner for taking Affidavits within British Columbia or
 A Notary Public in and for the Province of British Columbia.

Notary Recorder



LEGEND

100 - 1000
 1000 +

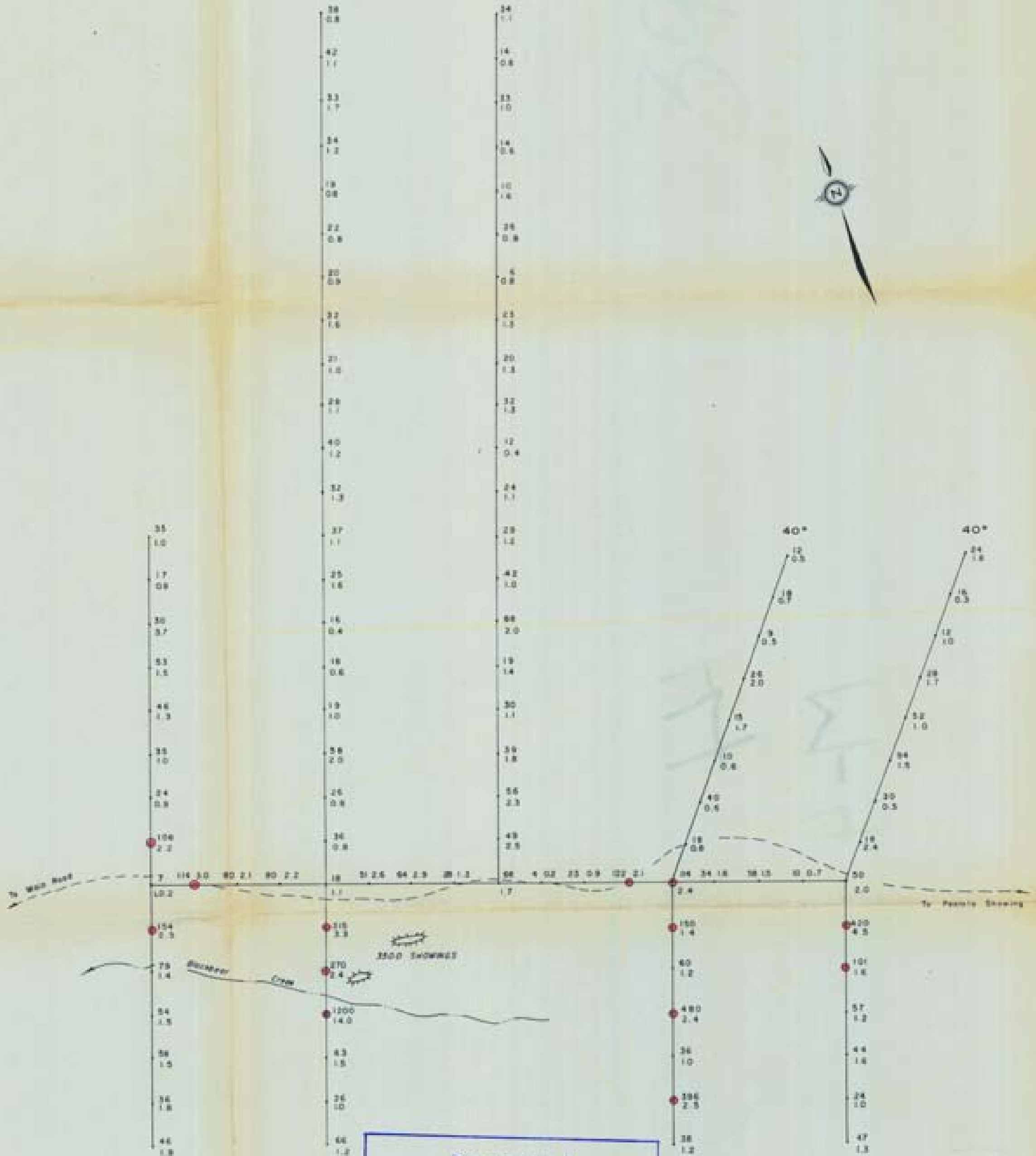
Adr
 Camp

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 3944 MIN #2

MAPS
 To accompany Geochemical Report
 by R. B. Stokes, P.Eng on the
 B.G. Claims nr Likely, Cariboo M.D.
 Dated October 31, 1972

STOKES EXPLORATION MANAGEMENT CO. LTD.
 BG CLAIMS - LIKELY, BC
 "5000' SHOWING" SOIL
 SAMPLE NUMBERS
 DATE: OCT. 1972 DRAWN: W.B. JOHST SCALE: 1"=200 FT.

R. B. Stokes



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3944 MAP #3

102

R. Stokes

MAPS
To accompany Geochemical Report
by R. B. Stokes, P. Eng on the
B.G. Claims nr Likely, Cariboo M.D.
Dated October 31, 1972

STOKES EXPLORATION MANAGEMENT CO. LTD.		
B.G. CLAIMS — LIKELY, B.C.		
"3500' SHOWING" SOIL SAMPLE NUMBERS		
DATE: OCT. 1972	DRAWN: R.B. STOKES	SCALE: 1" = 200 FT.



SW
 19 0.6
 24 1.0
 30 1.0
 18 0.5

19 27.9 24.10 40.1 29.08 27.12 29.12 43.14 62 34.07 44.12 32.14 88 44.18 38.11 104.17 52 44.22 70.12 72.14 97 21

39444

M-4

Pb 39
 Ag 17
 Pb 62 34 0.7
 Ag 11 Pb 44

162
 14

0

4E

8E

12E

MAPS

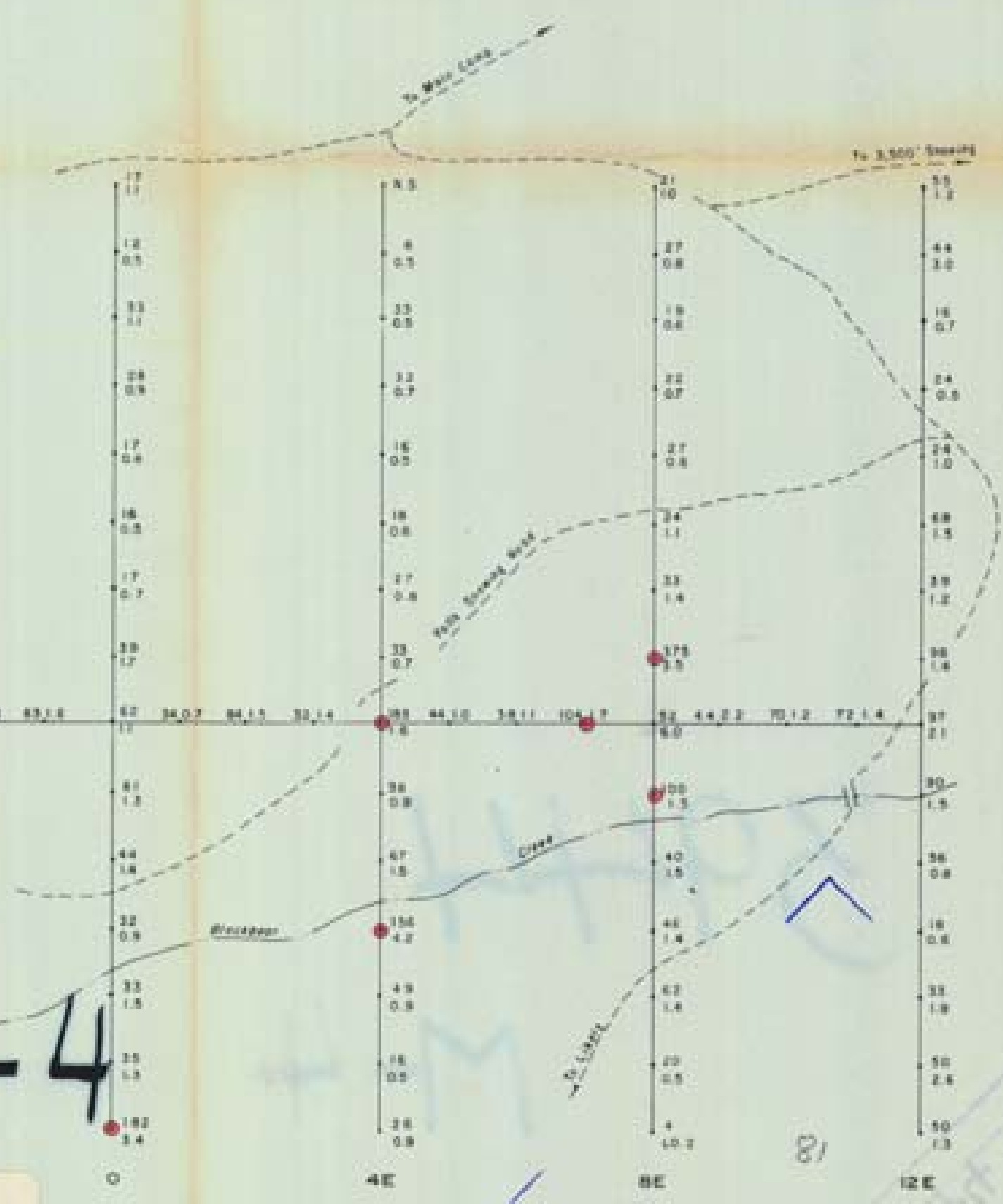
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R. B. Stokes

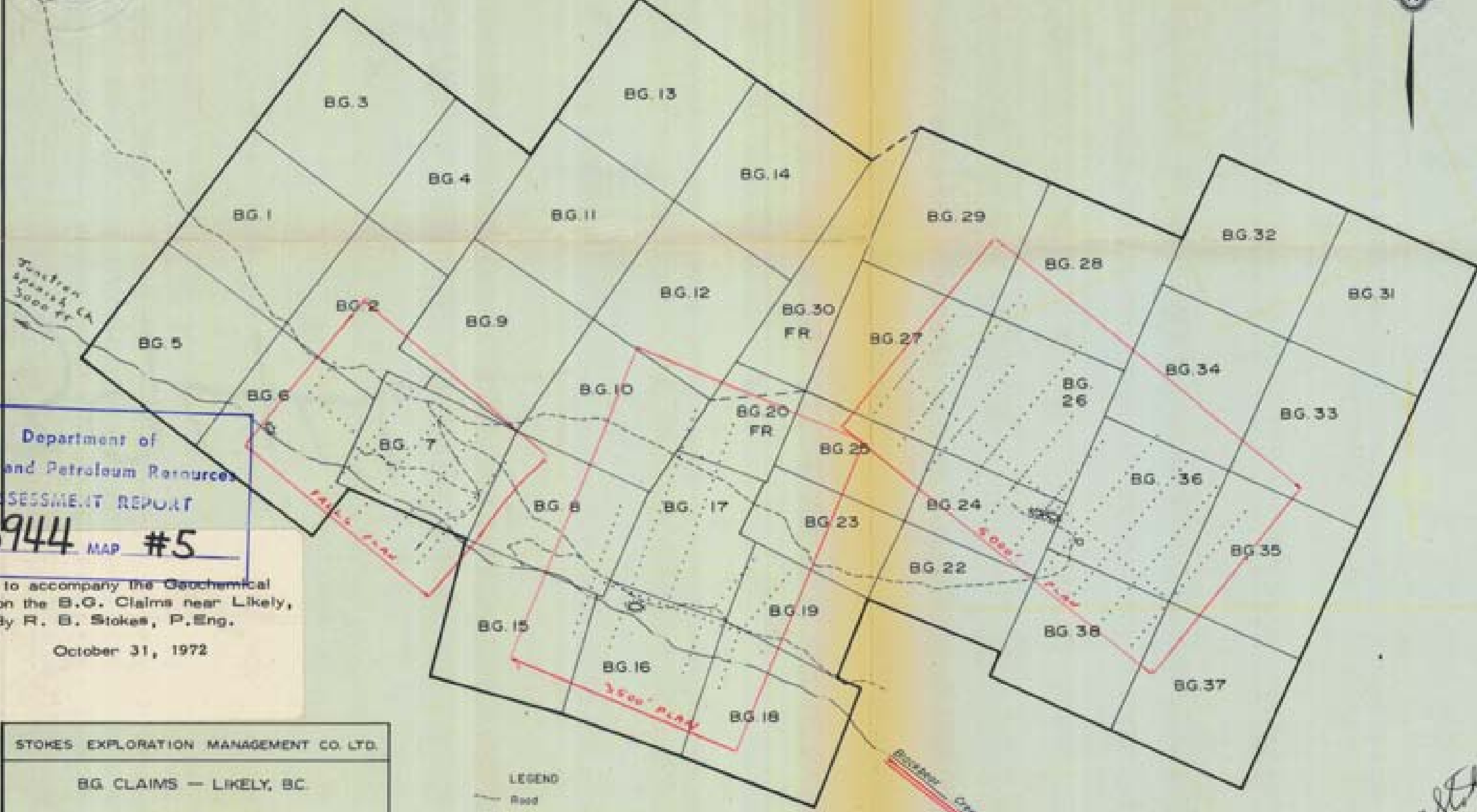
STOKES EXPLORATION MANAGEMENT CO. LTD.

BG CLAIMS — LIKELY, BC
 "FALLS SHOWING" SOIL
 SAMPLE NUMBERS

DATE OCT 1972 DRAWN RBNQUIST SCALE 1" = 200 FT



RB



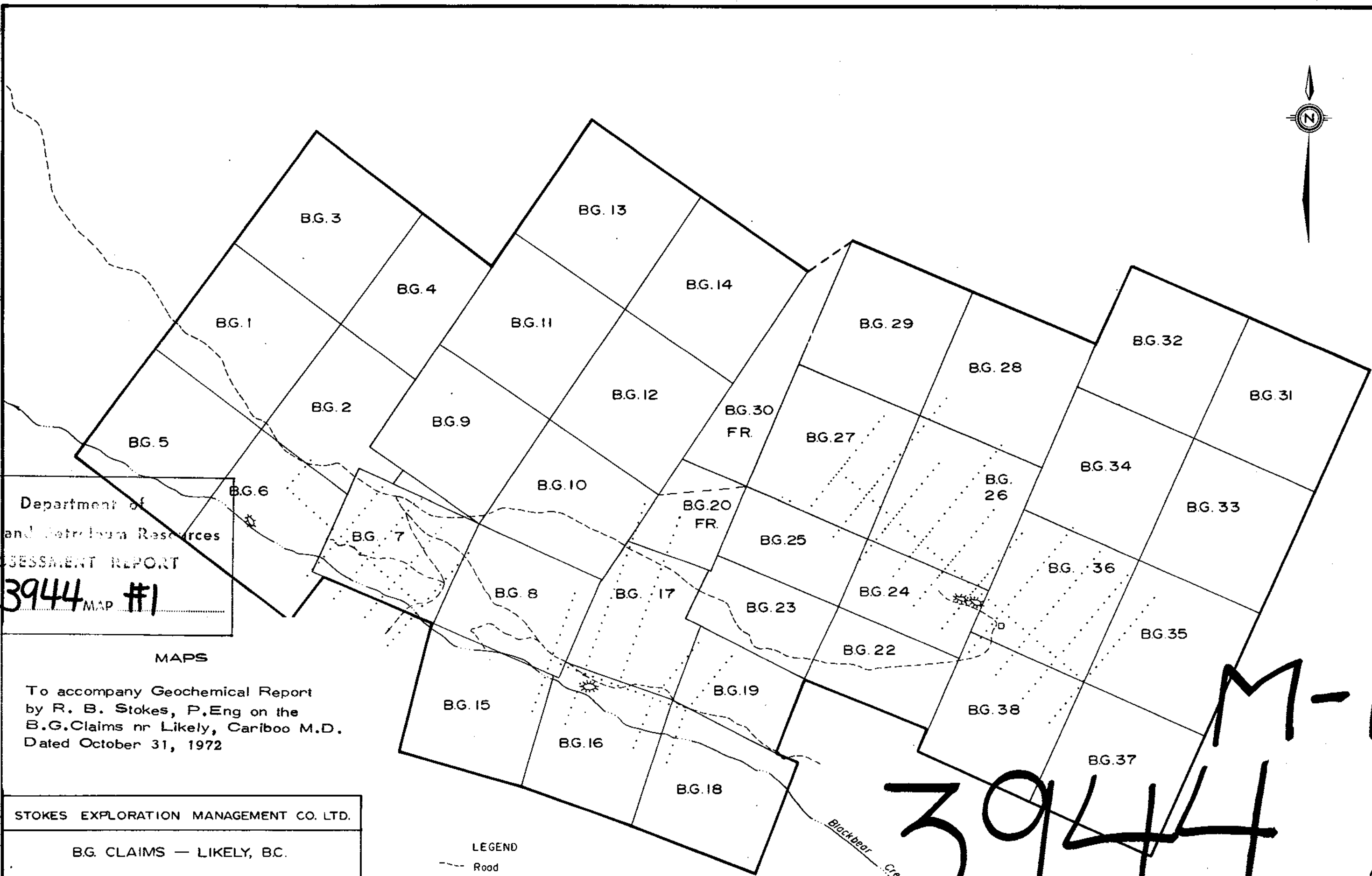
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **3944** MAP #5

This is to accompany the Geochemical
report on the B.G. Claims near Likely,
B.C. By R. B. Stokes, P.Eng.
October 31, 1972

STOKES EXPLORATION MANAGEMENT CO. LTD.
BG CLAIMS — LIKELY, BC.
GEO-CHEM GRID
DATE: OCT. 1972 DRAWN: RB/QUIST SCALE: 1"=1000 FT.

LEGEND
— Road
--- Sample line and location
○ Shewing

R.B. Stokes



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. **3944** MAP **#1**

MAPS

To accompany Geochemical Report
 by R. B. Stokes, P.Eng on the
 B.G. Claims nr Likely, Cariboo M.D.
 Dated October 31, 1972

STOKES EXPLORATION MANAGEMENT CO. LTD.

B.G. CLAIMS — LIKELY, BC.

GEO-CHEM GRID

- LEGEND
- - - Road
 - Sample line and location
 - ☼ Showing

DATE: OCT. 1972 | DRAWN: RB/IQUIST | SCALE: 1"=1000 FT.

M-1
3944

R. B. Stokes

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PROVINCE OF BRITISH COLUMBIA. }
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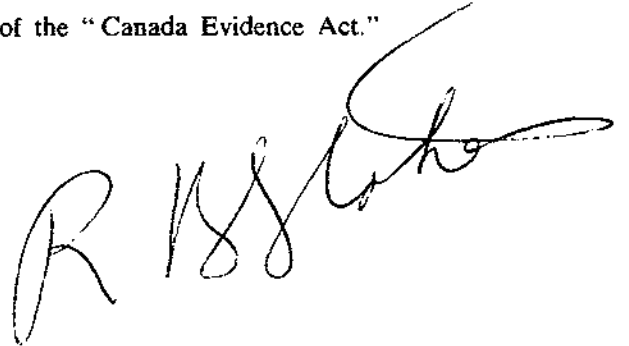
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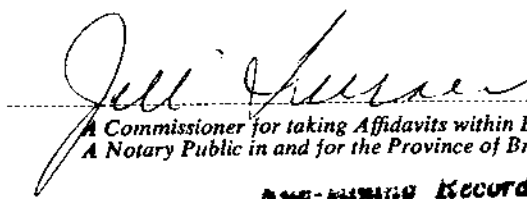
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Notary Recorder