

REPORT ON
SOIL GEOCHEMISTRY

OF

THE ROSS 2 MINERAL CLAIM

OF

L. G. MORRISON

SOUTHWEST OF ROSSLAND, B. C.

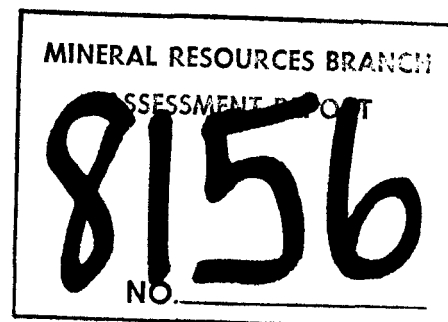
TRAIL CREEK MINING DIVISION

NTS 82 F/ 4 W

49° 03' N, 117° 54' W

for

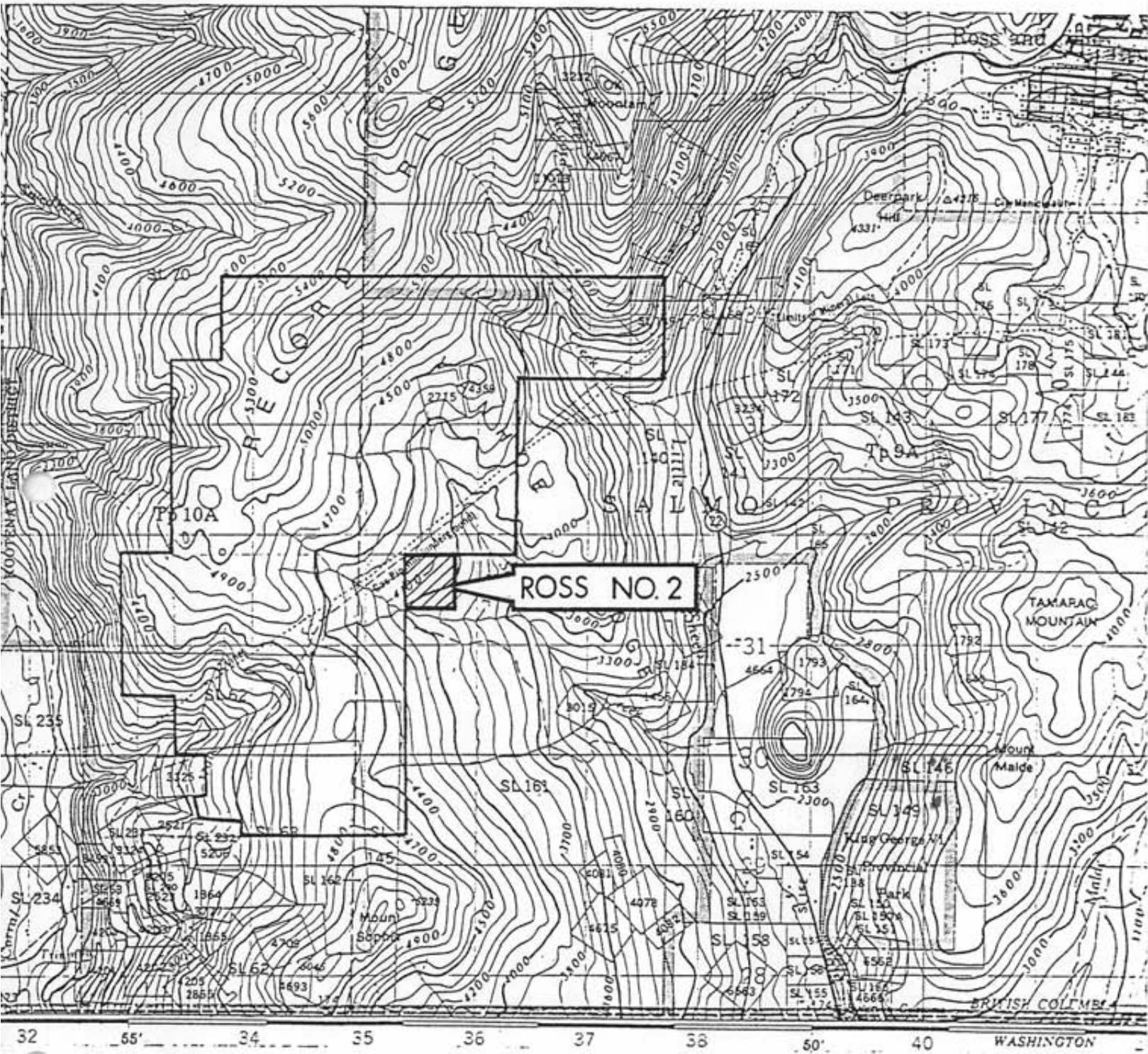
UNITED CANSO OIL & GAS LTD.



L. G. Morrison

June 27, 1980

LOCATION MAP
 MORRISON-WHITE PROPERTY
 ROSSLAND, B.C.



FROM ROSSLAND-TRAIL
 1:50,000 SHEET
 82 F/4

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- 1 SOIL GEOCHEMISTRY - ROSS 2 (1:2, 500)
- 2 CUMULATIVE FREQUENCY DISTRIBUTIONS

ABSTRACT

In May, 1980, 52 "B" horizon soil samples were collected from the ROSS 2 mineral claim and geochemically analyzed for copper, lead and zinc.

Threshold values were calculated by incorporating the metal values from these 52 samples with those from 56 samples collected nearby in the same geological environment in 1978.

A moderate, well-defined Pb-Zn anomaly trending northeast across the claim is not related to an old shaft on weakly auriferous quartz, pyrite and carbonate in a sheared zone.

Geological mapping of the claim and additional geochemical sampling in the anomalous trend are recommended.

LOCATION AND MEANS OF ACCESS

The Ross 2 claim is seven kilometers southwest of the city of Rossland. It is bounded on the north by the ROSS claim (Record No. 245) and on the west by the MAR 1 claim (Record No. 243).

About 400 meters west of the claim, a trail from the old Rossland-Cascade highway intersects a power line which may be followed by four-wheel drive vehicle to within 100 meters of the northwest corner of the claim.

PHYSICAL FEATURES

The claim lies on a gentle east slope in a fork of Sophia Creek. Elevations range from 3,700 feet at the east boundary to 4,050 feet in the northwest corner.

The claim is mostly covered by thin glacial till, but there are enough rock outcrops (5 - 10%) to allow reasonable interpretation of the geology.

There is a good stand of second-growth timber with some mature cedar in shallow ravines.

There are a power line, a gas transmission line and a telephone line at the northwest corner of the claim.

PROPERTY AND OWNERSHIP

The ROSS 2 claim was recorded July 9, 1978 by Lee Morrison.

By virtue of unregistered bills of sale and the completion of work obligations under the terms of an option agreement on contiguous claims, current beneficial interests are as follows:-

United Canso Oil & Gas Ltd. 3700 Scotia Centre, Calgary, Alberta.	56.25%
Lee G. Morrison 1608 - 49th Avenue S. W. , Calgary, Alberta.	28.00%
Alan M. White	15.75%

GEOLOGICAL SETTING

The major rock types on the claim are agglomerate, tuff and andesite of the Rosslund formation.

The southeast contact of a major mass of serpentinized ultrabasic rock passes through the northwest corner of the claim.

Light grey, fine-grained diorite (?), believed to be a facies of the Coryell intrusion, intrudes the Rosslund formation and is the dominant rock type in proximity to the ultrabasic mass.

For a detailed description of the geology of the entire Morrison-White property, the reader is referred to a report filed for assessment in February, 1979 (No. 79-50-7162).

MINERALIZATION

In the southeast quarter of the claim, the Rossland formation, and the fine grained diorite which intrudes it, both contain about 2% finely disseminated pyrite, and outcrops are iron-stained.

A vertical shaft estimated to be about 100 feet deep and 75 years old was apparently sunk to explore a 10 to 18 inches wide sheared zone striking N 40° W and dipping 70° SW. The weathered outcrop of this zone contains vuggy pyritiferous quartz and abundant oxides of iron and manganese. Material on the dump indicates that the unweathered vein contains abundant carbonates.

An initial sample of weathered vein material assayed 22.6 grams Au/tonne, but it has not been duplicated. Several subsequent assays have averaged only 0.6 grams Au and 17 grams Ag/tonne.

SOIL GEOCHEMISTRY

Soil geochemical analyses for heavy metals were performed as a gold tracing procedure since the gold of Rossland was in copper-rich sulphide ores. In 1978, 1,150 soil samples were collected on the Morrison-White property. Of these, 56 were from areas underlain by the Rossland formation. In May, 1980, 52 "B" horizon samples were collected on the ROSS 2 claim. Samples were taken at 50 meter intervals along chain and compass lines spaced approximately 100 meters apart.

Dried samples were sieved to recover the minus 80 mesh fraction for analysis. Analyses for Cu, Pb and Zn were

performed by Loring Laboratories Ltd. in Calgary, using aqua-regia dissolution and atomic absorption spectrometry.

To define backgrounds (m), first-order anomalous thresholds (t2s) at the 97.5 percentile, and second order anomalous thresholds (ts) at the 84 percentile, data from the May, 1980, samples were combined with results from the 56 samples taken over Rosslund volcanics in 1978, and cumulative frequency distributions were plotted (Fig. 2).

The significant values for the ROSS 2 claim were then defined as follows:-

	<u>ppm</u>		
	<u>m</u>	<u>ts</u>	<u>t2s</u>
Cu	22	31	45
Pb	27	41	60
Zn	102	180	310

Geochemical analyses were plotted at a scale of 1:2,500. (Fig. 1) Lead and copper values were contoured at intervals of 10 ppm, and zinc values were contoured at 50 ppm intervals.

CONCLUSIONS

There is a weak Cu-Pb anomaly in the northwest corner of the claim.

A moderate, well-defined Pb-Zn anomaly trending northeast passes diagonally across the claim from about 28 S, 1+ 50E to 25 S, 3+ 50E.

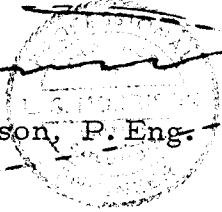
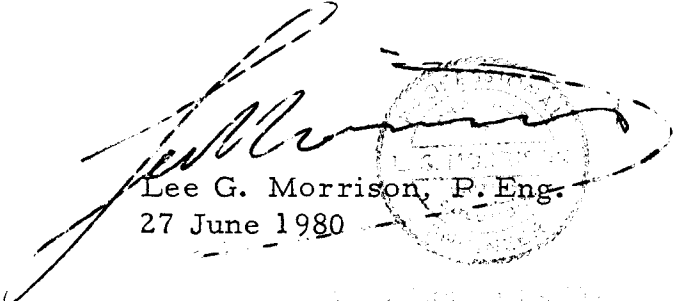
There is a weak copper halo around the old shaft, but this is not regarded as significant.

RECOMMENDATIONS

The northeast-trending Pb-Zn anomaly should be sampled in greater detail in conjunction with geological mapping.

Geophysics and/or physical work should be deferred pending the results of a drill program planned for 1980 on the nearby CAL, MAR and SKIN claims.

Respectfully submitted,



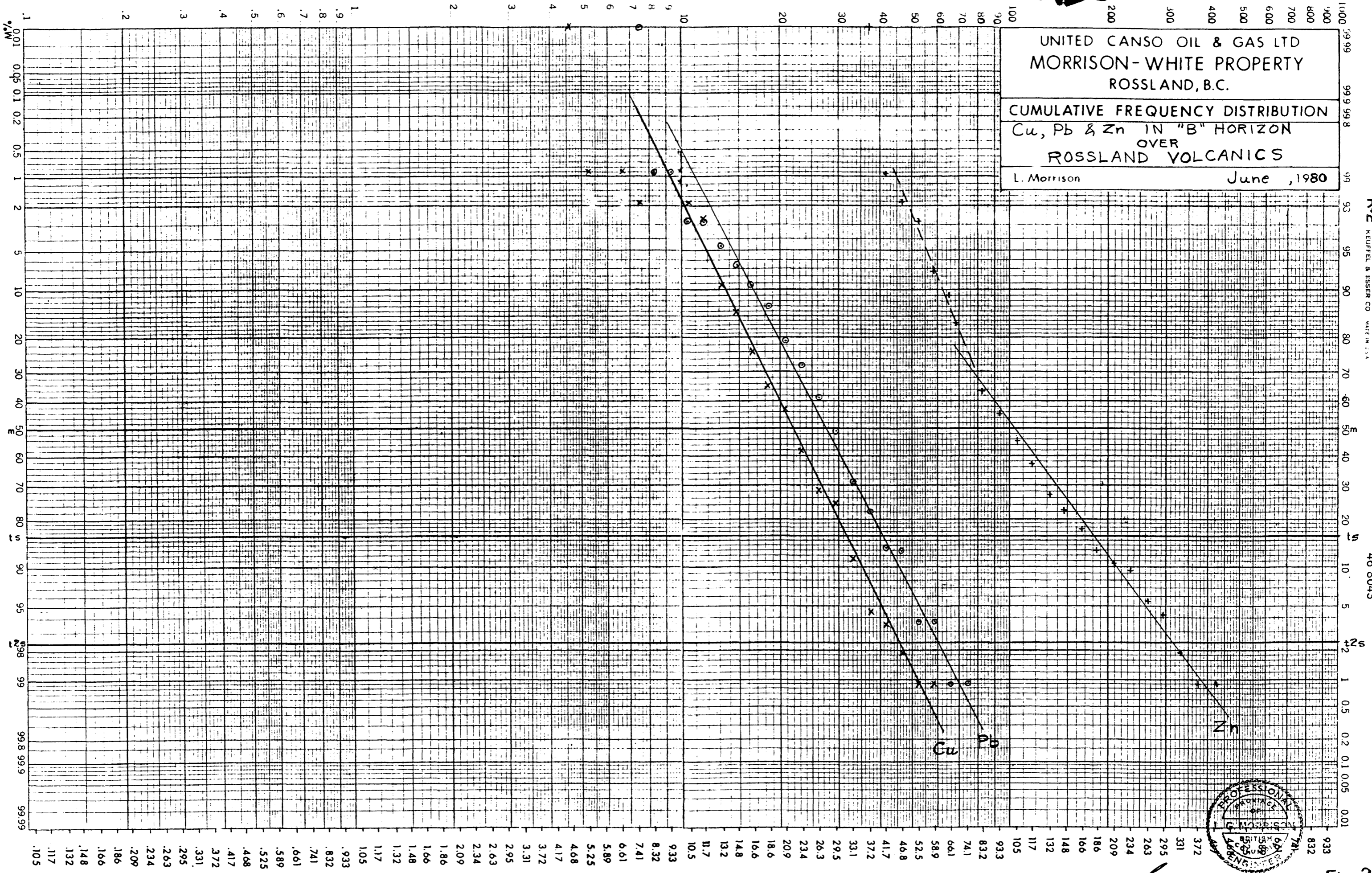
Lee G. Morrison, P. Eng.
27 June 1980

8156

UNITED CANSO OIL & GAS LTD
 MORRISON-WHITE PROPERTY
 ROSSLAND, B.C.

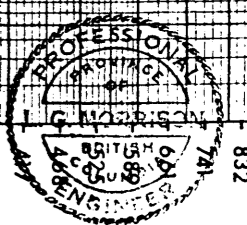
CUMULATIVE FREQUENCY DISTRIBUTION
 Cu, Pb & Zn IN "B" HORIZON
 OVER
 ROSSLAND VOLCANICS

L. Morrison June, 1980



K.E. PROBABILITY X 2 LOG CYCLES KEUFFEL & ESSER CO. MADE IN U.S.A.

46 8043



G. Morrison
 Expiry Date: Feb. 28, 1981

Fig. 2

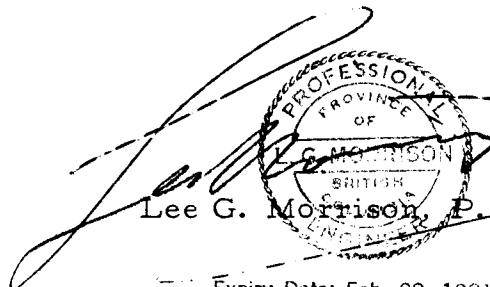
APPENDIX

CERTIFICATE OF QUALIFICATIONS

I, Lee G. Morrison, of the City of Calgary in the Province of Alberta

HEREBY CERTIFY:

- (1) THAT, I am a registered Professional Engineer in the Province of Alberta, with a Non-Resident License to practice in British Columbia;
- (2) THAT, I am a graduate of the University of Saskatchewan with Bachelor's degrees in Arts (1956) and Geological Engineering (1957);
- (3) THAT, I am a Consulting Mining Geologist residing at 1608 - 49th Avenue S.W., Calgary;
- (4) THAT, I have practiced my profession continuously since graduation;
- (5) THAT, I personally collected the samples and performed the interpretation discussed in this report;
- (6) THAT, I am the recorded owner of the ROSS 2 claim in which I have a 28 percent beneficial interest.


Lee G. Morrison, P. Eng.

PROFESSIONAL
ENGINEER
OF
ALBERTA
LEE G. MORRISON
BRITISH
COLUMBIA

Expiry Date; Feb. 28, 1981

STATEMENT OF COSTS

Field Survey

L. G. Morrison, Geologist
May 22, 1 day; May 23, $\frac{1}{2}$ day
Total $1\frac{1}{2}$ days at \$220 \$330

G. Grouwstra, Assistant
May 22, 1 day 70

Services

52 geochemical samples (3 elements)
@ \$2.25 117

Data Presentation, Interpretation
and Report
L. G. Morrison, Geologist
June 20, $\frac{1}{2}$ day; June 27, $\frac{3}{4}$ day
Total $1\frac{1}{4}$ days @ \$220 275

L. Diamond, Draftsman
June 26, $\frac{1}{2}$ day 40

Total \$832

BIBLIOGRAPHY

- Fyles, J. T. (1970) "Geological Map of the Rossland Area"
British Columbia Department of Lands,
Forests and Water Resources, Surveys
and Mapping Branch, Preliminary Map
No. 4, Project M229.
- Little, H. W. (1960) "Nelson Map Area, West Half, British
Columbia", Geological Survey of Canada
Memoir 308.
- Morrison, L. G. (1979) "Report on Geological, Geochemical
& Geophysical Studies, MAR 1-4,
LAND 1-6, SKIN 1-4, ROSS & CAL
Claims, Trail Creek Mining Division".
Assessment Report File No. 79-50-7162.



PROVINCE OF BRITISH COLUMBIA

RECEIPT

No. 593362 G

T. SUM OF Forty DOLLARS (\$ 40 -)

ON ACCOUNT OF: Recording fees subject to Parks Branch
Amendment to Order # 1-8 m/f
RECEIVED FROM: R.B. Lockman Sept 17, 1979

Roseland
ISSUING OFFICE

[Signature]
SIGNING OFFICER



MINERAL ACT

FREE MINER'S CERTIFICATE

NOT TRANSFERABLE

No. 180139

Surname: HUTCH (Please print clearly.)

Christian Names: RAY

Address: Box 460

BROOKS ALBERTA (Address for service)

Fee paid \$ 5.00 Date of issue October 18, 1979 (Postal Code)

Valid from the beginning of the day of issue.

Valid until midnight on the 31st day of December, 1979

Issued at: Roseland, British Columbia

* Insert here the date of the day immediately preceding the date of issue. [Signature] (Signature of issuing officer.)



MINERAL ACT

FREE MINER'S CERTIFICATE

NOT TRANSFERABLE

No. 180140

Surname: HUTCH (Please print clearly.)

Christian Names: RAY

Address: Box 460

BROOKS ALBERTA (Address for service)

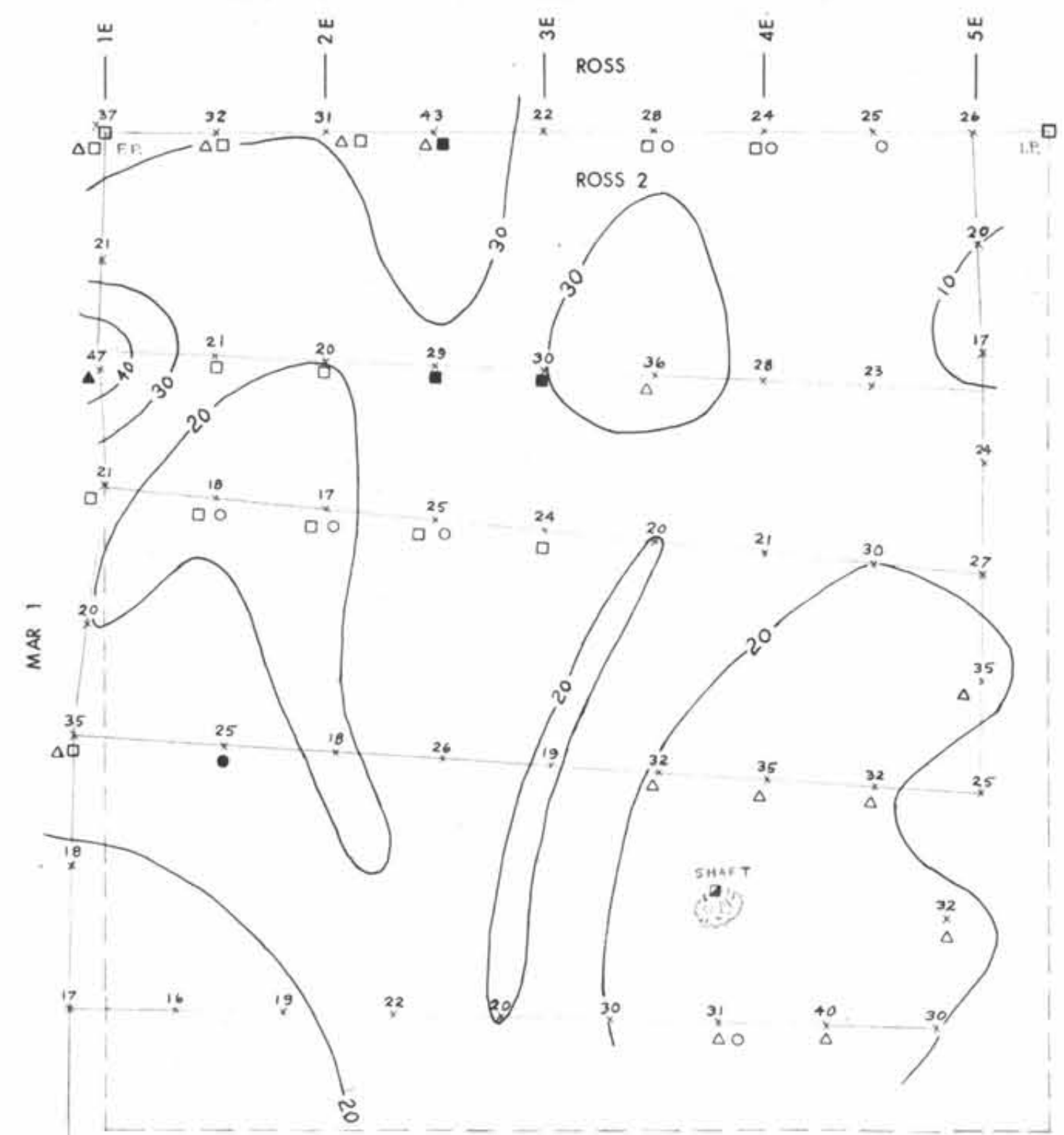
Fee paid \$ 5.00 Date of issue October 18, 1979 (Postal Code)

Valid from the beginning of the day of issue. January 1, 1980

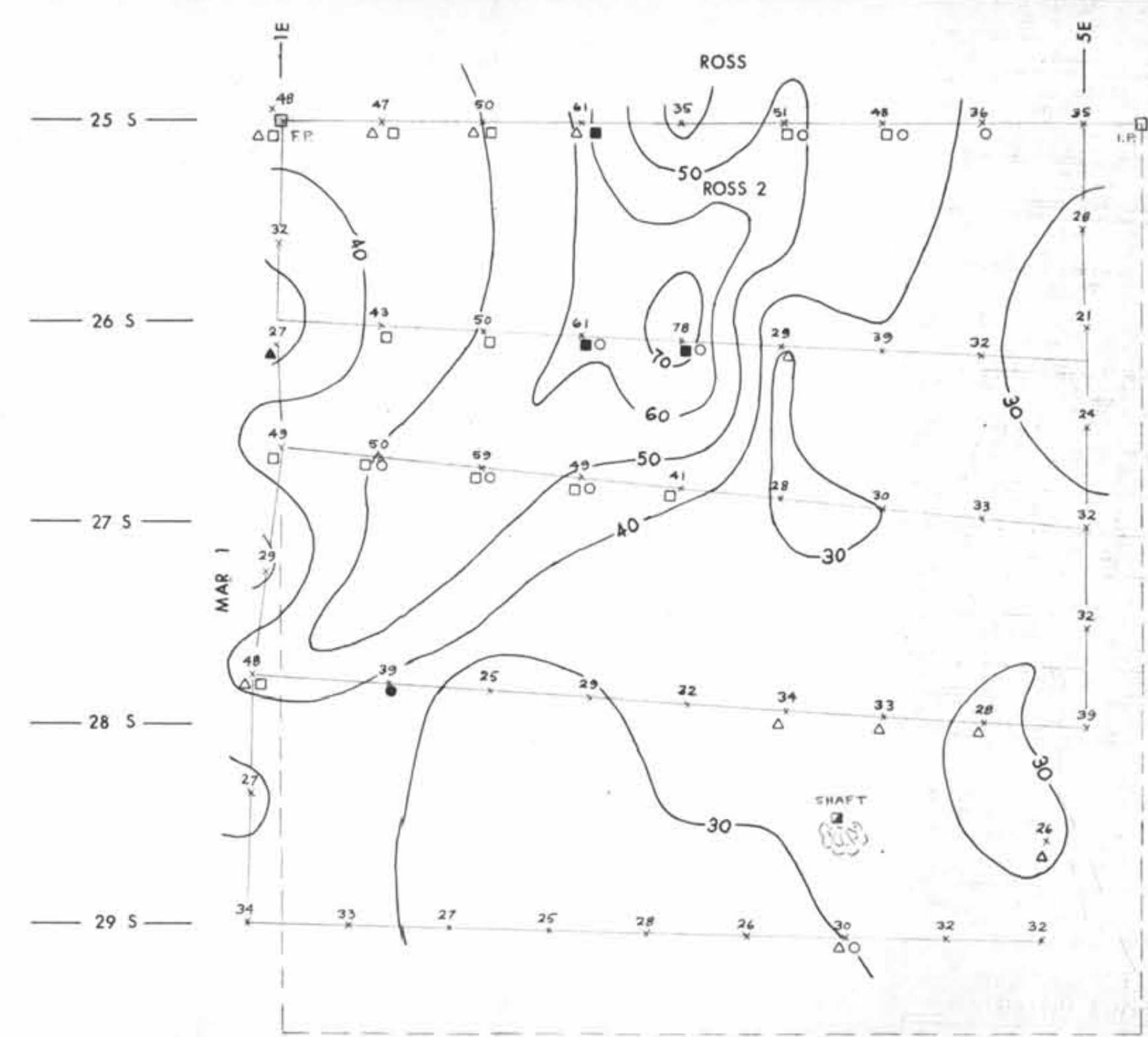
Valid until midnight on the 31st day of December, 1980

Issued at: Roseland, British Columbia

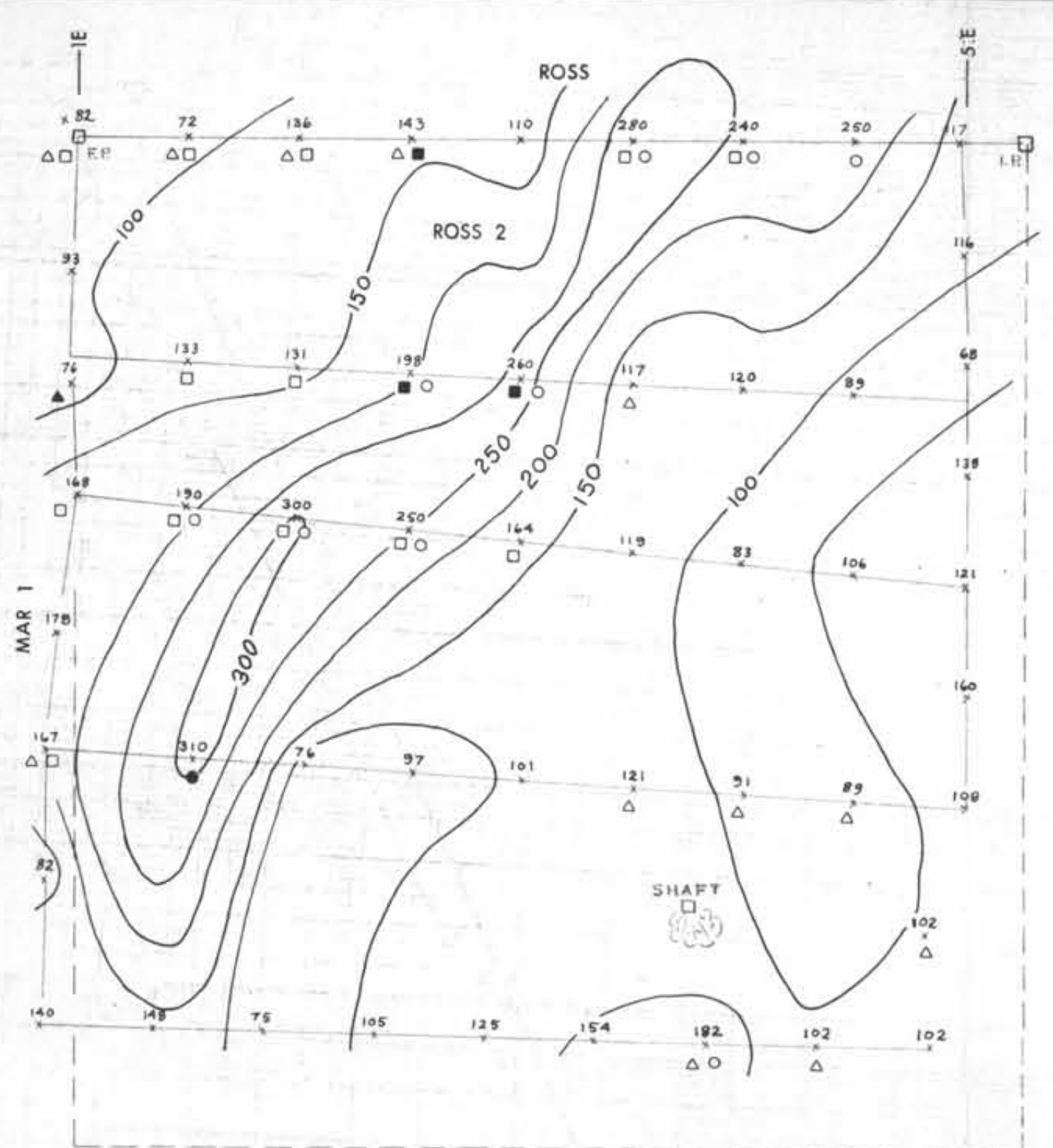
* Insert here the date of the day immediately preceding the date of issue. [Signature] (Signature of issuing officer.)



Cu (ppm)



Pb (ppm)



Zn (ppm)

- LEGEND**
- Blazed Traverse Line
 - - - Claim boundary
 - x Soil sample point
 - △ Sample anomalous in Cu (>1s; >12s)
 - Sample anomalous in Pb (>1s; >12s)
 - Sample anomalous in Zn (>1s; >12s)

SOIL GEOCHEMISTRY
B HORIZON
ROSS 2
MORRISON-WHITE PROPERTY
ROSSLAND, B.C.
 FOR UNITED CANSO OIL & GAS LTD.
 L MORRISON
 JUNE, 1980

Expiry Date: Feb. 28, 1984
 PROFESSIONAL ENGINEER
 L. MORRISON

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
8156