## GEOPHYSICAL SURVEY

On The
ROSE PROPERTY
(LAST ROSE OF SUMMER AND ROSE OF KLAPPAN CLAIMS)

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Situated North of Ealue Lake In the Liard Mining Division \(57^{\circ} 47^{\prime} \mathrm{N}\); \(129^{\circ} 53^{\prime} \mathrm{W}\) N.T.S. \(104 \mathrm{H} / 13 \mathrm{~W}\)
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Owned By
TEXASGULF CANADA LTD.
Work Performed By UTAH MINES LTD.

MINERAL RESOURCES ORANCH ASSESSMENT RQPORT

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The Rose Property, consisting of 15 contiguous mineral claims aggregating 94 units, was staked on behalf of Texasgulf Canada Ltd. during the 1975 and 1976 field seasons. The claims cover areas containing copper mineralization in monzonitic rocks and associated Upper Triassic volcanic and volcanoclastic sedimentary rocks.

In August, 1979 Utah Mines Ltd. completed two IP profiles over the property.

## Location, Access \& Terrain

The property is located in the Liard Mining Division, centred approximately 7 km S.E. of Iskut, B.C. at $57^{\circ} 47^{\prime} \mathrm{N}$ and $129^{\circ}$ 55'W. (See Figure l). It is accessible by helicopter from points along the Stewart-Cassiar highway or the "Keen Access Road" which runs along the north shore of Ealue Lake.

The terrain is mountainous, with a total relief of 1000 metres on the property, ranging from 900 metres at Ealue Lake to 1900 metres at the highest point on the claims. An upland surface of moderate relief has been deeply incised by streams which now flow in steep-walled canyons. In many areas, working conditions are extremely hazardous. The bulk of the property is covered by open grasslands, scree slopes or cliffs, but some very heavy scrub timber exists in the deeper canyons and on the flanks of the mountain.


## History

The earliest recorded work in the general area of the property was in 1929, when eight claims were staked on the "KlapanRose" showing, which lies on adverse ground immediately east of the Rose property. This showing was worked sporadically for years.

During the 1960's, several concerns examined the large "stainzone" directly above Eddontenajon, and the ground was staked at least once. Copper showings were discovered in the northwest flowing creek which cuts across the northwestern corner of the property (see Figure 2), but little work was done.

In the late 1960's, Yukonadian Mineral Explorations acquired a 35 claim block covering the old "Klapan-Rose" showing and adjacent ground to the northwest. Granduc Mines Ltd. examined the ground in 1970, and the results of their work appear in Assessment Work Report \#3l28. The claims finally lapsed in 1974, and Texasgulf Canada Ltd. began a programme of property acquisition in June 1975. Mr. J. Schussler located the four "Hi" claims in November 1974, and has continued to expand his property interests to the east of the Rose property.

Texasgulf did preliminary mapping in 1975 and continued with an integrated geological, geochemical, geophysical and diamond drilling project the following year. In 1977, geochemical and geophysical coverage was expanded and several hand trenches were excavated. No field work was completed in 1978.



## Geophysical Survey

A four man crew arrived in Iskut on August 20 th, 1979 and began an induced polarization survey the next day. The work was completed on August 23 rd .

The induced polarization survey was completed using time domain equipment manufactured by Crone Geophysics Ltd., Toronto, Ontario and Elliot Geophysical Co. Ltd. of Tucson, Arizona.

The pole-dipole array was used with an "a" spacing (potential electrode spacing) of 152 metres ( 500 feet). The distance between the moving current electrode ( $C_{1}$ ) and the nearest potential electrode ( $\mathrm{P}_{1}$ ) varied from 152 metres ( $n=1$ ) to 608 metres $(n=4)$. Readings were taken at $n=1,2,3$ and 4 .

Readings of the apparent chargeability and primary voltage were obtained at 152 metre intervals for each "na" value. The apparent resistivity at each station was then calculated using the output current from the transmitter and a geometric constant determined from the array.

Two lines totalling 3.66 kilometres were surveyed. The lead pot man used a compass to determine the proper direction of the line. The pot wire was used to measure the distance between stations.

The location of the lines is shown on figure 3. The I.P. data is plotted in psuedo-section form (figures 4 and 5) at a scale of $1: 7,500$. The plotting point is at the intersection of $45^{\circ}$ lines, one originating from the position of the moving
current electrode and the second one from the midpoint of the potential electrodes. The chargeability data is contoured in 10 millisecond intervals while the resistivity data is contoured in logarithmic fashion. The logarithmic intervals are $1,1.5,2,3,5,7.5$ and 10.

Line A has chargeability values ranging from 4 to 45 milliseconds. Readings over 20 milliseconds are considered anomalous. There are two anomalous zones on the line. The first one is located between stations A4 and A6. It extends to station $A 2$ on $n=3$ and 4. The second anomaly extends from station A9 on $n=4$ to the end of the line at station Al3. This zone has readings of up to 32 milliseconds. The two zones are separated by a 450 metre wide zone of background chargeability values.

The apparent resistivity values are moderately high over the length of the line. The anomalous chargeability zones have slightly lower resistivities than the low zone in the middle of the line.

Line $B$ has anomalous chargeability values over most of its length, with values ranging from 8 to 33 milliseconds. The anomalous zones are not as definite as on line A. There is a low chargeability zone in the middle of the line but the anomalous readings are connected on the $n=4$ data.

The apparent resistivity values are high, being generally over l,000 ohm-metres. The highest value is on station B9 at $\mathrm{n}=2$. The values increase with depth on the southwestern half of the line but decrease with depth on the northeastern end.

Apparent Chargeability



Apparent Resistivity


FIGURE-4
ROSE PROPERTY

## I.P. SURVEY LINE A

Pole - Dipole Array<br>$o=150$ metres<br>Scale $=1: 7500$



## Apparent Resistivity



FIGURE - 5
ROSE PROPERTY
I.P. SURVEY LINE B

Pole - Dipole Array $a=150$ metres

A.J. Schmidt, P.Eng.

September 27, 1979

## Wages

| J. Vyselaar | Geophysicist | 4 days | @ $\$ 73.08$ | $\$ 292.32$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| S. Bedard | Geophysical Assistant | 4 days | $@$ | 35.58 | 142.32 |
| J. MacDonald | Geophysical Assistant | 4 days | @ | 29.81 | 119.24 |
| G. Tjaden | Geophysical Assistant | 4 days | $@$ | 32.69 | 130.76 |

Fixed Wing
Helicopter

264 miles
13.5 hours
182.5 gals fuel

12 man-days
Food
Report Preparation - J. Vyselaar 5 days Drafting

TOTAL $\quad \$ \quad 684.64 \quad \$ \quad 684.64$
@ $\$ 1.50$
@ 190.00
@ $1.30 \quad 237.25$

TOTAL
$\$ 2,802.25 \$ 2,802.25$
$\begin{array}{ll}\text { @ } & \$ 56.00 \\ \text { @ } & 20.00 \\ \text { @ } & 73.08\end{array}$
$\$ \quad 396.00$
$\$ 2,565.00$
$\$ 168.00$
240.00
365.40
250.00

TOTAL
$\$ 4,906.29$


## APPEXDIX II - STATEMENT OF QUALIFICATIONS

J. Vyselaar, Geophysicist for Utah Mines Ltd., Vancouver,
British Columbia:

Completed B.Sc. (Geology and Geophysics) at the University of British Columbia in 1971; employed by Chisolm Prospecting Ltd. and Texas Gulf Sulphur Ltd. during the 1969 and 1970 field seasons, respectively, as geological assistant; employed by Geoterrex from May, 1971 to October, 1971 and January, 1972 to April, 1972 as a field geophysicist under Peer Norgaard, P.Eng.; employed by Barringer Research Ltd. as a geophysicist from May, 1972 to October, 1974 under the supervision of F.L. Jagodits, P.Eng., and R.J. Henderson; employed by Utah Mines Ltd. from January, 1975 to present as a geophysicist under the supervision of A.J. Schmidt, P.Eng.

