010

RECEIVED

OCT 3 1 1980

MINING LANDS SECTION

GEOPHYSICAL SURVEY REPORT

GRENFELL TOWNSHIP

CLAIM L507527

Re: Assessment Work Credit Geophysical Survey

Douglas Grant Sirola P.Eng., M.B.A.

\r'\

October 23, 1980

RESUME

Douglas Grant Sirola

Birth Date: May 19, 1940

Place: Kirkland Lake, Ontario

Education: B.S. Metallurgical Engineering, Michigan Technological University; B.S. Engineering Administration, Michigan Technological University; M.B.A. University of Toronto

Professional: Professional Engineer - province of Ontario,

member - Canadian Institute of Mining and Metallurgy

member - Prospectors and Developers Association

Employment: Haileybury School of Mines - faculty 1970 - present

Mineral Industry Consultant - 1976 - present

Research Securities of Canada Limited - vice president and director - 1973-1975

Merrill Lynch Royal Securities Limited - mining industry financial anaylst - 1970-1972

Midland Osler Securities Limited - mining industry financial anaylst - 1968-1970

Nordberg Manufacturing Company - sales engineering - 1964-1967

The Sirola family has been extensively involved in mining exploration work for many years. My own exposure to claim staking and geophysical work began at the age of fifteen.

LOCATION AND ACCESS TO THE PROPERTY

Claim L507527 is one of an eleven claim contiguous group located near the south boundary of Grenfell Township some nine miles west of the town of Kirkland Lake. Access is gained by a quarter mile long bush road east from Highway #11 approximately one and one-half miles north of the Kenogami Lake bridge.

SULMARY OF EXPLORATION TO DATE

During the 1978 summer program a VLF EM survey covering over 10,000 feet was completed on claim L507527 in order to establish structural relationships. The survey was followed up by extensive prospecting of surface outcrops and existing trenches. Assays were completed on over seventy grab samples collected at various locations on the claim.

Two sites were selected, and extensive backhoe stripping was completed.

METHOD OF SURVEY

An east-west base line was cut across claim L507527 and the adjoining claim L566640 in order to allow a tie-in to a known survey pin at post number one on the latter claim. Over 200 stations on a north-south grid were then established in the area of interest on claim 507527. These are individually identified in the bush by indelibly marked bush tape. The north-south grid is at 100 foot line intervals with stations at 50 foot intervals.

Marked stations were established either by pace and compass or by tape and compass. A VLF survey was conducted using a Ronka model 16 EM unit.

RESULTS AND CONCLUSIONS

Results appear to confirm the known north-westerly geological trend for the area. No crossovers were indicated by the survey results.

Douglas Grant Sirola P.Eng, M.B.A. October 23, 1980

gue ! ...

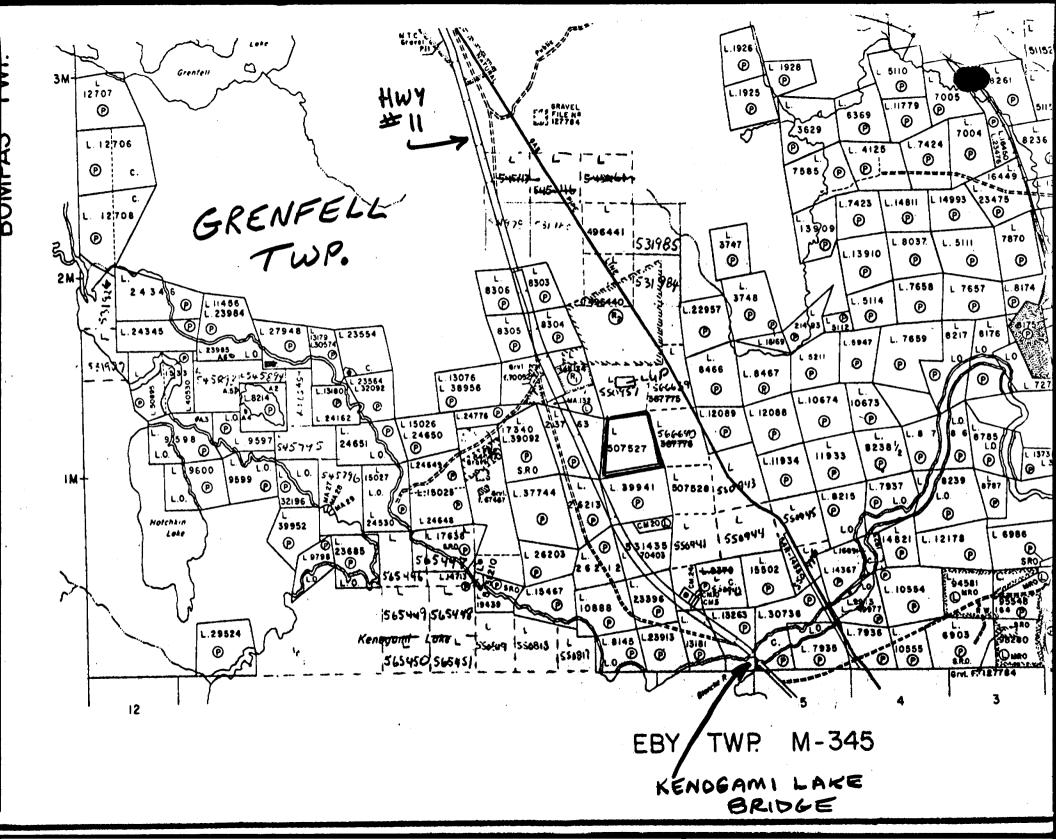
Congles Frank Scrob

*Note: This report includes a claim group map completed after filing for assessment work credit. The group map was prepared on the basis of extensive investigation of patent surveys. Assessment work credit for drafting is recorded in this report.

IN PHASE EM READINGS GRANT SIROLA CLAIMS (CLM 507527) GRENFELL TOWNSHIP

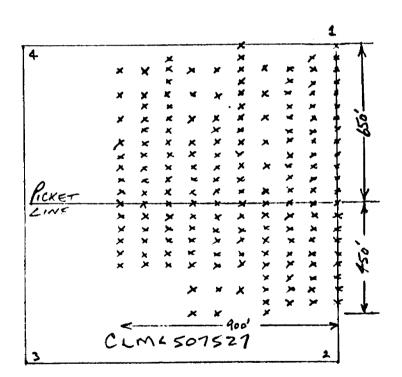
| Location | 200W | 100W | OW | 100E | 200E | - | 400E | 600E | 700E | 800E |
|----------|------|------|-----|------------|--------|------|------|------|-------|------|
| 900N | | | | | | +29 | | | | |
| 850N | | | +19 | | | +30 | | | +25 | +28 |
| 800N | +9 | +9 | +21 | +25 | +30 | | +37 | +35 | +25 | +25 |
| 750N | | | +21 | | | +25 | | +35 | +29 | +25 |
| 700N | +5 | +9 | +19 | +22 | +25 | +25 | +32 | +35 | +35 | +25 |
| 650N | | +9 | +17 | | | +25 | | +32 | +35 | +28 |
| 600N | +2 | +9 | +15 | +15 | +20 | +22 | +26 | +29 | +32 | +32 |
| 550N | | +9 | +10 | | +20 | +19 | | +29 | +30 | +33 |
| 500N | +5 | +7 | +10 | +15 | +20 | +19 | +21 | +20 | +30 | +30 |
| 450N | +5 | +5 | +7 | +14 | +15 | +18 | | +18 | +27 | +30 |
| 400N | +3 | +2 | +6 | +10 | +10 | +15 | +12 | +16 | +20 | +25 |
| 350N | +2 | +3 | +2 | +7 | +6 | +7 | | +15 | +20 | +25 |
| 300N | -1 | 0 | 0 | +1 | +5 | +5 | +2 | +14 | +10 | +15 |
| 250N* | -5 | 0 | -1 | +1 | 0 | 0 | +5 | +10 | +12 | +15 |
| 200N | -7 | 0 | -6 | - 5 | 0 | 0 | +5 | +10 | +10 | +13 |
| 150N | -3 | -3 | -1 | -8 | -2 | +3 | +6 | +2 | +5 | +11 |
| 100N | -9 | -6 | 0 | -6 | -3 | +5 | 0 | +8 | +5 | +8 |
| 50N | -12 | -8 | -3 | -1 | -5 | -1 | +3 | +4 | +7 | +5 |
| 0 | -19 | -12 | -8 | -5 | -10 | -10 | -3 | -3 | +2 | +5 |
| 50S | | | -9 | | | | -8 | -10 | -5 | -2 |
| 1005 | | | -9 | -4 | -5 | -17 | +2 | -10 | -5 | 0 |
| 150S | | | -16 | | | | -5 | -10 | -4 | +4 |
| 200S | | | -12 | -7 | -2 | -5 | -25 | -9 | -7 | +2 |
| 250S | | | -16 | | | | | -10 | -10 | |
| 300S | | | -20 | | | | | 15 | -22 . | -6 |
| 350S | | | -19 | | | | | -8 | -15 | -10 |
| 400S | | | -25 | | | | | +3 | | -20 |
| 450S | | | -29 | | | | | +9 | | |
| 500S | | | -36 | | | | | | | |
| 550S | | | -41 | fend | ce nea | arby | | | | |
| 600S | | | -33 | | | | | | | |
| | | | | | | | | | | |

^{*}east-west baseline cut at 250N. See claim group map



GEOPHYSICAL SURVEY RONKA EM-16

LOCATION OF STATIONS



- SCALE: 4 "= 100'
- LINE SPACING: 100'
- STATION INTERVAL: 50' EXCEPT WHERE OTHERWISE SHOWN.
- 179 MARKED STATIONS WITH READINGS COMPLETED.

13

GEOPHYSICAL SURVEYS

Author of Report: Grant Sirola

Instrument: Ronka EM 16
Expenditure: self operated

| DATE | OFFICE or FIELD | OPERATOR /HOURS | PACE, CHAIN & COMPASS OPERATOR / | HOURS |
|-------------|--------------------|-----------------|---|-------|
| May 22/80 | F | G. Sirola 6 | D. Hakola | 6 |
| May 23/80 | 0 | G. Sirola 4 | - 1 11111111111111111111111111111111111 | O |
| May 24/80 | 0 | G. Sirola 4 | | |
| May 24/80 | F | G. Sirola 4 | M. Sirola | 4 |
| May 28/80 | F | G. Sirola 6 | D. Hakola | 6 |
| May 28/80 | 0 | G. Sirola 2 | | J |
| June 1/80 | F | G. Sirola 3 | B. Sirola | 3 |
| June 2/80 | 0 | G. Sirola 2 | | , |
| June 3/80 | F | G. Sirola 5 | D. Hakola | 5 |
| June 3/80 | 0 | G. Sirola 2 | 1 | |
| July 8/80 | F | G. Sirola 8 | D. Hakola | 8 |
| July 8/80 | 0 | G. Sirola 4 | - 1 1111110110 | O |
| July 10/80 | F | G. Sirola 3 | D. Hakola | 3 |
| July 13/80 | F | G. Sirola 8 | | , |
| July 13/80 | 0 | G. Sirola 2 | | i. |
| July 15/80 | 0 | G. Sirola 5 | | |
| TOTAL HOURS | | 68 | | 35 |

Addresses:

Grant Sirola, Barbara Sirola, Mike Sirola P.O. Box 1178, Haileybury, Ontario

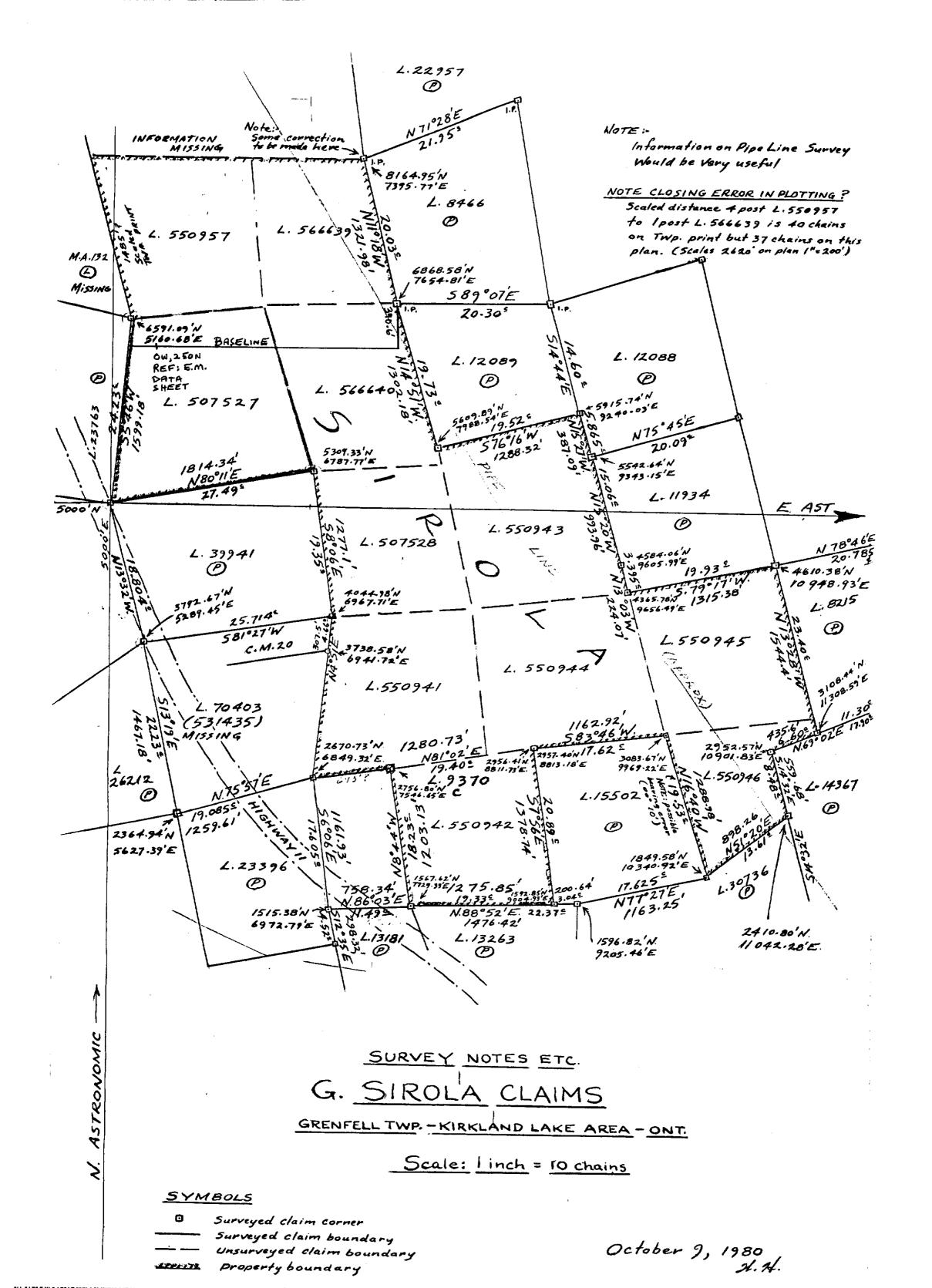
Dennis Hakola, RR# 1 Cobalt, Ontario

68 x 7 = 59.5 days.

35 = 4.375 days.

7010 63 days

A June



42A01SE0083 2.3522 GRENEFI 1

f co-ordinates: Nº 4 post of L. 39941 = 5000' N. and 5000' E. (Astronomic)

| 00' N | -29- | Post#1 CLM: L507527 | | |
|--|--|--|---|----------|
| 270' POST =4 CLM: L50752 | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 72.4 |
| SURVEY PIN N.F. | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | BASELINE I"SQUAR PIPELINE SURVEY P | GPS DIPE |
| -19 -12 | -8 -31 -101 -3 -3 -5 -17 -17 -17 -2 -2 -2 -12 -12 -12 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | VLF EM SURVEY- RONKA EM 16 STATION: CUTLER MAINE CLM L 507527 - G. SIROLA GROUP GRENFELL TWP- KIRKLAND LAKE AREA SCALE: I INCH = 200 FEET | |
| CLM: L507527 POST #3 5/8 SQUARE IRON PIN | -16- -20- -14- -25- -21- -34- -41- -33- 1)IRE FENCE | CLM: L507521 FOST *2 | DRAWN BY: G. SIROLA NOVEMBER, 1980 Little Ciole Jan 19, 1981 | |
| 42A01SE0083 2.3522 GRENFELL | 210 | | 'april 1, 1981 | 3333 |