

KLYCEPTOR GEOPHYSICAL REPORT
No. EM-68-60
JOE & CINDY CLAIM GROUPS
50°N - 120°W
FOR LIBERTY MINES LIMITED
16 MILES SE OF ASHCROFT, B.C.
JULY 9, 1968 TO JULY 30, 1968.

BY D.L. HINGS, P.Eng.

NO DEPOSIT? 50°34'-35" 120°57'-58" 9/1/68

1632

This is report No. EM-68-60 for
Liberty Mines Limited in the
area 16 miles South-east of
Ashcroft, B.C., July 9th, 1968 to
July 30th, 1968.

1632

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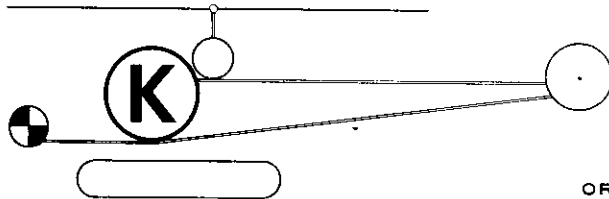
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PLAN

EM Profile

EM-68-60

KLYCEPTOR INTERNATIONAL AIR SURVEYS LIMITED,
250 NORTH GROSVENOR AVENUE,
BURNABY 2, B.C.
298-9619



KLYCEPTOR
INTERNATIONAL AIR SURVEYS LTD.

ORIGINATORS OF GEOELECTROMAGNETIC SURVEYS BY AIR
CUSTOM GEOPHYSICAL INTERPRETATIONS

July 30th, 1968.

KLYCEPTOR GEOPHYSICAL REPORT NO. EM-68-60 COVERING THE JOE & CINDY CLAIMS FOR LIBERTY MINES LIMITED, 50°N - 120°W, 16 MILES SOUTHEAST OF ASHCROFT, B.C. JULY 9th, 1968 TO JULY 30th, 1968.

Purpose:

The purpose of the survey was to delineate conductive anomalies that might be significant of intrusives when correlated with the geology of the area. The geophysical survey was conducted over the JOE claims 1 to 18, the CINDY claims 44 to 47 and the CINDY claims 58 to 61 inclusive. The survey was commenced on July 9th, 1968 under the supervision of R. Reece.

Instrumentation:

The geophysical instrument utilized, operates on signals emitted on of 18.6 KCS from station WPG, located at Arlington, in the state of Washington, U.S.A. The bearing on the signals was approximately 200 degrees. The instrument is known as a Ronka EM-16 and is operated with a geomagnetic azimuth reference.

Type of Survey:

This survey was conducted on the ground with the Ronka type EM-16 electromagnetic infinite source instrument. The readings were taken at stations having 100 foot spacing along 11 east-west lines and 2 north-south lines making a total of 16 miles of traverse.

Geological Reference:

Memoir # 249 issued by the Geological Survey of Canada, reference pages 118 and 119 of the Highland Valley area, B.C.

Presentation:

The presentation is in profile form showing the inphase and quadrature components on the plan No. EM-68-60.

The interpretation is based on the polarization and configuration of the anomalies with reference to the adjacent grid lines. The conductivity indicated is determined from related phase characteristics. The interpretation is based on the source signals originating to the south.

Results:

The anomalous features are indicated on the plan No. EM-68-60 and are all of linear form. The conductive anomalies indicated by the CL symbols indicate the width of the conductive measurements. The linear strikes indicated by the letter L in this case, indicate the easterly edge or surface outcrop area, apparently associated with the conductive linear (CL) anomaly. The linear anomaly L1 is offset by the fault F1 and is believed to continue to the north as L1B. The same applies to CL1 and CL1B for the conductive anomaly. The general bedding strike is shown by B1 and B2. In the north-west the anomalies L2 and CL2 are more clearly defined, wherein L2 is the limit of the formation outcrop to the east and is near the surface with the dip to the north-west, and CL2 appears considerably deeper.

The same type of formation to a smaller degree exists along L3 with a parallel conductor CL3.

The F2 fault to the south appears to break up CL1 and CL1A and it is difficult to determine the local strike most prominent in the CINDY 44 claim.

Conclusions:

Perhaps the most significant strike geologically is the L2, CL2 area having a north 50° east strike crossing the bedding. The L1, CL1 is the most substantial portion of this formation. The termination at the fault strike F1 is assumed as there were no control lines at this area. The conductive linear anomalies show depths in excess of 200 feet, whereas the linear anomalies such as L1 at co-ordinates 0+00 and 20+00 west would appear to be close to the surface.

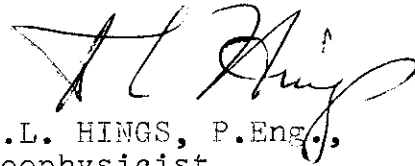
It also appears that CL1, CL1A and CL1B are plunging to the north, therefore CL1A in the south is closest to the surface.

Recommendations:

Trenching that appears between the linear anomaly and the conductive anomaly in both L1 and L2 areas would appear to support the outcropping areas, however, the deeper conductive linear anomalies of interest are all west of the trenching areas. The geological significance of the CL2 strike with other known veins of the Highland Valley area, perhaps warrants the first drilling investigation if this interpretation coincides with local geology.

The CL2 zone warrants more detail survey lines equal to the southern portion of the survey. Additional geophysical information in this area would create a better perspective for future development.

KLYCEPTOR INTERNATIONAL AIR SURVEYS LIMITED.

A handwritten signature in black ink, appearing to read "D.L. Hings", written in a cursive style.

D.L. HINGS, P.Eng.,
Geophysicist.

July 30th, 1968.

A STATEMENT OF COSTS FOR EM 16 GEOPHYSICAL SURVEY EM-68-60
COVERING THE JOE & CINDY CLAIMS 16 MILES SE OF ASHCROFT, B.C.,
BY KLYCEPTOR INTERNATIONAL AIR SURVEYS LIMITED, JULY 9th, 1968
TO JULY 30th, 1968.

Klyceptor Charges:

Survey Crew, 3 Men.

R. Williams	10 days @ \$25.00 =	\$ 250.00
R.L. Reece	10 days @ \$40.00 =	\$ 400.00
C. Kalmakoff	10 days @ \$20.00 =	<u>\$ 200.00</u>

		\$ 850.00
Plus 100 % Overhead		<u>850.00</u>

\$ 1,700.00

Transportation:

4 x 4 Truck Rental	10 days @ \$10.00 =	\$ 100.00
700 miles @ .08 per mile		56.00
Gas and Expenses		<u>42.28</u>

\$ 198.28

Living Costs:

Food and Motel	10 days @ \$25.00 =	\$ 250.00
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Equipment Rental:

Ronka EM-16	10 days @ \$10.00 =	\$ 100.00
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Data Processing:

D.A. Cramer	6 days @ \$35.00 =	\$ 210.00
Plus 100 % Overhead		<u>210.00</u>

\$ 420.00

Interpretation & Report:

D.L. Hings, P.Eng.		\$ 300.00
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TOTAL COSTS

\$ 2,968.28



all F's
CL1A, CL1, CL1B
6)

KLYCEPTOR GEOPHYSICAL SURVEY
JOE & CINDY GROUPS ASHCROFT, B.C.
LIBERTY MINES LTD.
JULY 1968. SCALE:-1"=400' DWG. NO.-EM-68-60
EM PROFILES
APPROVED *JLB*

- NOTE:-
- ± | ZERO LINE
 - - - IN-PHASE (1"=50%)
 - - - QUADRATURE (1"=50%)
 - - - CLAIM LINE ■ CLAIM POST
 - - - ROAD - - - CREEK - - - TRENCHING
 - - - LINEAR ANOMALY
 - - - CONDUCTIVE LINEAR ANOMALY
 - - - FAULT
 - - - BEDDING ANOMALY

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