#### GEOPHYSICAL REPORT

ON THE

FLY and AG CLAIMS

N.T.S.104/15E&16W

LIARD MINING DIVISION 59°57'16"N 130°31'36"W

for

REG RESOURCES CORP.

TERYL RESOURCES CORF.

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#### Introduction

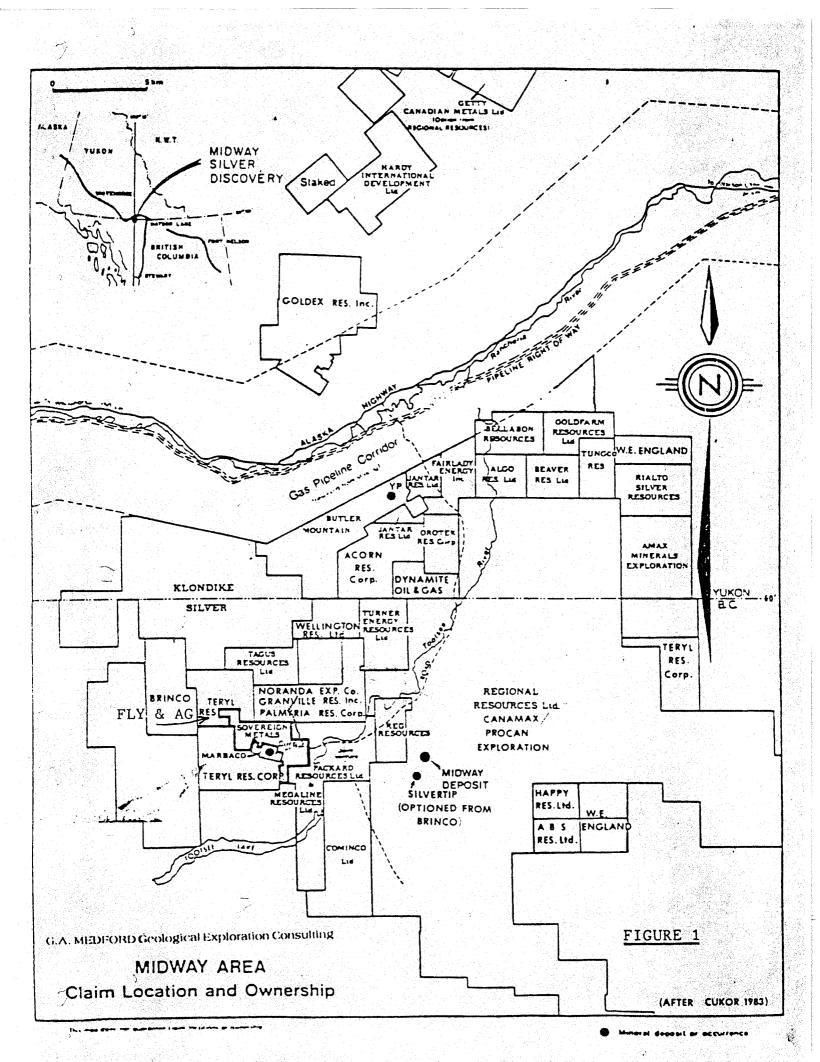
Geophysical surveying using a Scintrex SE-88 EM System was carried out on the Fly and Ag claims in order to upgrade a VLF-EM conductor located in previous work and hence delineate targets for drilling. The VLF-EM conductor is located within a broadly-developed lead-zinc-silver soil geochemical anomaly that possesses no strong central focus permitting drill-target selection. It was also suspected that the VLF-EM unit might be responding to surface conductors such as swampy areas rather than deeper conductive horizons.

In addition to the EM survey, a drift-corrected total field magnetometer survey was completed because of the skarn potential of the area.

#### Location and Access

The claims are located approximately 15 km south of Rancheria, Yukon Territory and 100 km west of Watson Lake (Figure 1). Access to the property is gained from the Alaska Highway at Mile 701, following the Tootsee River road to Regional Resources and then the old Rancheria Mine road to the Marbaco camp.

Helicopters are available at Watson Lake and at Rancheria in the summer season. Watson Lake is serviced by C.P. Air from Vancouver.



#### Claims

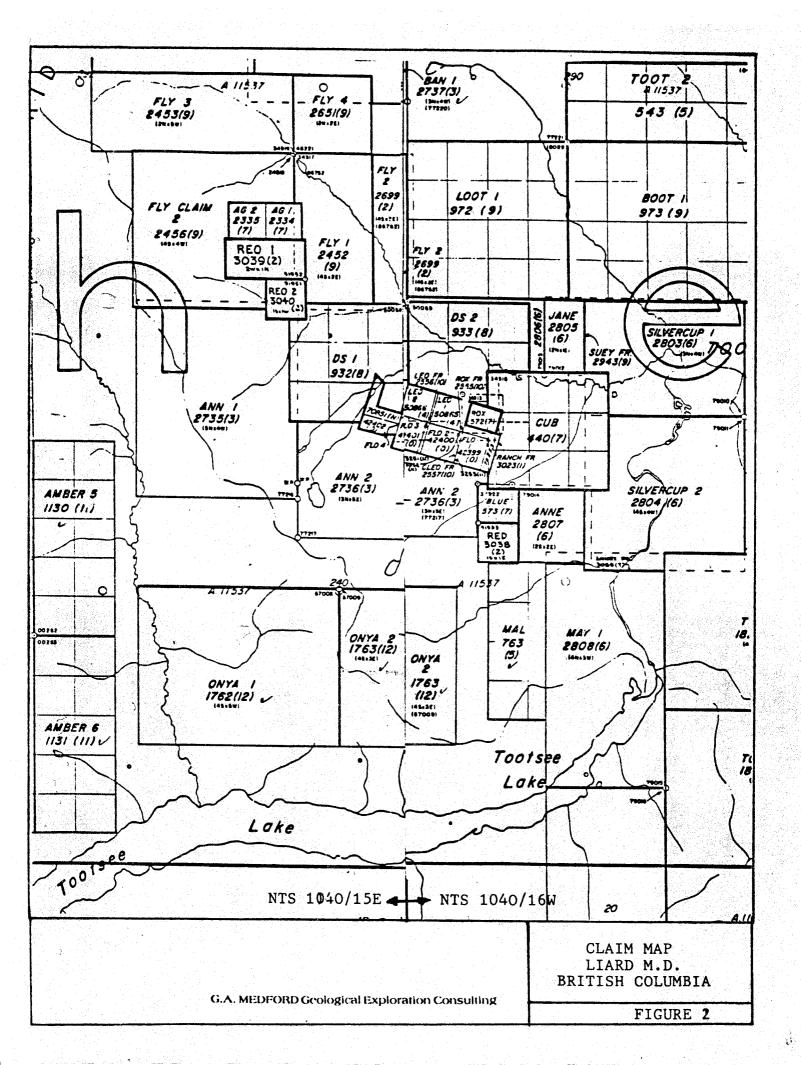
Government records indicate the following:

Claim	Units	Record No.	Expiry Date
Fly 1	8.1	2452(9)	Sept.2/85
F1y 2	16	2456(9)	Sept.7/85
F1y 3	10	2453(9)	Sept.2/85
Fly 4	4	2651(9)	Sept.2/85
Fly 2A	12	2699(2)	Feb. 2/86
AG 1 *	1 cl.	2334(7)	July29/85
AG 2 *	1 cl.	2335(7)	July29/85

\*AG 1 & 2 are 2 post mineral claims.

## Regional Geology

The claims are situated at the contact zone of the east flank of the Cassiar batholith (Figure 3) which extends over 300 km from the Wolfe Lake map sheet in the Yukon southeast to the Kechika map area in British Columbia. In this region, the batholith intrudes a metamorphic package of Cambrian to Silurian metasediments. These include members of the Atan and Good Hope Groups (dolomites, limestones, skarns, quartzites) which are, in turn, overlain by calcareous phyllite and phyllitic limestone of the Kechika Group. The upper part of the Kechika Group also includes black graptolitic shales and platy siltstones. The above sequence exhibits evidence of intense multiple deformations. Overlying the above rocks, and generally outcropping farther to the east, is the McDame colomite of Middle Devonian age. This group comprises fetid dolomites and limestones with abundant fossil debris and is overlain by the Lower Sylvester; fine-grained, black, locally graphitic slates and phyllites with grey to black bedded and ribbon cherts. The McDame and Sylvester are invariably in low-angle fault contact, the Sylvester



being an allocthonous slab (Gordey et al., 1982).

The Sylvestor allocthon is characterized by a broad northwesterly trending synclinal feature commonly referred to as the McDame Synclinorium. This structure parallels the contact of the Cassiar batholith in a general way. Strong northwest to northeast faulting has also affected the area. Most of these faults are steep and normal.

#### Mineral Deposits in the Area

Mineralization in the general area of the Fly and AG claims is both diverse and prolific and the location of a number of showings is illustrated in Figure 3. Immediately south of the claim group, the Marbaco deposit is found within a limestone unit of the Atan or Kechika Groups.

Galena, tetrahedrite, sphalerite, pyrrhotite and ankerite occur as a replacement zone in limestone along a limestone-argillite contact. Measured and drill indicated reserves include 79,849 tons of 10.7 oz per ton silver, 2.84% lead and 6.03% zinc with an additional 59,326 tons inferred with no assigned grade (Chapman et al., 1974).

Approximately 8 kilometers to the east, Regional Resources currently is proceeding with underground development of its Silver Creek zone. Mineralization in the Regional camp is presumed mostly to be within the McDame dolomite (i.e. localized by the McDame-Sylvester contact). Regional's current geological reserves (Silver Creek and Discovery zone) comprise approximately 6 million tons of 11.7 oz per ton silver and 18% combined lead-zinc (The Northern Miner, March 1985, page 137).

Recent work on the YP claims about 15 km to the northeast (White, 1985) has demonstrated the close association of a gold-bearing quartz-eye porphyry with lead-zinc mineralization. Geochronology completed by the present

FIGURE 3

author has indicated this intrusion to be Tertiary in age and isotope lead work has indicated that mineralization in the Regional Resources deposits is also approximately this age. This information has an important bearing on exploration in the area as lead-zinc-silver mineralization need not be restricted to a particular sedimentary horizon (e.g. the McDame dolomites) as in a Mississippi Valley model. It could, for example, be found in any place where there is a suitable stratigraphic trap. One such trap would be the McDame-Sylvester contact, but similar stratigraphic packages are also present in the older metamorphic sequences in the area.

#### Previous Work

A small tungsten skarn near the centre line of the Fly 1 and 2 claims was explored by DuPont of Canada Exploration (Eccles 1979) but little attention was paid to silver-lead-zinc anomalies that were located. A trench on one anomaly revealed only a narrow high-grade vein (galena, sphalerite, pyrargyrite) in limestone. In 1983 and 1984, small soil sampling, prospecting and VLF-EM programs were carried out by Christopher(1983,1984) and filed for assessment.

## Instrumentation-Geophysical Ground Survey

The SE-88 unit differs from the normal HLEM systems such as the MaxMin il in that it measures without regard to phase, the ratio of signal amplitude between two frequencies which are transmitted and received simultaneously. A low frequency of 112 Hz is used as a reference frequency. The signal difference is integrated or averaged over a period of time in order to improve the signal to noise ratio.

The survey parameters employed on this program are as follows:

Coil separation : 100 metres

Frequencies : 3037,1012,337 Hz

Reference frequencies: 112 Hz

Integration period : 16 seconds
Reading interval : 25 metres

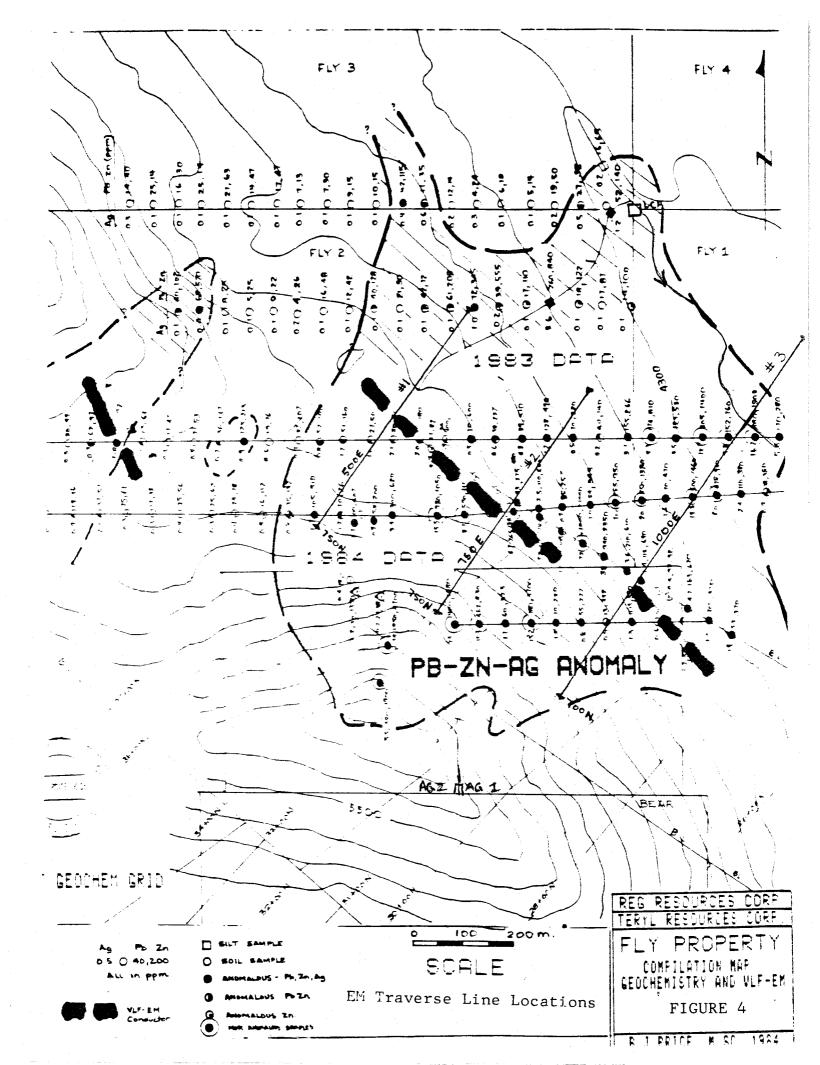
Measurement : ratio of amplitude between

reference and signal freq.,%

A magnetometer manufactured by Scintrex Ltd. was employed on this survey. The MP-3 Total Field Magnetometer consists of a field unit and a base station. Diurnal and day to day variations are automatically corrected at the end of the survey to an accuracy of 1 gamma.

## Geophysical Results and Interpretation

Three traverse lines crossing the VLF-EM conductor as shown in Figure 4 were completed. Stations were flagged at 25 metre intervals. Data profiles (1,2&3in pocket) for both EM and magnetometer are flat in the vicinity of the VLF-EM anomaly(950N). Line 1000E indicates some conductance and elevated magnetics but these are believed to be caused by a major structural break known to follow the creek that traverses the Fly 1 claim. A low amplitude magnetic dipole at 1275N on line 500E is typical of dikes which traverse limestone in the area.



## References and Bibliography

- Chapman, Wood, and Griswold Ltd. 1974. Fosco Mining Ltd. "Leo"-"Flo" claims area and "Leo" mine, Liard Mining Division, British Columbia Review of summary report for 1973.
- Christopher, P.A. 1983. Prospecting Report, Fly claims, Tootsee River area, Liard Mining Division, B.C., filed for asses.
- Christopher, P.A. 1984. Geochemical and Geophysical Report, Fly and AG claims, Tootsee River area, filed for asses.
- Eccles, L. 1979. Geological and Geochemical Report on the Bear, Bear 2, Blue, Blue 2, Cub, Col, TM, JM, RW, BP, MAL, DS1, DS2, and ROX claims. Dupont of Canada. A.R. 7539
- Gordey, S.P., Gabrielse, H. and Orchard, M.J., 1982.
  Stratigraphy and Structure of Sylvester Allochthon, southwest McDame map area, northern British Columbia in Current Research, Part B, Geological Survey of Canada, Paper 82-1B, p. 101-106.
- Mulligan, R., 1968. Metallogeny of the Region Adjacent to the Northern Part of the Cassiar Batholith, Yukon Territory and British Columbia. GSC paper 68-70.
- Vincent, J.S., P. Eng. Summary Review and Evaluation Report of the 1983 Field Program on the Lola and YP Mineral Claims for Butler Mountain Minerals Corp.
- White, G.E., P. Eng., 1985. Butler Mountain Minerals Corp. Lead Zinc Silver Gold Geophysical Discovery, Rancheria Area - Yukon Territory. Glen E. White Geophysical Consulting and Services Ltd., Richmond, B.C.

## Maps

Map 18 - 1968 Jennings River, B.C. 1:250,000

## CERTIFICATE

- I, Gary A. Medford, with business at 3582 West 14th Avenue, Vancouver, British Columbia, do hereby certify that:
- 1) I am a consulting geologist and have been engaged in my profession for over 15 years.
- 2) I am a graduate of McGill University with B.Sc. Honours (1968) and M.Sc. (1970) degrees in Geology, and have graduated from The University of British Columbia with a Ph.D. (1976) in Geology.
- 3) I am a Fellow of the Geological Association of Canada.
- 4) I have no direct or indirect interest in the securities of Teryl Resources Corporation, nor do I expect to acquire any.

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Gary A. Medford, Ph.D., FGAC

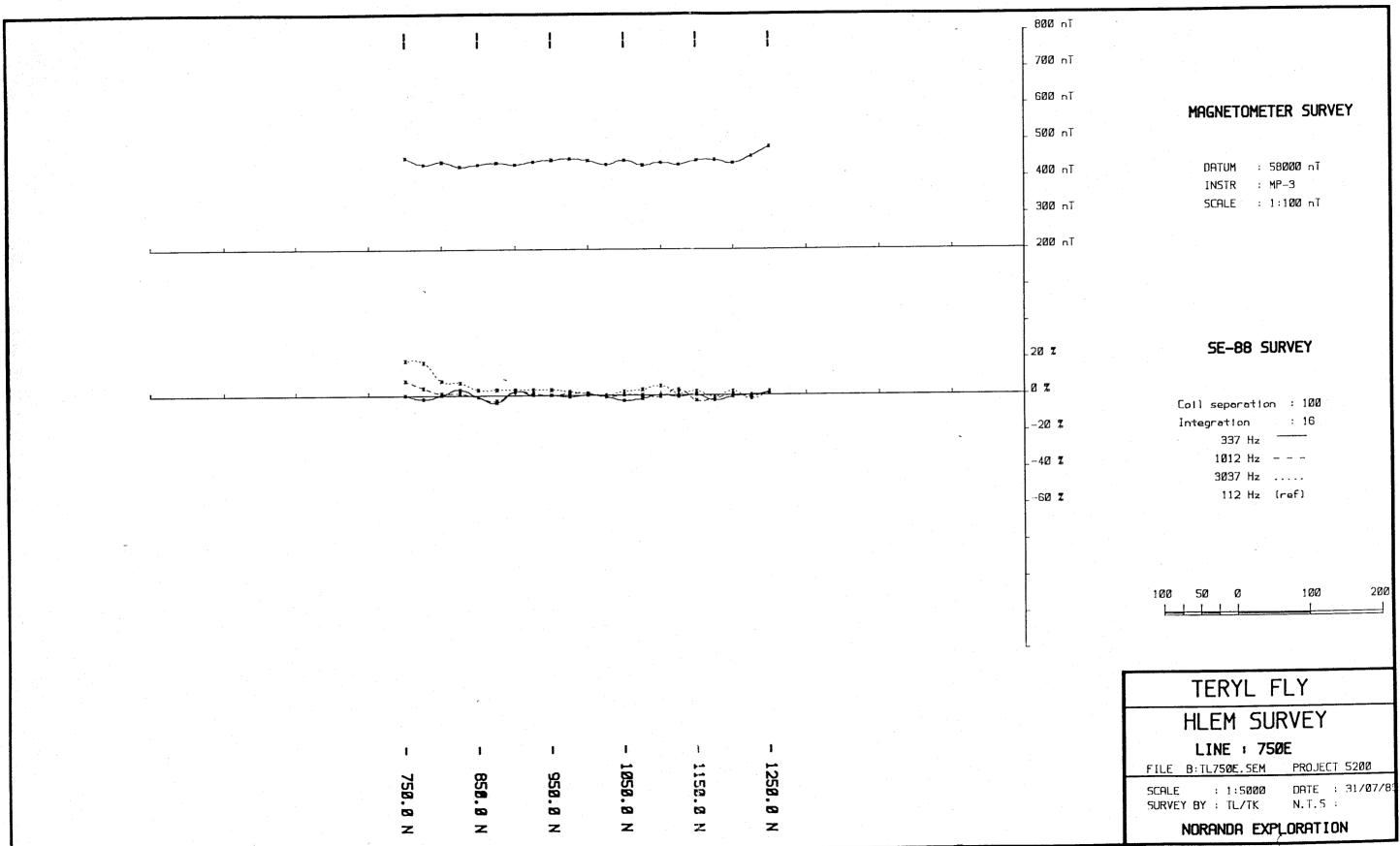
## STATEMENT OF EXPLORATION EXPENSES\*

R.J.Robinson, B.Sc., Project Geol., mag A.Lippert E.M	<pre>. oper.July31 \$200.00 . oper.July31 \$150.00</pre>
T.Keleman E.M	. oper.July31 \$150.00
E.M., Mag. rental	\$250.00
Food/lodging 4 man-days	\$200.00
Mob./demob./freight (pro-rata)Vanc.	-claims \$1350.00
Helicopter	\$440.00
G.Medford, Ph.D., consultant	½ July31 \$175.00
Reporting/admin.	\$1085.00

TOTAL

\$4000.00

<sup>\*</sup>Fly and AG claims, Liard M.D., owned by Reg Resources Corp. Work was carried out on July 31,1985.



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