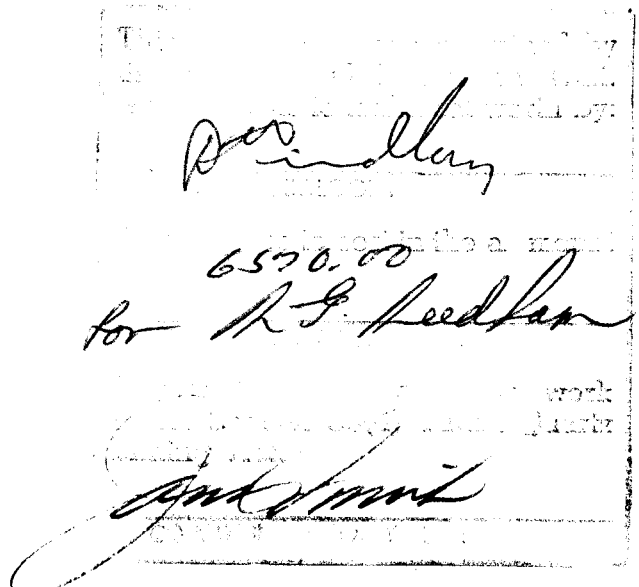
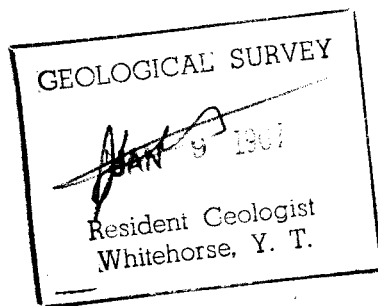


Report on a Magnetometer Survey on  
the Mag 1 to 32 Mineral Claims of  
T. C. EXPLORATIONS LTD.  
Dynasty Area, Y. T.

ALRAE EXPLORATION LTD.

November 24, 1966



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Report on a Magnetometer Survey on  
the Mag 1 to 32 Minerals Claims of  
T. C. EXPLORATIONS LTD.  
Dynasty Area, Y. T.

INTRODUCTION

The Mag claims of T. C. Explorations Ltd. are situate on the south shore of the Pelly River, approximately 35 miles northwest of Ross River. The claims consist of the Mag 1 to 32 contiguous full size claims.

Alrae Exploration Ltd. was contracted by T. C. Explorations Ltd. to carry out a line cutting program and a magnetometer survey on the claims. Linecutting and magnetometer work were under the field direction of D. Barclay and J. Mackie, respectively.

ACCESS

Personnel and supplies were flown, by fixed wing aircraft, from Watson Lake to Swim Lake. Thence, they were flown by helicopter to the claim group.

TOPOGRAPHY AND VEGETATION

A steep hillside adjacent to the Pelly is the only relief on the property. Except for this hillside the property is densely covered by small spruce, balsam, willows and buck brush. Poplar and cottonwood are common along the river bank.

GEOLOGY

Overburden is extensive in the area. Regional mapping by the

Geological Survey of Canada, indicates the claim group is underlain by metamorphic and volcanic rocks of Mississippian age. The Tintina Fault is assumed to pass through the claims. (Roddick and Green, Map 13-1961, Tay River, Y. T.)

### CLAIMS

T. C. Explorations owns the Mag 1 to 32 mineral claims, assigned record numbers 98843 to 98874 respectively. These claims are situated in the Whitehorse Mining Division, claim map 105 K-3 area.

### CONTROL GRID

East-West baselines were established at convenient intervals. Cross-lines were cut at 400 foot intervals. This system covers the entire claim group. Approximately 39 line-miles were cut, and picketed at 100 foot intervals. A staff-mounted compass and chain were used for control.

### TYPE OF MAGNETOMETER

A Sharpe, model MF-1, fluxgate magnetometer was used for the survey. It is hand-held and requires only coarse levelling. Orientation has negligible effect on field readings. Extensive temperature compensation have been built into the instrument.

The magnetometer is capable of measuring the earth's vertical, magnetic field to 5 gammas on the lowest scale range. Full scale ranges vary progressively from a minimum of plus or minus 1,000 gammas to a maximum of plus or minus 100,000 gammas. Station values are read directly from the scale. A high latitude adjustment permits zeroing of the

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instrument under reasonable circumstances.

### FIELD PROCEDURES

The magnetometer was zeroed for this area. Base stations were established along the baselines. Two field readings were taken at each base station, and the average used for subsequent calculations.

After base stations were established, field readings were taken at 100 foot intervals on all lines. Loops were limited to 1 hour duration. Each loop was begun from a base station.

Tolerable diurnal variation in any loop, was 1 gamma per minute elapsed in the loop, up to a maximum of 50 gammas. Variations were generally very low.

All operators were stripped of metallic objects which may have biased the survey.

### CORRECTIONS

Diurnal corrections were the only adjustments necessary to field readings. Diurnal variation in each loop, which is assumed to be linear, is determined by the difference between the initial and final readings. The correction added to each field reading in a loop, is the diurnal variation multiplied by the ratio, time elapsed when reading taken over total time elapsed in the loop. This correction is usually small. Each corrected loop is adjusted to eliminate negative values.

### INTERPRETATION

Anomalous readings were obtained in the north-east corner of the

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property for a length of 2,400 feet and over an average width of 400 to 500 feet. Residual magnetic values are in the order of 200 to 400 gammas. The anomaly may be caused by pyrrhotite and/or magnetic in metamorphic rocks or basic intrusive rocks. Both situations are common in the district.


RECOMMENDATIONS

The indicated magnetic anomaly appears worthy of further attention. It is recommended that an electromagnetic survey and a geochemical survey be carried out over and adjacent to the anomalous zone.

Report submitted by

  
J. Mackie

Endorsed by

  
R. Philp, P. Eng.

TIME AND COST DISTRIBUTIONLABOURLine Cutting

H. Jimmy (Watson Lake, Y. T.) April 4 to 21, 1966  
18 days

M. Jimmy (Watson Lake, Y. T.) April 4 to 21, 1966  
18 days

T. Allan (Watson Lake, Y. T. ) April 4 to 21, 1966  
18 days

P. Allan (Watson Lake, Y. T. ) April 4 to 21, 1966  
18 days

C. Pete (Lower Post, B. C.) April 4 to 21, 1966  
18 days

F. McMillan (Lower Post, B. C.) April 4 to 21, 1966  
18 days

Magnetic Survey

B. MacBean (Vancouver, B. C.) July 5 to 24, 1966  
20 days

C. Nelson (Vancouver, B. C.) July 5 to 17, 1966  
13 days

TRANSPORTATION

Helicopter

CAMP COSTS


|  |                           |
|--|---------------------------|
| Contract price for line cutting and magnetometer survey carried out<br>by Alrae Exploration Ltd. | \$ 5,570.00               |
| Administrative costs   | <u>1,000.00</u>           |
| <b>TOTAL</b>   | <b>\$ <u>6,570.00</u></b> |

CERTIFICATE

I, Ronald H.D. Philp of 812 Blundell Rd., Richmond, British Columbia, do hereby certify that:

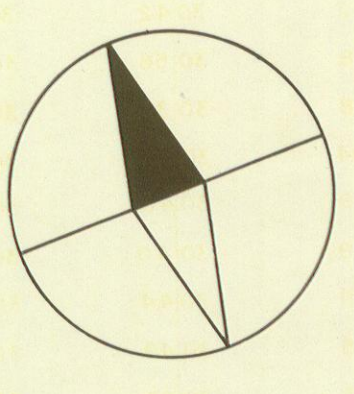
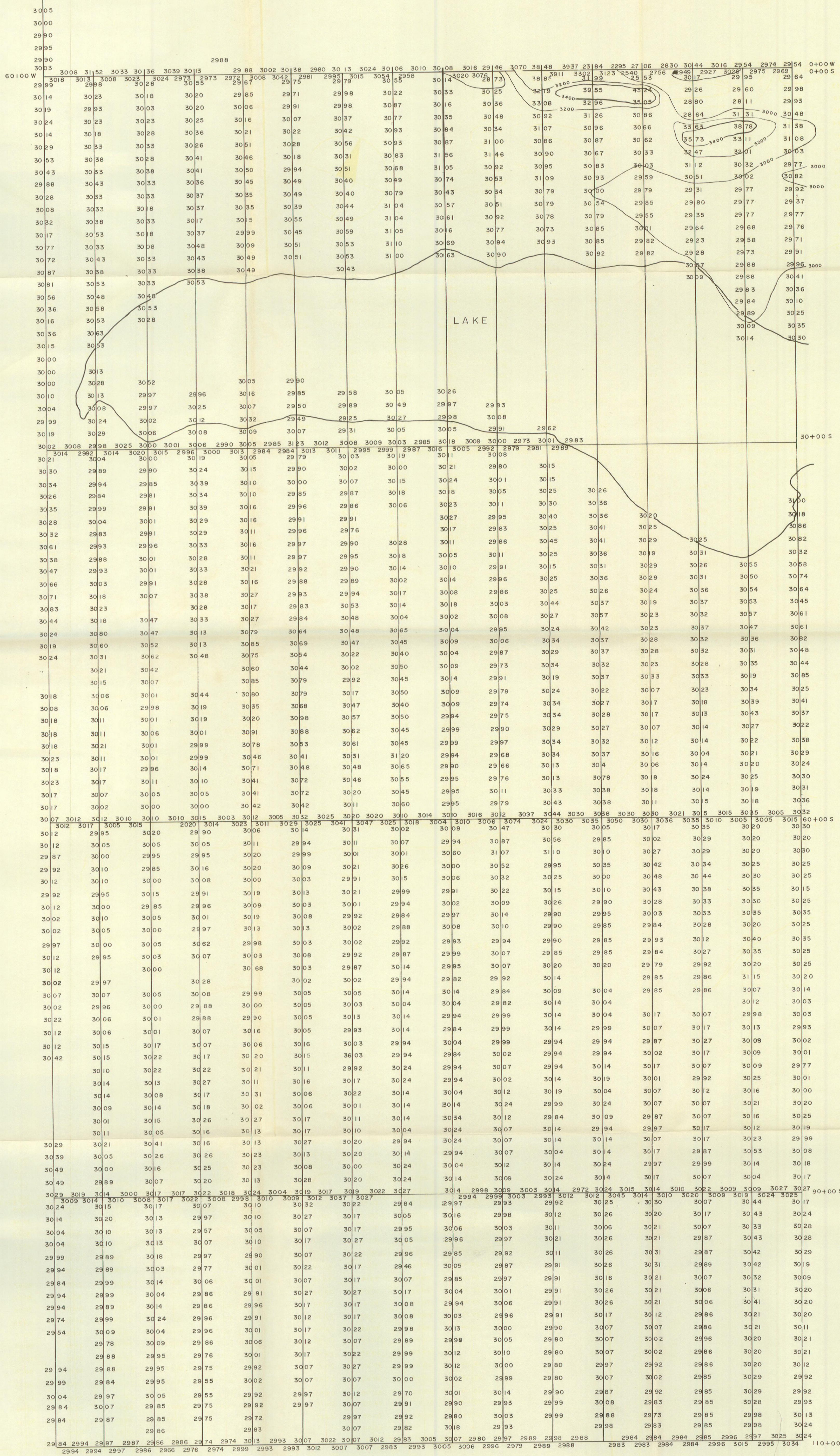
1. I am a registered Professional Engineer of the Province of British Columbia.
2. I am a graduate from the University of British Columbia (B.A. Sc., 1961).
3. I have practiced my profession since 1961 while employed with Caseco Consultants Ltd., Asbestos Corporation (Explorations) Ltd., and Alrae Exploration Ltd.
4. I have not visited the property of T.C. Explorations Ltd. but supervised the work being carried out on the Mag 1 - 32 claims by Alrae Exploration Ltd.
5. I have no interest, nor do I expect to receive any interest, in the property described herein or securities of T. C. Explorations Ltd.

DATED AT VANCOUVER, this 16th day of December, 1966.



R.H.D. Philp, P. Eng.

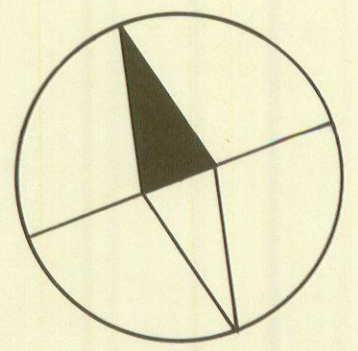
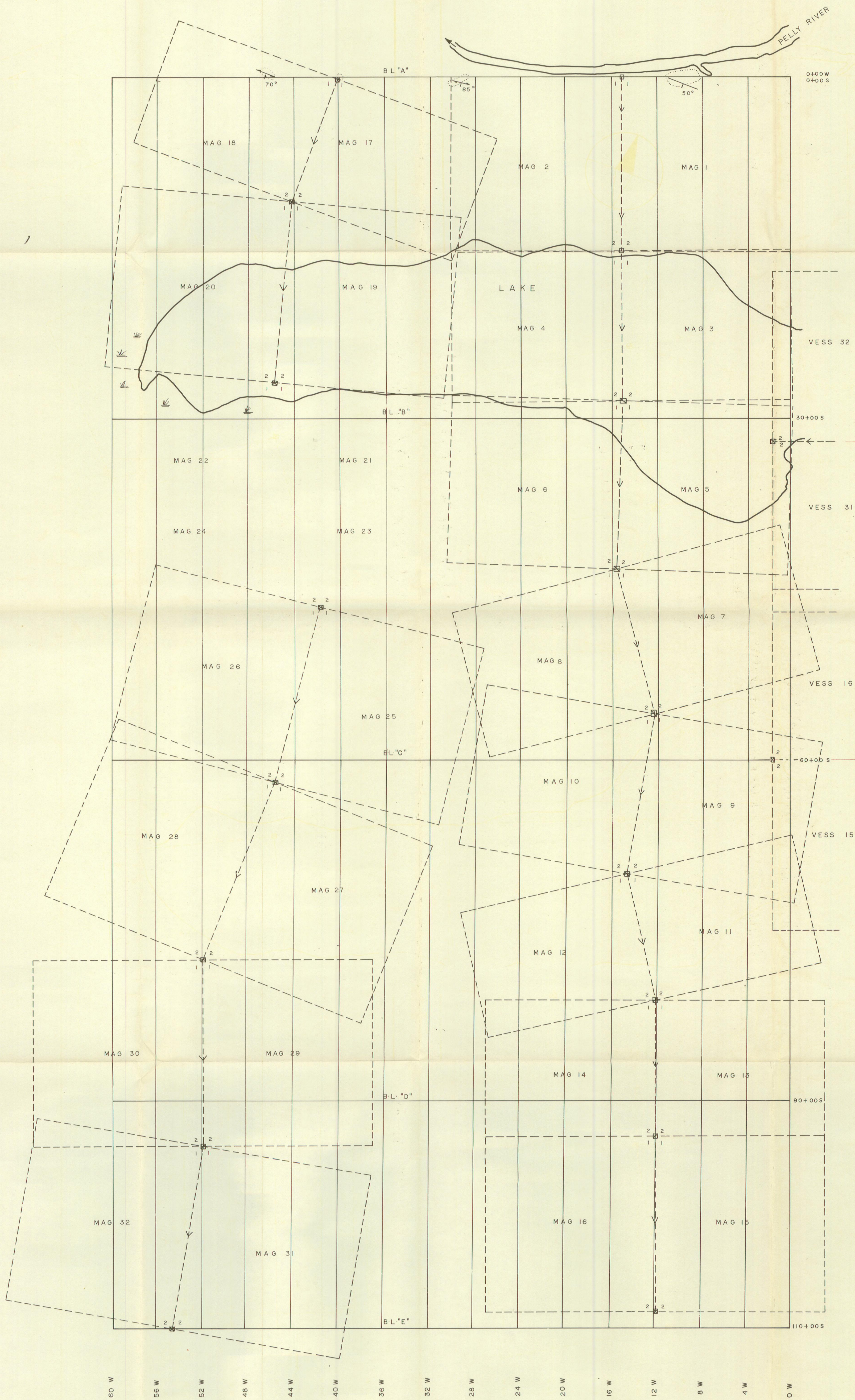




T.C. EXPLORATIONS LTD.  
MAG GROUP MAGNETIC READINGS & CONTOURS

**ALRAE EXPLORATION LTD.**  
GEOLOGISTS AND ENGINEERS  
VANCOUVER, B. C.

|                               |                          |
|-------------------------------|--------------------------|
| DESIGNED.....D.S.B.....       | SCALES<br>HOR: 1" = 400' |
| DRAWN.....C.L.C.....          | VERT: .....              |
| CHECKED.....                  | DATE Aug 31, 1966        |
| ALRAE EXP. LTD. DWG. No. .... | JOB No. ....             |



Legend

- Claim Boundary
- Grid Outline
- Outcrop
- Swamp /
- Claim Post
- Baseline B-L

Geology

- Gneiss - Dark, Fine grained probably altered Diorite, magnetic.
- Argillite - Chert - Med. grey with light & dark bands, interbedded.
- Bedding
- Foliation

*File  
Mag Survey  
T.C. EXPLORATIONS  
Ref: MAG 1  
Drafter: J. Red.*

|  |                      |
|--|----------------------|
| <b>T.C. EXPLORATIONS LTD.</b>                              |                      |
| MAG GROUP - CLAIM SURVEY AND GEOLOGY                       |                      |
| ALRAE EXPLORATION LTD. - GEOLOGISTS AND ENGINEERS VAN B.C. |                      |
| DESIGNED D.S.B.  | SCALE 1" = 400'      |
| DRAWN C.L.C.   | DATE AUGUST 24, 1966 |
| CHECKED  | JOB NO.              |
| APPROVED   | REV.                 |
| CLIENT DWG NO.   | ALRAE EXP DWG NO.    |