

# DYNASTY EXPLORATIONS LIMITED

(N. P. L.)

328 MARINE BUILDING

355 BURRARD STREET

VANCOUVER 1, B. C.

Chief Mining Recorder,  
Federal Building,  
Whitehorse, Yukon Territory

Dear Sir,

Submitted to you for the purposes of assessment work is the following report 'Magnetometer Survey, Dea and Dy (SE) Group. The total costs incurred for this geophysical survey are to be applied as a portion of the assessment work required to hold the following mineral claims.

Full claims to hold for one (1) year,

Dy 1 - 6                      Dea 11 - 22

Dy 8                              Dea 32 - 43

Dy 12 - 30                      Dea 52 - 55

Dy 48 - 49

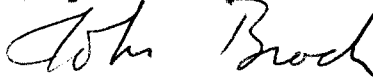
Dy 71

Dy 72

Full claims to hold for two (2) years,

Dea 44 - 51

Respectfully submitted,



John S. Brock

GEOPHYSICAL INVESTIGATIONS BY *MAGNETIC*  
METHODS OF THE  
DY(SE) and DEA CLAIM GROUPS

Location: 133° 02' W. Long.  
62° 12' N. Lat.

Reference: Claim Sheet 105 K3

Whitehorse Mining Division  
Swim Lake Area  
Yukon Territories

By: John S. Brock  
March, 1965

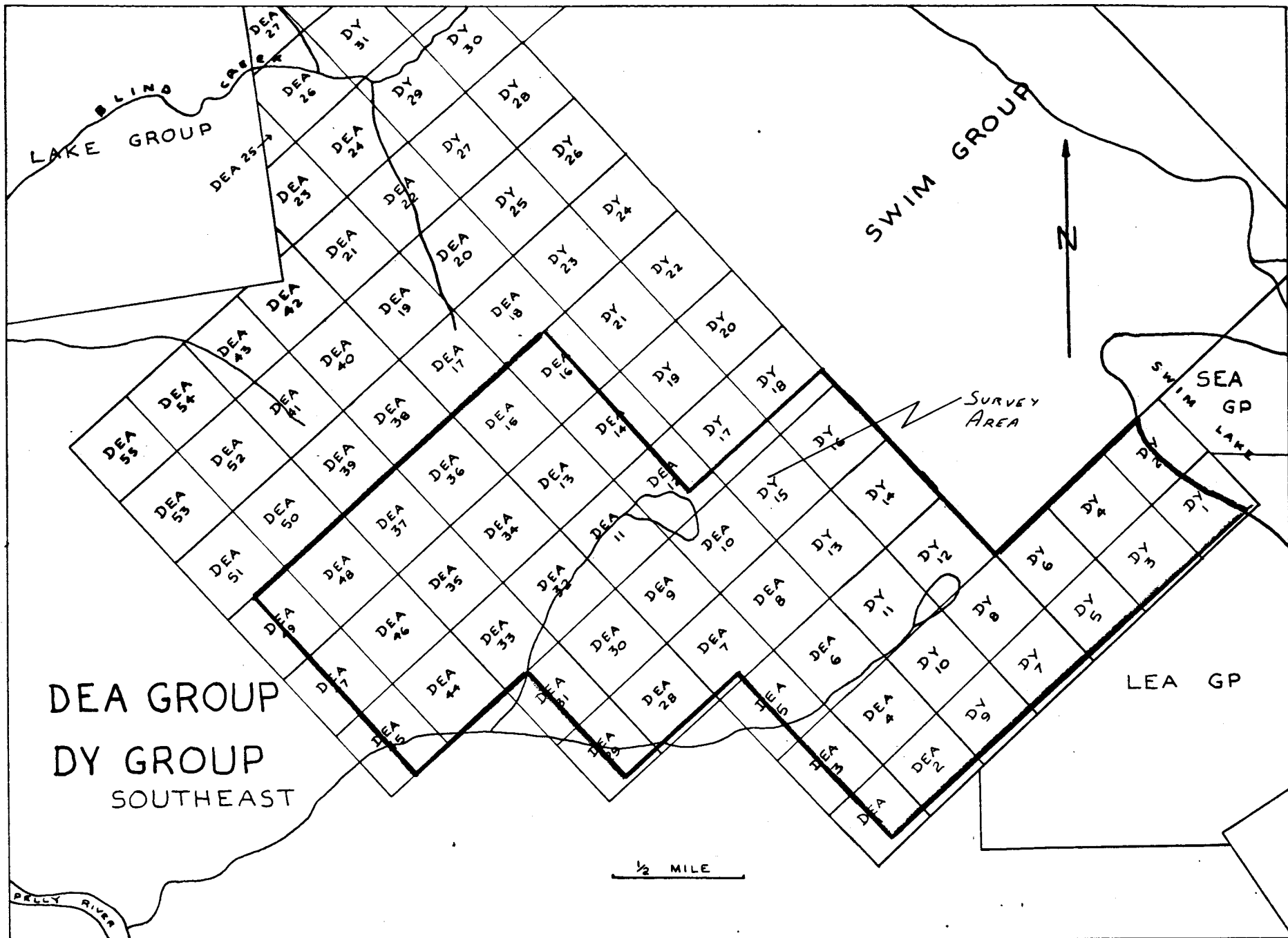


Fig 1

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## INTRODUCTION

### General

From August 23 to September 11, 1964, Dynasty Explorations Limited carried out an extensive ground magnetometer survey over a large portion of its DEA claim group and some of its DY (SE) claim group. The limits of survey coverage are outlined on the enclosed claim map (key map). It was hoped that magnetic surveys would prove useful in outlining anomalous zones indicative of sub-surface mineralization, as well as geologic conditions masked by overburden. The DEA and DY claims were staked on evidence of known mineralization in the area. A magnetic anomaly was subsequently located by ground survey methods.

A Sharpe A3 magnetometer was employed in order to measure the vertical component of the earth's magnetic field. The instrument is a portable, hand held magnetometer with a sensitivity of approximately 25 gamma per scale division, designed primarily for reconnaissance and mineral surveys. The actual survey and interpretations were conducted by John E. Brock, an employee of Dynasty Explorations Limited.

### Location and Access

The DEA and DY (SE) mineral claims are situated east of Blind Creek and south of Swim Lake, in the Whitehorse Mining District, Yukon Territory. The general area is of rolling gentle relief; the north, west, and south limits slope steeply into Swim Lake, Blind Creek, and the Pelly River Valley respectively. Most of the originally timbered areas have been burned over and now support heavy growths of willow and bush-brush (dwarf birch). Drainage is well developed. Areas of low topographic relief and depression are often characterized by lakes and/or regions of swamp and muskeg.

The property is directly accessible by means of wheeled vehicles. Access roads have been constructed from the south-east end of Swim Lake (Dynasty base camp) as well as the central south shore regions of Swim Lake to the main magnetic anomaly on the DEA claim group. These routes were constructed during March 1965, after the magnetic survey had been completed. A helicopter pad has been constructed near the northeast shore of the lake situated in the central portion of the claim group.

ADMINISTRATIVE DATA

Summary of Magnetometer Survey Costs

A) Line Cutting: DY (SE) Claim Group		
1)	60,000 ft. @ \$7.00/1,000 ft.	\$ 420.00
DEA Claim Group		
2)	72,000 ft. @ \$7/1,000 ft.	510.00
B) Magnetometer Survey: DY(SE) Claim Group		
1)	Operator @ \$18.50/day for 8 days	148.00
2)	Camp cost at \$6.00/day for 8 days	48.00
3)	Compilation and Report	150.00
DEA Claim Group		
1)	Operator @ \$18.50/day for 12 days	222.00
2)	Camp cost @ \$6.00/day for 12 days	72.00
3)	Compilation and Report	200.00
C)	Supervision	250.00
D)	Mobilisation and Camp Set-up	80.00
		<hr/>
		\$2,100.00

Personnel

- |                            |  |   |
|----------------------------|--|---|
| 1) Geophysical Operations: |  | John S. Brock<br>3050 Procter Avenue<br>West Vancouver, B.C.  |
| 2) Line Cutters :          |  | a) William Peter )<br>b) Robert Ethel ) All of Ross<br>c) Alex Shorty ) River, YT<br>d) Jimmy Ladue ) |
| 3) Grid Locations :        |  | David Barclay<br>6040 Iona Drive<br>Vancouver 8, B.C.   |
| 4) Supervision :           |  | R.E. Gordon Davis<br>4754 West 6th Avenue<br>Vancouver, B.C.  |

## GEOLOGY

From a private report to Dynasty Explorations Limited by John F. Fairley.

### DY Southeast Area (Northwest Magnetic Anomaly)

Small amounts of Pyrrhotite and Pyrite mineralisation in a coarse foliated, very fine grained, shale-quartzite formation occur three-hundred feet north of a high mafic quartz diorite. A prominent low narrow (one-hundred-foot) ridge continues northwest for about one mile and marks the intrusive which likely has an attitude of approximately 130/80N. Drag-folded siliceous chlorite schist containing some pyrite and graphite underlies the shale. Two hundred feet farther north, high mafic, medium-grained greenstone gabbro is devoid of any mineralisation.....

....Further examination would be warranted here, although little possibility of economic mineralisation exists, as the host rocks differ considerably from those of other occurrences. The ground magnetic anomaly is obtained over the greenstone-gabbro formation.

### DEA Claim Group

....In the vicinity of the central west end of the DEA group a unique situation exists with black cherty quartzite and shale occurring lower than normal in the greenstone section (Unit 8, Reddick and Green, 1961). This could be accounted for by a series of steep southwest-dipping normal faults lowering the quartzite and shale series to the south. (Note that these do not show up).

In the area of the DEA west magnetic anomaly greenstone of an apparent intrusive origin is found south of the quartzite and shale series. Also associated with the intrusive greenstone is coarse-grained gabbro and brecciated quartz containing magnetite mineralisation.

Reference should be made to the geologic map of the area as presented in Fairley's report.

## METHODS OF SURVEY

### Grid System

Base and tie lines were cut over the DY (SE) and DEA claim group by contracted line cutters, survey control was maintained by picket and chain methods with systematic and periodic checks by means of Brunton compass. A total of 132,000 feet of line were cut; only a portion of the cut grid has been used for survey so far.

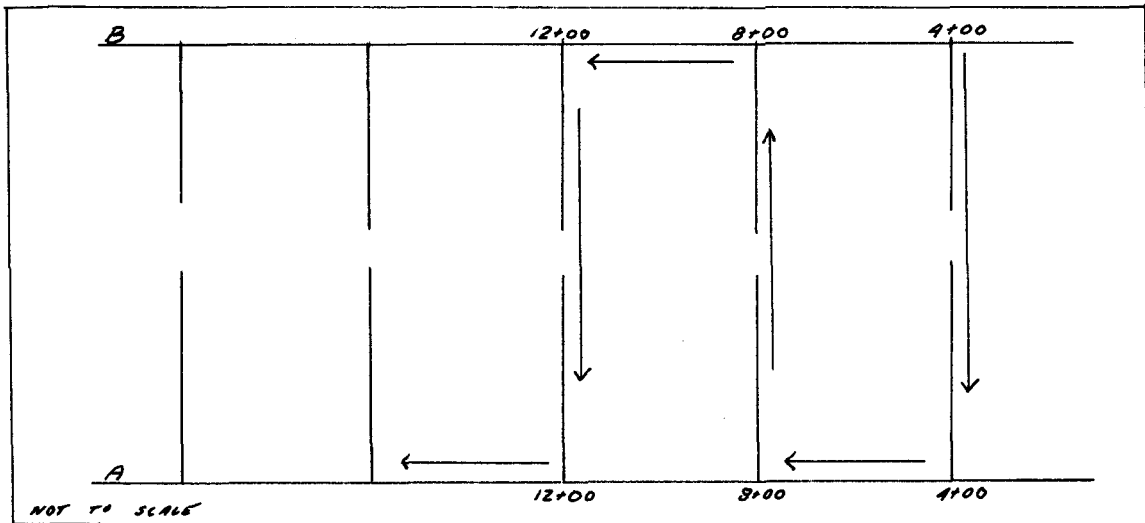
Base stations were established on each of the base lines at intervals of 400 feet. The magnetometer survey was conducted on cross lines laid out by pace and compass methods with terminal points of each cross line corresponding to the 400 foot stations on each base line. The survey was therefore carried out over lines of 400 foot spacing with readings taken at intervals of 200 feet on each line.

**Magnetometer Survey:**

Diurnal variations and drift were eliminated as much as possible by the following methods. Prior to actual survey, readings were taken at all 400-foot stations on the base lines, at the same time the diurnal variations were recorded by a second and stationary magnetometer. After reading of the base stations was completed, each value was corrected for diurnal variation as exhibited by records from the stationary magnetometer.

The use of predetermined magnetic values for each of the base line stations or terminal points of cross lines, lends to the accuracy and speed with which the survey may be carried out.

The survey was executed in the following manner: (fig. 11)



**Fig 11**

**Method of Survey**

- 1) A reading was taken at base line B (sta. 4+00);
- 2) The cross line 4+00 was traversed with readings taken at 200 foot stations located by paco and compass;
- 3) At base line B (sta. 4+00) a reading was taken;
- 4) The same procedure was repeated for lines 8+00, 12+00, etc.

As the base stations A 4+00, B 4+00, etc., all have predetermined magnetic values corrected for diurnal variation, re-readings each station at the terminal points of each cross line will give a corrective factor that can be applied to the stations on the cross lines. In this way, all values obtained during the course of the survey can be corrected for diurnal variation.

### TREATMENT OF DATA

All field readings were recorded directly as read from the vernier of the magnetometer. Conversion to gamma values was carried out by means of a 'vernier division-gamma value conversion curve', supplied by Sharpe for use with the magnetometer employed during the survey. Values were then corrected for diurnal variation by the method mentioned previously. An absolute background of 55,000 gammas was adopted.

After corrections were carried out, all gamma values were plotted on a base map (map 6a) in accordance with the station at which they were derived. The results were then contoured using an interval of 100 gammas (map 6b).

### INTERPRETATION OF RESULTS

#### General Observations

Three areas of magnetic interest were outlined by the ground survey. Only one appears to be of major significance due to its location with respect to geochemical anomalies, its magnitude of magnetic intensity and areal extent. The other two anomalies are extremely localized, although it is possible that further information may be gained by extending the limits of the survey in their vicinity.

#### Qualitative Examination

DEA West Anomaly: This anomaly is located on the southwestern boundary of the survey area (map 6b). Investigations to date by ground magnetic methods have shown it to strike approximately 105° for 2,600 feet. Another localized 'high' occurs at its eastern limit and strikes approximately in the same direction for 2,200 feet. The main anomaly is considered to be 'open' at its western end due to lack of survey coverage in that area. Ground magnetometer surveys will resume on the DEA claim group during the summer months of 1965. The greatest width obtained on the West Anomaly is 1,600 feet, again it should be noted that further survey coverage will be carried out in order to determine the exact limits of the anomaly. A narrow projection of magnetic intensity contours to the north is of interest but it is thought that this irregularity may be due to extreme diurnal variations at the time of survey because all values were obtained from one line.

A 'background' of values below 500 gammas, was assumed by visual inspection. The anomaly as shown appears to contain a certain degree of complexity due to localized 'peaks' which range from 600 to 1,900 gammas above background. The central portion of the anomaly rises to 1,000 gammas above background and is due to a series of brecciated quartz outcrops on strike with the anomaly, containing magnetite mineralization. The brecciated quartz appears to be related to a gabbroic intrusive found farther to the west. The overall anomaly appears to coincide with the location of a highly mafic cherty greenstone (Geologic Report, J.F. Fairley).

Qualitative Examination (Continued)

**DEA Northwest Anomaly:** The northwest anomaly is uniform in nature, strikes 160° for approximately 1,500 feet and is 600 feet wide at its maximum width, the northern end of the anomaly is bordered by claims owned by Kerr Addison Mines Ltd.. This anomaly is in the vicinity of highly mafic green stones that contact with a dioritic intrusive. Evidence of finely disseminated pyrite was found, old exploratory trenches were also discovered but there was no evidence of extensive mineralization. The anomaly has a total relief of 1,500 gammas over a background of 500 gammas.

**DEA North Anomaly:** This anomaly also occurs on the border of claims held by Kerr Addison Mines. Large accumulations of silt apparently derived from sidehill drainage occur within the area, there is no evidence of outcrop. Zinc and Copper geochemical anomalies are in general coincident with the magnetic anomaly but are of a larger areal extent.

SUMMARY AND CONCLUSION

The DEA West Anomaly is of the most interest. The major part of it appears to be due to occurrences of magnetite mineralization and ultra basic-intrusives as well as a highly mafic cherty-greenstone. However, the eastern and localized portion of the anomaly is situated within the same area as extensive zinc geochemical anomalies as well as soil and silt samples of very high copper trace content. The southern and northern boundaries of the central west anomaly also have high geochemical values in association with them. It is recommended that further survey coverage be conducted with the magnetometer, gravity profiles be run in select areas, and that areas to the east with coincident geochemical and geophysical anomalies be drilled by the rotary method now being used by Dynasty.

The DEA North Anomaly shows no extensive evidence of surface mineralization, but is in contact with the favourable dioritic intrusives found in the Vangorda-Swim area. The actual anomaly is most probably due to greenstone with high mafic content.

Trenches dug by other parties failed to show any significant mineralization within the confines of the actual anomaly, its sharpness signifies either a causative structure close to surface or a fault contact zone. It is therefore recommended that the claims be dropped in this vicinity.

**DEA Northeast Anomaly.** The DEA Northeast Anomaly could be caused by concentrations of magnetic minerals in the large accumulations of drainage silts within the area.

A fan shaped geochemical anomaly (see geochemical report) reflects the migration and accumulation of ions in the area of the magnetometer.

In view of the extreme local extent of the magnetic anomaly it is recommended that further investigations in this area not be considered.

Approved *[Signature]*

**REFERENCES USED**

**GEOLOGY AND MINERAL DEPOSITS OF THE VANDORBA DISTRICT, CENTRAL YUKON.**  
By J.F. Fairley, 1965. A private report to Dynasty Explorations Limited.

**GEOCHEMICAL SOIL SAMPLING SURVEY, of DY(SE) and DEA CLAIM GROUPS.**  
A private report for Dynasty Explorations Limited by J.S. Brock (1965).

**GEOPHYSICAL INVESTIGATIONS BY MAGNETIC METHODS ON THE DY(NW) CLAIM GROUP.** A private report for Dynasty Explorations Limited by J.S. Brock (1965).

# DYNASTY EXPLORATIONS LIMITED

(N. P. L.)


328 MARINE BUILDING  
355 BURRARD STREET  
VANCOUVER 1, B. C.


**AFFIDAVIT Supporting Statement of Costs  
Dea and Dy (SE) Mineral Claim Group  
Magnetometer Survey**

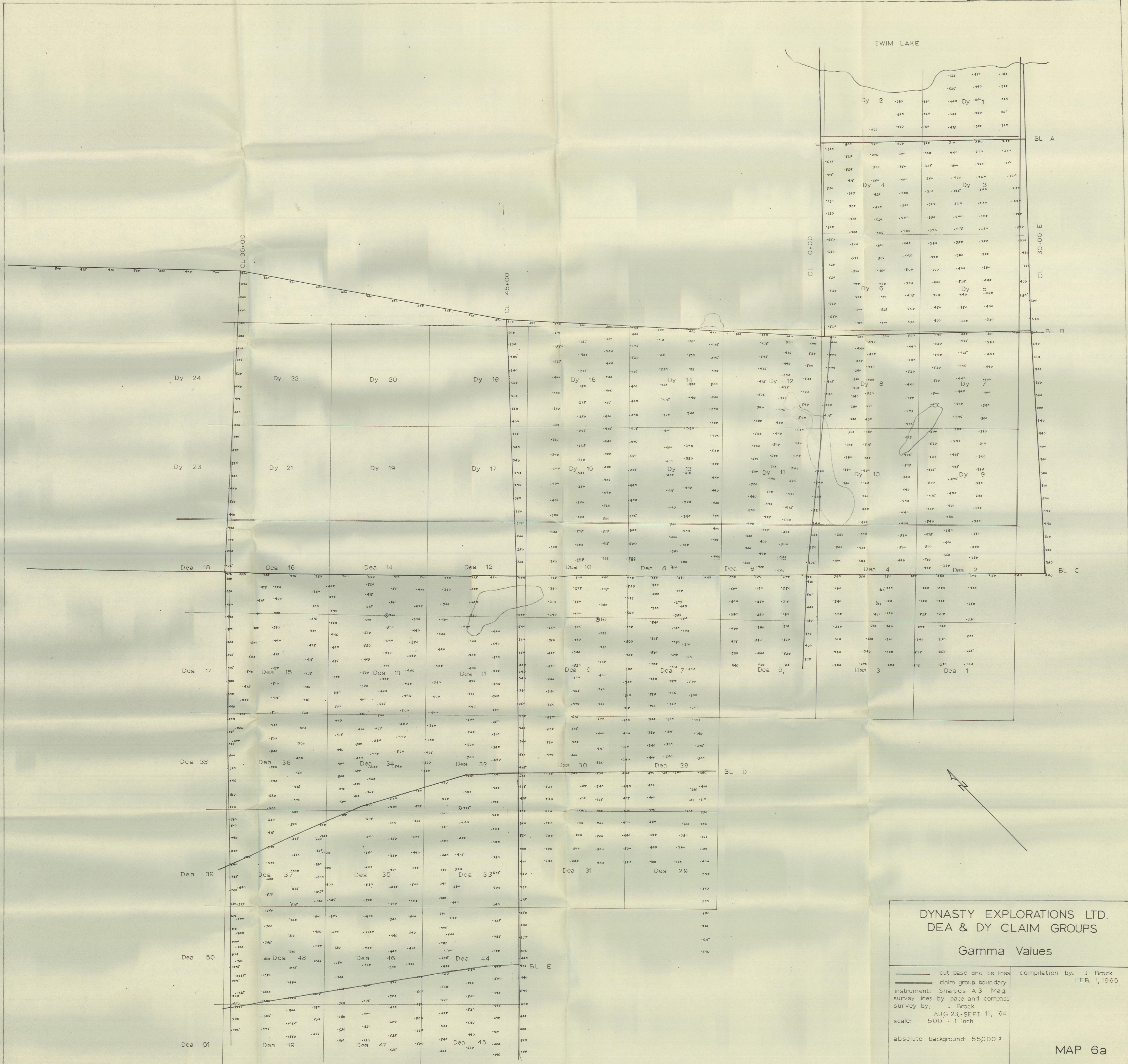
I, John S. Brock, of West Vancouver, British Columbia, have compiled the statement of costs (Magnetometer Survey, Dea and Dy (SE) Claim Group).

I make oath and say that to the best of my knowledge and belief, the statement of costs as presented in this report, is true and an accurate representation of expenditure to be applied for assessment work on the Dea and Dy (SE) mineral claims.

  
\_\_\_\_\_  
John S. Brock

  
\_\_\_\_\_  
A commissioner for taking  
affidavits, in and for the  
Yukon Territory

  
\_\_\_\_\_  
Witness (signed in presence  
of commissioner of oaths)



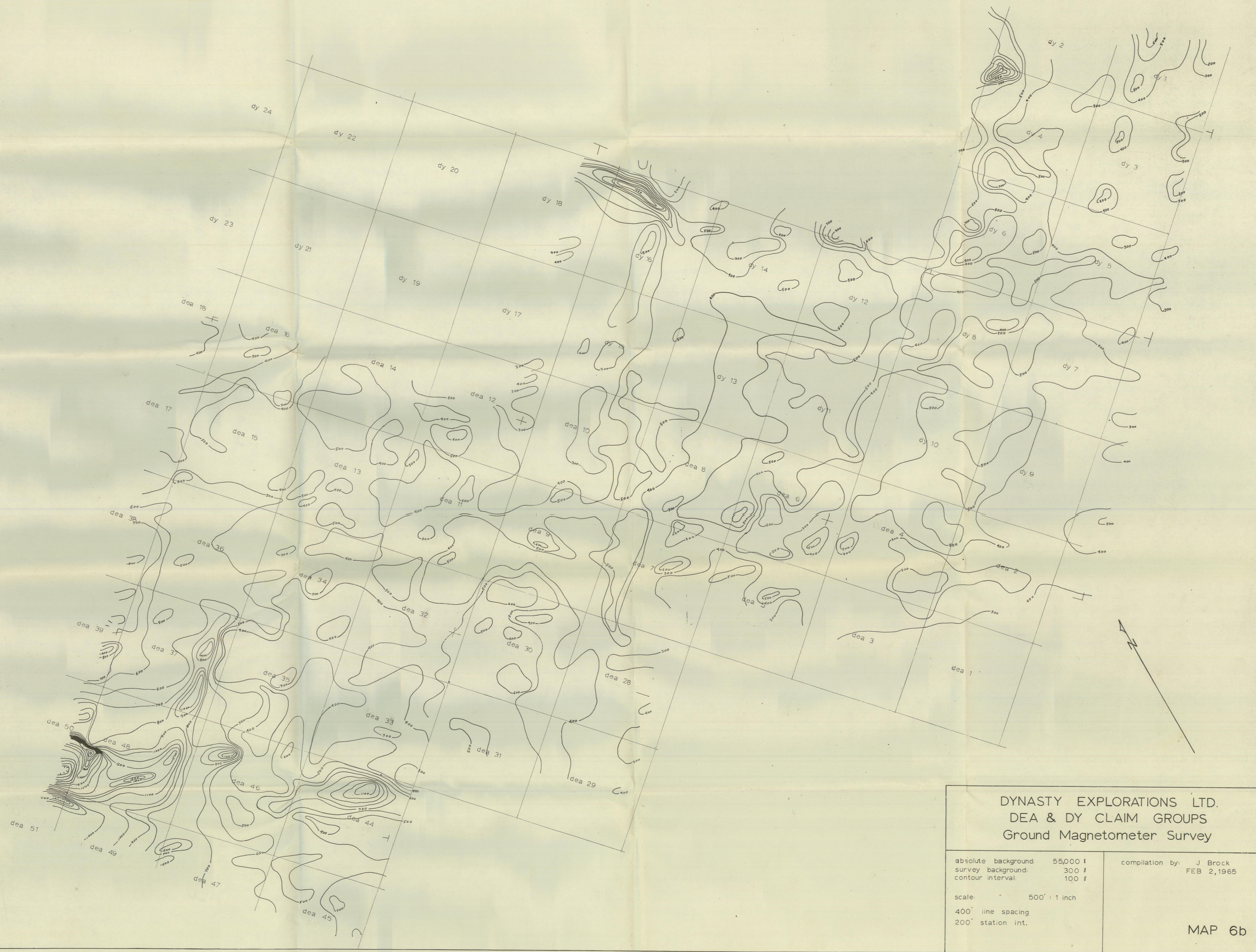
SWIM LAKE

DYNASTY EXPLORATIONS LTD.  
DEA & DY CLAIM GROUPS

Gamma Values

— cut base and tie lines  
 — claim group boundary  
 instrument: Sharpes A3 Mag.  
 survey lines by pace and compass  
 survey by: J Brock  
 AUG 23-SEPT. 11, '64  
 scale: 500' : 1 inch  
 absolute background: 55,000 γ

compilation by: J Brock  
 FEB. 1, 1965



DYNASTY EXPLORATIONS LTD.  
 DEA & DY CLAIM GROUPS  
 Ground Magnetometer Survey

absolute background: 55,000 f  
 survey background: 300 f  
 contour interval: 100 f

scale: 500' : 1 inch  
 400' line spacing  
 200' station int.

compilation by: J Brock  
 FEB 2, 1965