GEOPHYSICAL INVESTIGATIONS

BY MAGNETIC METHODS

BEA CLAIM GROUP

Location 132° 55' W long.
62° 14' N lat.

Reference Claim Map 105 K2

Whitehorse Mining Division

Swim Lakes Area, Y. T.

By

John S. Brock

May 1965

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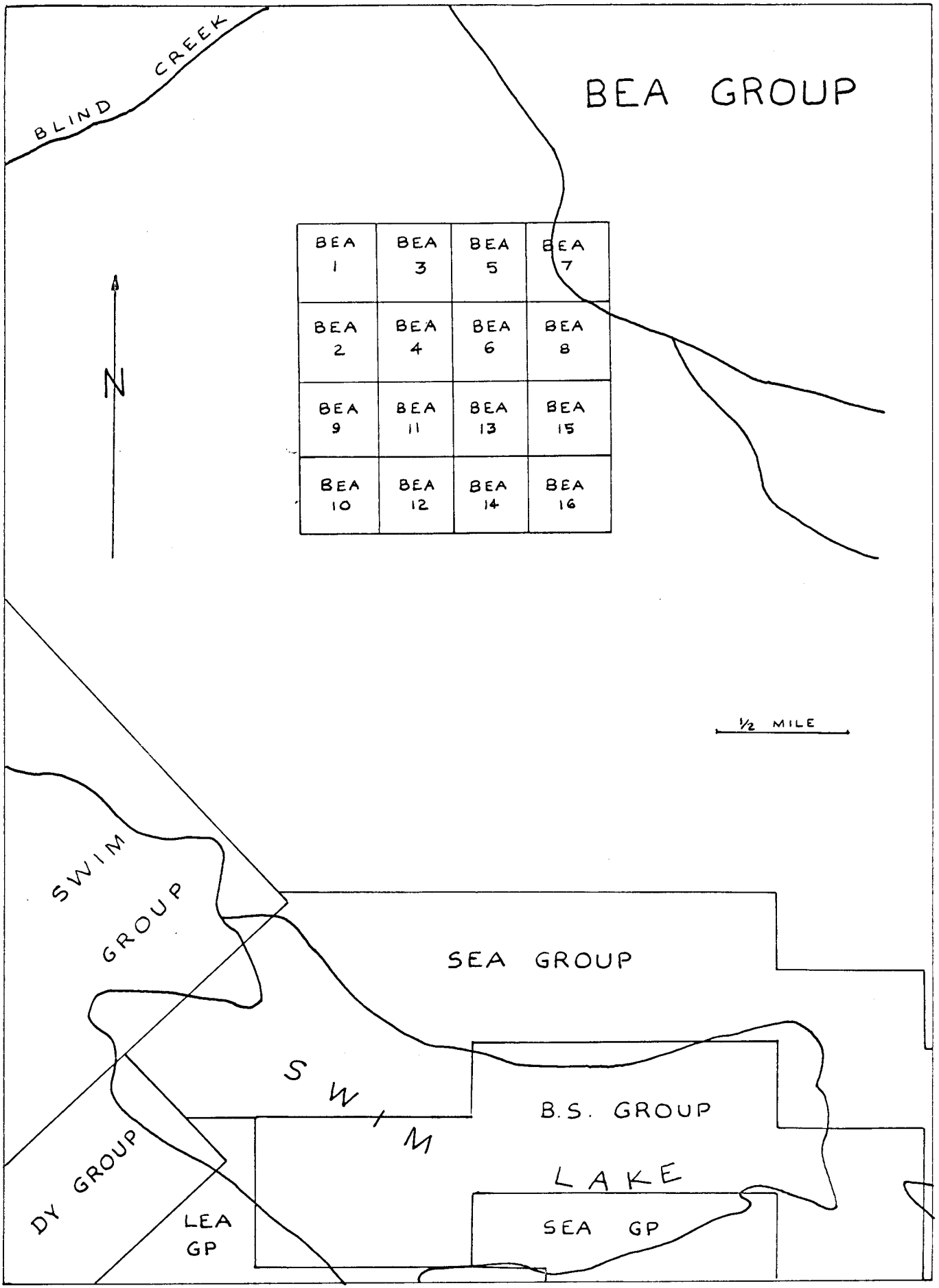
Table of Contents



KEY MAP Bea Claim Group

INTRODUCTION

General

Dynasty Exploration Limited staked the Bea claim group in April, 1964. During the month of August 1964 a ground magnetometer survey was carried out by Dynasty Explorations in order to determine the location and magnitude of any anomalous magnetic area. A Sharpe A-3 magnetometer was employed, a hand-held magnetometer designed primarily for reconnaissance and mining exploration surveys. The instrument is capable of measuring the vertical component of the earth's magnetic field to an accuracy of approximately 25 gammas per scale division. The actual survey was conducted by Andrew Harman with subsequent interpretation by John Brock, both employees of Dynasty Explorations.

Location and Access

The Bea claim group is located in the Whitehorse Mining Division approximately one mile north of Swim Lake. The Swim Lake area lies some seven miles east of the Kerr-Addison Vangorda property. The claims are at an elevation of approximately 4000 feet and lie on the north-facing slope of a prominent hill between the north side of Swim Lake and Blind Creek. The surrounding hills are gently rounded and in general burned over, with numerous swampy areas covering sections of flat relief. The vegetation is comprised mainly of dwarf-birch which predominates areas of burn.

Aircraft equipped with floats may land at Swim Lake, 130 air miles northeast of Whitehorse. A trail from the northwestern shore of Swim Lake leads to the Bea claim group.

GEOLOGY

Lack of outcrop over the Bea claims prevented a detailed geologic investigation of the property. It is suggested that the underlying rock is probably limy sericite schist with a possibility of relatively thin overlying greenstone dipping to the north. Reference should be made to a private report, 'Geology and Mineral Deposits of the Vangorda District', submitted to Dynasty Explorations by J.F. Fairley in 1964.

METHOD OF SURVEY

Grid System

Base and tie lines were cut over the Bea claim group by contracted line cutters from Ross River. Survey control was maintained by picket and chain methods with periodic checks for line by means of a Brunton compass. Three base lines were cut in a north-south direction across the property, two tie lines at the north and south boundaries of the claim group were also cut, a total of 30,000 feet of line.

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

Magnetometer Survey

Diurnal variation and drift were eliminated as much as possible by the following method. Prior to actual survey, readings were taken at all 400-foot stations on the base lines, at the same time diurnal variations were recorded by a second and stationary magnetometer. Each base station value was then corrected for diurnal variation as recorded by the stationary magnetometer while the base lines were being read. With accurately established base values, the survey was then carried out with diurnal control maintained by checking into base stations at the terminal points of each cross line.

TREATMENT OF DATA

All field readings were recorded directly as read from the vernier scale of the magnetometer. Conversion to gamma values was carried out by means of a 'vernier division-gamma conversion curve', supplied by Sharpe Instruments for use with the particular magnetometer employed during the survey. Values were then corrected for diurnal variation by the method previously mentioned. An absolute background of 50,000 gammas was adopted.

After data reductions were completed, all gamma values were plotted on a base map (see appendix) in accordance with the station at which they were read. The results were then contoured using an interval of 100 gammas.

INTERPRETATION OF RESULTS

The iso-magnetic contour map appears to reveal the geologically assumed limy sediment-greenstone contact. Lower magnetic values are obtained over the southern portion of the claim group and probably reflect a north dipping extension of limy sediments which outcrop south of the property. The assumed geologic contact strikes magnetically east-west across the central portion of the claims and is bounded to the north by an area of higher magnetic intensity representing the greenstone. The greenstone dips to the north, overlying the sediments which geologically and magnetically appear to be correctly positioned. Greenstone striking west with a north dip, outcrops about 1½ miles to the north-northeast of the Bea claims.

CONCLUSIONS AND RECOMMENDATIONS

Magnetically there appears to be no evidence of sulphide mineralization of magnetic content either in the limy sediments or the greenstone contact as interpreted from this survey. The higher magnetic relief over the assumed contact may be explained by a susceptibility change in this area as well as the northerly dipping greenstone formation.

It is recommended that no further geophysical work be done on the Bea claim group in view of this interpretation.

Respectfully submitted,

John S. Brock.

Approved

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BY MAGNETIC METHODS

Bea Claim Group

APPENDIX

APPENDIX 1

Personnel

Andrew Harman Salmo, British Columbia	Magnetometer Operator
Scott Cameron Whitehorse, Y.T.	Operator's Assistant
John Ollie	Linecutter
George Steriah	Linecutter
Robert Etsel	Linecutter
William Peter All of Ross River, Y.T.	Linecutter
John Brock West Vancouver, B.C.	Report
Gordon Davis Vancouver, B.C.	Field Supervision

Summary of Costs

Linecutting	a)	Footage 30,000 feet	
	b)	Contract $7/1000 feet	
		Cost	210.00
	c)	Travel time 4 men @ $18/day for 2 days	144.00
			354.00
Magnetometer Survey	a)	Operator $14.50/day	
	b)	Time 8 days	
		Cost	116.00
	c)	Camp Cost $6/day	48.00
	d)	Supervision	50.00
	e)	Report	100.00
			314.00
Total cost geophysical survey:			$668.00

APPENDIX 2

AFFIDAVIT supporting statement of costs, geophysical survey, Bea claim group.

I, John S. Brock, of West Vancouver, British Columbia, have compiled the statement of costs, Geophysical Investigations by Magnetic Methods, Bea 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 both true and an accurate representation of expenditure to be applied as assessment work on the Bea mineral claim group.

John Brock
John S. Brock

Alan Kuhn
A Commissioner for taking affidavits, in and for the Yukon Territory.

Witness (signed in presence of Commissioner for taking oaths)

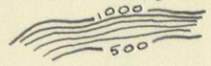
Sworn and subscribed to this day, 20 May 1965
at Cub Lake, Swim Lakes area, Y.T.

BEA GROUP

MAGNETOMETER SURVEY

ABSOLUTE BACKGROUND 50,000 GAMMAS

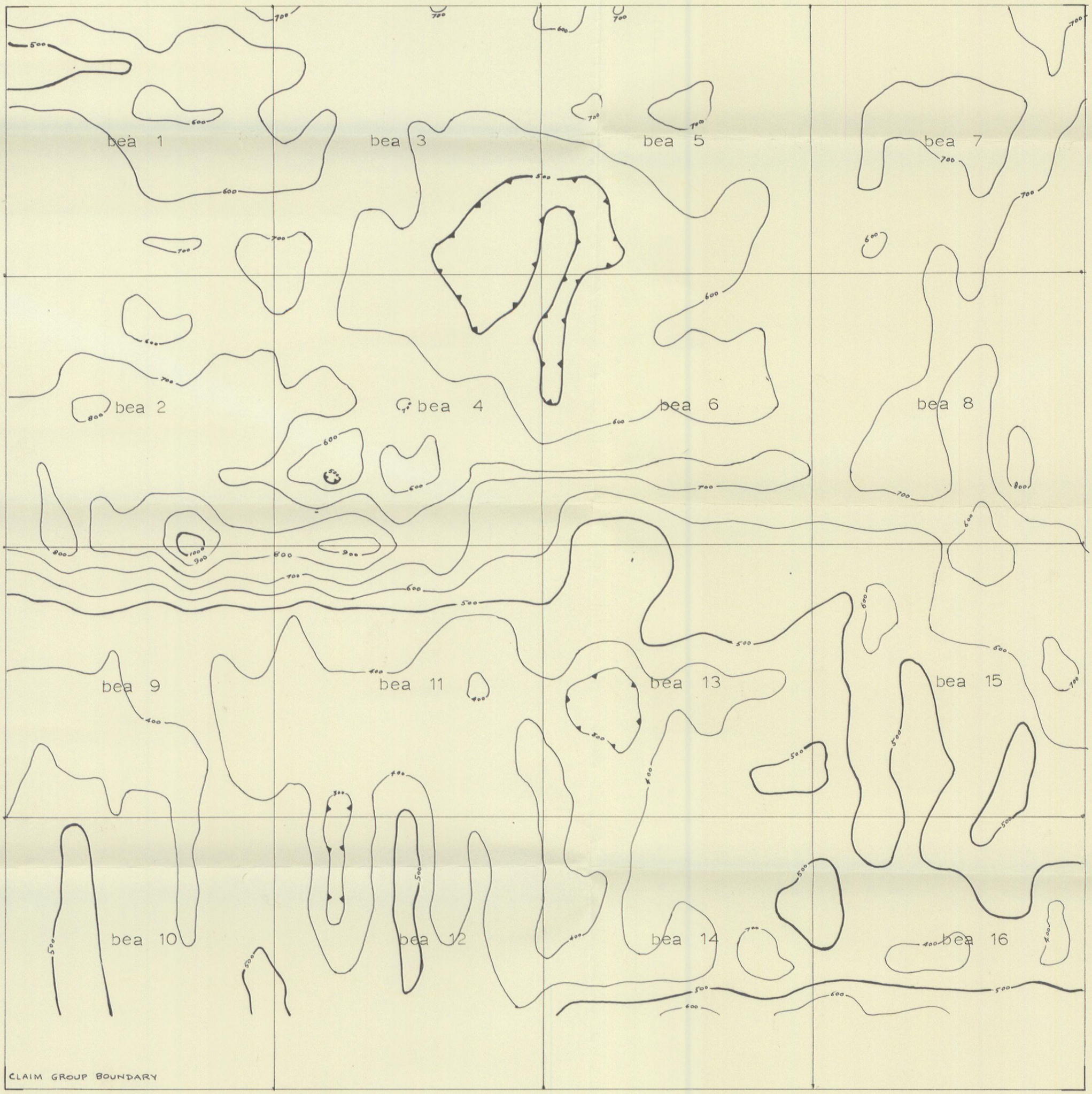
CONTOUR INTERVAL 100 GAMMAS



COUNTOURED BY: R.E.G. DAVIS

JAN. 1965

SCALE 0 500 1000 1500 FEET



BEA GROUP

MAGNETOMER SURVEY

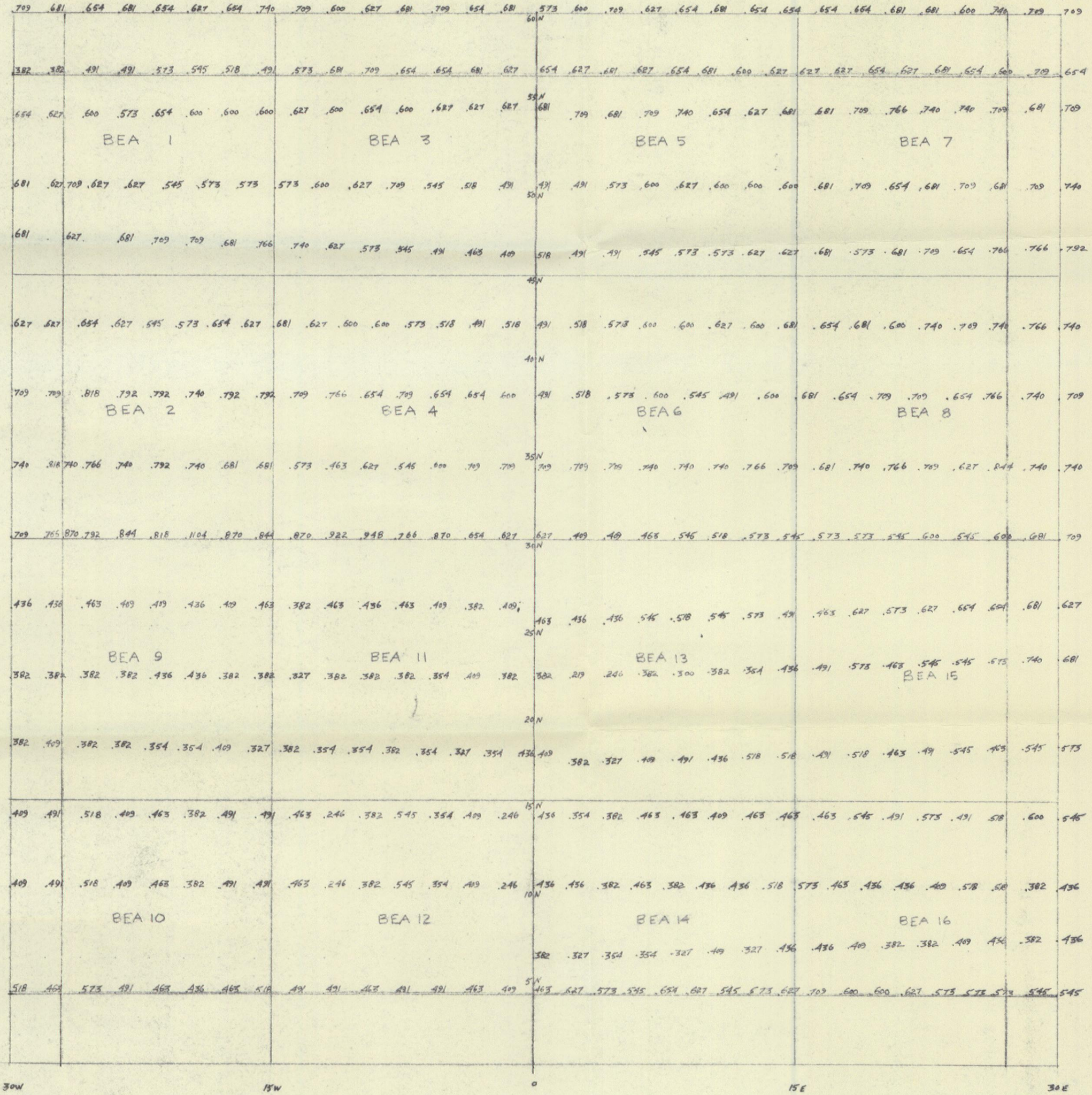
GAMMA VALUES

SCALE 0 500 1000 1500 FEET

ABSOLUTE BACKGROUND 50,000 GAMMAS

SURVEY BY: A. HARMAN
S. CAMERON
M. ACKLACK

AUGUST, 1964



A. HARMAN, R.E.G. DAVIS
JAN, 1965