

1799

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G E O P H Y S I C A L
M A G N E T O M E T E R S U R V E Y
V A L # 1 & # 2 G R O U P S
N I C O L A M . D .

M E R R I T T , B . C .
50' 51" - 120' S.W.
for

V A N G U A R D E X P L O R A T I O N S L T D .
24/8/68-18/9/68 A . R . A l l e n , P . E n g .

November 30, 1968

ALLEN GEOLOGICAL ENGINEERING LTD.
507 - 789 West Pender Street
VANCOUVER 1, B. C.

C O N T E N T S

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27765E 112.00

ALFRED R. ALLEN

EXHIBIT "A"

November 30th, 1968

GEOPHYSICAL SURVEY

Magnetometer survey over grids on VAL #1 and VAL #2 groups of mineral claims which include Val #5--#16 inclusive (Record Nos. 36298B to 36309B inclusive) and Val #17--#26 inclusive (Record Nos. 36310B to 36319B inclusive), respectively and are situated 2½ - 5 miles north of Merritt, Nicola Mining Division, British Columbia.

Alfred R. Allen, Consulting Engineer, Vancouver, B. C.
Tom Thomas, Operator, Langley, B. C.
John Wallace, Instrumentman, Vancouver, B. C.
Thomas Graham, Assistant, Princeton, B. C.
Joe Hunyadi, Assistant, Vancouver, B. C.
Terry Thomas, Assistant, Langley, B. C.
Randolph Thomas, Assistant, Langley, B. C.

A. R. Allen, Aug. 24 - 25	⊙ 100.00	\$200.00
Tom Thomas, Aug. 24 - 26; Sept. 5 - 17	⊙ 50.00	\$800.00
J. Wallace, Aug. 24 - 31	⊙ 40.00	\$320.00
J. Hunyadi, Aug. 28 - 31; Sept. 1 - 14	⊙ 30.00	\$540.00
T. Graham, Sept. 10 - 13	⊙ 30.00	\$120.00
Terry Thomas, Aug. 27 - 31; Sept. 1 - 18	⊙ 30.00	\$690.00
R. Thomas, Aug. 24 - 30	⊙ 30.00	\$180.00
		<u>\$2850.00</u>

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 19
day of February 1969, A.D.

Alfred R. Allen

John L. Turner
Commissioner for taking Affidavits within British Columbia or
Notary Public in and for the Province of British Columbia.
Submitting Recorder

Geophysical Survey, Val #1 & #2 Group,
Nicola M.D.
Aug. 24 - Sept. 18, 1968

GEOPHYSICAL OPERATOR.

T. Thomas, Langley B.C.

Twelve years field training by Alfred R. Allen, P. Eng.
Worked under direction and supervision of Alfred R. Allen.

GEOPHYSICAL REPORT
MAGNETOMETER SURVEY
VAL #1 & #2 GROUPS

NICOLA M.D.

MERRITT, B. C.

INTRODUCTION

A magnetometer survey was conducted on a grid pattern over the Val #1 & #2 groups of mineral claims from August 24th, 1968 to September 18th, 1968.

The field party consisted of A. R. Allen, T. Thomas, T. K. Thomas, R. Thomas, T. Graham, J. Hunyadi, and J. Wallace.

Headquarters and operations base was set up in Merritt. For transportation between base and property a 4-wheel drive vehicle was used. Field equipment consisted of a Sabre Vertical Component Fluxgate Magnetometer, transit and chain and the necessary camp and field office equipment.

The object of the survey was to detect and map any deviations in the magnetic field over the area of the two groups of claims.

LOCATION AND ACCESSIBILITY

The two groups of claims are located 2½ to 4 miles north of the town of Merritt, B. C.

Merritt is 225 miles from Vancouver. Access is 11 miles by road from Merritt. The main highway is followed from Merritt westwards for four miles to the Mamit Lake cut-off, then 1½ miles north on the Guichon Creek road toward Savona. From the turn off point by secondary road along the north side of Jesse Creek 5½ miles to the property.

The claims are directly north of Merritt and 1500 to 2000 feet higher in elevation.

PROPERTY

The property is composed of two groups of mineral claims.

GROUP #1	VAL #5 to #16 inclusive Record Nos. 36298B to 36309B incl.
GROUP #2	VAL #17 to #26 inclusive Record Nos. 36310B to 36319B incl.

These 22 claims were staked by T. Thomas in accordance with the requirements of the B. C. Government regulations and recorded February 22nd, 1968.

TOPOGRAPHY

The two groups of claims are on the upland plateau, 1500 to 2000 feet higher than Merritt and the Nicola Valley. The plateau is in a northerly direction from Merritt.

The hilltops of the upland plateau are rounded and drift covered with scattered outcrops close to the drop-off into the valleys and there are scattered stands of light timber.

The main drainage is Jesse Creek, which flows southwesterly into the Nicola River about a mile east from the railway station of Coyle.

GEOLOGY

The two groups of claims lie on both sides of the contact

between the Guichon Creek batholith and the Upper Triassic Nicola Group. Locally both the igneous and volcanic sedimentary rocks are overlain by small areas of Tertiary sediments of the Coldwater formation. The Guichon Creek batholith outcrops for a distance of 30 miles north from the property, and it is roughly elliptical being about 16 miles across. It is essentially composed of granodiorite, but over fairly large areas there are younger intrusives, mainly of quartz and feldspar porphyries, in the form of dykes and in places stocks. Also there are zones of explosion breccia. It is with these younger intrusives and explosive breccias that the porphyry copper deposits of the region are associated.

The Nicola Group in the Merritt area is made up chiefly of andesitic rocks, but there are sizeable zones of sediments. Across the Guichon Creek Valley from the property, the Craigmont Mine lies near the Guichon Creek batholith, within limestone strata contorted into isoclinal folds.

On the Val #5 to #8 claims there are exposures of oxidized iron and copper mineralization. Little or no exploratory work has been carried out on the properties.

Much of the claims area is covered with overburden but this mantle is light enough not to hinder geophysical and geochemical prospecting methods.

MAGNETOMETER SURVEY

The magnetometer survey was conducted over a surveyed grid. A base-line, surveyed by chain and transit, was established on both groups. From stations along the base line, at 300-foot spacings, parallel grid lines were extended across the areas of the two groups. Stations were located at 100 foot intervals along each parallel grid line. All stations were numbered and magnetometer readings were taken at each station and recorded in a field notebook. Diurnal corrections were made in accordance with readings taken at designated points twice daily.

The magnetic field intensity, in gammas, recorded at each station, is shown on the maps accompanying this report.

SURVEY RESULTS

The two groups of mineral claims are located such that the Vall #1 group is underlain by the Nicola Series and

the Val #2 group is underlain by Guichon Creek igneous rocks.

There is a magnetic high extending northerly across the Val 5 and 6 claims. Magnetic intensity is 5,000 to 6,000 gammas above normal for the area. The core of this anomalous zone is 500 feet long and 180 feet wide, lying on the line between Val 5 and Val 6 claims. The top magnetometer reading is 27,160 gammas, and intensity within the anomalous area is all above the 24,000 gamma level. Within the area of the two claims, Val 5 and 6, there are seven anomalous areas of various dimensions above the 24,000 gamma level. On the Val 14 there is one small anomalous zone which appears to extend several hundred feet towards the north boundary of the claims area.

In summary, the one pronounced area of interest, so far as the results of the magnetometer survey is concerned, is a wide band trending a few degrees east of north across the Val 5 and 6 claims.

SUMMARY AND CONCLUSIONS

The Val 1 and Val 2 groups of claims were so located as to lie on opposite sides of the contact between the Guichon Creek batholith and the volcanic Upper Triassic rocks of the Nicola

Series. This is considered a geologically favourable location in the Merritt area, since the Craigmont mine is so located. Also, since the presence of iron mineralization in the area may signify associated copper, the detection of anomalous zones by means of a magnetometer survey are a first requirement for the thorough investigation of the property.

The presence of iron mineralization on the property is most strongly indicated by the survey over length of 3,000 feet on the Val 1 group, and it is therefore concluded that this part of the property at least should be further investigated for the possible occurrence of copper mineralization.

RECOMMENDATIONS

It is herewith recommended that, because of the presence of anomalous conditions signifying iron mineralization on two claims, the property be further investigated by other geophysical methods.

Respectfully submitted,

Vancouver, B. C.
November 30th, 1968

per Allen B. Allen P. Eng.
ALLEN GEOLOGICAL ENGINEERING LTD.

REFERENCES

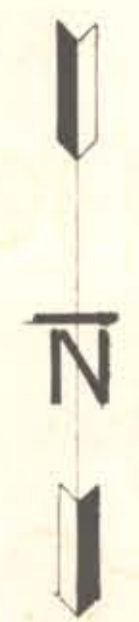
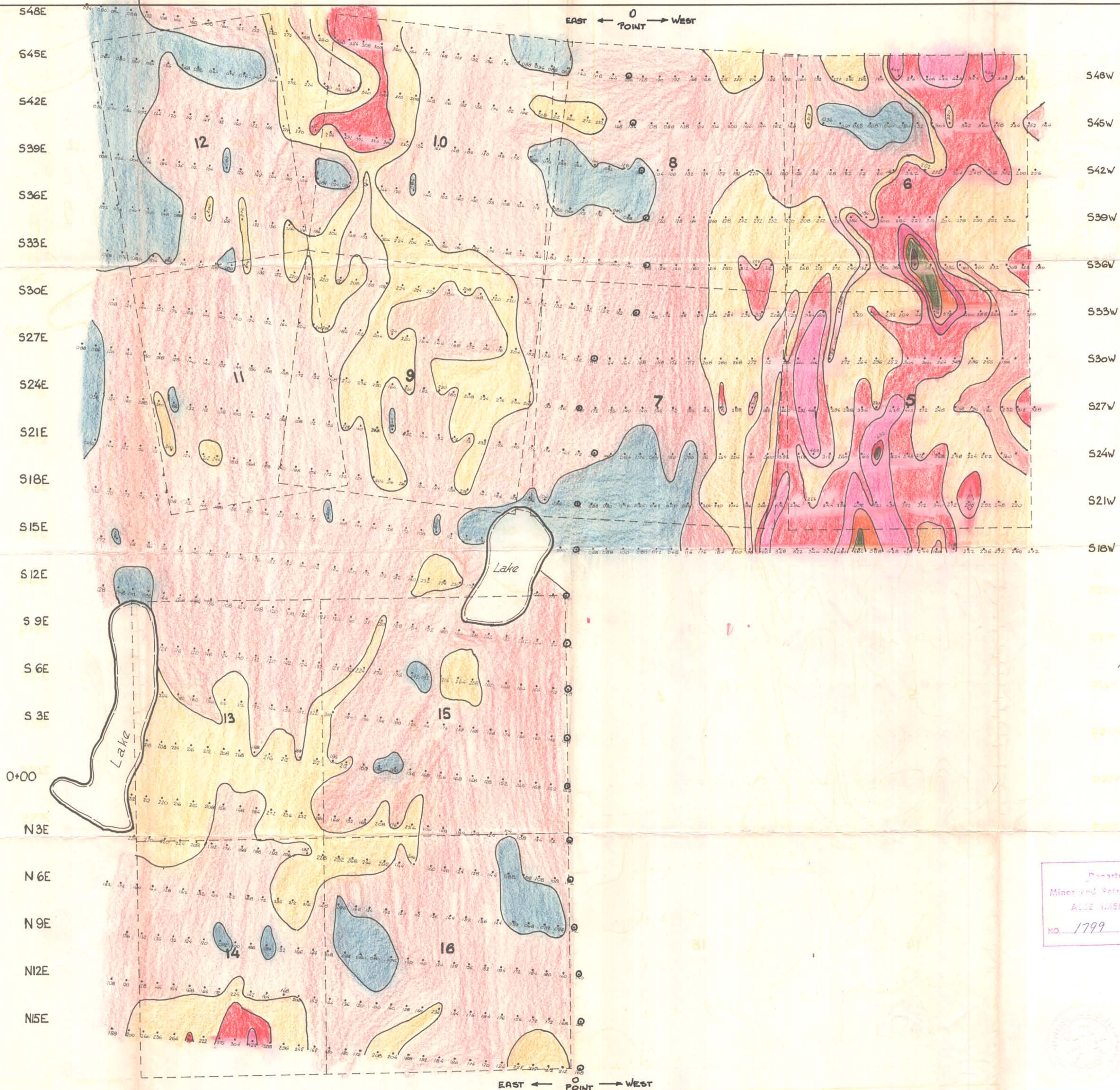
Cockfield, W. E. - G.Sc. ----- Mem. 249

Duffell and McTaggart, - G.Sc. - Mem. 262

B. C. Minister of Mines Reports

Staff and Technical Reports -- The Craigmont Mine

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NOTE: MAP READINGS IN TENS OF GAMMAS.
 RELATIVE LEVEL: 23000 GAMMAS.
 (EXAMPLE: 344 = 23440 GAMMAS.)

Department of
 Mines and Petroleum Resources
 ALLEN REPORT
 NO. 1799 MAP 1

1799

27000-28000 GAMMAS
26000-27000 GAMMAS
25000-26000 GAMMAS
24000-25000 GAMMAS
23000-24000 GAMMAS
22000-23000 GAMMAS
21000-22000 GAMMAS
20000-21000 GAMMAS

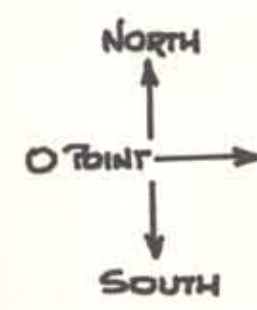
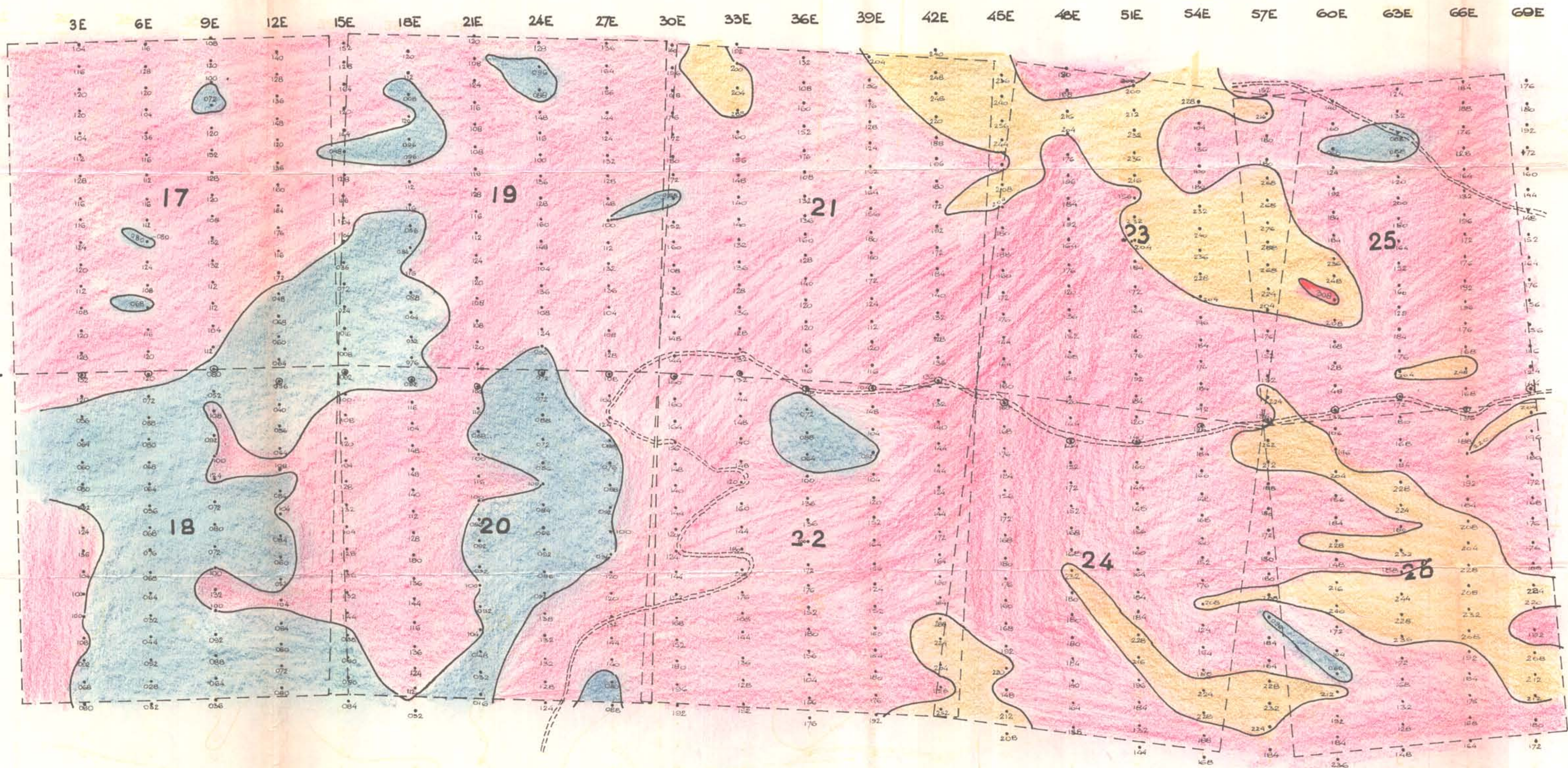
VANGUARD EXPLORATIONS LTD.

MAGNETOMETER SURVEY
 VAL # 1 GROUP

SCALE: 1" = 500'

DRAWN BY A. FUSTOS	DATE Oct. 1968	ALLEN GEOLOGICAL ENGINEERING LTD. <i>A. R. Allen</i>
CHECKED BY A. R. ALLEN	DWG. No.	

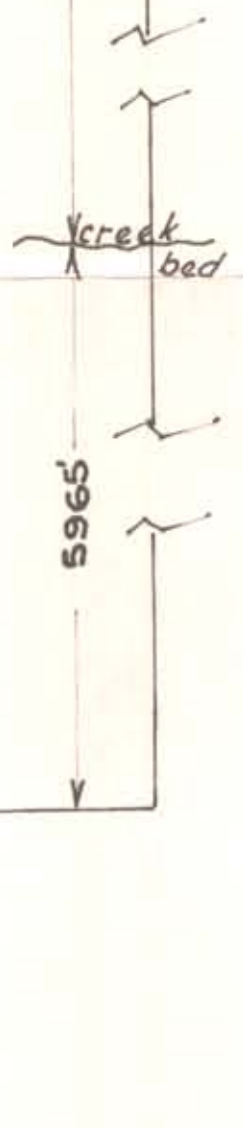
UNITED FILIPINOS
 NATIONAL UNIVERSITY



I.R.#1

3170

5965



NOTE: MAP READINGS IN TERMS OF GAMMAS.
 RELATIVE 0 LEVEL: 20000 GAMMAS.
 (EXAMPLE: 344 = 23440 GAMMAS.)

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 1799 MAP 2

1799

	25000 24000 GAMMAS
	22000 23000 GAMMAS
	21000 22000 GAMMAS
	20000 21000 GAMMAS

VANGUARD EXPLORATIONS LTD.

MAGNETOMETER SURVEY
VAL #2 GROUP

SCALE: 1" = 200'

DRAWN BY R. FUSTOS	DATE Oct. 1968	ALLEN GEOLOGICAL ENGINEERING LTD.
CHECKED BY R. R. ALLEN	DWG. No.	<i>R. R. Allen</i>