



41109SE0015 001201 CRERAR

010

ASPI MINES LIMITED
CRERAR TOWNSHIP, ONTARIO
MAGNETOMETER SURVEY

Geophysical (mag)

Willowdale, Ontario
November 18, 1966

H. Grant Harper, F.G.A.C., P.Eng.
Economic Geologist

AZEN MINES LIMITED
CRERAR TOWNSHIP, ONTARIO
MAGNETOMETER SURVEY

INTRODUCTION

A magnetometer survey was carried out on the Crerar Township property of Azen Mines Limited. The purpose of the survey was to locate zones of above normal magnetism, for experience in the area shows that magnetic anomalies are reflections of either or both of the following features:

- a - areas of gabbro and related intrusives, and
- b - sulphide mineralization with which copper and nickel values are associated.

PROPERTY AND LOCATION

The area covered by the survey includes portions of lots 10 and 11, concessions IV and V, Crerar Township, Temiskaming Mining Division, Ontario. The following ten unpatented mining claims were surveyed:

T54990 to T54999 inclusive.

GEOLOGY

The geology of the area and the claims has not been mapped in detail. The geological information available is extrapolated from the Tomrose and associated claims lying to the east

2

which were explored by Tomrose Mines Limited and Falconbridge Nickel Mines Limited.

The Northern and Eastern claims are characterized by a complex basic intrusive mass which includes such related rock types as gabbro, norite, diorite, and anorthosite. Enclosed within the complex intrusive are zones of alteration, chiefly chloritization, and zones of sulphidization. The zones of sulphidization are sometimes associated with visible grains of magnetite.

On its south side for certain, and possibly elsewhere, the complex basic intrusive is in contact with typical Grenville gneisses and amphibolites.

SURVEY RESULT AND INTERPRETATION

The magnetometer survey was carried out over a grid system of picket lines cut in a north-south direction. The picket line interval was 200 ft. and magnetometer readings were taken every 100 ft. except in areas of strong magnetism where readings were taken every 50 ft. The magnetometer used was a Sharpe A2. The results were plotted as gammas after correction for diurnal variation.

An examination of the magnetometer map shows three distinct anomalies occurring within the four northeast claims. The anomalies have a peak intensity of 10,000 plus gammas as compared to a background intensity of 600 to 800 gammas. All three anomalies extend off the property to the north and east and terminate on the property to the south and west.

There is no doubt that the anomalies are due to basic intrusives and their magnetism is such that a careful examination

3
in the area of the strongest readings should disclose the presence of magnetite. Sulphide minerals may also be present.

CONCLUSIONS AND RECOMMENDATIONS

1. The magnetometer survey indicates that only the four north-east claims are likely to be underlain by the complex basic intrusive known to be a favourable host for copper, nickel, sulphide mineralization.
2. The highest magnetic intensity suggests that the mineral magnetite will be found nearby.
3. The medium intensity areas of magnetism may be due to a lower content of magnetite or to a significant content of pyrrhotite - the sulphide with which nickel is often associated.
4. The anomalous areas warrant prospecting.

My report is respectfully submitted.

Willowdale, Ontario.
November 18, 1966

H. G. Harper.
H. Grant Harper, F.G.A.C., P.Eng.
Economic Geologist

ASSESSMENT DETAILS

SPONSOR Azen Mines Ltd.
LOCATION: Crerar Twp., Temiskaming Mining Division,
 Ontario.
TYPE OF SURVEY: Magnetometer SCALE CONSTANT: 20
INSTRUMENT: Sharpe A2

No. of Stations: 1506. PICKET LINES: 21 miles
 SURVEY LINES: 20 miles

DATE STARTED: Aug. 20, 1966 DATE FINISHED: Nov. 15, 1966

LINE CUTTING:

Jack Leclair	25 days	
Wilfred Moses	<u>25</u> "	50 days

SURVEYING

Jack Leclair	15 days	
Wilfred Moses	<u>5</u> "	<u>20 days</u>

OPERATING MAN DAYS	70 days	
EQUIVALENT 8 HOUR DAYS		105

DRAFTING & TYPING		
H. G. Harper, Joyce Perry		3

CONSULTING		
H. G. Harper		<u>1</u>

TOTAL DAYS		109
		===

W.F. 100-10-21 G

Technician:
Jack Leclair, 684 Frontenac St., Malartic, Quebec

Helper:
Wilfred Moses, 792 Royale St., Malartic, Quebec

Consultant:
H.G. Harper, P.Eng., 314 Hendon Ave., Willowdale, Ontario

Typist:
Joyce Perry, Suite 420, 62 Richmond St.W., Toronto, Ontario.

H. G. Harper

November 18, 1966

H. Grant Harper, F.G.A.C., P.Eng.



ONTARIO
DEPARTMENT OF MINES
Mining Lands Branch

PARLIAMENT BUILDINGS
TORONTO 2, ONTARIO

File: 62.2083

May 18, 1967.



41109SE0015 0012B1 CRERAR

900

Dear Sir:

Subject: Geophysical and Geological Surveys

The assessment work credits as shown on the attached list have been approved as of the above date. Please inform the recorded holder and so indicate on your records.

Yours truly,

FVM/ee
Att.

for R. V. Scott,
Director.

cc: Asan Mines Ltd.,
Dr. J. P. Donovan.

Mr. W. A. Buchan,
Mining Recorder,
Halleybury, Ont.



ONTARIO
DEPARTMENT OF MINES
Mining Lands Branch

PARLIAMENT BUILDINGS
TORONTO 2, ONTARIO

File 63,2083

THE MINING ACT

Assessment Work Credits

Name: AZEN MINES LTD.

Township or Area: CRERAR TWP.

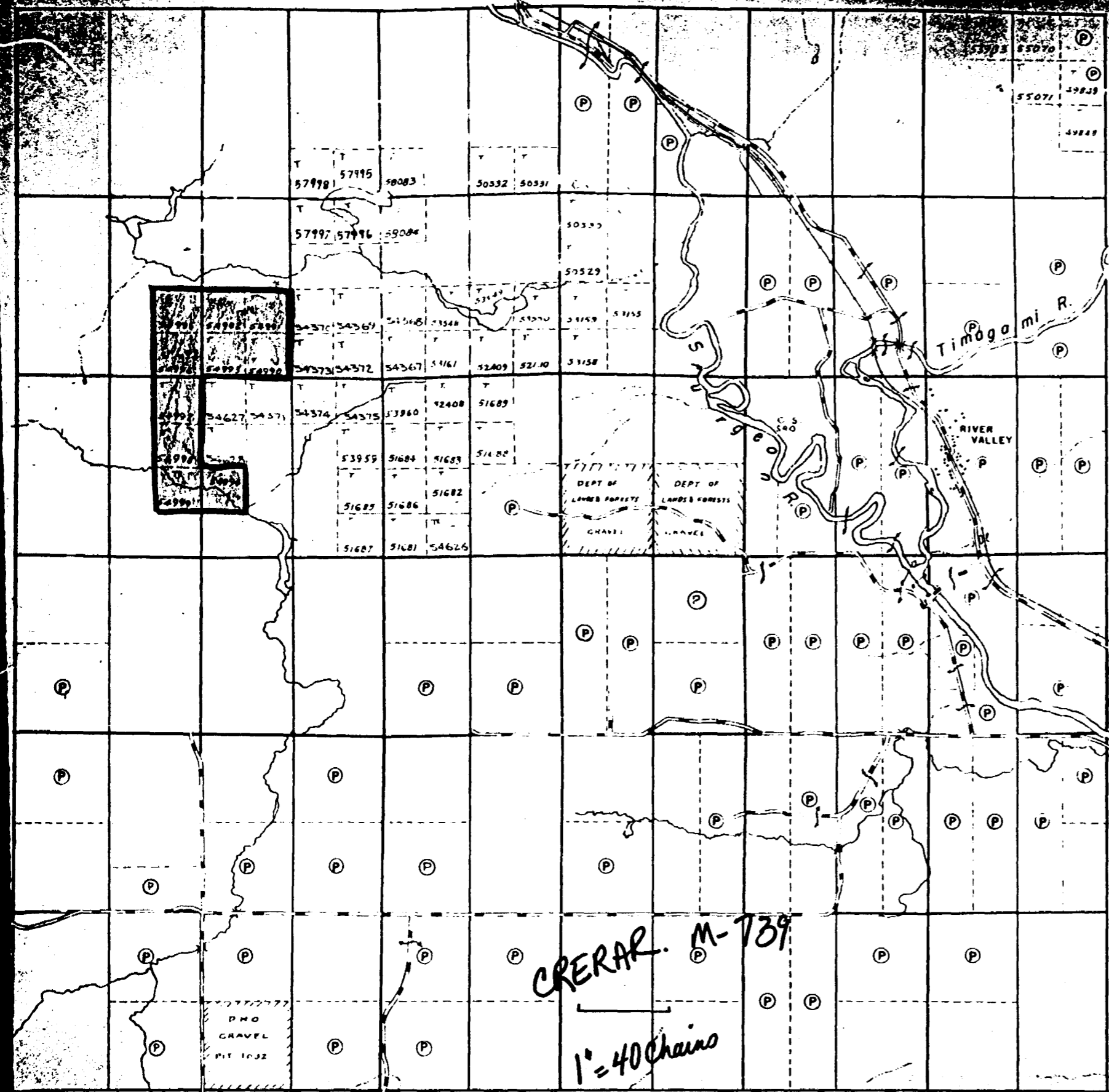
Number of Assessment work days per claim

Geophysical 21.8 Magnetometer

Geological nil

Mining Claims: T 54990 to 54999 inclusive

Dana Twp.



VI

V

IV

III

II

I

Gibbons Twp.

CRERAR. M-139

1" = 40 chains

DNO
GRAVEL
PIT 1032

DEPT OF
LANDS FORESTS
GRAVEL
LAWCE

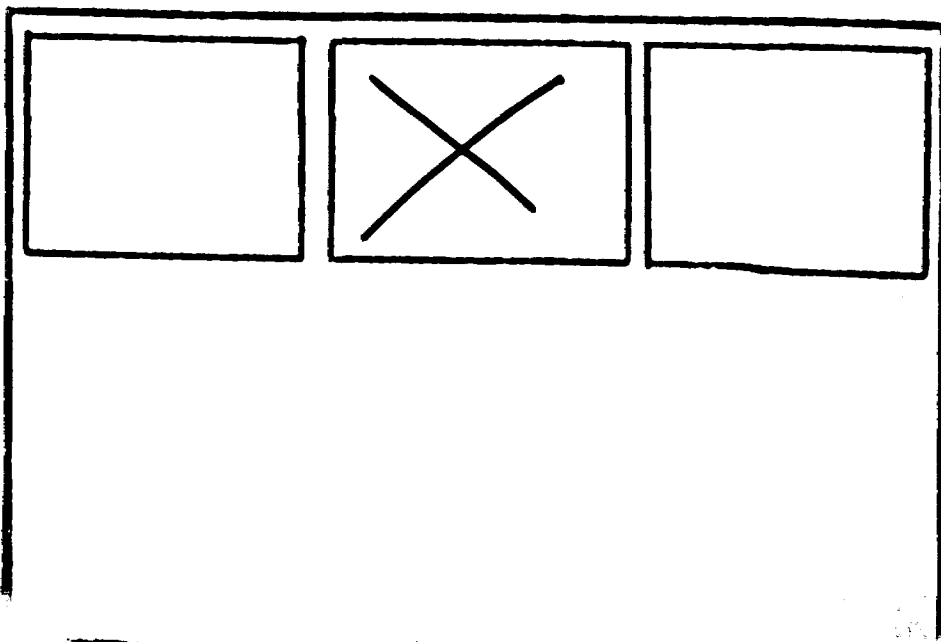
Timoga mi R.
RIVER VALLEY

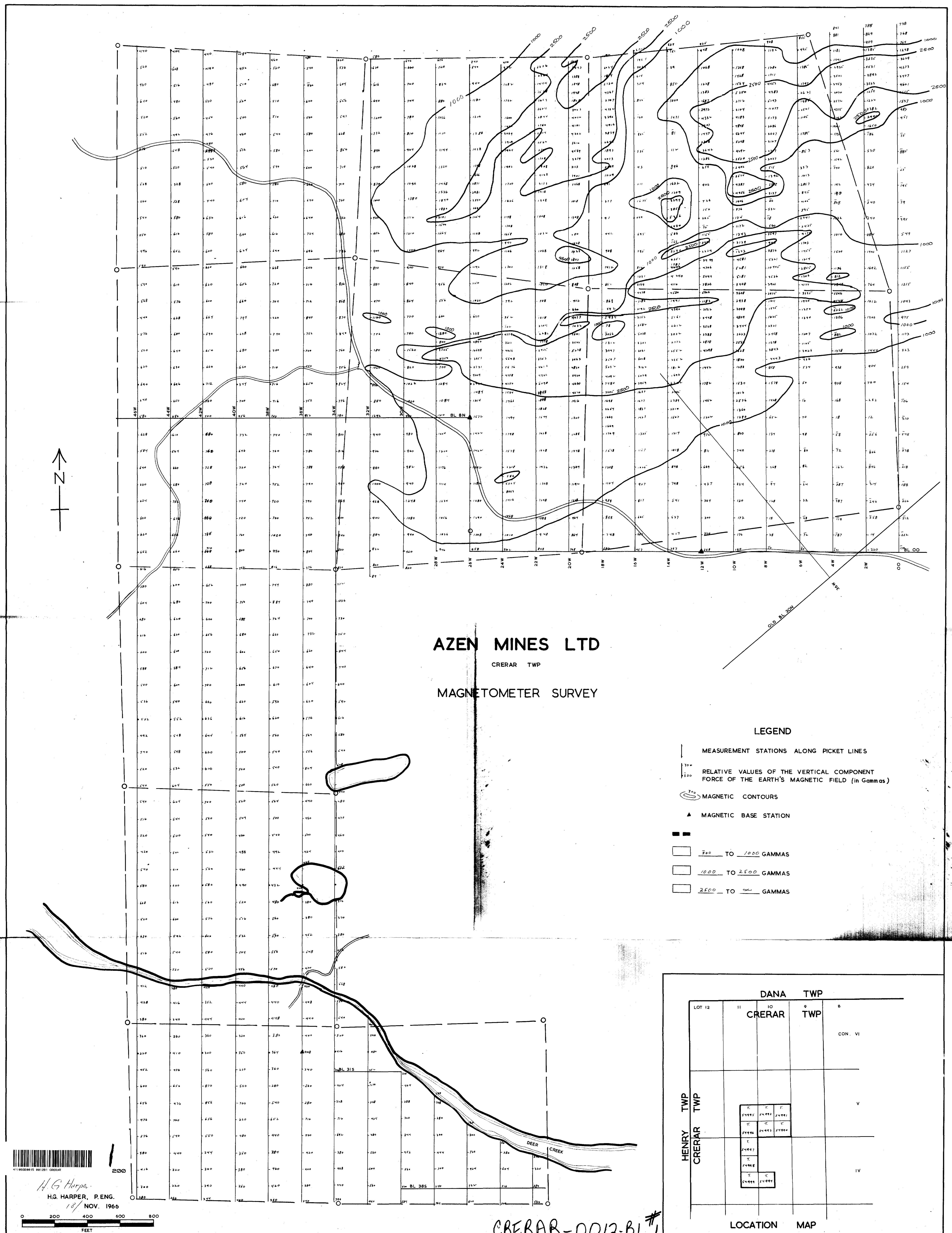
12 11 10 9 8 7 6 5 4 3 2 1

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

CRERAR-0012-B1 #1

LOCATED IN THE MAP
CHANNEL IN THE FOLLOWING
SEQUENCE (X)

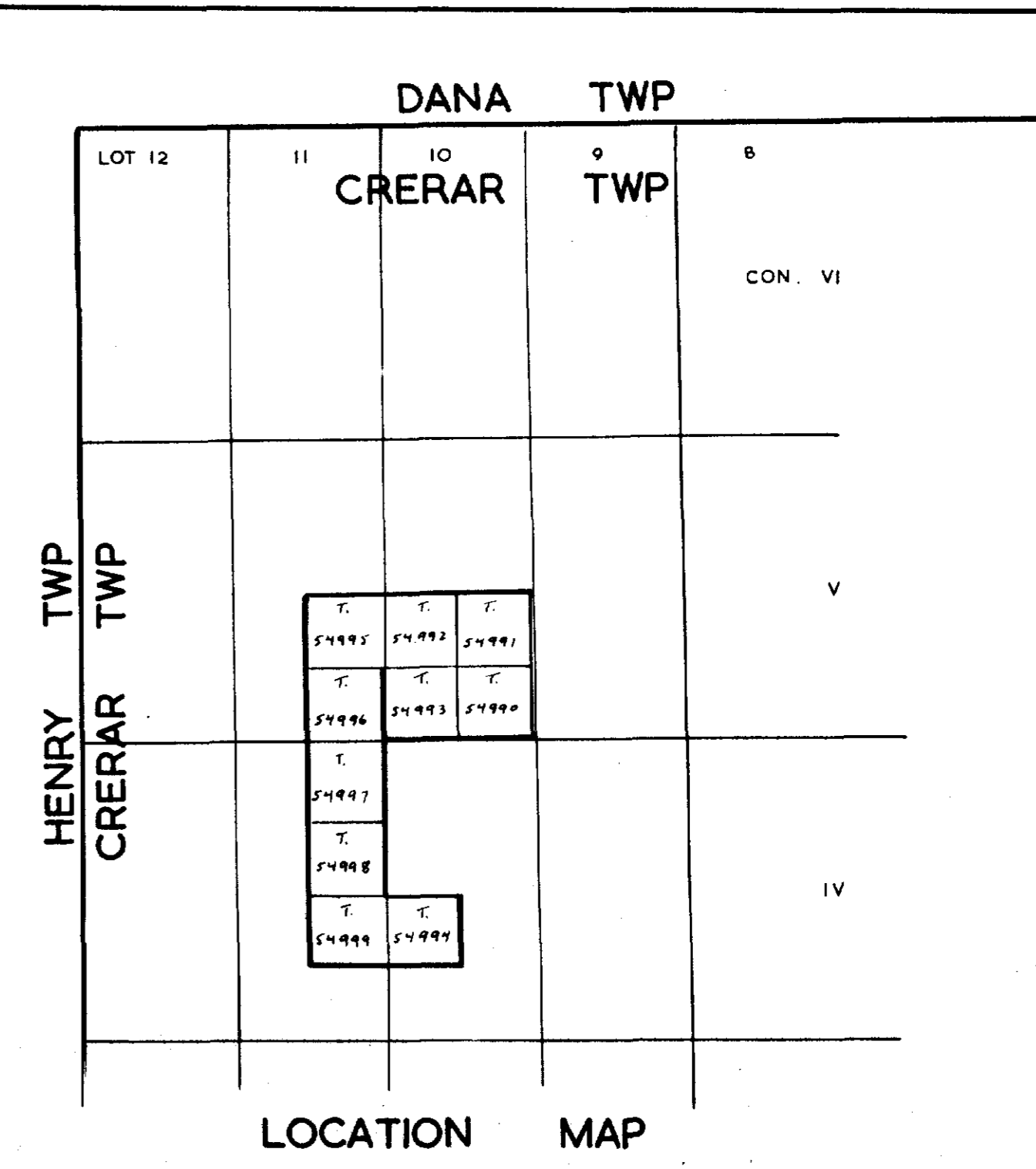




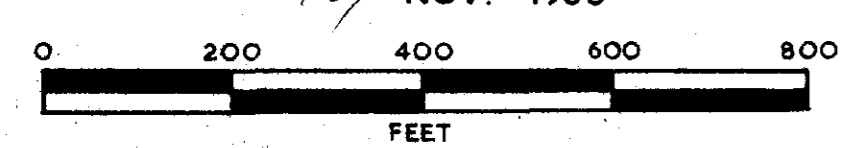
AZEN MINES LTD
 CRERAR TWP
MAGNETOMETER SURVEY

LEGEND

- MEASUREMENT STATIONS ALONG PICKET LINES
- RELATIVE VALUES OF THE VERTICAL COMPONENT FORCE OF THE EARTH'S MAGNETIC FIELD (in Gammas)
- MAGNETIC CONTOURS
- ▲ MAGNETIC BASE STATION
-
- 500 TO 1000 GAMMAS
- 1000 TO 2500 GAMMAS
- 2500 TO ∞ GAMMAS



H.G. Harper,
 H.G. HARPER, P. ENG.
 18/ NOV. 1966



CRERAR-0012-B1 #1