



Bergvesenet

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Rapportarkivet

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Tittel Teh geology of the Maliseter area				
Forfatter Bollingmo, Åse		Dato 11.12 1981	Bedrift Orkla Industrier A/S	
Kommune Meldal	Fylke Sør-Trøndelag	Bergdistrikt Trondheimske	1: 50 000 kartblad 15213	1: 250 000 kartblad
Fagområde Geologi	Dokument type		Forekomster Maliseter	
Råstofftype Malm/metall	Emneord			
Sammendrag				

GULF - ORKLA

LØKKEN VENTURE

REPORT NO.: L.V.2

DATE: 11.12.1981

TITLE: The geology of the Maliseter area

ORKLA INDUSTRIER A.S.

MINING SECTION, EXPLORATION

Report no: L.V.(Løkken Venture)2	Date: 11.12.1981
Title: The geology of the Maliseterarea	
Prepared by: Åse Bollingmo	Areas name: Maliseter area
Map no., name: 15213 Løkken	Coordinates (UTM): NW-corner: 275026
Field work period(s): 30.6 - 15.7, 1981	Pages: 5 Map enclosures: 4
Summary (purpose, execution, results): <p>A system of turam anomalies was to be investigated. VLF- and magnetometre measurements showed that the anomalies were caused by lenses/layers of black chert and jasper. For this project, the area does not seem interesting regarding to an ore discovery. No further investigations are recommended.</p>	
Key words: Geological mapping, VLF, magnetometre	
Project initiated (date): 30.6.1981	Report finished (date): 11.12.1981

CONTENT:

1. Introduction
2. Geology
3. Discussion of VLF- and magnetometer results
4. Conclusion

- Enclosures:
1. Map 1, Geographical site of the Maliseter area, scale 1:50.000
 2. Map 2, Geological map, scale 1:5000
 3. VLF-curves, imaginary and dip
 4. Magnetometer curves

1. Introduction

The Maliseter area covers $1200 \times 1500 \text{ m}^2$ between the two lakes Malisetertjønna and Hoslynga (Encl. 1).

A system of turm anomalies from the 1950's had never been investigated. Last summer this was done by means of VLF, magnetometre and geological mapping.

2. Geology

In the area you find greenstones and metagabbro of the Støren group (Encl. 2). To the north these have a border to green sediments of the younger, lower Hovin group. The border is partly marked by a limestone horizon.

The greenstones are partly pillowed, partly massive. At one pillow lava locality it is possible to see the way up of the layernig. In this case it is inverted.

The gabrro is partly sausurized.

In the northern part of the area, when approaching the lower Hovin group, the rocks are heavily tectonised. The schistority strikes E-W and falls vertically.

The greenstones contain several lenses/layers of jasper and black chert concordant to the schistosity. The black chert has a high magnetite content. The jasper is usually laminated with magnetite.

The lenses/layers seem to have a width of 0.5-5 m and a length of 20-200 m. Sometimes jasper and chert occur more as thin (cm) laminae in the greenstones.

3. Discussion of the VLF- and magnetometre anomalies (K3C, A8)

Generally both the magnetometre and VLF-anomalies interfere with the turam conductors.

Besides, there are several other VLF- and magnetometre anomalies. These might be casued by swamps or conductors hidden by the plentiful overburden. At any rate there is no obvious sign of an economical ore.

The following table gives a general view of the VLF-conductors, dip, depth and possible explanation for them:

Data

- * Profil direction: N-5
- * Profil intervals: 100 metres
- * Measurements intervals: 25 metres
- * VLF-station: NAA
- * Measurement area: 0.4 sq km

Profile	Locality	Dip	Depth	Possible explanation	Remarks
700 V	100 N	steep 70-90°	uncertain		Interference with turam
	150 N	uncertain	"	swamp	" " "
600 V	50 N	steep	narrow	chert	" " "
	125 N	"	"	"	" " "
	175 N	"	"	"	" " "
	several			swamps	
500 V	100 N	steep		chert	
	175 N	"		"	weak
	225 N	uncertain			
	300 N	steep			
	375 N	"			
400 V	250 N	very steep		swamp	
	325 N	" "		"	
	450 N	" "		jasper	
200 V	125 N	steep		uncertain	
	300 N	"		jasper	
0 V				swamps	

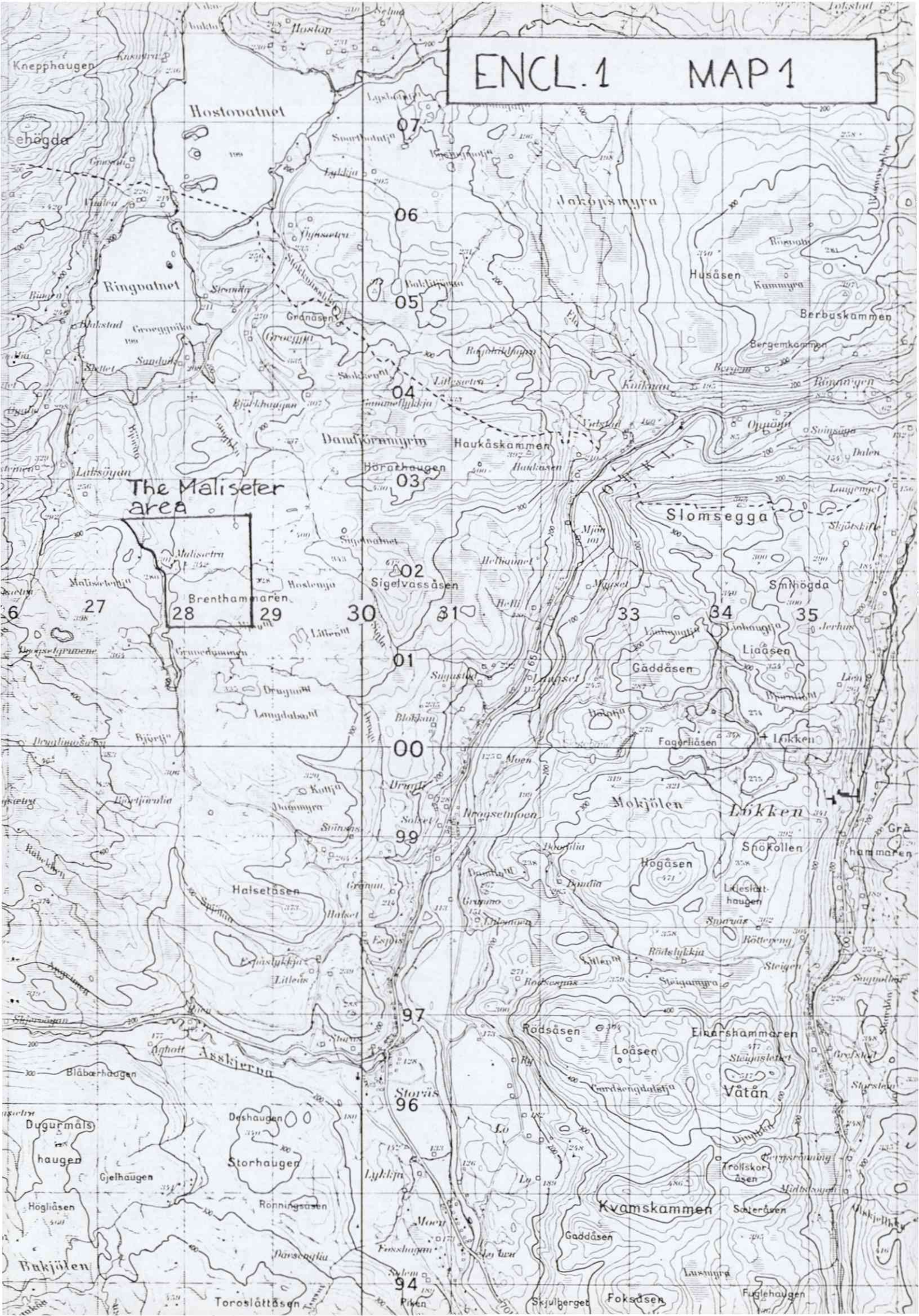
4. Conclusion

The turam anomalies were caused by lenses/layers of jasper and black chert. These were also detected by the VLF and the magnetometer.

Besides, the VLF and the magnetometer gave several other anomalies. Most probable the reason is swamps, that covers a lot of the area.

Further investigations are not recommended, because the area at this point of time seems uninteresting regarding to an ore discovery.

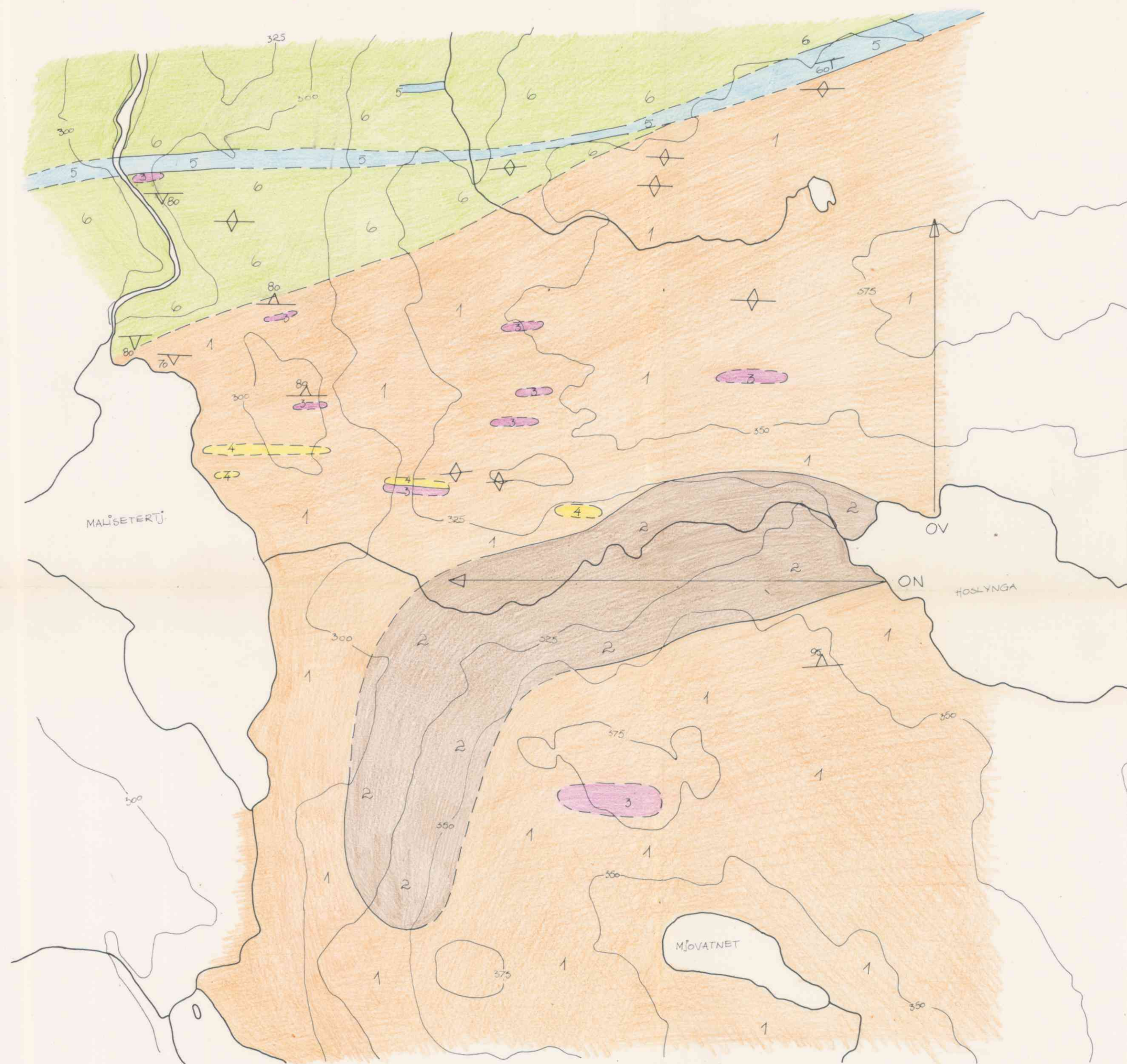
ENCL.1 MAP1



GEOLOGICAL MAP OF THE MALISETER AREA

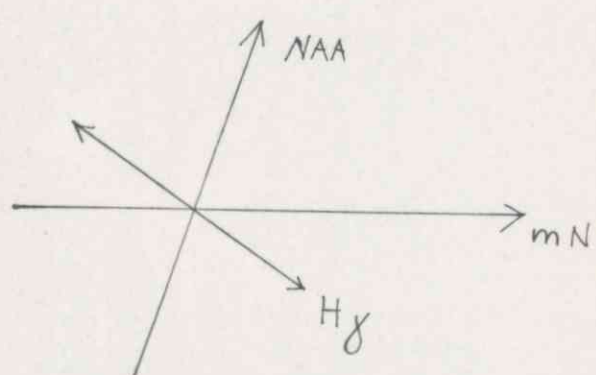
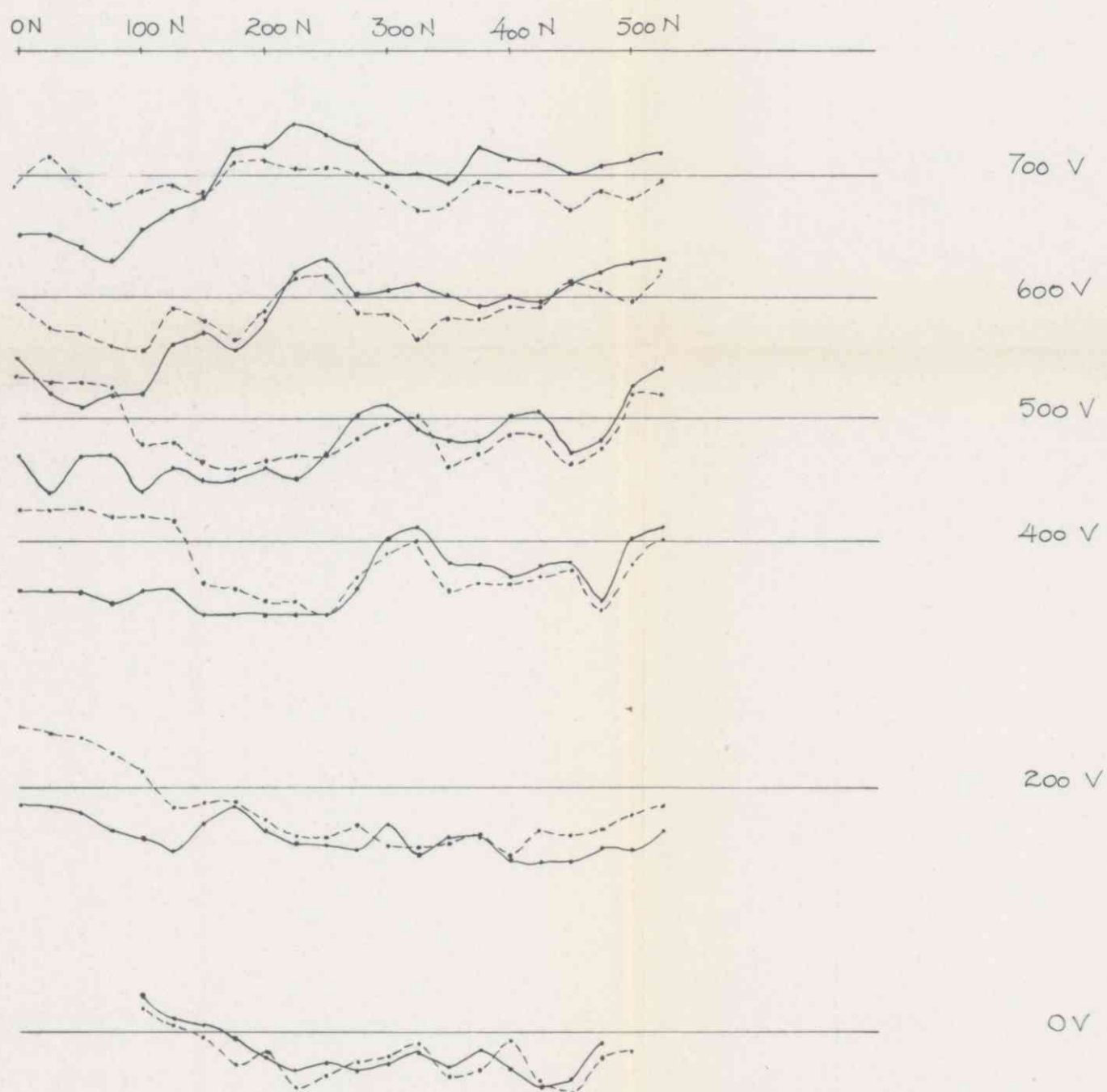
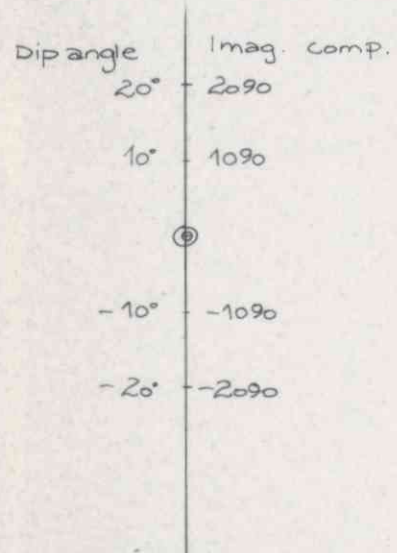
Scale: 1:5000

Contour interval: 25m

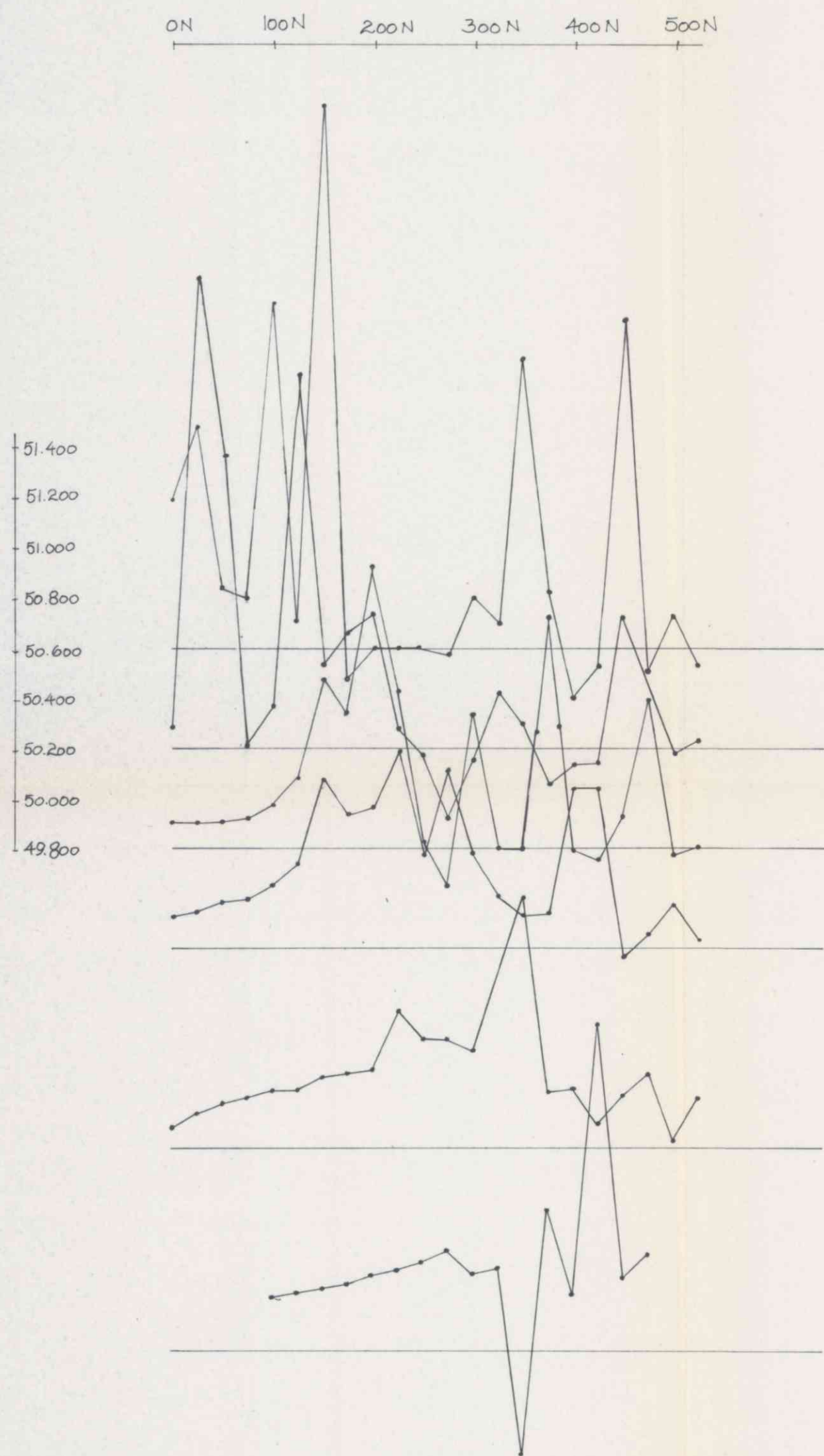


LEGEND

- Støren group
- 1 Finegrained greenstone/pillowlava
- 2 Metagabbro
- 3 Jasper
- 4 Black chert
- 5 Lower Hovin group
- 5 Limestone
- 6 Green sediments
- $\frac{V}{70}$ Strike and dip, schistosity
- Lithological boundary



MALISETRA VLF - anomali map (instr. Paulsen) Dip angle \longleftrightarrow Imaginare component Station NAA	Scale: 1:5000	Draw:	K.L
		Trac:	AM
			GGr. KBC
Orkla Industrier A.s 7332 Løkken Verk Gulf - Orkla Venture	No: Gf I 44		



700 V
600 V
500 V
400 V
200 V
0 V

ср. л. 62
ЕИСТ-7
Модуль 1000/1000

MALISETRA Total magnetic field map	Scale:	Draw:	KL
	1 : 5000	Trac :	AM
Orkla Industrier A.s 7332 Løkken Verk Gulf - Orkla Venture	No: Gf J2		