



Bergvesenet

Postboks 3021, N-7441 Trondheim

Rapportarkivet

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6867				

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Tittel

Summary of interpretations of Mise-a-la-masse measurements in the Godejord area, 21. - 28.4. 1992

Forfatter

Hattula, Aimo

Dato År

16.05.1992

Bedrift (Oppdragsgiver og/eller oppdragstaker)

Norsulfid AS

Kommune

Grong

Fylke

Nord-Trøndelag

Bergdistrikt

1: 50 000 kartblad

1823 4

1: 250 000 kartblad

Grong

Fagområde

Geofysikk

Dokument type

Forekomster (forekomst, gruvefelt, undersøkelsesfelt)

Godejord skjerp

Råstoffgruppe

Malm/metall

Råstofftype

Cu, Zn, Pb, Ag, Au

Sammendrag, innholdstegnelse eller innholdsbeskrivelse

En kort oppsummering av målingene som er et supplement til tidligere målinger.

Full rapport skal foreligge fra Soumen Malmi Oy.

Det er jordnet i en rekke av borhullene i feltet. Resultatet av jordingen og tolkinger blir framlagt. Det foreslås boring av flere hull.

Aimo Hattula

16.5.1992

SUMMARY OF INTERPRETATION RESULTS OF MISE-A-LA MEASUREMENTS
IN THE GODEJORD AREA 21. - 28.4.1992

Survey

The measurement was a supplement of the survey in November 1992 by using newest holes for new groundings and loggings. In the interpretation also older results have been used.

The new current electrodes located in hole GO-112 at the depth of 178.3 m and in hole GO-115 at the depth of 84.5 m. The used older groundings were in hole GO-104 at the depth of 56 m and in hole GO-107 at the depth of 81 m. The measurements were carried out both in the holes and on the ground surface. Some of the hole casings were so deep in the snow that they could not be found.

Suomen Malmi Oy will produce a technical report of the Mise- a-la-masse survey.

Results

Descriptions and results are presented in the diamond drill hole co-ordinate system.

1. Grounding GO-104 / 56 m

The grounded orebody forms a lens which has quite clear boundaries. Electrically the plunge is about 60 degrees to the east. The strike is turning to the north according to section E 5400. But the section is not exact because the topography is not plotted on geological profile.

The suboutcrop of the orebody extends to profile E 5325 in the west. It could be dug out at the front of 35 m from hole GO-101. A shallow and/or a less rich border part can extend to profile E 5300 (at the front of 27 m from hole GO-2).

In the direction of plunge, the orebody could be found below hole GO-4. A possible place for a new hole could be GO-4 but by the dip of 80 degrees. The length should be 90 m.

According to ground survey, the the orebody is ending quickly east from section E 5400 but there exist indications about one or two new bodies close to axle N 1000.

WHAT DO YOU
MEAN

MAY BE ADDITIONAL
DRILLING OF
± 3 HOLES IN
THIS MAIN LENSE
WOULD BE
INTERESTING
SECTION 5400 ± 25m
DOWN TO A
DEPTH LEVEL OF
544 ± 200m

2. Groundings GO-107 / 81 m and GO-115 / 84.5 m

Groundings GO-107/81 m and GO-115/84.5 m belong to a same body. The plunge of the mineralization is electrically about 60 degrees. Hole GO-107 has intersected the conductive body in the upper edge and hole GO-115 in the lower edge. This can be checked with a short hole on profile E 5038 (section where GO-115 exists): N 1060, inclination 55 degrees and length 40 m. If there are good results a deeper hole below GO-107 could be drilled: N 5125, inclination 60 degrees and length 160 m. Another way is to follow the mineralization along the plunge between 25 m profile interval so that a intersection will be located at the depth of Z 100 m on profile E 5075, Z 130 m on profile E 5100 and Z 170 m on profile E 5125 as specified above (plan is presented on longitudinal profile).

A shallow hole could be useful to drill on profile E 5100 (together with the proposed short hole E 5038 / N 1060): N 1060, inclination 55 degrees and length 50 m.

The mise-a-la-masse results show that the poor mineralization in hole GO-114 locates little lower than the horizon where the body by the GO-107/81 m grounding exists even the body/GO-107 locates much deeper than hole 114 intersection.

If a richer mineralization does not locate between GO-107 and GO-115 (longitudinal profile) the conductive body consists of many poor deeply plunging lenses.

3. Grounding GO-112 / 178.3 m

The mineralized intersection of hole GO-112 at the depth of 175-178 m belongs to a body which is separated from each others. It has the same plunge of 60 degrees but it has no suboutcrop close to surface.

The weak pyritizations in holes GO-111 and GO-113 belong to the very border edge of the orebody where grounding GO-104/56 m located.

The grounding GO-112/178.3 locates in the upper edge the new body. It could have a continuation in the direction of the plunge. But the structure can change to more complicated because mise-a-la-masse measurement shows the body coming again very close the drill hole at the end of hole GO-112 (profile E 5325, GO-112/178.3 m).

WHAT'S THE RECOMMENDATION
BASED ON GEOPHYSICS ?

DRILL UNDER 112 ALONG PLUNGE
(i.e. REVERSE 5325)

ACTUALLY
BUT WE MIGHT AS WELL
DRILL IN 5050

THINEST WORKING
LITIZING

SEPARATE FROM
THE OTHER KNOWN
LENSE ?

Conclusions

Mise-a-la-measurement shows that the mineralizations consist electrically of deeply plunging lenses. They locate near a same horizon but little overlapped. Then also it is possible that for example the body grounded by GO-107/81 m belongs to a upper horizon (in the present position).

Other groundings except GO-112 show that main parts of the bodies locate quite close the ground surface.

The planned magnetic and EM ground surveys will show if a separate lens locates close the ground surface between E 5175 - E 5275.

Mise-a-la-masse method can be used for following and extending of discovery hole intersections but when an ore horizon consists of many lenses also many current groundings is required for following separate targets.

Mise-a-la-masse ground surveys have also given indications about conductive targets outside the grounded bodies. Meaning of these new targets will be more clear after comparison to the new systematic magnetic and EM surveys.

Other

* MAG EM 9-12.5 (S.M.S.)

↓
AIMMO VISIT / PREL DISC 15-17.6

* MAG EM RESULTS - INTERPRETATION
ASAP AM / AGGREGATION CLOSE COOP
PRIOR TO RESULT OF DRILLING IN
EARLY AUGUST.

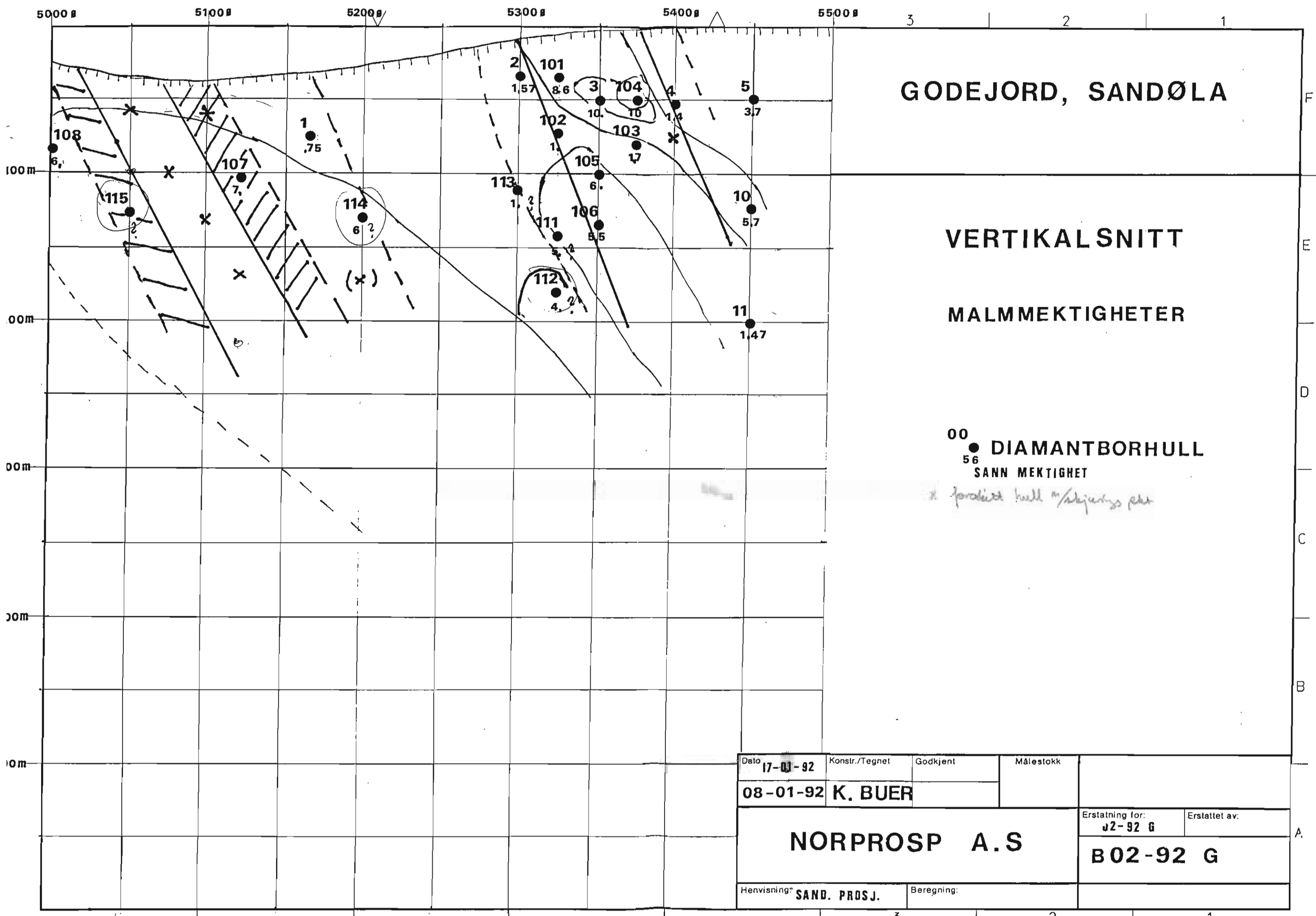
(SOME CENTRAL INTERSECTIONS BASED ON
PRESENT INFO COULD POSSIBLY BE
DRILLED IN JULY (IF NOT HOLIDAY)).

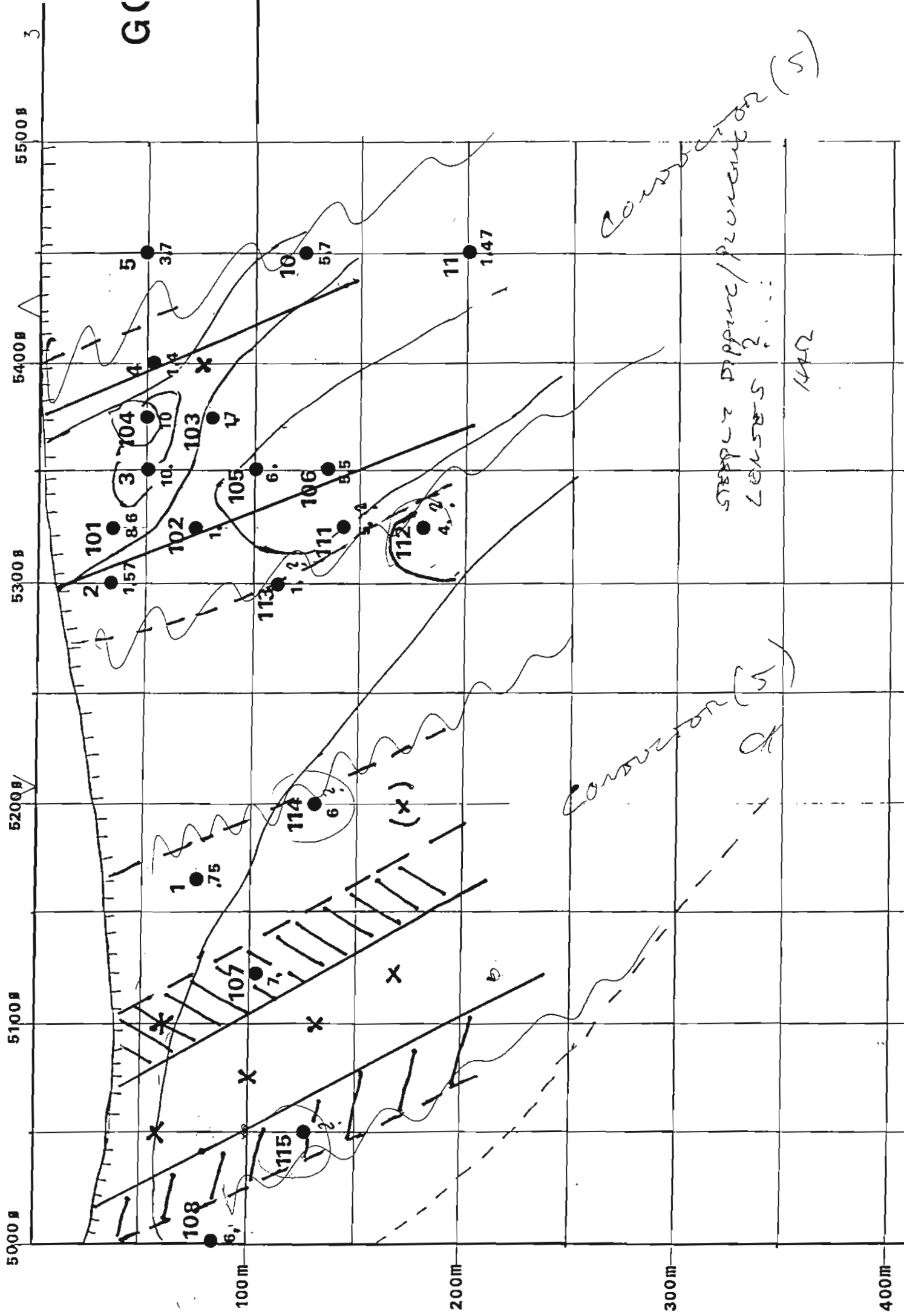
METEMAGE

PENDING
INFO ON
FINANCING
SUPPORT

FILE (MIL)

GOBEYOND 30% DRILLING AUG + SEPT + OCT !





- 100

$\frac{1}{2}$ GC 115 / 04.5 m

GC - 112

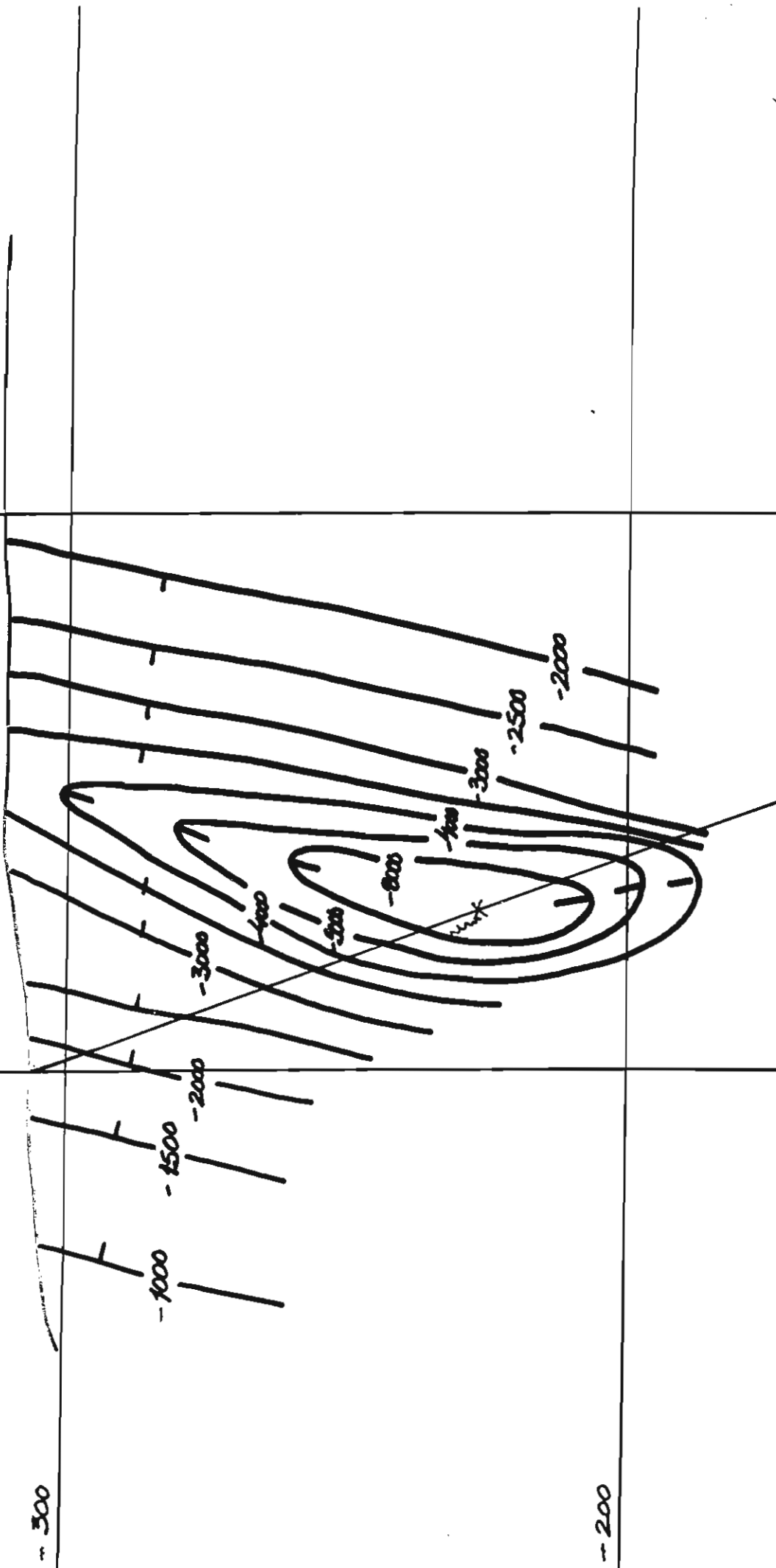
GODEJORD (5050)
5038

1000

1100

- 300

- 200



GO - 115

- 1/2 GO - 115 / 84.5 m

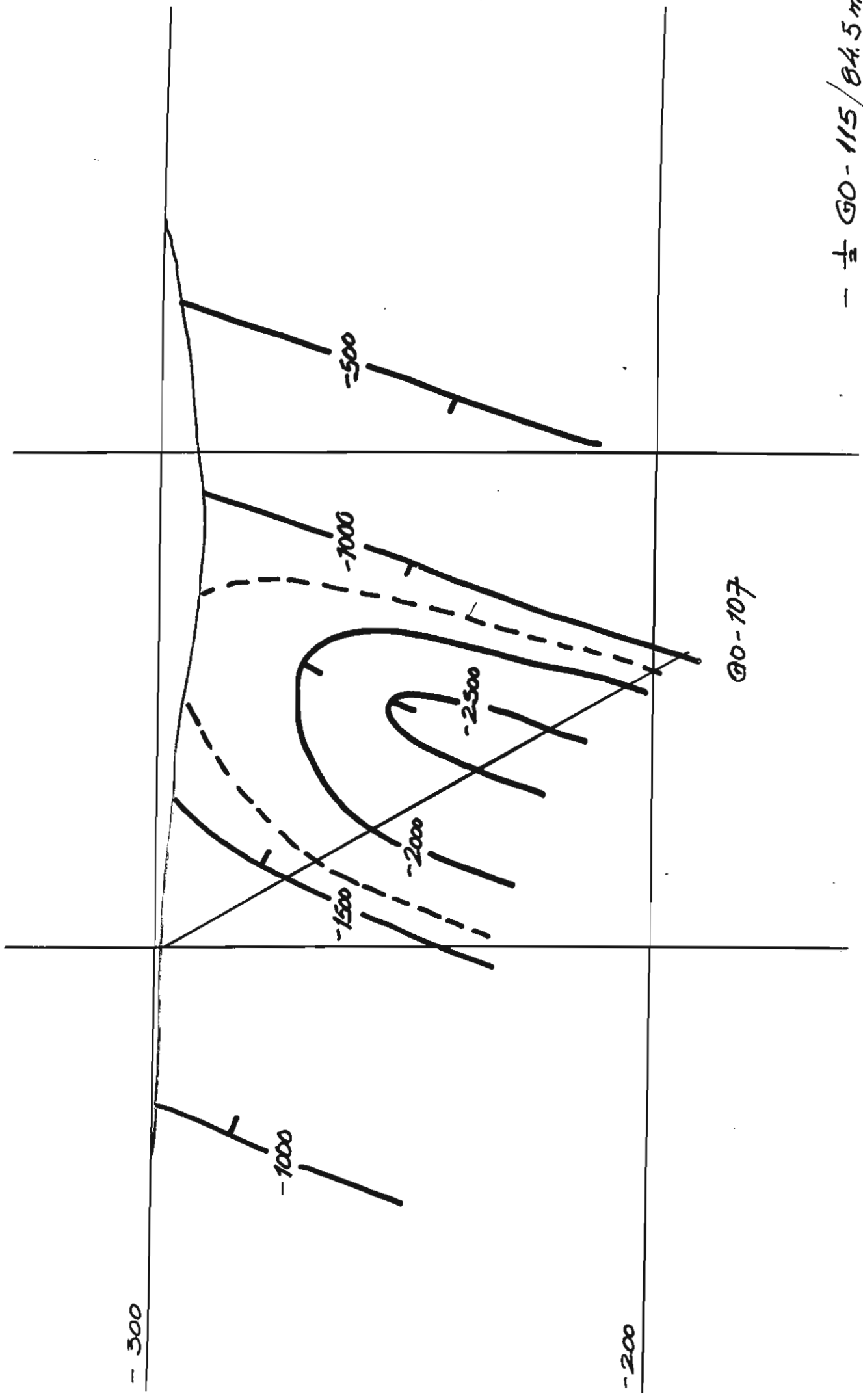
1000

1100

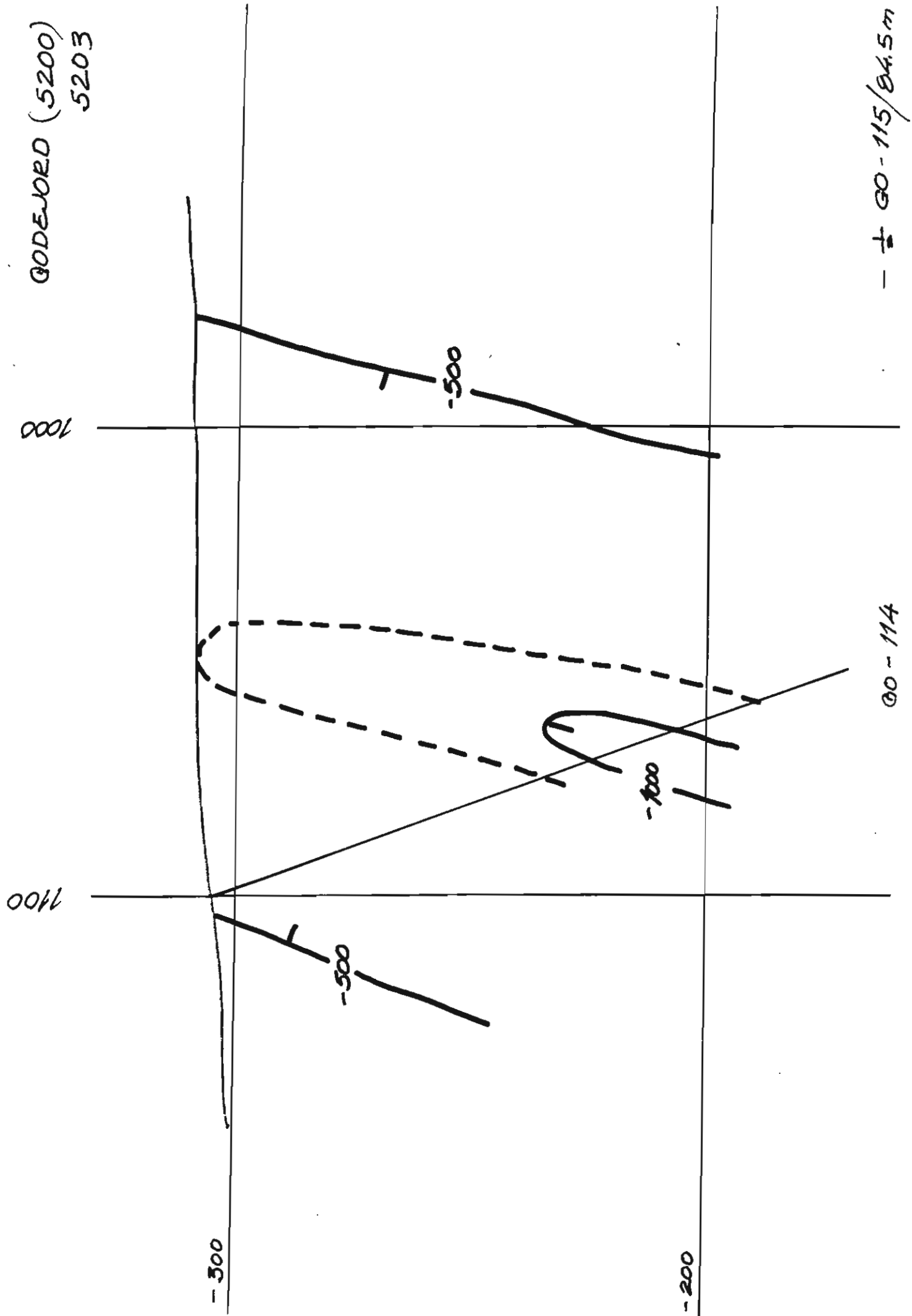
CODED 5125

- 300

- 200



- 1/2 GO-115/84.5m



- 1/2 GO-115/84.5m

1100

300
1

200

1000

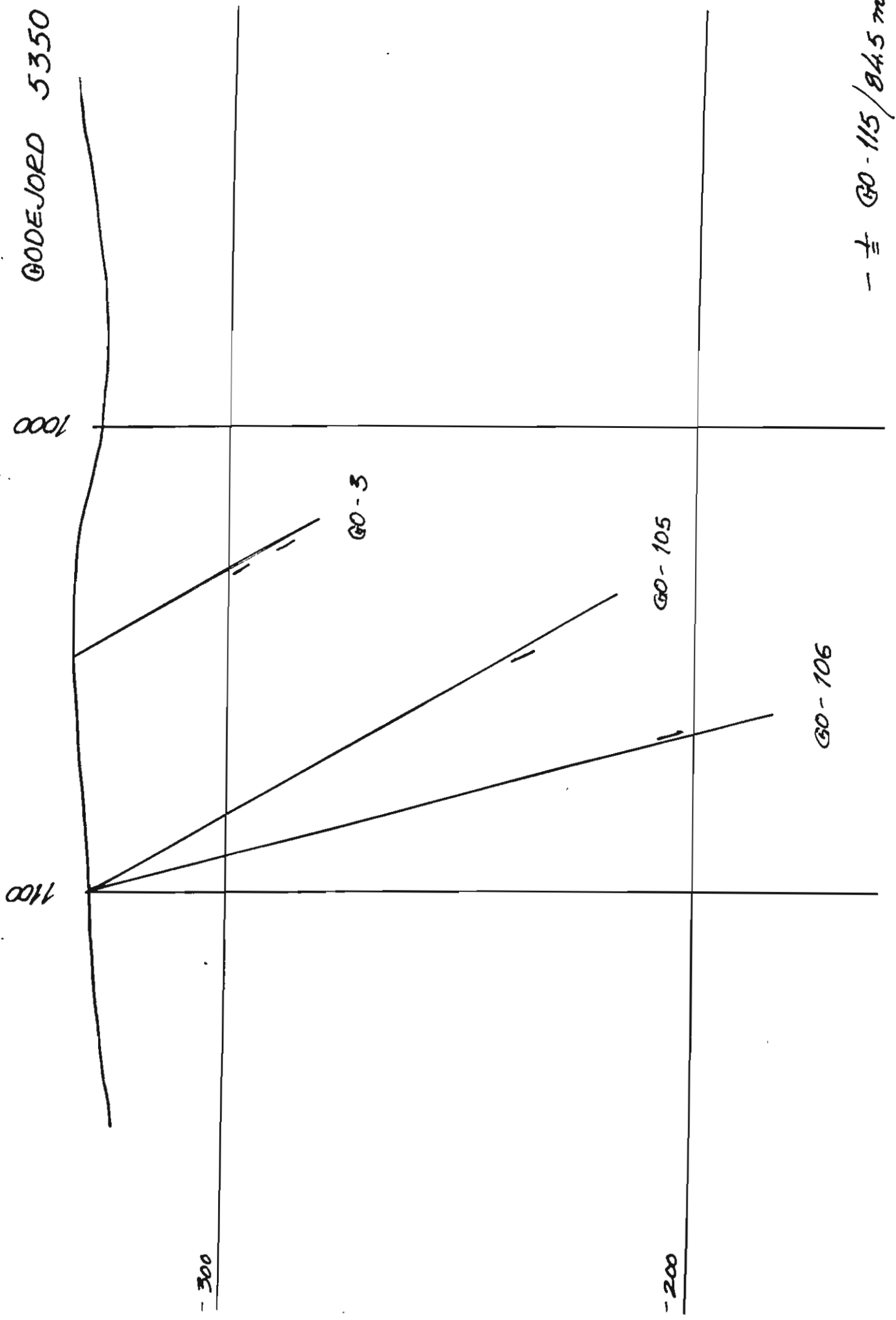
GOVERNED (5300)
5292

[90-2]

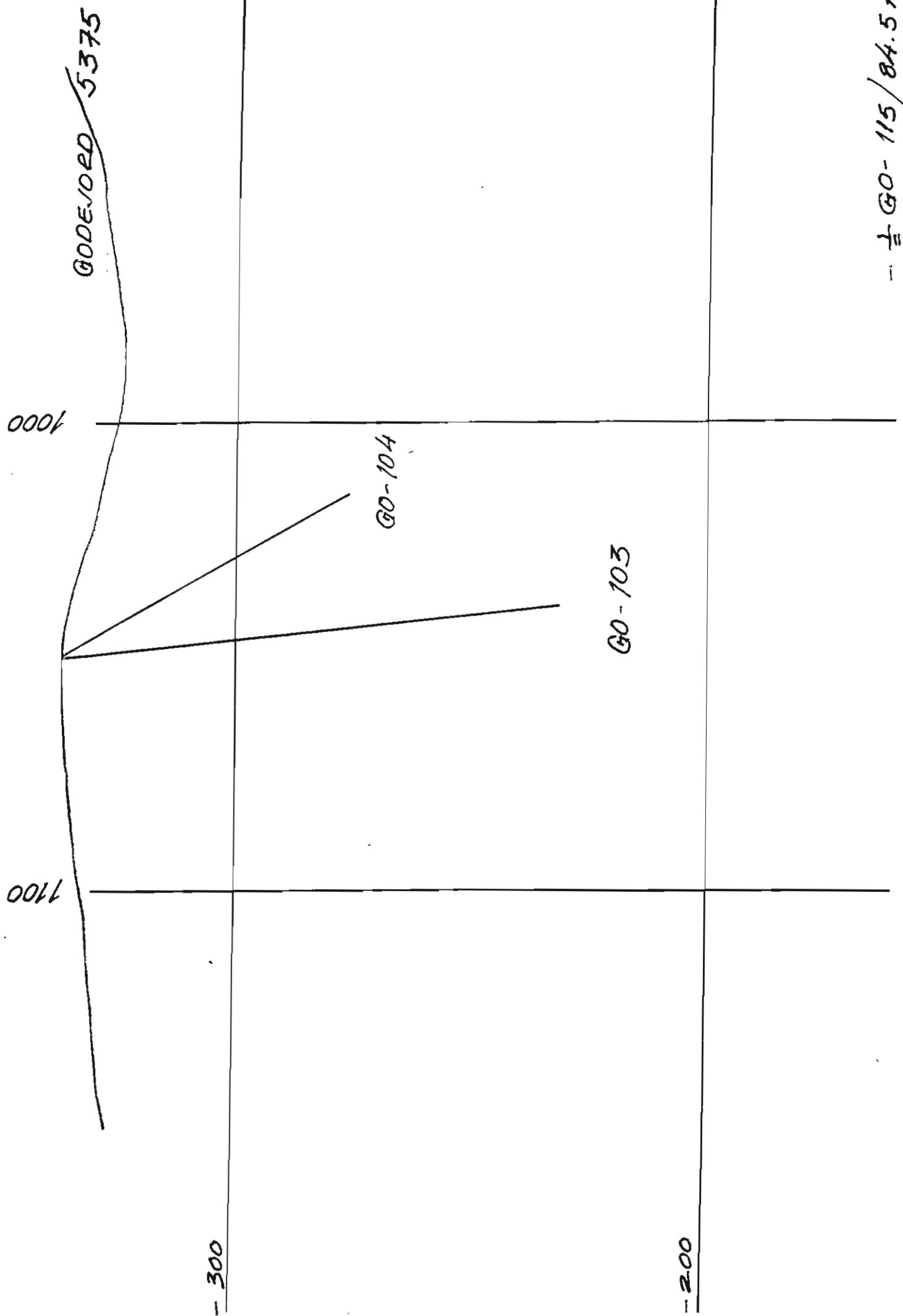
GO-113

-505-

$$-\frac{1}{m} \log \frac{115}{84.5m}$$



- 1/2 GO-115/84.5 m



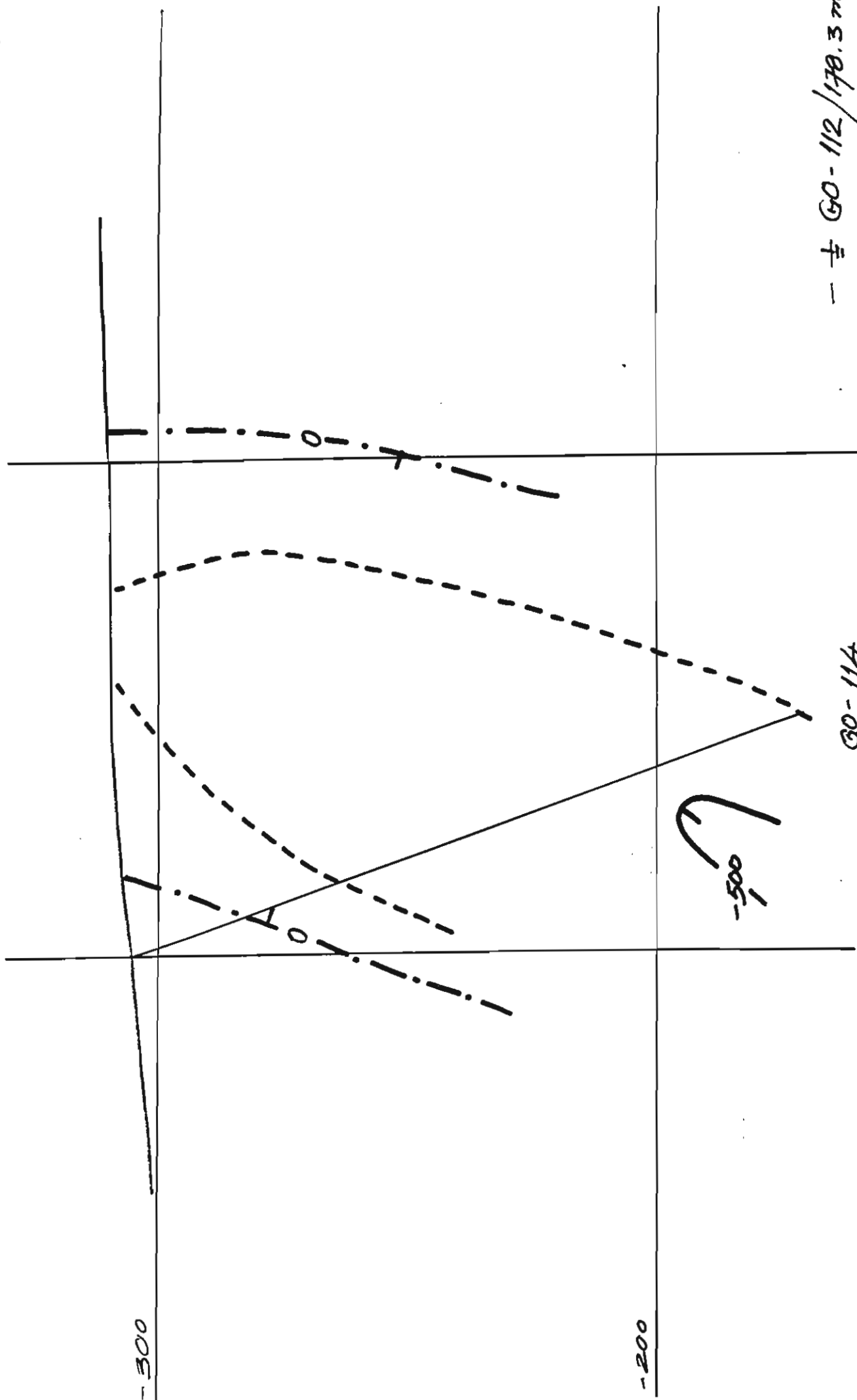
- 1/2 GO-115/84.5m

1000



— 178.3m / 112-60

30-114



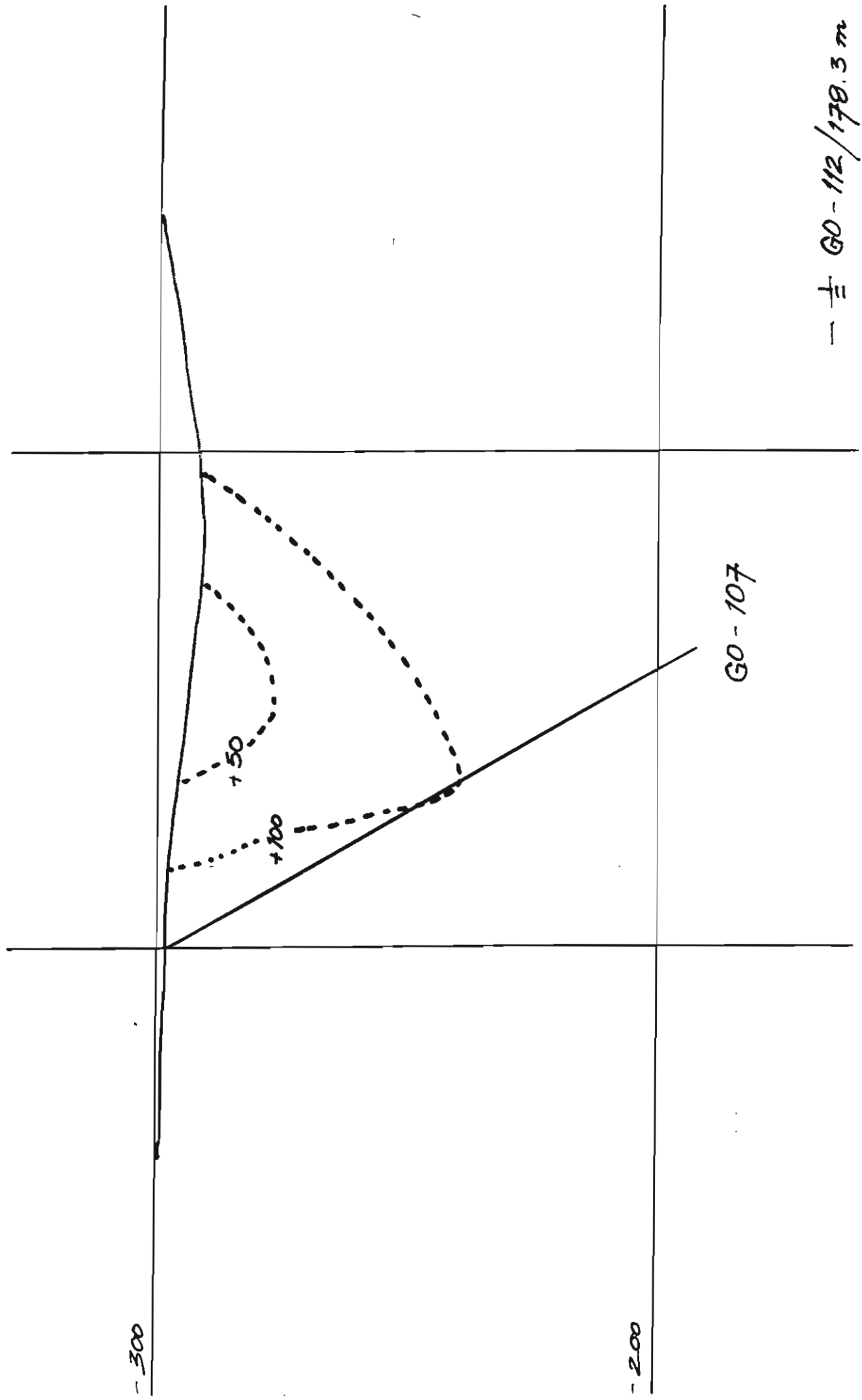
GODEJORD 5125

1000

1100

- 300

- 200



- 1/2 GO - 112 / 178.3 m

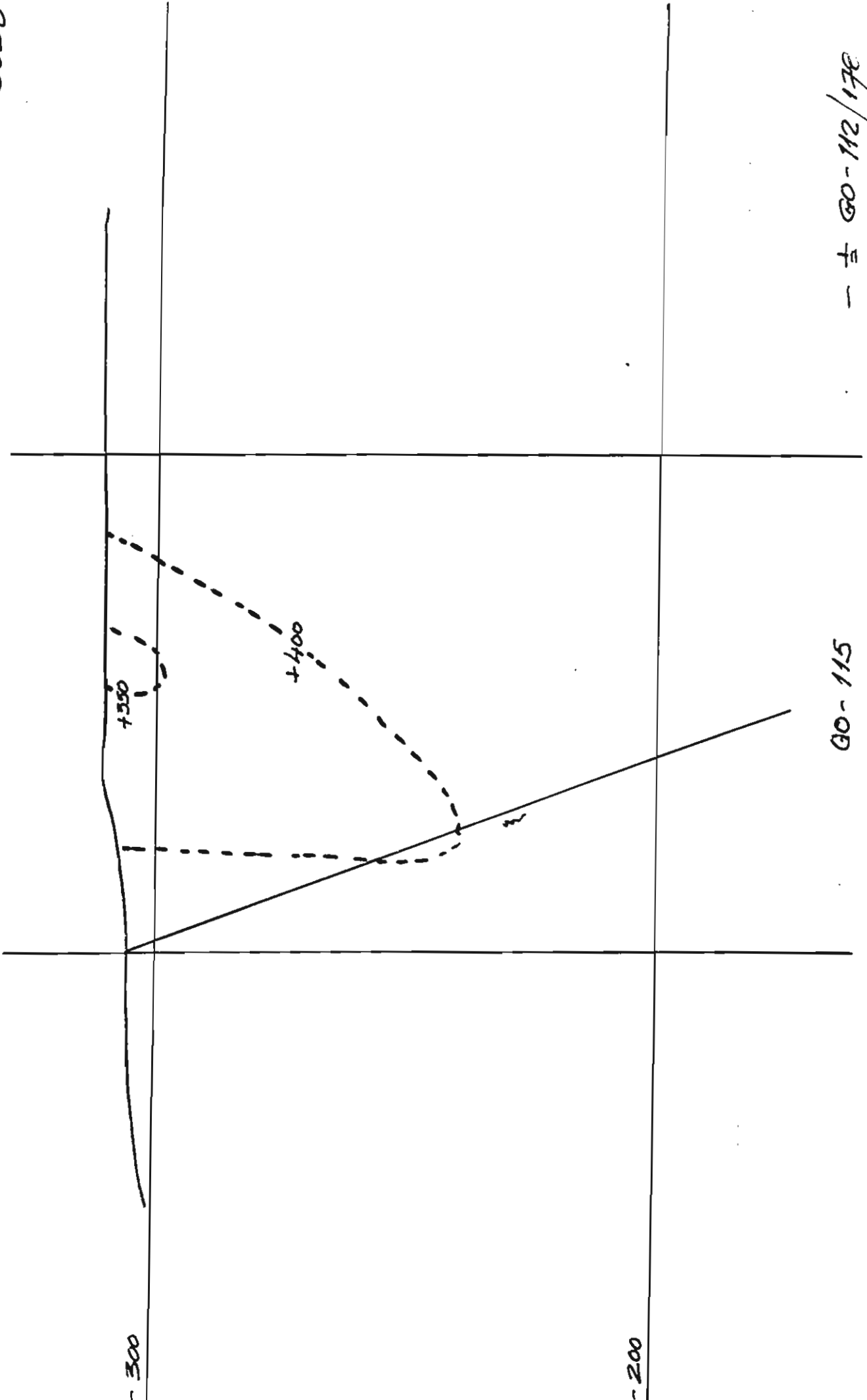
GODEFORD (5050,
5038

1000

1100

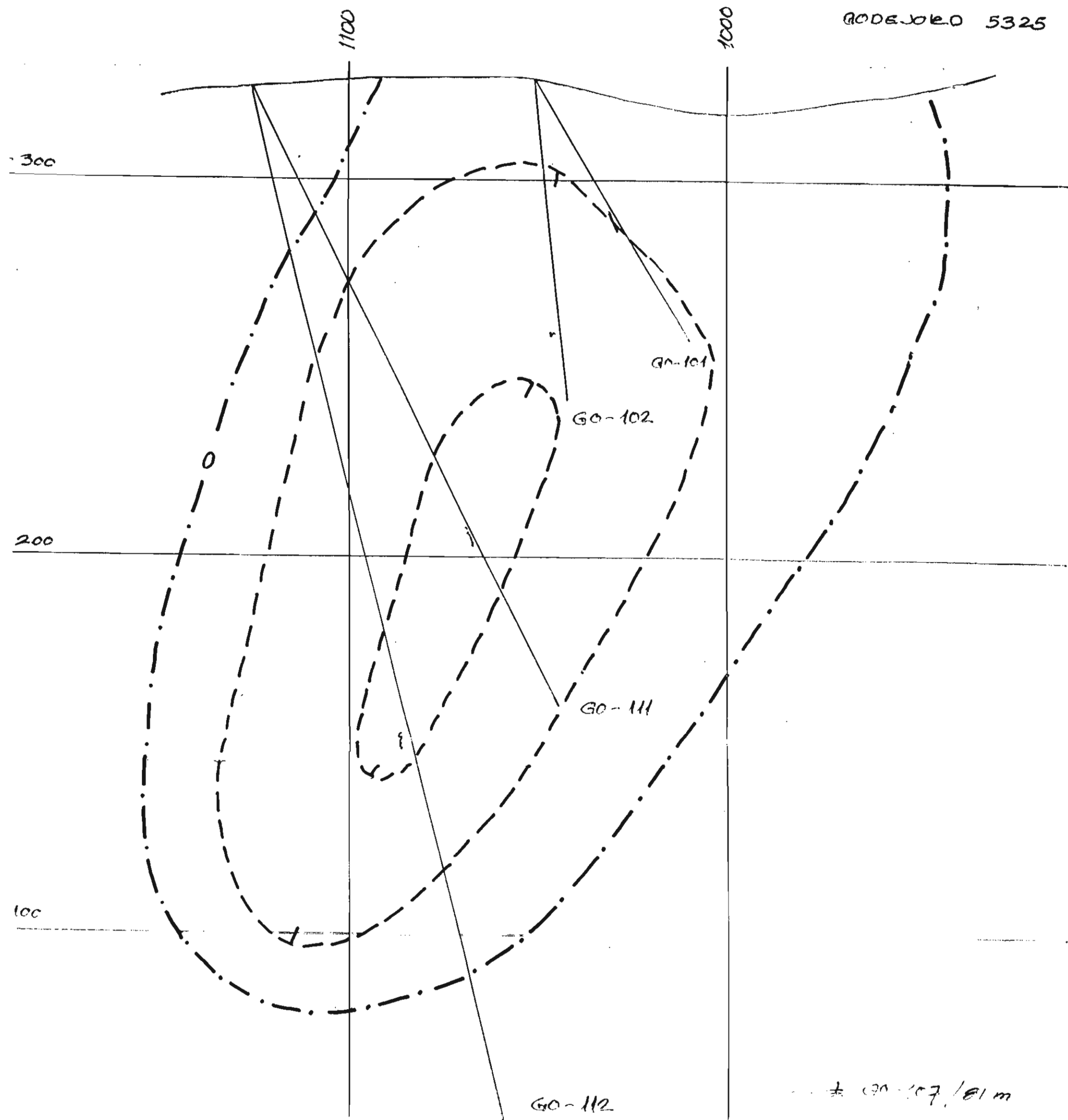
- 300

- 200



GO-115

- 1/2 GO-112/178



CODED 535

1000

1100

-300

-200

200
150
100

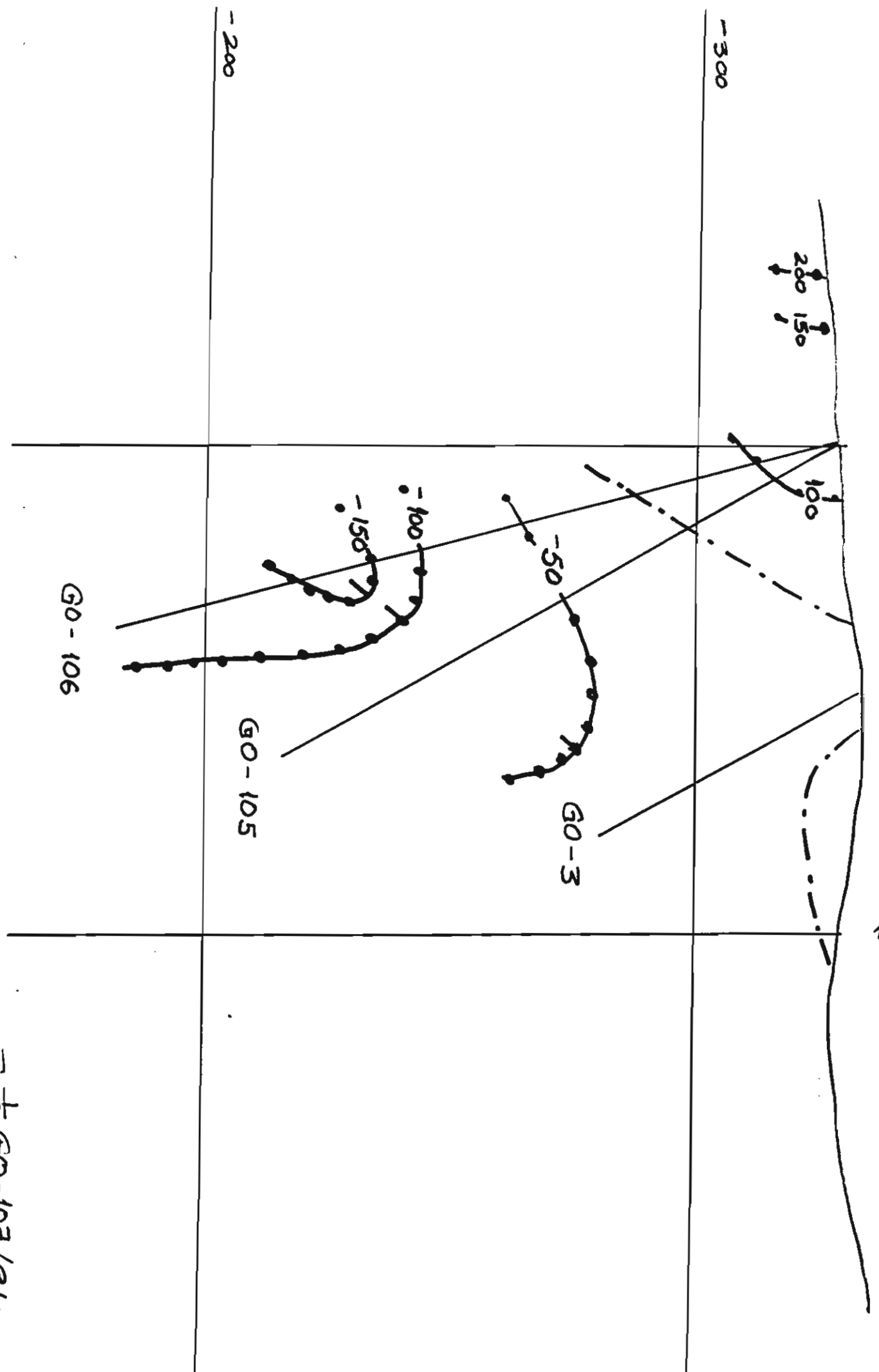
GO-3

GO-105

GO-106

-100
-150

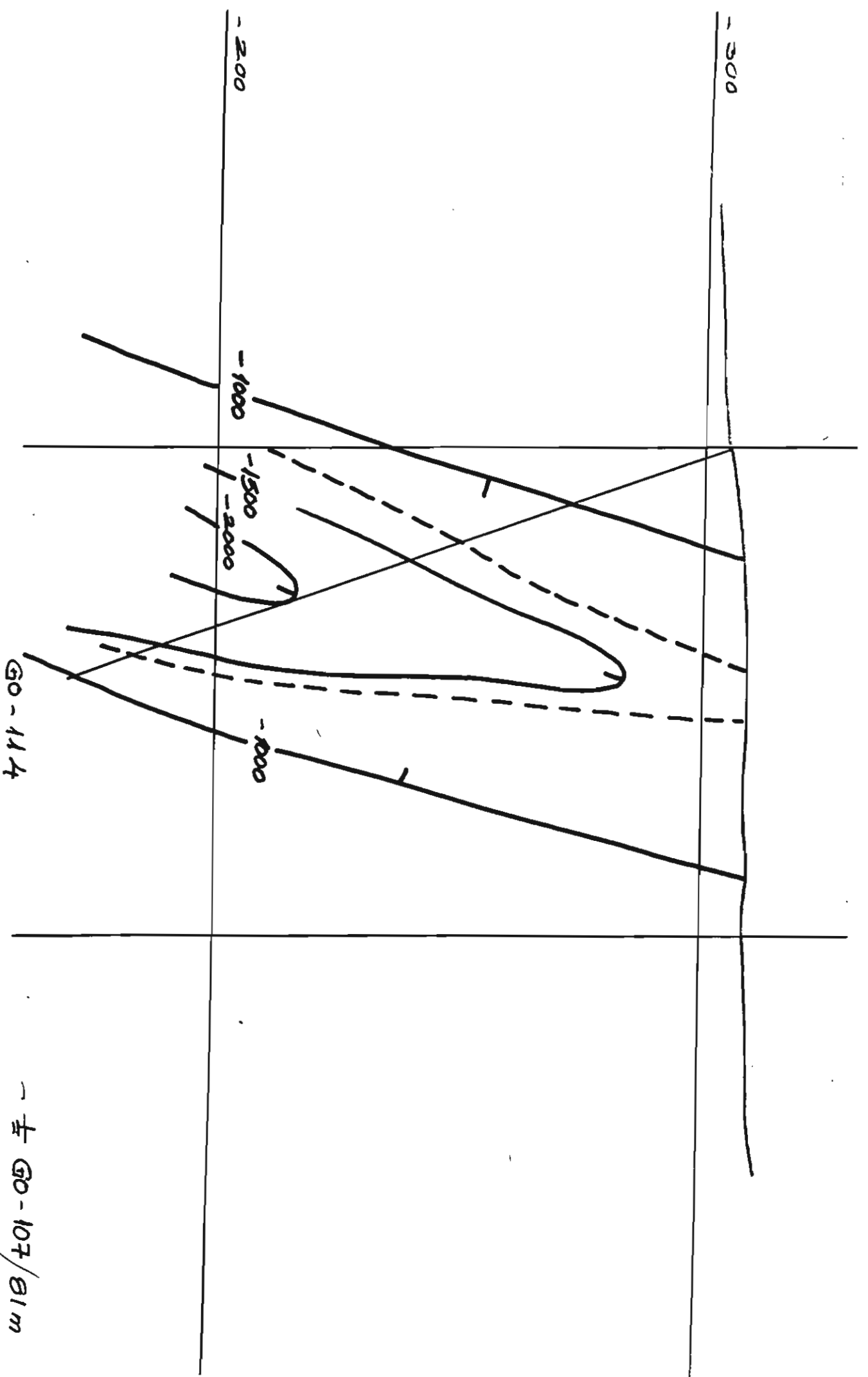
- 1/2 GO-107/81m



GODEJED 5200

1000

1100



1100

1000

MODELOED 5125

-300

-200

-1500

-2000

-2500

-3500

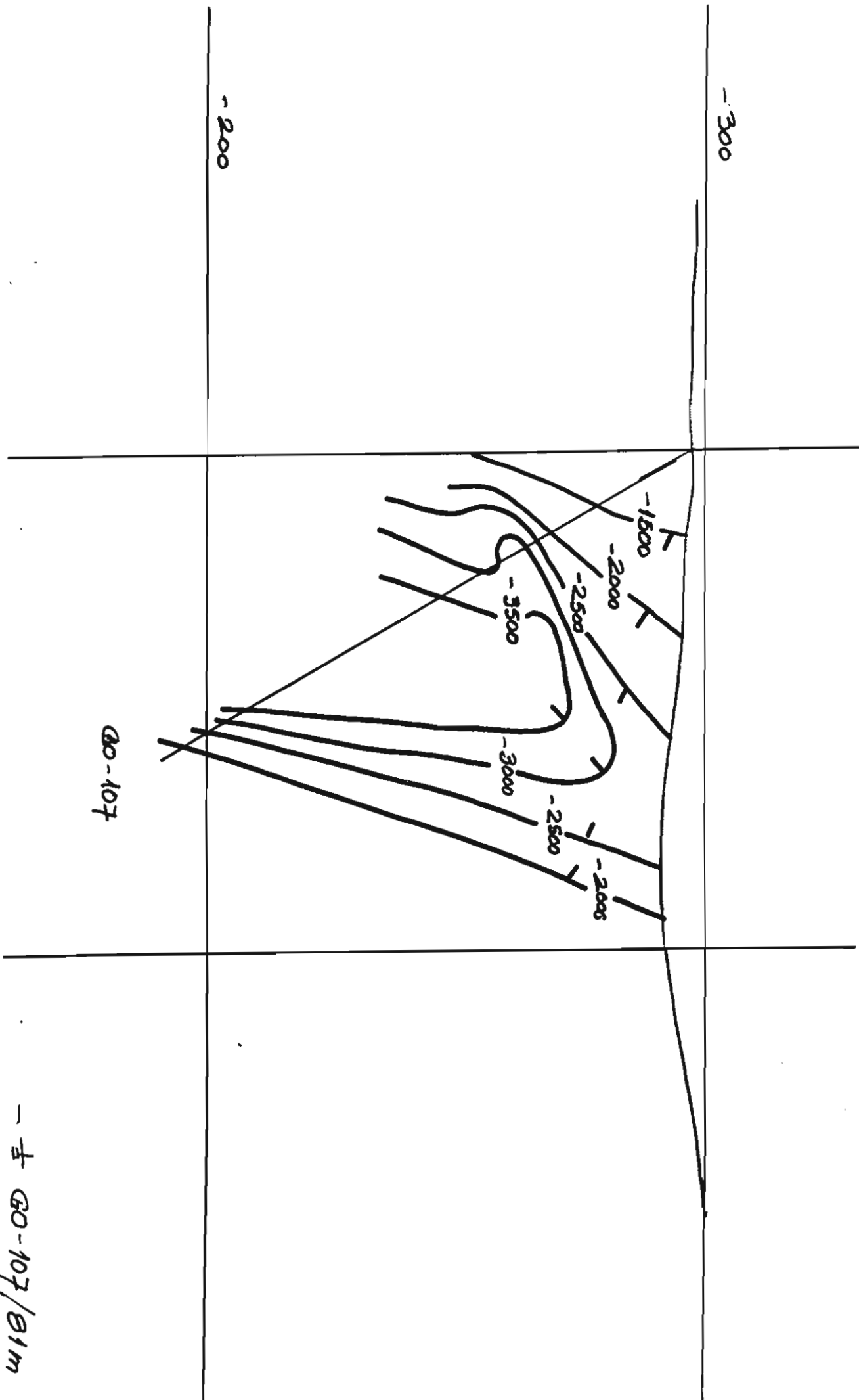
-3000

-2500

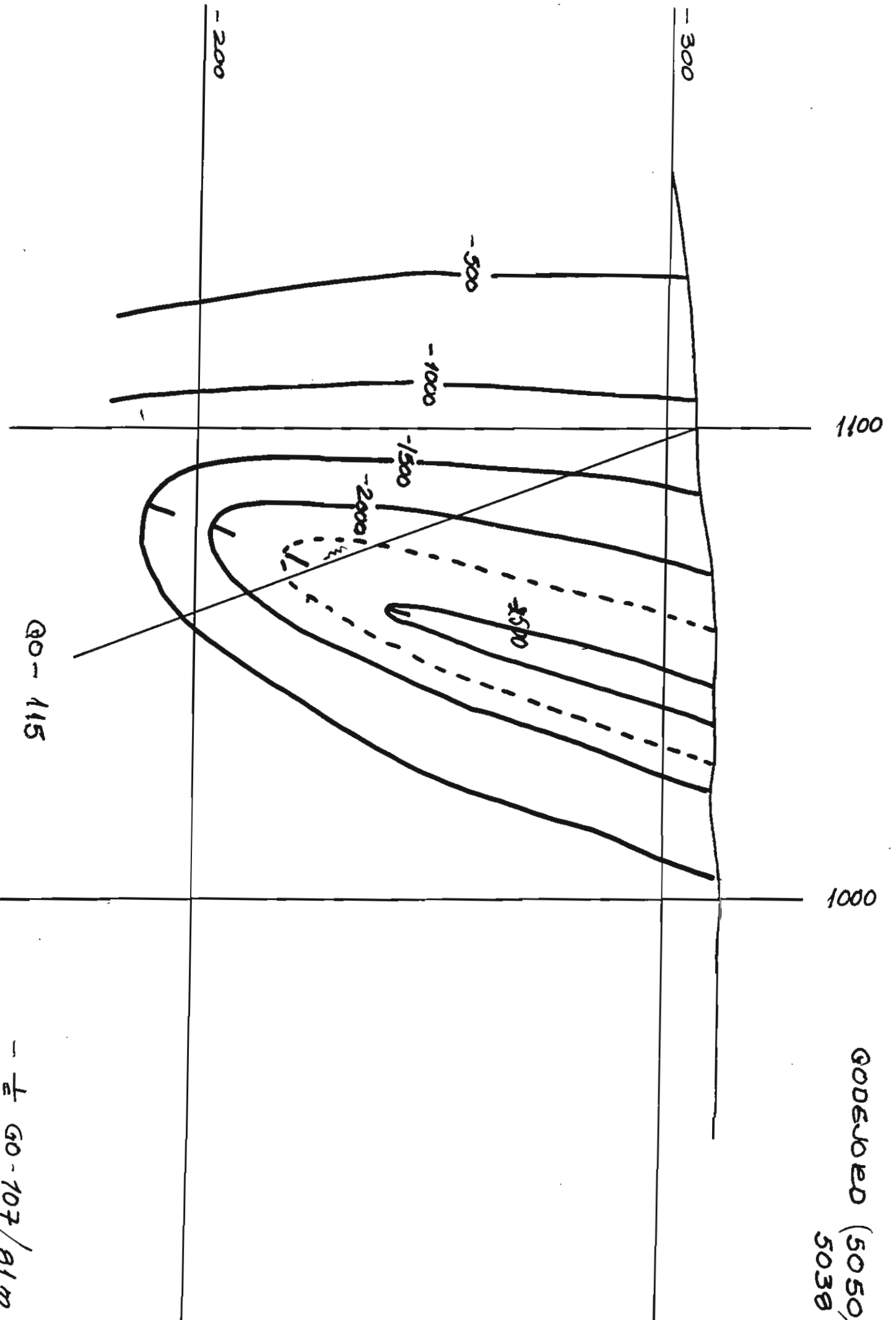
-2000

00-107

- 1/3 00-107/01m



CODED (5050)
5038



GODEJOED (5300)
5292

1000

1100

-300

-200

[GO-2]

GO-113

0

-200

-300

-400

-500

- $\frac{1}{2}$ GO-107/81m

1100

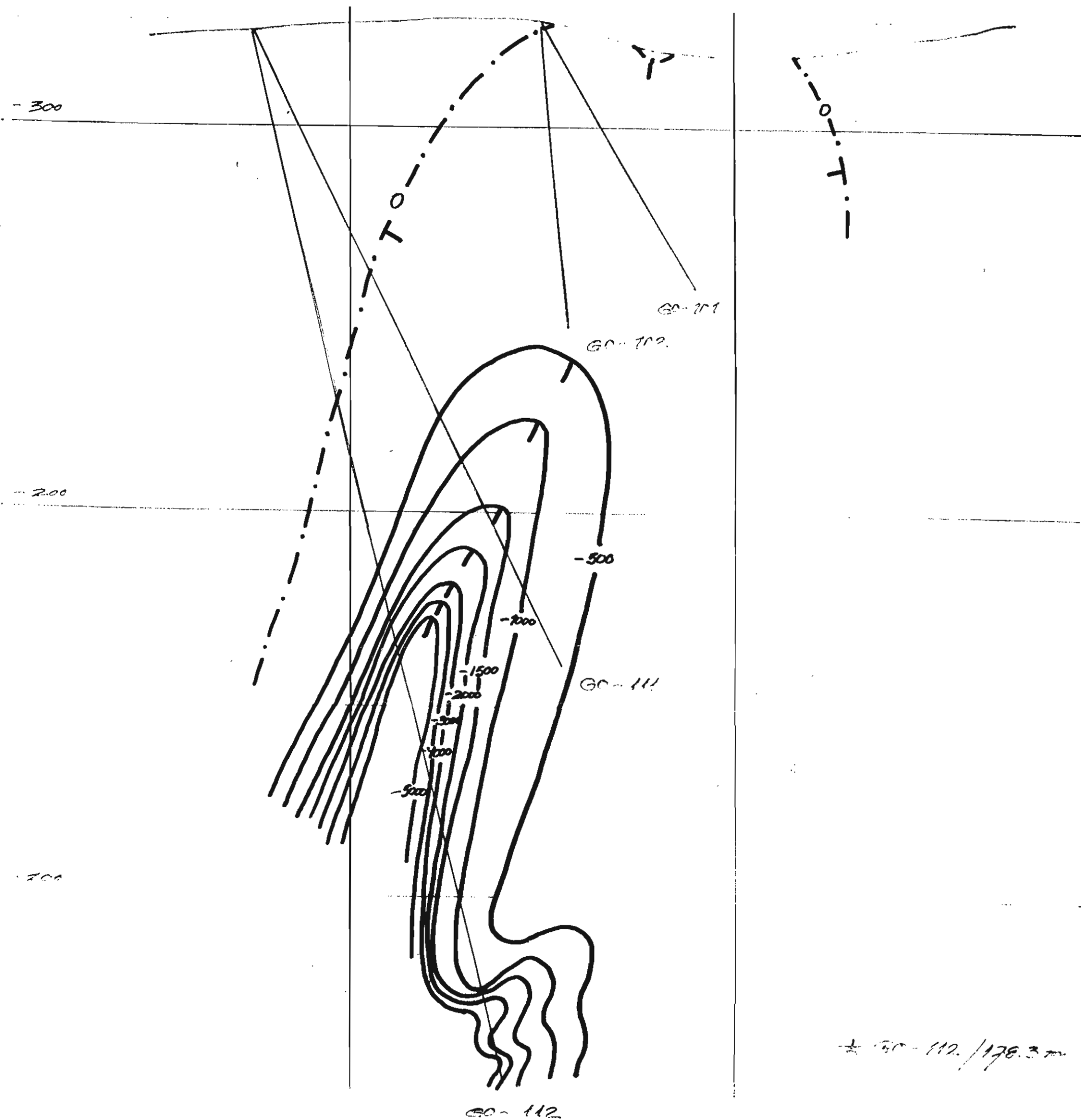


GO-108

1100

1000

GODEJOED 5325



GODELORO 5325

1000

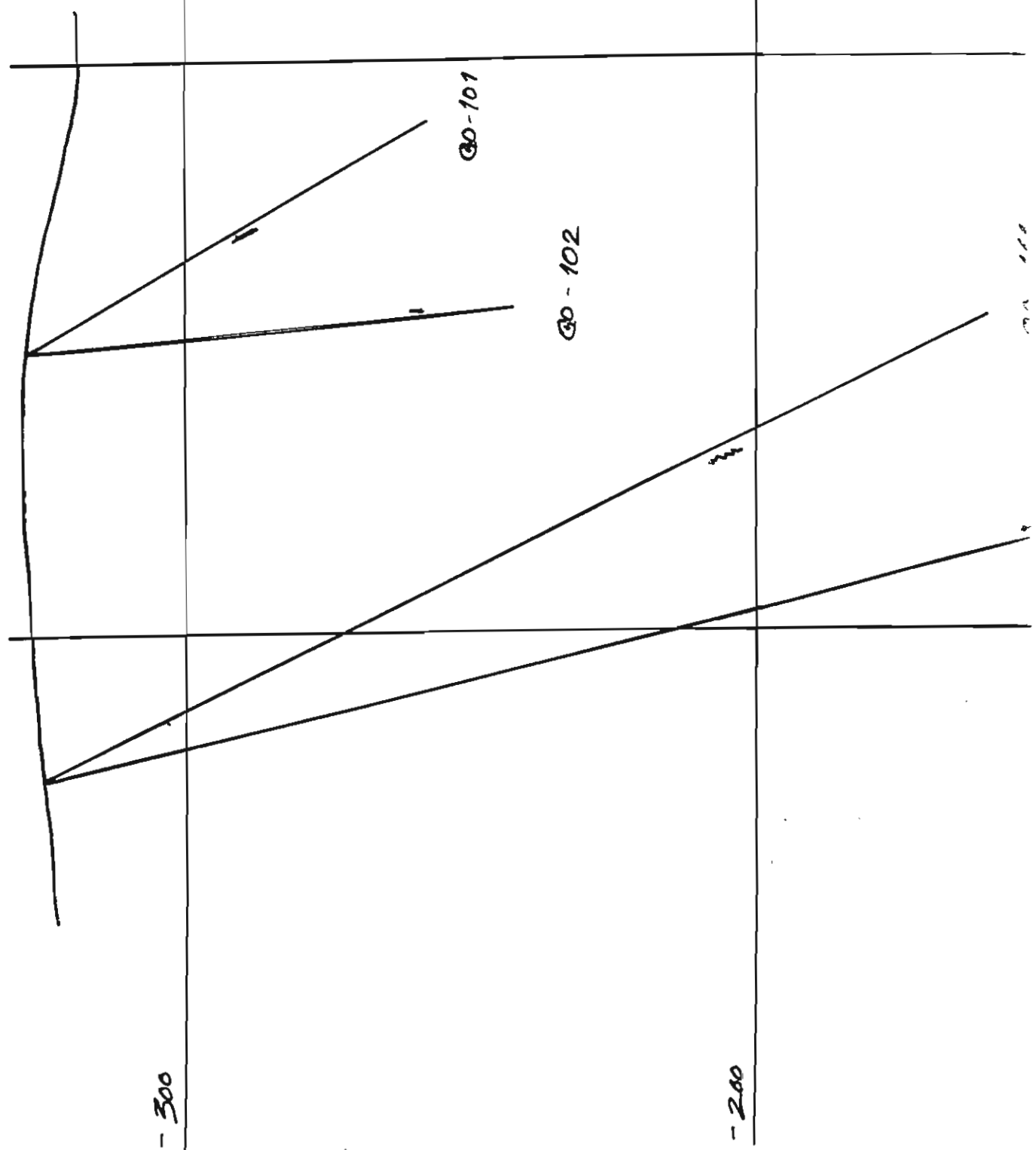
1100

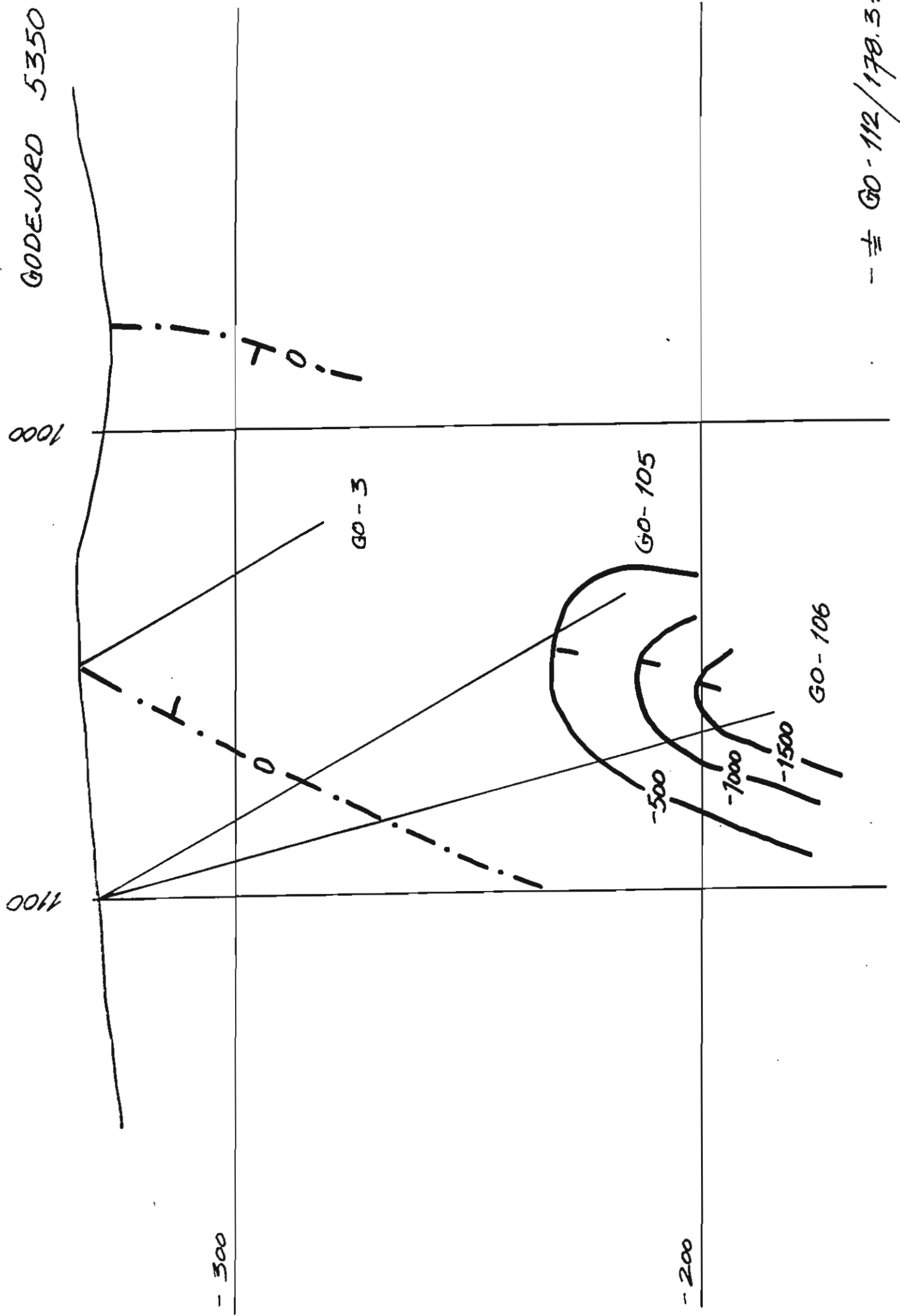
- 300

- 200

GO-101

GO-102





GODEJORD 5375

0001

1100

- 300 -

-200

GO-104

GO-103

-500-

- 1/2 GO-112 / 770.3 m