TIHANGE 2

[redacted]

COURRIER

[redacted]

AFFAIRE : TIHANGE 2 - DOEL 3

Concerne : Cuve - ANNEAU SPHERIQUE
30811-002 - Réparations

Date : 8.1.76

Fournisseur : FRAMACECO / Rotterdam Nucleair

PLANS RECUS

N°	Titre
	- Rapport de la réunion du 8.1.76 à Seraing
	- Relevé des défauts
	- Plan E1.048 - Appropriation pour réparations -

[redacted]

8. 1. 76

Reunion : EBL. TE. FRA. RN. CKL.

119

Soraing 8_1_76.

Objet : Spherical Ring (Ph.2.)

[redacted]

MH.

1. The situation

1.1 Magnaflux showed indications out of the standards.
R.N send CKL a PV which indicated that the piece was rejected.
Then because of delay CKL and RN decided to recheck the piece. (RN estimated that a repair was possible.)
RN asked then to have the autorization to machine the defects (CKL accepted but refused that the repairs be done in Cockerill).
CKL asked to RN to present all the examination of this area. (CKL assisted this extra examination).
To day RN presents the results of those examinations

1.2. A new indication was found in the piece by UT yesterday.
dimensions : 50 x 10 mm.
10 mm below the machining surface.
(CKL asked to RN to not remove this indication because the groove is allready at 1/3 T.)

2. K.N. explanations:

2.1 RN explains that this defect are due to hydrogen ~~flaws~~. flakes.

.2 - FRA states that the delay are very possible even in case of repair because this operation is very difficult.

RN answers that the new ingot is allready ordered.

.3 - CKL insists on the fact that he did not ask the repair.

4 - FRA says that the weld would take place in an area with a important hydrogen content. (RN answers that this region has not a too high hydrogen content.)

5 - the new ingot will be at RN early next week (in any case RN will preforge this new ingot.)

6 - If RN machined more than 1/3 T there the repair has to been examined in service (ASHE XI.).

7. - the ASTME SA 508 asks that one examine the defect by trepaning or other way but there one go wider than 1/3 T for the remaining defects. (mainly for this mentionned § 1.2 of this minute.)

3. Planning:

3.1 The new piece would be ready for the 23 april.

3.2 If the qualifications are accepted by CKL and the Customers and Fra, the repaired piece would be ready end of february. (Spec. accepted for the 20/1/76.)

4. Framatome conclusions:

4.1. It is necessary to remove all the defects of the piece.

4.2. " " " " perform some extra tests before welding.

In front of this position the Customers can not accept the repair. (ASHE XI.)

5. Qualifications:

the qualifications of RN are done on SA 533 and not 508.

SA 654 asks for same grade and same type in case of repair.
(this inspection is not req by the RN qualifications)

6. General conclusions:

Repair is unacceptable:

- Suspect métal at the boundary of the weld repair.
- indications remaining (after 1/3 T.)
- Qualifications (sensitivity) not in accordance with ECCA (with possible delay.)
- delay very probable due to the repair - (results of contract).

all these considerations bring to rejection of this item.

- According to ASME XI the defect 3.1.2 is in the range of the unacceptable weld defect (EBL ref. INB · 3511.1)

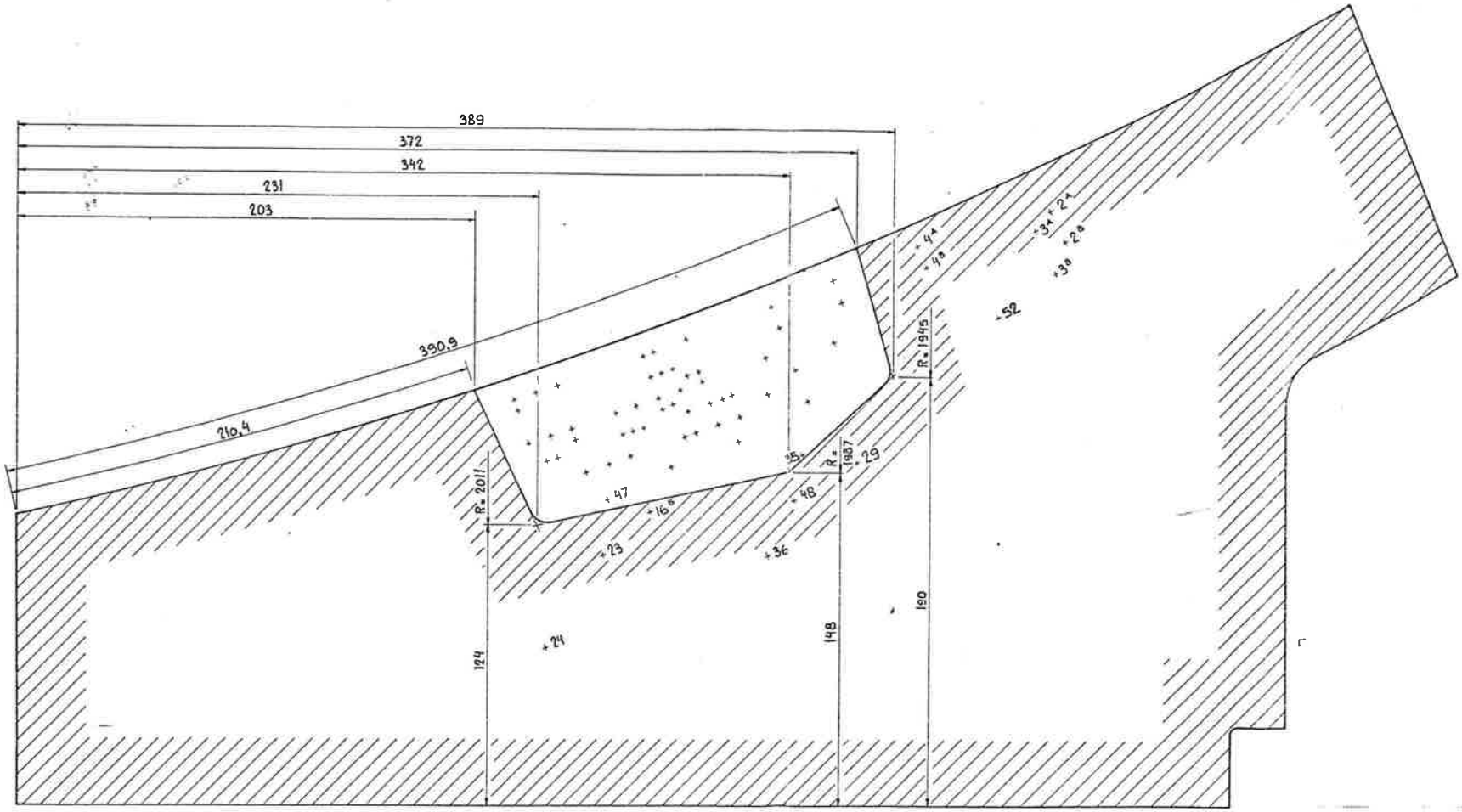
the customers and CRC and FRA ask to RN not to scrap this piece, because in the future in front of a big delay problem (due to the fact that the new piece would not be good.) the customers would accept eventually a successive inspection of the repair.

[redacted]

13.21.11 N

REVISIONS					
REV.	No. ▲	DWN. BY	O.A.P. ENG.	DES. ENG.	DESCRIPTION

Anomalie V12.
Réunion du 8.1.76.



7 JAN. 1976

VOOR AFMETINGEN SPHERICAL RING 002 ZIE TEK E.D.006

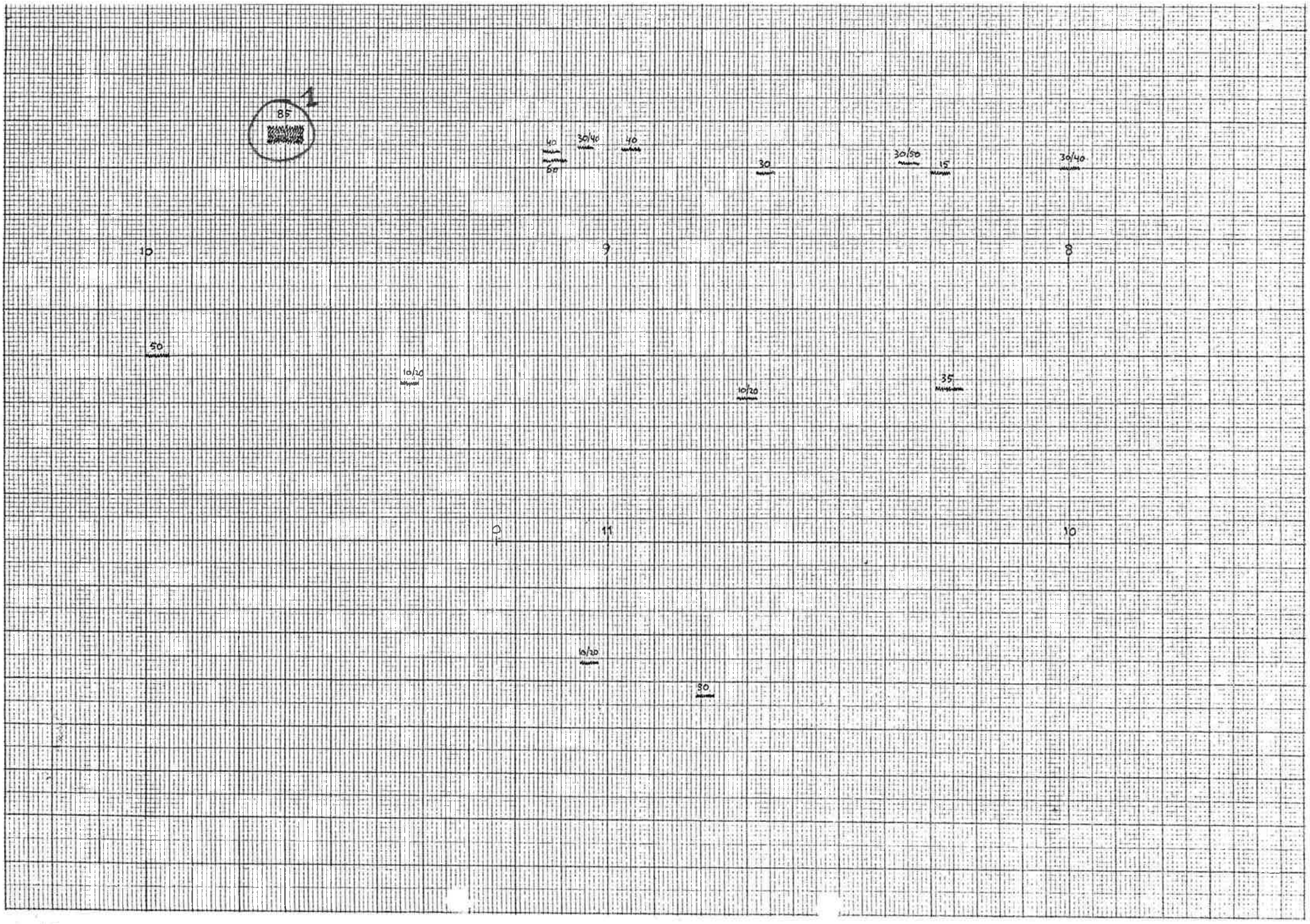
SCHAAL / SCALE		
2 : 1	20 mm
1 : 1	40 mm
1 : 2.5	100 mm
1 : 5	200 mm
1 : 10	400 mm
1 : 25	1000 mm

GEWICHT / WEIGHT

rotterdam nuclear

TITLE: MACHINING FOR BASE METAL REPAIR OF SPHERICAL RING ITEM 30811_002

ORDER No.	DWG. No	SHEET	CONT ON SH.
30811	E1_048	REVISION	
SUB ORDER No.	SCALE 1:1		O.A.P. ENG. / DES. EN.
	DWN. BY: HOEK	APPROVED BY	
	DATE 24.11.1975	DATE	


1
85
40
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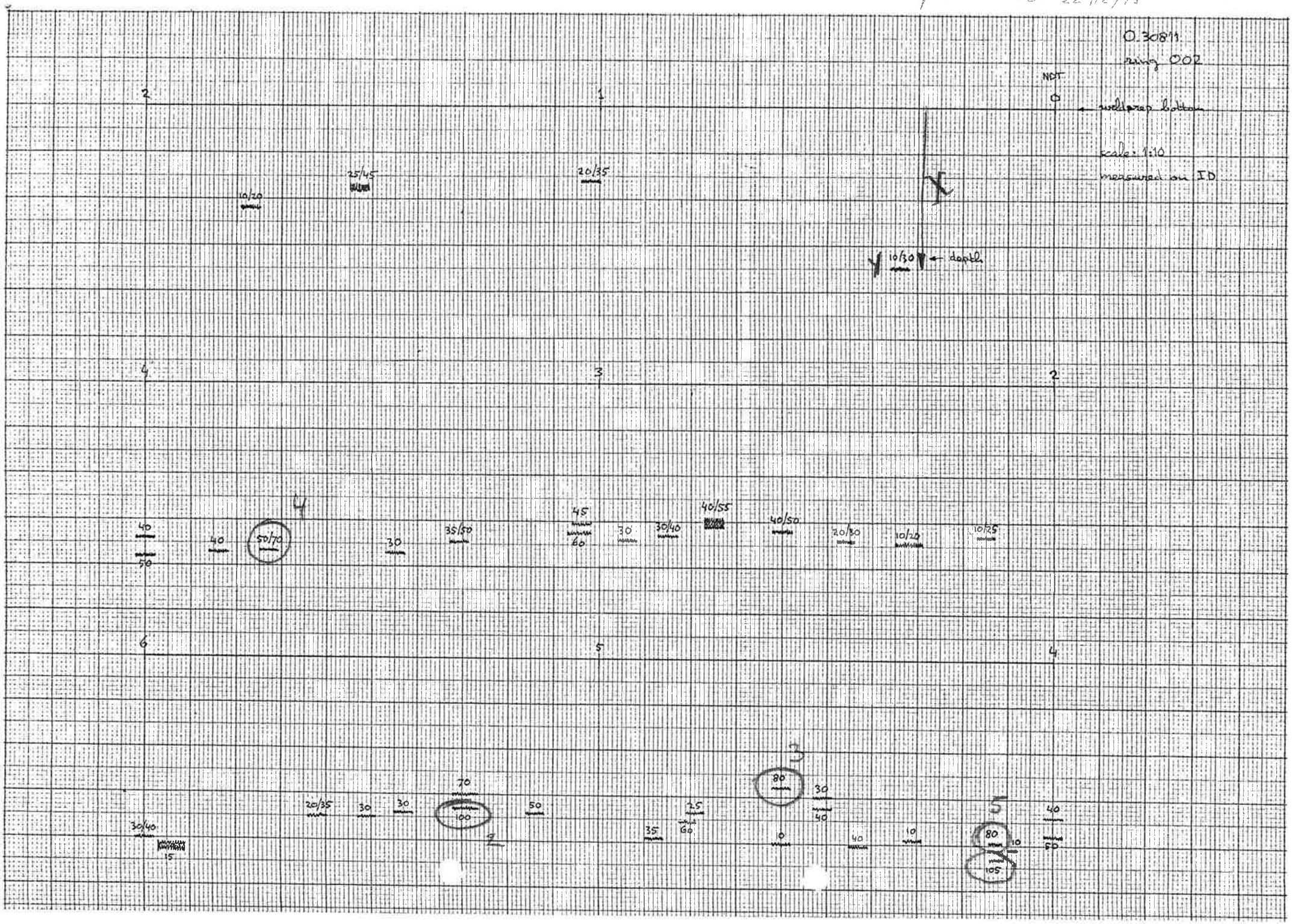
0.308"
ring 002
NDT
0
weldprep bottom
scale: 1:10
measured on ID
10/30
depth
25/45
20/35
10/20
40
50
40
50/70
30
35/50
45
60
30
30/40
40/55
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10/25
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100
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105
40
50