A 09/26/78

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)
DISTRIBUTION FOR INCOMING MATERIAL 50-315

REC: KEPPLER J G
NRC

ORG: SHALLER D V
IN & MI PWR

DOCDATE: 04/04/78
DATE RCVD: 04/24/78

DOCTYPE: LETTER NOTARIZED: NO
SUBJECT:
FURNISHING REPT PURSUANT TO APPPENDIX A TECH SPECS 3.4.8 & 6.9.1 CONCERNING, ON 01/07/78 THE DOSE EQUIVALENT IODINE-131 ACTIVITY WAS FOUND OUT OF SPECIFICATION...W/ATT SUPPORTING INFO.

COPIES RECEIVED
LTR 1 ENCL 1

PLANT NAME: COOK - UNIT 1

REVIEWER INITIAL: XJM
DISTRIBUTOR INITIAL: ml

********** DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS **********

GENERAL DISTRIBUTION FOR AFTER ISSUANCE OF OPERATING LICENSE.
(DISTRIBUTION CODE A001)

FOR ACTION: BR CHIEF SCHWENCER**W/7 ENCL

INTERNAL:
REG FILE**W/ENCL
I & E**W/2 ENCL
HANAUER**W/ENCL
EISENHUT**W/ENCL
BAER**W/ENCL
EEB**W/ENCL
J. MCGOUGH**W/ENCL
NRC PDR**W/ENCL
OELD**LTR ONLY
CHECK**W/ENCL
SHAO**W/ENCL
BUTLER**W/ENCL
J COLLINS**W/ENCL
SCHROEDER/IPPOLITO ENCL
HOUSTON ENCL
NOVAK ENCL
KNIGHT ENCL
TEDESCO ENCL
VOLLMER/BUNCH ENCL
KREGER ENCL
ROSA ENCL
K. SEYFRIT ENCL.

EXTERNAL:
LPDR'S
ST. JOSEPH, MI**W/ENCL
TIC**W/ENCL
NSIC**W/ENCL
ACRS CAT B**W/16 ENCL

DISTRIBUTION: LTR ~~40~~ 50 ENCL ~~39~~ 50
SIZE: 2P+10P

CONTROL NBR: 781150032

MA 4
GD

********** THE END **********

D Lenham

REGULATORY DOCKET FILE COPY

American Electric Power System INDIANA & MICHIGAN POWER COMPANY
DONALD C. COOK NUCLEAR PLANT
P.O. Box 458, Bridgman, Michigan 49106
(616) 465-5901

April 4, 1978

Operating License DPR-58
Docket # 50-315

RECEIVED DISTRIBUTION SERVICES UNIT
1978 APR 24 AM 10 05

Mr. J. G. Keppler, Regional Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Ill. 60137

Dear Mr. Keppler:

This report is submitted persuant to the requirement of Appendix A Technical Specifications 3.4.8 and 6.9.1. On January 7, 1978 the dose equivalent iodine-131 activity was found out of specification.

At 1400 on January 7, 1978 reactor power on Unit 1 was reduced slowly to 8% power and the reactor tripped from 8%. Power reduction was done for a scheduled repair/investigation outage.

Routine surveillance at 2100 January 7, 1978 showed that the dose equivalent iodine-131 had spiked with a maximum value noted of 1.1 μ Ci/gram.*

Reactor power had been varied considerably the previous week with no evidence of iodine spiking noted. During power reduction CVCS purification flow through the mixed bed demineralizer was approximately 75 gpm, as it had been for the majority of the week. No degassing operations were associated with this occurrence.

Analysis of the reactor coolant prior to this excursion had shown dose equivalent iodine-131 to range from 9.12×10^{-3} μ Ci/g to 2.80×10^{-2} μ Ci/g during the period of numerous power changes. Analysis at 0500 on 1-8-78 showed the iodine-131 had decreased to 0.539 μCi/g with dose equivalent iodine-131 at 0.675 μCi/g. This activity continued to decrease even during power ascension on 1-9-78. Once stable at 100% dose equivalent iodine-131 remained constant at approximately 2.3×10^{-2} μCi/g.

Iodine release at this time period is consistant with data reported in Westinghouse Electric Corporation WCAP-8637 "Iodine Behavior under transient conditions in the Pressurized Water Reactor". Dose equivalent iodine-131 values were in the "Acceptable Operation" portion of Technical

APR 10 1978

781150032

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S11

Specification Figure 3.4.1 at all times during the transient. Fuel burnup by core region is indicated in the attached table.

This report does not meet the 30 day Technical Specification reporting requirement. This is presently under investigation and a Licensee Event Report will be submitted describing the findings and resolutions.

* Coolant samples are brought to ambient conditions before counting; therefore, units of μCi/gram and μCi/cc are interchangeable.

Very truly yours,

D. V. Shaller
Plant Manager

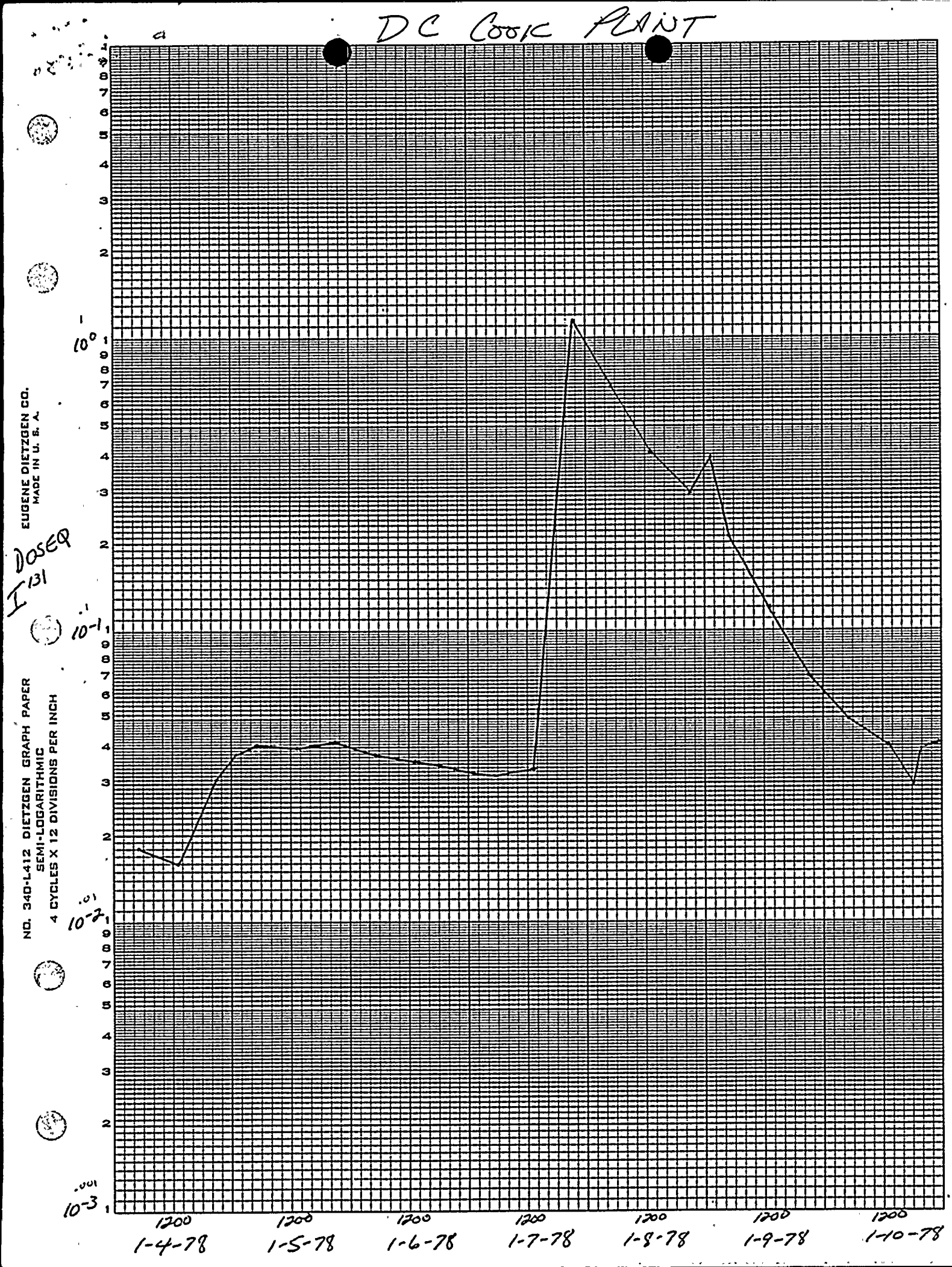
ms

attachments

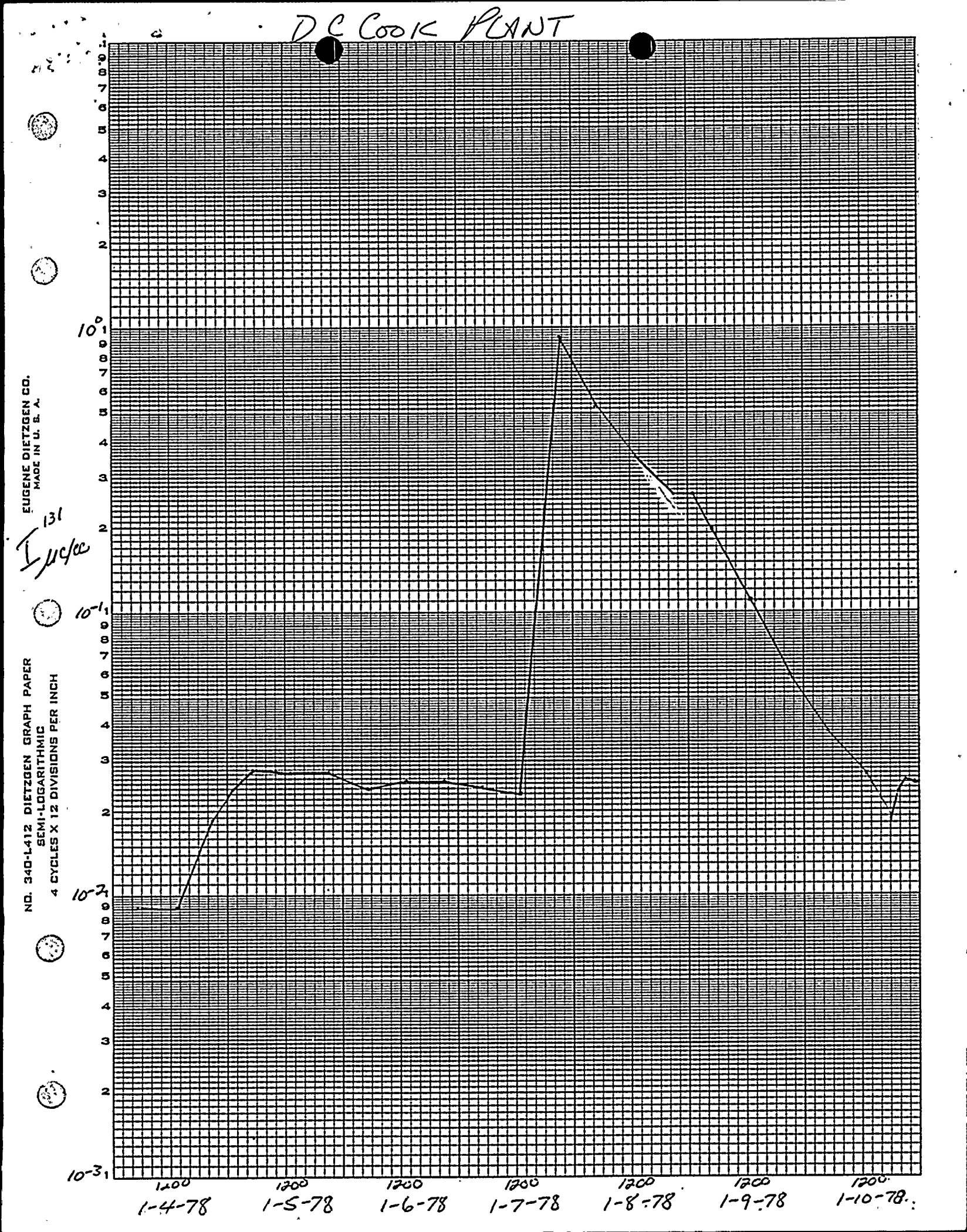
cc: R. W. Jurgensen
J. E. Dolan
R. Kilburn
R. F. Kroeger
R. J. Vollen, BPI
K. R. Baker, RO:III
P. W. Steketee, Esq.
R. C. Callan
R. Walsh, Esq.
G. Olson
J. Stietzel
PNSRC File
G. Charnoff, Esq.
J. M. Hennigan
Dir, IE (20 copies)
Dir, MIPC (2 copies)

CORE REGION	BURNUP FOR PERIOD (MWD/MTU) 10-1-77 to 1-18-78
4 (D)	0.7672×10^4
2 (B)	0.2622×10^5
3 (C)	0.2192×10^5

DC COOK PLANT



D C COOK PLANT



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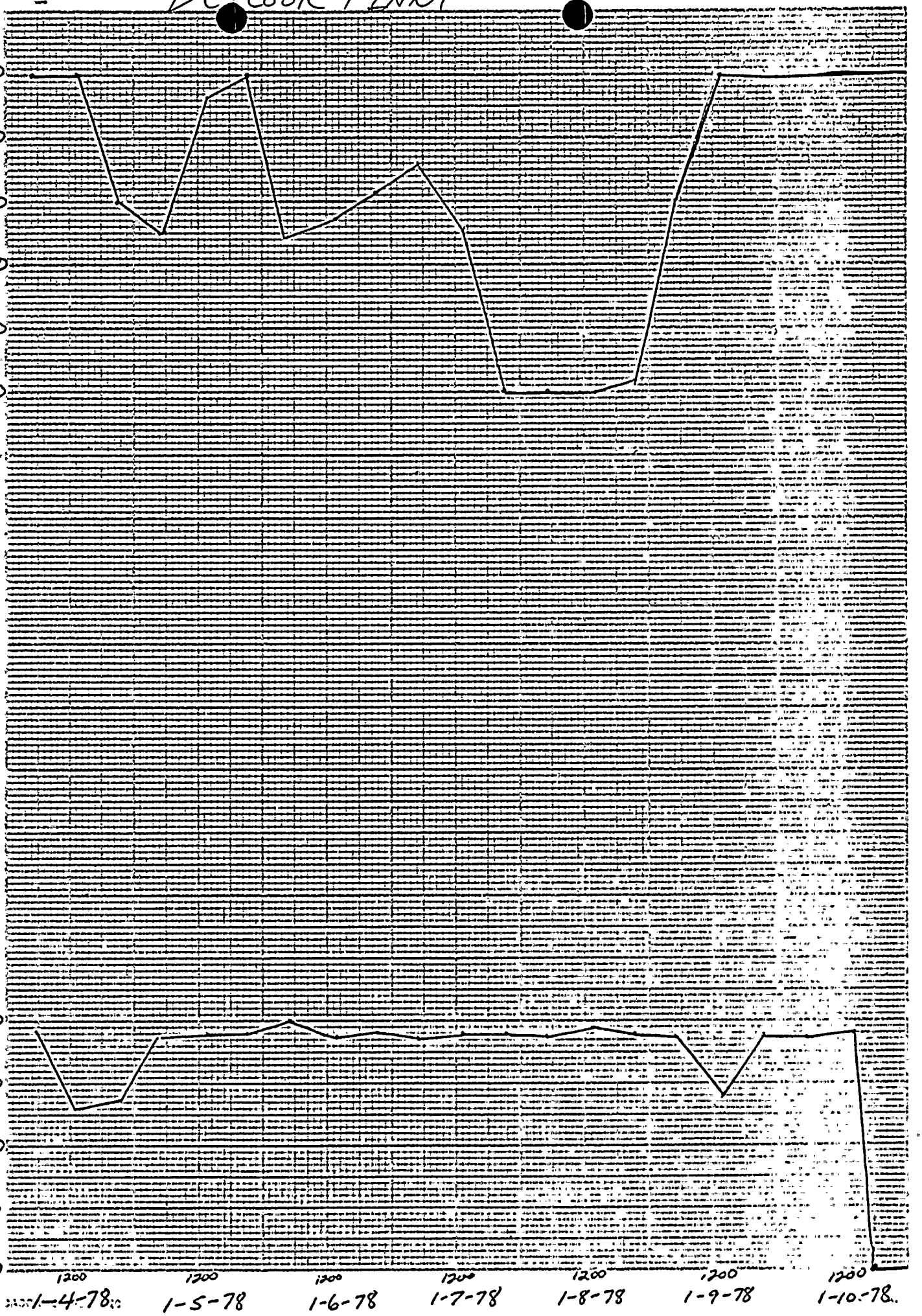

DONALD C. COOK NUCLEAR PLANT CONDITION REPORT

(1) CR No. 1-1-78-13
(2) Date 1-9-78 Time 1200
(3) Category A B (C) D E
(4) Classified By [signature]
(5) AO/AEO No. ________ (Special Report)

TO: Plant Manager

LER DUE BY 1/30/78

(6) Item Reported On Dose Equivalent I-131 in the Unit 1 R.C.S. out of specification

(7) Plant Conditions
Unit #1 Mode 2 Testing ( )Yes (✓)No
Unit #2 Mode ______ Testing ( )Yes ( )No

(8) Description of Condition At 2100 on 1-7-78, the dose equivalent I-131 on the reactor coolant system was found to be 1.14 μCi/cc. This was following unit 1 trip from ~8% power at 1426

( ) Additional Pages Reported By [signature: James Wojcik]

(9) Corrective Action Taken

By ______________

(10) Off-Site Notification Made By X (Complete Telephone Records & Attach)
( ) AEPSC ( ) I & M ( ) NRC ( ) Michigan (X) Not Applicable

(11) Investigation Assigned To E. A. SMARRELLA

(12) Investigation Report Attached report on the dose equivalent I-131 closes out the investigation

( ) Additional Pages Completed By [signature: James Wojcik]

(13) Preventive Action Taken

SEE ATTACHED.

( ) Additional Pages Dept. Head Approval [signature: E A Smarrella]

(14) PNSRC Review: Date ______________
Comments:

(15) Distribution:
Plant Mgr., Asst. Plant Mgr., QA Supv., PNSRC Secretary, AEPSC Manager Q.A. Dept. Head of Orig. Dept.

Form No. DMP 7030 RPT 001-1

CONDITION REPORTS

Instructions For Use

1. Condition Report No. — assigned by Q.A. Supervisor, Duty Staff Supervisor, Plant Manager or Assistant Plant Manager.

2. Date and Time — completed by originator.

3. Category — assigned by Plant Manager, Assistant Plant Manager, Operations Supervisor or Duty Staff Supervisor.

4. Classified By — signature of classifier.

5. AO/AEO No. — assigned by Q.A. Supervisor — after review of Condition Report by PNSRC.

6. Item Reported On — completed by originator.

7. Plant Condition — completed by originator.

8. Description of Condition — completed by originator.

9. Corrective Action — completed by whoever takes the action.

   NOTE:

   1. Corrective Action is the action taken to 1) restore the system, component or structure to a normal condition or 2) to place the plant in a safe and stable condition until permanent corrective action can be identified and accomplished.
   2. If a Job Order was written, provide the number. If a Temporary Change Sheet was initiated, provide the number.
   3. If no Corrective Action was required, enter NA and sign it.

10. Off-Site Notification — completed by classifier. If not applicable, the classifier should enter his initials in that block.

11. Investigation Assignment — completed by the classifier.

12. Investigation Report — completed by individual conducting the investigations.

13. Preventive Action Taken — completed by individual who completes the preventive action.

    NOTE: Preventive action is that action taken in addition to the Corrective Action Taken, to identify the root cause of the condition and the measures taken to prevent recurrence of the condition.

14. PNSRC Review — completed by PNSRC.

15. Distribution — made by QA Supervisor or Duty Staff Supervisor a) after completion through item 11, b) by QA Supervisor after original is reviewed by PNSRC.

INDIANA AND MICHIGAN POWER COMPANY
DONALD C. COOK NUCLEAR PLANT

Iodine Spike Following Power Transient - January 7, 1978

This report is submitted persuant to the requirement of Appendix A Technical Specifications 3.4.8 and 6.9.1. On January 7, 1978 the dose equivalent iodine-131 activity was found out of specification.

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Iodine release at this time period is consistant with data reported in Westinghouse Electric Corporation WCAP-8637 "Iodine Behavior under transient conditions in the Pressurized Water Reactor". Dose equivalent iodine-131 values were in the "Acceptable Operation" portion of Technical Specification Figure 3.4.1 at all times during the transient. Fuel burnup by core region is indicated in the attached table.

---

* Coolant samples are brought to ambient conditions before counting; therefore, units of μCi/gram and μCi/cc are interchangeable.

CORE REGION	BURNUP FOR PERIOD (MWD/MTU) 10-1-77 to 1-18-78
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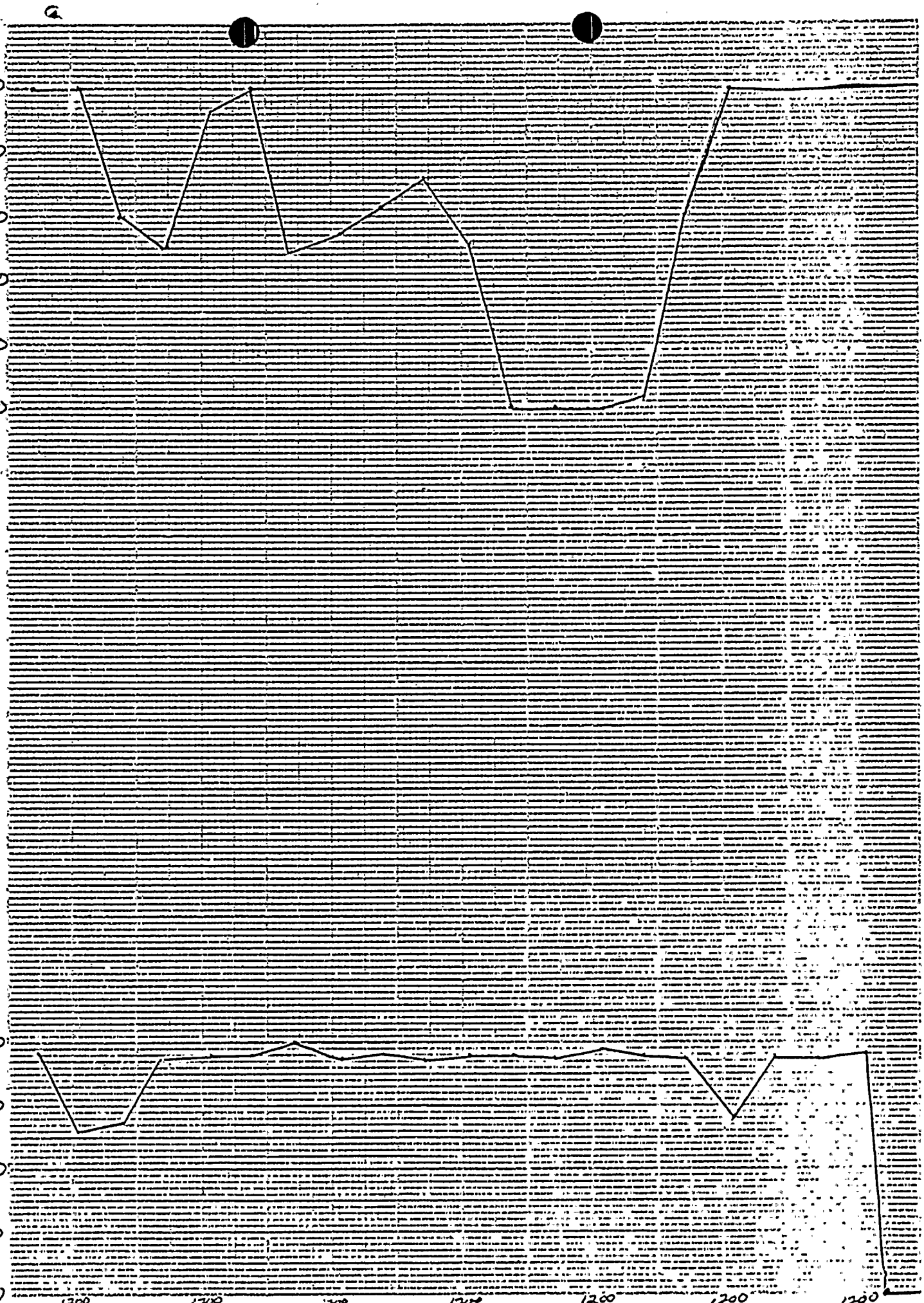
3 (C)	0.2192×10^5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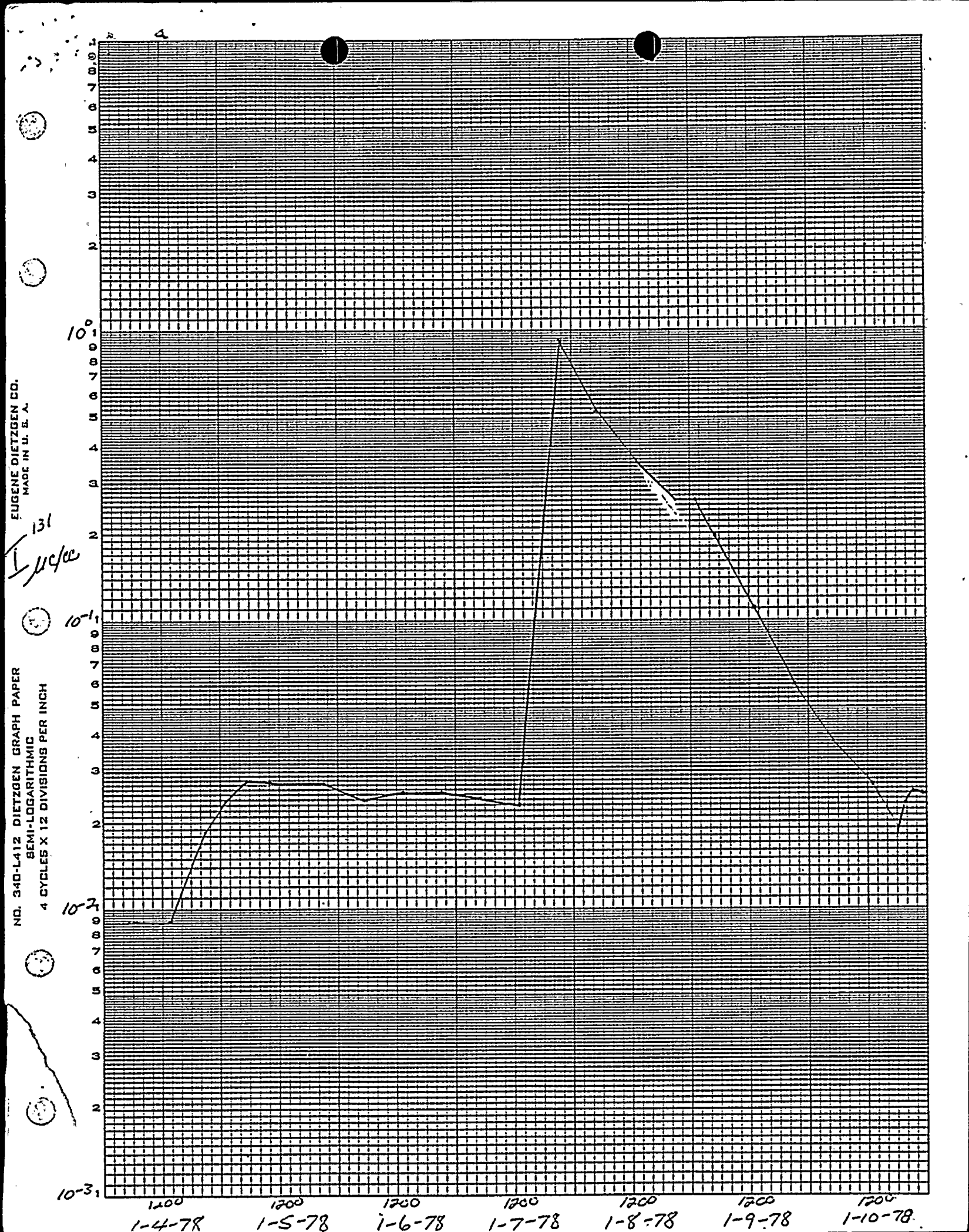
EUGENE DIETZGEN CO.
MADE IN U. S. A.
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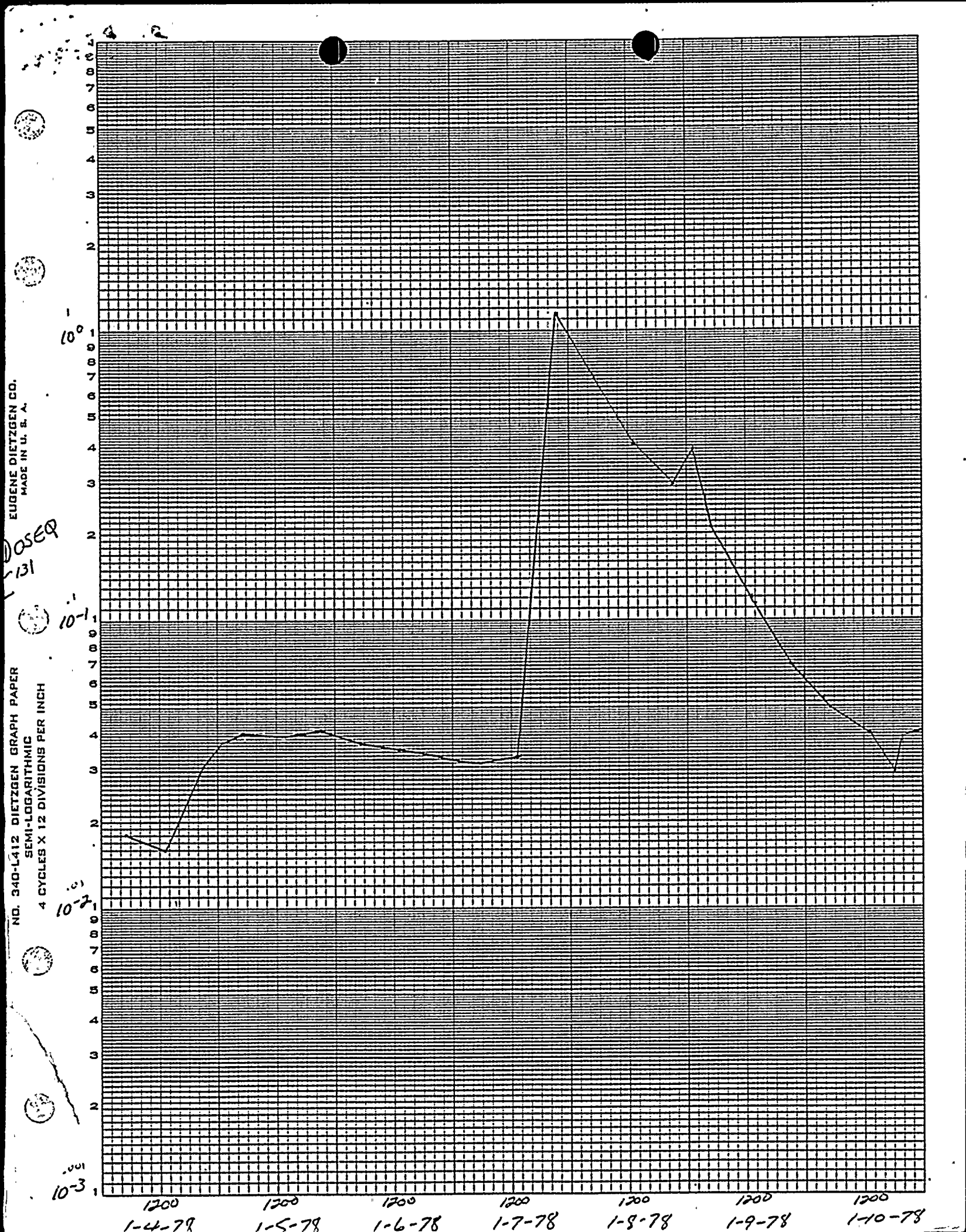
EUGENE DIETZGEN CO.
MADE IN U. S. A.
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10^{-1}
10^{-2}
10^{-3}
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