

November 26, 2014

Mr. Allan Batka  
**United States Environmental Protection Agency**  
**Region 5 (WU-16J)**  
77 West Jackson Blvd.  
Chicago, Illinois 60604

Re: EGT Monthly Report (in conformance with MI-163-1W-C010 & MI-163-1W-C011)

Dear Mr. Batka:

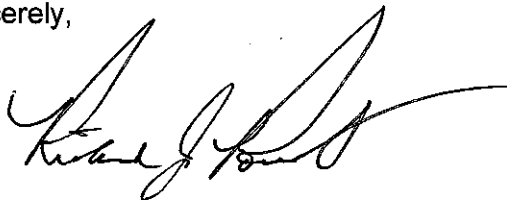
Environmental Geo-Technologies, LLC ("EGT") hereby timely submits its twelfth Monthly Report in conformance with the requirements of its two EPA UIC permits (#s MI-163-1W-C010 & MI-163-1W-C011).

EGT is providing all of the attached information in the same sequence as required by both subject permits, i.e. Part II.D.1 (a – i), Part III, Attachment A, and Part III, Attachment E.G.2 & E.I.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

We trust that you find this report satisfactory, however, if you have any questions or comments, please feel free to contact us.

Sincerely,



Richard J. Powals, P.E.  
Chief Operating Officer

cc: J. Frost (EGT), T. Athans (HH)

att.

rjp112814/EGTEPAMonthlyReport-October 2014

## **AVERAGE INJECTION RATE**

Calculation of Average Injection Rate

CURRENT REPORTING YEAR 2014

CURRENT REPORTING MONTH OCTOBER

Date (month, year) of the first injection into either well at the Citrin Road Facility

Nov 2013

CURRENT MONTH (all volumes in gallons)

	Injected Waste	Injected Non-Waste	Total injected
<b>MI-163-1W-C010, Well #1-12</b>			
Current Month	53,479	0	53,479
Since facility first injected			953,128
<b>MI-163-1W-C011, Well #2-12</b>			
Current Month	3,007	0	3,007
Since facility first injected			896,147
		Lifetime Combined	1,849,275

Conversion factors

365.25 days per year ÷ 12 months per year = 30.4375 days per month

30.4375 days per month × 1440 minutes per day = 43,830 minutes per month

Calculations

Whole number of months of injection 12

12 lifetime number of months of injection × 43,830 minutes/month  
= 525,960 minutes of injection

Lifetime combined injected volume 1,849,275 ÷ 525,960 minutes of injection  
= 3.5 gpm average injection rate

## **WELL 1 DATA**

WELL 01 Monthly Data

Date	Min Injection Pressure (PSIG)	Max Injection Pressure (PSIG)	Min Sight Glass Level (in)	Max Sight Glass Level (in)	Min Annulus Pressure (PSIG)	Max Annulus Pressure (PSIG)	Min Injectate pH	Max Injectate pH	Min Flow Rate (GPM)	Max Flow Rate (GPM)	Min Differential Pressure (PSIG)	Max Differential Pressure (PSIG)
10/1/2014	0.00	720.00	21.90	23.00	216.00	1020.00	1.70	1.70	0.00	36.00	216.00	306.00
10/2/2014	0.00	720.00	22.00	23.80	240.00	1026.00	0.10	0.10	0.00	28.00	243.00	318.00
10/3/2014	120.00	714.00	22.00	23.80	192.00	1044.00	2.10	2.10	0.00	16.00	174.00	324.00
10/4/2014	0.00	0.00	23.00	23.00	192.00	300.00	NI	NI	0.00	0.00	195.00	300.00
10/5/2014	0.00	0.00	23.00	23.00	246.00	258.00	NI	NI	0.00	0.00	246.00	264.00
10/6/2014	0.00	120.00	23.00	23.00	246.00	246.00	NI	NI	0.00	0.00	240.00	243.00
10/7/2014	0.00	726.00	22.00	23.50	225.00	1050.00	0.90	2.30	0.00	36.00	222.00	330.00
10/8/2014	0.00	717.00	22.50	23.20	210.00	1011.00	2.50	2.50	0.00	124.00	207.00	330.00
10/9/2014	0.00	741.00	22.20	24.00	207.00	1068.00	1.20	1.20	0.00	116.80	204.00	321.00
10/10/2014	0.00	717.00	22.40	24.10	198.00	1026.00	1.50	1.50	0.00	120.00	198.00	309.00
10/11/2014	0.00	666.00	22.50	24.00	204.00	963.00	5.70	0.08	0.00	108.00	210.00	330.00
10/12/2014	0.00	0.00	23.50	23.50	246.00	255.00	NI	NI	0.00	0.00	246.00	252.00
10/13/2014	0.00	0.00	23.50	23.60	240.00	240.00	NI	NI	0.00	0.00	246.00	270.00
10/14/2014	0.00	696.00	22.30	24.00	240.00	1044.00	0.06	0.06	0.00	178.00	201.00	336.00
10/15/2014	0.00	0.00	23.50	23.50	255.00	261.00	0.35	0.35	0.00	0.00	255.00	264.00
10/16/2014	0.00	720.00	22.40	24.00	201.00	1050.00	0.00	0.00	0.00	192.80	204.00	330.00
10/17/2014	0.00	72.00	23.10	23.50	216.00	390.00	0.00	0.00	0.00	132.00	216.00	318.00
10/18/2014	0.00	0.00	23.30	23.40	219.00	225.00	NI	NI	0.00	0.00	219.00	225.00
10/19/2014	0.00	0.00	23.20	23.30	225.00	225.00	NI	NI	0.00	0.00	219.00	219.00
10/20/2014	0.00	0.00	23.30	23.50	219.00	219.00	NI	NI	0.00	0.00	219.00	219.00
10/21/2014	0.00	714.00	21.30	23.80	219.00	936.00	6.40	6.40	0.00	168.00	216.00	906.00
10/22/2014	0.00	717.00	22.00	23.60	273.00	960.00	6.40	6.40	0.00	108.00	249.00	294.00
10/23/2014	0.00	0.00	23.60	23.60	285.00	291.00	NI	NI	0.00	0.00	285.00	294.00
10/24/2014	0.00	0.00	23.50	23.50	282.00	288.00	NI	NI	0.00	0.00	285.00	285.00
10/25/2014	0.00	0.00	23.50	23.50	270.00	282.00	NI	NI	0.00	0.00	273.00	279.00
10/26/2014	0.00	0.00	23.30	23.40	270.00	270.00	NI	NI	0.00	0.00	270.00	273.00
10/27/2014	0.00	0.00	23.20	23.50	270.00	270.00	NI	NI	0.00	0.00	270.00	270.00
10/28/2014	0.00	0.00	23.50	23.50	270.00	270.00	NI	NI	0.00	0.00	270.00	270.00
10/29/2014	0.00	0.00	23.50	23.50	270.00	276.00	NI	NI	0.00	0.00	270.00	276.00
10/30/2014	0.00	0.00	23.50	23.50	270.00	276.00	NI	NI	0.00	0.00	270.00	276.00
10/31/2014	0.00	0.00	23.50	23.50	270.00	270.00	NI	NI	0.00	0.00	270.00	270.00

## DATA DESCRIPTION

October 2014

This month's data for pH is entered from the instantaneous measurements that the deep well operator took during injection on any given day. The instantaneous measurements are tabulated on the well data sheets for both wells where injection was taking place. If injection did not take place on a day the pH column will have a "NI" that stands for no injection. This is a compliant temporary reporting step while EGT is troubleshooting the irregular readings from the system pH probe.

# Circle Chart Index

Environmental Geo-Technologies, LLC 28470 Citrin Drive Romulus, MI 48174

## Chart Recorder #1

Channel #1

**Blue Pen** - Well 1 Injection Pressure

Channel #2

**Red Pen** – Well 1 Annulus Pressure

Channel #3

**Green Pen** – Well 1 Flow Rate

Channel #4

**Black Pen** – Well 1 Annulus Tank Level

## Chart Recorder #2

Channel #1

**Blue Pen** – Well 2 Injection Pressure

Channel #2

**Red Pen** – Well 2 Annulus Pressure

Channel #3

**Green Pen** – Well 2 Flow Rate

Channel #4

**Black Pen** – Well 2 Annulus Tank Level

## Chart Recorder #3

Channel #1

**Blue Pen** – Injection pH Well 1 & 2

Channel #2

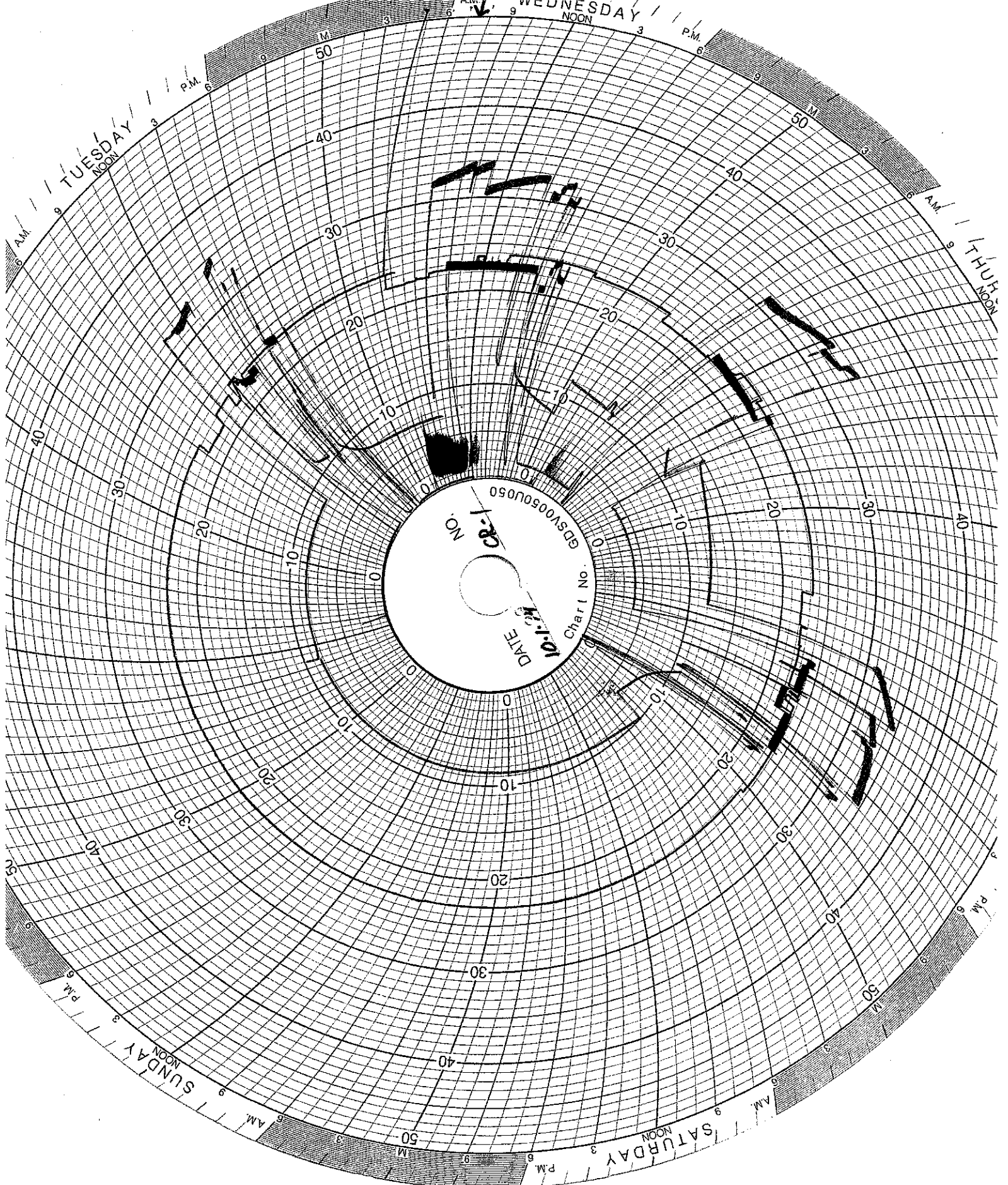
**Red Pen** – Well 1 Monthly Volume

Channel #3

**Green Pen** – Well 2 Monthly Volume

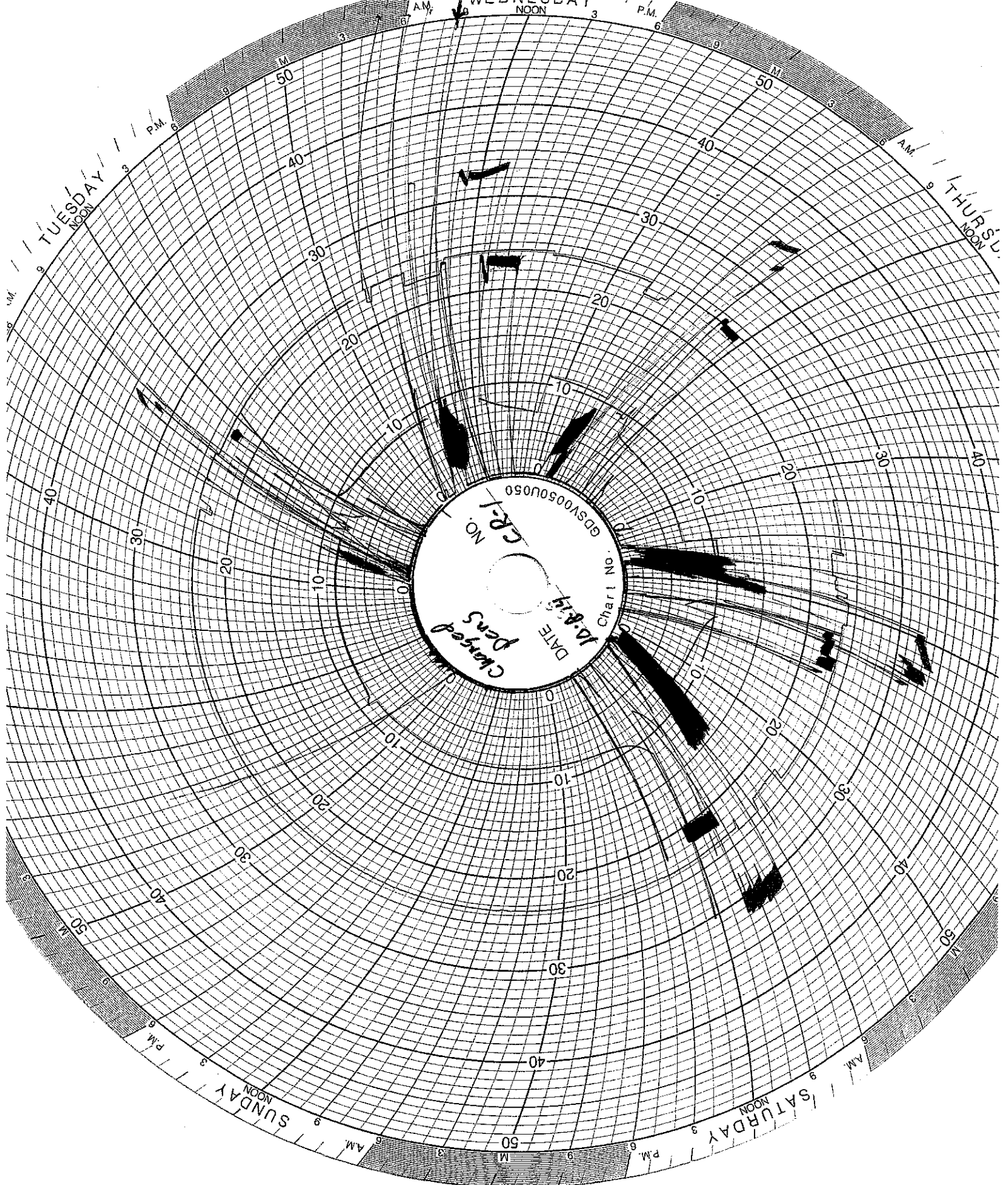
Channel #4

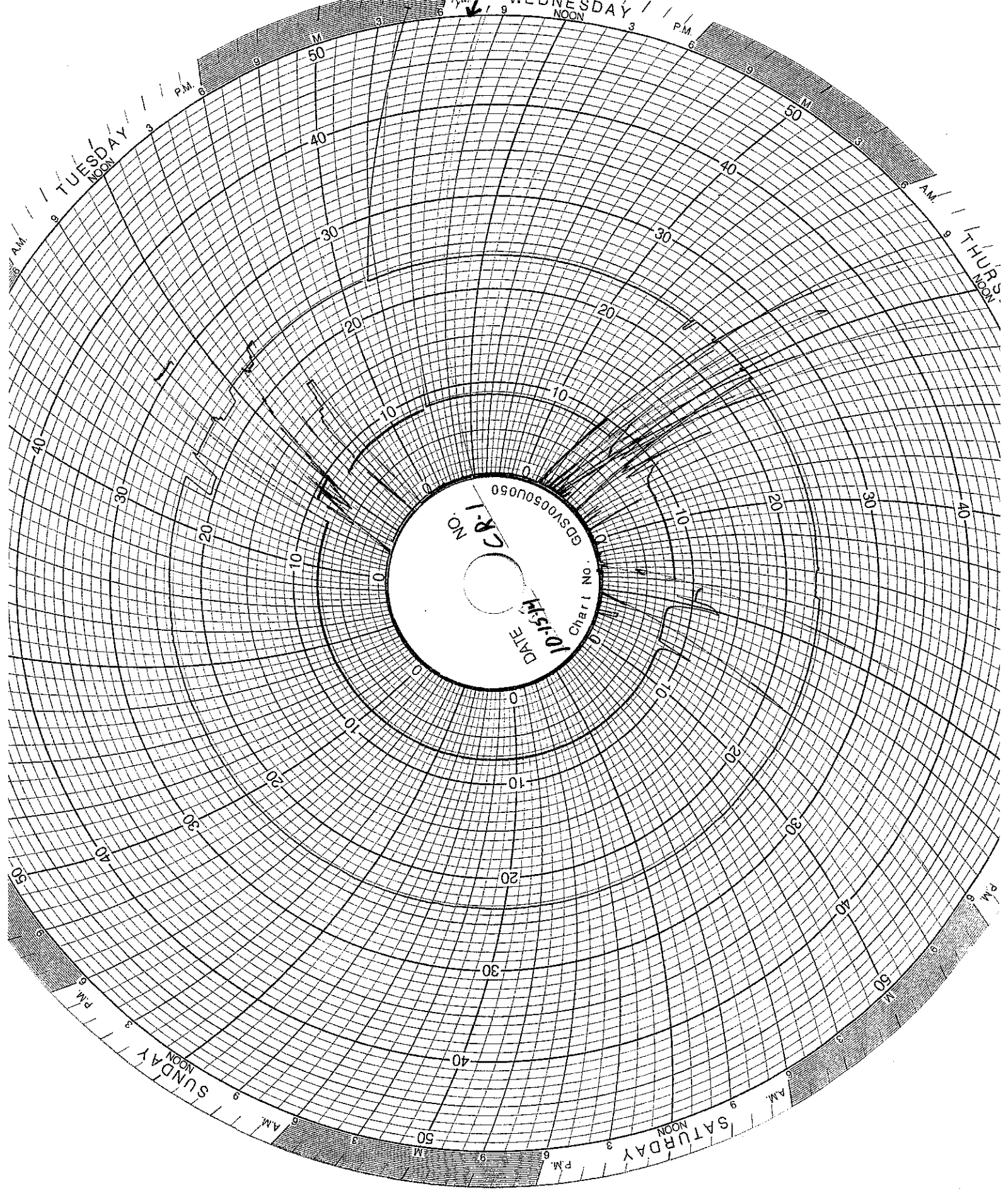
**Black Pen** - Temperature



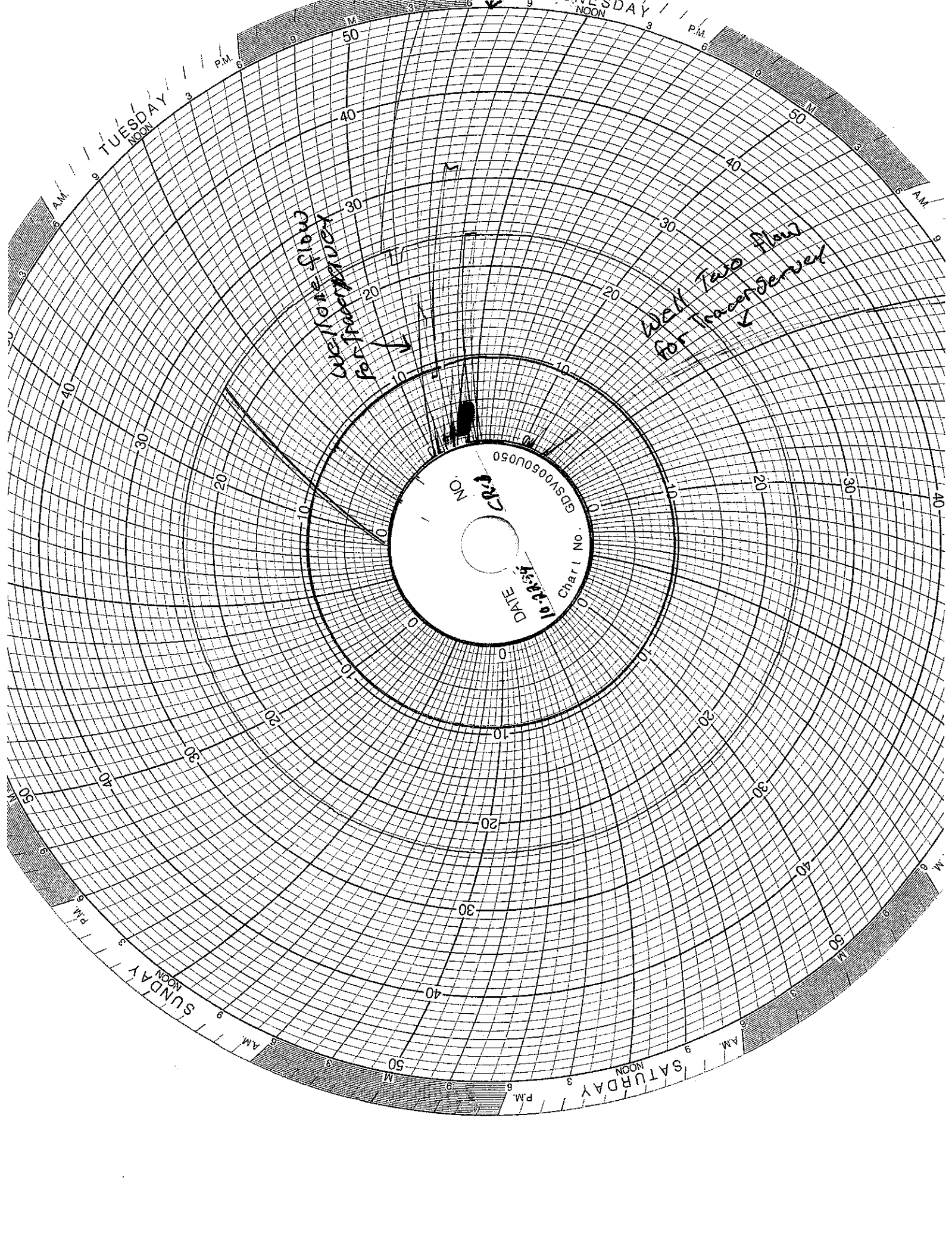
DATE 10.1.88  
Charl No  
GDSV0050U050  
CR-1 NO







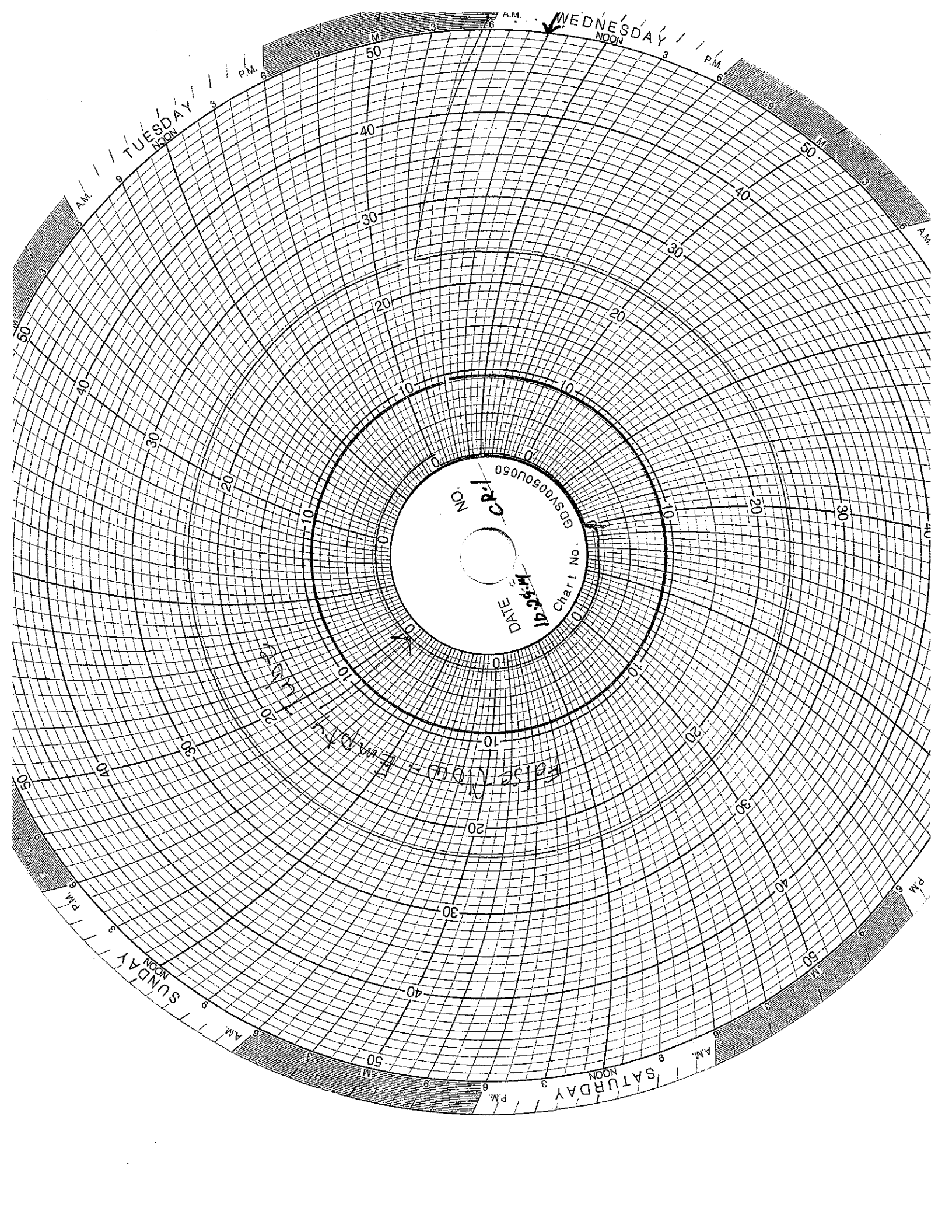
101514  
DATE  
Chart No. 050505050  
CP-1



CUSTOMER'S LOCATION FOR TRACKING

WEEK TWO flow for tracer bomb

DATE 10-12-57  
Charl No. 0  
GDS1005050  
NO. 1  
CRV



TUESDAY  
NOON

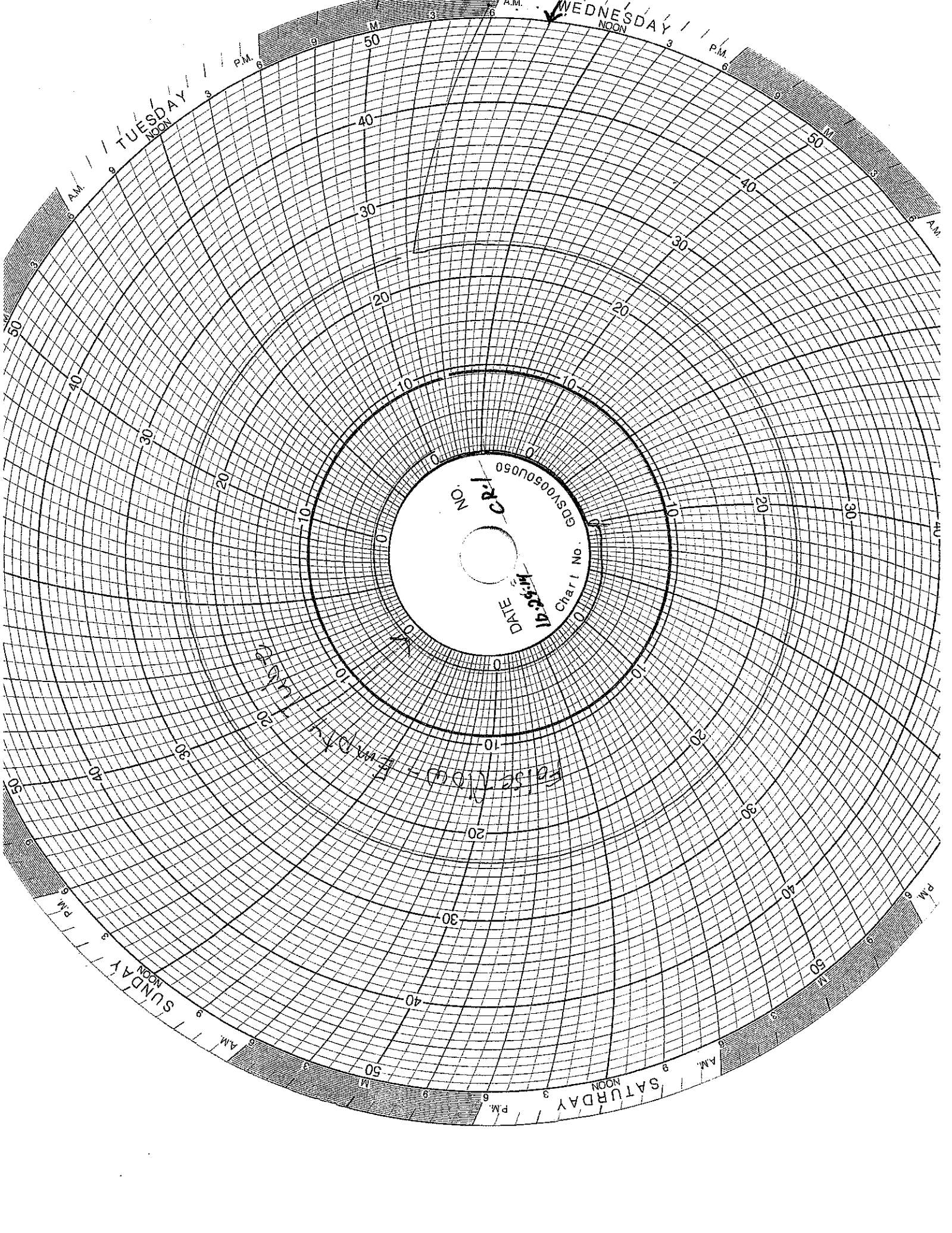
WEDNESDAY  
NOON

SATURDAY  
NOON

SUNDAY  
NOON

DATE 11-25-54  
Charl No. 65V0050U050  
CR-1

EISENHOOD - F.W.D.



## WELL 2 DATA

Well 02 Monthly Data

Date	Min Injection Pressure (PSIG)	Max Injection Pressure (PSIG)	Min Sight Glass Level (in)	Max Sight Glass Level (in)	Min Annulus Pressure (PSIG)	Max Annulus Pressure (PSIG)	Min Injectate pH	Max Injectate pH	Min Flow Rate (GPM)	Max Flow Rate (GPM)	Min Differential Pressure (PSIG)	Max Differential Pressure (PSIG)
10/1/2014	0.00	0.00	18.25	18.25	240.00	240.00	1.70	1.70	0.00	0.00	232.50	240.00
10/2/2014	0.00	0.00	18.25	18.25	240.00	240.00	0.10	0.10	0.00	0.00	240.00	240.00
10/3/2014	0.00	0.00	18.25	18.25	240.00	240.00	2.10	2.10	0.00	0.00	240.00	240.00
10/4/2014	0.00	0.00	18.25	18.25	240.00	240.00	NI	NI	0.00	0.00	240.00	240.00
10/5/2014	0.00	0.00	18.25	18.25	240.00	240.00	NI	NI	0.00	0.00	240.00	240.00
10/6/2014	0.00	0.00	18.25	18.25	240.00	240.00	NI	NI	0.00	0.00	240.00	240.00
10/7/2014	0.00	0.00	18.25	18.25	240.00	240.00	0.90	2.30	0.00	0.00	240.00	240.00
10/8/2014	0.00	0.00	18.75	18.75	217.50	232.50	2.50	2.50	0.00	0.00	217.50	232.50
10/9/2014	0.00	0.00	18.75	18.75	232.50	232.50	1.20	1.20	0.00	0.00	232.50	232.50
10/10/2014	0.00	0.00	18.95	18.95	232.50	232.50	1.50	1.50	0.00	0.00	232.50	232.50
10/11/2014	0.00	0.00	18.95	18.95	232.50	232.50	5.70	0.08	0.00	0.00	232.50	232.50
10/12/2014	0.00	0.00	18.95	18.95	225.00	225.00	NI	NI	0.00	0.00	225.00	225.00
10/13/2014	0.00	0.00	18.75	18.75	217.50	225.00	NI	NI	0.00	0.00	217.50	225.00
10/14/2014	0.00	0.00	18.75	18.75	210.00	217.50	0.06	0.06	0.00	0.00	210.00	217.50
10/15/2014	0.00	0.00	18.75	18.75	217.50	300.00	0.35	0.35	0.00	0.00	217.50	300.00
10/16/2014	0.00	0.00	18.75	18.75	217.50	217.50	0.00	0.00	0.00	0.00	217.50	217.50
10/17/2014	0.00	0.00	18.75	18.75	217.50	217.50	0.00	0.00	0.00	0.00	217.50	217.50
10/18/2014	0.00	0.00	18.75	18.75	217.50	217.50	NI	NI	0.00	0.00	217.50	217.50
10/19/2014	0.00	0.00	18.75	18.75	217.50	217.50	NI	NI	0.00	0.00	217.50	217.50
10/20/2014	0.00	0.00	18.75	18.75	217.50	217.50	NI	NI	0.00	0.00	217.50	217.50
10/21/2014	0.00	0.00	15.75	18.75	217.50	930.00	6.40	6.40	0.00	0.00	217.50	930.00
10/22/2014	0.00	712.50	16.25	17.25	180.00	982.50	6.40	6.40	0.00	44.00	180.00	270.00
10/23/2014	0.00	0.00	19.75	20.25	165.00	285.00	NI	NI	0.00	0.00	165.00	285.00
10/24/2014	0.00	0.00	18.00	18.00	270.00	270.00	NI	NI	0.00	0.00	270.00	270.00
10/25/2014	0.00	0.00	18.00	18.00	270.00	270.00	NI	NI	0.00	0.00	270.00	270.00
10/26/2014	0.00	0.00	18.00	18.00	270.00	270.00	NI	NI	0.00	0.00	270.00	270.00
10/27/2014	0.00	0.00	18.00	18.00	270.00	270.00	NI	NI	0.00	0.00	270.00	270.00
10/28/2014	0.00	0.00	18.00	18.00	270.00	270.00	NI	NI	0.00	0.00	270.00	270.00
10/29/2014	0.00	0.00	17.75	18.00	267.00	267.00	NI	NI	0.00	0.00	267.00	267.00
10/30/2014	0.00	0.00	17.75	18.00	267.00	267.00	NI	NI	0.00	0.00	267.00	267.00
10/31/2014	0.00	0.00	18.00	18.00	267.00	267.00	NI	NI	0.00	0.00	267.00	267.00

# Circle Chart Index

Environmental Geo-Technologies, LLC 28470 Citrin Drive Romulus, MI 48174

## Chart Recorder #1

Channel #1

**Blue Pen** - Well 1 Injection Pressure

Channel #2

**Red Pen** - Well 1 Annulus Pressure

Channel #3

**Green Pen** - Well 1 Flow Rate

Channel #4

**Black Pen** - Well 1 Annulus Tank Level

## Chart Recorder #2

Channel #1

**Blue Pen** - Well 2 Injection Pressure

Channel #2

**Red Pen** - Well 2 Annulus Pressure

Channel #3

**Green Pen** - Well 2 Flow Rate

Channel #4

**Black Pen** - Well 2 Annulus Tank Level

## Chart Recorder #3

Channel #1

**Blue Pen** - Injection pH Well 1 & 2

Channel #2

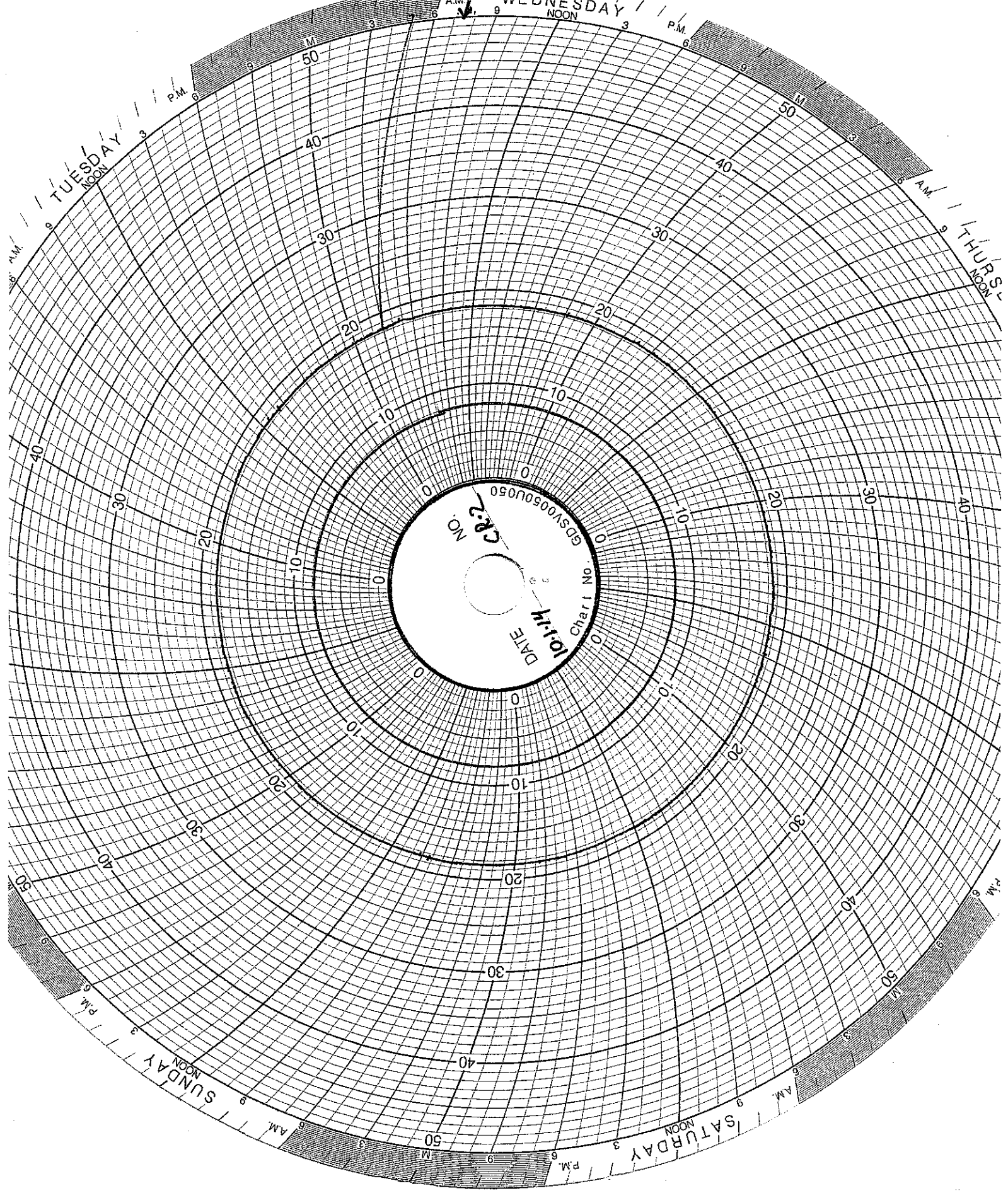
**Red Pen** - Well 1 Monthly Volume

Channel #3

**Green Pen** - Well 2 Monthly Volume

Channel #4

**Black Pen** - Temperature



TUESDAY  
NOON

WEDNESDAY  
NOON

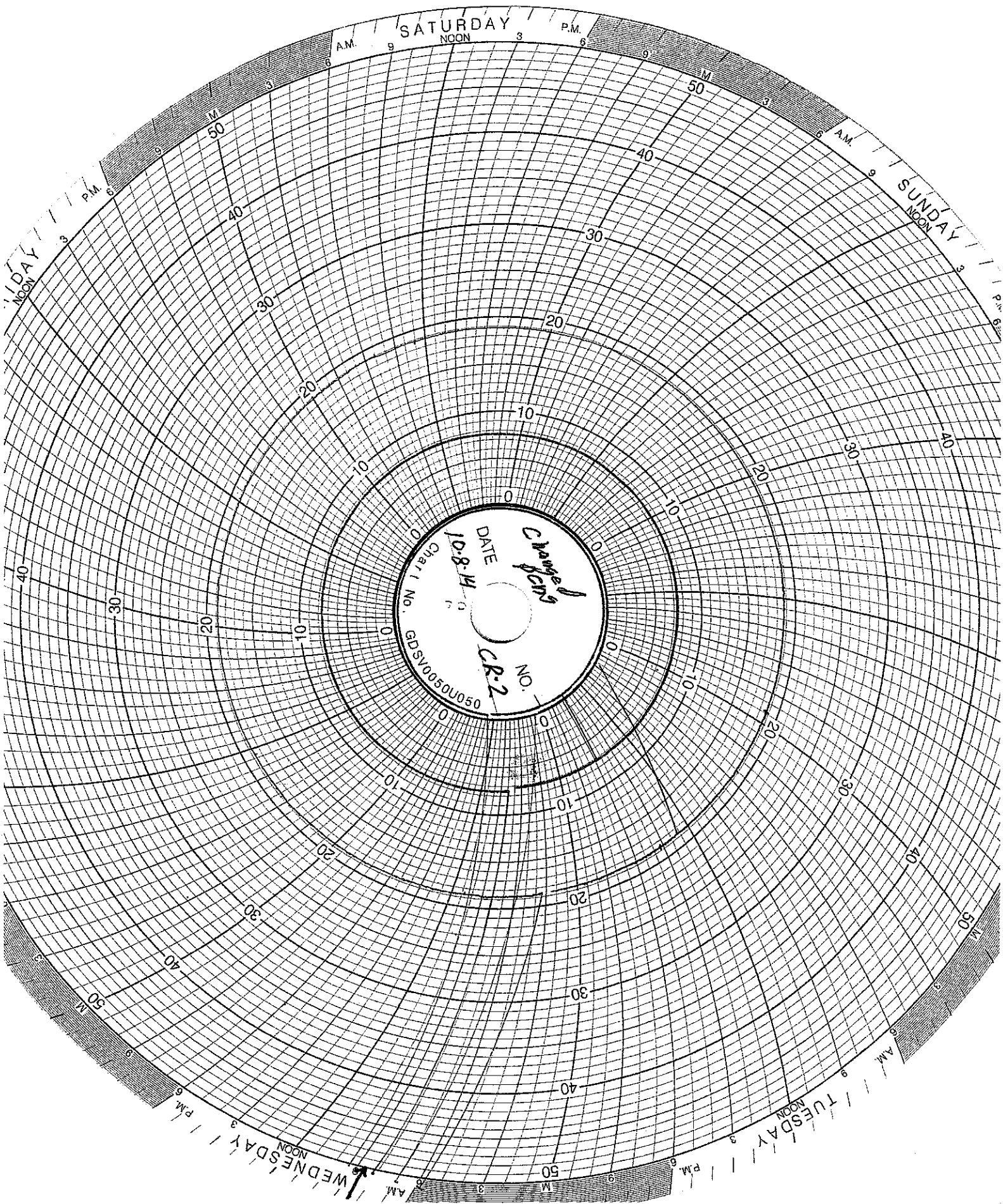
THURSDAY  
NOON

SUNDAY  
NOON

SATURDAY  
NOON

DATE 10-1-14  
Chart No. 0  
GDSV05050050  
NO. CR-2





SATURDAY  
NOON 3 P.M. 6

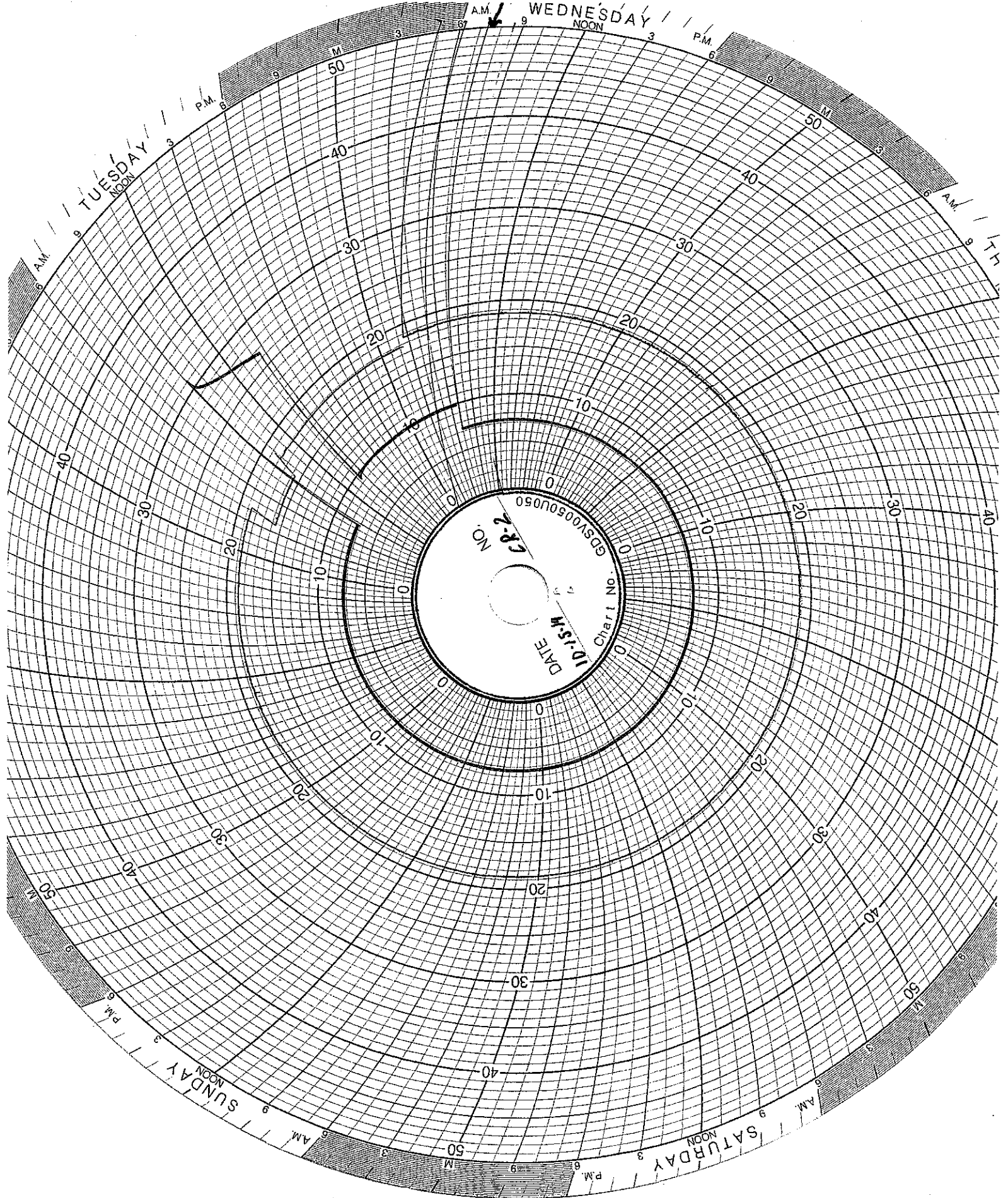
SUNDAY  
NOON 3 P.M. 6

FRIDAY  
NOON 3 P.M. 6

TUESDAY  
NOON 3 P.M. 6

WEDNESDAY  
NOON 3 P.M. 6

Campers  
DATE 10-8-14  
Charl No 6  
GDSV0050U050  
NO. CR-2



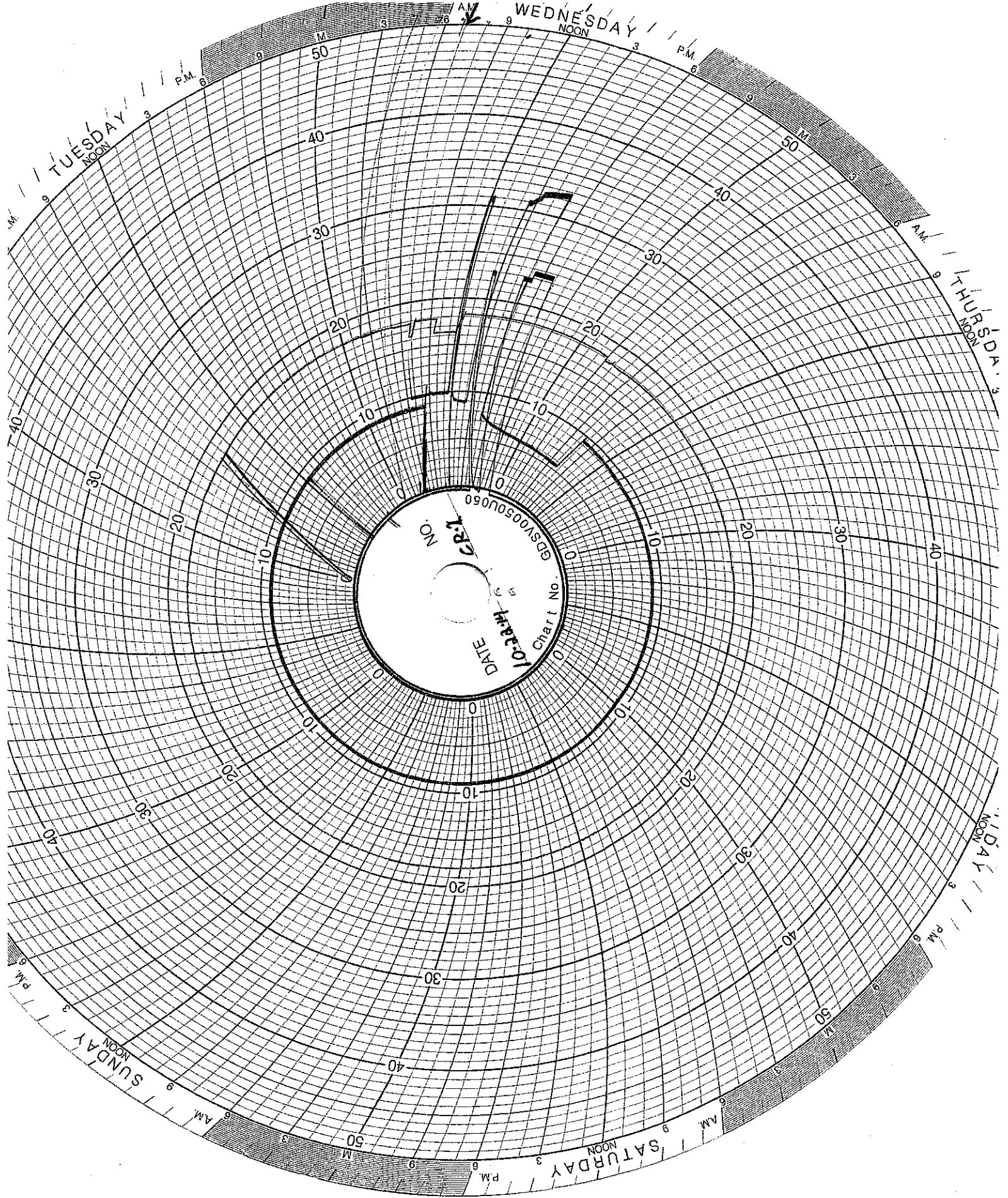
DATE 10-5-54  
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TUESDAY  
9 AM  
NOON  
6 PM

WEDNESDAY  
9 AM  
NOON  
6 PM

SATURDAY  
9 AM  
NOON  
6 PM

SUNDAY  
9 AM  
NOON  
6 PM



TUESDAY  
NOON

WEDNESDAY  
NOON

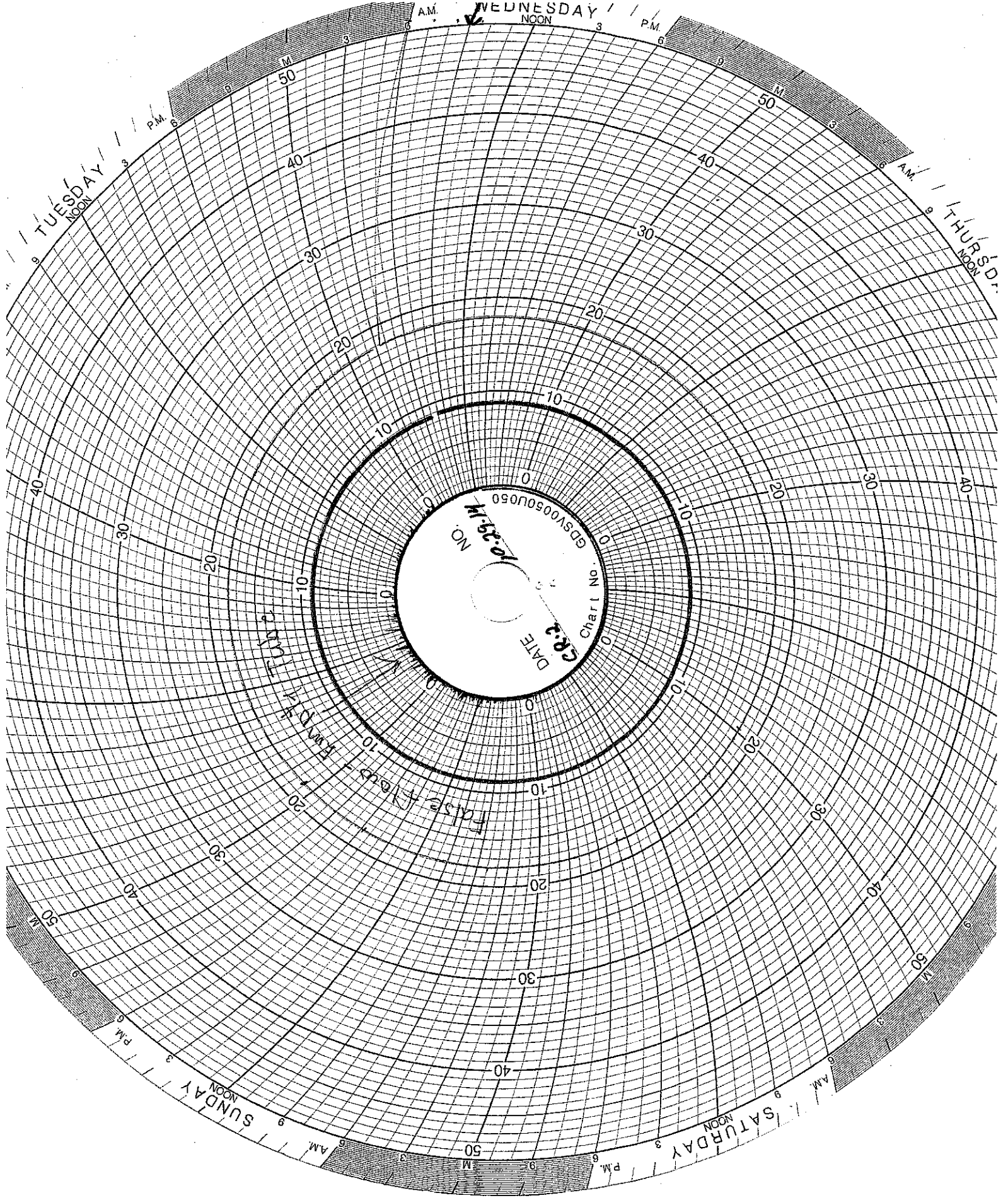
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FRIDAY  
NOON

SATURDAY  
NOON

SUNDAY  
NOON

10-12-44  
DATE  
Chart No  
GDS10050060  
ER.1 NO.



WEDNESDAY  
NOON

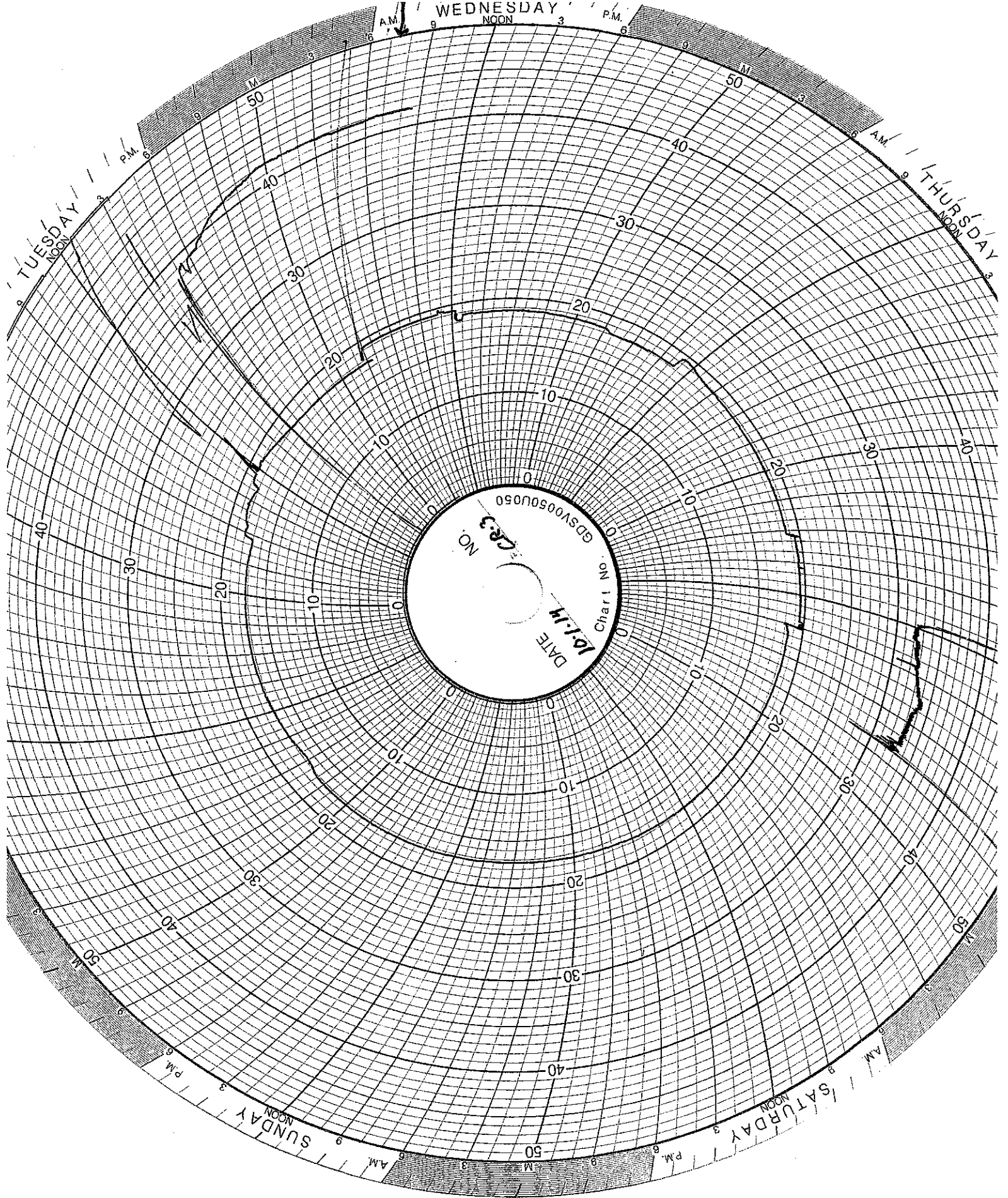
TUESDAY  
NOON

THURSDAY  
NOON

SUNDAY  
NOON

SATURDAY  
NOON

M. 3000  
NO. 01505050  
Chart No. 01505050  
DATE  
Faise (No. 1)



WEDNESDAY

AM NOON PM

M 50

M 50

TUESDAY

THURSDAY

SUNDAY

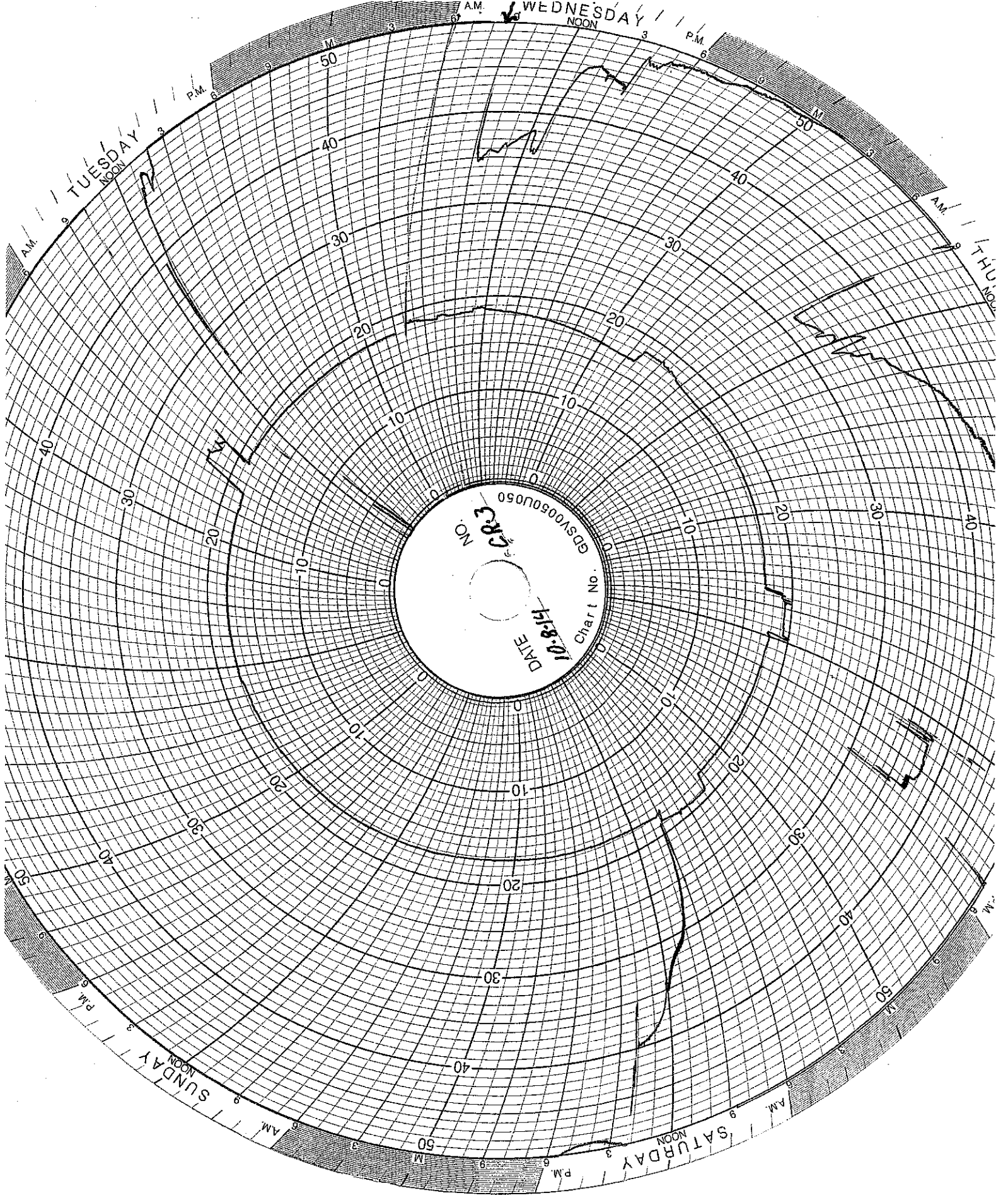
SATURDAY

NO. CR3

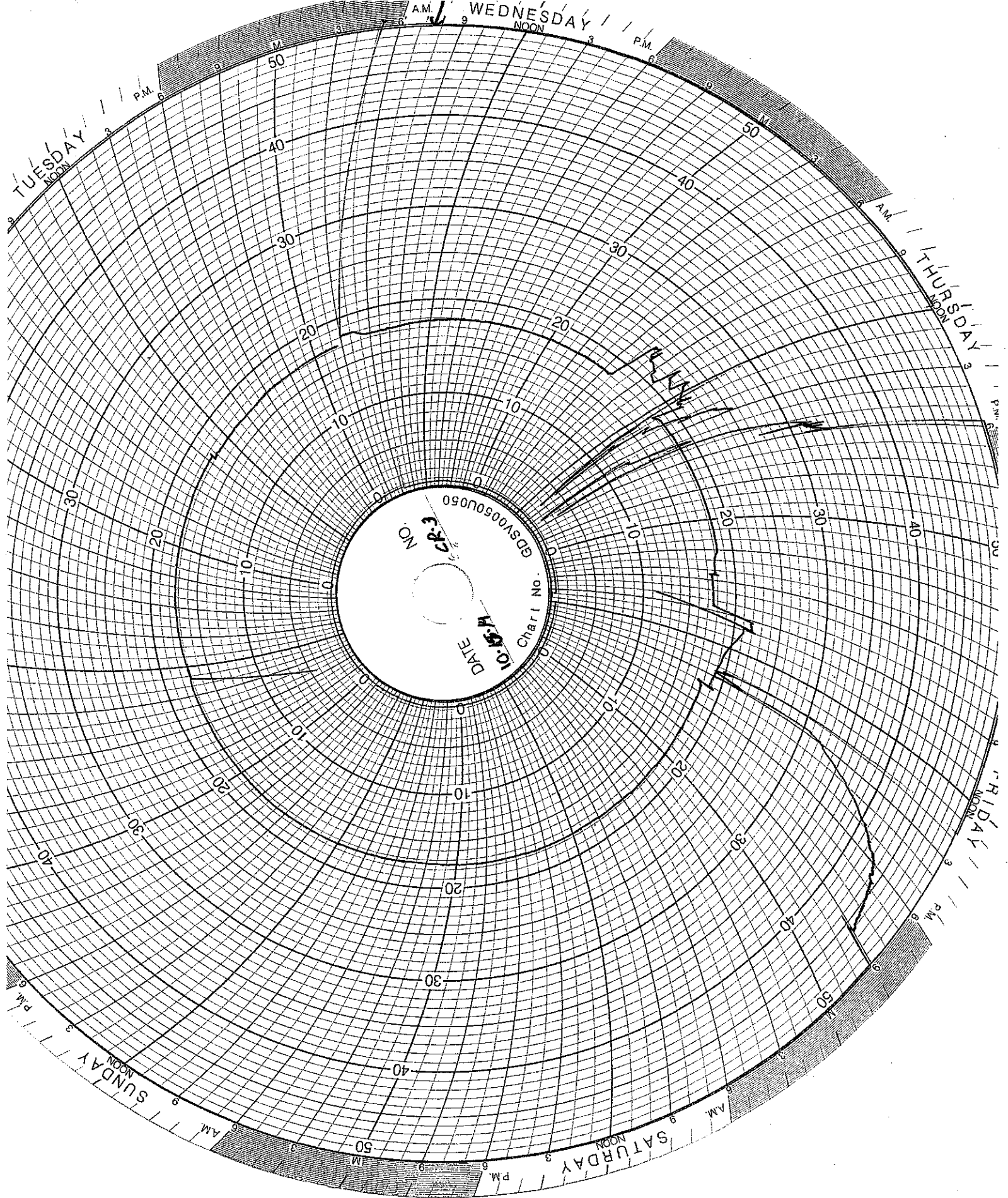
DATE 10/11

Charl No 10

GDSV0050U050



DATE 10.21.11  
Chart No. GSV0050050  
NO. 273



TUESDAY  
NOON

WEDNESDAY  
NOON

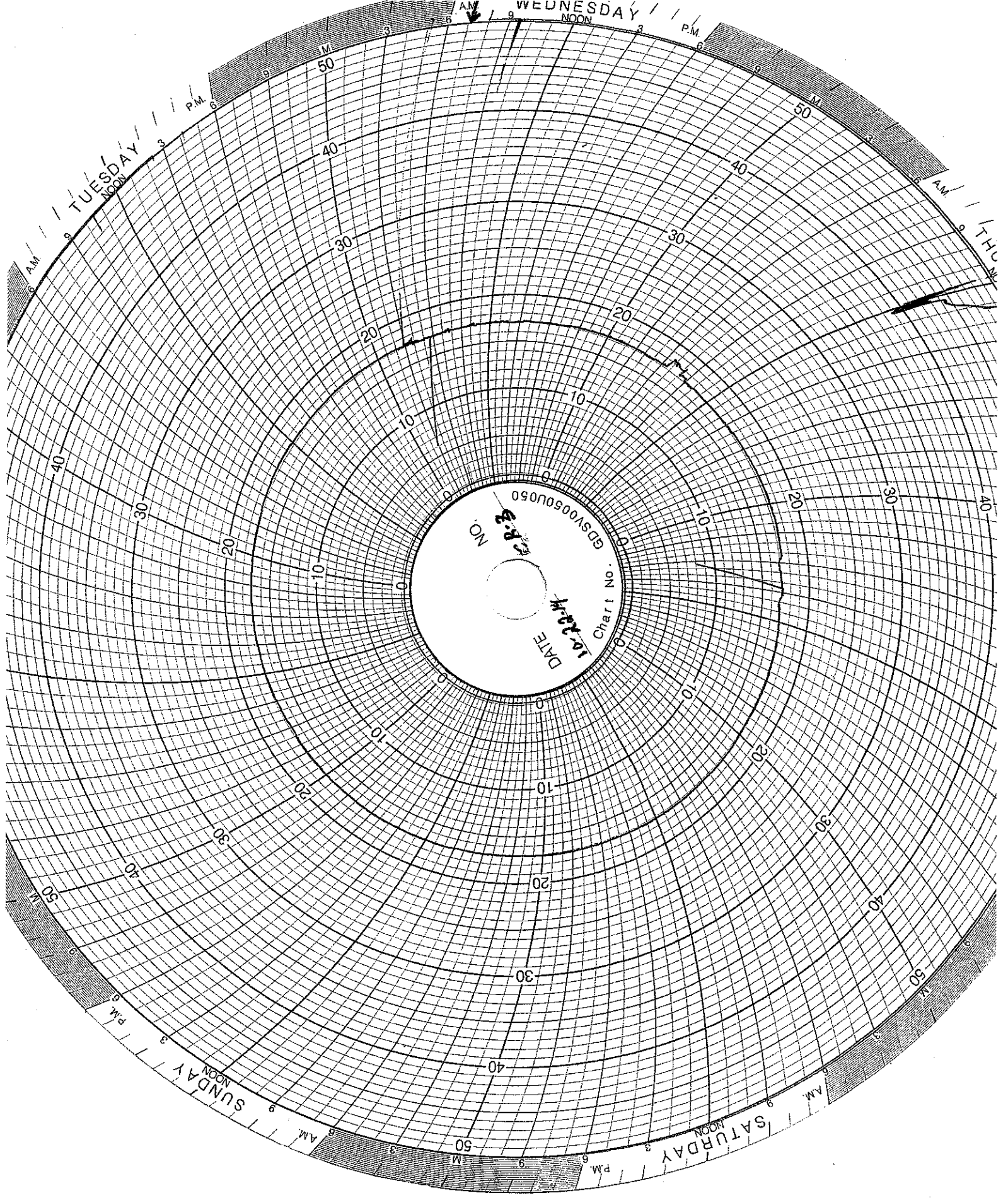
THURSDAY  
NOON

FRIDAY  
NOON

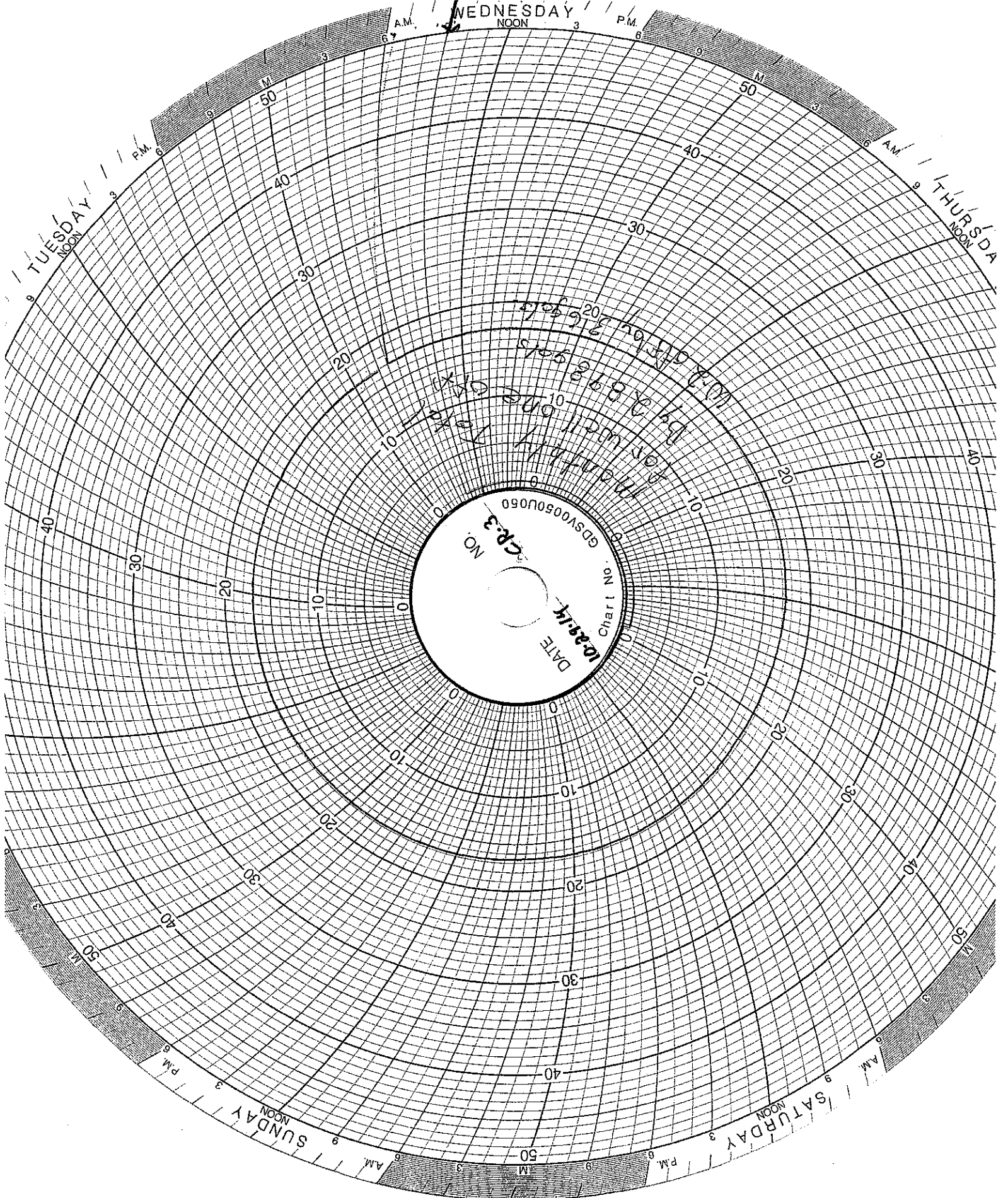
SATURDAY  
NOON

SUNDAY  
NOON

DATE 10.15.14  
Chart No. GDSV06500650  
NO. 523







WEDNESDAY  
NOON

TUESDAY  
NOON

THURSDAY  
NOON

SUNDAY  
NOON

SATURDAY  
NOON

DATE  
Chart No. GDSV0050850  
CP-3  
NO. 5

Monthly Tax  
By 2/28/95

## **MAINTENANCE LOG**

## UIC Monthly Maintenance Log

10/3/2014	Link seals	New link seals were installed around the pipes in the containment wall of the cartridge filter containment.
10/13/2014	Welding repair SS pipe	Injection well I feed pipes to the Roto Jet pump needed welding at joints.
10/14/2014	Flow Meter	The injection 1 flow tube and transmitter were replaced.
10/15/2014	Welding repair SS pipe	Additional welding was needed on Injection well I feed pipes to the Roto Jet pump.
10/17/2014	Welding repair SS pipe	Another welded joint on the stainless steel pipe feeding the Roto Jet pump needed repair.
10/17/2014	Foundation Fieldbus	Contracted programmer to change the foundation field buss and initialize the new flow meter for well 2.
10/22/2014	Radioactive tracer survey	Annual testing.
10/27/2014	pH probe	The system pH probe was determined to be reading irregular. The probe and system components were inspected and tested.

# **CORROSION MONITORING**

# CORROSION MONITORING COUPONS BASELINE VISUAL DESCRIPTION

November 4, 2013

## Fiberglass

The fiberglass coupon is Red Box 2000 type and is 2-1/2 inches long by 1/2 inch wide and 1/4 inches thick. It is a dark orange (rust) in color with a glossy shine on one side a polished look on the opposite side and the cut edges look sanded.

## Hastelloy

The hastelloy coupon is identified as C276 with serial number 1. The dimensions of the coupon are 3 inches long by 1/2 inch wide and 1/4 inch thick. The coupon is silver in color with a lightly sandblasted surface.

## Stainless Steel

The stainless steel coupon is identified as 316L with serial number C1562. The dimensions of the coupon are 3 inches long by 1/2 inch wide and 1/4 inch thick. The coupon is silver in color with a lightly sandblasted surface.

Fiberglass Coupon

Date: 08/06/2013

Wt.: 7.309 Grams

Prior to Waste Exposure

C276

1

Hastelloy Coupon

ID: C267 (1)

Date: 08/06/2013

Wt.: 13.330 Grams

Prior to Waste Exposure

316L  
C1562

Stainless Steel Coupon

ID: 316L / C1562

Date: 08/06/2013

Wt.: 10.848 grams

Prior to Waste Exposure



# Ghesquiere Plastic Testing, Inc.

20450 HARPER AVENUE  
HARPER WOODS, MI 48225  
PHONE (313) 885-3535  
FAX (313) 885-1771

Report Date: November 15, 2013  
Test Date: October 15 - November 14, 2013

Report #1310-77651  
Performed for:  
Environmental Geo-Technologies  
28470 Citrin Drive  
Romulus, MI 48174

Attention: Mr. Don Anderson

### WORK REQUESTED:

Perform Barcol Hardness test on sample submitted.

### DESCRIPTION OF SAMPLE:

Sample submitted was identified as a fiberglass test coupon.  
(P. O. #Credit Card).

### WORK PERFORMED:

Test specimen was prepared as necessary and conditioned for a minimum of 24 hours at standard laboratory conditions prior to testing.

Barcol Hardness test was performed in accordance with the procedures of ASTM D2583-13. One specimen was tested.

### RESULTS:

The following determination was made based upon the above test:

### BARCOL HARDNESS

#### Hardness

Specimen 1	90
------------	----

Specimen is being returned with this report for further evaluation.

Ghesquiere Plastic Testing, Inc.

  
M. W. Ghesquiere  
President

MWG/kni

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TOTAL 1 PAGES

# Ghesquiere Plastic Testing, Inc.

20460 HARPER AVENUE  
HARPER WOODS, MI 48225  
PHONE (313) 885-3535  
FAX (313) 885-1771

Report Date: February 17, 2014  
Test Date: February 14 - 17, 2014

Report #1402-78036  
Performed for:  
Environmental Geo-Technologies  
28470 Citrin Drive  
Romulus, MI 48174

Attention: Mr. Don Anderson

### WORK REQUESTED:

Perform Barcol Hardness test on sample submitted.

### DESCRIPTION OF SAMPLE:

Sample submitted was identified as a fiberglass test coupon.  
(P. O. #Credit Card).

### WORK PERFORMED:

Test specimen was prepared as necessary and conditioned for a minimum of 24 hours at standard laboratory conditions prior to testing.

Barcol Hardness test was performed in accordance with the procedures of ASTM D2583-13. One specimen was tested.

### RESULTS:

The following determination was made based upon the above test:

### BARCOL HARDNESS

#### Hardness

Specimen 1: 90

Specimen was returned to the client on February 17, 2014.

Ghesquiere Plastic Testing, Inc.

M. W. Ghesquiere  
President

MWG/dm

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TOTAL 1 PAGES

# Ghesquiere Plastic Testing, Inc.

20450 HARPER AVENUE  
HARPER WOODS, MI 48225  
PHONE (313) 885-3535  
FAX (313) 885-1771

Report Date: June 16, 2014  
Test Date: June 13 - 16, 2014

Report #1406-78499  
Performed for:  
Environmental Geo-Technologies, LLC  
28470 Citrin Drive  
Romulus, MI 48174

Attention: Mr. Don Anderson

## WORK REQUESTED:

Perform Barcol Hardness test on sample submitted.

## DESCRIPTION OF SAMPLE:

Sample submitted was identified as a fiberglass test coupon.

(P. O. #Credit Card).

## WORK PERFORMED:

Test specimen was prepared as necessary and conditioned for a minimum of 24 hours at standard laboratory conditions prior to testing.

Barcol Hardness test was performed in accordance with the procedures of ASTM D2583-13. One specimen was tested.

## RESULTS:

The following determination was made based upon the above test:

### BARCOL HARDNESS

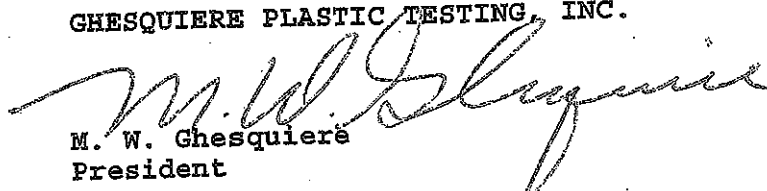
### Hardness

Specimen 1

85

Specimen was returned to the client June 16, 2014.

Ghesquiere Plastic Testing, Inc.

  
M. W. Ghesquiere  
President

MWG/dm

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TOTAL 1 PAGES

October 2, 2014

**• TEST REPORT •**

**PN 118325**


*PO Attn: John Frost*

**PLASTICS TESTING DEPARTMENT**

Prepared For:

John Frost  
Environmental Geo-Technologies, LLC  
28470 Citrin Drive  
Romulus, MI 48174

Prepared By:

  
Melissa Martin  
*Sr. Project Technician*

Approved By:

  
Jim Drummond  
*Physical & Plastics Testing, Manager*



An A2LA ISO 17025 Accredited Testing Laboratory — Certificate Numbers 255.01 & 255.02  
ISO 9001:2008 Registered

**ISO 9001:2008**  
Registered

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2887 Gilchrist Rd. | Akron, Ohio 44305 | [answers@ardl.com](mailto:answers@ardl.com)  
Toll Free (800) 830-ARDL | Worldwide (330) 794-6600 | Fax (330) 794-6610



October 2, 2014

John Frost  
Environmental Geo-Technologies, LLC

Page 2 of 2  
PN118325

**SUBJECT:** Barcol Hardness on one material.  
PO# Attn: John Frost

**RECEIVED:** One small section identified as; Fiberglass Coupon.

**BARCOL HARDNESS ASTM D 2583-13a**

**Results**

Barcol Hardness, Instant

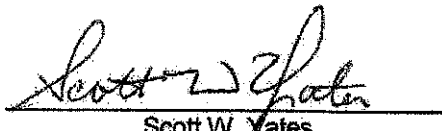
97

Prepared By:



Melisea Martin  
Sr. Project Technician

Approved By:



Scott W. Yates  
Plastics Testing Assistant Manager

14

Fiberglass

7.075 g



10/30/2014

Semi-smooth

C316 L / C1562

9.387 g

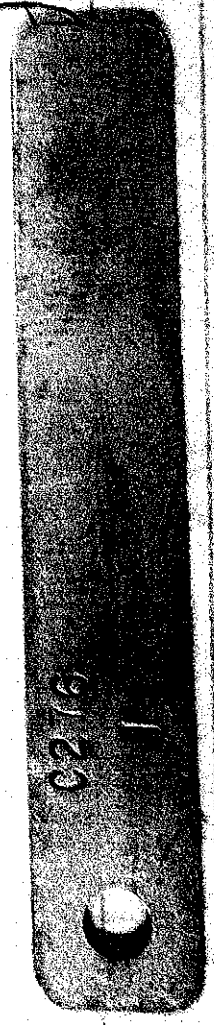


10/30/2014

Peck marked

C276 1

13.321 g



10/30/2014

Smooth appearance

**INJECTION  
FINGERPRINTS**

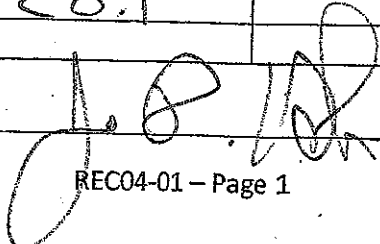
## FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

## RECEIVING &amp; APPROVAL FORM

RECEIVING INFORMATION	
Date	10/2/14
Receiving ID#	IL10021401
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	EGT
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	J.H.

COPY

LAB INFORMATION		Oilfield Brines Only	
All Waste Shipments			
Compatible? (RT# )	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	140	Magnesium	
pH (S.U.)	7.1	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.00	TDS	1.4%
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	89°F		
Conductivity	2.7 nS		
% Solids	1.4		
Turbidity	Yes No		
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature			



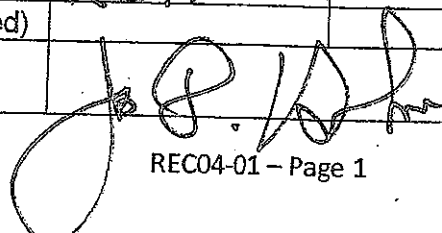
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/3/14
Receiving ID#	E1003140
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	EGT
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	NAH

COPY

AS INFORMATION		Field Tests Only	
All Waste Shipments			
Compatible? (RT# )	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	2.1	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.13	TDS	6.9%
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	72°F		
Conductivity	138.7 mS		
% Solids	6.9		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

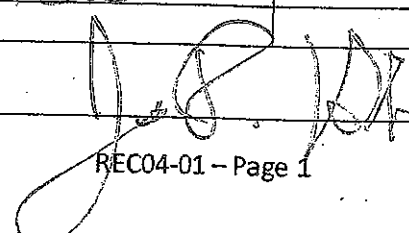
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ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	16/2/14
Receiving ID#	E 10071407
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	EGT
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	DAF

COPY

LAB INFORMATION		Oilfield Brines Only	
Compatible? (RT# )	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	2.3	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.10	TDS	5.17
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	67°F		
Conductivity	101.3 mS		
% Solids	10.1		
Turbidity	Yes No		
Color (visual)			
TSS (%)	5.0		
Radiation Screen (as needed)			
Lab Signature			

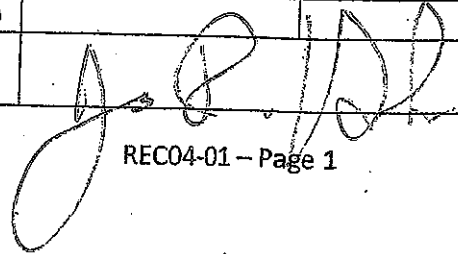
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/7/14
Receiving ID#	T 10071402
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	EGT
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	W.A.H.

COPY

LAB INFORMATION		Oil Field Sites Only	
Compatible? (RT# )	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	140	Magnesium	
pH (S.U.)	0.9	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.18	TDS	7.39
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	70°F		
Conductivity	145.4 μS		
% Solids	8.0		
Turbidity	Yes No		
Color (visual)			
TSS (%)	0.7		
Radiation Screen (as needed)			
Lab Signature			

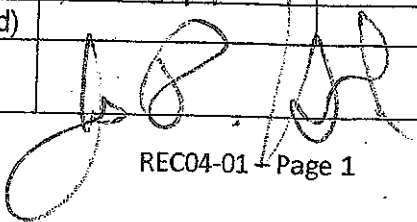
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/8/14
Receiving ID#	II 10081401
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	EGT
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	DH

COPY

LAB INFORMATION		Oilfield Brines Only	
All Waste Samples			
Compatible? (RT# )	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	2.5	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.06	TDS	3.5%
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	68°F		
Conductivity	69.7 mS		
% Solids	3.5		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

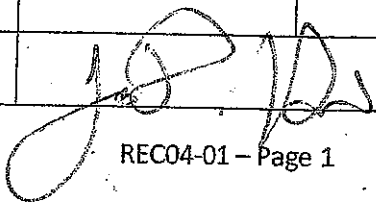
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/9/14
Receiving ID#	I 10091401
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	EGT
Client	
Transporter	
Time in	
Time out	
Received by	S.H.
Sampled by	D.H.

COPY

LAB INFORMATION		Oilfield Brines Only	
All Waste Shipments			
Compatible? (RT# )	<u>Yes</u> No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	1.2	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.15	TDS	6.89
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	67 °F		
Conductivity	136.0 mS		
% Solids	7.6		
Turbidity	Yes No		
Color (visual)			
TSS (%)	0.8		
Radiation Screen (as needed)			
Lab Signature			

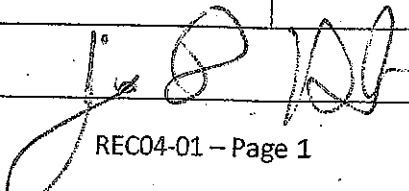
## FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

## RECEIVING &amp; APPROVAL FORM

RECEIVING INFORMATION	
Date	10/10/14
Receiving ID#	E10101401
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	EGT
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	W.H.

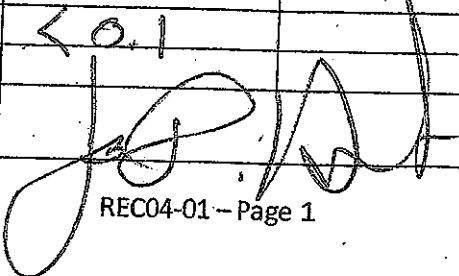
COPY

LAB INFORMATION		Oilfield Brines Only	
All Waste Ship Tests			
Compatible? (RT# )	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	140	Magnesium	
pH (S.U.)	1.5	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.17	TDS	7.9
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	70°F		
Conductivity	158.3 mS		
% Solids	10.9		
Turbidity	Yes No		
Color (visual)			
TSS (%)	3.0		
Radiation Screen (as needed)			
Lab Signature			

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/14/14
Receiving ID#	10141401
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	EGT
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	D.A.R.

COPY

LAB INFORMATION		Oilfield Brines Only	
Compatible? (RT# )	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	2.0	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.27	TDS	27.99
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	79°F		
Conductivity	> 400.0 mS		
% Solids	27.9		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/16/14
Receiving ID#	10161401
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	EGT
Client	
Transporter	
Time in	
Time out	
Received by	J.H.L.
Sampled by	J.H.L.

COPY

LAB INFORMATION		Official Values Only	
Compatible? (RT# )	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	140	Magnesium	
pH (S.U.)	< 0.1	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.32	TDS	31.2
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	82°F		
Conductivity	400.0mS		
% Solids	31.2		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			



**WASTE STREAMS  
CHARACTERIZATIONS**