



January 31, 2017

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 thirty-eighth 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.

EGT hereby timely submits its nineteenth Injection Fluid Analyses (for December, 2016) identified on both Pages A-3 of 3 also in conformance with EGT's two EPA UIC permits with the attached "Data Summary Sheet" from a contract laboratory, Ann Arbor Technical Services, Inc., and, those results demonstrate compliance with all of the limits for each of the chemical entities ("Names) identified on Page A-3 of 3 for F039 waste which EGT accepted.

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 interim report satisfactory, however, if you have any questions or comments, please feel free to contact us.

Sincerely,

Richard J. Powells, P.E.  
Vice-President

cc: J. Frost (EGT), T. Athans (EGT), P. Sullivan (EGT)

att.

rjp013117/EGTEPAMonthlyReport-December, 2016



290 South Wagner Road  
 Ann Arbor, Michigan 48103  
 Tel. 734/995-0995 Fax. 734/995-3731  
 Michigan Laboratory ID: 9604  
 Wisconsin Laboratory ID: 998321720

## Semivolatile Organic Compounds Data Summary Sheet

For: Mr. Richard Powals  
 Environmental Geo-Technologies, Inc.  
 28470 Citrin Drive  
 Romulus, MI 48174

ATS Project: Environmental Geo-Technologies, Inc. #E008-000  
 Report Date: 1/30/17  
 ATS SRF: 0104171

**Sample Identification:** December Composite 2016

Sample Date:	1/3/17	QC Batch Number:	QCORG0104171-E
Laboratory Receipt Date:	1/4/17		B7A0054
Preparation Date:	1/4/17, 1/12/17	Sample Matrix:	Wastewater
Analysis Date:	1/11/17, 1/14/17	Dilution Factor:	500

<u>Parameter (CAS)</u>	<u>Method</u>	<u>Units</u>	<u>Result</u>	<u>Reporting Limit</u>
Aldrin (309-00-2)	EPA 8270 Mod	mg/mL	<0.00001	0.00001
Benzidine (92-87-5)	EPA 8270 Mod	mg/mL	<0.00075	0.00075
N-Nitrosodimethylamine (62-75-9)	EPA 8270 Mod	mg/mL	<0.0001	0.0001
Tetraethyl Lead (78-00-2)	EPA 8270 Mod	mg/mL	<0.00005	0.00005
Hexachlorodibenzo-p-dioxins	EPA 1613B	mg/mL	<0.00000000005	0.00000000005
Octachlorodibenzofuran (39001-02-0)	EPA 1613B	mg/mL	<0.00000000005	0.00000000005
Octachlorodibenzo-p-dioxin (3268-87-9)	EPA 1613B	mg/mL	<0.00000000005	0.00000000005
Tetrachlorodibenzo-p-dioxins	EPA 1613B	mg/mL	<0.00000000004	0.00000000004

<u>Surrogates / Labeled Standards:</u>	<u>Method</u>	<u>Percent Recovery</u>	<u>Recovery Limits</u>
2-Fluorobiphenyl	EPA 8270 Mod	116.0	(50 - 150)
Nitrobenzene-d5	EPA 8270 Mod	116.8	(50 - 150)
p-Terphenyl-d14	EPA 8270 Mod	176.5*	(50 - 150)
Tetrachloro-m-xylene (TCMX)	EPA 8270 Mod	110.3	(50 - 150)
13C-1,2,3,4,7,8-HxCDD	EPA 1613B	85.8	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	EPA 1613B	82.6	(28 - 130)
13C-1,2,3,7,8,9-HxCDD	EPA 1613B	80.1	(32 - 141)
13C-OCDF	EPA 1613B	50.5	(17 - 157)
13C-OCDD	EPA 1613B	45.0	(17 - 157)
13C-2,3,7,8-TCDD	EPA 1613B	81.1	(25 - 164)

**Comments:**

USEPA Analysis 1613B performed by Vista Analytical.  
 \* Outside standard control limits.

## **AVERAGE INJECTION RATE**

## Calculation of Average Injection Rate

CURRENT REPORTING YEAR 2016CURRENT REPORTING MONTH DECEMBERDate (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	234,134	0	234,134
Since facility first injected			7,470,862
<b>MI-163-1W-C011, Well #2-12</b>			
Current Month	0	0	0
Since facility first injected			3,998,474
		Lifetime Combined	11,469,336

Conversion factors365.25 days per year  $\div$  12 months per year = 30.4375 days per month30.4375 days per month  $\times$  1440 minutes per day = 43,830 minutes per monthCalculationsWhole number of months of injection 37

37 lifetime number of months of injection  $\times$  43,830 minutes/month  
 = 1,621,710 minutes of injection

Lifetime combined injected volume 11,469,336  $\div$  1,621,710 minutes of injection  
 = 6.9 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)
12/1/2016	-7.1	720.1	24.0	25.6	893.1	1203.3	7.9	7.9	0.0	104.9	413.1	946.8
12/2/2016	-2.1	632.2	24.1	24.7	896.8	1199.9	7.9	7.9	0.0	173.4	415.0	947.6
12/3/2016	-1.0	-0.1	24.2	24.4	940.0	945.7	7.9	7.9	0.0	0.0	942.9	946.5
12/4/2016	-1.0	-0.2	24.1	24.5	940.5	942.6	-0.2	19.2	0.0	0.0	940.8	943.6
12/5/2016	-10.0	568.4	24.0	25.5	889.3	1200.0	7.9	7.9	0.0	71.6	449.2	1010.3
12/6/2016	-9.7	646.0	24.0	27.1	889.9	1201.6	7.9	7.9	0.0	138.9	350.4	1020.3
12/7/2016	-6.8	654.9	24.2	26.6	889.0	1200.8	7.9	7.9	0.0	145.6	353.2	988.4
12/8/2016	18.4	100.2	24.2	24.3	965.4	1014.1	7.9	9.2	0.0	0.0	901.3	958.2
12/9/2016	55.6	57.4	24.2	24.4	970.8	972.5	7.9	7.9	0.0	0.0	914.4	916.1
12/10/2016	55.1	56.2	24.1	24.4	968.6	970.9	7.9	7.9	0.0	0.0	912.8	915.3
12/11/2016	54.9	55.8	24.1	24.3	966.9	968.7	7.9	7.9	0.0	0.0	911.3	913.5
12/12/2016	54.4	55.7	24.1	24.3	965.5	967.0	7.9	7.9	0.0	0.0	910.5	912.0
12/13/2016	-6.5	608.1	24.0	25.2	890.5	1200.0	7.9	8.0	0.0	124.7	419.3	963.1
12/14/2016	-8.1	626.9	24.1	24.3	907.6	1181.9	7.9	7.9	0.0	132.6	554.9	959.6
12/15/2016	-1.1	36.5	24.1	24.4	941.4	959.7	7.9	7.9	0.0	0.0	904.9	960.8
12/16/2016	-1.2	-0.2	24.1	24.4	959.6	960.9	7.9	7.9	0.0	0.0	960.1	961.7
12/17/2016	-1.1	587.3	24.1	24.3	919.9	1198.9	7.9	7.9	0.0	69.4	573.8	962.3
12/18/2016	43.6	46.8	24.2	24.3	955.0	962.8	7.9	7.9	0.0	0.0	908.3	919.1
12/19/2016	-10.0	535.7	24.0	25.4	873.1	1200.0	-1.3	7.9	0.0	119.7	460.5	985.2
12/20/2016	-9.9	-2.1	23.9	24.2	963.0	981.8	7.9	7.9	0.0	0.0	972.9	991.7
12/21/2016	-9.9	-9.9	24.0	24.3	981.7	983.6	7.9	7.9	0.0	0.0	991.6	993.5
12/22/2016	-9.9	-9.9	23.9	24.2	983.5	983.9	7.9	7.9	0.0	0.0	993.4	993.8
12/23/2016	-9.9	-9.9	24.0	24.2	982.2	983.7	7.9	7.9	0.0	0.0	992.1	993.6
12/24/2016	-9.9	-9.9	24.0	24.2	982.3	983.0	7.9	7.9	0.0	0.0	992.2	992.9
12/25/2016	-9.9	-9.9	23.9	24.1	981.4	982.3	7.9	7.9	0.0	0.0	991.3	992.2
12/26/2016	-9.9	-9.9	23.9	24.2	981.2	981.7	7.9	8.0	0.0	0.0	991.1	991.6
12/27/2016	-9.9	-9.9	23.9	24.2	979.5	981.3	7.9	7.9	0.0	0.0	989.4	991.2
12/28/2016	-9.9	-9.9	24.0	24.2	978.7	979.6	7.9	7.9	0.0	0.0	988.6	989.5
12/29/2016	-9.9	436.3	23.9	24.2	937.1	1195.7	7.9	7.9	0.0	111.7	749.2	1005.6
12/30/2016	-9.9	225.3	23.9	24.2	930.2	1119.7	7.9	8.0	0.0	102.0	884.3	995.3
12/31/2016	-1.5	-0.6	23.9	24.2	948.0	949.9	7.9	7.9	0.0	0.0	948.9	951.4

## Circle Chart Index

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

### Chart Recorder #1

Channel #1

**Blue Pen** - Well 1 Injection Pressure (chart value x 30)

Channel #2

**Red Pen** - Well 1 Annulus Pressure (chart value x 30)

Channel #3

**Green Pen** - Well 1 Flow Rate (chart value x 4)

Channel #4

**Black Pen** - Well 1 Annulus Tank Level (chart value x 0)

### Chart Recorder #2

Channel #1

**Blue Pen** - Well 2 Injection Pressure (chart value x 30)

Channel #2

**Red Pen** - Well 2 Annulus Pressure (chart value x 30)

Channel #3

**Green Pen** - Well 2 Flow Rate (chart value x 4)

Channel #4

**Black Pen** - Well 2 Annulus Tank Level (chart value x 0)

### Chart Recorder #3

Channel #1

**Blue Pen** - Injection pH Well 1 & 2 (chart value x 30)

Channel #2

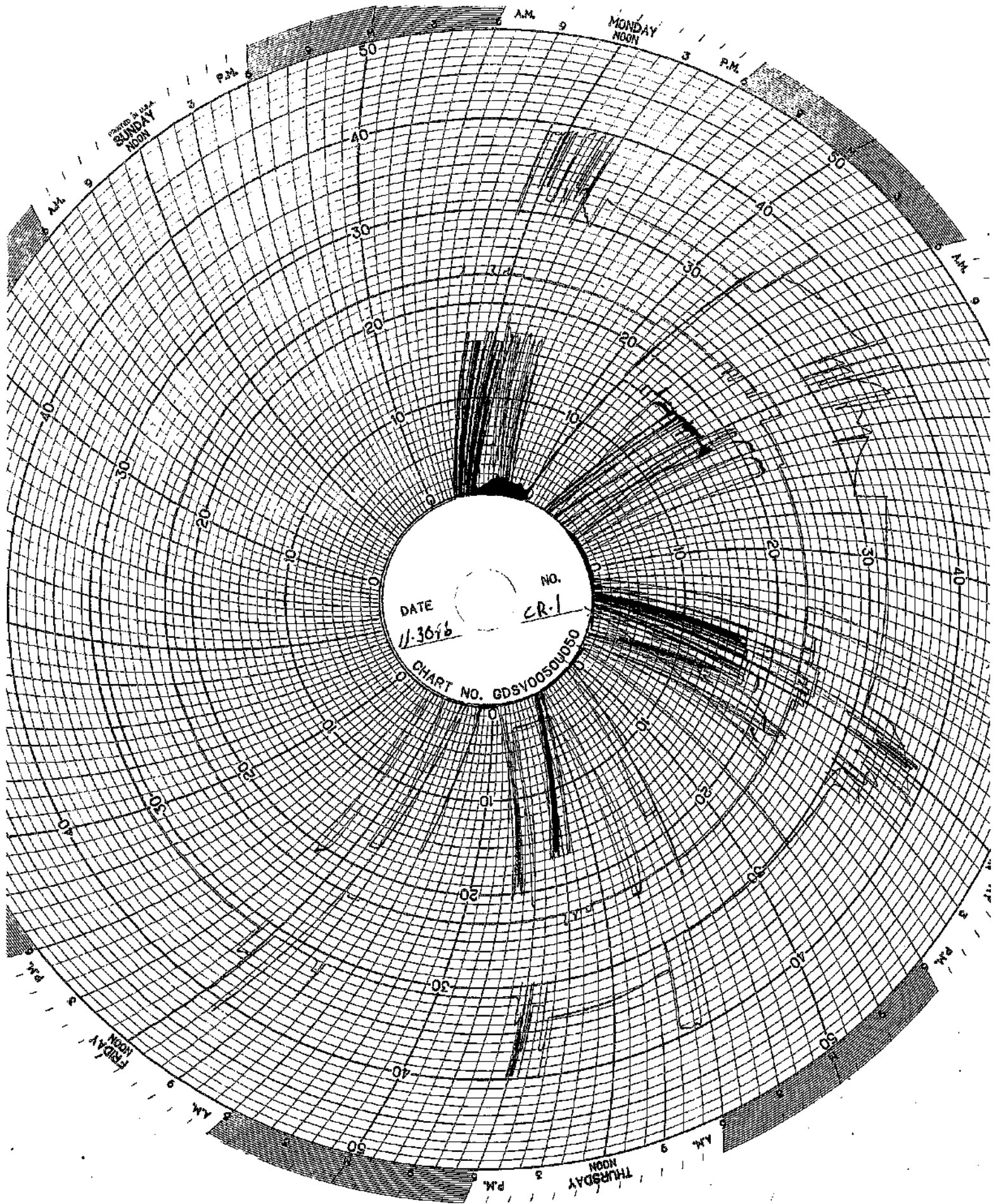
**Red Pen** - Well 1 Monthly Volume (chart value x 30)

Channel #3

**Green Pen** - Well 2 Monthly Volume (chart value x 4)

Channel #4

**Black Pen** - Temperature (chart value x 0)



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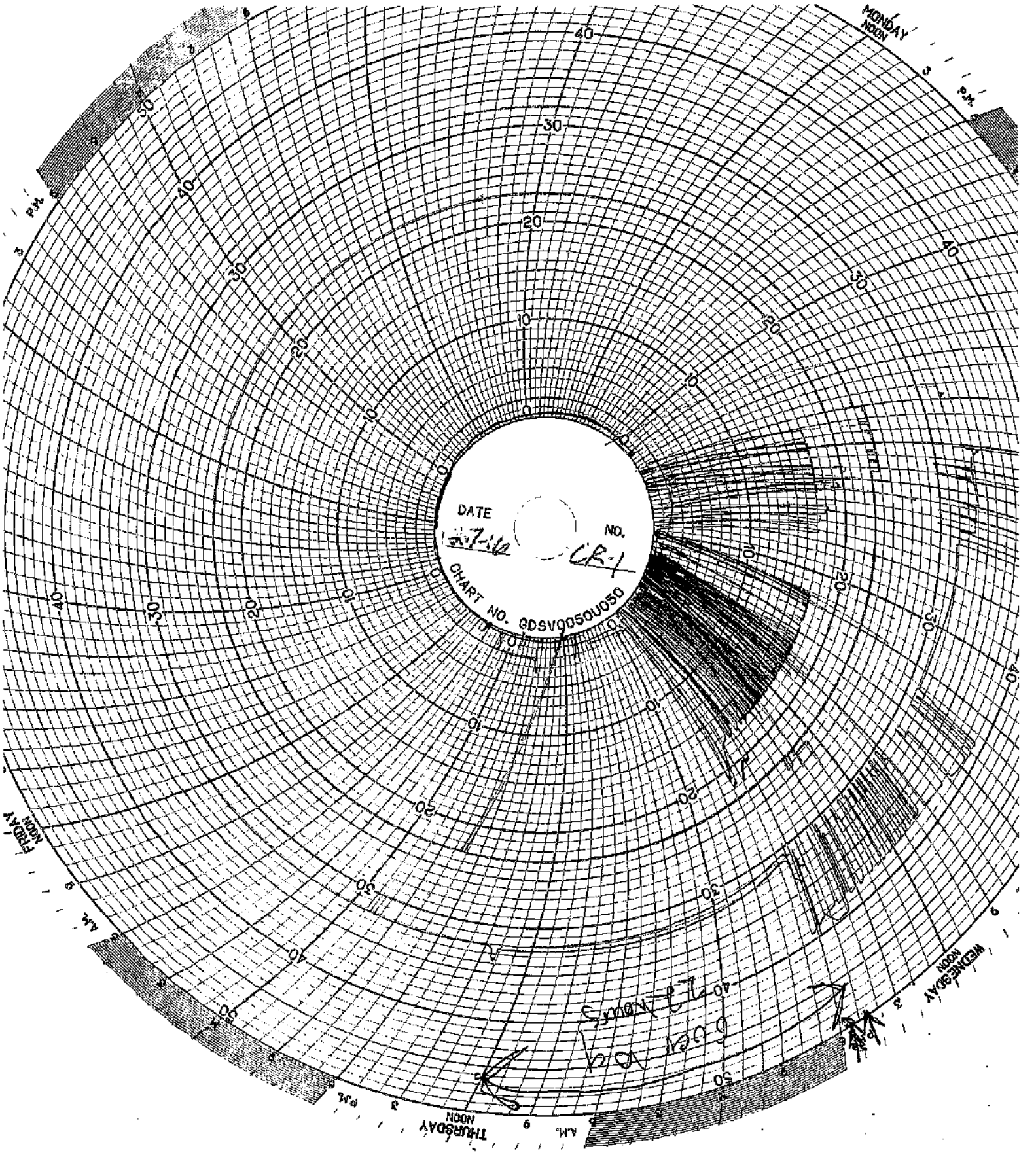
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CHART NO. GDSY00500050





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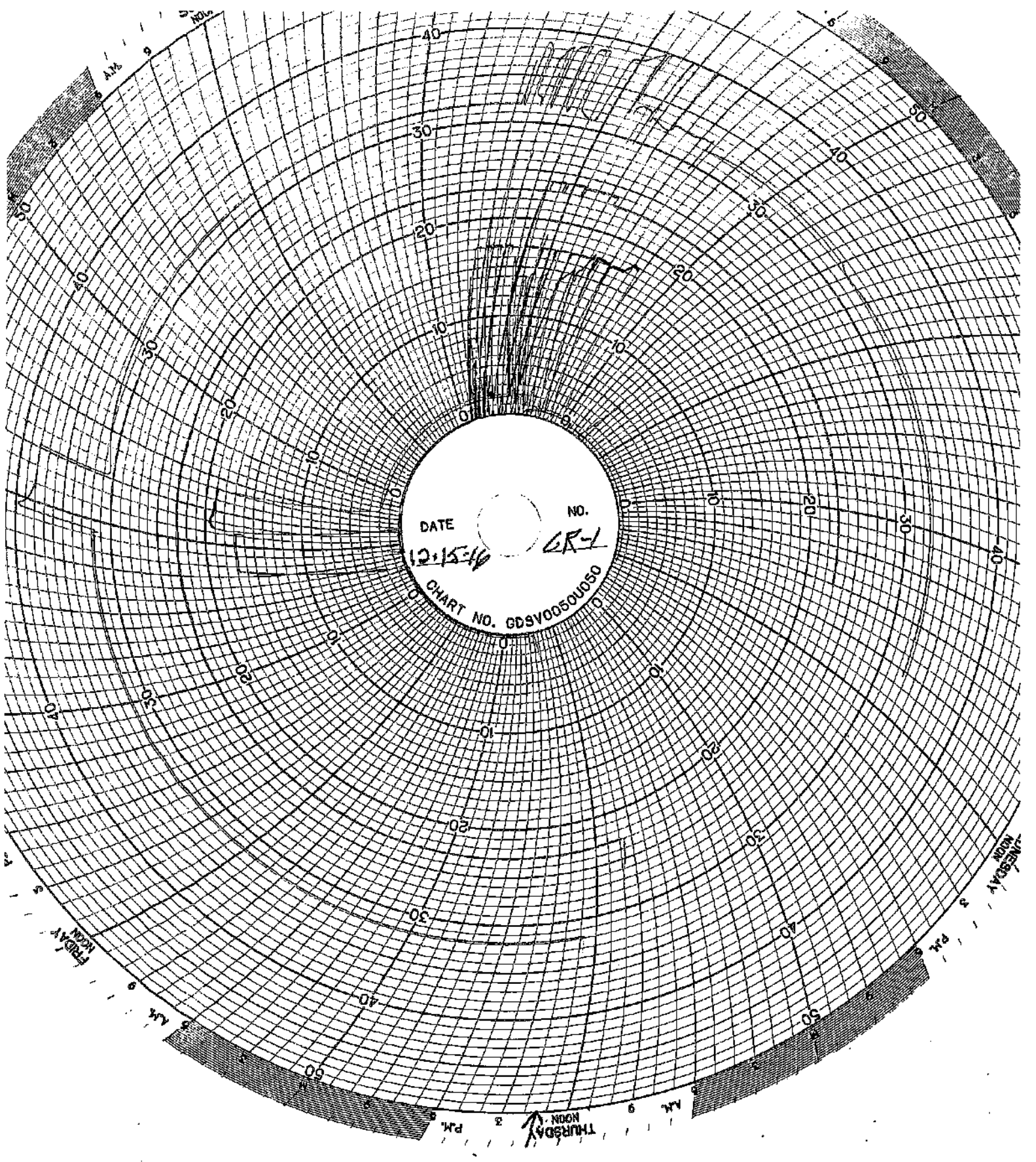
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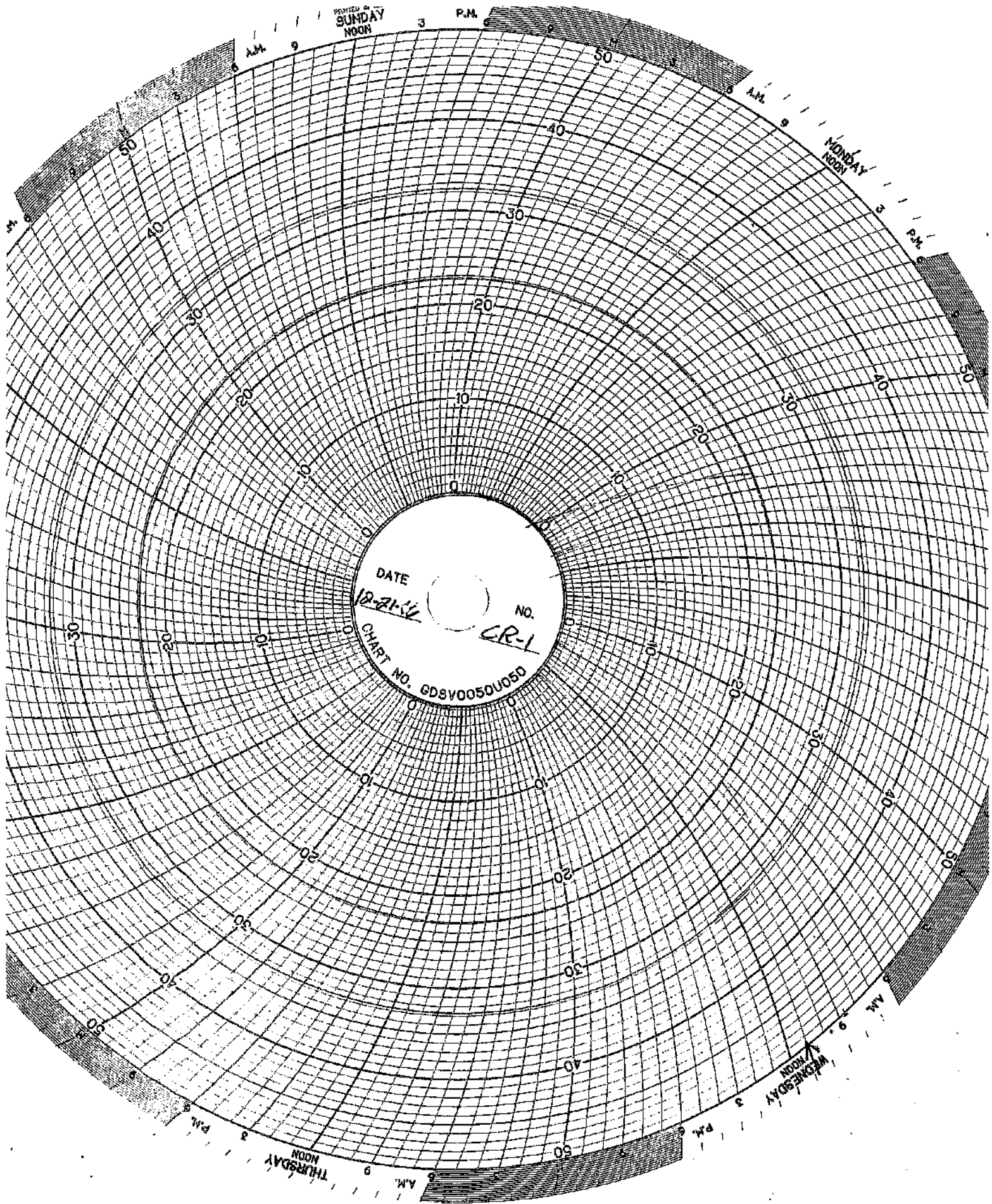
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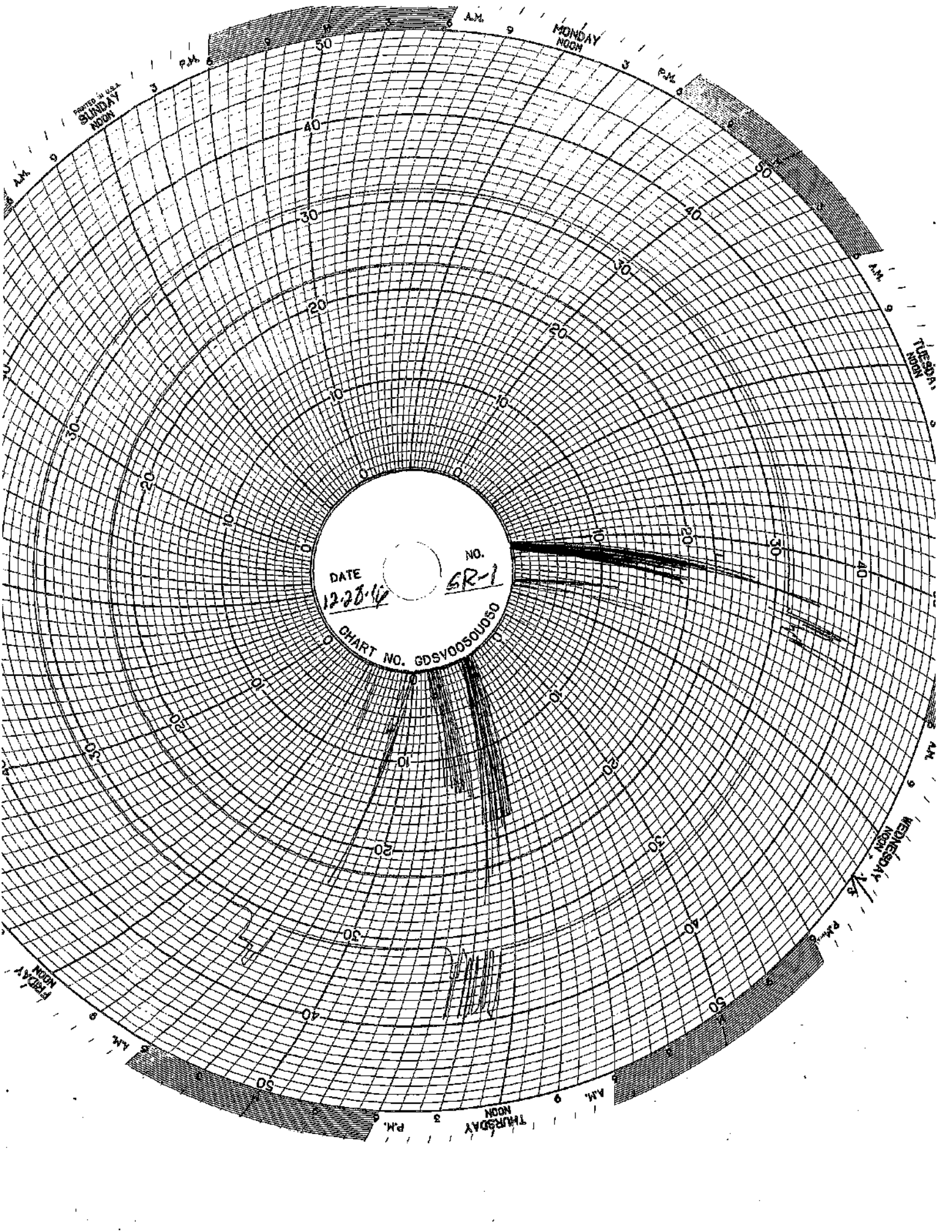
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THURSDAY  
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DATE 12-28-14  
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CHART NO. GDSV0050050

## 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)
12/1/2016	-3.9	-3.4	22.5	22.6	347.5	350.0	7.9	7.9	0.0	0.0	351.2	353.4
12/2/2016	-4.4	-3.8	22.1	22.8	345.5	348.0	7.9	7.9	0.0	0.0	349.8	351.9
12/3/2016	-4.4	-4.1	22.1	22.8	344.4	346.2	7.9	7.9	0.0	0.0	348.8	350.5
12/4/2016	-4.5	-4.1	22.1	22.8	342.3	345.1	-0.2	19.2	0.0	0.0	346.6	349.5
12/5/2016	-4.6	-4.1	22.1	22.8	340.9	343.0	7.9	7.9	0.0	0.0	345.5	347.3
12/6/2016	-4.7	-4.0	22.2	22.8	340.0	343.9	7.9	7.9	0.0	0.0	344.4	348.1
12/7/2016	-4.7	-4.3	22.1	22.9	340.1	342.3	7.9	7.9	0.0	0.0	344.6	346.7
12/8/2016	-5.2	-4.5	22.4	22.5	336.9	340.8	7.9	9.2	0.0	0.0	341.9	345.4
12/9/2016	-5.3	-4.8	22.1	22.5	335.7	338.4	7.9	7.9	0.0	0.0	340.9	343.3
12/10/2016	-5.4	-4.9	22.3	22.5	334.5	336.3	7.9	7.9	0.0	0.0	339.6	341.6
12/11/2016	-5.3	-4.7	22.3	22.4	333.2	335.1	7.9	7.9	0.0	0.0	338.0	340.3
12/12/2016	-5.2	-4.6	22.3	22.4	332.5	335.5	7.9	7.9	0.0	0.0	337.4	340.3
12/13/2016	-5.4	-4.9	22.3	22.4	331.3	333.7	7.9	8.0	0.0	0.0	336.4	338.9
12/14/2016	-5.5	-5.0	22.3	22.4	331.0	334.0	7.9	7.9	0.0	0.0	336.5	339.3
12/15/2016	-5.7	-5.3	22.2	22.8	329.3	332.9	7.9	7.9	0.0	0.0	335.0	338.4
12/16/2016	-5.8	-5.1	22.0	22.7	328.5	329.8	7.9	7.9	0.0	0.0	333.7	335.6
12/17/2016	-5.2	-4.8	22.3	22.4	328.5	330.9	7.9	7.9	0.0	0.0	333.5	336.0
12/18/2016	-5.8	-5.0	22.3	22.4	327.2	330.2	7.9	7.9	0.0	0.0	332.8	335.6
12/19/2016	-6.9	-5.7	22.3	22.4	326.1	329.1	-1.3	7.9	0.0	0.0	332.7	335.7
12/20/2016	-6.8	-5.8	22.2	22.8	326.4	328.7	7.9	7.9	0.0	0.0	332.5	334.9
12/21/2016	-6.2	-5.6	22.1	23.0	326.1	327.5	7.9	7.9	0.0	0.0	332.1	333.4
12/22/2016	-6.1	-5.5	22.3	22.8	326.1	328.0	7.9	7.9	0.0	0.0	332.0	333.6
12/23/2016	-6.2	-5.7	22.1	22.8	325.1	326.7	7.9	7.9	0.0	0.0	330.8	332.7
12/24/2016	-6.0	-5.5	22.3	22.4	324.8	326.0	7.9	7.9	0.0	0.0	330.6	331.7
12/25/2016	-6.0	-5.8	22.3	22.4	323.8	325.4	7.9	7.9	0.0	0.0	329.6	331.3
12/26/2016	-6.0	-4.9	22.1	22.7	323.7	325.8	7.9	8.0	0.0	0.0	329.3	330.9
12/27/2016	-5.9	-5.4	22.0	23.0	322.6	324.7	7.9	7.9	0.0	0.0	328.4	330.2
12/28/2016	-6.0	-5.5	22.3	22.5	322.1	324.4	7.9	7.9	0.0	0.0	327.7	330.1
12/29/2016	-5.7	-5.2	22.1	22.9	322.0	324.7	7.9	7.9	0.0	0.0	327.5	330.0
12/30/2016	-5.9	-5.6	22.1	22.9	320.7	322.8	7.9	8.0	0.0	0.0	326.4	328.5
12/31/2016	-5.9	-5.1	22.3	22.5	320.4	323.1	7.9	7.9	0.0	0.0	325.9	328.4

## Circle Chart Index

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

### Chart Recorder #1

Channel #1

**Blue Pen** - Well 1 Injection Pressure (chart value x 30)

Channel #2

**Red Pen** - Well 1 Annulus Pressure (chart value x 30)

Channel #3

**Green Pen** - Well 1 Flow Rate (chart value x 4)

Channel #4

**Black Pen** - Well 1 Annulus Tank Level (chart value x 0)

### Chart Recorder #2

Channel #1

**Blue Pen** - Well 2 Injection Pressure (chart value x 30)

Channel #2

**Red Pen** - Well 2 Annulus Pressure (chart value x 30)

Channel #3

**Green Pen** - Well 2 Flow Rate (chart value x 4)

Channel #4

**Black Pen** - Well 2 Annulus Tank Level (chart value x 0)

### Chart Recorder #3

Channel #1

**Blue Pen** - Injection pH Well 1 & 2 (chart value x 30)

Channel #2

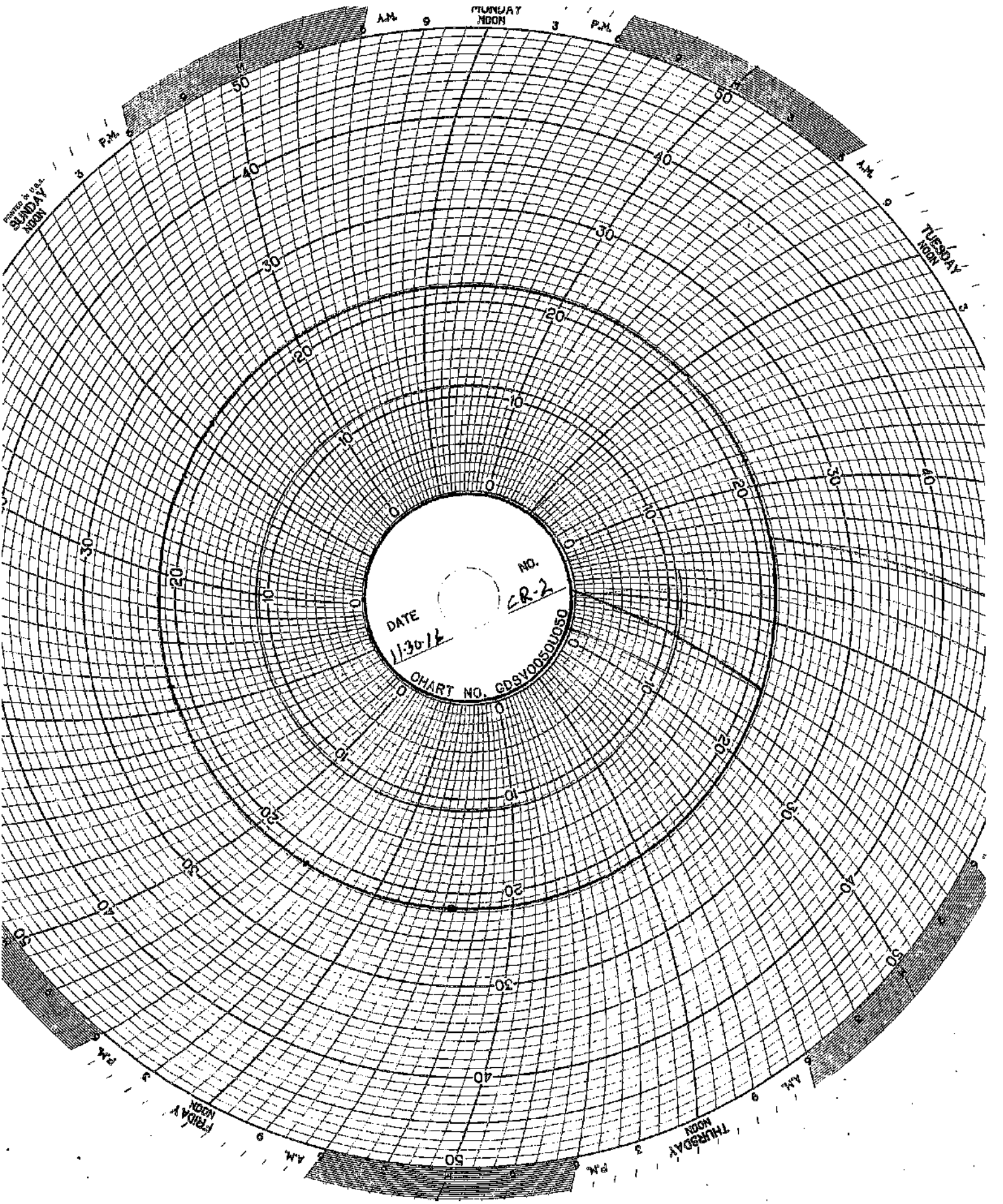
**Red Pen** - Well 1 Monthly Volume (chart value x 30)

Channel #3

**Green Pen** - Well 2 Monthly Volume (chart value x 4)

Channel #4

**Black Pen** - Temperature (chart value x 0)



DATE

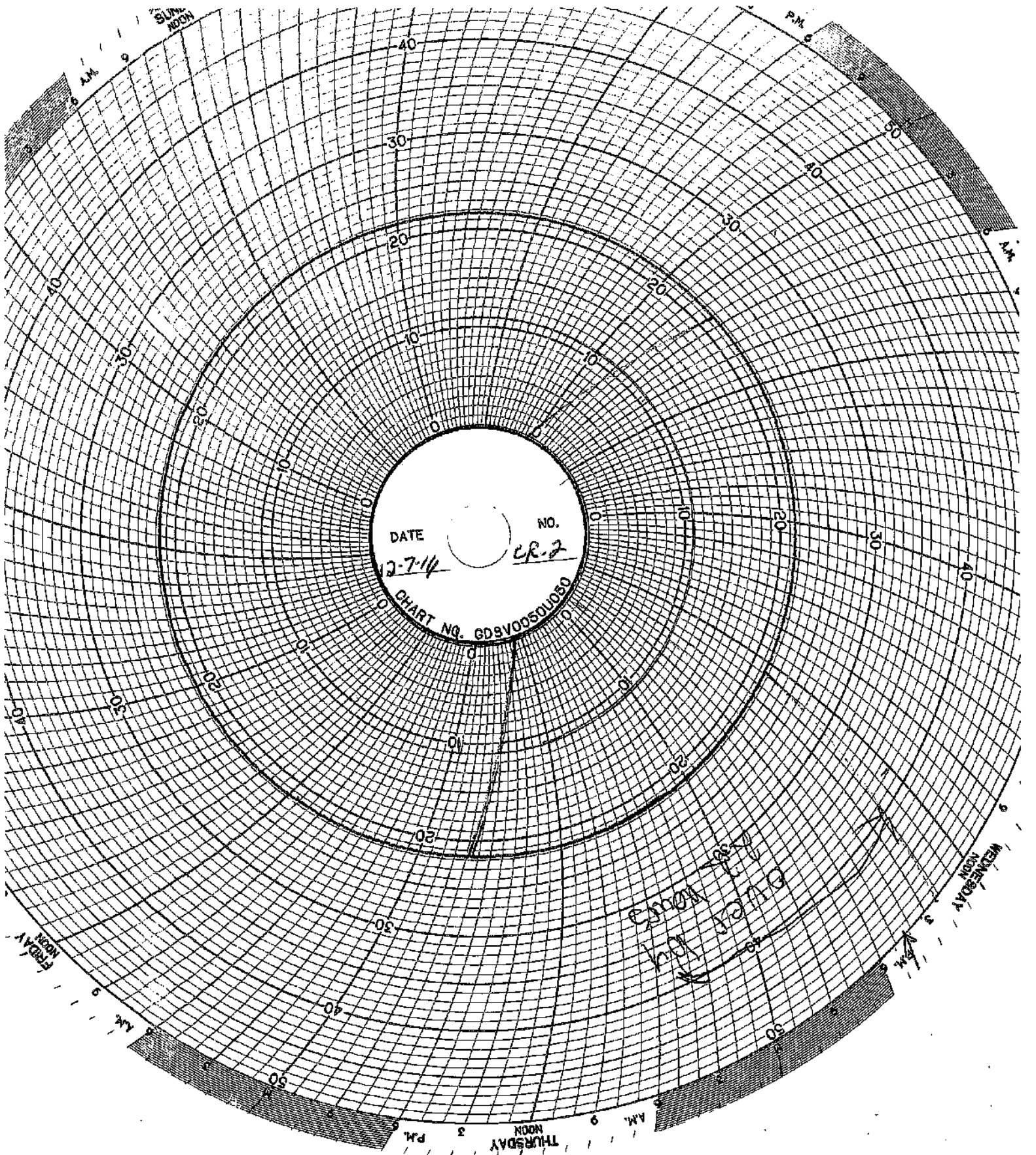
1/30/16

No.

ER-2

CHART NO. GDSY00501050

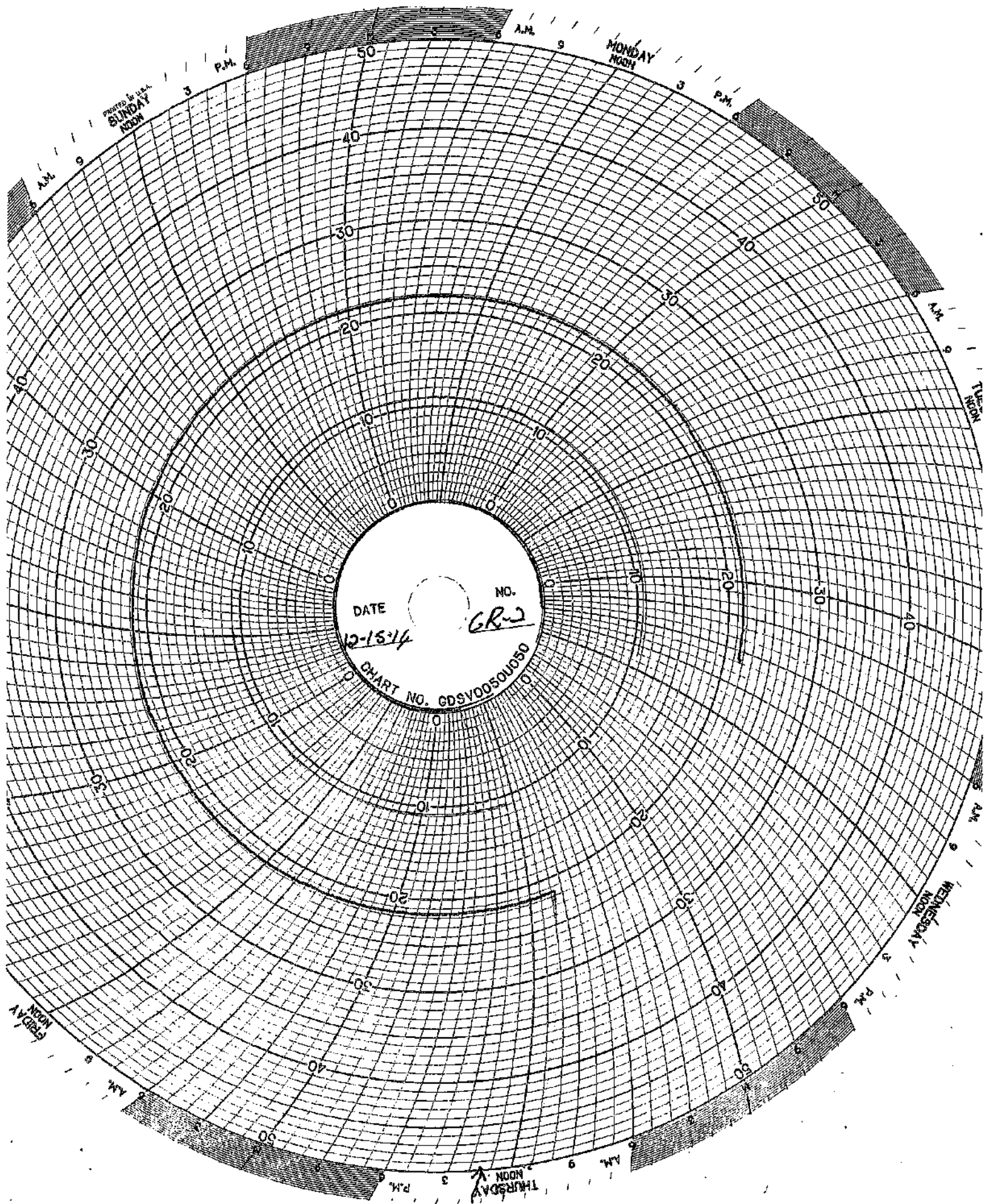




DATE 12-7-14 NO. CR-2  
CHART NO. GDSV0050U050

OVER THE  
WATER

SUN-NOON 9 AM 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 PM  
THURSDAY 3 PM 2 1 0 1 2 3 4 5 6 7 8 9 AM  
FRIDAY 9 AM 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 PM  
WEDNESDAY 9 AM 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 PM



PRINTED IN U.S.A.  
**SUNDAY**  
NOON

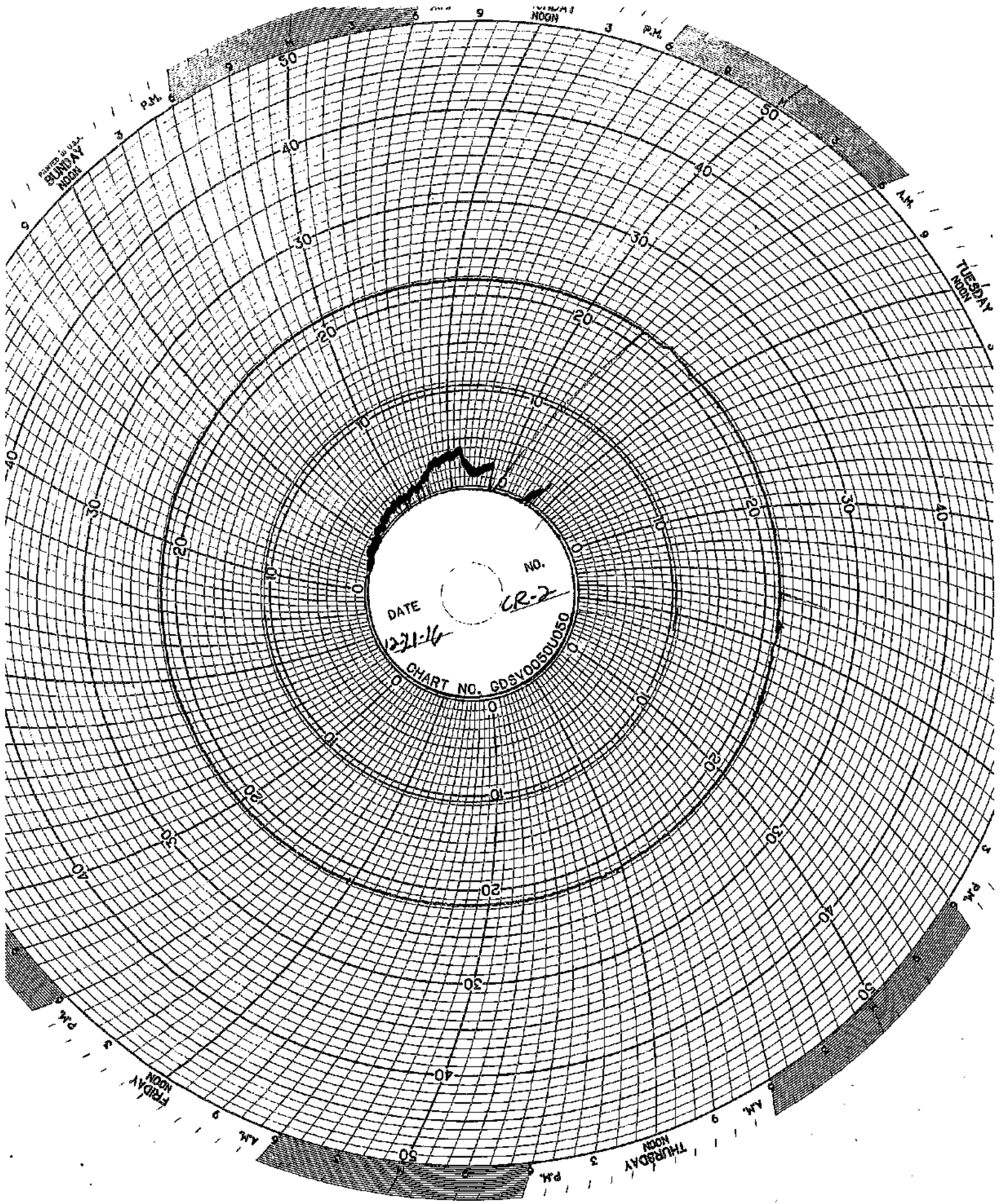
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NOON

**TUESDAY**  
NOON

**WEDNESDAY**  
NOON

**THURSDAY**  
NOON

DATE 12-15-74 NO. GR-2  
CHART NO. GDSV00500000



PRINTED IN U.S.A.  
SUNDAY  
NOON

NOON

P.M.

TUESDAY  
NOON

P.M.

FRIDAY  
NOON

THURSDAY  
NOON

AM

P.M.



PREPARED BY  
SUNDAY  
NOON

MONDAY  
NOON

DATE

NO.

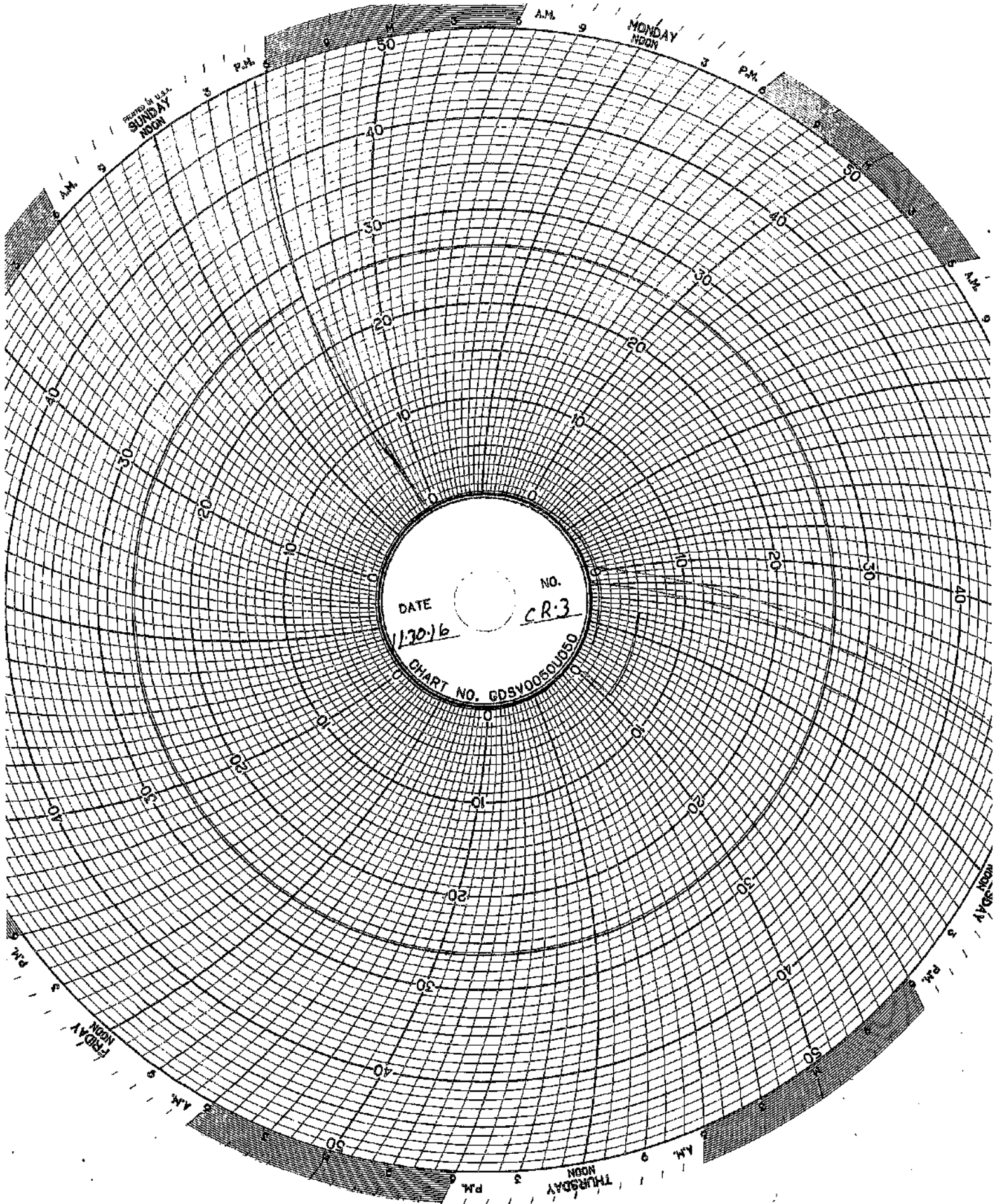
22814

CR-2

CHART NO. GDSV0050150

THURSDAY  
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WEDNESDAY  
NOON



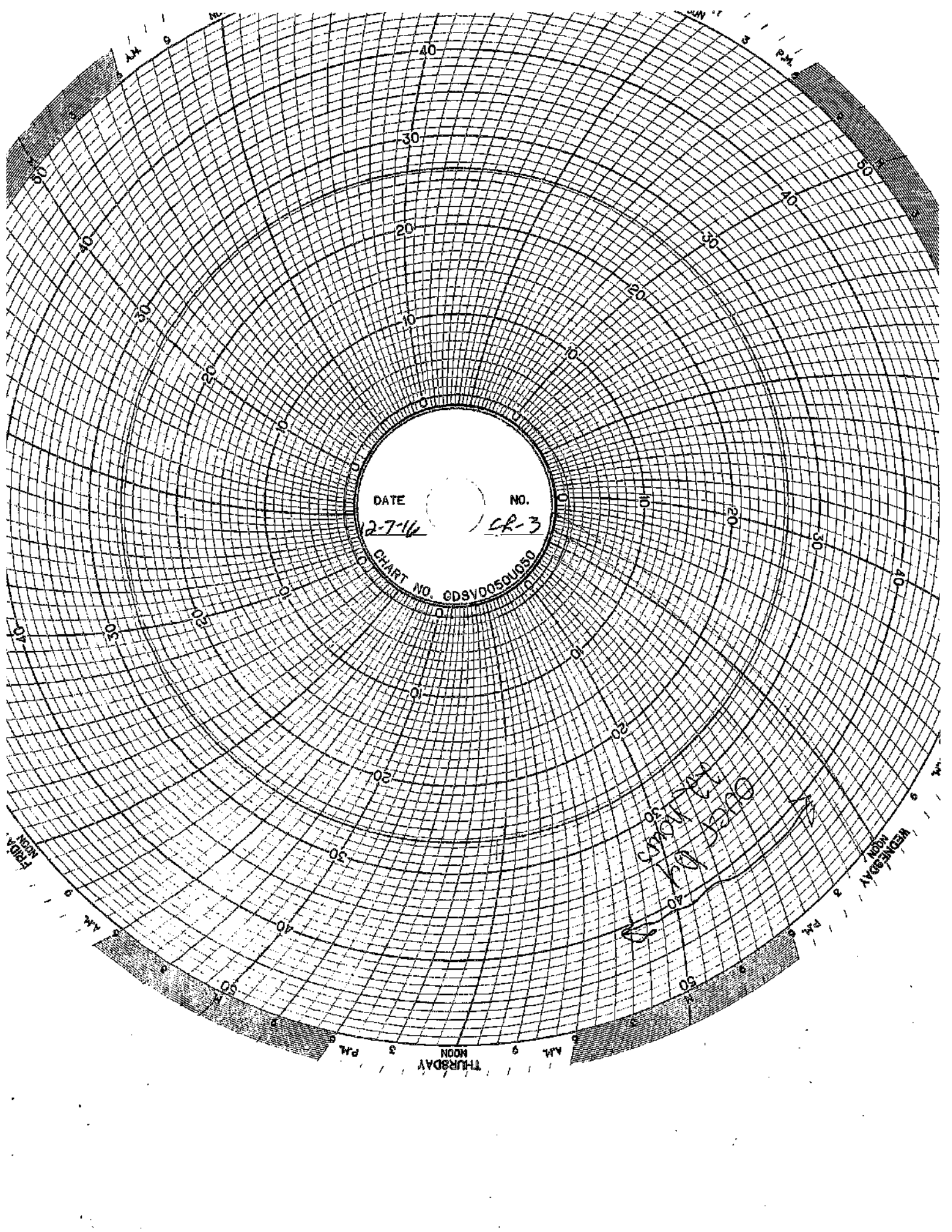
UNITED STATES  
SUNDAY  
NOON

MONDAY  
NOON

FRIDAY  
NOON

THURSDAY  
NOON

DATE 1/30/16  
NO. CR-3  
CHART NO. GDSVOC501050



DATE 2-7-16 NO. CR-3

CHART NO. GDSV0050U050

CR-3  
2-7-16

THURSDAY  
NOON  
3 PM  
9 AM

WEDNESDAY  
NOON  
3 PM  
9 AM

FRIDAY  
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3 PM  
9 AM

THURSDAY  
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FRIDAY  
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SATURDAY  
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WEDNESDAY  
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TUESDAY  
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3 PM  
9 AM

WEDNESDAY  
NOON  
3 PM  
9 AM



PRINTED IN U.S.A.  
SUNDAY  
NOON

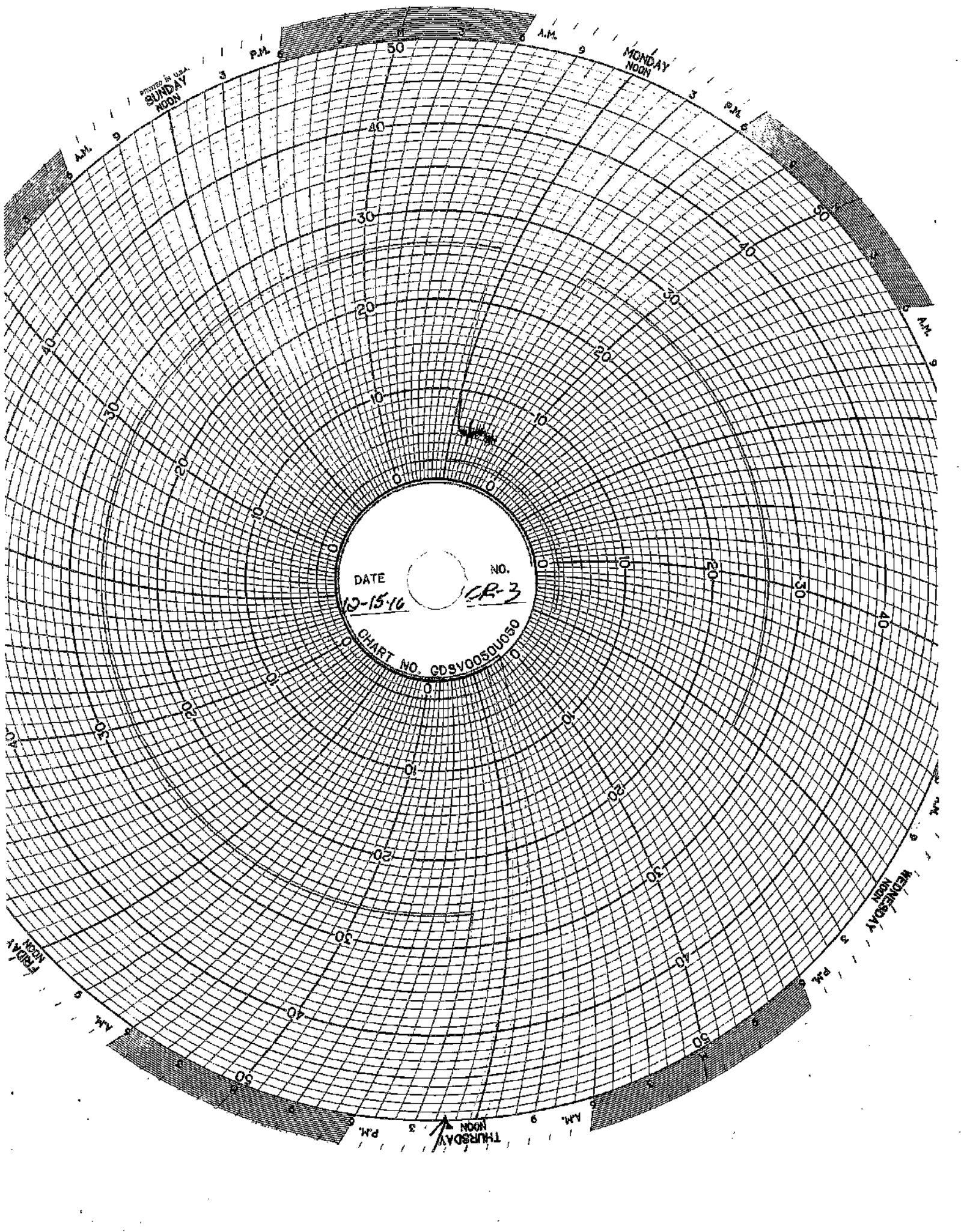
MONDAY  
NOON

DATE 12-15-46 NO. CR-3  
CHART NO. GDSV0050U050

THURSDAY  
NOON

WEDNESDAY  
NOON

FRIDAY  
NOON



PRINTED IN U.S.A.  
SUNDAY  
NOON

P.M.

A.M.

MONDAY  
NOON

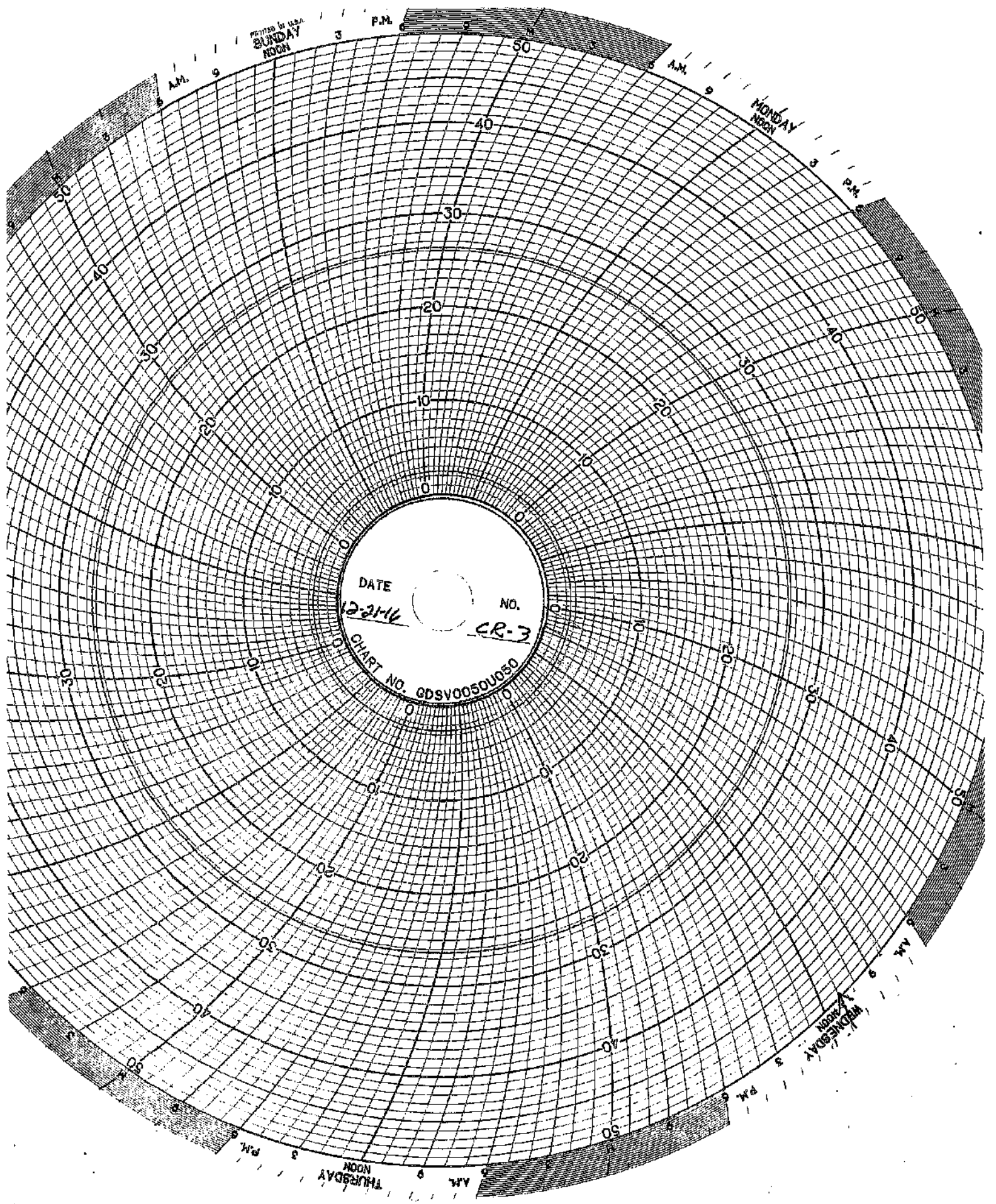
P.M.

THURSDAY  
NOON

A.M.

WEDNESDAY  
NOON

A.M.



DATE

12-21-16

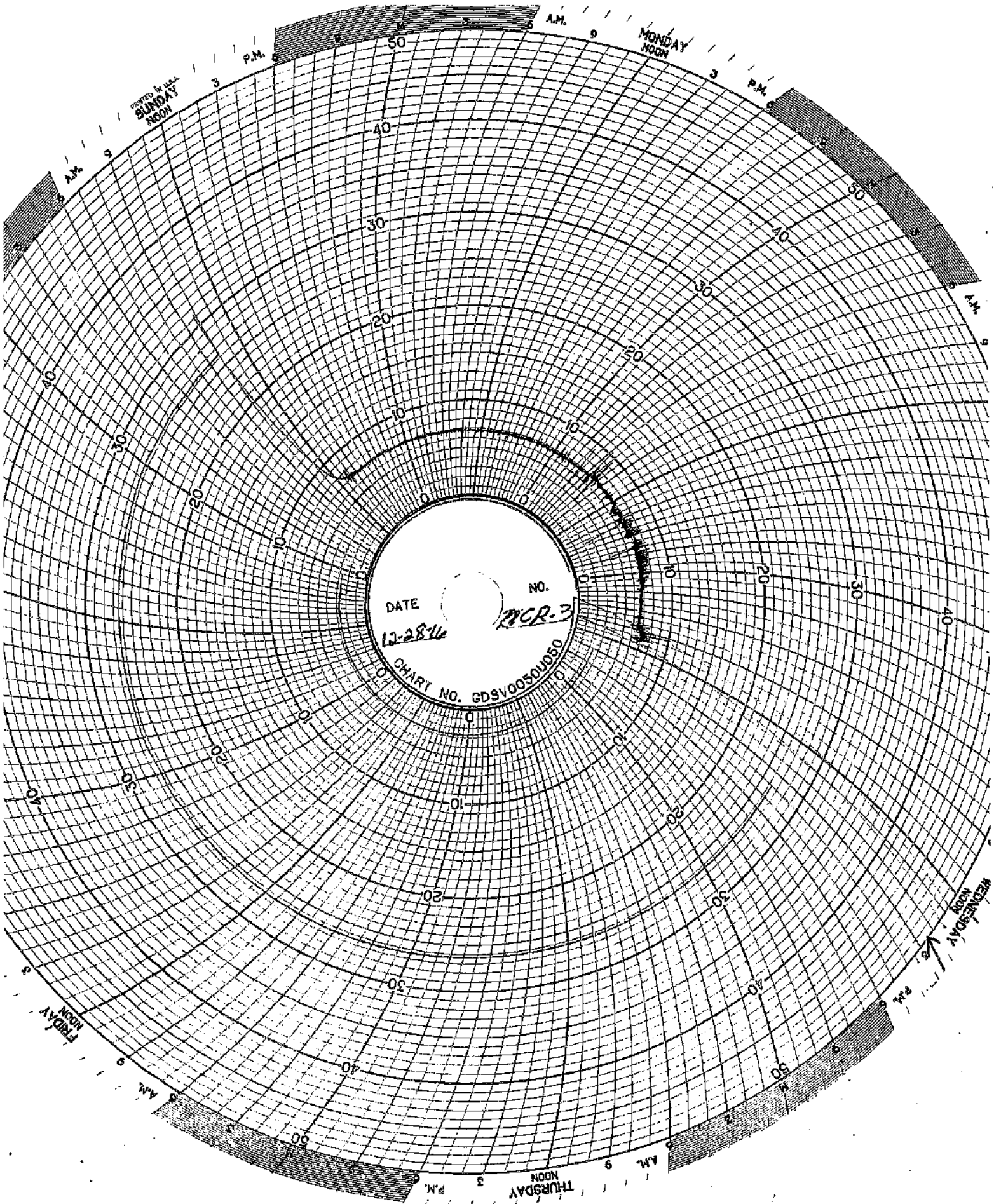
NO.

CR-3

CHART NO.

GDSV0050U050





OFFERS BY U.S.A.  
SUNDAY  
NOON

MONDAY  
NOON

WEDNESDAY  
NOON

THURSDAY  
NOON

FRIDAY  
NOON

DATE

NO.

12-28-16

MCR-3

CHART NO. GDSV00301050

## **MAINTENANCE LOG**

**UIC Monthly Maintenance Log**

12/5/2016	Well 1	Replaced main valve on wellhead
12/20/2016	Well 1	Replaced wing valve (inlet) on wellhead
12/20/2016	Injection pump 1	Replaced injection hose on injection pump
12/29/2016	Injection pump 1	Rebuilt wet end of injection pump

## **CORROSION MONITORING**

**CORROSION MONITORING PLAN  
COUPON SUMMARY**

Date	Hastelloy (C267)	Stainless Steel (316L)	Fiberglass (Redbox)	
12/19/2013	13.330 g	10.848 g	7.309 g	Initial Mass @ start up
2/21/2014	13.329 g	10.846 g	7.306 g	
3/10/2014	13.327 g	10.845 g	7.300 g	
4/18/2014	13.324 g	10.841 g	7.272 g	
5/30/2014	13.328 g	10.818 g	7.226 g	
6/30/2014	13.321 g	10.337 g	7.196 g	
7/11/2014	13.323 g	10.304 g	7.196 g	
8/12/2014	13.328 g	10.045 g	7.182 g	
9/17/2014	13.321 g	9.997 g	7.090 g	
10/30/2014	13.321 g	9.387 g	7.075 g	
11/21/2014	13.320 g	9.386 g	7.069 g	
12/19/2014	13.321 g	9.315 g	7.084 g	
1/12/2015	13.321 g	9.289 g	7.063 g	
2/23/2015	13.339 g	9.286 g	7.005 g	
3/31/2015	13.339 g	9.286 g	7.005 g	
4/27/2015	13.335 g	9.130 g	6.852 g	
5/21/2015	13.336 g	9.124 g	6.809 g	
6/12/2015	13.334 g	9.126 g	6.819 g	
7/27/2015	13.337 g	9.127 g	6.818 g	
8/26/2015	13.337 g	9.022 g	6.780 g	
9/21/2015	13.336 g	8.987 g	6.792 g	
10/19/2015	13.335 g	8.985 g	6.797 g	
11/16/2015	13.334 g	8.982 g	6.788 g	
12/17/2015	13.334 g	8.933 g	6.791 g	
1/29/2016	13.334 g	8.931 g	6.788 g	New stainless steel coupon
2/16/2016	13.332 g	8.799 g	6.757 g	
3/31/2016	13.339 g	9.286 g	7.005 g	
4/22/2016	13.333 g	8.590 g	6.744 g	
5/31/2015	13.334 g	6.084 g	6.784 g	
6/30/2016	13.328 g	10.942 g	6.793 g	
8/3/2016	13.326 g	10.529 g	6.743 g	
8/29/2016	13.325 g	10.020 g	6.723 g	
10/27/2016	13.325 g	8.765 g	6.708 g	
11/29/2016	13.327 g	8.571 g	6.740 g	
12/12/2016	13.323 g	8.223 g	6.717 g	

# 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.

## **CORROSION MONITORING COUPONS VISUAL DESCRIPTION**

December 12, 2016

### **Fiberglass Coupon**

The fiberglass coupon is Red Box 200 type with dimensions of 2-1/2 inches long by 1/2 inch wide by 3/16 inches thick. It is dark orange (rust) in color with similar semi-smooth textures on both sides. Its cut edges appear sanded. It weighs 6.717 grams.

### **Hastelloy Coupon**

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 by 1/16 inches thick. The coupon is silver in color with a lightly sandblasted texture. It weighs 13.323 grams.

### **Stainless Steel Coupon**

The Stainless Steel coupon is identified as 316 L with serial number C1562. The dimensions of the coupon are 3 inches long by 1/2 inch wide by 1/16 inches thick. The coupon is silver in color with a pock-marked texture. It weighs 8.223 grams.

1940-2-8 Mo

13123

0276

5



2016

2016

2017



Dec-2016  
316L/C1564  
8.223

316L/C1564

# GHESQUIERE PLASTIC TESTING, INC.

20450 HARPER AVENUE  
HARPER WOODS, MI 48225  
PHONE (313) 885-3635  
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:

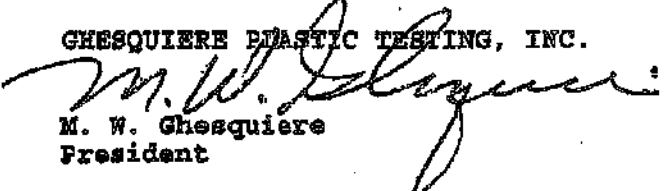
The following determination was made based upon the above test:

### BARCOL HARDNESS

	<u>Hardness</u>
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.

20450 HARPER AVENUE  
HARPER WOODS, MI 48225  
PHONE (313) 885-3635  
FAX (313) 865-1771

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 ID: 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

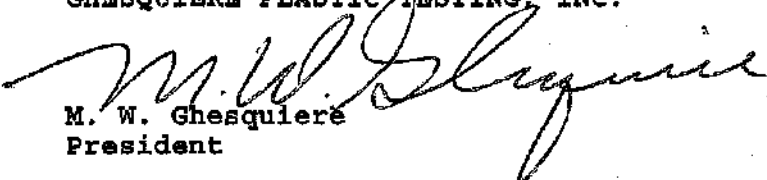
### Hardness

Specimen 1

85

Specimen was returned to the client June 16, 2014.

Ghesquiere Plastic Testing, Inc.

  
M. W. Ghesquiere  
President

MWG/dm



Testing. Development. Problem Solving.

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:

*[Signature]*  
Melissa Martin  
Sr. Project Technician

Approved By:

*[Signature]*  
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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[www.ardl.com](http://www.ardl.com)

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



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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**

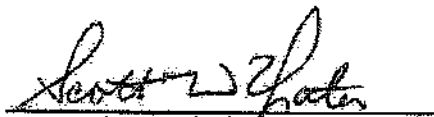
Barcol Hardness, Instant

97

Prepared By:

  
Melissa Martin  
Sr. Project Technician

Approved By:

  
Scott W. Yates  
Plastics Testing Assistant Manager

www.ardl.com

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



AKRON RUBBER DEVELOPMENT LABORATORY, INC.

Progress Through Innovation, Technology and Customer Satisfaction

October 22, 2015

John Frost  
Environmental Geo-Technologies, LLC

Page 2 of 2  
PN 125322

**SUBJECT:** Barcol Hardness on one material.

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


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

**Results**

Barcol Hardness, Instant

96

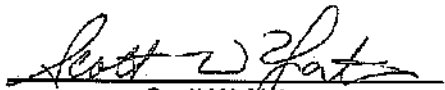
Prepared By:



Melissa Martin  
Sr. Project Technician

to

Approved By:



Scott W. Yates  
Plastics Testing Assistant Manager



**INJECTION  
FINGERPRINTS**

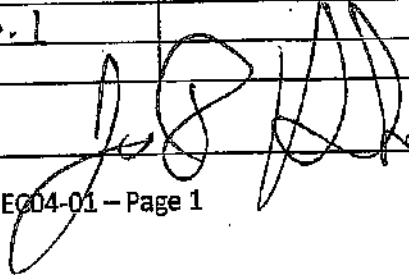
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12/01/10	
Receiving ID#	E12011601	
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	RP	

**COPY**

ANALYSIS INFORMATION		ANALYSIS RESULTS	
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.)	1.6	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.05	TDS	2.6?
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	64°F		
Conductivity	52.2 mS		
% Solids	2.6		
Turbidity	Yes No		
Color (visual)			
TSS (%)	0.1		
Radiation Screen (as needed)			
Lab Signature			

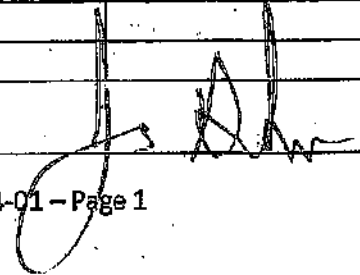
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12/02/12
Receiving ID#	12021201
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time In	
Time out	
Received by	J.H.
Sampled by	G.K.

**COPY**

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	1.10	TDS	50
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	66°F		
Conductivity	100.7mS		
% Solids	5.0		
Turbidity	Yes No		
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature			

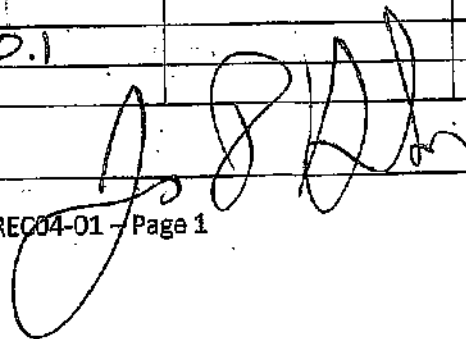
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12/5/16
Receiving ID#	12051601
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time In	
Time out	
Received by	J.H.
Sampled by	J.P.

**COPY**

		Compatibility	
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.)	0.3	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.16	TDS	7.32
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	65°F		
Conductivity	145.7 mS		
% Solids	7.3		
Turbidity	Yes No		
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature			

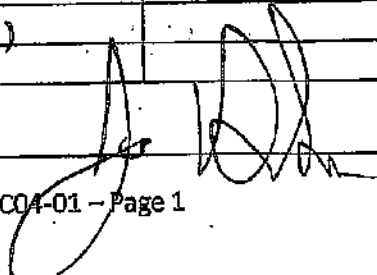
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12-6-16
Receiving ID#	L12061601
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time In	
Time out	
Received by	JFH
Sampled by	TF

**COPY**

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.)	0.2	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.18	TDS	8.2%
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil In Sample	Yes No		
Temperature	67°F		
Conductivity	163.4 mS		
% Solids	8.2		
Turbidity	Yes No		
Color (visual).			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

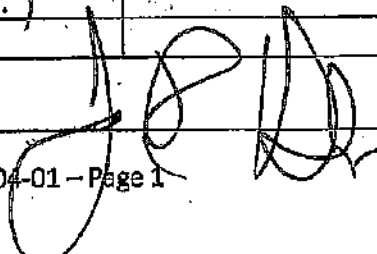
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12-06-16
Receiving ID#	E12061602
Manifest# Line:	
Land Ban Cert Included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time In	
Time out	
Received by	J.H.
Sampled by	T.F.

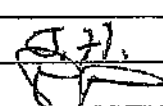
**COPY**

Compatible? (RT# )	(Yes) No	Berium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	0.2	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.17	TDS	8.0
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	68°F		
Conductivity	159.6 mS		
% Solids	8.0		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

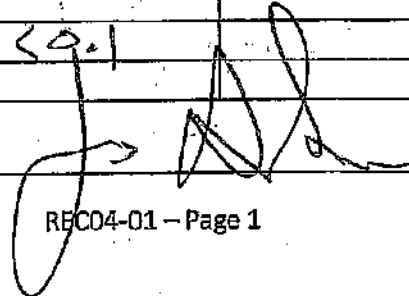
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

Date	12/16/16
Receiving ID#	IL2001603
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	

**COPY**

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.)	1.4	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.11	TDS	3.52
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	81°F		
Conductivity	70.2 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

Date	12/7/16
Receiving ID#	#12071601
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	[Signature]

**COPY**

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.)	0.7	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.13	TDS	5.77
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	65°F		
Conductivity	114.0 mS		
% Solids	5.7		
Turbidity	Yes No		
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature	[Signature]		



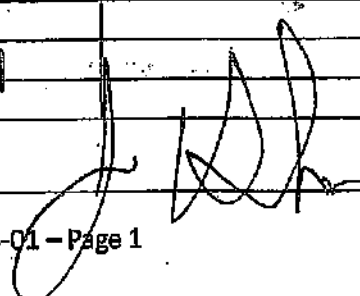
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12/7/10
Receiving ID#	I12071602
Manifest# Line:	
Land Ban Cert Included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	BB

**COPY**

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.)	0.6	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.13	TDS	6.12
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	64°F		
Conductivity	122.6 mS		
% Solids	6.1		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

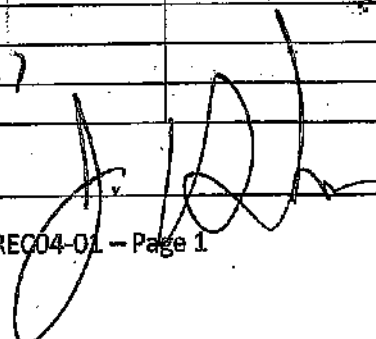
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12/13/16
Receiving ID#	(1213160)
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	TR

**COPY**

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.)	0.5	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.10	TDS	1107
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	61°F		
Conductivity	219.6µS		
% Solids	11.0		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.7		
Radiation Screen (as needed)			
Lab Signature			

FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12-13-2016
Receiving ID#	L/2131602
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	<i>[Signature]</i>

**COPY**

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.)	0.2	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.13	TDS	14.39
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	66°F		
Conductivity	285.7mS		
% Solids	14.3		
Turbidity	Yes No		
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature	<i>[Signature]</i>		

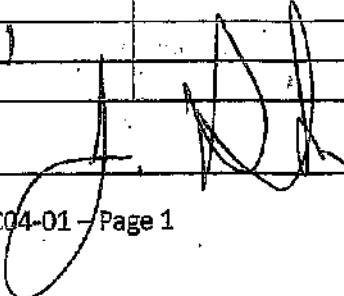
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12/14/16
Receiving ID#	J.12141601
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	JH

**COPY**

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.)	0.3	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.12	TDS	9.2%
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil In Sample	Yes No		
Temperature	64°F		
Conductivity	187.6 μm S		
% Solids	9.2		
Turbidity	Yes No		
Color (Visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature			

FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12/14/14
Receiving ID#	I12141652
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time In	
Time out	
Received by	<i>[Signature]</i>
Sampled by	<i>[Signature]</i>

**COPY**

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.)	0.3	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.14	TDS	20.09
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	58°F		
Conductivity	394.0 μS		
% Solids	20.0		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature	<i>[Signature]</i>		

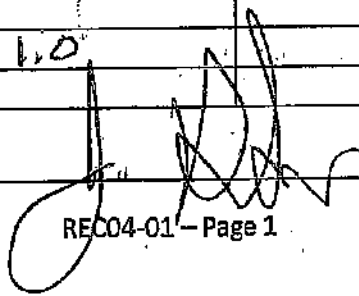
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12/14/16
Receiving ID#	12141603
Manifest# Line:	
Land Ban Cert Included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time In	
Time out	
Received by	J.H.
Sampled by	JP

**COPY**

Physical Properties		Chemical Properties	
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.)	0.2	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.13	TDS	12.77
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	106°F		
Conductivity	253.6 mS		
% Solids	12.7		
Turbidity	Yes No		
Color (visual)			
TSS (%)	1.0		
Radiation Screen (as needed)			
Lab Signature			

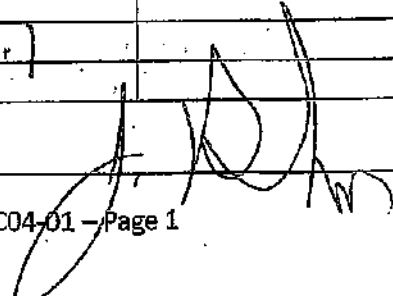
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

**COPY**

Date	12/17/16
Receiving ID#	I12171601
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.A. DP
Sampled by	

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.)	0.8	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.07	TDS	4.77
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil In Sample	Yes No		
Temperature	65°F		
Conductivity	92.6 mS		
% Solids	4.7		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			



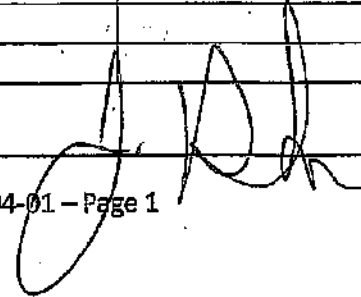
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12-19-16
Receiving ID#	E12-19-1601
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time In	
Time out	
Received by	J.H
Sampled by	T.E

**COPY**

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.)	0.3	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.17	TDS	15.87
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	63°F		
Conductivity	315.6 µS		
% Solids	15.8		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

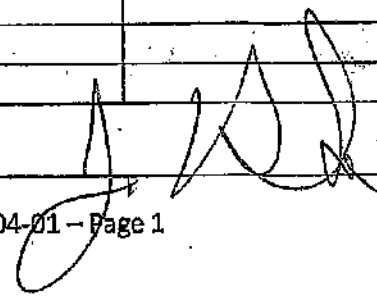
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12/19/16
Receiving ID#	E12191602
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time In	
Time out	
Received by	J.H.
Sampled by	TK

**COPY**

Compatible? (RT# )	Yes No	Barium	
PCBs. (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140°F	Magnesium	
pH (S.U.)	0.1	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.17	TDS	14.9%
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	64°F		
Conductivity	298.4 mS		
% Solids	14.9		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

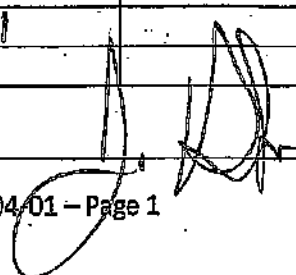
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ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12/19/16
Receiving ID#	E12191603
Manifest# Line:	
Land Ban Cert Included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	SP

COPY

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.)	0.4	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.11	TDS	15.2%
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil In Sample	Yes No		
Temperature	66°F		
Conductivity	303.4 mS		
% Solids	15.2		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

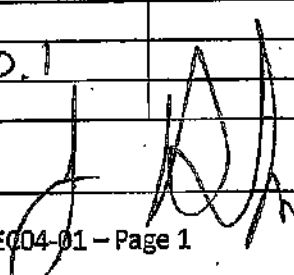
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12/29/16
Receiving ID#	E12291601
Manifest# Line:	
Land Ban Cert Included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time In	
Time out	
Received by	J.H.
Sampled by	SP

**COPY**

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.)	1.0	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.15	TDS	12.6%
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	62°F		
Conductivity	250.5 mS		
% Solids	12.6		
Turbidity	Yes No		
Color (visual)			
TSS (%)	50.1		
Radiation Screen (as needed)			
Lab Signature			

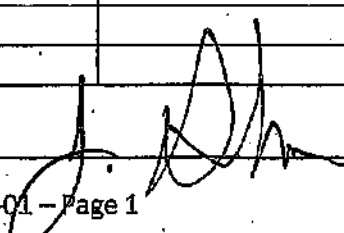
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

Date	12-30-16
Receiving ID#	E 12301601
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	T.E.

**COPY**

Compatible? (RT# )	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	0.6	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.17	TDS	1137
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	65°F		
Conductivity	226.3 mS		
% Solids	11.3		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

**WASTE STREAMS  
CHARACTERIZATIONS**

01013  
MATERIAL PROFILE

**GENERATOR INFORMATION**

Generator:

Site Location:

Mailing Address:

Contact:

**WASTE INFORMATION**

Name of Waste: Equalized Influent to WTP w/Glycol Estimated Volume: 175,000 Gallons

Proper Shipping Name:

Hazard Class: 9-0000 UN3077 Hazardous Waste, Liquid, N.O.S. Lead UNNA Number: NA3077 PG: III

Process Generating Waste: Neutralization of wastewater generated during the production of lead acid batteries.

EPA/RCRA/State Waste Codes:

SIC/NAICS#: 33530

Is this waste to Federal Categorical Pretreatment Standards?: This waste is treated and re-used on a daily basis-no discharge

Current Disposal Facility: Currently this waste is treated and re-used

**COMPOSITION OF WASTE**

Major Components	Concentrations (% or ppm)		
	lower	upper	typical
Lead	20 PPM	800 PPM	500 PPM
Sulfuric Acid	0.5%	3.0%	2.0%
Propylene Glycol	10 PPM	1,000 PPM	5 PPM
Water			

account #  
120116

**PHYSICAL PROPERTIES**

pH: 1.8 Total Solids: 25000 Total Suspended Solids: 1000  
 Odor: Slight Color/Appearance: Murky Gray  
 Flash Point: Not Known TOC: Not Known BOD: Not Known COD: Not Known

**GENERATORS CERTIFICATION**

I hereby certify that I have personally examined and am familiar with the information submitted. I certify that the above and attached information is complete and accurate and that no deliberate or willful omissions of composition or properties exist, and that all known or suspected hazards have been disclosed. \_\_\_\_\_ is authorized to utilize the information provided herein to execute waste profile on behalf of the Generator for the purpose of waste approvals or profile amendments.

[Redacted Signature Area]



01041

SECTION 2: HAZARD IDENTIFICATION

Chemical Name: Leachate

Recommended use: None (waste material)

Uses advised against: NA (waste material)

SECTION 3: HAZARD IDENTIFICATION

Signal Word: None

Pictograms: None

None	Health	None	Physical	None	Environment
Classifications:		Physical		Environment	
Not hazardous.		Not hazardous.		Not hazardous.	

Hazards not otherwise classified:  
Contains less than 1% of unknown substances that may not have been evaluated for hazards.

SECTION 4: COMPOSITION/INFORMATION ON INGREDIENTS

Components	CASRN	% weight
Xylene (Xylol, Dimethylbenzene)	1330-20-7	<0.01 - 0.042
Toluene (Toluol, Methylbenzene)	108-88-3	<0.01 - 0.037
Ethyl Benzene (Phenyl Ethane)	100-41-4	<0.01 - 0.068
1,4 Dichlorobenzene (P-Dichlorobenzene)	108-48-7	<0.01 - 0.080
Perchloroethylene (Tetrachloroethylene)	127-18-4	<0.01 - 0.013
Water	7732-18-5	99.742-99.95

Leachate may also contain trace quantities (<0.1%) of other compounds not listed above. Absolute concentrations vary by site.

*acceptable*  
*120716*

SECTION 5: HAZARD PREVENTION MEASURES

**Eye contact:**  
Flush eyes and eyelids thoroughly under gently running water for at least 15 minutes. Seek medical attention if irritation develops or persists.

**Skin contact:**  
After removing contaminated clothing, wash effected area thoroughly with soap and water. Seek medical attention if irritation develops or persists.

**Inhalation:**  
Remove to fresh air. Perform cardio-pulmonary resuscitation (CPR) if patient is not breathing or if there is no pulse. Seek medical attention if patient is/has been unconscious or experiences difficulty in breathing.

**Ingestion:**  
Seek medical attention immediately. Do not give anything by mouth to a person that is unconscious or convulsing. If vomiting should occur, keep patient's head at level of their hips to prevent breathing liquid into their lungs.

SECTION 6: HAZARD PREVENTION MEASURES

**Flash point:**  
Not applicable.

Being essentially water, there are no fire and explosion hazards associated with this material.

SECTION 7: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment, and emergency procedures:**  
Notify appropriate response personnel. Restrict access to area. Keep away from any incompatible materials. Contain large spills/leaks. Absorb spilled material with sand, earth, vermiculite, or other absorbents designed to collect water based products.

SECTION 8: HANDLING AND STORAGE

**Precautions for safe handling:**  
Use proper personal protection equipment according to Section 6. Wash hands thoroughly before eating, drinking, or smoking.

**Conditions for safe storage:**  
Store in a manner to minimize unnecessary exposures to personnel.

SECTION 9: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters:**  
In accordance with standard company practice, implement all control parameters to minimize exposure to this material.

**Work Hygiene Practices:**  
In accordance with standard company practice, follow all hygiene practices to minimize exposure to this material.

Components	OSHA PEL (mg/m <sup>3</sup> )	NIOSH REL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )	Quebec (mg/m <sup>3</sup> )	Ontario TWA (mg/m <sup>3</sup> )	EU OELs (mg/m <sup>3</sup> )
Xylene	435	434	434	434	N.E.	221
Toluena	788	377	75	377	75	182
Ethyl Benzene	435	434	88	434	88	442
1,4 Dichlorobenzene	450	0 (a)	60	450	60	122
Perchloroethylene	690	0 (a)	170	338	170	70 (b)

N.E.: Not Established

(a): No detectable exposure levels for proven carcinogenic substances.

(b): Based on OEL's of Denmark, Finland, and Sweden.

**Engineering controls:**

Ventilation: Local exhaust may be necessary under some handling/use conditions. Specific needs should be addressed by Supervisory or Health/Safety personnel.

**Protective measures:**

Wear appropriate personal protective equipment as necessary such as eye and face protection and protective clothing including gloves.

**Respiratory protection:**

Wear appropriate respiratory protection for the situation to minimize exposure.

**Environmental exposure controls:**

Prevent releases to the environment with equipment as appropriate and in accordance with standard company practices.

**SECTION 3 PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Clear to cloudy liquid
<b>Odor:</b>	Varies from none to characteristic odor.
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	3.5-8.0
<b>Melting point:</b>	Not applicable.
<b>Initial boiling point and boiling range:</b>	212 °F (as water)
<b>Flash point:</b>	Not applicable.
<b>Evaporation rate (butyl acetate = 1):</b>	No data available.
<b>Flammability (solid, gas):</b>	Not applicable.
<b>Lower flammability/explosive limits</b>	Not applicable.
<b>Upper flammability/explosive limits</b>	Not applicable.
<b>Specific gravity (water = 1)</b>	~1
<b>Vapor pressure (mm Hg):</b>	760 at 212 °F
<b>Vapor density (air = 1):</b>	>1
<b>Relative density:</b>	No data available.
<b>Solubility(ies) in water:</b>	100%
<b>Partition coefficient, n-octanol/water:</b>	No data available.
<b>Autoignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.
<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	No data available.

**SECTION 4 STABILITY AND REACTIVITY**

**Reactivity:**

Not reactive.

**Chemical stability:**

Stable.

**Hazardous reactions:**

See incompatible materials.

**Conditions to avoid:**

See incompatible materials.

**Incompatible materials:**

Oxidizing agents, caustic soda, nitric acid, sulfuric acid, and water active materials, such as metallic sodium and magnesium.

**Hazardous polymerization:**

Will not occur.

**Hazardous decomposition products:**

Heating may produce water vapor (steam) or hydrocarbon gases/vapors.

**SECTION 14 TOXICOLOGICAL INFORMATION**

This product is not classified as a hazardous substance.

**Acute toxicity:**

The mixture does not present acute toxicity hazards by ingestion, inhalation, or dermal exposures.

Toluene: Dermal LD50, rat: >4200 mg/kg  
Inhalation LC50, rat: 6350 ppm

**Respiratory or Skin sensitization:**

The components identified are not recognized sensitizers.

**Germ Cell Mutagenicity:**

The components identified are not recognized mutagens.

**Carcinogenicity:**

This material may contain carcinogenic substances at concentrations below the cut off values for classification under HazCom 2012.

Components listed as carcinogenic	International Agency for Research on Cancer (IARC) Classification Group	National Toxicology Program (NTP) Listing	OSHA
Ethyl Benzene	2B	N.E.	N.E.
1,4 Dichlorobenzene	2B	R	N.E.
Perchloroethylene	2A	R	N.E.

2A: Probably carcinogenic to humans  
2B: Possibly carcinogenic to humans  
R: Reasonably anticipated to be a human carcinogen  
N.E.: Not Established

Components disclosed in Section 3 but not in this table are not established as carcinogens by IARC, NTP, or OSHA.

**Reproductive toxicity:**

Toluene is a reproductive toxin.

**Specific Target Organ Toxicity-Single Exposure:**

Not classified as a STOT-SE hazard.

**Specific Target Organ Toxicity-Repeated Exposure (STOT-RE):**

Not classified as a STOT-RE hazard.

**Aspiration hazard:**

Not classified as an aspiration hazard.

**SECTION 12: ECOLOGICAL INFORMATION**

This product is not classified as hazardous to the environment under GHS revision 5.

**Aquatic Toxicity:**

Xylene: 96-h LC50, *Oncorhynchus mykiss*: 2.6 mg/L  
24-h IC50, *Daphnia magna*: 1 mg/L  
56-d NOEC, *Oncorhynchus mykiss*: >1.3 mg/L  
7-d NOEC, *Ceriodaphnia dubia*: 1.17 mg/L  
78-h EC50, *Pseudokirchnerella subcapitata*: 4.36 mg/L

1,4 Dichlorobenzene: 24-h LC50, *Oncorhynchus mykiss*: 1.37 mg/L  
48-h LC50, *Daphnia magna*: 2.2 mg/L  
96-h EC50, *Pseudokirchnerella subcapitata*: 1.6 mg/L  
14-d NOEC, *Jordanella floridae*: 0.2-0.23 mg/L  
28-d NOEC, *Daphnia magna*: 0.22 mg/L

1,3 Dichlorobenzene: 72-h EC50, *Pseudokirchnerella subcapitata*: >6.3 mg/L  
32d NOEC, *Pimephales promelas*: 1 mg/L  
21-d NOEC, *Daphnia magna*: 0.5 mg/L

Perchloroethylene: 10-d NOEC, *Jordanella floridae*: 1.96 mg/L  
28-d NOEC, *Daphnia magna*: 0.51 mg/L  
72-h EC50, *Chlamydomonas reinhardtii*: 3.84 mg/L

**Persistence and degradability:**

Perchloroethylene may persist in the environment upon release.

**Other adverse effects:**

No known hazards to the ozone layer.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste treatment methods:**

Handle as municipal wastewater. Dispose in accordance with Federal, State and Local regulations.

**SECTION 14 TRANSPORT INFORMATION**

Not classified as a hazardous material.

**Environmental Hazards:**

Prevent release to environment.

**SECTION 15 REGULATORY INFORMATION**

**TSCA:**

All components of this product are listed on the TSCA inventory.

**SARA 302 EPCRA Extremely Hazardous Substances (EHS):**

Substances listed in Section 3 are not regulated under SARA Section 302.

**SARA 304 CERCLA Hazardous Substances:**

Component	CASRN	Reportable Quantity (lb)
Xylene	1330-20-7	100
Toluene	108-88-3	1000
Ethyl Benzene	100-41-4	1000
1,4 Dichlorobenzene	106-46-7	100
Perchloroethylene	127-18-4	100

Components disclosed in Section 3 but not in this table are not reportable under SARA 304.

**SARA 311/312 Hazards:**

EPCRA Section 312 Tier Two reporting is not required for any substances listed in Section 3.

**SARA 313 Reportable Quantities:**

Component	CASRN	Concentration (% by weight)
Xylene	1330-20-7	0.13 - 13.0
Toluene	108-88-3	0.07 - 2.7
Ethyl Benzene	100-41-4	0.03 - 2.0
1,4 Dichlorobenzene	106-46-7	0.10 - 1.4
Perchloroethylene	127-18-4	0.01 - 0.11

Components disclosed in Section 3 but not in this table are not reportable under SARA 313.

**RCRA:**

Component	CASRN	EPA Hazardous Waste Number
Xylene	1330-20-7	U239
Toluene	108-88-3	U220
1,4 Dichlorobenzene	106-46-7	U072
Perchloroethylene	127-18-4	U210

Components disclosed in Section 3 but not in this table are not regulated under RCRA.

**Clean Air Act Section 112 Hazardous Air Pollutants (HAPs):**

Substances listed in Section 3 are not regulated under CAA 112.

**State regulations:**

**California Proposition 65**

WARNING: This product contains Toluene; 1,4 Dichlorobenzene; and Perchloroethylene, chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

**Massachusetts**

Xylene; Toluene; Ethyl benzene; 1,4 Dichlorobenzene; 1,3 Dichlorobenzene; Perchloroethylene.

**New York**

Xylene; Toluene; Ethyl benzene; 1,4 Dichlorobenzene; 1,3 Dichlorobenzene; Perchloroethylene.

**New Jersey**

Xylene; Toluene; Ethyl benzene; 1,4 Dichlorobenzene; 1,3 Dichlorobenzene; Perchloroethylene.

**Pennsylvania**

Xylene; Toluene; Ethyl benzene; 1,4 Dichlorobenzene; 1,3 Dichlorobenzene; Perchloroethylene.

**SECTION 16 OTHER INFORMATION**

**SDS preparation information:**

Date issued: June 17, 2016

**Disclaimer:**

The information herein is based on our best knowledge but no warranty is made on any specific values.

The physical and chemical property values are not certified.

Precautions only cover normal handling conditions and safety measures may need to be adapted/modified to meet special use or handling conditions.

OSHA HazCom 2012 Final Rule & Appendices are available at: <https://www.osha.gov/dsg/hazcom/phs-final-rule.html>.

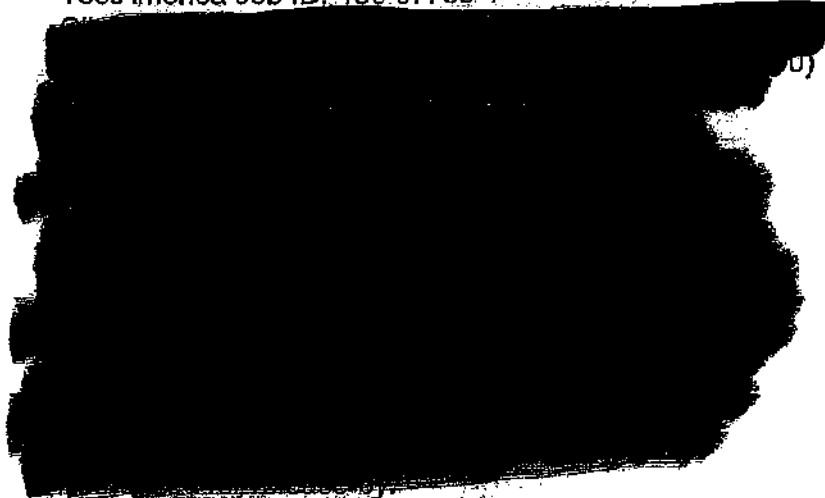
# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Buffalo  
10 Hazelwood Drive  
Amherst, NY 14228-2298  
Tel: (716)691-2600

TestAmerica Job ID: 480-97769-1



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*The test results in this report meet all 2003 NELAP and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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## Definitions/Glossary

TestAmerica

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

#### GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

### General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
#	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Buffalo



## Case Narrative

[REDACTED] RA [REDACTED]

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Laboratory: TestAmerica Buffalo

### Narrative

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[REDACTED]

### Comments

No additional comments.

### Receipt

The samples were received on 4/7/2016 8:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6° C.

### GC/MS VOA

Method(s) 624: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: 001 (480-97769-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### GC/MS Semi VOA

Method(s) 625: The following sample was diluted to bring the concentration of target analytes within the calibration range: 001 (480-97769-1). Elevated reporting limits (RLs) are provided.

Method(s) 625: Surrogate recovery for the following sample was outside control limits: 001 (480-97769-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### GC Semi VOA

Method(s) 608: Tetrachloro-m-xylene and Decachlorobiphenyl surrogate recoveries for the following sample were outside control limits: 001 (480-97769-1). Matrix interference is suspected; therefore, re-extraction and re-analysis were not performed.

Method(s) 608: The following sample was diluted due to the nature of the sample matrix: 001 (480-97769-1). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### Metals

Method(s) 200.7 Rev 4.4: The following sample was diluted due to the presence of Total Calcium which interferes with Total Copper: 001 (480-97769-1). Elevated reporting limits (RLs) are provided.

Method(s) 245.1: Due to interference with the sample matrix, the standard mercury preparation procedure was inadequate for the following sample: 001 (480-97769-1). This was demonstrated when the potassium permanganate reagent was added and the characteristic purple color faded rapidly. This loss of color indicates oxidizing conditions were not maintained. The sample(s) was prepared and analyzed at a 1:5 dilution, which maintained the purple color during digestion.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### General Chemistry

Method(s) 1664A: The reference method requires samples to be preserved to a pH of 2 or less. The following sample was received at the laboratory with a pH of greater than 2: 001 (480-97769-2).

Method(s) SM 2540C: Due to the matrix, the initial volume used for the following sample deviated from the standard procedure: 001 (480-97769-1). The reporting limits (RLs) have been adjusted proportionately.

Method(s) SM 2540D: Due to the matrix, the initial volume used for the following sample deviated from the standard procedure: 001 (480-97769-1). The reporting limits (RLs) have been adjusted proportionately.



**Case Narrative**

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**Laboratory: TestAmerica Buffalo (Continued)**

Method(s) Distill/Ammonia: Due to the matrix, the initial volumes used for the following samples deviated from the standard procedure: 001 (480-97769-2) and (480-97769-C-2 MS). The reporting limits (RLs) have been adjusted proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Organic Prep**

Method(s) 3510C: Due to the matrix, the initial volume used for the following sample deviated from the standard procedure: 001 (480-97769-1). The reporting limits (RLs) have been adjusted proportionately.

Method(s) 3510C: The following sample formed emulsions during the extraction procedure: 001 (480-97769-1). The emulsions were broken up using centrifugation.

Method(s) 3510C: The following sample formed emulsions during the extraction procedure: 001 (480-97769-1). The emulsions were broken up using centrifugation.

Method(s) 625: Due to the matrix, the initial volume used for the following sample deviated from the standard procedure: 001 (480-97769-1). The reporting limits (RLs) have been adjusted proportionately.

Method(s) 625: The following sample formed emulsions during the extraction procedure: 001 (480-97769-1). The emulsions were broken up using centrifugation.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client Sample ID: 001

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenol	6800		500		ug/L	10		625	Total/NA
Arsenic	0.26		0.015		mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	0.75		0.0040		mg/L	1		200.7 Rev 4.4	Total/NA
Copper	0.068		0.050		mg/L	5		200.7 Rev 4.4	Total/NA
Lead	0.064		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Nickel	0.21		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	2.3		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Chemical Oxygen Demand	40300		5000		mg/L	500		410.4	Total/NA
Total Dissolved Solids	26400		400		mg/L	1		SM 2640C	Total/NA
Biochemical Oxygen Demand	24400	b	12000		mg/L	100		SM 5210B	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	650		62.5		mg/L	1		SM 2640D	Total/NA

Client Sample ID: 001

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Oil & Grease	15.5		5.3		mg/L	1		1664A	Total/NA
Ammonia	2320		400		mg/L	2		350.1	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

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# Client Sample Results

TestAmerica Job ID: 480-97769-1

Client Sample ID: [REDACTED]

Date Collected: 04/06/16 11:55

Matrix: Leachate

Date Received: 04/07/16 09:00

## Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Acenaphthylene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Anthracene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Benzidine	ND		8000		ug/L		04/07/16 15:01	04/09/16 09:01	10
Benzo[a]anthracene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Benzo[a]pyrene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Benzo[b]fluoranthene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Benzo[g,h,i]perylene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Benzo[k]fluoranthene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Bis(2-chloroethyl)ether	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Bis(2-chloroethoxy)methane	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
bis(2-chloroisopropyl) ether	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Bis(2-ethylhexyl) phthalate	ND		1000		ug/L		04/07/16 15:01	04/09/16 09:01	10
4-Bromophenyl phenyl ether	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Butyl benzyl phthalate	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
2-Chloronaphthalene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
4-Chlorophenyl phenyl ether	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Chrysene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Dibenz[a,h]anthracene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Di-n-butyl phthalate	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
1,2-Dichlorobenzene	ND		1000		ug/L		04/07/16 15:01	04/09/16 09:01	10
1,3-Dichlorobenzene	ND		1000		ug/L		04/07/16 15:01	04/09/16 09:01	10
1,4-Dichlorobenzene	ND		1000		ug/L		04/07/16 15:01	04/09/16 09:01	10
3,3'-Dichlorobenzidine	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Diethyl phthalate	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Dimethyl phthalate	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
2,4-Dinitrotoluene	ND		1000		ug/L		04/07/16 15:01	04/09/16 09:01	10
2,6-Dinitrotoluene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Di-n-octyl phthalate	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
1,2-Diphenylhydrazine	ND		1000		ug/L		04/07/16 15:01	04/09/16 09:01	10
Fluoranthene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Fluorene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Hexachlorobenzene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Hexachlorobutadiene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Hexachlorocyclopentadiene	ND		1000		ug/L		04/07/16 15:01	04/09/16 09:01	10
Hexachloroethane	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Indeno[1,2,3-cd]pyrene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Isophorone	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Naphthalene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Nitrobenzene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
N-Nitrosodi-n-propylamine	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
N-Nitrosodimethylamine	ND		1000		ug/L		04/07/16 15:01	04/09/16 09:01	10
N-Nitrosodiphenylamine	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Phenanthrene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Pyrene	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
1,2,4-Trichlorobenzene	ND		1000		ug/L		04/07/16 15:01	04/09/16 09:01	10
4-Chloro-3-methylphenol	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
2-Chlorophenol	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
2,4-Dichlorophenol	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10

TestAmerica Buffalo



# Client Sample Results

TestAmerica Job ID: 480-97769-1

**Client Sample ID:** 001

**Lab Sample**

**Date Collected:** 04/06/16 11:55

**Matrix:** Leachate

**Date Received:** 04/07/16 09:00

## Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
2,4-Dinitrophenol	ND		1000		ug/L		04/07/16 15:01	04/09/16 09:01	10
4,6-Dinitro-2-methylphenol	ND		1000		ug/L		04/07/16 15:01	04/09/16 09:01	10
2-Nitrophenol	ND		500		ug/L		04/07/16 16:01	04/09/16 09:01	10
4-Nitrophenol	ND		1500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Pentachlorophenol	ND		1000		ug/L		04/07/16 15:01	04/09/16 09:01	10
Phenol	6800		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
2,4,6-Trichlorophenol	ND		500		ug/L		04/07/16 15:01	04/09/16 09:01	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		52 - 151				04/07/16 15:01	04/09/16 09:01	10
2-Fluorobiphenyl	78		44 - 120				04/07/16 15:01	04/09/16 09:01	10
2-Fluorophenol	47		17 - 120				04/07/16 15:01	04/09/16 09:01	10
Nitrobenzene-d5	104		42 - 120				04/07/16 15:01	04/09/16 09:01	10
Phenol-d5	0 X		10 - 120				04/07/16 15:01	04/09/16 09:01	10
p-Terphenyl-d14	41		22 - 125				04/07/16 15:01	04/09/16 09:01	10

## Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
alpha-BHC	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
beta-BHC	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
delta-BHC	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
gamma-BHC (Lindane)	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
Chlordane (technical)	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
4,4'-DDD	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
4,4'-DDE	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
4,4'-DDT	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
Dieldrin	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
Endosulfan I	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
Endosulfan II	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
Endosulfan sulfate	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
Endrin	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
Endrin aldehyde	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
Heptachlor	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
Heptachlor epoxide	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
Toxaphene	ND		4.0		ug/L		04/07/16 14:45	04/08/16 14:47	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0 X		23 - 120				04/07/16 14:45	04/08/16 14:47	20
Tetrachloro-m-xylene	182 X		38 - 120				04/07/16 14:45	04/08/16 14:47	20

## Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24		ug/L		04/07/16 14:55	04/08/16 03:11	1
PCB-1221	ND		0.24		ug/L		04/07/16 14:55	04/08/16 03:11	1
PCB-1232	ND		0.24		ug/L		04/07/16 14:55	04/08/16 03:11	1
PCB-1242	ND		0.24		ug/L		04/07/16 14:55	04/08/16 03:11	1
PCB-1248	ND		0.24		ug/L		04/07/16 14:55	04/08/16 03:11	1
PCB-1254	ND		0.24		ug/L		04/07/16 14:55	04/08/16 03:11	1

TestAmerica Buffalo

# Client Sample Results

TestAmerica Job ID: 480-97768-1

**Client Sample ID: 001**

**Date Collected: 04/06/16 11:55**

**Matrix: Leachate**

**Date Received: 04/07/16 09:00**

**Method: 608 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	ND		0.24		ug/L		04/07/16 14:55	04/08/16 03:11	1
<b>Surrogate</b>									
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl	2	X	26 - 135				04/07/16 14:55	04/08/16 03:11	1
Tetrachloro-m-xylene	16	X	27 - 159				04/07/16 14:55	04/08/16 03:11	1

**Method: 200.7 Rev 4.4 - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.26		0.015		mg/L		04/08/16 08:00	04/08/16 21:56	1
Cadmium	ND		0.0020		mg/L		04/08/16 08:00	04/08/16 21:56	1
Chromium	0.75		0.0040		mg/L		04/08/16 08:00	04/08/16 21:56	1
Copper	0.058		0.050		mg/L		04/08/16 08:00	04/08/16 22:00	5
Lead	0.064		0.010		mg/L		04/08/16 08:00	04/08/16 21:56	1
Nickel	0.21		0.010		mg/L		04/08/16 08:00	04/08/16 21:56	1
Selenium	ND		0.025		mg/L		04/08/16 08:00	04/08/16 21:56	1
Silver	ND		0.0060		mg/L		04/08/16 08:00	04/08/16 21:56	1
Zinc	2.3		0.010		mg/L		04/08/16 08:00	04/08/16 21:56	1

**Method: 245.1 - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0010		mg/L		04/08/16 08:55	04/08/16 13:44	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	40300		5000		mg/L			04/12/16 12:30	500
Total Dissolved Solids	26400		400		mg/L			04/08/16 11:22	1
Biochemical Oxygen Demand	24400	b	12000		mg/L			04/08/16 02:06	100
<b>General Chemistry</b>									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	950		62.5		mg/L			04/12/16 08:46	1

TestAmerica Buffalo

# Client Sample Results

TestAmerica Job ID: 480-97769-1

**Client Sample ID: 001**

**Date Collected: 04/06/16 11:55**

**Date Received: 04/07/16 09:00**

Matrix: Leachate

**Method: 624 - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2000		ug/L			04/07/16 22:12	400
1,1,2,2-Tetrachloroethane	ND		2000		ug/L			04/07/16 22:12	400
1,1,2-Trichloroethane	ND		2000		ug/L			04/07/16 22:12	400
1,1-Dichloroethane	ND		2000		ug/L			04/07/16 22:12	400
1,1-Dichloroethene	ND		2000		ug/L			04/07/16 22:12	400
1,2-Dichlorobenzene	ND		2000		ug/L			04/07/16 22:12	400
1,2-Dichloroethane	ND		2000		ug/L			04/07/16 22:12	400
1,2-Dichloroethene, Total	ND		4000		ug/L			04/07/16 22:12	400
1,2-Dichloropropene	ND		2000		ug/L			04/07/16 22:12	400
1,3-Dichlorobenzene	ND		2000		ug/L			04/07/16 22:12	400
1,4-Dichlorobenzene	ND		2000		ug/L			04/07/16 22:12	400
2-Chloroethyl vinyl ether	ND		10000		ug/L			04/07/16 22:12	400
Acrolein	ND		40000		ug/L			04/07/16 22:12	400
Acrylonitrile	ND		20000		ug/L			04/07/16 22:12	400
Benzene	ND		2000		ug/L			04/07/16 22:12	400
Bromodichloromethane	ND		2000		ug/L			04/07/16 22:12	400
Bromoform	ND		2000		ug/L			04/07/16 22:12	400
Bromomethane	ND		2000		ug/L			04/07/16 22:12	400
Carbon tetrachloride	ND		2000		ug/L			04/07/16 22:12	400
Chlorobenzene	ND		2000		ug/L			04/07/16 22:12	400
Chlorodibromomethane	ND		2000		ug/L			04/07/16 22:12	400
Chloroethane	ND		2000		ug/L			04/07/16 22:12	400
Chloroform	ND		2000		ug/L			04/07/16 22:12	400
Chloromethane	ND		2000		ug/L			04/07/16 22:12	400
cis-1,3-Dichloropropene	ND		2000		ug/L			04/07/16 22:12	400
Ethylbenzene	ND		2000		ug/L			04/07/16 22:12	400
Methylene Chloride	ND		2000		ug/L			04/07/16 22:12	400
Tetrachloroethene	ND		2000		ug/L			04/07/16 22:12	400
Toluene	ND		2000		ug/L			04/07/16 22:12	400
trans-1,3-Dichloropropene	ND		2000		ug/L			04/07/16 22:12	400
Trichloroethane	ND		2000		ug/L			04/07/16 22:12	400
Vinyl chloride	ND		2000		ug/L			04/07/16 22:12	400
trans-1,2-Dichloroethene	ND		2000		ug/L			04/07/16 22:12	400

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		72 - 130		04/07/16 22:12	400
4-Bromofluorobenzene (Surr)	101		69 - 121		04/07/16 22:12	400
Toluene-d8 (Surr)	97		70 - 123		04/07/16 22:12	400
Dibromofluoromethane (Surr)	110		70 - 130		04/07/16 22:12	400

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	15.5		5.3		mg/L		04/07/16 16:09	04/07/16 19:41	1
Ammonia	2320		400		mg/L		04/08/16 14:27	04/08/16 20:25	2

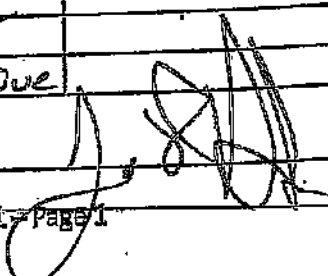
TestAmerica Buffalo

FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	10/12/16
Receiving ID#	Leachate
Manifest#	Line:
Land Ban Cert Included	Yes No
EGT Approval #	[Redacted]
Generator	[Redacted]
Client	
Transporter	
Time In	
Time out	
Received by	J.H.
Sampled by	Client

Compatible? (RT#)	(Yes) No	Barium
PCBs (ppm)(Oily Waste Only)?	N/A	Calcium
TOC (ppm)(CG Waste Only)?	N/A	Total Iron
Flash Point (°F)	> 140	Magnesium
pH (S.U.)	7.4	Sodium Chloride
Cyanides? (mg/L)	< 30	Bicarbonate
Sulfides? (ppm)	< 200	Carbonate
Specific Gravity	1.05	TDS
Physical Description	Liquid	Reactivity
Stream Consistency	(Yes) No	Sulfate
Oil In Sample	Yes No	
Temperature	66°F	
Conductivity	32.8 mS	
% Solids	2.0	
Turbidity	(Yes) No	
Color (visual)	Black	
TSS (%)	0.2	
Radiation Screen (as needed)	Negative	
Lab Signature		



**GENERATOR INFORMATION**

Name: [REDACTED]  
 Facility Address: [REDACTED]  
 City: [REDACTED]  
 Contact: [REDACTED]

**BILLING INFORMATION**

Company Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
 Attention: \_\_\_\_\_ Phone: ( ) \_\_\_\_\_ Fax: ( ) \_\_\_\_\_

**WASTE INFORMATION**

Name of Waste/Common Chemical Name: SPENT H2L ACID  
 Process Generating Waste (Please be specific, incomplete information may delay the approval process):  
SAKAMIZING

**USEPA / STATE WASTE IDENTIFICATION**

- This waste is considered to be:  Non Hazardous Liquid Industrial Waste  Hazardous Waste
- Regulated by TSCA?  Yes  No (PCBs, etc.)
- List ALL Applicable Waste Codes: D002 D007 D008 D010

**PHYSICAL CHARACTERISTICS OF WASTE**

<b>Color:</b> <input type="checkbox"/> White/Clear <input type="checkbox"/> Black/Brown <input checked="" type="checkbox"/> Other <u>green</u>	<b>Suspended Solids</b> <input checked="" type="checkbox"/> 0-1 % <input type="checkbox"/> 3-5 % <input type="checkbox"/> 1-3 % <input type="checkbox"/> > 5%	<b>Layers:</b> <input type="checkbox"/> Multi-Layered <input type="checkbox"/> Bi-Layered <input checked="" type="checkbox"/> Single Phase	<b>Specific Gravity:</b> <input type="checkbox"/> <0.8 <input type="checkbox"/> 1.0-1.2 <input type="checkbox"/> 0.8-1.0 <input checked="" type="checkbox"/> 1.3-1.4 Exact/Other: <u>1.33</u>	available 120716
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pH:  NA  ≤ 2  2-4  4-6  6-8  8-10  10-12.5  ≥ 12.5

Liquid Flash Point:  <73°F  73-100°F  101-140°F  141-200°F  >200°F  None  Closed Cup  Open Cup

VOG CONCENTRATION - 0 PPM (MUST BE COMPLETED)

TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (LIST EACH CONSTITUENT ≥ 0.1%)

CONSTITUENT	MAX	MIN	CONSTITUENT	MAX	MIN
Water	98	35			
Phosphoric Acid	10	1			
Solids	35	1			

Metals: Indicate if this waste contains any of the following metals. If Generator knowledge provide backup

Lab Analysis  Generator Knowledge  TOLP  TOTAL

	Not Present	Concentration		Not Present	Concentration		Not Present	Concentration
PCB	<input type="checkbox"/>	ppm	Aromatic Amine	<input type="checkbox"/>	ppm	Arsenic (As)	<input checked="" type="checkbox"/>	5 ppm
Dioxins	<input type="checkbox"/>	ppm	Pesticides	<input type="checkbox"/>	ppm	Barium (Ba)	<input checked="" type="checkbox"/>	100 ppm
Cyanides Reactive	<input type="checkbox"/>	ppm	Rodenticides	<input type="checkbox"/>	ppm	Cadmium (Cd)	<input checked="" type="checkbox"/>	1 ppm
Cyanides Total	<input type="checkbox"/>	ppm	Fungicides	<input type="checkbox"/>	ppm	Chromium (Cr)	<input checked="" type="checkbox"/>	5 ppm
Sulfides Reactive	<input type="checkbox"/>	ppm				Lead (Pb)	<input checked="" type="checkbox"/>	5 ppm
Sulfides Total	<input type="checkbox"/>	ppm				Mercury (Hg)	<input checked="" type="checkbox"/>	0.2 ppm
						Selenium (Se)	<input checked="" type="checkbox"/>	1 ppm
						Silver (Ag)	<input checked="" type="checkbox"/>	5 ppm

TOLP Organics D012 - D043 above regulatory limits: Present  Not Present

IS WASTE ANY OF THE FOLLOWING?

At Least One Box Must Be Checked.

- Radioactive
- Water Reactive
- Oxidizer
- Shock Sensitive
- Reactive (other)
- DOT Explosives
- NIOSH Human-Possible Carcinogens
- NESHAP Wastes (Benzene, etc.)
- Biological
- None Apply

SHIPPING INFORMATION

- Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)?  Yes  No
- Reportable Quantity (RQ) in pounds \_\_\_\_\_
- DOT Shipping Name RO, UN 1789, Wash Hydrochloric Acid Solution, B, II Hazard Class 8 UN 1789
- PG II ERG 157 Hazardous Constituents for "H.O.S." \_\_\_\_\_
- Method of Shipment:  Bulk Tanker  Vac truck  Rail Car  Drums  Totes
- Number of Units to Ship Now: \_\_\_\_\_ 6. Anticipated Volume / Units per Year: VARIES or  One Time
- Special Handling Requirements including PPE: \_\_\_\_\_

CERTIFICATION STATEMENT

I hereby represent and warrant that I have personally examined and am familiar with the information contained and submitted in this and all attached documents. Based on my inquiry and personal knowledge of those individuals responsible for supplying or obtaining the information, the information contained herein is true, accurate, and complete to the best of my knowledge and belief. Furthermore, no material fact has been omitted as to make this information misleading. I understand that others may rely on this representation and warranty in the handling and processing of the waste material described herein. If this box is checked , I request Environmental Geo-Technologies not to correct any inconsistencies. Any corrections Environmental Geo-Technologies makes will be consistent with the results of the sample characterization and regulatory requirements.

Printed Name: \_\_\_\_\_

Generator's \_\_\_\_\_

GENERATOR'S CHAIN OF CUSTODY RECORD INSTRUCTIONS: PLEASE collect a representative 1-quart sample of the waste described in the above referenced Generator's Waste Profile Report using an appropriate container. A representative sample is one obtained using any of the applicable sampling methods cited in 40 CFR 281-Appendix 1. Fill in the sampling information in the spaces provided below. If you have problems obtaining a representative sample of your waste, please contact your Environmental Geo-Technologies representative.

- GRAB SAMPLING METHOD
- TANK #2 COLLECTION POINT
- WCS SAMPLE COLLECTOR'S NAME, TITLE, EMPLOYER
- Sample No. \_\_\_\_\_ Preservation: Yes  No



5. CHAIN OF CUSTODY Each person who handles the sample must sign below when the sample passes from one to another.

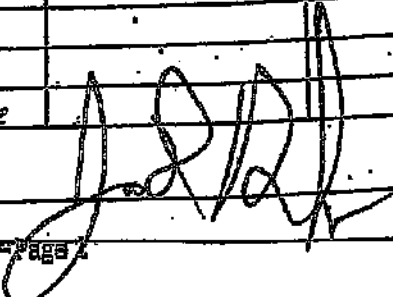
Released by:	Received by:	Date	Time
_____	_____	_____	_____

FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

Date	10/23/16
Receiving ID#	Spec# HCL
Manifest#	Line:
Leak Ban Cert Included	Yes No
EOT Approval #	
Generator	
Client	
Transporter	
Time In	
Time out	
Received by	J. J.
Sampled by	Client

Compatible W/RT#	Yes No	Barium
PCBe (ppm)(Oily Waste Only)?	N/A	Calcium
TGC (ppm)(CG Waste Only)?	N/A	Total Iron
Flash Point (°F)	> 140	Magnesium
pH (S.U.)	2.01	Sodium Chloride
Cyanides? (mg/L)	23.0	Bicarbonate
Sulfides? (ppm)	2200	Carbonate
Specific Gravity	1.33	TDS
Physical Description	1.9050	Reactivity
Stream Consistency	Yes No	Sulfate
Oil in Sample	Yes No	
Temperature	61.7	
Conductivity	288.1mS	
% Solids	41.1	
Turbidity	Yes No	
Color (Visual)	Green	
TSS (%)	20.1	
Radiation Screen (as needed)	Negative	
Lab Signature		

**ENVIRONMENTAL GEO-TECHNOLOGIES, LLC**

28470 Citrin Dr, Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002

**Generator Waste Profile**

Profile # **01057**

**GENERATOR INFORMATION**



**BILLING INFORMATION**

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Attention: \_\_\_\_\_ Phone: ( ) \_\_\_\_\_ Fax: ( ) \_\_\_\_\_

**WASTE INFORMATION**

Name of Waste/Common Chemical Name:

Sulfuric Acid

Process Generating Waste (Please be specific, incomplete information may delay the approval process):

Electrolytic Plating

**USEPA / STATE WASTE IDENTIFICATION**

1. This waste is considered to be:  Non Hazardous Liquid Industrial Waste  Hazardous Waste

2. Regulated by TSCA?  Yes  No (PCBs, etc.)

3. List ALL Applicable Waste Codes: D002

**PHYSICAL CHARACTERISTICS OF WASTE**

<b>Color:</b> <input type="checkbox"/> White/Clear <input checked="" type="checkbox"/> Black/Brown <input type="checkbox"/> Other _____	<b>Suspended Solids</b> <input checked="" type="checkbox"/> 0-1 % <input type="checkbox"/> 3-5 % <input type="checkbox"/> 1-3 % <input type="checkbox"/> > 5%	<b>Layers:</b> <input type="checkbox"/> Multi-Layered <input type="checkbox"/> Bi-Layered <input checked="" type="checkbox"/> Single Phase	<b>Specific Gravity:</b> <input type="checkbox"/> <0.8 <input checked="" type="checkbox"/> 1.0 - 1.2 <input type="checkbox"/> 0.8 - 1.0 <input type="checkbox"/> 1.3 - 1.4 Exact / Other <u>1.17</u>	<u>Accepted</u> <u>120216</u>
--	---	---	---	----------------------------------

pH:  NA  ≤ 2  2 - 4  4 - 6  6 - 8  8 - 10  10 - 12.5  ≥ 12.5

Liquid Flash Point:  <73°F  73 - 100°F  101 - 140°F  141 - 200°F  >200°F  None  Closed Cup  Open Cup

VOC CONCENTRATION - 0 PPM (MUST BE COMPLETED)

TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (LIST EACH CONSTITUENT >= 0.1%)

CONSTITUENT	MAX	MIN	CONSTITUENT	MAX	MIN
<u>Water</u>	<u>99</u>	<u>30</u>			
<u>Sulfuric Acid</u>	<u>40</u>	<u>3</u>			
<u>SOLIDS</u>	<u>40</u>	<u>5</u>			

Metals: Indicate if this waste contains any of the following metals. If Generator Knowledge provide backup

Lab Analysis  Generator Knowledge  TCLP  TOTAL

PCB	<input type="checkbox"/> Not Present	_____ ppm	Aromatic Amine	<input type="checkbox"/> Not Present	_____ ppm	Arsenic (As)	D004	<input type="checkbox"/> <	5	ppm	_____ ppm
Dioxins	<input type="checkbox"/> Not Present	_____ ppm	Pesticides	<input type="checkbox"/> Not Present	_____ ppm	Barium (Ba)	D005	<input type="checkbox"/> <	100	ppm	_____ ppm
Cyanides Reactive	<input type="checkbox"/> Not Present	_____ ppm	Rodenticides	<input type="checkbox"/> Not Present	_____ ppm	Cadmium (Cd)	D006	<input type="checkbox"/> <	1	ppm	_____ ppm
Cyanides Total	<input type="checkbox"/> Not Present	_____ ppm	Fungicides	<input type="checkbox"/> Not Present	_____ ppm	Chromium (Cr)	D007	<input type="checkbox"/> <	5	ppm	_____ ppm
Sulfides Reactive	<input type="checkbox"/> Not Present	_____ ppm				Lead (Pb)	D008	<input type="checkbox"/> <	5	ppm	_____ ppm
Sulfides Total	<input type="checkbox"/> Not Present	_____ ppm				Mercury (Hg)	D009	<input type="checkbox"/> <	0.2	ppm	_____ ppm
						Selenium (Se)	D010	<input type="checkbox"/> <	1	ppm	_____ ppm
						Silver (Ag)	D011	<input type="checkbox"/> <	5	ppm	_____ ppm

TCLP Organics D012 - D043 above regulatory limits: Present  Not Present

IS WASTE ANY OF THE FOLLOWING?

At Least One Box Must Be Checked.

- Radioactive
- Water Reactive
- Oxidizer
- Shock Sensitive
- Reactive (other)
- DOT Explosives
- NIOSH Human-Positive Carcinogens
- NESHAP Wastes (Benzene, etc.)
- Biological
- None Apply

SHIPPING INFORMATION

- Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)?  Yes  No
- Reportable Quantity (RQ) in pounds \_\_\_\_\_
- DOT Shipping Name RQ, UN 2796 Waste Sulfonic Acid, 8, PG II Hazard Class 8 UN 2796  
PG II ERG 157 Hazardous Constituents for "n.o.s." \_\_\_\_\_
- Method of Shipment:  Bulk Tanker  Vco truck  Rail Car  Drums  Totes
- Number of Units to Ship Now: \_\_\_\_\_ 6. Anticipated Volume / Units per Year: \_\_\_\_\_ or  One Time
- Special Handling Requirements Including PPE: \_\_\_\_\_

CERTIFICATION STATEMENT

I hereby represent and warrant that I have personally examined and am familiar with the information contained and submitted in this and all attached documents. Based on my inquiry and personal knowledge of those individuals responsible for supplying or obtaining the information, the information contained herein is true, accurate, and complete to the best of my knowledge and belief. Furthermore, no material fact has been omitted as to make this information misleading. I understand that others may rely on this representation and warranty in the handling and processing of the waste material described herein. If this box is checked , I request Environmental Geo-Technologies not to correct any inconsistencies. Any corrections Environmental Geo-Technologies makes will be consistent with the results of the sample characterization and/or regulatory requirements.

Print

Generate

**GENERATOR'S CHAIN OF CUSTODY RECORD INSTRUCTIONS:** PLEASE collect a representative 1-quart sample of the waste described in the above referenced GENERATOR'S WASTE PROFILE REPORT using an appropriate container. A representative sample is one obtained using any of the applicable sampling methods cited in 40 CFR 261-Appendix 1. Fill in the sampling information in the spaces provided below. If you have problems obtaining a representative sample of your waste, please contact your Environmental Geo-Technologies representative.

- SAMPLING METHOD \_\_\_\_\_ 2. COLLECTION POINT \_\_\_\_\_
- SAMPLE COLLECTOR'S NAME, TITLE, EMPLOYER \_\_\_\_\_
- Sample No. \_\_\_\_\_ Preservation: Yes  No

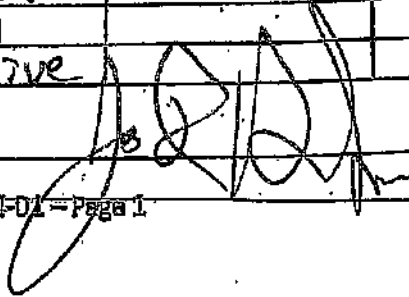
5. CHAIN OF CUSTODY: Each person who handles the sample must sign and date the record and pass it from one to another.

FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

Date	10/24/16
Receiving ID#	Sulfuric Acid
Manifest# Line:	
Land Ban Cert Included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time In	
Time out	
Received by	J.H.
Sampled by	C. West

Parameter	Value	Parameter	Value
Compatible w/RT#	Yes No	Barium	
PGBs (ppm)(Only Waste Only)?	N/A	Calcium	
TCC (ppm)(CC Waste Only)?	N/A	Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	3.3	Sodium Chloride	
Cyanides? (mg/L)	< 30	Bicarbonate	
Sulfides? (ppm)	< 200	Carbonate	
Specific Gravity	1.17	TDS	
Physical Description	liquid	Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	68°F		
Conductivity	203.0 mS		
% Solids	22.2		
Turbidity	Yes No		
Color (visual)	12. Brown		
TSS (%)	< 0.1		
Radiation Screen (as needed)	Negative		
Lab Signature			

**ENVIRONMENTAL GEO-TECHNOLOGIES, LLC**

28470 Citrin Dr, Romulus, MI 48174, Telephone 734 946 1000, Fax 734 946 1002

**Generator Waste Profile**

Profile # **01053**

**GENERAL**

Name: \_\_\_\_\_

Firm: \_\_\_\_\_

City: \_\_\_\_\_

Contact: \_\_\_\_\_

**BILLING INFORMATION**

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

Attention: \_\_\_\_\_

Phone: ( ) \_\_\_\_\_

Fax: ( ) \_\_\_\_\_

**WASTE INFORMATION**

Name of Waste/Common Chemical Name: \_\_\_\_\_

Chromates

Process Generating Waste (Please be specific, incomplete information may delay the approval process):

Electrolytic Plating

**USEPA / STATE WASTE IDENTIFICATION**

- This waste is considered to be:  Non Hazardous Liquid Industrial Waste  Hazardous Waste
- Regulated by TSCA?  Yes  No (PCBs, etc.)
- List ALL Applicable Waste Codes: D002

**PHYSICAL CHARACTERISTICS OF WASTE**

<b>Color:</b> <input type="checkbox"/> White/Clear <input type="checkbox"/> Black/Brown <input checked="" type="checkbox"/> Other <u>Yellow</u>	<b>Suspended Solids</b> <input checked="" type="checkbox"/> 0-1 % <input type="checkbox"/> 3-5 % <input type="checkbox"/> 1-3 % <input type="checkbox"/> > 5%	<b>Layers:</b> <input type="checkbox"/> Multi-Layered <input type="checkbox"/> Bi-Layered <input checked="" type="checkbox"/> Single Phase	<b>Specific Gravity:</b> <input type="checkbox"/> <0.8 <input checked="" type="checkbox"/> 1.0 - 1.2 <input type="checkbox"/> 0.8 - 1.0 <input type="checkbox"/> 1.3 - 1.4 Exact / Other <u>1.04</u>	<i>accepted</i> <u>12.02.16</u>
--	---	---	---	------------------------------------

pH:  NA  ≤ 2  2 - 4  4 - 6  6 - 8  8 - 10  10 - 12.5  ≥ 12.5

Liquid Flash Point:  <79°F  73 - 100°F  101 - 140°F  141 - 200°F  >200°F  None  Closed Cup  Open Cup

VOC CONCENTRATION - 0 ppm (MUST BE COMPLETED)

TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (LIST EACH CONSTITUENT >= 0.1%)

CONSTITUENT	MAX	MIN	CONSTITUENT	MAX	MIN
<u>Water</u>	<u>99</u>	<u>30</u>			
<u>Copper Chromate</u>	<u>5</u>	<u>1</u>			
<u>Solids</u>	<u>20</u>	<u>1</u>			
<u>Sulfuric Acid</u>	<u>5</u>	<u>1</u>			
<u>Chromic Acid</u>	<u>5</u>	<u>0</u>			



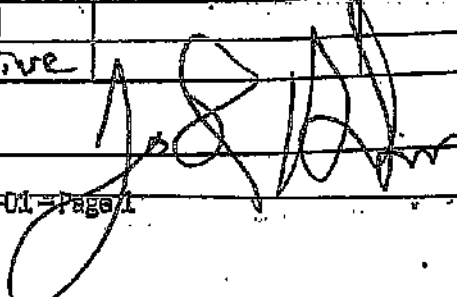


FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

Date	10/24/16
Receiving ID#	Chromate
Manifest#	Line:
Land Ban Cert Included	Yes No
EGT Approval#	
Generated	
Client	
Transporter	
Time In	
Time out	
Received by	J.H.
Sampled by	C.L.M.

Compatible (RT#)	(Yes) No	Barium	
PCBs (ppm) (Oil Waste Only)?	N/A	Calcium	
TGC (ppm) (CG Waste Only)?	N/A	Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (B.U.)	2.3	Sodium Chloride	
Cyanides? (mg/L)	< 30	Bicarbonate	
Sulfides? (ppm)	< 200	Carbonate	
Specific Gravity	1.04	TDS	
Physical Description	Liquid	Resistivity	
Stream Consistency	(Yes) No	Sulfate	
Oil in Sample	Yes No		
Temperature	68°F		
Conductivity	36.9 mS		
% Solids	4.5		
Turbidity	(Yes) No		
Color (visual)	Yellow		
TSS (%)	< 0.1		
Radiation Screen (as needed)	Negative		
Lab Signature			



15016

# Generator's Waste Profile and Service Agreement

In order to properly transport and manage your waste stream, please complete the following:

## SECTION 1: GENERAL INFORMATION

	Generator Information	Customer Information	Billing Information
EPA ID #	[Redacted]		
Company	[Redacted]		
Address 1	[Redacted]		
Address 2	[Redacted]		
City, State, Zip Code	[Redacted]		
Contact	[Redacted]		
Telephone	[Redacted]		
Telephone 2	[Redacted]		
Facsimile	[Redacted]		
Email	[Redacted]		

## SECTION 2: WASTE INFORMATION

Common Name of Waste: Pumpable-Sludge ✓

Process Generating Waste: Oil-Water Separation

Waste Volume Produced Annually: 50,000 gallons

Shipping Increments:  One Time  Weekly  Monthly  Quarterly  Yearly  Other

Check Any Hazardous Characteristics That Apply:  Reactive  Corrosive  Toxic  Flammable  Listed

acceptable  
  
 120916

## SECTION 3: USED / WASTE OIL

Does your waste stream contain oil?  Yes  No

Is this oil considered to be a "used oil" as determined by 40CFR 260.10?  Yes  No  
*(If yes, then please complete used oil certification sheet.)*

Attach analytical and check the appropriate box below for any parameters for which your oils have been tested.

PCBs  TGLP( Volatiles/Semivolatiles)  Total Halogens  Total Metals



**SECTION 4. PHYSICAL AND CHEMICAL PROPERTIES**

Is this waste a nonhazardous liquid industrial by-product?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
What is the Color?	<input type="checkbox"/> White <input type="checkbox"/> Grey <input checked="" type="checkbox"/> Black <input type="checkbox"/> Clear <input type="checkbox"/> (enter color)
Describe the Odor.	<input type="checkbox"/> Strong <input checked="" type="checkbox"/> Mild <input type="checkbox"/> None
Does it Pass Paint Filter Test	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Physical State at 70° F	<input checked="" type="checkbox"/> Liquid <input checked="" type="checkbox"/> Slurry <input type="checkbox"/> Other
Density (weight/volume)	
Specific Gravity	
pH:	
Flash Point (closed cup)	
Viscosity at 70° F	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low
Percent Composition	<u>0</u> VOCs <u>70-75</u> % Water <u>5-10</u> % Oil <u>    </u> % Rag <u>10-20</u> % Solids
Solids Composition:	<input type="checkbox"/> Suspended <input type="checkbox"/> Setttable <input checked="" type="checkbox"/> Both
Chemical Composition: <i>List all major constituents, include herbicides, pesticides, carcinogens, pathogens and other hazardous constituents.</i>	

**SECTION 5. TCLP AND TESTING CERTIFICATION**

Please attach analytical results to this profile and check either "YES" indicating concentrations above the regulatory level or "NO" verifying the constituent is not present above regulatory level. All constituents must have either a "YES" or "NO" checked.

Check the method used:  Total  TCLP

METALS mg/L (ppm)			
Metal	Level > than	Yes	No
D004 Arsenic	5.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D005 Barium	100.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D006 Cadmium	1.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D007 Chromium	5.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D008 Lead	5.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D009 Mercury	0.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D010 Selenium	1.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D011 Silver	5.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ORGANICS mg/L (ppm)			
Material	Level > than	Yes	No
D018 Benzene	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D019 Carbon Tetrachloride	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D021 Chlorobenzene	100.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D022 Chloroform	5.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D028 1, 2-Dichloroethane	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D029 1, 1-Dichloroethylene	0.7	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D036 Methyl Ethyl Ketone	200.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D039 Tetrachloroethylene	0.7	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D040 Trichloroethylene	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D043 Vinyl Chloride	0.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>



ACID EXTRACTABLES mg/L (ppm)			
Material	Level > than	Yes	No
D023 o-Cresol	200	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D024 m-Cresol	200	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D025 p-Cresol	200	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D028 Cresol	200	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D037 Pentachlorophenol	100	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D041 2, 4, 5-Trichlorophenol	400	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D042 2, 4, 6-Trichlorophenol	2.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>

BASE NEUTRAL EXTRACTABLES mg/L (ppm)			
Material	Level > than	Yes	No
D027 1, 4-Dichlorobenzene	7.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D030 2, 4-Dinitrotoluene	0.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D032 Hexachlorobenzene	0.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D033 Hexachlorobutadiene	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D034 Hexachloroethane	3.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D036 Nitrobenzene	2.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D038 Pyridine	5.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>

HERBICIDES and PESTICIDES mg/L (ppm)			
Material	Level > than	Yes	No
D012 Endrin	0.02	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D013 Lindane	0.4	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D014 Methoxychlor	10.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D015 Toxaphene	0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D016 2, 4-D	10.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D017 2, 4, 5-TP (Silvex)	1.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D020 Chlordane	0.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D031 Heptachlor	0.008	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### SECTION 6 SHIPPING INFORMATION

Is this waste a D.O.T. Hazardous Material?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
By-Product Reporting Code:	<input type="checkbox"/> 017L - Crankcase Oil <input type="checkbox"/> 019L - Coolants and Water Soluble Oil <input type="checkbox"/> 021L - Other Oil <input checked="" type="checkbox"/> 029L - Other Wastes <input type="checkbox"/> _____
Proper Shipping Name:	Non-Hazardous / Non DOT Regulated Material Non-Hazardous Other Waste
Method of Shipment:	<input checked="" type="checkbox"/> Bulk <input type="checkbox"/> Drum <input type="checkbox"/> Tote
Additional Handling / Comments:	
Waste Receipt Classification:	<input type="checkbox"/> Organic Waste <input checked="" type="checkbox"/> Oily Waste <input type="checkbox"/> Metal Derived Waste

### Section 7 Terms and Conditions of Waste Service

1. **Waste Disposal.** Subject to the terms and conditions contained herein and those in the Proposal and Approval Notification Letter, Advanced Resource Recovery, (hereinafter "ARR" or "Company"), and the Service Provider and/or Generator, (hereinafter collectively "Customer"), agree to be legally bound hereby and that ARR agrees to accept at its facility (the "Facility") Industrial Waste (hereinafter referred to as "Industrial Waste" or "Waste") delivered by Customer, and which is acceptable to ARR as herein provided.

2. **The Agreement.** The entire agreement of the parties for the disposal of Industrial Waste (the "Agreement") shall consist of these terms and conditions, and any application, permit, approval or other documents provided by the Company that may be applicable to such Waste. Waste accepted at the Facility by Company will constitute Customer's acceptance of the Proposal and Approval Notification's terms and conditions as well as the terms and conditions herein. Each Waste Approval's terms and conditions will supersede the terms and conditions of any prior Agreement between the parties.

3. **Waste Accepted at Facility.** Customer warrants that the Waste described in the Waste Characterization Profile that is delivered to Company at its Facility hereunder will not contain any quantity of hazardous materials or substances, radioactive materials or substances or toxic wastes

or substances as defined by applicable federal, state and/or local laws or regulations. Any waste which does not meet this requirement shall hereinafter be referred to as "Unacceptable Waste." The Customer shall in all matters relating to the collection, transportation and disposal of the Waste hereunder, comply with all applicable federal, state and local laws, regulations, rules and orders regarding the same. The word "Facility" shall mean the Company's disposal facility located at 27140 Princeton Ave., Inkster, MI 48141.

4. **Industrial Waste.** Customer warrants that the Waste delivered to Company hereunder will not contain any waste that is not specifically described on the Waste Characterization Profile which is incorporated herein and which is subsequently approved by the Company and will meet the material description as set forth in the application and otherwise in all significant respects. The parties may incorporate additional Industrial Waste as part of this Agreement if prior to delivery of such Waste to Company, Customer has provided a Waste Characterization Profile Application for such Waste and Company has approved disposal of such Waste within the limitations and conditions contained in Company's written notice of approval of Industrial Waste disposal. Title to all Waste handled or disposed of by Company shall at all times remain with Customer.

5. **Rights of Refusal/Rejection.** Company has the right to reuse or reject after acceptance any load of wastes delivered to the facility if the Company believes the Customer has breached (or is breaching) its warranties or agreements hereunder. If Customer delivers wastes in breach of any warranty or agreements herein, Company may in its sole discretion, either remove and dispose of that waste and charge Customer for the costs or require Customer to promptly remove the waste.

6. **Charges and Payment.** Customer agrees to pay the Company's rates as written in the Proposal and Approval Notification Letter, which may be modified from time to time upon thirty (30) days written notice to the Customer. Payment shall be made by Customer within thirty (30) days after receipt of invoice from Company. In the event that any amount is overdue, the Company may terminate this Agreement. Customer agrees to pay service charge of 1.5% per month, or the maximum interest rate permitted by law whichever is less.

7. **Term.** This Agreement shall continue in effect until terminated by Company or Customer, with or without cause, upon prior notice by either party and representations and warranties regarding the waste delivered and the indemnities set forth herein shall survive termination of this Agreement.

8. **Indemnity.** Customer agrees to indemnify, save harmless, and defend Company, its Corporate affiliates, employees, officers and directors from and against any and all liabilities, claims, penalties, forfeitures, suits and the costs and expenses incident thereto (including costs of defense, settlement, and reasonable attorney's fees), which it may hereafter incur, become responsible for, or pay out as a result of death or bodily injuries to any person, destruction or damage to any property, contamination of or adverse effects on the environment, of any violation of governmental laws, regulations, or orders caused, in whole or in part by the Customer's breach of any warranty, term or provision of this Agreement, or any act, omission, willful misconduct or negligence of the Customer, its employees, or subcontractors in the performance of this Agreement.

9. **Default.** The occurrence of any of the following events shall also constitute an event of default by the Customer and shall give the Company the right to immediately terminate this Agreement. (a) A petition for reorganization or bankruptcy filed by or against the Customer; (b) Failure by Customer to pay any amount due to Company (c) Any breach by Customer of any of its obligations pursuant to the Agreement. The parties covenant and agree that the Company's removal and acceptance of the Customer's Waste constitutes work on and an improvement to the Customer's real property. Accordingly, Customer grants to Company the right to file any and all documents permitted by law or otherwise on Customer's real property to secure the monies owed to Company by Customer for services performed.

10. **Attorneys' Fee.** In the event of a breach by Customer of the Agreement, the Customer shall pay all attorneys' fee, collection fees and costs of Company incident to any action brought to enforce the Agreement.

11. **Assignment.** Customer may not assign, transfer or otherwise vest in any other company, entity or person, any of its rights or obligations under this Agreement without the prior written consent of Company.

12. **Miscellaneous.** The Agreement shall be governed by and constructed in accordance with the laws of the state of Michigan in which the Facility is located. The price and terms of this proposal are confidential and are not to be disclosed to any other persons or entities. Customer agrees to take all precautions to insure that its officers, employees and agents maintain the confidentiality of this information and do not disclose the price and terms of this proposal. Service Provider is defined as any company working on behalf of a Generator.

13. **Notices.** All notices herein shall be considered as having been given upon being placed in the mail, certified, postage prepaid, addressed to the Company or Customer at the address set forth in the Waste Characterization Profile.

**SECTION 8: GENERATOR CERTIFICATION and WASTE SERVICE AGREEMENT**

I certify that I am authorized to sign below and all information is complete, factual (including attached information), is an accurate representation of the known and suspected hazards and of waste generator regulations pertaining to the waste described herein and agree to the terms and conditions of waste services in Section 7. Based on our knowledge of the process generating this specific waste stream, the material is not classified as a TSCA regulated waste.

[Redacted signature area]

Internal Use Only: AR LDF LD ST

[Redacted footer area]



## Used Oil Certification



Please mark with an "X" in the appropriate box below, the statement best describing your used oil waste stream:



The oil in our waste stream is below 1,000 ppm total halogens and therefore is not regulated. This oil also does not exceed regulated levels of individual halogenated constituents including PCB's. *(If this box is marked, please attach the PCB analysis for this waste stream.)*



The oil in our waste stream exceeds 1,000 ppm halogens and is exempt from hazardous presumption because the process uses petroleum products containing non-hazardous chlorinated substances. *(If this box is marked, please attach either the Material Safety Data Sheet (MSDS) demonstrating chlorinated paraffin content or a F-Series Solvant-Scan demonstrating the oil has not been mixed with chlorinated solvents.)*

The undersigned hereby certifies the marked paragraph above and any attached information is true and accurate, that the used oil stream has not been mixed with PCB's and PCB's do not exist at the generator's facility. The undersigned has executed this Certification with full and complete power and authority to do so, as of the day and year written below.

