REPUBLIC SERVICES
28470 Citrin Drive Romulus, MI 48174
o 734.946.1000 republicservices.com

December 2nd, 2022

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

Re: RIES Monthly Report

Dear Mr. Batka:

Republic Industrial and Energy Solutions, LLC (RIES) hereby submits the Hundred and Fifth Monthly Report ("MR") in conformance with the requirements of its two EPA UIC permits (#s MI-163-1W-C010 & MI-163-1W-C011). RIES is providing all 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.

RIES accepted F039 waste in October of 2022 so as stated on page A-3 of RIES's two EPA UIC permits an analysis is required and is included in this report.

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 supervision and interaction with the persons who manage and operate the system, and those persons responsible for the collection of the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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

Sincerely,

John Frost

cc: Rick Sauve (Republic Services)

AVERAGE INJECTION RATE

Calculation of Average Injection Rate

CURRENT REPORTING YEAR 2022

CURRENT REPORTING MONTH October

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

November 2013

CURRENT MONTH (all volumes in gallons)

	Injected Waste	Injected Non-Waste	Total injected
MI-163-1W-C010 , Well #1-12			
Current Month	326,940	0	326,940
Since facility first injected			49,853,773
MI-163-1W-C011, Well #2-12			
Current Month	452,741	0	452,741
Since facility first injected			29,718,746
		Lifetime Combined	79,572,519

Conversion factors

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

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

Calculations

Whole number of months of injection 106

106 lifetime number of months of injection × 43,830 minutes/month

= 4,645,980 minutes of injection

Lifetime combined injected volume 79,572,519 ÷ 4,645,980 minutes of injection

= 17.13 gpm average injection rate

WELL 1 DATA

REPUBLIC SERVICES

Injection Well 1, October 2022

	Injection Pressure (psig)		Annulus Tank Level (inch)		Annulus Pressure (psig)		Injection pH		Flow Rate (gpm)		Differential Pressure (psig)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
10/1/2022	110.6	181.7	24.7	24.8	938.7	971.9	7.1	7.6	0.0	0.0	790.0	829.6
10/2/2022	109.4	111.1	24.7	24.8	934.4	939.5	7.0	7.1	0.0	0.0	824.8	828.8
10/3/2022	109.1	954.9	24.7	24.8	932.9	1,348.7	2.8	8.2	0.0	48.7	338.6	825.8
10/4/2022	132.5	940.1	24.7	24.9	951.3	1,379.1	2.4	7.9	0.0	49.1	348.7	819.3
10/5/2022	133.0	940.2	24.8	24.9	964.3	1,450.9	3.0	7.3	0.0	47.9	401.5	839.6
10/6/2022	141.0	940.4	24.8	24.9	993.5	1,529.4	2.8	8.1	0.0	48.3	412.8	856.6
10/7/2022	141.7	940.4	24.8	24.9	1,029.1	1,439.6	2.9	7.7	0.0	48.0	390.5	909.6
10/8/2022	38.8	940.1	24.7	24.8	952.8	1,345.4	0.9	7.8	0.0	73.1	401.1	1226.5
10/9/2022	38.8	45.2	24.6	24.8	935.0	953.4	2.4	2.5	0.0	0.0	890.0	914.4
10/10/2022	44.8	940.2	24.7	24.9	929.4	1,358.3	2.0	10.1	0.0	73.9	338.8	890.9
10/11/2022	139.3	939.4	24.7	24.9	934.4	1,320.4	2.8	8.7	0.0	49.4	342.2	799.2
10/12/2022	118.1	939.5	24.8	24.9	920.0	1,279.2	2.6	7.3	0.0	38.2	329.3	806.0
10/13/2022	113.6	922.4	24.7	24.8	913.1	1,259.4	2.8	8.1	0.0	29.6	325.9	800.8
10/14/2022	106.1	920.2	24.6	24.8	904.8	1,239.2	4.8	7.5	0.0	29.7	318.7	801.8
10/15/2022	114.0	119.1	24.7	24.7	897.6	905.3	7.1	7.4	0.0	0.0	783.2	786.8
10/16/2022	111.2	114.3	24.6	24.7	892.5	898.4	7.4	7.4	0.0	0.0	780.8	784.5
10/17/2022	100.2	926.8	24.6	24.7	874.1	1,198.7	6.2	8.7	0.0	39.1	260.8	784.8
10/18/2022	85.2	940.1	24.6	24.6	875.8	1,208.2	4.1	9.8	0.0	38.9	268.0	784.2
10/19/2022	111.3	939.3	24.5	24.6	877.6	1,244.0	5.4	8.2	0.0	29.6	283.4	772.5
10/20/2022	122.1	940.1	24.6	24.6	885.1	1,250.2	2.9	8.0	0.0	48.9	290.9	771.5
10/21/2022	121.2	939.8	24.6	24.8	886.8	1,245.8	2.8	8.1	0.0	49.0	279.7	768.3
10/22/2022	129.7	205.5	24.7	24.8	872.5	923.3	7.0	7.6	0.0	0.0	717.4	752.4
10/23/2022	126.0	130.0	24.7	24.8	864.1	873.4	6.5	7.4	0.0	0.0	737.6	743.7
10/24/2022	118.8	940.1	24.7	24.9	861.9	1,335.5	2.7	8.1	0.0	49.0	269.4	781.8
10/25/2022	123.2	940.1	24.8	24.9	892.6	1342.6	2.6	8.0	0.0	29.7	330.3	791.9
10/26/2022	135.1	940.2	24.8	24.9	893.2	1342.8	3.0	7.6	0.0	21.9	357.3	792.4
10/27/2022	135.7	940.2	24.7	24.8	882.0	1309.8	2.9	7.2	0.0	50.1	321.0	768.1
10/28/2022	133.0	940.1	24.7	24.8	899.5	1307.3	2.7	10.6	0.0	25.1	324.6	763.3
10/29/2022	2.2	940.7	24.6	24.8	846.5	1248.6	1.0	7.8	0.0	77.8	300.9	1161.0
10/30/2022	2.7	3.9	24.6	24.7	826.0	847.0	2.4	2.4	0.0	0.0	822.5	844.3
10/31/2022	3.2	1586.4	24.7	24.8	821.4	1336.8	2.4	7.4	0.0	78.4	-763.5	823.4

Well 1 Data Comments

On 10/31/22, at 8:48 AM, the injection pump was started. The wing valve between the injection flow line and well tree was closed. This resulted in a high reading on the injection pressure gauge situated on the well tree. The injection pump ran less than 30 seconds before it was shut off. This did not result in any equipment failure or waste release.

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 ÷ 3.3)

Channel #2

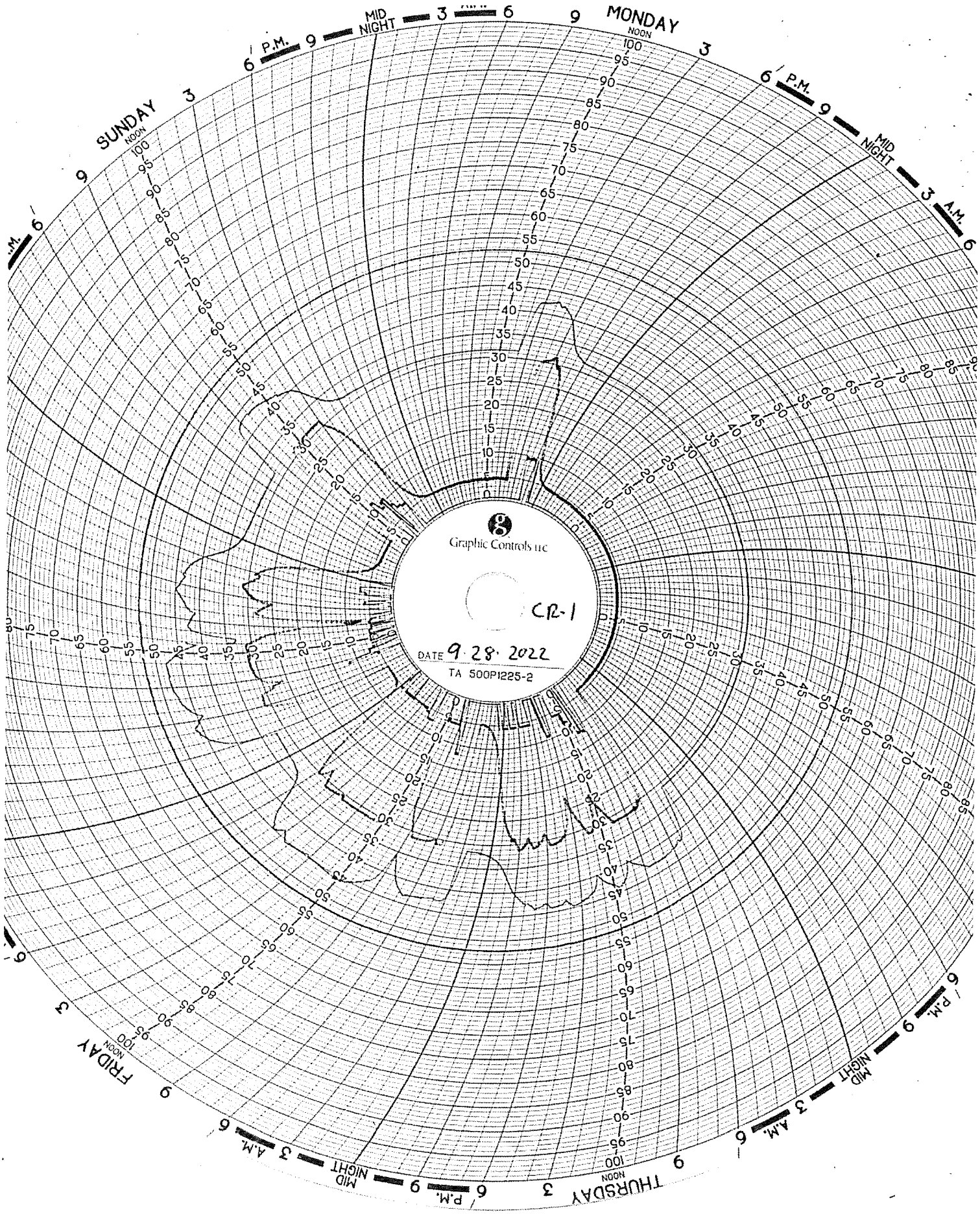
Red Pen – Well 1 Monthly Volume (chart value x 100,000)

Channel #3

Green Pen – Well 2 Monthly Volume (chart value x 100,000)

Channel #4

Black Pen – Temperature (chart value x 0)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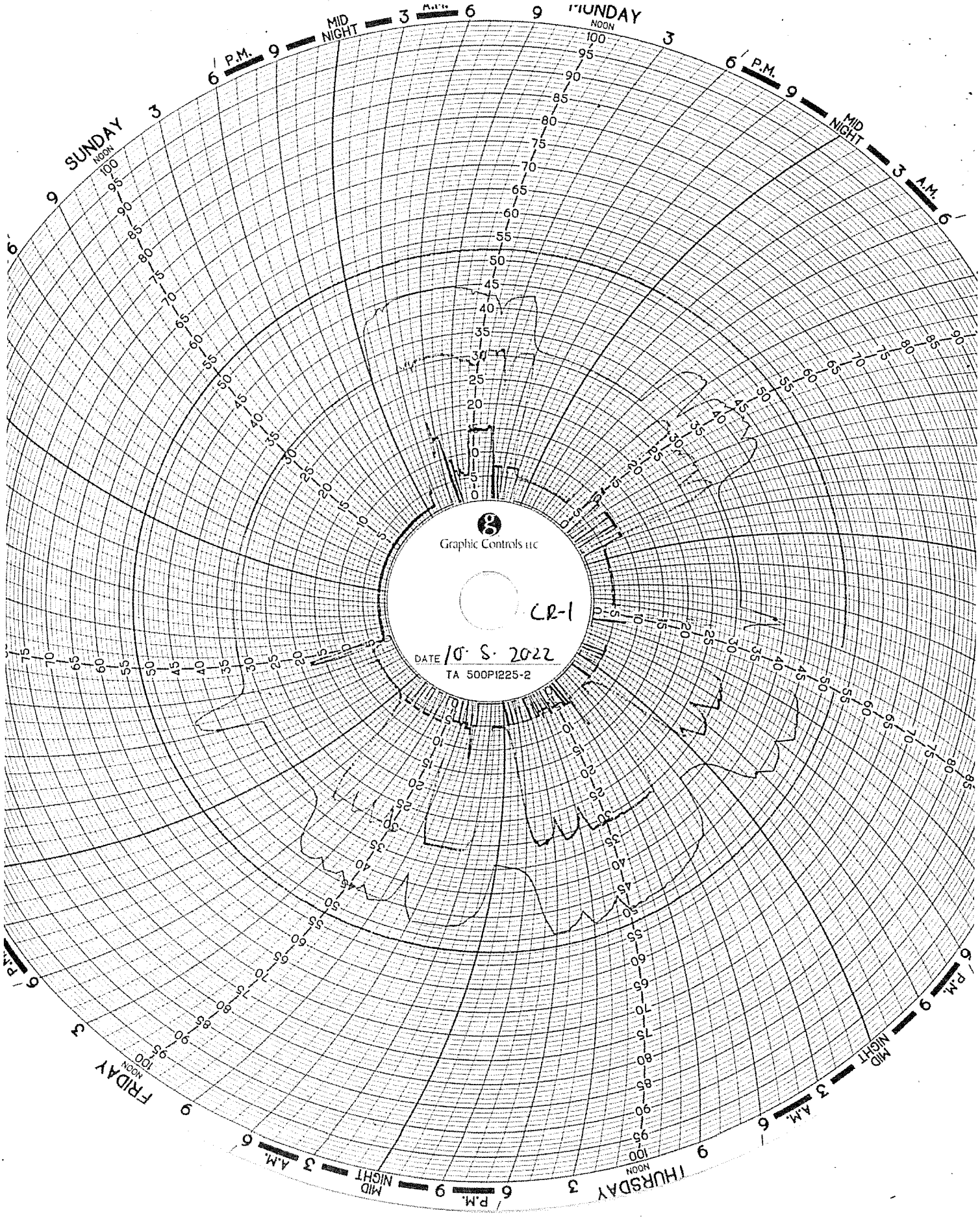
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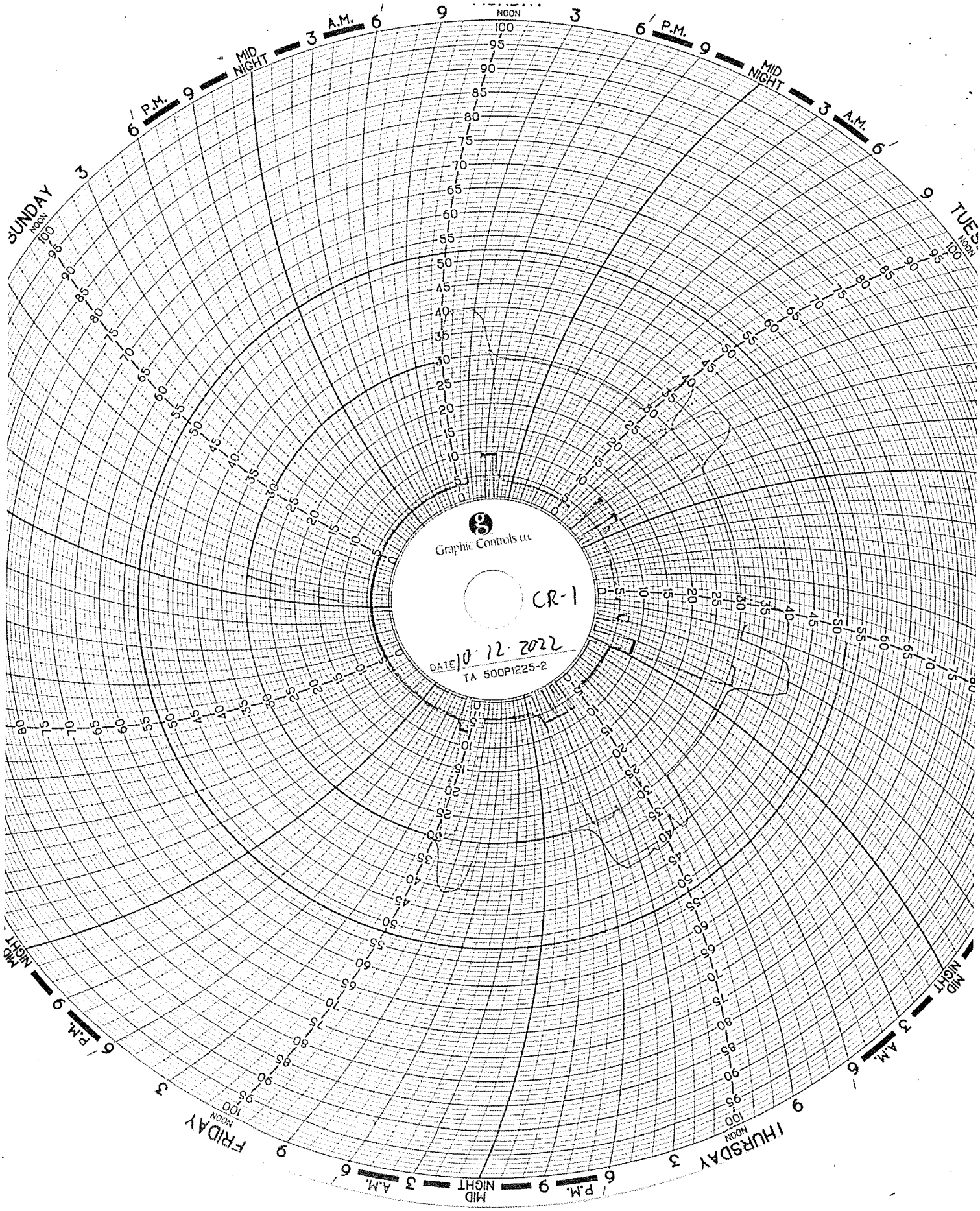
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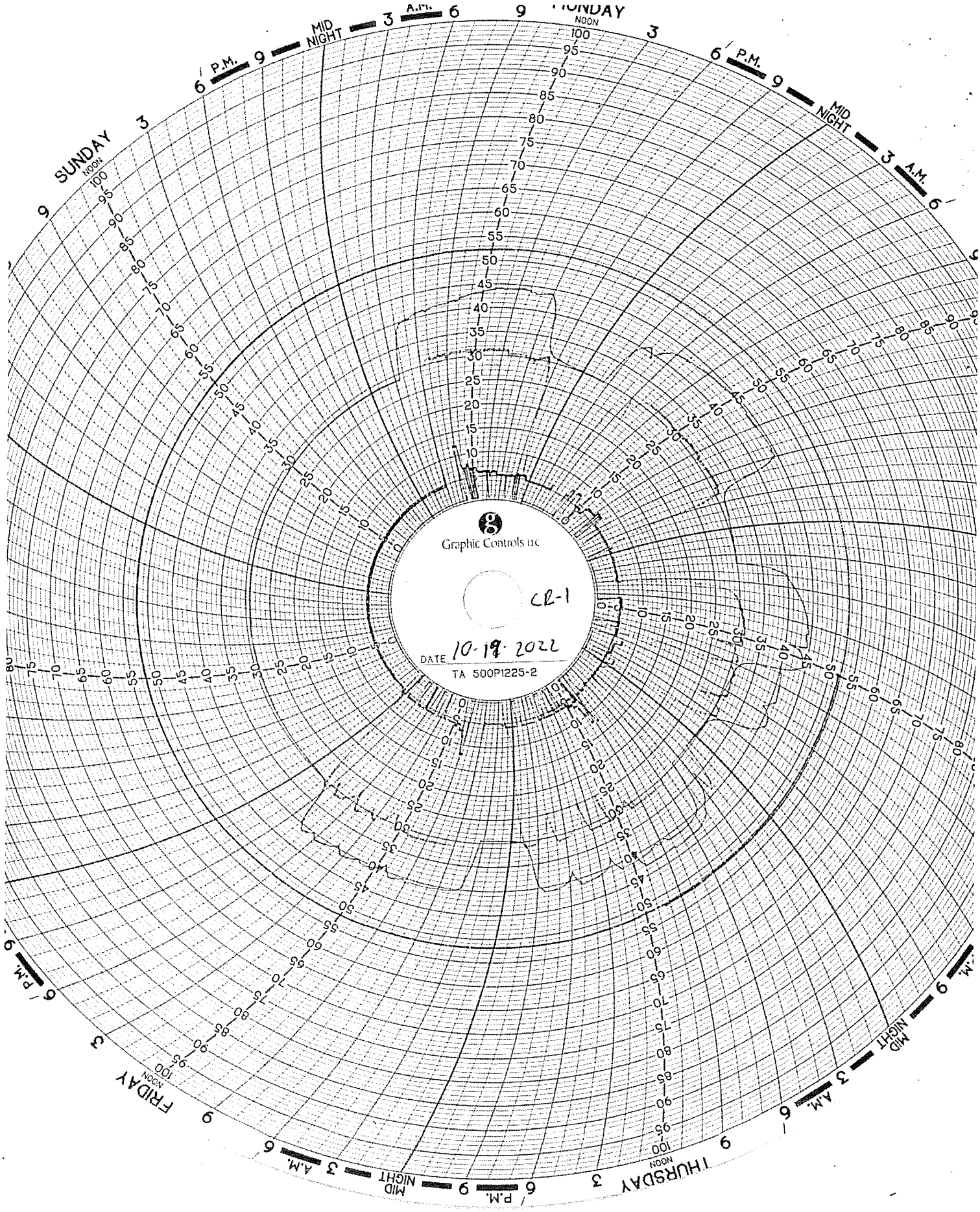
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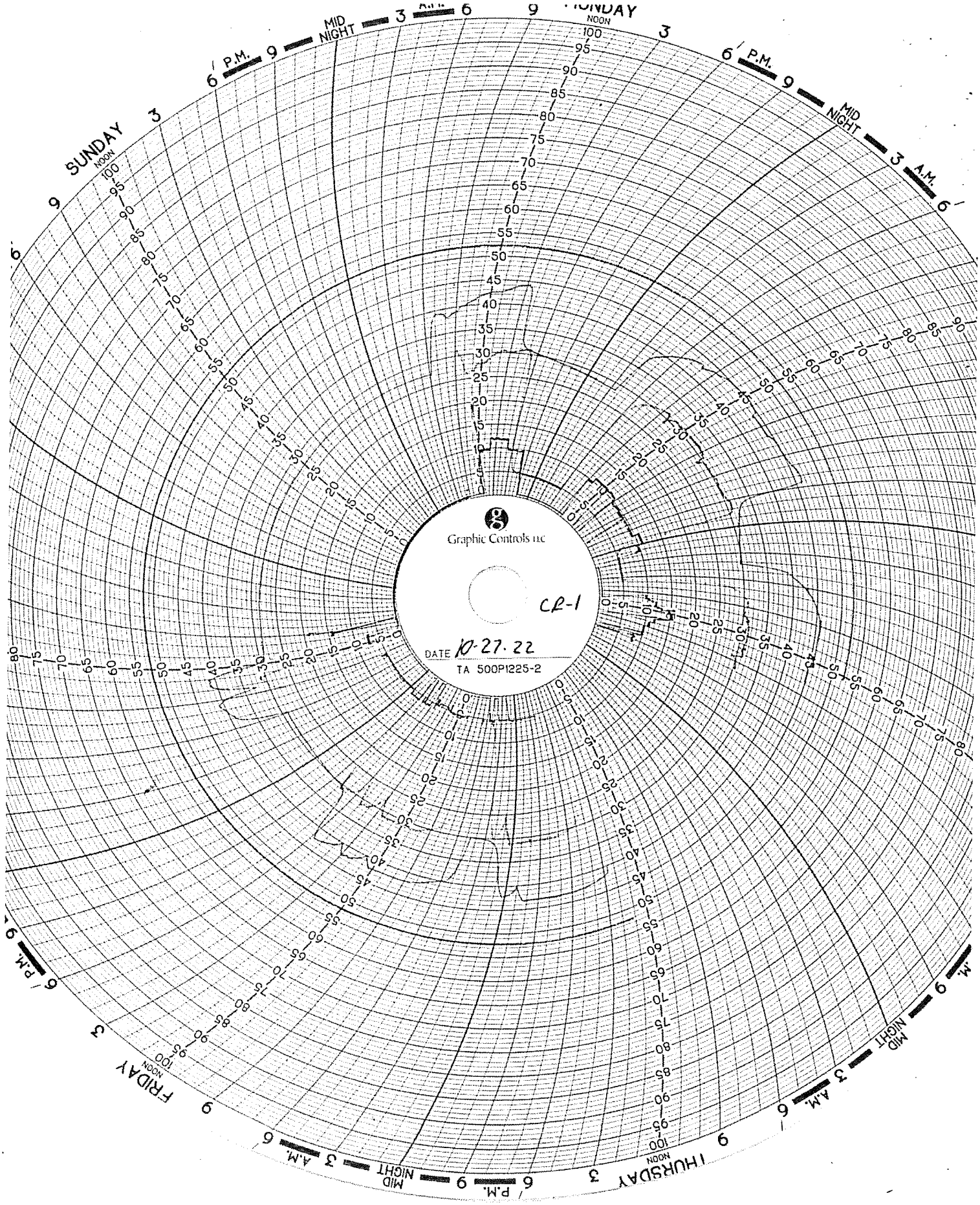
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WELL 2 DATA

REPUBLIC SERVICES

Injection Well 2, October 2022

	Injection Pressure (psig)		Annulus Tank Level (inch)		Annulus Pressure (psig)		Injection pH		Flow Rate (gpm)		Differential Pressure (psig)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
10/1/2022	116.0	145.3	31.4	31.5	1013.9	1020.2	7.1	7.6	0.0	0.0	874.7	898.2
10/2/2022	112.5	116.6	31.5	31.5	1012.2	1014.3	7.0	7.1	0.0	0.0	897.3	900.0
10/3/2022	111.5	940.4	31.4	31.5	1011.3	1,461.6	2.8	8.2	0.0	52.9	436.6	900.1
10/4/2022	142.2	951.1	31.4	31.6	1035.4	1,505.6	2.4	7.9	0.0	53.5	437.7	924.4
10/5/2022	48.0	952.4	31.5	31.7	1,060.2	1,599.8	3.0	7.3	0.0	52.3	515.6	981.4
10/6/2022	121.9	953.8	31.6	31.7	1108.3	1,696.4	2.8	8.1	0.0	53.3	540.3	985.2
10/7/2022	105.7	943.8	31.5	31.7	1,140.4	1,562.8	2.9	7.7	0.0	52.3	496.4	1141.1
10/8/2022	26.1	951.3	31.4	31.5	1,044.0	1,451.2	0.9	7.8	0.0	80.8	502.6	1293.6
10/9/2022	16.9	26.5	31.4	31.5	1024.1	1,044.3	2.4	2.5	0.0	0.0	1006.8	1018.1
10/10/2022	15.7	948.3	31.4	31.6	1,019.5	1,462.5	2.0	10.1	0.0	85.7	439.7	1007.5
10/11/2022	89.4	942.8	31.5	31.6	1,029.6	1,433.2	2.8	8.7	0.0	53.5	447.0	1021.0
10/12/2022	81.9	935.3	31.6	31.6	1,006.8	1,371.4	2.6	7.3	0.0	42.6	434.9	980.7
10/13/2022	100.7	909.2	31.5	31.6	1,004.7	1,349.1	2.8	8.1	0.0	33.2	432.9	895.3
10/14/2022	65.8	889.5	31.4	31.5	995.9	1,323.8	4.8	7.5	0.0	32.2	430.1	924.9
10/15/2022	115.2	123.6	31.4	31.4	995.5	999.7	7.1	7.4	0.0	0.0	875.7	880.8
10/16/2022	110.9	115.7	31.4	31.4	992.7	995.9	7.4	7.4	0.0	0.0	879.9	882.2
10/17/2022	103.4	922.2	31.4	31.4	961.7	1,284.9	6.2	8.7	0.0	42.9	363.9	883.3
10/18/2022	98.1	922.7	31.3	31.4	970.3	1,307.0	4.0	9.8	0.0	42.8	380.6	884.9
10/19/2022	113.2	939.7	31.3	31.4	973.9	1,369.2	5.4	8.2	0.0	42.8	401.9	870.5
10/20/2022	126.0	943.4	31.3	31.4	996.5	1,369.3	2.9	8.0	0.0	53.6	412.4	878.8
10/21/2022	129.3	946.3	31.3	31.5	1002.4	1,371.9	2.8	8.1	0.0	53.9	396.7	869.3
10/22/2022	136.9	184.6	31.4	31.5	993.5	1,026.2	7.0	7.6	0.0	0.0	841.5	856.9
10/23/2022	128.4	137.5	31.4	31.5	988.3	993.8	6.5	7.4	0.0	0.0	856.2	860.1
10/24/2022	112.3	949.1	31.4	31.7	987.3	1,500.5	2.7	8.1	0.0	53.9	413.8	915.1
10/25/2022	135.1	948.3	31.6	31.7	1032.4	1512.1	2.6	8.0	0.0	43.0	500.9	928.7
10/26/2022	150.4	939.4	31.6	31.7	1040.0	1512.9	3.0	7.6	0.0	38.2	512.7	939.7
10/27/2022	135.2	950.1	31.5	31.6	1033.2	1491.9	2.9	7.2	0.0	53.6	503.4	908.0
10/28/2022	124.6	940.0	31.5	31.6	1070.5	1486.6	2.7	10.6	0.0	35.6	502.9	942.8
10/29/2022	-4.7	943.9	31.4	31.5	1012.2	1421.0	1.0	7.8	0.0	74.6	458.5	1097.6
10/30/2022	-4.7	-2.8	31.4	31.5	991.8	1012.3	2.4	2.4	0.0	0.0	994.8	1016.9
10/31/2022	-3.7	1342.8	31.4	31.6	987.2	1516.2	2.4	7.4	0.0	63.8	-348.2	995.5

Well 2 Data Comments

On 10/31/22, at 8:48 AM, the injection pump was started. The wing valve between the injection flow line and well tree was closed. This resulted in a high reading on the injection pressure gauge situated on the well tree. The injection pump ran less than 30 seconds before it was shut off. This did not result in any equipment failure or waste release.

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 ÷ 3.3)

Channel #2

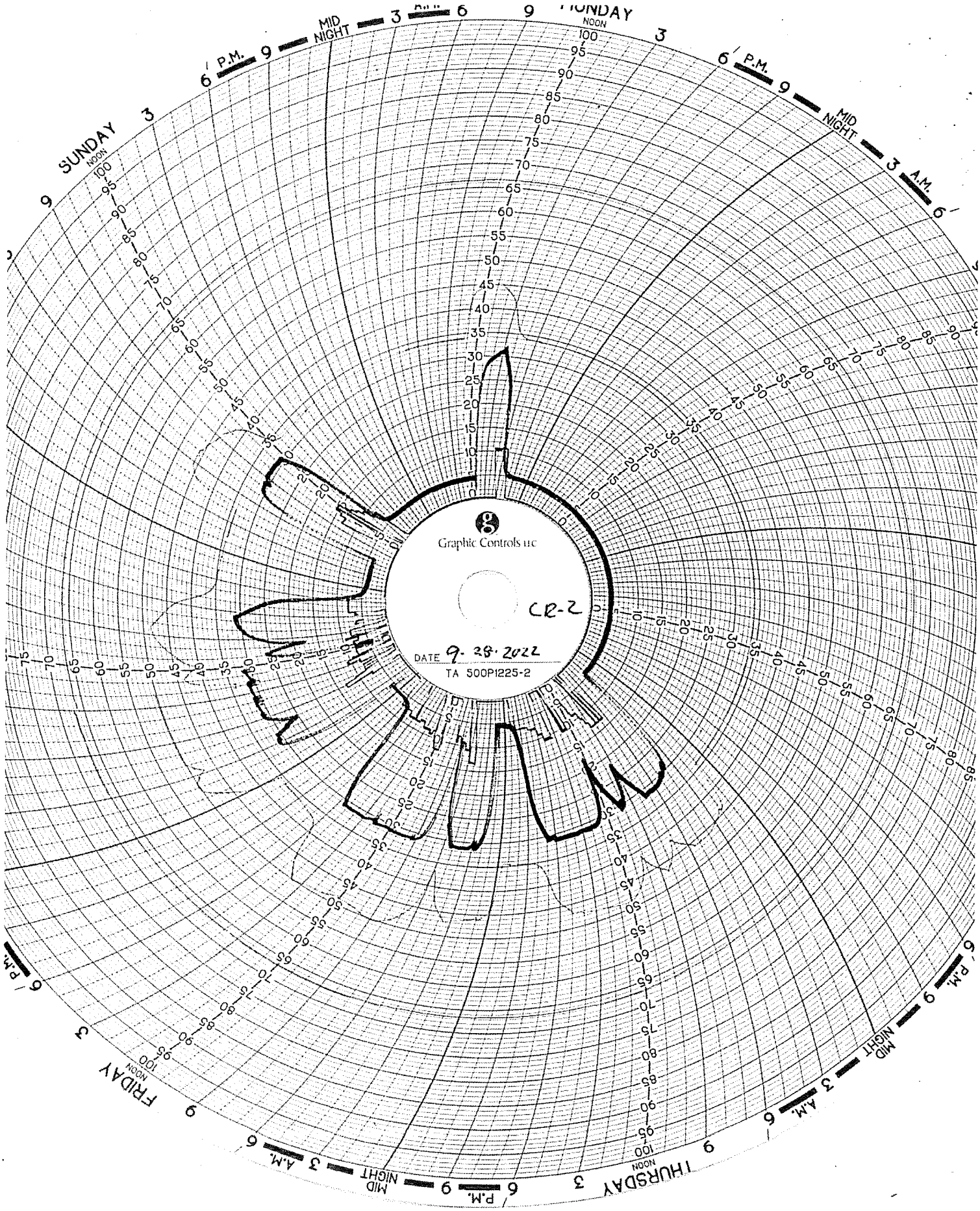
Red Pen – Well 1 Monthly Volume (chart value x 100,000)

Channel #3

Green Pen – Well 2 Monthly Volume (chart value x 100,000)

Channel #4

Black Pen – Temperature (chart value x 0)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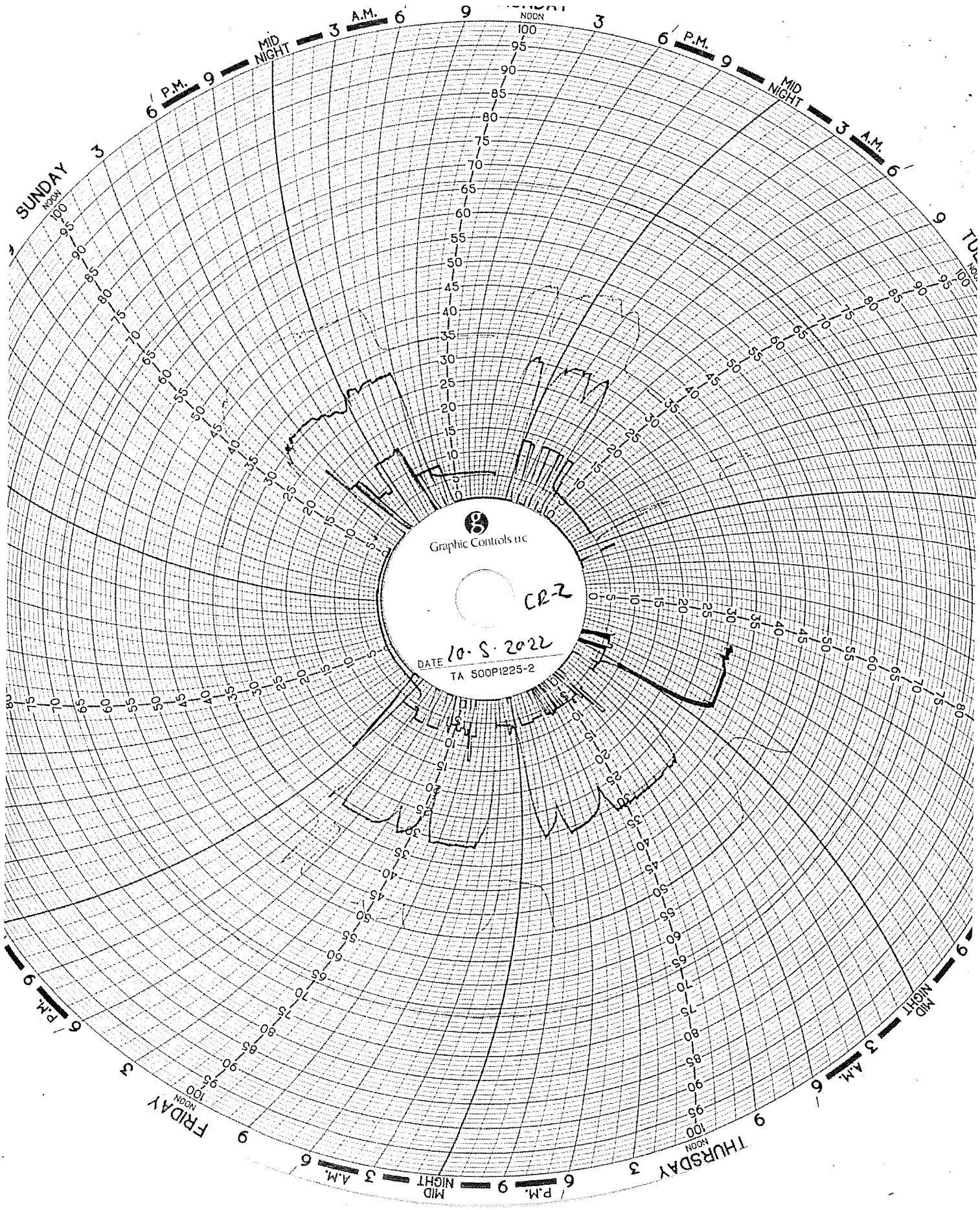
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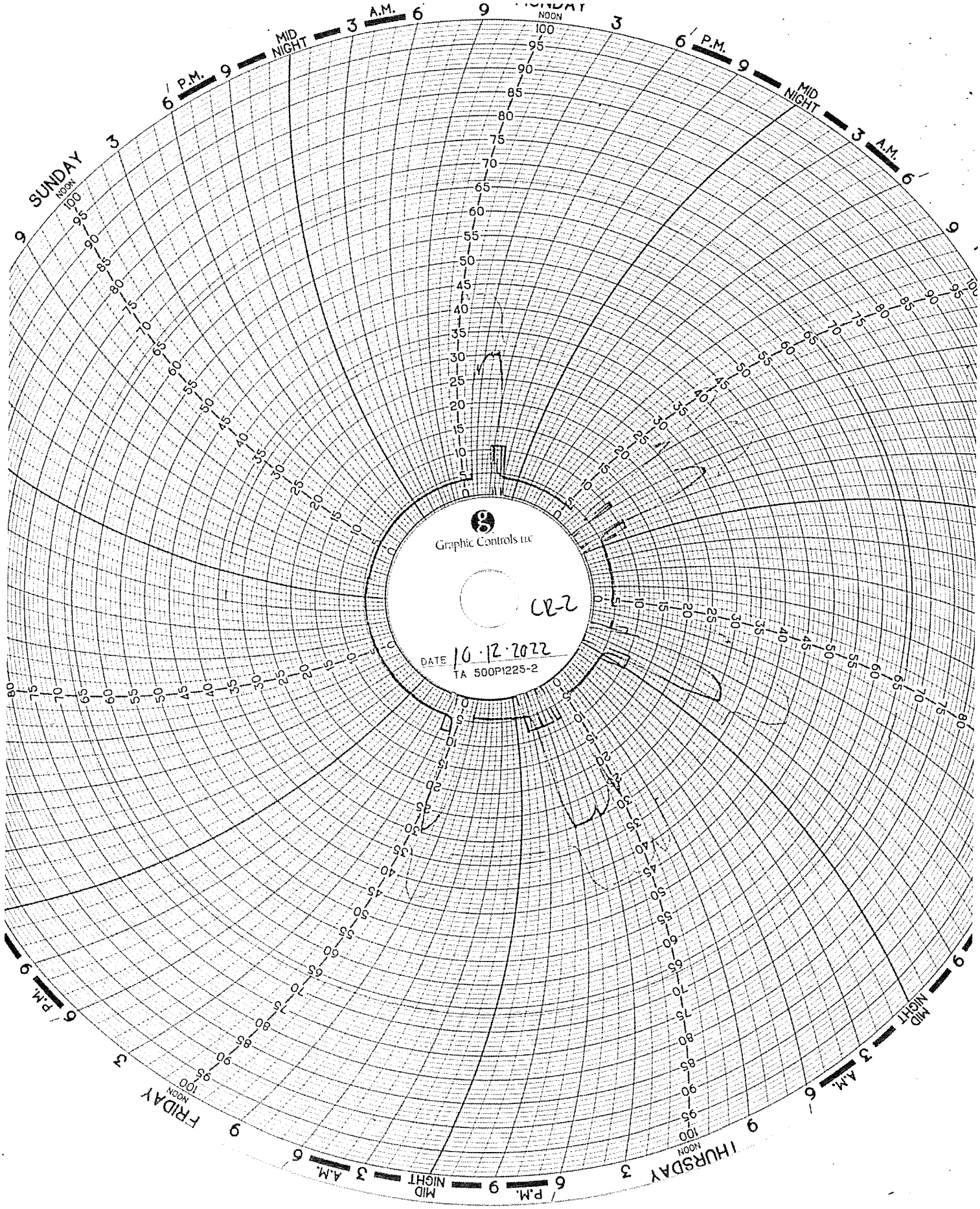
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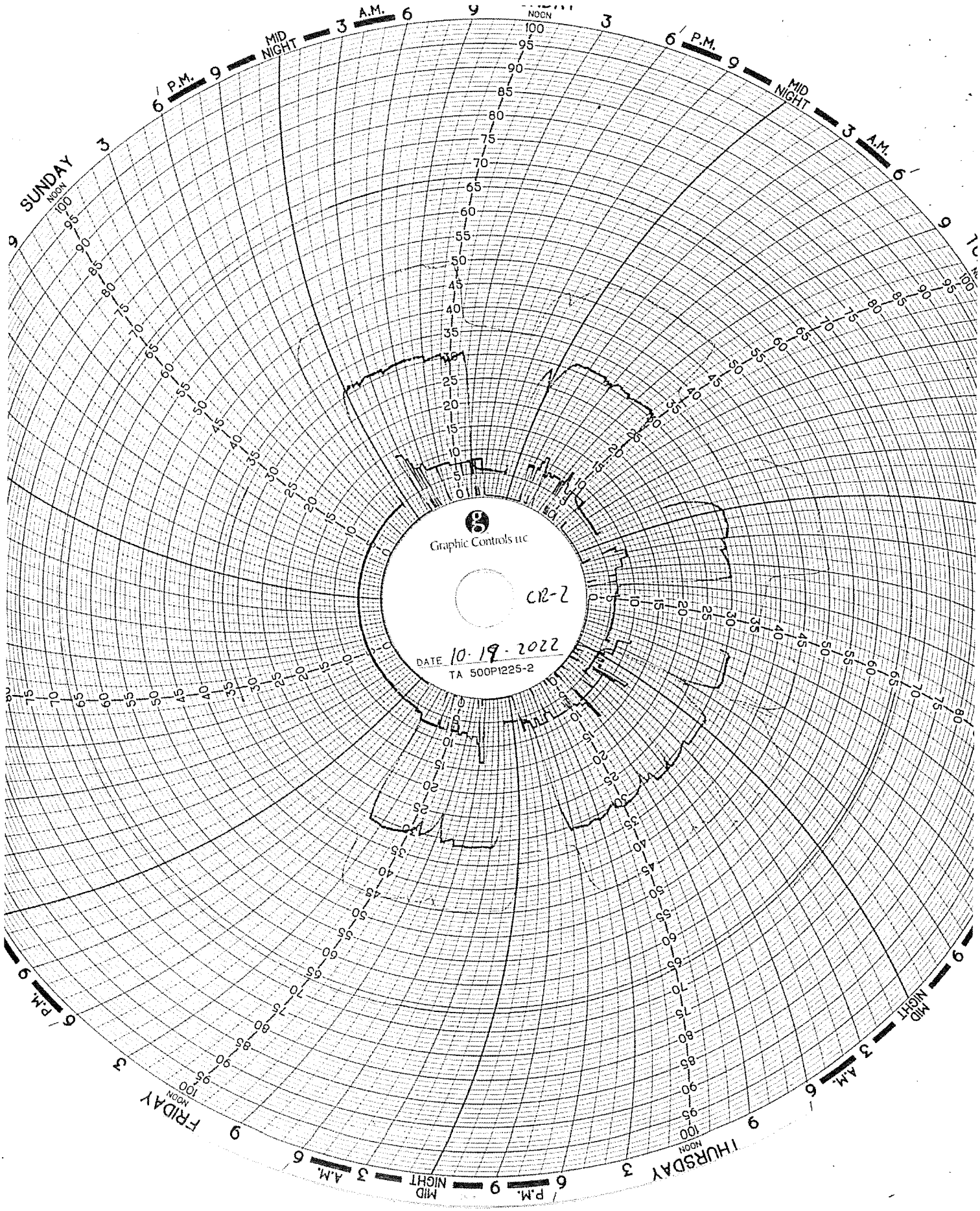
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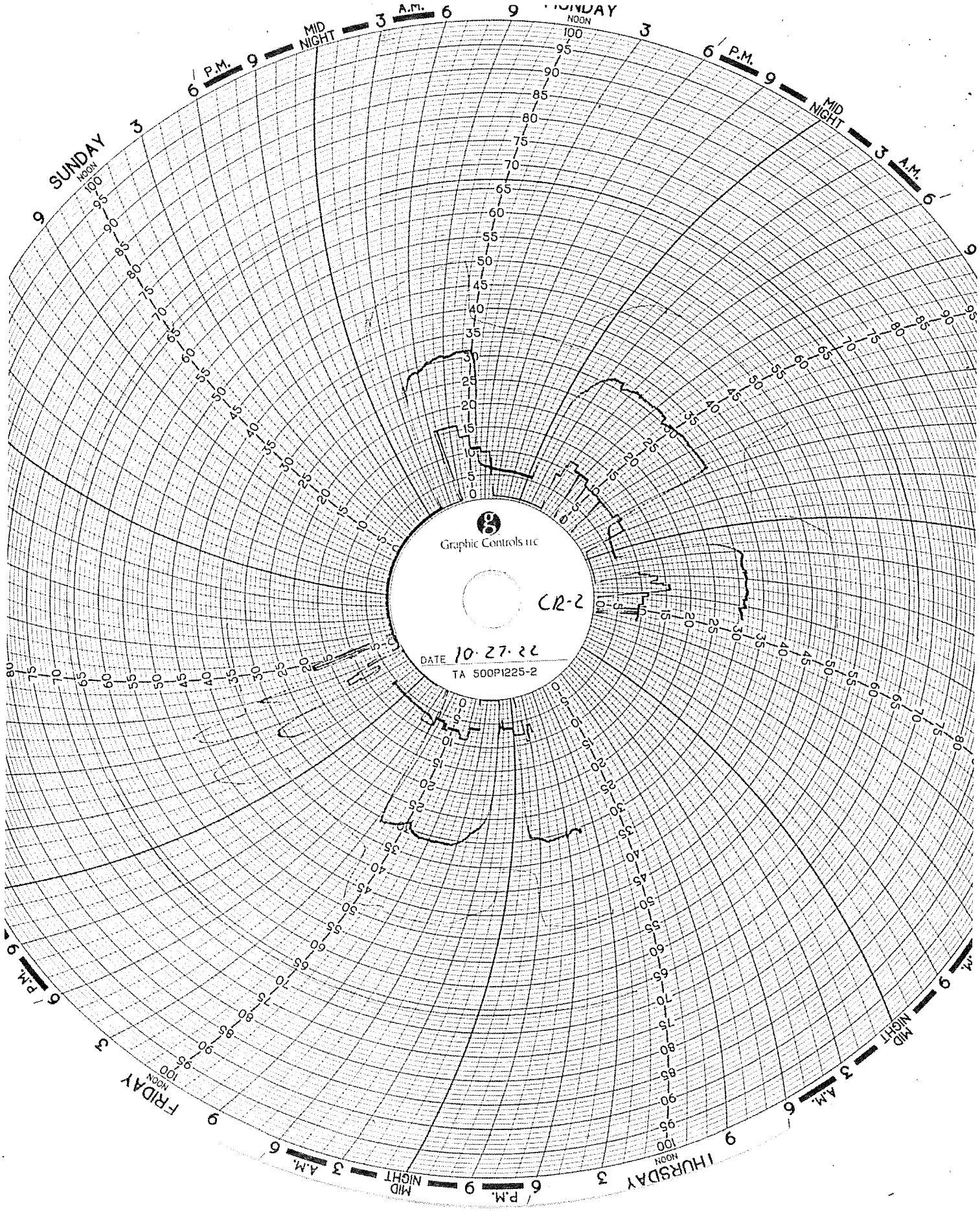
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Circle Chart Index

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 + 3.3)

Channel #2

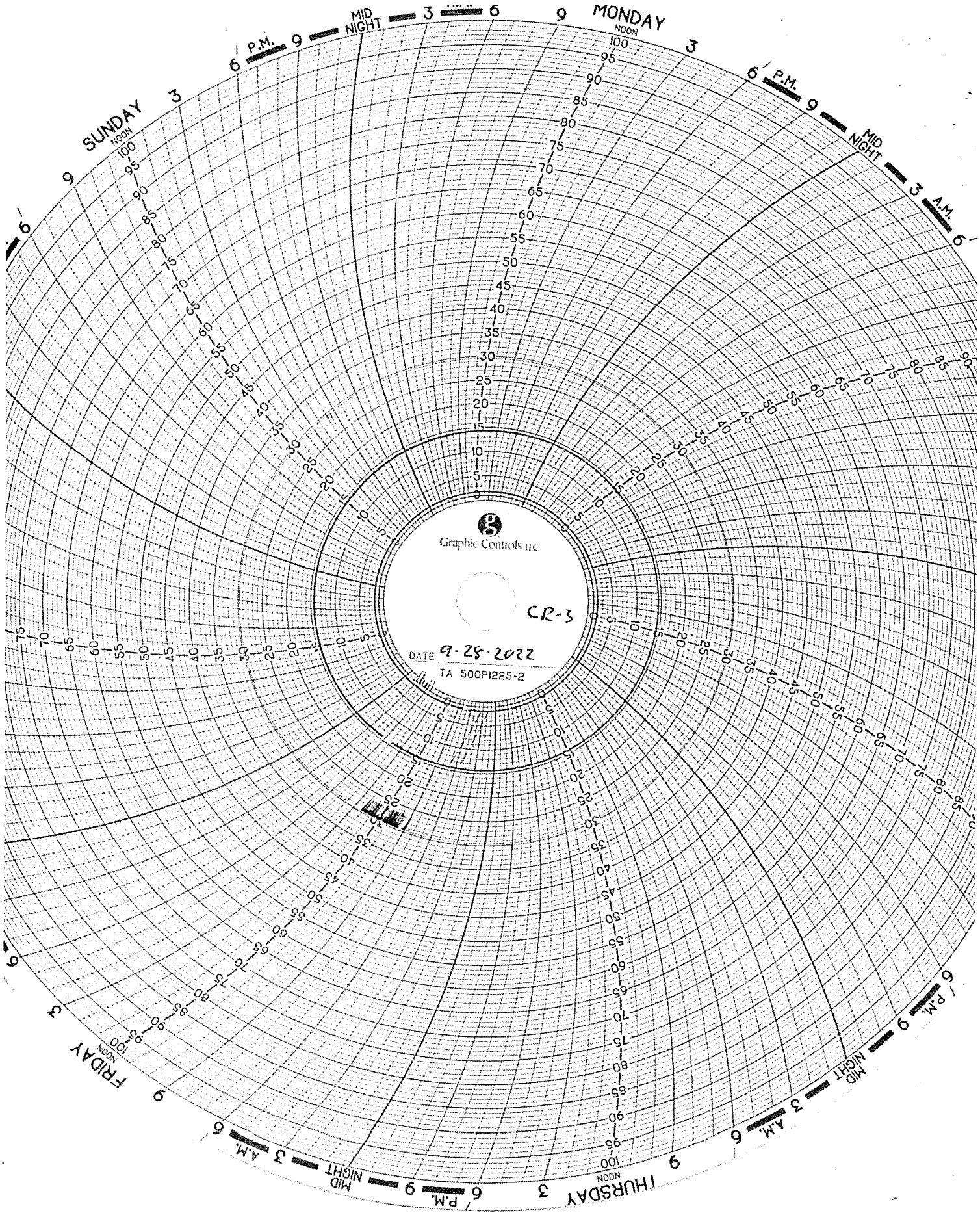
Red Pen – Well 1 Monthly Volume (chart value x 100,000)

Channel #3

Green Pen – Well 2 Monthly Volume (chart value x 100,000)

Channel #4

Black Pen – Temperature (chart value x 0)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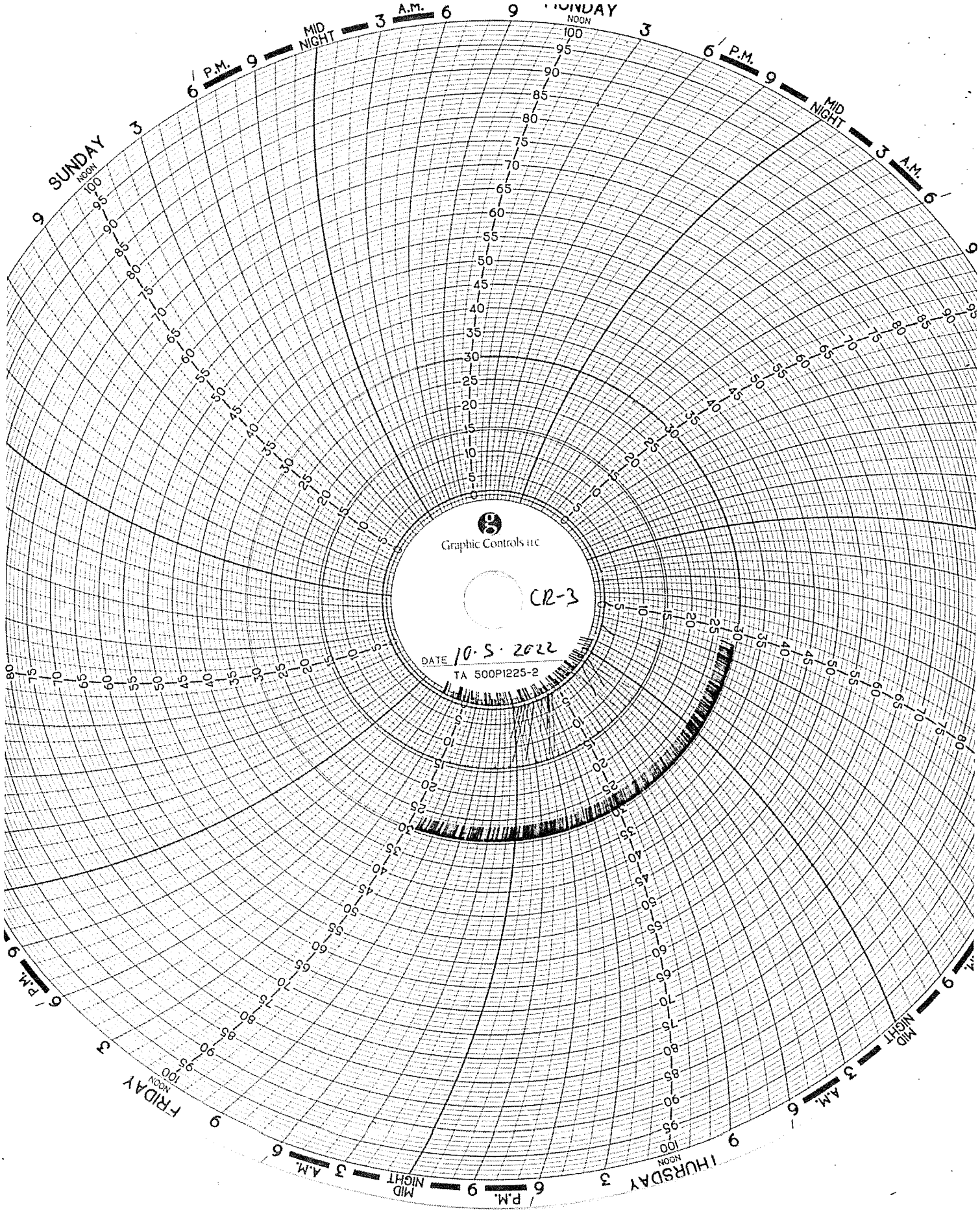
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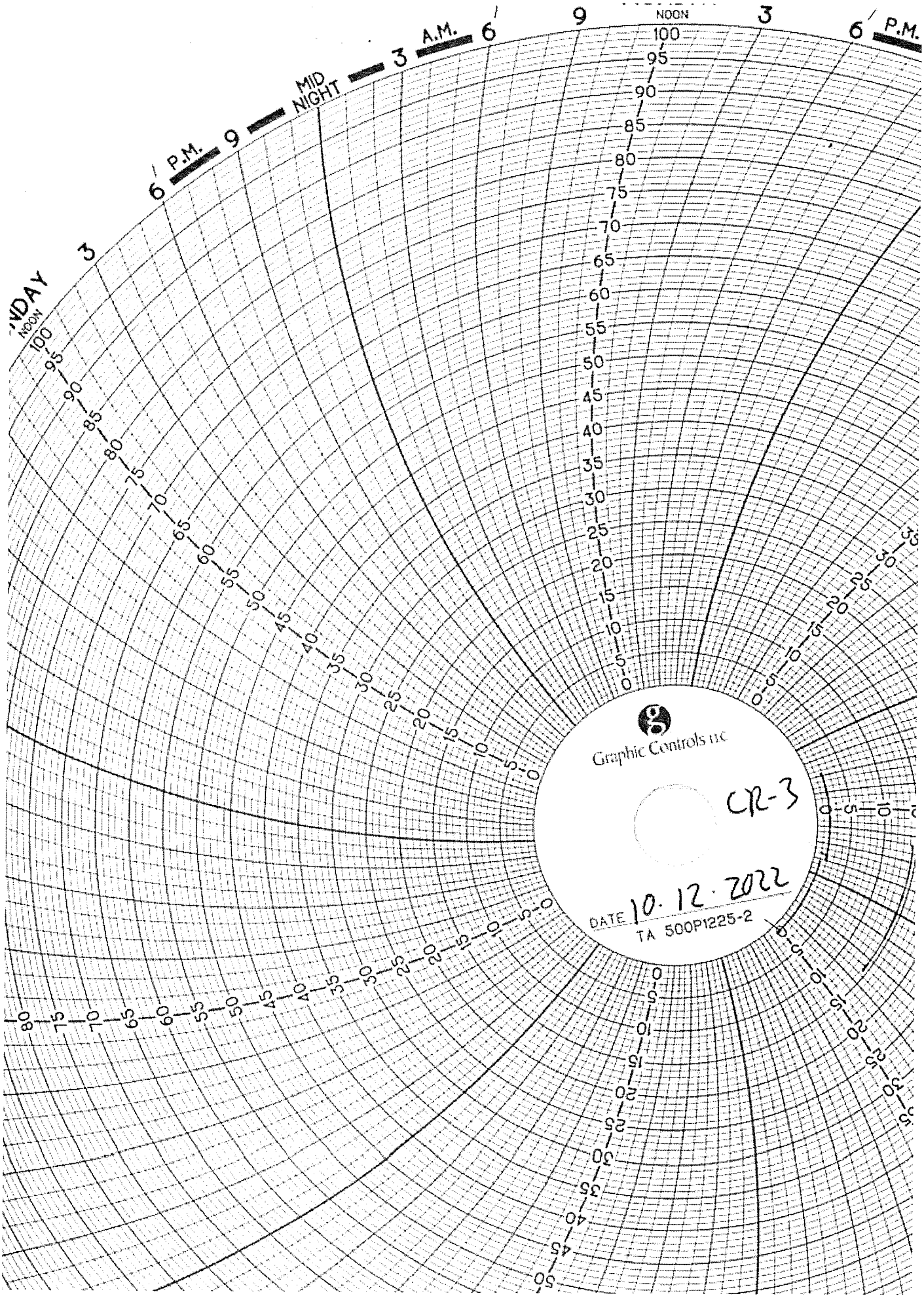
MID NIGHT
A.M.
P.M.
Graphic Controls llc
CR-3
DATE 10·5·2022
TA 500P1225-2


NOON
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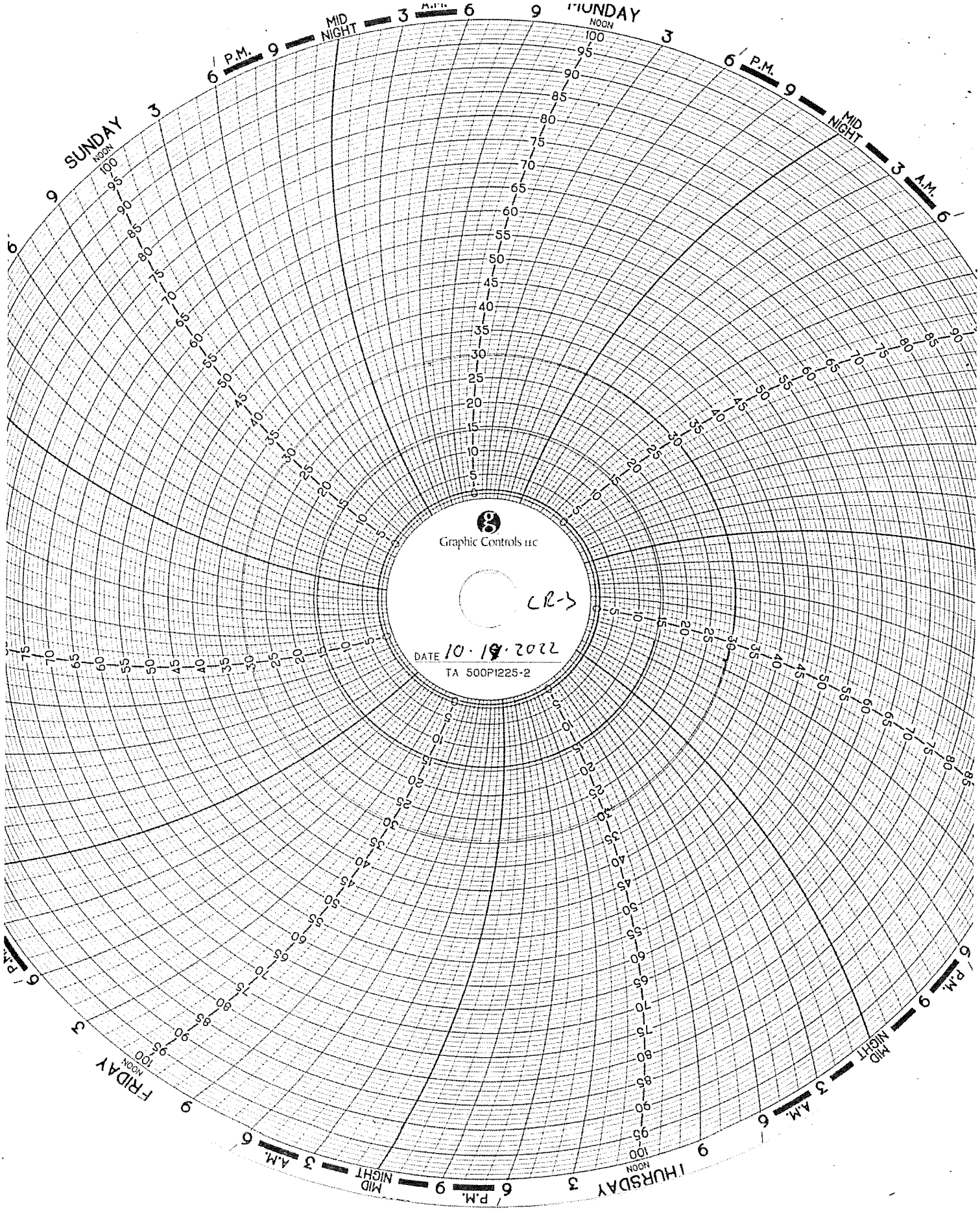
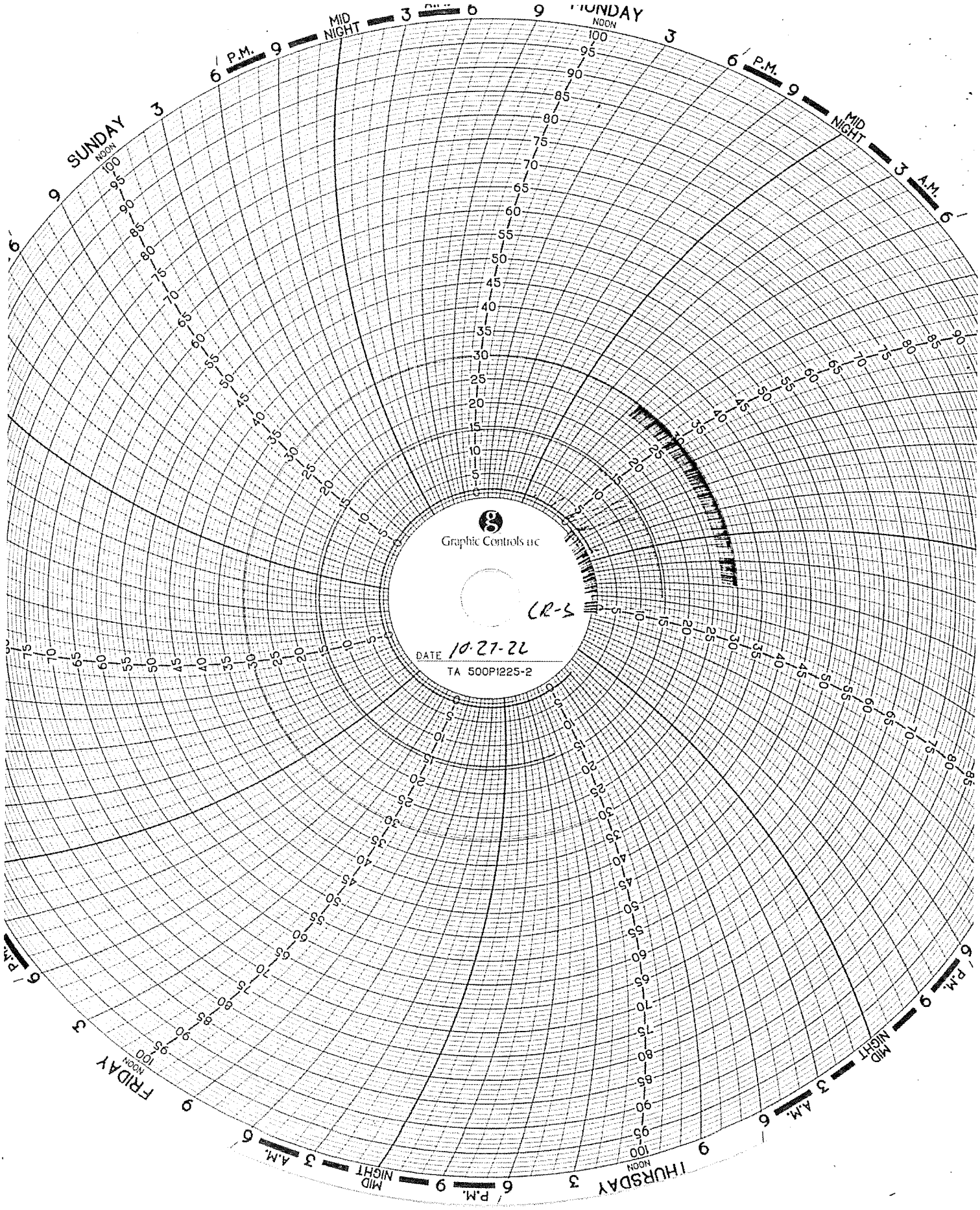
NOON
Graphic Controls LLC
CR-3
DATE 10. 12. 2022
TA 500P1225-2


SUNDAY
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
NOON
MID NIGHT
A.M.
P.M.
Graphic Controls LLC
CR-3
DATE 10-19-2022
TA 500P1225-2


MONDAY
NOON
MID NIGHT
A.M.
P.M.
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
SUNDAY
Graphic Controls LLC
CR-5
DATE 10-27-22
TA 500P1225-2

CORROSION MONITORING

CORROSION MONITORING PLAN
COUPON SUMMARY

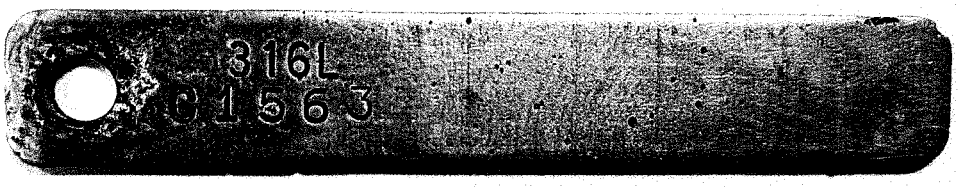
Date	Hastelloy (C267)	Stainless Steel (316L)	Fiberglass (Redbox)	
12/19/2013	13.330 g	10.848 g	7.309 g	Initial Mass @ start up
2/21/2014	13.329 g	10.846 g	7.306 g	
3/10/2014	13.327 g	10.845 g	7.300 g	
4/18/2014	13.324 g	10.841 g	7.272 g	
5/30/2014	13.328 g	10.818 g	7.226 g	
6/30/2014	13.321 g	10.337 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	New hastelloy coupon
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	
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	New stainless steel coupon
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	
1/3/2017	13.325 g	8.059 g	6.712 g	
2/28/2017	13.324 g	7.634 g	6.727 g	
3/24/2017	13.325 g	7.370 g	6.732 g	
4/28/2017	13.325 g	6.736 g	6.736 g	
5/11/2017	13.323 g	7.352 g	6.689 g	
6/12/2017	13.323 g	7.357 g	6.689 g	
7/5/2017	13.323 g	7.355 g	6.689 g	
8/30/2017	13.324 g	7.353 g	18.105 g	New Fiberglass coupon
9/28/2017	13.325 g	7.352 g	18.060 g	
10/11/2017	13.324 g	7.350 g	18.038 g	
11/16/2017	13.325 g	7.363 g	18.047 g	
12/12/2017	13.326 g	7.308 g	18.307 g	

CORROSION MONITORING PLAN
COUPON SUMMARY

Date	Hastelloy	Stainless Steel	Fiberglass	
1/29/2018	13.326 g	10.930 g	18.027 g	New stainless steel coupon
2/9/2018	13.325 g	10.932 g	18.044 g	
3/19/2018	13.325 g	10.926 g	18.030 g	
4/16/2018	13.336 g	10.863 g	18.068 g	
5/17/2018	13.325 g	10.858 g	18.037 g	
6/20/2018	13.325 g	10.855 g	18.029 g	
7/12/2018	13.326 g	10.852 g	18.032 g	
8/21/2018	13.326 g	10.854 g	18.031 g	
9/14/2018	13.326 g	10.852 g	18.036 g	
10/10/2018	13.326 g	10.851 g	18.031 g	
11/20/2018	13.326 g	10.853 g	18.032 g	
12/11/2018	13.326 g	10.852 g	18.033 g	
1/14/2019	13.326 g	10.852 g	18.033 g	
2/20/2019	13.326 g	10.850 g	18.033 g	
3/15/2019	13.326 g	10.850 g	18.033 g	
4/10/2019	13.326 g	10.848 g	18.031 g	
5/17/2019	13.326 g	10.849 g	18.036 g	
6/5/2019	13.326 g	10.848 g	18.031 g	
7/8/2019	13.326 g	10.845 g	18.032 g	
8/12/2019	13.326 g	10.845 g	18.032 g	
9/8/2019	13.326 g	10.842 g	18.029 g	
10/17/2019	13.326 g	10.842 g	18.030 g	
11/20/2019	13.326 g	10.842 g	18.030 g	
12/11/2019	13.326 g	10.842 g	18.030 g	
1/16/2020	13.326 g	10.840 g	18.033 g	
2/6/2020	13.326 g	10.836 g	18.034 g	
3/3/9/20	13.326 g	10.842 g	18.034 g	Well 1 workover new well
4/9/2020	13.328 g	10.839 g	18.037 g	
5/12/2020	13.322 g	10.830 g	18.035 g	
6/16/2020	13.316 g	10.771 g	18.009 g	
7/16/2020	13.308 g	10.560 g	17.843 g	
8/25/2020	13.310 g	10.214 g	17.773 g	
9/24/2020	13.289 g	9.796 g	17.656 g	
10/19/2020	13.282g	9.737g	17.621g	
11/5/2020	13.280g	9.728g	17.600g	
12/3/2020	13.281g	9.730g	17.689g	
2/10/2021	13.284g	9.728g	17.683g	
3/9/2021	13.290g	9.733g	17.585g	
4/13/2021	13.288g	9.730g	17.649g	
5/18/2021	13.282g	9.691g	17.543g	
6/17/2021	13.279g	9.639g	17.546g	
7/19/2021	13.278g	9.480g	17.507g	
8/3/2021	13.278g	9.437g	17.467g	
9/14/2021	13.277g	9.392g	17.467g	
10/11/2021	13.277g	9.359g	17.465g	
11/3/2021	13.277g	9.350g	17.273g	
12/15/2021	13.276g	9.351g	17.256g	
1/17/2022	13.276g	9.351g	17.256g	
2/15/2022	13.276g	9.347g	16.965g	
3/18/2022	13.281g	9.368g	17.246g	

CORROSION MONITORING PLAN
COUPON SUMMARY

4/18/2022	13.275	9.339	16.656	
5/16/2022	13.298	9.328	16.600	
6/15/2022	13.276	9.300	16.219	
7/20/2022	13.303	9.324	16.393	
8/17/2022	13.277	9.195	15.841	
9/9/2022	13.276	9.171	15.757	
10/19/2022	13.274	9.157	15.623	



316L / C1563

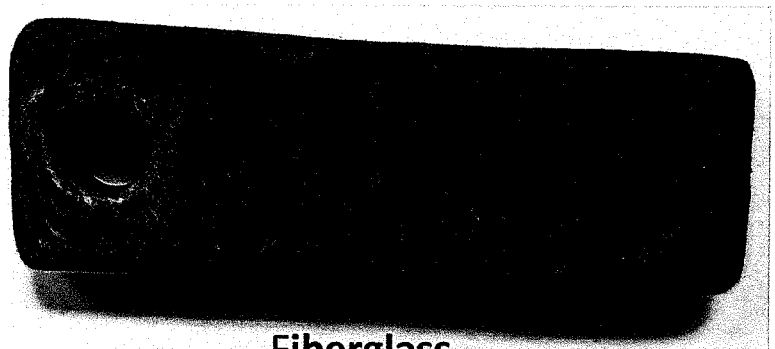
Weight: 9.157

Date: 10/19/2022

C276 / 5

Weight: 13.274

Date: 10/19/2022



Fiberglass

Weight: 15.623

Date: 10/19/2022

COOROSION MONITORING COUPONS VISUAL DESCRIPTION

October 2022

Fiberglass Coupon

The coupon is grey in color on both sides. Its cut edges appear sanded. The coupon is free of cracks, pitting, swelling, blemishes. There is corrosion and apparent exposed fiberglass on both sides of this coupon. There has been no obvious change in appearance to this coupon since last month.

Hastelloy Coupon

This coupon is identified as: C276 / 5. The coupon is silver in color with a lightly sandblasted texture. It is clean and free of pits, cracks, and blemishes. There is no effect to this coupon.

Stainless Steel Coupon

This coupon is identified as: Serial Number: C1563 / 316L. There has been no change to this coupon since last month. It is clean with a small amount of pitting.

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.

October 22, 2015

· TEST REPORT ·

PN 125322

PO 00154

PLASTICS TESTING DEPARTMENT

Prepared For:

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

Prepared By: _____
Melissa Martin
Sr. Project Technician

Approved By: _____
Jim Drummond, Sr.
Physical & Plastic Testing, Manager

October 22, 2015

John Frost
Environmental Geo-Technologies, LLC

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

Approved By: Scott W. Yates
Plastics Testing Assistant Manager

tc

December 12, 2016

▪TEST REPORT▪

PN 132662

PO

PLASTICS TESTING DEPARTMENT

Prepared For:

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

Prepared By: _____
Melissa Martin
Senior Project Technician

Approved By: _____
Jim Drummond
Physical Testing, Manager

Rev 041916

December 12, 2016

John Frost
Environmental Geo-Technologies, LLC

SUBJECT: Barcol Hardness on one (1) material.

RECEIVED: One (1) small section identified as; Fiberglass Coupon.

BARCOL HARDNESS ASTM D 2583-13a
Instant Reading

	RESULTS
Barcol Hardness, Instant	96

Prepared By: _____
Melissa Martin
Senior Project Technician

Approved By: _____
Scott Yates
Plastics Testing, Assistant Manager

wk

ARDL is ISO 17025 accredited by A2LA for the test methods listed on the certificates referenced on page one.* ***NOTE: Non-ISO 17025 accredited test methods are designated with the ^ symbol to differentiate from ISO 17025 accredited methods in the body of the test report.**

December 13, 2017

▪TEST REPORT▪

PN 139140

PO#

PLASTIC TESTING DEPARTMENT

Prepared For:

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

Prepared By:_____
Melissa Martin
Sr Project Technician

Approved By:_____
Jim Drummond
Rubber & Plastic Testing, Manager

Rev 041916

December 13, 2017

John Frost
Environmental Geo-Technologies, LLC

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

Approved By: Scott Yates
Plastics Testing, Assistant Manager

sc

ARDL is ISO 17025 accredited by A2LA for the test methods listed on the certificates referenced on page one. **NOTE: Non-ISO 17025 accredited test methods are designated with the ^ symbol to differentiate from ISO 17025 accredited methods in the body of the test report.**

GHESQUIERE PLASTIC TESTING, INC.

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

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

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

Attention: Mr. Don Anderson

WORK REQUESTED:

Perform Barcol Hardness test on sample submitted.

DESCRIPTION OF SAMPLE:

Sample submitted was identified as a fiberglass test coupon.

(P. O. #Credit Card).

WORK PERFORMED:

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

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

RESULTS:

The following determination was made based upon the above test:

BARCOL HARDNESS

	Hardness
Specimen 1	90

Specimen is being returned with this report for further evaluation.

GHESQUIERE PLASTIC TESTING, INC.

M. W. Ghesquiere
President

MWG/kni

GHESQUIERE PLASTIC TESTING, INC.

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

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

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

Attention: Mr. Don Anderson

WORK REQUESTED:

Perform Barcol Hardness test on sample submitted.

DESCRIPTION OF SAMPLE:

Sample submitted was identified as a fiberglass test coupon.

(P. O. #Credit Card).

WORK PERFORMED:

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

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

RESULTS:

The following determination was made based upon the above test:

BARCOL HARDNESS

	Hardness
Specimen 1	90

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

GHESQUIERE PLASTIC TESTING, INC.

M. W. Ghesquiere
President

MWG/dm

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

October 2, 2014

· TEST REPORT ·

PN 118325

PO Attn:John Frost

PLASTICS TESTING DEPARTMENT

Prepared For:

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

Prepared By: _____
Melissa Martin
Sr. Project Technician

Approved By: _____
Jim Drummond
Physical & Plastics Testing, Manager

October 2, 2014

John Frost
Environmental Geo-Technologies, LLC

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

st

BARCOL HARDNESS REPORT

Customer: Republic Industrial and Energy Solutions, LLC

Component Tested: Test Coupon

PO Number: 9575553 **Job Number:** 3415

Calibration: **Disc:** 43 - 48 **Actual Reading:** 45

Barcol Readings	1	2	3	Average
Side One:	62	63	58	61
Side Two:	58	60	57	58
			Overall Average:	60

Tested By: _____
(signature)

Gary Nicholson
(print or type name)

Date: 01/12/2021

BARCOL HARDNESS REPORT

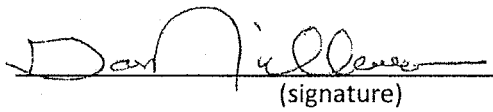
Customer: Republic Industrial and Energy Solutions, LLC

Component Tested: Test Coupon

PO Number: 10159792 **Job Number:** 3556

Calibration: **Disc:** 43 - 48 **Actual Reading:** 45

Barcol Readings	1	2	3	Average
Side One:	56	60	60	59
Side Two:	60	62	62	61
			Overall Average:	60

Tested By: 

(signature)

Gary Nicholson

(print or type name)

Date: 10/11/2021

BARCOL HARDNESS REPORT

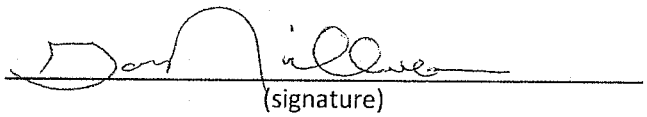
Customer: Republic Industrial and Energy Solutions

Component Tested: Fiberglass Coupon

PO Number: Credit Card **Job Number:** 3734

Calibration: **Disc:** 43 - 48 **Actual Reading:** 45

Barcol Readings	1	2	3	Average
Side One:	55	50	58	54
Side Two:	53	56	59	56
			Overall Average:	55

Tested By: 
(signature)

Gary Nicholson
(print or type name)

Date: 08/23/2022

MAINTENANCE

UIC Monthly Maintenance Log

No Maintainance this month

INJECTION FINGERPRINTS

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 3 / 22
Receiving ID#	I10032202
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H-
Sampled by	TC

5T-1

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	
pH (S.U.)	6.75
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	73.0
Conductivity	4.77
% Solids	0.5
Turbidity	Yes No
Color	
TSS (%)	0.5
Radiation Screen (as needed)	
Lab Signature/Initials	JH

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 03 / 22
Receiving ID#	R10032202
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	BB

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.93
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	69.1
Conductivity	4.58 ms
% Solids	20.1
Turbidity	Yes No
Color	
TSS (%)	4.0
Radiation Screen (as needed)	
Lab Signature/Initials	J.M

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 4 / 22
Receiving ID#	I10042201
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.T
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	2.09
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.100
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	69.1
Conductivity	8.58 mS
% Solids	0.34
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.T

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 04 / 22
Receiving ID#	I10042202
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	7.04
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	71.4
Conductivity	2.74
% Solids	<0.1
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/ 4 /22
Receiving ID#	J1004 22 03
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	MW

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	4.45
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.01
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	69.4
Conductivity	5.95
% Solids	.55%
Turbidity	Yes (No)
Color	CLEAR
TSS (%)	<0.1
Radiation Screen (as needed)	NEG
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 5 / 22
Receiving ID#	I10052201
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	N/A
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.46
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.01
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	77.6
Conductivity	2.92
% Solids	.15%
Turbidity	Yes (No)
Color	CLEAR
TSS (%)	<0.1
Radiation Screen (as needed)	NCG
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/05/22
Receiving ID#	I10052202
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	5.92
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.00
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	72.6
Conductivity	3.24
% Solids	
Turbidity	Yes (No)
Color	CLEAR
TSS (%)	
Radiation Screen (as needed) Lab Signature/Initials	NEG

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 05 / 22
Receiving ID#	I1005 2205
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	AW

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	
pH (S.U.)	6.14
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	69.7
Conductivity	3.30 mS
% Solids	0.25
Turbidity	Yes No
Color	
TSS (%)	0.25
Radiation Screen (as needed)	
Lab Signature/Initials	J.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 6 / 22
Receiving ID#	I1006220 1
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	S.H
Sampled by	DM

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	
pH (S.U.)	5.09
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	73.4
Conductivity	2.81 mS
% Solids	<0.1
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	S.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/04/22
Receiving ID#	D0062202
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	S.H.
Sampled by	TG

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	
pH (S.U.)	5.63
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	75.5
Conductivity	2.83
% Solids	<0.1
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.R

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/06/22
Receiving ID#	R1006220 3
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140°
pH (S.U.)	5.90
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.00
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	69.5
Conductivity	3.35
% Solids	.427
Turbidity	Yes (No)
Color	CLEAR
TSS (%)	<0.1
Radiation Screen (as needed)	N66
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	/ / 22
Receiving ID#	I 10072201
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	JM DF

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140°F
pH (S.U.)	5.97
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.00
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	70
Conductivity	2.41
% Solids	
Turbidity	Yes (No)
Color	CLEAR
TSS (%)	<0.1
Radiation Screen (as needed)	NAD
Lab Signature/Initials	DF

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 7 / 22
Receiving ID#	R10072207
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	N/A
TOC ppm (CC Waste Only)?	
Flash Point (F)	> @140
pH (S.U.)	6.30
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.01
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	70°
Conductivity	3.13
% Solids	.30%
Turbidity	Yes (No)
Color	CLEAR
TSS (%)	<0.1
Radiation Screen (as needed)	NEG
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 7 / 22
Receiving ID#	I 100722 05
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	AW

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	N/A
Flash Point (F)	>140
pH (S.U.)	6.66
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.00
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	69.4
Conductivity	3.18
% Solids	.5490
Turbidity	Yes (No)
Color	CLEAR
TSS (%)	<0.1
Radiation Screen (as needed)	NEG
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 10 / 22
Receiving ID#	I10102201
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	N/A
Flash Point (F)	> 140
pH (S.U.)	6.32
Cyanides? (mg/L)	< 30
Sulfides? (ppm)?	< 200
Specific Gravity	1.00
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	69.5
Conductivity	10.65
% Solids	2.09
Turbidity	Yes (No)
Color	CLEAR
TSS (%)	< 0.1
Radiation Screen (as needed)	N66
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 10 / 22
Receiving ID#	I1010220Z
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	N/A
Flash Point (F)	>140
pH (S.U.)	6.10
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.01
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	69.6
Conductivity	6.18
% Solids	.60%
Turbidity	Yes (No)
Color	CLEAR
TSS (%)	<0.1
Radiation Screen (as needed)	N66
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 10 / 22
Receiving ID#	I101022-03
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	N/A
Flash Point (F)	>140
pH (S.U.)	4.59
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.05
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	69.9
Conductivity	33.5
% Solids	3.30 %
Turbidity	Yes (No)
Color	LT. BLACK
TSS (%)	<0.1
Radiation Screen (as needed)	NEG
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/10/22
Receiving ID#	I10102204
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	AW

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	N/A
Flash Point (F)	>140
pH (S.U.)	9.02
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.00
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	70.0
Conductivity	4.67
% Solids	.329%
Turbidity	Yes (No)
Color	LT. BLACK
TSS (%)	<0.1
Radiation Screen (as needed)	N66
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/10/22
Receiving ID#	I101022C9
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	AW

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	N/A
Flash Point (F)	>140
pH (S.U.)	6.66
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.00
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	69.7
Conductivity	3.06
% Solids	.16%
Turbidity	Yes (No)
Color	CLEAR
TSS (%)	<0.1
Radiation Screen (as needed)	NEG
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 11 / 22
Receiving ID#	D1011220;
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	DH

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	N/A
Flash Point (F)	>140
pH (S.U.)	5.84
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.00
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	69.7
Conductivity	5.64
% Solids	.3390
Turbidity	Yes (No)
Color	CLEAR
TSS (%)	.25%
Radiation Screen (as needed)	NGC
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/11/22
Receiving ID#	I1011 2202
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	AW JT

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	N/A
Flash Point (F)	>140
pH (S.U.)	5.96
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.02
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	69.9
Conductivity	30.7
% Solids	1.8990
Turbidity	Yes (No)
Color	BLACK
TSS (%)	<0.1
Radiation Screen (as needed)	NEG
Lab Signature/Initials	JT

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 12 / 22
Receiving ID#	R10122201
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	BB

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	3.57
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.01
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	71.8
Conductivity	12.74
% Solids	1.74
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	S.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 12 / 22
Receiving ID#	I10122201
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	N/A
Flash Point (F)	>140
pH (S.U.)	4.76
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.01
Physical Description	LIQUID
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	65.0
Conductivity	9.03
% Solids	1.49%
Turbidity	Yes (No)
Color	LT BROWN
TSS (%)	<0.1
Radiation Screen (as needed)	NEG
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

SST-1

RECEIVING INFORMATION	
Date	10/13/22
Receiving ID#	I10132201
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	TG

LAB INFORMATION	
Compatible? (RT#)	Yes
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	4.62
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	66.7
Conductivity	14.35
% Solids	1.02
Turbidity	Yes No
Color	
TSS (%)	<.1
Radiation Screen (as needed)	
Lab Signature/Initials	TG

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 13 / 22
Receiving ID#	R10132207
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	BB

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	4.18
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.02
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	71.8
Conductivity	18.06 mS
% Solids	1.32
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	SM

RECEIVING & APPROVAL FORM

SST-1

RECEIVING INFORMATION	
Date	10 / 14 / 22
Receiving ID#	I1014220
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	TG

LAB INFORMATION	
Compatible? (RT#)	Yes
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	4.26
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	LiQ
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	67.7
Conductivity	13.70
% Solids	1.17
Turbidity	Yes No
Color	Black
TSS (%)	<.5
Radiation Screen (as needed)	Neg
Lab Signature/Initials	TL

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 17 / 22
Receiving ID#	F10172201
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	7.56
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.02
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	64.3
Conductivity	20.5 mS
% Solids	1.02
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 18 / 22
Receiving ID#	I101822 01
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.T.
Sampled by	J.T.

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	
pH (S.U.)	6.46
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.02
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	64.5
Conductivity	24.9 mS
% Solids	5.59
Turbidity	Yes No
Color	
TSS (%) J.T. ~~4.0~~ 4.0	
Radiation Screen (as needed)	
Lab Signature/Initials	J.T.

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 19 / 22
Receiving ID#	I1019220\
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.T
Sampled by	J.T

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	7.08
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.01
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	64.5
Conductivity	4.64 mS
% Solids	0.29
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.T

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 19 / 22
Receiving ID#	I101922202
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	JTL
Sampled by	BB

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.76
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.10
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	69.4
Conductivity	3.77
% Solids	0.47
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	JT

RECEIVING & APPROVAL FORM

SST-1

RECEIVING INFORMATION	
Date	10 / 20 / 22
Receiving ID#	I10Z0220J
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	TG
Sampled by	DM

LAB INFORMATION	
Compatible? (RT#)	Yes
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.60
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	70.3
Conductivity	3.53
% Solids	.30
Turbidity	Yes No
Color	
TSS (%)	<.1
Radiation Screen (as needed) Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 20 / 22
Receiving ID#	I102022-02
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	JH

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	> 140
pH (S.U.)	6.63
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	66.8
Conductivity	2.85
% Solids	0.34
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 21 / 22
Receiving ID#	I102122 01
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.M.
Sampled by	DM

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.25
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	72
Conductivity	6.29
% Solids	0.47
Turbidity	Yes No
Color	
TSS (%) JM	~~0.1~~ < 0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.M

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 21 / 22
Receiving ID#	I10212202
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H
Sampled by	DH

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.64
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	70.0
Conductivity	3.48
% Solids	0.15
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 21 / 22
Receiving ID#	I102122 03
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.T.
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	5.56
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	70.0
Conductivity	4.54
% Solids	<0.1
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed) Lab Signature/Initials	J.T.

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/21/22
Receiving ID#	I102122 05
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	O.R
Sampled by	AW

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	5.91
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	71.5
Conductivity	6.54 mS
% Solids	0.15
Turbidity	Yes No
Color	
TSS (%)	60.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.H

RECEIVING & APPROVAL FORM

SST-1

RECEIVING INFORMATION	
Date	10/24/22
Receiving ID#	I10242201
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	TG
Sampled by	DB

LAB INFORMATION	
Compatible? (RT#)	Yes
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	7.04
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	69.2
Conductivity	4.17
% Solids	.37
Turbidity	Yes No
Color	
TSS (%)	<.1
Radiation Screen (as needed)	
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/24/22
Receiving ID#	I102422d
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.T
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.91
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.08
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	71.9
Conductivity	4.23
% Solids	0.15
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	JT

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/24/22
Receiving ID#	I102422C3
Manifest # Line	
Land Ban Cert included	Yes - No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.38
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	69.7
Conductivity	3.34 mS
% Solids	0.11
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	JH

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/24/22
Receiving ID#	10242203
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	BB

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.27
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	75.5
Conductivity	2.63
% Solids	<0.1
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	JH

RECEIVING & APPROVAL FORM

SST-1

RECEIVING INFORMATION	
Date	10/25/22
Receiving ID#	I10252201
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	TG

LAB INFORMATION	
Compatible? (RT#)	Yes
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	~~6.0~~ 5.93
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	71.4
Conductivity	6.01
% Solids	.53
Turbidity	Yes No
Color	
TSS (%)	2.1
Radiation Screen (as needed)	
Lab Signature/Initials	TG

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/25/22
Receiving ID#	I10252202
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H
Sampled by	JH

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	3.79
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.01
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	73.6
Conductivity	7.04 mS
% Solids	0.50
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/25/22
Receiving ID#	R10252203
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.N
Sampled by	BB

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	5.28
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.01
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	72.4
Conductivity	5.33 mS
% Solids	0.22
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.N

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/26/22
Receiving ID#	R102622201
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H
Sampled by	BB

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	4.90
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	73.7
Conductivity	4.97 mS
% Solids	<0.1
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/26/22
Receiving ID#	R10262202
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	BB

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.12
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.0
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	72.1
Conductivity	2.42 mS
% Solids	<0.1
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/27/22
Receiving ID#	I102722.01
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.T.
Sampled by	DM

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	5.20
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	72.5
Conductivity	2.18
% Solids	<0.1
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 27 / 22
Receiving ID#	I102-22-07
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H
Sampled by	

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.50
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	Liquid
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	72.2
Conductivity	3.36 mS
% Solids	0.22
Turbidity	Yes (No)
Color	Colorless
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/27/22
Receiving ID#	I10272203
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.T
Sampled by	AW

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.65
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	71.3
Conductivity	2.80
% Solids	<0.1
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.T

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/28/22
Receiving ID#	I102822-02
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.T)
Sampled by	DM

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	8.83
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	70.1
Conductivity	7.05 mS
% Solids	0.27
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.T)

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10 / 28 / 22
Receiving ID#	I10282201
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.T
Sampled by	AW

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.32
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	71.1
Conductivity	3.05
% Solids	<0.1
Turbidity	Yes No
Color	
TSS (%)	20.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.T

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/28/22
Receiving ID#	I10282203
Manifest # Line	
Land Ban Cert included	Yes - No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	S.T
Sampled by	AV

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	2.51
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	72.3
Conductivity	5.69 mS
% Solids	<0.1
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	JJ

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/24/22
Receiving ID#	I1024220I
Manifest # Line	
Land Ban Cert included	Yes . No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.T
Sampled by	Ø

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	5.13
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	72.6
Conductivity	2.26
% Solids	2.01
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.T

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/31/22
Receiving ID#	I103122-01
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	DM

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	1.95
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.00
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	72.1
Conductivity	
% Solids	<0.1
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/31/22
Receiving ID#	R1031220Z
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H
Sampled by	BB

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.) J.H	~~6.74~~ 4.08
Cyanides? (mg/L)	
Sulfides? (ppm)?	
Specific Gravity	1.01
Physical Description	
Stream Consistency	Yes No
Oil in Sample?	Yes No
Temperature (F)	72.2
Conductivity	6.86
% Solids	0.60
Turbidity	Yes No
Color	
TSS (%)	<0.1
Radiation Screen (as needed)	
Lab Signature/Initials	J.H

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/31/22
Receiving ID#	2103122-03
Manifest # Line	
Land Ban Cert included	Yes - No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	BB

LAB INFORMATION		
Compatible? (RT#)	Y	
PCBs (ppm) (Oily Waste Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>140	
pH (S.U.)	5.83 5.87 ~~5.83~~ ~~6.29~~	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.01	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	74.9	
Conductivity	5.87 ~~0.22~~ 6.28 mS	
% Solids		
Turbidity	Yes	No
Color		
TSS (%)	<0.1	
Radiation Screen (as needed)		
Lab Signature/Initials	JJ	

WASTE PROFILES

Republic Services

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile # 64402213669	**Expiration Date** 4/11/2023	
I. Decision Request:	☑ **Initial** ☐ **Recertification** ☐ **Change**		
Disposal Facility: 6440 - Detroit Ind Well			
Generator Name: AJAX METAL PROCESSING, INC			
Generator Site Address: 21777 HOOVER RD			
City: WARREN	**County:**	**State:** MI	**Zip:**
Name of Waste: PICKLE LIQUOR IN PROCESS			
Estimated Annual Volume: 8000 Gallons			

II. Special Waste Department Decision: ◉ **Approved** ○ **Rejected**

Management Method(s): ☐ Landfill ☐ Solidification ☐ Bioremediation ☑ Deep Well ☐ Transfer Facility

Problematic Special Waste according to Republic? ○ Yes ◉ No

If yes, which one?

Approved by Special Waste Review Committee? ○ Yes ○ No ◉ Not Applicable

Precautions, Conditions or Limitations on Approval

The site must ensure that all pre-acceptance and verification analytical is performed in accordance with the site's permit requirements prior to acceptance and disposal of the profiled waste.

Special Waste Analyst Signature: Stephen L. Brown **Name (Printed):** Stephen Brown

Date: 10/4/2022

III. Facility Decision: ◉ **Approved** ○ **Rejected**

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: John Frost **Name (Printed):** John Frost

Date: 10/4/2022

Republic Industrial and Energy Solutions, LLC
28470 Citrin Dr, Romulus, MI 48174, Telephone 734 946 1000, Fax 734 946 1002

GENERATOR WASTE PROFILE

Profile # 64402213669

GENERATOR INFORMATION

Name: Ajax Metal Processing, Inc. USEPA ID # MID083942714

Facility Address: 21777 Hoover Rd SIC/NAICS Code: State Code:

City: Warren State: MI Zip Code: 48001

Contact: Alex Muench Title: Manager Phone: ( ) 267-2100 Fax: ( )

BILLING INFORMATION ☐ SAME AS ABOVE

Company Name: Environmental Equipment Enterprises, Inc. (3E, Inc.)

Address: 7065 E 8 Mile Rd.

City: Warren State: MI Zip Code: 48091

Attention: [redacted] Title: Manager Phone: ( ) 756-4570 x101 Fax: ( )

WASTE INFORMATION

Name of Waste/Common Chemical Name:

Pickle liquor in Process

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

Pickle Liquor conditioning steel coils to remove impurities, rust, and scale from the surface of a material. Sulfuric acid approximately 6-9 %, balance water. Heavy iron content approximately 2%

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 D007

PHYSICAL CHARACTERISTICS OF WASTE

Color:	Suspended Solids	Layers:	Specific Gravity:	
☐ White/Clear	☐ 0-1 % ☑ 3-5 %	☐ Multi layered	☐ <0.8 ☐ 1.0 — 1.2	
☑ Black/Brown	☐ 1-3 % ☐ > 5%	☑ Bi-Layered	☐ 0.8 — 1.0 ☑ 1.3 — 1.4	
☐ Other		☐ Single Phase	Exact / Other	

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 <>1= 0.1%)*

CONSTITUENT	MAX	MIN		CONSTITUENT	MAX	MIN	
Sulfuric Acid (7664-93-9)	6	9	%				%
Water (7732-18-5)	94	91	%				%
			%				%

Metals: Indicate if this waste contains any of the following metals
If Generator knowledge-provide backup ☑ Lab Analysis ☑ Generator Knowledge ☑ TCLP ☐ TOTAL

	Not Present	Concentration		Not Present	Concentration					
PCB	☑	ppm	Aromatic Amine	☐	ppm	Arsenic (As)	D004	☑ <5	ppm	ppm
Dioxins	☑	ppm	Pesticides	☑	ppm	Barium (Ba)	D005	☑ <100	ppm	ppm
Cyanides Reactive	☑	ppm	Rodenticides	☑	ppm	Cadmium (Cd)	D006	☑ <1	ppm	ppm
Cyanides Total	☑	ppm	Fungicides	☑	ppm	Chromium (Cr)	D007	☐ <5	ppm 120	ppm
Sulfides Reactive	☐ 22	ppm				Lead (Pb)	D008	☑ <5	ppm .68	ppm
Sulfides Total	☐	ppm				Mercury (Hg)	D009	☑ <0.2	ppm	ppm
						Selenium (Se)	D010	☑ <1	ppm	ppm
						Silver (Ag)	D011	☑ <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

1. Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)? ☑ Yes ☐ No
2. Reportable Quantity (RQ) in pounds 100
3. DOT Shipping Name UN1832, Waste sulfuric acid, spent, 8, PGII Hazard Class 8 UN/NA UN1832

PG II ERG _____ Hazardous Constituents for "n.o.s." _____

4. Method of Shipment: ☑ Bulk Tanker ☑ Vac truck ☐ Rail Car ☐ Drums ☐ Totes
5. Number of Units to Ship Now 8000gal 6. Anticipated Volume / Units per Year: _____ or ☐ One Time
6. 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 Republic Industrial & Energy Solutions not to correct any inconsistencies. Any corrections Republic Industrial & Energy Solutions makes will be consistent with the results of the sample characterization and/or regulatory requirements.

Printed Name: Alexandria Muench Title: Compliance Manager

Generator's Signature: Alexandria Muench Date: 5/11/2022

GENERATOR'S CHAIN OF CUSTODY RECORD INSTRUCTIONS:

PLEASE collect a representative 1-quartsample of the waste described in the above referenced GENERATORS 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 Republic Industrial & Energy Solutions representative.

1. Grab 2. Pickling tank
SAMPLING METHOD COLLECTION POINT

05-25-22 ~~Mp4 5-6-22~~
Pickel Liquor in Process

3 Tom McClanaghan, Manager, 3E, Inc.
SAMPLE COLLECTOR'S NAME, TITLE, EMPLOYER

4. 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.*

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	5/9/22
Receiving ID#	Pickle Liquor in Process
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	Ajax Metal Processing
Client	
Transporter	
Time in	
Time out	
Received by	J.M.
Sampled by	Client

LAB INFORMATION	
Compatible? (RT#)	
PCBs (ppm) (Oily Waste Only)?	N/A
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	0.72
Cyanides? (mg/L)	< 30
Sulfides? (ppm)?	< 200
Specific Gravity	1.25
Physical Description	Liquid - Top / Solid - Bottom
Stream Consistency	Yes (No)
Oil in Sample?	Yes (No)
Temperature (F)	67.6
Conductivity	>1000mS
% Solids	32.09 (top liquid layer)
Turbidity	(Yes) No
Color	Blue
TSS (%)	22.2
Radiation Screen (as needed)	Neg.
Lab Signature/Initials	

(See lab Notes)

Republic Services

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	64402213679	9/23/2023	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 6440 - Detroit Ind Well

Generator Name: CHICAGO-DEPT OF AVIATION- ENVIRONMENTAL

Generator Site Address: 6201 S LARAMIE AVENUE

City: CHICAGO **County:** **State:** IL **Zip:**

Name of Waste: AQUEOUS SOLUTION OF AFFF WATER FROM CHICAGO FIRE DEPARTMENT VEHICLE TESTING

Estimated Annual Volume: 25,000 Gallons

II. Special Waste Department Decision: ◉ Approved ○ Rejected

Management Method(s): ☐ Landfill ☐ Solidification ☐ Bioremediation ☑ Deep Well ☐ Transfer Facility

Problematic Special Waste according to Republic? ○ Yes ◉ No

If yes, which one?

Approved by Special Waste Review Committee? ○ Yes ○ No ◉ Not Applicable

Precautions, Conditions or Limitations on Approval

The site must ensure that all pre-acceptance and verification analytical is performed in accordance with the site's permit requirements prior to acceptance and disposal of the profiled waste.

Special Waste Analyst Signature: _____ **Name (Printed):** KEITH DIAMANTI

Date: 10/4/2022

III. Facility Decision: ◉ Approved ○ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** John Frost

Date: 10/4/2022

Republic Industrial and Energy Solutions, LLC
28470 Citrin Dr, Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002

GENERATOR WASTE PROFILE

Profile # 64402213679

GENERATOR INFORMATION

Name: Chicago-Dept of Aviation-Environmental USEPA ID # ILD984841197

Facility Address: 6201 S Laramie Avenue SIC/NAICS Code: State Code: 488119

City: Chicago State: IL Zip Code: 60638

Contact: Ryan Lane Title: Phone: (7 7 3) 686-7492 Fax: ( )

BILLING INFORMATION ☐ SAME AS ABOVE

Company Name: SET Environmental, Inc.

Address: 450 Sumac Road

City: Wheeling State: IL Zip Code: 60090

Attention: Title: Phone: (8 4 7) 537-9221 Fax: ( )

WASTE INFORMATION

Name of Waste/Common Chemical Name:

Aqueous solution of AFFF water from Chicago Fire Department Vehicle Testing

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

~~FAA MANDATED FIRE FOAM SUPPRESSION SYSTEM TESTING~~

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:

PHYSICAL CHARACTERISTICS OF WASTE

Color:	Suspended Solids	Layers:	Specific Gravity:	
☐ White/Clear	☑ 0-1 % ☐ 3-5 %	☐ Multi layered	☐ <0.8 ☑ 1.0 — 1.2	
☐ Black/Brown	☐ 1-3 % ☐ > 5%	☐ Bi-Layered	☐ 0.8 —1.0 ☐ 1.3 —1.4	
☑ Other		☑ Single Phase	Exact / Other	

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 - <500 PPM (MUST BE COMPLETED)

TOTAL COMPOSITION OF WASTE - *MUST BE EQUAL TO* OR *GREATER THAN 100% (LIST EACH CONSTITUENT <>1= 0.1%)*

CONSTITUENT	MAX	MIN		CONSTITUENT	MAX	MIN	
Water	99	95	%				%
Grit/soil/sediment	2	0	%				%
Chemguard 3% AFFF	5	1	%				%

Metals: Indicate if this waste contains any of the following metals
If Generator knowledge-provide backup ☐ Lab Analysis ☑ Generator Knowledge ☐ TCLP ☐TOTAL

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

1. Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)? ☐ Yes ☑ No
2. Reportable Quantity (RQ) in pounds _____
3. DOT Shipping Name NOT REGULATED Hazard Class _____ UN/NA _____

PG _____ ERG _____ Hazardous Constituents for "n.o.s." _____

4. Method of Shipment: ☑ Bulk Tanker ☐ Vac truck ☐ Rail Car ☐ Drums ☐Totes
5. Number of Units to Ship Now 5 6. Anticipated Volume / Units per Year: 25,000 GALLONS or ☐ One Time
6. 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 Republic Industrial & Energy Solutions not to correct any inconsistencies. Any corrections Republic Industrial & Energy Solutions makes will be consistent with the results of the sample characterization and/or regulatory requirements.

Printed Name: MARK PARQUETTE ON BEHALF OF CHICAGO DEPT OF AVIATION Title: PROJECT MANAGER

Generator's Signature: Mark Parquette Date: 9-23-2022

GENERATOR'S CHAIN OF CUSTODY RECORD INSTRUCTIONS:

PLEASE collect a representative 1-quartsample of the waste described in the above referenced GENERATORS 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 Republic Industrial & Energy Solutions representative.

1. GRAB SAMPLING METHOD 2. FRAC TANK COLLECTION POINT

3. BRANDON CARLING, CHEMIST, SET ENVIRONMENTAL
SAMPLE COLLECTOR'S NAME, TITLE, EMPLOYER

4. Sample No. FT-A4744 Preservation: Yes ☐ No ☑
5. CHAIN OF CUSTODY *Each person who handles the sample must sign below when the sample passes from one to another.*

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Brandon Carling	9/23/22	12:00			

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	9/26/22
Receiving ID#	Aqueous AFFF Chicago F.D. Veh. Testing
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	Chicago Dept of Aviation-Env.
Client	
Transporter	
Time in	
Time out	
Received by	J.M.
Sampled by	Client

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	N/A
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	6.75
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.00
Physical Description	Liquid
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	66.4
Conductivity	1.307 mS
% Solids	<0.1
Turbidity	Yes (No)
Color	Lt. Grey
TSS (%)	<0.1
Radiation Screen (as needed)	X Reg.
Lab Signature/Initials	J.M

(See attached lab Notes)

Republic Services

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	64402212815	9/22/2023	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 6440 - Detroit Ind Well

Generator Name: PREMIER PLATING- OLD USE APPROVAL D172503DET

Generator Site Address: 32370 HOWARD DRIVE

City: MADISON HEIGHTS **County:** **State:** MI **Zip:**

Name of Waste: ELECTROLESS NICKEL SOLUTION

Estimated Annual Volume: 30000 Gallons

II. Special Waste Department Decision: ◉ Approved ○ Rejected

Management Method(s): ☐ Landfill ☐ Solidification ☐ Bioremediation ☑ Deep Well ☐ Transfer Facility

Problematic Special Waste according to Republic? ○ Yes ◉ No

If yes, which one?

Approved by Special Waste Review Committee? ○ Yes ○ No ◉ Not Applicable

Precautions, Conditions or Limitations on Approval

The site must ensure that all pre-acceptance and verification analytical is performed in accordance with the site's permit requirements prior to acceptance and disposal of the profiled waste.

Special Waste Analyst Signature: Stephen L. Brown **Name (Printed):** Stephen Brown

Date: 10/20/2022

III. Facility Decision: ● Approved ○ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: John Frost **Name (Printed):** John Frost

Date: 10/20/2022

Republic Industrial and Energy Solutions, LLC
28470 Citrin Dr, Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002

GENERATOR WASTE PROFILE

Profile # _____

GENERATOR INFORMATION

Name: Premier Plating - Old USE Approval D172503DET USEPA ID # MID985580133

Facility Address: 32370 Howard Drive SIC/NAICS Code: State Code: _____

City: Madison Heights State: MI Zip Code: ~~48529~~ 48071

Contact: Greg Bone Title: Manager Phone: (313) 702-4294 Fax: ( ) _____

BILLING INFORMATION ☑ SAME AS ABOVE

Company Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Attention: _____ Title: _____ Phone: ( ) _____ Fax: ( ) _____

WASTE INFORMATION

Name of Waste/Common Chemical Name:
Electroless Nickel Solution

Process Generating Waste (*Please be specific, incomplete information may delay the approval process*):
~~Spent electroless nickel plating solution used to plate nickel onto steel parts.~~

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: None

PHYSICAL CHARACTERISTICS OF WASTE

Color:	Suspended Solids	Layers:	Specific Gravity:	
☐ White/Clear	☑ 0-1 % ☐ 3-5 %	☐ Multi layered	☐ <0.8 ☑ 1.0 — 1.2	
☐ Black/Brown	☐ 1-3 % ☐ > 5%	☐ Bi-Layered	☐ 0.8 — 1.0 ☐ 1.3 — 1.4	
☑ Other		☑ Single Phase	Exact / Other	

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 <>1= 0.1%)*

CONSTITUENT	MAX	MIN	CONSTITUENT	MAX	MIN
Electroless Nickel Plating Solution	100	100 %			%
		%			%
		%			%

Metals: Indicate if this waste contains any of the following metals
If Generator knowledge-provide backup ☐ Lab Analysis ☑ Generator Knowledge ☑ TCLP ☐ TOTAL

	Not Present	Concentration		Not Present	Concentration
PCB	☑	ppm	Aromatic Amine	☑	ppm
Dioxins	☑	ppm	Pesticides	☑	ppm
Cyanides Reactive	☑	ppm	Rodenticides	☑	ppm
Cyanides Total	☑	ppm	Fungicides	☑	ppm
Sulfides Reactive	☑	ppm			
Sulfides Total	☑	ppm			

Arsenic (As)	D004	☑ <5	ppm	ppm
Barium (Ba)	D005	☑ <100	ppm	ppm
Cadmium (Cd)	D006	☑ <1	ppm	ppm
Chromium (Cr)	D007	☑ <5	ppm	ppm
Lead (Pb)	D008	☑ <5	ppm	ppm
Mercury (Hg)	D009	☑ <0.2	ppm	ppm
Selenium (Se)	D010	☑ <1	ppm	ppm
Silver (Ag)	D011	☑ <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

1. Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)? ☐ Yes ☑ No
2. Reportable Quantity (RQ) in pounds _____
3. DOT Shipping Name Non-Hazardous Liquid Hazard Class _____ UN/NA _____
PG _____ ERG _____ Hazardous Constituents for "n.o.s." _____
4. Method of Shipment: ☐ Bulk Tanker ☑ Vac truck ☐ Rail Car ☐ Drums ☐ Totes
5. Number of Units to Ship Now 5000 6. Anticipated Volume / Units per Year: 30000 or ☐ One Time
6. Special Handling Requirements including PPE:
None

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 Republic Industrial & Energy Solutions not to correct any inconsistencies. Any corrections Republic Industrial & Energy Solutions makes will be consistent with the results of the sample characterization and/or regulatory requirements.

Printed Name: Greg Bone Title: Plant Manager

Generator's Signature: Greg Bone Date: 9/6/22

GENERATOR'S CHAIN OF CUSTODY RECORD INSTRUCTIONS:

PLEASE collect a representative 1-quartsample of the waste described in the above referenced GENERATORS 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 Republic Industrial & Energy Solutions representative.

1. Grab — SAMPLING METHOD
2. Working Tank — COLLECTION POINT
3. Mike Cate, Sales, US Ecology — SAMPLE COLLECTOR'S NAME, TITLE, EMPLOYER

Sample ID 9920 Grab
Sample Date 09/22/2022

4. 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.*

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	8/5/22
Receiving ID#	Elect. Ni. Sol.
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	Premier Plating
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	Client

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	N/A
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	5.29
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	2.00
Physical Description	Liquid
Stream Consistency	(Yes) No
Oil in Sample?	Yes (No)
Temperature (F)	74
Conductivity	115.7 mS
% Solids	23.69
Turbidity	Yes (No)
Color	Green
TSS (%)	<0.1
Radiation Screen (as needed)	Neg.
Lab Signature/Initials	J.H

(See Lab Notes)

Republic Services

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	64402214814	9/22/2023	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 6440 - Detroit Ind Well

Generator Name: SVRC INDUSTRIES INC.

Generator Site Address: 919 VETERANS MEMORIAL PARKWAY

City: SAGINAW	County:	State: MI	Zip:

Name of Waste: WASH WATER

Estimated Annual Volume: 5000 Gallons

II. Special Waste Department Decision: ◉ Approved ○ Rejected

Management Method(s): ☐ Landfill ☐ Solidification ☐ Bioremediation ☑ Deep Well ☐ Transfer Facility

Problematic Special Waste according to Republic? ○ Yes ◉ No

If yes, which one?

Approved by Special Waste Review Committee? ○ Yes ○ No ◉ Not Applicable

Precautions, Conditions or Limitations on Approval

The site must ensure that all pre-acceptance and verification analytical is performed in accordance with the site's permit requirements prior to acceptance and disposal of the profiled waste.

Special Waste Analyst Signature: _____ **Name (Printed):** KEITH DIAMANTI

Date: 10/26/2022

III. Facility Decision: ● Approved ○ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** JOHN FROST

Date: 10/26/2022

Republic Industrial and Energy Solutions, LLC
28470 Citrin Dr, Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002

GENERATOR WASTE PROFILE

Profile # 64402214814

GENERATOR INFORMATION

Name: SVRC Industries Inc. USEPA ID # MID981794498

Facility Address: 919 Veterans Memorial Parkway SIC/NAICS Code: State Code:

City: Saginaw State: MI Zip Code: 48601

Contact: Jessica Smith Title: Phone: ( ) 280-5811 Fax: ( )

BILLING INFORMATION ☐ SAME AS ABOVE

Company Name: ERG Environmental Services

Address: 13040 Merriman Rd

City: Livonia State: MI Zip Code: 48150

Attention: Accounts Payable Title: Phone: ( ) 437-9650 Fax: ( )

WASTE INFORMATION

Name of Waste/Common Chemical Name:

Wash Water

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

~~Washing and rinsing of small manufactured brass casings~~

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: _____

PHYSICAL CHARACTERISTICS OF WASTE

Color:	Suspended Solids	Layers:	Specific Gravity:	
☑ White/Clear	☑ 0-1 % ☐ 3-5 %	☐ Multi layered	☐ <0.8 ☑ 1.0 — 1.2	
☐ Black/Brown	☐ 1-3 % ☐ > 5%	☐ Bi-Layered	☐ 0.8 —1.0 ☐ 1.3 —1.4	
☐ Other		☑ Single Phase	Exact / Other	

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 <>1= 0.1%)*

CONSTITUENT	MAX	MIN		CONSTITUENT	MAX	MIN	
~~Water~~	~~90~~	~~95~~	%	~~Metalnox M6093~~	~~1~~	~~10~~	%
Metalnox M6310	1	5	%				%
Masterall B3592	1	6	%				%

Metals: Indicate if this waste contains any of the following metals
If Generator knowledge-provide backup ☑ Lab Analysis ☐ Generator Knowledge ☑ TCLP ☐TOTAL

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

1. Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)? ☐ Yes ☑ No
2. Reportable Quantity (RQ) in pounds _____
3. DOT Shipping Name Non-RCRA, Non-DOT Regulated Hazard Class _____ UN/NA _____

PG _____ ERG _____ Hazardous Constituents for "n.o.s." _____

4. Method of Shipment: ☑ Bulk Tanker ☑ Vac truck ☐ Rail Car ☐ Drums ☐Totes
5. Number of Units to Ship Now 1000 6. Anticipated Volume / Units per Year: 5000 or ☐ One Time
6. Special Handling Requirements including PPE:

NA

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.

Printed Name: Jessica Smith Title: Director of Industrial Operation

Generator's Signature: Jessica Smith Date: 9/22/22

GENERATOR'S CHAIN OF CUSTODY RECORD INSTRUCTIONS: PLEASE collect a representative 1-quartsample of the waste described in the above referenced GENERATORS 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.

1. Grab (SAMPLING METHOD) 2. Tank (COLLECTION POINT)

3. Terry Atkins (SAMPLE COLLECTOR'S NAME, TITLE, EMPLOYER)

4. Sample No. 1A - Waste Wash Water Preservation: Yes ☐ No ☑

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10/17/22
Receiving ID#	Wash Water
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	SVRC Industries
Client	
Transporter	
Time in	
Time out	
Received by	J.H
Sampled by	Client

LAB INFORMATION	
Compatible? (RT#)	Y
PCBs (ppm) (Oily Waste Only)?	N/A
TOC ppm (CC Waste Only)?	
Flash Point (F)	>140
pH (S.U.)	3.20
Cyanides? (mg/L)	<30
Sulfides? (ppm)?	<200
Specific Gravity	1.00
Physical Description	Liquid
Stream Consistency	Yes (No)
Oil in Sample?	Yes (No)
Temperature (F)	70
Conductivity	198.3 mS
% Solids	1.65
Turbidity	(Yes) No
Color	Green
TSS (%)	1.0
Radiation Screen (as needed)	Neg.
Lab Signature/Initials	JH.

(See Attached 1.3 NJAC)

Republic Services

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	6440224460	3/22/2023	
I. Decision Request:	☑ Initial ☐ Recertification ☐ Change		
Disposal Facility: 6440 - Detroit Industrial Well			
Generator Name: BFI WASTE SYSTEMS OF NORTH AMERICA, LLC			
Generator Site Address: 8501 STILLHOUSE ROAD			
City: LIBERTY	**County:**	**State:** MO	**Zip:**
Name of Waste: F039- HAZARDOUS WASTE LEACHATE			
Estimated Annual Volume: 60,000 Gallons			

II. Special Waste Department Decision: ◉ Approved ○ Rejected

Management Method(s): ☐ Landfill ☐ Solidification ☐ Bioremediation ☑ Deep Well ☐ Transfer Facility

Problematic Special Waste according to Republic? ○ Yes ◉ No

If yes, which one?

Approved by Special Waste Review Committee? ○ Yes ○ No ◉ Not Applicable

Precautions, Conditions or Limitations on Approval

The site must ensure that all pre-acceptance and verification analytical is performed in accordance with the site's permit requirements prior to acceptance and disposal of the profiled waste.

Special Waste Analyst Signature: _____ **Name (Printed):** KEITH DIAMANTI

Date: 4/7/2022

III. Facility Decision: ● Approved ○ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** JOHN FROST

Date: [redacted]

10·19·22

Republic Industrial and Energy Solutions, LLC
28470 Citrin Dr, Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002

GENERATOR WASTE PROFILE

Profile # 6440224460

GENERATOR INFORMATION

Name: BFI Waste Systems of North America, LLC USEPA ID # MOD000624452

Facility Address: 8501 Stillhouse Road SIC/NAICS Code: State Code:

City: Liberty State: MO Zip Code: 64068

Contact: Brad Zimmerman Title: EM Phone: (6 7 3) 636-1144 Fax: ( )

BILLING INFORMATION ☐ SAME AS ABOVE

Company Name: BFINA

Address: 5605 MOREAU RIVER ACCESS RD

City: Jefferson City State: MO Zip Code: 65101

Attention: Brad Zimmerman Title: EM Phone: (6 7 3) 6361144 Fax: ( )

WASTE INFORMATION

Name of Waste/Common Chemical Name:
F039 - hazardous waste leachate

Process Generating Waste (Please *be specific, incomplete information may delay the approval process):*
~~groundwater collection systems that collect groundwater that has been in contact with hazardous waste leachate~~

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: F039

PHYSICAL CHARACTERISTICS OF WASTE

Color:	Suspended Solids	Layers:	Specific Gravity:	
☑ White/Clear	☑ 0-1 % ☐ 3-5 %	☐ Multi layered	☐ <0.8 ☐ 1.0 — 1.2	
☑ Black/Brown	☐ 1-3 % ☐ > 5%	☐ Bi-Layered	☑ 0.8 —1.0 ☐ 1.3 —1.4	
☐ Other		☑ Single Phase	Exact / Other	

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 - 4.1 **PPM (MUST BE COMPLETED)**

TOTAL COMPOSITION OF WASTE - *MUST BE EQUAL TO* OR *GREATER THAN 100% (LIST EACH CONSTITUENT <>1= 0.1%)*

CONSTITUENT	MAX	MIN		CONSTITUENT	MAX	MIN	
Multi source Leacahte	100	100	%				%
			%				%
			%				%

Metals: Indicate if this waste contains any of the following metals
If Generator knowledge-provide backup ☑ Lab Analysis ☐ Generator Knowledge ☐ TCLP ☑TOTAL

	Not Present	Concentration		Not Present	Concentration
PCB	☑	ppm	Aromatic Amine	☒	
Dioxins 0.000067	☐	ppm	Pesticides 4.1	☐	pesticide, dioxin, and cyanide - see attached table for concentration
Cyanides Reactive	☑	ppm	Rodenticides	☑	
Cyanides Total	☐ 0.25	ppm	Fungicides	☑	
Sulfides Reactive	☑	ppm			
Sulfides Total	☑	ppm			

Arsenic (As)	D004	☑ <5	ppm 0	ppm
Barium (Ba)	D005	☑ <100	see attached table	
Cadmium (Cd)	D006	☑ <1	ppm 0	ppm
Chromium (Cr)	D007	☑ <5	ppm 0	ppm
Lead (Pb)	D008	☑ <5	ppm 0	ppm
Mercury (Hg)	D009	☒ <0.2	ppm	
Selenium (Se)	D010	☒ <1		
Silver (Ag)	D011	☒ <5		

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

1. Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)? ☐ Yes ☑ No
2. Reportable Quantity (RQ) in pounds 1
3. DOT Shipping Name Hazardous waste liquids Hazard Class 9 UN/NA 3082
PG III ERG 171 Hazardous Constituents for "n.o.s." F039
4. Method of Shipment: ☑ Bulk Tanker ☐ Vac truck ☐ Rail Car ☐ Drums ☐Totes
5. Number of Units to Ship Now 5,000 gallons 6. Anticipated Volume / Units per Year: 20,000 to 60,000 gallons or ☐ One Time
6. 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 Republic Industrial & Energy Solutions not to correct any inconsistencies. Any corrections Republic Industrial & Energy Solutions makes will be consistent with the results of the sample characterization and/or regulatory requirements.

Printed Name: Brad Zimmerman Title: Environmental Manager

Generator's Signature: Brad Zimmerman Date: 3/22/2022

GENERATOR'S CHAIN OF CUSTODY RECORD INSTRUCTIONS:

PLEASE collect a representative 1-quartsample of the waste described in the above referenced GENERATORS 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 Republic Industrial & Energy Solutions representative.

1. grab (SAMPLING METHOD) 2. Tanks 3, 5, 7 and NAPL (COLLECTION POINT)

3. Rick Nuessen, SPM, Landmarc Environmental
SAMPLE COLLECTOR'S NAME, TITLE, EMPLOYER

4. 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.*

Relinquished by: (Signature)	*Date*	*Time*	Received by: (Signature)	Date	Time
	2-8-2022				

Samples were collected on 8 Feb and sent with a draft of this form.
The draft form has the samplers signature.

F039 Analysis

01-Dec-2022

Rick Sauve
Republic Industrial and Energy Solutions, LLC
28470 Cintrin Dr.
Romulus, MI 48174

Re: **(REIS) F039 Leachate analysis 11.1.2022** Work Order: **22110213**

Dear Rick,

ALS Environmental received 1 sample on 01-Nov-2022 09:00 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 46.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Les Arnold

Electronically approved by: Les Arnold

Les Arnold
General Manager

Report of Laboratory Analysis

Certificate No: FL E871106

ALS Group, USA

Date: 01-Dec-22

Client: Republic Industrial and Energy Solutions, LLC
Project: (REIS) F039 Leachate analysis 11.1.2022
Work Order: **22110213**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
22110213-01	October 2022 F039 Analytical	Liquid		11/1/2022 10:00	11/1/2022 21:00	☐

ALS Group, USA

Date: 01-Dec-22

Client:	Republic Industrial and Energy Solutions, LLC
Project:	(REIS) F039 Leachate analysis 11.1.2022
Work Order:	22110213

Case Narrative

The attached "Sample Receipt Checklist" documents the date of receipt, status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. A copy of the laboratory's scope of accreditation is available upon request.

Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting.

Any flags on MS/MSD samples not addressed in this narrative are unrelated to samples in this report.

With the following exceptions, all sample analyses achieved analytical criteria.

Dioxin/Furan analysis was performed at ALS Houston.
Subcontracted analytical data has been appended to this report in its entirety.

ALS Group, USA

Date: *01-Dec-2022*

Client: Republic Industrial and Energy Solutions, LLC
Project: (REIS) F039 Leachate analysis 11.1.2022
Work Order: 22110213
Sample ID: October 2022 F039 Analytical
Lab ID: 22110213-01
Collection Date: 11/1/2022 10:00 AM
Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PESTICIDES			**SW8081B**		Prep: SW3511 11/8/22 17:18	Analyst: **MMO**
Aldrin	ND		0.10	µg/L	1	11/9/2022 10:14 PM
Surr: Decachlorobiphenyl	*83.5*		*42-148*	*%REC*	1	11/9/2022 10:14 PM
Surr: Tetrachloro-m-xylene	*78.5*		*57-141*	*%REC*	1	11/9/2022 10:14 PM
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3510 11/8/22 14:56	Analyst: **EEW**
N-Nitrosodimethylamine	ND		100	µg/L	1	11/9/2022 07:59 AM
Surr: 2,4,6-Tribromophenol	*86.9*		*47-103*	*%REC*	1	11/9/2022 07:59 AM
Surr: 2-Fluorobiphenyl	*65.7*		*41-96*	*%REC*	1	11/9/2022 07:59 AM
Surr: 2-Fluorophenol	*45.5*		*28-66*	*%REC*	1	11/9/2022 07:59 AM
Surr: 4-Terphenyl-d14	*91.3*		*49-107*	*%REC*	1	11/9/2022 07:59 AM
Surr: Nitrobenzene-d5	*7.20*	S	*41-95*	*%REC*	1	11/9/2022 07:59 AM
Surr: Phenol-d6	*0*	S	*18-44*	*%REC*	1	11/9/2022 07:59 AM
SUBCONTRACTED ANALYSES			**SUBCONTRACT**			Analyst: **ALS**
Subcontracted Analyses	**See attached**			**as noted**	1	12/1/2022

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client:	Republic Industrial and Energy Solutions, LLC
Project:	(REIS) F039 Leachate analysis 11.1.2022
WorkOrder:	**22110213**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Analyte accreditation is not offered
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
µg/L	Micrograms per Liter
as noted	

ALS Group, USA

Date: 01-Dec-22

Client: Republic Industrial and Energy Solutions, LLC

Work Order: 22110213

Project: (REIS) F039 Leachate analysis 11.1.2022

QC BATCH REPORT

Batch ID: **206250** Instrument ID **GC12** Method: **SW8081B**

MBLK Sample ID: **PBLKW1-206250-206250** Units: **µg/L** Analysis Date: **11/9/2022 06:04 PM**

Client ID: Run ID: **GC12_221109A** SeqNo: **8995397** Prep Date: **11/8/2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aldrin	ND	0.010								
Surr: Decachlorobiphenyl	*0.295*	0	*0.25*	0	*118*	*42-148*	0			
Surr: Tetrachloro-m-xylene	*0.2446*	0	*0.25*	0	*97.8*	*57-141*	0			

LCS Sample ID: **PLCSW1-206250-206250** Units: **µg/L** Analysis Date: **11/9/2022 06:32 PM**

Client ID: Run ID: **GC12_221109A** SeqNo: **8995399** Prep Date: **11/8/2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aldrin	0.2154	0.010	0.2	0	108	51-164	0			
Surr: Decachlorobiphenyl	*0.311*	0	*0.25*	0	*124*	*42-148*	0			
Surr: Tetrachloro-m-xylene	*0.2742*	0	*0.25*	0	*110*	*57-141*	0			

LCSD Sample ID: **PLCSDW1-206250-206250** Units: **µg/L** Analysis Date: **11/9/2022 06:46 PM**

Client ID: Run ID: **GC12_221109A** SeqNo: **8995400** Prep Date: **11/8/2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aldrin	0.2152	0.010	0.2	0	108	51-164	0.2154	0.0929	20	
Surr: Decachlorobiphenyl	*0.3068*	0	*0.25*	0	*123*	*42-148*	0.311	*1.36*	*20*	
Surr: Tetrachloro-m-xylene	*0.2704*	0	*0.25*	0	*108*	*57-141*	0.2742	*1.4*	*20*	

The following samples were analyzed in this batch: 22110213-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Republic Industrial and Energy Solutions, LLC
Work Order: 22110213
Project: (REIS) F039 Leachate analysis 11.1.2022

QC BATCH REPORT

Batch ID: **206216** Instrument ID **SVMS10** Method: **SW846 8270D**

MBLK Sample ID: **SBLKW1-206216-206216** Units: **µg/L** Analysis Date: **11/8/2022 07:27 PM**
Client ID: Run ID: **SVMS10_221108A** SeqNo: **8989083** Prep Date: **11/8/2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
N-Nitrosodimethylamine	ND	5.0								
Surr: 2,4,6-Tribromophenol	*35.4*	0	*50*	0	*70.8*	*47-103*	0			
Surr: 2-Fluorobiphenyl	*34.42*	0	*50*	0	*68.8*	*41-96*	0			
Surr: 2-Fluorophenol	*22.67*	0	*50*	0	*45.3*	*28-66*	0			
Surr: 4-Terphenyl-d14	*47.39*	0	*50*	0	*94.8*	*49-107*	0			
Surr: Nitrobenzene-d5	*34.92*	0	*50*	0	*69.8*	*41-95*	0			
Surr: Phenol-d6	*13.76*	0	*50*	0	*27.5*	*18-44*	0			

LCS Sample ID: **SLCSW1-206216-206216** Units: **µg/L** Analysis Date: **11/8/2022 07:54 PM**
Client ID: Run ID: **SVMS10_221108A** SeqNo: **8989084** Prep Date: **11/8/2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
N-Nitrosodimethylamine	10.72	5.0	20	0	53.6	26-74	0			
Surr: 2,4,6-Tribromophenol	*42.57*	0	*50*	0	*85.1*	*47-103*	0			
Surr: 2-Fluorobiphenyl	*39.25*	0	*50*	0	*78.5*	*41-96*	0			
Surr: 2-Fluorophenol	*27.51*	0	*50*	0	*55*	*28-66*	0			
Surr: 4-Terphenyl-d14	*48.99*	0	*50*	0	*98*	*49-107*	0			
Surr: Nitrobenzene-d5	*38.14*	0	*50*	0	*76.3*	*41-95*	0			
Surr: Phenol-d6	*18*	0	*50*	0	*36*	*18-44*	0			

MS Sample ID: **22110395-01A MS** Units: **µg/L** Analysis Date: **11/8/2022 09:43 PM**
Client ID: Run ID: **SVMS10_221108A** SeqNo: **8989085** Prep Date: **11/8/2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
N-Nitrosodimethylamine	208	100	400	0	52	26-74	0			
Surr: 2,4,6-Tribromophenol	*848.6*	0	*1000*	0	*84.9*	*47-103*	0			
Surr: 2-Fluorobiphenyl	*757.4*	0	*1000*	0	*75.7*	*41-96*	0			
Surr: 2-Fluorophenol	*512*	0	*1000*	0	*51.2*	*28-66*	0			
Surr: 4-Terphenyl-d14	*966.2*	0	*1000*	0	*96.6*	*49-107*	0			
Surr: Nitrobenzene-d5	*719*	0	*1000*	0	*71.9*	*41-95*	0			
Surr: Phenol-d6	*326.8*	0	*1000*	0	*32.7*	*18-44*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Republic Industrial and Energy Solutions, LLC
Work Order: 22110213
Project: (REIS) F039 Leachate analysis 11.1.2022

QC BATCH REPORT

Batch ID: **206216** Instrument ID **SVMS10** Method: **SW846 8270D**

MSD Sample ID: **22110395-01A MSD** Units: **µg/L** Analysis Date: **11/8/2022 10:10 PM**
Client ID: Run ID: **SVMS10_221108A** SeqNo: **8989086** Prep Date: **11/8/2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
N-Nitrosodimethylamine	194.2	100	400	0	48.6	26-74	208	6.86	30	
Surr: 2,4,6-Tribromophenol	*833.2*	0	*1000*	0	*83.3*	*47-103*	848.6	*1.83*	*40*	
Surr: 2-Fluorobiphenyl	*761.2*	0	*1000*	0	*76.1*	*41-96*	757.4	*0.5*	*40*	
Surr: 2-Fluorophenol	*494.4*	0	*1000*	0	*49.4*	*28-66*	512	*3.5*	*40*	
Surr: 4-Terphenyl-d14	*960.8*	0	*1000*	0	*96.1*	*49-107*	966.2	*0.56*	*40*	
Surr: Nitrobenzene-d5	*708.4*	0	*1000*	0	*70.8*	*41-95*	719	*1.49*	*40*	
Surr: Phenol-d6	*320*	0	*1000*	0	*32*	*18-44*	326.8	*2.1*	*40*	

The following samples were analyzed in this batch: 22110213-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Chain of Custody Form

Page 1 of 1

ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

ALS Project Manager:		ALS Work Order #:	

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	RIES110122F039	A	Aldrin
Work Order		Project Number		B	Hexachlorodibenzo-p-dioxins
Company Name	Republic Industrial and Energy	Bill To Company	Republic Industrial and Energy	C	Nitrosodimethlyamine
Send Report To	Rick Sauve	Invoice Attn.		D	1,2,3,4,6,7,8,9-Octachlor-dibenzofuran
Address	28470 Cintrin Dr.	Address	28470 Cintrin Dr.	E	1,2,3,4,6,7,8,9-Octachloro-dibenzo-p-dioxin
				F	Tetrachlorodibenzo-p-dioxins
City/State/Zip	Romulus, MI 48174	City/State/Zip	Romulus, MI 48174	G	
Phone	734-784-2708	Phone		H	
Fax		Fax		I	
e-Mail Address	RSauve@republicservices.com			J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	October 2022 F039	11/1/2022	10:00 am	L		3	X	X	X	X	X	X					

22110213
REPUBLICINDUSTRIAL - ROMULUS: Republic Industrial and Energy Solutions, LLC
Leacnate analysis 11.1.2022

Sampler(s): Please Print & Sign	Shipment Method:	Turnaround Time: (Business Days)	Results Due Date:
Rick Sauve Rick Sauve		☐ 10 BD ☑ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD ☐ Other	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
Rick Sauve Rick Sauve	11/1/2022	2:21pm	Nat D	11/01/22	2:21pm	11/1/22 2100
Relinquished by: Nat D	Date: 11/01/22	Time: 5:00pm	Received by (Laboratory): QS	Date: 11/01/22	Time: 5:00pm	
Logged by (Laboratory): KL	Date: 11/2/22	Time: 1445	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)	
		☑ Level II: Standard QC	☐ Level III: Raw Data
LB3	3.1°C	☐ TRRP LRC	☐ TRRP Level IV
PH32		☐ Level IV: SW846 Methods/CLP like	
		☐ Other:	

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

Hazardous Substances Limitations and Reporting

RCRA CODE(S)	NAME	LIMIT (mg/ml)	MINIMUM[5] MONITORING FREQUENCY	MINIMUM REPORTING FREQUENCY
F039, P004	Aldrin	200	monthly/per load	monthly
U021	Benzidine	200	monthly/per load	monthly
P016,K017	sym-Dichloromethyl ether	160	monthly/per load	monthly
F020,F021, F022,F026, F027,F028, F032,F039, F032,K043, K099	Hexachlorodibenzo-p-dioxins	6	monthly/per load	monthly
K174,K178	Hexachlorodibenzo-p-dioxins, all	6	monthly/per load	monthly
F039,P082	Nitrosodimethylamine	200	monthly/per load	monthly
F039,K174, K178	1,2,3,4,6,7,8,9- Octachloro-dibenzofuran	6	monthly/per load	monthly
F039,K174, K178	1,2,3,4,6,7,8,9- Octachloro-dibenzo-p-dioxin	6	monthly/per load	monthly
F020,F021, F022,F026, F027,F028, F032,F039, F032,K043	Tetrachlorodibenzo-p-dioxins (TCDD)	30	monthly/per load	monthly
K174,K178	Tetrachlorodibenzo-p-dioxins (TCDD)	30	monthly/per load	monthly
P110	Tetraethyl lead	100	monthly/per load	monthly

[5]The monthly chemical analyses for the specific chemicals and waste codes required by this table apply to post-treatment "source" material for injection. A "per load" fingerprint analysis is required for each incoming waste shipment received and for each batch of post-treatment source material as specified in Part III(E) to confirm the general characteristics of the materials. The fingerprint analysis of the general characteristics of the source is not specific to these individual waste codes.

ALS Group, USA
Holland, Michigan

Sample Receipt Checklist

Client Name: **REPULICINDUSTRIAL - ROMULU** Date/Time Received: **01-Nov-22 21:00**

Work Order: **22110213** Received by: **KRW**

Checklist completed by Keith Wierenga (eSignature) 02-Nov-22 (Date) Reviewed by: (eSignature) (Date)

Matrices: Liquid
Carrier name: Courier

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.1/4.1 C	IR3	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	11/2/2022 2:47:10 PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

December 01, 2022 Service Request No:E2201085

Les Arnold
ALS - Holland
3352 128th Avenue
Holland, MI 49424

Laboratory Results for: 22110213

Dear Les,

Enclosed are the results of the sample(s) submitted to our laboratory November 04, 2022
For your reference, these analyses have been assigned our service request number **E2201085.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2188. You may also contact me via email at James.Guin@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

ALS Environmental

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental – Holland (MI)	**Service Request No.:**	E2201085
Project:	22110213	**Date Received:**	11/04/22
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One sample was received for analysis at ALS Environmental in Houston on 11/04/22.

The sample was received in good condition and is consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2200529: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch.

The batch precision (MS/DMS) measurements were determined on an unrelated sample in the extraction batch. The MS/DMS results are not included in this report.

B flags – Method Blanks

The Method Blank EQ2200529-01 contained low levels of target compounds below the Method Reporting Limit (MRL). The associated compounds in the samples are flagged with 'B' flags where the sample result is less than ten times the level detected in the method blank.

2378-TCDF

Samples analyzed on the DB-5MSUI column were analyzed under conditions where sufficient separation between 2,3,7,8-TCDF and its closest eluter was achieved. Confirmation of this result was not required.

Y flags – Cleanup Standard

The recoveries for the cleanup standard, 37Cl-2,3,7,8-TCDD are below control limits. The sample results are not affected since this labeled standard is provided as a means of demonstrating that both the sample extraction and subsequent cleanup steps performed as expected and is not used in quantitation of target analytes.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The TEQ Summary results for each sample have been calculated by ALS/Houston to include:

- WHO-2005 TEFs, The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds (M. Van den Berg et al., Toxicological Sciences 93(2):223-241, 2006)
- Non-detected compounds are not included in the 'Total'

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - Holland (MI) **Service Request:**E2201085
Project: 22110213

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2201085-001	October 2022 F039 Analysis	11/1/2022	1000

Service Request Summary

Folder #: **E2201085**
Client Name: ALS Environmental - Holland (MI)
Project Name: 22110213
Project Number:

Report To: Les Arnold
ALS - Holland
3352 128th Avenue
Holland, MI 49424
USA
Phone Number: 616-738-7307
Cell Number: 616-836-2964
Fax Number: 616-399-6185
E-mail: les.arnold@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 11/04/22
Internal Due Date: 12/16/2022
QAP: LAB QAP
Qualifier Set: HRMS Qualifier Set
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: 22110213
EDD: BASIC_WQC_CASNo

1 500 mL-Glass Bottle NM AMBER Teflon Liner Unpreserved
Location: EHRMS-WIC 6B
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON Dioxins Furans/1613B
E2201085-001	October 2022 F039 Analysis	Water	11/01/22 1000	II

Service Request Summary

Folder #: **E2201085**
Client Name: ALS Environmental - Holland (MI)
Project Name: 22110213
Project Number:

Report To: Les Arnold
ALS - Holland
3352 128th Avenue
Holland, MI 49424
USA
Phone Number: 616-738-7307
Cell Number: 616-836-2964
Fax Number: 616-399-6185
E-mail: les.arnold@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 11/04/22
Internal Due Date: 12/16/2022
QAP: LAB QAP
Qualifier Set: HRMS Qualifier Set
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: 22110213
EDD: BASIC_WQC_CASNo

1 500 mL-Glass Bottle NM AMBER Teflon Liner Unpreserved
Location: EHRMS-WIC 6B
Pressure Gas:

Data Qualifiers

HRMS Qualifier Set

B Indicates the associated analyte was found in the method blank at >1/10th the reported value.

E Estimated value. The reported concentration is above the calibration range of the instrument.

H Sample extracted and/or analyzed out of suggested holding time.

J Estimated value. The reported concentration is below the MRL.

K The ion abundance ratio between the primary and secondary ions were outside of theoretical acceptance limits.The concentration of this analyte should be considered as an estimate.

P Chlorodiphenyl ether interference was present at the retention time of the target analyte. Reported result should be considered an estimate.

Q Monitored lock-mass indicates matrix-interference. Reported result is estimated.

S Signal saturated detector. Result reported from dilution.

U Compound was analyzed for, but was not detected (ND).

X See Case Narrative.

Y Isotopically Labeled Standard recovery outside of acceptance limits. In all cases, the signal-to-nois ratios are greater than 10:1, making the recoveries acceptable.

i The MDL/MRL have been elevated due to a matrix interference.

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793	5/27/2023
Arkansas Department of Environmental Quality	22-041-0	3/27/2023
California Department of Health Services	2919-2023	4/30/2023
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Hawaii Department of Health	2022	4/30/2023
Illinois Environmental Protection Agency	2000322022-9	5/9/2023
Kansas Department of Health and Environment	E-10352 2022-2023	7/31/2023
Louisiana Department of Environmental Quality	03087-2022	6/30/2023
Louisiana Department of Health and Hospitals	LA028	12/31/2022
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	6/30/2023
Michigan Depratment of Environmental Quality	9971-2022	4/30/2023
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
New Hampshire Environmental Laboratory Accreditation Program	209422	4/24/2023
New Jersey Department of Environmental Protection	TX008-2023	6/30/2023
New York Department of Health	11707	3/31/2023
Oklahoma Department of Environmental Quality	2022-141	8/31/2023
Oregon Environmental Laboratory Accreditation Program	TX200002	5/15/2023
Pennsylvania Department of Environmental Protection	68-03441-016	6/30/2023
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	04016-2022	4/30/2023
Texas Commision on Environmental Quality	T104704231-22-29	4/30/2023
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
Washington Department of Ecology	C819-22	11/14/2023

ALS ENVIRONMENTAL – Houston
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID: E2201085 | DB-5MSUI | SPB-Octyl

First Level - Data Processing - to be filled by person generating the forms

Date:	Analyst:	Samples:
11/30/22	LKL	001

Second Level - Data Review – to be filled by person doing peer review

Date:	Analyst:	Samples:
12/01/22	SL	001

ALS Environmental

Chain of Custody

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Subcontractor:
ALS Environmental
10450 Stancliff Rd
Suite 210
Houston, TX 77099

TEL: (281) 530-5656
FAX: (281) 530-5887
Acct #:

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Date: 02-Nov-22
COC ID: 21377
Due Date: 22-Nov-22

Salesperson: ALSHN Account

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order	HN-22110213	Project Name	22110213	A	Subcontracted Analyses (SUBCONTRACT)
Work Order		Project Number		B	D/F - client List
Company Name	ALS Group USA, Corp	Bill To Company	ALS Group USA, Corp	C	
Send Report To	Les Arnold	Inv Attn	Accounts Payable	D	
Address	3352 128th Ave	Address	3352 128th Ave	E	
				F	
City/State/Zip	Holland, Michigan 49424	City/State/Zip	Holland, Michigan 49424	G	
Phone	(616) 399-6070	Phone	(616) 399-6070	H	
Fax	(616) 399-6185	Fax	(616) 399-6185	I	
eMail Address	les.arnold@alsglobal.com	eMail CC		J	

ALS Sample ID	Client Sample ID	Matrix	Collection Date 24hr	Bottle	A	B	C	D	E	F	G	H	I	J
22110213-01B	October 2022 F039 Analytical	Liquid	1/Nov/2022 10:00	(1) 250AMGNEAT	X									

Comments:

Les Arnold 2 Nov 2022

Relinquished by:	Date/Time	Received by:	Date/Time	Cooler IDs	Report/QC Level
					Std
Relinquished by:	Date/Time	Received by:	Date/Time		

Cooler Receipt Form

ALS Environmental

Project Chemist JG

Client/Project ALS Thermometer ID IR21

Date/Time Received: 11-4-22 Initials: CG Date/Time Logged in: 11-4-22 Initials CG

1. Method of delivery: ○ US Mail ⊗ Fed Ex ○ UPS ○ DHL ○ Courier ○ Client

2. Samples received in: ⊗ Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ○ Yes ⊗ No
   Were they intact? ○ Yes ○ No ⊗ N/A
   Were they signed and dated? ○ Yes ○ No ✓ N/A
   If yes, how many and where?

4. Packing Material: ○ Inserts ⊗ Baggies ⊗ Bubble Wrap ○ Gel Packs ⊗ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
5551 4188 8039		11-4-22	0900	CG	2.7	☒
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ⊗ Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ⊗ Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ⊗ Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ⊗ Yes ○ No
10. Did sample labels and tags agree with custody documents? ✓ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 713 266 1599
F: +1 713 266 1599
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental - Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6°C.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10°C.
- ✓ Air samples are shipped and stored cold, at 0 to 6°C
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

ALS Environmental

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 410141
Team: Semivoa GCMS/NBIDJONGO

Prep WorkFlow: OrgExtAq(365)
Prep Method: Method Sep Funnel/Jar

Status: Prepped
Prep Date/Time: 11/16/22 13:48

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2201052-001	TK 109-115	.01	1613B/Dioxins Furans			Water	1056mL	Dark Green
2	E2201054-001	CTBD	.01	1613B/Dioxins Furans			Water	1093mL	yellow Clear
3	E2201066-001	Field Blank	.01	1613B/Dioxins Furans			Water	1036mL	Yellow
4	E2201066-002	MW-04	.01	1613B/Dioxins Furans			Water	1064mL	Clear
5	E2201066-003	MW-06	.01	1613B/Dioxins Furans			Water	1051mL	Clear
6	E2201066-004	MW-07	.01	1613B/Dioxins Furans			Water	1049mL	Yellow
7	E2201066-005	Duplicate	.01	1613B/Dioxins Furans			Water	1060mL	Yellow
8	E2201066-006	MW-08	.01	1613B/Dioxins Furans			Water	1050mL	Clear yellow
9	E2201066-007	Equipment Blank	.01	1613B/Dioxins Furans			Water	1056mL	Clear
10	E2201083-001	3271467-003	.01	1613B/Dioxins Furans			Drinking Water	1068mL	Yellow
11	E2201084-003	GP-BE-11-02-22	.01	1613B/Dioxins Furans			Water	2000mL	orange cloudy
12	E2201085-001	October 2022 F039 Analysis	.01	1613B/Dioxins Furans			Water	125mL	Dark Green
13	E2201086-001	LSW11-22-261361	.01	1613B/Dioxins Furans			Water	972mL	clear
14	E2201087-001	OF01 Composite	.01	1613B/Dioxins Furans			Water	1009mL	orange cloudy
15	E2201089-001	VT-680	.01	1613B/Dioxin Furans Unadjusted			Water	990.00	brown cloudy
16	E2201089-002	EDC Process	.01	1613B/Dioxin Furans Unadjusted			Water	1035.0	clear
17	E2201089-003	T2T-07	.01	1613B/Dioxin Furans Unadjusted			Water	1019.0	yellow clear
18	E2201089-004	Biological	.01	1613B/Dioxin Furans Unadjusted			Water	993.00	yellow clear
19	E2201089-005	Physical	.01	1613B/Dioxin Furans Unadjusted			Water	1012.0	clear yellow
20	EQ2200529-01	MB		1613B/Dioxins Furans			Liquid	1000.0	
21	EQ2200529-02	LCS		1613B/Dioxins Furans			Liquid	1000.0	
22	EQ2200529-03	DLCS		1613B/Dioxins Furans			Liquid	1000.0	

Spiking Solutions

Name: 1613B Labeled Working Standard Inventory ID 226027 Logbook Ref: NB 11/11/2022 226027 2-4ng/mL Expires On: 04/10/2023

E2201052-001	1,000.00µL	E2201054-001	1,000.00µL	E2201066-001	1,000.00µL	E2201066-002	1,000.00µL	E2201066-003	1,000.00µL	E2201066-004	1,000.00µL
E2201066-005	1,000.00µL	E2201066-006	1,000.00µL	E2201066-007	1,000.00µL	E2201083-001	1,000.00µL	E2201084-003	1,000.00µL	E2201085-001	1,000.00µL
E2201086-001	1,000.00µL	E2201087-001	1,000.00µL	E2201089-001	1,000.00µL	E2201089-002	1,000.00µL	E2201089-003	1,000.00µL	E2201089-004	1,000.00µL
E2201089-005	1,000.00µL	EQ2200529-01	1,000.00µL	EQ2200529-01	1,000.00µL	EQ2200529-02	1,000.00µL	EQ2200529-02	1,000.00µL	EQ2200529-03	1,000.00µL
EQ2200529-03	1,000.00µL										

Name: 1613B Matrix Working Standard Inventory ID 226039 Logbook Ref: NB 11/14/2022 226039 Expires On: 05/13/2023

EQ2200529-02	100.00µL	EQ2200529-02	100.00µL	EQ2200529-03	100.00µL	EQ2200529-03	100.00µL

Preparation Information Benchsheet

Prep Run#: 410141
Team: Semivoa GCMS/NBIDJONGO

Prep WorkFlow: OrgExtAq(365)
Prep Method: Method Sep Funnel/Jar

Status: Prepped
Prep Date/Time: 11/16/22 13:48

Name:	8290/1613B Cleanup Working Standard	Inventory ID	226078	Logbook Ref:	bf 11/15/222, 226078	Expires On:	02/28/2023

E2201052-001	100.00µL	E2201054-001	100.00µL	E2201066-001	100.00µL	E2201066-002	100.00µL	E2201066-003	100.00µL	E2201066-004	100.00µL
E2201066-005	100.00µL	E2201066-006	100.00µL	E2201066-007	100.00µL	E2201083-001	100.00µL	E2201084-003	100.00µL	E2201085-001	100.00µL
E2201086-001	100.00µL	E2201087-001	100.00µL	E2201089-001	100.00µL	E2201089-002	100.00µL	E2201089-003	100.00µL	E2201089-004	100.00µL
E2201089-005	100.00µL	EQ2200529-01	100.00µL	EQ2200529-01	100.00µL	EQ2200529-02	100.00µL	EQ2200529-02	100.00µL	EQ2200529-03	100.00µL
EQ2200529-03	100.00µL										

Preparation Materials

Carbon, High Purity	bf 11/09/22 (226103)	Ethyl Acetate 99.9% Minimum EtOAc	Ethyl Acetate 6/30/22 (223782)	Glass Wool	TW 5/20/22 (225628)
Hexanes 95%	NB 11/03/2022 Hexane #10299537 (225859)	Chlorine Test Strips	NB 11/22/22 Chlorine (226261)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	tw 10/04/22 (225325)
Silica Gel	bf 11/08/22 (226238)	sulfuric acid	Sulfuric Acid (226264)	Toluene 99.9% Minimum	Bf 11/10/2022 (225991)
ColorpHast pH-Indicator Strips	pH-Indicator strips (217936)	Sodium Sulfate Anhydrous Reagent Grade Na2SO4	SN 5/18/22 (223143)	Tridecane (n-Tridecane)	tw 08/15/22 (224552)

Preparation Steps

Step:	Extraction	Step:	Acid Clean	Step:	Silica Gel Clean	Step:	Final Volume
Started:	11/16/22 13:48	Started:	11/16/22 13:48	Started:	11/17/22 09:00	Started:	11/23/22 09:00
Finished:	11/17/22 17:40	Finished:	11/17/22 17:40	Finished:	11/17/22 16:00	Finished:	11/23/22 16:00
By:	NBIDJONGO	By:	NBIDJONGO	By:	NBIDJONGO	By:	NBIDJONGO
Comments		Comments		Comments		Comments	

Comments: _____

Reviewed By: TW Date: 11/16/22

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

ALS Environmental

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
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Analytical Report

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	11/01/22 10:00
Sample Matrix:	Water	**Date Received:**	11/04/22 09:00
Sample Name:	October 2022 F039 Analysis	**Units:**	pg/L
Lab Code:	E2201085-001	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Date Analyzed:**	11/30/22 02:14
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	11/16/22
Sample Amount:	125mL	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P633357	**Blank File Name:**	P633355
ICAL Date:	03/15/22	**Cal Ver. File Name:**	P633352

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	21.5	**JK**	6.99	40.0	0.26	1.001	1
1,2,3,7,8-PeCDD	17.6	**J**	2.59	200	1.46	1.000	1
1,2,3,4,7,8-HxCDD	28.7	**J**	3.52	200	1.28	1.000	1
1,2,3,6,7,8-HxCDD	13.1	**JK**	3.20	200	0.86	1.000	1
1,2,3,7,8,9-HxCDD	10.4	**BJ**	3.23	200	1.22	1.007	1
1,2,3,4,6,7,8-HpCDD	125	**J**	9.04	200	0.89	1.000	1
OCDD	1070		6.63	400	0.84	1.000	1
2,3,7,8-TCDF	21.5	**J**	6.11	40.0	0.89	1.000	1
1,2,3,7,8-PeCDF	141	**J**	4.56	200	1.44	1.000	1
2,3,4,7,8-PeCDF	135	**J**	4.85	200	1.70	1.001	1
1,2,3,4,7,8-HxCDF	1110		9.04	200	1.19	1.000	1
1,2,3,6,7,8-HxCDF	378		10.1	200	1.20	1.000	1
1,2,3,7,8,9-HxCDF	37.8	**JK**	11.8	200	1.02	1.001	1
2,3,4,6,7,8-HxCDF	92.3	**J**	8.51	200	1.22	1.000	1
1,2,3,4,6,7,8-HpCDF	6340		11.6	200	1.00	1.000	1
1,2,3,4,7,8,9-HpCDF	130	**J**	12.9	200	0.92	1.000	1
OCDF	6700		6.26	400	0.85	1.005	1

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	11/01/22 10:00
Sample Matrix:	Water	**Date Received:**	11/04/22 09:00
Sample Name:	October 2022 F039 Analysis	**Units:**	pg/L
Lab Code:	E2201085-001	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Date Analyzed:**	11/30/22 02:14
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	11/16/22
Sample Amount:	125mL	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P633357	**Blank File Name:**	P633355
ICAL Date:	03/15/22	**Cal Ver. File Name:**	P633352

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	36.1**J**		6.99	40.0	0.83		1
Total Penta-Dioxins	27.0**J**		2.59	200	1.37		1
Total Hexa-Dioxins	72.2**J**		3.32	200	1.41		1
Total Hepta-Dioxins	245		9.04	200	1.01		1
Total Tetra-Furans	743		6.11	40.0	0.69		1
Total Penta-Furans	1460		4.70	200	1.49		1
Total Hexa-Furans	2920		9.73	200	1.10		1
Total Hepta-Furans	6900		12.2	200	1.00		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	11/01/22 10:00
Sample Matrix:	Water	**Date Received:**	11/04/22 09:00
Sample Name:	October 2022 F039 Analysis	**Units:**	Percent
Lab Code:	E2201085-001	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Date Analyzed:**	11/30/22 02:14
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	11/16/22
Sample Amount:	125mL	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P633357	**Blank File Name:**	P633355
ICAL Date:	03/15/22	**Cal Ver. File Name:**	P633352

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1604.494	80		25-164	0.79	1.020
13C-1,2,3,7,8-PeCDD	2000	1487.650	74		25-181	1.58	1.176
13C-1,2,3,4,7,8-HxCDD	2000	1381.318	69		32-141	1.26	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1507.568	75		28-130	1.24	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1358.714	68		23-140	1.03	1.066
13C-OCDD	4000	2294.003	57		17-157	0.89	1.142
13C-2,3,7,8-TCDF	2000	1400.882	70		24-169	0.77	0.994
13C-1,2,3,7,8-PeCDF	2000	1449.354	72		24-185	1.55	1.136
13C-2,3,4,7,8-PeCDF	2000	1346.212	67		21-178	1.56	1.167
13C-1,2,3,4,7,8-HxCDF	2000	1303.693	65		26-152	0.51	0.972
13C-1,2,3,6,7,8-HxCDF	2000	1133.593	57		26-123	0.51	0.975
13C-1,2,3,7,8,9-HxCDF	2000	1220.018	61		29-147	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1446.546	72		28-136	0.51	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1024.480	51		28-143	0.43	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	1220.102	61		26-138	0.44	1.079
37Cl-2,3,7,8-TCDD	800	4905.450	613	Y	35-197	NA	1.021

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	11/01/22 10:00
Sample Matrix:	Water	**Date Received:**	11/04/22 09:00
Sample Name:	October 2022 F039 Analysis	**Units:**	pg/L
Lab Code:	E2201085-001	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Sep Funnel/Jar

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	**21.5**	6.99	40.0	1	1	21.5
1,2,3,7,8-PeCDD	**17.6**	2.59	200	1	1	17.6
1,2,3,4,7,8-HxCDD	**28.7**	3.52	200	1	0.1	2.87
1,2,3,6,7,8-HxCDD	**13.1**	3.20	200	1	0.1	1.31
1,2,3,7,8,9-HxCDD	**10.4**	3.23	200	1	0.1	1.04
1,2,3,4,6,7,8-HpCDD	**125**	9.04	200	1	0.01	1.25
OCDD	**1070**	6.63	400	1	0.0003	0.321
2,3,7,8-TCDF	**21.5**	6.11	40.0	1	0.1	2.15
1,2,3,7,8-PeCDF	**141**	4.56	200	1	0.03	4.23
2,3,4,7,8-PeCDF	**135**	4.85	200	1	0.3	40.5
1,2,3,4,7,8-HxCDF	**1110**	9.04	200	1	0.1	111
1,2,3,6,7,8-HxCDF	**378**	10.1	200	1	0.1	37.8
1,2,3,7,8,9-HxCDF	**37.8**	11.8	200	1	0.1	3.78
2,3,4,6,7,8-HxCDF	**92.3**	8.51	200	1	0.1	9.23
1,2,3,4,6,7,8-HpCDF	**6340**	11.6	200	1	0.01	63.4
1,2,3,4,7,8,9-HpCDF	**130**	12.9	200	1	0.01	1.30
OCDF	**6700**	6.26	400	1	0.0003	2.01
		Total TEQ				321

2005 WHO TEFs, ND = 0

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	pg/L
Lab Code:	EQ2200529-01	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Date Analyzed:**	11/30/22 00:34
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	11/16/22
Sample Amount:	1000.0mL	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P633355	**Blank File Name:**	P633355
ICAL Date:	03/15/22	**Cal Ver. File Name:**	P633352

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.808	5.00			1
1,2,3,7,8-PeCDD	0.862**JK**		0.681	25.0	0.98	1.000	1
1,2,3,4,7,8-HxCDD	1.50**JK**		0.405	25.0	2.04	1.001	1
1,2,3,6,7,8-HxCDD	0.888**JK**		0.357	25.0	0.92	1.000	1
1,2,3,7,8,9-HxCDD	1.06**J**		0.365	25.0	1.10	1.006	1
1,2,3,4,6,7,8-HpCDD	2.43**J**		0.444	25.0	0.89	1.000	1
OCDD	14.6**JK**		0.896	50.0	1.14	1.000	1
2,3,7,8-TCDF	ND	U	0.474	5.00			1
1,2,3,7,8-PeCDF	ND	U	0.401	25.0			1
2,3,4,7,8-PeCDF	0.851**J**		0.405	25.0	1.45	1.001	1
1,2,3,4,7,8-HxCDF	0.634**J**		0.256	25.0	1.11	1.000	1
1,2,3,6,7,8-HxCDF	0.843**JK**		0.280	25.0	0.95	1.000	1
1,2,3,7,8,9-HxCDF	1.81**JK**		0.321	25.0	1.47	1.000	1
2,3,4,6,7,8-HxCDF	0.807**JK**		0.224	25.0	0.88	1.000	1
1,2,3,4,6,7,8-HpCDF	ND	U	2.05	25.0			1
1,2,3,4,7,8,9-HpCDF	ND	U	1.56	25.0			1
OCDF	2.93**JK**		1.58	50.0	1.24	1.005	1

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	pg/L
Lab Code:	EQ2200529-01	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Date Analyzed:**	11/30/22 00:34
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	11/16/22
Sample Amount:	1000.0mL	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P633355	**Blank File Name:**	P633355
ICAL Date:	03/15/22	**Cal Ver. File Name:**	P633352

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.808	5.00			1
Total Penta-Dioxins	ND	U	0.681	25.0			1
Total Hexa-Dioxins	1.06**J**		0.374	25.0	1.10		1
Total Hepta-Dioxins	2.43**J**		0.444	25.0	0.89		1
Total Tetra-Furans	ND	U	0.474	5.00			1
Total Penta-Furans	1.70**J**		0.403	25.0	1.45		1
Total Hexa-Furans	0.634**J**		0.266	25.0	1.11		1
Total Hepta-Furans	ND	U	1.75	25.0			1

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Analytical Report

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	Percent
Lab Code:	EQ2200529-01	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Date Analyzed:**	11/30/22 00:34
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	11/16/22
Sample Amount:	1000.0mL	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P633355	**Blank File Name:**	P633355
ICAL Date:	03/15/22	**Cal Ver. File Name:**	P633352

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1518.062	76		25-164	0.79	1.020
13C-1,2,3,7,8-PeCDD	2000	1332.054	67		25-181	1.58	1.176
13C-1,2,3,4,7,8-HxCDD	2000	1172.363	59		32-141	1.24	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1351.607	68		28-130	1.27	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1173.418	59		23-140	1.03	1.066
13C-OCDD	4000	1694.028	42		17-157	0.89	1.142
13C-2,3,7,8-TCDF	2000	1353.501	68		24-169	0.78	0.994
13C-1,2,3,7,8-PeCDF	2000	1233.475	62		24-185	1.55	1.136
13C-2,3,4,7,8-PeCDF	2000	1188.656	59		21-178	1.56	1.167
13C-1,2,3,4,7,8-HxCDF	2000	1124.588	56		26-152	0.54	0.972
13C-1,2,3,6,7,8-HxCDF	2000	987.392	49		26-123	0.51	0.975
13C-1,2,3,7,8,9-HxCDF	2000	1068.512	53		29-147	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1291.907	65		28-136	0.52	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	561.660	28		28-143	0.44	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	1016.038	51		26-138	0.44	1.079
37Cl-2,3,7,8-TCDD	800	5290.191	661	Y	35-197	NA	1.020

ALS Environmental

Accuracy & Precision

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Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Analyzed:**	11/30/22
Sample Matrix:	Water	**Date Extracted:**	11/16/22

Duplicate Lab Control Sample Summary
Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Units:**	pg/L
Prep Method:	Method Sep Funnel/Jar	**Basis:**	NA
		Analysis Lot:	786890

	Lab Control Sample EQ2200529-02			Duplicate Lab Control Sample EQ2200529-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,3,4,6,7,8-HpCDD	810	1000	81	864	1000	86	70-140	6	50
1,2,3,4,7,8-HxCDD	914	1000	91	955	1000	95	70-164	4	50
1,2,3,6,7,8-HxCDD	844	1000	84	871	1000	87	76-134	3	50
1,2,3,7,8,9-HxCDD	953	1000	95	981	1000	98	64-162	3	50
1,2,3,7,8-PeCDD	895	1000	90	948	1000	95	70-142	6	50
2,3,7,8-TCDD	167	200	84	173	200	87	67-158	4	50
OCDD	1880	2000	94	2000	2000	100	78-144	7	50
1,2,3,4,6,7,8-HpCDF	871	1000	87	898	1000	90	82-122	3	50
1,2,3,4,7,8,9-HpCDF	786	1000	79	824	1000	82	78-138	5	50
1,2,3,4,7,8-HxCDF	799	1000	80	842	1000	84	72-134	5	50
1,2,3,6,7,8-HxCDF	896	1000	90	918	1000	92	84-130	2	50
1,2,3,7,8,9-HxCDF	844	1000	84	881	1000	88	78-130	4	50
1,2,3,7,8-PeCDF	802	1000	80	843	1000	84	80-134	5	50
2,3,4,6,7,8-HxCDF	725	1000	73	754	1000	75	70-156	4	50
2,3,4,7,8-PeCDF	883	1000	88	926	1000	93	68-160	5	50
2,3,7,8-TCDF	164	200	82	165	200	83	75-158	1	50
OCDF	1650	2000	83	1740	2000	87	63-170	5	50

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	pg/L
Lab Code:	EQ2200529-02	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Date Analyzed:**	11/30/22 06:23
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	11/16/22
Sample Amount:	1000.0mL	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P633362	**Blank File Name:**	P633355
ICAL Date:	03/15/22	**Cal Ver. File Name:**	P633352

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	167		0.475	5.00	0.71	1.001	1
1,2,3,7,8-PeCDD	895		0.306	25.0	1.54	1.000	1
1,2,3,4,7,8-HxCDD	914		0.269	25.0	1.24	1.000	1
1,2,3,6,7,8-HxCDD	844		0.241	25.0	1.23	1.000	1
1,2,3,7,8,9-HxCDD	953		0.245	25.0	1.24	1.007	1
1,2,3,4,6,7,8-HpCDD	810		0.380	25.0	1.00	1.000	1
OCDD	1880		4.53	50.0	0.88	1.000	1
2,3,7,8-TCDF	164		0.313	5.00	0.77	1.001	1
1,2,3,7,8-PeCDF	802		0.267	25.0	1.52	1.000	1
2,3,4,7,8-PeCDF	883		0.281	25.0	1.53	1.000	1
1,2,3,4,7,8-HxCDF	799		0.0990	25.0	1.20	1.000	1
1,2,3,6,7,8-HxCDF	896		0.106	25.0	1.20	1.000	1
1,2,3,7,8,9-HxCDF	844		0.117	25.0	1.19	1.000	1
2,3,4,6,7,8-HxCDF	725		0.0880	25.0	1.21	1.000	1
1,2,3,4,6,7,8-HpCDF	871		1.18	25.0	0.97	1.000	1
1,2,3,4,7,8,9-HpCDF	786		1.35	25.0	1.00	1.000	1
OCDF	1650		0.697	50.0	0.87	1.005	1

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Analytical Report

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	pg/L
Lab Code:	EQ2200529-02	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Date Analyzed:**	11/30/22 06:23
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	11/16/22
Sample Amount:	1000.0mL	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P633362	**Blank File Name:**	P633355
ICAL Date:	03/15/22	**Cal Ver. File Name:**	P633352

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	167		0.475	5.00	0.71		1
Total Penta-Dioxins	895		0.306	25.0	1.54		1
Total Hexa-Dioxins	2710		0.251	25.0	1.24		1
Total Hepta-Dioxins	810		0.380	25.0	1.00		1
Total Tetra-Furans	165		0.313	5.00	0.66		1
Total Penta-Furans	1700		0.274	25.0	1.52		1
Total Hexa-Furans	3260		0.102	25.0	1.20		1
Total Hepta-Furans	1660		1.26	25.0	0.97		1

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Analytical Report

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	Percent
Lab Code:	EQ2200529-02	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Date Analyzed:**	11/30/22 06:23
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	11/16/22
Sample Amount:	1000.0mL	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P633362	**Blank File Name:**	P633355
ICAL Date:	03/15/22	**Cal Ver. File Name:**	P633352

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1839.459	92		25-164	0.79	1.020
13C-1,2,3,7,8-PeCDD	2000	1757.317	88		25-181	1.60	1.177
13C-1,2,3,4,7,8-HxCDD	2000	1584.317	79		32-141	1.23	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1782.835	89		28-130	1.22	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1666.648	83		23-140	1.04	1.066
13C-OCDD	4000	2470.532	62		17-157	0.89	1.142
13C-2,3,7,8-TCDF	2000	1539.965	77		24-169	0.76	0.994
13C-1,2,3,7,8-PeCDF	2000	1680.119	84		24-185	1.55	1.136
13C-2,3,4,7,8-PeCDF	2000	1539.907	77		21-178	1.53	1.167
13C-1,2,3,4,7,8-HxCDF	2000	1526.562	76		26-152	0.52	0.972
13C-1,2,3,6,7,8-HxCDF	2000	1348.679	67		26-123	0.52	0.975
13C-1,2,3,7,8,9-HxCDF	2000	1527.382	76		29-147	0.50	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1716.983	86		28-136	0.51	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1239.659	62		28-143	0.43	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	1417.501	71		26-138	0.44	1.079
37Cl-2,3,7,8-TCDD	800	5359.089	670	Y	35-197	NA	1.021

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Analytical Report

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	pg/L
Lab Code:	EQ2200529-03	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Date Analyzed:**	11/30/22 07:13
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	11/16/22
Sample Amount:	1000.0mL	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P633363	**Blank File Name:**	P633355
ICAL Date:	03/15/22	**Cal Ver. File Name:**	P633352

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	173		0.739	5.00	0.73	1.001	1
1,2,3,7,8-PeCDD	948		0.753	25.0	1.51	1.001	1
1,2,3,4,7,8-HxCDD	955		0.467	25.0	1.25	1.000	1
1,2,3,6,7,8-HxCDD	871		0.432	25.0	1.22	1.000	1
1,2,3,7,8,9-HxCDD	981		0.431	25.0	1.25	1.007	1
1,2,3,4,6,7,8-HpCDD	864		0.548	25.0	1.01	1.000	1
OCDD	2000		0.776	50.0	0.86	1.000	1
2,3,7,8-TCDF	165		0.388	5.00	0.75	1.000	1
1,2,3,7,8-PeCDF	843		0.537	25.0	1.52	1.000	1
2,3,4,7,8-PeCDF	926		0.553	25.0	1.54	1.001	1
1,2,3,4,7,8-HxCDF	842		0.291	25.0	1.19	1.000	1
1,2,3,6,7,8-HxCDF	918		0.324	25.0	1.23	1.000	1
1,2,3,7,8,9-HxCDF	881		0.338	25.0	1.19	1.000	1
2,3,4,6,7,8-HxCDF	754		0.266	25.0	1.17	1.000	1
1,2,3,4,6,7,8-HpCDF	898		1.29	25.0	0.99	1.000	1
1,2,3,4,7,8,9-HpCDF	824		1.50	25.0	0.98	1.000	1
OCDF	1740		0.837	50.0	0.87	1.005	1

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	pg/L
Lab Code:	EQ2200529-03	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Date Analyzed:**	11/30/22 07:13
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	11/16/22
Sample Amount:	1000.0mL	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P633363	**Blank File Name:**	P633355
ICAL Date:	03/15/22	**Cal Ver. File Name:**	P633352

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	173		0.739	5.00	0.73		1
Total Penta-Dioxins	948		0.753	25.0	1.51		1
Total Hexa-Dioxins	2810		0.443	25.0	1.25		1
Total Hepta-Dioxins	870		0.548	25.0	0.96		1
Total Tetra-Furans	166		0.388	5.00	0.83		1
Total Penta-Furans	1780		0.545	25.0	1.44		1
Total Hexa-Furans	3390		0.303	25.0	1.19		1
Total Hepta-Furans	1720		1.39	25.0	0.99		1

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Analytical Report

Client:	ALS Environmental - Holland (MI)	**Service Request:**	E2201085
Project:	22110213	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	Percent
Lab Code:	EQ2200529-03	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:	1613B	**Date Analyzed:**	11/30/22 07:13
Prep Method:	Method Sep Funnel/Jar	**Date Extracted:**	11/16/22
Sample Amount:	1000.0mL	**Instrument Name:**	E-HRMS-08
		GC Column:	DB-5MSUI
Data File Name:	P633363	**Blank File Name:**	P633355
ICAL Date:	03/15/22	**Cal Ver. File Name:**	P633352

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1352.809	68		25-164	0.78	1.020
13C-1,2,3,7,8-PeCDD	2000	1327.183	66		25-181	1.61	1.176
13C-1,2,3,4,7,8-HxCDD	2000	1246.342	62		32-141	1.26	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1361.661	68		28-130	1.23	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1226.520	61		23-140	1.03	1.066
13C-OCDD	4000	1924.750	48		17-157	0.89	1.142
13C-2,3,7,8-TCDF	2000	1143.524	57		24-169	0.78	0.994
13C-1,2,3,7,8-PeCDF	2000	1258.619	63		24-185	1.56	1.136
13C-2,3,4,7,8-PeCDF	2000	1183.313	59		21-178	1.55	1.167
13C-1,2,3,4,7,8-HxCDF	2000	1164.202	58		26-152	0.51	0.972
13C-1,2,3,6,7,8-HxCDF	2000	1038.779	52		26-123	0.51	0.975
13C-1,2,3,7,8,9-HxCDF	2000	1195.454	60		29-147	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1325.126	66		28-136	0.52	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	954.364	48		28-143	0.43	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	1091.428	55		26-138	0.44	1.079
37Cl-2,3,7,8-TCDD	800	4333.294	542	Y	35-197	NA	1.021