

September 9th, 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 First 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 July 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. Samples were received by the third-party laboratory on August 3<sup>rd</sup>, 2022. Analyses were not received by RIES until September 9<sup>th</sup>, 2022. This report is submitted as timely as possible upon the receipt of the F039 analyses by RIES.

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.

John Frost

Sincerely,

cc: Rick Sauve (Republic Services)

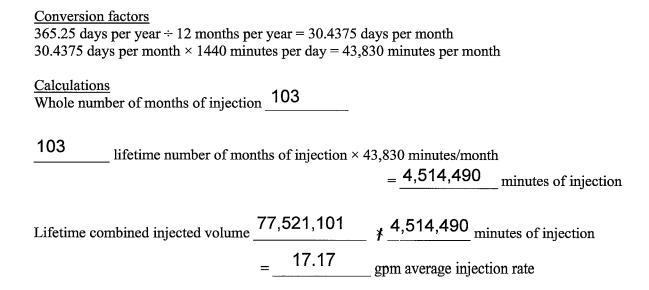
**AVERAGE INJECTION RATE** 

## **Calculation of Average Injection Rate**

CURRENT REPORTING YEAR	2022	
CURRENT REPORTING MONTH	July	
Date (month, year) of the first injecti	on 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	143,179	0	143,179										
Since facility first injected			48,975,265										
MI	MI-163-1W-C011, Well #2-12												
Current Month	789,325	0	789,325										
Since facility first injected			28,545,836										
		Lifetime Combined	77,521,101										





## Comment on Well 1 Data

On 7-11-22, injection pressure gauges, annulus pressure gauges, and injection flow meter was calibrated by utilities instrumentation services. No waste injection occurred during the duration of the pressure gauge calibration. Extreme injection pressure, annulus pressure, and differential pressure values occurred during gauge calibration and are not reflective of actual injection parameters.



					Г			Г		Γ	Г		Π																			Γ	
	essure (psig)	Max	724.9	722.8	721.5	721.5	721.2	720.1	716.1	715.0	9.607	9.602	2617.4	804.6	803.6	802.2	800.5	799.5	796.3	798.5	7.767	815.0	7.797	791.7	789.6	786.4	785.8	682.8	818.9	846.1	831.2	814.8	717.5
	Differential Pressure (psig)	Min	720.1	719.2	719.7	719.5	718.9	713.7	710.0	9.707	9'202	708.2	-1802.0	802.0	800.9	798.4	797.5	795.3	793.1	792.9	790.0	789.2	789.2	788.3	785.5	782.5	476.7	279.7	315.2	375.5	376.5	676.1	698.7
	e (gpm)	Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.4	70.8	53.9	72.8	62.3	0.0	0.0
	Flow Rate (gpm)	Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Hd uc	Max	2.0	2.0	2.0	2.0	2.0	7.2	7.0	7.1	6.9	7.0	7.0	7.0	7.3	7.2	7.2	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.0	7.0	7.1	7.1	8.1	7.4	7.2	6.9	6.8
2022	Injection pH	Min	2.0	1.9	1.9	1.9	2.0	1.8	5.8	5.4	6.9	6.9	6.9	5.5	5.4	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.0	7.0	7.0	7.0	4.5	4.8	3.6	5.7	4.4	6.3	6.3
Injection Well 1, July 2022	ssure (psig)	Max	846.5	842.6	839.2	835.1	831.8	828.7	837.9	828.2	826.3	822.4	1,038.6	818.8	818.3	816.6	815.4	814.5	810.5	807.1	807.1	806.5	806.0	804.6	802.2	798.5	954.1	1414.5	1435.3	1467.4	1432.9	1138.8	841.9
Injecti	Annulus Pressure (psig)	Min	841.6	838.2	834.0	830.7	827.7	826.5	826.2	825.3	821.5	818.1	-1,799.6	816.9	815.7	814.5	813.2	809.7	806.3	805.0	804.6	803.3	802.7	801.6	797.9	794.8	785.8	792.8	866.2	9.606	931.8	841.3	816.9
	ג Level (inch)	Max	26.7	26.7	26.7	26.7	26.7	26.6	26.7	26.7	26.6	26.6	26.6	26.6	26.6	26.6	26.7	26.6	26.6	26.6	26.7	26.7	26.7	26.7	26.7	26.6	26.6	26.5	26.6	26.7	26.7	26.6	26.6
	Annulus Tank Level (inch)	Min	26.6	26.5	26.5	26.5	26.6	26.5	26.5	26.6	26.5	26.5	26.5	26.6	26.5	26.5	26.5	26.5	26.5	26.5	26.6	26.6	26.6	26.6	26.5	26.5	26.5	26.4	26.5	26.5	26.5	26.5	26.5
	essure (psig)	Max	123.8	120.8	118.3	114.0	111.1	114.0	126.5	130.4	117.7	113.2	1001.9	15.7	15.2	16.5	16.7	15.2	14.5	14.5	14.8	14.7	14.3	13.8	13.0	12.8	473.6	940.1	947.6	967.4	963.0	462.7	124.6
	Injection Pressure (psig)	Min	120.2	117.7	113.6	110.8	108.7	107.7	112.5	113.7	112.8	109.5	-0.2	13.4	13.7	13.8	14.0	14.1	12.7	2.7	9.7	1.0	7.3	11.4	11.4	11.0	8.7	110.2	88.4	116.3	140.6	124.3	117.8
•			7/1/2022	7/2/2022	7/3/2022	7/4/2022	7/5/2022	7/6/2022	7/7/2022	7/8/2022	7/9/2022	7/10/2022	7/11/2022	7/12/2022	7/13/2022	7/14/2022	7/15/2022	7/16/2022	7/17/2022	7/18/2022	7/19/2022	7/20/2022	7/21/2022	7/22/2022	7/23/2022	7/24/2022	7/25/2022	7/26/2022	7/27/2022	7/28/2022	7/29/2022	7/30/2022	7/31/2022

#### 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

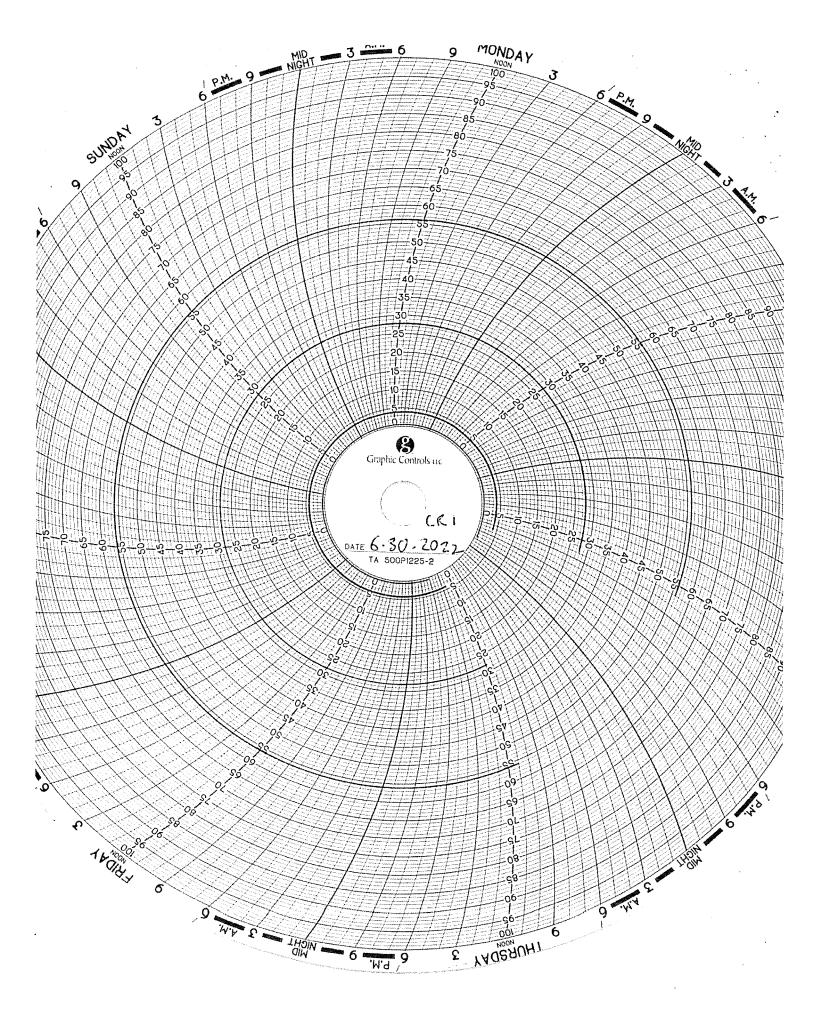
Red Pen – Well 1 Monthly Volume (chart value x 100,000)

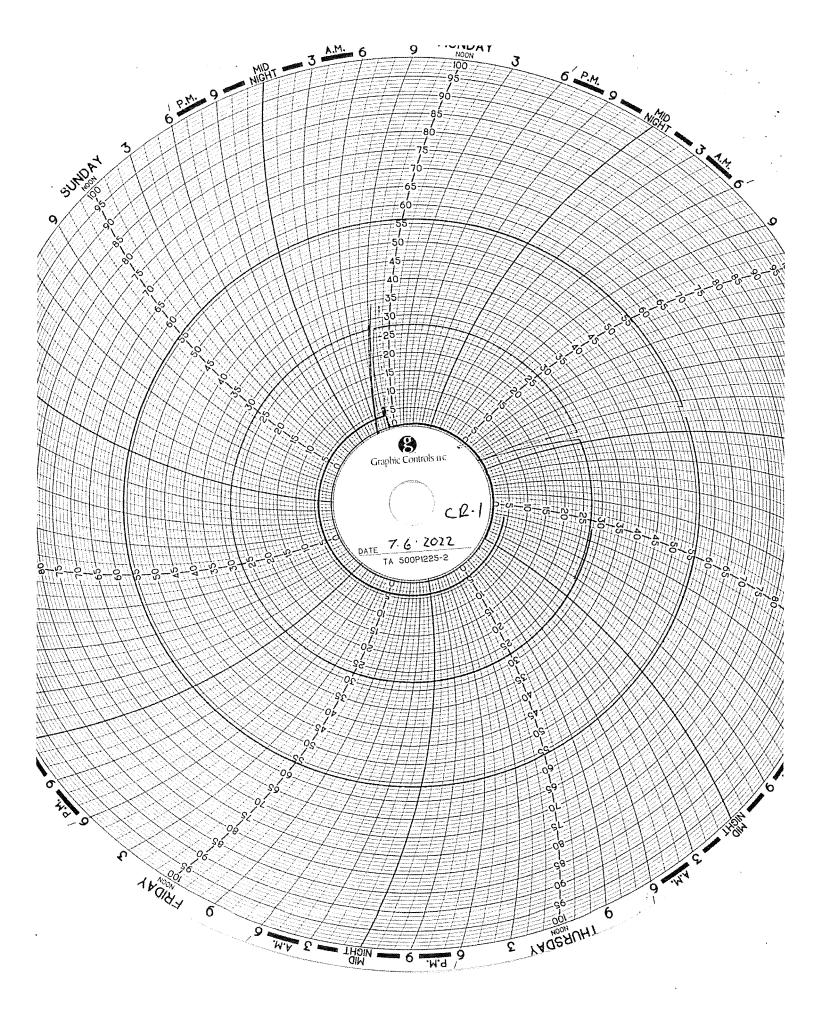
Channel #3

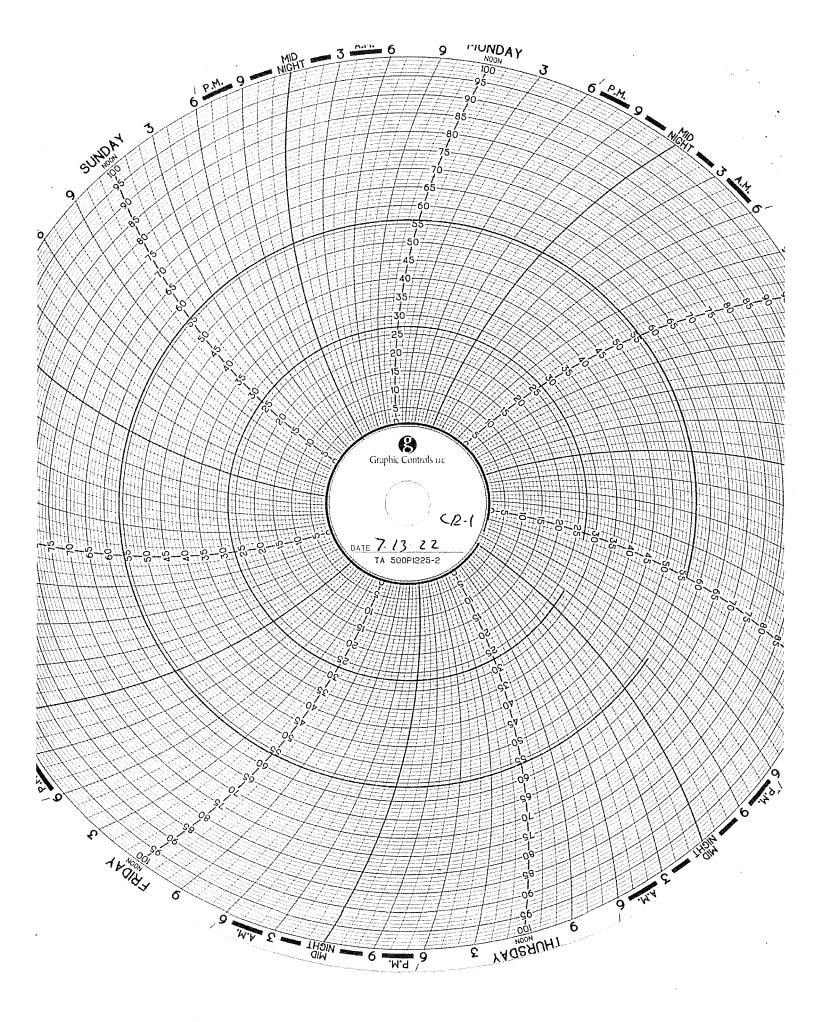
Green Pen – Well 2 Monthly Volume (chart value x 100,000)

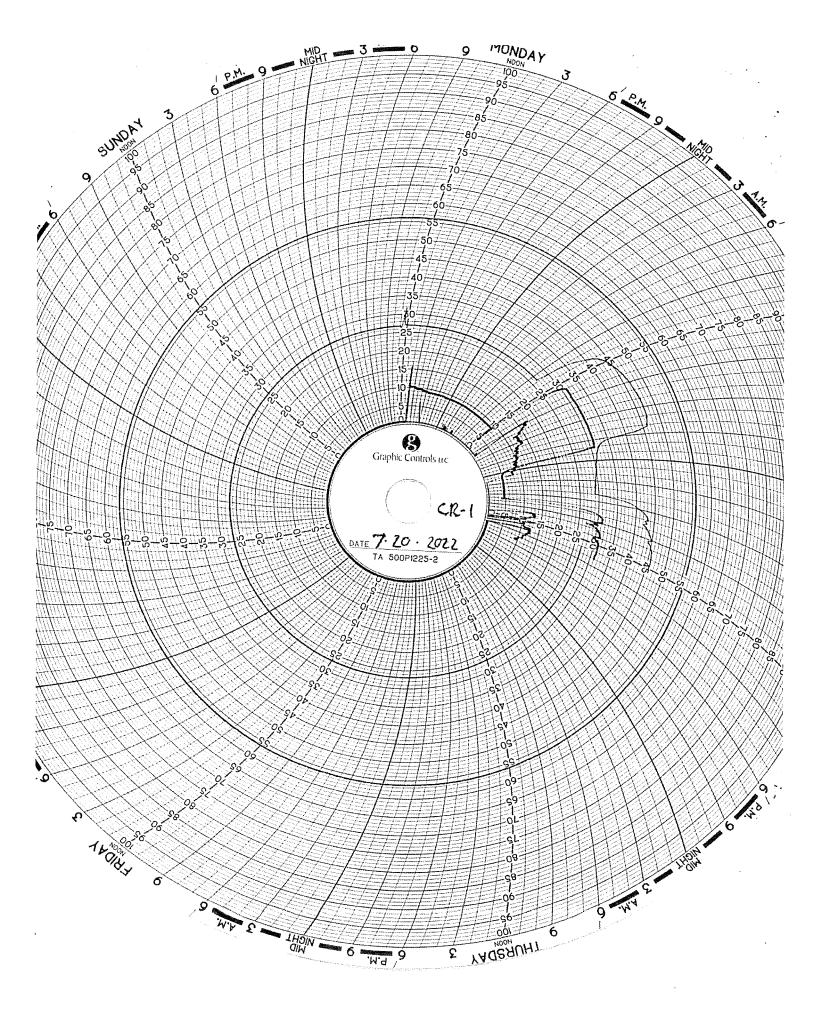
Channel #4

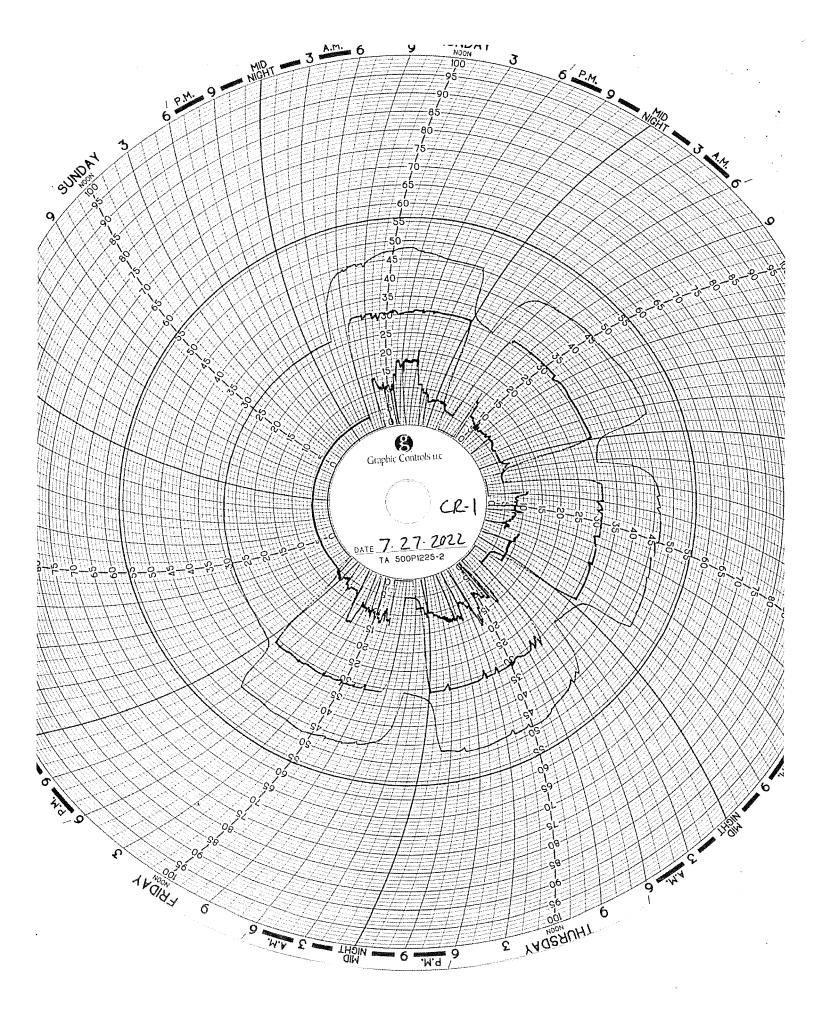
Black Pen - Temperature (chart value x 0)











**WELL 2 DATA** 

## Comment on Well 2 Data

On 7-11-22, injection pressure gauges, annulus pressure gauges, and injection flow meter was calibrated by utilities instrumentation services. No waste injection occurred during the duration of the pressure gauge calibration. Extreme injection pressure, annulus pressure, and differential pressure values occurred during gauge calibration and are not reflective of actual injection parameters.



		_	_	_	_	_	_	_					_	_				_	_	_	_		_	_	_	_	_					_	
	essure (psig)	Max	994.0	988.3	865.5	831.0	822.7	991.7	1009.9	953.7	920.5	840.6	3051.9	914.4	918.5	926.0	955.2	935.9	855.5	837.7	919.1	922.2	1015.7	930.4	9.768	830.0	812.6	930.7	6.906	933.9	911.9	897.7	828.5
	Differential Pressure (psig)	Min	524.3	468.4	830.5	821.8	817.5	414.1	520.9	517.0	652.1	823.4	-2682.3	507.4	535.2	532.1	559.1	754.6	836.7	443.8	517.4	541.9	602.2	546.0	681.6	811.2	349.6	536.1	430.1	528.9	519.7	687.9	813.2
	e (gpm)	Max	71.6	75.7	0:0	0.0	0:0	77.4	76.3	68.3	0.0	0.0	427.3	58.7	54.7	54.3	54.2	0.0	0:0	55.9	48.9	60.2	52.2	50.5	0.0	0.0	71.4	59.0	65.0	60.5	56.4	0.0	0.0
	Flow Rate (gpm)	Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Hd uc	Max	7.1	7.1	6.9	6.9	6.9	12.3	7.4	7.0	7.0	7.0	7.2	7.3	7.5	6.7	7.5	7.0	7.0	7.2	7.2	9.3	7.4	7.4	7.1	7.1	12.8	8.6	7.2	7.1	7.1	7.1	7.1
2022	Injection pH	Min	6.9	6.9	6.9	6.9	6.9	1.9	2.4	4.7	6.8	6.6	2.9	5.4	5.3	4.9	6.1	6.9	7.0	5.0	4.8	3.5	2.8	6.9	7.1	7.0	1.1	4.8	1.2	6.8	7.0	7.0	7.0
Injection Well 2, July 2022	ssure (psig)	Max	1594.9	1584.6	1,001.0	920.6	935.2	1,681.2	1,576.8	1,551.9	1,467.0	964.1	1,543.6	1,615.7	1,598.7	1,591.2	1,597.6	1,379.2	970.9	1,538.6	1,592.1	1,812.1	1,635.0	1,554.9	1,379.1	973.9	1588.0	1555.2	1561.1	1577.6	1557.0	1367.3	966.7
Injecti	Annulus Pressure (psig)	Min	1023.8	993.2	950.3	934.7	926.1	890.8	1,046.9	1,036.6	964.0	937.3	-1,798.7	1,042.4	1,052.6	1,065.0	1,065.7	970.6	940.5	936.3	1,022.8	1067.4	1113.4	1,082.3	973.6	945.8	940.4	1040.2	1032.0	1058.7	1065.6	966.5	937.6
	Annulus Tank Level (inch)	Max	32.7	32.7	32.6	32.7	32.7	32.6	32.7	32.7	32.7	32.6	32.6	32.6	32.6	32.7	32.7	32.7	32.6	32.7	32.8	32.8	32.8	32.8	32.7	32.6	32.6	32.6	32.7	32.8	32.8	32.7	32.6
	Annulus Tan	Min	32.6	32.5	32.5	32.5	32.6	32.5	32.5	32.6	32.5	32.5	32.5	32.6	32.5	32.5	32.6	32.6	32.5	32.5	32.6	32.7	32.7	32.6	32.6	32.6	32.6	32.5	32.5	32.6	32.6	32.6	32.5
	Injection Pressure (psig)	Max	929.5	931.6	135.8	120.0	112.9	940.2	940.2	940.2	814.6	124.1	1019.8	941.4	940.1	940.1	940.1	624.7	116.0	940.5	940.4	940.2	940.2	940.1	697.3	144.8	940.2	940.2	940.2	940.2	944.8	679.8	138.6
	Injection Pre	Min	145.3	135.5	119.5	112.5	108.1	37.1	87.5	118.4	123.6	113.2	-1799.0	157.7	150.5	149.9	129.4	115.4	103.3	100.9	125.5	152.5	137.2	164.9	144.0	133.5	130.8	130.0	155.6	166.7	175.6	138.1	123.8
3			7/1/2022	7/2/2022	7/3/2022	7/4/2022	7/5/2022	7/6/2022	7/7/2022	7/8/2022	7/9/2022	7/10/2022	7/11/2022	7/12/2022	7/13/2022	7/14/2022	7/15/2022	7/16/2022	7/17/2022	7/18/2022	7/19/2022	7/20/2022	7/21/2022	7/22/2022	7/23/2022	7/24/2022	7/25/2022	7/26/2022	7/27/2022	7/28/2022	7/29/2022	7/30/2022	7/31/2022

### 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

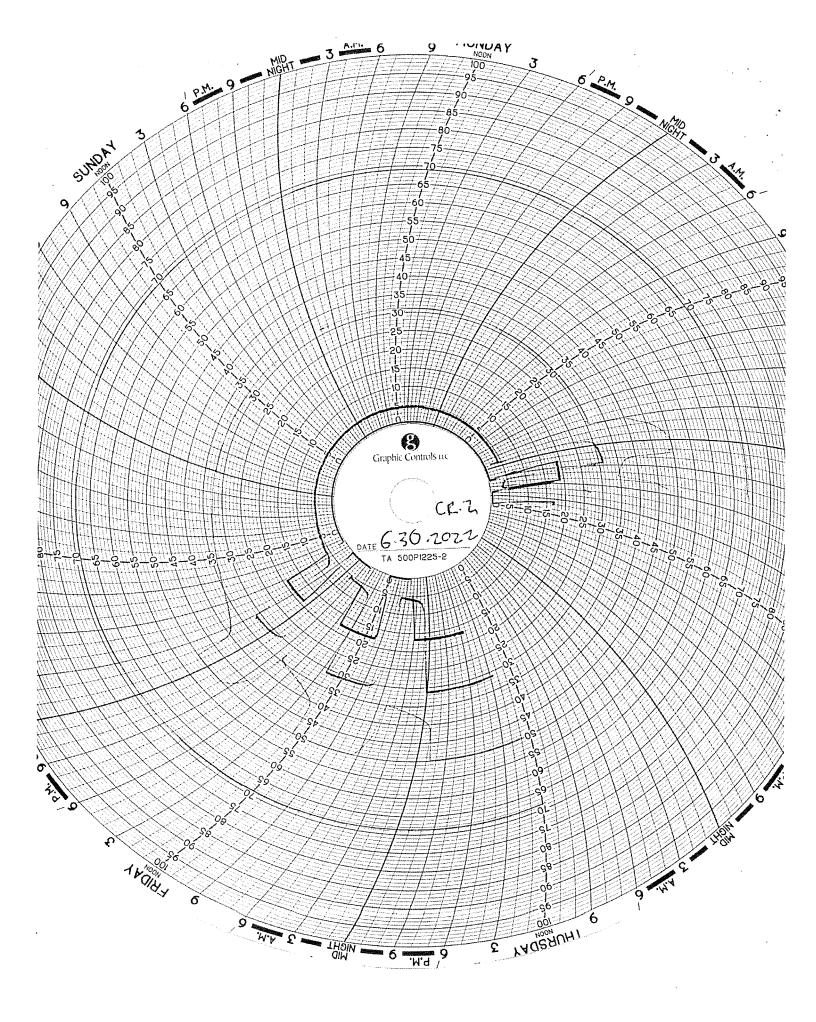
Red Pen – Well 1 Monthly Volume (chart value x 100,000)

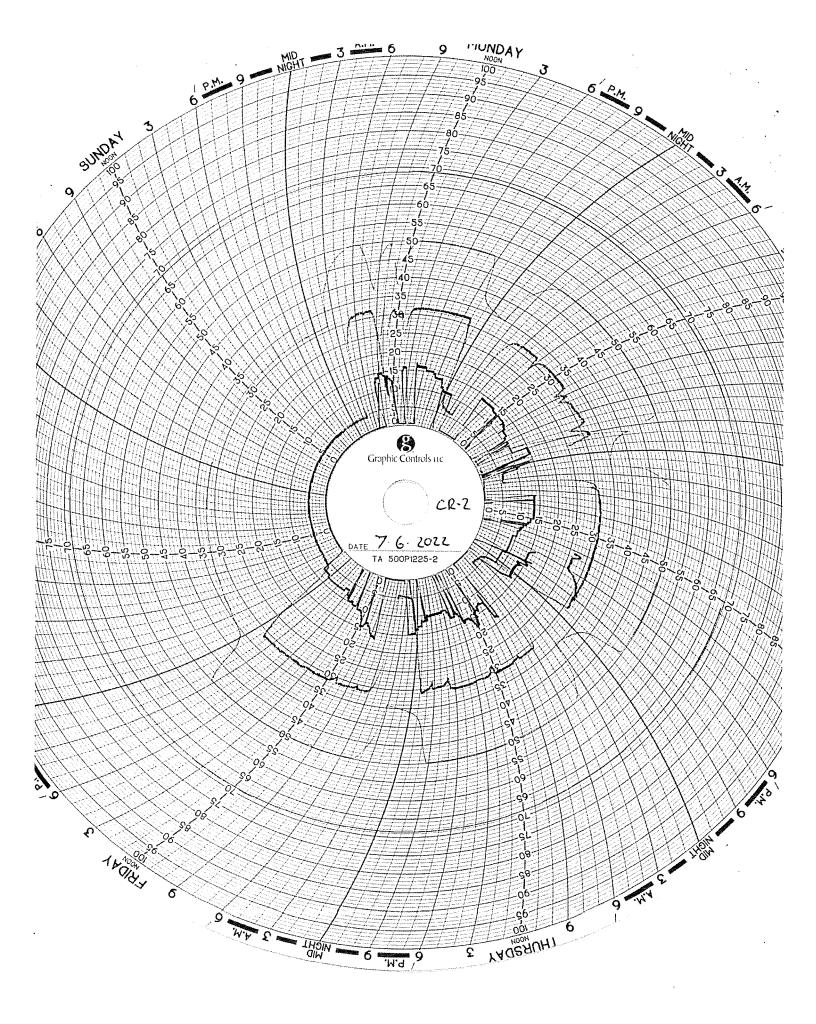
Channel #3

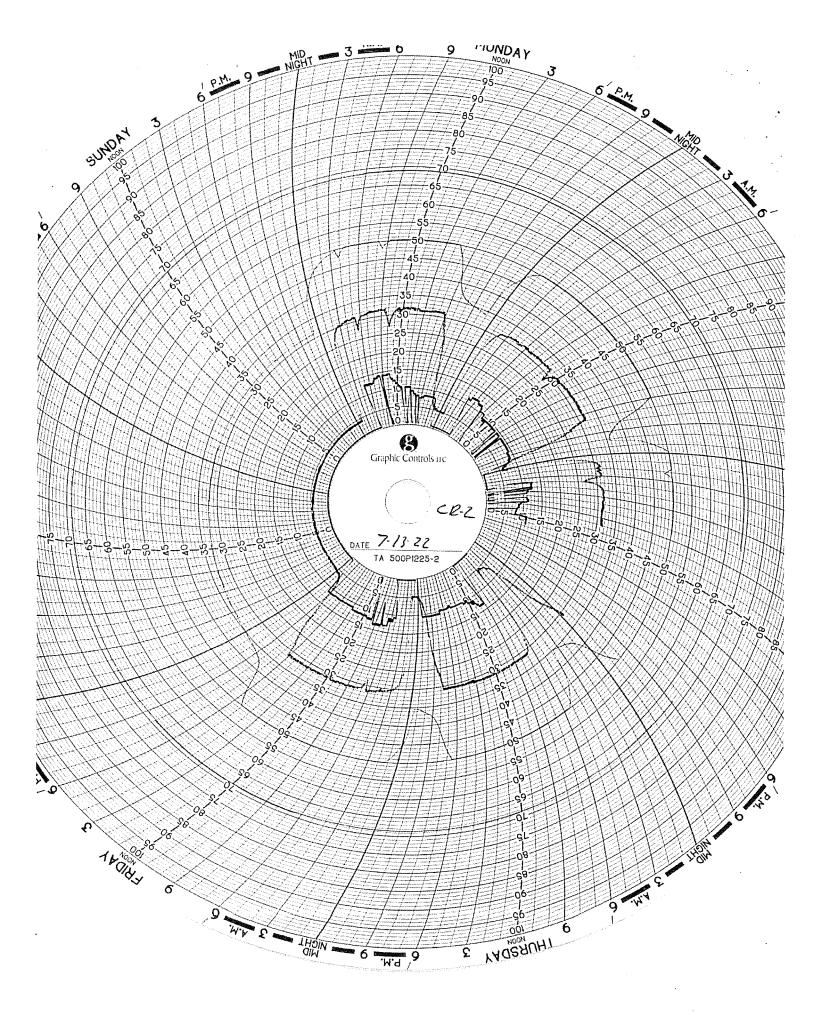
Green Pen – Well 2 Monthly Volume (chart value x 100,000)

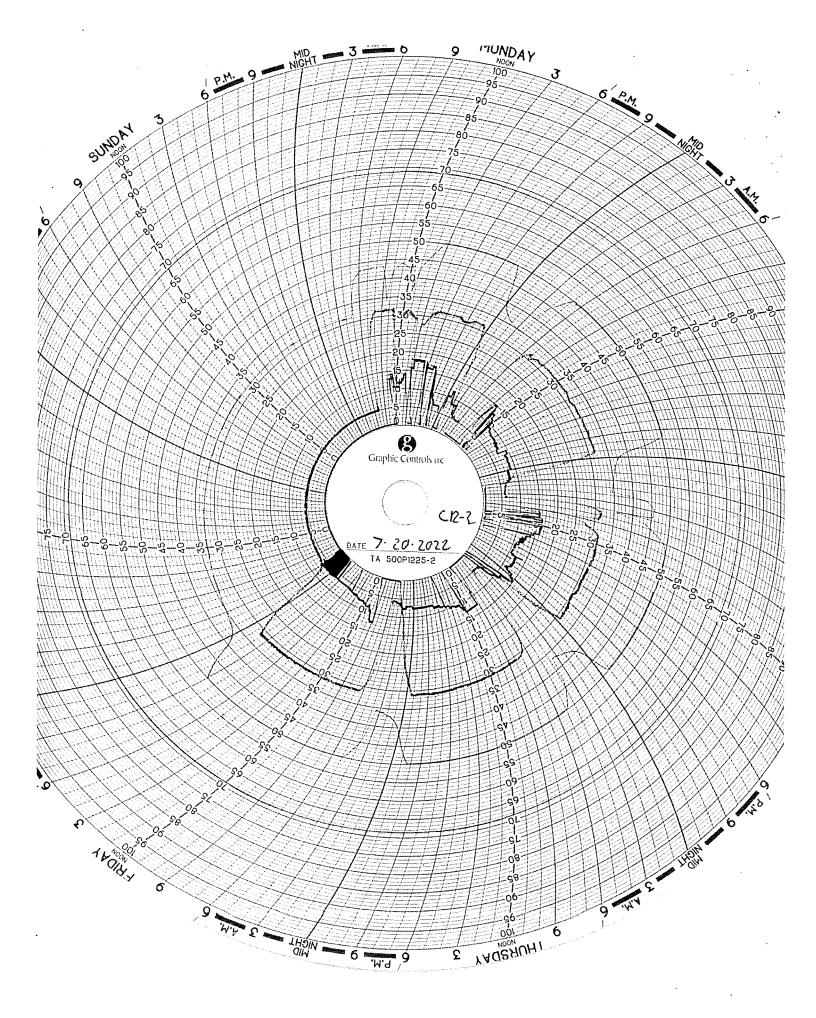
Channel #4

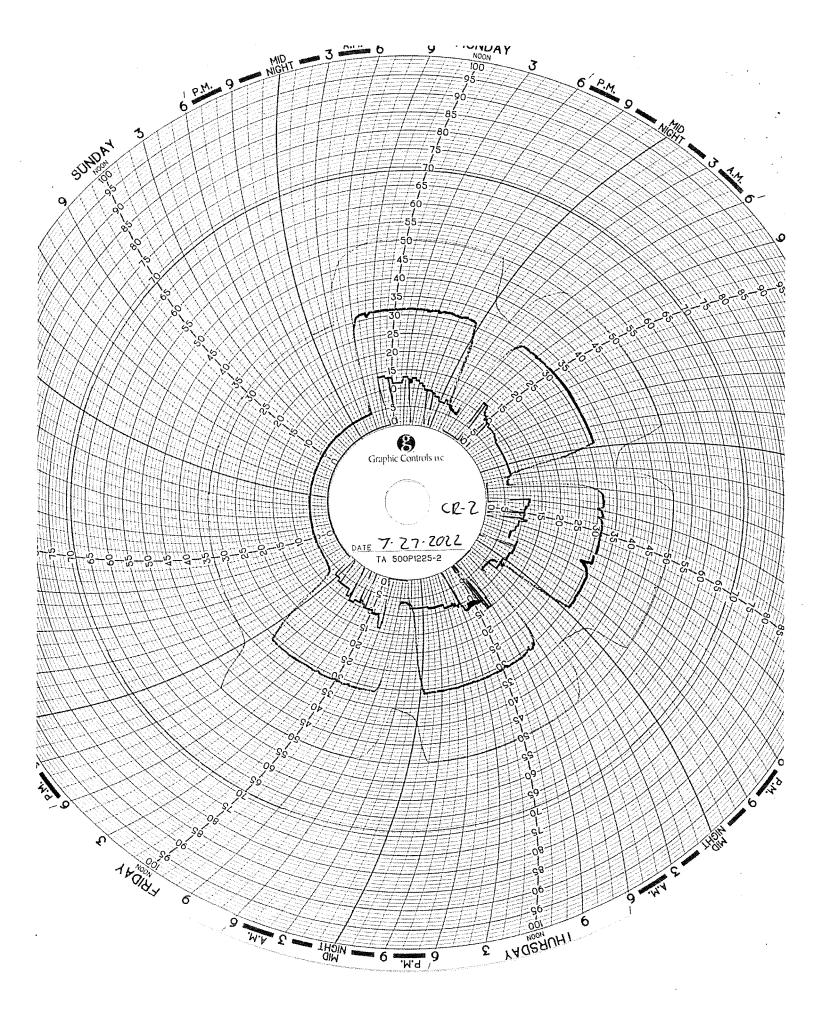
Black Pen – Temperature (chart value x 0)











# 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

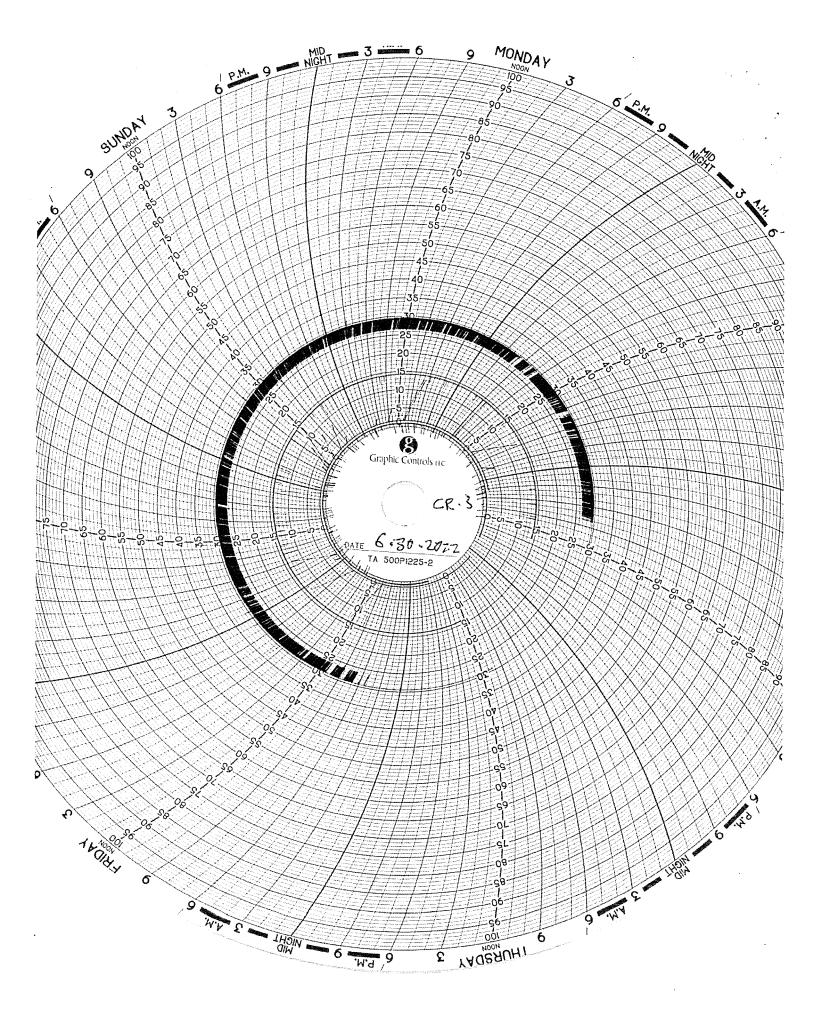
Red Pen – Well 1 Monthly Volume (chart value x 100,000)

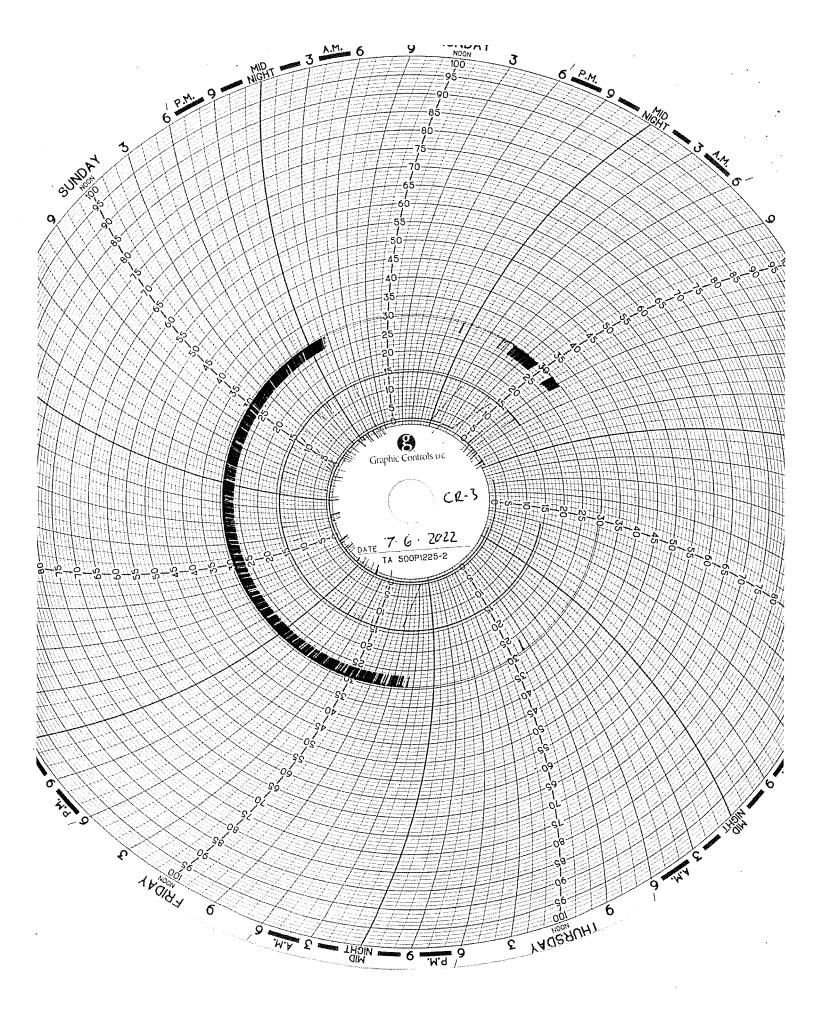
Channel #3

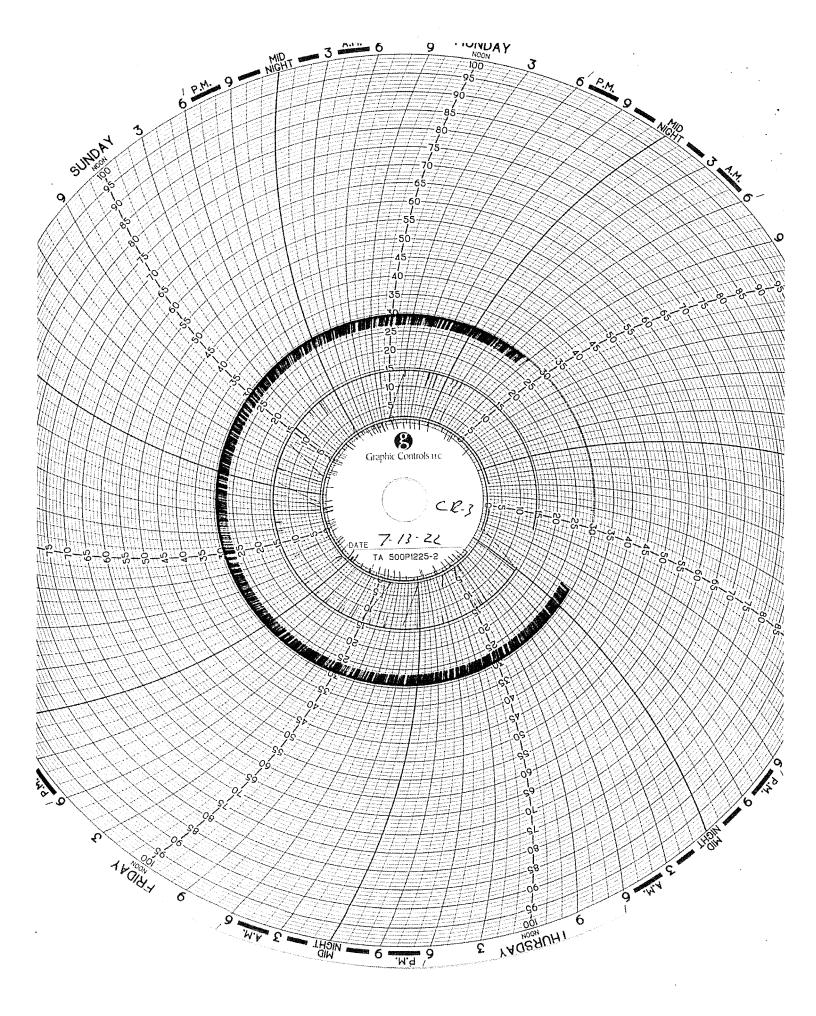
Green Pen – Well 2 Monthly Volume (chart value x 100,000)

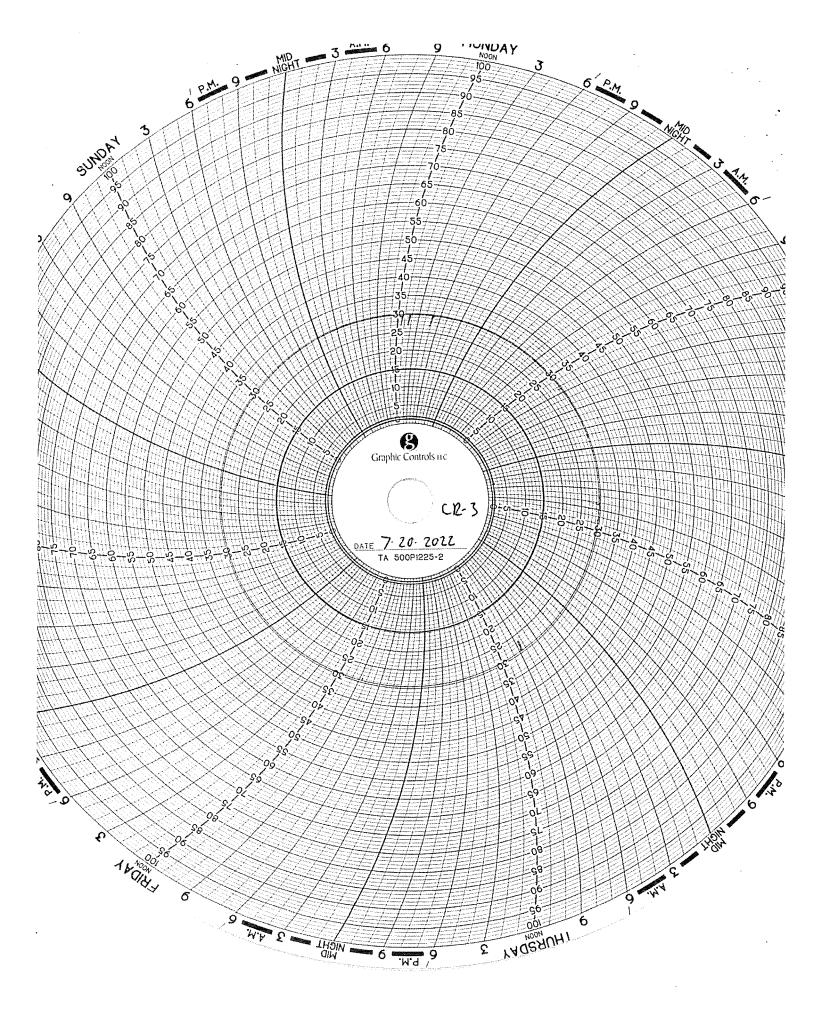
Channel #4

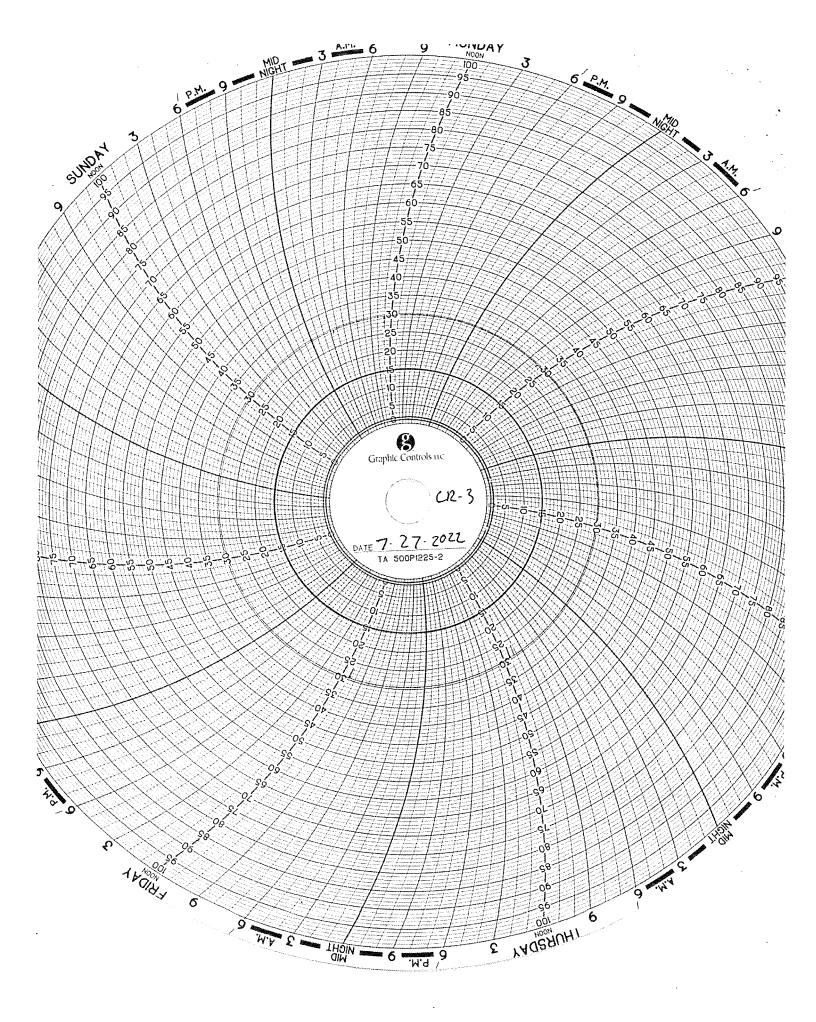
**Black Pen** – Temperature (chart value x 0)











**CORROSION MONITORING** 

# CORROSION MONITORING PLAN COUPON SUMMARY

Date	Hastelloy	Stainless Steel	Fiberglass	
	(C267)	(316L)	(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	1
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	İ
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	1
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	Table 1
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	ļ
4/28/2017	13.325 g	6.736 g	6.736 g	1
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	İ
8/25/2020 9/24/2020	13.310 g	10.214 g	17.773 g	
10/19/2020	13.289 g	9.796 g	17.656 g	
11/5/2020	13.282g 13.280g	9.737g 9.728g	17.621g	]
12/3/2020	13.281g	9.720g 9.730g	17.600g 17.689g	
2/10/2021	13.284g	9.730g 9.728g	17.683g	
3/9/2021	13.290g	9.720g 9.733g	17.585g	İ
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	1
11/3/2021	13.277g	9.350g	17.400g 17.273g	
12/15/2021	13.276g	9.351g	17.276g	
1/17/2022	13.276g	9.351g	17.256g 17.256g	
2/15/2022	13.276g 13.276g	9.347g	17.250g 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	9.3	16.219
7/20/2022	13.303	9.324	16.393

Date: 07/20/2022 Material: C1563/316L Weight: 9.324 g.



Date: 07/20/2022 Material: C276 5 Weight: 13.303 g.



Date: 07/20/2022 Material: Fiberglass Weight: 16.393g.



# 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 Diummond, Sr.
Physical & Plastic Testing, Manager



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

ISO 9001:2008

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Progress Through Innovation, Technology and Customer Satisfaction

October 22, 2015

John Frost Environmental Geo-Technologies, LLC

Page 2 of 2 PN 125322

**SUBJECT:** 

Barcol Hardness on one material.

**RECEIVED:** 

One small section identified as; Fiberglass Coupon.

## BARCOL HARDNESS ASTM D 2583-13a

Instant Reading

Results

Barcol Hardness, Instant

96

Prepared By:

Melissa Martin Sr. Project Technician

tc

Approved By:

Scott W. Yates

Plastics Testing Assistant Manager



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

Melisşá Martin

Senior Project Technician

Approved By

Jim Drummond

Physical Testing, Manager

Rev 041916

ACCREDITED

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

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Progress Through Innovation, Technology and Customer Satisfaction

December 12, 2016

John Frost Environmental Geo-Technologies, LLC

Page 2 of 2 PN 132662

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

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



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

ISO 9001:2008

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Progress Through Innovation, Technology and Customer Satisfaction

December 13, 2017

John Frost

Environmental Geo-Technologies, LLC

Page 2 of 2 PN 139140

**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 PHASTIC TESTING, INC

M. W. Ghesquiere

President

MWG/kni

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TOTAL 1 PAGES

# GHESQUIERE PLASTIC TESTING, INC.

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

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

CONTRACTOR CONTRACTOR SERVICES AND AREAS

1 Nov. 1 34 2

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:

A CONTRACTOR OF THE ARCHITECTURE TO A TOTAL TO A STATE OF THE STATE OF 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

· 等 人 時 》 的现在分词 在 自然不适宜 #

which was remainded them, they be establed to Specimen was returned to the client on February 17, 2014. ALTER SECTION

GHESOUIERE PLASTIC TESTING, INC.

3.7.7.1973年(19.7.1982**李**克斯)《明·安·尔特里,约克斯·尔

W. Ghesquiere -

President

MWG/dm

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TOTAL 1 PAGES

# GHESQUIERE PLASTIC TESTING, INC.

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

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

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

Attention: Mr. Don Anderson

### WORK REQUESTED:

Perform Barcol Hardness test on sample submitted.

#### DESCRIPTION OF SAMPLE:

Sample submitted was identified as a fiberglass test coupon.

(P. O. #Credit Card).

### WORK PERFORMED:

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

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

#### **RESULTS:**

The following determination was made based upon the above test:

### BARCOL HARDNESS

Hardness

Specimen 1

85

Specimen was returned to the client June 16, 2014.

GHESQUIERE PLASTIC/TESTING, INC.

M. W. Ghesquieré

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

Sf. Project Technician

Jim Drummond

Physical & Plastics Testing, Manager



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ISO 9001:2008

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# Testing. Development. Problem Solving.

October 2, 2014

John Frost

Environmental Geo-Technologies, LLC

Page 2 of 2 PN118325

SUBJECT:

Barcol Hardness on one material.

PO# Attn; John Frost

RECEIVED:

One small section identified as; Fiberglass Coupon.

BARCOL HARDNESS ASTM D 2583-13a

**Results** 

Barcol Hardness, Instant

97

Prepared By

st

Melisea Martin Sr. Project Technician Approved By:

Scott W. Yates

Plastics Testing Assistant Manager

### **BARCOL HARDNESS REPORT**

<b>Customer:</b>	Republi	Industrial and Energy Solutions, LLC			
Component Tested:		Test Coupo	n		
PO Number:	957555	3	Jok	Number:	3415
Calibration:	Disc:	43 - 48	Actua	l Reading:	45
Barcol Read	dings	1	2	3	Average
Si	de One:	62	63	58	61

Side One:	62	63	58	61
Side Two:	58	60	57	58
		Overall	Average:	60

(signature)

Tested By:

Gary Nicholson

Date: 01/12/2021

(print or type name)

### **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:

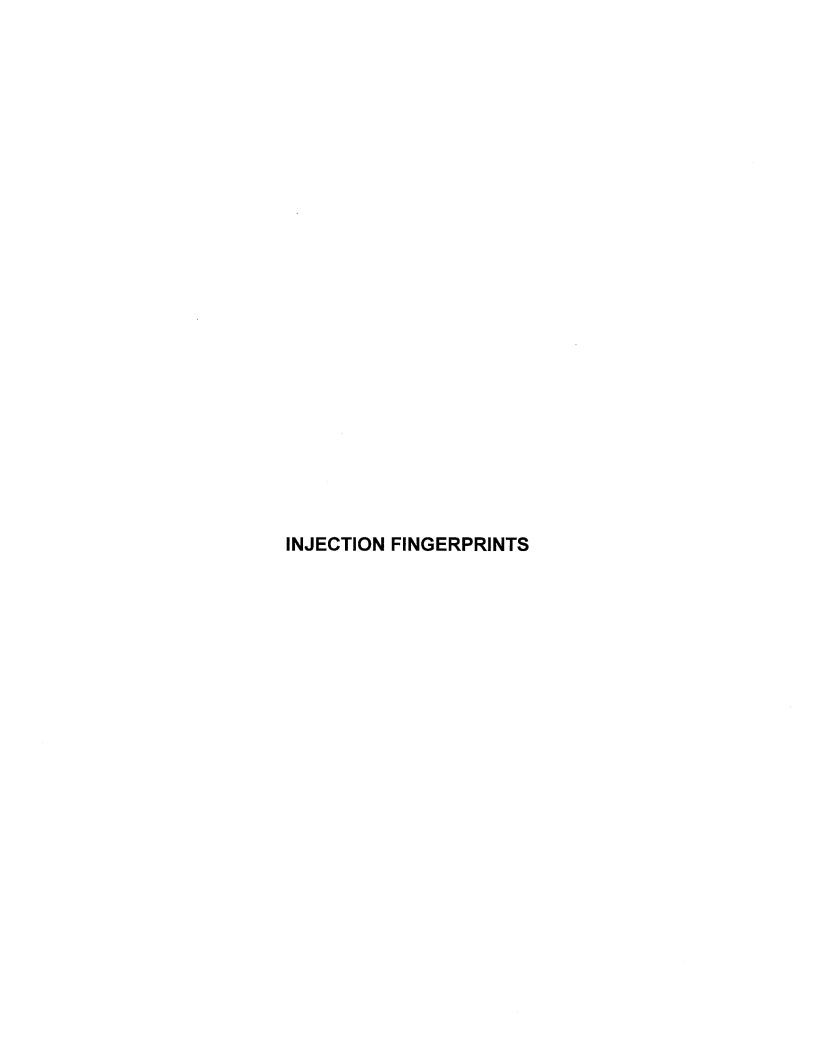
(3)Briatare

Gary Nicholson

Date: 10/11/2021

(print or type name)





RECEIVINGINFO	RMATION:	
Date ,	7/1	122
Receiving ID#	I0701	2201
Manifest # Line	and the state of t	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J,	か
Sampled by		<b>十</b>
		, ,

LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?	411	
Flash Point (F)	>14	Ď
pH (S.U.)	7.30	,
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	2
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	33,0	3~?
% Solids	2.3	}
Turbidity	Yes	No
Color		
TSS (%)	<b>ζ</b> 0.	. 1
Radiation Screen (as needed)		
Lab Signature/Initials	J.H	<u> </u>

RECEIVING INFOR	RMATION	
Date	7-29	- 2022
Receiving ID#	20729	2206
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	V.7.	
Sampled by		

LAB INFORMA	TION	4
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?	<u></u>	
TOC ppm (CC Waste Only)?		
Flash Point (F)		
pH (S.U.)	7./1	)
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.07	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	>3	
Conductivity	35.7	-ms
% Solids	3.2	LO
Turbidity	Yes	No
Color		
TSS (%)	10	
Radiation Screen (as needed)		
Lab Signature/Initials	<u></u>	77

RECEIVING INFO	RMATION:	
Date	7/2	8 / 22
Receiving ID#	Z07 28	2203
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		· · · · · · · · · · · · · · · · · · ·
Time in		
Time out		
Received by	J,	7]
Sampled by	AV	

SST-1

LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	) t	10
pH (S.U.)	6	90
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	2
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	35.6	1ms_
% Solids	2.20	6
Turbidity	Yes	No
Color		
TSS (%)	<6	D.1
Radiation Screen (as needed)		
Lab Signature/Initials	<u></u> ا	<i>P</i> )

RECEIVING INFO	RMATION	
Date	3 / -	8 / 22
Receiving ID#	70728	\$ 22 03
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	上 よ れ	
Sampled by	BM.	

SST-Z

	·	
LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>14	<u> </u>
pH (S.U.)	6:	<u> </u>
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	3
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	:
Conductivity	40.3	~~§
% Solids	4.10	
Turbidity	Yes	No
Color		
TSS (%)	40	}
Radiation Screen (as needed)		*
Lab Signature/Initials	J.7	<u> </u>

RECEIVING INFO	RMATION	
Date	7 /2	9/22
Receiving ID#	2077	9220
Manifest# Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	Jit	
Sampled by		

SST-)

LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		:
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	2)4	Ď
pH (S.U.)	5.	18
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	3
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	44.	8~5
% Solids	4.2	1
Turbidity	Yes	No
Color		
TSS (%)	<0.	
Radiation Screen (as needed)		,
Lab Signature/Initials	JI	)

RECEIVING INFO	MATION	
Date	7 / 2	<b>7</b> / 22
Receiving ID#	F072	12201
Manifest# Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		:
Time out		
Received by	J.H	
Sampled by		:

SST-2

LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		:
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	214	0
pH (S.U.)	フィ	$\mathcal{O}$
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	[.0	<u></u>
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	58.9	~S
% Solids	2.3	)
Turbidity	Yes	No
Color		
TSS (%)	<u> </u>	-1
Radiation Screen (as needed)		
Lab Signature/Initials	ロイ	)

RECEIVING INFO	DRMATION	
Date	7/2	7 / 22
Receiving ID#	I0729	ZZO 1
Manifest# Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		:
Client		
Transporter		· · · · · · · · · · · · · · · · · · ·
Time in		
Time out		
Received by		
Sampled by	76	2

555-1

LAB INFORMA	JION :	
Compatible? (RT# )	7	
PCBs (ppm) (Oily Waste		
Only)?	ļ	
TOC ppm (CC Waste Only)?		
Flash Point (F)	<u> </u>	140
pH (S.U.)	(0.7	6
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	10	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	76	Ø
Conductivity	17.7	5
% Solids	ø	91
Turbidity	Yes	No
Color		
TSS (%)	L	l
Radiation Screen (as needed)	· · · · · · · · · · · · · · · · · · ·	
Lab Signature/Initials	1	1

	2007	
RÉCEIVING INFO	DRMATION-	
Date	7/2	9/22
Receiving ID#	T0774	12201
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by		
Sampled by	TE	y-

SST-Z

LAB INFORMA	TION.	
Compatible? (RT# )	٧	
PCBs (ppm) (Oily Waste		:
Only)?	<u></u>	
TOC ppm (CC Waste Only)?		
Flash Point (F)	719	40
pH (S.U.)	6.0	19
Cyanides? (mg/L)		· · · · · · · · · · · · · · · · · · ·
Sulfides? (ppm)?		
Specific Gravity	1.00	
Physical Description	•	
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	76	:
Conductivity	34	.5
% Solids	. 9	3
Turbidity	Yes	No
Color		
TSS (%)	1	ne l
Radiation Screen (as needed)		
Lab Signature/Initials	4	Co

RECEIVING INFO	DRMATION	ă.
Date	17/2	8 / 22 ·
Receiving ID#	IO728	2202
Manifést# Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by		<u>, 57)</u>
Sampled by	17-	
	11	

55T-Z

	·	
LAB INFORMA	VTION :	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>11	10
pH (S.U.)	7.01	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.02	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	33,5	ms
% Solids	1.5	9,
Turbidity	Yes	No
Color		
TSS (%)	40.	
Radiation Screen (as needed)		
Lab Signature/Initials	7.	ガ、

I 0728720285T.1

## RECEIVING & APPROVAL FORM

RECEIVING INF	ORMATION	
Date	07/28	/ 22
Receiving ID#	-B07982	OX
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		:
Time in		
Time out		<del></del>
Received by	J.	H
Sampled by	NE	:

Time in
Time out
Received by
Sampled by

LAB INFORMA	MOITA	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	214	0
pH (S.U.)	6.8	71
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	3
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	72	
Conductivity	41.0	~5
% Solids	1-5	9
Turbidity	Yes	No
Color		:
TSS (%)	40.	1
Radiation Screen (as needed)		
Lab Signature/Initials	J	· t-1_

RECEIVING INFO	RMATION	
Date	107/2	1 2 2 2 .
Receiving ID#	2072	2203
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		<u></u>
Time in		
Time out		
Received by	G.1	7.
Sampled by	1 133	

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LAB INFORMA	TION ;	
Compatible? (RT# )	1 4	
PCBs (ppm) (Oily Waste	1	
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	<u> </u>	40
pH (S.U.)	63	8
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1,0	2-
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	72	
Conductivity	29.6	2 m 3
% Solids	1.5	2
Turbidity	Yes	No
Color		
TSS (%)	40,	1
Radiation Screen (as needed)		
Lab Signature/Initials	J.	)

RECEIVING INF	ORMATION	
Date	07/7	7 / 22
Receiving ID#	2012	12203
Manifest # Line	-	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		in the same of the
Time out		
Received by	₫.	17).
Sampled by	BP	

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LAB INFORMA	TION .	
Compatible? (RT# )	y	
PCBs (ppm) (Oily Waste		
Only)?	\	
TOC ppm (CC Waste Only)?		
Flash Point (F)	>14	6
pH (S.U.)	6.98	}
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.02	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	72	
Conductivity	36.4	£
% Solids	14	9
Turbidity	Yes	No
Color		
TSS (%)	101	\
Radiation Screen (as needed)	•	,
Lab Signature/Initials		a.H

557-1

24.20		
RECEIVING INFO	DRMATION -	_
Date	7/2	7/22
Receiving ID#	2072	12204
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		<u></u>
Time in		
Time out		
Received by	3,7	)
Sampled by	Qh.	

LAB INFORMATION Compatible? (RT# ) PCBs (ppm) (Oily Waste Only)? TOC ppm (CC Waste Only)? >140 Flash Point (F) pH (S.U.) Cyanides? (mg/L) Sulfides? (ppm)? Specific Gravity 07 Physical Description **Stream Consistency** Yes No Oil in Sample? Yes No 72-Temperature (F) 32-6ms Conductivity 2.10 % Solids **Turbidity** Yes No Color TSS (%) 18. Radiation Screen (as needed) Lab Signature/Initials

Receiving & Departure Approval Form

RECEIVING INFOR	MATION	
Date	[ 7 / Z	7/22
Receiving ID#	T072	72204
Manifest # Line		!
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J,	7)
Sampled by	Alv	

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LAB INFORMA	TION .	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	27	40
pH (S.U.)	6.9	19
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	2
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	77	<u> </u>
Conductivity	36	3 m5
% Solids	1.10%	}
Turbidity	Yes	No
Color		
TSS (%)	<b>\</b>	ラント
Radiation Screen (as needed)		
Lab Signature/Initials	ري جي	r)

RECEIVING INFOR	MATION	
Date	7-28-	てて
Receiving ID#	I07282	201
Manifest # Line	4	
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by		
Sampled by	TG	

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LAB INFORMA	TION:	
Compatible? (RT# )	i if	
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	7140	,
pH (S.U.)	7140	1
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1,00	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	78	
Conductivity	32.4	
% Solids	1.60	
Turbidity	Yes	No
Color		
TSS (%)	2.1	· · · · · · · · · · · · · · · · · · ·
Radiation Screen (as needed)		ş1 .
Lab Signature/Initials	-76-	

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RECEIVING INI	FORMATION	
Date	7-28	- マス
Receiving ID#	1072	32201
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		. ~
Generator		
Client		
Transporter		
Time in		
Time out		
Received by		
Sampled by	76	2

357-2

LAB INFORMA	TION .	
Compatible? (RT# )	12	
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>140	>
pH (S,U.)	Lois	15
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	40	
Conductivity	36.	2
% Solids	1,12	ĵ
Turbidity	Yes	No
Color		
TSS (%)	L-	)
Radiation Screen (as needed)		ş* .
Lab Signature/Initials	16	1

2.1 mg/s		
RECEIVING INFO	RMATION	
Date	7-27-2	7
Receiving ID#	I0727	<del> </del>
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	(JH)	:
Sampled by	16	

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LAB INFORMA	TION :	
Compatible? (RT# )	1	
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>1H	)
pH (S.U.)	7/33	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	78	
Conductivity	28.5	10 S
% Solids	1-41	2
Turbidity	Yes	No
Color		
TSS (%)	160	
Radiation Screen (as needed)		pt :
Lab Signature/Initials	(AC)	

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RECEIVING INFOR	MATION	
Date	7-27-2	
Receiving ID#	IO727	ZOS
Manifest # Line		:
Land Ban Cert included	Yes -	- No
EGT Approval #		
Generator		:
Client		
Transporter		
Time in		
Time out		
Received by	J, H	
Sampled by	To	

557-1

LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?	-	
Flash Point (F)	2140	
pH (S.U.)	6.97	
Cyanides? (mg/L)	Transmetter	
Sulfides? (ppm)?		
Specific Gravity	1-07	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	78	
Conductivity	35.6~	~ 5
% Solids	1.39	
Turbidity	Yes	No
Color		- Annual
TSS (%)	<0.1	
Radiation Screen (as needed)		97.
Lab Signature/Initials	JH	

4.00		
RECEIVING INFO	ORMATION -	
Date	07/21	0/22
Receiving ID#	20726	,२२०५
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	7.	77
Sampled by	BF	)

LAB INFORMA	TION	
Compatible? (RT# )	4	
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	1/	40
pH (S.U.)	(0.6	To
Cyanides? (mg/L)		:
Sulfides? (ppm)?		
Specific Gravity	1.07	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	35 2	-25
% Solids	2.0	4
Turbidity	Yes	No
Color		
TSS (%)	_ <i>&lt;0</i> ~	<b>)</b>
Radiation Screen (as needed)		
Lab Signature/Initials	J.H)	

RECEIVING INF	ORMATION	
Date	07/2	C / 22
Receiving ID#	20726	2204
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		·
Time in		
Time out		
Received by		「たん
Sampled by	B	3

LAB: INFORMA	ATION:	
Compatible? (RT# )	I Y	
PCBs (ppm) (Oily Waste	-1 /	
Only)?	1	
TOC ppm (CC Waste Only)?		
Flash Point (F)	<u> </u>	40
pH (S.U.)	61	34
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.03	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	34.	m 5
% Solids	2-6	27
Turbidity	Yes	No
Color		
TSS (%)	10.	)
Radiation Screen (as needed)		
Lab Signature/Initials		N

The Company of the Co		
RECEIVING INFOR	NOTION	
Date	7-27-0	2<
Receiving ID#	I0727	2201
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by		
Sampled by	76	

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Compatible? (RT# )			
PCBs (ppm) (Oily Waste Only)?  TOC ppm (CC Waste Only)?  Flash Point (F)  pH (S.U.)  Cyanides? (mg/L)  Sulfides? (ppm)?  Specific Gravity  Physical Description  Stream Consistency  Oil in Sample?  Temperature (F)  Conductivity  % Solids  Turbidity  Color  TSS (%)  Radiation Screen (as needed)	LAB INFORMA	JION:	
Only)?  TOC ppm (CC Waste Only)?  Flash Point (F)  pH (S.U.)  Cyanides? (mg/L)  Sulfides? (ppm)?  Specific Gravity  Physical Description  Stream Consistency  Oil in Sample?  Temperature (F)  Conductivity  % Solids  Turbidity  Color  TSS (%)  Radiation Screen (as needed)		4	
TOC ppm (CC Waste Only)?  Flash Point (F)  pH (S.U.)  Cyanides? (mg/L)  Sulfides? (ppm)?  Specific Gravity  Physical Description  Stream Consistency  Oil in Sample?  Temperature (F)  Conductivity  % Solids  Turbidity  Color  TSS (%)  Radiation Screen (as needed)	PCBs (ppm) (Oily Waste		
Flash Point (F) pH (S.U.) Cyanides? (mg/L) Sulfides? (ppm)? Specific Gravity Physical Description Stream Consistency Oil in Sample? Temperature (F) Conductivity % Solids Turbidity Color TSS (%) Radiation Screen (as needed)	Only)?		
pH (S.U.) Cyanides? (mg/L) Sulfides? (ppm)? Specific Gravity Physical Description Stream Consistency Oil in Sample? Temperature (F) Conductivity % Solids Turbidity Color TSS (%) Radiation Screen (as needed)	TOC ppm (CC Waste Only)?		
Cyanides? (mg/L) Sulfides? (ppm)? Specific Gravity Physical Description Stream Consistency Oil in Sample? Temperature (F) Conductivity % Solids Turbidity Color TSS (%) Radiation Screen (as needed)	Flash Point (F)	7140	<b>&gt;</b>
Sulfides? (ppm)?  Specific Gravity  Physical Description  Stream Consistency  Oil in Sample?  Temperature (F)  Conductivity  % Solids  Turbidity  Color  TSS (%)  Radiation Screen (as needed)	pH (S.U.)	1.3	9
Specific Gravity Physical Description Stream Consistency Oil in Sample? Temperature (F) Conductivity % Solids Turbidity Color TSS (%) Radiation Screen (as needed)			
Physical Description Stream Consistency Oil in Sample? Temperature (F) Conductivity % Solids Turbidity Color TSS (%) Radiation Screen (as needed) Yes No No Ves No No Color	Sulfides? (ppm)?		
Stream Consistency Oil in Sample? Yes No Temperature (F) Conductivity % Solids Turbidity Color TSS (%) Radiation Screen (as needed)	Specific Gravity	1.00	
Oil in Sample? Temperature (F)  Conductivity % Solids Turbidity  Color TSS (%)  Radiation Screen (as needed)	Physical Description		
Temperature (F)  Conductivity  % Solids  Turbidity  Yes  No  Color  TSS (%)  Radiation Screen (as needed)	Stream Consistency	Yes	No
Conductivity  % Solids  Turbidity  Color  TSS (%)  Radiation Screen (as needed)	Oil in Sample?	Yes	No
% Solids Turbidity Yes No Color TSS (%) Radiation Screen (as needed)	Temperature (F)	70	
Turbidity Yes No Color TSS (%)	Conductivity	60.	3
Color TSS (%) Radiation Screen (as needed)	% Solids	.51	7
TSS (%) Z.   Radiation Screen (as needed)	Turbidity	Yes	No
Radiation Screen (as needed)	Color	-1 100,00	
	TSS (%)	<i>L</i> .	
1 -1 0	Radiation Screen (as needed)		
Lab Signature/Initials	Lab Signature/Initials	10	

RECEIVING INFO	RMATION	
Date	7/21	0 /22:
Receiving ID#	I072	62202
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	(すっ)	
Sampled by	10	

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LAB INFORMA	VTION	5.
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)		
pH (S.U.)	4.60	5
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	1
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	76	0
Conductivity		7m5
% Solids	0.9	6
Turbidity	Yes	No
Color		
TSS (%)	-40	+0-
Radiation Screen (as needed)		11.
Lab Signature/Initials	し び,	<del>}</del>

The state of the s		
RECEIVING INFOR	MATION	
Date	07/2	5 / 22
Receiving ID#	20725	てしのろ
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		·
Time in		
Time out	400044	
Received by	J.	rl
Sampled by	L OB	

LAB INFORMA	TION:	
Compatible? (RT# )	Г Ч	
PCBs (ppm) (Oily Waste		
Only)?	1	
TOC ppm (CC Waste Only)?		
Flash Point (F)	>2	18
pH (S.U.)	4.8	<u> </u>
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	2
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	71	
Conductivity	24.3	m5
% Solids	2-0	03
Turbidity	Yes	No
Color		
TSS (%)	(0)	
Radiation Screen (as needed)		
Lab Signature/Initials	1	<i>"</i> (1)

Sampled by

# RECEIVING & APPROVAL FORM

		4.2.2
RECEIVING INFO	RMATION.	
Date	7-26-	<b>7</b>
Receiving ID#	I0726	2201
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter	- Lander-	
Time in		:
Time out		
Received by		

LAB INFORMA	TION	
Compatible? (RT# )	1 4	
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	7146	
pH (S.U.)	8.11	
Cyanides? (mg/L)	- Linear	
Sulfides? (ppm)?		
Specific Gravity		
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	76	
Conductivity	25.0	
% Solids	1.8-	7
Turbidity	Yes	No
Color		
TSS (%)	4,1	:
Radiation Screen (as needed)		147
Lab Signature/Initials	TG	;

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SOMETION	
T7/25	/ 22
107250	1202
Yes	No
Oπ	)
I B	
	PRMATION 7 / 25 T 07250 Yes

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LAB INFORMA	(TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	21	10
pH (S.U.)	1 2	5
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.00	)
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	33.	5~5
% Solids	(	0.1
Turbidity	Yes	No
Color		
TSS (%)	(0	. J
Radiation Screen (as needed)		-
Lab Signature/Initials	J.4	)

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RECEIVING INF	ORMATION OT/QS	/ 22
Receiving ID#	107952	
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	5.4	
Sampled by	NE	

LAB INFORMA	TION:	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)		
pH (S.U.)	1.7	9
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	50
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	201	a ms
% Solids	40	. ]
Turbidity	Yes	No
Color		
TSS (%)	100	1
Radiation Screen (as needed)		41
Lab Signature/Initials	2.4	

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RECEIVING INFO	RMATION	
Date	7/22	2 / 22
Receiving ID#	I07722	202
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		:
Generator		
Client		
Transporter		i i
Time in		
Time out		
Received by	乙,4	/
Sampled by	AM	
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LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>14	
pH (S.U.)	7.3	4
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	1
Physical Description	•	
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	78	
Conductivity	16	10 ms
% Solids	1.0	
Turbidity	Yes	No
Color		
TS\$ (%)	<b>⟨</b> <i>O</i> ,	
Radiation Screen (as needed)		
Lab Signature/Initials	ゴッ	)

RECEIVING INF	ORMATION	
Date	7/20	2, / 22
Receiving ID#	L0773	2201
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #	. :	
Generator		
Client		
Transporter		
Time in		
Time out		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Received by		<i>t</i> ) .
Sampled by	03	

LAB INFORMA	ATION .	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	21	40
pH (S.U.)	7.4	5
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	2-
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	)
Conductivity	19.1	3 05
% Solids	1.89	
Turbidity	Yes '	No
Color		
TS\$ (%)	10.	1
Radiation Screen (as needed)		
Lab Signature/Initials	JH	

RECEIVING INFO	RMATION	
Date	712	l / 22 <u> </u>
Receiving ID#	IT072	12203
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		·
Time out		
Received by	Ġ	M
Sampled by	AW	

TION :	
	:
> 1	40)
٦.	43
1.0%	2
Yes	No
Yes	No
70	)
197	825
1.5	9
Yes	No
(	9-1
	*
ر ا	<del>})</del>
	Yes 7.0

RECEIVING INFOR	MATION	
Date	7-21-	てて
Receiving ID#	J072/	705
Manifest # Line		
Land Ban Cert included	Yes	· No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J. 7	7
Sampled by	76	

LAB INFORMA	TION:	
Compatible? (RT# )	5	
PCBs (ppm) (Oily Waste	NI	t)
Only)?	, , ,	
TOC ppm (CC Waste Only)?		
Flash Point (F)	>/5	10
pH (S.U.)	6.67	
Cyanides? (mg/L)	` <	30
Sulfides? (ppm)?	1	-240
Specific Gravity	1.0	$\mathcal{O}_{\bullet}$
Physical Description	Liaz	58
Stream Consistency	Yes '	No
Oil in Sample?	Yes	No
Temperature (F)	78	
Conductivity	10.2	8
% Solids	0	20
Turbidity	(Yes)	No
Color	135	own
TSS (%)	10.	1
Radiation Screen (as needed)	New	
Lab Signature/Initials	Û	3.7

RECEIVING INFOR	MATION -	
Date	7.20	. 22
Receiving ID#	立0720	12203
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		. 1
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H	
Sampled by	A	$\sim$

LAB INFORMA	TION:	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>14	0
pH (S.U.)	3,50	·
Cyanides? (mg/L)		-
Sulfides? (ppm)?		•
Specific Gravity	1.05	-
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	1.951	
% Solids	7.4	2
Turbidity	Yes	No
Color		
TSS (%)	40.	1
Radiation Screen (as needed)		»!
Lab Signature/Initials	J. 17.	

RECEIVING INFOR	MATION	
Date	7-71-	ZZ
Receiving ID#	I072	12201
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by		
Sampled by	76	

LAB INFORMA	TION:	
Compatible? (RT# )	Y	
PCBs (ppm) (Oily Waste	/	
Only)?	<u></u>	
TOC ppm (CC Waste Only)?		
Flash Point (F)	7140	
pH (S.U.)	2.4	3
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.02	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)		
Conductivity	23/1	
% Solids	1.6	28
Turbidity	Yes	No
Color		
TSS (%)	4	
Radiation Screen (as needed)	- 6	s2 <u>.</u>
Lab Signature/Initials		6

2.200	14.	
RECEIVING INFOR	RMAHON	
Date	7-20-	とて
Receiving ID#		っててのよ
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		_
Transporter		
Time in		
Time out		
Received by	54)	
Sampled by	76	

55T-1

LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)		
pH (S.U.)	7.73	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.03	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	72	
Conductivity	320	~5
% Solids	1.58	
Turbidity	Yes	No
Color		
TSS (%)	10	
Radiation Screen (as needed)		»: .
Lab Signature/Initials	<u> び.け、</u>	Mary marks and a second second second second second second second second second second second second second se

RECEIVING INFOI	RMATION	
Date	7-19-	22
Receiving ID#	IO719'	2203
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		. *
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H)	
Sampled by	M	

LABINFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>14	0
pH (S,U.)	6.9	3
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.02	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	32.6	2005
% Solids	1.2	2_
Turbidity	Yes	No
Color		
TSS (%)	1.0	<b>)</b>
Radiation Screen (as needed)		,et ,
Lab Signature/Initials	J.7	

RECEIVING INFO		
Date	7-20-	えて
Receiving ID#	7-20-2 F0776	2701
Manifest # Line		
Land Ban Cert included	Yes	" No
EGT Approval #		•
Generator		
Client		
Transporter		
Time in		
Time out		
Received by		
Sampled by	762	

557-1

LAB INFORMA	TION .	
Compatible? (RT# )	1 50	
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>140	)
pH (S.U.)	7.15	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.01	
Physical Description		:
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	80	
Conductivity	33.2	,
% Solids	1.3	
Turbidity	Yes	No
Color		
TSS (%)	L.	
Radiation Screen (as needed)	10.00	٧.
Lab Signature/Initials	TG	<u>, , , , , , , , , , , , , , , , , , , </u>

	140	
RECEIVING INFOR	MATION	
Date	2022074	9
Receiving ID#	T071920	! .
Manifest # Line		
Land Ban Cert included	Yes	* No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	NE	

<u>LAB INFORMA</u>	TION ;	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>14	0
pH (S.U.)	7.11	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.02	-
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	79	
Conductivity	29.5	m5
% Solids	1.46	
Turbidity	Yes	No
Color		
TSS (%)	0.75	
Radiation Screen (as needed)		>1
Lab Signature/Initials	るみ	)

	1964 (S145)	
RECEIVING INFOR	MATION	
Date	7/18):	2
Receiving ID#	20718	2-2-63
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		34 14
Time out		
Received by	5秒	
Sampled by	BB	

45.00		247494585858585972337070
LAB INFORMA	TION	
Compatible? (RT# )	5	
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)		
pH (S.U.)	4.69	·
Cyanides? (mg/L)		
Sulfides? (ppm)?	- The state of the	
Specific Gravity	1.02	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	71	
Conductivity	23-	୫୍ଲ
% Solids	8-2-7	
Turbidity	Yes	No
Color		
TSS (%)	5.0	
Radiation Screen (as needed)		,:
Lab Signature/Initials	J.th	

100		
RECEIVING INFO	RMATION	200
Date	7-19-	2 7
Receiving ID#	I07192261	
Manifest # Line		
Land Ban Cert included	Yes	No No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by		
Sampled by	TG	

557	-/

LAB INFORMA	TION	
Compatible? (RT# )	y	
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?	-	
Flash Point (F)	>140	<b>&gt;</b>
pH (S.U.)	4.59	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.01	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	80	
Conductivity	28.7	
% Solids	2.1	3
Turbidity	Yes	No
Color		
TSS (%)	۷.	1
Radiation Screen (as needed)		s*
Lab Signature/Initials	76	

RECEIVING INFOR	NOTION	
Date	7. 15· 2	2022
Receiving ID#	Z07152	203
Manifest # Line		
Land Ban Cert included	Yes	- Na
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	3.7	7)
Sampled by	BW	

	C2	Santas de la comita comita
LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>142	
pH (S.U.)	7.6	7
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	102	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	43.7	2-25
% Solids	2-74	
Turbidity	Yes	No
Color		
TSS (%)	200	
Radiation Screen (as needed)		,:
Lab Signature/Initials	クナ	)

Element 1	100	
RECEIVINGUNEO	RMATION	
Date	7-18-2	
Receiving ID#	I07182	202
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	JH) 76	
Sampled by	Te	

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LAB INFORMA	TION	
Compatible? (RT# )	4es	
PCBs (ppm) (Oily Waste		
Only)?	****	
TOC ppm (CC Waste Only)?		
Flash Point (F)	>140	
pH (S.U.)	6.56	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	L-01	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	78	
Conductivity	26.3	
% Solids	1,49	
Turbidity	Yes	No
Color		
TSS (%)	2.1	
Radiation Screen (as needed)		141
Lab Signature/Initials	18/	3.77

Sampled by

## RECEIVING & APPROVAL FORM

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4.000		
RECEIVING INFO	RWATION:	
Date	7-18-2	7
Receiving ID#	7-18-2 IO7182	201
Manifest # Line		· · · · · · · · · · · · · · · · · · ·
Land Ban Cert included	Yes -	- No
EGT Approval #	-	
Generator		
Client		
Transporter	1	
Time in		
Time out		
Received by	TG	

LAB INFORMA	FION	
Compatible? (RT# )	425	
PCBs (ppm) (Oily Waste		<del></del>
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>140	
- pH (S.U.)	<i>5140</i> <b>6.93</b>	
Cyanides? (mg/L)	Parameter Parame	
Sulfides? (ppm)?		
Specific Gravity	1.02	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	76.	
Conductivity	42.1 0	5
% Solids	3,8	8
Turbidity	Yes	No
Color		
TSS (%)	2.1	
Radiation Screen (as needed)		2.
Lab Signature/Initials	J.H. IT	G.

Receiving & Departure Approval Form

RECEIVING INFOR	MAILON	
Date	7-15	-22
Receiving ID#	F0715	2202
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	7.47	
Sampled by	WA	

		PROGRAMMO CONTRACTOR
LAB INFORMA	TION .	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		4.60
TOC ppm (CC Waste Only)?		
Flash Point (F)	>14	D
pH (S.U.)	7.77	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.02	-
Physical Description	and the same of th	
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	345	N-5
% Solids	1-65	
Turbidity	Yes	No
Color		
TSS (%)	100	
Radiation Screen (as needed)	1	
Lab Signature/Initials	תיות	

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RECEIVINGUNFO	RMATION	9.00
Date	57/14-Z	OUL
Receiving ID#	207142	
Manifest # Line		_
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out	3.7	-
Received by		
Sampled by	1 36	
•	- market	1

LAB INFORMA	TION:	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?	/	
TOC ppm (CC Waste Only)?		
Flash Point (F)	) ) //	<b>)</b>
pH (S.U.)	(Ca.)	5
Cyanides? (mg/L)		,
Sulfides? (ppm)?	-	
Specific Gravity	1.03	
Physical Description		·
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	38,1	105
% Solids	1.0	7
Turbidity	Yes	No
Color		
TSS (%)	(01	
Radiation Screen (as needed)		
Lab Signature/Initials	イズり	_

(対ION) フ-15-	77
7-15-	77
	Z乙
10715	
	_
Yes	- No
Tla	
16	
	10115

LAB INFORM	ATION:		
Compatible? (RT# )			1
PCBs (ppm) (Oily Waste			1
Only)?			
TOC ppm (CC Waste Only)?			
Flash Point (F)	>140		ĺ
pH (S.U.)	1.6	76 6	60
Cyanides? (mg/L)			
Sulfides? (ppm)?			
Specific Gravity	1.02		
Physical Description	Lia		
Stream Consistency	Tes	No	
Oil in Sample?	Yes	/No	
Temperature (F)	80		
Conductivity	45.0		
% Solids	2.8	<b>)</b>	
Turbidity	Yes	No	
Color			
TSS (%)	6		:
Radiation Screen (as needed)			
Lab Signature/Initials	16		

RECEIVING INFOR	MATION	
Date	7-14-	22
Receiving ID#	IO7/42	
Manifest # Line		
Land Ban Cert included	Yes	· No
EGT Approval #		
Generator		
Client	uðs.	
Transporter	#\$).i	
Time in		
Time out		
Received by	るな	
Sampled by	_03	

LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>14	0
pH (S.U.)	6.4	7
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.02	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	33.0	~5
% Solids	1.93	
Turbidity	Yes	No
Color		
TSS (%)	(0.)	
Radiation Screen (as needed)		
Lab Signature/Initials	J.7)	

	100	
RECEIVING INFOR	MATION	100
Date	7-14-	てて
Receiving ID#	I071	
Manifest # Line		
Land Ban Cert included	Yes ·	- No
EGT Approval #		
Generator	657-	2_
Client		
Transporter		
Time in		
Time out	· · · · · · · · · · · · · · · · · · ·	
Received by		
Sampled by	NE	

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LAB INFORMA	TION:	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>140	
pH (S.U.)	12.19	
Cyanides? (mg/L)	-630	230
Sulfides? (ppm)?	#30°	PLZCO
Specific Gravity	1.07	
Physical Description	Lic	2
Stream Consistency	Yes	No
Oil in Sample?	Yes	(Ñg)
Temperature (F)	76	
Conductivity	34.2	
% Solids	2.30	,
Turbidity	Yeş	(QQ)
Color	Brown	
TSS (%)	۷,	Ì
Radiation Screen (as needed)	Neg	af .
Lab Signature/Initials	J	16

MATION	
	022
207132	203
Yes	- No
	,
Ŋ	ナ <i>)</i> -
Bh	
	MATION 07/13-7 TOUS  Yes  J:

7. (9xx) 570/(1xxx) 9x (8xxx) 2xxx (8xxx)		
LAB INFORMA	TION .	
Compatible? (RT# )	1	
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	2141	)
pH (S.U.)	6-5	र
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	2
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	32-6	ms
% Solids	2.62	~
Turbidity	Yes	No
Color		
TSS (%)	(0-	)
Radiation Screen (as needed)		,:
Lab Signature/Initials	J.77	

RECEIVING INFOR	RMATION	6 ( ja e. j.)
Date	7-13-7	7
Receiving ID#	T07/322	<del></del>
Manifest # Line		
Land Ban Cert included	Yes	· Na
EGT Approval #		-
Generator		
Client		
Transporter		·
Time in		
Time out		
Received by	<b>ゴ.</b> カ	
Sampled by	DM	

LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>140	
pH (S.U.)	7.35	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.03	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	34.2	ms
% Solids	1.81	
Turbidity	Yes	No
Color		
TSS (%)	201	
Radiation Screen (as needed)		
Lab Signature/Initials	びれ	

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RECEIVINGUNFOR	MATION	
Date	7-12-2	Z
Receiving ID#	20712	
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.77	
Sampled by	The	

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LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	214	(b)
pH (S.U.)	6.29	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.02	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	183	9 205
% Solids	1.09	
Turbidity	Yes	No
Color		
TSS (%)	201	
Radiation Screen (as needed)		¥.
Lab Signature/Initials	した。こ	

RECEIVING INFOR	MATION .	
Date		2022
Receiving ID#	Z0111	2203
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in	<del> </del>	
Time out	Section at a section of the section	
Received by	7.13	
Sampled by		

	Section Control	
LAB INFORMA	UHON .	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>7,40	)
pH (S.U.)	2-33	
Cyanides? (mg/L)	and the same of th	
Sulfides? (ppm)?	The state of the s	
Specific Gravity	1.00	
Physical Description	The state of the s	2
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	6.66	~~\S
% Solids	1.13	
Turbidity	Yes	No
Color		
TSS (%)	(0)	
Radiation Screen (as needed)	YAN G	
Lab Signature/Initials	ゴ.ド	

RECEIVING INFOR	MATION	
Date		1025
Receiving ID#	107117	202
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		**
Time in		(A)
Time out		
Received by	TF.C	
Sampled by	AW	

LAB INFORMA	TION:	7 Jan 1
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>140	
pH (S.U.)	4.39	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1-02	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	27	5~5
% Solids	2.25	ĺ
Turbidity	Yes	No
Color		
TSS (%)	400	
Radiation Screen (as needed)		
Lab Signature/Initials	2.14	

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TO 713	2201
Yes ·	· No
	·
Jul	)
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LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>140	$\triangleright$
pH (S.U.)	5.3	9
Cyanides? (mg/L)	-	
Sulfides? (ppm)?		
Specific Gravity	1.03	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	34.2	~5
% Solids	2.83	}
Turbidity	Yes	No
Color		
TSS (%)	40-1	
Radiation Screen (as needed)	, , , , , , , , , , , , , , , , , , , ,	
Lab Signature/Initials	(だし	

RECEIVING INFOR	RMATION	
Date	Charles and the control of the second contro	orz
Receiving ID#	207122	203
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in	<u> </u>	
Time out		A CALL THE SAME OF
Received by	0-17)-	
Sampled by	BB	

The state of the s		
LAB INFORMA	TION	
Compatible? (RT# )	Y	
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?	1	
Flash Point (F)	>140	
pH (S.U.)	7.89	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.03	>
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	38.8	~S
% Solids	336	~
Turbidity	Yes	No
Color		
TSS (%)	10-N	
Radiation Screen (as needed)	,	
Lab Signature/Initials	J.H	

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RECEIVING INFO	RMATION	
Date	7-12-	22
Receiving ID#	10712	2202
Manifest # Line		
Land Ban Cert included	Yes	- No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	3.7	
Sampled by	CS	
	Carried Control	1

LAB INFORMA	TION:	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		****
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	214	D
pH (S.U.)	6.7	60
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.02	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	72	
Conductivity	22.0	J pr 5
% Solids	1.02	e par
Turbidity	Yes	No
Color		
TSS (%)	< Q	\
Radiation Screen (as needed)		31
Lab Signature/Initials	0.17	

RECEIVING INFOR	MATION	
Date	7/8	122
Receiving ID#	I070	8 2707
Manifest # Line		
Land Ban Cert included	Yes	· No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.,	ス
Sampled by		

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LAB INFORMAT	TON:	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	214	<b>)</b>
pH (S.U.)	4.8	33
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.02	_
Physical Description	154.	
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	72	
Conductivity	24.2	~~ <sup>5</sup>
% Solids	2.73	,
Turbidity	Yes	No
Color		
TSS (%)	(a)	
Radiation Screen (as needed)		
Lab Signature/Initials	<b>す</b> 、刊	

		5.75
RECEIVING INFO	RMATION	
Date	07/07	122
Receiving ID#	207077	203
Manifest # Line	Objects that	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator	and the same of th	
Client	- Arterior	
Transporter	2	
Time in	1	
Time out		
Received by	9.7	)_
Sampled by	BB"	i
	~	I .

LAB INFORMA	TION:	
Compatible? (RT# )	M	
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?	THE COUNTY OF TH	
Flash Point (F)	> 19	Ø
pH (S.U.)	5.	27
Cyanides? (mg/L)	Almeter III	
Sulfides? (ppm)?	THE PARTY OF THE P	
Specific Gravity	1.03	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	32-9	<u>~</u> 5
% Solids	2.7	10
Turbidity	Yes	No
Color		
TSS (%)	500	
Radiation Screen (as needed)		
Lab Signature/Initials	J. 17	

RECEIVING INFO	RMATION	
Date	13/11	122
Receiving ID#	I0711	2201
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #	the state of the s	-
Generator	Per established in	
Client	- Harmanny	
Transporter		
Time in		
Time out		
Received by	3,4	1)
Sampled by	TG	1

The state of the s		
LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste	-	
Only)?		
TOC ppm (CC Waste Only)?	111111111111111111111111111111111111111	
Flash Point (F)		
pH (S.U.)	7.14	
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.02	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	72	
Conductivity	30.0	~S
% Solids	1.59	
Turbidity	Yes	No
Color		
TSS (%)	(0,	.)
Radiation Screen (as needed)		
Lab Signature/Initials	び、ひ	

RECEIVING INFOR	MATION	
Date	7/8	122
Receiving ID#	Z0708	2208
Manifest # Line		
Land Ban Cert included	Yes	· No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		1.3
Time out		
Received by	5.	וז
Sampled by	AL	Z1

12 Control of Proceedings (Control of Control		
LAB INFORMA	TION:	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste	-	
Only)?		
TOC ppm (CC Waste Only)?	411	
Flash Point (F)	)/41	)
pH (S.U.)	6.5	,9
Cyanides? (mg/L)		,
Sulfides? (ppm)?		
Specific Gravity	1.0	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	72	
Conductivity	27.4	~\ <sup>\'</sup>
% Solids	2.27	
Turbidity	Yes	No
Color		
TSS (%)	(0,	)
Radiation Screen (as needed)		
Lab Signature/Initials	J.H.	

RECEIVING INFO	PRMATION	
Date	7/8	122
Receiving ID#	J0708	2201
Manifest # Line	-	
Land Ban Cert included	Yes	· Na
EGT Approval #	and the same of th	
Generator	111111111111111111111111111111111111111	
Client	te married la la la la la la la la la la la la la	
Transporter	12.22.22.22.22.22.22.22.22.22.22.22.22.2	
Time in	***************************************	
Time out		100
Received by	5.7	)
Sampled by		A
		)

	-	12.14
LAB INFORMA	HUN	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste	Apparent t	
Only)?		
TOC ppm (CC Waste Only)?	The state of the s	
Flash Point (F)	> 1	W
pH (S.U.)	5	96
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.0	2
Physical Description .		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	72	_
Conductivity	20.1	~n S
% Solids	2.23	
Turbidity	Yes	No
Color		
TSS (%)	10.	7
Radiation Screen (as needed)		
Lab Signature/Initials	ゴカ	

RECEIVINGUNEO	RMATION	
Date	67/07	122
Receiving ID#	207077	204
Manifest# Line		
Land Ban Cert included	Yes	· No
EGT Approval #		
Generator		
Client		
Transporter	1	
Time in		
Time out		
Received by	5,5	7
Sampled by	My	ŕ
		T

LAB INFORMA	TION:	
Compatible? (RT# )	7	
PCBs (ppm) (Oily Waste	1	
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	> 14	Ø
pH (S.U.)	3.7	6
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.05	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	72	
Conductivity	42-8	3~5
% Solids	(5-1	50
Turbidity	Yes	No
Color		
TSS (%)	100	
Radiation Screen (as needed)		
Lab Signature/Initials	J.19.	

ATION 7 7 7 07 07 07	/22 27 D Z
7/7	122 2202
	2202
Yes	No
4.	
	1
J. t)	-
Ø	•
	Yes J.t)

- 12.2 C. C. C. C. C. C. C. C. C. C. C. C. C.		
LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste	1111	
Only)?		
TOC ppm (CC Waste Only)?	4	
Flash Point (F)	) 12	18
pH (S.U.)	6.	58
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.03	
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	70	
Conductivity	31.4~	5
% Solids	6.0	25
Turbidity	Yes	No
Color		
TSS (%)	0.1	
Radiation Screen (as needed)		
Lab Signature/Initials		J.+1

RECEIVING INFOR	MATION	
Date	7/7	122
Receiving ID#	1070	
Manifest # Line		
Land Ban Cert included	Yes	· Na
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	
Received by	J.,	)
Sampled by	76	1

LAB_INFORMA	JION:	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?	4	
Flash Point (F)	2140	
pH (S.U.)	6.84	)
Cyanides? (mg/L)	- Transmission	
Sulfides? (ppm)?	I I I I I I I I I I I I I I I I I I I	
Specific Gravity	1.02	
Physical Description .	And And And And And And And And And And	
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	34.9 ~	7 (
% Solids	230	
Turbidity	Yes	No
Color		
TSS (%)	40	)
Radiation Screen (as needed)		
Lab Signature/Initials		

RECEIVINGINFOR	MATION	
Date	7/6	122
Receiving ID#	Z07062	204
Manifest # Line		
Land Ban Cert included	Yes	· No
EGT Approval #		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	2,	77)
Sampled by	Au	( ,

LAB INFORMA	TION:	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste	507	
Only)?		
TOC ppm (CC Waste Only)?	Trible-Wasse	
Flash Point (F)	>14	0
pH (S.U.)	7.16	
Cyanides? (mg/L)	THE COLUMN TO TH	
Sulfides? (ppm)?	1	
Specific Gravity	1.0	4
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	43.5	~
% Solids	5.6	2
Turbidity	Yes	No
Color		
TSS (%)	40.	1
Radiation Screen (as needed)		
Lab Signature/Initials	and	*180-

RECEIVINGINFOR	MATION	
Date	7/6	122
Receiving ID#	I0700	2203
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	7.7	7
Sampled by	pm	<i>^</i> :

	7.77	
LAB INFORMA	TION:	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste	ĺ	
Only)?		
TOC ppm (CC Waste Only)?		
Flash Point (F)	>12	<i>U</i>
pH (S.U.)	5.1	12
Cyanides? (mg/L)	1000	
Sulfides? (ppm)?		
Specific Gravity	1.16	)
Physical Description .		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	85,2	-m5
% Solids	14.33	7
Turbidity	Yes	No
Color		
TSS (%)	(0.	)
Radiation Screen (as needed)		
Lab Signature/Initials	に、し	

RECEIVINGINFOR	MATIÓN	
Date	70/6	122
Receiving ID#	I07062	201
Manifest # Line		
Land Ban Cert included	Yes	· No
EGT Approval #		
Generator	un militari i	
Client	throwalds	
Transporter		
Time in		
Time out		
Received by	びが	
Sampled by	EN	·

7.0-127 (27 of page 22 of page 23		
LAB INFORMA	TION:	
Compatible? (RT# )	de la constantina della consta	
PCBs (ppm) (Oily Waste		
Only)?		
TOC ppm (CC Waste Only)?	THE STATE OF THE S	
Flash Point (F)	> 1 > 1 >	0
pH (S.U.)	7.28	}
Cyanides? (mg/L)		
Sulfides? (ppm)?	Aliteratura	
Specific Gravity	1.02	,
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	34.2	MS
% Solids	2.72	
Turbidity	Yes	No
Color		
TSS (%)	40,	
Radiation Screen (as needed)		1
Lab Signature/Initials	\(\frac{1}{2}\)	*-

THE RESERVE TO THE PARTY OF THE	
RECEIVINGIN	ORMATION 1
Date	3/2/22
Receiving ID#	F07027207
Manifest# Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	M.L.
Sampled by	

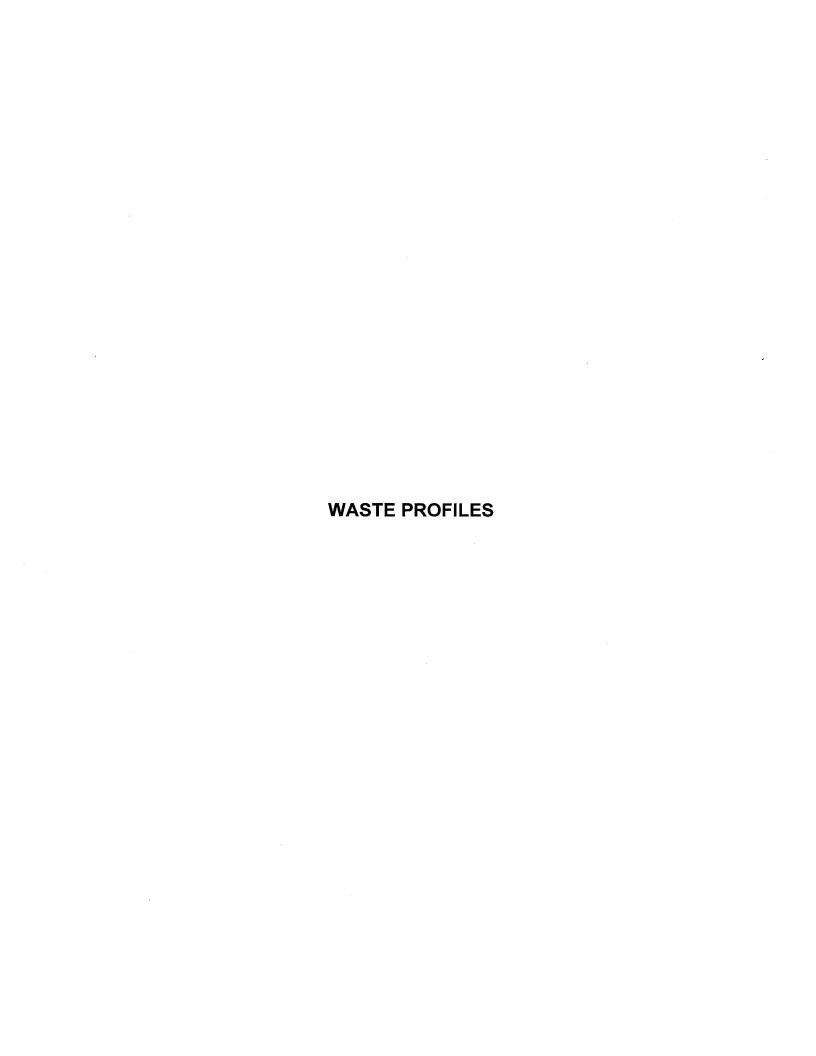
LAB INFORMA	TION	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste	- Company	
Only)?		
TOC ppm (CC Waste Only)?	444	
Flash Point (F)	>14	)
pH (S.U.)	7.26	>
Cyanides? (mg/L)		
Sulfides? (ppm)?		
Specific Gravity	1.02	
Physical Description .	,	
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	34.3	~S
% Solids	3.01	
Turbidity	Yes	No
Color		
TSS (%)	(0.1	
Radiation Screen (as needed)		
Lab Signature/Initials	び.17-	

RECEIVING INFO	DRIMATION	
Date	7/2	122
Receiving ID#	I0702	Z201
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	, 5,	)
Sampled by	TA	ř Dan

<u>LAB INFORMA</u>	TION:	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste		***************************************
Only)?		
TOC ppm (CC Waste Only)?	THE CHAPTER OF THE CH	
Flash Point (F)	714	Λ
pH (S.U.)	7.2	Š
Cyanides? (mg/L)	elli)	
Sulfides? (ppm)?	Meetrand	
Specific Gravity	1.02	
Physical Description .	Add the latest and th	
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	34.9	ms.
% Solids	0.5	>
Turbidity	Yes	No
Color		
TSS (%)	10-1	
Radiation Screen (as needed)		
Lab Signature/Initials	5)	1

RECEIVING INFO	RMATION	
Date	7/1	162
Receiving ID#	T0701	2202
Manifest # Line		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator	opposite traffic	
Client	- American de la company de la	
Transporter	The second of th	
Time in	ALCOHOLINA A	
Time out		
Received by	, J,	D D
Sampled by		7
	( )	

LAB INFORMA	TION :	
Compatible? (RT# )		
PCBs (ppm) (Oily Waste	distribution of the state of th	
Only)?		
TOC ppm (CC Waste Only)?	-	
Flash Point (F)	>/2	10
pH (S.U.)	7.2	}
Cyanides? (mg/L)		
Sulfides? (ppm)?	Alferran	
Specific Gravity	1.0	2
Physical Description		
Stream Consistency	Yes	No
Oil in Sample?	Yes	No
Temperature (F)	73	
Conductivity	34.8	mS
% Solids	2,8	32
Turbidity	Yes	No
Color		
TSS (%)	20,1	
Radiation Screen (as needed)		
Lab Signature/Initials	立、カ	<u> </u>



REPUBLIC	Danish	dia Sandaca	_
SERVICES	}	olic Services Ulied Way, Phoenix, AZ 85054	
SF		PARTMENT DECISION	
	Waste Profile # 6440229260	Expiration Date 7/11/2023	
I. Decision Request:		tification Change	
Disposal Facility: 6440 - Detroit Ind Well			
Generator Name: BESSINGER PICKLE CO			,
Generator Site Address: 537 N COURT STRE	ET		
City: AU GRES	County:	State: MI	Zip:
Name of Waste: VINGAR			
Estimated Annual Volume: 3700 Gallons			
II. Special Waste Department Decision  Management Method(s): Landfill  Problematic Special Waste according to Rep	Solidification B	a	Transfer Facility
If yes, which one?			
Approved by Special Waste Review Commit	tee? Over On	o Not Applicable	
The site must ensure that all pre-accepta prior to acceptance and disposal of the p	nce and verification analyti	or Limitations on Approval ical is performed in accordance w	ith the site's permit requirements
Special Waste Analyst Signature: 524 Date: 7/11/2022	mx 3	Name	(Printed): <u>Stephen Brown</u>
		Name  Approved © Rejected	(Printed): <u>Stephen Brown</u>
Date: 7/11/2022 III. Facility Decision:		Approved O Rejected	(Printed): <u>Stephen Brown</u>
Date: 7/11/2022		<u>.</u> .	(Printed): <u>Stephen Brown</u>

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Republic Indu 28470 Citrin Dr, Ros	<u>strial and Energy Sol</u> nuius, Mi 48174. Telephone 73	<b>utions, LLC</b> 14 946 1000. Fax 734 946 1	GENERATOR W OO2 Profile # 64402292	ASTE PROFILE
GENERATOR INFORMATION Name: Bessinger I		USEPA	ID# VSQG	
Facility Address: 537	N Court Street	SIC/NA	ICS Code: State Code:	
City: Au Gres		State: M	I Zip Code; 48703	
Contact: Jack Bessir	nger Title: Owner	Phone: (6 o 2 ) 538-6		
BILLING INFORMATI	ON Environmental Services	SAME AS ABOVE		
	erriman Rd, Suite 200			
	Silinai Nu, Guite 200			
City: Livonia	<del></del>	State: M		<del></del>
Attention: Accounts I	Payable Title:	Phone: (7 3 4 ) 437-9	9650 Fax (7 3 4 ) 43	7-9651
Vinegar Process Generating W		ete information may delay the	approval process):	
	? DYes Mo (PCBs, etc.)	doga Edora magariar Magac	W HEZEIGOUS VVESUS	
3. List ALL Applicable	Waste Codes: NA			
PHYSICAL CHARAC	TERISTICS OF WASTE			-
Color:	Suspended Solids	Layers:	Specific Gravity:	
☑ White/Clear	Ø 0-1% ☐ 3-5%	☐ Multi layered	□ <0.8 □ 1.0 — 1.2	
☐ Black/Brown	□ 1-3 % □ > 5%	☐ Bi-Layered	0.8—1.0 01.3—1.4	1 1
O Other	<u> </u>	☐ 6 — 8 ☐ 8-10 ☐	Exact / Other	
pH: □NA □ < 2				
•	nt: 🗆 <73°F 🗆 73—100°F 🖸			osed Cup 🗆 Open Cu
VOC CONCENTRATION	<u>- <del>120,000</del> </u>	PPM (MUST BE COMPLETE	<b>=D)</b>	
TOTAL COMPOSITION	N OF WASTE - MUST BE EQUAL TO (	OR GREATER THAN 100% (L1ST E	ACH CONSTITUENT <>1= 0.1%)	
CONSTITUENT		MAX MIN CONS	TITUENT	MAX MIN
Acetic Acid. Vir	egar	12 - 12 %		
Water		88 * 88 %	Constant Annie Haline Blanch annie Haline Annie Annie Annie Annie Annie Annie Annie Annie Annie Annie Annie An	
1110101	<u> </u>			

Metals: Indicate if the If Generator knowled	nis waste o edge-provi	contains a de backu	any of the followi p 🔾 Lab Analysi	ng me s 121 (	etals Generator Knowl	ledge C	TCLP LITOTA	AL.			
	Not Co	ncentratio	1 nc	Vot	Concentration		Arsenic (As)	D004	☑ <5	ppm	ppm
	Present		Pre	esent	·		Barium (Ba)	D005	<b>⊠</b> <100	ppm	ppm
PCB	921	ppm	Aromatic Amine	<b>2</b>	ppm		Cadmium (Cd)	D006	☑ <1	ppm	ppm
Dioxins	₩.	ppm	Pesticides	Ø	ppm		Chromium (Cr)	D007	<b>☑</b> <5	ppm	ppm
Cyanides Reactive	₩.	ppm	Rodenticides	•	ppm		Lead (Pb)	D008	☑ <5	ppm	ppm
Cyanides Total	Ø	ppm	Fungicides	<b>4</b>	ppm		Mercury (Hg)	D009	☑ <0.2	ppm	ppm
Sulfides Reactive	₩.	ppm					Selenium (Se)	D010	<b>⊆</b> 3 <1	ppm	ppm
Sulfides Total	<b>2</b>	ppm					Silver (Ag)	D011	☑ <5	ppm	ppm
TCLP Organics D	0012 — D	043 abo	ve regulatory li	mits:	Present ☐ Not	Present 5	1				
IS WASTE ANY	OF THE	OLLOW	ING?	At L	Least One Box M						
□ Radioactive	☐ Water	Reactiv			☐ Shock Sensi		Reactive (other		OT Explosi	ves	
☐ NIOSH Human-i	Positive C	arcinoge	ns 🗆 NESHAI	<sup>2</sup> Was	stes (Benzene, e	etc.) 🗀 I	Biological 🛭 N	one App	У		
SHIPPING II  1. is this a DOT				172 -	101 & 173 Sub	nart DI2	☑ Yes (	3 No			
Reportable Qua				172.	101 0 173 000	part Dj.	22 .00 (				
Reportable Qua     DOT Shipping				-				_Hazaro	Class 8	UN	NA UN2790
			rdous Constitue	nts fo							
4. Method of Ship		_				Rail Car	□ Drum	s	□Totes	1	
5. Number of Unit					6. Anticipated						☐ One Time
6. Special Handl	ing Requi	rements					•				
	·										
CERTIFICATI I hereby represer	ON ST	ATEME	ENT	-dh	aminad and a	m familiar	with the informa	ation cor	Itained and	submitte	d in this and all
attached docume	nte Rose	d on my	inquiry and ne	renna	al knowledge of	those indi	viduais respons	ible for :	supplying of	r optainin	g the
information, the i	nformatio	n contai	ned herein is tri	ue, ad	ccurate, and co	mplete to	the best of my k and that others	nowledg may rely	e and belie on this rec	r. Furthe presentati	rmore, no on and warranty
in the handling a	nd proces	ising of	the waste mater	ial de	escribed herein.						<b>-</b>
If this box is ched	ked □ Lt	eouest l	Environmental C	Sec-T	echnologies no	ot to correc	t any inconsiste	ncies. A	ny correcti	ons Envii	onmental Geo-
Technologies ma	kes will b	e consig	stent with the re	sults	of the sample of	characteriz	ation and/or reg	gulatory	requiremen	ts.	<b>1</b>
Printed Name:	eani	<u>1e j</u>	Bessin	<u> 9e</u>	r We	rth		Title	بک م "	=	·
Generator's Signat	ure: #	ax	re Bè	<u>مەمۇر</u>	unger	Me	VII h	Date	: <u> </u>	41	1,2022
	0				()				U	<del></del>	
GENERATOR	e's CH	AIN OF	CUSTODY	RF	CORD INST	TRUCTION	ONS: PLEASE	collect a	representa	tive 1-au	artsample of the
wasta described i	n the abo	ve refer	enced GENERAT	ORS	WASTE PROFILE	REPORT U	sing an appropi	iate con	tainer. A rei	oresentat	ive sample is one
obtained using ar below. If you have	ny of the a e problem	ipplicabl is obtain	e sampling met ing a represent	hods ative :	cited in 40 CFR sample of your	t 261-Appe waste, ple	endix 1. Fill in th ase contact you	e sampı r Enviro	ing intermat imental Ge	ion in the o-Techno	spaces provided logies
representative.					• •						
1		_	2.								
SAMPLING ME	THOD .		COLLECTI	ON P	POINT						l
					•		l				
3		210 1141		21.03	/FD		<del></del>				
SAMPLE CO	LLEGIU	NAN C A	AE, TITLE, EMI				<u> </u>				
4. Sample No 5. CHAIN OF C	USTODY	Fach n	Preserv	ation:		No □ st sian belo	ow when the sa	mole na	sses from	one to ar	nother.
			J. John Wild Hall		dampie iilud		Received by:		Da Da		Time
	inquished Signature)		Defe		Time		(Signature)		"	···	12110
```	/		Date		Time	ļ			<del> </del>		

REPUBLIC' SERVICES		Iblic Services N. Allied Way, Phoenix, AZ 85054	
		DEPARTMENT DECISION	
<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	Waste Profile # 6440229222	Expiration Date 6/28/2023	
I. Decision Request:	✓ Initial ☐ Re	certification	
Disposal Facility: 6440 - Detroit Ind Well			
Generator Name: HIGH PERFORMANCE	METAL FINISHING INC.		
Generator Site Address: 1821 VANDERB	ILT AVE.		
City: PORTAGE	County:	State: MI	Zip:
Name of Waste: EP RINSE WATER			
Estimated Annual Volume: 12000 Gallons	)		
Problematic Special Waste according to  If yes, which one?  Approved by Special Waste Review Con  The site must ensure that all pre-acce	nmittee? Ores Ores	No	
prior to acceptance and disposal of th	e profiled waste.		
Special Waste Analyst Signature: 5	Central S	Name	e (Printed): <u>Stephen Brown</u>

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

Precautions, Conditions or Limitations on Approval

11

General Manager or Designee:

Date: 7/13/2022

Facility Address: 1821		ing inc.		USEPA ID	MID03	8618658	·	<del></del>
-	Vanderbilt Ave.	<u> </u>		_ SIC/NAICS	Code: Sta	te Code: 33	2813	,, <del>,</del>
City: Portage				State MI		_Zip Code:	49024	
Contact Pat Greens	Ti	ile: President	, Phone. (	, 269-327	-8897	_ Fax: (	>	
BILLING INFORMATI	ON	Ċ	SAME AS A	BOVE				
Company Name: ERG								
Address: 13040 Me	rriman Rd, Suite 2	200						
cay: Livonia				State: Mi		_Zœ Cose;	18150	
Attention: Accounts P	'ayable Ti	Va:	Phone (	734-437	-9650	Fax: (	)	
Process Generating Wi								
l. This waste is conside L. Regulated by TSCA?	red to be: CiYes SiNo (PCBs, et	O Non Hazardous (C.) O007	Liquid Industrial	Waste	2) Haz	edous Weste	<del></del>	
This waste is conside     Regulated by TSCA?     List ALL Applicable W	red to be: CIYes BNo (PCBs, et itssie Codes: D002	©) 	Liquid Industrial	Waste	2 Haz	erdous Wasie	•	
. This waste is conside L. Regulated by TSCA? L. List ALL Applicable W	red to be: CIYes SINo (PCBs, et issie Codes: D002 ERISTICS OF WAS: Supported S	C007 C007	Liquid industrial	Waste ,		edous Weste		
This waste is consider. Regulated by TSCA? List ALL Applicable W "HYSIGAL CHARAGE Color" CI White/Clear	CYes SNo (PCBs, et issue Codes: D002  ERISTICS OF WAS:  Supported Sc	C007 C007						
This waste is consider. Regulated by TSCA? List ALL Applicable W HYSIGAL CHARAGT Color C White/Clear C Black/Brown	red to be: CIYes SINo (PCBs, et issie Codes: D002 ERISTICS OF WAS: Supported S	C) D007	Layera: Q Multi layer Q Bi-Layere:	red C	Spec 2 <0.8 2 0.8—1.0	(Sc Gravity: 21,0 1	.2	
WhylorClear     Black/Brown     Coner Gyeen	red to be: CIYes 20No (PCBs, et laste Codes: D002 ERISTICS OF WAS: Suspended Sc pt 0-1 % D 3- D 1-3 % D >	D007  D007  E	Leyera: O Multi layer O Bi-Layere: O Single Plu	red C	Speci 2 0.8 — 1.6 xact / Other	(Sc Gravity: 21.0-1 21.3-1,	.2	
L. This waste is consider. Regulated by TSCA? LUST ALL Applicable W PHYSIGAL CHARACT  Deloy:  D. White/Clear  D. Sinck/Brown  M. Coner Gyzzan  H: DNA 2 < 2 C  Liquid Fissh Point  TOC CONCENTRATION-	red to be: CYes 20to (PCBs, et laste Codes: D002 ERISTICS OF WAS: Suspended Sc p( 0-1 %	COO7  DOO7  E  S  S  S  T  T  T  T  T  T  T  T  T  T	Layers:  C) Multi layer  C) Single Plu  B — 0 C)  -140°F C) 14	rad C d C 840 E 8-10 C 10 41—200-F	Spec 2 <0.8 2 0.8—1,0 3 0.8—1,0 4 12.5 2 >200°	18c Gravity: 21.0—1 21.3—1, 1 21.3—1, 1 2 > 12.5 F 3 None	.2 4 3 Close	ed Cup 12 Op
This waste is consider. Regulated by TSCA? List ALL Applicable W PHYSICAL CHARACT Bolor  C White/Clear  Black/Brown	red to be: CYes 20to (PCBs, et laste Codes: D002 ERISTICS OF WAS: Suspended Sc p( 0-1 %	E 0007  15 105 105 105 105 105 105 105 105 105 1	Layers:  C) Multi layer  C) Single Plu  B — 0 C)  -140°F C) 14	rad C d C 840 E 8-10 C 10 41—200-F	Spec 2 (0.8 2 0.8—1.0 3 = 12.5 3 > 200°	18c Gravity: 21.0—1 21.3—1, 1 21.3—1, 1 2 > 12.5 F 3 None	.2 4 3 Close	od Cup D Op

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Melais, indicate it ti If Generator knowle	rq8e-but pe wast	o conteine i wide backu	ary of the following p 10 Lab Armlysis	9	otols Generator Kno	wledge	20 TCLP	OTOTA	AL.				
	Not C	ionoon(mitic	on N	al	Concentratio	 G	Ansenic (	(As)	D504	23 <5	pam	0.23	ppm
	Rosert		Pres	ser4			Barium (	(Ba)	D005	€2 <100	ppm		pom
PCB	3	ppm .	Arometic Amine	2	ppm		Cadmiun	n (Cd)	D006	<b>18</b> <1	ppm		ppm
Diaxins	3	ppm	Pestodes :	à	ppm		Chroniu	m (Cr)	D007	Q <6	ppm	189	bom
Cyanizes Reactive	2	bbm	Rodenticides	7	ppm		Lead (Pt	<b>)</b>	D008	23 <5	ppm		ppm
Cyanides Total	3	ppm :	Fungicides :	2	open		Mercury	(tłg)	Done	23 < 0.2	ppm		ppm
Suitides Reactive	23	bbus					Selenium	n (8s)	D010	<b>23 &lt;1</b>	ppm		ppm
Sulfides Total	3	ppm					Sher (A	<b>9</b> }	0011	<b>2</b> ∂ <5	ppm		ppm
TCLP Organics O	012	D043 abo	ve regulatory lim	dis:	Present 3 N	ol Present	20						
IS WASTE ANY	OF THE	FOLLOW	NG7	A! L	east One Box	Must Be Ci	hacked.						
☐ Radioactive	Q Wet	er Reactiv	e Li Oxidizer		Li Shock Sen	sitive 🗀	Reactive	(other)	OD	T Explos!	ves		
O NIOSH Human-i	OSSESSO (	Caronoger	B J NESHAP	Vies	des (Banzana.	elc.) D	Biological	10 N	one Appl	7			
is this a DOT     Reportable Qua     DOT Shipping     BERG     Method of Ship     Number of Uno     Special Handli	ntity (RC Name V 3 154 ment: 5 to Ship	Vasie Cor Hazen 13 Bulk 1 Nov 4.00	a 100 Tosive Liquid, A dous Constituent Tenter Q V 30 gal	cidi s for	ic, inorganic,	n.c.s. sphoric Ar 3 Rai Car	cid, Sulfu	3 Drums	Hazard	Class 8 OToles gal		AMM O C Y	LIN3264
CERTIFICATION I hereby represent attached documer information, the in material fact has a in the bandling an if this box is check Technologies make Printed Name:	i and wr its. Bas fermatic Seen per d proces	errant that ed on my i en contain litted as to asing of th request Er se consists	I have personall inquiry and perso ed herein is true, make this inform e waste material	. Scr nadi I da o-Te	mowhage a curate, and o on misleading scribed hereif chnologies a of the sample	i inose mai omplete to ). I underst i.	Mousis re the best o	esponsii of my lu others a	ble for si lowledge nay rely	upplying or and belie on this rep	obtaini L. Furth resenta nn Env	ing the ermore Lion ar	o, no nd warranly nniel Geo-
Generatora Signatu	ne:	1-00	- ke	25	ne				Cote	· 6	122	/27	7
									7,775	}			
4. Sample No.	problem HOO ECTO	epplicable as obtainin 2  R'S NAME	sampling method g a representative COLLECTION Sale	TPO TPO	ded in 40 CFF sample of your  C / G	251-Aspe waste, pin	sing an a ndix 1, Fi	pproprie	de conte samplin Environ	iner. A top g inlometi nenial Geo	resenta on in the Techn	bve sa a spec plogies	mple is one es provided ;
5. CHAIN OF CU	PIUUY	mach per	son who bandies	# the	sample mus	t sign befo	m mythu t	ha sen	pie pas:	ses from e	no to ai	nother.	
	porteny (outliers)		Date	I	Time		Received (Signati			Date	•		Time
L													

SERVICES SERVICES	T (	•	Service  y, Phoenix, AZ 85054	<del></del>	
	SPECIAL WA	STE DEPART	MENT DECISI	ON	
	Waste Profile # 6440229634	ŧ	Expiration Date 7/19/2023		
I. Decision Request:	<b>☑</b> Initial	Recertificati	ion Change	•	
Disposal Facility: 6440 - Detroit Ind Wel	ļ				
Generator Name: CYCLE CHEM, INC.					
Generator Site Address: 550 INDUSTR					
City: LEWISBERRY	County:		State: PA		Zip:
Name of Waste: AQUEOUS WASTE WI	TH VOLITILE ORGANI	C COMPOUNDS			
Estimated Annual Volume: 500 Drums					
II. Special Waste Department De	ecision:	● Approved ○ Re	elected		
Management Method(s):			•	ell 🗍 Trans	sfer Facility
Problematic Special Waste according t	o Republic? (	O Yes			
If yes, which one?					<del></del> 1
Approved by Special Waste Review Co	mmittan2 (	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
The site must ensure that all pre-acc	Precautions, Co		itations on Appro		ite's permit requirem
The site must ensure that all pre-acc prior to acceptance and disposal of t	Precautions, Co	onditions or Lim	itations on Appro		ite's permit requirem
The site must ensure that all pre-acc	Precautions, Co	onditions or Lim	itations on Appro		ite's permit requirem
The site must ensure that all pre-acc prior to acceptance and disposal of t	Precautions, Co eptance and verifica he profiled waste.	onditions or Lim	itations on Appro		ite's permit requirem
The site must ensure that all pre-acc prior to acceptance and disposal of t	Precautions, Co	onditions or Lim	itations on Appro erformed in accordar	nce with the s	ite's permit requirem
The site must ensure that all pre-acc prior to acceptance and disposal of t Special Waste Analyst Signature:	Precautions, Co eptance and verifica he profiled waste.	onditions or Limition analytical is pe	itations on Appro erformed in accordar	nce with the s	
The site must ensure that all pre-acc prior to acceptance and disposal of t	Precautions, Co eptance and verifica he profiled waste.	onditions or Limition analytical is pe	itations on Appro erformed in accordar	nce with the si	
The site must ensure that all pre-acc prior to acceptance and disposal of t Special Waste Analyst Signature:	Precautions, Conseptance and verificate he profiled waste.  Precautions, Consequence of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the profile of the prof	enditions or Limition analytical is perfectly the province of Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limitions or Limition	itations on Appro erformed in accordan Nam red  Rejected fations on Approv	nce with the since with the since (Printed): _k	ŒITH DIAMANTI

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	nulus, MI 48174. Telephone 7		734 946 100	Profile #644022963	
GENERATOR INFOR			_USEPA ID	# PAD067098822	
Facility Address: 550	Industrial Drive		SIC/NAICS	S Code: State Code: 562112	
City: Lewisberry			State: PA	Zip Code: 17339	
Contact: Jay Perez	: Title: Speci			700 Fax: (7 1 7 ) 938	3-0976
BILLING INFORMATI	ION	☑ SAME AS A	BOVE		
Company Name:					
Address:	· · · · · · · · · · · · · · · · · · ·		<del></del>	·	
City:	***************************************		State:	Zip Code:	
Attention:	Title:	Phone: (	)	Fax: ( )	
USEPA / STATE WAST  1. This waste is consid  2. Regulated by TSCA'  3. List ALL Applicable N	ered to be: □ Non Haza ? □Yes ☑No (PCBs, etc.)	erdous Liquid Industrie		☑ Hazardous Waste  01 F002 D002 see continuation	
		1000 5018	<u> </u>	71 TOOL DOOL SEE COMMUNICATION	ni page
Color:  White/Clear  Black/Brown  Other	Suspended Solids  2 0-1 %	Layers:   Multi layer  Bi-Layer  121 Single Pl	ed	Specific Gravity: □ <0.8	
pH: □NA □ < 2	□ 2 4 ☑ 4 6	Ø 6 8 U	2 8-10 C2 1	0 — 12.5 □ >12.5	
VOC CONCENTRATION	nt:	PPM (MUST BE	COMPLETED)		ed Cup 🗆 Open Cup
CONSTITUENT	NOTE WOOT BE EQUAL TO	MAX MIN	CONSTIT		MAX MIN
Water		99. 100 %			<u> </u>
Sediment (if p		0.1 1.0%	DE MINENE MANUEL PRINCE PRINCE		INCOMENT TANABAS BELIANGUARE AND
volitile Orga	nic Compounds	0.01 0.05 %			- 1 %

Republic Industrial &	Energy S	olutions -	- 28470 Citrin	Drive	- Romulus - MI -	48174			Wa	ste Prof	ile - Pag	je 2
Metals: Indicate if thi If Generator knowled	s waste co Ige-provide	ntains a backup	ny of the follov □ Lab Analy:	ving n sis (2)	netals Generator Knov	wledge [	TCLP ZOTOT	AL				
	Not Con	centratio	on	Not	Concentration	1 ,	Arsenic (As)	D004	☑ <5	ppm	ı	ppm
F	resent		P	reseni	t		Barium (Ba)	D005	<b>☑</b> <100	ppm	ı	ppm
PCB	621	ppm A	Aromatic Amine	إشا د	ppm		Cadmium (Cd)	D006	☑ <1	ppm	1	ppm
Dioxins			Pesticides	62	ppm		Chromium (Cr)	D007	<b>☑</b> <5	ppm		ppm
Cyanides Reactive	 <b>☑</b> 1	• •	Rodenticides	₩.	ppm		Lead (Pb)	D008	_ ☑ <5	ppm		ppm
Cyanides Total	121	ppm F	ungicides	D2	ppm		Mercury (Hg)	D009	☑ <0.2	ppm		ppm
Sulfides Reactive	<b>2</b> 0	ppm	•				Selenium (Se)	D010	621 <1	ppm		ppm
Sulfides Total	<b>2</b>	ppm					Silver (Ag)	D011	☑ <5	ppm	ı	ppm
TCLP Organics D0	12 D0	43 abov	e regulatory l	limits	Present 🛭 No	t Present C	1					
IS WASTE ANY C	F THE FO	LLOWI	NG?	At	Least One Box	Must Be Ch	ecked.		<del></del>		·····	
	□ Water I				☐ Shock Sens		Reactive (other		OT Explos	ives	٠	
☐ NIOSH Human-Pe	ositive Car	cinogen	S UNESMA	P vva	stes (Benzene,	etc.) U b	Biological ☑ N	one Appl	У			
SHIPPING IN												
1. Is this a DOT				172.	101 & 173 Su	bpart D)?	Ø Yes 0	J No				
2. Reportable Quar				<del>.</del> .		_			_			
3. DOT Shipping N	lame RC	, Haza	ardous Was	ste L	iquias, N.O.	S.		Hazard	Class 9		JN/NA	3082
PG III ERG	171	Hazard	lous Constitue	ents fo	or "n.o.s." Teti	rachloroe	thylene, Ben	zene				
4. Method of Shipm	ent:	Ø Bulk 1	Tanker D	3 Vac	truck [	Rail Car	Ø Drum:	s	ØTote	s		
5. Number of Units							Jnits per Year:				or 🗆 O	ne Time
6. Special Handlin	g Require	ments i	ncluding PPE	:	-		·					
No Special Handli	ng require	<del>d</del>				···		<del></del>				
CERTIFICATIO I hereby represent attached document information, the inf material fact has b in the handling and If this box is checket Solutions makes will	and warrate. Based formation een omitte processid D I requel be consisted.	ent that on my incontained ed as to ng of the est Reputent with	I have persor nquiry and pe ed herein is tr make this int e waste mate	orsona rue, a forma rial d & Ene	al knowledge of ccurate, and co tion misleading escribed herein rgy Solutions no	f those indiversely, I understand.	iduals responsing best of my kind that others in the inconsistenci	ible for s nowledg nay rely es. Any o	upplying of and belicated on this response contractions	r obtair ef. Furti present	ning the hermore ation ar	e, no nd warranty
Printed Name: Ja	y Perez							Title	Specia	alist		
Generator's Signatur	'e:	(	11m					Date:	7/1	8 23	_	
			1	1								
GENERATOR's waste described in obtained using any of you have problems of representative.	the above of the appli	referen cable sa	iced GENERAT mpling method	ORS ' ls cite	WASTE PROFILE d in 40 CFR 261	REPORT us -Appendix 1	ing an appropri . Fill in the samn	ate cont	ainer. A re	present	ative sa	ample is on
1		2										
SAMPLING MET	HOD		COLLECT	ON P	OINT							
3SAMPLE COLI	ECTOR'S	S NAME	, TITLE, EMI	PLOY	ER ·		-					.
4. Sample No.			Preserv			5 (n. 1 <sup>m</sup> )	L		***			
5. CHAIN OF CU	STODY E	ach per	son who hand	dies t	ਾਦਨ ਪ he sample mus	No 🗓 st sign belo	w when the san	nple pas	ses from	one to a	another	:
Relino	uished by		Date		Time		Received by: (Signature)		Da			Time
			Date		illie				ļ			

# Additional RCRA codes for Aqueous waste with volatile organic compounds profile

U044

D027

U072

D028

U077

D029

U078

. D034

U131

D035

U159

F005

D038

D039

U210

D040

U228

D043

U043

F003

REPUBLIC"	R	Republic 18500 N. Allied V				
S	PECIAL W	ASTE DEPAR				
	Waste Profile 6440229568	e #	Expiration 7/1/202	on Date		
I. Decision Request:	✓ Initial	Recertifica	tion [	<b>◯</b> Change		***************************************
Disposal Facility: 6440 - Detroit Ind Well	·	***************************************				
Generator Name: AAM-FRASER		***************************************	~~			***************************************
Generator Site Address: 18450 15 MILE RD						
City: FRASER	County:		State: M	I	Zip:	
Name of Waste: GRAPHITE WATER						
Estimated Annual Volume: 130000 Gallons						
Problematic Special Waste according to R  If yes, which one?  Approved by Special Waste Review Comm	ittee?	Yes No No Conditions or Lin				
The site must ensure that all pre-accept prior to acceptance and disposal of the		cation analytical is	performed i	in accordance wit	h the site's permit requ	uirements
Special Waste Analyst Signature: 520	tuteX.	3		Name (P	rinted): <u>Stephen Brown</u>	

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

Name (Printed): \_\_\_\_\_Rodriquez

Rodriquez, Tomply: CN = Rodriquez, Tom OU = / Fejoins, East, Users Dete: 2022.07.21 08:27:16-0500'

special waste file is complete.

Date: 7/18/2022

General Manager or Designee:

1,

## Republic Industrial and Energy Solutions, LLC **GENERATOR WASTE PROFILE** 28470 Citrin Dr, Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002 6440229568 Profile # **GENERATOR INFORMATION** MID084300987 Name: AAM-Fraser USEPA ID# Facility Address: 18450 15 Mile Rd SIC/NAICS Code: State Code: City: Fraser Zip Code: 48026 State: MI Contact: Shakira Jacobs Phone: (3 + 3 ) 915-5516 Title: EHS Fax: ( ☐ SAME AS ABOVE **BILLING INFORMATION** Company Name: Environmental & Disposal Management LLC Address: 1900 Stephenson Hwy, Suite 100 Zip Code: 48083 City: Troy State: MI Attention: Lamar Gabbara Title: CFO Phone: (7 s 4 ) 989-8301 Fax: ( WASTE INFORMATION Name of Waste/Common Chemical Name: Graphite water Process Generaling Waste (Please be specific, incomplete information may delay the approval process): Oraphite is used in the forging process. Some of the graphite is lost through leaks that need repair, Some of the graphite is also generated when flushing the press of spent graphite and oil. The system is closed loop, SDS Sheet ID. AMLUBE 1127 Analytical information Sample ID Gray water/ Graphite water sample date 6/27/2022 **USEPA / STATE WASTE IDENTIFICATION** 1. This waste is considered to be: 2 Non Hazardous Liquid Industrial Waste ☐ Hazardous Waste 2. Regulated by TSCA? TYes XINo (PCBs, etc.) SJ 7/15/22 3. List ALL Applicable Waste Codes: PHYSICAL CHARACTERISTICS OF WASTE Color: Suspended Solids Layers: Specific Gravity: □ White/Clear □ 0-1 % **2** 3-5 % ☐ Multi layered 8.0> □ 1.0 — 1.2 ☐ Black/Brown □ 1-3 % Q > 5% □ Bi-Layered ☑ Other 2 Single Phase Exact / Other □NA □ < 2 □ 2 — 4 □ 4 — 6 □ 8-10 □ 10 — 12.5 □ >12.5 **2** 6 — 8 Liquid Flash Point: □ <73°F □ 73-100°F □ 101-140°F □ 141-200°F 図 >200°F □ None □ Closed Cup □ Open Cup VOC CONCENTRATION - <5PPM PPM (MUST BE COMPLETED) TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (L1ST EACH CONSTITUENT <>1= 0.1%)

MAX MIN

70

CONSTITUENT

MAX MIN

CONSTITUENT

water

Graphit

Metals: Indicate if th If Generator knowle					wledge ØTCLP	<b>ITOTAL</b>			
	Not Co	ncentration	N	ot Concentration	n Arsenic (As	s) D004	<b>1</b> <5	ppm	ppm
I	Present		Pres	sent	Barium (Ba	) D005	@ <100	ppm	ppm
PCB	12	ppm Are	omatic Amine	2dppm	Cadmlum (	(Cd) D006	<b>@ &lt;1</b>	ppm	ppm
Dioxins	Œ	ppm Pe	sticides	<u></u>	Chromium	(Cr) D007	<b>2</b> <5	ppm	ppm
Cyanides Reactive	₩.	ppm Ro	denticides	<b>2</b> 2ppm	Lead (Pb)	D008	☑ <5	ppm	ppm
Cyanides Total	<b>2</b>	•••	ngicides	☑ppm	Mercury (H	T.:	☑ <0.2	ppm	ppm
Sulfides Reactive	<b>©</b>	ppm			Selenium (	•	<b>2</b> 2 <1	ppm	ppm
Sulfides Total	₩.	ppm			Silver (Ag)	D011	₩ <5	ppm	ppm
TCLP Organics D	012 DO	043 above	regulatory lim	nits: Present 🗆 No	t Present 🗹	····			
IS WASTE ANY	OF THE F	OLLOWING	37	At Least One Box	Must Be Checked.				
☐ Radioactive	□ Water	Reactive	□ Oxidizer	☐ Shock Sens	iltive 🛛 Reactive (	other) 🗆 D	OT Explosi	ves	
□ NIOSH Human-P	ositive Ca	ır <b>ci</b> nogens	O NESHAP	Wastes (Benzene,	etc.) 🗆 Biological	☑ None Appl	ly		
SHIPPING IN  1. Is this a DOT  2. Reportable Quar  3. DOT Shipping it	Hazardo ntity (RQ)	us Materi In pounds_			bpart D)?	Yes ☑ No Hazard	Class	UN/N	
4. Method of Shipn 5. Number of Units 6. Special Handlin None	nent: to Ship N	2 Bulk Ta	nker 🗆 \	/ac truck E		Drums	□Totes	ì	One Time
attached documen information, the int	and warr ts, Based formation een omit	rant that I I I on my inc contained ted as to m	have personal puiry and pers herein is true take this infor	onal knowledge of o, accurate, and co mation misleading	am familiar with the in f those individuals res omplete to the best of , I understand that of	ponsible for a	supplying or	r obtaining	the
If this box is checke Solutions makes will Printed Name	l be <sub>r</sub> çonsi:	stent with th	19 results of the	s samola charactari	ot to correct any inconsi zation and/or regulatory	regulsemente			
Oananatada Cimatu	4	ha 1/:	$\sim$ $T_{c}$	La			257/	10/000	A-PESCHANIVE
Generators Signatul	re; <u>ut.</u>	(F)CL  \ {7	· Jaca	205	· · · · · · · · · · · · · · · · · · ·	Date		3/20	
waste described in obtained using any o you have problems o representative.	the above of the appl	e reference Icable sami	ed GENERATOI pilng methods o	RS WASTE PROFILE cited in 40 CFR 261	TRUCTIONS: PLE REPORT using an app -Appendix 1. Fill in the contact your Republic	propriate cont sampling infor	alner. A rep	presentativ e spaces pr	e sample is one
1. Grab		2·	Tank						İ
SAMPLING MET	HOD	_	-COLLECTION	POINT	_ [				1
3 Jay Kanapsky	,			7	-15-22				
SAMPLE COLI	LECTOR'	S NAME,	TITLE, EMPL	OYER					
4. Sample No. 1 5. CHAIN OF CUS	STODY E	ach perso	Preservati n who handle	on: Yes ⊠ s the sample mus	No □ st sign below when th	ne sample pai	sses from c	one to ano	ther.
Relino	quished by gnature)		Date	Time	Received (Signatur	by:	Da		Time
							† ····		

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RECEIVINGINE	RMATION
Date	7/6/22
Receiving ID#	Grown te Water
Manifest # Line	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	AAM-Frage
Client	
Transporter	
Time in	
Time out	
Received by	Q.H.
Sampled by	Client

LABINFORMA	ATION SECURITY
Compatible? (RT# )	1 5
PCBs (ppm) (Oily Waste	MA
Only)?	11
TOC ppm (CC Waste Only)?	
Flash Point (F)	2140
pH (S.U.)	6.39
Cyanides? (mg/L)	130
Sulfides? (ppm)?	220
Specific Gravity	1.00
Physical Description	6.200.
Stream Consistency	Yes No
Oil in Sample?	Yes (No
Temperature (F)	74
Conductivity	1.944~5
% Solids	0.63
Turbidity	(Yes) No
Color	Black
TSS (%)	0.1
Radiation Screen (as needed)	Nea
Lab Signature/Initials	(4.T.)

(See Attached lab Notes)

€ REPUBLIC	Re	epublic	Service	es
SERVICES			/ay, Phoenix, AZ 85054	
SP	ECIAL WA		TMENT DECISI	ON
	Waste Profile # 6440229939		Expiration Date 7/12/2023	
I. Decision Request:	☑ Initial	Recertifica	tion Change	
Disposal Facility: 6440 - Detroit Ind Well		······································		
Generator Name: NETWORK MATERIALS & F		J.		
Generator Site Address: 31 GOLDEN GATE (	γ			
City: TORONTO	County:		State: ON	Zip:
Name of Waste: TRIVALENT CHROME				· · · · · · · · · · · · · · · · · · ·
Estimated Annual Volume: 30,000 Gallons	***************************************		***************************************	***************************************
II. Special Waste Department Decision	on:	Approved O	Rejected	
Management Method(s): Landfill	Solidification	on Bioreme	diation 💟 Deep We	II Transfer Facility
Problematic Special Waste according to Reg	oublic?	⊃Yes <b>®</b> No		,
		Yes Wind		*
If yes, which one?  Approved by Special Waste Review Commit	**************************************	Yes O No O		***************************************
Pro The site must ensure that all pre-acceptar prior to acceptance and disposal of the pr	nce and verifica		mitations on Appro	
Special Waste Analyst Signature:	Section 1	<u> </u>		ne (Printed): <u>KEITH DIAMANTI</u>
III. Facility Decision:		⊗ <sub>Appr</sub>	oved ORejected	
Pro	ecautions, Co	onditions or Lir	nitations on Appro	val
By signing below, the General Manager or Designed waste file is complete.	gnee agrees that		pecial Waste Service Agr	eement is on file for this profile and that the

Tom Rodriquez

Name (Printed): \_

Rodriquez, Tom Digitalty signed by: Rodriquez, Tom OU =

// Regions, East, Users
// Date: 2022.07.25 09:26:13 -05:00

General Manager or Designee: \_

Date: 7/25/2022

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

## **GENERATOR WASTE PROFILE** 6440229939

SEPA ID # MIRO00016055   State Code: NAICS 541620, 562210							1	101fte #	
City: Toronto						USEPA	ID#	MIR000016055	
City:   Toronto	Facility Address: 31 G	olden Gate Court				SIC/NA	ics c	Code: State Code: NAICS 54	1620, 562210
SAME AS ABOVE	City: Toronto								
Company Name: Network Environmental Services Inc.  Address: 31 Golden Gate Court  City: Toronto	Contact: Mike Aston	Title: General							
City:   Toronto	Company Name: Netw	rork Environmental Services Inc		SAM	E AS	ABOVE			
Attention: Giles Goulding				·	<del></del>				
WASTE INFORMATION           Name of Waste/Common Chemical Name:         Trivalent Chrome           Process Generating Waste (Please be specific, incomplete information may delay the approval process):         Passivation on galvanized parts           USEPA / STATE WASTE IDENTIFICATION         □ Non Hazardous Liquid Industrial Waste         ☑ Hazardous Waste           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: □002, D004, D007           PHYSICAL CHARACTERISTICS OF WASTE           Color:         Suspended Solids         Layers:         Specific Gravity:           □ White/Clear         □ 0-1%         □ 3-5 %         □ Multi layered         □ 0.8									
Name of Waste/Common Chemical Name: Trivalent Chrome  Process Generating Waste (Please be specific, incomplete information may delay the approval process):	Attention: Giles Goule	ding Title: Contro	ller	_ Pho	ne: (4 1	• ) 299-0	116	Fax: (4 1 6 ) 299-	-9649
PHYSICAL CHARACTERISTICS OF WASTE           Color:         Suspended Solids         Layers:         Specific Gravity:           □ White/Clear         □ 0-1 %         □ 3-5 %         □ Multi layered         □ <0.8	Trivalent Chrome Process Generating W Passivation on galve USEPA / STATE WASTI 1. This waste is conside 2. Regulated by TSCA?	aste (Please be specific, incomplemized parts  E IDENTIFICATION ored to be:   Non Haza							
Color:         Suspended Solids         Layers:         Specific Gravity:           □ White/Clear         □ 0-1 %         □ 3-5 %         □ Multi layered         □ <0.8			•••••						
Liquid Flash Point:   <73°F   73—100°F   101—140°F   141—200°F   >200°F   None   Closed Cup   Open Cup Voc concentration - 0	Color:      White/Clear      Black/Brown      Other	Suspended Solids □ 0-1 % □ 3-5 %  ☑ 1-3 % □ > 5%		O M O B O S	lulti layı i-Layen ingle Pl	ed hase	□ Exa	<0.8	
VOC CONCENTRATION - 0 PPM (MUST BE COMPLETED)  TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (L1ST EACH CONSTITUENT <>1= 0.1%)  CONSTITUENT MAX MIN CONSTITUENT MAX MIN  Chromium Nitrate 0 0 10 % Phosphoric Acid 0 5 %  Chrome (III) Phosphate 0 5 % Ethanol 0 5 %									
CONSTITUENT  MAX MIN  CONSTITUENT  MAX MIN  Chromium Nitrate  O . 10 % Phosphoric Acid  O . 5 %  Chrome (III) Phosphate  O . 5 %  Ethanol	VOC CONCENTRATION	. 0	PPI	M (MU	IST BE	COMPLETE	D)		ed Cup 🗆 Open Cup
Chrome (III) Phosphate 0 5 % Ethanol 0 5 %		OF WASTE - MUST BE EQUAL TO			HAN 1U				MAX MIN
Chrome (III) Phosphate 0 5 % Ethanol 0 5 %	Chromium Nitrate		7 6	7 7	0 0/	Phospho	ric A	cid	0 5 6
70		snhate	<u> </u>	ጟ 듣	=;:				
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Republic Industrial & Ene	rgy Solutions -	- 28470 Citrin Driv	ve - Romulus - MI	- 48174			Was	te Profile	- Pag	je 2
Metals: Indicate if this wa If Generator knowledge-p	ste contains ar rovide backup	ny of the following Lab Analysis	netals ☑ Generator Kno	owledge 🗆 To	CLP ZOTOTA	<b>AL</b>				
Not Prese	Concentratio ent	n No Prese			enic (As) ium (Ba)	D004 D005	□ <5 <b>2</b> <100	ppm ppm	5	ppm ppm
PCB 22	ppm A	romatic Amine 🗵	ippm	Cad	lmium (Cd)	D006	©2 <1	ppm		ppm
Dioxins <b>☑</b>	ppm P	esticides 2	<u>ppm</u>	Chr	omium (Cr)	D007	□ <5	ppm	13900	ppm
Cyanides Reactive 🛮 🗹	ppm R	lodenticides Z	ppm	Lea	d (Pb)	D008	₩ <5	ppm		ppm
Cyanides Total	ppm F	ungicides 2	opm	Mer	cury (Hg)	D009	☑ <0.2	ppm		ppm
Sulfides Reactive	ppm			Sele	enium (Se)	D010	⊠ <1	ppm		ppm
Sulfides Total	ppm			Silve	er (Ag)	D011	<b>⊠</b> <5	ppm		ppm
TCLP Organics D012 -	D043 above	e regulatory limi	tš: Present 🔾 N	ot Present ⊠						
IS WASTE ANY OF TH	IE FOLLOWIN	IG?	At Least One Box	Must Be Checke	ed.					
☐ Radioactive ☐ Wa	ater Reactive	Oxidizer	☐ Shock Sen	sitive 🗆 Read	ctive (other)	□ DC	T Explosiv	es		
☐ NIOSH Human-Positiv	e Carcinogens	□ NESHAP W	Vastes (Benzene,	etc.) 🗀 Biolo	gical 🖸 No	ne Apply	<i>'</i>			
SHIPPING INFOI 1. Is this a DOT Haza 2. Reportable Quantity (I	ardous Mater RQ) in pounds				2d Yes ⊡					
3. DOT Shipping Name	Corrosive L	iquia, Aciaic, in	organic, nos		1777	Hazard	Class 8	UN/	NA	3264
PG II ERG	Hazardo	ous Constituents	for "n.o.s." Chr	omium Nitrate,	Chrome III	Phosph	ate			
4. Method of Shipment:	2 Bulk Ta		ic truck 0	⊐ Rail Car	2 Drums		<b>⊠</b> Totes			
5. Number of Units to St	ip Now 3000	USG	6. Anticipate	ed Volume / Units	s per Year: 💆	30,000	USG	ог	□ Or	e Time
6. Special Handling Re	quirements in	cluding PPE:								
							••••			
CERTIFICATION S I hereby represent and attached documents. Be information, the information and process of the handling and process of this box is checked [1] I solutions makes will be contacted.	warrant that I used on my in tion contained mitted as to ressing of the request Repub	have personally quiry and person d herein is true, make this inform waste material	nal knowledge of accurate, and co ation misleading described herein neroy Solutions no	f those individual to the book of the book of the book of the book of the correct applies to correct applies.	als responsiblest of my knick that others m	le for su owledge ay rely i	ipplying or and belief, on this repr	obtaining . Further esentatio	the more on an	, no d warranty
Printed Name: Mike As	ton			and of the	and tory require	Title:	General	Manage	r	
Generator's Signature:		Mike I	Aston			— D-1	12-7-2022		<u>.                                    </u>	
			. 1477711			_ Date:	12-1-2022	-		
GENERATOR'S CI waste described in the a obtained using any of the you have problems obtain representative.	applicable sam	eu GENERATORS Iplina methods cit	ed in 40 CFR 261	: REPORT using : I-Annendix 1 Fill	an appropria	te conta	iner. A repr	esentativ		
1. Grab	2.	Tote				<del></del>				
SAMPLING METHOD	,	COLLECTION	POINT		-					ı
Mike Aston, Gen. M	lgr., Network	Materials & Re	esources							
SAMPLE COLLECT					1					
4. Sample No. 3CRDFS							<del></del>			
5. CHAIN OF CUSTOD	Y Each perso	Preservation on who handles	i. res ⊔ the sample mus	No ⊉ st sign below wh	nen the samu	ole pass	es from on	e to ann	ther	
Relinquishe		T	T		eived by:	· T	Date			ime
(Signatur	e)	Date	Time		gnature)		Date		•	
Mike	Aston	2022-7-12	10:30							

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	The Control of	
<b>IRECEIVINGUNFOR</b>	RMATION	
Date	7/14/22	
Receiving ID#		siame
Manifest # Line		
Land Ban Cert included	Yes No	
EGT Approval #		
Generator	Not work	
Client		
Transporter		,
Time in		
Time out		'
Received by	J.H.	
Sampled by	Cloot	

LAB INFORMA	TION'S ES	
Compatible? (RT# )	No	
PCBs (ppm) (Oily Waste	~ 1/A	
Only)?	/~/+1	
TOC ppm (CC Waste Only)?		
Flash Point (F)	>140	>
pH (S.U.)	1.60	5
Cyanides? (mg/L)	43	0
Sulfides? (ppm)?	1 42	-00
Specific Gravity	1.04	0
Physical Description	1500	.0
Stream Consistency	(Yes,	No
Oil in Sample?	Yes	440)
Temperature (F)	70	
Conductivity	23.9	<b>~</b> 5
% Solids	5.44	
Turbidity	(Yes)	No
Color	Blive-	Green
TSS (%)	5,0	
Radiation Screen (as needed)	Neg.	
Lab Signature/Initials	05	$[\cdot, \tau]$

(See lab Noges)





09-Sep-2022

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

Re: (REIS) F039 Leachate analysis 08.03.2022

Dear Rick,

ALS Environmental received 1 sample on 03-Aug-2022 10:00 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 44.

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,

Electronically approved by: Les Arnold

Ses arula

Les Arnold General Manager

**Report of Laboratory Analysis** 

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Work Order: 22080355

**ALS Group, USA** 

Date: 09-Sep-22

Client:

Republic Industrial and Energy Solutions, LLC

Project:

(REIS) F039 Leachate analysis 08.03.2022

Work Order:

22080355

**Case Narrative** 

Subcontracted analytical data has been appended to this report in its entirety.

**ALS Group, USA** 

Date: 09-Sep-22

Client:

Republic Industrial and Energy Solutions, LLC

Project:

(REIS) F039 Leachate analysis 08.03.2022

WorkOrder: 22

22080355

**QUALIFIERS,** 

**ACRONYMS, UNITS** 

# ALS Group, USA

Date: 09-Sep-22

Client:

Republic Industrial and Energy Solutions, LLC

Work Order:

22080355

Project:

(REIS) F039 Leachate analysis 08.03.2022

**QC BATCH REPORT** 

Batch ID: 201005	Instrument ID G	C12		Metho	d: SW808	1B				·····		
MBLK	Sample ID: PBLKW1	-201005-20°	1005	***************************************		Ĺ	Jnits: µg/L	•	Analysis	Date: 8/9/	2022 05:1	7 PM
Client ID:		Run II	D: <b>GC12_</b> 2	220809A		Se	qNo: <b>869</b> 4	1643	Prep Date: 8/8/2	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: Decachloroi	biphenyl	0.2035	0	0.208		0	97.8	42-148	0			
Surr: Tetrachloro-	m-xylene	0.1943	0	0.208		0	93.4	57-141	0			
LCS	Sample ID: PLCSW1	-201005-201	1005			l	Jnits: µg/L		Analysis	Date: 8/9/	2022 05:4	5 PM
Client ID:		Run II	D: GC12_2	220809A		Se	qNo: <b>869</b> 4	1645	Prep Date: 8/8/2	2022	DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aldrin		0.1668	0.010	0.167		0	99.9	51-164	0			
Surr: Decachlorol	biphenyl	0.1897	0	0.208		0	91.2	42-148	0			
Surr: Tetrachloro-	m-xylene	0.1993	0	0.208		0	95.8	57-141	0			
LCSD	Sample ID: PLCSDW	/1-201005-2	01005			ι	Jnits: µg/L		Analysis	Date: 8/9/	2022 05:5	9 PM
Client ID:		Run II	D: <b>GC12_</b> 2	220809A	-	Se	qNo: <b>869</b> 4	1646	Prep Date: 8/8/2	2022	DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aldrin		0.1963	0.010	0.167		0	118	51-164	0.1668	16.2	20	
Surr: Decachlorol	piphenyl	0.2065	0	0.208		0	99.3	42-148	0.1897	8.5	20	
Surr: Tetrachloro-	m-yvlene	0.2072	0	0.208		0	99.6	57-141	0.1993	3.85	20	



# **Chain of Custody Forn**

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Page	

Project (REIS) F039 Leachate analysis 08.03.2022	
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22080355

L						ALS Project Manager:	t Manager:				מארי ן	חבט חטוא טואה הי	ישבר שיני	_			
$\perp$	Cust	Customer Information		Project Information	nformatic	'n			P.	ramet	er/Met	Parameter/Method Request for Analysis	dnest	for An	alysis		
	Purchase Order		Project Name		RIES 08032022	:		A AK	Aldrin								
	Work Order		Project Number	ıber				8	Hexachlorodibenzo-p-dioxins	dibenz	xoip-d-c	ins					
	Company Name	Republic Industrial and Energy	Bill To Company		lic Industri	Republic Industrial and Energy	γ	S	Nitrosodimethlyamine	ethlyar	nine						
	Send Report To	Rick Sauve	Invoice Attn.	ıttı.				D 1,2	,3,4,6,7,	8,9-Oct	achior-c	1,2,3,4,6,7,8,9-Octachlor-dibenzofuran	Lan				
	Address	28470 Cintrin Dr.	Adalah		28470 Cintrin Dr.			E 1,2	,3,4,6,7,	8,9-Oct	achloro	1,2,3,4,6,7,8,9-Octachloro-dibenzo-p-dioxin	p-dioxir	_			
		[	innu	200				F Te	Tetrachlorodibenzo-p-dioxins	dibenz	o-p-d-c	ins					
	City/State/Zip	Romulus, MI 48174	City/State/Zip		Romulus, MI 48174	74		ပ									
	Phone	734-784-2708	P.	Phone				I									
	Fax			Fax				-									
	e-Mail Address	e-Mail Address RSauve@republicservices.com						7									
Z	No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	4	m	U	_	ш	၅	I	_	7	Hold
	1 July 2022 F039 Analysis	Analysis	8/3/2022		7		9	×	×	×	×	×	-				
										-							
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Sa	Sampler(s): Please Print & Sign	Print & Sign	Shipment Method:	Method:	Turn	around Tim	Turnaround Time: (Business Days)	Days)			Other		28	Results Due Date:	ue Date	<u>ا</u> ا	
泛	Rick Sauve			_			<b>≤</b> 5 BD	38		☐ 2 BD	180	83					
Ric Re	2	10 Miles 8/3/2022	Time: Rec   Rec     Rec	Received by:	0		Date: 8/3/22	12 2:14	Notes:	12/2	28	1/2/2 2000					
Re.	Relinquished by:	Daty: 5/3/22	Time: Rec	Received by (Laboratory):	fory):		C/3/2/	Time:	ALS Cooler	- je	Cooler	QC Package: (Check Box Below)	(age: (c	heck B	ox Belc	( <u>M</u>	
9	Logged By (Laboratory):	Date		Charted hull shorethand	Dud.			}	3 3	+	duna	Level II: Standard QC	l: Standar		Level III: Raw Data	Raw De	TZ
		7	Ĩ	March of Canada	i I				/R3	7	હ્યુ	TRRP LRC	RC CM646	TRRP LRC	TRRP Level IV	Xel ĭ<	
		1/1/1/27										Other	OVO TO	Heunous	Tr like		
ď.	Preservative Key:	: 1-HCI 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub>	O <sub>4</sub> 4-NaOH	5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>		6-NaHSO₄	7-Other	84°C		Note	Any c	Note: Any changes must be made in writing once	nust be 1	nade in	writing	once	
å	Revision 2 - Effective 11/9/2016	e 11/9/2016		Copy	right 2016	Copyright 2016 by ALS Environmental	vironmental			Samp	les and	samples and COC Form have been submitted to ALS.	rm have	been sı	ıbmitte	d to AI	κį

Copyright 2016 by ALS Environmental

## ALS Holland WO# 22080355



Service Request No:E2200764

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

**Laboratory Results for: 22080355** 

Dear Les,

Enclosed are the results of the sample(s) submitted to our laboratory August 05, 2022 For your reference, these analyses have been assigned our service request number **E2200764**.

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.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager

## **ALS Environmental**

Client:

ALS Environmental – Holland (MI)

**Service Request No.:** 

E2200764

Project:

22080355

Date Received:

08/05/22

## 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 08/05/22.

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:

EO2200380-02/03: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch.

## **B flags – Method Blanks**

The Method Blank EQ2200380-01 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.

## Y flags - Labeled Standards

Quantification of the native 2,3,7,8-substituted congeners is based on isotopic dilution, which automatically corrects for variation in extraction efficiency and provides accurate values even with poor recovery. Samples that had recoveries of labeled standards outside the acceptance limits are qualified with 'Y' flags on the Labeled Compound summary pages. In all cases, the signal-to-noise ratios are greater than 10:1 and detection limits were below the Method Reporting Limits.

## K flags

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

Client:

ALS Environmental - Holland (MI)

Project:

22080355

Service Request: E2200764

### **SAMPLE CROSS-REFERENCE**

SAMPLE#

**CLIENT SAMPLE ID** 

E2200764-001

July 2022 F039 Analytical

**DATE** 

<u>TIME</u>

8/3/2022 0000

# Service Request Summary

ALS Environmental - Holland (MI) E2200764

22080355

Project Number: Project Name:

Client Name:

Folder #:

Report To:

Les Arnold

ALS - Holland

3352 128th Avenue

Holland, MI 49424 USA

616-738-7307 Phone Number:

616-836-2964 Cell Number:

616-399-6185 Fax Number:

les.arnold@alsglobal.com

E-mail:

Project Chemist: Corey Grandits HOUSTON Originating Lab:

1 500 mL-Glass Bottle NM AMBER Teflon Liner Unpreserved EHRMS-WIC 10A

> **CGRANDITS** Logged By:

Pressure Gas: Location:

> 08/05/22 Date Received:

8/26/2022 LAB QAP QAP: Internal Due Date:

HRMS Qualifier Set Qualifier Set:

Formset:

Report to MDL?:

20-2208355 P.O. Number:

Lab Standard

Merged?:

BASIC\_WQC\_CASNo EDD:

7 of 34

### **ALS Laboratory Group**

### 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 – Houston Data Processing/Form Production and Peer Review Signatures

SR# Unique ID	F2200764	(DB-5MSUI)	SPB-Octyl
First	Level - Data Processi	ing - to be filled by person generating	the forms
Date:	Analyst:	Samples;	
09/08/22	LKL	001	
Date: 69/0 8/ 2 2	cond Level - Data Rev Analyst:	riew – to be filled by person doing peer Samples: - 007	review
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ALS Laboratory Group

10450 Standiff Rd Suite 210 Houston, TX 77099

Subcontractor: ALS Environmental - Houston HR

TEL: FAX:

Acct #:

(713) 266-1599

CHAIN-OF-CUSTODY RECORD

04-Aug-22 20533

09-Aug-22

Date: 0 COC ID: 2 Due Date: (

	Salesperson	ALSHN Account									
	Customer Information		Project Information			ď	Parameter/Method Request for Analysis	thod Reques	st for Analy	sis	
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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

# Preparation Information Benchsheet

Prep Run#: 405522
Team: Semivoa GCMS/TWOODS

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

Status: Prepped Prep Date/Time: 8/30/22 10:48

#	Lab Code	Client ID	#B	B# Method /Test pH	[공	Cl Matrix	Amt. Ext.	Amt. Ext. Sample Description
-	E2200751-001	Used Sylica Media	<u>1</u> 0:	1613B/Dioxins Furans	_	Aqueous Leachate	1045mL	
7	E2200751-002	Spent Acid	10:	1613B/Dioxins Furans	_	Aqueous Leachate	232mL	
3	E2200757-001	COU IU Permit 0100	.02	1613B/Dioxins Furans		Water	982mL	yellow murky
4	E2200758-001	VT-680	10.	1613B/Dioxin Furans Unadjusted	_	Water	1024.0	brown cloudy
5	E2200758-002	EDC Process	.01	1613B/Dioxin Furans Unadjusted		Water	1020.0	clear
9	E2200758-003	T2T-07	.01	1613B/Dioxin Furans Unadjusted		Water	1004.0	yellow clear
7	E2200758-004	Biological	10:	1613B/Dioxin Furans Unadjusted		Water	1001.0	yellow clear
∞ .	E2200758-005	Physical	10:	1613B/Dioxin Furans Unadjusted	_	Water	1009.0	clear yellow
6	E2200762-001	22H0066-01	.01	1613B/Dioxins Furans		Water	987mL	clear
10	10 E2200762-002	22H0066-02	10:	1613B/Dioxins Furans		Water	998mL	clear
11	11 E2200764-001	July 2022 F039 Analytical	10:	1613B/Dioxins Furans		Water	487mL	green cloudy
12	12 E2200782-001	BJWD-L 101	10.	1613B/Dioxins Furans		Water	883mL	
13	13 E2200783-002	22H0281-01	10:	1613B/Dioxins Furans		Water	988mL	
14	14 E2200786-001	GW1A-220808	10.	1613B/Dioxins Furans	_	Water	1050mL	
15	E2200786-002	GW1B-220808	.01	1613B/Dioxins Furans		Water	1053mL	
16	16 EQ2200380-01	MB		1613B/Dioxins Furans		Liquid	1000.0	
17	17 EQ2200380-02	TCS		1613B/Dioxins Furans	ļ	Liquid	1000.0	
18	18 EQ2200380-03	DLCS		1613B/Dioxins Furans		Liquid	1000.0	
19	19 K2209202-001	M22W-DXN-IN	10:	1613B/Dioxins Furans		Water	1056mL	
20	20 K2209202-002	M22W-DXN-EF	10:	.01 1613B/Dioxins Furans		Water	1029mL	

# Spiking Solutions

Name: 8290/1613B Cleanup Working Standard	king Standard	Inventory ID 224494	Logbook Ref: SN 8/15/22		Expires On: 02/11/2023	
E2200751-002 E2200758-005 E2200782-001 EQ2200380-02	E2200751-002 100.00µL E2200758-005 100.00µL E2200782-001 100.00µL EQ2200380-02 100.00µL	E2200757-001 100.00µL E2200759-003.R 100.00µL E2200783-002 100.00µL EQ2200380-02 100.00µL	E2200758-001 100.00µL E2200762-001 100.00µL E2200786-001 100.00µL EQ2200380-03 100.00µL	E2200758-002 100.00µL E2200762-002 100.00µL E2200786-002 100.00µL EQ2200380-03 100.00µL	E2200758-003 100.00µL E2200764-001 100.00µL EQ2200380-01 100.00µL K2209202-001 100.00µL	
Name: 1613B Matrix Working Standard		Inventory ID 224666	Logbook Ref: tw 08/25/22 224666	99	Expires On: 02/21/2023	
222003	ЕQ2200380-02 100.00µL	. ЕQ2200380-03 100.00µL	ЕQ2200380-03 100.00µL			ļ
Name: 1613B Labeled Working Standard		Inventory ID 224724	Logbook Ref: tw 08/30/22 224724	24	Expires On: 02/25/2023	
200751	Е2200751-002 1,000.00µL		E2200757-001 1,000.00 $\mu$ L 17 of 34 200758-001 1,000.00 $\mu$ L	Е2200758-002 1,000.00µL	Е2200758-003 1,000.00µL	

Preparation Information Benchsheet

Printed 9/8/22 15:13



### **Analytical Results**

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

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

**Date Collected:** 08/03/22 00:00

Sample Matrix:

Water

Date Received: 08/05/22 09:25

Sample Name:

July 2022 F039 Analytical

Units: pg/L

Lab Code:

E2200764-001

Basis: NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analysis Method:** 

1613B

Date Analyzed: 09/07/22 09:08

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount:

487mL

**Instrument Name:** E-HRMS-08

Data File Name:

P631405

Blank File Name: P631397

GC Column: DB-5MSUI

**ICAL Date:** 

03/15/22

Cal Ver. File Name: P631394

**Native Analyte Results** 

Analyte Name	Result	0	EDL	MRL	Ion Ratio	RRT	Dilution Factor
					Natio	KKI	Factor
Total Tetra-Dioxins	ND	U	18.2	18.2			1
Total Penta-Dioxins	23.2 <b>J</b>		5.27	51.3	1.63		1
Total Hexa-Dioxins	ND	U	3.88	51.3			1
Total Hepta-Dioxins	77.3		7.78	51.3	1.03		1
•							
Total Tetra-Furans	461		12.0	12.0	0.70		1
Total Penta-Furans	1430		1.29	51.3	1.39		1
Total Hexa-Furans	3340		10.6	51.3	1.23		1
Total Hepta-Furans	9090		26.5	51.3	0.97		1

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

**Date Collected:** 08/03/22 00:00

Sample Matrix:

Water

Date Received: 08/05/22 09:25

Sample Name:

July 2022 F039 Analytical

Units: pg/L

Lab Code:

E2200764-001

Basis: NA

 $Polychlorinated\ Dibenzo dioxins\ and\ Polychlorinated\ Dibenzo furans\ by\ HRGC/HRMS$ 

**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	ND	18.2	18.2	1	1	
1,2,3,7,8-PeCDD	ND	5.27	51.3	1	1	
1,2,3,4,7,8-HxCDD	5.05	4.17	51.3	1	0.1	0.505
1,2,3,6,7,8-HxCDD	8.18	3.72	51.3	1	0.1	0.818
1,2,3,7,8,9-HxCDD	ND	3.78	51.3	1	0.1	
1,2,3,4,6,7,8-HpCDD	69.1	7.78	51.3	1	0.01	0.691
OCDD	935	12.1	103	1	0.0003	0.281
2,3,7,8-TCDF	ND	12.0	12.0	1	0.1	
1,2,3,7,8-PeCDF	128	16.0	51.3	1	0.03	3.84
2,3,4,7,8-PeCDF	102	14.5	51.3	1	0.3	30.6
1,2,3,4,7,8-HxCDF	1150	9.57	51.3	1	0.1	115
1,2,3,6,7,8-HxCDF	389	10.2	51.3	1	0.1	38.9
1,2,3,7,8,9-HxCDF	27.8	13.6	51.3	1	0.1	2.78
2,3,4,6,7,8-HxCDF	86.5	9.69	51.3	1	0.1	8.65
1,2,3,4,6,7,8-HpCDF	8690	25.3	51.3	1	0.01	86.9
1,2,3,4,7,8,9-HpCDF	162	27.8	51.3	1	0.01	1.62
OCDF	10000	29.1	103	1	0.0003	3.00
	T	tol TEO				204

Total TEQ

294

2005 WHO TEFs, ND = 0

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

Date Collected: NA

Sample Matrix:

Water

Date Received: NA

Sample Name:

Method Blank

Units: pg/L Basis: NA

Lab Code:

EQ2200380-01

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analysis Method:** 

1613B

Date Analyzed: 09/07/22 02:08

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

**Sample Amount:** 

1000.0 mL

Instrument Name: E-HRMS-08

GC Column: DB-5MSUI

Data File Name:

P631397

Blank File Name: P631397

**ICAL Date:** 

03/15/22

Cal Ver. File Name: P631394

### **Native Analyte Results**

					Ion		Dilution
Analyte Name	Result	Q	EDL	MRL	Ratio	RRT	Factor
Total Tetra-Dioxins	ND	U	2.15	5.00			1
Total Penta-Dioxins	ND	U	0.718	25.0			1
Total Hexa-Dioxins	1.05 <b>J</b>		0.459	25.0	1.22		1
Total Hepta-Dioxins	7.36 <b>J</b>		0.754	25.0	1.00		1
Total Tetra-Furans	ND	U	1.21	5.00			1
Total Penta-Furans	ND	U	0.531	25.0			1
Total Hexa-Furans	3.20 <b>J</b>		0.196	25.0	1.11		1
Total Hepta-Furans	ND	U	0.241	25.0			1



### **Accuracy & Precision**

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

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

Date Collected: NA

Sample Matrix:

Water

Date Received: NA

Sample Name:

Lab Control Sample

Units: pg/L

Lab Code:

EQ2200380-02

Basis: NA

### ${\bf Polychlorinated\ Dibenzo furans\ by\ HRGC/HRMS}$

**Analysis Method:** 

1613B

Date Analyzed: 09/07/22 23:47

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount:

1000 0 T

Instrument Name: E-HRMS-08

Sample Amount: 100

1000.0mL In

GC Column: DB-5MSUI

Data File Name:

P631422

Blank File Name: P631397

ICAL Date:

03/15/22

Cal Ver. File Name: P631409

### **Native Analyte Results**

					Ion		Dilution
Analyte Name	Result	Q	EDL	MRL	Ratio	RRT	Factor
2,3,7,8-TCDD	155	,	1.36	5.00	0.74	1.001	1
1,2,3,7,8-PeCDD	888		0.303	25.0	1.61	1.001	1
1,2,3,4,7,8-HxCDD	911		0.202	25.0	1.25	1.000	1
1,2,3,6,7,8-HxCDD	806		0.179	25.0	1.25	1.000	1
1,2,3,7,8,9-HxCDD	855		0.182	25.0	1.27	1.007	1
1,2,3,4,6,7,8-HpCDD	852		0.486	25.0	1.01	1.000	1
OCDD	1810		4.73	50.0	0.85	1.000	1
2,3,7,8-TCDF	161		0.755	5.00	0.76	1.001	1
1,2,3,7,8-PeCDF	810		0.425	25.0	1.54	1.000	1
2,3,4,7,8-PeCDF	777		0.383	25.0	1.50	1.001	1
1,2,3,4,7,8-HxCDF	798		0.172	25.0	1.23	1.000	1
1,2,3,6,7,8-HxCDF	885		0.192	25.0	1.22	1.000	1
1,2,3,7,8,9-HxCDF	892		0.230	25.0	1.24	1.000	1
2,3,4,6,7,8-HxCDF	755		0.163	25.0	1.22	1.000	1
1,2,3,4,6,7,8-HpCDF	895		2.56	25.0	1.02	1.000	1
1,2,3,4,7,8,9-HpCDF	841		3.10	25.0	1.01	1.000	1
OCDF	1600		0.919	50.0	0.87	1.004	1

Analytical Report

Client: ALS Environmental - Holland (MI)

Service Request: E2200764

Project: 22080355
Sample Matrix: Water

Date Collected: NA

Date Received: NA

Sample Name:

Lab Code:

Lab Control Sample

Units: Percent

EQ2200380-02

Basis: NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:

1613B

**Date Analyzed:** 09/07/22 23:47

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount:

1000.0mL

Instrument Name: E-HRMS-08

GC Column

GC Column: DB-5MSUI

Data File Name: ICAL Date:

P631422 03/15/22 Blank File Name: P631397

Cal Ver. File Name: P631409

**Labeled Standard Results** 

	Spike	Conc.			Control	Ion	
Labeled Compounds	Conc.(pg)	Found (pg)	% Rec	Q	Limits	Ratio	RRT
13C-2,3,7,8-TCDD	2000	1537.702	77		25-164	0.78	1.027
13C-1,2,3,7,8-PeCDD	2000	1503.480	75		25-181	1.61	1.229
13C-1,2,3,4,7,8-HxCDD	2000	1426.277	71		32-141	1.24	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1666.673	83		28-130	1.23	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1446.605	72		23-140	1.02	1.070
13C-OCDD	4000	3180.611	80		17-157	0.90	1.142
13C-2,3,7,8-TCDF	2000	1309.811	65		24-169	0.77	0.991
13C-1,2,3,7,8-PeCDF	2000	1552.696	78		24-185	1.59	1.179
13C-2,3,4,7,8-PeCDF	2000	1634.619	82		21-178	1.54	1.218
13C-1,2,3,4,7,8-HxCDF	2000	1441.682	72		26-152	0.52	0.968
13C-1,2,3,6,7,8-HxCDF	2000	1357.737	68		26-123	0.51	0.971
13C-1,2,3,7,8,9-HxCDF	2000	1250.420	63		29-147	0.50	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1630.246	82		28-136	0.50	0.986
13C-1,2,3,4,6,7,8-HpCDF	2000	1271.697	64		28-143	0.43	1.045
13C-1,2,3,4,7,8,9-HpCDF	2000	1301.178	65		26-138	0.43	1.082
37C1-2,3,7,8-TCDD	800	575.969	72		35-197	NA	1.028

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

**Project:** 

22080355

Date Collected: NA

Sample Matrix:

Water

Date Received: NA

Sample Name:

**Duplicate Lab Control Sample** 

Units: pg/L

Lab Code:

EQ2200380-03

Basis: NA

### Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analysis Method:** 

1613B

Date Analyzed: 09/07/22 10:48

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount:

1000.0mL

Instrument Name: E-HRMS-08

GC Column: DB-5MSUI

Data File Name:

P631407

Blank File Name: P631397

**ICAL Date:** 

03/15/22

Cal Ver. File Name: P631394

### **Native Analyte Results**

					Ion		Dilution
Analyte Name	Result	Q	EDL	MRL	Ratio	RRT	Factor
Total Tetra-Dioxins	151		3.14	5.00	0.79		1
Total Penta-Dioxins	893		0.554	25.0	1.58		1
Total Hexa-Dioxins	2570		0.219	25.0	1.27		1
Total Hepta-Dioxins	871		0.606	25.0	1.03		1
Total Tetra-Furans	162		1.23	5.00	0.74		1
Total Penta-Furans	1590		0.560	25.0	1.61		1
Total Hexa-Furans	3290		0.239	25.0	1.24		1
Total Hepta-Furans	1730		2.51	25.0	1.02		1



09-Sep-2022

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

Re: (REIS) F039 Leachate analysis 08.03.2022

Work Order: 22080355

Dear Rick,

ALS Environmental received 1 sample on 03-Aug-2022 10:00 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 44.

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,

Electronically approved by: Les Arnold

Les arula

Les Arnold

General Manager

Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Date: 09-Sep-22

Client:

Republic Industrial and Energy Solutions, LLC

Project:

(REIS) F039 Leachate analysis 08.03.2022

Work Order:

22080355

**Work Order Sample Summary** 

Lab Samp ID Client Sample ID	<u>Matrix</u>	Tag Number	<b>Collection Date</b>	Date Received	<u>Hold</u>
22080355-01 July 2022 F039 Analysis	Liquid		8/3/2022	8/3/2022 22:00	

Date: 09-Sep-22

Client:

Republic Industrial and Energy Solutions, LLC

Project:

(REIS) F039 Leachate analysis 08.03.2022

Work Order:

22080355

**Case Narrative** 

Subcontracted analytical data has been appended to this report in its entirety.

**Date:** 09-Sep-2022

Client:

Republic Industrial and Energy Solutions, LLC

Project:

(REIS) F039 Leachate analysis 08.03.2022

Sample ID:

July 2022 F039 Analysis

Collection Date: 8/3/2022

Work Order: 22080355

**Lab ID:** 22080355-01

Matrix: LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PESTICIDES Aldrin	ND	1	<b>SW8081E</b> 0.12	<b>3</b> μg/L	Prep: SW3511 8/8/22 17:34	Analyst: <b>MMO</b> 8/9/2022 08:45 PM
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8	270D	Prep: SW3510 8/9/22 14:52	Analyst: <b>EEW</b>
N-Nitrosodimethylamine SUBCONTRACTED ANALYSES	ND		100 SUBCON	μg/L I <b>TRACT</b>	10 -	8/10/2022 12:03 AM Analyst: <b>ALS</b>
Subcontracted Analyses	See attached			as not	<b>ed</b> 1	9/9/2022

Date: 09-Sep-22

Client:

Republic Industrial and Energy Solutions, LLC

Project:

(REIS) F039 Leachate analysis 08.03.2022

WorkOrder:

22080355

QUALIFIERS, ACRONYMS, UNITS ALS Group, USA

Date: 09-Sep-22

Qualifier	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
В	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
Н	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
0	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	<u>Description</u>
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
Α	APHA Standard Methods
D	ASTM
E	EPA
sw	SW-846 Update III
Units Reported	Description
μg/L	Micrograms per Liter
as noted	

QF Page 2 of 2

Date: 09-Sep-22

Client:

Republic Industrial and Energy Solutions, LLC

Work Order:

22080355

**Project:** 

(REIS) F039 Leachate analysis 08.03.2022

Batch ID: 201005	Instrument ID GC12		Method	: SW808	31B						
MBLK S	Sample ID: <b>PBLKW1-201005</b>	-201005			ι	Jnits: µg/L		Analysis	Date: 8/9/	2022 05:1	7 PM
Client ID:	Ru	ın ID: GC1	2_220809A		Se	qNo: <b>869</b> 4	1643	Prep Date: 8/8/2	2022	DF: 1	
Analyte	Resu	lt PG	L SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aldrin	N	D 0.01	0								
Surr: Decachlorobiph	nenyl 0.203	5	0 0.208		0	97.8	42-148	0			
Surr: Tetrachloro-m->	kylene 0.194	3	0 0.208		0	93.4	57-141	0			
LCS S	Sample ID: PLCSW1-201005	-201005			Ĺ	Jnits: µg/L		Analysis	Date: 8/9/	2022 05:4	5 PM
Client ID:	Ru	ın ID: GC1	2_220809A		Se	qNo: <b>869</b> 4	1645	Prep Date: 8/8/2	2022	DF: 1	
Analyte	Resu	lt PG	L SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aldrin	0.166	8 0.01	0 0.167		0	99.9	51-164	0			
Surr: Decachlorobiph	enyl 0.189	7	0 0.208		0	91.2	42-148	0			
Surr: Tetrachloro-m->	kylene 0.199	3	0 0.208		0	95.8	57-141	0			
LCSD S	Sample ID: PLCSDW1-20100	5-201005			L	Jnits: µg/L		Analysis	Date: 8/9/	2022 05:5	9 PM
Client ID:	Ru	ın ID: GC1	2_220809A		Se	qNo: <b>869</b> 4	1646	Prep Date: 8/8/2	2022	DF: 1	
Analyte	Resu	lt PQ	L SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aldrin	0.196	3 0.01	0 0.167		0	118	51-164	0.1668	16.2	20	
Surr: Decachlorobiph	enyl 0.206	5	0 0.208		0	99.3	42-148	0.1897	8.5	20	
Surr: Tetrachloro-m-x	cylene 0.207	2	0 0.208		0	99.6	57-141	0.1993	3.85	20	
The following samples	were analyzed in this bate	h:	22080355-01C								

Client:

Republic Industrial and Energy Solutions, LLC

Work Order:

22080355

Project:

(REIS) F039 Leachate analysis 08.03.2022

QC BATCH REPORT

Batch ID: 201058 In	nstrument ID SVMS10		Method	: SW846	827	70D					
MBLK Sample	e ID: SBLKW1-201058-20	1058			Ŀ	Jnits: µg/L	•	Analysis	Date: 8/9/	2022 03:2	3 PM
Client ID:	Run II	D: <b>SVMS1</b>	0_220809A		Se	qNo: <b>869</b> 0	5204	Prep Date: 8/9/2	2022	DF: 1	
Analyte	Result	PQL.	SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
<u> </u>			0			,,,,LO	.A		701412		
N-Nitrosodimethylamine	ND	5.0			_		47.400				
Surr: 2,4,6-Tribromophenol		0	50		0	66.7	47-103	0			
Surr: 2-Fluorobiphenyl	29.31	00	50		0	58.6	41-96	0			
Surr: 2-Fluorophenol	20.28	0	50 50		0	40.6	28-66	0			
Surr: 4-Terphenyl-d14	39.27	0	50		0	78.5	49-107	0			
Surr: Nitrobenzene-d5	30.73	0	50		0	61.5	41-95	0			
Surr: Phenol-d6	12.75	0	50		0	25.5	18-44	0			
LCS Sample	ID: SLCSW1-201058-201	1058			L	Jnits: µg/L		Analysis	Date: 8/9/	2022 03:5	D PM
Client ID:	Run II	D: <b>SVMS1</b> (	)_220809A		Se	qNo: <b>8696</b>	205	Prep Date: 8/9/2	2022	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
N-Nitrosodimethylamine	8.82	5.0	20		0	44.1	26-74	0			
Surr: 2,4,6-Tribromophenol		0.0	50		0	71.6	47-103	0			
Surr: 2-Fluorobiphenyl	28.91	0	50		0	57.8	41-96	0			
Surr: 2-Fluorophenol	20.63	0	50		0	41.3	28-66	0			
Surr: 4-Terphenyl-d14	38.9	0	50		0	77.8	49-107	0			
Surr: Nitrobenzene-d5	29.72	0	50		0	59.4	41-95	0			
Surr: Phenol-d6	13.32	0	50		0	26.6	18-44	0			
LCSD Sample	ID: SLCSDW1-201058-2	01058			·	Jnits: µg/L		Analysis	Date: 8/9/2	2022 04:1	R PM
Client ID:			_220809A			qNo: <b>8696</b>		Prep Date: 8/9/2		DF: 1	
Analyte	Result	PQL		SPK Ref Value		%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
N-Nitrosodimethylamine	9.5	5.0	20		0	47.5	26-74	8.82	7.42	30	
Surr: 2,4,6-Tribromophenol		0.0	50		0	68.5	47-103	35.8	4.45	40	
Surr: 2-Fluorobiphenyl	29.06	0	50 50		0	58.1	41-103	28.91	4.45 0.518	40 40	
Surr: 2-Fluorophenol	22.14	0	50		0	44.3	28-66	20.63	7.06	40	
Surr: 4-Terphenyl-d14	37.8	0	50 50		0	75.6	49-107	38.9	2.87	40 40	
Surr: Nitrobenzene-d5	30.56	0	50	- new	0	61.1	49-107	29.72	2.87	40	
Surr: Phenol-d6	14.15	0	50 50		0	28.3	18-44	13.32	6.04	40 40	
					<u> </u>	20.0	10 77	10.02	0.04	70	

# **Chain of Custody Forn**

ğ Page 1

22080355

L						ALS Projec	ALS Project Manager:				- L	TOTA CHAST	100 m	_			
	Custo	Customer Information		Project	Project Information	ou			Pa	rame	er/Met	Parameter/Method Request for Analysis	guest	for An	alvsis		
	Purchase Order		Project N	Name RIES	RIES 08032022			A	Aldrin								
	Work Order		Project Number	mber				8	Hexachlorodibenzo-p-dioxins	dibenz	oip-d-c	ins					
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	Send Report To	Rick Sauve	Invoice Attn.					D 1,	1,2,3,4,6,7,8,9-Octachlor-dibenzofuran	8,9-Oct	achlor-c	libenzof	ıraı				
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	200		- TOP	ccar				F Te	Tetrachlorodibenzo-p-dioxins	dibenz	o-p-d-o	ins					
	City/State/Zip	Romulus, MI 48174	City/State/Zip		Romulus, MI 48174	174		Ø									
	Phone	734-784-2708	۵	Phone				I									
	Fax			Fax				-									
	e-Mail Address	e-Mail Address RSauve@republicservices.com						5									
Š		Sample Description	Date	Time	Matrix	Pres. Key	# Bottles	<b>A</b>	8	U		Ш	O	I	_	7	Hold
_	July 2022 F039 Analysis	Analysis	8/3/2022			S LOUIDAN	9	×	×	×	×	×	-				
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잂	Rick Sauve					OB 01	√ 5 8D	38			☐ 1 BD	CB					
Rick	Relinquished by: Rick Sauve $_{f l}$ $KL$	2 ft Duch 8/3/2022	1 year	Received by:	2		Date: 8/3/22	Time: 2:/4/		1/2/8	28	15 8/2/22 23000					
<u>8</u>	Relinquished by:	Date: 0/3/22	Ι=	Received by (Laboratory):	oratory):		Date: 12	Time:	ALS Cooler	oler /	Cooler	QC Package: (Check Box Below)	kage: ((	Sheck B	ox Belo	(A)	Γ
		21/100	202	5	_	J-	10/04	35	₽			기 Level II: Standard QC	I: Standar		☐ Level III: Raw Data	Raw Dat	, p
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Rev	Revision 2 - Effective 11/9/2016	9 11/9/2016		ဒ	pyriaht 2016	Copyright 2016 by ALS Environmental	vironmental			samp	les and	samples and COC Form have been submitted to ALS.	rm have	s peen sı	abmitted	I to AL	vi.

Copyright 2016 by ALS Environmental

### ALS Group, USA Holland, Michigan

### Sample Receipt Checklist

Client Name:	REPULICINDUSTRIAL - ROM	<u>ULU</u>			Date/Time	Receive	d: <u>03-</u>	Aug-22	2 22:00		
Work Order:	22080355				Received b	y:	LYS	<u>3</u>			
Checklist comp			04-Aug-22	-	Reviewed by:		Arnold			04-Aug-	
Matriaga	eSignature	İ	Date			eSigna	ature			Date	
Matrices: Carrier name:	<u>Liquid</u> <u>Courier</u>										
Shipping conta	iner/cooler in good condition?		Yes	<b>✓</b>	No 🗌	No	t Present				
Custody seals i	intact on shipping container/cool	er?	Yes		No 🗌	No	t Present	<b>✓</b>			
Custody seals i	intact on sample bottles?		Yes		No 🗌	No	t Present	<b>✓</b>			
Chain of custoo	dy present?		Yes	<b>✓</b>	No 🗆						
Chain of custoo	dy signed when relinquished and	received?	Yes	<b>✓</b>	No 🗆						
Chain of custoo	ly agrees with sample labels?		Yes	<b>V</b>	No 🗌						
Samples in pro	per container/bottle?		Yes	✓	No 🗌						
Sample contain	ners intact?		Yes	✓	No 🗌						
Sufficient samp	le volume for indicated test?		Yes	<b>✓</b>	No 🗆						
All samples rec	eived within holding time?		Yes	<b>V</b>	No 🗆						
Container/Temp	p Blank temperature in complian	ce?	Yes	<b>V</b>	No 🗆						
Sample(s) rece	ived on ice?		Yes	<b>V</b>	No 🗌						
	/Thermometer(s):		4.6/5.60	2			IR3				
Cooler(s)/Kit(s)											
Date/Time sam	ple(s) sent to storage:			2 8:0	7:39 AM						
Water - VOA via	als have zero headspace?		Yes		No L	No VO	A vials sub	mitted	<b>✓</b>		
Water - pH acco	eptable upon receipt?		Yes		No 🗆	N/A	<b>V</b>				
pH adjusted? pH adjusted by:			Yes		No 🗀	N/A	<b>✓</b>				
Login Notes:			<u>-</u>								
Login Notes.											
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Client Contacte	d:	Date Contacted:			Person	Contact	ed:				
Contacted By:		Regarding:									
-		- •									
Comments:					,						
CorrectiveAction	n:										
									SRC	Page 1 of	1

### ALS Holland WO# 22080355



Service Request No:E2200764

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

Laboratory Results for: 22080355

Dear Les,

Enclosed are the results of the sample(s) submitted to our laboratory August 05, 2022 For your reference, these analyses have been assigned our service request number **E2200764**.

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.

Respectfully submitted.

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager



### 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.: Date Received:

E2200764 08/05/22

Project:

22080355

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 08/05/22.

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:

EQ2200380-02/03: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch.

### B flags - Method Blanks

The Method Blank EQ2200380-01 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.

### Y flags - Labeled Standards

Quantification of the native 2,3,7,8-substituted congeners is based on isotopic dilution, which automatically corrects for variation in extraction efficiency and provides accurate values even with poor recovery. Samples that had recoveries of labeled standards outside the acceptance limits are qualified with 'Y' flags on the Labeled Compound summary pages. In all cases, the signal-to-noise ratios are greater than 10:1 and detection limits were below the Method Reporting Limits.

### K flags

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

### **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)

Project: 22080355 Service Request: E2200764

### **SAMPLE CROSS-REFERENCE**

SAMPLE#

**CLIENT SAMPLE ID** 

E2200764-001

July 2022 F039 Analytical

<u>DATE</u>

<u>TIME</u>

8/3/2022

0000

# Service Request Summary

Originating Lab:

ALS Environmental - Holland (MI)

E2200764

Client Name:

Folder #:

22080355 Project Number: Project Name:

Les Arnold Report To:

3352 128th Avenue ALS - Holland

Holland, MI 49424 USA

616-738-7307 Phone Number:

616-836-2964 Cell Number:

les.arnold@alsglobal.com 616-399-6185 Fax Number: E-mail:

Project Chemist: Corey Grandits HOUSTON

500 mL-Glass Bottle NM AMBER Teflon Liner Unpreserved EHRMS-WIC 10A

> **CGRANDITS** Logged By:

Pressure Gas: Location:

> 08/05/22 Date Received:

8/26/2022 LAB QAP QAP: Internal Due Date:

HRMS Qualifier Set Qualifier Set:

Lab Standard Formset:

Merged?:

Report to MDL?:

P.O. Number:

BASIC\_WQC\_CASNo 20-2208355 EDD:

HOUST Dioxins Furans/1613B

08/03/22 0000 Collected Matrix Water Client Samp No July 2022 F039 Analytical Lab Samp No. E2200764-001

6 of 34

# Service Request Summary

ALS Environmental - Holland (MI) Client Name:

E2200764

Folder #:

22080355 Project Name:

Project Number:

Les Arnold Report To:

3352 128th Avenue ALS - Holland

Holland, MI 49424 USA

616-738-7307 616-836-2964 Phone Number: Cell Number:

616-399-6185 Fax Number:

les.arnold@alsglobal.com E-mail:

Project Chemist: Corey Grandits

1 500 mL-Glass Bottle NM AMBER Teflon Liner Unpreserved EHRMS-WIC 10A

> HOUSTON Originating Lab:

Pressure Gas: Location:

> **CGRANDITS** Logged By:

08/05/22 Date Received:

8/26/2022 LAB QAP QAP: Internal Due Date:

HRMS Qualifier Set Qualifier Set:

Lab Standard Formset:

Merged?:

Report to MDL?:

20-2208355 P.O. Number:

BASIC\_WQC\_CASNo EDD:

### **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.

### **ALS Laboratory Group**

### 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



### 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	2228443	12/31/2022
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Conservation and Natural Resources	ТХ026932023-1	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	ТХ200002	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
United States Department of Agriculture	P330-19-00299	10/10/2022
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
Washington Department of Health	C819-2022	11/14/2022

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

SR# Unique ID	F2200764	DB-5MSUI SPB-Octyl
First	Level - Data Processin	g - to be filled by person generating the forms
Date:	Analyst:	Samples:
09/08/22	LKL	001
	ond Level - Data Revie	w – to be filled by person doing peer review
Date:	Analyst:	Samples:
09/08/22	<u>Sl</u>	-001-



# **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

ALS ALS Group

Suite 210 Houston, TX 77099

Subcontractor:
ALS Environmental - Houston HR
10450 Standliff Rd

TEL: FAX: Acct #:

(713) 266-1599

CHAIN-OF-CUSTODY RECORD

Date: <u>04-Aug-22</u> COC ID: <u>20533</u> Due Date: <u>09-Aug-22</u>

Page 1 of 1

	Salesperson	ALSHN Account			
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Company Name	Company Name ALS Group USA, Cop	Bill To Company	oany ALS Group USA, Corp	огр	9
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Phone	(616) 399-6070	Phone	0209-668 (919)	A	#
Fax	(616) 399-6185	Fax	(616) 399-6185		THE THE TO BE A SECTION OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTR
eMail Address	les.amold@alsglobal.com	eMail CC			To the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the
ALS Sample ID	Client Sample ID	Matrix Coll	Collection Date 24hr	Bottle	A B C D E F G H -
22080355-01B	22080355-01B July 2022 F039 Analysis	Liquid	3/Aug/2022 (1) 500	1) 500AMGNEAT	X

PO 20-2208355

Comments:	* A sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of the sea of	(>(ve 1.1c (RT) CPT)	(RT) (PT)		
The Church	4 Aug 2022	Parler	85% 453		
clinquished by:	Date/Time	Received by:	Date/Time	Cooler IDs	Repon/QC Level Std
clinquished by:	Date/Time	Received by:	Date/Time		
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### Cooler Receipt Form

Project Chemist	14	

Client/Project 	Δις				The	rmometer	ID	ष्ट्रि	
Date/Time Received:	15/2/8	<b>=</b>	Initia —	als: PM D	ate/Time Logg	ed in:	<u> </u>		initials (c
. Method of delivery:	○ US Mail	Ø	Fed Ex	○ UPS	ODHL C	Courier	OCI	ent	
. Samples received in:	<b>⋈</b> Cooler	⊜Box	( )Enve	elope OOth	er				
. Were custody seals on	coolers?	() Yes	Ø No		If yes, how mai	ıy			
Were	they intact?	○ Yes	ONo	Ø)N/A	and where?				
Were they signed	and dated?	○Yes	⊖No	<b>⊘</b> N/A					
. Packing Material: (	∩Inserts <b>Ø</b> :Bag	gles 💋 Bu	ıbble Wra	ap CGel Pac	ks 🌈 Wet ic	e 🔘 Slée	eves (	Other .	
. Foreign or Regulated S	ioil?	○Yes (	⊜No	Location of	Sampling:				
Cooler Trackl	ng Number	1	COCID	Date Opened	Time Opened	Opened	i∙By	Temp *©	o. Temp Blank
5551 44	יפט לפט			विशय	ዕጥና	M9		1.6	
		i			1 1				
. Were custody papers p	roperly filled out	(ink, sign	ed, dated	d, etc)?		<b>⊘</b> Yes	0	No	
. Were custody papers p Did all botties arrive in Were all sample labels Were appropriate botti D. Did sample labels and	good condition ( complete (i.e., sai les/containers an	not broke mple ID, a d volume	en, no sign analysis, p as recelved	ns of leakage)? preservation, et d for the reque	c)?	ØYes ØYes ØYes ØYes	00000	No No No	
Did all bottles arrive in Were all sample labels Were appropriate bottl	good condition ( complete (i.e., sar les/containers and I tags agree with	not broke mple ID, a d volume	en, no sign analysis, p as recelved	ns of leakage)? preservation, et d for the reque	c)?	Ø Yes G∳Yes ØYes	() () ()	No No No	
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Did all bottles arrive in Were all sample labels Were appropriate bottl D. Did sample labels and	good condition ( complete (i.e., sar les/containers and I tags agree with	not broke mple ID, a d volume	en, no sign analysis, p as recelved	ns of leakage)? preservation, et d for the reque	c)?	Ø Yes G∳Yes ØYes	() () ()	No No No	
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Did all bottles arrive in Were all sample labels Were appropriate bottl D. Did sample labels and	good condition ( complete (i.e., sar les/containers and I tags agree with	not broke mple ID, a d volume	en, no sign analysis, p as recelved	ns of leakage)? preservation, et d for the reque	c)?	Ø Yes G∳Yes ØYes	() () ()	No No No	
Did all bottles arrive in Were all sample labels Were appropriate bottl D. Did sample labels and	good condition ( complete (i.e., sar les/containers and I tags agree with	not broke mple ID, a d volume	en, no sign analysis, p as recelved	ns of leakage)? preservation, et d for the reque	c)?	Ø Yes G∳Yes ØYes	() () ()	No No No	
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Did all bottles arrive in Were all sample labels Were appropriate bottl D. Did sample labels and	good condition ( complete (i.e., sar les/containers and I tags agree with	not broke mple ID, a d volume	en, no sign analysis, p as recelved	ns of leakage)? preservation, et d for the reque	c)? sted tests?	Ø Yes G∳Yes ØYes	() () ()	No No No	

14 of 34



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



# 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#: 405522
Team: Semivoa GCMS/TWOODS

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

Status: Prepped Prep Date/Time: 8/30/22 10:48

#	Lab Code	Client ID	B#	B# Method /Test p	된	CI Matrix	Amt. Ext.	Sample Description
	E2200751-001	Used Sylica Media	.01	1613B/Dioxins Furans		Aqueous Leachate	1045mL	
2	E2200751-002	Spent Acid	10.	1613B/Dioxins Furans		Aqueous Leachate	232mL	
3	E2200757-001	COU IU Permit 0100	20.	1613B/Dioxins Furans		Water	982mL	yellow murky
4	E2200758-001	VT-680	10.	1613B/Dioxin Furans Unadjusted		Water	1024.0	brown cloudy
5	E2200758-002	EDC Process	10.	1613B/Dioxin Furans Unadjusted	L	Water	1020.0	clear
9	E2200758-003	T2T-07	10.	1613B/Dioxin Furans Unadjusted		Water	1004.0	yellow clear
7	E2200758-004	Biological	10.	1613B/Dioxin Furans Unadjusted		Water	1001.0	yellow clear
8	E2200758-005	Physical	10.	1613B/Dioxin Furans Unadjusted		Water	1009.0	clear yellow
6	E2200762-001	22H0066-01	.01	1613B/Dioxins Furans		Water	987mL	clear
10	10 E2200762-002	22H0066-02	.01	1613B/Dioxins Furans		Water	998mL	clear
11	11 E2200764-001	July 2022 F039 Analytical	.01	1613B/Dioxins Furans		Water	487mL	green cloudy
12	12 E2200782-001	BJWD-L 101	.01	1613B/Dioxins Furans		Water	883mL	
13	13 E2200783-002	22H0281-01	.01	1613B/Dioxins Furans		Water	988mL	1,400.00
14	14 E2200786-001	GW1A-220808	.01	1613B/Dioxins Furans		Water	1050mL	positive)
15	15 E2200786-002	GW1B-220808	.01	1613B/Dioxins Furans		Water	1053mL	
16	16 EQ2200380-01	MB	_	1613B/Dioxins Furans		Liquid	1000.0	
17	17 EQ2200380-02	TCS		1613B/Dioxins Furans		Liquid	1000.0	111111
18	18 EQ2200380-03	DLCS	_	1613B/Dioxins Furans		Liquid	1000.0	
19	19 K2209202-001	M22W-DXN-IN	.01	1613B/Dioxins Furans		Water	1056mL	
20	20 K2209202-002	M22W-DXN-EF	.01	1613B/Dioxins Furans		Water	1029mL	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s

# Spiking Solutions

Name: 8290/1613B Cleanup Working Standard	eanup Working Standard		Inventory ID 224494	Logbook Ref: SN 8/15/22		Expires On: 02/11/2023
E2200751-001 100.00µL E2200758-004 100.00µL E2200773-001.R 100.00µL EQ2200380-01 100.00µL K2209202-002 100.00µL	E2200751-002 E2200758-005 E2200782-001 EQ2200380-02	100.00µL 100.00µL 100.00µL 100.00µL	E2200757-001 100.00µL E2200759-003.R 100.00µL E2200783-002 100.00µL EQ2200380-02 100.00µL	E2200758-001 100.00µL E2200762-001 100.00µL E2200786-001 100.00µL EQ2200380-03 100.00µL	E2200758-002 100.00µL E2200762-002 100.00µL E2200786-002 100.00µL EQ2200380-03 100.00µL	E2200758-003 100.00μL E2200764-001 100.00μL EQ2200380-01 100.00μL K2209202-001 100.00μL
Name: 1613B Matrix Working Standard	Working Standard		Inventory ID 224666	Logbook Ref: tw 08/25/22 224666	1666	Expires On: 02/21/2023
ЕQ2200380-02 100.00µL	ЕQ2200380-02 100.00µL	100.00μL	ЕQ2200380-03 100.00µL	ЕQ2200380-03 100.00µL		
Name: 1613B Labeled Working Standard	Working Standard		Inventory ID 224724	Logbook Ref: tw 08/30/22 224724	4724	Expires On: 02/25/2023
Е2200751-001 1,000.00µL	ιL Ε2200751-002 1,000.00μL	1,000.000L		E2200757-001 1,000.00µL 17 of 32 200758-001 1,000.00µL	E2200758-002 1,000.00µL	E2200758-003 1,000.00µL

Printed 9/8/22 15:13

Preparation Information Benchsheet

# Preparation Information Benchsheet

Semivoa GCMS/TWOODS

E2200758-004

Prep Run#: 405522

EQ2200380-02 E2200758-005 E2200782-001 1,000.00µL E2200773-001.R 1,000.00µL EQ2200380-01 1,000.00µL 1,000.00µL

ЕQ2200380-02 1,000.00µL 1,000.00µL 1,000.00µL 1,000.000L

E2200762-001 1,000.00μL Prep Method: Method Sep Funnel/Jar Prep WorkFlow: OrgExtAq(365) E2200759-003.R 1,000.00µL E2200783-002 1,000.00µL

1,000.00µL EQ2200380-03 1,000.00µL E2200786-001

1,000.00µL E2200762-002 E2200786-002

E2200764-001 1,000.00µL ΕQ2200380-01 1,000.00μL К2209202-001 1,000.00µL

Prep Date/Time: 8/30/22 10:48 Status: Prepped

1,000.000L

1,000.00µL

EQ2200380-03

Final Volume

9/2/22 09:00 9/2/22 12:00 TWOODS

Started:

Silica Gel Clean 9/1/22 13:00 9/1/22 16:00 TWOODS

Finished:

Comments

Comments

Finished: Started: Step:

> 9/1/22 10:00 9/1/22 11:00

8/30/22 10:48 8/30/22 16:00

Finished: Started: Step:

Extraction

Preparation Steps

K2209202-002

TWOODS

Finished: Started:

Comments

Acid Clean

TWOODS Comments

Comments:

08/30/22 Date: Ţ Reviewed By:

Chain of Custody

Printed 9/8/22 15:13

Received By:

Date: Date: Relinquished By:

Extracts Examined

ž

Yes

Preparation Information Benchsheet

Page 2



# **Analytical Results**

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

Analytical Report

Client:

ALS Environmental - Holland (MI)

Project: 22080355

Sample Matrix:

Sample Name:

Lab Code:

Water

Service Request: E2200764

Date Collected: 08/03/22 00:00 Date Received: 08/05/22 09:25

July 2022 F039 Analytical

E2200764-001

Units: pg/L Basis: NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analysis Method:** 

1613B

Date Analyzed: 09/07/22 09:08

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount:

487mL

Instrument Name: E-HRMS-08

GC Column: DB-5MSUI

Data File Name: **ICAL Date:** 

P631405

Cal Ver. File Name: P631394

Blank File Name: P631397

03/15/22

A X A - NY	<b>D</b> 14	•	EDI	N #PO Y	Ion	DD#	Dilution
Analyte Name	Result	Q	EDL	MRL	Ratio	RRT	Factor
2,3,7,8-TCDD	ND	U	18.2	18.2			1
1,2,3,7,8-PeCDD	ND	U	5.27	51.3			1
1,2,3,4,7,8-HxCDD	5.05 <b>BJ</b>	K	4.17	51.3	1.01	1.000	1
1,2,3,6,7,8-HxCDD	8.18 <b>JK</b>		3.72	51.3	0.94	1.000	1
1,2,3,7,8,9-HxCDD	ND	U	3.78	51.3			1
1,2,3,4,6,7,8-HpCDD	69.1		7.78	51.3	1.03	1.000	1
OCDD	935		12.1	103	0.99	1.000	1
2,3,7,8-TCDF	ND	U	12.0	12.0			1
1,2,3,7,8-PeCDF	128		16.0	51.3	1.60	1.001	1
2,3,4,7,8-PeCDF	102		14.5	51.3	1.47	1.000	1
1,2,3,4,7,8-HxCDF	1150		9.57	51.3	1.22	1.000	1
1,2,3,6,7,8-HxCDF	389		10.2	51.3	1.22	1.000	1
1,2,3,7,8,9-HxCDF	27.8JK		13.6	51.3	0.69	1.001	1
2,3,4,6,7,8-HxCDF	86.5 <b>K</b>		9.69	51.3	1.01	1.000	1
1,2,3,4,6,7,8-HpCDF	8690		25.3	51.3	0.97	1.000	1
1,2,3,4,7,8,9-HpCDF	162		27.8	51.3	1.05	1.000	1
OCDF	10000		29.1	103	0.86	1.005	1

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

**Date Collected:** 08/03/22 00:00

Sample Matrix:

Water

**Date Received:** 08/05/22 09:25

Sample Name:

July 2022 F039 Analytical

Units: pg/L Basis: NA

Lab Code:

E2200764-001

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analysis Method:** 

1613B

Date Analyzed: 09/07/22 09:08

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount:

487mL

Instrument Name: E-HRMS-08

GC Column: DB-5MSUI

Data File Name: **ICAL Date:** 

P631405 03/15/22 Blank File Name: P631397

Cal Ver. File Name: P631394

					Ion		Dilution
Analyte Name	Result	Q	EDL	MRL	Ratio	RRT	Factor
Total Tetra-Dioxins	ND	U	18.2	18.2			1
Total Penta-Dioxins	23.2 <b>J</b>		5.27	51.3	1.63		1
Total Hexa-Dioxins	ND	U	3.88	51.3			1
Total Hepta-Dioxins	77.3		7.78	51.3	1.03		1
Total Tetra-Furans	461		12.0	12.0	0.70		1
Total Penta-Furans	1430		1.29	51.3	1.39		1
Total Hexa-Furans	3340		10.6	51.3	1.23		1
Total Hepta-Furans	9090		26.5	51.3	0.97		1

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

Date Collected: 08/03/22 00:00

Sample Matrix:

Water

**Date Received:** 08/05/22 09:25

Sample Name: Lab Code: July 2022 F039 Analytical

E2200764-001

Units: Percent
Basis: NA

#### Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analysis Method:** 

1613B

Date Analyzed: 09/07/22 09:08

**Prep Method:** 

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount:

487mL

Instrument Name: E-HRMS-08

GC Column: DB-5MSUI

Data File Name:

P631405

Blank File Name: P631397

ICAL Date:

03/15/22

Cal Ver. File Name: P631394

#### **Labeled Standard Results**

	Spike	Conc.			Control	Ion	
Labeled Compounds	Conc.(pg)	Found (pg)	% Rec	Q	Limits	Ratio	RRT
13C-2,3,7,8-TCDD	2000	373.741	19	Y	25-164	0.79	1.027
13C-1,2,3,7,8-PeCDD	2000	339.725	17	Y	25-181	1.60	1.229
13C-1,2,3,4,7,8-HxCDD	2000	333.650	17	Y	32-141	1.26	0.991
13C-1,2,3,6,7,8-HxCDD	2000	376.253	19	Y	28-130	1.25	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	328.248	16	Y	23-140	1.07	1.070
13C-OCDD	4000	579.458	14	Y	17-157	0.90	1.142
13C-2,3,7,8-TCDF	2000	336.878	17	Y	24-169	0.80	0.990
13C-1,2,3,7,8-PeCDF	2000	352.606	18	Y	24-185	1.63	1.178
13C-2,3,4,7,8-PeCDF	2000	358.505	18	Y	21-178	1.62	1.218
13C-1,2,3,4,7,8-HxCDF	2000	359.852	18	Y	26-152	0.50	0.968
13C-1,2,3,6,7,8-HxCDF	2000	336.080	17	Y	26-123	0.50	0.972
13C-1,2,3,7,8,9-HxCDF	2000	302.821	15	Y	29-147	0.50	1.008
13C-2,3,4,6,7,8 <b>-</b> HxCDF	2000	375.122	19	Y	28-136	0.50	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	270.309	14	$\mathbf{Y}$	28-143	0.40	1.045
13C-1,2,3,4,7,8,9-HpCDF	2000	312.286	16	Y	26-138	0.42	1.082
37Cl-2,3,7,8-TCDD	800	392.414	49		35-197	NA	1.028

Analytical Report

Client: Project: ALS Environmental - Holland (MI)

22080355

Service Request: E2200764 Date Collected: 08/03/22 00:00

Sample Matrix:

Water

**Date Received:** 08/05/22 09:25

Sample Name:

July 2022 F039 Analytical

Lab Code:

E2200764-001

Units: pg/L Basis: NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analysis Method:** 

1613B

Prep Method:

Method Sep Funnel/Jar

#### **Toxicity Equivalency Quotient**

				Dilution		TEF - Adjusted
Analyte Name	Result	DL	MRL	Factor	TEF	Concentration
2,3,7,8-TCDD	ND	18.2	18.2	1	1	
1,2,3,7,8-PeCDD	ND	5.27	51.3	1	1	
1,2,3,4,7,8-HxCDD	5.05	4.17	51.3	1	0.1	0.505
1,2,3,6,7,8-HxCDD	8.18	3.72	51.3	1	0.1	0.818
1,2,3,7,8,9-HxCDD	ND	3.78	51.3	1	0.1	
1,2,3,4,6,7,8-HpCDD	69.1	7.78	51.3	1	0.01	0.691
OCDD	935	12.1	103	1	0.0003	0.281
2,3,7,8-TCDF	ND	12.0	12.0	1	0.1	
1,2,3,7,8-PeCDF	128	16.0	51.3	1	0.03	3.84
2,3,4,7,8-PeCDF	102	14.5	51.3	1	0.3	30.6
1,2,3,4,7,8-HxCDF	1150	9.57	51.3	1	0.1	115
1,2,3,6,7,8-HxCDF	389	10.2	51.3	1	0.1	38.9
1,2,3,7,8,9-HxCDF	27.8	13.6	51.3	1	0.1	2.78
2,3,4,6,7,8-HxCDF	86.5	9.69	51.3	1	0.1	8.65
1,2,3,4,6,7,8-HpCDF	8690	25.3	51.3	1	0.01	86.9
1,2,3,4,7,8,9-HpCDF	162	27.8	51.3	1	0.01	1.62
OCDF	10000	29.1	103	1	0.0003	3.00
	To	otal TEQ				294

2005 WHO TEFs, ND = 0

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

Date Collected: NA

Sample Matrix:

Water

Date Received: NA

Sample Name:

Method Blank

Units: pg/L

Lab Code:

EQ2200380-01

Basis: NA

#### Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analysis Method:** 

1613B

Date Analyzed: 09/07/22 02:08

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount:

1000.0mL

Instrument Name: E-HRMS-08

GC Column: DB-5MSUI

Data File Name: **ICAL Date:** 

P631397 03/15/22

Blank File Name: P631397 Cal Ver. File Name: P631394

				Ion		Dilution
Analyte Name	Result Q	EDL	MRL	Ratio	RRT	Factor
2,3,7,8-TCDD	ND U	2.15	5.00			1
1,2,3,7,8-PeCDD	ND U	0.718	25.0			1
1,2,3,4,7,8-HxCDD	1.05 <b>J</b>	0.487	25.0	1.22	1.000	1
1,2,3,6,7,8-HxCDD	0.758 <b>JK</b>	0.448	25.0	0.58	1.000	1
1,2,3,7,8,9-HxCDD	0.539 <b>JK</b>	0.448	25.0	0.50	1.007	1
1,2,3,4,6,7,8-HpCDD	5.37 <b>JK</b>	0.754	25.0	0.82	1.000	1
OCDD	55.5	0.360	50.0	0.78	1.000	1
2,3,7,8-TCDF	ND U	1.21	5.00			1
1,2,3,7,8-PeCDF	ND U	0.564	25.0			1
2,3,4,7,8-PeCDF	ND U	0.500	25.0			1
1,2,3,4,7,8-HxCDF	1.59 <b>J</b>	0.183	25.0	1.11	1.000	1
1,2,3,6,7,8-HxCDF	0.670 <b>JK</b>	0.198	25.0	2.09	1.000	1
1,2,3,7,8,9-HxCDF	1.61 <b>J</b>	0.256	25.0	1.13	1.001	1
2,3,4,6,7,8-HxCDF	0.523 <b>JK</b>	0.165	25.0	2.69	1.000	1
1,2,3,4,6,7,8-HpCDF	1.66 <b>JK</b>	0.223	25.0	0.64	1.000	1
1,2,3,4,7,8,9-HpCDF	ND U	0.262	25.0			1
OCDF	4.78 <b>JK</b>	1.32	50.0	1.48	1.005	1

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

Date Collected: NA

Sample Matrix:

Water

Date Received: NA

Sample Name: Lab Code:

Method Blank EQ2200380-01 Units: pg/L Basis: NA

#### Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analysis Method:** 

1613B

Date Analyzed: 09/07/22 02:08

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount:

1000.0mL

Instrument Name: E-HRMS-08

Data File Name:

GC Column: DB-5MSUI Blank File Name: P631397

**ICAL Date:** 

P631397 03/15/22

Cal Ver. File Name: P631394

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	2.15	5.00			1
Total Penta-Dioxins	ND	U	0.718	25.0			1
Total Hexa-Dioxins	1.05 <b>J</b>		0.459	25.0	1.22		1
Total Hepta-Dioxins	7.36 <b>J</b>		0.754	25.0	1.00		1
Total Tetra-Furans	ND	U	1.21	5.00			1
Total Penta-Furans	ND	U	0.531	25.0			1
Total Hexa-Furans	3.20 <b>J</b>		0.196	25.0	1.11		1
Total Hepta-Furans	ND	U	0.241	25.0			1

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

Date Collected: NA

Sample Matrix:

Water

Date Received: NA

Sample Name:

Method Blank

Units: Percent Basis: NA

Lab Code:

EQ2200380-01

#### Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:

1613B

Date Analyzed: 09/07/22 02:08

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount: 1000.0mL

Instrument Name: E-HRMS-08

GC Column: DB-5MSUI

Data File Name: **ICAL Date:** 

P631397 03/15/22

Blank File Name: P631397 Cal Ver. File Name: P631394

#### **Labeled Standard Results**

	Spike	Conc.			Control	Ion	
Labeled Compounds	Conc.(pg)	Found (pg)	% Rec	Q	Limits	Ratio	RRT
13C-2,3,7,8-TCDD	2000	1065.797	53		25-164	0.80	1.027
13C-1,2,3,7,8-PeCDD	2000	1032.483	52		25-181	1.60	1.229
13C-1,2,3,4,7,8-HxCDD	2000	1188.804	59		32-141	1.28	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1449.161	72		28-130	1.25	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1188.663	59		23-140	1.02	1.070
13C-OCDD	4000	2180.366	55		17-157	0.87	1.142
13C-2.3.7.8-TCDF	2000	958,365	48		24-169	0.76	0.990
13C-1,2,3,7,8-PeCDF	2000	1081.684	54		24-109	1.59	1.178
13C-2,3,4,7,8-PeCDF	2000	1154.834	58		21-178	1.57	1.218
13C-1,2,3,4,7,8-HxCDF	2000	1234.398	62		26-152	0.52	0.968
13C-1,2,3,6,7,8-HxCDF	2000	1139.729	57		26-123	0.51	0.972
13C-1,2,3,7,8,9-HxCDF	2000	1073.897	54		29-147	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1408.901	70		28-136	0.51	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	970.321	49		28-143	0.43	1.045
13C-1,2,3,4,7,8,9-HpCDF	2000	1049.213	52		26-138	0.42	1.082
37Cl-2,3,7,8-TCDD	800	360.257	45		35-197	NA	1.028



### **Accuracy & Precision**

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

QA/QC Report

Client:

ALS Environmental - Holland (MI)

Project:

22080355

Sample Matrix:

Water

Service Request:

E2200764

Date Analyzed: Date Extracted: 09/07/22 08/30/22

#### **Duplicate Lab Control Sample Summary**

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method:

1613B

Prep Method:

Method Sep Funnel/Jar

Units: Basis:

pg/L

A malmaia

NA 776754

**Analysis Lot:** 

Lab Control Sample EQ2200380-02 **Duplicate Lab Control Sample** 

EQ2200380-03

							% Rec		
Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	Limits	RPD	RPD Limit
1,2,3,4,6,7,8-HpCDD	852	1000	85	871	1000	87	70-140	2	50
1,2,3,4,7,8-HxCDD	911	1000	91	908	1000	91	70-164	<1	50
1,2,3,6,7,8-HxCDD	806	1000	81	801	1000	80	76-134	<1	50
1,2,3,7,8,9-HxCDD	855	1000	86	861	1000	86	64-162	<1	50
1,2,3,7,8-PeCDD	888	1000	89	893	1000	89	70-142	<1	50
2,3,7,8-TCDD	155	200	77	151	200	76	67-158	2	50
OCDD	1810	2000	91	1830	2000	91	78-144	<1	50
1,2,3,4,6,7,8-HpCDF	895	1000	89	900	1000	90	82-122	<1	50
1,2,3,4,7,8,9-HpCDF	841	1000	84	826	1000	83	78-138	2	50
1,2,3,4,7,8-HxCDF	798	1000	80	806	1000	81	72-134	<1	50
1,2,3,6,7,8-HxCDF	885	1000	88	898	1000	90	84-130	1	50
1,2,3,7,8,9-HxCDF	892	1000	89	847	1000	85	78-130	5	50
1,2,3,7,8-PeCDF	810	1000	81	807	1000	81	80-134	<1	50
2,3,4,6,7,8-HxCDF	755	1000	76	735	1000	74	70-156	3	50
2,3,4,7,8-PeCDF	777	1000	78	784	1000	78	68-160	<1	50
2,3,7,8-TCDF	161	200	80	162	200	81	75-158	<1	50
OCDF	1600	2000	80	1650	2000	83	63-170	3	50

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

Date Collected: NA

Sample Matrix:

Water

Date Received: NA

Sample Name:

Lab Control Sample

Units: pg/L Basis: NA

Lab Code:

EQ2200380-02

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analysis Method:** 

1613B

Date Analyzed: 09/07/22 23:47

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount:

1000.0mL

Instrument Name: E-HRMS-08

GC Column: DB-5MSUI

Data File Name:

P631422

Blank File Name: P631397

**ICAL Date:** 

03/15/22

Cal Ver. File Name: P631409

					Ion		Dilution
Analyte Name	Result	Q	EDL	MRL	Ratio	RRT	Factor
2,3,7,8-TCDD	155		1.36	5.00	0.74	1.001	1
1,2,3,7,8-PeCDD	888		0.303	25.0	1.61	1.001	1
1,2,3,4,7,8-HxCDD	911		0.202	25.0	1.25	1.000	1
1,2,3,6,7,8-HxCDD	806		0.179	25.0	1.25	1.000	1
1,2,3,7,8,9-HxCDD	855		0.182	25.0	1.27	1.007	1
1,2,3,4,6,7,8-HpCDD	852		0.486	25.0	1.01	1.000	1
OCDD	1810		4.73	50.0	0.85	1.000	1
2,3,7,8-TCDF	161		0.755	5.00	0.76	1.001	1
1,2,3,7,8-PeCDF	810		0.425	25.0	1.54	1.000	1
2,3,4,7,8-PeCDF	777		0.383	25.0	1.50	1.001	1
1,2,3,4,7,8-HxCDF	798		0.172	25.0	1.23	1.000	. 1
1,2,3,6,7,8-HxCDF	885		0.192	25.0	1.22	1.000	1
1,2,3,7,8,9-HxCDF	892		0.230	25.0	1.24	1.000	1
2,3,4,6,7,8-HxCDF	755		0.163	25.0	1.22	1.000	1
1,2,3,4,6,7,8-HpCDF	895		2.56	25.0	1.02	1.000	1
1,2,3,4,7,8,9-HpCDF	841		3.10	25.0	1.01	1.000	1
OCDF	1600		0.919	50.0	0.87	1.004	1

Analytical Report

Client: ALS Environmental - Holland (MI) Service Request: E2200764

Project:22080355Date Collected:NASample Matrix:WaterDate Received:NA

Sample Name:Lab Control SampleUnits: pg/LLab Code:EQ2200380-02Basis: NA

#### Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B Date Analyzed: 09/07/22 23:47

Prep Method:Method Sep Funnel/JarDate Extracted:8/30/22Sample Amount:1000.0mLInstrument Name:E-HRMS-08

GC Column: DB-5MSUI

 Data File Name:
 P631422
 Blank File Name:
 P631397

 ICAL Date:
 03/15/22
 Cal Ver. File Name:
 P631409

				Ion		Dilution
Analyte Name	Result (	Q EDL	MRL	Ratio	RRT	Factor
Total Tetra-Dioxins	155	1.36	5.00	0.74		1
Total Penta-Dioxins	888	0.303	25.0	1.61		1
Total Hexa-Dioxins	2570	0.187	25.0	1.25		1
Total Hepta-Dioxins	852	0.486	25.0	1.01		1
Total Tetra-Furans	161	0.755	5.00	0.83		1
Total Penta-Furans	1590	0.403	25.0	1.54		1
Total Hexa-Furans	3330	0.186	25.0	1.23		1
Total Hepta-Furans	1740	2.80	25.0	1.02		1

Analytical Report

Client: ALS Environmental - Holland (MI) Service Request: E2200764

Project:22080355Date Collected:NASample Matrix:WaterDate Received:NA

Sample Name:Lab Control SampleUnits: PercentLab Code:EQ2200380-02Basis: NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B Date Analyzed: 09/07/22 23:47

Prep Method:Method Sep Funnel/JarDate Extracted:8/30/22Sample Amount:1000.0mLInstrument Name:E-HRMS-08

GC Column: DB-5MSUI

 Data File Name:
 P631422

 ICAL Date:
 03/15/22

 Blank File Name:
 P631397

 Cal Ver. File Name:
 P631409

#### Labeled Standard Results

	Spike	Conc.			Control	Ion	
Labeled Compounds	Conc.(pg)	Found (pg)	% Rec	Q	Limits	Ratio	RRT
13C-2,3,7,8-TCDD	2000	1537.702	77		25-164	0.78	1.027
13C-1,2,3,7,8-PeCDD	2000	1503.480	75		25-181	1.61	1.229
13C-1,2,3,4,7,8-HxCDD	2000	1426.277	71		32-141	1.24	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1666.673	83		28-130	1.23	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1446.605	72		23-140	1.02	1.070
13C-OCDD	4000	3180.611	80		17-157	0.90	1.142
13C-2,3,7,8-TCDF	2000	1309.811	65		24-169	0.77	0.991
13C-1,2,3,7,8-PeCDF	2000	1552.696	78		24-185	1.59	1.179
13C-2,3,4,7,8-PeCDF	2000	1634.619	82		21-178	1.54	1.218
13C-1,2,3,4,7,8-HxCDF	2000	1441.682	72		26-152	0.52	0.968
13C-1,2,3,6,7,8-HxCDF	2000	1357.737	68		26-123	0.51	0.971
13C-1,2,3,7,8,9-HxCDF	2000	1250.420	63		29-147	0.50	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1630.246	82		28-136	0.50	0.986
13C-1,2,3,4,6,7,8-HpCDF	2000	1271.697	64		28-143	0.43	1.045
13C-1,2,3,4,7,8,9-HpCDF	2000	1301.178	65		26-138	0.43	1.082
37Cl-2,3,7,8-TCDD	800	575.969	72		35-197	NA	1.028

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

Date Collected: NA

Sample Matrix:

Water

Date Received: NA

Sample Name:

Duplicate Lab Control Sample

Units: pg/L Basis: NA

Lab Code:

EQ2200380-03

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analysis Method:** 

1613B

Date Analyzed: 09/07/22 10:48

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount:

1000.0mL

Instrument Name: E-HRMS-08

GC Column: DB-5MSUI

Data File Name:

P631407

Blank File Name: P631397

**ICAL Date:** 

03/15/22

Cal Ver. File Name: P631394

					Ion		Dilution
Analyte Name	Result	Q	EDL	MRL	Ratio	RRT	Factor
2,3,7,8-TCDD	151		3.14	5.00	0.79	1.001	1
1,2,3,7,8-PeCDD	893		0.554	25.0	1.58	1.001	1
1,2,3,4,7,8-HxCDD	908		0.237	25.0	1.27	1.000	1
1,2,3,6,7,8-HxCDD	801		0.210	25.0	1.26	1.000	1
1,2,3,7,8,9-HxCDD	861		0.213	25.0	1.22	1.008	1
1,2,3,4,6,7,8-HpCDD	871		0.606	25.0	1.03	1.000	1
OCDD	1830		5.37	50.0	0.88	1.000	1
2,3,7,8-TCDF	162		1.23	5.00	0.75	1.001	1
1,2,3,7,8-PeCDF	807		0.591	25.0	1.61	1.001	1
2,3,4,7,8-PeCDF	784		0.531	25.0	1.56	1.000	1
1,2,3,4,7,8-HxCDF	806		0.229	25.0	1.24	1.000	1
1,2,3,6,7,8-HxCDF	898		0.246	25.0	1.24	1.000	1
1,2,3,7,8,9-HxCDF	847		0.300	25.0	1.17	1.000	1
2,3,4,6,7,8-HxCDF	735		0.198	25.0	1.23	1.000	1
1,2,3,4,6,7,8-HpCDF	900		2.28	25.0	1.02	1.000	1
1,2,3,4,7,8,9-HpCDF	826		2.77	25.0	1.04	1.000	1
OCDF	1650		1.01	50.0	0.88	1.005	1

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

Date Collected: NA

Sample Matrix:

Water

Date Received: NA

Sample Name:

Duplicate Lab Control Sample

Units: pg/L

Lab Code:

EQ2200380-03

Basis: NA

#### Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analysis Method:** 

1613B

Date Analyzed: 09/07/22 10:48

Prep Method:

Method Sep Funnel/Jar

Date Extracted: 8/30/22

Sample Amount:

1000.0mL

Instrument Name: E-HRMS-08

GC Column: DB-5MSUI

Data File Name:

P631407

Blank File Name: P631397

ICAL Date:

03/15/22

Cal Ver. File Name: P631394

					Ion		Dilution
Analyte Name	Result	Q	EDL	MRL	Ratio	RRT	Factor
Total Tetra-Dioxins	151		3.14	5.00	0.79		1
Total Penta-Dioxins	893		0.554	25.0	1.58		1
Total Hexa-Dioxins	2570		0.219	25.0	1.27		1
Total Hepta-Dioxins	871		0.606	25.0	1.03		1
Total Tetra-Furans	162		1.23	5.00	0.74		1
Total Penta-Furans	1590		0.560	25.0	1.61		1
Total Hexa-Furans	3290		0.239	25.0	1.24		1
Total Hepta-Furans	1730		2.51	25.0	1.02		1

Analytical Report

Client:

ALS Environmental - Holland (MI)

Service Request: E2200764

Project:

22080355

Date Collected: NA

Sample Matrix:

Water

Date Received: NA

Sample Name:

Duplicate Lab Control Sample

Units: Percent Basis: NA

Lab Code:

EQ2200380-03

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

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GC Column: DB-5MSUI

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P631407

Blank File Name: P631397

**ICAL Date:** 

03/15/22

Cal Ver. File Name: P631394

#### **Labeled Standard Results**

	Spike	Conc.			Control	Ion	
Labeled Compounds	Conc.(pg)	Found (pg)	% Rec	_Q	Limits	Ratio	RRT
13C-2,3,7,8-TCDD	2000	1456.983	73		25-164	0.80	1.027
13C-1,2,3,7,8-PeCDD	2000	1415.007	71		25-181	1.57	1.228
13C-1,2,3,4,7,8-HxCDD	2000	1383.593	69		32-141	1.24	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1734.048	87		28-130	1.22	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1506.665	75		23-140	1.03	1.070
13C-OCDD	4000	3416.355	85		17-157	0.87	1.142
13C-2,3,7,8-TCDF	2000	1272.673	64		24-169	0.76	0.990
13C-1,2,3,7,8-PeCDF	2000	1449.176	72		24-185	1.60	1.178
13C-2,3,4,7,8-PeCDF	2000	1527.886	76		21-178	1.55	1.218
13C-1,2,3,4,7,8-HxCDF	2000	1436.117	72		26-152	0.50	0.968
13C-1,2,3,6,7,8-HxCDF	2000	1343.325	67		26-123	0.51	0.972
13C-1,2,3,7,8,9-HxCDF	2000	1319.645	66		29-147	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1670.525	84		28-136	0.51	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	1288.653	64		28-143	0.44	1.045
13C-1,2,3,4,7,8,9-HpCDF	2000	1360.108	68		26-138	0.42	1.082
37Cl-2,3,7,8-TCDD	800	552.663	69		35-197	NA	1.028