June 30, 2015

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

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

Dear Mr. Batka:

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

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

We have incorporated the laboratory results for the "Hazardous Substances Limitations and Reporting" (pg. A-3 of 3 of each EPA UIC Permit) as the last page of this and each successive monthly report when EGT accepts F039 waste.

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

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

Sincerely,

Richard J. Powals, P.E.

Vice-President

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

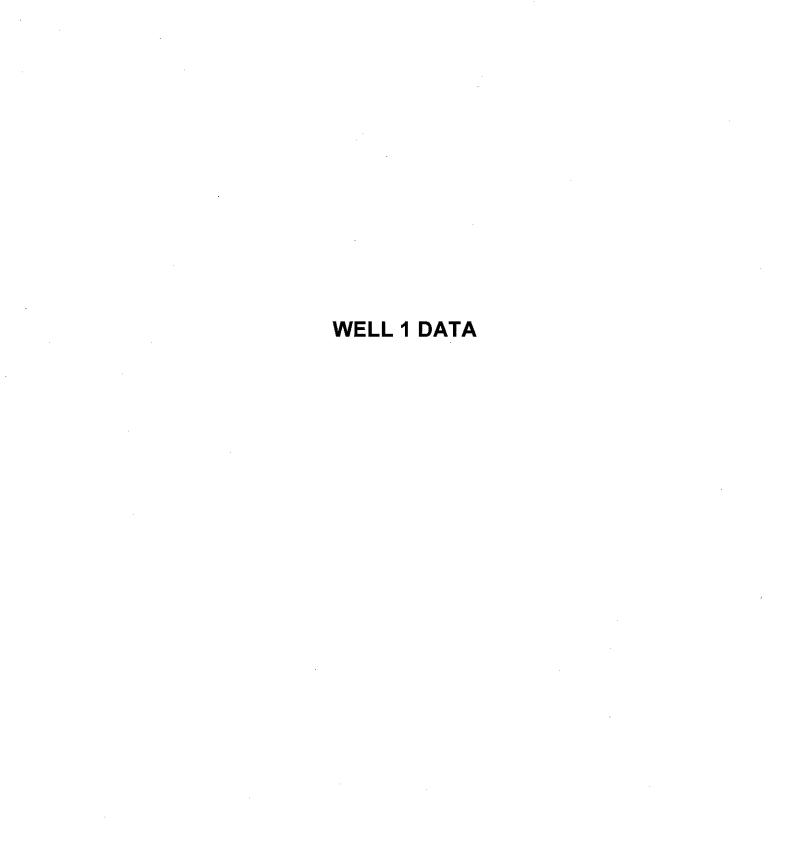
att.

rjp063015/EGTEPAMonthlyReport-May 2015



#### Calculation of Average Injection Rate

CURRENT REPORTING YEAR	2013	_	
CURRENT REPORTING MONTI	H MAY	_	•
Date (month, year) of the first inject	ction into either well	at the Citrin Road Fa	acility
HOVEMBER 2013			
CURREN	NT MONTH (all volu	imes in gallons)	•
	Injected Waste	Injected Non-Waste	Total injected
MI	-163-1W-C010 , v	Well #1-12	
Current Month	275,004	0	275,004
Since facility first injected			275,004 1,679,497
MI	-163-1W-C011, v	Vell #2-12	
Current Month	3,952	0	3,952
Since facility first injected			
		Lifetime Combined	1,199,883 2,879,380
Conversion factors			
365.25 days per year ÷ 12 months p			_
30.4375 days per month × 1440 min	nutes per day = $43,83$	o minutes per montr	
Calculations	19		
Whole number of months of injection	OH 11		
lifetime number of mo	nths of injection $\times A$	3 830 minutes/month	
incline named of me	nuis of injection A 4.	_	minutes of injection
			minuco or injection
Lifetime combined injected volume	2,879,380	× <u>832,770</u> min	utes of injection
		gpm average injection	



## WELL 01 Monthly Data

Date	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
	Injection	Injection	Sight Glass	Sight Glass	Annulus	Annulus	Injectate	tate	Flow	Flow	Differentail	
	Pressure	īē	<u> </u>	Level	Pressure	ıre	Н	H	Rate	Rate	Pressure	Pressure
	(PSIG)		(in)	(in)	(PSIG)	(PSIG)			(GPM)	(GPM)	(PSIG)	(PSIG)
5/1/2015	-1.9	712.0	19.7	22.4	478.9	1153.9	6.3	7.9	6.3	63.8	281.8	1034.3
5/2/2015	72.8	76.4	19.8	20.1	1030.9	1051.1	7.2	7.2	0.0	0.0	927.8	975.3
5/3/2015	71.3	73.1	19.8	20.2	1019.6	1030.9	7.2	7.2	0.0	0.0	947.8	958.2
5/4/2015	-9.8	714.8	19.6	35.7	681.8	1156.8	6.3	9.7	8.5	110.0	148.6	1105.4
5/5/2015	-5.8	714.7	32.8	35.0	837.6	1153.8	9.9	8.4	3.7	78.9	285.6	1065.7
5/6/2015	23.7	0'202	32.7	35.0	893.3	1154.6	6.7	9.7	5.7	59.4	203.9	1057.1
5/7/2015	-3.9	715.0	32.7	35.7	9.007	1157.0	5.9	7.0	9.9	120.9	155.4	1105.7
5/8/2015	6.6-	713.4	32.7	2.35.7	853.1	1203.1	6.3	7.0	9.9	132.7	166.6	1108.0
5/9/2015	-0.5	0.4	33.3	33.7	926.1	956.7	6.7	6.8	0.0	0.0	925.8	957.0
5/10/2015	-0.5	0.4	33.3	93.6	917.8	926.2	2.9	6.7	0.0	0.0	917.5	926.5
5/11/2015	-0.4	7.707	33.2	35.4	890.1	1199.9	6.3	7.5	4.1	44.9	195.5	1073.8
5/12/2015	5.8	9'669	33.1	34.8	897.9	1200.2	6.5	7.3	4.2	177.5	372.5	1029.8
5/13/2015	6.6-	695.7	33.1	35.6	830.8	1207.4	6.4	7.2	2.7	9'29	219.4	1052.8
5/14/2015	12.2	642.8	33.1	33.9	897.4	1190.2	6.5	7.5	2.7	48.7	479.5	970.4
5/15/2015	6.0	724.3	33.1	34.8	879.4	1203.6	2.9	2.2	15.4	79.1	357.6	2.326
5/16/2015	-1.3	1.2	33.3	33.6	911.0	931.9	7.1	7.1	0.0	0.0	911.7	931.2
5/17/2015	-1.7	-0.7	33.3	33.7	904.9	911.0	1.7	7.1	0.0	0.0	906.1	912.3
5/18/2015	-1.9	-1.0	33.4	33.8	8.006	904.9	7.1	7.1	0.0	1.3	902.0	906.5
5/19/2015	-1.9	37.8	32.8	33.7	0.006	1020.3	7.1	7.8	0.0	114.2	901.4	1008.1
5/20/2015	0.4	1.4	32.7	33.0	992.1	997.0	7.2	7.2	0.0	8.8	991.0	996.3
5/21/2015		720.6	32.7	34.1	883.8	1202.8	6.5	7.6	5.3	105.5	374.6	991.4
5/22/2015	92.5	95.1	33.0	33.2	984.9	993.4	6.8	6.9	0.0	2.0	891.8	9.868
5/23/2015	91.4	93.2	32.9	33.2	980.1	985.0	8.9	6.8	0.0	11.3	888.1	892.4
5/24/2015	90.8	92.0	33.0	33.3	976.4	980.1	6.8	6.9	0.0	6.4	884.9	888.4
5/25/2015	90.1	91.3	33.0	33.3	973.0	976.5	6'9	6.9	0.0	1.9	882.2	885.6
5/26/2015	31.5	698.8	33.1	34.5	884.8	1200.7	6.9	7.7	3.0	53.9	361.4	944.1
5/27/2015	20.8	726.4	33.2	34.6	894.8	1206.7	6.9	7.5	10.5	72.6	345.5	939.9
5/28/2015	9.0-	26.9	32.9	33.7	6.006	1006.2	7.1	7.2	0.0	26.4	879.1	1002.2
5/29/2015		738.1	32.9	35.5	794.6	1202.6	6.8	8.0	6.3	81.7	238.2	1005.4
5/30/2015	-1.5	-0.5	33.1	33.4	912.5	944.3	7.0	7.2	0.0	384.3	913.4	945.3
5/31/2015	-1.7	6'0-	33.0	33.3	904.6	912.5	6.9	7.0	0.0	245.1	905.7	914.0

#### Circle Chart Index

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

#### Chart Recorder #1

Channel #1

Blue Pen - Well 1 Injection Pressure

Channel #2

Red Pen - Well 1 Annulus Pressure

Channel #3

Green Pen - Well 1 Flow Rate

Channel #4

Black Pen - Well 1 Annulus Tank Level

#### Chart Recorder #2

Channel #1

Blue Pen – Well 2 Injection Pressure

Channel #2

Red Pen - Well 2 Annulus Pressure

Channel #3

Green Pen - Well 2 Flow Rate

Channel #4

Black Pen - Well 2 Annulus Tank Level

#### Chart Recorder #3

Channel #1

Blue Pen - Injection pH Well 1 & 2

Channel #2

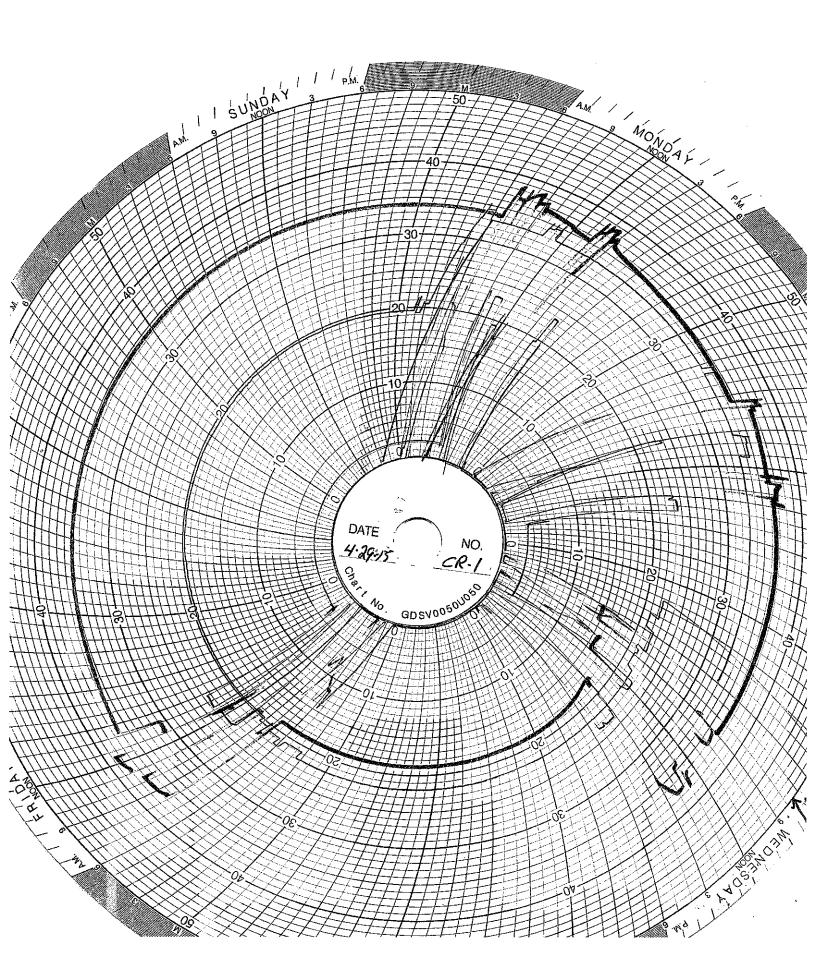
Red Pen - Weil 1 Monthly Volume

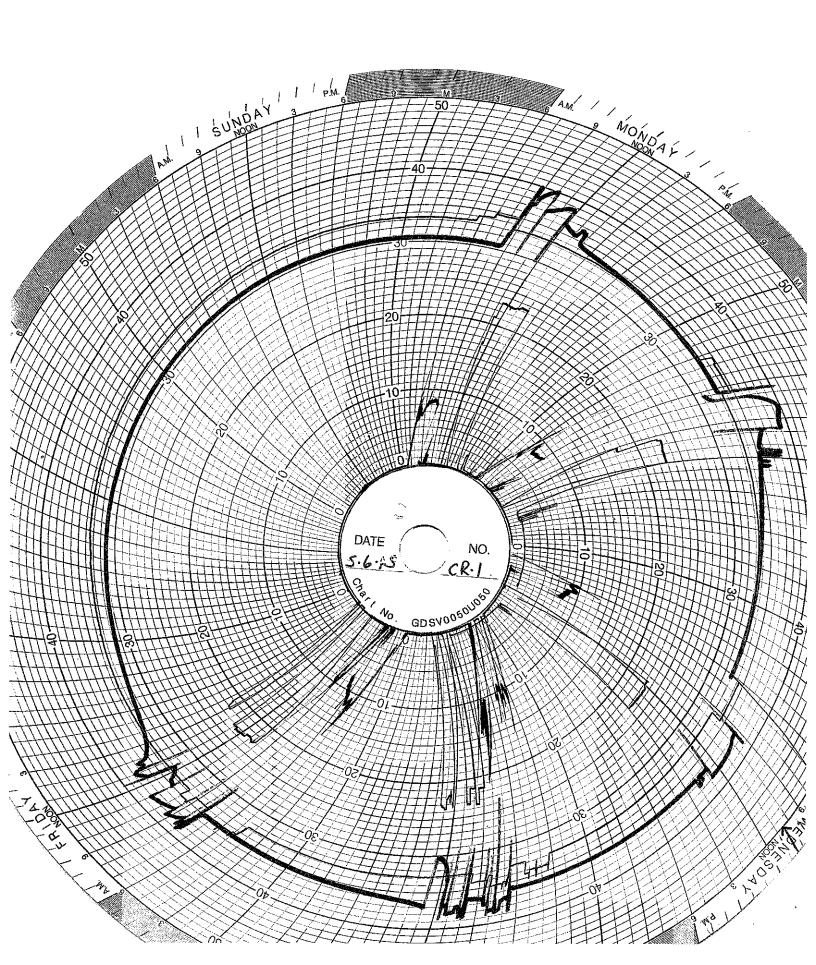
Channel #3

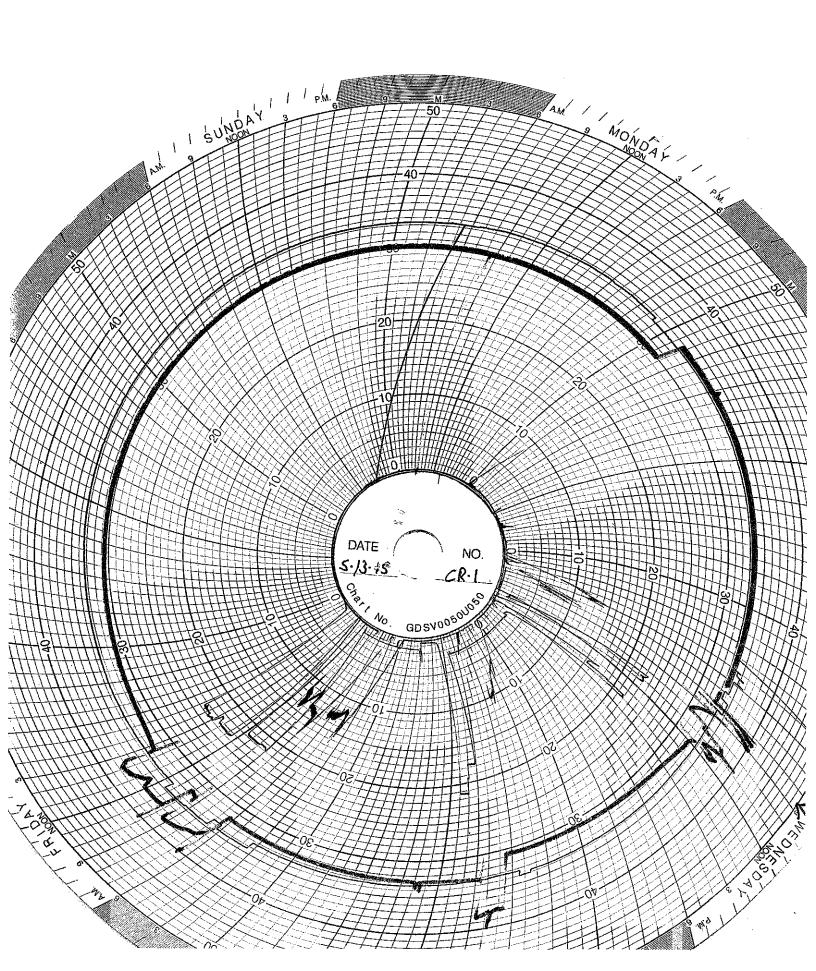
Green Pen - Well 2 Monthly Volume

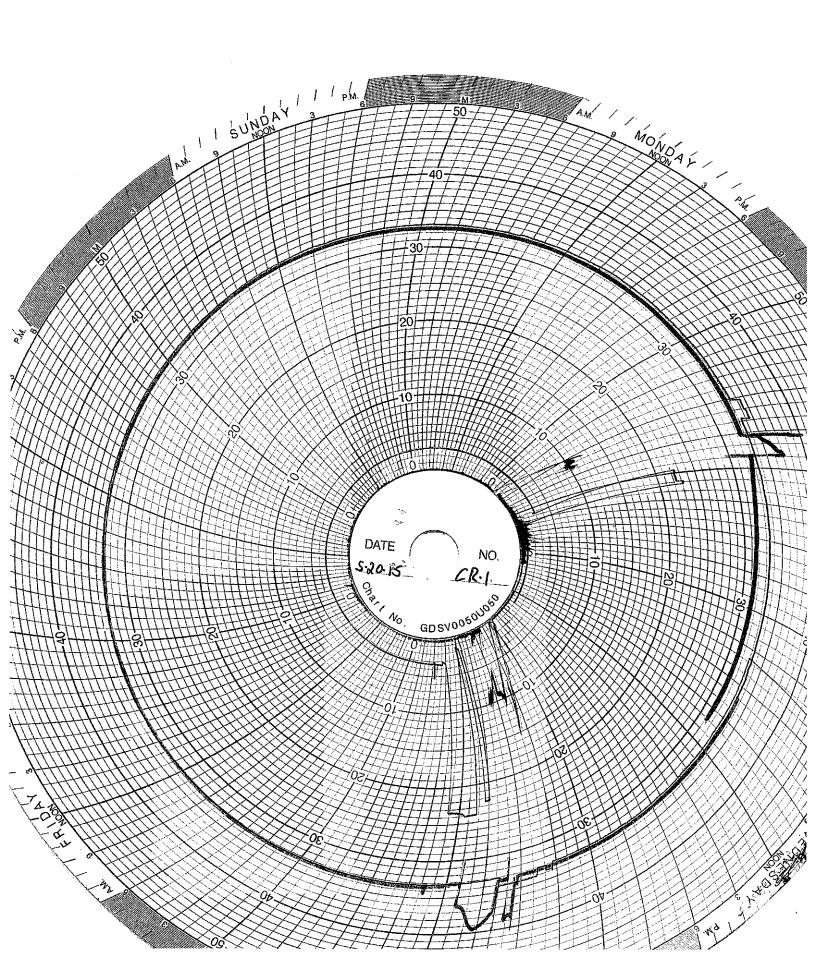
Channel #4

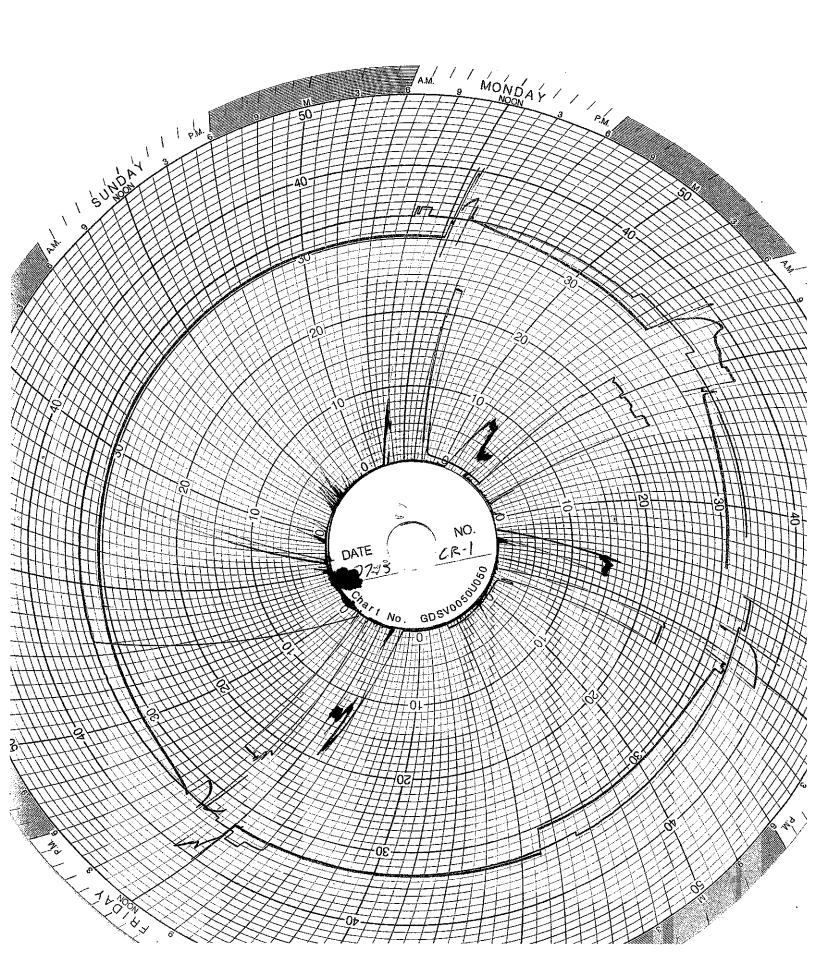
Black Pen - Temperature













## Well 02 Monthly Data

Date	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
	Injection	Injection	Sight Glass	Sight Glass	Annulus	Annulus	Injectate	tate	Flow	Flow	Differentail	Differential
	Pressure	Pressure	Level	Level	Pressure	Pressure	五	H	Rate	Rate	Pressure	Pressure
	(PSIG)	(PSIG)	(in)	(in)	(PSIG)	(PSIG)			(GPM)	(GPM)	(PSIG)	(PSIG)
5/1/2015	7.7	22.3	9.5	17.9	395.8	1106.8	6.3	6.7	0.0	0.0	397.5	1098.1
5/2/2015		4.0	9.2	10.5	281.8	613.0	7.2	7.2	0.0	0.0	280.1	610.3
5/3/2015	1.6	13.6	8.2	10.3	226.6	512.7	7.2	7.2	0.0	0.0	224.6	500.2
5/4/2015		24.0	6.7	36.4	377.2	1046.4	6.3	9.7	0.0	0.0	373.8	1027.1
5/5/2015		24.3	29.9	32.7	552.6	1019.0	9.9	8.4	0.0	0.0	546.5	1005.6
5/6/2015		25.6	28.0	30.2	501.6	939.1	6.7	9.7	0.0	0.0	495.0	923.6
5/7/2015		12.9	27.9	28.4	418.7	684.3	5.9	7.0	0.0	0.0	408.8	676.0
5/8/2015	·	39.5	24.1	28.9	333.7	1227.7	6.3	2.0	0.0	0.0	321.5	1189.3
5/9/2015		11.7	25.4	25.5	365.0	654.4	6.7	6.8	0.0	0.0	355.5	642.7
5/10/2015		9.5	25.4	25.5	264.2	365.3	6.7	6.7	0.0	0.0	255.1	355.8
5/11/2015	_	32.5	22.1	25.5	254.4	914.4	6.3	7.5	0.0	0.0	245.0	6.988
5/12/2015		34.3	20.0	22.9	432.3	914.4	6.5	7.3	0.0	0.0	419.1	886.8
5/13/2015		12.7	20.0	20.8	414.3	9.929	6.4	7.2	0.0	0.0	403.2	665.3
5/14/2015		33.4	17.7	20.5	374.7	911.5	6.5	7.5	0.0	0.0	362.9	883.7
5/15/2015		32.2	16.3	18.5	452.4	914.3	6.7	7.5	0.0	0.0	456.6	0.006
5/16/2015		15.4	17.8	18.0	493.2	505.2	7.1	7.1	0.0	0.0	481.2	489.8
5/17/2015		12.0	17.8	18.0	485.8	493.5	7.1	7.1	0.0	0.0	474.7	481.6
5/18/2015		11.2	17.9	18.1	478.9	486.5	7.1	7.1	0.0	0.0	468.2	475.4
5/19/2015		10.8	17.5	18.3	471.7	479.6	7.1	7.8	0.0	0.0	461.1	468.8
5/20/2015		10.6	17.4	18.2	466.5	472.3	7.2	7.2	0.0	0.0	455.9	461.7
5/21/2015		15.0	17.6	18.1	462.7	467.0	6.5	9.7	0.0	0.0	450.0	456.5
5/22/2015		12.7	17.6	18.3	457.2	463.2	6.8	6.9	0.0	0.0	445.9	450.6
5/23/2015		11.4	17.6	18.4	452.6	457.9	8.9	6.8	0.0	0.0	441.6	446.6
5/24/2015		11.1	17.8	18.4	448.4	453.2	8.9	6.9	0.0	0.0	437.5	442.3
5/25/2015		11.1	17.9	18.0	444.8	449.1	6.9	6.9	0.0	0.0	433.8	438.1
5/26/2015		12.8	17.5	18.3	437.5	445.4	6.9	7.7	0.0	0.0	430.1	441.7
5/27/2015		15.1	17.5	18.3	438.7	441.7	6.9	7.5	0.0	0.0	425.8	430.3
5/28/2015		12.9	17.9	18.1	435.5	439.4	7.1	7.2	0.0	0.0	424.0	426.5
5/29/2015		355.2	17.9	18.2	428.3	701.0	6.8	8.0	2.5	90.9	262.4	546.8
5/30/2015		-1.3	17.6	18.5	412.9	428.9	7.0	7.2	0.0	0.0	414.3	430.4
5/31/2015	-1.6	-14	17.7	18.4	408.2	413.4	6.9	7.0	0.0	0.0	409.6	414.9

#### DATA DESCRIPTION

#### May 2015

This month's data is reported from the report generator. The data recorded from the foundation fieldbus requires manual observation by the deep well operators, who have been manually checking flow rate by displacement of tank volume over time. This is used to generate a multiplier for the purposes of reporting flow rates. An outside programmer was hired to troubleshoot and reset the foundation fieldbus parameters.

#### Circle Chart Index

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

#### Chart Recorder #1

Channel #1

Blue Pen - Well 1 Injection Pressure

Channel #2

Red Pen - Well 1 Annulus Pressure

Channel #3

Green Pen - Well 1 Flow Rate

Channel #4

Black Pen - Well 1 Annulus Tank Level

#### Chart Recorder #2

Channel #1

Blue Pen - Well 2 Injection Pressure

Channel #2

Red Pen - Well 2 Annulus Pressure

Channel #3

Green Pen - Well 2 Flow Rate

Channel #4

Black Pen - Well 2 Annulus Tank Level

#### Chart Recorder #3

Channel #1

Blue Pen - Injection pH Well 1 & 2

Channel #2

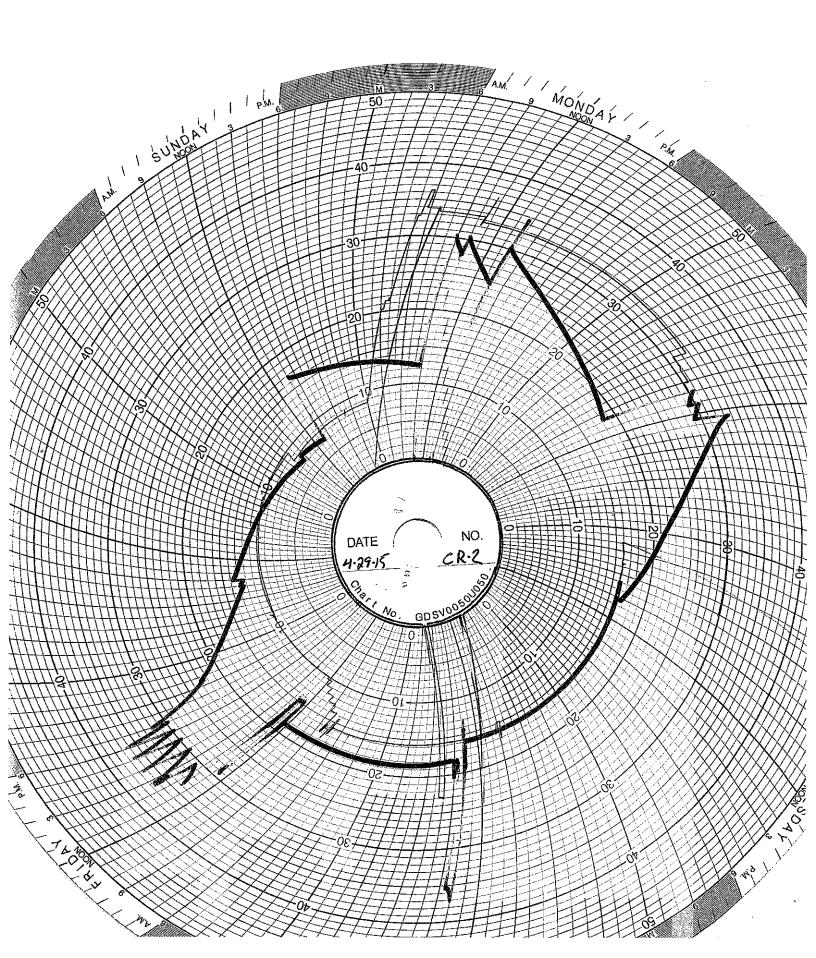
Red Pen - Well 1 Monthly Volume

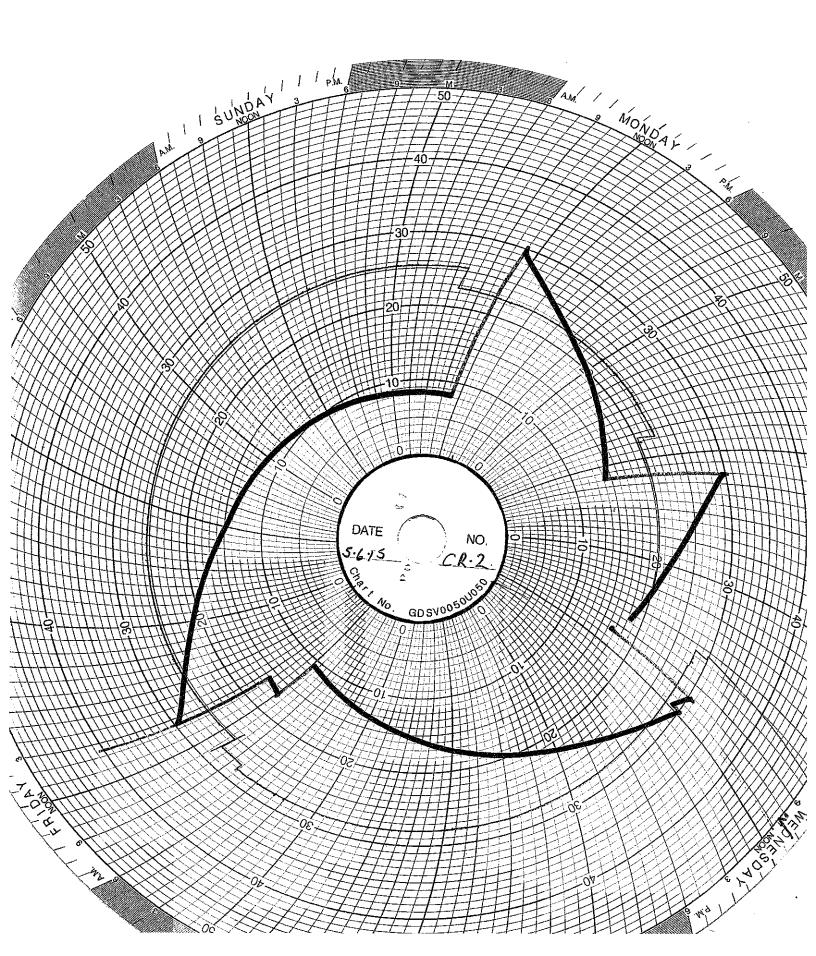
Channel #3

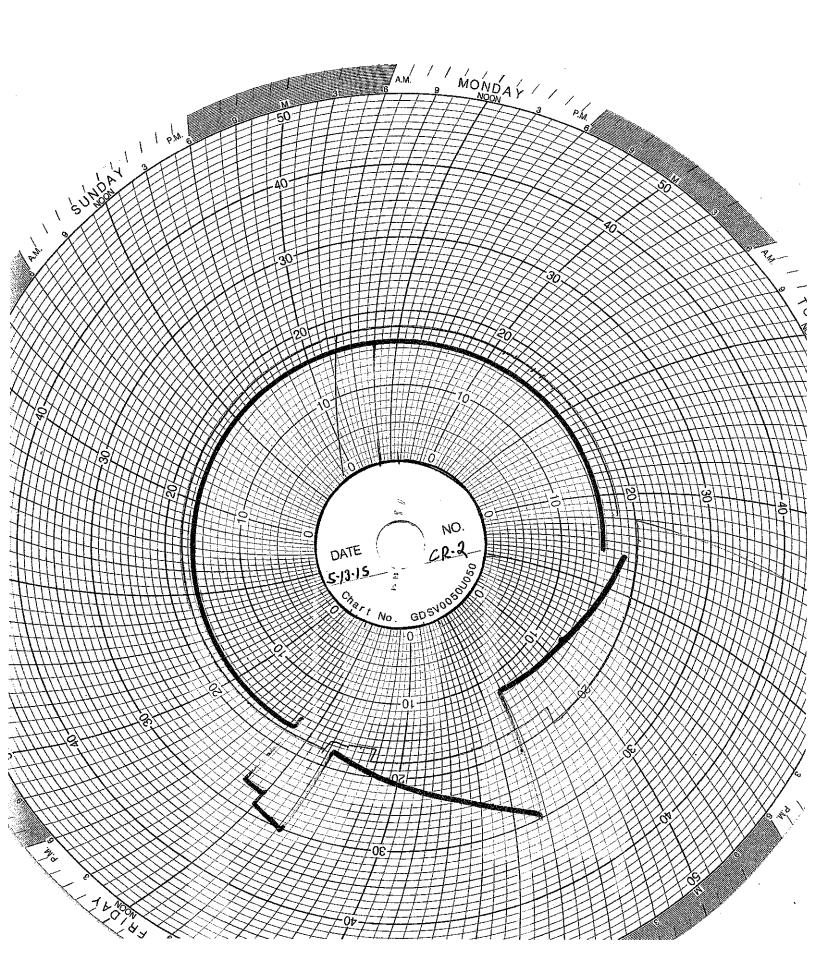
Green Pen - Well 2 Monthly Volume

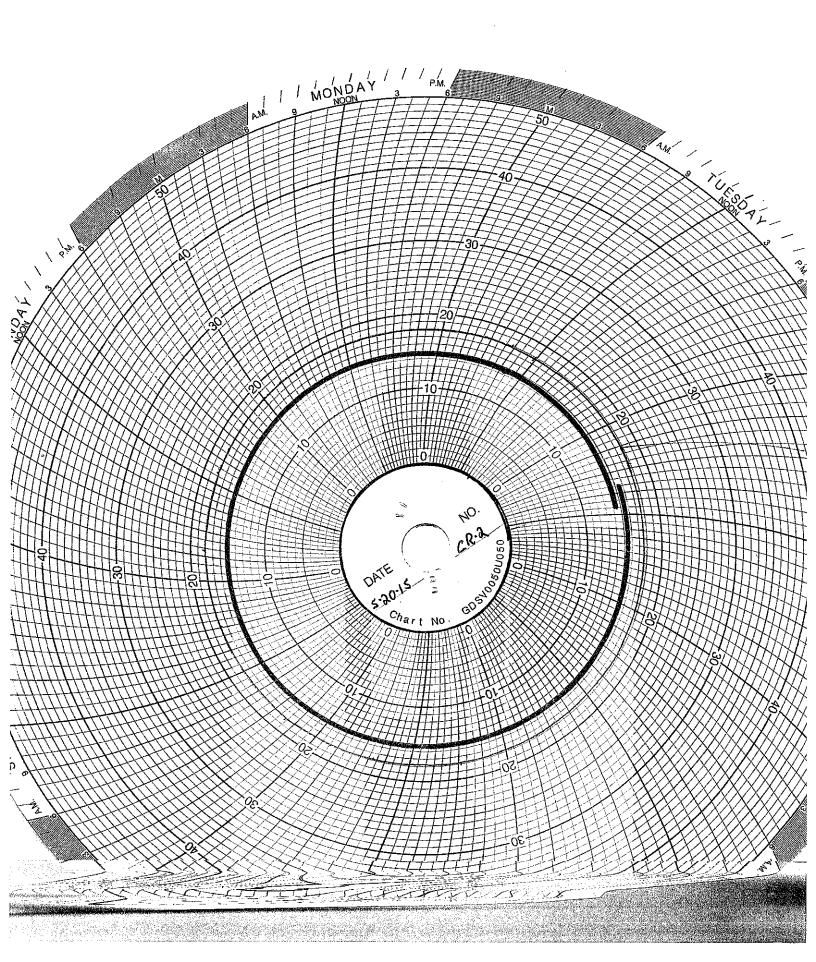
Channel #4

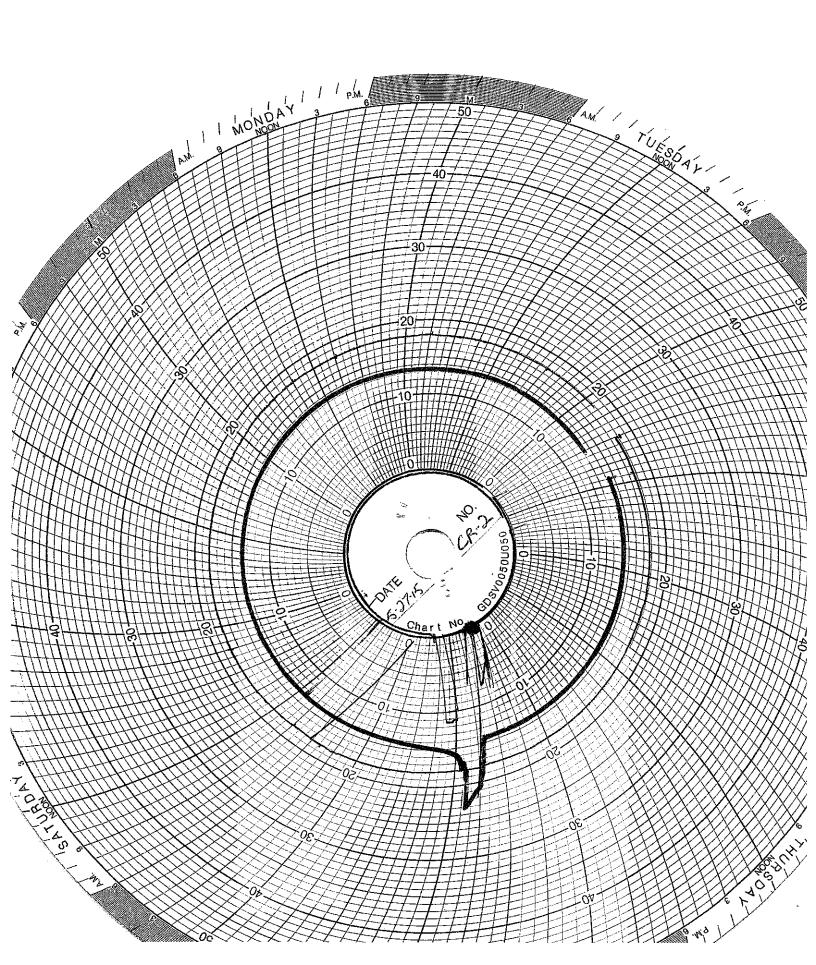
Black Pen - Temperature

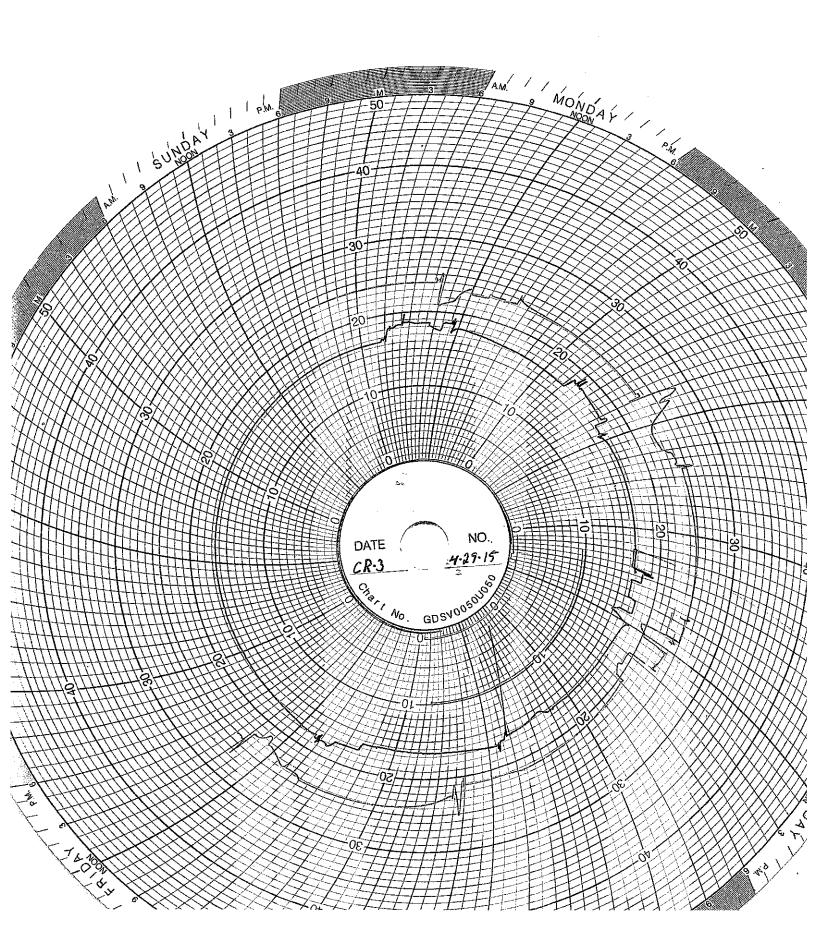


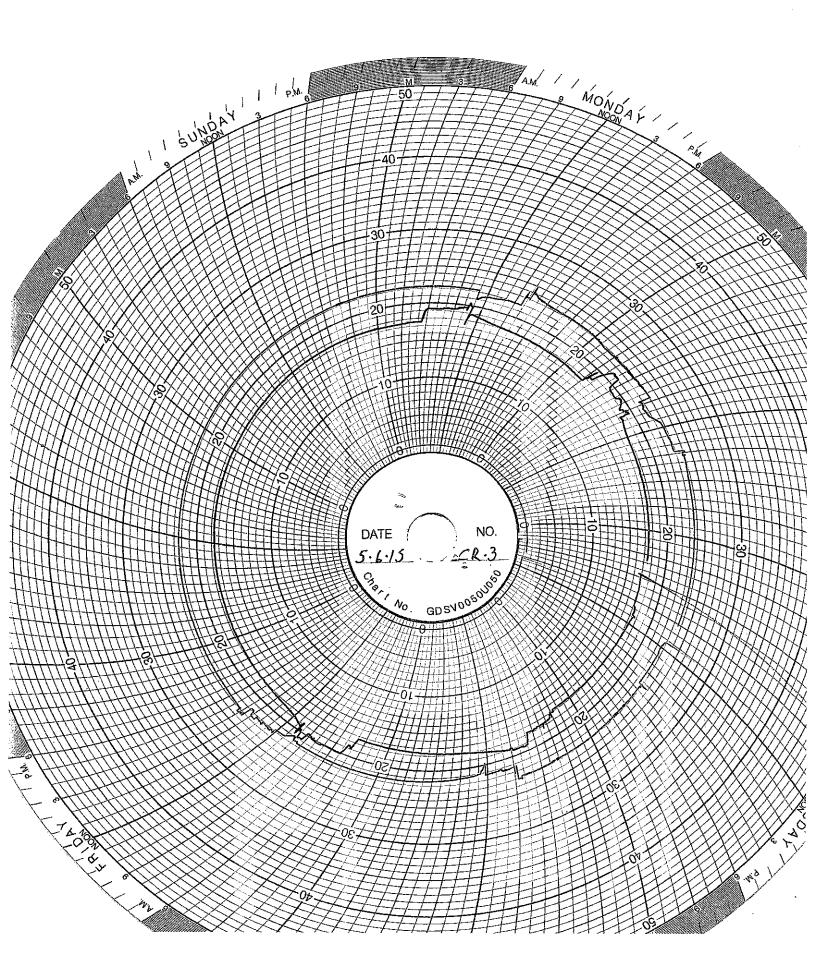


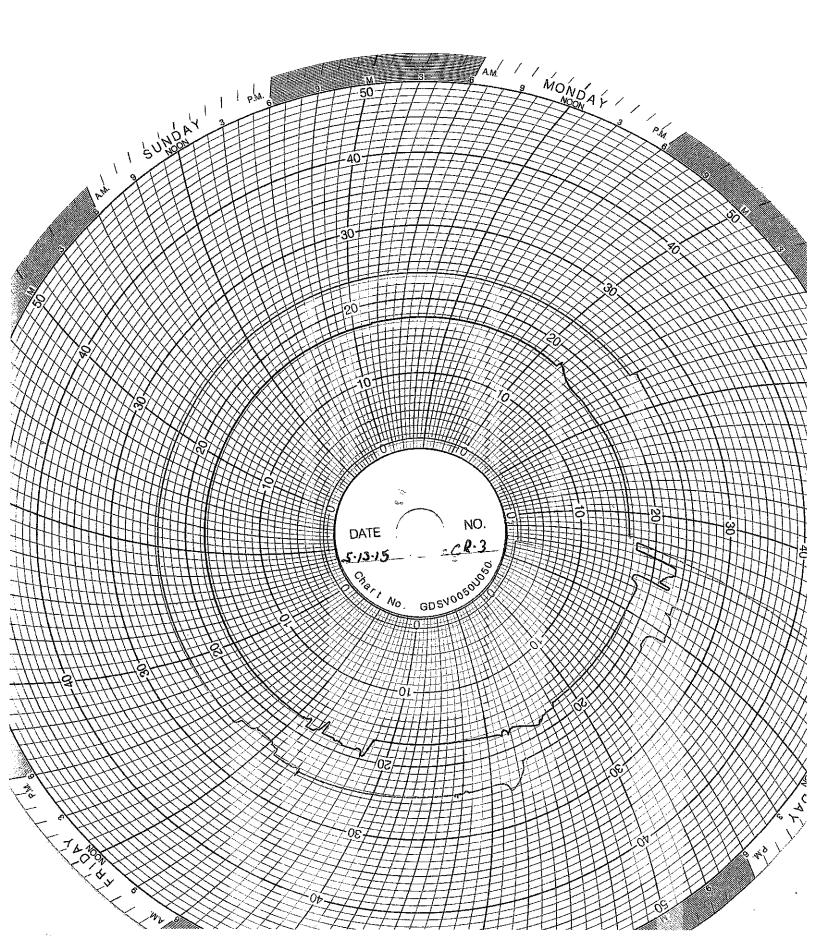


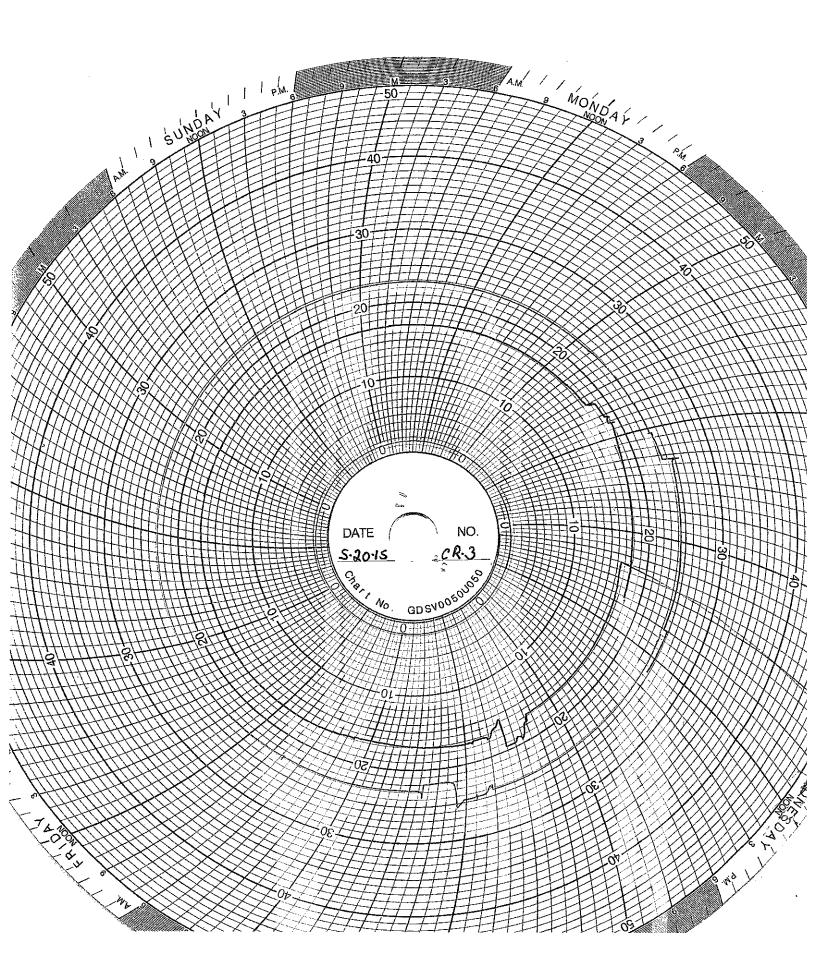


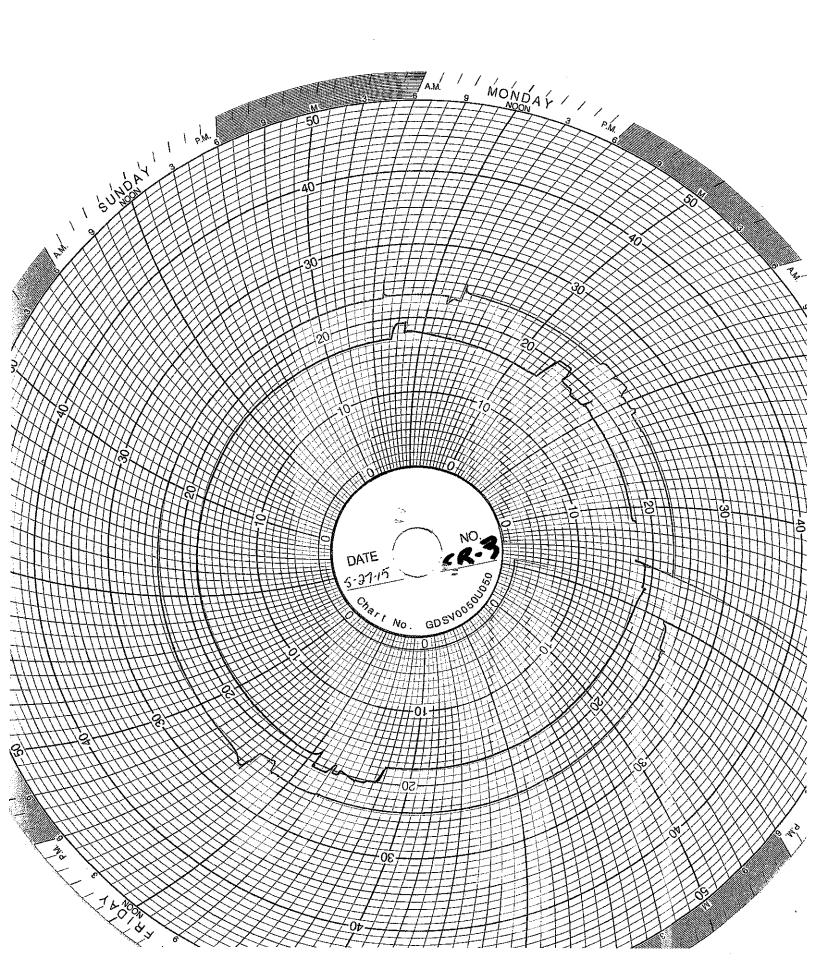








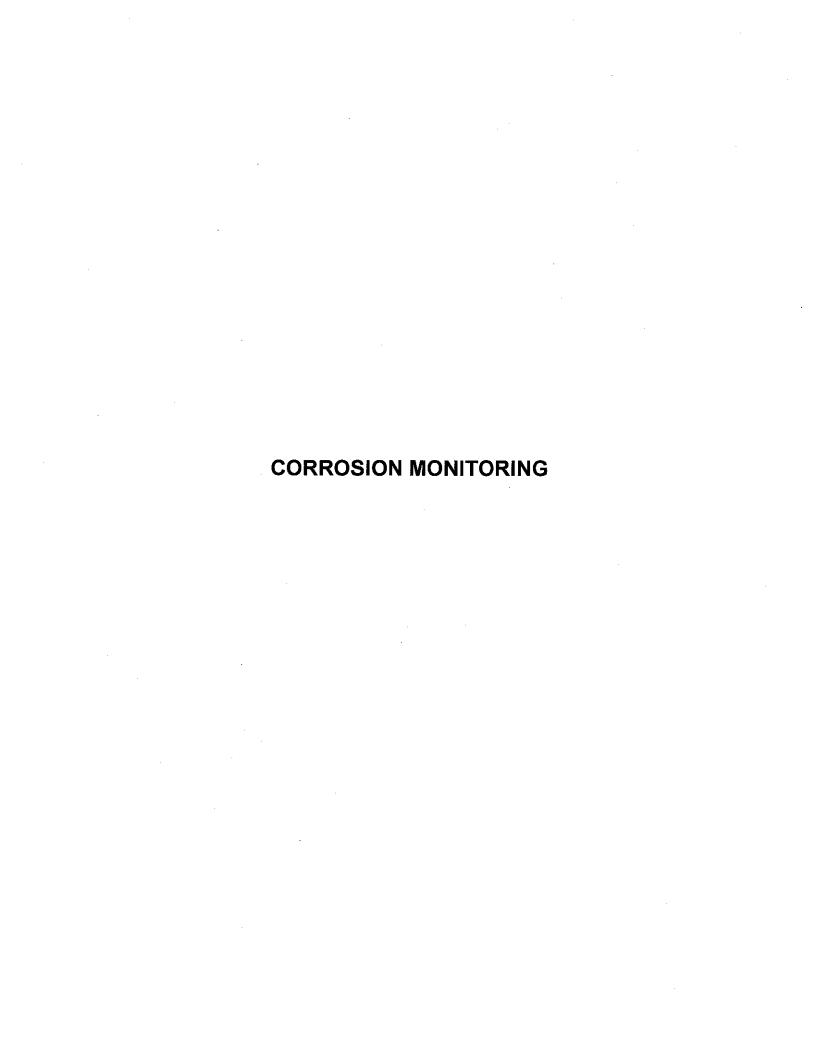




**MAINTENANCE LOG** 

# UIC Monthly Maintenance Log

	Г	_	_	_	
	had 62.5 gallons of diesel firel added	had 123 gallons of diesel fuel added	Flow tubes had the operational settings and parameters reentered into the foundation fieldhus	Flow tube was tested for resistance on its windings. Resistance was poor on each winding. New flow	tube was ordered.
	AT-1 Tank	AT-2 Tank	Well 1&2	Flow meter well 2	
1700/7/1	5/4/2015	5/4/2015	5/6/2015	5/13/2015	



#### 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	
10/30/2014	13.321 g	9.387 g	7.075 g	
11/21/2014	13.320 g	9.386 g	7.069 g	
12/19/2014	13.321 g	9.315 g	7.084 g	
1/12/2015	13.321 g	9.289 g	7.063 g	
2/23/2015	13.339 g	9.286 g	7. <b>00</b> 5 g	New hastelloy coupon
3/31/2015	13.339 g	9.286 g	7. <b>00</b> 5 g	İ
4/27/2015	13.335 g	9.130 g	6.852 g	
5/21/2015	13.336 g	9.124 g	6.809 g	

#### CORROSION MONITORING COUPONS VISUAL DESCRIPTION

#### May 21, 2015

#### Fiberglass Coupon

The observation is the same as last Month. The coupon is dark orange (rust) in color with similar semi-smooth textures on both sides. Its cut edges appear sanded. The coupon is free of pits, cracks, swelling and blemishes.

#### **Hastelloy Coupon**

This coupon is identified as C276 with Serial Number 5. This weighed coupon replaces the original coupon that was mangled in a pump and filter down after breaking off of its mounted location sometime in February. The coupon is silver in color with a lightly sandblasted texture. It is clean and free of pits, cracks, and blemishes.

#### Stainless Steel Coupon

The coupon is silver in color with a pock-marked and corroded surface.

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. Ghesquiers

President

MWG/kni

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TOTAL 1 PAGES

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

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

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

Attention: Mr. Don Anderson

#### WORK REQUESTED:

Perform Barcol Hardness test on sample submitted.

#### DESCRIPTION OF SAMPLE:

Sample submitted was identified as a fiberglass test coupon.

(P. O. #Credit Card).

#### WORK PERFORMED:

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

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

#### RESULTS:

The following determination was made based upon the above test:

#### BARCOL HARDNESS

#### Hardness

Specimen 1 · 90

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

等了。特别是**你的事实企为了特别是**为

GHESQUIERE PLASTIC PESTING, INC.

2. 人名西西克格里 (1970.0000) (1985<del>年10.18年1</del>年1月1日)

M. W. Chesquiere -President

# F-70.

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MWG/dm

Our letters and reports are for the exclusive use of the client to whom they are addressed, and shall not be reproduced except in full without our written approval. Our letters and reports apply only to the sample tested and are not necessarily indicative of the qualities of apparantly identical or similar products. The letters and reports and the name of Grazulere Plastic Testing, inc., are not to be used under any chromatances in advarising to the general public. Samples, extra and related test materials will be destroyed 30 days after the date of the final report unless the client indicates offerwise in writing.

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

<u>Hardness</u>

Specimen 1

85

Specimen was returned to the client June 16, 2014.

GHESQUIERE PLASTIC TESTING, INC.

M. W. Ghesquiere

President

MWG/dm



October 2, 2014

#### - TEST REPORT -

PN 118325 PO Attn:John Frost

#### PLASTICS TESTING DEPARTMENT

Prepared For:

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

Prepared By:

Wellssa Wartin

Sf. Project Technician

Approved-By:-

Jim Drummond

Physical & Plastics Festing, 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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The liability of ARDL, inc. shall be limited to the amount of consideration paid for services. ARDL, Inc. is ISO 17025 accredited by A2LA for the test methods listed on the attached scope.



#### 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

Melisee Wartin

Sr. Project Technician

Approved By:

Scott W. Yates

Plastics Testing Assistant Manager

### INJECTION FINGERPRINTS

# WASTE STREAMS CHARACTERIZATIONS

RECEIVINGINEORWATION	
Date	5/1/15
Receiving ID#	IU5011501
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	,
Time in	
Time out	
Received by	J.H.
Sampled by	WA



LABINFÖRMATION ALFWASIE SAMMENS			cultield Brines Only #	English to the second of the s
Compatible? (RT# )	Yes	No	Barium	
PCBs (ppm)(Oily Waste				
Only)?			Calcium	
TOC (ppm)(CC Waste Only)?	,	·	Total Iron	·
Flash Point (°F)	> 140		Magnesium	
pH (S.U.)	1.2		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.07		TDS	5.79
Physical Description			Resistivity	
Stream Consistency	Yes	· No	Sulfate	·
Oil in Sample	Yes	· No		
Temperature	64	F		
Conductivity	114.4	n 5		
% Solids	5.7			
Turbidity	Yes	No	•	
Color (visual)		,	4	
.TSS (%)	(0.1			·
Radiation Screen (as needed)			$\langle \cdot \rangle$	
				-
Lab Signature			>/Nh	

	A A B T C	<b>西瓜</b> 苗
RECEIVING NEORMATIONS		
Date	5/4/	15
Receiving ID#	I050	11502
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter .		
Time in		
Time out	,	
Received by	0.7	8
Sampled by		A



LABINEORNATION				
All Wastershaments			ioilfeldEdnesionive	
Compatible? (RT# )	(Yes)	No	Barium	
PCBs (ppm)(Oily Waste Only)?			Calcium	
TOC (ppm)(CC Waste Only)?		· · · · · · · · · · · · · · · · · · ·	Total Iron	
	113	<u> </u>		
Flash Point (°F)	17	<u> </u>	Magnesium	
pH (S.U.)			Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)	1 00 000	,	Carbonate	2 - 0
Specific Gravity	1.05		TDS	3.11
Physical Description	,		Resistivity	
Stream Consistency	Yes	No	Sulfate	
Oil in Sample	Yes	No		
Temperature	60%	Ŧ		
Conductivity	73.7	5		
% Solids	3.7			
Turbidity	Yes	No		
Color (visual)				
TSS (%)	(0.	)	A	
Radiation Screen (as needed)		· · · · · · · · · · · · · · · · · · ·		
		A	21/1	
Lab Signature	110			
	RECO	4-01 – Pag	ge 1 V.	

	. D CLEAR L GEV. D	Z t t t i
RECEIVING NEORWATION		
Date	5/4/	15
Receiving ID#	10504	150)
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	H.C	7 /
Sampled by	I DA	1



LABINFORMATION : AUNWasie Shipmiens : 1		in the second	Ölfreid: Brines Only	
Compatible? (RT# )	(Yes)	No	Barium	
PCBs (ppm)(Oily Waste				
Only)?	<u> </u>		Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	2	140	Magnesium	
pH (S.U.)	0.7		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)	·		Carbonate	
Specific Gravity	1.10		TDS '	7.09.
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	
Oil in Sample	Yes	No		
Temperature	69° F			
Conductivity	140.0	1m5		
% Solids	7.0	,		
Turbidity	Yes	No		
Color (visual)				
TSS (%)	40.	1		
Radiation Screen (as needed)		N . 1	(, ) / N.	
Lab Signature		BE	X / W	

RECEIVING INFORMATION		Cabl
Date	5/4/	75
Receiving ID#	I 0564	1302
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #	,	
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	7.	<del>)</del> ),
Sampled by	. RC	



LABINGORNATION (CANONICALIVATION CONTROL OF			Oilfield:Birmes Outly 2	
Compatible? (RT# )	Yes	No	Barium	
PCBs (ppm)(Oily Waste				
Only)?		· · · · · · · · · · · · · · · · · · ·	Calcium	
TOC (ppm)(CC Waste Only)?	J		Total Iron	
Flash Point (°F)	140		Magnesium	
pH (S.U.)	10.9		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.10		TDS	7.12
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	·
Oil in Sample	Yes	· No		
Temperature	70°F			
Conductivity	141.4.	~, S		
% Solids	7.1			,
Turbidity	Yes	No	•	
Color (visual)				
TSS (%)	(0.)			
Radiation Screen (as needed)	A\		1	
Lab Signature		A		

RECEIVINGINEORMATION		
Date	5/5/	115
Receiving ID#	I0505	1501
Manifest# Line:		
Land Ban Cert included	Yes	. No
EGT Approval#		·
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.th 1	
Sampled by	MK	



LABNINEGRMATION	800			To the second second second
All Waste Shipmen's			Official Brines Only 5	
Compatible? (RT# )	Yes	No	Barium	
PCBs (ppm)(Oily Waste				
Only)?			Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	140		Magnesium	
pH (S.U.)	1.6		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.03	Α	TDS	2.1
Physical Description	•		Resistivity	
Stream Consistency	Yes	No	Sulfate	
Oil in Sample	Yes	No		
Temperature	64°E			
Conductivity	41.6m	S		:
% Solids	8.1			
Turbidity ·	Yes	No	·	
Color (visual)				
TSS (%)	6.0			
Radiation Screen (as needed)				
Lab Signature			I What	

		711.50.11
PECEIVINGINFORMATION		
Date	5/6	115
Receiving ID#	5/6/ I0506	,150)
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	JH	
Sampled by	R	



LABUNGORNATIONAL LABUNG			Offield Brines Only	ng digital
Compatible? (RT# )	(Yes)	No	Barium	
PCBs (ppm)(Oily Waste				
Only)?			Calcium	`
TOC (ppm)(CC Waste Only)?	<u></u>		Total Iron	
Flash Point (°F)	$\supset$	140	Magnesium	
pH (S.U.)	1.4		Sodium Chloride	
Cyanides? (mg/L)		<del>,</del>	Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.05		TDS	3.17
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	•
Oil in Sample	Yes	No		·
Temperature	65°	F		
Conductivity	62.3	m S		
% Solids	3.1		·	
Turbidity	Yes	No		
Color (visual)				
.TSS (%)	<o.< td=""><td>1</td><td>ı</td><td></td></o.<>	1	ı	
Radiation Screen (as needed)		$\Lambda$		
Lab Signature		1/2 d		
BEC04-01 - Page 1				

RECEIMING THE ORWATION		
Date	5/7/	15
Receiving ID#	5/7/ I0507	150)
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	B
Sampled by	DA	Ķ.



LABINEORIVATION ARVVasie Shipprepis			Olfield Brines Only 1	
Compatible? (RT# )	(Yes)	No	Barium	
PCBs (ppm)(Oily Waste				
Only)?		<del> </del>	Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	· · · · · · · · · · · · · · · · · · ·	<u>yo</u>	Magnesium	
pH (S.U.)	1.1	<del> </del>	Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate @	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.10		TDS	5.32,
Physical Description			Resistivity	
Stream Consistency	Yes	· No	Sulfate	•
Oil in Sample	Yes	· No		
Temperature	66°F	,		
Conductivity	103.5	کرم		
% Solids	5,3		·	
Turbidity	Yes	No		
Color (visual)		•	·	
.TSS (%)	20.1		, n. A.	
Radiation Screen (as needed)	Λ.			
Lab Signature			W	·
	RECO	04-01 – Pag		

RECEIVING WEORWATION	e e e e e	
Date	5/7/	5
Receiving ID#	10507	1502
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	6/3	1



LABUNEORIVATION :					
Compatible? (RT# )	Yes	No			
PCBs (ppm)(Oily Waste		140	Danam		
Only)?"			Calcium		
TOC (ppm)(CC Waste Only)?			Total Iron		
Flash Point (°F)	> 140	2	Magnesium		
pH (S.U.)	0.2		Sodium Chloride		
Cyanides? (mg/L)			Bicarbonate		
Sulfides? (ppm)			Carbonate		
Specific Gravity	1,26		TDS	7.32	
Physical Description			Resistivity		
Stream Consistency	Yes	No	Sulfate	•	
Oil in Sample	Yes	No			
Temperature	72°	F			
Conductivity	146.6	~S			
% Solids	7.3				
Turbidity	Yes	No	•		
Color (visual)					
.TSS (%)	< o,	1			
Radiation Screen (as needed)					
Lab Signature					
REC04-01 - Page 1					

RECEIVINGENEOR WATION		
Date	5/8/	15
Receiving ID#	10508	1502
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #	·	
Generator	·	
Client		
Transporter		
Time in		
Time out		
Received by	3.7	
Sampled by	SP	



	3			
LABINGORMARCNI All Wasie Sandons			Official British Conflict	
Compatible? (RT# )	Yes	No	Barium	
PCBs (ppm)(Olly Waste				
Only)?			Calcium	
TOC (ppm)(CC Waste Only)?	•	,	Total Iron	
Flash Point (°F)	140		Magnesium	
pH (S.U.)	1.2		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.14		TDS	7.27
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	
Oil in Sample	Yes	. No		
Temperature	77 %	-sy		
Conductivity	143,60			
% Solids	7.2	<del>•</del>		
Turbidity	Yes	No		
Color (visual)				
TSS (%)	(0.)		1 N	
Radiation Screen (as needed)		N		
	-			
Lab Signature			SO MA	
	REC04	1-01 - Pag	<b>.</b>	

RECEIMINGINFORMATIONE		
Date	5/8/1	5
Receiving ID#	5/8/1 I 05081	SDI
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Genérator		
Client	,	
Transporter		
Time in		
Time out		
Received by	び、み	
Sampled by	CAL.	

Lab Signature



Annual Control of the				
LABUNGORNATION				
All Wastershipments 2007			(Official Barries Crity)	
Compatible? (RT# )	/Yes)	No	Barium	
PCBs (ppm)(Oily Waste	K /			
Only)?			Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	140		Magnesium	
pH (S.U.)	0.5		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)	-		Carbonate	
Specific Gravity	1.13		TDS	19.72
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	•
Oil in Sample	Yes	: No		
Temperature	70°F			
Conductivity	393	1,25		
% Solids	19.7			
Turbidity	Yes	No.		
Color (visual)				
TSS (%)	(0.1			
Radiation Screen (as needed)	<u> </u>			
	\ \ (		$M \setminus X$	

RECEIVING INFORMATION :	
Date	5/11/13
Receiving ID#	IOS11551
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	·
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	ML



LABINEORNALION			77.20	
AlleWasie Shipmenis - Paragos			Official Brimes Only	
Compatible? (RT# )	Yes	No	Barium	
PCBs (ppm)(Oily Waste			0-1-1	
Only)?			Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)		140	Magnesium	
pH (S.U.)	1.0		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.06	Ź	TDS	4.7%
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	
Oil in Sample	Yes	No		
Temperature	72°F			
Conductivity	93.1	~5		
% Solids	4.7			
Turbidity	Yes	No		·
Color (visual)	•			
TSS (%)	<u> </u>		<u> </u>	-
Radiation Screen (as needed)		Λ	O(h)	
Lab Signature			of KN	
	REC	04/01 - P/ag	ge 1	

RECEMBIGINEORIZATION		
Date	5/12/13 I05pls0	
Receiving ID#	I0512150	1
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	LaJ.H.	
Sampled by	1 LL	



<u> </u>	<u> </u>		→	
LABINEORMATION:			Ölfield Banes Oally	
Compatible? (RT# )	(Yes)	No	Barium	
PCBs (ppm)(Oily Waste		······································		
Only)?			Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	> 12	16	Magnesium	
pH (S.U.)	1.0		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.16		TDS	5.49
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	
Oil in Sample	Yes	No		
Temp <b>erature</b>	75°F			
Conductivity	109.2-	, <i>5</i>		
% Solids	5.4			
Turbidity	Yes	No		
Color (visual)	-			
TSS (%)	(0.)			
Radiation Screen (as needed)		$\mathbb{N}$		
Lab Signature			& KA	
	RECO	4-01 - Pa	ge 1	

RECEIMING INFORMATION		
Date		
Receiving ID#	\$113/15 \$\tau 55/3150)	
Manifest# Line:		
Land Ban Cert included	Yes No	
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	Jatha	
Sampled by	NA	



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LABUNEORWATION  All Waste Shipments in the same			Ollfield Brines Only	organistic englishment General Company of Company
Compatible? (RT# )	(Yes	No	Barium	
PCBs (ppm)(0ily Waste Only)?			Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	> 140		Magnesium	
pH (S.U.)	1.5		Sodium Chloride	·
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.17		TDS '	6.47.
Physical Description			Resistivity	4.
Stream Consistency	Yes	No	Sulfate	·
Oil in Sample	Yes	No		-
Temperature	82°#	-		
Conductivity	129.2	۵5		
% Solids	6.4			
Turbidity	Yes	No		
Color (visual)				
TSS (%)	<0,1			
Radiation Screen (as needed)		N		
Lab Signature		1	18 /A	

RECEIVING INFORMATION :		14.
Date	5/13/	1.15
Receiving ID#	IO9131	502
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	(J.H)	
Sampled by	1 X Ad	



LABUNEORNATION		Port of page and the East of	
All Waste Stripmens Compatible? (RT# )	Yes No	i Oineld Brines Onlys	
PCBs (ppm)(Oily Waste	140	Darium	
Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	5 190	Magnesium	
pH (S.U.)	(1)	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.02	TDS	2.67
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	•
Oil in Sample	Yes No		
Temperature	64°F		
Conductivity	52.205		
% Solids	2.6		
Turbidity	Yes No		
Color (visual)			
TSS (%)	20,1	·	
Radiation Screen (as needed)			
			\   )
Lab Signature		43()/As	1

RECEIVINGINGORMATION		70 VI
Date	5/14	115
Receiving ID#	105/4	1501
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by		5.4)
Sampled by	To	



LABINEORWATION +			Oineld Ennes Only	
Compatible? (RT# )	Yes	No	Barium	
PCBs (ppm)(Oily Waste				
Only)?		····	Calcium	
TOC (ppm)(CC Waste Only)?		•	Total Iron	
Flash Point (°F)	> 14	<u> </u>	Magnesium	
pH (S.U.)	101		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)	-		Carbonate	
Specific Gravity	1.07		TDS	5.79
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	
Oil in Sample	Yes	· No		
Temperature	65	of-		
Conductivity	114.	2 2 2		
% Solids	5.7		·	
Turbidity	Yes	No	,	
Color (visual)	•			
TSS (%)	(0.)		1 1	
Radiation Screen (as needed)		· .		
		W.	15/11/1	
Lab Signature			W M De	
	RECO	04-01/- Pag	ge 1	V

RECEIVING INFORMATION		
Date	5//4	715
Receiving ID#	ID5/4/	502
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		,
Transporter		
Time in		
Time out		
Received by	<u>ل</u>	.+).
Sampled by	15	<b>3</b>



LABINFORMATION All Waste Shipments			en in the second of the second		
Compatible? (RT# )	Yes)	No	Barium		
PCBs (ppm)(Oily Waste					
Only)?			Calcium		
TOC (ppm)(CC Waste Only)?			Total Iron		
Flash Point (°F)	140		Magnesium		
pH (S.U.)	0.7		Sodium Chloride		
Cyanides? (mg/L)			Bicarbonate		
Sulfides? (ppm)			Carbonate		
Specific Gravity	1.10		TDS	6.87	
Physical Description			Resistivity	- ' '	
Stream Consistency	Yes	No	Sulfate		
Oil in Sample	Yes	No		,	
Temperature	71°	F			
Conductivity	135.	425			
% Solids	6.8				
Turbidity	Yes	No			
Color (visual)			A		
TSS (%)	20.V				
Radiation Screen (as needed)	,	Ä /	A . 1/		
Lab Signature					
XEC04-01 - Page 1					

RECEIVING INFORMATION		
Date	5/2	1/15
Receiving ID#	105	1/15
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		_
Time out		
Received by	Q.H	•
Sampled by		ŧ



	LABINFORMATION AND A				
	All-Waste-Shipments, 4-5-1	-		Office of Brines, Only 4	
	Compatible? (RT# )	Yes	No	Barium	
	PCBs (ppm)(0ily Waste	Carried Control			
	Only)?			Calcium	
	TOC (ppm)(CC Waste Only)?			Total Iron	
Q-MIN	Flash Point (°F)		140	Magnesium	
This later is	pH (S.U.)	1.8		Sodium Chloride	
	Cyanides? (mg/L)			Bicarbonate	
	Sulfides? (ppm)			Carbonate	
-	Specific Gravity	1.05	·	-TDS	2.97
	Physical Description			Resistivity	
	Stream Consistency	Yes	No	Sulfate	
	Oil in Sample	Yes	· No		
-	Temperature	700	F		
•	Conductivity	57.4		•	
-	% Solids	2,9			
	Turbidity	Yes	No		
	Color (visual)				
-	TSS (%)	<0	, )		· ,
	Radiation Screen (as needed)		· · · · · · · · · · · · · · · · · · ·		
				11/1/11	
	Lab Signature		•	120 KM	
	,				

RECEIVING NEORMATION		
Date	5/2	6115
Receiving ID#	5/2. I0526	1501
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	丁. 升.	
Sampled by	46	



	LABINEGRUATION: All Waste Shipments.			Olheld Brines Only	
	Compatible? (RT# )	Yes	No	Barium	
	PCBs (ppm)(0ily Waste			· ·	
	Only)?			Calcium	
	TOC (ppm)(CC Waste Only)?			Total Iron	
•	Flash Point (°F)		10	Magnesium	
	pH (S.U.)	1.4		Sodium Chloride	
	Cyanides? (mg/L)			Bicarbonate	
	Sulfides? (ppm)			Carbonate	
<del></del>	Specific Gravity	1.00	, ,	-TDS	3.5%
	Physical Description			Resistivity	, ".
	Stream Consistency	Yes	No	Sulfate	
	Oil in Sample	Yes	. No		
	Temperature	70	of		
	Conductivity	682	7~5		<u>.</u>
	% Solids	3,5	-		
	Turbidity	Yes	No		
	Color (visual)	•	·		
_	TSS (%)	ζ <i>ο</i> ,	)		
	Radiation Screen (as needed)		Λ	( )	_
	Lab Signature			X John	

RECEIMING/INFORMATION"		
Date	5127	15
Receiving ID#	5127	7/50/
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by		J. H.
Sampled by	A C	·



LABINFORMATION:			Official Brines Only			
Compatible? (RT# )	/Yes)	No	Barium			
PCBs (ppm)(Oily Waste			į.			
Only)?			Calcium			
TOC (ppm)(CC Waste Only)?			Total Iron			
Flash Point (°F)	140		Magnesium			
pH (S.U.)			Sodium Chloride			
Cyanides? (mg/L)			Bicarbonate			
Sulfides? (ppm)			Carbonate			
Specific Gravity	1.06		-TDS	4.57		
Physical Description			Resistivity			
Stream Consistency	Yes	No	Sulfate			
Oil in Sample	Yes	No				
Temperature	60°F		·			
Conductivity	90.7	<u>~</u> 5				
% Solids	4.5	,,				
Turbidity	Yes	No				
Color (visual)						
TSS (%)	40.1					
Radiation Screen (as needed)		Å.				
Lab Signature			YWK			
REC04-01 - Page 1						

RECEIMING INFORMATION		
Date	5/20	115
Receiving ID#	10529	1501
Manifest# Line:		
Land Ban Cert included	Yes	No_
EGT Approval #		
Generator		·
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	100	<b>&gt;</b> 



1568	LAB INFORMATION			Official Brines Only.	
	Compatible? (RT# )	∕Yes ∕	No	Barium	
	PCBs (ppm)(0ily Waste				
	Only)?			Calcium	
	TOC (ppm)(CC Waste Only)?			Total Iron	<u> </u>
-	Flash Point (°F)	> 140		Magnesium	
-	pH (S.U.)	113		Sodium Chloride	
	Cyanides? (mg/L)			Bicarbonate	
	Sulfides? (ppm)			Carbonate	
- 3	Specific Gravity	1.13	-	TDS	6.97
	Physical Description			Resistivity	
	Stream Consistency	Yes	No	Sulfate	
(	Oil in Sample	Yes	No		
	Геmperature	74°F			
- (	Conductivity	138,7,	۸5		
0	% Solids	69			
٦	Turbidity	Yes	No		
	Color (visual)				·
- 7	SS (%)	0.1			
F	Radiation Screen (as needed)			111	
L	ab Signature		0		
		RECO/	l-01 – Pag	NO K	<del></del> ;

RECEIVING INFORMATION		
Date	5/29	115
Receiving ID#	II 05 20	1502
Manifest# Line:		
Land Ban Cert included	Yes	No ·
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	ML	



	LAB INFORMATION All Waste Shipmens			Olfreid Brines Only a			
	Compatible? (RT# )	(Yes)	No	Barium			
	PCBs (ppm)(0ily Waste						
	Only)?			Calcium			
	TOC (ppm)(CC Waste Only)?			Total Iron			
-	Flash Point (°F)	> 140		Magnesium			
	pH (S.U.)	1.4	<u> </u>	Sodium Chloride			
	Cyanides? (mg/L)			Bicarbonate			
	Sulfides? (ppm)			Carbonate			
-	Specific Gravity	1.14	to	-TDS	7.67		
	Physical Description			Resistivity			
	Stream Consistency	Yes	No	Sulfate			
	Oil in Sample	Yes	· No				
	Temperature	75					
سند	Conductivity	151.0	~5				
-	% Solids	7.6					
	Turbidity	Yes	No	·			
	Color (visual)						
	TSS (%)	(0.)	Λ				
	Radiation Screen (as needed)		/\				
	Lab Signature		1/3	X K			
	REC04-01 - Page 1						

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC 28470 Citrin Dr, Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002

Generator Waste Profile Profile # OOG47

The second secon		and the second s		
GENERATOR INFORMATION				<u> </u>
Name:	USEPA	NID#		collineare at
Facility	SIC/NA	ICS Code:	_State Code:_	
City:	State:	Zip	Code:	
Contact:	Phone: (	Fa	x: (	
BILLING	SAME AS ABOVE			
Company Name:				•
Address:				
City:	State:	Zip	Code:	
Attention:	Phone;	Fa	ex: (248 )	
			Tank 16 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Andrews and the same of the same
WASTE INFORMATION  Name of Waste/Common Chemical Name:				
	Mix		,	•
Process Generating Waste (Please be specific, incompl		approval process	· •	
Metal processing & fort			<u> </u>	
	•			
		·		
USEPA / STATE WASTE IDENTIFICATION		•		
	lous Liquid Industrial Waste		Waste	
2. Regulated by TSCA? Yes No (PCBs, etc.)				
3. List ALL Applicable Waste Codes: 2007				·
PHYSICAL CHARACTERISTICS OF WASTE			the first of the second	
Color: Suspended Solids  White/Clear 0-1 % 3-5 %	Layers: ☐ Multi-Layered	Specific Grav	<b>vity:</b> 1.0 − 1.2	ecaptable
☐ Black/Brown ☐ 1-3 %	Bi-Layered Single Phase	0.8 –1.0 1 c	1.3 – 1.4	10000
pH: □NA		☐ 10 — 12.5 [		0428/5
- याद		-		
<b>Liquid Flash Point:</b> ☐ <73°F ☐ 73 – 100°F ☐ 101 –	- 140°F □ 141 – 200°F □	>200°F None	Closed Cup	Open Cup
VOC CONCENTRATION -	PPM (MUST BE COMPLETED)			
TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO	OR GREATER THAN 100% (LIST E	ACH CONSTITUEN	T >/= 0.1%)	
CONSTITUENT	MAX MIN CONSTI	TUENT		MAX MIN
Sporum CHROMATE	10-12 % WAte	<u> </u>		99.75
POTASSIUM CARPMATE				:_
Aminovium CHROMATS	5 72 %			:~

EGT - 28470 Citrin Drive - Ro					Waste Př	ofile – Page 2
	siciatol Mudalis	ollowing metals, dge	. If Generator knowledge	-provide back	knib	
PCB ppm  Dioxins Cyanides Reactive Sulfides Total	Aromatic Amine   Pesticides   Rodenticides   Fungicides	ot Concentrationsent  Concentrationsent  ppm ppm ppm ppm ppm	Barium ( Cadmiun Chromiun Lead (Pb Mercury ( Selenium Silver (Ag	Ba) D000 n (Cd) D000 n (Cr) D000 ) D000 Hg) D001 (Se) D010	5	ppm
TCLP Organics D012 - D043 above		Present 🗌 No	ot Present 🖄	٠		
IS WASTE ANY OF THE FOLLOW  ☐ Radioactive ☐ Water Read ☐ NIOSH Human-Positive Carcin	tive 🗌 Oxidiz	rer 🖺		Reactive (o	ther) DOT	Explosives Apply
SHIPPING INFORMATIO				The second secon		
<ol> <li>Is this a DOT Hazardous Mater</li> <li>Reportable Quantity (RQ) in po</li> </ol>		01 & 173 Subpa	art D)? ⊠Yes □No	ı		
3. DOT Shipping Name RQ		<u> </u>	Dichamate	Haza	rd Class <u></u> <u></u>	(M) 1439
PG Haza	rdous Constituen	ts for "n.o.s."				
<ol> <li>Method of Shipment:</li> <li>Number of Units to Ship Now:</li> <li>Special Handling Requirements</li> </ol>		er □Vac truck 6, Anticipa	□Rail Car □Drums ated Volume / Units per	XIotes Year:		or [] One Time
CERTIFICATION STATES		<u> </u>				
I hereby represent and warrant that attached documents. Based on my information, the information contair material fact has been omitted as to in the handling and processing of the Technologies not to correct any incoof the sample characterization and/or	I have personally inquiry and personal	accurate, and continuous accurate, and continuous accurate, and continuous accuracy	complete to the best of ig. I understand that of	ponsible for my knowledg hers may rel d ∐, I reque ologies mak	supplying or obt ge and belief. Fu y on this represe est Environmenta es will be consis	aining the irthermore, no intation and warrant al Geo- tent with the results
Printed Name:				Title	: 4-21-1 e: 4-21-	<u> 15</u>
Generator's Signature						
GENERATOR'S CHAIN OF the waste described in the above ref one obtained using any of the applic provided below. If you have problem representative.	able sampling me	iono ivadie est Stade oitad in d	O CED 204 Amendia 4	ippropriate c	ontainer. A repr	esentative sample i
12. SAMPLING METHOD	COLLECTIO	N POINT		<u></u>		
3. SAMPLE COLLECTOR'S NAME	TITLE EMPLO	VER				
_	reservation: Y					-
			ust sign below when th	e semple no	eege from one to	
Relinquished by: (Signature)	Date	Time	Received (Signatur	oy:	Date	Time
						<del> </del>

## ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING	&	APPROVAL	<b>FORM</b>

REGEMINGINEORMATIONS	
Date	4/23/15
Receiving ID#	bromate Mix
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	Client

MEAGNINE CIPINATIONS OF THE			o illing all Binges Johny	
Compatible? (RT# )	(Yes)	No	Barium	
PCBs (ppm)(Oily Waste Only)?	N/A		Calcium	
TOC (ppm)(CC Waste Only)?	· N/f	A	Total Iron	
Flash Point (°F)	1	10	Magnesium	
pH (S.U.)	6.	1	Sodium Chloride	
Cyanides? (mg/L)	430	)	Bicarbonate	
Sulfides? (ppm)	426		Carbonate	
Specific Gravity	1.64		TDS	
Physical Description	lia	vid	Resistivity	
Stream Consistency	(Yes)	No	Sulfate	
Oil in Sample	Yes	(No)		
Temperature	610	Page 1		
Conductivity	104,4	~ S		
% Solids	_65.	lo		
Turbidity	Yes	No		
Color (visual)	TRE	20		
TSS (%)	6,0			
Radiation Screen (as needed)	Negati	ve		
Lab Signature			AS W	

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC 28470 Citrin Dr, Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002

Generator Profile:	Waste	Profile
Profile:	. OO	

Security of the security of th		TANK AND	e a correce a	
GENERATOR INFORMATION				
Name:		USEPA ID	#	; 
Facility Address		SIC/NAICS Co	de:332811 State Code	e:
City		·	•	
Contact:	Title:	Disconnection	and a second	
BILLING INFORMATION	and the second s	AS ABOVE	fax: ( )	
Company Name:				
Address:				
City:	Chata	~ ~		•
	State	Zip C	ode	
Attention:	Phone:	Fax		
USEPA / STATE WASTE IDENTIFICATION  1. This waste is considered to be:  2. Regulated by TSCA?	X Non Hazardous Liquid Indu (PCBs, etc.)		Hazardous Waste	
PHYSICAL CHARACTERISTICS OF WA	STE			The state of the s
Color:  ☐ White/Clear ☐ Black/Brown X Other Blue  Suspended: X 0-1 % ☐ 1-3 %	□ 3-5 % □ M □ > 5% □ B	ulti-Layered	Specific Gravity: 0.8	acceptable
pH: □NA □≤2 □ 2-4	☐ 4-6 X 6-8	□ 8 – 10 □ 10	) – 12.5   □ ≥12.5	1 60.0.
Liquid Flash Point: ☐ <73°F ☐ 73 – 10	00°F □ 101 – 140°F □ 14	1 – 200°F X >200°F	☐ None X Closed (	Cup
OC CONCENTRATION<10	PPM (M	UST BE COMPLETED)		
TOTAL COMPOSITION OF WASTE - MUS	ST BE EQUAL TO OR GREATER TH	AN 100% (LIST EACH CO	ONSTITUENT >/= 0.1%)	
CONSTITUENT	MAX MIN		-	MAX MIN
opper Stripping Solution Spent	95-99%	Copper		1-5 %
		%		

EGI - 20410 ORBIT DITYE - NORK	1102 - 1411 - 40 I t	-40			waste r	Ome - rage 2
Metals: Indicate if this waste conta X Lab Analysis X Gener	ins any of the fol rator Knowledg		If Generator knowledge x TCLP	-provide backt ∐TOTAL	ıp	
Dioxins x ppm P Cyanides Reactive x ppm R Gyanides Total x ppm F Sulfides Reactive x ppm Sulfides Total x ppm	Pres romatic Amine x esticides x codenticides x ungicides x	ent ppm ppm ppm ppm ppm	Beilum ( Cadmium Chromium Lead (Pb Mercury ( Selenium Silver (Ac	Ba) D005 ((Cd) D006 n (Cr) D007 ) D008 Hg) D009 (Se) D010	x < 100 p x < 1 p x < 5 p x < 6 p x < 0.2 p x < 1 p	pm ppm pm ppm pm ppm pm ppm pm ppm pm ppm ppm ppm pm ppm pm ppm
TCLP Organics D012 - D043 above n				ningweij inggreendidd.		
IS WASTE ANY OF THE FOLLOW!  ☐ Radioactive ☐ Water Reacti ☐ NIOSH Human-Positive Carcino	ve 🗌 Oxidize	er 🔲		] Reactive (ot ] Biological		Explosives Apply
SHIPPING INFORMATION		,				
1. Is this a DOT Hazardous Materia	I (49CFR 172.10	)1 & 173 Subpar	tD)? ∐YesxNo			
2. Reportable Quantity (RQ) in pour	nds					
3. DÖT Shipping NameNon-H	azardous Liquid	· · · · · · · · · · · · · · · · · · ·		izard Class	<del></del>	UN/NA
PG ERG Hazard	lous Constituent	s for "n.o.s."				
4. Method of Shipment:	∐Bulk Tankei	r ∐Vac truck	□Rail Car XDrums	Totes		
5. Number of Units to Ship Now:	10	6. Antici	pated Volume / Units	oer Year:	10	or 🔲 One Tim
6. Special Handling Requirements in	isiduniy FFE					
I hereby represent and warrant that I attached documents. Based on my I information, the information containe material fact has been omitted as to in the handling and precessing of the Technologies not to correct any incorrect the sample characteristics.	have personally nguiry and perso ed herein is true, make this inform waste material	onal knowledge of accurate, and contains ration misleading described herei	of those individuals re complete to the best of g. I understand that o n. If this box is checke	sponsible for s my knowledg there may rely ed [], I reque nologies make	supplying or of e and belief. It on this represent st Environmer ss will be cons	otaining the furthermore, no sentation and warranty tal Geo- istent with the results
Printed Name:					7.	dent
Generator's Signatur				Date	e: <u>5-/3</u>	-/5
GENERATOR'S CHAIN OF the waste described in the above refe one obtained using any of the applica provided below. If you have problem representative.	erenced General	rons Waste Pro	FILE REPORT using an OCFR 261-Appendix	appropriate c	ontainer. À re ampling infor	presentative sample is nation in the spaces
1. 2. SAMPLING METHOD	COLLECTION	N POINT			-	
3. SAMPLE COLLECTOR'S NAME,	TITLE, EMPLO	YER	· · · · · · · · · · · · · · · · · · ·	_		
4. Sample No Pr	reservation: Y	es □ No □	<u></u>	·	<del>. ,</del>	
5. CHAIN OF CUSTODY Each pe	rson who handle	es the sample m	ust sign below when t	he sample pa	sses from one	to another.
Relinquished by: (Signature)	Date	Time	Received (Signatu		Date	Time
<u> </u>	<del> </del>	ļ				

SECTION OF WILLIAM	MLIUN	ZEWB	
REGEWING NEORWATIONS			
Date	1:5/1/	15	
Receiving ID#	Waste	Water	-
Manifest# Line:			1
Land Ban Cert included	Yes	No	
EGT Approval #			
Generator	-		
Client		e can market	
Transporter			
Time in			
Time out		,	
Received by	J.H.		
Sampled by	Cliens		

LABINEORNADIONE.				
Compatible? (RT# )	(Yes)	No	Barium	
PCBs (ppm)(Oily Waste	NIA			
Only)?	<del></del>		Calcium	
TOC (ppm)(CC Waste Only)?	IN/A		Total Iron	
Flash Point (°F)		40	Magnesium	
pH (S.U.)	9.4.		Sodium Chloride	
Cyanides? (mg/L)	(30	7	Bicarbonate	
Sulfides? (ppm)	< 2	OU	Carbonate	
Specific Gravity	1.11	1	TDS	
Physical Description	1:00	250	Resistivity	
Stream Consistency	(Yes)	No	Sulfate	
Oil in Sample	Yes	·(No)		
Temperature	601			
Conductivity	312	2		
% Solids	(e.1			
Turbidity	Yes	No	-	
Color (visual) ·		56	·	
TSS (%)	Z 8.1		· · · · · · · · · · · · · · · · · · ·	
Radiation Screen (as needed)		Five		k/)
	<del></del>		1 6 1 1/	
Lab Signature	<u> </u>		11 CX M	Whe !
			H	



# Lakeland Laboratories, Inc.

8290 Pettysville Road Pinckney, MI 48169

Phone: (734) 878-3400 FAX: (734) 878-3981

# Certificate of Analysis

Date: May 12, 2015

Project Name: Project Number: 2557

Submit Date:

Collection Date: 5/5/2015

5/5/2015

Customer:

Lab Sample ID: 10393-99727

Sample ID: #2: Copper Stripper

Parameters	Result	LRL	Units	Method Reference	Analysis Date	Analyst
RIC Analysis			,			
Reactive Cyanide	ND	50	mg/Kg	SW846 9014	5/8/2015	EDW
Reactive Sulfide	ND	50	mg/Kg	SW846 9030	5/8/2015	EDW
Flashpoint	XXXX	200	o₽ _	SW846 1010	5/8/2015	EDW
рН	7.8	1-14		SW846 9045C	5/5/2015	LLW
TCLP Metals Analysis						
Arsenic	ND	0.5	mg/L	SW846 7060	5/11/2015	LLW
Barium	ND	0.5	mg/L	SW846 7081	5/11/2015	LLW
Cadmium	ND	0.5	mg/L	SW846 7130	5/11/2015	LLW
Chromium	ND	0.5	mg/L	SW846 7190	5/11/2015	LLW
Lead	ND	0.5	mg/L	SW846 7420	5/11/2015	LLW.
Mercury	ND	0.1	mg/L	SW846 7471	5/8/2015	LLW
Selenium	ND	0.5	mg/L	SW846 7740	5/11/2015	LLW
Silver	ND	0.5	mg/L	SW846 7761	5/11/2015	LLW

Parameter- The analysis performed or name of the chemical analyzed. Result- The reported concentration in the sample at or above reg level LRL- Lower Reporting Level

Units- The unit which corresponds to the reported concentration Method Reference- The method used to provide results.

Analysis Date- Date the analysis was performed

Analyst- Initials of the analyst performing the analysis ND- Parameter not detected above the reported LRL

Larri White Reviewed By:

> 5/12/2015 Date:

# **MSDS** Document

# Product ALK-CU-Strip Part A

### 1. Chemical Product and Company Identification

### Product ALK-CU-Strip Part A

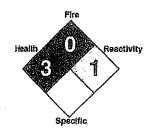
### MSDS ID 8860

#### Manufacturer

Phibro-Tech Inc. 65 Challenger Road Ridgefield Park, NJ 07660 Phone Number
(201) 329-7300

Emergency Phone
CHEMTREC (800) 424-9300
CHEMTREC International (703) 527-3887

Revision Date 7/2/2008



### 2. Composition and Information on Ingredients

Ingredient TRADE SECRET INGREDIENT	CAS Number Trade Secret	Weight %	ACGIH TLV	PEL	STEL
AMMONIUM HYDROXIDE	1336-21-6	25 %	25ppm (NH3)	50 ppm (NH3)	

### 3. Hazard Identification

#### ingestion

This material may be harmful or fatal if swallowed. Corrosive and may cause severe and permanent damage to mouth, throat, and stomach. May cause vomiting.

### Inhalation

Toxic by inhalation. May be fatal if inhaled. Corrosive. May cause irritation of the upper respiratory tract.

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#### Eye

Corrosive to the eyes and may cause severe damage including blindness. Vapor may cause eye irritation.

#### Skin

Contact causes severe skin irritation and possible burns. Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

Exposure may aggravate other pre-existing diseases, including diseases of the eyes, skin and lungs,

### 4. First Aid Information

#### Eye

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel.

#### Skin

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Thoroughly wash (or discard) clothing and shoes before reuse.

#### Inhalation

Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention.

ingestion

If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

### 5. Fire Fighting Measures

**LEL** 15.75 **UEL** 26

The Flammable Limits are for ammonia vapor.

### Flammable Properties

This material is not considered a fire hazard. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may form explosive mixture with air.

Extinguishing Media

Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material. Cool fire exposed containers with water spray. Exposure to extreme heat may cause containers to burst.

Fire fighting instructions

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH

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(approved or equivalent) and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire.

#### Accidental Release Measures

#### Clean-up

Ventilate area of leak or spill. Remove all sources of heat or ignition. Vacuum or sweep up material and place in a disposal container. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Large spills may be neutralized with dilute alkaline solutions of soda ash, or lime. Do not flush to sewer.

### 7. Handling and Storage

#### Handling

Wash thoroughly after handling. Use with adequate ventilation. Avoid breathing (dust, vapor, mist, gas). Avoid contact with eyes, skin, and clothing.

#### Storage

Store in a cool place in original container and protect from sunlight. Store away from heat. Store away from incompatible materials. Keep container closed when not in use. Keep away from food and drinking water.

### 8. Exposure Controls and Personal Protection

#### **Engineering controls**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

#### Respirators

A NIOSH-approved air purifying respirator with the appropriate cartridge or canister for the hazards may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

#### Other clothing

Wear safety glasses with side shields (or goggles) and a face shield. Use gloves, and other body coverings, recommended for this material by manufacturers or suppliers based on test data showing adequate permeation and penetration resistance.

### 9. Physical and Chemical Properties

Physical State

Liquid

Specific Gravity

1.06

Color/Appearance

Colorless to Pale Blue

Odor pH Strong Ammonia DO NOT SMELL ~10

Boiling/Cond. Point

172-174 F

Page 4 of 6 Print Rev. Date 07/02/2008 MSDS ID 8860 ALK-CU-Strip Part A

Solubility Complete
Evaporation Rate <1
Percent Volatile 80
Vapor Density 0.6
Vapor Pressure 95.1

### 10. Stability and Reactivity

#### Thermal Stability

Stable under normal conditions of use and storage.

#### Conditions to Avoid

incompatibles. Exposure to heat. Direct sunlight.

### Hazardous Polymerization

Will not occur.

### **Hazardous Decomposition Products**

Thermal decomposition may release toxic ammonia fumes. Thermal decomposition releases oxides of nitrogen.

#### Incompatibility

Acids, Acrolein, Dimethyl Sulfate, Halogens, Silver Nitrate, Propylene Oxide, Nitromethane, Silver Oxide, Silver Permanganate, Oleum, And Beta-Propiolactone. Most common metals.

### 11. Toxicological Information

#### Carcinogen

NTP: No IARC: No OSHA: No

TOXICITY DATA: (44 % AMMONIUM HYDROXIDE)

Oral Toxicity: LDLo: 43 Mg/Kg (Human)
Oral Toxicity: LD50: 350 Mg/Kg (Rat)
Oral Toxicity: LDIo: 750 Mg/Kg (Cat)
Eye Toxicity: SEV1 Mg/30S Rns (Rabbit)
Inhalation Toxicity: LDLo: 5000 Ppm (Human)
Inhalation Toxicity: TCLo: 700 ppm:Eye (Human)
Inhalation Toxicity: TCLo: 408 ppm:Irr (Human)

### 12. Ecological Information

Harmful to fish and other water organisms. Keep out of waterways.

LC50: 0.008 Mg/L 24H (Rainbow Trout) LC50: 8.2 Mg/L 96H (Flathead Minnow) LC50: 0.024 Mg/L 48H (Bluegill) EC50: 0.66 Mg/L 48H (Water Flea)

### 13. Disposal Considerations

#### Disposal Method

Dispose in accordance with applicable federal, state, local environmental and regulatory

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requirements.

### 14. Transportation Information

DOT Shipping Name: RQ, Ammonia Solutions, (10-30% Ammonia)

**DOT Hazard Class: 8** 

Hazardous Ingredients: Ammonium Hydroxide

Identification Number: UN 2672

Packing Group: III Label: Corrosive

RQ is applicable when shipping 1000# or more ammonium hydroxide in one package.

NOTE: During an incident involving this material, Use Of DOT Emergency Response Guide No. 154 is also recommended.

### 15. Regulatory Information

### Toxic Substances Control Act(TSCA)

Chemical ingredients are on the TSCA inventory.

### Superfund Reportable Quantity (RQ)

1000#/454 KG - Ammonium Hydroxide

#### Hazardous Waste No.

Not Regulated.

#### Sara Title III (Section 313)

This product contains ammonia and is subject to reporting as ammonia and ammonium ion on an ammonia basis = 1.6 Lb/Gal

### California Proposition 65 Warning

This product may contain chemicals known to the state of California to cause cancer, or birth defects or other reproductive harm.

#### Canadian Lists

#### DSL/NDSL

Found on the Domestic Substances List.

#### WHMIS

Ammonium hydroxide: item number 96, reporting at 1% threshold;

STATE LISTS: This product contains ingredients that are listed for disclosure or reporting in the states of California, Connecticut, Illinois, Louisiana, Massachusetts, North Carolina, New Jersey, New York, Pennsylvania, and Texas. Please check with the appropriate Agencies.

For States Not Listed: Please check with the appropriate agencies.

#### 16. Other Information

It is reasonable to assume that ammonia etchant compounds contain arsenic, cadmium,

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chromium, and lead in concentrations ranging from a few parts per billion to several hundred parts per million. All information presented herein is given in good faith and is based on sources and tests considered to be reliable, but cannot be guaranteed. It is the user's full responsibility to accept risk for the safety, toxicity, handling, storage, and use of the product, as well as to determine the suitability of the product for a specific purpose. We make no warranty as to the results to be obtained in using the product; therefore all risks must be assumed by the user.

# MSDS Document

# Product ALK-CU-STRIP, PART B

### 1. Chemical Product and Company Identification

### Trade Name of this Product ALK-CU-STRIP, PART B

Synonyms:

SODIUM CHLORITE SOLUTION

### MISDS ID 8870

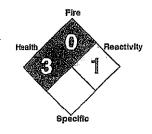
#### Manufacturer

Phibro-Tech Inc.

65 Challenger Road

Ridgefield Park, NJ 07660

Phone Number
(201) 329-7300
Emergency Phone
CHEMTREC (800) 424-9300
CHEMTREC International (703) 527-3887
Revision Date 5/31/2006



### 2. Composition and Information on Ingredients

Ingredient WATER	<b>CAS Number</b> 7732-18-5	<b>Weight %</b> 69% - 78%	ACGIH TLV	PEL	STEL
SODIUM CHLORITE	7758-19-2	20 %			
SODIUM CHLORIDE	7647-14-5	16 %	•		
SODIUM SULFATE	7757-82-6	12 %		•	
SODIUM CHLORATE	7775-09-9	03 %			

### 3. Hazard Identification

**EFFECTS OF OVEREXPOSURE:** 

SYMPTOMS OF INGESTION: CAUSES SEVERE BURNING OR IRRITATION OF THE

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DIGESTIVE TRACT. SYMPTOMS MAY INCLUDE NAUSEA, VOMITING, ABDOMINAL PAIN, AND DIARRHEA. SWALLOWING MAY BE DIFFICULT AT FIRST, THEN ALMOST IMPOSSIBLE. EFFECTS ON THE ESOPHAGUS AND G.I. TRACT MAY RANGE FROM IRRITATION TO SEVERE CORROSION, TO DEATH.

SYMPTOMS OF INHALATION: LIQUID AND VAPOR IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT. SYMPTOMS MAY INCLUDE COUGHING, SORE THROAT, AND SHORTNESS OF BREATH. IN SEVERE CASES, PULMONARY EDEMA MAY DEVELOP.

SYMPTOMS OF SKIN CONTACT: IRRITATING TO THE SKIN. SYMPTOMS MAY INCLUDE IRRITATION, REDNESS, AND PAIN TO SEVERE BURNS.

SYMPTOMS OF EYE CONTACT: MAY CAUSE IRRITATION, REDNESS, PAIN, BLURRED OR IMPAIRED VISION, DISCOLORATION, AND DAMAGE.

CHRONIC EXPOSURE: MAY AGGRAVATE OTHER PRE-EXISTING DISEASES, INCLUDING DISEASES OF THE EYES, SKIN, AND LUNGS.

#### 4. First Aid Information

EYE CONTACT: IMMEDIATELY, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS APART. WASHING WITHIN A FEW SECONDS IS ESSENTIAL TO ACHIEVE MAXIMUM EFFECTIVENESS, GET IMMEDIATE MEDICAL ATTENTION AFTER FLUSHING.

SKIN CONTACT: WASH AFFECTED AREA THOROUGHLY WITH WATER. REMOVE CONTAMINATED CLOTHING AND LAUNDER BEFORE REUSE. IF IRRITATION SHOULD DEVELOP, GET MEDICAL ATTENTION.

INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CONSULT A PHYSICIAN.

INGESTION: NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. DO NOT INDUCE VOMITING. GIVE PLENTY OF WATER. IF SPONTANEOUS VOMITING OCCURS, KEEP AIRWAY CLEAR. GIVE MORE WATER WHEN VOMITING STOPS. GET IMMEDIATE MEDICAL ATTENTION.

NOTES TO PHYSICIAN: CHLORINE DIOXIDE VAPORS ARE EMITTED WHEN THIS CONTACTS ACID OR CHLORINE. IF THESE VAPORS ARE INHALED, MONITOR PATIENT CLOSELY FOR DELAYED DEVELOPMENT OF PULMONARY EDEMA WHICH MAY OCCUR UP TO 48-72 HOURS POST-INHALATION. FOLLOWING INGESTION, NEUTRALIZATION AND USE OF ACTIVATED CHARCOAL IS NOT INDICATED.

#### 5. Fire Fighting Measures

MATERIAL IS NOT COMBUSTIBLE. WHEN DRY SUBSTANCE IS A STRONG OXIDIZER AND THE HEAT OF ITS REACTION WITH REDUCING AGENTS OR COMBUSTIBLE MAY CAUSE IGNITION. INCREASES THE FLAMMABILITY OF ANY COMBUSTIBLE MATERIAL.

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FLASH POINT (DEG C): NA
TEST METHOD: NA
FLAMMABLE LIMITS (% BY VOL): NA
AUTOIGNITION TEMP. (DEG C): NA

EXTINGUISHING MEDIA: ANY SUITABLE MEANS TO EXTINGUISH SURROUNDING FIRE. COOL DRUMS WITH WATER SPRAY.

SPECIAL FIRE FIGHTING PROCEDURES: USE SPECIAL BREATHING EQUIPMENT AND PROTECTIVE CLOTHING APPROPRIATE TO THE SURROUNDING FIRE.

UNUSUAL FIRE OR EXPLOSION HAZARDS: THERMAL DECOMPOSITION RELEASES TOXIC CHLORINE FUMES.

#### Accidental Release Measures

SPILL/LEAK CLEAN-UP PROCEDURES: VENTILATE SPILL AREA. REMOVE ALL SOURCES OF HEAT OR IGNITION. CONTAIN SPILL. SPILL MATERIAL MAY BE ABSORBED USING NON-COMBUSTIBLE COMMERCIAL ABSORBENTS. DAMPEN AND SCOOP SPILLED MATERIAL INTO CLEAN, DEDICATED EQUIPMENT. EVERY PRECAUTION SHOULD BE TAKEN TO AVOID MIXING SPILLED MATERIAL WITH OTHER CHEMICALS OR DEBRIS WHEN CLEANING UP. KEEP COLLECTED MATERIALS DAMP AND PUT INTO DRUMS. DISPOSE PROMPTLY. DRIED MATERIAL CAN IGNITE UPON CONTACT WITH COMBUSTIBLES.

### 7. Handling and Storage

PRECAUTIONARY MEASURES: AVOID CONTACT WITH SKIN, EYES, AND CLOTHING. WEAR PROTECTIVE CLOTHING, GLOVES, AND SPLASH GOGGLES OR SHIELD. WASH THOROUGHLY AFTER USING. AVOID BREATHING DUST OR MIST. USE WITH ADEQUATE VENTILATION.

STORAGE AND HANDLING: KEEP IN A CLOSED CONTAINER. STORE IN A COOL, DRY, WELL VENTILATED AREA AND AWAY FROM DIRECT SUNLIGHT. ISOLATE FROM INCOMPATIBLE MATERIALS.

PROTECT FROM PHYSICAL DAMAGE.

# 8. Exposure Controls and Personal Protection

VENTILATION: A SYSTEM OF LOCAL EXHAUST IS RECOMMENDED TO KEEP EMPLOYEE EXPOSURE BELOW THE AIRBORNE EXPOSURE LIMITS. LOCAL EXHAUST IS USUALLY PREFERRED BECAUSE IT CONTROLS THE EMISSION AT ITS SOURCE, PREVENTING DISPERSION OF IT INTO THE GENERAL WORK AREA. REFER TO THE ACGIH DOCUMENT INDUSTRIAL VENTILATION, A MANUAL OF RECOMMENDED PRACTICES FOR DETAILS.

RESPIRATORY PROTECTION: NIOSH/MSHA APPROVED RESPIRATOR IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS. GENERALLY, A DUST/MIST RESPIRATOR MAY BE WORN IN AREAS WHERE THE TLV IS EXCEEDED UP TO TEN TIMES. (50 TIMES IF THE APPROPRIATE FULL\_FACE

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RESPIRATOR AND CARTRIDGES ARE USED.) ALTERNATIVELY, A SUPPLIED-AIR FULL FACE-PIECE RESPIRATOR OR AIR-LINE HOOD MAY BE WORN. WHEN CHLORINE OR CHLORINE DIOXIDE FUMES ARE PRESENT, USE ACID GAS CARTRIDGES WITH AIR-PURIFYING RESPIRATORS.

EYE PROTECTION: USE CHEMICAL SAFETY GOGGLES AND A FACE SHIELD IF THE POTENTIAL FOR SPLASHING EXISTS.

AN EYE WASH FOUNTAIN AND QUICK-DRENCH FACILITIES SHOULD BE MAINTAINED IN THE WORK AREA.

SKIN PROTECTION: USE RUBBER OR GAUNTLET TYPE NEOPRENE IMPERVIOUS GLOVES AND BODY-COVERING CLOTHING.

PERSONAL HYGIENE: WASH THOROUGHLY AFTER HANDLING.

INGREDIENTS WT PCT PEL TLV(TWA) (CAS NO.) (APPROX) MG/M3 PPM MG/M3 PPM

SODIUM CHLORITE 20 ND ND (7758-19-2)

SODIUM CHLORATE 0-3 ND ND (7775-09-9)

SODIUM CHLORIDE 1-6 ND ND (7647-14-5)

SODIUM SULFATE 1-2 ND ND (7757-82-6)

WATER 69-78 ND ND (7732-18-5)

THE TLV'S ARE GIVEN FOR GUIDANCE; LOCAL APPLICABLE REGULATIONS SHOULD ALWAYS BE FOLLOWED. INGREDIENTS ARE THOSE PRESENT AT 1% OR GREATER, OR AT 0.1% OR GREATER IF LISTED AS POTENTIAL CARCINOGENS BY OSHA/IARC/NTP. PROPRIETARY INGREDIENT IDENTITIES ARE AVAILABLE IN ACCORDANCE WITH 29 CFR 1910.1200.

CARCINOGEN: NTP - NO IARC - NO OSHA - NO

## 9. Physical and Chemical Properties

Product CAS Number Molecular Formula NOT APPLICABLE TO MI

MIXTURE

D = DECOMPOSES

BOILING POINT, 760 MM HG (DEG C): 182 - 186 F

MELTING/FREEZING POINT (DEG C): ND

SPECIFIC GRAVITY (WATER = 1): 1.15

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VAPOR PRESSURE (MM HG): 110.5 VAPOR DENSITY (AIR = 1): 0.620 WATER SOLUBILITY (% BY WT): MISCIBLE VOLATILES (% BY WT): 75 EVAPORATION RATE (BUTYL ACETATE = 1): <1 PH OF SOLUTION: 12.5

APPEARANCE/ODOR: CLEAR, COLORLESS LIQUID, WITH A SLIGHT CHLORINE ODOR.

### 10. Stability and Reactivity

THERMAL STABILITY: STABLE UNDER ORDINARY CONDITIONS OF USE AND STORAGE.

INCOMPATIBILITY: ACIDS, REDUCING AGENTS, COMBUSTIBLE MATERIALS, OXIDIZING MATERIALS, HYPOCHLORITE, ORGANIC SOLVENTS AND COMPOUNDS, GARBAGE, DIRT, ORGANIC MATTER, HOUSEHOLD PRODUCTS, SOAP PRODUCTS, PAINT PRODUCTS, VINEGAR, BEVERAGES, OILS, PINE OIL, DIRTY RAGS, SULFUR-CONTAINING RUBBER, OR ANY OTHER FOREIGN MATTER.

CONDITIONS TO AVOID: DO NOT STORE IN DIRECT SUNLIGHT OR EXPOSE TO HEAT. DRIED MATERIAL CAN IGNITE ON CONTACT WITH COMBUSTIBLES. AVOID CONTAMINATION WITH FOREIGN MATERIALS. DO NOT EXPOSE TO UV LIGHT.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION RELEASES TOXIC CHLORINE FUMES, AND OXIDES OF SODIUM. CONTACT WITH ACIDS RELEASES CHLORINE DIOXIDE GAS.

#### 11. Toxicological Information

TOXICITY DATA: (FOR 100% SODIUM CHLORITE)

ORAL TOXICITY: LD50: 165 MG/KG (RAT)

LD50: 350 MG/KG (MOUSE) LD50: 300 MG/KG (GUINEA PIG)

TDLO: 29750 MG/KG/85W (MOUSE) CARCINOGENIC EFFECTS

# 12. Ecological Information

# 13. Disposal Considerations

DISPOSAL METHOD: DISPOSE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL AND REGULATORY REQUIREMENTS.

### 14. Transportation Information

DOT SHIPPING NAME: CHLORITE SOLUTION, WITH MORE THAN 5% BUT LESS THAN 16% AVAILABLE CHLORINE

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DOT HAZARD CLASS: 8
HAZARDOUS INGREDIENTS: SODIUM CHLORITE
IDENTIFICATION NUMBER: UN 1908

PACKING GROUP: II LABEL: CORROSIVE

NOTE: DURING AN INCIDENT INVOLVING THIS MATERIAL, USE OF DOT EMERGENCY RESPONSE GUIDE NO. 154 IS ALSO RECOMMENDED.

#### 15. Regulatory Information

TOXIC SUBSTANCES CONTROL ACT(TSCA): CHEMICAL INGREDIENTS ARE ON THE TSCA INVENTORY.

SUPERFUND REPORTABLE QUANTITY (RQ): NOT REGULATED.

HAZARDOUS WASTE NO.: NOT REGULATED. ?

SARA TITLE III: NOT REGULATED. (SECTION 313)

CANADIAN LISTS:

16 Other Information

DSL/NDSL: SODIUM CHLORITE IS ON THE DOMESTIC SUBSTANCES LIST. WHMIS: SODIUM CHLORITE IS ITEM NUMBER 1432 FROM THE INGREDIENT DISCLOSURE LIST AND IS SUBJECT TO REPORTING AT 1% THRESHOLD.

STATE LISTS: THIS MATERIAL CONTAINS INGREDIENTS THAT MAY BE LISTED FOR REPORTING OR DISCLOSURE IN THE STATES OF CONNECTICUT, MASSACHUSETTS, NEW JERSEY, PENNSYLVANIA, OR RHODE ISLAND. PLEASE CHECK WITH THE APPROPRIATE STATE AGENCIES.

FOR STATES NOT LISTED: PLEASE CHECK WITH THE APPROPRIATE AGENCIES.

HANG GARA	>	
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<u>ENVIKUNMEN I AL GEU-I ECHNOLOGIES, LLC</u> Generator Waste Profile 28470 Citrin Dr, Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002 Profile # ( GENERATOR INFORMATION Name: USEPAID #\_ Facility Address: SIC/NAICS Code: State Code: City: \_ Zip Code: State: Contact: Title: Phone: Fax: ( BILLING INFERMATION SAME AS ABOVE Company Name: \_ Address: State: Attention: \_\_ Phone: ( Fax: ( WASTE INFORMATION Name of Waste/Common Chemical Name: SPENT PIZKLE LIGOUR (KOLD) Process Generating Waste (Please be specific, incomplete information may delay the approval process): WIRE PROCESSING USEPA / STATE WASTEIDENTIFICATION 1. This waste is considered to be: Non Hazardous Liquid Industrial Waste M Hazardous Waste Regulated by TSCA? ☐Yes ZNo (PCBs, etc.) 3. List ALL Applicable Waste Codes: KOLA 10002 PHYSICAL CHARACTERISTICS OF WASTE Color: Suspended Solids Layers: Specific Gravity: ☐ White/Clear □ 0-1 % □ 3-5 % ☐ Multi-Layered 1.0 - 1.2 □<0.8 Black/Brown > 5% **1-3 %** Bi-Layered □ 0.8 –1.0 区 1.3 – 1.4 ☐ Other Single Phase 22.5 ρH:  $\square$ NA  $\boxtimes$  < 2  $\square$  2 - 4 □ 4-6 6 - 8□ 8 - 10 □ 10 - 12.5 □ ≥12.5 Liquid Flash Point: ☐ <73°F ☐ 73 – 100°F ☐ 101 – 140°F ☐ 141 – 200°F ☒ >200°F ☑ None ☑ Closed Cup ☐ Open Cup **VOC CONCENTRATION -\_\_** — O — PPM (MUST BE COMPLETED) TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (LIST EACH CONSTITUENT >/= 0.1%) CONSTITUENT CONSTITUENT MIN MAX MIN Suffer 9.20 % <u> 20</u>% Séttian & DR soived Socias

EQ : - 404:0 Course divine - volumes - 188 - 40:1/4	Mazis Lloine - bade 3
Metals: Indicate if this waste contains any of the following metals,. If Generator knowledge-provide bat Lab Analysis Generator Knowledge TCLP TOTAL	:kup
Not Concentration Not Concentration Arsenic (As) D0  Present Present Present Barium (Ba) D0  PCB ppm Aromatic Amine ppm Cadmium (Cd) D0  Dioxins ppm Pesticides ppm Chromium (Cr) D0  Cyanides Reactive ppm Rodenticides ppm Lead (Pb) D0  Cyanides Total ppm Fungicides ppm Selenium (Se) D0  Sulfices Total ppm Solerium (Se) D0  Sulfices Total ppm Solerium (Se) D0  Sulfices Total ppm Solerium (Se) D0	05     <100 ppm
TCLP Organics D012 - D043 above regulatory limits: Present Not Present 💢	
IS WASTE ANY OF THE FOLLOWING?  At Least One Box Must Be Checked.  Radioactive Water Reactive Oxidizer Shock Sensitive Reactive NIOSH Human-Positive Carcinogens NESHAP Wastes (Benzene, etc.)	
SHIPPING INFORMATION  1. Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)?   Yes  No  Reportable Quantity (RQ) in pounds	
3. DOT Shipping Name Haz	rard Class UN/NA
PG ERG Hazardous Constituents for "n.o.s."	
4. Method of Shipment: Sulk Tanker Vac truck Rail Car Drums Total 5. Number of Units to Ship Now: 6. Anticipated Volume / Units per Year: 80 6. Special Handling Requirements including PPE:	
CERTIFICATION STATEMENT  I hereby represent and warrant that I have personally examined and am familiar with the information of attached documents. Based on my inquiry and personal knowledge of those individuals responsible for information, the information contained herein is true, accurate, and complete to the best of my knowled material fact has been omitted as to make this information misleading. I understand that others may rein the handling and processing of the waste material described herein. If this box is checked [], I required the sample characterization and/or regulatory reguirements.	r supplying or obtaining the dge and belief. Furthermore, no ely on this representation and warrar uest Environmental Geo-
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I hereby represent and warrant that I have personally examined and am familiar with the information of attached documents. Based on my inquiry and personal knowledge of those individuals responsible for information, the information contained herein is true, accurate, and complete to the best of my knowled material fact has been omitted as to make this information misleading. I understand that others may rein the handling and processing of the waste material described herein. If this box is checked [], I required to correct any inconsistencies. Any corrections Environmental Geo-Technologies may of the sample characterization and/or regulatory regulrements.  Printed Name:  Generator's Signature:  Description of the above referenced Generators Waste Profile Report using an appropriate one obtained using any of the applicable sampling methods cited in 40 CFR 261-Appendix 1. Fill in the provided below. If you have problems obtaining a representative sample of your waste, please contact.	or supplying or obtaining the dge and belief. Furthermore, no ely on this representation and warrar uest Environmental Geo-akes will be consistent with the result ele:    MAY 7, 20/5
I hereby represent and warrant that I have personally examined and am familiar with the information of attached documents. Based on my inquiry and personal knowledge of those individuals responsible for information, the information contained herein is true, accurate, and complete to the best of my knowledge material fact has been omitted as to make this information misleading. I understand that others may represent in the handling and processing of the waste material described herein. If this box is checked ☐, I required Technologies not to correct any inconsistencies. Any corrections Environmental Geo-Technologies may of the sample characterization and/or regulatory requirements.  Printed Name:	or supplying or obtaining the dge and belief. Furthermore, no ely on this representation and warrar uest Environmental Geo-akes will be consistent with the result ele:    MAY 7, 20/5
I hereby represent and warrant that I have personally examined and am familiar with the information of attached documents. Based on my inquiry and personal knowledge of those individuals responsible for information, the information contained herein is true, accurate, and complete to the best of my knowled material fact has been omitted as to make this information misleading. I understand that others may meet in the handling and processing of the waste material described herein. If this box is checked ☐, I required the sample characterization and/or regulatory requirements.  Printed Name: ☐ ☐  GENERATOR'S CHAIN OF CUSTODY RECORD INSTRUCTIONS: Please of the waste described in the above referenced Generators Waste Profile Report using an appropriate one obtained using any of the applicable sampling methods cited in 40 CFR 261-Appendix 1. Fill in the provided below. If you have problems obtaining a representative sample of your waste, please contact representative.  1	or supplying or obtaining the dge and belief. Furthermore, no ely on this representation and warrar uest Environmental Geo-akes will be consistent with the result die:  MAY 7, 20/5  Dilect a representative 1-quart_sample container. A representative sample a sampling information in the spaces your Environmental Geo-Technological discussions.

# ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING	8	APPROVAL FORM
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RECEWING INFORWATION		7. 207
Date	5/7/	75
Receiving ID#	501fort	ACA
Manifest# Line:		,,,,,,,
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		<u></u>
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	Client	

LAFON CENTATION ENDAGES STUDIES			Onlocalla de Santo	
Compatible? (RT# )	(Yes)	No	Barium	
PCBs (ppm)(Oily Waste				
Only)?	N/A	<u> </u>	Calcium	
TOC (ppm)(CC Waste Only)?	NA	<u> </u>	Total Iron	
Flash Point (°F)		40	Magnesium	
pH (S.U.)	0.1		Sodium Chloride	
Cyanides? (mg/L)	430		Bicarbonate	
Sulfides? (ppm)	4 20	0	Carbonate	
Specific Gravity	1.30		TDS	
Physical Description	Lausd	Solid	Resistivity	
Stream Consistency	Yes	(Na)	Sulfate	
Oil in Sample	Yes	(SN)		
Temperature	74°F			
Conductivity	350.7	<u></u> ΔΩ S		
% Solids	50.	7 .		
Turbidity	(Yes)	No		
Color (visual)	Gree			· .
TSS (%)	22.5	2		
Radiation Screen (as needed)	Negat	J VO		
Lab Signature	Dol			

REC04-01 - Page 1

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC 28470 Citrin Dr., Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002

# Generator Waste Profile Profile \* OO654

GENERATOR INFO	RMATION						
Name:				USEPA (D	#		
Facility Adures		7		SIC/NAICS	The second second	_State Code:	
City: _		200		State:			
Contact		Title:		-		_Zip Code:	
BILLING INFORMA	LION	1,110,2	SAME AS A	Phone		Fax: ( )	
Company Name,				arë e e			
Address:						· ·	<del>-</del>
Citye			State:				· · · · · · · · · · · · · · · · · · ·
Attention:			Phone:		Zip Code:		·
			_ randie:	- 40	Fax: (	)	
WASTEINFORMATI						<del></del>	The second secon
Name of Waste/C			Acid solution				
Process Generating V	Vaste (Please be spe	cific, incomplete	information may	delay the a	pproval process):_		
By prog	uct of manufacturing o	eramics.	<del></del>	· · · · · · · · · · · · · · · · · · ·			
		·					
	<u> </u>	· <del>····································</del>					
USEPA/STATE WAS	TE IDENTIFICATION	l					_
1. This waste is consi	A Company of the Comp		Liquid Industrial \	Masta	V Hammanda 184		
2. Regulated by TSC/	√? □Yes ☑No (I	PCBs, etc.)		A ACTORIE.	X Hazardous Wa	iste	
3. List ALL Applicable	Waste Codes:						•
PHYSICAL CHARACT	ERISTICS OF WAST	· ·					<del></del>
Color:	Suspended So		Layers:	· · · · · · · · · · · · · · · · · · ·			
☐ White/Clear ☐ Black/Brown	□ 0-4 %	□ 3-5 %	□ Multi-Lay	ered	Specific Gravit □<0.8 × 1.0	7: 00°	ceptable
X Othergreen_	X 1-3 % [	□ > 5%	☐ Bi-Layen	ed j	0.8 -1.0 1 1.3	-1.4	
pH: □NA X ≤			X Single Ph		Exact / Other		51515
	2 1 2 - 4 1	4-6	6-8 <u></u>	8 – 10 [	10 – 12.5	≥ 12:5	
Liquid Flash Point:	<73°F □ 73 – 100°	F [] 101 - 140	100 - 114 - 110 - 110 - 110 - 110 - 110 - 110 - 110 - 110 - 110 - 110 - 110 - 110 - 110 - 110 - 110 - 110 - 110	36E 🗀 - 2	Ocer we know to		
VOC CONCENTRATION						SI Closed Cup [	Open Cup
-		·	-0- F	PM (MUST B	E COMPLETED)		
TOTAL COMPOSITION	OF WASTE - MUSTE	BE EQUAL TO OR G	REATER THAN 100	% (LIST EAC	H CONSTITUENT >	√= 0.1%)	
CONSTITUENT	· · · · · · · · · · · · · · · · · · ·	N	MAX MIN .	CONSTITU	ËNT		Pin sir
7 V GIACO 7		76	- On 02 136	Sir			WAX MIN
		1	- 3 % CA	والمتاشيط الماجو وخراجه	i,		
	· · · · · · · · · · · · · · · · · · ·		- %		and the second s		
	<u></u>		%	<del></del> _			

EGT - 28470 Citrin Drive - R	andina - int - do	19			304 - cm	
Metals: Indicate if this waste co	ntains any of the f	ollowing metals: If	Generator knowled		waste Prof	ile – Page 2
		ige	TCLP	ge-provide backup ☐TOTAL	•	
Not Concentra Present  PCB ppm Dioxins ppm Cyanides Reactive ppm Cyanides Total ppm Sulfides Total ppm Sulfides Total ppm	Aromatic Amine Pesticides Rodenticides Fungicides	ppm ppm ppm	Chromi Lead (f Mercur Seleniu Silver (	(As) D004 [ (Ba) D005 [ Im (Cd) D006 [ Im (Cr) D007 [ 2b) D008 [ V(Hg) D009 [ Im (Se) D010	< 5 ppm   <100 ppm   < 1 ppm   < 5 ppm   < 5 ppm   < 02 ppm	ppm ppm ppm
TCLP Organics D012 - D043 abov		Present Not I	resent X	.ay 2013 .U	I≤ 5 ppm	— ррт
IS WASTE ANY OF THE FOLLO Radioactive Water Rea NIOSH Human-Positive Carci	ethia TT avita	t Least One Box fi er □ S AP Wastes (Benzo	Shock Sensitive	☐ Reactive (other) ☐ Biological	□ DOTE X None A	pply
SHIPPING INFORMATIO	)M					
1. Is this a DOT Hazardous Mate	nal (49CFR 172.10	1 & 173 Subcart (	110 VV 174	_		
2. Reportable Quantity (RQ) in po	ounds <u>100</u>		D)? X Yes □N	9		
3. DOT Shipping Name Waste or	orrosive liquid, N.C	).S.		lazard Class 8	٠.	
PG II ERG 154 Har	ardous Constitue	<b>.</b>		razaiu Class 8	UN	I/NA <u>1760</u>
PG II ERG 154 Haz  4. Method of Shipment						
	☐Bulk Tanke	「 □Vac truck  □	Rail Car X Drum	s		
<ol> <li>Number of Units to Ship Now:</li> <li>Special Handling Requirements</li> </ol>	including DDE	6. Anticipated \	/olume / Units per	Year:		or X One Time
,						
CERTIFICATION STATES I hereby represent and warrant that attached documents. Based on my information, the information contain material fact has been omitted as to in the handling and processing of ti Technologies not to correct any inco of the sample characterization and	t! have personally rinquiry and perso ned herein is true, o make this inform	accurate, and com ation misleading.	plete to the best of understand that o	my knowledge and	belief. Furth	ng the
or the sample characterization and	onsistencies. Any	described herein. corrections Enviro	If this box is check nmental Geo-Tech	eo L.I. I request En nologies makes will	vironmental (	
of the sample characterization and/	onsistencies. Any accordatory remui	described herein corrections Enviro rements	nmental Geo-Tech	nologies makes will	vironmental ( be consisten	
or and demple originations and was a series	onsistencies. Any Greenulatory remui	described herein corrections Enviro ements	nmental Geo-Tech	nologies makes will	be consisten	lion and warrant lep- with the results
Printed Name:  Generator's Signature:	onsistencies. Any arregulatory remui	corrections Enviro	nmental Geo-Tech Title	nologies makes will	be consisten	lion and warrant iep- t with the results
Printed Name:  Generator's Signature:  GENERATOR'S CHAIN Of the waste described in the above rel one obtained using any of the	CUSTODY Ferenced Generator	RECORD INS	nmental Geo-Tech Title Date TRUCTIONS:	PLEASE COIlect a	be consistent	lion and warrant lep- I with the results
Printed Name:  Generator's Signature:  GENERATOR'S CHAIN Of the waste described in the above ret one obtained using any of the applic provided below. If you have problem representative.	CUSTODY Ferenced Generator	RECORD INS	nmental Geo-Tech Title Date TRUCTIONS:	PLEASE COIlect a	be consistent	lion and warrant lep- I with the results
Printed Name;  Generator's Signature:  GENERATOR'S CHAIN Of the waste described in the above refone obtained using any of the applic provided below. If you have problem representative.	CUSTODY Ferenced Generator	RECORD INS PRES WASTE PROFILINGS CITED IN 40 C	nmental Geo-Tech Title Date TRUCTIONS:	PLEASE COIlect a	be consistent	lion and warrant lep- I with the results
Printed Name:  Generator's Signature:  GENERATOR'S CHAIN Of the waste described in the above rel one obtained using any of the applic provided below. If you have problem representative.  1	COLLECTION	RECORD INS PROPERTY P	nmental Geo-Tech Title Date TRUCTIONS:	PLEASE COIlect a	be consistent	lion and warrant lep- I with the results
Printed Name:  Generator's Signature:  GENERATOR'S CHAIN Of the waste described in the above rel one obtained using any of the applic provided below. If you have problem representative.  2. SAMPLING METHOD	COLLECTION	RECORD INS PROPERTY P	nmental Geo-Tech Title Date TRUCTIONS:	PLEASE COIlect a	be consistent	lion and warrant lep- I with the results
Printed Name:  Generator's Signature:  GENERATOR'S CHAIN OF the waste described in the above reformed using any of the applic provided below. If you have problem representative.  1	COLLECTION	RECORD INS PROPERTY P	nmental Geo-Tech Title Date TRUCTIONS:	PLEASE COIlect a	be consistent	lion and warrant lep- I with the results
Printed Name:  Generator's Signature:  GENERATOR'S CHAIN Of the waste described in the above ret one obtained using any of the applic provided below. If you have problem representative.  1	COLLECTION TITLE, EMPLOY	RECORD INS RECORD INS RES WASTE PROFILI hods cited in 40 Cesentative sample  POINT  ER	Title  Date TRUCTIONS: REPORT using an FR 261-Appendix of your waste, plea	PLEASE COllect a rappropriate contain. Fill in the samplings contact your En	epresentative er. A representation information	lion and warrant leo- I with the results  1-quart sample in the spaces leo-Technologic
Printed Name:  Generator's Signature:  GENERATOR'S CHAIN Of the waste described in the above ret one obtained using any of the applic provided below. If you have problem representative.  1	COLLECTION TITLE, EMPLOY	RECORD INS RECORD INS RES WASTE PROFILI hods cited in 40 Cesentative sample  POINT  ER	Title  Date TRUCTIONS: REPORT using an FR 261-Appendix of your waste, plea	PLEASE COllect a rappropriate contain the sample passes from	epresentative er. A representation information	lion and warrant leo- I with the results  1-quart sample in the spaces leo-Technologic

#### ENVIRONMENTAL GEO-TECHNOLOGIES, LLC Generator Waste Profile 28470 Citrin Dr., Romulus, Mt.48174 Telephone 734 946 1000 Fax 734 946 1002 Profile# GENERATOR INFORMATION Name: USEPA ID#\_ Facility Address: SIC/NAICS Code: State Code: Zip Code: City: State: Title: Contact: Phone ax; BILLINGINFORMATION SAME AS ABOVE Company Name Address City Zip Code. State: Attention: Phone: Fax: ( WASTE INFORMATION Name of Waste/Common Chemical Name: Bonderite C-AK Process Generating Waste (Please be specific, incomplete information may delay the approval process): Material found during plant clean out. USEPA / STATE WASTE IDENTIFICATION 1. This waste is considered to be: Non Hazardous Liquid Industrial Waste X Hazardous Waste 2. Regulated by TSCA? Tyes X No (PCBs, etc.) 3. List ALL Applicable Waste Codes: \_\_\_\_ PHYSICAL CHARACTERISTICS OF WASTE Color: Suspended Solids Layers: Specific Gravity: ☐ White/Clear X 0-1 % 3-5 % ■ Multi-Layered \_\_×0.8 X 10-12 □ Black/Brown 1-3 % > 5% Bi-Layered **□0.8-1.0 □ 1.3-1.4** X Other\_IL red X Single Phase Exact / Other pH: MA X ≤ 2 🔲 2 - 4 ☐ 4 – 6 □ 6 – 8 □ 8 - 10 □ 10 - 125 □ > 125 Liquid Flash Point: - <73°F 73 - 100°F 101 - 140°F 141 - 200°F X>200°F ☐ None 🔀 Closed Cup ☐ Open Cup VOC CONCENTRATION -

	MAX	MIN	CONSTITUENT	MÂX	MIÑ
Bonderite CAK See MSDS	60	- <u>100.</u> s	4		
	· · · · · · · · · · · · · · · · · · ·		6		
The state of the s	<del></del>	·	<u> </u>	<del>. المروود </del>	<del></del>
		9	6		أرف حضون

PPM (MUST BE COMPLETED)

EGT - 28470 Citrin Drive - Romu	ius — MI — 48174	1			Waste Prof	ile - Page 2
Metals: Indicate if this waste contain Lab Analysis X Gener	ns any of the folloator Knewledge	owing metals,. I	Generator knowle	ige-provide backu TOTAL	ıliv	
Dioxins	Not Prese Omatic Amine III esticides III odenticides III ingicides III ingicides III III III III III III III III III I		Banu Cedin Chror Lead Merci	iny (Hg) D009 ium (Se) D010	<100 ppm   < 1 ppm   < 5 ppm   < 5 ppm   < 0.2 ppm	pom pom pom pom pom
TCLP Organics D012 - D043 above re	gulatory limits:	Present 🗌 Not	Present 🔀			- w.*
IS WASTE ANY OF THE FOLLOWII  Radioactive  Water Reactive  NIOSH Human-Positive Garcinog	∕e ∐ Oxidize	r 🔲	Must Be Checked. Shock Sensilive sene, etc.)	☐ Reactive (of ☐ Stological	her) []DOTE X None	aplosives Apply
SHIPPING INFORMATION	ŗ.		•			
1. Is this a DOT Hazardous Material	•	1 & 173 Subpar	D)? X Yes	ļÑο		
2. Reportable Quantity (RQ) in pour		<del></del>			,	
3. DOT Shipping Name Waste Sod	ium hydroxide		<del>4</del>	_ Hazard Class _	<u>8</u>	NNA 1823
PG II ERG 154 Hazar	Jous Constituent	s for "n.o.s."			Markey Co.	
4. Method of Shipment:			□Reil Car X Dr	•		
<ol> <li>Number of Units to Ship Now: 1-</li> <li>Special Handling Regularments in</li> </ol>	55 gallon reluding PPE:	6. Anticipate	d Volume / Units p	er Year:		_orX One Time
CERTIFICATION STATEMI	EÑT		•.			
I hereby represent and warrant that I attached documents. Based on my information containe material fact has been omitted as to in the handling and processing of the Technologies not to correct any incorpor the sample characterization and/or	nguiry and person of herein is true, make this inform waste material isistencies. Any	mal knowledge of accurate, and continuous misleading described hereif contents Environs Envir	of those individual complete to the best g. I understand the h. If this box is ch	sresponsible for it of my knowledg at others may rel ecked □. I reque	supplying or obta perand belief. Fu y on this represe ast Environmenta	ining the thermore, no itation and warranty I State
Printed Name:				me:		
Generator's Signat			<u>/</u> 1	Date:	= (X ~ / 0	
GENERATO  the waste described in the above refe che obtained using any of the applica provided below. If you have problems representative.	renced GENERAT ble sampling me	ORS WASTE PRO thods cited in 4	FILE REPORT USING D CFR 261-Appen	an appropriate of	container. A repression and a second contains a	lion in the spaces
12.			<del></del>			
SAMPLING METHOD	COLLECTION	POINT	,			
3.  SAMPLE COLLECTOR'S NAME,	TITLE, EMPLO	YER,			,	
4. Sample No Pi	eservation: Yo	es 🗌 No 🗍			\$2 \$1 \$2 \$1 \$2 \$2.	
5. CHAIN OF CUSTODY Each pe	rson who handle	s the sample m	ust sign below wh			
Relinquished by: (Signature)	Date	Time		ved by: (ature)	Date	Time
	}	,	*			

Safety Data Sheet

lenke

Revision Number: 002.0

Issue date: 08/05/2014

### PRODUCT AND COMPANY IDENTIFICATION

Product name:

BONDERITE C-AK MIL-ETCH AERO known as TURCO MIL-ETCH

Aluminium Etching Agents None identified

Product type: Restriction of Use:

Company address: Henkel Corporation

One Henkel Way Rocky Hill, Connected 06067

(DH number:

594939

Region:

United States

Contact information: Telephone: (860) 571-5100

MEDICAL EMERGENCY Phone: Poison Control Center

1-877-671-4608 (foll free) or 1-303-592-17:11 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887

Internet: www.henkelna.com

#### 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER:

MAY BE CORROSIVE TO METALS. HARMFUL IN CONTACT WITH SKIN.

CAUSES SEVERE SKIN BURNS AND EYE DAMAGE

HAZARD CLASS	HAZARD CATEGORY
CORROSIVE TO METALS	
ACUTE TOXICITY DERMAL	4
SKIN CORROSION	1B
SERIOUS EYE DAMAGE	<u> </u>

#### PICTOGRAM(S)



### Precautionary Statements

Prevention:

Keep only in original container. Do not breame dust or fumes. Wash thoroughly after handling.

Response:

Wear protective gloves, eye protection, and face protection.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove person to tresh air and keep

comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing, immediately call a polson control center or physician. Wash contaminated cirthing before reuse. Absorb spillage to prevent material

Storage: Disposal:

Store locked up: Store in corrosive resistant container with a resistant inner liner. Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification compiles with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological Information.

IDH number: 594939

Product name: BONDERITE C-AK MIL-ETCH AERO known as TURCO MIL-ETCH Page 1 of 5

#### COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Sodium hydroxide	1310-73-2	60 - 100

Exact percentage is a trate secret. Concentration range is provided to assist users in providing appropriate protections

#### FIRST AID MEASURES

Inhalation:

If inhaled, immediately remove the affected person to fresh air.

Skin contact:

For skin contact, fulsit with large amounts of water. Seek immediate medical attention. If imitation persists, repeat flushing and get medical attention. Discard any shoes or clothing Items that cannot be decontaminated.

Eye contact:

In case of contact with the eyes, rinse immediately with plenty of water for 15

minutes, and seek immediate medical attention.

Ingestion:

Seek medical advice. Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or

is having convulsions.

Symptoms:

See Section 11.

Notes to physician:

If the product is ingested, probable mucosal damage may contraindicate the

use of gastric lavage. Treat the affected person appropriately.

#### FIRE FIGHTING MEASURES

Extinguishing media:

Use media appropriate for surrounding material.

Special firefighting procedures:

Wear full protective clothing. Wear self-contained breathing apparatus.

Unusual fire or explosion hazards:

Not a fire hazard.

Hazardous combustion products:

imfating and texte gases or fumes may be released during a fire.

#### ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected

Environmental precautions:

Prevent further leakage or spillage it safe to do so. Wear suitable protective

clothing, gloves and eye/face protection.

Clean-up methods:

Sweep up or gather material and place in appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

#### HANDLING AND STORAGE

Handling:

Avoid contact with eyes, skin and clothing. Avoid breathing dust. Provide adequate ventilation. Wash thoroughly after handling. For industrial use only. NEVER ADD WATER TO PRODUCT. For dilutions, add product slowly to water while stirring. Use caution; heat may be generated.

Storage:

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Material is hydroscopic and may absorb small amount of atmospheric moisture.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

IDH number: 594939

Product name: BONDERITE C-AK MIL-ETCH AERO-known as TURGO MIL-ETCH Page 2 of 5

#### EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Sodlum hydroxide	2 mg/m3 Celting	2 mg/m3 PEL	None	None

Engineering controls:

Ventilation should effectively remove and prevent buildup of any dust

generated from the handling of this product.

Respiratory protection:

If ventilation is not sufficient to effectively prevent buildup of dust, appropriate

NIOSH/MSHA respiratory protection must be provided.

Eye/face protection:

Wear safety glasses; chemical goggles (if splashing is possible).

Skin protection:

Chemical resistant, Impermeable gloves. Gloves should be tested to

determine suitability for prolonged contact. Use of impervious apron and boots

are recommended.

#### PHYSICAL AND CHEMICAL

Physical state:

Color:

Odor

Odor threshold:

pH:

Vapor pressure: Bolling pointrange: Melting point range: Specific gravity: Vapor density:

Flash point:

Flammable/Explosive limits - lower: Flammable/Explosive limits - upper:

Autoignition temperature:

Evaporation rate: Solubility in water:

Partition coefficient (n-octanol/water):

VOC content:

Viscosity: Decomposition temperature: Powder Offwhite

Solvent Not available.

Not applicable Not applicable Not applicable Not applicable

Not applicable Not applicable Not applicable Not applicable Not applicable

Not applicable Not applicable Appreciable

Not determined Not determined. Not available. Not evailable.

# 10. STABILITY AND REACTIVITY

Stability:

Stable at normal conditions.

Hazardous reactions:

Will not occur.

Hazardous decomposition

products:

Initiating and/or toxic tumes and gases may be emitted upon the product's decomposition.

incompatible materials:

Reaction with strong acids. Avoid contact with organic materials, oils, greases, and any oxidizable materials. Adding water to this product may cause localized overheating and

splattering.

Reactivity:

Not available.

Conditions to avoid:

Store away from incompatible materials.

IDH number: 594939

Product name: BONDERITE C-AK MIL-ETCH AERO known as TURGO MIL-ETCH Page 3 of 5

# TOXICOLOGICAL INFORMATION

Relevant routes of exposure:

Skin, Inhalation, Eyes

#### Potential Health Effects/Symptoms

Inhalation: Skin contact: Inhalation of dusts of this product may cause severe irritation and burns to the respiratory tract. Corrosive to the skin. Contact with the skin or mucous membranes may cause severe imitation

Eye contact:

and burns.

This product is severely initiating to the eyes and may cause ineversible damage including

burns and blindness.

ingestion:

This product may produce corrosive damage to the gastromestinal tract if it is swallowed.

Hazardous Component(s)	LD50s and LC50	and Delayed Health Effects		
Sodjum hydroxide	None	Jn	Irritant, Corrosive, Eyes	
Hazardous Component(s)	NTP Carcinogen	IARC Cardinogen	OSHA Carcinogen (Specifically Regulated)	
Sodium hydroxide	No	No	No	

# **ECOLOGICAL INFORMATION**

Ecological Information:

Not available.

### DISPOSAL CONSIDERATIONS

#### Information provided is for unused product only.

Recommended method of disposal:

Follow all local state, federal and provincial regulations for disposal. This

product contains a chelating agent.

Hazardous waste number:

Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA.

# TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name:

Sodium hydroxide, solid

Hazard class or division:

Identification number: Packing group:

UN 1823 11

International Air Transportation (ICAC/IATA)

Proper shipping name:

Sodium hydroxide, solid

Hazard class or division:

UN 1823

identification number: Packing group:

Water Transportation (IMO/IMDG)

Proper shipping name:

SODIUM HYDROXIDE, SOLID

Hazard class or division:

identification number:

UN 1823

Packing group;

#### 15. REGULATORY INFORMATION

#### United States Regulatory Information

TSCA 8 (b) Inventory Status:

All components are listed or are exempt from listing on the Toxic Substances Control Act

inventory.

TSCA 12 (b) Export Notification:

None above reporting de minimis

CERCLA/SARA Section 302 EMS: CERCLA/SARA Section 3/1/3/12: CERCLA/SARA Section 3/3: CERCLA/SARA Section 3/3: None above reporting de minimis immediate Health, Reactive None above reporting de minimis

Sodium hydroxide (CAS# 1310-73-2) 1,000 lbs. (454 kg)

California Proposition 65:

This product contains a chemical known in the State of California to cause barder. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

CEPA DSL/NDSL Status:

Canada Regulatory Information

All components are listed on or are exempt from listing on the Canadian Domestic

Substances List.

#### 16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: Updated Contact Information in Section 1.

Prepared by:

John DiCerbo, Sr. Regulatory Affairs Specialist

issue date:

08/05/2014

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, persons against any disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

#### <u>IENVIRONMENTAL GEO-TECHNOLOGIES. LLC</u> Generator Waste Profile 28470 Citrin Dr. Romulus, MI 48174: Telephone 734 946 1000, Fax 734 946 1002 Profile# 😂 GENERATOR INFORMATION Name: USEPA ID# Facility Address State Code: SIC/NAICS Code: Zip Code: City State: Contact: Title: Phone: Fax: ( ) BILLING INFORMATION SAME AS ABOVE Company Name Address Zip Code: City: State: Attention: )\_ Phone: Fax: ( WASTE INFORMATION Name of Waste/Common Chemical Name: Chromicoat T3 Process Generating Waste (Please be specific, incomplete information may delay the approval process): Material found during plant clean out. LISEPA / STATE WASTE IDENTIFICATION 1. This waste is considered to be: ☐ Non Hazardous Liquid Industrial Waste X Hazardous Waste 2. Regulated by TSCA? Yes X No (PCBs, etc.) 3. List ALL Applicable Waste Codes PHYSICAL CHARACTERISTICS OF WASTE Color: Suspended Solids Specific Gravity Layers: ☐ White/Clear X 0-1 % 3-5% □<0.8 □ 0.8-1.0 □ Multi-Layered X = 1.0 - 1.2☐ Bi-Layered ☐ Black/Brown □ 1-3 % > 5% 13-14 X Other \_lt. red X Single Phase Exact / Other pH: $X \le 2 \square 2-4$ □ 4 − 6 □ 6 - 8 □ 8 - 10 □ 10 - 12.5 ≥ 12.5 Liquid Flash Point: C <73°F C 73 - 100°F C 101 - 140°F C 141 - 200°F X >200°F ☐ None ☑ Closed Cup ☐ Open Cup VOC CONCENTRATION --O - PPM (MIJST BE COMPLETED) TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (LIST EACH CONSTITUENT >/= 0.1%) CONSTITUENT CONSTITUENT MAX MIN See MSDS

<u> EG7 - 28470 Citrin Drive - Rom</u>	ulus - MI - 48174			Waste Profil	e - Page 2
Metals: Indicate if this waste conta	ins any of the following rator Knowledge		nowledge-provide back	ùp	-
Dioxins ppm F Cyanides Reactive ppm F Cyanides Total ppm F Sulfides Reactive ppm Sulfides Total ppm	Present Immedic Amine III	ppm ppm ppm ppm ppm	Arsenic (As) 5000 Barium (Ba) 5000 Cadmium (Gd) 5000 Chrondium (Gr) 5000 Lega (Pb) 5000 Nercuny (Fig) 5000 Selenium (Se) 5010 Silver (Ag) 5001	5	ppm
TCLP Organics D012 - D043 above r		t ☐ Not Present 🔀			
IS WASTEANY OF THE FOLLOW Radioactive Water React NIOSH Human-Positive Cardino	ve 🗌 Oxidizer	One Box Must Be Ch ☐ Shock Sens stes (Benzene, etc.)		ther) DOT 50 X Nome A	
SHIPPING INFORMATION  1. Is this a DOT Hazardous Materia  2. Reportable Quantity (RQ) in pour	1 (49CFR 172.101 & 17	3 Subpart D)? X	Yes □No		
Reportable Quantity (RQ) in pout     DOT Shipping Name <u>Waste Co</u>	· · · · · · · · · · · · · · · · · · ·		ilianaud Ölana	<u>8</u> Uñ	alaniania
	dous Constituents for "	and a Milester and O		<u>o</u> Ur	I/NA <u>1760</u>
4. Wethod of Shipment:		-	•	The Control of the Co	·
Number of Units to Ship Now: 2     Special Handling Requirements	5gallon pails 6./				or X One Time
CERTIFICATION STATEM I hereby represent and warrant that attached documents. Based on my information, the information contain material fact has been omitted as to in the handling and processing of the Technologies not to correct any incoming the sample characterization and/or printed Name:	I have personally examinguity and personal kneed herein is true, accurate make this information is waste material descriptions.	owledge of those indi- ite, and complete to the misleading. I understo bed herein. If this boo	viduals responsible for the best of my knowled and that others may re is checked ☐, I requilated Technologies may Title:	supplying or obtain ge and belief. Furt ly on this represent est Environmental	ning the hermore, no ation and warranty Gen-
Generator's Signature			Date		
GENERATOR'S CHAIN OF the waste described in the above ref one obtained using any of the applic provided below. If you have problem representative.	erenced GENERATORS V able sampling methods	ASTE PROFILE REPORT cited in 40 CFR 261-	using an appropriate Appendix 1. Fill in the	container: A repres sampling information	sentative sample is
12. SAMPLING METHOD	COLLECTION POIN	<b>17</b> .		****	
3. SAMPLE COLLECTOR'S NAME	TITLE, EMPLOYER	· · · · · · · · · · · · · · · · · · ·	-		
	reservation: Yes □	No 🏻			
5. CHAIN OF CUSTODY Each p	erson who handles the :	*: *	w when the sample o	asses from one to a	another.
Relinquished by: (Signature)			Received by: (Signature)	Date	Time
·					

ZMilo Coer

Material Safety Data Sheet

Chemetall

Chromicoat® T3

1-25

Print Date 11/28/2006

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Version 12 Revision Date 10/31/2006

# SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name

Chromicoat® T3

**MSDS** Number

**REL 3541** 

Company

OAKITE PRODUCTS INC 675 Central Avenue

New Providence, NJ 07974

Telephone Telefax

+18005264473 +19084644658

Emergency telephone no

CHEMTREC - 800-424-9300

#### SECTION 2. HAZARDOUS COMPONENTS INFORMATION

Component	CAS-No.	Weight %
Nime acid	7697-37-2	1.00 - 10.00
Chromium (VI) trioxide	1333-82-0	1.06 - 10.00
Hydrofluoric Acid	7664-39-3	1.00 - 10.00
Trade Secret Registry	735517-5008P	1.00.4 5200

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29CFR 1910.1200).

#### SECTION 3. HAZARDS IDENTIFICATION

#### **Emergency Overview**

Form

liquid

Colour

orange

Odour

acrid

Hazerd Summary

Hamful by inhalation and if swallowed Causes severe

burns Liquid or vapor causes burns which may be

delayed.May cause cancer.

Rome(s) of Entry	inhalation	Skin	Ingestion
	yes	yes	yes

#### Carcinogenicity:

NTP

Chromium (VI)

This substance is listed by NTP as a Carcinogen.

IARC

trioxide

This substance is listed by tARC as a Carcinogen.

trioxide

Chromium (VI)

**OSHA** 

1

No substance in this product is regulated by OSHA as a carcinogen

N.D. - Not Determined

1/6

# Chemetall Oakite

# Chromicoaf® 73

Version 1.2 Revision Date 10/31/2006 Print Date 11/28/2008

#### SECTION 4. FIRST AID MEASURES

Inhalation

If inhaled, remove to tresh air. If symptoms persist, call a obysician if breathing is irregular or stopped, administer

artificial respiration

Skin contact

: Wash off immediately with plenty of water for at least 15 minutesPay particular attention to skin under nails. Take off contaminated clothing and shoes immediatelyGet medical attention immediately if irritation develops and persists

Eye contact

Rinse immediately with plenty of water for at least 15

minutesKeep eye wide open while rinsingGet medical attention

Immediately

Ingestion

Rinse mointhGive several glasses of water to drink followed by milk of magnesia. Never give anything by mouth to an

unconscious personGei medical attention immediately

#### SECTION 5. FIRE-FIGHTING MEASURES

Flash point

Note: does not flash

Lower explosion limit

Note: Not applicable.

Upper explosion limit

Note: Not applicable.

**TDG Flammability Class** 

NONE

Sultable extinguishing

media

Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Special protective

aquipment for fire-fighters Further information in the event of line, wear self-contained breathing apparatus.

Heat liberates oxygen which may intensity combustion. May have oxidizing Properties, fire risk on contact with

combustible material

#### SECTION 6, ACCIDENTAL RELEASE MEASURES

Methods for cleaning up

Soak up with inen absorbent material.

lime

soda ash

Flush with plenty of water.

N.D. - Not Determined

2/8

# Chemetall Oakite

# Chromicoar® T3

Version 12

Revision Date 10/31/2006

Print Date 11/28/2006

Additional advice

: Never return spills in original containers for re-use.

#### SECTION 7. HANDLING AND STORAGE

Handling

Handling

: Unscrew closure slowly. Allow all pressure to escape through

threads before removing closure

Add this product to surface of solution slowly to avoid

spattering

Storage

1

ľ

Requirements for storage areas and containers

Keep containers tightly closed to avoid contamination

Store indoors in a cool, well-ventilated place Keep container out of sun and away from heat.

#### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	ACGIH	OSHA
	TLV (TWÅ)	PEL (TWA)
Nitric acid	5.2 mg/m3 N.D.	.5 mg/m3 N.D.
Chromium (VI) trioxide	0.05 mg/m3 as GN.D.	0:005 mg/m3 as CrN:D
Hydrofluoric Acid	2.3 mg/m3 cellinoN.D	3 ppm N.D.
Trade Secret Registry	N.D.	ND.

Eye protection

Chemical resistant goggles must be worn.

face-shield

Hand protection

impervious gloves

Skin and body protection

complete suit protecting against chemicals

Respiratory protection

Use NIOSH approved respiratory protection.

Hygiene measures

Avoid contact with skin, eyes and clothing

Wear suitable gloves and eye/face protection

Wear suitable protective clothing

Wash hands before breaks and immediately after handling the

product

Provide adequate ventilation

Do not inhale fumes

Keep away from food and drink

N.D. - Not Determined

3/6

# Chemetall Oakite

# Chromicoaf® 73

Version 12

Revision Date 10/31/2006

Print Date 11/28/2006

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

рН

: < 25

Melting point/range

: Note: no data available

Boiling point/range

: Note: no data available

Vapour pressure

: Note: no data available

Bulk densky

: 9.50 lb/gat

Water solubility

: Note: completely soluble

Partition coefficient (n-

octanol/water)

Note: no data available

Percent of Volatile by Weight

excluding water

: Note: no data available

Relative density

: 1.140

Evaporation rate

. 1

Note: Water = 1

#### SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid

: Heat,

Avoid letting the product become dry.

Materials to avoid

bases

reducing agents organic materials combustible material

Avoid prolonged contact of concentrate with glass, ceramic, or

concrete.

Warning! Do not use together with other products; may

release dangerous gases (chilorine).

Hazardous decomposition

products

: nitrogen oxides (NOx)

Chromium trioxide

Gaseous hydrogen fluoride (HF). hydrogen, by reaction with metals

Traces of Fluorides

N.D. - Not Determined

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4/6

# Chromicoat® T3

Version 12

Revision Date 10/31/2006

Print Date 11/28/2006

#### SECTION 11. TOXICOLOGICAL INFORMATION

Toxicny

: Mixture; Not Determined.

Acute oral toxicity

Chromium (VI) trioxide

: LD50, rat

Dose: 80 mg/kg

Sodium tungstate

: LD50, rat

Dose: 1.190 mg/kg

Acute toxicity (other route)

Hydrofluoric Acid

: LD50, rat, intraperitoreal

Dose: 25 mg/kg

#### SECTION 12. ECOLOGICAL INFORMATION

Not Available

#### SECTION 13. DISPOSAL CONSIDERATIONS

Advice on Disposal

Refer to applicable local, state and federal regulations as well

as industry standards.

#### SECTION 14. TRANSPORT INFORMATION

Refer to Bill of Lading.

#### SECTION 16. REGULATORY INFORMATION

TSCA Status

All components of this material are on the US TSCA

inventory.

SARA 313 Components

Nitric acid

CAS-No. 7697-37-2

Chromium (VI) trioxide Hydrofluoric Acid

CAS-No. 1333-82-0

SARA 313 Components

CERCLA Reportable Quantity

N.O.

Nimic acid

CAS-No. 7664-39-3

1.000 Pounds

Chromium (VI) trioxide

10 Pounds

Hydrofluoric Acid

100 Pounds

California Prop. 65

: N.D

N.D. - Not Determined

1

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Chemetall Oakite

Chromicoat® T3

Version 12

1

Revision Date 10/31/2006

Print Date 11/28/2006

NFPA

: 3 0 1 Corrosive Acid

PINIS

3011

WHMIS

: D2A: Very Toxic Material Causing Other Toxic Effects

E: Corrosive Material

#### SECTION 16. OTHER INFORMATION

#### Further information

Oakite Products. Inc. warrants that the products described herein will conform with its published specifications. The products supplied by Oakite and Information related to them are intended for use by buyers having necessary industrial still and knowledge. Buyers should undertake sufficient verification and testing to determine the suitability of the Oakite materials for their own particular purpose. Since buyers conditions of use of products are beyond Oakite's control. Oakite does not warrant any recommendations and information for the use of such products. OAKITE DISCLAIMS ALL OTHER WARRANTIES INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH THE USE OF ITS PRODUCTS.

N.D. - Not Determined

4

6/6

#### <u>ENVIRONMENTAL GEO-TECHNOLOGIES, LLC</u> Generator Waste Profile 28470 Citrin Dr. Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002 Profile # 006 GENERATORINEO PULATIO Name: USEPA ID# Facility Address: SIC/NAICS Code: State Code: Zip Code: City: State: Title: Contact: Phone Fax: (:..) SILL NO NEOSWATON SAME AS ABOVE Company Name: Address: City: State Zip Code; Attention: Phone: Fax: ( WASTE INFORMATION Name of Waste/Common Chemical Name: Muratic acid Process Generating Waste (Please be specific, incomplete information may delay the approval process): Material found during plant clean out. USEPA / STATE WASTE IDENTIFICATION 1. This waste is considered to be: Non Hazardous Liquid Industrial Waste X Hazardous Wäste 3. List ALL Applicable Waste Codes: D002 PHYSICAL CHARACTERISTICS OF WASTE Golor: X: White/Clear ☑ Black/Brown Suspended Solids Layers: □ 0-1 % □ 3-5 % Multi-Layered Bi-Layered Single Phase X 1-3 % □ > 5% Other X ≤ 2 □ 2-4 □ 8 - 10 □ 10 - 12.5 □ ≥12.5 oh: □ 4 - 6 □ 6-8 X None Closed Cup Open Cup Liquid Plash Point: ☐ <73°F ☐ 73 - 100°F ☐ 101 - 140°F ☐ 141 - 200°F ☐ >200°F

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

VOC CONCENTRATION -

CONSTITUENT MAX MIN CONSTITUENT MAX MIN NOTATION OF STATE 
-O- PPM (MUST BE COMPLETED)

EGA - S8840 CIRLIU DUAS - KOMITII				1 .	waste Frome - Fac	
Metals: Indicate if this waste contain  Lab Analysis X Genera	s any of the following the same of the sam	wing metals,. If G		ovide backup _TOTAL	1	
Not Concentration	Not	Concentration	Arsenic (As)	D004 []]	< 5 ppm	_ ppm
Present	Preser	<u>t</u> .	Barium (Ba	D005 🔟	<100 ppm	- ppm
	matic Amine 🎹 iticides 🕕	maga <u>.</u>	Cadmium (C Chromium (	d) D006 II Cr) D007 II	* 1 ppm     * 5 ppm	_ ppm
	lenticides 🎹	ppm	Lead (Pb)	D008 11	5 ppm 5 ppm \$ 5 ppm \$ 0.2 ppm	_ ppm _ ppm
Cvanides Total IIIppm Fur	igicides 🗓	ppm	Mercury (Ho	) D009 - 🗓	< 0.2 ppm	_ ppm
Sulfides Reactive			Selenium (S Silver (Ag)	e) D010 ff D014 ff	< 1 ppm < 5 ppm	_ ppm _ ppm
TCLP Organics D012 - D043 above reg	ulatory limits: P	resent Not P	resent X			Service Servic
IS WASTE ANY OF THE FOLLOWIN			ust Be Checked.			a naivi is <del>a stati</del> stics
☐ Radioactive ☐ Water Reactive				Reactive (other)	☐ DÖT Explosive	<b>S</b> .
☐ NIOSH Human-Positive Carcinoge	ens 🔲 NESHAF	Wastes (Benze	ne, etc.) 🛄 E	liological	X None Apply	
				u Sakanada G	disast and	
	, , , , , , , , , , , , , , , , , , , ,				SE TO SECTION TO THE PARTY OF T	30
SHIPPING INFORMATION				•		
1. Is this a DOT Hazardous Material	(49CFR 172.101	& 173 Subpart	D)? X Yes ∐No			
2. Reportable Quantity (RQ) in pound	ds 100					,
	,,	•	t-to-	ard Class 8	UNNA	4 <b>3</b> 00
3. DOT Shipping Name Waste como	*	,	• · · · · · · · · · · · · · · · · · · ·	.a.u (ass <u>.u</u>	UNIVA	1760
PG_II ERG_154 Hazard	ous Constituents	for "n.o.s." <u>(M</u>	uratic acid)	1		·
4. Method of Shipment:	☐Bulk Tanker	□Vac truck □	]Rail Car ☐ Drums	☐Totes		
5. Number of Units to Ship Now: 2-5		_ 6. Anticipated	Volume / Units per Ye	ar:	or X.0	ne Time
6. Special Handling Requirements in	cluding PPE:		and of the second of the second second	erus ar konta kantan	Alasian salahda garaga).	tagapan)
B.	reaching an east, in Section 1	et a comparison of the compari	And the second of the second o	entre en	The state of the s	king Markey single-service to a
CERTIFICATION STATEME	NT			L da	(1)	•
I hereby represent and warrant that I I	nave personally	examined and a	n familiar with the info	rmation containe	ed and submitted in th	is and all
attached documents. Based on my in	quiry and persor	ral knowledge of	those individuals resp	ionsible for supp	lying or obtaining the	
information, the information contained	therein is true, a	accurate, and co	mplete to the best of h	iv knowledge ar	id belief Furthermon	∍, no
material fact has been omitted as to r in the handling and processing of the	nake misinioimi	ation misleading: lescribed berein	If this boy is checker	ers navisiyor Mali regjest 5	uis epiesemanoriai Overninental Geo	id warranty
Technologies not to correct any incon	sistencies. Anv	corrections Envi	onmental Geo-Techn	ologies makes w	ill be consistent with	he results
of the sample characterization and/or.			(14 m) - 10 m			A CONTRACTOR OF CALL SHAPE
Printed Name:			Title			
			Date	The second	2	
Generator's Signature:		- 1 	pale:			CONTRACTOR .
	and the second s				THE CONTRACTOR OF THE CONTRACT	THE RESERVE AND THE PERSON NAMED IN
CENERATORISICHAINIGE	CHSTODY	zi nezoizi pai N	STRUCTIONS	PLEASE collect	et elonesonte love de la	
GENERATOR'S CHAIN OF the waste described in the above reference.						
the waste described in the above reference obtained using any of the applical	renced GENERAT	ors Waste Pror thods cited in 40	ILE REPORT USING AN A CFR 261-Appendix 1	ppropriate conta Fill in the sam	ainer. A representativ	e sample is e spaces
the waste described in the above refer one obtained using any of the applical provided below. If you have problems	renced GENERAT	ors Waste Pror thods cited in 40	ILE REPORT USING AN A CFR 261-Appendix 1	ppropriate conta Fill in the sam	ainer. A representativ	e sample is e spaces
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the waste described in the above reference obtained using any of the applical provided below. If you have problems representative.  1	renced GENERATION SAMPLING THE COLLECTION TITLE, EMPLOY	ors Waste Proi thods cited in 40 esentative same POINT PER	LEREPORT using an a CFR 261-Appendix 1 ale of your waste, plea	ppropriate conte Fill in the sam se contact your e sample passe by:	ainer. A fepresentativ pling information in th Environmental Geo-T	e sample is e spaces echinologies

# ENVIRONMENTAL GEO-TECHNOLOGIES, LLC 28470 Citrin Dr, Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002

Generator Waste Profile # 色の色素

GENERATORINFORMATION	
Name:	USEPA ID #
Facility Address:	SIC/NAICS Code:State Code:
City:	State Zip Code
Contact: Title:	Phone: Fax:
BILLING INFORMATION	SAME AS ABOVE
Company Name:	
Address:	
City:	State: Zip Code:
Attention:	Phone: ( )Fax: ( )
WASTE INFORMATION	
Name of Waste/Common Chemical Name:	
ELECTROPOLISHING & PLATIN	ia Wask
Process Generating Waste (Please be specific, incomple	
Electroposithing & Patro	×9,
	V
USEPA / STATE WASTE IDENTIFICATION	
•	ous Liquid Industrial Waste 🔣 Hazardous Waste
2. Regulated by TSCA? Tyes No (PCBs, etc.)	
3. List ALL Applicable Waste Codes Doo 2 Doo 7	2 Dos 8 Polo
PHYSICAL CHARACTERISTICS OF WASTE	
Color: Suspended Solids	Layers: Specific Gravity:
☐ White/Clear	☐ Multi-Layered ☐<0.8 ☐ 1.0 – 1.2
☐ Black/Brown ☐ 1-3 % ☐ > 5% ☐ > 5% ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	☐ Bi-Layered ☐ 0.8 – 1.0 ☑ 1.3 – 1.4 ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
pH: □NA 図≤2 □ 2-4 □ 4-6	□ 6-8 □ 8-10 □ 10-12.5 □ ≥12.5
Liquid Floob Boints 7 /720F 7 72 1000F 7 101	-140°F
Edding 1.1921 Louis [7 42 1 7 10 L [7 10] -	140-F 11 141 - 200°F 121 >200°F 11 None 121 Closed Cup 11 Open Cup
VOC CONCENTRATION -	PPM (MUST BE COMPLETED)
TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO	OR GREATER THAN 100% (LIST EACH CONSTITUENT >/= 0.1%)
CONSTITUENT	MAX MIN CONSTITUENT MAX MIN
	15.0% Water 71.23
Chroniz Acib Chronium Sustanie Acip	30 10 %
Phosphonic Acie	<u>30 - 19 %</u>

EGT - 28470 Citrin Drive - Romulus - MI - 48174	· ·	Waste Profi	e - Page 2
Metals: Indicate if this waste contains any of the following metals. If General Lab Analysis Generator Knowledge	rator knowledge-provide backu TCLP  TOTAL		
Not Concentration Present  PCB Dioxins Cyanides Reactive Cyanides Cyanides Cyanides Reactive Cyanides Cyanides Cyanides Reactive Cyanides Reactive Cyanides	Arsenic (As) D004 Barium (Ba) D005 Cadmium (Cd) D006 Chromium (Cr) D007 Lead (Pb) D008 Mercury (Hg) D009 Selenium (Se) D010 Silver (Ag) D011	< 5 ppm	ppm ppm ppm ppm ppm ppm ppm
TCLP Organics D012 - D043 above regulatory limits: Present  Not Preser	nt X		
IS WASTE ANY OF THE FOLLOWING?  Radioactive Water Reactive Oxidizer Shock NIOSH Human-Positive Carcinogens NESHAP Wastes (Benzene, et	Sensitive	ner) DOT E Mone A	
SHIPPING INFORMATION			
1. Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)?	⊠Yes □No		
2. Reportable Quantity (RQ) in pounds		•	
3. DOT Shipping Name Ra, Waste Conside Liquis, Acioic,	Tuongane NOS Hazar	d Class 8	UN)NA 3765
PG ERG Hazardous Constituents for "n.o.s." Chrome	Acio, Suturiz Acio	Phosphonic	Acro
4. Method of Shipment: ☐Bulk Tanker ☐Vac truck ☐Rai	I Car □Drums □Totes		
Number of Units to Ship Now:	lume / Units per Year:	ntes	or 🗌 One Time
CERTIFICATION STATEMENT			
I hereby represent and warrant that I have personally examined and am fan attached documents. Based on my inquiry and personal knowledge of thos information, the information contained herein is true, accurate, and complet material fact has been omitted as to make this information misleading. I un in the handling and processing of the waste material described herein. If the Technologies not to correct any inconsistencies. Any corrections Environment of the sample characterization and/or regulatory requirements.	e individuals responsible for a te to the best of my knowledge derstand that others may rely his box is checked [], I reque	supplying or obtai e and belief. Fun on this represen st Environmental	ning the hermore, no tation and warrar Geo-
Printed Name:	Title	:_4	
Generator's Signature:	Dat	e: <i>\$129</i>	115
GENERATOR'S CHAIN OF CUSTODY RECORD INSTE the waste described in the above referenced GENERATORS WASTE PROFILE R one obtained using any of the applicable sampling methods cited in 40 CFR provided below. If you have problems obtaining a representative sample of representative.	EPORT using an appropriate of 261-Appendix 1. Fill in the s	ontainer. A repre sampling informati	sentative sample on in the spaces
1. 2.		····	
SAMPLING METHOD COLLECTION POINT			İ
3. SAMPLE COLLECTOR'S NAME, TITLE, EMPLOYER		·	
4. Sample No Preservation: Yes ☐ No ☐			
5. CHAIN OF CUSTODY Each person who handles the sample must sig	n below when the sample pa	sses from one to	another.
Relinquished by: (Signature) Date Time	Received by: (Signature)	Date	Time



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

# **Semivolatile Organic Compounds Data Summary Sheet**

For: Mr. Richard Powals

Environmental Geo-Technologies, Inc.

28470 Citrin Drive Romulus, MI 48174 ATS Project: Environmental Geo-Technologies, Inc.

Report Date: 6/25/15

ATS SRF: 0603151

Sample Identification:

Injection - May 2015

Sample Date:

6/2/15

Laboratory Receipt Date:

6/3/15

Preparation Date:

6/5/15, 6/16/15

Analysis Date:

6/11/15, 6/18/15, 6/19/15

QC Batch Number:

QCORG0605151-E

B5F0064

Sample Matrix:

Wastewater

Dilution Factor:

500

Parameter (CAS)	<u>Method</u>	Units	Result	Reporting Limit
Aldrin (309-00-2)	EPA 8270 Mod	mg/L	<0.01	0.01
Benzidine (92-87-5)	EPA 8270 Mod	mg/L	<0.75	0.75
N-Nitrosodimethylamine (62-75-9)	EPA 8270 Mod	mg/L	<0.10	0.10
Tetraethyl Lead (78-00-2)	EPA 8270 Mod	mg/L	<0.05	0.05
Hexachlorodibenzo-p-dioxins	EPA 1613B	ng/L	<0.05	0.050
Octachlorodibenzofuran (39001-02-0)	EPA 1613B	ng/L	0.057	0.050
Octachlorodibenzo-p-dioxin (3268-87-9)	EPA 1613B	ng/L	0.22	0.050
Tetrachlorodibenzo-p-dioxins	EPA 1613B	ng/L	< 0.04	0.040

Surrogates / Labeled Standards:	Method	Percent Recovery	Recovery Limits
2-Fluorobiphenyl	EPA 8270 Mod	80.2	(50 - 150)
Nitrobenzene-d5	EPA 8270 Mod	77.5	(50 - 150)
p-Terphenyl-d14	EPA 8270 Mod	108.2	(50 - 150)
Tetrachloro-m-xylene (TCMX)	EPA 8270 Mod	68.5	(50 - 150)
13C-1,2,3,4,7,8-HxCDD	EPA 1613B	<b>72</b> .7	(32 - 144)
13C-1,2,3,6,7,8-HxCDD	EPA 1613B	74.2	(28 - 130)
13C-1,2,3,7,8,9-HxCDD	EPA 1613B	75.3	(32 - 144)
13C-OCDF	EPA 1613B	81.7	(17 - 157)
13C-OCDD	EPA 1613B	87.0	(17 - 157)
13C-2,3,7,8-TCDD	EPA 1613B	82.6	(25 - 164)

#### Comments:

<sup>\*</sup> Outside standard control limits. USEPA Analysis 1613B performed by Vista Analytical.