BRRTS # 02-68-577004

State of Wisconsin Department of Natural Resources dnr.wi.gov

FID # 268182310

### **Notification For Hazardous Substance Discharge** (Non-Emergency Only)

Form 4400-225 (09/13) Page 1 of 2

3/31/16

3-17-16

Emergency Discharges / Spills should be reported via the 24-Hour Hotline: 1-800-943-0003

Notice: Hazardous substance discharges must be reported immediately according to s. 292.11 Wis. Stats. Non-emergency hazardous substance discharges may be reported by telefaxing or e-mailing a completed report to the Department, or calling or visiting a Department office in person. If you choose to notify the Department by telefax or by email, you should use this form to be sure that all necessary information is included. However, use of this form is not mandatory. Under s. 292.99, Wis. Stats., the penalty for violating the reporting requirements of ch. 292 Wis. Stats., shall be no less than \$10 nor more than \$5000 for each violation. Each day of continued violation is a separate offense. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than program administration. However, information submitted on this form may also be made available to requesters under Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

Confirmatory laboratory data should be included with this form, to assist the DNR in processing this Hazardous Substance Release Notification.

Complete this form. TYPE or PRINT LEGIBLY. NOTIFY appropriate DNR region (see next page) IMMEDIATELY upon discovery of a potential release from (check one):

Underground Petroleum Storage Tank System (additional information may be required for Item 6 below)

Aboveground Petroleum Storage Tank System

Dry Cleaner Facility

X Other - De	escribe: RCRA STORAGE FACILITT	
ATTN DNR:	R & R Program Associate	Date DNR Notified:

#### R & R Program Associate ATTN DNR:

1. Discharge Reported By				
Name Mori Sorenson	Firm Safety-Kleen Systems, Inc.		,	Phone No. (include area code) 515-266-0319
Mailing Address 4704 NE 22nd Street, Des Moines, IA 50313	•	24		il Address nori.sorenson@safety-kleen.com

#### 2. Site Information

Name of site at which discharge occurred. Include local name of site/business, not responsible party name, unless a residence/vacant property. Safety-Kleen Systems, Inc.

Location: Include street address, not PO Box. If no street address, describe as precisely as possible, i.e., 1/4 mile NW of CTHs 60 & 123 on E side of CTH 60. 2200 S. West Ave.

Municipality: (City, Village, Township) Specify municipality in which the site is located, not mailing address/city. Waukesha

County:	Legal Des	cription:								WTM:		
Waukesha	NE 1/4	NE 1/4	Sec	22	Tn	6N	Range	19	(€E∩W	X	Y	

### 3. Responsible Party (RP) and/or RP Representative

Responsible Party Name: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

Safety-Kleen Systems, Inc.

Reported in compliance with s. 292.11(2), Wis. Stats., by a local government exempt from liability under s. 292.11(9)(e), Wis. Stats. For more information see http://dnr.wi.gov/topic/Brownfields/Liability.html.

Contact Person Name (if different)	Phone Number	Email A	ddress
Mailing Address	City	State	ZIP Code

Property owner if Different From RP: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

Contact Person Name (if different)	Phone Number	Email A	ddress
Mailing Address	City	State	ZIP Code

(continued)

State of Wisconsin Department of Natural Resources dnr.wi.gov

(Non-Emergency Only)

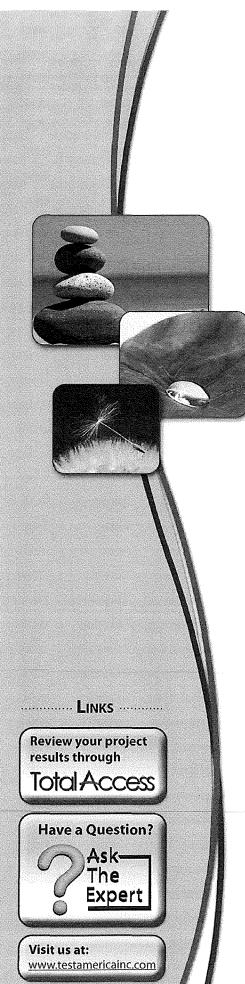
Form 4400-225 (09/13) Page 2 of 2

4. Hazardous Substance Information		
Identify hazardous substance discharged (che	eck all that apply):	
└─ VOC's	Diesel	F PERC (Dry Cleaners)
T PAH's	Fuel Oil	RCRA Hazardous Waste
	Gasoline	Leachate
Metals (specify):	Hydraulic Oil	
☐ Arsenic	🗍 Jet Fuel	Fertilizer
Chromium	Mineral Oil	Pesticide/Herbicide/Insecticide(s)
Cyanide	Waste Oil	
Lead		Other (specify): Unknown
☐ PCB's	🔀 Petroleum-Unknown Type	j Unknown
5. Impacts to the Environment Information		
Enter "K" for known/confirmed or "P" for poter	tial for all that apply.	
Air Contamination	Sanitary Sewer Conta	
Co-Contamination (Petroleum &	Contamination in Righ	t of Way Storm Sewer
Non-Petroleum)	Fire Explosion Threat	Surface Water Contamination
Contamination Within 1 Meter of Bedrock	Free Product	Within 100 ft of Private Well
Contaminated Private Well	Groundwater Contami	nation Within 1000 ft of Public Well
Contaminated Public Well	Off-Site Contamination	1
Contamination in Fractured Bedrock	Other (specify):	
Contamination was discovered as a result of:		
· · · · · · · · · · · · · · · · · · ·		Her-Describe: CONSTRUCTION EXCAUATION
Date Date	Da	ate 3-17-16
Lab results: Lab results will be faxed	upon receipt 🛛 🕅 Lab results	are attached
Additional Comments: Include a brief descript		halt the release and contain or cleanup
hazardous substances that have been dischar		
Excavated soil containerized pending addition	al assessment	
6. Federal Energy Act Requirements (Secti	on 9002(d) of the Solid Waste D	isposal Act (SWDA))
	Source	Cause
from UST's occurring after   Tank		☐ Spill
9/30/2007 please provide Piping the following information:		Overfill
Dispenser		
Submersible	Turbine Pump	Physical or Mechanical Damage
Does not apply.	lem	Installation Problem
Other (specify	<b>/)</b> :	☐ Other (does not fit any of above)
	-	Unknown
Contact information to report non-emerge	ncy releases in DNR's five reg	ions are as follows:
Northeast Region (FAX: 920-662-5197); Att	ention R&R Program Associa	te: DNRRRNER@wisconsin.gov
Brown, Calumet, Door, Fond du Lac (except Marinette, Marquette, Menominee, Oconto, G		n <b>tral Region)</b> , Green Lake, Kewaunee, Manitowoc, , Waupaca, Waushara, Winnebago counties
Northern Region (FAX: 715-623-6773); Atte		
Ashland, Barron, Bayfield, Burnett, Douglas, Sawyer, Taylor, Vilas, Washburn counties	Forest, Florence, Iron, Langlade,	Lincoln, Oneida, Polk, Price, Rusk,

South Central Region (FAX: 608-273-5610); Attention -- R&R Program Associate: DNRRRSCR@wisconsin.gov Columbia, Dane, Dodge, Fond du Lac (City of Waupun only), Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk, Walworth counties

Southeast Region (FAX: 414-263-8550); Attention -- R&R Program Associate: DNRRRSER@wisconsin.gov Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha counties

West Central Region (FAX: 715-839-6076); Attention -- R&R Program Associate: DNRRRWCR@wisconsin.gov Adams, Buffalo, Chippewa, Clark, Crawford, Dunn, Eau Claire, Jackson, Juneau, LaCrosse, Marathon, Monroe, Pepin, Pierce, Portage, St. Croix, Trempealeau, Vernon, Wood counties



# **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

# **ANALYTICAL REPORT**

TestAmerica Laboratories, Inc. TestAmerica Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Tel: (412)963-7058

TestAmerica Job ID: 180-53240-1 TestAmerica Sample Delivery Group: 77WAU Client Project/Site: SAFETY KLEEN, Safety-Kleen Customer

For: Safety-Kleen Systems, Inc 1502 East Villa Street 2nd Floor Elgin, Illinois 60120

Attn: Rick Haskins

Judie Unger

Authorized for release by: 3/29/2016 11:09:45 AM Julie Unger, Project Management Assistant I julie.unger@testamericainc.com

Designee for

Debra Bowen, Project Manager I (412)963-2445 debra.bowen@testamericainc.com

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

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

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TestAmerica Job ID: 180-53240-1 SDG: 77WAU

# **Table of Contents**

Cover Page	1
Table of Contents	2
Case Narrative	3
Certification Summary	4
Definitions	5
Sample Summary	6
Method Summary	7
Client Sample Results	8
Chronicle	10
Action Limits	12
Chain of Custody	13
Receipt Checklists	17

Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer

### Job ID: 180-53240-1

### Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative 180-53240-1

### Receipt

The sample was received on 3/22/2016 9:00 AM; the sample arrived in good condition. The temperature of the cooler at receipt was 2.0° C.

### GC/MS VOA

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for 171717 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for 171717 was outside control limits. Sample matrix interference is suspected.

### GC/MS Semi VOA

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

### Metals

Method 6010B: The %RSD for several analytes in the second continuing calibration verification (CCV2) was greater than 5%, as per 6010B, but the subsequent CCV's throughout the run had passed for these analytes. Samples 1 (180-53240-1), (180-53197-A-3-B) and (180-53197-A-3-B SD ^) are reported as is with this narrative.

### **General Chemistry**

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

TestAmerica Job ID: 180-53240-1

# **Certification Summary**

### Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-16
California	State Program	9	2891	03-31-16 *
Connecticut	State Program	1	PH-0688	09-30-16
Florida	NELAP	4	E871008	06-30-16
Illinois	NELAP	5	200005	06-30-16
Kansas	NELAP	7	E-10350	05-31-16
Louisiana	NELAP	6	04041	06-30-16
New Hampshire	NELAP	1	2030	04-04-16
New Jersey	NELAP	2	PA005	06-30-16
New York	NELAP	2	11182	03-31-16 *
North Carolina (WW/SW)	State Program	4	434	12-31-16
Pennsylvania	NELAP	3	02-00416	04-30-16
South Carolina	State Program	4	89014	04-30-16
Texas	NELAP	6	T104704528-15-2	03-31-16 *
USDA	Federal		P-Soil-01	05-23-16
Utah	NELAP	8	PA001462015-4	05-31-16
Virginia	NELAP	3	460189	09-14-16
West Virginia DEP	State Program	3	142	01-31-17
Wisconsin	State Program	5	998027800	08-31-16

### Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-16
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-16
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16
Wisconsin	State Program	5	999518190	08-31-16

\* Certification renewal pending - certification considered valid.

TestAmerica Job ID: 180-53240-1

SDG: 77WAU

# **Definitions/Glossary**

Client: Safety-Kleen Systems, Inc
Project/Site: SAFETY KLEEN, Safety-Kleen Customer

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# Qualifiers

GC/MS VC	ΟΑ
Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
GC/MS Se	mi VOA
Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
Metals	
Qualifier	Qualifier Description
В	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General C	hemistry
Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

# Glossary

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

# Sample Summary

Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer TestAmerica Job ID: 180-53240-1 SDG: 77WAU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-53240-1	1	Solid	03/21/16 15:00	03/22/16 09:00

# **Method Summary**

### Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer

TestAmerica Job ID: 180-53240-1 SDG: 77WAU

**5 7** 

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PIT
6010B	Metals (ICP)	SW846	TAL PIT
7470A	Mercury (CVAA)	SW846	TAL PIT
1020B	Ignitability, Small Scale Closed-Cup Method	SW846	TAL PIT
2540G	SM 2540G	SM22	TAL PIT
9023	Organic Halides, Extractable (EOX)	SW846	TAL CAN
9071B	HEM and SGT-HEM	SW846	TAL PIT

### Protocol References:

SM22 = SM22

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# **Client Sample Results**

Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer

# Client Sample ID: 1

Date Collected: 03/21/16 15:00 Date Received: 03/22/16 09:00 TestAmerica Job ID: 180-53240-1 SDG: 77WAU

### Lab Sample ID: 180-53240-1 Matrix: Solid

Method: 8260B - Volatile O Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil F
1,1-Dichloroethene	ND		0.20	0.043				03/25/16 10:48	
1,2-Dichloroethane	ND		0.20	0.038	-			03/25/16 10:48	
2-Butanone (MEK)		F2	0.20	0.043				03/25/16 10:48	
Benzene	ND		0.20	0.040	-			03/25/16 10:48	
Carbon tetrachloride	ND		0.20	0.043				03/25/16 10:48	
Chlorobenzene	ND		0.20	0.021	•			03/25/16 10:48	
Chloroform	ND	F1	0.20	0.040	-			03/25/16 10:48	
Tetrachloroethene	ND		0.20	0.033	•			03/25/16 10:48	
Trichloroethene	ND		0.20	0.032	-			03/25/16 10:48	
Vinyl chloride	ND		0.20	0.052				03/25/16 10:48	
1,4-Dichlorobenzene	ND		0.20	0.021	-			03/25/16 10:48	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
Toluene-d8 (Surr)	102		80 - 120				400000000000000000000000000000000000000	03/25/16 10:48	
1,2-Dichloroethane-d4 (Surr)	90		62 - 123					03/25/16 10:48	
4-Bromofluorobenzene (Surr)	100		75 - 120					03/25/16 10:48	
Dibromofluoromethane (Surr)	95		80 - 120					03/25/16 10:48	
Method: 8270C - Semivolat	lile Organic Co	mpounds	(GC/MS) - T	CLP					
Analyte		Qualifier	` ŔL	MDL	Unit	D	Prepared	Analyzed	Dil F
2,4,5-Trichlorophenol	ND		0.050	0.013	mg/L		03/24/16 12:50	03/25/16 16:49	
2,4,6-Trichlorophenol	ND		0.050	0.011	mg/L		03/24/16 12:50	03/25/16 16:49	
2,4-Dinitrotoluene	ND		0.050	0.010	mg/L		03/24/16 12:50	03/25/16 16:49	
2-Methylphenol	ND		0.050	0.014	mg/L		03/24/16 12:50	03/25/16 16:49	
lexachlorobenzene	ND		0.050	0.011	mg/L		03/24/16 12:50	03/25/16 16:49	
lexachlorobutadiene	ND		0.050	0.013	mg/L		03/24/16 12:50	03/25/16 16:49	
lexachloroethane	ND		0.050	0.013	mg/L		03/24/16 12:50	03/25/16 16:49	
Nitrobenzene	ND		0.050	0.013	mg/L		03/24/16 12:50	03/25/16 16:49	
Pentachlorophenol	ND	*	0.25	0.022	mg/L		03/24/16 12:50	03/25/16 16:49	
Pyridine	ND		0.10	0.0083	mg/L		03/24/16 12:50	03/25/16 16:49	
Methylphenol, 3 & 4	ND		0.050	0.027	mg/L		03/24/16 12:50	03/25/16 16:49	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil F
			0 - 11-				03/24/16 12:50	03/25/16 16:49	
2-Fluorobiphenyl	71	•	35 - 115				02/24/46 42.50	03/25/16 16:49	
	71 74		35 - 115 20 - 110				03/24/10 12.50		
2-Fluorophenol		·						03/25/16 16:49	
2-Fluorophenol Nitrobenzene-d5	74		20 - 110				03/24/16 12:50		
2-Fluorophenol Vitrobenzene-d5 Phenol-d5	74 64		20 - 110 39 - 115				03/24/16 12:50 03/24/16 12:50	03/25/16 16:49	
2-Fluorophenol Nitrobenzene-d5 Phenol-d5 Terphenyl-d14	74 64 72		20 - 110 39 - 115 30 - 118				03/24/16 12:50 03/24/16 12:50 03/24/16 12:50	03/25/16 16:49 03/25/16 16:49	
2-Fluorophenol Vitrobenzene-d5 Phenol-d5 Ferphenyl-d14 2,4,6-Tribromophenol	74 64 72 89 77		20 - 110 39 - 115 30 - 118 30 - 143				03/24/16 12:50 03/24/16 12:50 03/24/16 12:50	03/25/16 16:49 03/25/16 16:49 03/25/16 16:49	
P-Fluorophenol Nitrobenzene-d5 Phenol-d5 Ferphenyl-d14 P,4,6-Tribromophenol Method: 6010B - Metals (IC Analyte	74 64 72 89 77 •P) - TCLP Result	Qualifier	20 - 110 39 - 115 30 - 118 30 - 143 19 - 138 RL	MDL		D	03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 Prepared	03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 Analyzed	Dil Fi
P-Fluorophenol Nitrobenzene-d5 Phenol-d5 Ferphenyl-d14 P,4,6-Tribromophenol Method: 6010B - Metals (IC Analyte	74 64 72 89 77 •P) - TCLP <u>Result</u> ND		20 - 110 39 - 115 30 - 118 30 - 143 19 - 138 RL 0.50	0.037	mg/L	<u>D</u>	03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 03/24/16 12:50	03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 Analyzed	Dil F
P-Fluorophenol Nitrobenzene-d5 Phenol-d5 Ferphenyl-d14 P,4,6-Tribromophenol Method: 6010B - Metals (IC Analyte Arsenic	74 64 72 89 77 •P) - TCLP Result		20 - 110 39 - 115 30 - 118 30 - 143 19 - 138 RL		mg/L	<u>D</u>	03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 Prepared	03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 Analyzed 03/25/16 13:16	Dil F
2-Fluorophenol Nitrobenzene-d5 Phenol-d5 Ferphenyl-d14 2,4,6-Tribromophenol Method: 6010B - Metals (IC Analyte Arsenic Barium	74 64 72 89 77 •P) - TCLP <u>Result</u> ND		20 - 110 39 - 115 30 - 118 30 - 143 19 - 138 RL 0.50	0.037	mg/L mg/L	D	03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 <b>Prepared</b> 03/24/16 11:02	03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 13:16	Dil F
2-Fluorophenol Nitrobenzene-d5 Phenol-d5 Ferphenyl-d14 2,4,6-Tribromophenol Method: 6010B - Metals (IC Analyte Arsenic Barium Cadmium	74 64 72 89 77 •P) - TCLP <u>Result</u> ND 0.63		20 - 110 39 - 115 30 - 118 30 - 143 19 - 138 <u>RL</u> 0.50 2.0	0.037 0.0014	mg/L mg/L mg/L	D	03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 <b>Prepared</b> 03/24/16 11:02 03/24/16 11:02	03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 13:16 03/25/16 13:16 03/25/16 13:16	Dil F
2-Fluorophenol Vitrobenzene-d5 Phenol-d5 Ferphenyl-d14 2,4,6-Tribromophenol Method: 6010B - Metals (IC Analyte Arsenic Barium Cadmium Chromium	74 64 72 89 77 •P) - TCLP Result ND 0.63 ND		20 - 110 39 - 115 30 - 118 30 - 143 19 - 138 <b>RL</b> 0.50 2.0 0.50	0.037 0.0014 0.0026	mg/L mg/L mg/L mg/L	<u>D</u>	03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 <b>Prepared</b> 03/24/16 11:02 03/24/16 11:02 03/24/16 11:02	03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 13:16 03/25/16 13:16 03/25/16 13:16	Dil F
2-Fluorobiphenyl 2-Fluorophenol Nitrobenzene-d5 Phenol-d5 Terphenyl-d14 2,4,6-Tribromophenol Method: 6010B - Metals (IC Analyte Arsenic Barium Cadmium Chromium Lead Selenium	74 64 72 89 77 •P) - TCLP Result ND 0.63 ND ND		20 - 110 39 - 115 30 - 118 30 - 143 19 - 138 <b>RL</b> 0.50 2.0 0.50 0.50	0.037 0.0014 0.0026 0.0097	mg/L mg/L mg/L mg/L mg/L	<u>D</u>	03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 03/24/16 12:50 <b>Prepared</b> 03/24/16 11:02 03/24/16 11:02 03/24/16 11:02 03/24/16 11:02	03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 16:49 03/25/16 13:16 03/25/16 13:16 03/25/16 13:16 03/25/16 13:16	Dil F

TestAmerica Pittsburgh

8

# **Client Sample Results**

		onone	Campio	110041							
lient: Safety-Kleen Systems, Inc							TestAmerica	a Job ID: 180-5			
Project/Site: SAFETY KLEEN, Safe	ety-Kleen (	Customer				SDG: 77WAU					
Client Sample ID: 1						l	Lab Sampl	e ID: 180-53	3240-1		
Date Collected: 03/21/16 15:00							•	Matrix	k: Solid		
Date Received: 03/22/16 09:00											
- Method: 7470A - Mercury (CVA	A) - TCLP										
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Mercury	ND		0.00020	0.000052	mg/L		03/24/16 12:26	03/25/16 13:31	1		
General Chemistry											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Ignitability	<140				Degrees F			03/27/16 12:41	1		
Percent Moisture	14.1		0.1	0.1	%			03/23/16 13:44	1		
Client Sample ID: 1						L	_ab Sample	e ID: 180-53	3240-1		
Date Collected: 03/21/16 15:00							-	Matrix	: Solid		
Date Received: 03/22/16 09:00								Percent Solid	ls: 85.9		
General Chemistry											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Halogens, Extractable Organic	ND		230		mg/Kg	— <del>-</del>	03/29/16 08:02	03/29/16 09:06	1		
HEM	470		190		mg/Kg	¢	03/23/16 01:30	03/23/16 01:30	1		
SGT-HEM	73	J	190			₽	03/23/16 01:30	03/23/16 01:30	1		

Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer TestAmerica Job ID: 180-53240-1 SDG: 77WAU

### Client Sample ID: 1 Date Collected: 03/21/16 15:00 Date Received: 03/22/16 09:00

Lab Sample ID: 180-53240-1 Matrix: Solid

Lab Sample ID: 180-53240-1

Matrix: Solid

Percent Solids: 85.9

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
TCLP	Leach	1311			171717	03/24/16 12:24	JPM	TAL PIT
TCLP	Analysis	8260B		1	171780	03/25/16 10:48	PJJ	TAL PIT
TCLP	Leach	1311			171594	03/23/16 12:45	JPM	TAL PIT
TCLP	Prep	3510C			171732	03/24/16 12:50	CBY	TAL PIT
TCLP	Analysis	8270C		1	171771	03/25/16 16:49	VVP	TAL PIT
TCLP	Leach	1311			171594	03/23/16 12:45	JPM	TAL PIT
TCLP	Prep	3010A			171699	03/24/16 11:02	ANA	TAL PIT
TCLP	Analysis	6010B		1	171894	03/25/16 13:16	RJR	TAL PIT
TCLP	Leach	1311			171594	03/23/16 12:45	JPM	TAL PIT
TCLP	Prep	7470A			171719	03/24/16 12:26	EVR	TAL PIT
TCLP	Analysis	7470A		1	171849	03/25/16 13:31	EVR	TAL PIT
Total/NA	Analysis	1020B		1	171882	03/27/16 12:41	JLR	TAL PIT
Total/NA	Analysis	2540G		1	171598	03/23/16 13:44	CLL	TAL PIT

### Client Sample ID: 1 Date Collected: 03/21/16 15:00 Date Received: 03/22/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9023			223599	03/29/16 08:02	LKG	TAL CAN
Total/NA	Analysis	9023		1	223653	03/29/16 09:06	LKG	TAL CAN
Total/NA	Analysis	9071B		1	171710	03/23/16 01:30	MTW	TAL PIT
Total/NA	Prep	9071B			171505	03/23/16 01:30	KLG	TAL PIT

### Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer

#### Analyst References:

Lab: TAL CAN Batch Type: Prep LKG = Lucas Grossman

### Batch Type: Analysis

LKG = Lucas Grossman

#### Lab: TAL PIT

Batch Type: Leach JPM = Jeremy Merriman

### Batch Type: Prep

ANA = Alexis Anderson

CBY = Charles Yushinski

EVR = Emilie Reichenbach

KLG = Kevin Geehring

### Batch Type: Analysis

CLL = Cheryl Loheyde

EVR = Emilie Reichenbach

JLR = Jennifer Rumble

MTW = Michael Wesoloski

PJJ = Patrick Journet

RJR = Ron Rosenbaum

VVP = Vincent Piccolino

TestAmerica Job ID: 180-53240-1 SDG: 77WAU

# 5 0 9

# **Action Limit Summary**

### Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer

### TestAmerica Job ID: 180-53240-1 SDG: 77WAU

### **Client Sample ID: 1**

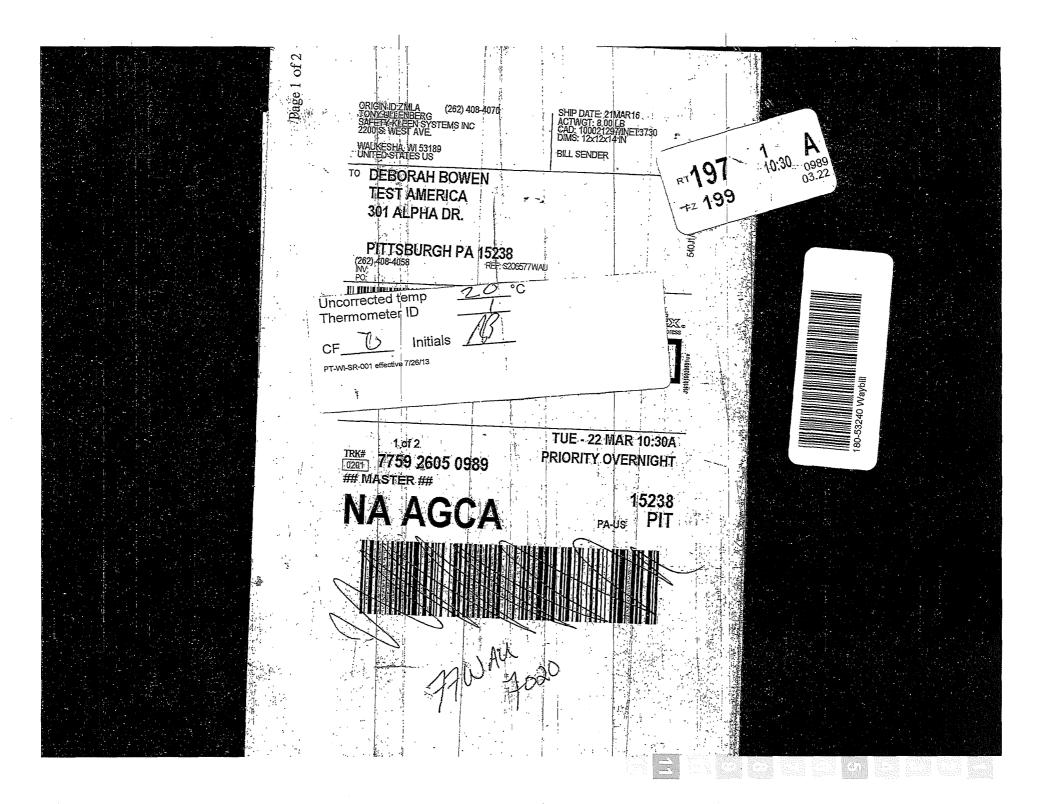
Lab Sample ID: 180-53240-1

		PIT - T	CLP (Sol	id)			
-				High Reg			
Analyte	Result	Qualifier	Unit	Limit	RL	Method	Prep Type
1,1-Dichloroethene	ND		mg/L	0.70000	0.20	8260B	TCLP
1,2-Dichloroethane	ND		mg/L	0.50000	0.20	8260B	TCLP
2-Butanone (MEK)	ND	F2	mg/L	200.00	0.20	8260B	TCLP
Benzene	ND		mg/L	0.50000	0.20	8260B	TCLP
Carbon tetrachloride	ND		mg/L	0.50000	0.20	8260B	TCLP
Chlorobenzene	ND		mg/L	100.00	0.20	8260B	TCLP
Chloroform	ND	F1	mg/L	6.0000	0.20	8260B	TCLP
Tetrachloroethene	ND		mg/L	0.70000	0.20	8260B	TCLP
Trichloroethene	ND		mg/L	0.50000	0.20	8260B	TCLP
Vinyl chloride	ND		mg/L	0.20000	0.20	8260B	TCLP
1,4-Dichlorobenzene	ND		mg/L	7.5000	0.20	8260B	TCLP
2,4,5-Trichlorophenol	ND		mg/L	400.00	0.050	8270C	TCLP
2,4,6-Trichlorophenol	ND		mg/L	2.0000	0.050	8270C	TCLP
2,4-Dinitrotoluene	ND		mg/L	0.13000	0.050	8270C	TCLP
2-Methylphenol	ND		mg/L	200.00	0.050	8270C	TCLP
Hexachlorobenzene	ND		mg/L	0.13000	0.050	8270C	TCLP
Hexachlorobutadiene	ND		mg/L	0.50000	0.050	8270C	TCLP
Hexachloroethane	ND		mg/L	3.0000	0.050	8270C	TCLP
Nitrobenzene	ND		mg/L	2.0000	0.050	8270C	TCLP
Pentachlorophenol	ND	*	mg/L	100.00	0.25	8270C	TCLP
Pyridine	ND		mg/L	5.0000	0.10	8270C	TCLP
Methylphenol, 3 & 4	ND		mg/L	200.00	0.050	8270C	TCLP
Arsenic	ND		mg/L	5.0000	0.50	6010B	TCLP
Barium	0.63	JВ	mg/L	100.00	2.0	6010B	TCLP
Cadmium	ND		mg/L	1.0000	0.50	6010B	TCLP
Chromium	ND		mg/L	5.0000	0.50	6010B	TCLP
Lead	ND		mg/L	5.0000	0.50	6010B	TCLP
Selenium	ŇD		mg/L	1.0000	0.50	6010B	TCLP
Silver	ND		mg/L	5.0000	0.50	6010B	TCLP
Mercury	ND		mg/L	0.20000	0.00020	7470A	TCLP



# SAMPLE CHAIN-OF-CUSTODY RECORD

· · ·		CO	LLECTION I	NFORMATION		
SAMPLE ID #	GENERATOR NAME & SAMPLING LOCATION	DATE	TIME	DESCRIPTION OF SAMPLE	NO. OF CONTAINERS & SIZE	SIGNATURE OF COLLECTOR
1:	SAFATE KLEEN DOOG S WEIT	3-21-2016	3:00	Soil	1-94	MOB K
Was sample	kept chilled until relinquished for shipn	nent to lab?		(Circle One) YES	NO	
lf No, Explai	n:					
	AN	ALYSIS REQUE	ST (PLACE (	CHECKS BY TESTS REC	QUIRED)	
XTCLP V	olatiles (SPN 870807)	Total Metals R	CRA 8 (SPN 87	70806)	X Total Petro	oleum Hydrocarbons (TPH) (SPN 870817)
	emivolatiles - Aq/solids (SPN 870808)	Total Cyanide	for D003 (SPN.8	870814)		nic Halogens (TOX) (SPN 870825)
TCLP S	emivolatiles - Organics (SPN 870809)	Total Sulfide f	or D003 (SPN 8	70815)	Gasoline F	ange Organics (GRO) (SPN 870828)
TCLP R	CRA Metals (SPN 870805)	pH/Corrosivity	for D002 (SPN	870812)	Diesel Rar	ge Organics (DRO) (SPN 870829)
TCLP P	esticides (SPN 870810)	Paint Filter (SF	N 870821)			•
TCLP H	erbicides (SPN 870811)	Specific Gravit	ty/Bulk Density	(SPN 870818)		DO INAUKULA
	nical Oxygen Demand (BOD) (SPN 870826)		g wipes) (SPN 8	370820)		\$2200 S WEIT AUD
Chemic	al Oxygen Demand (COD) (SPN 870827)	BTEX (SPN 87				UKilha WE SSB88
F1-1-1-14/1			ustion (BTU) (SF	-	Branch Fax #	262-549-3173
	gnitability for D001 (SPN 870813) y Martins (Temp at Flash)		arl Fischer (SPN		Sales Specialis	
			Carbon (TOC) (S	•		st Phone # 262-613-0432
	lash (Screen @ <or>140°F)</or>		HEM (SPN 8	170816)	Email Address	S. Riersack 6 Sofitz-Komh. Co
ADDITIONA	L TESTING REQUIREMENTS: FAS					
	· ·			NSFER RECORD		
	RELINQUISHED BY	DATE	TIME	/ RECEIVED	BY	DATE TIME
	0 R'I	321-2016	. 3:00	CAN	PT-	36216 900
				SE ONLY		
				SE UNLI		
TEMPERATÙR	E WHEN RECEIVED $\underline{\alpha} \underline{\psi}_{c}$	AND	An		111	
SAMPLE KIT	OPENED AND CHECKED IN BY	S	XT Y : W	ONIS DZ + P		
C.O.C. SEALS	SIGNED, DATED, AND INTACT ON ALL SAMPL	ES JABSZ YES	NO	IF NO, EXPLAI	N	80-53240 Chain of Custody
					······································	80-332-00
	$\Lambda G R q$					
	<b>f</b>					
						Draft SK Cust COC rev 10_08_07, 7/11/07
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TestAmerica	Pittsburgh
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301 Alpha Drive RIDC Park

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Chain of Custody Record





hone (412) 963-7058 Fax (412) 963-2468	Sampler:			Lab PM:					Ca	rrier Tra	king No	o(s):		COC No:		· 1
lient Information (Sub Contract Lab)	Phone:			Bowen, E E-Mail:	Debra									180-236439.1 Page:		 
ient Contact: hipping/Receiving				debra.bo	wen@te	stameric	ainc.co	m				-		Page 1 of 1		<u> </u>
ompany: estAmerica Laboratories, Inc.							Ana	alysis	Requ	ested				Job #: 180-53240-1		<u>;</u>
ddress:	Due Date Requeste	d:	<u> </u>	<b>*</b>					<u> </u>			Ţ.	à.	Preservation Cod	les:	i i
101 Shuffel Street NW, ,	3/28/2016 TAT Requested (day	vsh		Â										A - HCL B - NaOH	M - Hexane N - None	
ity: Iorth Canton		,.,.						·						C - Zn Acetate	O - AsNaO2	
tate, Zip: DH, 44720				470.1									ic.	D - Nitric Acid E - NaHSO4	P - Na2O4S Q - Na2SO3	; İ
hone:	PO #:			{								- [ i		F - MeOH G - Amchlor	R - Na2S2O3 S - H2SO4	1
30-497-9396(Tel) 330-497-0772(Fax)				<u></u> 2								1	333	11+ICe	T - TSP Dodeca U - Acelone	ahydrate
imail:	w0#:			50 S	i o							·		J - DI Water	V - MCAA W - ph 4-5	
roject Name:	Project #: 18012341			(Vě	0								12.02	L-EDA	Z - other (specif	fy)
AFETY KLEEN, Safety-Kleen Customer	SSOW#:										1 1		N. 18 542, 18	Ga Other:		
····				t Sáj										Б <sup>4</sup>		
			oumpic ,	atrix	Pectornin/S/M 9023/9023_Prep									Special li	7	: 1
		Sample	S=	solid, 20	1902								187		$\mathcal{L}$	
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab) BT=Tis		9020									Special l	nstructions/No	ote:
and the second	· and Alexand		Preservation	Code: X	$X \approx$	2. W. 3. 4		24	. right		tian .	W. E. t.		Linkits Sant Linking	- Gardina The Cart	14 10 1 in 1
(180-53240-1)	3/21/16	15:00 Eastern	s	olid	x								44.4	17		i
		- autororre												ar Ar	<u></u>	
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														2001) 1270) 2270) 2270)		: ]
Possible Hazard Identification	1.1	1	<u> </u>	<u></u>	Sampl	e Dispo	sal (A	fee ma	v be as	sesse	) d if sa	moles		ained longer than	1 month)	
Unconfirmed						Return 1				isposal				rchive For	Months	
Deliverable Requested: I, II, III, IV, Other (specify)						Instruc										r
Empty Kit Relinquished by:		Date:		IT	ime:		+			Me	thod of	Shipme	nt:			
Relinquistied by	Date/Time;		Com			ceived by:									Company	
sejinguished by:	Date/Time:	116	1700 1	pany Ab		ceived by:	Mai	<u>tí</u>		Mind by		3/3	me: 24/16 ime:	9:20	Company TA C	ton
selunguished by:	Date/Time:		Com	pany 🛩	Re	ceived by:						Date/T	me:	-	Company	·
Relinquished by:	Date/Time:		Com	pany	Re	ceived by:	Ì					Date/T	ime:		Company	.
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No				· · · ·	Co	oler Temp		) °C and	Other Re	marks:	:	L		1	<u> </u>	1
A A Maa A Ma A								٠,								

Coler Reveived on       Opened on       Other         FedBx: 1 <sup>a</sup> Grd Dr SFAS Stetson Client Drop Off TestAmerics Courier       Other       Other         TestAmerics Cooler #       Foam Box Client Drop Off TestAmerics Courier       Other         TestAmerics Cooler #       Foam Dox Client Coler Box Other       Other         COLANT: WEDe Blue Ice Dry Ice Water None       Client Cooler Temp.       *C         I. Goder temperature upon receipt       I ase Mutiple Couler Temp.       *C         I. ReUN# 18- (CH - 1.9 *C)       Observed Cooler Temp.       *C	Client TA Pittsburgh	Site Name Safety	Kleen	Cooler unpacked by:	
Receipt After-hours: Drop-off Date/Time				Annanti	
TestAmerica Cooler #       Foam Box Cleff Capter       Box Other         Packing material used: Bubble Wrap Foam PathErs and None       Other       COOLANT: Yest Bubble Dry Ice Water None         1. Cooler temperature upon receipt       See Multiple Cooler Temp C Corrected Cooler Temp C C C Corrected Cooler Temp C C C C C C Corrected Cooler Temp C C C C Corrected Cooler Temp C C C C	FedEx: 1 <sup>st</sup> Grd $\overrightarrow{Fxp}$ UPS FAS Ste		America Courier		
Packing material used:       Bubble Wrap       Form       COOLANT:       COULANT:       COULANT:<	Receipt After-hours: Drop-off Date/Time		Storage Location		
Packing material used: Bubble Wrap Form Perform Perform COOLANT: (************************************			ox Other	······	
1. Cooler temperature upOf receipt			one Other		
IR. GUN# 48       (CF - 1.9 °C)       Observed Cooler Temp°C       Corrected Cooler Temp°C         IR. GUN# 16 (CF - 0.5 °C)       Observed Cooler Temp?C       Corrected Cooler Temp?C      ~?C	COOLANT: Wet De Bhue				
	I. Cooler temperature upon receipt		See Multiple Cooler For	m	
	IR GUN# 48 ( $CF - 1.9^{\circ}C$ ) Observ IP GUN# 36 ( $CF - 1.5^{\circ}C$ ) Observ	red Cooler Temp°C (	orrected Cooler Te	mp°C	
2. Were custody seals on the outside of the cooler(s)?       If Yes Quantity       Yes       No         -Were custody seals on the outside of the cooler(s) signed & dated?       Yes       NA         -Were custody seals on the bottle (s) or bottle kits (LLHg/MeHg)?       Yes       No         Shippers' packing slip attached to the cooler(s)?       No       No         Meet custody papers accompany the sample(s)?       No       No         Were dustody papers accompany the sample(s)?       No       No         Were the custody papers accompany the sample(s)?       No       No         Could all bottle sarrive in good condition (Unbroken)?       No       No         Could all bottle labels be reconciled with the COC?       No       No         O. Sufficient quantity received to perform indicated analyses?       No       No         J. Are these work share samples?       No       No       No         J. Were auble(s) at the corter th upon receipt?       Yes       No       No         J. Were sample(s) at the corter coll upon receipt?       Yes       No       No         J. Were sample(s) at the corter of plupon receipt?       Yes       No       NA         J. Were sample(s)       the coller(s)?       Yes       No       No         J. Were aribubbles >6 mm in any VOA vials?		ved Cooler TempC C	orrected Cooler Te	$mp = \mathbf{O} + $	
-Were custody seals on the outside of the cooler(s) signed & dated?       Yes       NA         -Were custody seals on the bottle kits (LLHg/MeHg)?       Yes       No         Shippers' packing sign attached to the cooler(s)?       No       No         -Were the eustody papers accompany the sample(s)?       No       No         -Were the person(s) who collected the samples clearly identified on the COC?       No       No         -Were curve the person(s) who collected the samples clearly identified on the COC?       No       No         -Were curve to the person(s) who collected the samples clearly identified on the COC?       No       No         -Were curve to bottle(s) used for the test(s) indicated?       No       No       No         0. Sufficient quantity received to perform indicated analyses?       No       No       No         1. Are these work share samples?       Yes       No       No         1/yee, Questions 12-16 have been checked at the originating laboratory.       Yes       No         12. Were sample(s) at the correct pH upon receipt?       Yes       No       No         14. Were air bubbles >6 m in any VOA vials?       Yes       No       No         15. Was a VOA trip blank present?       yes       Yes       No         16. Was a LH go rule Hg tip blank present?       yes       Yes       No<					
3. Shippers' packing slip attached to the cooler(s)?       Image: Shippers' packing slip attached to the cooler(s)?       Ima					
4. Did custody papers accompany the sample(s)? Were the custody papers relinquished & signed in the appropriate place? No					1
5.       Were the outsody papers relinquished & signed in the appropriate place?       INO         5.       Was/were the person(s) who collected the samples clearly identified on the COC?       No         7.       Did all bottle sarrive in good condition (Unbroken)?       No         8.       SAMPLE CONDITION       No         7.       CHAIN OF CUSTODY & SAMPLE DISCREPANCIES       Samples processed by:         7.       CHAIN OF CUSTODY & SAMPLE DISCREPANCIES       Samples processed by:         8.       SAMPLE CONDITION       were received after the recommended holding time had expired.         8.       SAMPLE CONDITION       were received with bubble >6 mm in diameter. (Notify PM)         9.       SAMPLE PRESERVATION       Samples in diameter. (Notify PM)					
5. Was/were the person(s) who collected the samples clearly identified on the COC? Yes To No Did all bottles arrive in good condition (Unbroken)? Could all bottles arrive in the cooler (s)? Could all bottles are in the cooler (s)? Trip Blank Lot #Yes No Contacted PMDatebyvia Verbal Voice Mail Other Concerning					
7. Did all bottles arrive in good condition (Unbroken)?       Image: Solution of the s					
D.       Were correct bottle(s) used for the test(s) indicated?       No         10.       Sufficient quantity received to perform indicated analyses?       No         11.       Are these work share samples?       No         12.       Were sample(s) at the correct pH upon receipt?       Yes No NA pH Strip Lot# <u>HC559158</u> 13.       Were vOAs on the COC?       Yes No         14.       Were air bubbles >6 mm in any VOA vials?       Yes No         15.       Was a LL Hg or Me Hg trip blank present?       Yes No         16.       Was a LL Hg or Me Hg trip blank present?       Yes No         20.       Ontacted PM       Date       by         21.       CHAIN OF CUSTODY & SAMPLE DISCREPANCIES       Samples processed by:         22.       Samples       Samples processed by:         23.       Were received after the recommended holding time had expired.         ample(s)					ľ
0.       Sufficient quantity received to perform indicated analyses?       Os No         1.       Are these work share samples?       Os No         If yes, Questions 12-16 have been checked at the originating laboratory.       Yes No NA pH Strip Lot# <u>HC559158</u> 12.       Were sample(s) at the correct pH upon receipt?       Yes No NA pH Strip Lot# <u>HC559158</u> 13.       Were VOAs on the COC?       Yes No         14.       Were air bubbles >6 mm in any VOA vials?       Yes No         15.       Was a LL Hg or Me Hg trip blank present?       Yes No         16.       Was a LL Hg or Me Hg trip blank present?       Yes No         20.       Date       by					1
1. Are these work share samples?       Image: Second start in the					
If yes, Questions 12-16 have been checked at the originating laboratory.         12. Were sample(s) at the correct pH upon receipt?       Yes No NA pH Strip Lot# <u>HC559158</u> 13. Were VOAs on the COC?       Yes No         14. Were air bubbles >6 mm in any VOA vials?       Yes No         15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #Yes No       Yes No         16. Was a LL Hg or Me Hg trip blank present?      Yes No         20. Ontacted PMDate       byvia Verbal Voice Mail Other         20. Ontacted PM					
13. Were VOAs on the COC?       Yes No         14. Were air bubbles >6 mm in any VOA vials?       Yes No         15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #Yes No       Yes No         16. Was a LL Hg or Me Hg trip blank present?       Yes No         Contacted PM       Date       by       via Verbal Voice Mail Other         Concerning       To Pate       by       via Verbal Voice Mail Other         Concerning       Samples processed by:       Samples processed by:         7. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES       Samples processed by:         8. SAMPLE CONDITION       were received after the recommended holding time had expired.         ample(s)       were received after the recommended holding time had expired.         ample(s)       were received with bubble >6 mm in diameter. (Notify PM)         9. SAMPLE PRESERVATION       SAMPLE PRESERVATION		ked at the originating laborator			
14. Were air bubbles >6 mm in any VOA vials?       Yes No NA         15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #Yes No       Yes No         16. Was a LL Hg or Me Hg trip blank present?       Yes No         Contacted PM       Date       by       via Verbal Voice Mail Other         Concerning       Samples processed by:       Samples processed by:         7. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES       Samples processed by:         8. SAMPLE CONDITION       were received after the recommended holding time had expired.         ample(s)       were received after the recommended holding time had expired.         ample(s)       were received with bubble >6 mm in diameter. (Notify PM)         9. SAMPLE PRESERVATION       SAMPLE PRESERVATION	12. Were sample(s) at the correct pH upon	n receipt?	Yes	No NA pH Strip Lot# HC55915	8
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #Yes No         16. Was a LL Hg or Me Hg trip blank present?Yes No         Ontacted PMDatebyvia Verbal Voice Mail Other         Concerning         7. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES         Samples processed by:			Yes	No	
16. Was a LL Hg or Me Hg trip blank present?       Yes No         Contacted PM       Date       by       via Verbal Voice Mail Other         Concerning       7. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES       Samples processed by:         7. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES       Samples processed by:         8. SAMPLE CONDITION       ample(s)       were received after the recommended holding time had expired.         ample(s)       were received with bubble >6 mm in diameter. (Notify PM)         9. SAMPLE PRESERVATION       SAMPLE PRESERVATION					
Concerning	15. Was a VOA trip blank present in the c	cooler(s)? Trip Blank Lot #	Yes	No	ľ
Concerning	16. Was a LL Hg or Me Hg trip blank pre	sent?	Yes	No	
7. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES       Samples processed by:		by	via verbai vo	lice Mail Other	
8. SAMPLE CONDITION         ample(s)			<u> </u>		
8. SAMPLE CONDITION         ample(s)	7. CHAIN OF CUSTODY & SAMPLE	DISCREPANCIES		Samples processed by:	
8. SAMPLE CONDITION         ample(s)			. L		
8. SAMPLE CONDITION         ample(s)				······	-
8. SAMPLE CONDITION         ample(s)	<u> </u>				_
8. SAMPLE CONDITION         ample(s)		· · · · · · · · · · · · · · · · · · ·			_
8. SAMPLE CONDITION         ample(s)					
ample(s)		•			
ample(s)		·····		•	
ample(s)					
ample(s)					
ample(s)	8 SAMPLE CONDITION				
ample(s)	•	were received after the re	commended holdin	g time had expired.	
9. SAMPLE PRESERVATION	ample(s)		were received i	n a broken container.	
9. SAMPLE PRESERVATION	ample(s)	· were received wit	h bubble >6 mm in	diameter. (Notify PM)	
		, ,, ,, ,, , , , ,			
ample(s)were further preserved in the laboratory. ime preserved:Preservative(s) added/Lot number(s):	9. SAMPLE PRESERVATION				1

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Ref: SOP NC-SC-0005, Sample Receiving L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\W1-NC-099X-011816 Cooler Receipt Form.doc djl

# Login Sample Receipt Checklist

Client: Safety-Kleen Systems, Inc

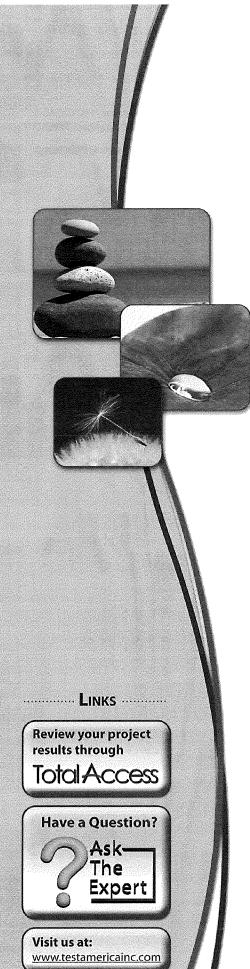
Job Number: 180-53240-1 SDG Number: 77WAU

> 8 9 12

List Source: TestAmerica Pittsburgh

### Login Number: 53240 List Number: 1 Creator: Neri, Tom

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# <u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TESTING

# **ANALYTICAL REPORT**

TestAmerica Laboratories, Inc. TestAmerica Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Tel: (412)963-7058

TestAmerica Job ID: 180-53237-1 TestAmerica Sample Delivery Group: 77WAU Client Project/Site: SAFETY KLEEN, Safety-Kleen Customer

For: Safety-Kleen Systems, Inc 1502 East Villa Street 2nd Floor Elgin, Illinois 60120

Attn: Rick Haskins

fidis Urger

Authorized for release by: 3/29/2016 10:12:32 AM Julie Unger, Project Management Assistant I julie.unger@testamericainc.com

Designee for

Debra Bowen, Project Manager I (412)963-2445 debra.bowen@testamericainc.com

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

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

2

# **Table of Contents**

Cover Page	1
Table of Contents	2
Case Narrative	3
Certification Summary	4
Definitions	6
Sample Summary	7
Method Summary	8
Client Sample Results	9
Chronicle	11
Action Limits	13
Chain of Custody	14
Receipt Checklists	18

### Job ID: 180-53237-1

### Laboratory: TestAmerica Pittsburgh

### Narrative

Job Narrative 180-53237-1

### Receipt

The sample was received on 3/22/2016 9:00 AM; the sample arrived in good condition. The temperature of the cooler at receipt was 4.5° C.

### GC/MS VOA

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

### GC/MS Semi VOA

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

### Metals

Method 6010B: The %RSD for several analytes in the second continuing calibration verification (CCV2) was greater than 5%, as per 6010B, but the subsequent CCV's throughout the run had passed for these analytes. Samples 2 (180-53237-1) and (180-53237-A-1-C SD ^) are reported as is with this narrative.

### **General Chemistry**

Method 1664B: The reference method requires samples to be preserved to a pH of 2 or less or analyzed within 4 hours of the collection time. The following sample was received at the laboratory with a pH of greater than 2. The sample pH was adjusted correctly to a pH of <2.0 prior to the analysis: 2 (180-53237-1).

Method 1664B: Elevated reporting limits are provided for the following sample due to insufficient sample provided preparation/analysis: 2 (180-53237-1).

Method 9020B: The following samples was analyzed at a dilution due to particulates and strong odor: 2 (180-53237-1). Due to the matrix of the sample, analysis could not be performed at a lower dilution. Elevated reporting limits (RLs) are provided.

TestAmerica Job ID: 180-53237-1

SDG: 77WAU

# **Certification Summary**

Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer

### Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date	
Arkansas DEQ	State Program	6	88-0690	06-27-16	
California	State Program	9	2891	03-31-16 *	
Connecticut	State Program	1	PH-0688	09-30-16	
Florida	NELAP	4	E871008	06-30-16	
Illinois	NELAP	5	200005	06-30-16	
Kansas	NELAP	7	E-10350	05-31-16	
Louisiana	NELAP	6	04041	06-30-16	
New Hampshire	NELAP	1	2030	04-04-16	
New Jersey	NELAP	2	PA005	06-30-16	
New York	NELAP	2	11182	03-31-16 *	
North Carolina (WW/SW)	State Program	4	434	12-31-16	
Pennsylvania	NELAP	3	02-00416	04-30-16	
South Carolina	State Program	4	89014	04-30-16	
Texas	NELAP	6	T104704528-15-2	03-31-16 *	
USDA	Federal		P-Soil-01	05-23-16	
Utah	NELAP	8	PA001462015-4	05-31-16	
Virginia	NELAP	3	460189	09-14-16	
West Virginia DEP	State Program	3	142	01-31-17	
Wisconsin	State Program	5	998027800	08-31-16	

### Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	06-30-16
A2LA	ISO/IEC 17025		0453.07	03-31-16 *
Alaska (UST)	State Program	10	UST-087	07-24-16
Arizona	State Program	9	AZ0473	05-05-17
Arkansas DEQ	State Program	6	88-0737	04-25-16 *
California	State Program	9	2938	10-31-16
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200010	12-09-16
Iowa	State Program	7	131	04-01-16 *
Kansas	NELAP	7	E-10229	05-31-16
Kentucky (UST)	State Program	4	19	06-30-16
Kentucky (WW)	State Program	4	90038	12-31-16
Louisiana	NELAP	6	30613	06-30-16
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-17
Massachusetts	State Program	1	M-TN032	06-30-16
Minnesota	NELAP	5	047-999-345	12-31-16
Mississippi	State Program	4	N/A	06-30-16
Montana (UST)	State Program		NA	02-24-20
Nevada	State Program	9	TN00032	07-31-16
New Hampshire	NELAP	1	2963	10-09-16
New Jersey	NELAP	2	TN965	06-30-16
New York	NELAP	2	11342	03-31-16 *
North Carolina (WW/SW)	State Program	4	387	12-31-16

\* Certification renewal pending - certification considered valid.

TestAmerica Pittsburgh

# **Certification Summary**

### Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer

### TestAmerica Job ID: 180-53237-1 SDG: 77WAU

4

# Laboratory: TestAmerica Nashville (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
North Dakota	State Program	8	R-146	06-30-16
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-16
Oregon	NELAP	10	TN200001	04-27-16 *
Pennsylvania	NELAP	3	68-00585	06-30-16
Rhode Island	State Program	1	LAO00268	12-30-15 *
South Carolina	State Program	4	84009 (001)	02-28-16 *
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-17
Texas	NELAP	6	T104704077	08-31-16
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-16
Virginia	NELAP	3	460152	06-14-16
Washington	State Program	10	C789	07-19-16
West Virginia DEP	State Program	3	219	02-28-17
Wisconsin	State Program	5	998020430	08-31-16
Wyoming (UST)	A2LA	8	453.07	03-31-16 *

\* Certification renewal pending - certification considered valid.

# **Definitions/Glossary**

Client: Safety-Kleen Systems, Inc	
Project/Site: SAFETY KLEEN, Safety-Kleen Customer	

# Qualifiers

GC/MS Se	
Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
Metals	
Qualifier	Qualifier Description
В	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General C	hemistry
Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
В	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

# Glossary

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

5 ::

# Sample Summary

Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer

TestAmerica Job ID: 180-53237-1 SDG: 77WAU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-53237-1	2	Water	03/18/16 15:00	03/22/16 09:00

# Method Summary

### Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer

TestAmerica Job ID: 180-53237-1 SDG: 77WAU

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PIT
3010B	Metals (ICP)	SW846	TAL PIT
7470A	Mercury (CVAA)	SW846	TAL PIT
1010A	Ignitability, Pensky-Martens Closed Cup Method	SW846	TAL PIT
1664B	HEM and SGT-HEM	1664B	TAL PIT
9020B	Organic Halides, Total (TOX)	SW846	TAL NSH
9040C	pH	SW846	TAL PIT
D5057-90	Specific Gravity and Bulk Density (Screening)	ASTM	TAL PIT

### **Protocol References:**

1664B = 1664B

ASTM = ASTM International

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177 TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

Page 8 of 19

# **Client Sample Results**

Client: Safety-Kleen Systems, Inc	
Project/Site: SAFETY KLEEN, Safety-Kleen Customer	

### **Client Sample ID: 2** Date Collected: 03/18/16 15:00 Data Pacaivad: 03/22/16 00:00

Selenium

Silver

TestAmerica Job ID: 180-53237-1 SDG: 77WAU Lab Sample ID: 180-53237-1

Matrix: Water

Method: 8260B - Volatile O Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1-Dichloroethene	ND		0.20	0.043	mg/L			03/24/16 12:16	
1,2-Dichloroethane	ND		0.20	0.038	mg/L			03/24/16 12:16	
2-Butanone (MEK)	ND		0.20	0.043	mg/L			03/24/16 12:16	
Benzene	ND		0.20	0.040	mg/L			03/24/16 12:16	
Carbon tetrachloride	ND		0.20	0.043	mg/L			03/24/16 12:16	
Chlorobenzene	ND		0.20	0.021	mg/L			03/24/16 12:16	
Chloroform	ND		0.20	0.040	mg/L			03/24/16 12:16	
Tetrachloroethene	ND		0.20	0.033	mg/L			03/24/16 12:16	
Trichloroethene	ND		0.20	0.032	mg/L			03/24/16 12:16	
Vinyl chloride	ND		0.20	0.052	mg/L			03/24/16 12:16	
1,4-Dichlorobenzene	ND		0.20	0.021	mg/L			03/24/16 12:16	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
Toluene-d8 (Surr)	100	<u></u>	80 - 120					03/24/16 12:16	-
1,2-Dichloroethane-d4 (Surr)	91		62 - 123					03/24/16 12:16	
4-Bromofluorobenzene (Surr)	94		75 - 120					03/24/16 12:16	
Dibromofluoromethane (Surr)	91		80 - 120					03/24/16 12:16	
Method: 8270C - Semivolat	tile Organic Co	mpounds	(GC/MS) - T(	CLP					
Analyte		Qualifier	ŔL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
2,4,5-Trichlorophenol	ND		0.050	0.013	mg/L		03/24/16 12:50	03/25/16 15:40	
2,4,6-Trichlorophenol	ND		0.050	0.011	mg/L		03/24/16 12:50	03/25/16 15:40	
2,4-Dinitrotoluene	ND		0.050	0.010	mg/L		03/24/16 12:50	03/25/16 15:40	
2-Methylphenol	ND		0.050	0.014	mg/L		03/24/16 12:50	03/25/16 15:40	
Hexachlorobenzene	ND		0.050	0.011	mg/L		03/24/16 12:50	03/25/16 15:40	
Hexachlorobutadiene	ND		0.050	0.013	mg/L		03/24/16 12:50	03/25/16 15:40	
Hexachloroethane	ND		0.050	0.013	mg/L		03/24/16 12:50	03/25/16 15:40	
Nitrobenzene	ND		0.050	0.013	mg/L		03/24/16 12:50	03/25/16 15:40	
Pentachlorophenol	ND	*	0.25	0.022	mg/L		03/24/16 12:50	03/25/16 15:40	
Pyridine	ND		0.10	0.0083	mg/L		03/24/16 12:50	03/25/16 15:40	
Methylphenol, 3 & 4	ND		0.050	0.027	mg/L		03/24/16 12:50	03/25/16 15:40	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
2-Fluorobiphenyl			35-115				03/24/16 12:50	03/25/16 15:40	
2-Fluorophenol	72		20 - 110				03/24/16 12:50	03/25/16 15:40	
Nitrobenzene-d5	64		39 - 115				03/24/16 12:50	03/25/16 15:40	
Phenol-d5	72		30 - 118				03/24/16 12:50	03/25/16 15:40	
Terphenyl-d14	91		30 - 143				03/24/16 12:50	03/25/16 15:40	
2,4,6-Tribromophenol	79		19 - 138				03/24/16 12:50	03/25/16 15:40	
Method: 6010B - Metals (IC	P) - TCI P								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Arsenic	ND		0.10	0.037			-	03/25/16 12:23	
Barium	0.065	JB	2.0	0.0014				03/25/16 12:23	
Cadmium	ND	—	0.050	0.0026	-			03/25/16 12:23	
Chromium	ND		0.050	0.0097				03/25/16 12:23	
Lead	ND		0.10	0.021	-			03/25/16 12:23	
Palanium	0.024	1.0	0.10	0.025				03/25/16 12:23	

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03/24/16 11:02 03/25/16 12:23

03/24/16 11:02 03/25/16 12:23

0.10

0.050

0.034 JB

ND

0.025 mg/L

0.0069 mg/L

1

1

# **Client Sample Results**

Client: Safety-Kleen Systems,	Inc
Project/Site: SAFETY KLEEN,	Safety-Kleen Customer

# Client Sample ID: 2

Date Collected: 03/18/16 15:00 Date Received: 03/22/16 09:00

# TestAmerica Job ID: 180-53237-1 SDG: 77WAU

Method: 7470A - Mercury (C	VAA) - TCLP								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020	0.00052	mg/L		03/24/16 12:36	03/25/16 13:00	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	> 200		1.00	1.00	Degrees F			03/28/16 09:30	1
HEM (Oil & Grease)	280	В	100	25	mg/L		03/28/16 09:00	03/28/16 09:00	1
TPH	68	J	100	15	mg/L		03/28/16 09:00	03/28/16 09:00	1
Halogens, Total Organic	ND		0.60	0.20	mg/L			03/25/16 08:42	20
TOX Result 1	ND		0.60	0.20	mg/L			03/25/16 08:42	20
TOX Result 2	ND		0.60	0.20	mg/L			03/25/16 08:42	20
рH	7.50	HF	0.100	0.100	SU			03/25/16 15:22	1
Specific Gravity	1.0		0.010	0.010	No Unit			03/25/16 13:27	1

TestAmerica Pittsburgh

Lab Sample ID: 180-53237-1 Matrix: Water

Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer TestAmerica Job ID: 180-53237-1 SDG: 77WAU

### Client Sample ID: 2 Date Collected: 03/18/16 15:00 Date Received: 03/22/16 09:00

Lab Sample ID: 180-53237-1 Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
TCLP	Leach	1311			171589	03/23/16 11:52	JPM	TAL PIT
TCLP	Analysis	8260B		1	171628	03/24/16 12:16	KLG	TAL PIT
TCLP	Leach	1311			171588	03/23/16 11:50	JPM	TAL PIT
TCLP	Prep	3510C			171732	03/24/16 12:50	CBY	TAL PIT
TCLP	Analysis	8270C		1	171771	03/25/16 15:40	VVP	TAL PIT
TCLP	Leach	1311			171588	03/23/16 11:50	JPM	TAL PIT
TCLP	Prep	3010A			171698	03/24/16 11:02	ANA	TAL PIT
TCLP	Analysis	6010B		1	171894	03/25/16 12:23	RJR	TAL PIT
TCLP	Leach	1311			171588	03/23/16 11:50	JPM	TAL PIT
TCLP	Prep	7470A			171721	03/24/16 12:36	EVR	TAL PIT
TCLP	Analysis	7470A		1	171849	03/25/16 13:00	EVR	TAL PIT
Total/NA	Analysis	1010A		1	171983	03/28/16 09:30	JWS	TAL PIT
Total/NA	Analysis	1664B		1	171978	03/28/16 09:00	MTW	TAL PIT
Total/NA	Prep	1664B			171949	03/28/16 09:00	MTW	TAL PIT
Total/NA	Analysis	9020B		20	326556	03/25/16 08:42	RN	TAL NSH
Total/NA	Analysis	9040C		1	171812	03/25/16 15:22	JAS	TAL PIT
Total/NA	Analysis	D5057-90		1	171847	03/25/16 13:27	CAK	TAL PIT

#### Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177 TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058 Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer

Analyst References:

Lab: TAL NSH Batch Type: Analysis RN = Ryan Nowak

Niv – Nyan Nov

# Lab: TAL PIT

Batch Type: Leach JPM = Jeremy Merriman

### Batch Type: Prep

ANA = Alexis Anderson

CBY = Charles Yushinski

EVR = Emilie Reichenbach

MTW = Michael Wesoloski

Batch Type: Analysis

CAK = Chuck Kieda

EVR = Emilie Reichenbach

JAS = Joshua Schmidt

JWS = Jim Swanson

KLG = Kathy Gordon

MTW = Michael Wesoloski

RJR = Ron Rosenbaum

VVP = Vincent Piccolino

TestAmerica Job ID: 180-53237-1 SDG: 77WAU

# **Action Limit Summary**

### Client: Safety-Kleen Systems, Inc Project/Site: SAFETY KLEEN, Safety-Kleen Customer

### **Client Sample ID: 2**

TestAmerica Job ID: 180-53237-1 SDG: 77WAU

		•								
		PIT - TC	LP (Aqu	ieous)						
				High Reg	High Reg					
Analyte	Result	Qualifier	Unit	Limit	RL	Method	Prep Type			
1,1-Dichloroethene	ND		mg/L	0.70000	0.20	8260B	TCLP			
1,2-Dichloroethane	ND		mg/L	0.50000	0.20	8260B	TCLP			
2-Butanone (MEK)	ND		mg/L	200.00	0.20	8260B	TCLP			
Benzene	ND		mg/L	0.50000	0.20	8260B	TCLP			
Carbon tetrachloride	ND		mg/L	0.50000	0.20	8260B	TCLP			
Chlorobenzene	ND		mg/L	100.00	0.20	8260B	TCLP			
Chloroform	ND		mg/L	6.0000	0.20	8260B	TCLP			
Tetrachloroethene	ND		mg/L	0.70000	0.20	8260B	TCLP			
Trichloroethene	ND		mg/L	0.50000	0.20	8260B	TCLP			
Vinyl chloride	ND		mg/L	0.20000	0.20	8260B	TCLP			
1,4-Dichlorobenzene	ND		mg/L	7.5000	0.20	8260B	TCLP			
2,4,5-Trichlorophenol	ND		mg/L	400.00	0.050	8270C	TCLP			
2,4,6-Trichlorophenol	ND		mg/L	2.0000	0.050	8270C	TCLP			
2,4-Dinitrotoluene	ND		mg/L	0.13000	0.050	8270C	TCLP			
2-Methylphenol	ND		mg/L	200.00	0.050	8270C	TCLP			
Hexachlorobenzene	ND		mg/L	0.13000	0.050	8270C	TCLP			
Hexachlorobutadiene	ND		mg/L	0.50000	0.050	8270C	TCLP			
Hexachloroethane	ND		mg/L	3.0000	0.050	8270C	TCLP			
Nitrobenzene	ND		mg/L	2.0000	0.050	8270C	TCLP			
Pentachlorophenol	ND	*	mg/L	100.00	0.25	8270C	TCLP			
Pyridine	ND		mg/L	5.0000	0.10	8270C	TCLP			
Methylphenol, 3 & 4	ND		mg/L	200.00	0.050	8270C	TCLP			
Arsenic	ND		mg/L	5.0000	0.10	6010B	TCLP			
Barium	0.065	JB	mg/L	100.00	2.0	6010B	TCLP			
Cadmium	ND		mg/L	1.0000	0.050	6010B	TCLP			
Chromium	ND		mg/L	5.0000	0.050	6010B	TCLP			
Lead	ND		mg/L	5.0000	0.10	6010B	TCLP			
Selenium	0.034	JB	mg/L	1.0000	0.10	6010B	TCLP			
Silver	ND		mg/L	5.0000	0.050	6010B	TCLP			
Mercury	ND		mg/L	0.20000	0.0020	7470A	TCLP			
-										

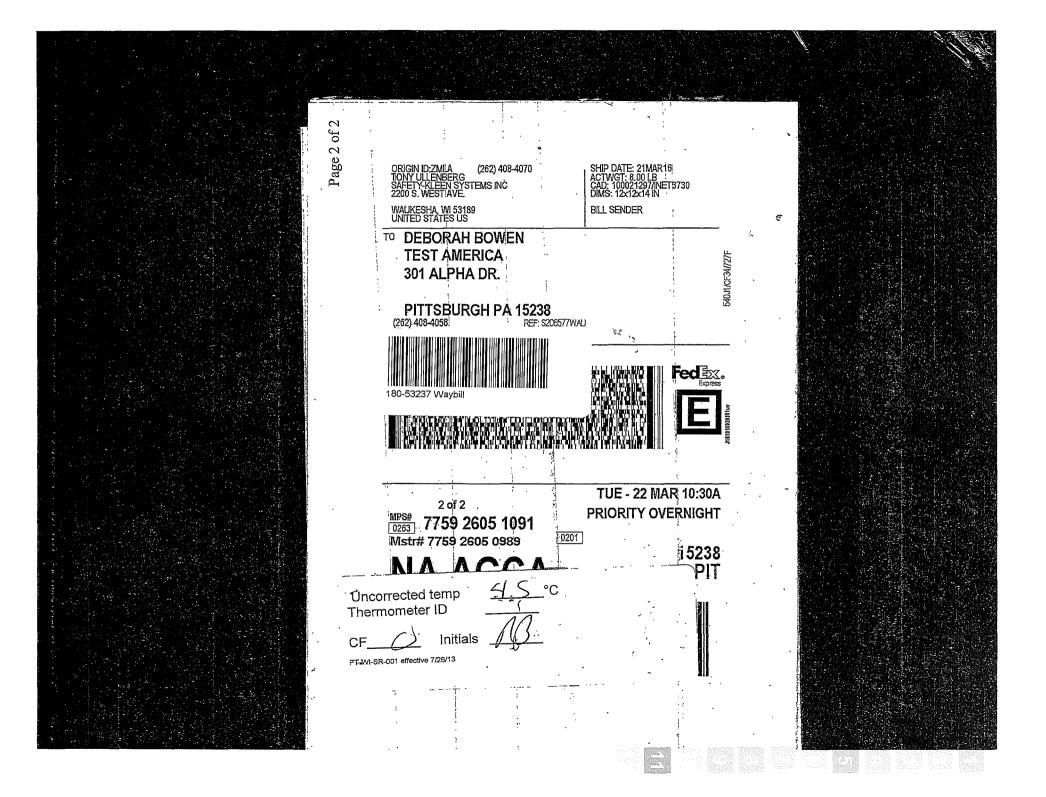
Lab Sample ID: 180-53237-1 

10



# SAMPLE CHAIN-OF-CUSTODY RECORD

	COL	LECTION I	NFORMATION	· · · · · · · · · · · · · · · · · · ·					
SAMPLE ID # GENERATOR NAME & SAMPLING LOCATION	DATE	TIME	DESCRIPTION OF SAMPLE	NO. OF CONTAINERS & SIZE	SIGNATU	RE OF COLLECTOR			
2 SAFPTY -KIND 2200 S WET AUD WANKS WIT 531PP	3-18-2016	3200	BARTA GROUND WATER	107	MAP	mand			
Was sample kep: chilled until relinquished for shipn	nent to lab?	•	(Circle One) YES	NÓ					
f No, Explain:									
	ALYSIS REQUES	T (PLACE C	HECKS BY TESTS REC	2UIRED)					
TCLP Volatiles (SPN 870807) TCLP Semivolatiles - Aq/solids (SPN 870808) TCLP Semivolatiles - Organics (SPN 870809) TCLP RCRA Metals (SPN 870805.) TCLP Pesticides (SPN 870810)	c Halogens (TOX) nge Organics (GRC	Hydrocarbons (TPH) (SPN 870817) alogens (TOX) (SPN 870825) Organics (GRO) (SPN 870828) ganics (DRO) (SPN 870829)							
TCLP Herbicides (SPN 870811)       X Specific Gravity/Bulk Density (SPN 870818)       Branch # 7020 WAVKJL4         Biochemical Oxygen Demand (BOD) (SPN 870826)       PCBs (including wipes) (SPN 870820)       Branch Address J200 S west Au         Chemical Oxygen Demand (COD) (SPN 870827)       BTEX (SPN 870819)       WAUK #ALA WT 53/FR         Heat of Combustion (BTU) (SPN 870822)       Branch Fax # 2/2 - 549-3/73									
Flashpoint/Ignitability for D001 (SPN 870813) Pensky Martins (Temp at Flash)	% Water by Kar Total Organic C		-	Sales Specialist Sales Specialist	pecialist Name Strue Birreach				
SetaFlash (Screen @ <or>140°F)</or>	Email Address S-B. 2536CKA Safet King								
ADDITIONAL TESTING REQUIREMENTS: F/25									
			ISFER RECORD						
RELINQUISHED	DATE	TIME	RECEIVED	BY	DATE	TIME .			
M Bull	3-21-2016	3:00	Florend	lec_	3/22/16	09.00			
	· · · · · · · · · · · · · · · · · · ·	<u> </u>							
TEMPERATURE WHEN RECEIVED 45°C SAMPLE KIT OPENED AND CHECKED IN BY AT 07.00 ON 3727 1°C C.O.C. SEALS SIGNED, DATED, AND INTACT ON ALL SAMPLES JARS? YES NO IF NO, EXPLAIN: 180-53237 Chain of Custody									
		_			Draft SK Cust COC	rev 10 08 07, 7/11/07			



THE LEADER IN ENVIRONMENTAL TESTING Nashville, TN	COOLER RECEIPT FORM	180-53237 Chain of Custody
Cooler Received/Opened On_ <u>3/24/20</u>	16 @ 1000	
Time Samples Removed From Coole	r Time Samples Placed In Storage	(2 Hour Window)
1. Tracking #	(last 4 digits, FedEx) Courier: _FedEx	x_
IR Gun ID <u>96210146</u> pH Strip	Lot_HC568401 Chlorine Strip Lot_112514D	
2. Temperature of rep. sample or ter	mp blank when opened: $3, 1$ Degrees Celsius	
3. If Item #2 temperature is 0°C or les	ss, was the representative sample or temp blank fro:	zen? YES NONA TO 2 21 10
4. Were custody seals on outside of	cooler?	YES TC 3-24-16
If yes, how many and where:	·····	·V
5. Were the seals intact, signed, and	dated correctly?	YESNONA
6. Were custody papers inside coole	r?	TESNONA
I certify that I opened the cooler and	answered questions 1-6 (intial)	
7. Were custody seals on containers	: YES NO and Intact	YESNO NA
Were these signed and dated corre	ectly?	YESNO.
8. Packing mat'l used? Bubblewrap	⊳Plastic bag Peanuts Vermiculite Foam Insert F	Paper Other None
9. Cooling process:	(ce) Ice-pack Ice (direct contact) Dr	y ice Other None
10. Did all containers arrive in good o	condition (unbroken)?	VESNONA
11. Were all container labels complet	te (#, date, signed, pres., etc)?	ESNONA
12. Did all container labels and tags a	agree with custody papers?	ESNONA
I3a. Were VOA vials received?		YESONA
b. Was there any observable heads	space present in any VOA vial?	YESNONA
<ol><li>Was there a Trip Blank in this cod</li></ol>	oler? YESNA If multiple coolers, seq	juence # <u></u>
certify that I unloaded the cooler and	answered questions 7-14 (intial)	EA
5a. On pres'd bottles, did pH test str	rips suggest preservation reached the correct pH lev	vel? YESNO
	at the correct preservatives were used	VES NONA
6. Was residual chlorine present?		YESNO.
certify that I checked for chlorine and	d pH as per SOP and answered questions 15-16 (inti	ial) <u>EU4</u>
7. Were custody papers properly fill	ed out (ink, signed, etc)?	ENONA
8. Did you sign the custody papers i	in the appropriate place?	YESNONA
9. Were correct containers used for	the analysis requested?	ENONA
0. Was sufficient amount of sample a	sent in each container?	EsNONA
certify that I entered this project into	LIMS and answered questions 17-20 (intial)	Ts.A.
	unique LIMS number to each container (intial)	7.1

Number of

<b>TestAmerica Pittsburgh</b> 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468	Chain of Custody Record					Loc: 180 <b>53237</b>					an in a sub-transmission					
Client Information (Sub Contract Lab)	Sampler:			Lab Pi Bowe		ahra	_			,			-		COC No: 180-236441.1	
Client Contact:	Phone:			E-Mail	:										Page:	
Shipping/Receiving Company:			······	debra	a.bow	ren@te	stame	ricainc.	.com						Page 1 of 1 Job #:	
TestAmerica Laboratories, Inc								Ai	nalysi	s Req	uesteo	i			180-53237-1	
Address: 2960 Foster Creighton Drive, ,	Due Date Requeste 3/28/2016	ed:													Preservation Coo	
Dity:	TAT Requested (da	ays):												ų.	A - HCL B - NaOH	M - Hexane N - None
Nashville State, Zip:															C - Zn Acetate D - Nitric Acid	0 - AsNaO2 P - Na2O4S
TN, 37204															E - NaHSO4 F - MeOH	Q - Na2SO3 R - Na2S2O3
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO#				]-										G - Amchlor H - Ascorbic Acid	S - H2SO4 T - TSP Dodec
Email:	WO#:				No No	(X)									1 - Ice	U - Acetone
Project Name:	Project #:		•		05 0	o XVV // XVV = VUTS / YVVV 9020B/ Total Organic Halides (TOX)									J - DI Water K - EDTA L - EDA	V - MCAA W - ph 4-5
SAFETY KLEEN, Safety-Kleen Customer	18012341				ы () (	falid									L-EDA	Z - other (speci
Site:	SSOW#:				dmp	r ol n							1		Other:	
		<u> </u>	1		(ered Sam	Orge										
			Sample Type	Matrix ( <sub>W=water</sub> ,		Fotal									Otal Special Ir	
		Sample	(C=comp,	S=solid, O=waste/oll,	Field Fi	,1EI 0								h		
Sample Identification - Client ID (Lab ID)	Sample Date	Time		BT=Tissue, A=Air)	Ē			····		_				i Formal		structions/N
a file and a second		15:00	Preserva	tion Code:	¥Υ	4		_							X	× 45 5 %
2 (180-53237-1)	3/18/16	Eastern		Water		X									.1	
nantana <b>−</b>			_		$\vdash$		-+-	-+					1		<u>`.</u>	
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Possible Hazard Identification										ay be a	issesse	o ir samp Dodatka	nes a		ined longer than " chive For	
Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)								o Clier	nt De Røg	)ireme	Disposal	By Lab		Al	chive For	Months
							inoti ut									
Empty Kit Relinquished by:		Date:		-	Tim			/		/	Me	thod of Ship				
Relinguistied	Date/Time: Date/Time:	1.1	i700	Company	<b>)</b>		ived by:	9.	$\Lambda$			Da	te/Time	3-2	416 1000	Company /4/
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				L		_		_ //								
Relinquished by:	Date/Time:			Company		Rece	ived by:	1				Da	te/Time	9:		Company

## Login Sample Receipt Checklist

Client: Safety-Kleen Systems, Inc

Job Number: 180-53237-1 SDG Number: 77WAU

List Source: TestAmerica Pittsburgh

### Login Number: 53237 List Number: 1 Creator: Neri, Tom

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: Safety-Kleen Systems, Inc

### Login Number: 53237 List Number: 2 Creator: Abernathy, Eric

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Job Number: 180-53237-1 SDG Number: 77WAU List Source: TestAmerica Nashville List Creation: 03/24/16 11:21 AM