REDACTED VERSION

HOU-3316 SemaSys

EPAHO104000077

9586106

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

MM

Waste Pre-Acceptance/Approval Letter

Date **5/14/2009**

Dear **Gary Watts**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3316

Expiration Date 5/14/2011

Generator: Semasys
Address: 702 Ashland
Houston, TX 77007

Waste Information

Name of Waste: Nonhazardous rinse water
TCEQ Waste Code #: CESQ1191
Container Type:
Detailed Description of Process Generating Waste:
Water used to cool off heat coils in machines used for making extrusions
Color: clear to brown **Odor:** none **pH:** 5-9
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

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CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Semasys
Address: 702 Ashland
City: Houston State: TX Zip: 77007
Contact: Gary Watts Title:
Phone Number: 832-325-3433 Fax Number: gwatts@semasys.com
24/hr Phone Number:
US EPA ID No: TXCESQG
State ID No: CESQG SIC Code:

SECTION 2: Billing Information - ☑ Same as Above

Company:
Address:
City: State: Zip:
Contact: Title:
Phone Number: Fax Number:

SECTION 3: General Description of the Waste

Name of Waste: Non-Hazardous Rinsewater
Detailed Description of Process Generating Waste:

Water used to cool off heat coils in machines used for making extrusions

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Clear to brown Odor: None

Specific Gravity (water=1): 1 Density: 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 4

May. 14. 2009 4:40PM Semasys Inc. No. 1086 P. 1

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is It: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ1191

Proper US DOT Shipping Name: Non-RCRA / Non DOT Regulated Rinsewater
Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150 F		5-9		<.25	mg/l	<.25	mg/l	1-2	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
<1500	mg/l	<1500	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	98-99	%
Sand / Dirt	1-2	%

May. 14. 2009 4:40PM Semasys Inc. No. 1086 P. 2

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None Known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	NON
Corrosivity:	NON
Ignitability:	NON

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☑ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☑ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory *: Subpart C*

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☑ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Gary M Watts **Date:** 5/14/09

Printed Name/Title: Gary M Watts

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert Shrader
Date: 5-14-09 ☑ Approved ☐ Rejected
Approval Number: 331b

May. 14. 2009 4:40PM Semasys Inc. No. 1086 P. 4

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

.10/gal ($300 min)
$75/hr (4 hour min)

2. Contamination Limit (maximum limit before surchages apply):

nonconforming to profile

3. Surcharge Pricing:

call Dan/Morgan

4. Special Testing Requirements:

pH, Flash

5. Treatment and Handling Protocol:

WWTP

6. Treated Wastewater Discharge Subcategory:

☑ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

HOU-3320 Vertex Residual Manag.

EPAHO10400085

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **5/15/2009**

Dear **Jennifer Ownes**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3320

Expiration Date 5/15/2011

Generator: Vertex Residual Management (Westheimer)
Address: Clear Lake City Blvd. @ Eldorado Blvd.
Houston, TX 77063

Waste Information

Name of Waste: Non hazardous Class II waste water
TCEQ Waste Code #: CESQ1192
Container Type:
Detailed Description of Process Generating Waste:
Water from sampling of groundwater monitoring wells
Color: clear to brown **Odor:** non **pH:** 3-10
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

AP/MM

SECTION 1: Generator Information

Company :	Vertex Residual Management ~~(Westheimer)~~ on behalf of the generator		
Address :	~~9033 Westheimer~~ ~~9033 Westheimer~~ Clear Lake City Blvd. @ El Dorado Blvd.		
City, State, Zip :	~~Houston TX 77063~~ Houston, TX 77058		
Contact :	Jennifer Owens	**Title :**	
Phone No :	(281) 486-4182	**Fax :**	(281) 486-0217
24 / HR Phone :			
U.S EPA I.D No :	na		
State I.D :	na	**SIC Code**	

SECTION 2: Billing Information

Company :	Vertex Residual Management		
Address :	1331 Gemini St. Suite 103 1331 Gemini St. Suite 103		
City, State, Zip :	Houston TX 77058		
Contact :	Jennifer Owens	**Title :**	
Phone No :	(281) 486-4182	**Fax :**	(281) 486-0217

SECTION 3: General Description of the Waste

Name of Waste : Non Haz water — Class 2

Detailed Description of the Process Generating Waste:

Water from sampling of groundwater monitoring wells

Physical State : ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color : clear tp brown **Odor :** none

Specific Gravity (Water=1) : 1 **Density :** 8.34 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size : 55 gallon

Number Of Units : 10

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

EPAHO104000087

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No CESQ119

Proper U.S. State Waste Code No : Non-RCRA/Non DOT regulated wastewater

Class : na **UN/NA :** na **PG :** na **RQ :** na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>140°F	3-10	na mg/l	na mg/l	<2 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
<1500 mg/l	<10000 mg/l	<2 mg/l	<2 mg/l	<2 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Water	99-100	%
· trace contaminants (see analytical)	< reg limit	"

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
analytical

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
none known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : X
TCLP Volatiles : X
TCLP Semi-Volatiles : X

EPAHO104000088

Reactivity : x
Corrosivity : x
Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☑ YES ☐ NO

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☑ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation

EPAHO104000089

☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☑ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : Jennifer Owens **Date :** 5-15-09

Printed Name / Title : Jennifer Owens / RDC

CES USE ONLY (DO NOT WRITE IN THIS SPACE) **Process Facility Information :**

Compliance Officer : [signature]

Date : 5-15-09 **Status :** Approved Rejected

Approval Number : 3320

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$ 50 / drum + $ 300 / load + fsc

2. Contamination Limit (maximum limit before surchages apply):

Std

3. Surcharge Pricing:

Std - rate sheet

4. Special Testing Requirements:

pH, TOC, metals, % solids, phenol

5. Treatment and Handling Protocol:

Sub Cat C WW

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☒ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Environmental Science Corporation
Mount Juliet, TN

For: Envirotest
Clear Lake

L288294

Lab SampleID.	Client ID
L288294-01	PS1-MW1
L288294-02	PS1-MW2
L288294-03	PS1-MW3
L288294-04	PS1-MW4
L288294-05	PS1-MW5
L288294-06	PS2-MW1
L288294-07	PS2-MW2
L288294-08	PS2-MW3
L288294-09	PS2-MW4
L288294-10	PS2-MW5

(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

EST. 1970

Appendix A Laboratory Data Package Cover Page

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 Sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
b) dilution factors,
c) preparation methods,
d) cleanup methods, and
e) if required for the project, tentatively identified compounds (TICs).

R4 Surrogate recovery data including:

a) Calculated recovery (%R), and
b) The laboratory's surrogate QC limits.

R5 Test reports/summary forms for blank samples;

R6 Test reports/summary forms for laboratory control samples (LCSs) including:

a) LCS spiking amounts,
b) Calculated %R for each analyte, and
c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a) Samples associated with the MS/MSD clearly identified,
b) MS/MSD spiking amounts,
c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
d) Calculated %Rs and relative percent differences (RPDs), and
e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

a) the amount of analyte measured in the duplicate,
b) the calculated RPD, and
c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

R10 Other problems or anomalies.

The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [ ] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

William Mock
Operations Manager
Environmental Science Corp.

EPAHO104000094

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/19/07
Project Name: Clear Lake	Laboratory Job Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, and -10
Reviewer Name: Susan Murphy, Regulatory Affairs	Prep Batch Number(s): WG294995 CHLORIDE

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?			✓		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			✓		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✓				
		Were analytical duplicates analyzed at the appropriate frequency?	✓				
		Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000095

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/19/07
Project Name: Clear Lake	Laboratory Job Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, and -10
Reviewer Name: Susan Murphy, Regulatory Affairs	Prep Batch Number(s): WG295026 SV8270PAHSIM

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?			✓		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			✓		
		Were MS/MSD analyzed at the appropriate frequency?			✓		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		
		Were MS/MSD RPDs within laboratory QC limits?			✓		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000096

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/19/07
Project Name: Clear Lake	Laboratory Job Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, and -10
Reviewer Name: Susan Murphy, Regulatory Affairs	Prep Batch Number(s): WG295033 TPHTX

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?			✓		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			✓		
		Were MS/MSD analyzed at the appropriate frequency?			✓		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		
		Were MS/MSD RPDs within laboratory QC limits?			✓		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000097

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/19/07
Project Name: Clear Lake	Laboratory Job Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, and -10
Reviewer Name: Susan Murphy, Regulatory Affairs	Prep Batch Number(s): WG295103 AGICP

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			✓		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?			✓		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✓				
		Were analytical duplicates analyzed at the appropriate frequency?	✓				
		Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000098

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports

Laboratory Name: Environmental Science Corp.	LRC Date: 4/19/2007
Project Name: Clear Lake	Laboratory Job Number: L288294
Reviewer Name: Susan Murphy	Prep Batch Numbers: WG295103 AGICP

Sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5,

ER#:	Description
1	The matrix spike or matrix spike duplicate recoveries were outside the laboratory control limits for Silver

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/19/07
Project Name: Clear Lake	Laboratory Job Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, and -10
Reviewer Name: Susan Murphy, Regulatory Affairs	Prep Batch Number(s): WG295253 HG

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			✓		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?			✓		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Were MS/MSD RPDs within laboratory QC limits?		✓			1
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✓				
		Were analytical duplicates analyzed at the appropriate frequency?	✓				
		Were RPDs or relative standard deviations within the laboratory QC limits?		✓			2
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000100

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports

Laboratory Name: Environmental Science Corp.	LRC Date: 4/19/2007
Project Name: Clear Lake	Laboratory Job Number: L288294
Reviewer Name: Susan Murphy	Prep Batch Numbers: WG295253 HG

Sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5,

ER#:	Description
1	The relative percent difference exceeded the laboratory control limits.
2	The relative percent difference exceeded the laboratory control limits.

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/19/07
Project Name: Clear Lake	Laboratory Job Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, and -10
Reviewer Name: Susan Murphy, Regulatory Affairs	Prep Batch Number(s): WG295358 ASG

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?			✓		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			✓		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?			✓		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✓				
		Were analytical duplicates analyzed at the appropriate frequency?	✓				
		Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000102

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/19/07
Project Name: Clear Lake	Laboratory Job Number: L288294-01, -02, and -03
Reviewer Name: Susan Murphy, Regulatory Affairs	Prep Batch Number(s): WG295623 V8260

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			2
		Were MS/MSD RPDs within laboratory QC limits?		✓			3
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000103

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports

Laboratory Name: Environmental Science Corp.	LRC Date: 4/19/2007
Project Name: Clear Lake	Laboratory Job Number: L288294
Reviewer Name: Susan Murphy	Prep Batch Numbers: WG295623 V8260

Sample(s) PS1-MW1, PS1-MW2, PS1-MW3 were analyzed for

ER#:	Description
1	The laboratory control sample or laboratory control sample duplicate recoveries were outside the laboratory control limits for 1,2,3-Trimethylbenzene
2	The matrix spike or matrix spike duplicate recoveries were outside the laboratory control limits for 2-Chloroethyl vinyl ether
3	The relative percent differences exceeded laboratory limits for 2-Chloroethyl vinyl ether

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/19/07
Project Name: Clear Lake	Laboratory Job Number: L288294-04, -05, -06, -08, -09, and -10
Reviewer Name: Susan Murphy, Regulatory Affairs	Prep Batch Number(s): WG295634 V8260

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?		✓			2
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000105

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports

Laboratory Name: Environmental Science Corp.	LRC Date: 4/19/2007
Project Name: Clear Lake	Laboratory Job Number: L288294
Reviewer Name: Susan Murphy	Prep Batch Numbers: WG295634 V8260

Sample(s) PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW3, PS2-MW4,

ER#:	Description
1	The matrix spike or matrix spike duplicate recoveries were outside the laboratory control limits for 2-Chloroethyl vinyl ether
2	The relative percent differences exceeded laboratory limits for Acrolein

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/19/07
Project Name: Clear Lake	Laboratory Job Number: L288294-07
Reviewer Name: Susan Murphy, Regulatory Affairs	Prep Batch Number(s): WG295930 V8260

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			2
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000107

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports

Laboratory Name: Environmental Science Corp.	LRC Date: 4/19/2007
Project Name: Clear Lake	Laboratory Job Number: L288294
Reviewer Name: Susan Murphy	Prep Batch Numbers: WG295930 V8260

Sample(s) PS2-MW2 were analyzed for Volatile Organic Compounds

ER#:	Description
1	The laboratory control sample or laboratory control sample duplicate recoveries were outside the laboratory control limits for Acrolein
2	The matrix spike or matrix spike duplicate recoveries were outside the laboratory control limits for Acrolein

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Jason Binford
Envirotest
3902 Braxton St.

Houston, TX 77063

Report Summary

Tuesday April 17, 2007

Report Number: L288294
Samples Received: 04/10/07
Client Project: HOU-07-0260

Description: Clear Lake Tract

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Reviewed By: Mark W. Beasley, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 09227, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, WA - C1915

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-01

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS1-MW1

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 17:50

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	94.	0.22	1.0	mg/l		9056	04/11/07	1
Arsenic	0.0035	0.00015	0.0010	mg/l		6020	04/13/07	1
Mercury	U	0.000044	0.00020	mg/l		7470A	04/12/07	1
Barium	0.28	0.0010	0.0050	mg/l		6010B	04/11/07	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	04/11/07	1
Chromium	0.0035	0.0023	0.010	mg/l	J	6010B	04/11/07	1
Lead	U	0.0024	0.0050	mg/l		6010B	04/11/07	1
Selenium	U	0.0092	0.020	mg/l		6010B	04/11/07	1
Silver	U	0.0025	0.010	mg/l		6010B	04/11/07	1
Volatile Organics								
Acetone	U	0.017	0.050	mg/l		8260B	04/15/07	1
Acrolein	U	0.013	0.050	mg/l		8260B	04/15/07	1
Acrylonitrile	U	0.0014	0.010	mg/l		8260B	04/15/07	1
Benzene	0.00044	0.00031	0.0010	mg/l	J	8260B	04/15/07	1
Bromobenzene	U	0.00045	0.0010	mg/l		8260B	04/15/07	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Bromoform	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
n-Butylbenzene	U	0.00024	0.0010	mg/l		8260B	04/15/07	1
sec-Butylbenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
tert-Butylbenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Carbon tetrachloride	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Chlorobenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chlorodibromomethane	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chloroethane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
2-Chloroethyl vinyl ether	U	0.0060	0.050	mg/l		8260B	04/15/07	1
Chloroform	U	0.00054	0.0050	mg/l		8260B	04/15/07	1
Chloromethane	U	0.00065	0.0010	mg/l		8260B	04/15/07	1
2-Chlorotoluene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
4-Chlorotoluene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dibromo-3-Chloropropane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
1,2-Dibromoethane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Dibromomethane	U	0.00079	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichlorobenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Dichlorodifluoromethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloroethane	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloroethane	U	0.00034	0.0010	mg/l		8260B	04/15/07	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:
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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-01

Site ID :

Project # : HOU-07-0260

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS1-MW1

Collected By : Ed Canalez
Collection Date : 04/05/07 17:50

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
1,1-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
cis-1,2-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
trans-1,2-Dichloroethene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloropropane	U	0.00054	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloropropene	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichloropropane	U	0.00035	0.0010	mg/l		8260B	04/15/07	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
trans-1,3-Dichloropropene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
2,2-Dichloropropane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Di-isopropyl ether	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Ethylbenzene	0.0016	0.00026	0.0010	mg/l		8260B	04/15/07	1
Hexachlorobutadiene	U	0.00058	0.0010	mg/l		8260B	04/15/07	1
Isopropylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
p-Isopropyltoluene	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
2-Butanone (MEK)	U	0.0027	0.010	mg/l		8260B	04/15/07	1
Methylene Chloride	U	0.00038	0.0050	mg/l		8260B	04/15/07	1
4-Methyl-2-pentanone (MIBK)	U	0.0020	0.010	mg/l		8260B	04/15/07	1
Methyl tert-butyl ether	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
Naphthalene	0.00031	0.00027	0.0050	mg/l	J	8260B	04/15/07	1
n-Propylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Styrene	U	0.00027	0.0010	mg/l		8260B	04/15/07	1
1,1,1,2-Tetrachloroethane	U	0.00047	0.0010	mg/l		8260B	04/15/07	1
1,1,2,2-Tetrachloroethane	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
Tetrachloroethene	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Toluene	0.0062	0.0016	0.0050	mg/l		8260B	04/15/07	1
1,2,3-Trichlorobenzene	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trichlorobenzene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,1,1-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloroethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
Trichloroethene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Trichlorofluoromethane	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trichloropropane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trimethylbenzene	0.0024	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trimethylbenzene	0.00061	0.00025	0.0010	mg/l	JJ4	8260B	04/15/07	1
1,3,5-Trimethylbenzene	0.00062	0.00026	0.0010	mg/l	J	8260B	04/15/07	1
Vinyl chloride	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Xylenes, Total	0.015	0.00073	0.0030	mg/l		8260B	04/15/07	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	04/15/07	1
Dibromofluoromethane	102.			% Rec.		8260B	04/15/07	1
4-Bromofluorobenzene	106.			% Rec.		8260B	04/15/07	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:
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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-01

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS1-MW1

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 17:50

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
TNRCC Method 1005 - TPH								
TPH C6 - C12	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C12 - C28	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C28 - C35	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C6 - C35	U	1.6	5.0	mg/l		TX 1005	04/12/07	1
Surrogate Recovery								
o-Terphenyl	102.			% Rec.		TX 1005	04/12/07	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(b)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(g,h,i)perylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(k)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Chrysene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Dibenz(a,h)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluorene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Indeno(1,2,3-cd)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Naphthalene	0.00018	0.00012	0.00025	mg/l	J	8270C-S	04/11/07	1
Phenanthrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
1-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
2-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Surrogate Recovery								
Nitrobenzene-d5	72.3			% Rec.		8270C-S	04/11/07	1
2-Fluorobiphenyl	80.9			% Rec.		8270C-S	04/11/07	1
p-Terphenyl-d14	72.0			% Rec.		8270C-S	04/11/07	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
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Est. 1970

REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-02

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS1-MW2

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 18:05

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	180	2.2	10.	mg/l		9056	04/11/07	10
Arsenic	0.0033	0.00015	0.0010	mg/l		6020	04/13/07	1
Mercury	U	0.000044	0.00020	mg/l		7470A	04/12/07	1
Barium	0.29	0.0010	0.0050	mg/l		6010B	04/11/07	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	04/11/07	1
Chromium	0.0036	0.0023	0.010	mg/l	J	6010B	04/11/07	1
Lead	U	0.0024	0.0050	mg/l		6010B	04/11/07	1
Selenium	U	0.0092	0.020	mg/l		6010B	04/11/07	1
Silver	U	0.0025	0.010	mg/l		6010B	04/11/07	1
Volatile Organics								
Acetone	U	0.017	0.050	mg/l		8260B	04/15/07	1
Acrolein	U	0.013	0.050	mg/l		8260B	04/15/07	1
Acrylonitrile	U	0.0014	0.010	mg/l		8260B	04/15/07	1
Benzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Bromobenzene	U	0.00045	0.0010	mg/l		8260B	04/15/07	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Bromoform	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
n-Butylbenzene	U	0.00024	0.0010	mg/l		8260B	04/15/07	1
sec-Butylbenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
tert-Butylbenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Carbon tetrachloride	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Chlorobenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chlorodibromomethane	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chloroethane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
2-Chloroethyl vinyl ether	U	0.0060	0.050	mg/l		8260B	04/15/07	1
Chloroform	U	0.00054	0.0050	mg/l		8260B	04/15/07	1
Chloromethane	U	0.00065	0.0010	mg/l		8260B	04/15/07	1
2-Chlorotoluene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
4-Chlorotoluene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dibromo-3-Chloropropane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
1,2-Dibromoethane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Dibromomethane	U	0.00079	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichlorobenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Dichlorodifluoromethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloroethane	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloroethane	U	0.00034	0.0010	mg/l		8260B	04/15/07	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
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Est. 1970

REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-02

Site ID :

Project # : HOU-07-0260

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS1-MW2

Collected By : Ed Canalez
Collection Date : 04/05/07 18:05

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
1,1-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
cis-1,2-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
trans-1,2-Dichloroethene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloropropane	U	0.00054	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloropropene	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichloropropane	U	0.00035	0.0010	mg/l		8260B	04/15/07	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
trans-1,3-Dichloropropene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
2,2-Dichloropropane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Di-isopropyl ether	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Ethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Hexachlorobutadiene	U	0.00058	0.0010	mg/l		8260B	04/15/07	1
Isopropylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
p-Isopropyltoluene	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
2-Butanone (MEK)	U	0.0027	0.010	mg/l		8260B	04/15/07	1
Methylene Chloride	U	0.00038	0.0050	mg/l		8260B	04/15/07	1
4-Methyl-2-pentanone (MIBK)	U	0.0020	0.010	mg/l		8260B	04/15/07	1
Methyl tert-butyl ether	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
Naphthalene	U	0.00027	0.0050	mg/l		8260B	04/15/07	1
n-Propylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Styrene	U	0.00027	0.0010	mg/l		8260B	04/15/07	1
1,1,1,2-Tetrachloroethane	U	0.00047	0.0010	mg/l		8260B	04/15/07	1
1,1,2,2-Tetrachloroethane	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
Tetrachloroethene	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Toluene	U	0.0016	0.0050	mg/l		8260B	04/15/07	1
1,2,3-Trichlorobenzene	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trichlorobenzene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,1,1-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloroethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
Trichloroethene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Trichlorofluoromethane	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trichloropropane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trimethylbenzene	U	0.00025	0.0010	mg/l	J4	8260B	04/15/07	1
1,3,5-Trimethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Vinyl chloride	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Xylenes, Total	U	0.00073	0.0030	mg/l		8260B	04/15/07	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	04/15/07	1
Dibromofluoromethane	102.			% Rec.		8260B	04/15/07	1
4-Bromofluorobenzene	105.			% Rec.		8260B	04/15/07	1

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Est. 1970

REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-02

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS1-MW2

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 18:05

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
TNRCC Method 1005 - TPH								
TPH C6 - C12	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C12 - C28	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C28 - C35	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C6 - C35	U	1.6	5.0	mg/l		TX 1005	04/12/07	1
Surrogate Recovery								
o-Terphenyl	101.			% Rec.		TX 1005	04/12/07	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(b)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(g,h,i)perylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(k)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Chrysene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Dibenz(a,h)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluorene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Indeno(1,2,3-cd)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Naphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Phenanthrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
1-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
2-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Surrogate Recovery								
Nitrobenzene-d5	76.7			% Rec.		8270C-S	04/11/07	1
2-Fluorobiphenyl	81.1			% Rec.		8270C-S	04/11/07	1
p-Terphenyl-d14	74.3			% Rec.		8270C-S	04/11/07	1

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-03

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS1-MW3

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 18:25

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	220	2.2	10.	mg/l		9056	04/11/07	10
Arsenic	0.0046	0.00015	0.0010	mg/l		6020	04/13/07	1
Mercury	U	0.000044	0.00020	mg/l		7470A	04/12/07	1
Barium	0.34	0.0010	0.0050	mg/l		6010B	04/11/07	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	04/11/07	1
Chromium	0.0043	0.0023	0.010	mg/l	J	6010B	04/11/07	1
Lead	U	0.0024	0.0050	mg/l		6010B	04/11/07	1
Selenium	U	0.0092	0.020	mg/l		6010B	04/11/07	1
Silver	U	0.0025	0.010	mg/l		6010B	04/11/07	1
Volatile Organics								
Acetone	U	0.017	0.050	mg/l		8260B	04/15/07	1
Acrolein	U	0.013	0.050	mg/l		8260B	04/15/07	1
Acrylonitrile	U	0.0014	0.010	mg/l		8260B	04/15/07	1
Benzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Bromobenzene	U	0.00045	0.0010	mg/l		8260B	04/15/07	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Bromoform	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
n-Butylbenzene	U	0.00024	0.0010	mg/l		8260B	04/15/07	1
sec-Butylbenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
tert-Butylbenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Carbon tetrachloride	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Chlorobenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chlorodibromomethane	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chloroethane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
2-Chloroethyl vinyl ether	U	0.0060	0.050	mg/l		8260B	04/15/07	1
Chloroform	U	0.00054	0.0050	mg/l		8260B	04/15/07	1
Chloromethane	U	0.00065	0.0010	mg/l		8260B	04/15/07	1
2-Chlorotoluene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
4-Chlorotoluene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dibromo-3-Chloropropane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
1,2-Dibromoethane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Dibromomethane	U	0.00079	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichlorobenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Dichlorodifluoromethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloroethane	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloroethane	U	0.00034	0.0010	mg/l		8260B	04/15/07	1

U = ND (Not Detected)
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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-03

Site ID :

Project # : HOU-07-0260

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS1-MW3

Collected By : Ed Canalez
Collection Date : 04/05/07 18:25

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
1,1-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
cis-1,2-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
trans-1,2-Dichloroethene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloropropane	U	0.00054	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloropropene	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichloropropane	U	0.00035	0.0010	mg/l		8260B	04/15/07	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
trans-1,3-Dichloropropene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
2,2-Dichloropropane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Di-isopropyl ether	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Ethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Hexachlorobutadiene	U	0.00058	0.0010	mg/l		8260B	04/15/07	1
Isopropylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
p-Isopropyltoluene	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
2-Butanone (MEK)	U	0.0027	0.010	mg/l		8260B	04/15/07	1
Methylene Chloride	U	0.00038	0.0050	mg/l		8260B	04/15/07	1
4-Methyl-2-pentanone (MIBK)	U	0.0020	0.010	mg/l		8260B	04/15/07	1
Methyl tert-butyl ether	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
Naphthalene	U	0.00027	0.0050	mg/l		8260B	04/15/07	1
n-Propylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Styrene	U	0.00027	0.0010	mg/l		8260B	04/15/07	1
1,1,1,2-Tetrachloroethane	U	0.00047	0.0010	mg/l		8260B	04/15/07	1
1,1,2,2-Tetrachloroethane	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
Tetrachloroethene	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Toluene	U	0.0016	0.0050	mg/l		8260B	04/15/07	1
1,2,3-Trichlorobenzene	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trichlorobenzene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,1,1-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloroethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
Trichloroethene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Trichlorofluoromethane	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trichloropropane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trimethylbenzene	U	0.00025	0.0010	mg/l	J4	8260B	04/15/07	1
1,3,5-Trimethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Vinyl chloride	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Xylenes, Total	U	0.00073	0.0030	mg/l		8260B	04/15/07	1
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	04/15/07	1
Dibromofluoromethane	102.			% Rec.		8260B	04/15/07	1
4-Bromofluorobenzene	106.			% Rec.		8260B	04/15/07	1

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-03

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS1-MW3

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 18:25

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
TNRCC Method 1005 - TPH								
TPH C6 - C12	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C12 - C28	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C28 - C35	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C6 - C35	U	1.6	5.0	mg/l		TX 1005	04/12/07	1
Surrogate Recovery								
o-Terphenyl	101.			% Rec.		TX 1005	04/12/07	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(b)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(g,h,i)perylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(k)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Chrysene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Dibenz(a,h)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluorene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Indeno(1,2,3-cd)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Naphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Phenanthrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
1-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
2-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Surrogate Recovery								
Nitrobenzene-d5	65.3			% Rec.		8270C-S	04/11/07	1
2-Fluorobiphenyl	67.6			% Rec.		8270C-S	04/11/07	1
p-Terphenyl-d14	60.3			% Rec.		8270C-S	04/11/07	1

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-04

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS1-MW4

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 19:05

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	210	2.2	10.	mg/l		9056	04/11/07	10
Arsenic	0.0038	0.00015	0.0010	mg/l		6020	04/13/07	1
Mercury	U	0.000044	0.00020	mg/l		7470A	04/12/07	1
Barium	0.24	0.0010	0.0050	mg/l		6010B	04/11/07	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	04/11/07	1
Chromium	0.0025	0.0023	0.010	mg/l	J	6010B	04/11/07	1
Lead	U	0.0024	0.0050	mg/l		6010B	04/11/07	1
Selenium	U	0.0092	0.020	mg/l		6010B	04/11/07	1
Silver	U	0.0025	0.010	mg/l		6010B	04/11/07	1
Volatile Organics								
Acetone	U	0.017	0.050	mg/l		8260B	04/15/07	1
Acrolein	U	0.013	0.050	mg/l	J3	8260B	04/15/07	1
Acrylonitrile	U	0.0014	0.010	mg/l		8260B	04/15/07	1
Benzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Bromobenzene	U	0.00045	0.0010	mg/l		8260B	04/15/07	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Bromoform	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
n-Butylbenzene	U	0.00024	0.0010	mg/l		8260B	04/15/07	1
sec-Butylbenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
tert-Butylbenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Carbon tetrachloride	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Chlorobenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chlorodibromomethane	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chloroethane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
2-Chloroethyl vinyl ether	U	0.0060	0.050	mg/l		8260B	04/15/07	1
Chloroform	U	0.00054	0.0050	mg/l		8260B	04/15/07	1
Chloromethane	U	0.00065	0.0010	mg/l		8260B	04/15/07	1
2-Chlorotoluene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
4-Chlorotoluene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dibromo-3-Chloropropane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
1,2-Dibromoethane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Dibromomethane	U	0.00079	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichlorobenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Dichlorodifluoromethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloroethane	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloroethane	U	0.00034	0.0010	mg/l		8260B	04/15/07	1

U = ND (Not Detected)
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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS1-MW4

Collected By : Ed Canalez
Collection Date : 04/05/07 19:05

ESC Sample # : L288294-04

Site ID :

Project # : HOU-07-0260

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
1,1-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
cis-1,2-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
trans-1,2-Dichloroethene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloropropane	U	0.00054	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloropropene	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichloropropane	U	0.00035	0.0010	mg/l		8260B	04/15/07	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
trans-1,3-Dichloropropene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
2,2-Dichloropropane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Di-isopropyl ether	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Ethylbenzene	*0.00032*	*0.00026*	0.0010	mg/l	*J*	8260B	04/15/07	1
Hexachlorobutadiene	U	0.00058	0.0010	mg/l		8260B	04/15/07	1
Isopropylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
p-Isopropyltoluene	U	*0.00029*	0.0010	mg/l		8260B	04/15/07	1
2-Butanone (MEK)	U	0.0027	0.010	mg/l		8260B	04/15/07	1
Methylene Chloride	U	0.00038	0.0050	mg/l		8260B	04/15/07	1
4-Methyl-2-pentanone (MIBK)	U	0.0020	0.010	mg/l		8260B	04/15/07	1
Methyl tert-butyl ether	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
Naphthalene	0.0016	0.00027	0.0050	mg/l	J	8260B	04/15/07	1
n-Propylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Styrene	U	0.00027	0.0010	mg/l		8260B	04/15/07	1
1,1,1,2-Tetrachloroethane	U	0.00047	0.0010	mg/l		8260B	04/15/07	1
1,1,2,2-Tetrachloroethane	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
Tetrachloroethene	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Toluene	U	0.0016	0.0050	mg/l		8260B	04/15/07	1
1,2,3-Trichlorobenzene	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trichlorobenzene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,1,1-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloroethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
Trichloroethene	U	*0.00026*	0.0010	mg/l		8260B	04/15/07	1
Trichlorofluoromethane	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trichloropropane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trimethylbenzene	0.00049	0.00025	0.0010	mg/l	J	8260B	04/15/07	1
1,2,3-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,3,5-Trimethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Vinyl chloride	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Xylenes, Total	0.00077	0.00073	0.0030	mg/l	J	8260B	04/15/07	1
Surrogate Recovery								
Toluene-d8	92.8			% Rec.		8260B	04/15/07	1
Dibromofluoromethane	91.2			% Rec.		8260B	04/15/07	1
4-Bromofluorobenzene	94.4			% Rec.		8260B	04/15/07	1

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-04

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS1-MW4

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 19:05

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
TNRCC Method 1005 - TPH								
TPH C6 - C12	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C12 - C28	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C28 - C35	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C6 - C35	U	1.6	5.0	mg/l		TX 1005	04/12/07	1
Surrogate Recovery								
o-Terphenyl	100.			% Rec.		TX 1005	04/12/07	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(b)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(g,h,i)perylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(k)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Chrysene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Dibenz(a,h)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluorene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Indeno(1,2,3-cd)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Naphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Phenanthrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
1-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
2-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Surrogate Recovery								
Nitrobenzene-d5	78.8			% Rec.		8270C-S	04/11/07	1
2-Fluorobiphenyl	80.6			% Rec.		8270C-S	04/11/07	1
p-Terphenyl-d14	74.7			% Rec.		8270C-S	04/11/07	1

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS1-MW5

Collected By : Ed Canalez
Collection Date : 04/05/07 19:40

ESC Sample # : L288294-05

Site ID :

Project # : HOU-07-0260

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	520	2.2	10.	mg/l		9056	04/11/07	10
Arsenic	0.0023	0.00015	0.0010	mg/l		6020	04/13/07	1
Mercury	U	0.000044	0.00020	mg/l		7470A	04/12/07	1
Barium	0.32	0.0010	0.0050	mg/l		6010B	04/11/07	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	04/11/07	1
Chromium	0.0030	0.0023	0.010	mg/l	J	6010B	04/11/07	1
Lead	U	0.0024	0.0050	mg/l		6010B	04/11/07	1
Selenium	U	0.0092	0.020	mg/l		6010B	04/11/07	1
Silver	U	0.0025	0.010	mg/l		6010B	04/11/07	1
Volatile Organics								
Acetone	U	0.017	0.050	mg/l		8260B	04/15/07	1
Acrolein	U	0.013	0.050	mg/l	J3	8260B	04/15/07	1
Acrylonitrile	U	0.0014	0.010	mg/l		8260B	04/15/07	1
Benzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Bromobenzene	U	0.00045	0.0010	mg/l		8260B	04/15/07	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Bromoform	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
n-Butylbenzene	U	0.00024	0.0010	mg/l		8260B	04/15/07	1
sec-Butylbenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
tert-Butylbenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Carbon tetrachloride	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Chlorobenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chlorodibromomethane	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chloroethane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
2-Chloroethyl vinyl ether	U	0.0060	0.050	mg/l		8260B	04/15/07	1
Chloroform	U	0.00054	0.0050	mg/l		8260B	04/15/07	1
Chloromethane	U	0.00065	0.0010	mg/l		8260B	04/15/07	1
2-Chlorotoluene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
4-Chlorotoluene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dibromo-3-Chloropropane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
1,2-Dibromoethane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Dibromomethane	U	0.00079	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichlorobenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Dichlorodifluoromethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloroethane	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloroethane	U	0.00034	0.0010	mg/l		8260B	04/15/07	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
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Est. 1970

REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-05

Site ID :

Project # : HOU-07-0260

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS1-MW5

Collected By : Ed Canalez
Collection Date : 04/05/07 19:40

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
1,1-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
cis-1,2-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
trans-1,2-Dichloroethene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloropropane	U	0.00054	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloropropene	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichloropropane	U	0.00035	0.0010	mg/l		8260B	04/15/07	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
trans-1,3-Dichloropropene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
2,2-Dichloropropane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Di-isopropyl ether	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Ethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Hexachlorobutadiene	U	0.00058	0.0010	mg/l		8260B	04/15/07	1
Isopropylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
p-Isopropyltoluene	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
2-Butanone (MEK)	U	0.0027	0.010	mg/l		8260B	04/15/07	1
Methylene Chloride	U	0.00038	0.0050	mg/l		8260B	04/15/07	1
4-Methyl-2-pentanone (MIBK)	U	0.0020	0.010	mg/l		8260B	04/15/07	1
Methyl tert-butyl ether	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
Naphthalene	0.00036	0.00027	0.0050	mg/l	J	8260B	04/15/07	1
n-Propylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Styrene	U	0.00027	0.0010	mg/l		8260B	04/15/07	1
1,1,1,2-Tetrachloroethane	U	0.00047	0.0010	mg/l		8260B	04/15/07	1
1,1,2,2-Tetrachloroethane	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
Tetrachloroethene	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Toluene	U	0.0016	0.0050	mg/l		8260B	04/15/07	1
1,2,3-Trichlorobenzene	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trichlorobenzene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,1,1-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloroethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
Trichloroethene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Trichlorofluoromethane	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trichloropropane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,3,5-Trimethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Vinyl chloride	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Xylenes, Total	U	0.00073	0.0030	mg/l		8260B	04/15/07	1
Surrogate Recovery								
Toluene-d8	93.7			% Rec.		8260B	04/15/07	1
Dibromofluoromethane	91.4			% Rec.		8260B	04/15/07	1
4-Bromofluorobenzene	99.9			% Rec.		8260B	04/15/07	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-05

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS1-MW5

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 19:40

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
TNRCC Method 1005 - TPH								
TPH C6 - C12	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C12 - C28	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C28 - C35	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C6 - C35	U	1.6	5.0	mg/l		TX 1005	04/12/07	1
Surrogate Recovery								
o-Terphenyl	97.5			% Rec.		TX 1005	04/12/07	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(b)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(g,h,i)perylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(k)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Chrysene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Dibenz(a,h)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluorene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Indeno(1,2,3-cd)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Naphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Phenanthrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
1-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
2-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Surrogate Recovery								
Nitrobenzene-d5	79.4			% Rec.		8270C-S	04/11/07	1
2-Fluorobiphenyl	78.5			% Rec.		8270C-S	04/11/07	1
p-Terphenyl-d14	77.1			% Rec.		8270C-S	04/11/07	1

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Est. 1970

REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-06

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS2-MW1

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 17:00

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	24.	0.22	1.0	mg/l		9056	04/11/07	1
Arsenic	0.0014	0.00015	0.0010	mg/l		6020	04/13/07	1
Mercury	U	0.000044	0.00020	mg/l		7470A	04/12/07	1
Barium	0.36	0.0010	0.0050	mg/l		6010B	04/11/07	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	04/11/07	1
Chromium	0.0031	0.0023	0.010	mg/l	J	6010B	04/11/07	1
Lead	U	0.0024	0.0050	mg/l		6010B	04/11/07	1
Selenium	U	0.0092	0.020	mg/l		6010B	04/11/07	1
Silver	U	0.0025	0.010	mg/l		6010B	04/11/07	1
Volatile Organics								
Acetone	U	0.017	0.050	mg/l		8260B	04/15/07	1
Acrolein	U	0.013	0.050	mg/l	J3	8260B	04/15/07	1
Acrylonitrile	U	0.0014	0.010	mg/l		8260B	04/15/07	1
Benzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Bromobenzene	U	0.00045	0.0010	mg/l		8260B	04/15/07	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Bromoform	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
n-Butylbenzene	U	0.00024	0.0010	mg/l		8260B	04/15/07	1
sec-Butylbenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
tert-Butylbenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Carbon tetrachloride	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Chlorobenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chlorodibromomethane	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chloroethane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
2-Chloroethyl vinyl ether	U	0.0060	0.050	mg/l		8260B	04/15/07	1
Chloroform	U	0.00054	0.0050	mg/l		8260B	04/15/07	1
Chloromethane	U	0.00065	0.0010	mg/l		8260B	04/15/07	1
2-Chlorotoluene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
4-Chlorotoluene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dibromo-3-Chloropropane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
1,2-Dibromoethane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Dibromomethane	U	0.00079	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichlorobenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Dichlorodifluoromethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloroethane	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloroethane	U	0.00034	0.0010	mg/l		8260B	04/15/07	1

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-06

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS2-MW1

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 17:00

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
1,1-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
cis-1,2-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
trans-1,2-Dichloroethene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloropropane	U	0.00054	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloropropene	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichloropropane	U	0.00035	0.0010	mg/l		8260B	04/15/07	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
trans-1,3-Dichloropropene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
2,2-Dichloropropane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Di-isopropyl ether	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Ethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Hexachlorobutadiene	U	0.00058	0.0010	mg/l		8260B	04/15/07	1
Isopropylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
p-Isopropyltoluene	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
2-Butanone (MEK)	U	0.0027	0.010	mg/l		8260B	04/15/07	1
Methylene Chloride	U	0.00038	0.0050	mg/l		8260B	04/15/07	1
4-Methyl-2-pentanone (MIBK)	U	0.0020	0.010	mg/l		8260B	04/15/07	1
Methyl tert-butyl ether	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
Naphthalene	U	0.00027	0.0050	mg/l		8260B	04/15/07	1
n-Propylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Styrene	U	0.00027	0.0010	mg/l		8260B	04/15/07	1
1,1,1,2-Tetrachloroethane	U	0.00047	0.0010	mg/l		8260B	04/15/07	1
1,1,2,2-Tetrachloroethane	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
Tetrachloroethene	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Toluene	U	0.0016	0.0050	mg/l		8260B	04/15/07	1
1,2,3-Trichlorobenzene	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trichlorobenzene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,1,1-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloroethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
Trichloroethene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Trichlorofluoromethane	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trichloropropane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,3,5-Trimethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Vinyl chloride	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Xylenes, Total	U	0.00073	0.0030	mg/l		8260B	04/15/07	1
Surrogate Recovery								
Toluene-d8	95.7			% Rec.		8260B	04/15/07	1
Dibromofluoromethane	91.5			% Rec.		8260B	04/15/07	1
4-Bromofluorobenzene	94.4			% Rec.		8260B	04/15/07	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-06

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS2-MW1

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 17:00

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
TNRCC Method 1005 - TPH								
TPH C6 - C12	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C12 - C28	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C28 - C35	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C6 - C35	U	1.6	5.0	mg/l		TX 1005	04/12/07	1
Surrogate Recovery								
o-Terphenyl	101.			% Rec.		TX 1005	04/12/07	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(b)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(g,h,i)perylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(k)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Chrysene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Dibenz(a,h)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluorene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Indeno(1,2,3-cd)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Naphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Phenanthrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
1-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
2-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Surrogate Recovery								
Nitrobenzene-d5	77.7			% Rec.		8270C-S	04/11/07	1
2-Fluorobiphenyl	76.6			% Rec.		8270C-S	04/11/07	1
p-Terphenyl-d14	69.8			% Rec.		8270C-S	04/11/07	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-07

Site ID :

Project # : HOU-07-0260

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS2-MW2

Collected By : Ed Canalez
Collection Date : 04/05/07 13:30

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	37.	0.22	1.0	mg/l		9056	04/11/07	1
Arsenic	0.0023	0.00015	0.0010	mg/l		6020	04/13/07	1
Mercury	U	0.000044	0.00020	mg/l		7470A	04/12/07	1
Barium	0.46	0.0010	0.0050	mg/l		6010B	04/11/07	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	04/11/07	1
Chromium	0.0077	0.0023	0.010	mg/l	J	6010B	04/11/07	1
Lead	U	0.0024	0.0050	mg/l		6010B	04/11/07	1
Selenium	U	0.0092	0.020	mg/l		6010B	04/11/07	1
Silver	U	0.0025	0.010	mg/l		6010B	04/11/07	1
Volatile Organics								
Acetone	U	0.017	0.050	mg/l		8260B	04/17/07	1
Acrolein	U	0.013	0.050	mg/l	J4	8260B	04/17/07	1
Acrylonitrile	U	0.0014	0.010	mg/l		8260B	04/17/07	1
Benzene	U	0.00031	0.0010	mg/l		8260B	04/17/07	1
Bromobenzene	U	0.00045	0.0010	mg/l		8260B	04/17/07	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	04/17/07	1
Bromoform	U	0.00043	0.0010	mg/l		8260B	04/17/07	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	04/17/07	1
n-Butylbenzene	U	0.00024	0.0010	mg/l		8260B	04/17/07	1
sec-Butylbenzene	U	0.00028	0.0010	mg/l		8260B	04/17/07	1
tert-Butylbenzene	U	0.00030	0.0010	mg/l		8260B	04/17/07	1
Carbon tetrachloride	U	0.00036	0.0010	mg/l		8260B	04/17/07	1
Chlorobenzene	U	0.00031	0.0010	mg/l		8260B	04/17/07	1
Chlorodibromomethane	U	0.00031	0.0010	mg/l		8260B	04/17/07	1
Chloroethane	U	0.00046	0.0010	mg/l		8260B	04/17/07	1
2-Chloroethyl vinyl ether	U	0.0060	0.050	mg/l		8260B	04/17/07	1
Chloroform	U	0.0017	0.0050	mg/l		8260B	04/17/07	1
Chloromethane	U	0.00065	0.0010	mg/l		8260B	04/17/07	1
2-Chlorotoluene	U	0.00032	0.0010	mg/l		8260B	04/17/07	1
4-Chlorotoluene	U	0.00033	0.0010	mg/l		8260B	04/17/07	1
1,2-Dibromo-3-Chloropropane	U	0.00089	0.0050	mg/l		8260B	04/17/07	1
1,2-Dibromoethane	U	0.00036	0.0010	mg/l		8260B	04/17/07	1
Dibromomethane	U	0.00079	0.0010	mg/l		8260B	04/17/07	1
1,2-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/17/07	1
1,3-Dichlorobenzene	U	0.00028	0.0010	mg/l		8260B	04/17/07	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/17/07	1
Dichlorodifluoromethane	U	0.00040	0.0010	mg/l		8260B	04/17/07	1
1,1-Dichloroethane	U	0.00032	0.0010	mg/l		8260B	04/17/07	1
1,2-Dichloroethane	U	0.00034	0.0010	mg/l		8260B	04/17/07	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
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Est. 1970

REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-07

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS2-MW2

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 13:30

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
1,1-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/17/07	1
cis-1,2-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/17/07	1
trans-1,2-Dichloroethene	U	0.00033	0.0010	mg/l		8260B	04/17/07	1
1,2-Dichloropropane	U	0.00054	0.0010	mg/l		8260B	04/17/07	1
1,1-Dichloropropene	U	0.00034	0.0010	mg/l		8260B	04/17/07	1
1,3-Dichloropropane	U	0.00035	0.0010	mg/l		8260B	04/17/07	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	04/17/07	1
trans-1,3-Dichloropropene	U	0.00032	0.0010	mg/l		8260B	04/17/07	1
2,2-Dichloropropane	U	0.00036	0.0010	mg/l		8260B	04/17/07	1
Di-isopropyl ether	0.00041	0.00037	0.0010	mg/l	J	8260B	04/17/07	1
Ethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/17/07	1
Hexachlorobutadiene	U	0.00058	0.0010	mg/l		8260B	04/17/07	1
Isopropylbenzene	U	0.00031	0.0010	mg/l		8260B	04/17/07	1
p-Isopropyltoluene	U	0.00029	0.0010	mg/l		8260B	04/17/07	1
2-Butanone (MEK)	U	0.0027	0.010	mg/l		8260B	04/17/07	1
Methylene Chloride	0.0021	0.00038	0.0050	mg/l	J	8260B	04/17/07	1
4-Methyl-2-pentanone (MIBK)	U	0.0020	0.010	mg/l		8260B	04/17/07	1
Methyl tert-butyl ether	U	0.00032	0.0010	mg/l		8260B	04/17/07	1
Naphthalene	U	0.00027	0.0050	mg/l		8260B	04/17/07	1
n-Propylbenzene	U	0.00031	0.0010	mg/l		8260B	04/17/07	1
Styrene	U	0.00027	0.0010	mg/l		8260B	04/17/07	1
1,1,1,2-Tetrachloroethane	U	0.00047	0.0010	mg/l		8260B	04/17/07	1
1,1,2,2-Tetrachloroethane	U	0.00043	0.0010	mg/l		8260B	04/17/07	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00034	0.0010	mg/l		8260B	04/17/07	1
Tetrachloroethene	U	0.00043	0.0010	mg/l		8260B	04/17/07	1
Toluene	U	0.0016	0.0050	mg/l		8260B	04/17/07	1
1,2,3-Trichlorobenzene	U	0.00037	0.0010	mg/l		8260B	04/17/07	1
1,2,4-Trichlorobenzene	U	0.00032	0.0010	mg/l		8260B	04/17/07	1
1,1,1-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	04/17/07	1
1,1,2-Trichloroethane	U	0.00040	0.0010	mg/l		8260B	04/17/07	1
Trichloroethene	U	0.00026	0.0010	mg/l		8260B	04/17/07	1
Trichlorofluoromethane	U	0.00029	0.0010	mg/l		8260B	04/17/07	1
1,2,3-Trichloropropane	U	0.00046	0.0010	mg/l		8260B	04/17/07	1
1,2,4-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/17/07	1
1,2,3-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/17/07	1
1,3,5-Trimethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/17/07	1
Vinyl chloride	U	0.00031	0.0010	mg/l		8260B	04/17/07	1
Xylenes, Total	U	0.00073	0.0030	mg/l		8260B	04/17/07	1
Surrogate Recovery								
Toluene-d8	98.2			% Rec.		8260B	04/17/07	1
Dibromofluoromethane	86.1			% Rec.		8260B	04/17/07	1
4-Bromofluorobenzene	100.			% Rec.		8260B	04/17/07	1

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Est. 1970

REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-07

Site ID :

Project # : HOU-07-0260

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS2-MW2

Collected By : Ed Canalez
Collection Date : 04/05/07 13:30

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
TNRCC Method 1005 - TPH								
TPH C6 - C12	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C12 - C28	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C28 - C35	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C6 - C35	U	1.6	5.0	mg/l		TX 1005	04/12/07	1
Surrogate Recovery								
o-Terphenyl	96.8			% Rec.		TX 1005	04/12/07	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(b)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(g,h,i)perylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(k)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Chrysene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Dibenz(a,h)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluorene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Indeno(1,2,3-cd)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Naphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Phenanthrene	0.000032	0.000025	0.000050	mg/l	J	8270C-S	04/11/07	1
Pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
1-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
2-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Surrogate Recovery								
Nitrobenzene-d5	76.8			% Rec.		8270C-S	04/11/07	1
2-Fluorobiphenyl	79.9			% Rec.		8270C-S	04/11/07	1
p-Terphenyl-d14	72.6			% Rec.		8270C-S	04/11/07	1

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-08

Site ID :

Project # : HOU-07-0260

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS2-MW3

Collected By : Ed Canalez
Collection Date : 04/05/07 14:15

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	73.	0.22	1.0	mg/l		9056	04/11/07	1
Arsenic	0.0025	0.00015	0.0010	mg/l		6020	04/13/07	1
Mercury	U	0.000044	0.00020	mg/l		7470A	04/12/07	1
Barium	0.63	0.0010	0.0050	mg/l		6010B	04/11/07	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	04/11/07	1
Chromium	0.0087	0.0023	0.010	mg/l	J	6010B	04/11/07	1
Lead	U	0.0024	0.0050	mg/l		6010B	04/11/07	1
Selenium	U	0.0092	0.020	mg/l		6010B	04/11/07	1
Silver	U	0.0025	0.010	mg/l		6010B	04/11/07	1
Volatile Organics								
Acetone	U	0.017	0.050	mg/l		8260B	04/15/07	1
Acrolein	U	0.013	0.050	mg/l	J3	8260B	04/15/07	1
Acrylonitrile	U	0.0014	0.010	mg/l		8260B	04/15/07	1
Benzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Bromobenzene	U	0.00045	0.0010	mg/l		8260B	04/15/07	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Bromoform	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
n-Butylbenzene	U	0.00024	0.0010	mg/l		8260B	04/15/07	1
sec-Butylbenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
tert-Butylbenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Carbon tetrachloride	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Chlorobenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chlorodibromomethane	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chloroethane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
2-Chloroethyl vinyl ether	U	0.0060	0.050	mg/l		8260B	04/15/07	1
Chloroform	U	0.00054	0.0050	mg/l		8260B	04/15/07	1
Chloromethane	U	0.00065	0.0010	mg/l		8260B	04/15/07	1
2-Chlorotoluene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
4-Chlorotoluene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dibromo-3-Chloropropane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
1,2-Dibromoethane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Dibromomethane	U	0.00079	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichlorobenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Dichlorodifluoromethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloroethane	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloroethane	U	0.00034	0.0010	mg/l		8260B	04/15/07	1

U = ND (Not Detected)
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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-08

Site ID :

Project # : HOU-07-0260

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS2-MW3

Collected By : Ed Canalez
Collection Date : 04/05/07 14:15

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
1,1-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
cis-1,2-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
trans-1,2-Dichloroethene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloropropane	U	0.00054	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloropropene	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichloropropane	U	0.00035	0.0010	mg/l		8260B	04/15/07	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
trans-1,3-Dichloropropene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
2,2-Dichloropropane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Di-isopropyl ether	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Ethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Hexachlorobutadiene	U	0.00058	0.0010	mg/l		8260B	04/15/07	1
Isopropylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
p-Isopropyltoluene	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
2-Butanone (MEK)	U	0.0027	0.010	mg/l		8260B	04/15/07	1
Methylene Chloride	U	0.00038	0.0050	mg/l		8260B	04/15/07	1
4-Methyl-2-pentanone (MIBK)	U	0.0020	0.010	mg/l		8260B	04/15/07	1
Methyl tert-butyl ether	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
Naphthalene	U	0.00027	0.0050	mg/l		8260B	04/15/07	1
n-Propylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Styrene	U	0.00027	0.0010	mg/l		8260B	04/15/07	1
1,1,1,2-Tetrachloroethane	U	0.00047	0.0010	mg/l		8260B	04/15/07	1
1,1,2,2-Tetrachloroethane	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
Tetrachloroethene	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Toluene	U	0.0016	0.0050	mg/l		8260B	04/15/07	1
1,2,3-Trichlorobenzene	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trichlorobenzene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,1,1-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloroethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
Trichloroethene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Trichlorofluoromethane	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trichloropropane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,3,5-Trimethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Vinyl chloride	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Xylenes, Total	U	0.00073	0.0030	mg/l		8260B	04/15/07	1
Surrogate Recovery								
Toluene-d8	93.9			% Rec.		8260B	04/15/07	1
Dibromofluoromethane	92.2			% Rec.		8260B	04/15/07	1
4-Bromofluorobenzene	94.7			% Rec.		8260B	04/15/07	1

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Est. 1970

REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-08

Site ID :

Project # : HOU-07-0260

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS2-MW3

Collected By : Ed Canalez
Collection Date : 04/05/07 14:15

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
TNRCC Method 1005 - TPH								
TPH C6 - C12	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C12 - C28	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C28 - C35	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C6 - C35	U	1.6	5.0	mg/l		TX 1005	04/12/07	1
Surrogate Recovery								
o-Terphenyl	96.1			% Rec.		TX 1005	04/12/07	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(b)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(g,h,i)perylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(k)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Chrysene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Dibenz(a,h)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluorene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Indeno(1,2,3-cd)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Naphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Phenanthrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
1-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
2-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Surrogate Recovery								
Nitrobenzene-d5	81.4			% Rec.		8270C-S	04/11/07	1
2-Fluorobiphenyl	73.4			% Rec.		8270C-S	04/11/07	1
p-Terphenyl-d14	72.6			% Rec.		8270C-S	04/11/07	1

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-09

Site ID :

Project # : HOU-07-0260

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS2-MW4

Collected By : Ed Canalez
Collection Date : 04/05/07 15:00

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	100	0.22	1.0	mg/l		9056	04/11/07	1
Arsenic	0.0027	0.00015	0.0010	mg/l		6020	04/13/07	1
Mercury	U	0.000044	0.00020	mg/l		7470A	04/12/07	1
Barium	0.61	0.0010	0.0050	mg/l		6010B	04/11/07	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	04/11/07	1
Chromium	0.0038	0.0023	0.010	mg/l	J	6010B	04/11/07	1
Lead	U	0.0024	0.0050	mg/l		6010B	04/11/07	1
Selenium	U	0.0092	0.020	mg/l		6010B	04/11/07	1
Silver	U	0.0025	0.010	mg/l		6010B	04/11/07	1
Volatile Organics								
Acetone	U	0.017	0.050	mg/l		8260B	04/15/07	1
Acrolein	U	0.013	0.050	mg/l	J3	8260B	04/15/07	1
Acrylonitrile	U	0.0014	0.010	mg/l		8260B	04/15/07	1
Benzene	0.00066	0.00031	0.0010	mg/l	J	8260B	04/15/07	1
Bromobenzene	U	0.00045	0.0010	mg/l		8260B	04/15/07	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Bromoform	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
n-Butylbenzene	U	0.00024	0.0010	mg/l		8260B	04/15/07	1
sec-Butylbenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
tert-Butylbenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Carbon tetrachloride	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Chlorobenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chlorodibromomethane	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chloroethane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
2-Chloroethyl vinyl ether	U	0.0060	0.050	mg/l		8260B	04/15/07	1
Chloroform	U	0.00054	0.0050	mg/l		8260B	04/15/07	1
Chloromethane	U	0.00065	0.0010	mg/l		8260B	04/15/07	1
2-Chlorotoluene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
4-Chlorotoluene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dibromo-3-Chloropropane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
1,2-Dibromoethane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Dibromomethane	U	0.00079	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichlorobenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Dichlorodifluoromethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloroethane	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloroethane	U	0.00034	0.0010	mg/l		8260B	04/15/07	1

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-09

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS2-MW4

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 15:00

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
1,1-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
cis-1,2-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
trans-1,2-Dichloroethene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloropropane	U	0.00054	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloropropene	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichloropropane	U	0.00035	0.0010	mg/l		8260B	04/15/07	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
trans-1,3-Dichloropropene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
2,2-Dichloropropane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Di-isopropyl ether	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Ethylbenzene	0.00098	0.00026	0.0010	mg/l	J	8260B	04/15/07	1
Hexachlorobutadiene	U	0.00058	0.0010	mg/l		8260B	04/15/07	1
Isopropylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
p-Isopropyltoluene	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
2-Butanone (MEK)	U	0.0027	0.010	mg/l		8260B	04/15/07	1
Methylene Chloride	U	0.00038	0.0050	mg/l		8260B	04/15/07	1
4-Methyl-2-pentanone (MIBK)	U	0.0020	0.010	mg/l		8260B	04/15/07	1
Methyl tert-butyl ether	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
Naphthalene	U	0.00027	0.0050	mg/l		8260B	04/15/07	1
n-Propylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Styrene	U	0.00027	0.0010	mg/l		8260B	04/15/07	1
1,1,1,2-Tetrachloroethane	U	0.00047	0.0010	mg/l		8260B	04/15/07	1
1,1,2,2-Tetrachloroethane	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
Tetrachloroethene	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Toluene	0.0060	0.0016	0.0050	mg/l		8260B	04/15/07	1
1,2,3-Trichlorobenzene	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trichlorobenzene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,1,1-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloroethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
Trichloroethene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Trichlorofluoromethane	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trichloropropane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trimethylbenzene	0.00068	0.00025	0.0010	mg/l	J	8260B	04/15/07	1
1,2,3-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,3,5-Trimethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Vinyl chloride	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Xylenes, Total	0.0083	0.00073	0.0030	mg/l		8260B	04/15/07	1
Surrogate Recovery								
Toluene-d8	95.5			% Rec.		8260B	04/15/07	1
Dibromofluoromethane	91.4			% Rec.		8260B	04/15/07	1
4-Bromofluorobenzene	95.8			% Rec.		8260B	04/15/07	1

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-09

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS2-MW4

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 15:00

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
TNRCC Method 1005 - TPH								
TPH C6 - C12	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C12 - C28	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C28 - C35	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C6 - C35	U	1.6	5.0	mg/l		TX 1005	04/12/07	1
Surrogate Recovery								
o-Terphenyl	94.9			% Rec.		TX 1005	04/12/07	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(b)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(g,h,i)perylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(k)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Chrysene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Dibenz(a,h)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluorene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Indeno(1,2,3-cd)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Naphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Phenanthrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
1-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
2-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Surrogate Recovery								
Nitrobenzene-d5	61.7			% Rec.		8270C-S	04/11/07	1
2-Fluorobiphenyl	62.4			% Rec.		8270C-S	04/11/07	1
p-Terphenyl-d14	61.2			% Rec.		8270C-S	04/11/07	1

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-10

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS2-MW5

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 16:40

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Chloride	37.	0.22	1.0	mg/l		9056	04/11/07	1
Arsenic	0.0013	0.00015	0.0010	mg/l		6020	04/13/07	1
Mercury	U	0.000044	0.00020	mg/l		7470A	04/12/07	1
Barium	0.86	0.0010	0.0050	mg/l		6010B	04/11/07	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	04/11/07	1
Chromium	0.0030	0.0023	0.010	mg/l	J	6010B	04/11/07	1
Lead	U	0.0024	0.0050	mg/l		6010B	04/11/07	1
Selenium	U	0.0092	0.020	mg/l		6010B	04/11/07	1
Silver	U	0.0025	0.010	mg/l		6010B	04/11/07	1
Volatile Organics								
Acetone	U	0.017	0.050	mg/l		8260B	04/15/07	1
Acrolein	U	0.013	0.050	mg/l	J3	8260B	04/15/07	1
Acrylonitrile	U	0.0014	0.010	mg/l		8260B	04/15/07	1
Benzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Bromobenzene	U	0.00045	0.0010	mg/l		8260B	04/15/07	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Bromoform	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
n-Butylbenzene	U	0.00024	0.0010	mg/l		8260B	04/15/07	1
sec-Butylbenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
tert-Butylbenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Carbon tetrachloride	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Chlorobenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chlorodibromomethane	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Chloroethane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
2-Chloroethyl vinyl ether	U	0.0060	0.050	mg/l		8260B	04/15/07	1
Chloroform	U	0.00054	0.0050	mg/l		8260B	04/15/07	1
Chloromethane	U	0.00065	0.0010	mg/l		8260B	04/15/07	1
2-Chlorotoluene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
4-Chlorotoluene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dibromo-3-Chloropropane	U	0.00089	0.0050	mg/l		8260B	04/15/07	1
1,2-Dibromoethane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Dibromomethane	U	0.00079	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichlorobenzene	U	0.00028	0.0010	mg/l		8260B	04/15/07	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	04/15/07	1
Dichlorodifluoromethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloroethane	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloroethane	U	0.00034	0.0010	mg/l		8260B	04/15/07	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
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ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-10

Site ID :

Project # : HOU-07-0260

Date Received : April 10, 2007
Description : Clear Lake

Sample ID : PS2-MW5

Collected By : Ed Canalez
Collection Date : 04/05/07 16:40

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
1,1-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
cis-1,2-Dichloroethene	U	0.00044	0.0010	mg/l		8260B	04/15/07	1
trans-1,2-Dichloroethene	U	0.00033	0.0010	mg/l		8260B	04/15/07	1
1,2-Dichloropropane	U	0.00054	0.0010	mg/l		8260B	04/15/07	1
1,1-Dichloropropene	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
1,3-Dichloropropane	U	0.00035	0.0010	mg/l		8260B	04/15/07	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
trans-1,3-Dichloropropene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
2,2-Dichloropropane	U	0.00036	0.0010	mg/l		8260B	04/15/07	1
Di-isopropyl ether	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
Ethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Hexachlorobutadiene	U	0.00058	0.0010	mg/l		8260B	04/15/07	1
Isopropylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
p-Isopropyltoluene	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
2-Butanone (MEK)	U	0.0027	0.010	mg/l		8260B	04/15/07	1
Methylene Chloride	U	0.00038	0.0050	mg/l		8260B	04/15/07	1
4-Methyl-2-pentanone (MIBK)	U	0.0020	0.010	mg/l		8260B	04/15/07	1
Methyl tert-butyl ether	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
Naphthalene	U	0.00027	0.0050	mg/l		8260B	04/15/07	1
n-Propylbenzene	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Styrene	U	0.00027	0.0010	mg/l		8260B	04/15/07	1
1,1,1,2-Tetrachloroethane	U	0.00047	0.0010	mg/l		8260B	04/15/07	1
1,1,2,2-Tetrachloroethane	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00034	0.0010	mg/l		8260B	04/15/07	1
Tetrachloroethene	U	0.00043	0.0010	mg/l		8260B	04/15/07	1
Toluene	U	0.0016	0.0050	mg/l		8260B	04/15/07	1
1,2,3-Trichlorobenzene	U	0.00037	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trichlorobenzene	U	0.00032	0.0010	mg/l		8260B	04/15/07	1
1,1,1-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	04/15/07	1
1,1,2-Trichloroethane	U	0.00040	0.0010	mg/l		8260B	04/15/07	1
Trichloroethene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Trichlorofluoromethane	U	0.00029	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trichloropropane	U	0.00046	0.0010	mg/l		8260B	04/15/07	1
1,2,4-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,2,3-Trimethylbenzene	U	0.00025	0.0010	mg/l		8260B	04/15/07	1
1,3,5-Trimethylbenzene	U	0.00026	0.0010	mg/l		8260B	04/15/07	1
Vinyl chloride	U	0.00031	0.0010	mg/l		8260B	04/15/07	1
Xylenes, Total	U	0.00073	0.0030	mg/l		8260B	04/15/07	1
Surrogate Recovery								
Toluene-d8	95.0			% Rec.		8260B	04/15/07	1
Dibromofluoromethane	91.2			% Rec.		8260B	04/15/07	1
4-Bromofluorobenzene	96.2			% Rec.		8260B	04/15/07	1

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REPORT OF ANALYSIS

Jason Binford
Envirotest
3902 Braxton St.
Houston, TX 77063

April 17, 2007

ESC Sample # : L288294-10

Date Received : April 10, 2007
Description : Clear Lake

Site ID :

Sample ID : PS2-MW5

Project # : HOU-07-0260

Collected By : Ed Canalez
Collection Date : 04/05/07 16:40

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
TNRCC Method 1005 - TPH								
TPH C6 - C12	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C12 - C28	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C28 - C35	U	0.98	5.0	mg/l		TX 1005	04/12/07	1
TPH C6 - C35	U	1.6	5.0	mg/l		TX 1005	04/12/07	1
Surrogate Recovery								
o-Terphenyl	112.			% Rec.		TX 1005	04/12/07	1
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Acenaphthylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(a)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(b)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(g,h,i)perylene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Benzo(k)fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Chrysene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Dibenz(a,h)anthracene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluoranthene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Fluorene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Indeno(1,2,3-cd)pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Naphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Phenanthrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
Pyrene	U	0.000025	0.000050	mg/l		8270C-S	04/11/07	1
1-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
2-Methylnaphthalene	U	0.00012	0.00025	mg/l		8270C-S	04/11/07	1
Surrogate Recovery								
Nitrobenzene-d5	80.3			% Rec.		8270C-S	04/11/07	1
2-Fluorobiphenyl	82.0			% Rec.		8270C-S	04/11/07	1
p-Terphenyl-d14	79.0			% Rec.		8270C-S	04/11/07	1

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MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:
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EPAHO104000139

Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L288294-01	Naphthalene	J
	Chromium	J
	Benzene	J
	Naphthalene	J
	1,2,3-Trimethylbenzene	JJ4
	1,3,5-Trimethylbenzene	J
L288294-02	Chromium	J
	1,2,3-Trimethylbenzene	J4
L288294-03	Chromium	J
	1,2,3-Trimethylbenzene	J4
L288294-04	Chromium	J
	Acrolein	J3
	Ethylbenzene	J
	Naphthalene	J
	1,2,4-Trimethylbenzene	J
	Xylenes, Total	J
L288294-05	Chromium	J
	Acrolein	J3
	Naphthalene	J
L288294-06	Chromium	J
	Acrolein	J3
L288294-07	Phenanthrene	J
	Acrolein	J4
	Di-isopropyl ether	J
	Methylene Chloride	J
	Chromium	J
L288294-08	Chromium	J
	Acrolein	J3
L288294-09	Chromium	J
	Acrolein	J3
	Benzene	J
	Ethylbenzene	J
	1,2,4-Trimethylbenzene	J
L288294-10	Chromium	J
	Acrolein	J3

EPAHO104000140

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

	Control Limits				(AQ)	(SS)
2-Fluorophenol	31-119	Nitrobenzene-d5	43-118	Dibromfluoromethane	68-128	64-125
Phenol-d5	12-134	2-Fluorobiphenyl	45-128	Toluene-d8	76-115	69-118
2,4,6-Tribromophenol	51-141	Terphenyl-d14	43-137	4-Bromofluorobenzene	79-127	61-134

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

EPAHO104000141

Summary of Remarks For Samples Printed
04/17/07 at 16:37:39

TSR Signing Reports: 134
RX - Priority Rush

Client wants pH reported on all SS requesting metals per JB Arsenic H2O log method 6020

Sample: L288294-01 Account: ENVTESTX Received: 04/10/07 09:00 Due Date: 04/17/07 00:00 RPT Date: 04/17/07 15:39
Removed ASICP from WG295103 and added ASG per MB. dor 4/11/07.
Sample: L288294-02 Account: ENVTESTX Received: 04/10/07 09:00 Due Date: 04/17/07 00:00 RPT Date: 04/17/07 15:39
Removed ASICP from WG295103 and added ASG per MB. dor 4/11/07.
Sample: L288294-03 Account: ENVTESTX Received: 04/10/07 09:00 Due Date: 04/17/07 00:00 RPT Date: 04/17/07 15:39
Removed ASICP from WG295103 and added ASG per MB. dor 4/11/07.
Sample: L288294-04 Account: ENVTESTX Received: 04/10/07 09:00 Due Date: 04/17/07 00:00 RPT Date: 04/17/07 15:39
Removed ASICP from WG295103 and added ASG per MB. dor 4/11/07.
Sample: L288294-05 Account: ENVTESTX Received: 04/10/07 09:00 Due Date: 04/17/07 00:00 RPT Date: 04/17/07 15:39
Removed ASICP from WG295103 and added ASG per MB. dor 4/11/07.
Sample: L288294-06 Account: ENVTESTX Received: 04/10/07 09:00 Due Date: 04/17/07 00:00 RPT Date: 04/17/07 15:39
Removed ASICP from WG295103 and added ASG per MB. dor 4/11/07.
Sample: L288294-07 Account: ENVTESTX Received: 04/10/07 09:00 Due Date: 04/17/07 00:00 RPT Date: 04/17/07 15:39
Removed ASICP from WG295103 and added ASG per MB. dor 4/11/07.
Sample: L288294-08 Account: ENVTESTX Received: 04/10/07 09:00 Due Date: 04/17/07 00:00 RPT Date: 04/17/07 15:39
Removed ASICP from WG295103 and added ASG per MB. dor 4/11/07.
Sample: L288294-09 Account: ENVTESTX Received: 04/10/07 09:00 Due Date: 04/17/07 00:00 RPT Date: 04/17/07 15:39
Removed ASICP from WG295103 and added ASG per MB. dor 4/11/07.
Sample: L288294-10 Account: ENVTESTX Received: 04/10/07 09:00 Due Date: 04/17/07 00:00 RPT Date: 04/17/07 15:39
Removed ASICP from WG295103 and added ASG per MB. dor 4/11/07.

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Anions by Method 9056**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Analysis Date: 4/10/2007
Instrument ID: IC3
Analyst: 098
Analytic Batch: WG294995

EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
Chloride		<1.00

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Chloride	40.0	38.0	95.0	90 - 110	

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Chloride	40.0	38.1	95.2	90 - 110	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Trace Metals by Method 6020**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/12/2007
Analysis Date: 4/13/2007
Instrument ID: ICPMS
Analyst: 400
Analytic Batch: WG295358

EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
Arsenic	7440-38-2	<0.00100

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Arsenic	0.0567	0.0517	91.2	85 - 115	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Anions by Method 9056**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Analysis Date: 4/10/2007
Instrument ID: IC3
Analyst: 098
Analytic Batch: WG294995 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Chloride	40.0	38.0	95.0	38.1	95.2	90-110		0.3	20	

Sample Duplicate

L288294-03

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Chloride	220	226	2.7	20	

Sample Duplicate

L288294-06

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Chloride	24.0	23.4	2.5	20	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Anions by Method 9056**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Analysis Date: 4/10/2007
Instrument ID: IC3
Analyst: 098
Analytic Batch: WG294995 EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate
L288294-07

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Chloride	50.0	37.0	85.5	97.0	85.9	97.8	80-120		0.5	20	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Trace Metals by Method 6020**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/12/2007
Analysis Date: 4/13/2007
Instrument ID: ICPMS
Analyst: 400
Analytic Batch: WG295358 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
Arsenic	7440-38-2	<0.00100

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Arsenic	0.0567	0.0517	91.2	85 - 115	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Trace Metals by Method 6020**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/12/2007
Analysis Date: 4/13/2007
Instrument ID: ICPMS
Analyst: 400
Analytic Batch: WG295358 EPA ID: TN00003

Sample Duplicate

L288408-01

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Arsenic	0.00153	0.00170	11	20	

Matrix Spike/Matrix Spike Duplicate

L288408-01

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Arsenic	0.0567	0.00170	0.0542	92.6	0.0538	91.9	75-125		0.7	20	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Trace Metals by Method 6020**
Matrix: Water - mg/L units
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/12/2007
Analysis Date: 4/13/2007
Instrument ID: ICPMS

Analytic Batch: WG295358

Method Blank Summary

Client Sample ID	Laboratory Sample ID	Lab Filename	Instrument	Date Analyzed	Time Analyzed
Blank WG295358	Blank WG295358	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	1:58 PM
LCS WG295358	LCS WG295358	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	2:00 PM
PS1-MW1	L288294-01	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	2:04 PM
PS1-MW2	L288294-02	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	2:14 PM
PS1-MW3	L288294-03	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	2:16 PM
PS1-MW4	L288294-04	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	2:18 PM
PS1-MW5	L288294-05	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	2:20 PM
PS2-MW1	L288294-06	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	2:21 PM
PS2-MW2	L288294-07	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	2:24 PM
PS2-MW3	L288294-08	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	2:26 PM
PS2-MW4	L288294-09	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	2:28 PM
PS2-MW5	L288294-10	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	2:37 PM
DUP WG295358	DUP WG295358	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	3:10 PM
MS WG295358	MS WG295358	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	3:12 PM
MSD WG295358	MSD WG295358	041307ICPMS.SAV	ICPMS.SAV	4/13/2007	3:14 PM

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Trace Metals by Method 6010B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/11/2007
Analysis Date: 4/11/2007
Instrument ID: ICP6
Analyst: 107
Analytic Batch: WG295103

EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
Barium	7440-39-3	<0.00500
Cadmium	7440-43-9	<0.00500
Chromium	7440-47-3	<0.0100
Lead	7439-92-1	<0.00500
Selenium	7782-49-2	<0.0200
Silver	7440-22-4	<0.0100

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Barium	1.13	1.06	93.8	85 - 115	
Cadmium	1.13	1.07	94.7	85 - 115	
Chromium	1.13	1.03	91.2	85 - 115	
Lead	1.13	1.07	94.7	85 - 115	
Selenium	1.13	0.992	87.8	85 - 115	
Silver	1.13	1.03	91.2	85 - 115	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Trace Metals by Method 6010B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/11/2007
Analysis Date: 4/11/2007
Instrument ID: ICP6
Analyst: 107
Analytic Batch: WG295103 EPA ID: TN00003

Sample Duplicate

L288193-01

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Barium	0.0329	0.0318	3.4	20	
Cadmium	0.00000	0.00060			
Chromium	0.00000	0.00390			
Lead	0.00000	0.00480			
Selenium	0.00000	0.00340			
Silver	0.00000	0.00000			

Matrix Spike/Matrix Spike Duplicate

L288193-01

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Barium	1.13	0.0318	1.14	98.1	1.13	97.2	75-125		0.9	20	
Cadmium	1.13	0.00000	1.14	101	1.13	100	75-125		0.9	20	
Chromium	1.13	0.00390	1.08	95.2	1.07	94.3	75-125		0.9	20	
Lead	1.13	0.00480	1.10	96.9	1.10	96.9	75-125		0.0	20	
Selenium	1.13	0.00340	1.03	90.8	1.02	90.0	75-125		1.0	20	
Silver	1.13	0.00000	0.505	44.7	0.471	41.7	75-125	J6	7.0	20	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Trace Metals by Method 6010B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/11/2007
Analysis Date: 4/11/2007
Instrument ID: ICP6
Analyst: 107
Analytic Batch: WG295103 EPA ID: TN00003

Post Digest Spike
L288193-01

Analyte	Spike Value	Sample	PS	% Rec	Control Limits	Qualifier

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Trace Metals by Method 6010B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/11/2007
Analysis Date: 4/11/2007
Instrument ID: ICP6
Analyst: 107
Analytic Batch: WG295103 EPA ID: TN00003

Post Digest Spike
L288193-01

Analyte	Spike Value	Sample	PS	% Rec	Control Limits	Qualifier

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Trace Metals by Method 6020**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/12/2007
Analysis Date: 4/13/2007
Instrument ID: ICPMS
Analyst: 400
Analytic Batch: WG295358

EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
Arsenic	7440-38-2	<0.00100

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Arsenic	0.0567	0.0517	91.2	85 - 115	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Trace Metals by Method 6020**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/12/2007
Analysis Date: 4/13/2007
Instrument ID: ICPMS
Analyst: 400
Analytic Batch: WG295358 EPA ID: TN00003

Sample Duplicate

L288408-01

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Arsenic	0.00153	0.00170	11	20	

Matrix Spike/Matrix Spike Duplicate

L288408-01

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Qualifier	RPD	Control Limits	Qualifier
Arsenic	0.0567	0.00170	0.0542	92.6	0.0538	91.9	75-125		0.7	20	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Mercury by Method 7470A**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/11/2007
Analysis Date: 4/12/2007 1:27:00 AM
Instrument ID: CVAA3
Analyst: 196
Analytic Batch: WG295253 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
Mercury		<0.0002

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Mercury	0.0030	0.0030	99.3	85 - 115	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Mercury by Method 7470A**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/11/2007
Analysis Date: 4/12/2007 1:27:00 AM
Instrument ID: CVAA3
Analyst: 196
Analytic Batch: WG295253 EPA ID: TN00003

Sample Duplicate

L288342-01

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Mercury	0.0000	0.0007			

Matrix Spike/Matrix Spike Duplicate

L288218-01

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Qualifier	RPD	Control Limits	Qualifier
Mercury	0.0030	0.0000	0.0030	98.7	0.0032	107	70-130		8.4	20	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 2:57:00 AM
Instrument ID: VOCMS2
Analyst: 120
Analytic Batch: WG295623

EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
1,1,1,2-Tetrachloroethane	630-20-6	<0.001
1,1,1-Trichloroethane	71-55-6	<0.001
1,1,2,2-Tetrachloroethane	79-34-5	<0.001
1,1,2-Trichloroethane	79-00-5	<0.001
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	<0.001
1,1-Dichloroethane	75-34-3	<0.001
1,1-Dichloroethene	75-35-4	<0.001
1,1-Dichloropropene	563-58-6	<0.001
1,2,3-Trichlorobenzene	87-61-6	<0.001
1,2,3-Trichloropropane	96-18-4	<0.001
1,2,3-Trimethylbenzene	526-73-8	<0.001
1,2,4-Trichlorobenzene	120-82-1	<0.001
1,2,4-Trimethylbenzene	95-63-6	<0.001
1,2-Dibromo-3-Chloropropane	96-12-8	<0.002
1,2-Dibromoethane	106-93-4	<0.001
1,2-Dichlorobenzene	95-50-1	<0.001
1,2-Dichloroethane	107-06-2	<0.001
1,2-Dichloropropane	78-87-5	<0.001
1,3,5-Trimethylbenzene	108-67-8	<0.001
1,3-Dichlorobenzene	541-73-1	<0.001
1,3-Dichloropropane	142-28-9	<0.001
1,4-Dichlorobenzene	106-46-7	<0.001
2,2-Dichloropropane	594-20-7	<0.001
2-Butanone (MEK)	78-93-3	<0.010
2-Chloroethyl vinyl ether	110-75-8	<0.001
2-Chlorotoluene	95-49-8	<0.001
4-Chlorotoluene	106-43-4	<0.001
4-Methyl-2-pentanone (MIBK)	108-10-1	<0.010
Acetone	67-64-1	<0.050
Acrolein	107-02-8	<0.050
Acrylonitrile	107-13-1	<0.010
Benzene	71-43-2	<0.001
Bromobenzene	108-86-1	<0.001
Bromodichloromethane	75-27-4	<0.001

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 2:57:00 AM
Instrument ID: VOCMS2
Analyst: 120
Analytic Batch: WG295623

EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
Bromoform	75-25-2	<0.001
Bromomethane	74-83-9	<0.005
Carbon tetrachloride	56-23-5	<0.001
Chlorobenzene	108-90-7	<0.001
Chlorodibromomethane	124-48-1	<0.001
Chloroethane	75-00-3	<0.001
Chloroform	67-66-3	<0.005
Chloromethane	74-87-3	<0.001
cis-1,2-Dichloroethene	156-59-2	<0.001
cis-1,3-Dichloropropene	10061-01-5	<0.001
Di-isopropyl ether	108-20-3	<0.001
Dibromomethane	74-95-3	<0.001
Dichlorodifluoromethane	75-71-8	<0.001
Ethylbenzene	100-41-4	<0.001
Hexachlorobutadiene	87-68-3	<0.001
Isopropylbenzene	98-82-8	<0.001
Methyl tert-butyl ether	1634-04-4	<0.001
Methylene Chloride	75-09-2	<0.005
n-Butylbenzene	104-51-8	<0.001
n-Propylbenzene	103-65-1	<0.001
Naphthalene	91-20-3	<0.005
p-Isopropyltoluene	99-87-6	<0.001
sec-Butylbenzene	135-98-8	<0.001
Styrene	100-42-5	<0.001
tert-Butylbenzene	98-06-6	<0.001
Tetrachloroethene	127-18-4	<0.001
Toluene	108-88-3	<0.005
trans-1,2-Dichloroethene	156-60-5	<0.001
trans-1,3-Dichloropropene	10061-02-6	<0.001
Trichloroethene	79-01-6	<0.001
Trichlorofluoromethane	75-69-4	<0.001
Vinyl chloride	75-01-4	<0.001
Xylenes, Total	1330-20-7	<0.003

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-04, -05, -06, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 1:58:00 AM
Instrument ID: VOCMS1
Analyst: 366
Analytic Batch: WG295634 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
1,1,1,2-Tetrachloroethane	630-20-6	<0.001
1,1,1-Trichloroethane	71-55-6	<0.001
1,1,2,2-Tetrachloroethane	79-34-5	<0.001
1,1,2-Trichloroethane	79-00-5	<0.001
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	<0.001
1,1-Dichloroethane	75-34-3	<0.001
1,1-Dichloroethene	75-35-4	<0.001
1,1-Dichloropropene	563-58-6	<0.001
1,2,3-Trichlorobenzene	87-61-6	<0.001
1,2,3-Trichloropropane	96-18-4	<0.001
1,2,3-Trimethylbenzene	526-73-8	<0.001
1,2,4-Trichlorobenzene	120-82-1	<0.001
1,2,4-Trimethylbenzene	95-63-6	<0.001
1,2-Dibromo-3-Chloropropane	96-12-8	<0.002
1,2-Dibromoethane	106-93-4	<0.001
1,2-Dichlorobenzene	95-50-1	<0.001
1,2-Dichloroethane	107-06-2	<0.001
1,2-Dichloropropane	78-87-5	<0.001
1,3,5-Trimethylbenzene	108-67-8	<0.001
1,3-Dichlorobenzene	541-73-1	<0.001
1,3-Dichloropropane	142-28-9	<0.001
1,4-Dichlorobenzene	106-46-7	<0.001
2,2-Dichloropropane	594-20-7	<0.001
2-Butanone (MEK)	78-93-3	<0.010
2-Chloroethyl vinyl ether	110-75-8	<0.001
2-Chlorotoluene	95-49-8	<0.001
4-Chlorotoluene	106-43-4	<0.001
4-Methyl-2-pentanone (MIBK)	108-10-1	<0.010
Acetone	67-64-1	<0.050
Acrolein	107-02-8	<0.050
Acrylonitrile	107-13-1	<0.010
Benzene	71-43-2	<0.001
Bromobenzene	108-86-1	<0.001
Bromodichloromethane	75-27-4	<0.001

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-04, -05, -06, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 1:58:00 AM
Instrument ID: VOCMS1
Analyst: 366
Analytic Batch: WG295634 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
Bromoform	75-25-2	<0.001
Bromomethane	74-83-9	<0.005
Carbon tetrachloride	56-23-5	<0.001
Chlorobenzene	108-90-7	<0.001
Chlorodibromomethane	124-48-1	<0.001
Chloroethane	75-00-3	<0.001
Chloroform	67-66-3	<0.005
Chloromethane	74-87-3	<0.001
cis-1,2-Dichloroethene	156-59-2	<0.001
cis-1,3-Dichloropropene	10061-01-5	<0.001
Di-isopropyl ether	108-20-3	<0.001
Dibromomethane	74-95-3	<0.001
Dichlorodifluoromethane	75-71-8	<0.001
Ethylbenzene	100-41-4	<0.001
Hexachlorobutadiene	87-68-3	<0.001
Isopropylbenzene	98-82-8	<0.001
Methyl tert-butyl ether	1634-04-4	<0.001
Methylene Chloride	75-09-2	<0.005
n-Butylbenzene	104-51-8	<0.001
n-Propylbenzene	103-65-1	<0.001
Naphthalene	91-20-3	<0.005
p-Isopropyltoluene	99-87-6	<0.001
sec-Butylbenzene	135-98-8	<0.001
Styrene	100-42-5	<0.001
tert-Butylbenzene	98-06-6	<0.001
Tetrachloroethene	127-18-4	<0.001
Toluene	108-88-3	<0.005
trans-1,2-Dichloroethene	156-60-5	<0.001
trans-1,3-Dichloropropene	10061-02-6	<0.001
Trichloroethene	79-01-6	<0.001
Trichlorofluoromethane	75-69-4	<0.001
Vinyl chloride	75-01-4	<0.001
Xylenes, Total	1330-20-7	<0.003

Quality Control Summary for client sample(s) PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-07
Sample Date: 4/5/2007
Extraction Date: 4/17/2007
Analysis Date: 4/17/2007 2:50:00 PM
Instrument ID: VOCMS9
Analyst: 189
Analytic Batch: WG295930

EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
1,1,1,2-Tetrachloroethane	630-20-6	<0.001
1,1,1-Trichloroethane	71-55-6	<0.001
1,1,2,2-Tetrachloroethane	79-34-5	<0.001
1,1,2-Trichloroethane	79-00-5	<0.001
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	<0.001
1,1-Dichloroethane	75-34-3	<0.001
1,1-Dichloroethene	75-35-4	<0.001
1,1-Dichloropropene	563-58-6	<0.001
1,2,3-Trichlorobenzene	87-61-6	<0.001
1,2,3-Trichloropropane	96-18-4	<0.001
1,2,3-Trimethylbenzene	526-73-8	<0.001
1,2,4-Trichlorobenzene	120-82-1	<0.001
1,2,4-Trimethylbenzene	95-63-6	<0.001
1,2-Dibromo-3-Chloropropane	96-12-8	<0.002
1,2-Dibromoethane	106-93-4	<0.001
1,2-Dichlorobenzene	95-50-1	<0.001
1,2-Dichloroethane	107-06-2	<0.001
1,2-Dichloropropane	78-87-5	<0.001
1,3,5-Trimethylbenzene	108-67-8	<0.001
1,3-Dichlorobenzene	541-73-1	<0.001
1,3-Dichloropropane	142-28-9	<0.001
1,4-Dichlorobenzene	106-46-7	<0.001
2,2-Dichloropropane	594-20-7	<0.001
2-Butanone (MEK)	78-93-3	<0.010
2-Chloroethyl vinyl ether	110-75-8	<0.001
2-Chlorotoluene	95-49-8	<0.001
4-Chlorotoluene	106-43-4	<0.001
4-Methyl-2-pentanone (MIBK)	108-10-1	<0.010
Acetone	67-64-1	<0.050
Acrolein	107-02-8	<0.050
Acrylonitrile	107-13-1	<0.010
Benzene	71-43-2	<0.001
Bromobenzene	108-86-1	<0.001
Bromodichloromethane	75-27-4	<0.001

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-07
Sample Date: 4/5/2007
Extraction Date: 4/17/2007
Analysis Date: 4/17/2007 2:50:00 PM
Instrument ID: VOCMS9
Analyst: 189
Analytic Batch: WG295930

EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
Bromoform	75-25-2	<0.001
Bromomethane	74-83-9	<0.005
Carbon tetrachloride	56-23-5	<0.001
Chlorobenzene	108-90-7	<0.001
Chlorodibromomethane	124-48-1	<0.001
Chloroethane	75-00-3	<0.001
Chloroform	67-66-3	<0.005
Chloromethane	74-87-3	<0.001
cis-1,2-Dichloroethene	156-59-2	<0.001
cis-1,3-Dichloropropene	10061-01-5	<0.001
Di-isopropyl ether	108-20-3	<0.001
Dibromomethane	74-95-3	<0.001
Dichlorodifluoromethane	75-71-8	<0.001
Ethylbenzene	100-41-4	<0.001
Hexachlorobutadiene	87-68-3	<0.001
Isopropylbenzene	98-82-8	<0.001
Methyl tert-butyl ether	1634-04-4	<0.001
Methylene Chloride	75-09-2	<0.005
n-Butylbenzene	104-51-8	<0.001
n-Propylbenzene	103-65-1	<0.001
Naphthalene	91-20-3	<0.005
p-Isopropyltoluene	99-87-6	<0.001
sec-Butylbenzene	135-98-8	<0.001
Styrene	100-42-5	<0.001
tert-Butylbenzene	98-06-6	<0.001
Tetrachloroethene	127-18-4	<0.001
Toluene	108-88-3	<0.005
trans-1,2-Dichloroethene	156-60-5	<0.001
trans-1,3-Dichloropropene	10061-02-6	<0.001
Trichloroethene	79-01-6	<0.001
Trichlorofluoromethane	75-69-4	<0.001
Vinyl chloride	75-01-4	<0.001
Xylenes, Total	1330-20-7	<0.003

Quality Control Summary for client sample(s) PS2-MW2
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 2:57:00 AM
Instrument ID: VOCMS2
Analyst: 120
Analytic Batch: WG295623 EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,1,1,2-Tetrachloroethane	0.050	0.053	107	61 - 134	
1,1,1-Trichloroethane	0.050	0.053	107	62 - 133	
1,1,2,2-Tetrachloroethane	0.050	0.053	106	66 - 124	
1,1,2-Trichloroethane	0.050	0.051	103	62 - 124	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.050	0.048	95.0	66 - 130	
1,1-Dichloroethane	0.050	0.051	103	59 - 135	
1,1-Dichloroethene	0.050	0.053	106	68 - 136	
1,1-Dichloropropene	0.050	0.055	110	63 - 125	
1,2,3-Trichlorobenzene	0.050	0.055	110	57 - 152	
1,2,3-Trichloropropane	0.050	0.051	102	62 - 138	
1,2,3-Trimethylbenzene	0.050	0.054	108	61 - 107	J4
1,2,4-Trichlorobenzene	0.050	0.056	112	49 - 153	
1,2,4-Trimethylbenzene	0.050	0.054	109	61 - 128	
1,2-Dibromo-3-Chloropropane	0.050	0.055	110	50 - 139	
1,2-Dibromoethane	0.050	0.051	102	70 - 122	
1,2-Dichlorobenzene	0.050	0.053	107	54 - 135	
1,2-Dichloroethane	0.050	0.052	103	61 - 131	
1,2-Dichloropropane	0.050	0.051	102	64 - 126	
1,3,5-Trimethylbenzene	0.050	0.054	108	65 - 126	
1,3-Dichlorobenzene	0.050	0.053	107	45 - 143	
1,3-Dichloropropane	0.050	0.051	101	74 - 118	
1,4-Dichlorobenzene	0.050	0.052	105	48 - 138	
2,2-Dichloropropane	0.050	0.055	110	52 - 140	
2-Butanone (MEK)	0.250	0.219	87.7	50 - 132	
2-Chloroethyl vinyl ether	0.250	0.259	104	36 - 136	
2-Chlorotoluene	0.050	0.054	108	61 - 134	
4-Chlorotoluene	0.050	0.053	106	67 - 129	
4-Methyl-2-pentanone (MIBK)	0.250	0.246	98.5	47 - 143	
Acetone	0.250	0.228	91.3	36 - 163	
Acrolein	0.250	0.248	99.3	27 - 122	
Acrylonitrile	0.250	0.252	101	44 - 130	
Benzene	0.050	0.051	103	63 - 121	
Bromobenzene	0.050	0.052	104	70 - 130	
Bromodichloromethane	0.050	0.054	107	64 - 127	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 2:57:00 AM
Instrument ID: VOCMS2
Analyst: 120
Analytic Batch: WG295623

EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Bromoform	0.050	0.057	114	60 - 139	
Bromomethane	0.050	0.048	95.3	30 - 125	
Carbon tetrachloride	0.050	0.046	92.8	70 - 140	
Chlorobenzene	0.050	0.053	106	70 - 126	
Chlorodibromomethane	0.050	0.055	110	62 - 132	
Chloroethane	0.050	0.046	92.9	43 - 146	
Chloroform	0.050	0.051	103	65 - 121	
Chloromethane	0.050	0.047	94.6	45 - 131	
cis-1,2-Dichloroethene	0.050	0.052	103	68 - 123	
cis-1,3-Dichloropropene	0.050	0.055	110	66 - 121	
Di-isopropyl ether	0.050	0.052	104	58 - 127	
Dibromomethane	0.050	0.051	102	69 - 119	
Dichlorodifluoromethane	0.050	0.043	85.4	24 - 155	
Ethylbenzene	0.050	0.052	105	70 - 121	
Hexachlorobutadiene	0.050	0.051	101	60 - 119	
Isopropylbenzene	0.050	0.054	109	68 - 128	
Methyl tert-butyl ether	0.050	0.051	103	51 - 137	
Methylene Chloride	0.050	0.048	95.3	53 - 131	
n-Butylbenzene	0.050	0.058	116	59 - 134	
n-Propylbenzene	0.050	0.056	112	68 - 123	
Naphthalene	0.050	0.052	104	54 - 150	
p-Isopropyltoluene	0.050	0.058	116	64 - 132	
sec-Butylbenzene	0.050	0.057	113	67 - 124	
Styrene	0.050	0.052	105	68 - 123	
tert-Butylbenzene	0.050	0.054	108	65 - 128	
Tetrachloroethene	0.050	0.048	95.2	64 - 134	
Toluene	0.050	0.052	103	65 - 120	
trans-1,2-Dichloroethene	0.050	0.051	103	59 - 138	
trans-1,3-Dichloropropene	0.050	0.053	106	55 - 113	
Trichloroethene	0.050	0.053	107	74 - 120	
Trichlorofluoromethane	0.050	0.046	92.3	49 - 121	
Vinyl chloride	0.050	0.051	102	46 - 133	
Xylenes, Total	0.150	0.158	106	68 - 124	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 2:57:00 AM
Instrument ID: VOCMS2
Analyst: 120
Analytic Batch: WG295623 EPA ID: TN00003

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,1,1,2-Tetrachloroethane	0.050	0.055	110	61 - 134	
1,1,1-Trichloroethane	0.050	0.055	110	62 - 133	
1,1,2,2-Tetrachloroethane	0.050	0.056	113	66 - 124	
1,1,2-Trichloroethane	0.050	0.054	108	62 - 124	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.050	0.048	95.9	66 - 130	
1,1-Dichloroethane	0.050	0.052	105	59 - 135	
1,1-Dichloroethene	0.050	0.053	106	68 - 136	
1,1-Dichloropropene	0.050	0.057	114	63 - 125	
1,2,3-Trichlorobenzene	0.050	0.058	115	57 - 152	
1,2,3-Trichloropropane	0.050	0.054	109	62 - 138	
1,2,3-Trimethylbenzene	0.050	0.055	111	61 - 107	J4
1,2,4-Trichlorobenzene	0.050	0.060	119	49 - 153	
1,2,4-Trimethylbenzene	0.050	0.055	111	61 - 128	
1,2-Dibromo-3-Chloropropane	0.050	0.060	119	50 - 139	
1,2-Dibromoethane	0.050	0.053	105	70 - 122	
1,2-Dichlorobenzene	0.050	0.054	109	54 - 135	
1,2-Dichloroethane	0.050	0.053	105	61 - 131	
1,2-Dichloropropane	0.050	0.052	104	64 - 126	
1,3,5-Trimethylbenzene	0.050	0.055	109	65 - 126	
1,3-Dichlorobenzene	0.050	0.054	107	45 - 143	
1,3-Dichloropropane	0.050	0.052	104	74 - 118	
1,4-Dichlorobenzene	0.050	0.053	107	48 - 138	
2,2-Dichloropropane	0.050	0.056	111	52 - 140	
2-Butanone (MEK)	0.250	0.241	96.4	50 - 132	
2-Chloroethyl vinyl ether	0.250	0.271	109	36 - 136	
2-Chlorotoluene	0.050	0.055	110	61 - 134	
4-Chlorotoluene	0.050	0.055	110	67 - 129	
4-Methyl-2-pentanone (MIBK)	0.250	0.267	107	47 - 143	
Acetone	0.250	0.244	97.7	36 - 163	
Acrolein	0.250	0.264	106	27 - 122	
Acrylonitrile	0.250	0.267	107	44 - 130	
Benzene	0.050	0.053	105	63 - 121	
Bromobenzene	0.050	0.052	104	70 - 130	
Bromodichloromethane	0.050	0.055	111	64 - 127	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 2:57:00 AM
Instrument ID: VOCMS2
Analyst: 120
Analytic Batch: WG295623 EPA ID: TN00003

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Bromoform	0.050	0.060	120	60 - 139	
Bromomethane	0.050	0.049	98.0	30 - 125	
Carbon tetrachloride	0.050	0.048	95.6	70 - 140	
Chlorobenzene	0.050	0.054	108	70 - 126	
Chlorodibromomethane	0.050	0.056	112	62 - 132	
Chloroethane	0.050	0.046	91.0	43 - 146	
Chloroform	0.050	0.053	106	65 - 121	
Chloromethane	0.050	0.048	96.6	45 - 131	
cis-1,2-Dichloroethene	0.050	0.053	105	68 - 123	
cis-1,3-Dichloropropene	0.050	0.055	111	66 - 121	
Di-isopropyl ether	0.050	0.054	108	58 - 127	
Dibromomethane	0.050	0.052	104	69 - 119	
Dichlorodifluoromethane	0.050	0.044	88.4	24 - 155	
Ethylbenzene	0.050	0.053	106	70 - 121	
Hexachlorobutadiene	0.050	0.053	106	60 - 119	
Isopropylbenzene	0.050	0.055	111	68 - 128	
Methyl tert-butyl ether	0.050	0.054	109	51 - 137	
Methylene Chloride	0.050	0.050	100	53 - 131	
n-Butylbenzene	0.050	0.060	120	59 - 134	
n-Propylbenzene	0.050	0.057	114	68 - 123	
Naphthalene	0.050	0.057	114	54 - 150	
p-Isopropyltoluene	0.050	0.058	117	64 - 132	
sec-Butylbenzene	0.050	0.057	115	67 - 124	
Styrene	0.050	0.053	107	68 - 123	
tert-Butylbenzene	0.050	0.056	112	65 - 128	
Tetrachloroethene	0.050	0.049	97.3	64 - 134	
Toluene	0.050	0.053	105	65 - 120	
trans-1,2-Dichloroethene	0.050	0.052	103	59 - 138	
trans-1,3-Dichloropropene	0.050	0.055	109	55 - 113	
Trichloroethene	0.050	0.055	109	74 - 120	
Trichlorofluoromethane	0.050	0.047	94.4	49 - 121	
Vinyl chloride	0.050	0.052	104	46 - 133	
Xylenes, Total	0.150	0.161	107	68 - 124	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-04, -05, -06, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 1:58:00 AM
Instrument ID: VOCMS1
Analyst: 366
Analytic Batch: WG295634 EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,1,1,2-Tetrachloroethane	0.050	0.048	97.0	61 - 134	
1,1,1-Trichloroethane	0.050	0.043	85.0	62 - 133	
1,1,2,2-Tetrachloroethane	0.050	0.047	93.8	66 - 124	
1,1,2-Trichloroethane	0.050	0.049	98.2	62 - 124	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.050	0.038	76.5	66 - 130	
1,1-Dichloroethane	0.050	0.042	83.7	59 - 135	
1,1-Dichloroethene	0.050	0.044	87.8	68 - 136	
1,1-Dichloropropene	0.050	0.042	84.0	63 - 125	
1,2,3-Trichlorobenzene	0.050	0.052	104	57 - 152	
1,2,3-Trichloropropane	0.050	0.044	88.9	62 - 138	
1,2,3-Trimethylbenzene	0.050	0.046	92.3	61 - 107	
1,2,4-Trichlorobenzene	0.050	0.054	108	49 - 153	
1,2,4-Trimethylbenzene	0.050	0.048	96.1	61 - 128	
1,2-Dibromo-3-Chloropropane	0.050	0.048	95.8	50 - 139	
1,2-Dibromoethane	0.050	0.049	97.4	70 - 122	
1,2-Dichlorobenzene	0.050	0.050	101	54 - 135	
1,2-Dichloroethane	0.050	0.037	74.1	61 - 131	
1,2-Dichloropropane	0.050	0.048	95.9	64 - 126	
1,3,5-Trimethylbenzene	0.050	0.049	97.0	65 - 126	
1,3-Dichlorobenzene	0.050	0.050	99.4	45 - 143	
1,3-Dichloropropane	0.050	0.046	91.3	74 - 118	
1,4-Dichlorobenzene	0.050	0.049	98.5	48 - 138	
2,2-Dichloropropane	0.050	0.038	76.7	52 - 140	
2-Butanone (MEK)	0.250	0.220	88.1	50 - 132	
2-Chloroethyl vinyl ether	0.250	0.310	124	36 - 136	
2-Chlorotoluene	0.050	0.046	92.5	61 - 134	
4-Chlorotoluene	0.050	0.048	96.1	67 - 129	
4-Methyl-2-pentanone (MIBK)	0.250	0.225	90.1	47 - 143	
Acetone	0.250	0.176	70.3	36 - 163	
Acrolein	0.250	0.145	57.9	27 - 122	
Acrylonitrile	0.250	0.200	80.2	44 - 130	
Benzene	0.050	0.041	82.8	63 - 121	
Bromobenzene	0.050	0.043	85.4	70 - 130	
Bromodichloromethane	0.050	0.042	83.7	64 - 127	

Quality Control Summary for client sample(s) PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-04, -05, -06, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 1:58:00 AM
Instrument ID: VOCMS1
Analyst: 366
Analytic Batch: WG295634 EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Bromoform	0.050	0.049	97.6	60 - 139	
Bromomethane	0.050	0.052	104	30 - 125	
Carbon tetrachloride	0.050	0.041	81.8	70 - 140	
Chlorobenzene	0.050	0.048	96.6	70 - 126	
Chlorodibromomethane	0.050	0.050	99.1	62 - 132	
Chloroethane	0.050	0.042	84.6	43 - 146	
Chloroform	0.050	0.039	77.3	65 - 121	
Chloromethane	0.050	0.035	69.7	45 - 131	
cis-1,2-Dichloroethene	0.050	0.044	87.5	68 - 123	
cis-1,3-Dichloropropene	0.050	0.045	90.2	66 - 121	
Di-isopropyl ether	0.050	0.040	80.3	58 - 127	
Dibromomethane	0.050	0.044	88.5	69 - 119	
Dichlorodifluoromethane	0.050	0.036	72.9	24 - 155	
Ethylbenzene	0.050	0.050	101	70 - 121	
Hexachlorobutadiene	0.050	0.052	104	60 - 119	
Isopropylbenzene	0.050	0.048	95.2	68 - 128	
Methyl tert-butyl ether	0.050	0.041	82.7	51 - 137	
Methylene Chloride	0.050	0.039	77.0	53 - 131	
n-Butylbenzene	0.050	0.048	96.2	59 - 134	
n-Propylbenzene	0.050	0.046	92.2	68 - 123	
Naphthalene	0.050	0.048	96.6	54 - 150	
p-Isopropyltoluene	0.050	0.047	94.9	64 - 132	
sec-Butylbenzene	0.050	0.047	94.4	67 - 124	
Styrene	0.050	0.051	101	68 - 123	
tert-Butylbenzene	0.050	0.046	92.0	65 - 128	
Tetrachloroethene	0.050	0.053	107	64 - 134	
Toluene	0.050	0.044	88.5	65 - 120	
trans-1,2-Dichloroethene	0.050	0.044	88.4	59 - 138	
trans-1,3-Dichloropropene	0.050	0.043	85.4	55 - 113	
Trichloroethene	0.050	0.047	93.3	74 - 120	
Trichlorofluoromethane	0.050	0.038	76.8	49 - 121	
Vinyl chloride	0.050	0.038	75.8	46 - 133	
Xylenes, Total	0.150	0.146	97.5	68 - 124	

Quality Control Summary for client sample(s) PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-04, -05, -06, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 1:58:00 AM
Instrument ID: VOCMS1
Analyst: 366
Analytic Batch: WG295634 EPA ID: TN00003

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,1,1,2-Tetrachloroethane	0.050	0.049	97.9	61 - 134	
1,1,1-Trichloroethane	0.050	0.041	81.6	62 - 133	
1,1,2,2-Tetrachloroethane	0.050	0.048	95.9	66 - 124	
1,1,2-Trichloroethane	0.050	0.049	98.3	62 - 124	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.050	0.038	75.5	66 - 130	
1,1-Dichloroethane	0.050	0.041	81.8	59 - 135	
1,1-Dichloroethene	0.050	0.044	88.1	68 - 136	
1,1-Dichloropropene	0.050	0.042	83.9	63 - 125	
1,2,3-Trichlorobenzene	0.050	0.054	107	57 - 152	
1,2,3-Trichloropropane	0.050	0.046	91.7	62 - 138	
1,2,3-Trimethylbenzene	0.050	0.045	90.2	61 - 107	
1,2,4-Trichlorobenzene	0.050	0.054	108	49 - 153	
1,2,4-Trimethylbenzene	0.050	0.047	94.4	61 - 128	
1,2-Dibromo-3-Chloropropane	0.050	0.053	106	50 - 139	
1,2-Dibromoethane	0.050	0.049	98.2	70 - 122	
1,2-Dichlorobenzene	0.050	0.049	98.4	54 - 135	
1,2-Dichloroethane	0.050	0.037	73.3	61 - 131	
1,2-Dichloropropane	0.050	0.045	90.8	64 - 126	
1,3,5-Trimethylbenzene	0.050	0.047	94.9	65 - 126	
1,3-Dichlorobenzene	0.050	0.050	99.2	45 - 143	
1,3-Dichloropropane	0.050	0.045	90.2	74 - 118	
1,4-Dichlorobenzene	0.050	0.048	95.9	48 - 138	
2,2-Dichloropropane	0.050	0.038	76.6	52 - 140	
2-Butanone (MEK)	0.250	0.241	96.6	50 - 132	
2-Chloroethyl vinyl ether	0.250	0.304	121	36 - 136	
2-Chlorotoluene	0.050	0.045	90.9	61 - 134	
4-Chlorotoluene	0.050	0.046	92.8	67 - 129	
4-Methyl-2-pentanone (MIBK)	0.250	0.231	92.4	47 - 143	
Acetone	0.250	0.186	74.6	36 - 163	
Acrolein	0.250	0.178	71.1	27 - 122	
Acrylonitrile	0.250	0.204	81.7	44 - 130	
Benzene	0.050	0.041	82.1	63 - 121	
Bromobenzene	0.050	0.042	84.3	70 - 130	
Bromodichloromethane	0.050	0.042	83.2	64 - 127	

Quality Control Summary for client sample(s) PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-04, -05, -06, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 1:58:00 AM
Instrument ID: VOCMS1
Analyst: 366
Analytic Batch: WG295634 EPA ID: TN00003

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Bromoform	0.050	0.050	101	60 - 139	
Bromomethane	0.050	0.051	101	30 - 125	
Carbon tetrachloride	0.050	0.041	81.6	70 - 140	
Chlorobenzene	0.050	0.049	98.4	70 - 126	
Chlorodibromomethane	0.050	0.051	101	62 - 132	
Chloroethane	0.050	0.042	83.7	43 - 146	
Chloroform	0.050	0.038	76.9	65 - 121	
Chloromethane	0.050	0.034	67.5	45 - 131	
cis-1,2-Dichloroethene	0.050	0.044	89.0	68 - 123	
cis-1,3-Dichloropropene	0.050	0.044	87.4	66 - 121	
Di-isopropyl ether	0.050	0.039	77.3	58 - 127	
Dibromomethane	0.050	0.044	88.7	69 - 119	
Dichlorodifluoromethane	0.050	0.037	74.3	24 - 155	
Ethylbenzene	0.050	0.051	102	70 - 121	
Hexachlorobutadiene	0.050	0.053	106	60 - 119	
Isopropylbenzene	0.050	0.048	95.0	68 - 128	
Methyl tert-butyl ether	0.050	0.041	82.3	51 - 137	
Methylene Chloride	0.050	0.039	77.0	53 - 131	
n-Butylbenzene	0.050	0.048	95.1	59 - 134	
n-Propylbenzene	0.050	0.046	91.5	68 - 123	
Naphthalene	0.050	0.051	102	54 - 150	
p-Isopropyltoluene	0.050	0.048	95.5	64 - 132	
sec-Butylbenzene	0.050	0.048	95.8	67 - 124	
Styrene	0.050	0.049	98.8	68 - 123	
tert-Butylbenzene	0.050	0.046	92.1	65 - 128	
Tetrachloroethene	0.050	0.053	106	64 - 134	
Toluene	0.050	0.043	86.8	65 - 120	
trans-1,2-Dichloroethene	0.050	0.045	89.6	59 - 138	
trans-1,3-Dichloropropene	0.050	0.042	84.6	55 - 113	
Trichloroethene	0.050	0.046	92.9	74 - 120	
Trichlorofluoromethane	0.050	0.038	75.4	49 - 121	
Vinyl chloride	0.050	0.038	76.7	46 - 133	
Xylenes, Total	0.150	0.147	97.9	68 - 124	

Quality Control Summary for client sample(s) PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-07
Sample Date: 4/5/2007
Extraction Date: 4/17/2007
Analysis Date: 4/17/2007 2:50:00 PM
Instrument ID: VOCMS9
Analyst: 189
Analytic Batch: WG295930 EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,1,1,2-Tetrachloroethane	0.050	0.051	101	61 - 134	
1,1,1-Trichloroethane	0.050	0.041	82.4	62 - 133	
1,1,2,2-Tetrachloroethane	0.050	0.044	87.8	66 - 124	
1,1,2-Trichloroethane	0.050	0.047	93.6	62 - 124	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.050	0.043	86.8	66 - 130	
1,1-Dichloroethane	0.050	0.038	76.5	59 - 135	
1,1-Dichloroethene	0.050	0.043	86.8	68 - 136	
1,1-Dichloropropene	0.050	0.041	81.6	63 - 125	
1,2,3-Trichlorobenzene	0.050	0.056	111	57 - 152	
1,2,3-Trichloropropane	0.050	0.050	100	62 - 138	
1,2,3-Trimethylbenzene	0.050	0.039	77.3	61 - 107	
1,2,4-Trichlorobenzene	0.050	0.055	109	49 - 153	
1,2,4-Trimethylbenzene	0.050	0.048	95.4	61 - 128	
1,2-Dibromo-3-Chloropropane	0.050	0.043	85.6	50 - 139	
1,2-Dibromoethane	0.050	0.050	100	70 - 122	
1,2-Dichlorobenzene	0.050	0.043	85.0	54 - 135	
1,2-Dichloroethane	0.050	0.046	92.1	61 - 131	
1,2-Dichloropropane	0.050	0.042	84.9	64 - 126	
1,3,5-Trimethylbenzene	0.050	0.047	94.3	65 - 126	
1,3-Dichlorobenzene	0.050	0.052	104	45 - 143	
1,3-Dichloropropane	0.050	0.046	91.9	74 - 118	
1,4-Dichlorobenzene	0.050	0.044	87.2	48 - 138	
2,2-Dichloropropane	0.050	0.040	79.9	52 - 140	
2-Butanone (MEK)	0.250	0.187	74.7	50 - 132	
2-Chloroethyl vinyl ether	0.250	0.177	70.8	36 - 136	
2-Chlorotoluene	0.050	0.045	90.8	61 - 134	
4-Chlorotoluene	0.050	0.047	93.3	67 - 129	
4-Methyl-2-pentanone (MIBK)	0.250	0.218	87.3	47 - 143	
Acetone	0.250	0.241	96.4	36 - 163	
Acrolein	0.250	0.419	167	27 - 122	J4
Acrylonitrile	0.250	0.174	69.8	44 - 130	
Benzene	0.050	0.038	75.6	63 - 121	
Bromobenzene	0.050	0.044	88.7	70 - 130	
Bromodichloromethane	0.050	0.049	98.2	64 - 127	

Quality Control Summary for client sample(s) PS2-MW2
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-07
Sample Date: 4/5/2007
Extraction Date: 4/17/2007
Analysis Date: 4/17/2007 2:50:00 PM
Instrument ID: VOCMS9
Analyst: 189
Analytic Batch: WG295930 EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Bromoform	0.050	0.056	112	60 - 139	
Bromomethane	0.050	0.047	94.1	30 - 125	
Carbon tetrachloride	0.050	0.043	85.3	70 - 140	
Chlorobenzene	0.050	0.048	96.3	70 - 126	
Chlorodibromomethane	0.050	0.051	101	62 - 132	
Chloroethane	0.050	0.048	95.8	43 - 146	
Chloroform	0.050	0.043	85.4	65 - 121	
Chloromethane	0.050	0.037	74.1	45 - 131	
cis-1,2-Dichloroethene	0.050	0.040	79.5	68 - 123	
cis-1,3-Dichloropropene	0.050	0.047	94.6	66 - 121	
Di-isopropyl ether	0.050	0.038	75.8	58 - 127	
Dibromomethane	0.050	0.047	94.6	69 - 119	
Dichlorodifluoromethane	0.050	0.050	101	24 - 155	
Ethylbenzene	0.050	0.047	94.6	70 - 121	
Hexachlorobutadiene	0.050	0.051	102	60 - 119	
Isopropylbenzene	0.050	0.047	93.0	68 - 128	
Methyl tert-butyl ether	0.050	0.043	86.3	51 - 137	
Methylene Chloride	0.050	0.039	77.2	53 - 131	
n-Butylbenzene	0.050	0.037	74.5	59 - 134	
n-Propylbenzene	0.050	0.046	91.2	68 - 123	
Naphthalene	0.050	0.050	99.1	54 - 150	
p-Isopropyltoluene	0.050	0.048	96.3	64 - 132	
sec-Butylbenzene	0.050	0.045	90.5	67 - 124	
Styrene	0.050	0.050	99.5	68 - 123	
tert-Butylbenzene	0.050	0.047	93.5	68 - 128	
Tetrachloroethene	0.050	0.055	110	64 - 134	
Toluene	0.050	0.045	89.0	65 - 120	
trans-1,2-Dichloroethene	0.050	0.042	85.0	59 - 138	
trans-1,3-Dichloropropene	0.050	0.048	96.0	55 - 113	
Trichloroethene	0.050	0.045	90.8	74 - 120	
Trichlorofluoromethane	0.050	0.042	84.1	49 - 121	
Vinyl chloride	0.050	0.042	84.0	46 - 133	
Xylenes, Total	0.150	0.144	95.9	68 - 124	

Quality Control Summary for client sample(s) PS2-MW2
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-07
Sample Date: 4/5/2007
Extraction Date: 4/17/2007
Analysis Date: 4/17/2007 2:50:00 PM
Instrument ID: VOCMS9
Analyst: 189
Analytic Batch: WG295930 EPA ID: TN00003

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,1,1,2-Tetrachloroethane	0.050	0.055	110	61 - 134	
1,1,1-Trichloroethane	0.050	0.043	86.2	62 - 133	
1,1,2,2-Tetrachloroethane	0.050	0.046	92.8	66 - 124	
1,1,2-Trichloroethane	0.050	0.051	102	62 - 124	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.050	0.045	90.3	66 - 130	
1,1-Dichloroethane	0.050	0.039	77.5	59 - 135	
1,1-Dichloroethene	0.050	0.046	92.1	68 - 136	
1,1-Dichloropropene	0.050	0.042	84.2	63 - 125	
1,2,3-Trichlorobenzene	0.050	0.052	104	57 - 152	
1,2,3-Trichloropropane	0.050	0.053	106	62 - 138	
1,2,3-Trimethylbenzene	0.050	0.040	80.3	61 - 107	
1,2,4-Trichlorobenzene	0.050	0.052	104	49 - 153	
1,2,4-Trimethylbenzene	0.050	0.051	102	61 - 128	
1,2-Dibromo-3-Chloropropane	0.050	0.044	88.0	50 - 139	
1,2-Dibromoethane	0.050	0.055	109	70 - 122	
1,2-Dichlorobenzene	0.050	0.044	87.6	54 - 135	
1,2-Dichloroethane	0.050	0.046	92.1	61 - 131	
1,2-Dichloropropane	0.050	0.043	86.2	64 - 126	
1,3,5-Trimethylbenzene	0.050	0.052	104	65 - 126	
1,3-Dichlorobenzene	0.050	0.055	111	45 - 143	
1,3-Dichloropropane	0.050	0.050	99.0	74 - 118	
1,4-Dichlorobenzene	0.050	0.045	89.6	48 - 138	
2,2-Dichloropropane	0.050	0.042	83.3	52 - 140	
2-Butanone (MEK)	0.250	0.184	73.6	50 - 132	
2-Chloroethyl vinyl ether	0.250	0.173	69.4	36 - 136	
2-Chlorotoluene	0.050	0.050	99.4	61 - 134	
4-Chlorotoluene	0.050	0.049	98.7	67 - 129	
4-Methyl-2-pentanone (MIBK)	0.250	0.215	86.2	47 - 143	
Acetone	0.250	0.231	92.5	36 - 163	
Acrolein	0.250	0.443	177	27 - 122	J4
Acrylonitrile	0.250	0.172	68.9	44 - 130	
Benzene	0.050	0.040	79.4	63 - 121	
Bromobenzene	0.050	0.047	93.9	70 - 130	
Bromodichloromethane	0.050	0.050	99.7	64 - 127	

Quality Control Summary for client sample(s) PS2-MW2
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-07
Sample Date: 4/5/2007
Extraction Date: 4/17/2007
Analysis Date: 4/17/2007 2:50:00 PM
Instrument ID: VOCMS9
Analyst: 189
Analytic Batch: WG295930 EPA ID: TN00003

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Bromoform	0.050	0.061	122	60 - 139	
Bromomethane	0.050	0.046	92.1	30 - 125	
Carbon tetrachloride	0.050	0.043	86.4	70 - 140	
Chlorobenzene	0.050	0.053	106	70 - 126	
Chlorodibromomethane	0.050	0.055	110	62 - 132	
Chloroethane	0.050	0.048	95.7	43 - 146	
Chloroform	0.050	0.044	87.3	65 - 121	
Chloromethane	0.050	0.037	73.8	45 - 131	
cis-1,2-Dichloroethene	0.050	0.042	83.9	68 - 123	
cis-1,3-Dichloropropene	0.050	0.048	95.5	66 - 121	
Di-isopropyl ether	0.050	0.039	77.8	58 - 127	
Dibromomethane	0.050	0.049	97.3	69 - 119	
Dichlorodifluoromethane	0.050	0.050	99.7	24 - 155	
Ethylbenzene	0.050	0.052	104	70 - 121	
Hexachlorobutadiene	0.050	0.051	102	60 - 119	
Isopropylbenzene	0.050	0.052	103	68 - 128	
Methyl tert-butyl ether	0.050	0.043	86.1	51 - 137	
Methylene Chloride	0.050	0.039	77.5	53 - 131	
n-Butylbenzene	0.050	0.038	76.7	59 - 134	
n-Propylbenzene	0.050	0.049	98.4	68 - 123	
Naphthalene	0.050	0.047	94.3	54 - 150	
p-Isopropyltoluene	0.050	0.052	104	64 - 132	
sec-Butylbenzene	0.050	0.050	99.1	67 - 124	
Styrene	0.050	0.054	108	68 - 123	
tert-Butylbenzene	0.050	0.050	101	68 - 128	
Tetrachloroethene	0.050	0.061	121	64 - 134	
Toluene	0.050	0.047	93.2	65 - 120	
trans-1,2-Dichloroethene	0.050	0.044	87.3	59 - 138	
trans-1,3-Dichloropropene	0.050	0.048	96.3	55 - 113	
Trichloroethene	0.050	0.047	94.4	74 - 120	
Trichlorofluoromethane	0.050	0.042	83.8	49 - 121	
Vinyl chloride	0.050	0.042	84.6	46 - 133	
Xylenes, Total	0.150	0.155	103	68 - 124	

Quality Control Summary for client sample(s) PS2-MW2
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 2:57:00 AM
Instrument ID: VOCMS2
Analyst: 120
Analytic Batch: WG295623 EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate

L288264-01

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,1,1,2-Tetrachloroethane	0.500	0.000	0.462	92.3	0.473	94.7	57-133		2.5	21	
1,1,1-Trichloroethane	0.500	0.000	0.425	85.1	0.446	89.2	54-143		4.7	22	
1,1,2,2-Tetrachloroethane	0.500	0.002	0.566	113	0.574	114	58-134		1.4	27	
1,1,2-Trichloroethane	0.500	0.001	0.510	102	0.510	102	58-125		0.0	19	
1,1,2-Trichloro-1,2,2-	0.500	0.000	0.329	65.8	0.347	69.4	61-136		5.2	20	
1,1-Dichloroethane	0.500	0.001	0.446	89.0	0.456	91.1	53-136		2.3	22	
1,1-Dichloroethene	0.500	0.002	0.421	83.9	0.433	86.3	58-145		2.8	22	
1,1-Dichloropropene	0.500	0.000	0.415	82.9	0.439	87.9	58-126		5.8	20	
1,2,3-Trichlorobenzene	0.500	0.002	0.507	101	0.522	104	48-127		3.0	26	
1,2,3-Trichloropropane	0.500	0.000	0.550	110	0.542	108	57-145		1.4	24	
1,2,3-Trimethylbenzene	0.500	0.101	0.582	96.2	0.593	98.5	51-106		1.9	19	
1,2,4-Trichlorobenzene	0.500	0.002	0.489	97.3	0.511	102	41-127		4.6	26	
1,2,4-Trimethylbenzene	0.500	0.511	1.00	97.9	1.03	104	52-125		2.8	26	
1,2-Dibromo-3-Chloropropane	0.500	0.000	0.593	119	0.594	119	44-138		0.2	27	
1,2-Dibromoethane	0.500	0.000	0.504	101	0.502	100	64-126		0.5	19	
1,2-Dichlorobenzene	0.500	0.001	0.468	93.5	0.475	94.8	50-127		1.4	19	
1,2-Dichloroethane	0.500	0.000	0.516	103	0.523	105	54-145		1.3	21	
1,2-Dichloropropane	0.500	0.000	0.462	92.3	0.471	94.2	55-135		2.0	20	
1,3,5-Trimethylbenzene	0.500	0.175	0.622	89.3	0.639	92.8	54-125		2.8	27	
1,3-Dichlorobenzene	0.500	0.001	0.454	90.5	0.460	91.8	47-128		1.4	25	
1,3-Dichloropropane	0.500	0.001	0.489	97.5	0.496	98.9	64-125		1.4	19	
1,4-Dichlorobenzene	0.500	0.001	0.448	89.3	0.460	91.7	47-123		2.6	18	
2,2-Dichloropropane	0.500	0.000	0.385	76.9	0.402	80.4	44-143		4.3	19	
2-Butanone (MEK)	2.50	0.000	2.55	102	2.60	104	47-133		1.8	22	
2-Chloroethyl vinyl ether	2.50	0.001	0.005	0.1	0.002	0.0	28-148	J6	79	18	J3
2-Chlorotoluene	0.500	0.000	0.472	94.3	0.479	95.9	51-135		1.6	28	
4-Chlorotoluene	0.500	0.001	0.454	90.7	0.462	92.2	57-123		1.6	25	
4-Methyl-2-pentanone	2.50	0.000	2.94	118	2.91	116	45-144		1.3	25	
Acetone	2.50	0.027	2.76	109	2.74	109	25-158		0.6	33	
Acrolein	2.50	0.000	3.10	124	3.13	125	25-128		1.2	15	
Acrylonitrile	2.50	0.000	2.82	113	2.82	113	39-136		0.0	25	
Benzene	0.500	0.220	0.667	89.3	0.682	92.5	51-134		2.3	18	
Bromobenzene	0.500	0.001	0.463	92.4	0.468	93.4	60-131		1.1	22	
Bromodichloromethane	0.500	0.001	0.507	101	0.502	100	54-139		1.0	19	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 2:57:00 AM
Instrument ID: VOCMS2
Analyst: 120
Analytic Batch: WG295623 EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate

L288264-01

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Qualifier RPD	Control Limits	Qualifier
Bromoform	0.500	0.000	0.553	111	0.565	113	52-144	2.2	21	
Bromomethane	0.500	0.000	0.406	81.1	0.411	82.3	23-131	1.4	24	
Carbon tetrachloride	0.500	0.000	0.343	68.7	0.362	72.4	51-147	5.3	23	
Chlorobenzene	0.500	0.000	0.448	89.6	0.453	90.5	59-125	1.1	22	
Chlorodibromomethane	0.500	0.000	0.519	104	0.524	105	57-133	0.9	19	
Chloroethane	0.500	0.000	0.403	80.7	0.395	79.0	38-153	2.1	25	
Chloroform	0.500	0.001	0.473	94.4	0.477	95.2	55-133	0.8	20	
Chloromethane	0.500	0.000	0.426	85.1	0.417	83.5	39-135	2.0	23	
cis-1,2-Dichloroethene	0.500	0.000	0.453	90.6	0.454	90.9	64-126	0.3	18	
cis-1,3-Dichloropropene	0.500	0.001	0.490	97.9	0.484	96.7	54-122	1.2	22	
Di-isopropyl ether	0.500	0.001	0.515	103	0.516	103	53-132	0.1	20	
Dibromomethane	0.500	0.002	0.510	102	0.504	100	61-132	1.2	19	
Dichlorodifluoromethane	0.500	0.000	0.274	54.7	0.286	57.3	26-153	4.6	25	
Ethylbenzene	0.500	0.044	0.470	85.1	0.477	86.7	55-125	1.6	20	
Hexachlorobutadiene	0.500	0.000	0.371	74.3	0.406	81.2	51-109	8.8	22	
Isopropylbenzene	0.500	0.000	0.430	86.0	0.443	88.6	59-127	3.0	26	
Methyl tert-butyl ether	0.500	0.007	0.552	109	0.552	109	50-137	0.1	21	
Methylene Chloride	0.500	0.000	0.458	91.5	0.463	92.6	44-143	1.1	22	
n-Butylbenzene	0.500	0.000	0.458	91.5	0.479	95.8	47-124	4.5	20	
n-Propylbenzene	0.500	0.002	0.442	88.1	0.459	91.4	53-124	3.6	26	
Naphthalene	0.500	0.000	0.573	115	0.588	118	45-141	2.5	25	
p-Isopropyltoluene	0.500	0.003	0.454	90.3	0.474	94.2	52-126	4.2	20	
sec-Butylbenzene	0.500	0.001	0.433	86.5	0.457	91.2	54-127	5.3	20	
Styrene	0.500	0.000	0.455	90.9	0.463	92.7	55-121	1.9	27	
tert-Butylbenzene	0.500	0.000	0.432	86.3	0.450	89.9	57-128	4.1	26	
Tetrachloroethene	0.500	0.000	0.350	70.0	0.362	72.3	53-128	3.2	24	
Toluene	0.500	0.000	0.468	93.7	0.471	94.1	57-126	0.4	26	
trans-1,2-Dichloroethene	0.500	0.000	0.399	79.8	0.424	84.7	52-139	5.9	24	
trans-1,3-Dichloropropene	0.500	0.001	0.495	98.8	0.491	97.9	48-113	0.9	22	
Trichloroethene	0.500	0.001	0.436	87.1	0.441	88.0	57-135	1.0	23	
Trichlorofluoromethane	0.500	0.000	0.345	68.9	0.362	72.5	42-134	5.0	21	
Vinyl chloride	0.500	0.000	0.403	80.6	0.420	83.9	44-132	4.0	24	
Xylenes, Total	1.50	1.30	2.70	93.5	2.77	97.7	54-129	2.3	24	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 2:57:00 AM
Instrument ID: VOCMS2
Analyst: 120
Analytic Batch: WG295623 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,1,1,2-Tetrachloroethane	0.050	0.053	107	0.055	110	61-134		2.5	17	
1,1,1-Trichloroethane	0.050	0.053	107	0.055	110	62-133		2.9	17	
1,1,2,2-Tetrachloroethane	0.050	0.053	106	0.056	113	66-124		6.4	16	
1,1,2-Trichloroethane	0.050	0.051	103	0.054	108	62-124		5.0	16	
1,1,2-Trichloro-1,2,2-	0.050	0.048	95.0	0.048	95.9	66-130		0.9	18	
1,1-Dichloroethane	0.050	0.051	103	0.052	105	59-135		1.9	22	
1,1-Dichloroethene	0.050	0.053	106	0.053	106	68-136		0.0	17	
1,1-Dichloropropene	0.050	0.055	110	0.057	114	63-125		3.3	17	
1,2,3-Trichlorobenzene	0.050	0.055	110	0.058	115	57-152		5.0	19	
1,2,3-Trichloropropane	0.050	0.051	102	0.054	109	62-138		6.5	18	
1,2,3-Trimethylbenzene	0.050	0.054	108	0.055	111	61-107	J4	2.3	16	
1,2,4-Trichlorobenzene	0.050	0.056	112	0.060	119	49-153		6.3	20	
1,2,4-Trimethylbenzene	0.050	0.054	109	0.055	111	61-128		1.8	18	
1,2-Dibromo-3-Chloropropane	0.050	0.055	110	0.060	119	50-139		8.3	19	
1,2-Dibromoethane	0.050	0.051	102	0.053	105	70-122		2.6	16	
1,2-Dichlorobenzene	0.050	0.053	107	0.054	109	54-135		2.1	16	
1,2-Dichloroethane	0.050	0.052	103	0.053	105	61-131		2.1	15	
1,2-Dichloropropane	0.050	0.051	102	0.052	104	64-126		1.4	18	
1,3,5-Trimethylbenzene	0.050	0.054	108	0.055	109	65-126		1.5	17	
1,3-Dichlorobenzene	0.050	0.053	107	0.054	107	45-143		0.4	17	
1,3-Dichloropropane	0.050	0.051	101	0.052	104	74-118		2.1	15	
1,4-Dichlorobenzene	0.050	0.052	105	0.053	107	48-138		1.9	17	
2,2-Dichloropropane	0.050	0.055	110	0.056	111	52-140		1.0	21	
2-Butanone (MEK)	0.250	0.219	87.7	0.241	96.4	50-132		9.4	21	
2-Chloroethyl vinyl ether	0.250	0.259	104	0.271	109	36-136		4.5	28	
2-Chlorotoluene	0.050	0.054	108	0.055	110	61-134		1.7	26	
4-Chlorotoluene	0.050	0.053	106	0.055	110	67-129		3.0	17	
4-Methyl-2-pentanone	0.250	0.246	98.5	0.267	107	47-143		8.1	21	
Acetone	0.250	0.228	91.3	0.244	97.7	36-163		6.8	20	
Acrolein	0.250	0.248	99.3	0.264	106	27-122		6.1	13	
Acrylonitrile	0.250	0.252	101	0.267	107	44-130		5.7	20	
Benzene	0.050	0.051	103	0.053	105	63-121		2.6	16	
Bromobenzene	0.050	0.052	104	0.052	104	70-130		0.5	16	
Bromodichloromethane	0.050	0.054	107	0.055	111	64-127		3.2	17	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 2:57:00 AM
Instrument ID: VOCMS2
Analyst: 120
Analytic Batch: WG295623 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Bromoform	0.050	0.057	114	0.060	120	60-139		5.3	15	
Bromomethane	0.050	0.048	95.3	0.049	98.0	30-125		2.8	21	
Carbon tetrachloride	0.050	0.046	92.8	0.048	95.6	70-140		3.0	17	
Chlorobenzene	0.050	0.053	106	0.054	108	70-126		2.0	16	
Chlorodibromomethane	0.050	0.055	110	0.056	112	62-132		1.8	15	
Chloroethane	0.050	0.046	92.9	0.046	91.0	43-146		2.0	24	
Chloroform	0.050	0.051	103	0.053	106	65-121		3.4	15	
Chloromethane	0.050	0.047	94.6	0.048	96.6	45-131		2.1	22	
cis-1,2-Dichloroethene	0.050	0.052	103	0.053	105	68-123		2.0	15	
cis-1,3-Dichloropropene	0.050	0.055	110	0.055	111	66-121		1.3	18	
Di-isopropyl ether	0.050	0.052	104	0.054	108	58-127		3.1	18	
Dibromomethane	0.050	0.051	102	0.052	104	69-119		2.1	16	
Dichlorodifluoromethane	0.050	0.043	85.4	0.044	88.4	24-155		3.5	22	
Ethylbenzene	0.050	0.052	105	0.053	106	70-121		1.4	17	
Hexachlorobutadiene	0.050	0.051	101	0.053	106	60-119		4.3	18	
Isopropylbenzene	0.050	0.054	109	0.055	111	68-128		2.0	17	
Methyl tert-butyl ether	0.050	0.051	103	0.054	109	51-137		5.3	18	
Methylene Chloride	0.050	0.048	95.3	0.050	100	53-131		4.9	17	
n-Butylbenzene	0.050	0.058	116	0.060	120	59-134		3.4	19	
n-Propylbenzene	0.050	0.056	112	0.057	114	68-123		2.0	17	
Naphthalene	0.050	0.052	104	0.057	114	54-150		9.0	17	
p-Isopropyltoluene	0.050	0.058	116	0.058	117	64-132		1.1	18	
sec-Butylbenzene	0.050	0.057	113	0.057	115	67-124		1.4	18	
Styrene	0.050	0.052	105	0.053	107	68-123		1.9	17	
tert-Butylbenzene	0.050	0.054	108	0.056	112	65-128		3.1	17	
Tetrachloroethene	0.050	0.048	95.2	0.049	97.3	64-134		2.2	18	
Toluene	0.050	0.052	103	0.053	105	65-120		1.9	18	
trans-1,2-Dichloroethene	0.050	0.051	103	0.052	103	59-138		0.5	22	
trans-1,3-Dichloropropene	0.050	0.053	106	0.055	109	55-113		3.1	18	
Trichloroethene	0.050	0.053	107	0.055	109	74-120		2.2	16	
Trichlorofluoromethane	0.050	0.046	92.3	0.047	94.4	49-121		2.3	19	
Vinyl chloride	0.050	0.051	102	0.052	104	46-133		2.1	17	
Xylenes, Total	0.150	0.158	106	0.161	107	68-124		1.5	17	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-04, -05, -06, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 1:58:00 AM
Instrument ID: VOCMS1
Analyst: 366
Analytic Batch: WG295634 EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate

L288511-05

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,1,1,2-Tetrachloroethane	0.050	0.000	0.047	93.4	0.048	95.7	57-133		2.5	21	
1,1,1-Trichloroethane	0.050	0.000	0.040	80.1	0.040	79.7	54-143		0.5	22	
1,1,2,2-Tetrachloroethane	0.050	0.000	0.048	95.8	0.048	95.0	58-134		0.8	27	
1,1,2-Trichloroethane	0.050	0.000	0.048	96.3	0.049	97.8	58-125		1.5	19	
1,1,2-Trichloro-1,2,2-	0.050	0.000	0.035	70.8	0.036	72.0	61-136		1.7	20	
1,1-Dichloroethane	0.050	0.001	0.042	82.1	0.042	82.5	53-136		0.4	22	
1,1-Dichloroethene	0.050	0.000	0.041	82.1	0.041	82.8	58-145		0.9	22	
1,1-Dichloropropene	0.050	0.000	0.040	79.3	0.039	78.8	58-126		0.6	20	
1,2,3-Trichlorobenzene	0.050	0.000	0.044	87.2	0.047	94.9	48-127		8.4	26	
1,2,3-Trichloropropane	0.050	0.000	0.044	88.5	0.043	86.2	57-145		2.7	24	
1,2,3-Trimethylbenzene	0.050	0.000	0.042	83.7	0.043	86.8	51-106		3.7	19	
1,2,4-Trichlorobenzene	0.050	0.000	0.043	85.0	0.045	90.4	41-127		6.1	26	
1,2,4-Trimethylbenzene	0.050	0.000	0.043	85.7	0.043	86.2	52-125		0.5	26	
1,2-Dibromo-3-Chloropropane	0.050	0.000	0.050	100	0.047	94.7	44-138		5.6	27	
1,2-Dibromoethane	0.050	0.000	0.047	94.9	0.048	95.7	64-126		0.8	19	
1,2-Dichlorobenzene	0.050	0.000	0.045	89.4	0.047	93.9	50-127		4.9	19	
1,2-Dichloroethane	0.050	0.000	0.039	78.7	0.038	76.5	54-145		2.9	21	
1,2-Dichloropropane	0.050	0.001	0.048	93.1	0.048	94.0	55-135		1.0	20	
1,3,5-Trimethylbenzene	0.050	0.000	0.043	86.3	0.045	89.0	54-125		3.1	27	
1,3-Dichlorobenzene	0.050	0.000	0.044	88.4	0.046	91.3	47-128		3.2	25	
1,3-Dichloropropane	0.050	0.000	0.044	87.8	0.044	88.8	64-125		1.1	19	
1,4-Dichlorobenzene	0.050	0.003	0.044	81.4	0.046	86.0	47-123		5.1	18	
2,2-Dichloropropane	0.050	0.000	0.035	70.5	0.036	71.4	44-143		1.3	19	
2-Butanone (MEK)	0.250	0.000	0.235	94.1	0.217	86.8	47-133		8.1	22	
2-Chloroethyl vinyl ether	0.250	0.000	0.000	0.0	0.000	0.0	28-148	J6		18	
2-Chlorotoluene	0.050	0.000	0.042	83.9	0.043	85.3	51-135		1.6	28	
4-Chlorotoluene	0.050	0.000	0.042	83.1	0.042	84.1	57-123		1.2	25	
4-Methyl-2-pentanone	0.250	0.000	0.231	92.4	0.225	89.9	45-144		2.7	25	
Acetone	0.250	0.000	0.185	74.0	0.166	66.5	25-158		11	33	
Acrolein	0.250	0.000	0.162	64.9	0.147	58.8	25-128		9.8	15	
Acrylonitrile	0.250	0.000	0.215	85.9	0.200	79.9	39-136		7.2	25	
Benzene	0.050	0.002	0.042	80.5	0.042	80.3	51-134		0.2	18	
Bromobenzene	0.050	0.000	0.039	78.2	0.042	83.8	60-131		6.9	22	
Bromodichloromethane	0.050	0.000	0.040	80.6	0.043	85.3	54-139		5.7	19	

Quality Control Summary for client sample(s) PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-04, -05, -06, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 1:58:00 AM
Instrument ID: VOCMS1
Analyst: 366
Analytic Batch: WG295634 EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate

L288511-05

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Qualifier RPD	Control Limits	Qualifier
Bromoform	0.050	0.000	0.047	94.9	0.051	103	52-144	7.9	21	
Bromomethane	0.050	0.000	0.050	101	0.051	101	21-131	0.6	24	
Carbon tetrachloride	0.050	0.000	0.039	77.5	0.040	79.0	51-147	1.9	23	
Chlorobenzene	0.050	0.002	0.046	89.4	0.048	91.8	59-125	2.5	22	
Chlorodibromomethane	0.050	0.000	0.048	96.2	0.049	97.8	57-133	1.6	19	
Chloroethane	0.050	0.000	0.039	78.2	0.041	81.4	38-153	4.0	25	
Chloroform	0.050	0.000	0.039	77.4	0.038	76.9	55-133	0.7	20	
Chloromethane	0.050	0.000	0.031	61.5	0.032	64.5	39-135	4.7	23	
cis-1,2-Dichloroethene	0.050	0.008	0.051	85.9	0.052	88.7	64-126	2.8	18	
cis-1,3-Dichloropropene	0.050	0.000	0.042	84.5	0.044	87.3	54-122	3.3	22	
Di-isopropyl ether	0.050	0.002	0.042	80.2	0.042	80.2	53-132	0.1	20	
Dibromomethane	0.050	0.000	0.043	85.4	0.044	87.3	61-132	2.2	19	
Dichlorodifluoromethane	0.050	0.000	0.036	71.7	0.036	72.5	26-153	1.1	25	
Ethylbenzene	0.050	0.000	0.046	91.8	0.047	93.2	55-125	1.6	20	
Hexachlorobutadiene	0.050	0.000	0.045	90.7	0.047	94.8	0-200	4.5	22	
Isopropylbenzene	0.050	0.000	0.043	86.7	0.044	88.3	59-127	1.8	26	
Methyl tert-butyl ether	0.050	0.001	0.044	86.2	0.043	84.1	50-137	2.4	21	
Methylene Chloride	0.050	0.000	0.039	77.6	0.039	77.9	44-143	0.4	22	
n-Butylbenzene	0.050	0.000	0.038	76.7	0.041	81.6	47-124	6.2	20	
n-Propylbenzene	0.050	0.000	0.041	82.1	0.042	84.1	53-154	2.4	26	
Naphthalene	0.050	0.000	0.047	93.2	0.048	95.8	45-141	2.7	25	
p-Isopropyltoluene	0.050	0.000	0.043	85.6	0.043	85.2	52-126	0.6	20	
sec-Butylbenzene	0.050	0.000	0.044	87.5	0.043	86.7	54-127	1.0	20	
Styrene	0.050	0.000	0.046	92.1	0.047	94.6	55-121	2.7	27	
tert-Butylbenzene	0.050	0.000	0.042	84.6	0.044	88.2	57-128	4.2	26	
Tetrachloroethene	0.050	0.000	0.045	90.5	0.047	93.4	53-128	3.2	24	
Toluene	0.050	0.000	0.040	80.9	0.042	84.4	57-126	4.2	26	
trans-1,2-Dichloroethene	0.050	0.000	0.041	81.3	0.042	83.3	52-139	2.4	24	
trans-1,3-Dichloropropene	0.050	0.000	0.041	82.9	0.042	84.8	48-113	2.3	22	
Trichloroethene	0.050	0.000	0.042	84.8	0.042	83.6	57-135	1.3	23	
Trichlorofluoromethane	0.050	0.000	0.036	72.2	0.036	72.1	42-134	0.2	21	
Vinyl chloride	0.050	0.001	0.036	69.0	0.038	72.9	44-132	5.3	24	
Xylenes, Total	0.150	0.000	0.133	88.4	0.136	90.9	54-129	2.7	24	

Quality Control Summary for client sample(s) PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-04, -05, -06, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 1:58:00 AM
Instrument ID: VOCMS1
Analyst: 366
Analytic Batch: WG295634 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,1,1,2-Tetrachloroethane	0.050	0.048	97.0	0.049	97.9	61-134		1.0	17	
1,1,1-Trichloroethane	0.050	0.043	85.0	0.041	81.6	62-133		4.1	17	
1,1,2,2-Tetrachloroethane	0.050	0.047	93.8	0.048	95.9	66-124		2.3	16	
1,1,2-Trichloroethane	0.050	0.049	98.2	0.049	98.3	62-124		0.1	16	
1,1,2-Trichloro-1,2,2-	0.050	0.038	76.5	0.038	75.5	66-130		1.3	18	
1,1-Dichloroethane	0.050	0.042	83.7	0.041	81.8	59-135		2.2	22	
1,1-Dichloroethene	0.050	0.044	87.8	0.044	88.1	68-136		0.5	17	
1,1-Dichloropropene	0.050	0.042	84.0	0.042	83.9	63-125		0.1	17	
1,2,3-Trichlorobenzene	0.050	0.052	104	0.054	107	57-152		3.2	19	
1,2,3-Trichloropropane	0.050	0.044	88.9	0.046	91.7	62-138		3.0	18	
1,2,3-Trimethylbenzene	0.050	0.046	92.3	0.045	90.2	61-107		2.3	16	
1,2,4-Trichlorobenzene	0.050	0.054	108	0.054	108	49-153		0.8	20	
1,2,4-Trimethylbenzene	0.050	0.048	96.1	0.047	94.4	61-128		1.8	18	
1,2-Dibromo-3-Chloropropane	0.050	0.048	95.8	0.053	106	50-139		9.8	19	
1,2-Dibromoethane	0.050	0.049	97.4	0.049	98.2	70-122		0.9	16	
1,2-Dichlorobenzene	0.050	0.050	101	0.049	98.4	54-135		2.6	16	
1,2-Dichloroethane	0.050	0.037	74.1	0.037	73.3	61-131		1.1	15	
1,2-Dichloropropane	0.050	0.048	95.9	0.045	90.8	64-126		5.5	18	
1,3,5-Trimethylbenzene	0.050	0.049	97.0	0.047	94.9	65-126		2.2	17	
1,3-Dichlorobenzene	0.050	0.050	99.4	0.050	99.2	45-143		0.2	17	
1,3-Dichloropropane	0.050	0.046	91.3	0.045	90.2	74-118		1.2	15	
1,4-Dichlorobenzene	0.050	0.049	98.5	0.048	95.9	48-138		2.6	17	
2,2-Dichloropropane	0.050	0.038	76.7	0.038	76.6	52-140		0.1	21	
2-Butanone (MEK)	0.250	0.220	88.1	0.241	96.6	50-132		9.2	21	
2-Chloroethyl vinyl ether	0.250	0.310	124	0.304	121	36-136		2.1	28	
2-Chlorotoluene	0.050	0.046	92.5	0.045	90.9	61-134		1.8	26	
4-Chlorotoluene	0.050	0.048	96.1	0.046	92.8	67-129		3.5	17	
4-Methyl-2-pentanone	0.250	0.225	90.1	0.231	92.4	47-143		2.6	21	
Acetone	0.250	0.176	70.3	0.186	74.6	36-163		5.9	20	
Acrolein	0.250	0.145	57.9	0.178	71.1	27-122		21	13	J3
Acrylonitrile	0.250	0.200	80.2	0.204	81.7	44-130		1.9	20	
Benzene	0.050	0.041	82.8	0.041	82.1	63-121		0.9	16	
Bromobenzene	0.050	0.043	85.4	0.042	84.3	70-130		1.3	16	
Bromodichloromethane	0.050	0.042	83.7	0.042	83.2	64-127		0.6	17	

Quality Control Summary for client sample(s) PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-04, -05, -06, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/14/2007
Analysis Date: 4/15/2007 1:58:00 AM
Instrument ID: VOCMS1
Analyst: 366
Analytic Batch: WG295634 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Bromoform	0.050	0.049	97.6	0.050	101	60-139		3.3	15	
Bromomethane	0.050	0.052	104	0.051	101	30-125		2.5	21	
Carbon tetrachloride	0.050	0.041	81.8	0.041	81.6	70-140		0.3	17	
Chlorobenzene	0.050	0.048	96.6	0.049	98.4	70-126		1.9	16	
Chlorodibromomethane	0.050	0.050	99.1	0.051	101	62-132		1.9	15	
Chloroethane	0.050	0.042	84.6	0.042	83.7	43-146		1.1	24	
Chloroform	0.050	0.039	77.3	0.038	76.9	65-121		0.6	15	
Chloromethane	0.050	0.035	69.7	0.034	67.5	45-131		3.3	22	
cis-1,2-Dichloroethene	0.050	0.044	87.5	0.044	89.0	68-123		1.6	15	
cis-1,3-Dichloropropene	0.050	0.045	90.2	0.044	87.4	66-121		3.1	18	
Di-isopropyl ether	0.050	0.040	80.3	0.039	77.3	58-127		3.8	18	
Dibromomethane	0.050	0.044	88.5	0.044	88.7	69-119		0.2	16	
Dichlorodifluoromethane	0.050	0.036	72.9	0.037	74.3	24-155		1.8	22	
Ethylbenzene	0.050	0.050	101	0.051	102	70-121		0.8	17	
Hexachlorobutadiene	0.050	0.052	104	0.053	106	60-119		2.3	18	
Isopropylbenzene	0.050	0.048	95.2	0.048	95.0	68-128		0.2	17	
Methyl tert-butyl ether	0.050	0.041	82.7	0.041	82.3	51-137		0.4	18	
Methylene Chloride	0.050	0.039	77.0	0.039	77.0	53-131		0.1	17	
n-Butylbenzene	0.050	0.048	96.2	0.048	95.1	59-134		1.2	19	
n-Propylbenzene	0.050	0.046	92.2	0.046	91.5	68-123		0.8	17	
Naphthalene	0.050	0.048	96.6	0.051	102	54-150		5.2	17	
p-Isopropyltoluene	0.050	0.047	94.9	0.048	95.5	64-132		0.6	18	
sec-Butylbenzene	0.050	0.047	94.4	0.048	95.8	67-124		1.5	18	
Styrene	0.050	0.051	101	0.049	98.8	68-123		2.2	17	
tert-Butylbenzene	0.050	0.046	92.0	0.046	92.1	65-128		0.1	17	
Tetrachloroethene	0.050	0.053	107	0.053	106	64-134		0.7	18	
Toluene	0.050	0.044	88.5	0.043	86.8	65-120		1.9	18	
trans-1,2-Dichloroethene	0.050	0.044	88.4	0.045	89.6	59-138		1.4	22	
trans-1,3-Dichloropropene	0.050	0.043	85.4	0.042	84.6	55-113		0.9	18	
Trichloroethene	0.050	0.047	93.3	0.046	92.9	74-120		0.3	16	
Trichlorofluoromethane	0.050	0.038	76.8	0.038	75.4	49-121		1.8	19	
Vinyl chloride	0.050	0.038	75.8	0.038	76.7	46-133		1.2	17	
Xylenes, Total	0.150	0.146	97.5	0.147	97.9	68-124		0.4	17	

Quality Control Summary for client sample(s) PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-07
Sample Date: 4/5/2007
Extraction Date: 4/17/2007
Analysis Date: 4/17/2007 2:50:00 PM
Instrument ID: VOCMS9
Analyst: 189
Analytic Batch: WG295930 EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate

L289281-02

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,1,1,2-Tetrachloroethane	0.050	0.000	0.052	103	0.055	111	57-133		6.8	21	
1,1,1-Trichloroethane	0.050	0.000	0.039	77.6	0.041	82.1	54-143		5.6	22	
1,1,2,2-Tetrachloroethane	0.050	0.000	0.048	95.5	0.049	98.0	58-134		2.6	27	
1,1,2-Trichloroethane	0.050	0.000	0.049	98.6	0.051	102	58-125		2.9	19	
1,1,2-Trichloro-1,2,2-	0.050	0.000	0.041	82.7	0.045	89.6	61-136		8.1	20	
1,1-Dichloroethane	0.050	0.000	0.035	70.4	0.038	76.2	53-136		7.9	22	
1,1-Dichloroethene	0.050	0.000	0.039	78.7	0.043	86.1	58-145		9.0	22	
1,1-Dichloropropene	0.050	0.000	0.038	76.5	0.041	81.2	58-126		5.9	20	
1,2,3-Trichlorobenzene	0.050	0.000	0.049	97.9	0.054	109	48-127		10	26	
1,2,3-Trichloropropane	0.050	0.000	0.055	111	0.056	112	57-145		0.8	24	
1,2,3-Trimethylbenzene	0.050	0.000	0.036	71.8	0.038	76.2	51-106		6.0	19	
1,2,4-Trichlorobenzene	0.050	0.000	0.045	90.6	0.049	98.6	41-127		8.5	26	
1,2,4-Trimethylbenzene	0.050	0.000	0.047	94.3	0.050	99.9	52-125		5.7	26	
1,2-Dibromo-3-Chloropropane	0.050	0.000	0.045	90.4	0.046	91.7	44-138		1.4	27	
1,2-Dibromoethane	0.050	0.000	0.053	107	0.056	113	64-126		5.3	19	
1,2-Dichlorobenzene	0.050	0.000	0.039	78.9	0.043	85.7	50-127		8.3	19	
1,2-Dichloroethane	0.050	0.000	0.042	84.5	0.046	92.9	54-145		9.5	21	
1,2-Dichloropropane	0.050	0.000	0.041	82.2	0.043	86.7	55-135		5.3	20	
1,3,5-Trimethylbenzene	0.050	0.000	0.048	95.9	0.051	101	54-125		5.4	57	
1,3-Dichlorobenzene	0.050	0.000	0.051	102	0.055	111	47-128		8.5	25	
1,3-Dichloropropane	0.050	0.000	0.046	92.1	0.050	99.3	64-125		7.5	19	
1,4-Dichlorobenzene	0.050	0.000	0.039	77.4	0.041	82.2	47-123		6.1	18	
2,2-Dichloropropane	0.050	0.000	0.036	71.3	0.038	76.2	44-143		6.6	19	
2-Butanone (MEK)	0.250	0.000	0.195	77.9	0.188	75.2	47-133		3.5	22	
2-Chloroethyl vinyl ether	0.250	0.000	0.162	65.0	0.172	68.7	28-148		5.5	18	
2-Chlorotoluene	0.050	0.000	0.045	90.7	0.048	96.4	51-135		6.2	28	
4-Chlorotoluene	0.050	0.000	0.044	88.7	0.047	94.2	57-123		6.0	25	
4-Methyl-2-pentanone	0.250	0.000	0.212	85.0	0.214	85.4	45-144		0.6	25	
Acetone	0.250	0.000	0.208	83.3	0.221	88.6	25-158		6.2	33	
Acrolein	0.250	0.000	0.307	123	0.353	141	25-128	J5	14	15	
Acrylonitrile	0.250	0.000	0.173	69.0	0.179	71.8	39-136		3.9	25	
Benzene	0.050	0.000	0.037	73.7	0.039	77.1	51-134		4.5	18	
Bromobenzene	0.050	0.000	0.044	87.6	0.046	92.7	60-131		5.7	22	
Bromodichloromethane	0.050	0.000	0.047	93.1	0.048	96.9	54-139		4.0	19	

Quality Control Summary for client sample(s) PS2-MW2
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

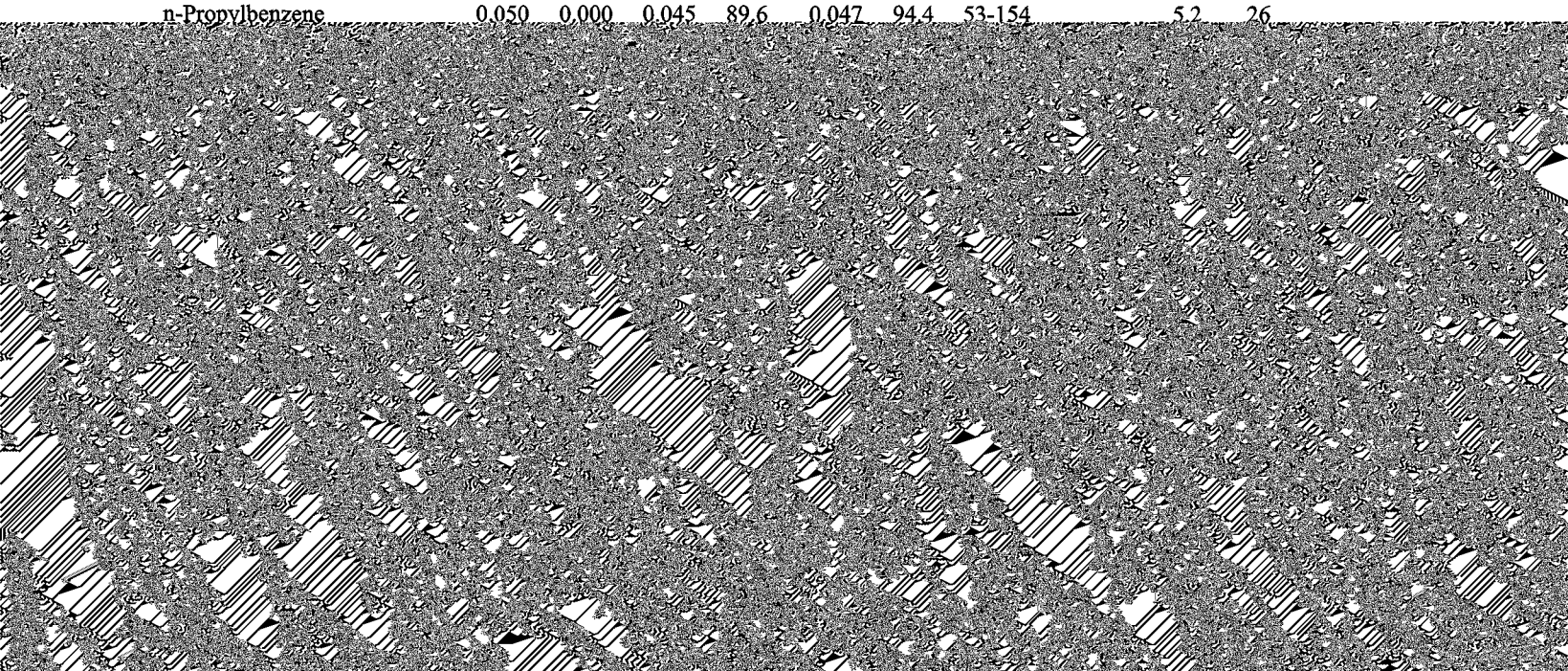
Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-07
Sample Date: 4/5/2007
Extraction Date: 4/17/2007
Analysis Date: 4/17/2007 2:50:00 PM
Instrument ID: VOCMS9
Analyst: 189
Analytic Batch: WG295930

EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate
L289281-02

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Qualifier RPD	Control Limits	Qualifier
Bromoform	0.050	0.000	0.061	121	0.063	127	52-144	4.4	21	
Bromomethane	0.050	0.000	0.046	92.8	0.048	95.4	21-131	2.8	24	
Carbon tetrachloride	0.050	0.000	0.040	79.7	0.043	85.4	51-147	6.9	23	
Chlorobenzene	0.050	0.000	0.049	97.0	0.052	103	59-125	6.1	22	
Chlorodibromomethane	0.050	0.000	0.053	106	0.056	111	57-133	5.3	19	
Chloroethane	0.050	0.000	0.042	84.9	0.049	97.2	38-153	14	25	
Chloroform	0.050	0.000	0.041	81.9	0.044	87.4	55-133	6.5	20	
Chloromethane	0.050	0.000	0.033	65.1	0.036	71.2	39-135	9.0	23	
cis-1,2-Dichloroethene	0.050	0.000	0.039	78.5	0.041	82.4	64-126	5.0	18	
cis-1,3-Dichloropropene	0.050	0.000	0.044	87.7	0.046	91.7	54-122	4.5	22	
Di-isopropyl ether	0.050	0.000	0.034	68.4	0.037	74.9	53-132	9.1	20	
Dibromomethane	0.050	0.000	0.047	94.8	0.048	96.9	61-132	2.1	19	
Dichlorodifluoromethane	0.050	0.000	0.044	88.1	0.047	94.2	26-153	6.7	25	
Ethylbenzene	0.050	0.000	0.048	95.5	0.052	103	55-125	7.6	20	
Hexachlorobutadiene	0.050	0.000	0.046	92.3	0.050	100	0-200	8.2	30	
Isopropylbenzene	0.050	0.000	0.047	93.9	0.050	100	59-127	6.4	26	
Methyl tert-butyl ether	0.050	0.000	0.041	82.2	0.043	85.5	50-137	4.0	21	
Methylene Chloride	0.050	0.000	0.039	77.4	0.040	80.8	44-143	4.3	22	
n-Butylbenzene	0.050	0.000	0.032	63.2	0.035	69.3	47-124	9.2	20	
n-Propylbenzene	0.050	0.000	0.045	89.6	0.047	94.4	53-154	5.2	26	



Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-07
Sample Date: 4/5/2007
Extraction Date: 4/17/2007
Analysis Date: 4/17/2007 2:50:00 PM
Instrument ID: VOCMS9
Analyst: 189
Analytic Batch: WG295930 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,1,1,2-Tetrachloroethane	0.050	0.051	101	0.055	110	61-134		8.8	17	
1,1,1-Trichloroethane	0.050	0.041	82.4	0.043	86.2	62-133		4.5	17	
1,1,2,2-Tetrachloroethane	0.050	0.044	87.8	0.046	92.8	66-124		5.6	16	
1,1,2-Trichloroethane	0.050	0.047	93.6	0.051	102	62-124		8.8	16	
1,1,2-Trichloro-1,2,2-	0.050	0.043	86.8	0.045	90.3	66-130		4.0	18	
1,1-Dichloroethane	0.050	0.038	76.5	0.039	77.5	59-135		1.2	22	
1,1-Dichloroethene	0.050	0.043	86.8	0.046	92.1	68-136		5.9	17	
1,1-Dichloropropene	0.050	0.041	81.6	0.042	84.2	63-125		3.1	17	
1,2,3-Trichlorobenzene	0.050	0.056	111	0.052	104	57-152		6.4	19	
1,2,3-Trichloropropane	0.050	0.050	100	0.053	106	62-138		5.8	18	
1,2,3-Trimethylbenzene	0.050	0.039	77.3	0.040	80.3	61-107		3.8	16	
1,2,4-Trichlorobenzene	0.050	0.055	109	0.052	104	49-153		4.6	20	
1,2,4-Trimethylbenzene	0.050	0.048	95.4	0.051	102	61-128		6.3	18	
1,2-Dibromo-3-Chloropropane	0.050	0.043	85.6	0.044	88.0	50-139		2.7	19	
1,2-Dibromoethane	0.050	0.050	100	0.055	109	70-122		8.8	16	
1,2-Dichlorobenzene	0.050	0.043	85.0	0.044	87.6	54-135		2.9	16	
1,2-Dichloroethane	0.050	0.046	92.1	0.046	92.1	61-131		0.0	15	
1,2-Dichloropropane	0.050	0.042	84.9	0.043	86.2	64-126		1.5	18	
1,3,5-Trimethylbenzene	0.050	0.047	94.3	0.052	104	65-126		9.5	17	
1,3-Dichlorobenzene	0.050	0.052	104	0.055	111	45-143		6.1	17	
1,3-Dichloropropane	0.050	0.046	91.9	0.050	99.0	74-118		7.5	15	
1,4-Dichlorobenzene	0.050	0.044	87.2	0.045	89.6	48-138		2.8	17	
2,2-Dichloropropane	0.050	0.040	79.9	0.042	83.3	52-140		4.1	21	
2-Butanone (MEK)	0.250	0.187	74.7	0.184	73.6	50-132		1.4	22	
2-Chloroethyl vinyl ether	0.250	0.177	70.8	0.173	69.4	36-136		2.1	28	
2-Chlorotoluene	0.050	0.045	90.8	0.050	99.4	61-134		9.0	26	
4-Chlorotoluene	0.050	0.047	93.3	0.049	98.7	67-129		5.6	17	
4-Methyl-2-pentanone	0.250	0.218	87.3	0.215	86.2	47-143		1.2	21	
Acetone	0.250	0.241	96.4	0.231	92.5	36-163		4.1	20	
Acrolein	0.250	0.419	167	0.443	177	27-122	J4	5.6	13	
Acrylonitrile	0.250	0.174	69.8	0.172	68.9	44-130		1.2	20	
Benzene	0.050	0.038	75.6	0.040	79.4	63-121		4.9	16	
Bromobenzene	0.050	0.044	88.7	0.047	93.9	70-130		5.7	16	
Bromodichloromethane	0.050	0.049	98.2	0.050	99.7	64-127		1.5	17	

Quality Control Summary for client sample(s) PS2-MW2
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-07
Sample Date: 4/5/2007
Extraction Date: 4/17/2007
Analysis Date: 4/17/2007 2:50:00 PM
Instrument ID: VOCMS9
Analyst: 189
Analytic Batch: WG295930 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Bromoform	0.050	0.056	112	0.061	122	60-139		8.2	15	
Bromomethane	0.050	0.047	94.1	0.046	92.1	30-125		2.1	21	
Carbon tetrachloride	0.050	0.043	85.3	0.043	86.4	70-140		1.3	17	
Chlorobenzene	0.050	0.048	96.3	0.053	106	70-126		9.5	16	
Chlorodibromomethane	0.050	0.051	101	0.055	110	62-132		7.9	15	
Chloroethane	0.050	0.048	95.8	0.048	95.7	43-146		0.1	24	
Chloroform	0.050	0.043	85.4	0.044	87.3	65-121		2.2	15	
Chloromethane	0.050	0.037	74.1	0.037	73.8	45-131		0.4	22	
cis-1,2-Dichloroethene	0.050	0.040	79.5	0.042	83.9	68-123		5.3	15	
cis-1,3-Dichloropropene	0.050	0.047	94.6	0.048	95.5	66-121		1.0	18	
Di-isopropyl ether	0.050	0.038	75.8	0.039	77.8	58-127		2.6	18	
Dibromomethane	0.050	0.047	94.6	0.049	97.3	69-119		2.8	16	
Dichlorodifluoromethane	0.050	0.050	101	0.050	99.7	24-155		1.1	22	
Ethylbenzene	0.050	0.047	94.6	0.052	104	70-121		9.3	17	
Hexachlorobutadiene	0.050	0.051	102	0.051	102	60-119		0.1	18	
Isopropylbenzene	0.050	0.047	93.0	0.052	103	68-128		10	17	
Methyl tert-butyl ether	0.050	0.043	86.3	0.043	86.1	51-137		0.3	18	
Methylene Chloride	0.050	0.039	77.2	0.039	77.5	53-131		0.4	17	
n-Butylbenzene	0.050	0.037	74.5	0.038	76.7	59-134		2.9	19	
n-Propylbenzene	0.050	0.046	91.2	0.049	98.4	68-123		7.6	17	
Naphthalene	0.050	0.050	99.1	0.047	94.3	54-150		5.0	17	
p-Isopropyltoluene	0.050	0.048	96.3	0.052	104	64-132		8.2	18	
sec-Butylbenzene	0.050	0.045	90.5	0.050	99.1	67-124		9.1	18	
Styrene	0.050	0.050	99.5	0.054	108	68-123		8.5	17	
tert-Butylbenzene	0.050	0.047	93.5	0.050	101	68-128		7.2	17	
Tetrachloroethene	0.050	0.055	110	0.061	121	64-134		10.0	18	
Toluene	0.050	0.045	89.0	0.047	93.2	65-120		4.5	18	
trans-1,2-Dichloroethene	0.050	0.042	85.0	0.044	87.3	59-138		2.8	22	
trans-1,3-Dichloropropene	0.050	0.048	96.0	0.048	96.3	55-113		0.2	18	
Trichloroethene	0.050	0.045	90.8	0.047	94.4	74-120		3.9	16	
Trichlorofluoromethane	0.050	0.042	84.1	0.042	83.8	49-121		0.4	19	
Vinyl chloride	0.050	0.042	84.0	0.042	84.6	46-133		0.7	17	
Xylenes, Total	0.150	0.144	95.9	0.155	103	68-124		7.2	17	

Quality Control Summary for client sample(s) PS2-MW2
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **TPH C6 - C35 by Method 8015**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/11/2007
Analysis Date: 4/12/2007 8:32:00 PM
Instrument ID: SVGC13
Analyst: 145
Analytic Batch: WG295033 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL
TPH C12 - C28		<5.00
TPH C28 - C35		<5.00
TPH C6 - C12		<5.00
TPH C6 - C35		<5.00

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
TPH C12 - C28	83.3	84.4	101	75 - 125	
TPH C6 - C12	83.3	77.4	92.9	75 - 125	
TPH C6 - C35	167	162	97.2	75 - 125	

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
TPH C12 - C28	83.3	85.9	103	75 - 125	
TPH C6 - C12	83.3	79.1	94.9	75 - 125	
TPH C6 - C35	167	165	99.1	75 - 125	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **TPH C6 - C35 by Method 8015**
Matrix: Water - mg/L
Project: Clear Lake
Project No: HOU-07-0260
Login No: L288294
Sample Number: L288294-01, -02, -03, -04, -05, -06, -07, -08, -09, -10
Sample Date: 4/5/2007
Extraction Date: 4/11/2007
Analysis Date: 4/12/2007 8:32:00 PM
Instrument ID: SVGC13
Analyst: 145
Analytic Batch: WG295033 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Qualifier	RPD	Control Limits	Qualifier
TPH C12 - C28	83.3	84.4	101	85.9	103	75-125		1.7	20	
TPH C6 - C12	83.3	77.4	92.9	79.1	94.9	75-125		2.2	20	
TPH C6 - C35	167	162	97.2	165	99.1	75-125		1.9	20	

Quality Control Summary for client sample(s) PS1-MW1, PS1-MW2, PS1-MW3, PS1-MW4, PS1-MW5, PS2-MW1, PS2-MW2, PS2-MW3, PS2-MW4, PS2-MW5
QC Outliers appear in shaded areas

3324

Phoenix Pollution Control

EPAHO104000190

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **5/18/2009**

Dear **Steve Sams**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3324

Expiration Date 5/18/2011

Generator: Phoenix Pollution Control
Address: 720 S Lynchburg Rd
Baytown, TX 77520

Waste Information

Name of Waste: Sodium hydroxide solution
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
Unused sodium hydroxide solution
Color: brown to red **Odor:** none **pH:** >12
Physical State:
Incompatibilities: acids, oxidizing agents
Safety Related Data/Special Handling:
Chem suit, rubber gloves, rubber boots, safety goggles, face shield, hard hat

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JB/MM

Product

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Phoenix Pollution Control
Address : 720 S Lynchburg Rd
City, State, Zip : Baytown TX 77520
Contact : Steve Sams **Title :**
Phone No : (713) 530-4550 **Fax :** (281) 424-7748
24 / HR Phone :
U.S EPA I.D No :
State I.D : **SIC Code**

SECTION 2: Billing Information

Company : Phoenix Pollution Control
Address : 4808 Fairmont Parkway Box #274
City, State, Zip : Baytown TX 77520
Contact : Steve Sams **Title :**
Phone No : (713) 530-4550 **Fax :** (281) 424-7748

SECTION 3: General Description of the Waste

Name of Waste : Sodium hydroxide solution

Detailed Description of the Process Generating Waste:
Unused Sodium hydroxide solution

Physical State : ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color : brown to red **Odor :** none

Specific Gravity (Water=1) : 1.261 **Density :** 9-9.5 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Container Size : 1000 gal

Number Of Units : 1

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☑ Yes ☐ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☑ D001 ☐ D002 ☐ D003

EPAHO104000192

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : Product

Proper U.S. State Waste Code No : Sodium hydroxide solution

Class : 8 **UN/NA :** UN1824 **PG :** II **RQ :** 1000

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>140	>12	na mg/l	na mg/l	0 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
na mg/l	na mg/l	2.1 mg/l	5.87 mg/l	.55 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
sodium hydroxide	>25	%
water	25-75	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Chem suit, rubber gloves, rubber boots, safety goggles, face shield, hard hat

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
~~msds~~ no we

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
acids, oxidizing agents

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x
TCLP Volatilies : x
TCLP Semi-Volatiles : x
Reactivity : x

EPAHO104000193

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ **YES** ☑ **NO**

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : _____ Date : 5/19/09

Printed Name / Title : Steve Sams

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Process Facility Information :

Compliance Officer : Robert Ranger

Date : 5-18-09 Status : Approved Rejected

Approval Number : 3324

EPAHO104000195

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

trans only if conforming

2. Contamination Limit (maximum limit before surchages apply):

NONE

3. Surcharge Pricing:

NONE

4. Special Testing Requirements:

Product: test concentration by titration & gravity, color, clarity, solids, & metals (diluted & scaled up)

5. Treatment and Handling Protocol:

transfer to totes as directed by Clint for use onsite

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Joy Baker
Cc: Matt Bowman, Clint Hopkins, Prabhaker, Sam Brown

Date: 5/18/09

From: Miles Root

Lab Memo: 09-090

Subject: **Phoenix Pollution Control Evaluation 0509-26**

A sample of caustic from Phoenix Pollution Control has been evaluated for potential use at CES. This sample is evaluation 0509-26 and is a sample of unused caustic which was previously used in a waste water treatment plant. This is a one-time acquisition of approximately 1000 gallons, and its acquisition is recommended.

This material is near water white in appearance with what appears to be rust and dirt that settles out to the bottom. Its density is 1.261, which equates to approximately 24% caustic, as NaOH. By titration this material is 24.7 wt% as NaOH.

The caustic has high copper at almost 6 ppm while zinc is at 2 ppm. We should still be able to handle this caustic. The metals were tested on an untreated sample and lime addition will reduce these metals down. Also, caustic will not be added in any quantity large enough to make these metals an issue. This material has typical caustic odor and looks good for caustic use at CES. Its acquisition is recommended.

The table below summarizes the analytical testing.

Phoenix Pollution Control Evaluation 0509-26	
Density	1.261
NaOH, wt%	24.7
Odor	Typical
Metals, ppm	
Ni	0.552
Zn	2.108
Cu	5.868
Cd	0.246
Cr	0.000

3325

Cliff Berry, Inc.

EPAHO104000199

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **5/20/2009**

Dear **Patti Lentz**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3325

Expiration Date 5/20/2011

Generator: Cliff Berry, Inc.
Address: 6660 FM 1728
Boling, TX

Waste Information

Name of Waste: Pipeline Flush Water
TCEQ Waste Code #: CESQ1011
Container Type:
Detailed Description of Process Generating Waste:
Purge water form flushing a pipeline that last contained natural gas.
Color: clear **Odor:** slight **pH:** 7
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#

JR
GB

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Cliff Berry, Inc.
Address: ~~1728 Farm Road~~ 6660 FM 1728
City: Boling State: TX Zip: 77420
Contact: Patti Lentz Title:
Phone Number: 904-813-1431 Fax Number: 713-842-8601
24/hr Phone Number:
US EPA ID No: ~~TXD988082202~~ TXCES06
State ID No: 78340 (CESH) SIC Code:
per Patti Lentz 5-20-09

SECTION 2: Billing Information - ☐ Same as Above

Company: Cliff Berry, Inc.
Address: ~~1518 Talleyrand Avenue~~ PO BOX 13079
City: ~~Jacksonville~~ Ft. Lauderdale State: FL Zip: 33316, ~~32206~~
Contact: Patti Lentz Title:
Phone Number: 904-356-5516 Fax Number: 904-356-5518

SECTION 3: General Description of the Waste

Name of Waste: Pipeline Flush Water
Detailed Description of Process Generating Waste:

Purge water from flushing a pipeline that last contained natural gas

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Clean Odor: Slight

Specific Gravity (water=1): 1-1.1 Density: 8.5 lbs/gal

Does this material contain any total phenolic compounds? ☑ Yes ☐ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☑ One-Time
Quantity: 2 to 3

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is It: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: ~~[illegible]~~ ~~RRCT101R~~ CESQ1011 per patti lenty 5-20-09

Proper US DOT Shipping Name: Non-RCRA / Non DOT Regulated Rinsewater
Class: na UN/NA: na PG: na RQ: na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150 F		7		<.25	mg/l	<.25	mg/l	0-2	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
~~<1500~~ 71500	mg/l	<1500	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	93-99	%
Soap Detergent	1-5	%
Rust / Dirt	0-1	%
Oil Residue	0-1	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. None

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

none known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	NON
Corrosivity:	NON
Ignitability:	NON

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pritaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

***Metals Subcategory*: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

***Oils Subcategory*: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☑ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☑ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☑ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Loyd Layman **Date:** 5-18-09

Printed Name/Title: Loyd Layman

CES USE ONLY (DO NOT WRITE IN THIS SPACE)		
Compliance Officer:		
Date:	☐ Approved	☐ Rejected
Approval Number:		

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$0.25 / gallon, $70 / hr Trans

2. Contamination Limit (maximum limit before surchages apply):

Phenol <15ppm
TOC <5000
<3% non treated solids

3. Surcharge Pricing:

$0.03/gallon per 50ppm phenol over 15ppm
$0.03/gallon per 5000 toc over 5000
$0.03/gallon per 3% solids over 3%

4. Special Testing Requirements:

toc, phenol, pH, solids

5. Treatment and Handling Protocol:

WWTP

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☑ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Laboratory Analysis Report

Total Number of Pages: 11

Job ID : 09050286

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
FGT Valve 4.0 to 4.1

Report To :	Client Name:	Cliff Berry, Incorporated Environmental Services	P.O.#.:
	Attn:	Patti Lentz	Sample Collected By: Patty Lentz / CBI
	Client Address:	1518 Talleyrand Avenue	Date Collected: 05/12/09 - 05/13/09
	City, State, Zip:	Jacksonville, Florida, 32206	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
Source	Water	09050286.01
Beginning	Water	09050286.02

Released By: Sonia West
Title: Senior Project Manager
Date: 5/15/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/30/2009
Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 05/14/2009 08:50

EPAHO104000207

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09050286

Date: 5/15/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count

Qualifier Definition

Q11	Insufficient sample for analysis of matrix spike. QC Batch reported with LCS/LCSD.

EPAHO104000208

LABORATORY TEST RESULTS

Job ID : 09050286

Date 5/15/2009

Client Name: Cliff Berry, Incorporated Environmental Services Attn: Patti Lentz

Project Name: FGT Valve 4.0 to 4.1

Client Sample ID: Source
Date Collected: 05/12/09
Time Collected: 16:40
Other Information:

Job Sample ID: 09050286.01
Sample Matrix Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
EPA 1664A	Oil & Grease, Hexane Extractables								
	Oil & Grease	4.9	mg/L	1.11	2.78		Q11	05/14/09 09:35	SG
SM 2510B	Conductivity								
	Conductance	976	umho/cm	1	5			05/14/09 10:45	AJ
SM 2540D	Total Suspended Solids								
	TSS	199	mg/L	1	2.5			05/14/09 12:15	RK
SM 5220D	Chemical Oxygen Demand								
	COD	20	mg/L	1	10			05/14/09 09:30	AJ
SW-846 8021B	Purgeable Aromatics								
	Benzene	BRL	mg/L	1	0.002			05/14/09 16:06	HK
	Trifluorotoluene(surr)	118	%	1	75-125			05/14/09 16:06	HK

LABORATORY TEST RESULTS

Job ID : 09050286

Date 5/15/2009

Client Name: Cliff Berry, Incorporated Environmental Services Attn: Patti Lentz

Project Name: FGT Valve 4.0 to 4.1

Client Sample ID: Beginning
Date Collected: 05/13/09
Time Collected: 22:22
Other Information:

Job Sample ID: 09050286.02
Sample Matrix Water

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
EPA 1664A	Oil & Grease, Hexane Extractables								
	Oil & Grease	487	mg/L	1.11	2.78		Q11	05/14/09 09:35	SG
SM 2510B	Conductivity								
	Conductance	1011	umho/cm	1	5			05/14/09 10:45	AJ
SM 2540D	Total Suspended Solids								
	TSS	429	mg/L	1	2.5			05/14/09 12:15	RK
SM 5220D	Chemical Oxygen Demand								
	COD	506	mg/L	1	10			05/14/09 09:30	AJ
SW-846 8021B	Purgeable Aromatics								
	Benzene	0.039	mg/L	5	0.01			05/14/09 16:31	HK
	Trifluorotoluene(surr)	105	%	5	75-125			05/14/09 16:31	HK

QUALITY CONTROL CERTIFICATE

Job ID : 09050286 **Date :** 5/15/2009

Analysis : Oil & Grease, Hexane Extractables **Method :** EPA 1664A **Reporting Units :** mg/L

QC Batch ID : Qb09051406 **Created Date :** 05/14/09 **Created By :** Sgarcia

Samples in This QC Batch : 09050286.01,02

Sample Preparation : PB09051403 **Prep Method :** EPA 1664A **Prep Date :** 05/14/09 09:15 **Prep By :** Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Oil & Grease		BRL	mg/L	1	2.5		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Oil & Grease	39.5	36.8	93.2	39.5	35.4	89.6	3.9	11	78-114	

Refer to the Definition page for terms.

EPAHO104000211

QUALITY CONTROL CERTIFICATE

Job ID : 09050286 **Date :** 5/15/2009

Analysis : Total Suspended Solids **Method :** SM 2540D **Reporting Units :** mg/L

QC Batch ID : Qb09051420 **Created Date :** 05/14/09 **Created By :** Rkurup

Samples in This QC Batch : 09050286.01,02

Sample Preparation : PB09051414 **Prep Method :** SM 2540D **Prep Date :** 05/14/09 11:35 **Prep By :** Rkurup

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
TSS		BRL	mg/L	1	2.5		

QC Type: Duplicate

QC Sample ID: 09050235.02

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
TSS	14.5	16.2	mg/L	11.1	20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
TSS	500	444	88.7						72-108	

Refer to the Definition page for terms.

EPAHO104000212

QUALITY CONTROL CERTIFICATE

Job ID : 09050286 **Date :** 5/15/2009

Analysis : Chemical Oxygen Demand **Method :** SM 5220D **Reporting Units :** mg/L

QC Batch ID : Qb09051428 **Created Date :** 05/14/09 **Created By :** Ajohn

Samples in This QC Batch : 09050286.01,02

Sample Preparation : PB09051423 **Prep Method :** SM 5220D **Prep Date :** 05/14/09 09:30 **Prep By :** Ajohn

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
COD		BRL	mg/L	1	10		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
COD	300	283	94.3	300	291	97	2.8	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09050267.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
COD	62	200	266	102	200	258	98	4	20	80-120	

Refer to the Definition page for terms.

EPAHO104000213

QUALITY CONTROL CERTIFICATE

Job ID : 09050286 **Date :** 5/15/2009

Analysis : Conductivity **Method :** SM 2510B **Reporting Units :** umho/cm

QC Batch ID : Q809051429 **Created Date :** 05/14/09 **Created By :** AJohn

Samples in This QC Batch : 09050286.01,02

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Conductance		BRL	umho/cm	1	5		

QC Type: Duplicate

QC Sample ID: 09050164.02

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Conductance	1271	1268	umho/cm	0.2	20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Conductance	100	98.5	98.5						90-110	

Refer to the Definition page for terms.

EPAHO104000214

QUALITY CONTROL CERTIFICATE

Job ID : 09050286 **Date :** 5/15/2009

Analysis : Purgeable Aromatics **Method :** SW-846 8021B **Reporting Units :** mg/L

QC Batch ID : Qb09051505 **Created Date :** 05/15/09 **Created By :** Hkhuc

Samples in This QC Batch : 09050286.01,02

Sample Preparation : PB09051502 **Prep Method :** SW-846 5030C **Prep Date :** 05/14/09 15:32 **Prep By :** Hkhuc

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Benzene	71-43-2	BRL	mg/L	1	0.002		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Benzene	0.02	0.021	105	0.02	0.021	105	0	30	79.1-123	

QC Type: MS and MSD
QC Sample ID: 09050294.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Benzene	BRL	0.02	0.021	105						65-143	

Refer to the Definition page for terms.

EPAHO104000215

A & B Labs Chain of Custody

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Page 1 of 1

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Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 09050286

5. Project #

1. REPORT TO:
Company: CBI
Address: 1518 Talleyrand
Jax FL 32206
Contact: Patti Lentz
Phone: 904 813 1431
Fax: ☐ 713-842-8601 / 904-356-5518
E-mail: ☐ Plentz@Cliffberryinc.com

2. INVOICE TO:
Company:
Address:
Contact:
Phone:
Fax: ☐
E-mail: ☐

3. PO #

4. Turnaround Time (Business Days)
☒ 1 Day* ☐ Other
☐ 2 Days*
☐ 3 Days* *Surcharge applies
☐ 7 Days - Standard

6. Project Name/Location
FGT Valve 4.0 to 4.1

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT): Patti Lentz CBI
Sampler's Signature & Date: [signature] 5

13. No. of Containers

14. Containers*	P	P	G	VOA				
15. Preservatives**	N/A	*	*	X				
16. PH-Lab Only								

17. Analyses/Methods: Conductivity, COD, O&G, Benzene

PAID

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	Time	11. Comp.	Grab	12. Matrix Water	Soil	Sludge	Oil	Air	Other	Conductivity	COD	O&G	Benzene				18. REMARKS
01A-F	Source	5/12	1660		1	1						X	X	X	X				Container "1"
02A-F	Beginning	5/13	2222		1	1						X	X	X	X				Container "2"

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1 [signature]	5/14/09	850A			
2					
3			21. RECEIVED BY LABORATORY [signature]	5/14/09	850

*Containers: VOA - 40 ml vial; 4 oz/8 oz - glass wide mouth; A/G - Amber/Glass 1 Liter; P/O - Plastic/other

**Preservatives: C - Cool; H - HCl; N - HNO_3; S - H_2SO_4; OH - NaOH; T - $Na_2S_2O_3$; X - Other

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

LAB USE ONLY SAMPLING _____ RENTAL _____ P/U _____

22. KNOWN HAZARDS/COMMENTS

Temperature: _____ °C

Intact: Y or N Initials _____

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

05/15/2009 16:56 713-453-6091 AB LAB PAGE 10/11

EPAHO104000216

Sample Condition Checklist

Date : 05/15/09

A&B JobID : 09050286	Date Received : 05/14/2009	Time Received : 8:50AM
Client Name : Cliff Berry, Incorporated Environmental Services		
Temperature : 4.9°C	Sample pH : N/A	

	Check Points	Yes	No
1.	Cooler seal present and signed.	N/A	
2.	Sample(s) in a cooler.	X	
3.	If yes, ice in cooler.	X	
4.	Sample(s) received with chain-of-custody.	X	
5.	C-O-C signed and dated.	X	
6.	Sample(s) received with signed sample custody seal.	N/A	
7.	Sample containers arrived intact. (If no comment).	X	
8.	Matrix : Water ☑ Soil ☐ Liquid ☐ Sludge ☐ Solid ☐ Cassette ☐ Tube ☐ Bulk ☐ Badge ☐ Food ☐ Other ☐		
9.	Sample(s) were received in appropriate container(s).	X	
10.	Sample(s) were received with proper preservative	N/A	
11.	All samples were logged or labeled.	X	
12.	Sample ID labels match C-O-C ID's	X	
13.	Bottle count on C-O-C matches bottles found.	X	
14.	Sample volume is sufficient for analyses requested.	X	
15.	Samples were received within the hold time.	X	
16.	VOA vials completely filled.	N/A	
17.	Sample accepted.	X	

Comments : Include actions taken to resolve discrepancies/problem:

Received by : Dwright

Check in by/date : Dwright / 05/14/2009

EPAHO104000217

TRANSMISSION VERIFICATION REPORT

TIME : 05/12/2009 11:17
NAME : HOLIDAY INN EXPRESS
FAX : 9792828312
TEL : 9792828300
SER.# : 000H4J328733

DATE,TIME	05/12 11:17
FAX NO./NAME	19043565518
DURATION	00:00:29
PAGE(S)	02
	COVERPAGE
RESULT	OK
MODE	STANDARD
	ECM

Laboratory Analysis Report

Total Number of Pages: 6

Job ID : 09050355

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-8091, http://www.ablabs.com

Client Project Name :
FGT - Boiling

Report To :	Client Name:	Cliff Berry, Incorporated Environmental Services	P.O.#.:
	Attn:	Patti Lentz	Sample Collected By:
	Client Address:	1518 Talleyrand Avenue	Date Collected: 05/15/09
	City, State, Zip:	Jacksonville, Florida, 32206	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
Oil & Grease #3	Water	09050355.01

Shantall Carpenter

Released By: Shantall Carpenter
Title: Project Manager
Date: 5/18/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/30/2009
Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception eports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no informati in or data have been knowingly withheld that would affect the quality of the data.

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Date Received : 05/15/200 9 17:27

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09050355 Date: 5/18/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count

Qualifier Definition

Q11	Insufficient sample for analysis of matrix spike. QC Batch reported with LCS/LCSD.

EPAHO104000220

LABORATORY TEST RESULTS

Job ID : 09050355

Date 5/18/2009

Client Name:	Cliff Berry, Incorporated Environmental Services
Project Name:	FGT - Boiling

Attn: Patti Lentz

Client Sample ID:	Oil & Grease #3	Job Sample ID:	09050355.01
Date Collected:	05/15/09	Sample Matrix	Water
Time Collected:			
Other Information:			

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
EPA 1664A	Oil & Grease, Hexane Extractables								
	Oil & Grease	BRL	mg/L	1.11	2.78		Q11	05/15/09 17:40	SG

EPAHO104000221

QUALITY CONTROL CERTIFICATE

Job ID : 09050355 **Date :** 5/18/2009

Analysis : Oil & Grease, Hexane Extractables **Method :** EPA 1664A **Reporting Units :** mg/L

QC Batch ID : Qb09051801 **Created Date :** 05/15/09 **Created By :** Sgarcia

Samples in This QC Batch : 09050355.01

Sample Preparation : PB09051802 **Prep Method :** EPA 1664A **Prep Date :** 05/15/09 17:40 **Prep By :** Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Oil & Grease		BRL	mg/L	1	2.5		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Oil & Grease	39.5	36.5	92.4	39.5	36.4	92.2	0.3	11	78-114	

Refer to the Definition page for terms.

EPAHO104000222

A & B Labs — Chain of Custody

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713-453-6091 Fax
ablabs.com

A&B JOB ID # 0905055

5. Project #

1. REPORT TO:	2. INVOICE TO:
Company: CBI	Company:
Address:	Address:
Contact: Patti Lentz	Contact:
Phone:	Phone:
Fax: ☐	Fax: ☐
E-mail: ☐ Plentz@cliffberrynet.com	E-mail: ☐

3. PO #

4. Turnaround Time (Business Days)
- ☒ 1 Day* ☐ Other
- ☐ 2 Days*
- ☐ 3 Days* *Surcharge applies
- ☐ 7 Days - Standard

6. Project Name/Location: FGT - Boling

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT) Sampler's Signature & Date

13. No. of Containers
14. Containers* 6
15. Preservatives** 5
16. PH-Lab Only
17. Analyses/Methods: O & G

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	10. Sampling Time	11. Comp.	11. Grab	12. Matrix Water	Soil	Sludge	Oil	Air	Other	18. REMARKS
01	Oil & grease #3	5/15			X	X						

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1 Phillip S	5/15	1515	Phillip S	5/15	15:15
2 Phillip S	5/15	17:27			
3			21. RECEIVED BY LABORATORY	5/15/09	

22. KNOWN HAZARDS/COMMENTS

Temperature: 4.3 °C

Intact: Y or N Initials

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

*Containers: VOA - 40 ml vial; A/G - Amber/Glass 1 Liter; 4 oz/8 oz - glass wide mouth; P/O - Plastic/other

**Preservatives: C - Cool; H - HCl; N - HNO_3; S - H_2SO_4; OH - NaOH; T - $Na_2S_2O_3$; X - Other

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

LAB USE ONLY SAMPLING ____ RENTAL ____ P/U ____

PAGE 05/06

AB LAB

713-457-0752

05/18/2009 08:42

EPAHO10400223

Sample Condition Checklist

Date : 05/18, 09

A&B JobID : 09050355	Date Received : 05/15/2009	Time Received : 5:27PM
Client Name : Cliff Berry, Incorporated Environmental Services		
Temperature : 4.3°C	Sample pH : N/A	

	Check Points	Yes	No
1.	Cooler seal present and signed.	N/A	
2.	Sample(s) in a cooler.	X	
3.	If yes, ice in cooler.	X	
4.	Sample(s) received with chain-of-custody.	X	
5.	C-O-C signed and dated.	X	
6.	Sample(s) received with signed sample custody seal.	N/A	
7.	Sample containers arrived intact. (If no comment).	X	
8.	Matrix : Water ☑ Soil ☐ Liquid ☐ Sludge ☐ Solid ☐ Cassette ☐ Tube ☐ Bulk ☐ Badge ☐ Food ☐ Other ☐		
9.	Sample(s) were received in appropriate container(s).	X	
10.	Sample(s) were received with proper preservative	N/A	
11.	All samples were logged or labeled.	X	
12.	Sample ID labels match C-O-C ID's	X	
13.	Bottle count on C-O-C matches bottles found.	X	
14.	Sample volume is sufficient for analyses requested.	X	
15.	Samples were received within the hold time.	X	
16.	VOA vials completely filled.	N/A	
17.	Sample accepted.	X	

Comments : Include actions taken to resolve discrepancies/problem:

Received by : Mgonzalez

Check in by/date : Mgonzalez / 05/15/2009

EPAHO104000224

3335
AMTEX Machine Products, Inc.

EPAHO10400225

7E
T-35
LAO
8-4-09

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **5/21/2009**

Dear **Fred Leach**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3335

Expiration Date 5/21/2011

Generator: AMTEX Machine Products, Inc.
Address: 4517 Brittmoore Road
Houston, TX 77041

Waste Information

Name of Waste: Machine Sludge
TCEQ Waste Code #: CESQ6091
Container Type:
Detailed Description of Process Generating Waste:
sludge removed from underneath plating
Color: dark **Odor:** slight **pH:** neutral
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM

CES Environmental Services, Inc.

4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

OSL

SECTION 1: Generator Information

Company: Amtex Machine Products
Address: 4517 Brittmore Rd.
City: Houston **State:** TX **Zip:** 77041
Contact: Fred Leach **Title:**
Phone Number: 281-224-8121 **Fax Number:** 713-896-6363
24/hr Phone Number: 713-748-9804
US EPA ID No: CESQG
State ID No: CESQ **SIC Code:** na

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Machine sludge
Detailed Description of Process Generating Waste: sludge removed from underneath plating line

Physical State: ☐ Liquid ☑ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: dark **Odor:** slight

Specific Gravity (water=1): 1.02 **Density:** 8.34-9 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☑ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 10

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please fill out the UHC Form

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: CESQ6091

Proper US DOT Shipping Name: Non-RCRA, Non-DOT regulated material
Class: na **UN/NA:** na **PG :** na **RQ:** na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150		neutral		0	mg/l	0	mg/l	0-50	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
0	mg/l	na	mg/l	0	mg/l	0	mg/l	0	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	1-10	%
Oil	0-3	%
Sludge	87-99	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analytical 09050092 (A&B labs)

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

none

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Fred Leach **Date:** 5/20/2009

Printed Name/Title: Fred Leach

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:

Date: 5-21-09 ☑ Approved ☐ Rejected

Approval Number: 3335

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$60.00/drum plus freight

2. Contamination Limit (maximum limit before surchages apply):

None

3. Surcharge Pricing:

None

4. Special Testing Requirements:

None

5. Treatment and Handling Protocol:

Put in class 1 Box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

Laboratory Analysis Report

Total Number of Pages: 8

Job ID : 09050092

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
0509-06 Amtex

Report To :	Client Name:	CES Environmental	P.O.#.: 0509-06
	Attn:	Dana Carter	Sample Collected By: Dana Carter
	Client Address:	4904 Griggs Rd	Date Collected: 05/05/09
	City, State, Zip:	Houston, Texas, 77021	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
Sludge	Sludge	09050092.01

Shantall Carpenter

Released By: Shantall Carpenter
Title: Project Manager
Date: 5/15/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/30/2009
Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 05/06/2009 12:37

EPAHO104000235

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09050092

Date: 5/15/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count

Qualifier Definition

EPAHO104000236

LABORATORY TEST RESULTS

Job ID : 09050092

Date 5/15/2009

Client Name: CES Environmental
Attn: Dana Carter
Project Name: 0509-06 Amtex

Client Sample ID: Sludge
Date Collected: 05/05/09
Time Collected: 14:45
Other Information:

Job Sample ID: 09050092.01
Sample Matrix Sludge

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 6010C	TCLP Metals								
	Arsenic	BRL	mg/L	1	0.04	5.0		05/07/09 13:17	TK
	Barium	0.079	mg/L	1	0.04	100.0		05/07/09 13:17	TK
	Cadmium	BRL	mg/L	1	0.04	1.0		05/07/09 13:17	TK
	Chromium	BRL	mg/L	1	0.04	5.0		05/07/09 13:17	TK
	Lead	BRL	mg/L	1	0.04	5.0		05/07/09 13:17	TK
	Selenium	BRL	mg/L	1	0.1	1.0		05/07/09 13:17	TK
	Silver	BRL	mg/L	1	0.04	5.0		05/07/09 13:17	TK
SW-846 7470A	TCLP Metals, Mercury								
	Mercury	BRL	mg/L	1	0.0005	0.2		05/11/09 13:19	SM
SW-846 8021B	Purgeable Aromatics								
	Benzene	BRL	mg/Kg	1	0.01			05/08/09 20:47	HK
	Toluene	0.063	mg/Kg	1	0.01			05/08/09 20:47	HK
	Ethylbenzene	17.7	mg/Kg	200	2			05/12/09 13:01	HK
	m- & p-Xylenes	65.3	mg/Kg	2000	40			05/12/09 13:26	HK
	o-Xylene	35.2	mg/Kg	200	2			05/12/09 13:01	HK
	Xylenes	101	mg/Kg	2000	60			05/12/09 13:26	HK
	Trifluorotoluene(surr)	98	%	1	81-111			05/08/09 20:47	HK

EPAHO104000237

QUALITY CONTROL CERTIFICATE

Job ID : 09050092 **Date :** 5/15/2009

Analysis : TCLP Metals **Method :** SW-846 6010C **Reporting Units :** mg/L

QC Batch ID : Qb09050717 **Created Date :** 05/07/09 **Created By :** Tkhuc

Samples in This QC Batch : 09050092.01

Digestion :	PB09050719	**Prep Method :**	SW-846 3010A	**Prep Date :**	05/07/09 11:00	**Prep By :**	Tkhuc
TCLP Prep :	PB09050705	**Prep Method :**	SW-846 1311	**Prep Date :**	05/06/09 16:45	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Arsenic	7440-38-2	BRL	mg/L	1	0.04		
Barium	7440-39-3	BRL	mg/L	1	0.04		
Cadmium	7440-43-9	BRL	mg/L	1	0.04		
Chromium	7440-47-3	BRL	mg/L	1	0.04		
Lead	7439-92-1	BRL	mg/L	1	0.04		
Selenium	7782-49-2	BRL	mg/L	1	0.1		
Silver	7440-22-4	BRL	mg/L	1	0.04		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Arsenic	2	2.05	103	2	2.04	102	0.5	20	80-120	
Barium	2	1.99	99.5	2	1.94	97	2.5	20	80-120	
Cadmium	2	2.00	100	2	1.95	97.5	2.5	20	80-120	
Chromium	2	1.96	98	2	1.92	96	2.1	20	80-120	
Lead	2	1.99	99.5	2	1.96	98	1.5	20	80-120	
Selenium	2	2.06	103	2	2.06	103	0	20	80-120	
Silver	2	2.04	102	2	1.98	99	3	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09050082.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Arsenic	BRL	2	1.98	99						45-138	
Barium	0.998	2	2.85	92.6						39-135	
Cadmium	BRL	2	1.89	94.5						56-125	
Chromium	BRL	2	1.87	93.5						52-125	
Lead	BRL	2	1.89	94.5						55-125	
Selenium	BRL	2	2.03	102						70-130	
Silver	BRL	2	1.94	97						26-148	

Refer to the Definition page for terms.

EPAHO104000238

QUALITY CONTROL CERTIFICATE

Job ID : 09050092 **Date :** 5/15/2009

Analysis : Purgeable Aromatics **Method :** SW-846 8021B **Reporting Units :** mg/Kg

QC Batch ID : Qb09051114 **Created Date :** 05/11/09 **Created By :** Hkhuc

Samples in This QC Batch : 09050092.01

Sample Preparation : PB09051109 **Prep Method :** SW-846 5035A **Prep Date :** 05/08/09 15:45 **Prep By :** Hkhuc

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Benzene	71-43-2	BRL	mg/Kg	1	0.01		
Toluene	108-88-3	BRL	mg/Kg	1	0.01		
Ethylbenzene	100-41-4	BRL	mg/Kg	1	0.01		
m- & p-Xylenes	108-38-3&106-42-3	BRL	mg/Kg	1	0.02		
o-Xylene	95-47-6	BRL	mg/Kg	1	0.01		
Xylenes		BRL	mg/Kg	1	0.03		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Benzene	0.1	0.106	106	0.1	0.105	105	0.9	20	80-120	
Toluene	0.1	0.097	97	0.1	0.095	95	2.1	20	80-120	
Ethylbenzene	0.1	0.106	106	0.1	0.104	104	1.9	20	80-120	
m- & p-Xylenes	0.2	0.226	113	0.2	0.221	111	2.2	20	80-120	
o-Xylene	0.1	0.099	99	0.1	0.097	97	2	20	80-120	
Xylenes	0.3	0.325	108	0.3	0.318	106	2.2	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09050132.05

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Benzene	BRL	0.1	0.09	90						68-138	
Toluene	BRL	0.1	0.072	72						67-135	
Ethylbenzene	BRL	0.1	0.078	78						71-127	
m- & p-Xylenes	BRL	0.2	0.166	83						56-135	
o-Xylene	BRL	0.1	0.074	74						56-134	
Xylenes	BRL	0.3	0.24	80						59-134	

Refer to the Definition page for terms.

EPAHO104000239

QUALITY CONTROL CERTIFICATE

Job ID : 09050092 **Date :** 5/15/2009

Analysis : TCLP Metals, Mercury **Method :** SW-846 7470A **Reporting Units :** mg/L

QC Batch ID : Qb09051126 **Created Date :** 05/11/09 **Created By :** Sathish

Samples in This QC Batch : 09050092.01

Digestion :	PB09051112	**Prep Method :**	SW-846 7470A	**Prep Date :**	05/11/09 08:30	**Prep By :**	Sathish
TCLP Prep :	PB09050705	**Prep Method :**	SW-846 1311	**Prep Date :**	05/06/09 16:45	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Mercury	7439-97-6	BRL	mg/L	1	0.0005		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.005	0.0052	103	0.005	0.0049	97.2	6.2	35	71-143	

QC Type: MS and MSD
QC Sample ID: 09050106.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.0053	99	0.005	0.0045	82.4	18.3	35	61-175	

Refer to the Definition page for terms.

EPAHO104000240

A & B Labs — *Chain of Custody*

The Chain of Custody is a Legal Document — Page ____ of ____

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 09050092

. Project #

1. REPORT TO:
Company: CES Environmental
Address: 4904 Griggs Road Houston TX 77021
Contact: Dana Carter
Phone: 713-748-9804
Fax: ☐ 713-748-8604
E-mail: ☐ dcarter@cesenvironmental.com

2. INVOICE TO:
Company: CES Environmental
Address: 4904 Griggs Rd Houston TX 77021
Contact: Juanita Thomas
Phone: 713-676-1460
Fax: ☐ 713-948-8604
E-mail: ☐ dcarter@cesenvironmental.com

3. PO # 0509-06

4. Turnaround Time (Business Days)
☐ 1 Day* ☐ Other
☐ 2 Days*
☐ 3 Days* *Surcharge applies
☒ 7 Days - Standard

. Project Name/Location: Amtex

. Reporting Requirement:

☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

. Sampler's Name & Company (PLEASE PRINT): Dana Carter

Sampler's Signature & Date: Dana Carter 5-5-09

A&B USE ONLY	9. Sample ID and Description	10. Sampling Date	10. Sampling Time	11. Comp.	11. Grab	12. Matrix: Water	Soil	Sludge	Oil	Air	Other	No. of Containers	Analyses/Methods: 13. 14. Containers* / 15. Preservatives** / 16. PH-Lab Only / 17. TCLP Metals / BTEX	18. REMARKS
01A	Sludge	5-5-09	2:45p	X				X					✓	

Page 1 of 8

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1 Dana Carter	5/6/09	12:37			
2					
3			21. RECEIVED BY LABORATORY	5/6/09	12:37

*Containers: VOA - 40 ml vial; A/G - Amber/Glass 1 Liter; 4 oz/8 oz - glass wide mouth; P/O - Plastic/other ____

**Preservatives: C - Cool; H - HCl; N - HNO_3; S - H_2SO_4; OH - NaOH; T - $Na_2S_2O_3$; X - Other ____

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

22. KNOWN HAZARDS/COMMENTS

Temperature: 2.5° °C

Intact: Y or N Initials: DW

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

LAB USE ONLY SAMPLING ____ RENTAL ____ P/U ____

EPAHO10400024 1

Sample Condition Checklist

Date : **05/15/09**

A&B JobID : **09050092**	Date Received : **05/06/2009**	Time Received : **12:37PM**
Client Name : **CES Environmental**		
Temperature : **25.0°C**	Sample pH : **N/A**	

	Check Points	Yes	No
1.	**Cooler seal present and signed.**	N/A	
2.	**Sample(s) in a cooler.**		X
3.	**If yes, ice in cooler.**		X
4.	**Sample(s) received with chain-of-custody.**	X	
5.	**C-O-C signed and dated.**	X	
6.	**Sample(s) received with signed sample custody seal.**	N/A	
7.	**Sample containers arrived intact. (If no comment).**	X	
8.	**Matrix :** **Water** ☐ **Soil** ☐ **Liquid** ☐ **Sludge** ☑ **Solid** ☐ **Cassette** ☐ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐		
9.	**Sample(s) were received in appropriate container(s).**	X	
10.	**Sample(s) were received with proper preservative**	N/A	
11.	**All samples were logged or labeled.**	X	
12.	**Sample ID labels match C-O-C ID's**	X	
13.	**Bottle count on C-O-C matches bottles found.**	X	
14.	**Sample volume is sufficient for analyses requested.**	X	
15.	**Samples were received within the hold time.**	X	
16.	**VOA vials completely filled.**	N/A	
17.	**Sample accepted.**	X	

Comments : Include actions taken to resolve discrepancies/problem:

Temperature requirements were not met. DW informed client when recieving the sample. Client gave the ok to continue the analysis.

Received by : Dwright

Check in by/date : Dwright / 05/06/2009

EPAHO104000242

3286
Kinder Morgan

EPAHO10400243

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/23/2009**

Dear **Lance Wiley**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3286

Expiration Date 4/23/2011

Generator: Kinder Morgan (Pasadena Facility)
Address: 916N Witter St.
Pasadena, TX 77506

Waste Information

Name of Waste: Tank Bottoms
TCEQ Waste Code #: RECYCLE
Container Type:
Detailed Description of Process Generating Waste:
Removal of tank bottoms from a gasoline, diesel & fuel oil tank
Color: dark **Odor:** hydrocarbon **pH:** 3-11
Physical State:
Incompatibilities: NONE KNOWN
Safety Related Data/Special Handling:
STANDARD PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.
4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company :	Kinder Morgan (Pasadena Facility)		
Address :	916N Witter St. 530 Witter St.		
City, State, Zip :	Pasadena TX 77506		
Contact :	Lance Wiley	**Title :**	
Phone No :	(713) 724-4912	**Fax :**	(713) 472-7660
24 / HR Phone :			
U.S EPA I.D No :	TXD070137161		
State I.D :	30772	**SIC Code**	na

SECTION 2: Billing Information

Company :	Kinder Morgan (Pasadena Facility)		
Address :	916N Witter St. 530 Witter St.		
City, State, Zip :	Pasadena TX 77506		
Contact :	Lance Wiley	**Title :**	
Phone No :	(713) 724-4912	**Fax :**	(713) 472-7660

SECTION 3: General Description of the Waste

Name of Waste : Tank bottoms

Detailed Description of the Process Generating Waste:

Removal of tank bottoms from a gasoline, diesel & fuel oil tank

Physical State : ☐ Liquid ☑ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color : dark **Odor :** hydrocarbon

Specific Gravity (Water=1) : 1.5 **Density :** 12 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☐ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☐ No

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2835 2836 2841 2842 2843 2844 2851
2861 2865 2869 2873 2874 2876 2879 2891 2892 2893 2896 2899 2911 3312 4953 4959 9511

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☐ Drum ☐ Tote ☐ Truck ☑ Other (explain) roll-off

Container Size : 15 yds

Number Of Units : 2

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☐ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 ☐ D002 ☐ D003

EPAHO104000245

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☐ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☐ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : RECYCLE

Proper U.S. State Waste Code No : Recyclable hydrocarbon and water mixture

Class : na UN/NA : na PG : na RQ : na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>150	3-11	<20 mg/l	<20 mg/l	95 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
>1500 mg/l	na mg/l	na mg/l	na mg/l	na mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Rust	85-90	%
dirt/sand	15-20	%
water	5-20	%
absorbent	2-8	%
hydrocarbon	trace	%
Fuel Oil	5-15	%
Fuel Oil tank bottoms	15-80	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
A & B analytical # 09040335.01

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
none known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x

EPAHO104000246

TCLP Volatiles :	X
TCLP Semi-Volatiles :	X
Reactivity :	X
Corrosivity :	X
Ignitability :	X

SECTION 8: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ YES ☑ NO

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Metals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phospha
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or olly sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol

- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcatego
- ☐ Oils Subcatego
- ☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : Lance Wiley **Date :** 4/22/09

Printed Name / Title : Lance Wiley / EHS Specialist

CES USE ONLY (DO NOT WRITE IN THIS SPACE) **Process Facility Information :**

Compliance Officer : Prabhakar Thangudu

Date : 4/22/2009 **Status :** Approved Rejected

Approval Number : HOU-1828

3287

Shaw Co

EPAHO10400024 9

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/23/2009**

Dear **Rick Cheatheam**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3287

Expiration Date 4/23/2011

Generator: Shawcor Pipe Protection
Address: 4501 Knapp Road
Pearland, TX 77581

Waste Information

Name of Waste: Recyclable Oily Water
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
water contaminated with oil
Color: brown to black **Odor:** hysrocarbon **pH:** 4-10
Physical State:
Incompatibilities: oxidizers
Safety Related Data/Special Handling:
std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

Recycle

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 748-8664
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company: Shawcor Pipe Protection
Address: 4501 Knapp Road
City, State, Zip: Pearland TX 77581
Contact: Rick Cheatheam Title:
Phone No: (713) 992-8547 Fax: (281) 485-2657
24 / HR Phone:
U.S EPA I.D No: TXT490013562
State I.D: 32925 SIC Code

SECTION 2: Billing Information

Company: Shawcor Pipe Protection
Address: 4501 Knapp Road
City, State, Zip: Pearland TX 77581
Contact: Rick Cheatheam Title:
Phone No: (713) 992-8547 Fax: (281) 485-2657

SECTION 3: General Description of the Waste

Name of Waste: Recyclable city water

Detailed Description of the Process Generating Waste:
water contaminated with oil

Physical State: ☑ Liquid ☑ Sludge ☐ Powder
☐ Solid ☐ Filter Cake ☐ Combination

Color: brown to black Odor: slight hydrocarbon

Specific Gravity (Water=1): .9-1.1 Density: 8-8.5 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2835 2836 2841 2842 2843 2844 2851
2861 2865 2869 2873 2874 2876 2879 2891 2892 2893 2896 2899 2911 3312 4953 4959 9511

Layers: ☐ Single-Phas ☑ Multi-Phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Container Size: 3000

Number Of Units: 1

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : Recycle

Proper U.S. State Waste Code No : Recyclable oily water mixture

Class : na UN/NA : na PG : na RQ : na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>150	4-10	na mg/l	na mg/l	5-20 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
na mg/l	na mg/l	na mg/l	na mg/l	4 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
water	80-90	%
solids	5-20	%
oil	0-10	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
generator knowledge

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : X

TCLP Volatiles : X

TCLP Semi-Volatiles : X

Reactivity : X

EPAHO104000252

Corrosivity : X
Ignitability : X

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☑ YES ☐ NO

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Metals Subcategory: *Subpart A*

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: *Subpart B*

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☑ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory *Subpart C*

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 6.9 mg/L
Copper: 4.6 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego
☑ Oils Subcatego
☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☑ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Rick Cheatham Date: 4/23/09

Printed Name / Title: HSE SUPERVISOR

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Prabhakar Thangudu

Date: 4-23-09 Status: Approved Rejected

Approval Number: HOU 3287

Process Facility Information:

.30/gal up to 10% solids
.40/gal 10-20% solids
.65/gal >20% solids
minimum $250

EPAHO104000254

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$250/minimum + $70/hr trans
.30/gal ≤ 10% solids
.40/gal 10-20% solids
.65/gal >20% solids

2. Contamination Limit (maximum limit before surchages apply):

non conforming to profile

3. Surcharge Pricing:

NONE - Call Dan/Morgan

4. Special Testing Requirements:

Flash, % oil, chlor detect, % solids

5. Treatment and Handling Protocol:

~~waste~~ oily water treatment, solids to landfill

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3288
Afton

EPAHO104000257

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Material / Product Approval Letter

Date **4/24/2009**

Dear **Ranell Revia**

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3288

Expiration Date 4/24/2011

Producer: Afton Chemical Additive Corporation - Port Arthur
Address: 4245 Savannah Ave
Port Arthur, TX 77640

Material / Product Information

Name of Material / Product Recyclable mixed solvents with products
Container Type:

Detailed Description of Process Generating or Producing the Material / Product:
Product along with solvents used to clean containers

Color: Dark Amber **Odor:** none **pH:** 4-9
Physical State:

Incompatibilities: aources of heat

Safety Related Data/Special Handling:
This mixture contains some flammable materials. Handle with care. Drum needs to be grounded before handling. Proper PPE for handling flammable material is advised.

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JBI AL
Product

CES Environmental Services, Inc.

☐ CES Environmental Services - Houston Facility	☑ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Afton Chemical Additive Corporation - Port Arthur
Address: 4245 Savannah Ave
City: Port Arthur **State:** TX **Zip:** 77640
Contact: Stephen Crouch **Title:**
Phone Number: 409.989.0604 **Fax Number:** 409-989-0603
24/hr Phone Number:
US EPA ID No:
State ID No: **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company: Afton Chemical Additive Corporation - Port Arthur
Address: 4245 Savannah Ave
City: Port Arthur **State:** TX **Zip:** 77640
Contact: Ranell Revia **Title:**
Phone Number: 409-989-0608 **Fax Number:** 409-989-0603

SECTION 3: General Description of the ~~Waste~~ material

Name of ~~Waste~~ material: Recyclable mixed solvents with product
Detailed Description of Process Generating Waste:

product along with solvents used to clean containers

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: dark amber **Odor:** none

Specific Gravity (water=1): na **Density:** na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☑ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 20 drums

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: ~~Recycle~~ Product

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material

Class: na **UN/NA:** na **PG :** na **RQ:** na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
<90 C		4~9		na	mg/l	na	mg/l	0	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	na	mg/l	na	mg/l	na	mg/l	na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
~~The waste consists of the following materials~~	Ranges are acceptable	or %
Hitec 5700 with Toluene, hexane, aceton and IPA	99-100	%
H2O	<1	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

This mixture contains some flammable materials. Handle with care. Drum needs to be grounded before handling.

Proper PPE for handling flammable material is advised.

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Lab Memo 09-023

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

sources of heat

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:
TCLP Volatiles:
TCLP Semi-Volatiles:
Reactivity:
Corrosivity:
Ignitability:

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 4-17-09

Printed Name/Title: Stephen Crouch

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 4-24-09 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$351 Drum + TRANS + FSC

2. Contamination Limit (maximum limit before surchages apply):

< 1% Water. Must be compatible w/ either Base oil or light ends

3. Surcharge Pricing:

4. Special Testing Requirements:

- Test compatibility w: ① Light ends
  ② Base oil
- Water (must be < 1%) ; Reject if ~~chlo~~ chloride test fails

5. Treatment and Handling Protocol:

Blend as tested in Step 4 determine

6. Treated Wastewater Discharge Subcategory: NA

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

See Section 4

8. Management for Product Recovered/Recycled (if applicable)

See Section 5

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Joy Baker
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 2/23/09

From: Miles Root

Lab Memo: 09-023

Subject: **Afton Port Arthur Evaluation 0209-36**

A sample of laboratory waste from Afton, Port Arthur, has been evaluated for potential recycling at CES. This sample is evaluation 0209-36 and represents four drums of product sample along with solvents used to clean our containers. Overall, this material looks to be a good fit for blending with our light ends. It will be a recyclable product.

This material is said to contain toluene, hexane, IPA and a product called HiTec 5700. It has a flash point less than 90 deg F, which is consistent with the solvents it is stated to contain. It blends well with our light ends. This material is free of any solids and looks like it may have been an oil additive when new. It is dark amber in appearance and should present no issues when blended into our light ends.

3289

Zach

EPAHO104000266

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/24/2009**

Dear **Ronald Smith**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3289

Expiration Date 4/24/2011

Generator: ZaCh System Corp. (La Porte)
Address: 914 South 16th Street
La Porte, TX 77571

Waste Information

Name of Waste: Waste CDI
TCEQ Waste Code #: 00144051
Container Type:
Detailed Description of Process Generating Waste:
Off Spec Product drums
Color: off white to cream **Odor:** none **pH:** neutral
Physical State:
Incompatibilities: Moisture. Acids. Bases
Safety Related Data/Special Handling:
Standard PPE and a dust mask

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

05 JB/AL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Zach Systems Corp. (La Porte)
Address: 914 South 16th Street
City: La Porte **State:** TX **Zip:** 77571
Contact: Ronald Smith **Title:**
Phone Number: (281) 842-0201 **Fax Number:** (281) 867-1734
24/hr Phone Number:
US EPA ID No: TXR000079062
State ID No: 88429 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Waste CDI
Detailed Description of Process Generating Waste:

OFF SPEC product drums

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Off white to cream **Odor:** none

Specific Gravity (water=1): na **Density:** na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 5 drums

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 00 14 4051

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material
Class: na UN/NA: na PG: na RQ: na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
na	neutral	0 mg/l	0 mg/l	100 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
<1500 mg/l	na mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
N, N' -Carbonyldiimidazole	>97	%
other	<3	%

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE and a dust mask.

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Moisture. Acids. Bases.

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory **: *Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory **: *Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Ronald E. Smith **Date:** 4/23/09

Printed Name/Title: Ronald E. Smith, CSP / EHS Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:

Date: 4-24-09 ☑ Approved ☐ Rejected

Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$60 Drum + Trans + PTC

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Bulkin Class 1 Solids Box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

ZaCh
SYSTEM
ZaCh System Corporation

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: _____CDI
PRODUCT ID: _____ 037
SYNONYMS: _____N,N'-Carbonyldiimidazole; Azoles; $C_7 H_6 N_4 O$
ISSUE DATE: _____ 2/6/2008
EDITION NO.: _____ 1

ZaCh System Corporation.
914 So. 16th Street, La Porte, Texas, USA
24-hour Emergency Telephone Number: 1-281-842-0245
For Product Safety Information (8am-5pm Central time):
1-281-842-0201

PREPARER: EHS Group

2. COMPOSITION / INFORMATION ON INGREDIENTS

Material/CAS Number	Percent
N,N'-Carbonyldiimidazole **530-62-1**	**> 97**

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Warning! Causes eye and skin irritation. May be harmful if inhaled or swallowed.

Precautions: Do not get in eyes, on skin, or on clothing. Extremely sensitive to moisture – Material should only be handled in a moisture-free environment. Unused material must be stored under dry nitrogen. Do not inhale. Dust may cause irritation of nasal and respiratory tract. Use only with adequate ventilation. Ventilation must be sufficient to minimize employee exposure in the work area. Use appropriate personal protective clothing and respiratory protection. Do not swallow. Remove and contaminated clothing before reuse. Wash thoroughly every day after work. Do not eat, drink, or smoke in work area. The fine dust contained in this product is capable of creating dust explosions.

4. FIRST AID MEASURES

INHALATION: Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room or physician for treatment information.

EPAHO104000274

EYE/SKIN CONTACT: EYE: Remove contact lens and pour a gentle stream of warm water through the affected eye for at least 15 minutes. If irritation persists, contact a poison control center, emergency room, or physician as further treatment may be necessary. SKIN: Run a gentle stream of water over the affected area for 15 minutes. A mild soap may be used if available. If any symptoms persist, contact a poison control center, emergency room, or physician as further treatment may be necessary.

INGESTION: Gently wipe or rinse the inside of the mouth with water. Sips of water may be given. Never give anything by mouth to an unconscious person. Contact a poison control center, emergency room or physician right away as further treatment may be necessary.

5. FIRE FIGHTING MEASURES

FLASH POINT: Not Applicable

EXTINGUISHING MEDIA: Carbon Dioxide. Dry Chemical. Foam.

SPECIAL FIREFIGHTING PROCEDURES: Dust/air mixtures may ignite or explode. Fire-fighters must wear NIOSH approved pressure demand, self-contained breathing apparatus and full protective clothing when fighting chemical fires. Emits toxic fumes under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Avoid generating dust. Dust may cause an explosion hazard. Provide maximum ventilation. Sweep or gather up material and place in proper container for disposal or recovery. Dispose of waste in accordance with all local, state and federal regulations.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE:
Store only in closed, properly labeled containers. Store in a cool, dry, well-ventilated place. Keep container closed when not in use. Material should be handled in a moisture-free environment. Unused material must be stored under dry nitrogen. The fine dust contained in this product is capable of creating dust explosions. When handling this product in large quantities, the guidelines established in NFPA 654, Prevention of Dust Explosions, should be followed.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Limits:
8-hour Time Weighted Average (TWA); 15 –minute Short-Term Exposure Limit (STEL)

OSHA: No occupational exposure limits have been established by OSHA for this product.
ACGIH: No occupational exposure limits have been established by ACGIH for this product.

EPAHO104000275

ONTARIO: No occupational exposure limits have been established by Ontario for this product.

RESPIRATORY PROTECTION: If use or application of this product generates dust, use an appropriate NIOSH-approved particulate filter respirator. The respirator use limitations made by NIOSH and by the manufacturer must be observed.

VENTILATION: Use local exhaust or general room/dilution ventilation as appropriate to control employee exposures in the work place.

EYE AND FACE PROTECTION: Standard safety glasses with side shields.

PROTECTIVE GLOVES: Impervious gloves.

OTHER PROTECTIVE EQUIPMENT: Boots, aprons, or chemical suits should be used when necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT:	**NA**
VAPOR DENSITY (Air=1):	**NA**
SPECIFIC GRAVITY (Water=1):	**NA**
pH:	**NA**
FREEZING/ MELTING POINT:	**243-248 °F (117-120 °C)**
SOLUBILITY (wt.% in water):	**Insoluble (decomposes)**
BULK DENSITY:	**24.7 lbs./cu.ft.**
VOLUME % VOLATILE:	**<1%**
VAPOR PRESSURE:	**NA**
HEAT OF SOLUTION:	**NA**
PHYSICAL STATE:	**Crystals**
ODOR:	**Odorless**
COLOR:	**Off-White to Cream**

10. STABILITY AND REACTIVITY

STABILITY: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY (CONDITIONS/ MATERIALS TO AVOID):
Moisture. Acids. Bases.

HAZARDOUS THERMAL DECOMPOSITION/ COMBUSTION PRODUCTS:
Oxides of Carbon. Oxides of nitrogen.

EPAHO104000276

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL LD50: .....1071 mg/kg. (mouse) Moderate Toxicity

CARCINOGENICITY STATUS:.... This product is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, ACGIH. Or OSHA

MEDICAL CONDITIONS AGGRAVATED: None known.

EFFECTS OF OVEREXPOSURE:

ACUTE: The toxicological properties of this product have not yet been fully investigated.

Inhalation: Airborne dust would be very irritating to nose and respiratory passages.

Eye/Skin Contact: Animal studies indicate that this product causes irritation (swelling, redness) to the eyes with clouding of the cornea. Long-term injury was seen which is interpreted as resulting in visual impairment or blindness in affected individuals. Skin contact in rabbits to cause irritation (swelling, redness) to the exposed surface which reverses gradually over a period of two weeks.

Ingestion: This product causes convulsions following administration to animals. It is also expected to be very irritating to the mouth and throat following ingestion.

CHRONIC: The effects of long-term, low level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the prevention of all contact with this material to avoid any effects from repetitive acute exposures.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:
No data at this time.

ENVIRONMENTAL FATE:
No data at this time.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:
Waste material must be disposed of in accordance with federal, state, provincial, and local environmental control regulations. Empty containers should be recycled or disposed of through an approved waste management facility.

14. TRANSPORT INFORMATION

Proper Shipping Name: Not regulated.

EPAHO104000277

15. REGULATORY INFORMATION

USA TSCA: All components of this product are listed on the TSCA inventory.
EU EINECS: All components in this product are listed on EINECS or meet the polymer definition.
CANADA DOMESTIC SUBSTANCES LIST (DSL): This product and/or all of its components are listed on the Canadian DSL.
AUSTRALIA AICS: All components of this product are listed on AICS.
KOREA ECL: All components in this product are listed on the Korean Existing Chemicals Inventory (KECI).
JAPAN MITI (ENCS): All components in this product are listed on the Japanese Existing and New Chemical Substances (ENCS) chemical inventory.
PHILIPPINES PICCS: One or more components in this product are not listed on the Philippines Inventory of Chemical and Chemical Substances 9PICCS). This product can only be used in R&D applications.
CHINA IECSC: A component in this product is not listed on the Inventory of Existing Chemical Substances in China (IECSC). This product can only be used in China with an appropriate exemption permit.
SARA TITLE III:
SARA (311, 312) Hazard Class:
Acute Health Hazard
SARA (313) Chemicals:
Not listed.
SARA Extremely Hazardous Substance:
Not listed.
CERCLA Hazardous Substance:
Not listed.
CALIFORNIA PROPOSITION 65: Warning: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

CANADA REGULATIONS (WHMIS): Not Applicable.

16. OTHER INFORMATION

The following has been revised since the last issue of this MSDS:
No Revisions – Original ZaCh System

Previous revision date:	N/A
Previous edition number:	N/A

NA = Not Available

EPAHO104000278

3290
Zach

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/24/2009**

Dear **Ronald Smith**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3290

Expiration Date 4/24/2011

Generator: ZaCh System Corp. (La Porte)
Address: 914 South 16th Street
La Porte, TX 77571

Waste Information

Name of Waste: Z Valine
TCEQ Waste Code #: 00094091
Container Type:
Detailed Description of Process Generating Waste:
Off spec product drums
Color: white **Odor:** none **pH:** 2-12
Physical State:
Incompatibilities: None known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

05 JB/AL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1676 U.S. EPA ID Number: TXD008950461 ISWR Number: 3090C TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-146C U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Zach Systems Corp (La Porte)
Address: 914 South 16th street
City: La Porte **State:** TX **Zip:** 77571
Contact: Ronald Smith **Title:** EHS Manager
Phone Number: 281.842.0201 **Fax Number:** 281.867.1734
24/hr Phone Number: 281.842.0244
US EPA ID No: TXR000079062
State ID No: 88429 **SIC Code:** na

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Z Valine
Detailed Description of Process Generating Waste:

Off Spec product drums

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: White **Odor:** Powder

Specific Gravity (water=1): na **Density:** na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 750 KG

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 0994091

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material
Class: na UN/NA: na PG: na RQ: na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>140	2-12	0 mg/l	0 mg/l	100 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
mg/l	na mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Z L Valine	98	%
other	2	%

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None Known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

***Metals Subcategory* : Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

***Oils Subcategory* : Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ *Tank clean-out from petroleum or oily sources*
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory *: Subpart C*

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ *Organics Subcategory*

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Ronald E. Smith Date: 4/23/09

Printed Name/Title: Ronald E. Smith, CSP / EHS Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:

Date: 4-24-09 ☑ Approved ☐ Rejected

Approval Number: 32-10

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$60 Drum + Transit FSC

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Bulk in Class 1 solids Box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

ZaCh
SYSTEM
ZaCh System Corporation

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Z-L-Valine
PRODUCT ID: 0484
SYNONYMS: N-(benzyloxycarbonyl)L-valine; amino acid derivative; $C_{13}H_{17}NO_4$
ISSUE DATE: 12/26/2007
EDITION NO.: 1

ZaCh System Corporation.
914 So. 16th Street, La Porte, Texas, USA
24-hour Emergency Telephone Number: 1-281-842-0245
For Product Safety Information (8am-5pm Central time):
1-281-842-0201

PREPARER: EHS Group

2. COMPOSITION / INFORMATION ON INGREDIENTS

Material/CAS Number	Percent
Z-L-Valine 1149-26-4	98

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Caution! May cause eye, skin and respiratory tract irritation. May be harmful if inhaled. May be harmful if swallowed.

Precautions: Do not get in eyes, on skin, or on clothing. Do not inhale. Use only with adequate ventilation. Ventilation must be sufficient to minimize employee exposure to this product. Use appropriate personal protective clothing and respiratory protection. Do not swallow. The fine dust contained in this product is capable of creating dust explosions. Remove and wash contaminated clothing before reuse. Wash thoroughly every day after work. Do not eat, drink or smoke in work area.

4. FIRST AID MEASURES

INHALATION: Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room or physician for treatment information.

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EYE/SKIN CONTACT: EYE: Remove contact lens and pour a gentle stream of warm water through the affected eye for at least 15 minutes. If irritation persists, contact a poison control center, emergency room, or physician as further treatment may be necessary. SKIN: Run a gentle stream of water over the affected area for 15 minutes. A mild soap may be used if available. If any symptoms persist, contact a poison control center, emergency room, or physician as further treatment may be necessary.

INGESTION: Gently wipe or rinse the inside of the mouth with water. Sips of water may be given. Never give anything by mouth to an unconscious person. Contact a poison control center, emergency room or physician right away as further treatment may be necessary.

5. FIRE FIGHTING MEASURES

FLASH POINT: Not Applicable

EXTINGUISHING MEDIA: Water spray. Carbon Dioxide. Dry Chemicals. Foam.

SPECIAL FIREFIGHTING PROCEDURES: Emits toxic fumes under fire conditions. Fire-fighters must wear NIOSH approved pressure demand, self-contained breathing apparatus and full protective clothing when fighting chemical fires. Dust/air mixtures may ignite or explode.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Provide maximum ventilation. Wear proper protective equipment. Avoid generating dust. Dust may cause an explosion hazard. Sweep or gather up material and place in proper container for disposal or recovery. After all visible traces have been removed, thoroughly wet vacuum the area. Do not flush to sewer. Dispose of waste in accordance with all local, state and federal regulations.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE:
Store only in closed, properly labeled containers. Store in a cool, dry, well-ventilated place. Store away from strong oxidizing agents. Store and handle away from sunlight and other sources of heat. The fine dust contained in this product is capable of creating dust explosions. When handling this product in large quantities, the guidelines established in NFPA 654, Prevention of Dust Explosions, should be followed.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Limits:
8-hour Time Weighted Average (TWA); 15 –minute Short-Term Exposure Limit (STEL)

OSHA: No occupational exposure limits have been established by OSHA for this product.

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ACGIH: No occupational exposure limits have been established by ACGIH for this product.

RESPIRATORY PROTECTION: If use or application of this product generates dust, use an appropriate NIOSH-approved particulate filter respirator. The respirator use limitations made by NIOSH and by the manufacturer must be observed.

VENTILATION: Use local exhaust or general room/dilution ventilation as appropriate to control employee exposures in the work place.

EYE AND FACE PROTECTION: Standard safety glasses with side shields.

PROTECTIVE GLOVES: Impervious gloves. Rubber.

OTHER PROTECTIVE EQUIPMENT: Boots, aprons, or chemical suits should be used when necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT:	**NA**
VAPOR DENSITY (Air=1):	**NA**
SPECIFIC GRAVITY (Water=1):	**NA**
pH:	**Acidic**
FREEZING/ MELTING POINT:	**140-144 °F (60-62 °C)**
SOLUBILITY (wt.% in water):	**Insoluble**
BULK DENSITY:	**NA**
VOLUME % VOLATILE:	**NA**
VAPOR PRESSURE:	**NA**
HEAT OF SOLUTION:	**NA**
PHYSICAL STATE:	**Powder**
ODOR:	**NA**
COLOR:	**White**

10. STABILITY AND REACTIVITY

STABILITY: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY (CONDITIONS/ MATERIALS TO AVOID):
Strong oxidizers. Excessive heat.

HAZARDOUS THERMAL DECOMPOSITION/ COMBUSTION PRODUCTS:
Carbon monoxide. Carbon dioxide. Oxides of nitrogen.

EPAHO104000289

11. TOXICOLOGICAL INFORMATION

CHRONIC EFFECTS/ CARCINOGENICITY: This product is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

MEDICAL CONDITIONS AGGRAVATED: None known.

EFFECTS OF OVEREXPOSURE:

The toxicological properties and related hazards of this product have not yet been fully determined. It is recommended that anyone handling or using this product do so with extreme care. The following information is based on testing of a similar product.

ACUTE: May cause irritation following direct contact with the eye. May cause mild skin irritation. It is anticipated that this product would produce nasal and respiratory tract irritation. This material may be harmful by ingestion.

CHRONIC: The effects of long-term, low level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the prevention of all contact with this material to avoid any effects from repetitive acute exposures.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:
No data at this time.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:
Waste material must be disposed of in accordance with federal, state, provincial, and local environmental control regulations. Empty containers should be recycled or disposed of through an approved waste management facility.

14. TRANSPORT INFORMATION

Proper Shipping Name: Not regulated.

15. REGULATORY INFORMATION

USA TSCA: A component in this product is not listed on the TSCA inventory. This product can only be used in R&D (by a technically qualified individual) of FDA regulated applications.
EUROPE EINECS: All components in this product are listed on EINECS.
CANADA DOMESTIC SUBSTANCES LIST (DSL): All components of this product are listed on the Canadian DSL or NDSL.

EPAHO104000290

AUSTRALIA AICS: A component in this product is not listed on AICS. This product can only be used in R&D applications.
KOREA ECL: One or more components in this product are not listed on the Korean Existing Chemicals Inventory (KECI). This product can only be used in R&D applications.
JAPAN MITI (ENCS): All components in this product are listed on the Japanese Existing and New Chemical Substances (ENCS) chemical inventory.
PHILIPPINES PICCS: One or more components in this product are not listed on the Philippines Inventory of Chemical and Chemical Substances 9PICCS).
SARA TITLE III:
SARA (311, 312) Hazard Class:
Acute Health Hazard
SARA (313) Chemicals:
Not listed.
SARA Extremely Hazardous Substance:
Not listed.

CERCLA Hazardous Substance:
Not listed.

CANADA REGULATIONS (WHMIS): Not Applicable.

6. OTHER INFORMATION

The following has been revised since the last issue of this MSDS:
No Revisions – Original ZaCh System

Previous revision date:	N/A
Previous edition number:	N/A

NA = Not Available

EPAHO104000291

3298
Sunbelt

EPAHO104000292

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/28/2009**

Dear **Craig Scantlin**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3298

Expiration Date 4/28/2011

Generator: Sunbelt Machine Works Corporation
Address: 13411 Redfish
Stafford, TX 77477

Waste Information

Name of Waste: Recyclable Used Oil
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
used oil from equipment
Color: light/dark brown **Odor:** hydrocarbon **pH:** na
Physical State:
Incompatibilities: oxidizers
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Sunbelt Machine Works Corporation
Address : 13411 Redfish 13411 Redfish
City, State, Zip : Stafford TX 77477
Contact : Craig Scantlin **Title :**
Phone No : (281) 499-0051 **Fax :** (281) 499-6326
24 / HR Phone :
U.S EPA I.D No : TXCESQG
State I.D : CESQG **SIC Code**

SECTION 2: Billing Information

Company : Sunbelt Machine Works Corporation
Address : 13411 Redfish 13411 Redfish
City, State, Zip : Stafford TX 77477
Contact : Craig Scantlin **Title :**
Phone No : (281) 499-0051 **Fax :** (281) 499-6326

SECTION 3: General Description of the Waste

Name of Waste : Recyclable Used Oil

Detailed Description of the Process Generating Waste:
used oil from equipment

Physical State : ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color : light brown **Odor :** hydrocarbon
Specific Gravity (Water=1) : .9 **Density :** 7-8.12 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No
Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No
Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☐ Single-Phas ☐ Multi-Phase
Container Type : [ ] Drum ☐ Tote ☑ Truck ☐ Other (explain)
Container Size : 5000
Number Of Units : 1

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

EPAHO104000294

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : Recycle / Product

Proper U.S. State Waste Code No : Recyclable used oil

Class : na **UN/NA :** na **PG :** na **RQ :** na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	na	0 mg/l	0 mg/l	0-5 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
>1500 mg/l	na mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
used oil	80-100	%
water	0-20	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
none-generator knowledge

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x
TCLP Volatilies : x
TCLP Semi-Volatiles : x
Reactivity : x

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ **YES** ☑ **NO**

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

EPAHO104000296

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : NO SIGNATURE NEEDED **Date :** 4/23/09

Printed Name / Title : PRODUCT

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Process Facility Information :

Compliance Officer : [signature]

Date : 4-28-09 **Status :** (Approved) Rejected

Approval Number : HOU-3298

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

on loads ~~@~~ <15 % water, pay .15/gal on OIL PHASE ONLY

2. Contamination Limit (maximum limit before surchages apply):

< 20%, little solids

3. Surcharge Pricing:

None

4. Special Testing Requirements:

flash, pH, clord-tect, % oil, % solids, % water, phenol on water

5. Treatment and Handling Protocol:

recycle to base or black oil

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3Z99

SM1

EPAHO104000300

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/28/2009**

Dear **Patrick Sullivan**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3299

Expiration Date 4/28/2011

Generator: SMI Manufacturing
Address: 13312 East Hardy Road
Houston, TX 77039

Waste Information

Name of Waste: Non Haz LDC wastes
TCEQ Waste Code #: CESQ1191
Container Type:
Detailed Description of Process Generating Waste:
out of date materials/ Off Spec
Color: dark green **Odor:** slight **pH:** 3-8
Physical State:
Incompatibilities: none expected
Safety Related Data/Special Handling:
Standard + gloves + face shield/safety glasses

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

1V DC/MM

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1460	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: SMI Manufacturing
Address: 13312 East Hardy Road
City: Houston **State:** TX **Zip:** 77039
Contact: John Crespo **Title:** Facilities and EHS manager
Phone Number: 713-393-4231 **Fax Number:**
24/hr Phone Number: 281-732-8387
US EPA ID No: TXCESQG
State ID No: CESGQ **SIC Code:** NA

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Non haz LDC wastes
Detailed Description of Process Generating Waste:

out of date materials /off Spec.

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☑ Combination

Color: dark green **Odor:** slight

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☑ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☑ One-Time
Quantity: 1 drums

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: CES01191

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Materail
Class: NA **UN/NA:** NA **PG:** NA **RQ:** NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		3-8		NA	mg/l	NA	mg/l	50	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	NA	mg/l	NA	mg/l	na	mg/l	na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
LDC-03 Activator and Etch	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	X
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** APRIL 24-2009

Printed Name/Title: JEFF JAEVER - MANUFACTURING ENGINEER

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____

Date: 4-27-09 ☑ Approved ☐ Rejected

Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

Disposal - $65.00/drum plus freight

2. Contamination Limit (maximum limit before surchages apply):

None

3. Surcharge Pricing:

None

4. Special Testing Requirements:

None

5. Treatment and Handling Protocol:

Put in class one box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION I - IDENTIFICATION

PRODUCT NAME: LDC-03 Activator & Etch

MANUFACTURER: Liquid Development Company
3748 E. 91st Street
Cleveland, Ohio 44105 U.S.A.
Ph# 216-641-9366
Fax# 216-641-6416

DATE PREPARED: January 2003

EMERGENCY TELEPHONE: Chemtrec U.S.A. & Canada: 800-424-9300
Chemtrec International: 703-527-3887

SECTION II - COMPOSITION

CHEMICAL NAME	CAS NUMBER	PERCENT
Water	7732-18-5	70-80
Sodium Hydroxide	1310-73-2	1-10
Citric Acid	77-92-9	10-20

SECTION III - HEALTH HAZARD INFORMATION

PRIMARY ROUTES OF EXPOSURE: Eyes, Skin, Inhalation, & Ingestion.

HEALTH HAZARDS (Chronic): Prolonged exposure may cause chronic Dermatitis.

CARCINOGENICITY (or potential): **NTP:** No **IARC:** No **OSHA:** No **ACGIH:** No

SIGNS AND SYMPTOMS (Acute):

EYE CONTACT: Irritation, continual contact may cause damage.

SKIN CONTACT: Irritation, continual contact may cause burns.

INHALATION: Chronic exposure may cause irritation and Lead to pneumonitis.

INGESTION: Could cause burns to mouth, throat, and stomach.

SIGNS AND SYMPTOMS OF EXPOSURE: Skin, eye, or throat irritation.

AGGRAVATED MEDICAL CONDITIONS: Impaired pulmonary function, any respiratory tract or skin disorders.

EPAHO104000308

SECTION IV - OCCUPATIONAL EXPOSURE LIMITS

THRESHOLD LIMITS:

	OSHA	ACGIH	OTHERS
Water	None established	None established	None established
Sodium Hydroxide	2 mg/m^3	C2 mg/m^3	None established
Citric Acid	None established	None established	None established

SECTION V - EMERGENCY AND FIRST AID PROCEDURE

EYE CONTACT: Hold apart eyelids and flush eyes with clean water for at least 15 minutes. Seek medical attention.

SKIN CONTACT: Remove contaminated clothing. Flush skin immediately with large quantities of clean water for at least 15 minutes. Discard contaminated clothing.

INHALATION: Remove to fresh air. Lay victim down. Give oxygen if breathing is difficult. Seek medical attention.

INGESTION: Do not induce vomiting. Give victim large quantities of water or milk. Give nothing by mouth to an unconscious person. Seek immediate medical attention.

NOTE TO FIRST AID PROVIDERS: Take proper precautions for your own safety before entering a contaminated area. Have someone else phone "911 / Operator" or emergency medical service, have this MSDS available to provide information.

SECTION VI - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: None **FIRE POINT:** None
FLAMMABLE LIMITS: **LOWER:** N/A **UPPER:** N/A

EXTINGUISHING MEDIA: All (Water, CO_2, Dry Chemical, Etc...)

SPECIAL FIRE FIGHTING PROCEDURES: Chemical resistant clothing and NIOSH/MSHA approved positive-pressure, self-contained breathing apparatus, should be worn in case of spill.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Under certain conditions, containers can burst from pressure caused by excessive heat. Water runoff can cause environmental damage. Contain runoff for later disposal.

EPAHO104000309

SECTION VII - PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT	200° + F; 100° + C
VAPOR PRESSURE (mm Hg.)	N/A
VAPOR DENSITY (AIR=1)	N/A
SPECIFIC GRAVITY (H_2O = 1)	1.12-1.13
MELTING POINT	N/A
EVAPORATION RATE (Butyl Acetate = 1)	N/A
SOLUBILITY IN WATER	Complete
pH:	4.3-5.0
APPEARANCE	Clear liquid
ODOR	No noticeable odor

SECTION VIII - HAZARD RATING

CODE

HMIS III	**HEALTH:** 1	**FLAMMABILITY:** 0	**PHYSICAL HAZARD:** 0
NFPA	**HEALTH:** 1	**FLAMMABILITY:** 0	**REACTIVITY:** 0

PRECAUTIONARY LABELS: Corrosive

SECTION IX - ACCIDENTAL RELEASE PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED, LEAKED OR SPILLED:

Evacuate all non-essential personnel. Isolate hazard area. Dike and contain, prevent entry into soil, sewers, or waterways. Provide maximum ventilation. Eliminate all sources of ignition. Wear proper personnel protective equipment before attempting clean up. Carefully, absorb or vacuum spill. Rinse area with water and collect. Put all product into a suitable plastic container. Dispose of in accordance with all local, state, and federal regulations.

SECTION X - PRECAUTIONS FOR SAFE HANDLING

VENTILATION: Local exhaust ventilation should be used to maintain air concentrations below TLV during the use of this product.

RESPIRATORY PROTECTION: If ventilation is not available or feasible; a respiratory protection program should be developed to meet OSHA regulations, utilizing NIOSH / MSHA approved respirators.

PROTECTIVE GLOVES: Nitrile, Vinyl, or latex gloves should be worn.

EYE PROTECTION: Face shield, chemical goggles, or safety glasses with side splash shields.

OTHER PROTECTIVE EQUIPMENT / CLOTHING: Chemical resistant or impervious aprons, clothes, and boots as required by job conditions. Eye wash station and safety shower should be near work area.

WORK / HYGIENIC PRACTICES: After working with this product, wash hands thoroughly with soap & water before eating, drinking, smoking, or using toilet facilities.

EPAHO104000310

SECTION XI - TRANSPORTATION DATA

FREIGHT CLASSIFICATION: Electroplating Solution
D.O.T. HAZARD CLASS: 8
PACKING GROUP: II
D.O.T. SHIPPING NAME: Sodium Hydroxide Solution
D.O.T. LABEL REQUIRED: Corrosive
UN NUMBER: 1824

NOTE: Consult - 49 CFR Part 173...

SECTION XII - PRECAUTIONS FOR SAFE STORAGE

PRECAUTIONS FOR STORING: Store in a container of proper construction. The container should be sealed tight and stored in the upright position. Store between 50 - 90°F (10-32°C). Out of direct light, and away from any incompatible materials. Do not remove container labels.

PRECAUTIONS FOR HANDLING: Handle all chemicals with care. Wear protective equipment and clothing. Use with adequate ventilation. Avoid contact with eyes, skin, clothing, and breathing vapors or mist. Wash thoroughly with soap & water after use.

OTHER PRECAUTIONS: Do not reuse container for storing any other materials.

SECTION XIII - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Normally, it is best to segregate wastes and collect in a suitable storage container. Dispose of in accordance with federal, state, and local regulations. Utilize approved treatment, disposal, or recycling facilities only. Disposal information applies to material as manufactured. Avoid contamination of material as it may effect disposal requirements.

Triple rinse all containers prior to disposal of containers, consult regulations on container disposal.

SECTION XIV - STABILITY AND REACTIVITY DATA

STABILITY (Conditions to avoid): Stable under normal conditions

INCOMPATIBILITY (materials to avoid): None expected.

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION: N/A

EPAHO104000311

SECTION XV - REGULATORY INFORMATION

1. NOTIFICATION OF TOXIC CHEMICALS:

LDC is required to inform you, our customer, that this product contains specific Toxic Chemicals. We are required to notify you of the presence of these chemicals in our products under Section 313 of Title III of the Emergency Planning and Community Right-To-Know At of 1986. This law requires certain manufacturers to report on annual emissions of specified Toxic Chemicals and Chemical Categories. If you are unsure if you must report or require more information, call the EPA Emergency Planning and Community Right-To-Know Hotline: (800) 535-0202.

Your other suppliers should also be notifying you if Section 313 chemicals are in the mixtures and trade name products they sell to you. Please also note that if you repackage or otherwise redistribute this product to industrial customers, a notice similar to this one should be sent to those customers.

TOXIC CHEMICAL	CAS#	% NOT TO EXCEED
None Established	None Established	None Established

2. TSCA STATEMENT: All ingredients contained in this product are listed under the Toxic Substances Control Act (TSCA).

3. OZONE DEPLETING CERTIFICATION: This product does not contain and was not manufactured with any Ozone Depleting Substances (ODS).

4. VOC CERTIFICATION: This product does not contain any Volatile Organic Compounds (VOC).

The information and recommendations contained herein have been compiled from sources of data considered to be factual and reliable to the best of knowledge and belief of Liquid Development Company (LDC). However, LDC makes no guarantee or warranties of any kind, expressed or implied, are made with respect to the accuracy of the information, or the results obtained from the use thereof. LDC assumes no legal responsibility for injury to recipient or third parties; or any damage to property. The user of this product assumes all risks from the use of the product or data described herein.

EPAHO104000312

3300

Zach

EPAHO10400313

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Material / Product Approval Letter

Date **4/28/2009**

Dear **Ronald Smith**

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3300

Expiration Date 4/28/2011

Producer: ZaCh System Corp. (La Porte)
Address: 914 South 16th Street
La Porte, TX 77571

Material / Product Information

Name of Material / Product Activated Carbon
Container Type:

Detailed Description of Process Generating or Producing the Material / Product:
Product

Color: Black **Odor:** none **pH:** na
Physical State:
Incompatibilities: MSDS
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Product

JB/AC

CES Environmental Services, Inc.

☒ CES Environmental Services – Houston Facility
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ CES Environmental Services – Port Arthur Facility
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	Zach Systems Corp. (La Porte)		
Address:	614 South 16th street		
City, State, Zip:	La Porte, TX 77571		
Contact:	Ronald Smith	**Title:**	EHS Manager
Phone No:	(281) 842-0201	**Fax No:**	(281)867-1734
24/hr Phone:	(281) 842-0245		
U.S. EPA I.D. No:	TXR000079062		
State I.D.	88429	**SIC Code:**	

SECTION 2: Billing Information – ☒ Same as Above

Company:			
Address:			
City, State, Zip:			
Contact:		**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Activated Carbon
Detailed Description of Process Generating or Producing the Material / Product: _____

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☒ Solid ☐ Filter Cake ☐ Combination

Color: Black **Odor:** _____

Density: _____ lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type:	☒ Drum	☐ Tote	☐ Truck	☐ Other (explain)
Container Size:	_____	_____	_____	_____

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Proper U.S. DOT Shipping Name: Product Carbon, Activated

Class: 4.2 **UN/NA:** UN1362 **PG:** III **RQ:** none

EPAHO104000315

Flash Point na	**pH** na	**N/A**	N/A	**Solids** 100%
Oil&Grease 0mg/l	**TOC** namg/l	**Zinc** 0mg/l	**Copper** 0mg/l	**Nickel** 0mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Activated carbon	100	

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Ronald E. Smith **Date:** 4/23/09

Printed Name/Title: Ronald E. Smith / EHS Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: _____ Date: _____ Approved Rejected Approval Number: _____	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

No charge / No payment

2. Contamination Limit (maximum limit before surchages apply):

Must be unused carbon

3. Surcharge Pricing:

~~* If spent/used: Charge $125/pallet or $65/drum~~
~~I, dispose to Class I Solids~~

+ If spent/used - reject

4. Special Testing Requirements:

Check odor to insure it is unused.

5. Treatment and Handling Protocol:

Take to carbon storage and use in Scrubber system or as needed.

6. Treated Wastewater Discharge Subcategory: NA

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

See Section 4

8. Management for Product Recovered/Recycled (if applicable)

See Section 5

Material Safety Data Sheet

Darco- G-60, Activated Carbon, 100-325 Mesh, Powder

ACC# 95953

Section 1 - Chemical Product and Company Identification

MSDS Name: Darco- G-60, Activated Carbon, 100-325 Mesh, Powder
Catalog Numbers: AC221720000, AC221720010, AC221722500
Synonyms: Snythetic Graphite; Acetylene Black; Black Pearls.
Company Identification:

Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01
For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7440-44-0	CARBON	100	231-153-3

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: black solid.
Caution! Flammable solid. May cause eye irritation. May cause lung damage.
Target Organs: Lungs.

Potential Health Effects
Eye: Causes eye irritation. May cause conjunctivitis.
Skin: May cause skin irritation.
Ingestion: Ingestion of large amounts may cause gastrointestinal irritation.
Inhalation: Dust is irritating to the respiratory tract. May cause lung damage.
Chronic: Chronic inhalation may lead to decreased pulmonary function.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

EPAHO104000319

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool. Dust can be an explosion hazard when exposed to heat or flame. Flammable solid. Can be easily ignited and burns vigorously. Containers may explode if exposed to fire.
Extinguishing Media: For large fires, use water spray, fog or alcohol-resistant foam. For small fires, use dry chemical, carbon dioxide, sand, earth, water spray or regular foam. Cool containers with flooding quantities of water until well after fire is out.
Flash Point: Not applicable.
Autoignition Temperature: 230 deg C (446.00 deg F)
Explosion Limits, Lower:N/A
Upper: N/A
NFPA Rating: Not published.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.

Section 7 - Handling and Storage

Handling: Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.
Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Keep from contact with oxidizing materials. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.
Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
CARBON	none listed	none listed	none listed

OSHA Vacated PELs: CARBON: No OSHA Vacated PELs are listed for this chemical.
Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to minimize contact with skin.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Appearance: black
Odor: Odorless.
pH: Not available.
Vapor Pressure: 1 mm Hg @ 3586C
Vapor Density: Not available.
Evaporation Rate: Negligible.
Viscosity: Not available.
Boiling Point: Sublimes @ 3652C
Freezing/Melting Point:3652 deg C
Decomposition Temperature: Not available.
Solubility: insoluble
Specific Gravity/Density:1.8-2.1
Molecular Formula:C
Molecular Weight:12

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, ignition sources, dust generation, moisture, excess heat.
Incompatibilities with Other Materials: May react vigorously or violently when mixed with strong oxidizing agents such as chlorates, bromates and nitrates, expecially when heated. Incompatible with chlorinated paraffins, Lead oxide, manganese oxide, iron oxide, liquid oxygen, oils, and moisture.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:
CAS# 7440-44-0: FF5250100
LD50/LC50:
Not available.

Carcinogenicity:
CAS# 7440-44-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

EPAHO104000321

Epidemiology: No information available.
Teratogenicity: No information available.
Reproductive Effects: No information available.
Mutagenicity: No information available.
Neurotoxicity: No information available.
Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.
Environmental: Particulates settle out of atmosphere and water.
Physical: No information available.
Other: No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	CARBON, ACTIVATED	No information available.
Hazard Class:	4.2	
UN Number:	UN1362	
Packing Group:	III	

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 7440-44-0 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.

EPAHO104000322

SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 7440-44-0: immediate.
Section 313 No chemicals are reportable under Section 313.
Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.
STATE
CAS# 7440-44-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives
Hazard Symbols:
Not available.
Risk Phrases:

Safety Phrases:
S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)
CAS# 7440-44-0: 0
Canada - DSL/NDSL
CAS# 7440-44-0 is listed on Canada's DSL List.
Canada - WHMIS
WHMIS: Not available.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
Canadian Ingredient Disclosure List

Section 16 - Additional Information

MSDS Creation Date: 3/26/1998
Revision #4 Date: 11/20/2008

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

EPAHO104000323

3301
H & W

EPAHO10400324

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/29/2009**

Dear **Kim Wooten**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3301

Expiration Date 4/29/2011

Generator: H & W Petroleum
Address: 9617 Wallisville
Houston, TX 77013

Waste Information

Name of Waste: Recyclable oily water
TCEQ Waste Code #:
Container Type:
Detailed Description of Process Generating Waste:
rain water from containments and containment ponds; oil from filling areas where virgin is dispatched for sale

Color: varies **Odor:** none to slight hydrocar **pH:** 4-10
Physical State:
Incompatibilities: oxidizers
Safety Related Data/Special Handling:
std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: H & W Petroleum Company
Address: 9617 Wallisville Road
City: Houston **State:** TX **Zip:** 77013
Contact: Keith Babb **Title:** Management
Phone Number: 713-672-0893 **Fax Number:** 713-896-3161
24/hr Phone Number: 713-672-0893
US EPA ID No: Na
State ID No: Na **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Recycable Oily Water
Detailed Description of Process Generating Waste:

Rain water from containments and containment ponds and oil from filling areas where virgin oil is dispatched for sale.

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Varies **Odor:** None to slight hydrocarbon

Specific Gravity (water=1): .9-1 **Density:** 7.5-8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ **Single-phase** ☑ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☑ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☑ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 5000-100,000

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Na

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: Na

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: Na

Texas State Waste Code Number: Recyclable

Proper US DOT Shipping Name: Recyclable Oily Water

Class: Na **UN/NA:** Na **PG :** Na **RQ:** Na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>160		4-10		0	mg/l	0	mg/l	0-5	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	<5000	mg/l	0	mg/l	0	mg/l	0	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Rain Water	90-97	%
Various virgin hydrocarbons and oils	3-10	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. None- Generator's knowledge

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	None in Process
TCLP Volatiles:	None in Process
TCLP Semi-Volatiles:	None in Process
Reactivity:	None in Process
Corrosivity:	None in Process
Ignitability:	None in Process

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☑ Oil-water emulsions or mixtures
- ☑ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☑ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 4/22/2009

Printed Name/Title: ~~Richard Freeland~~ KEITH BASS

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 4-28-09 ☑ Approved ☐ Rejected
Approval Number: _____

EPAHO104000329

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

.09/gal Treatment <5000 TOC
.045/gal trans
.005/gal FSC

2. **Contamination Limits (maximum limit before surcharges apply):**

>5000 TOC, <121 F flash, high metals, solids >4-5%

3. **Surcharge Pricing:**

Call Dan Cell 713-854-6150 if any of above occure

4. **Special Testing Requirements:**

Metals, Phenol, TOC, Flash, & Clordtet on oil phase

5. **Treatment and Handling Protocol:**

Oily water treatment, waste water treatment

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

7. **Tests for Product Recovered/Recycled (if applicable):**

Standard oil tests

8. **Management for Product Recovered/Recycled (if applicable);**

Cell in fuels market

3302

Zach

EPAHO10400332

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/29/2009**

Dear **Ronald Smith**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3302

Expiration Date 4/29/2011

Generator: ZaCh System Corp. (La Porte)
Address: 914 South 16th Street
La Porte, TX 77571

Waste Information

Name of Waste: Ammonium Chloride
TCEQ Waste Code #: 01123151
Container Type:
Detailed Description of Process Generating Waste:
off spec product drums
Color: white **Odor:** none **pH:** neutral
Physical State:
Incompatibilities: Concentrated acids, strong bases, silver salts, potassium chlorate, ammonium nitrate, bromine trifluoride and iodine heptafluroide. Ammonium chloridereacts explosively with potassium chlorate or bromine trifluoride ,and violently with bromide pentafluori
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JB/AL

IS

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-167E U.S. EPA ID Number: TXD008950461 ISWR Number: 3090C TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-146C U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Zach Systems Corp. (La Porte)
Address: 914 South 16th Street
City: La Porte **State:** TX **Zip:** 77571
Contact: Ronald Smith **Title:**
Phone Number: (281) 842-0201 **Fax Number:** (281) 867-1734
24/hr Phone Number:
US EPA ID No: TXR000079062
State ID No: 88429 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Ammonium chloride
Detailed Description of Process Generating Waste:

off spec product drums

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: white **Odor:** none

Specific Gravity (water=1): na **Density:** na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 50

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 0112 3151

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material
Class: na UN/NA: na PG: na RQ: na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
na		neutral		0	mg/l	0	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
<1500	mg/l	na	mg/l	0	mg/l	0	mg/l	0	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
ammonium chloride	100	%

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Concentrated acids, strong bases, silver salts, potassium chlorate, ammonium nitrate, bromine trifluoride and iodine heptafluroide. Ammonium chloridereacts explosively with potassium chlorate or bromine trifluoride , and violently with bromide pentafluoride.

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory **: *Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory **: *Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Ronald E. Smith **Date:** 4/23/09

Printed Name/Title: Ronald E. Smith, CSP / EHS Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:
Date: 4-29-09 ☑ Approved ☐ Rejected
Approval Number: 3302

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$60 drum TRANS + FSC

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Bulk in Class 1 Solids Box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

MSDS Number: **A5724** * * * * * *Effective Date:* ***08/23/07*** * * * * * *Supercedes:* ***08/18/05***

MSDS Material Safety Data Sheet

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865

Mallinckrodt CHEMICALS J.T.Baker

24 Hour Emergency Telephone: 908-859-2151
CHEMTREC: 1-800-424-9300
National Response in Canada
CANUTEC: 613-996-6666
Outside U.S. and Canada
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

AMMONIUM CHLORIDE

1. Product Identification

Synonyms: Sal ammoniac; Ammonium muriate
CAS No.: 12125-02-9
Molecular Weight: 53.49
Chemical Formula: NH4Cl
Product Codes:
J.T. Baker: 0660
Mallinckrodt: 1614, 3355, 3363, 3364, 3384

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Ammonium Chloride	12125-02-9	99 - 100%	Yes

3. Hazards Identification

Emergency Overview

WARNING! CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. HARMFUL IF SWALLOWED OR INHALED.

SAF-T-DATA(tm) *Ratings (Provided here for your convenience)*

Health Rating: 2 - Moderate
Flammability Rating: 0 - None
Reactivity Rating: 2 - Moderate
Contact Rating: 2 - Moderate
Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES
Storage Color Code: Green (General Storage)

Potential Health Effects

Inhalation:
Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.
Ingestion:
Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea.
Skin Contact:
Causes irritation to skin. Symptoms include redness, itching, and pain.
Eye Contact:
Causes irritation, redness, and pain.
Chronic Exposure:
No information found.
Aggravation of Pre-existing Conditions:
No information found.

4. First Aid Measures

Inhalation:

EPAHO104000340

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:
Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
Skin Contact:
Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention.

5. Fire Fighting Measures

Fire:
Not considered to be a fire hazard.
At fire temperatures ammonium chloride begins to corrode metals and may dissociate into ammonia and hydrogen chloride. Mixtures of about 16% to 25% (by volume) ammonia gas in air are flammable.
Explosion:
Not considered to be an explosion hazard.
Fire Extinguishing Media:
Use any means suitable for extinguishing surrounding fire. Water spray may be used to keep fire exposed containers cool.
Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

7. Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:
Ammonium chloride:
-ACGIH Threshold Limit Value (TLV):
10 mg/m3 (TWA); 20 mg/m3 (STEL) Fume
Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.
Personal Respirators (NIOSH Approved):
If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest.. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin Protection:
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Eye Protection:
Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:
White powder.
Odor:
Odorless.
Solubility:
29.7g/100g water @ 0C (32F)
Specific Gravity:
1.53
pH:
5.5 (1% aq.sol.); 5.1 (3% aq.sol.); 5.0 (10% aq.sol.)
% Volatiles by volume @ 21C (70F):

EPAHO104000341

0
Boiling Point:
520C (968F)
Melting Point:
338C (640F) Sublimes.
Vapor Density (Air=1):
1.9
Vapor Pressure (mm Hg):
1.0 @ 160C (320F)
Evaporation Rate (BuAc=1):
No information found.

10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage.
Hazardous Decomposition Products:
Involvement in a fire causes decomposition to form hydrogen chloride and ammonia.
Hazardous Polymerization:
Will not occur.
Incompatibilities:
Concentrated acids, strong bases, silver salts, potassium chlorate, ammonium nitrate, bromine trifluoride and iodine heptafluoride. Ammonium chloride reacts explosively with potassium chlorate or bromine trifluoride, and violently with bromide pentafluoride, ammonium compounds, nitrates, and iodine heptafluoride. Explosive nitrogen trichloride may result from reaction of ammonium chloride and hydrogen cyanide.
Conditions to Avoid:
Heat, moisture, incompatibles.

11. Toxicological Information

Oral rat LD50 : 1650 mg/kg Investigated as a mutagen.

--------\Cancer Lists\----------

Ingredient	---NTP Carcinogen--- Known	Anticipated	IARC Category
Ammonium Chloride (12125-02-9)	No	No	None

12. Ecological Information

Environmental Fate:
No information found.
Environmental Toxicity:
24 Hr LC50 Lepomis macrochirus (bluegill): 725 mg/L
96 Hr LC50 Cyprinus carpio (carp): 209 mg/L [static]

24 Hr EC50 water flea: 202 mg/L

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

--------\Chemical Inventory Status - Part 1\----------

Ingredient	TSCA	EC	Japan	Australia
Ammonium Chloride (12125-02-9)	Yes	Yes	Yes	Yes

--------\Chemical Inventory Status - Part 2\----------

Ingredient	Korea	--Canada-- DSL	NDSL	Phil.
Ammonium Chloride (12125-02-9)	Yes	Yes	No	Yes

--------\Federal, State & International Regulations - Part 1\----------

EPAHO104000342

Ingredient	-SARA 302- RQ	TPQ	------SARA 313------ List	Chemical Catg.
Ammonium Chloride (12125-02-9)	No	No	No	No

--------\Federal, State & International Regulations - Part 2\----------

Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
Ammonium Chloride (12125-02-9)	5000	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No
Reactivity: No (Pure / Solid)

Australian Hazchem Code: None allocated.
Poison Schedule: None allocated.
WHMIS:
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: **2** Flammability: **0** Reactivity: **0**
Label Hazard Warning:
WARNING! CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. HARMFUL IF SWALLOWED OR INHALED.
Label Precautions:
Avoid contact with eyes, skin and clothing.
Avoid breathing dust.
Wash thoroughly after handling.
Keep container closed.
Use only with adequate ventilation.
Label First Aid:
In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. In all cases, get medical attention.
Product Use:
Laboratory Reagent.
Revision Information:
MSDS Section(s) changed since last revision of document include: 12.
Disclaimer:
****
Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. MALLINCKRODT BAKER, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLINCKRODT BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.
****
Prepared by: Environmental Health & Safety
Phone Number: (314) 654-1600 (U.S.A.)

EPAHO104000343

3303
Zach

EPAHO10400034

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/30/2009**

Dear **Ronald Smith**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3303

Expiration Date 4/29/2011

Generator: ZaCh System Corp. (La Porte)
Address: 914 South 16th Street
La Porte, TX 77571

Waste Information

Name of Waste: Potassiu Carbonate
TCEQ Waste Code #: 01113051
Container Type:
Detailed Description of Process Generating Waste:

Color: white **Odor:** none **pH:** neutral
Physical State:
Incompatibilities: Acids, chlorine trifluoride, magnesium. An explosion occurred after mixing sodium hydrosulfite, aluminum powder potassium carbonate and benzaldehyde.
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

330 JB/AL 05

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Zach Systems Corp. (La Porte)
Address: 914 South 16th Street
City: La Porte **State:** TX **Zip:** 77571
Contact: Ronald Smith **Title:**
Phone Number: (281) 842-0201 **Fax Number:** (281) 867-1734
24/hr Phone Number:
US EPA ID No: TXR000079062
State ID No: 88429 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Potassium carbonate
Detailed Description of Process Generating Waste:

off spec product drums

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: white **Odor:** none

Specific Gravity (water=1): na **Density:** na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 6

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 0110051

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material
Class: na UN/NA: na PG: na RQ: na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
na		neutral		0	mg/l	0	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
<1500	mg/l	na	mg/l	0	mg/l	0	mg/l	0	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Potassium carbonate	100	%

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Acids, chlorine trifluoride, magnesium. An explosion occurred after mixing sodium hydrosulfite, aluminum powder potassium carbonate and benzaldehyde.

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory **: *Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory **: *Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory : ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 4/23/09

Printed Name/Title: Ronald E. Smith, CSO / EHS Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 4-29-09 ☑ Approved ☐ Rejected
Approval Number: 3303

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$60 drum + Trans fee

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Bulk in class 1 solids Box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

MSDS Number: **P5609** * * * * * *Effective Date:* ***11/21/08*** * * * * * *Supercedes:* ***01/16/06***

MSDS Material Safety Data Sheet

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865

Mallinckrodt CHEMICALS J.T.Baker

24 Hour Emergency Telephone: 908-859-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. and Canada
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

POTASSIUM CARBONATE

1. Product Identification

Synonyms: Pearl ash; potash; carbonic acid, dipotassium salt; salt of tartar
CAS No.: 584-08-7
Molecular Weight: 138.21
Chemical Formula: K2CO3
Product Codes:
J.T. Baker: 3011, 3012, 3014, 6056
Mallinckrodt: 0436, 4674, 6790, 6814, 6844

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Potassium Carbonate	584-08-7	99 - 100%	Yes

3. Hazards Identification

Emergency Overview

WARNING! CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. MAY BE HARMFUL IF SWALLOWED.

SAF-T-DATA(tm) *Ratings (Provided here for your convenience)*

Health Rating: 2 - Moderate
Flammability Rating: 0 - None
Reactivity Rating: 1 - Slight
Contact Rating: 3 - Severe
Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES
Storage Color Code: Green (General Storage)

Potential Health Effects

Inhalation:
Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.
Ingestion:
Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. May have moderate toxic effects if consumed in large enough quantities. Ingestion of large amounts may be corrosive to mouth, throat and GI tract and produce abdominal pains, vomiting, diarrhea, and circulatory collapse.
Skin Contact:
Contact with dry material causes irritation. In aqueous solution it is a strong caustic and as such may have corrosive effects on the skin.
Eye Contact:
Causes extreme irritation, redness, pain and possibly corneal damage.
Chronic Exposure:
A chronic dermatitis may follow repeated contact with this substance.
Aggravation of Pre-existing Conditions:
No information found.

4. First Aid Measures

EPAHO104000352

Inhalation:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:
If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin Contact:
Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire:
Not considered to be a fire hazard.
Explosion:
Not considered to be an explosion hazard. An explosion occurred after mixing sodium hydrosulfite, aluminum powder, potassium carbonate and benzaldehyde.
Fire Extinguishing Media:
Use any means suitable for extinguishing surrounding fire.
Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:
None established.
Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.
Personal Respirators (NIOSH Approved):
For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin Protection:
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Eye Protection:
Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:
Fine white granules.
Odor:
Odorless.
Solubility:
Soluble in equal parts of cold water.
Specific Gravity:
2.29
pH:
11.6 Aqueous solution
% Volatiles by volume @ 21C (70F):
0
Boiling Point:
Decomposes.
Melting Point:
891C (1636F)
Vapor Density (Air=1):

EPAHO104000353

No information found.
Vapor Pressure (mm Hg):
No information found.
Evaporation Rate (BuAc=1):
No information found.

10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage.
Hazardous Decomposition Products:
Contact with acids and involvement in a fire can cause formation of carbon dioxide. Thermal decomposition may also form potassium oxide.
Hazardous Polymerization:
Will not occur.
Incompatibilities:
Acids, chlorine trifluoride, magnesium. An explosion occurred after mixing sodium hydrosulfite, aluminum powder, potassium carbonate and benzaldehyde.
Conditions to Avoid:
Moisture, heat, dusting and incompatibles.

11. Toxicological Information

Oral rat LD50: 1870 mg/kg.

--------\Cancer Lists\----------

Ingredient	---NTP Carcinogen--- Known	Anticipated	IARC Category
Potassium Carbonate (584-08-7)	No	No	None

12. Ecological Information

Environmental Fate:
No information found.
Environmental Toxicity:
No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

--------\Chemical Inventory Status - Part 1\----------

Ingredient	TSCA	EC	Japan	Australia
Potassium Carbonate (584-08-7)	Yes	Yes	Yes	Yes

--------\Chemical Inventory Status - Part 2\----------

Ingredient	Korea	--Canada-- DSL	NDSL	Phil.
Potassium Carbonate (584-08-7)	Yes	Yes	No	Yes

--------\Federal, State & International Regulations - Part 1\----------

Ingredient	-SARA 302- RQ	TPQ	List	------SARA 313------ Chemical Catg.
Potassium Carbonate (584-08-7)	No	No	No	No

--------\Federal, State & International Regulations - Part 2\----------

Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
Potassium Carbonate (584-08-7)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No

EPAHO104000354

```
SARA 311/312:  Acute: Yes      Chronic: No   Fire: No  Pressure: No
Reactivity: No          (Pure / Solid)
```

Australian Hazchem Code: None allocated.
Poison Schedule: None allocated.
WHMIS:
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: **2** Flammability: **0** Reactivity: **0**
Label Hazard Warning:
WARNING! CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. MAY BE HARMFUL IF SWALLOWED.
Label Precautions:
Avoid breathing dust.
Avoid contact with eyes, skin and clothing.
Keep container closed.
Use only with adequate ventilation.
Wash thoroughly after handling.
Label First Aid:
If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.
Product Use:
Laboratory Reagent.
Revision Information:
No Changes.
Disclaimer:
****
Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. MALLINCKRODT BAKER, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLINCKRODT BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.
****
Prepared by: Environmental Health & Safety
Phone Number: (314) 654-1600 (U.S.A.)

EPAHO104000355

3305
Weatherford International Ltd

EPAHO104000356

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **5/8/2009**

Dear **Rick Phillips**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3305

Expiration Date 4/30/2011

Generator: Weatherford International Ltd. (Pinemont)
Address: 7721 Pinemont Drive
Houston, TX 77040

Waste Information

Name of Waste: Class 1 Liquid Mixture
TCEQ Waste Code #: CESQ2061
Container Type:
Detailed Description of Process Generating Waste:
Mixture used to inspect metal components for stress cracks
Color: Amber to Brown **Odor:** Slight Hydrocarbon **pH:** 5-9
Physical State:
Incompatibilities: None
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3305

JR

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1460	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Weatherford International Ltd.
Address: 7721 Pinemont Drive
City: Houston **State:** TX **Zip:** 77040
Contact: Alex Anzaldua **Title:**
Phone Number: (713) 580-9701 **Fax Number:** (713) 580-9797
24/hr Phone Number:
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Class 1 liquid mixture
Detailed Description of Process Generating Waste:

Mixture used to inspect metal components for stress cracks

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Amber to Brown **Odor:** Slight Hydrocarbon

Specific Gravity (water=1): 1.18 **Density:** 9.8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☑ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 3

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ2061

Proper US DOT Shipping Name: Non-Hazardous, Non-Regulated Material
Class: N/A UN/NA: N/A PG: N/A RQ: N/A

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>200		5-9		N/A	mg/l	N/A	mg/l	0	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	N/A	mg/l	N/A	mg/l	N/A	mg/l	N/A	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
FLORO DYE 649	70-90	%
Ethylene Glycol	10-20	%
OIL	1-10	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. None

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Not Regulated
TCLP Volatiles:	Not Regulated
TCLP Semi-Volatiles:	Not Regulated
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	>200

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 4/29/09

Printed Name/Title: HUGO YBARRA ASSET COORDINATOR

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____

Date: 5-8-09 ☒ Approved ☐ Rejected

Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

~~$65/DM~~ $100/TP

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

~~Remove oil from filters & bulk filters to class 1 box~~ Bulk to class 1 sludge.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3306

Suncoast

EPAHO10400364

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **5/6/2009**

Dear **Nathan**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3306

Expiration Date 5/6/2011

Generator: Sun Coast Resources, Inc.
Address: 6922 Cavalcade
Houston, TX 77028

Waste Information

Name of Waste: Recyclable Used oil
TCEQ Waste Code #: product
Container Type:
Detailed Description of Process Generating Waste:
used oil from equipment and various customers
Color: light/dark brown **Odor:** hydrocarbon **pH:** na
Physical State:
Incompatibilities: oxidixers
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Sun Coast Resources, Inc.
Address : 6922 Cavalcade 6922 Cavalcade
City, State, Zip : Houston TX 77028
Contact : Nathan **Title :**
Phone No : (281) 808-5043 **Fax :** (713) 429-8829
24 / HR Phone :
U.S EPA I.D No : TXCESQG
State I.D : CESQG **SIC Code**

SECTION 2: Billing Information

Company : Sun Coast Resources, Inc.
Address : 6922 Cavalcade 6922 Cavalcade
City, State, Zip : Houston TX 77028
Contact : Nathan **Title :**
Phone No : (281) 808-5043 **Fax :** (713) 429-8829

SECTION 3: General Description of the Waste

Name of Waste : Recyclable Used Oil

Detailed Description of the Process Generating Waste:
used oil from equipment and various customers

Physical State : ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color : light/dark brown **Odor :** hydrocarbon
Specific Gravity (Water=1) : .9 **Density :** 7-8.12 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No
Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No
Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2835 2836 2841 2842 2843 2844 2851
2861 2865 2869 2873 2874 2876 2879 2891 2892 2893 2896 2899 2911 3312 4953 4959 9511

Layers : ☐ Single-Phas ☑ Multi-Phase
Container Type : ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)
Container Size : 5000
Number Of Units : 1

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

EPAHO104000366

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : Product

Proper U.S. State Waste Code No : Recyclable used oil

Class : na **UN/NA :** na **PG :** na **RQ :** na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	na	0 mg/l	0 mg/l	0-5 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
>1500 mg/l	na mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
oil	80-100	%
water	0-20	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
none- generator knowledge

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x
TCLP Volatilies : x
TCLP Semi-Volatiles : x
Reactivity : x

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ **YES** ☑ **NO**

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : _____ **Date :** 5/6/09

Printed Name / Title : no signature needed /

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Process Facility Information :

Compliance Officer : [signature]

Date : 5-6-09 **Status :** Approved Rejected

Approval Number : HOU-3306

EPAHO104000369

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

on oil phase < provided it's 70% or more oil, 20% of water is free for disposal, remainder of water is charged .095/gal – pay .15/gal if oil's GOOD, or contact Salesrep

2. Contamination Limit (maximum limit before surchages apply):

if non-conforming to profile

3. Surcharge Pricing:

NONE

4. Special Testing Requirements:

chlor-d-test, flash, ash, API, % water, % solids, % oil

5. Treatment and Handling Protocol:

oil processing facility

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3307
Applied Machinery Corp.

EPAHO10400037 2

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **5/8/2009**

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3307

Expiration Date 5/8/2011

Generator: Applied Machinery Corp.
Address: 18734 E. Hardy Rd.
Houston, TX 77073

Waste Information

Name of Waste: Recyclable Oily Water
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
cleaning of diesel tank
Color: dark **Odor:** hydrocarbon **pH:** 4-9
Physical State:
Incompatibilities: oxidizers
Safety Related Data/Special Handling:
level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

To: Don or Morgan

Recycle DB/MM

CES Environmental Services, Inc.

4904 Griggs Road **Houston, TX 77021**
Phone: (713) 676-1460 **Fax: (713) 676-1676**
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 **ISWR No: 30900**

SECTION 1: Generator Information

Company:	Applied Machinery Corp.		
Address:	18734 E. hardy Rd.		
City, State, Zip:	Houston, TX 77073		
Contact:	Michael Arney	**Title:**	Rig Up Yard Supervisor
Phone No:	281-821-0700	**Fax No:**	281-214-8995
24/hr Phone:	832-928-7256		
U.S. EPA I.D. No:	TXCESQG		
State I.D.	CESQG	**SIC Code:**	

SECTION 2: Billing Information – ☐ Same as Above

Company:	CKG Services, LLC		
Address:	7420 Honea Egypt Rd.		
City, State, Zip:	Montgomery, TX 77316		
Contact:	Zac McKaughan	**Title:**	President
Phone No:	936-483-3662	**Fax No:**	936-756-1226

SECTION 3: General Description of the Waste

Name of Waste: Recylable Oily Water
Detailed Description of Process Generating Waste: Cleaning of Diesel Tank

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Dark **Odor:** Slight

Specific Gravity (water=1): Water **Density:** 9.1 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type:	☐ Drum	☐ Tote	☒ Truck	☐ Other (explain)
Container Size:	____	____	3500	____

Frequency: ☐ Weekly ☒ Monthly ☐ Quarterly ☐ Yearly
Number of Units (containers): 1 **Other:** ____
Texas State Waste Code No: Recycle
Proper U.S. DOT Shipping Name: Recyclable Oily Water Mixture
Class: NA **UN/NA:** NA **PG:** NA **RQ:** NA

EPAHO104000374

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>150	4-9	0 mg/l	0 mg/l	0-5 %

Oil&Grease	TOC	Zinc	Copper	Nickel
NA mg/l	<5000 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	Concentration Ranges are acceptable	Units or %
Water	85-95%	
Diesel	1-5%	
Oil	1-5%	
Solids (Dust, Dirt)	5-10%	

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

None Needed

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

Oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** ____

Printed Name/Title: Zac McKaughan

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____

Date: 5-8-09 Approved Rejected

Approval Number: _____

EPAHO104000375

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☒ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☒ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☒ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

EPAHO104000376

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

EPAHO104000377

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

Vacuum Truck $70/hr
Field Techs $30/hr/man
PW $50
FS Truck $50.00

Confined Space - $150
.15/gal ($250 min)

2. **Contamination Limits (maximum limit before surcharges apply):**

Flash < 120

3. **Surcharge Pricing:**

None unless TOC > 15,000

4. **Special Testing Requirements:**

TOC, Flash, PH, Phenols

5. **Treatment and Handling Protocol:**

Oily Water Treatment

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

EPAHO104000378

7. **Tests for Product Recovered/Recycled (if applicable):**

N/A

8. **Management for Product Recovered/Recycled (if applicable):**

N/A

3308

Texas City ISD

EPAHO10400380

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **5/7/2009**

Dear **Dean Artero or Todd Conner**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3308

Expiration Date 5/7/2011

Generator: Texas City ISD
Address: 1401 9th Avenue North
Texas City, TX 77592

Waste Information

Name of Waste: Hydrochloric Acid 20%
TCEQ Waste Code #: CESQ104H
Container Type:
Detailed Description of Process Generating Waste:
Old swimming pool chemical
Color: clear **Odor:** acidic **pH:** <1500
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:
LEVEL C

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

GB
JR
IV

3308

need to LDR
forms

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Texas City ISD
Address: 1401 9th Avenue North
City: Texas City **State:** TX **Zip:** 77592
Contact: Dean Artero **Title:** Project Manager
Phone Number: 713-670-0200 **Fax Number:** 713-670-0404
24/hr Phone Number: 281-841-4861
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: C4 Environmental Services LLC
Address: P.O. Box 692375
City: Houston **State:** TX **Zip:** 77269
Contact: Dean Artero **Title:** PM
Phone Number: 713-670-0200 **Fax Number:** 713-670-0404

SECTION 3: General Description of the Waste

Name of Waste: Hydrochloric Acid 20%
Detailed Description of Process Generating Waste:

Old swimming pool chemical.

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Clear **Odor:** Acidic

Specific Gravity (water=1): <1 **Density:** 7.8-8.3 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 1

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☑ Yes ☐ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☑ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ104H

Proper US DOT Shipping Name: RQ, Waste Hydrochloric Acid
Class: 8 **UN/NA:** UN1789 **PG:** II **RQ:** 5000

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		<2		BRL	mg/l	BRL	mg/l	0-1	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
<1500	mg/l	<1500	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	85-75	%
Muratic Acid	15-25	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Level C

SECTION 6: Attached Supporting Documents
List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Lab Memo

SECTION 7: Incompatibilities
Please list ALL incompatibilities (if any):

SECTION 8: Generator's Knowledge Documentation
Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	NON
Corrosivity:	NON
Ignitability:	NON

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A
- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☑ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B
- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☑ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 5/5/09

Printed Name/Title: Dean Artero / Project Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 5-7-09 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$50 / DM

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Nuetralize & discharge to WWTP

6. Treated Wastewater Discharge Subcategory:

☑ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Gary Brauckman
Cc: Matt Bowman, Prabhaker, Clint Hopkins

Date: 4/28/09

From: Miles Root

Lab Memo: 09-081

Subject: **C-4 Environmental Evaluation 0409-29**

A sample of waste water from C-4 Environmental, Texas City, has been evaluated for processing at CES. This sample is evaluation 0409-29 and represents one drum/qtr of supposedly out of spec sodium hypochlorite, or bleach. This one drum may be processed with our waste water without issues.

This material has no bleach value, as a test for hypochlorite shows nothing. The water has a pH of 11, no phenols and a TOC of 1260 ppm. The neat sample has around 7 ppm of zinc, but this is such a small volume, that it does not matter. This is clean looking water that can just be dumped into our water system without issues.

The table below summarizes the analytical testing.

C-4 Environmental Evaluation 0409-29	
Solids, vol%	0
Odor	none
Hypochlorite, as Cl, g/L	0
pH	11
Phenols, ppm	0
TOC, mg/L	1,260
Oil, vol%	0
Treatability	Okay
Metals, ppm	
Ni	7.000
Zn	0.440

Jennifer Rust
713 676-1676

CES Environmental Services, Inc.

LDR Notifications/Certifications

1. Generator Information		2. Receiving Facility Information	
Name:	Texas City ISD	Name:	CES Environmental Services, Inc.
Address:	1401 9th Avenue	Address:	4904 Griggs Road
			Houston, TX 77021
EPA ID No.:	TXCESQG	EPA ID No.:	TXD008950461
Manifest No.:	CESQG		

3. Waste Description at Point of Generation

Line Item	Waste Description	Hazardous Waste Codes	LDR Subcategory	WW / NWW	Underlying Hazardous Constituents [268.2(i)]
1	HYDROCHLORIC ACID	D002	E	NWW	NONE
2					
3					
4					
5					

4. Waste Disposition

Line Item	Subtitle C Exclusion Subsequent to Point of Generation (if applicable)	Current Disposition of Waste	268.45, Table 1 Technology used to treat debris (if applicable)	Date Shipped
1				
2				
3				
4				
5				

5. Was the waste hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste or exempt from Subtitle C regulation (including characteristic wastes managed in wastewater treatment systems discharging under the CWA)?
☐ Yes ☑ No (If yes, this constituents the 268.7(a)(7) one-time notification.)

6. Waste the waste characterstic at the point of generation, treated onsite to remove the characteristic, and treatment residues then shipped to a Subtitle D land disposal facility? ☐ Yes ☑ No (If yes, complete Certification 1 or 2.)

7. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(1) by treating it using an extraction or destruction technology in 268.45, Table 1? ☐ Yes ☑ No (If yes, complete Certification 3.)

8. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(2) by receiving a "no-longer-contains" determinatin from EPA or the authorized state?
☐ Yes ☑ No (If yes, this constituents the 268.7(d)(1) one-time notification.)

9. Is the waste residue from treating K061, K062 and/or F006 wastes in high-temperature metals recovery (HTMR) units that 1) meets the generic exclusion levels in 261.3(c)(2)(ii)(C), 2) does not exhibit any characterstics, and 3) is shipped to a Subtitle D land disposal facility?
☐ Yes ☑ No (If yes, complete Certification 4.)

10. ☐	Waste that has been treated to remove a characterstic and meets underlying hazardous constituents standards. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristics and that underlying hazardous constituents, as defined in 268.2(i) have been treated on-site to meet the 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items: Reference: 268.7(b)(4)(v) and 268.9(d)
11. ☐	Waste that has been treated to remove a characteristic but does not meet underlying hazardous constituents standards. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characterstic. This decharacterized waste contains underlying hazardous constituents that require further treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items: Reference: 268.7(b)(4)(v) and 268.9(d)
12. ☐	Debris that has been treated to meet the alternative treatment standards. I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45, I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items: Reference: 268.7(b)(4)(v) and 268.9(d)
13. ☐	HTMR residue from treating K061, K062 and/or F006 wastes. I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteretic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items: Reference: 268.7(b)(4)(v) and 268.9(d)

Authorized Signature: [signature] **Date:** 5/7/09

Printed Name / Title: DEAN ARTERO

3308
Texas City ISD

EPAHO10400390

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **5/7/2009**

Dear **Dean Artero or Todd Conner**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3308

Expiration Date 5/7/2011

Generator: Texas City ISD
Address: 1401 9th Avenue North
Texas City, TX 77592

Waste Information

Name of Waste: Hydrochloric Acid 20%
TCEQ Waste Code #: CESQ104H
Container Type:
Detailed Description of Process Generating Waste:
Old swimming pool chemical
Color: clear **Odor:** acidic **pH:** <1500
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:
LEVEL C

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

GB
JR
#3308

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Texas City ISD
Address: 1401 9th Avenue North
City: Texas City **State:** TX **Zip:** 77592
Contact: Dean Artero **Title:** Project Manager
Phone Number: 713-670-0200 **Fax Number:** 713-670-0404
24/hr Phone Number: 281-841-4861
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: C4 Environmental Services LLC
Address: P.O. Box 692375
City: Houston **State:** TX **Zip:** 77269
Contact: Dean Artero **Title:** PM
Phone Number: 713-670-0200 **Fax Number:** 713-670-0404

SECTION 3: General Description of the Waste

Name of Waste: Hydrochloric Acid 20%
Detailed Description of Process Generating Waste:

Old swimming pool chemical.

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Clear **Odor:** Acidic

Specific Gravity (water=1): <1 **Density:** 7.8-8.3 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 1

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☑ Yes ☐ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☑ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ104H

Proper US DOT Shipping Name: RQ, Waste Hydrochloric Acid
Class: 8 **UN/NA:** UN1789 **PG:** II **RQ:** 5000

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>140	<2	BRL mg/l	BRL mg/l	0-1 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
<1500 mg/l	<1500 mg/l	BRL mg/l	BRL mg/l	BRL mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	85-75	%
Muratic Acid	15-25	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Level C

SECTION 6: Attached Supporting Documents
List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Lab Memo

SECTION 7: Incompatibilities
Please list ALL incompatibilities (if any):

SECTION 8: Generator's Knowledge Documentation
Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	NON
Corrosivity:	NON
Ignitability:	NON

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☑ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☑ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 5/5/09

Printed Name/Title: Dean Artero / Project Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 5-7-09 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$50 / DM

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Nuetralize & discharge to WWTP

6. Treated Wastewater Discharge Subcategory:

☑ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Gary Brauckman
Cc: Matt Bowman, Prabhaker, Clint Hopkins

Date: 4/28/09

From: Miles Root

Lab Memo: 09-081

Subject: **C-4 Environmental Evaluation 0409-29**

A sample of waste water from C-4 Environmental, Texas City, has been evaluated for processing at CES. This sample is evaluation 0409-29 and represents one drum/qtr of supposedly out of spec sodium hypochlorite, or bleach. This one drum may be processed with our waste water without issues.

This material has no bleach value, as a test for hypochlorite shows nothing. The water has a pH of 11, no phenols and a TOC of 1260 ppm. The neat sample has around 7 ppm of zinc, but this is such a small volume, that it does not matter. This is clean looking water that can just be dumped into our water system without issues.

The table below summarizes the analytical testing.

C-4 Environmental	
Evaluation 0409-29	
Solids, vol%	0
Odor	none
Hypochlorite, as Cl, g/L	0
pH	11
Phenols, ppm	0
TOC, mg/L	1,260
Oil, vol%	0
Treatability	Okay
Metals, ppm	
Ni	7.000
Zn	0.440

Jennifer Rust
713 676-1676

CES Environmental Services, Inc.

LDR Notifications/Certifications

1. Generator Information		2. Receiving Facility Information	
Name:	Texas City ISD	Name:	CES Environmental Services, Inc.
Address:	1401 9th Avenue	Address:	4904 Griggs Road Houston, TX 77021
EPA ID No.:	TXCESQG	EPA ID No.:	TXD008950461
Manifest No.:	CESQG		

3. Waste Description at Point of Generation

Line Item	Waste Description	Hazardous Waste Codes	LDR Subcategory	WW / NWW	Underlying Hazardous Constituents [268.2(i)]
1	HYDROCHLORIC ACID	D002	E	WW	NONE
2					
3					
4					
5					

4. Waste Disposition

Line Item	Subtitle C Exclusion Subsequent to Point of Generation (if applicable)	Current Disposition of Waste	268.45, Table 1 Technology used to treat debris (if applicable)	Date Shipped
1				
2				
3				
4				
5				

5. Was the waste hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste or exempt from Subtitle C regulation (including characteristic wastes managed in wastewater treatment systems discharging under the CWA)?
☐ Yes ☑ No (If yes, this constituents the 268.7(a)(7) one-time notification.)

6. Waste the waste characterstic at the point of generation, treated onsite to remove the characteratic, and treatment residues then shipped to a Subtitle D land disposal facility? ☐ Yes ☑ No (If yes, complete Certification 1 or 2.)

7. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(1) by treating it using an extraction or destruction technology in 268.45, Table 1? ☐ Yes ☑ No (If yes, complete Certification 3.)

8. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(2) by receiving a "no-longer-containe" determinatin from EPA or the authorized state?
☐ Yes ☑ No (If yes, this constituents the 268.7(d)(1) one-time notification.)

9. Is the waste residue from treating K061, K062 and/or F006 wastes in high-temperature metals recovery (HTMR) units that 1) meets the generic exclusion levels in 261.3(c)(2)(ii)(C), 2) does not exhibit any characterstics, and 3) is shipped to a Subtitle D land disposal facility?
☐ Yes ☑ No (If yes, complete Certification 4.)

10. ☐	Waste that has been treated to remove a characterstic and meets underlying hazardous constituents standards. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristics and that underlying hazardous constituents, as defined in 268.2(i) have been treated on-site to meet the 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items: Reference: 268.7(b)(4)(v) and 268.9(d)
11. ☐	Waste that has been treated to remove a characteratic but does not meet underlying hazardous constituents standards. I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characterstic. This decharacterized waste contains underlying hazardous constituents that require further treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items: Reference: 268.7(b)(4)(v) and 268.9(d)
12. ☐	Debris that has been treated to meet the alternative treatment standards. I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items: Reference: 268.7(b)(4)(v) and 268.9(d)
13. ☐	HTMR residue from treating K061, K062 and/or F006 wastes. I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteretic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.	Applies to items: Reference: 268.7(b)(4)(v) and 268.9(d)

Authorized Signature: [signature] **Date:** 5/7/09

Printed Name / Title: DEAN ARTEO

3309
Texas City ISD

EPAHO10400400

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **5/7/2009**

Dear **Dean Artero or Todd Conner**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3309

Expiration Date

Generator: Texas City ISD
Address: 1401 9th Avenue North
Texas City, TX 77592

Waste Information

Name of Waste: 12% Sodium Hypochlorite Solution
TCEQ Waste Code #: CESQ1041
Container Type:
Detailed Description of Process Generating Waste:
Old Swimming Pool Chemical
Color: Clear **Odor:** none **pH:** <12
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:
LEVEL D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

GB
JR

#3309

Jennifer Rust

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

12

SECTION 1: Generator Information

Company: Texas City ISD
Address: 1401 9th Avenue North
City: Texas City **State:** TX **Zip:** 77592
Contact: Dean Artero **Title:** Project Manager
Phone Number: 713-670-0200 **Fax Number:** 713-670-0404
24/hr Phone Number: 281-841-4861
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: C4 Environmental Services LLC
Address: P.O. Box 692375
City: Houston **State:** TX **Zip:** 77269
Contact: Dean Artero **Title:** PM
Phone Number: 713-670-0200 **Fax Number:** 713-670-0404

SECTION 3: General Description of the Waste

Name of Waste: 12% Sodium Hypochlorite Solution
Detailed Description of Process Generating Waste:

Old swimming pool chemical.

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Clear **Odor:** None

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 3

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ1041

Proper US DOT Shipping Name: Non-Hazardous, Non-Regulated Material (Sodium Hypochlorite Solution)
Class: _____ **UN/NA:** _____ **PG:** _____ **RQ:** _____

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		<12		BRL	mg/l	BRL	mg/l	0-1	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
<1500	mg/l	<1500	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	85-90	%
Sodium Hypochlorite	10-15	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
Level D

SECTION 6: Attached Supporting Documents
List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Lab Memo

SECTION 7: Incompatibilities
Please list ALL incompatibilities (if any):

SECTION 8: Generator's Knowledge Documentation
Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	NON
Corrosivity:	NON
Ignitability:	NON

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☑ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory : Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☑ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 5/5/09

Printed Name/Title: Dean Artero / Project Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:
Date: 5-6-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$50 / DM

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Nuetralize & discharge to WWTP

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Gary Brauckman
Cc: Matt Bowman, Prabhaker, Clint Hopkins

Date: 4/28/09

From: Miles Root

Lab Memo: 09-081

Subject: **C-4 Environmental Evaluation 0409-29**

A sample of waste water from C-4 Environmental, Texas City, has been evaluated for processing at CES. This sample is evaluation 0409-29 and represents one drum/qtr of supposedly out of spec sodium hypochlorite, or bleach. This one drum may be processed with our waste water without issues.

This material has no bleach value, as a test for hypochlorite shows nothing. The water has a pH of 11, no phenols and a TOC of 1260 ppm. The neat sample has around 7 ppm of zinc, but this is such a small volume, that it does not matter. This is clean looking water that can just be dumped into our water system without issues.

The table below summarizes the analytical testing.

C-4 Environmental	
Evaluation 0409-29	
Solids, vol%	0
Odor	none
Hypochlorite, as Cl, g/L	0
pH	11
Phenols, ppm	0
TOC, mg/L	1,260
Oil, vol%	0
Treatability	Okay
Metals, ppm	
Ni	7.000
Zn	0.440

3311
BJ Services (Aldine Westfield)

EPAHO10400409

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **5/8/2009**

Dear **Willie Allen**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3311

Expiration Date 5/8/2011

Generator: BJ Services (Aldine Westfield)
Address: 16610 Aldine Westfield, Bldg. E
Houston, TX 77032

Waste Information

Name of Waste: Non-Hazardous Waste Water
TCEQ Waste Code #: CESQ1191
Container Type:
Detailed Description of Process Generating Waste:
mop water used to clean up coolant and oil spills from the machining area. Cutting area works on carbon steel

Color: black **Odor:** rancid **pH:** 3-9
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

IL DB/MM

CES Environmental Services, Inc.

☐ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079807 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: BJ Services Company
Address: 16610 Aldine Westfield, Bldg. E.
City: Houston State: TX Zip: 77032
Contact: Willie Allen Title:
Phone Number: 281-784-6109 Fax Number: 281-784-6112
24/hr Phone Number:
US EPA ID No: TXCESQG
State ID No: CESQG SIC Code:

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: State: Zip:
Contact: Title:
Phone Number: Fax Number:

SECTION 3: General Description of the Waste

Name of Waste: Non-Hazardous Waste Water
Detailed Description of Process Generating Waste:

Mop water used to clean up coolent and oil spills from the machining area. Cutting area works on carbon steel.

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Black Odor: Rancid

Specific Gravity (water=1): 1 Density: 8.3 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☑ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 300 Gals

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)
Na

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes: NA

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes: Na

Texas State Waste Code Number: CESQ1191

Proper US DOT Shipping Name: Non RCRA, Non DOT Regulated Waste Water
Class: Na UN/NA: Na PG: Na RQ: Na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>200				0	mg/l	0	mg/l	0-5	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>100	mg/l	<15,000	mg/l	Na	mg/l	Na	mg/l	Na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	85-90	%
Machine Coolant	3-5	%
Solids	0-5	%

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.
Level D PPE

SECTION 6: Attached Supporting Documents
List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. CES Lab Analysis

SECTION 7: Incompatibilities
Please list ALL incompatibilities (if any):
None

SECTION 8: Generator's Knowledge Documentation
Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Na
TCLP Volatiles:	Na
TCLP Semi-Volatiles:	Na
Reactivity:	Na
Corrosivity:	Na
Ignitability:	Na

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pretaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: ***Subpart A***
- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☑ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***
- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☒ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☒ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☑ Organics Subcategory

SECTION 10: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Willie J. Allen **Date:** 5/8/09

Printed Name/Title: Willie J. Allen

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:
Date: 5-8-09
☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Dan Bowman
Cc: Matt Bowman, Prabhaker, Clint Hopkins, Sam Brown

Date: 5/06/09

From: Miles Root

Lab Memo: 09-084

Subject: **BJ Services Evaluation 0509-07**

A sample of coolant and mop water from BJ Services has been evaluated for potential processing at CES. This sample is evaluation 0509-07 and represents around one half tote of coolant and mop water. Overall, we can process this small volume of water, even though it is somewhat high in nickel.

The water has a pH of 4.5. It is a pale green colored emulsion that tests to contain approximately 1% ethylene glycol. The water has an unpleasant odor but is not overly offensive, even though odor is subjective. The sample contains approximately 4% solids as determined by centrifuge and a trace of what initially appears to be oil. The addition of heat and acid does nothing to break out the emulsion. A standard treat results in clear but slightly amber colored water that continues to show approximately 1% ethylene glycol. The treated sample does not contain any oil sheen. The TOC on this water is only 441 ppm with no phenols. The nickel content of the treated water is high at 6.5 ppm, with the remaining metals at acceptable levels.

This small volume of water can be used in our equalization process to reduce the nickel content. It is recommended that we pursue its acquisition for CES processing. The table below summarizes the analytical testing.

BJ Services	
Evaluation 0509-07	
pH	4.5
Ethylene glycol	1%
Phenols, ppm	0
TOC, mg/L	441
Emulsion	Yes
Oil, vol%	trace
Treatability	OK
Metals, ppm	
Ni	6.475
Zn	2.068
Cu	0.071
Cd	0.000
Cr	0.000

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$250/tote disposal
$70/hr waste trans
$40/tote swap

2. **Contamination Limits (maximum limit before surcharges apply):**

Low PH

3. **Surcharge Pricing:**

None- Call sales person

4. **Special Testing Requirements:**

PH, TOC, Flash,

5. **Treatment and Handling Protocol:**

System 1 to NP

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

7. **Tests for Product Recovered/Recycled (if applicable):**

Na

8. **Management for Product Recovered/Recycled (if applicable);**

Na

3312
San Jacinto College District

EPAHO10400418

7E
8-4-09
T-35
LAD

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **5/11/2009**

Dear **Bill Miller**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3312

Expiration Date 5/11/2011

Generator: San Jacinto College District
Address: 5800 Uvalde Rd.
Pasadena, TX 77049

Waste Information

Name of Waste: Class 2 Solids (thermal storage tank solids)
TCEQ Waste Code #: CESQ5192
Container Type:
Detailed Description of Process Generating Waste:
removal of solids that precipitated out of city water stored in the tank
Color: brown **Odor:** none **pH:** 8-10
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM

ISL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1460	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: San Jacinto College District
Address: 5800 Uvalde Rd.
City: Houston **State:** TX. **Zip:** 77049
Contact: Bill Miller **Title:** Associate Director of Physical Plant
Phone Number: 281-478-2736 **Fax Number:** 281-478-2731
24/hr Phone Number: 281-389-1840
US EPA ID No:
State ID No: **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: San Jacinto College District
Address: 4624 Fairmont Pkwy.
City: PASADENA **State:** TX. **Zip:** 77504
Contact: Bill Miller **Title:** Associate Director of Physical Plant
Phone Number: 281-478-2736 **Fax Number:** 281-478-2731

SECTION 3: General Description of the Waste

Name of Waste: solids from thermal storage tank
Detailed Description of Process Generating Waste:

removal of solids that precicipated out of city water stored in the tank

Physical State: ☐ Liquid ☑ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: brown **Odor:** none

Specific Gravity (water=1): 1.05 **Density:** 8.4 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☑ Multi-phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☑ One-Time
Quantity:

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is It: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ 5192

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material
Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150		8-10		BRL	mg/l	BRL	mg/l	50-90	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
<1500	mg/l	1000	mg/l	na	mg/l	NA	mg/l	NA	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Solids (rust, etc)	50-90	%
Water	10-50	%

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analytical 09010198.01

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:
TCLP Volatiles:
TCLP Semi-Volatiles:
Reactivity:
Corrosivity:
Ignitability:

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Bill Miller **Date:** 5-4-09

Printed Name/Title: Bill Miller, Associate Director of Physical Plant

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert Taylor
Date: 5-11-09 ☑ Approved ☐ Rejected
Approval Number: HOU-3312

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$75.00/yard

2. Contamination Limit (maximum limit before surchages apply):

Na

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

Tests to be redirected

5. Treatment and Handling Protocol:

Redirect to landfill, class 2 solids

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

Laboratory Analysis Report

Total Number of Pages: 16

Job ID : 09010198

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
San Jacinto College District - North TES Houston, TX

Report To :	Client Name:	Nalco Company	P.O.#.:	
	Attn:	Bill R. Fritsche	Sample Collected By:	
	Client Address:	7705 Highway 90-A	Date Collected:	01/09/09
	City, State, Zip:	Sugarland, Texas, 77478		

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
SJCD-NTES	Sludge	09010198.01

Released By: Sonia West
Title: Senior Project Manager
Date: 1/20/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/03/2009
Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 01/09/2009 11:20

EPAHO104000427

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09010198

Date: 1/20/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	surr	Surrogate
MS	Matrix Spike	T	Time
MSD	Matrix Spike Duplicate	TNTC	Too numerous to count
MW	Molecular Weight		

Qualifier Definition

M2	Matrix Spike/Matrix Spike Duplicate recovery is below laboratory control limits due to matrix interference.
S6	Surrogate recovery is outside control limits due to matrix effects.

EPAHO104000428

LABORATORY TEST RESULTS

Job ID : 09010198

Date 1/20/2009

Client Name: Nalco Company
Attn: Bill R. Fritsche
Project Name: San Jacinto College District - North TES Houston, TX

Client Sample ID: SJCD-NTES
Date Collected: 01/09/09
Time Collected: 10:30
Other Information:

Job Sample ID: 09010198.01
Sample Matrix Sludge

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 1010	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				01/15/09 08:00	SG
SW-846 6010C	TCLP Metals								
	Arsenic	BRL	mg/L	1	0.04	5.0		01/16/09 14:52	PGm
	Barium	1.39	mg/L	1	0.04	100.0		01/16/09 14:52	PGm
	Cadmium	BRL	mg/L	1	0.04	1.0		01/16/09 14:52	PGm
	Chromium	BRL	mg/L	1	0.04	5.0		01/16/09 14:52	PGm
	Lead	BRL	mg/L	1	0.04	5.0		01/16/09 14:52	PGm
	Selenium	BRL	mg/L	1	0.1	1.0		01/16/09 14:52	PGm
	Silver	BRL	mg/L	1	0.04	5.0		01/16/09 14:52	PGm
SW-846 7.3	Reactive Cyanide								
	Reactive Cyanide	BRL	mg/Kg	1	25			01/13/09 09:30	KS
SW-846 7.3	Reactive Sulfide								
	Reactive Sulfide	BRL	mg/Kg	1	25			01/13/09 09:00	KS
SW-846 7470A	TCLP Metals, Mercury								
	Mercury	BRL	mg/L	1	0.0005	0.2		01/15/09 13:10	TK
SW-846 8081A	TCLP Organochlorine Pesticides								
	Chlordane	BRL	ug/L	1	25	30		01/15/09 11:55	ML
	Endrin	BRL	ug/L	1	2.5	20		01/15/09 11:55	ML
	g-BHC	BRL	ug/L	1	2.5	300		01/15/09 11:55	ML
	Heptachlor	BRL	ug/L	1	2.5	8		01/15/09 11:55	ML
	Heptachlor epoxide	BRL	ug/L	1	2.5	8		01/15/09 11:55	ML
	Methoxychlor	BRL	ug/L	1	2.5	10000		01/15/09 11:55	ML
	Toxaphene	BRL	ug/L	1	25	300		01/15/09 11:55	ML
	Tetrachloro-m-xylene(surr)	67.8	%	1	12-106			01/15/09 11:55	ML
	Decachlorobiphenyl(surr)	54.5	%	1	10-126			01/15/09 11:55	ML
SW-846 8151A	TCLP Herbicides								
	2,4,5-TP	BRL	ug/L	1	25	1000		01/15/09 17:01	ML
	2,4-D	BRL	ug/L	1	25	10000		01/15/09 17:01	ML
	DCPAA(surr)	8.45	%	1	34-124		S6	01/15/09 17:01	ML
SW-846 8260B	TCLP VOC								
	1,1-Dichloroethylene	BRL	mg/L	1	0.13	0.6		01/15/09 12:49	HW
	1,2-Dichloroethane	BRL	mg/L	1	0.13	0.5		01/15/09 12:49	HW
	1,4-Dichlorobenzene	BRL	mg/L	1	0.15	7.5		01/15/09 12:49	HW
	Benzene	BRL	mg/L	1	0.13	0.5		01/15/09 12:49	HW
	Carbon tetrachloride	BRL	mg/L	1	0.13	0.5		01/15/09 12:49	HW
	Chlorobenzene	BRL	mg/L	1	0.15	70		01/15/09 12:49	HW
	Chloroform	BRL	mg/L	1	0.13	6		01/15/09 12:49	HW
	MEK	BRL	mg/L	1	0.13	200		01/15/09 12:49	HW

EPAHO104000429

LABORATORY TEST RESULTS

Job ID : 09010198

Date 1/20/2009

Client Name: Nalco Company
Attn: Bill R. Fritsche
Project Name: San Jacinto College District - North TES Houston, TX

Client Sample ID: SJCD-NTES
Date Collected: 01/09/09
Time Collected: 10:30
Other Information:

Job Sample ID: 09010198.01
Sample Matrix Sludge

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260B	TCLP VOC								
	Tetrachloroethylene	BRL	mg/L	1	0.16	0.7		01/15/09 12:49	HW
	Trichloroethylene	BRL	mg/L	1	0.13	0.5		01/15/09 12:49	HW
	Vinyl Chloride	BRL	mg/L	1	0.1	0.2		01/15/09 12:49	HW
	p-Bromofluorobenzene(surr)	112	%	1	70-130			01/15/09 12:49	HW
	Toluene-d8(surr)	100	%	1	70-130			01/15/09 12:49	HW
	1,2-Dichloroethane-d4(surr)	99	%	1	70-130			01/15/09 12:49	HW
	Dibromofluoromethane(surr)	102	%	1	70-130			01/15/09 12:49	HW
SW-846 8270D	TCLP Semivolatiles								
	1,4-Dichlorobenzene	BRL	mg/L	1	0.05	7.5		01/15/09 13:33	ML
	2,4,5-Trichlorophenol	BRL	mg/L	1	0.05	400		01/15/09 13:33	ML
	2,4,6-Trichlorophenol	BRL	mg/L	1	0.05	2		01/15/09 13:33	ML
	2,4-Dinitrotoluene	BRL	mg/L	1	0.05	0.13		01/15/09 13:33	ML
	2-Methylphenol	BRL	mg/L	1	0.05	200		01/15/09 13:33	ML
	3- & 4-Methylphenols	BRL	mg/L	1	0.05	200		01/15/09 13:33	ML
	Aniline	BRL	mg/L	1	0.5			01/15/09 13:33	ML
	Hexachlorobenzene	BRL	mg/L	1	0.05	0.13		01/15/09 13:33	ML
	Hexachlorobutadiene	BRL	mg/L	1	0.05	0.4		01/15/09 13:33	ML
	Hexachloroethane	BRL	mg/L	1	0.05	3		01/15/09 13:33	ML
	Nitrobenzene	BRL	mg/L	1	0.05	2		01/15/09 13:33	ML
	Pentachlorophenol	BRL	mg/L	1	1.25	100		01/15/09 13:33	ML
	Phenol	BRL	mg/L	1	0.05			01/15/09 13:33	ML
	Pyridine	BRL	mg/L	1	0.05	4		01/15/09 13:33	ML
	2-Fluorophenol(surr)	47.4	%	1	20-115			01/15/09 13:33	ML
	p-Terphenyl-d14(surr)	62.6	%	1	30-140			01/15/09 13:33	ML
	2,4,6-Tribromophenol(surr)	74.1	%	1	10-120			01/15/09 13:33	ML
	2-Fluorobiphenyl(surr)	65.6	%	1	30-115			01/15/09 13:33	ML
	Nitrobenzene-d5(surr)	54.1	%	1	20-120			01/15/09 13:33	ML
	Phenol-d6(surr)	44.7	%	1	15-120			01/15/09 13:33	ML
SW-846 9045D	Corrosivity, pH								
	pH	8.12	s.u.					01/13/09 08:00	RK

EPAHO104000430

QUALITY CONTROL CERTIFICATE

Job ID : 09010198 **Date :** 1/20/2009

Analysis : **Corrosivity, pH** **Method :** **SW-846 9045D** **Reporting Units :** **s.u.**

QC Batch ID : Qb09011302 **Created Date :** 01/13/09 **Created By :** Rkurup

Samples in This QC Batch : 09010198.01

QC Type: Duplicate

QC Sample ID: 09010198.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
pH	8.10	8.12	s.u.	0.2	5		

QC Type: LCS and LCSD

Parameter	LCS Assigned	LCS Result		LCSD Assigned	LCSD Result		RPD	RPD CtrlLimit	Tolerance	Qual
pH	4.00	3.98							3.95-4.05	

Refer to the Definition page for terms.

EPAHO104000431

QUALITY CONTROL CERTIFICATE

Job ID : 09010198 **Date :** 1/20/2009

Analysis : **Reactive Sulfide** **Method :** **SW-846 7.3** **Reporting Units :** **mg/Kg**

QC Batch ID : Qb09011316 **Created Date :** 01/13/09 **Created By :** Ksudha

Samples in This QC Batch : 09010198.01

Sample Preparation : PB09011310 **Prep Method :** SW-846 7.3 **Prep Date :** 01/12/09 14:00 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Sulfide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09010126.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Sulfide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Sulfide	900	720	80	900	680	75.6	5.7	20	40-120	

Refer to the Definition page for terms.

EPAHO104000432

QUALITY CONTROL CERTIFICATE

Job ID : 09010198 **Date :** 1/20/2009

Analysis : Reactive Cyanide **Method :** SW-846 7.3 **Reporting Units :** mg/Kg

QC Batch ID : Qb09011318 **Created Date :** 01/13/09 **Created By :** Ksudha

Samples in This QC Batch : 09010198.01

Sample Preparation : PB09011312 **Prep Method :** SW-846 7.3 **Prep Date :** 01/12/09 14:00 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Cyanide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09010126.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Cyanide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Cyanide	5.0	2.12	42.4	5..0	2.20		3.7	20	40-120	

Refer to the Definition page for terms.

EPAHO104000433

QUALITY CONTROL CERTIFICATE

Job ID : 09010198 **Date :** 1/20/2009

Analysis : **Ignitability (Flash Point)** **Method :** **SW-846 1010** **Reporting Units :** **°F**

QC Batch ID : Qb09011526 **Created Date :** 01/15/09 **Created By :** Sgarcia

Samples in This QC Batch : 09010198.01

QC Type: Duplicate

QC Sample ID: 09010126.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Ignitability	47	45	°F	4.4	20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ignitability	83	85	102	83	85	102	0	20	75-125	

Refer to the Definition page for terms.

EPAHO104000434

QUALITY CONTROL CERTIFICATE

Job ID : 09010198 **Date :** 1/20/2009

Analysis : TCLP Metals, Mercury **Method :** SW-846 7470A **Reporting Units :** mg/L

QC Batch ID : Qb09011529 **Created Date :** 01/15/09 **Created By :** Tkhuc

Samples in This QC Batch : 09010198.01

Digestion :	PB09011523	**Prep Method :**	SW-846 7470A	**Prep Date :**	01/15/09 09:00	**Prep By :**	Tkhuc
TCLP Prep :	PB09011507	**Prep Method :**	SW-846 1311	**Prep Date :**	01/14/09 16:00	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Mercury	7439-97-6	BRL	mg/L	1	0.0005		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.005	0.0052	104	0.005	0.0050	101	2.9	20	71-143	

QC Type: MS and MSD
QC Sample ID: 09010288.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.0061	122						61-175	

Refer to the Definition page for terms.

EPAHO104000435

QUALITY CONTROL CERTIFICATE

Job ID : 09010198 **Date :** 1/20/2009

Analysis : TCLP Metals **Method :** SW-846 6010C **Reporting Units :** mg/L

QC Batch ID : Qb09011531 **Created Date :** 01/15/09 **Created By :** Pguirguis

Samples in This QC Batch : 09010198.01

Digestion :	PB09011525	**Prep Method :**	SW-846 3010A	**Prep Date :**	01/15/09 12:30	**Prep By :**	Pguirguis
TCLP Prep :	PB09011507	**Prep Method :**	SW-846 1311	**Prep Date :**	01/14/09 16:00	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Arsenic	7440-38-2	BRL	mg/L	1	0.04		
Barium	7440-39-3	BRL	mg/L	1	0.04		
Cadmium	7440-43-9	BRL	mg/L	1	0.04		
Chromium	7440-47-3	BRL	mg/L	1	0.04		
Lead	7439-92-1	BRL	mg/L	1	0.04		
Selenium	7782-49-2	BRL	mg/L	1	0.1		
Silver	7440-22-4	BRL	mg/L	1	0.04		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Arsenic	2	2.20	110	2	2.18	109	0.9	20	80-120	
Barium	2	2.03	102	2	2.03	102	0	20	80-120	
Cadmium	2	1.99	99.5	2	1.99	99.5	0	20	80-120	
Chromium	2	2.04	102	2	2.04	102	0	20	80-120	
Lead	2	2.09	105	2	2.07	104	1	20	80-120	
Selenium	2	2.13	107	2	2.12	106	0.5	20	80-120	
Silver	2	2.10	105	2	2.11	106	0.5	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09010288.02

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Arsenic	BRL	2	2.10	105						45-138	
Barium	0.861	2	2.76	95						39-135	
Cadmium	BRL	2	1.89	94.1						56-125	
Chromium	BRL	2	1.98	98.8						52-125	
Lead	BRL	2	1.97	98.4						55-125	
Selenium	BRL	2	2.09	104						18-137	
Silver	BRL	2	2.04	102						26-148	

Refer to the Definition page for terms.

EPAHO104000436

QUALITY CONTROL CERTIFICATE

Job ID : 09010198 **Date :** 1/20/2009

Analysis : TCLP VOC **Method :** SW-846 8260B **Reporting Units :** mg/L

QC Batch ID : Qb09011605 **Created Date :** 01/15/09 **Created By :** Whuimei

Samples in This QC Batch : 09010198.01

Sample Preparation : PB09011527 **Prep Method :** SW-846 5030C **Prep Date :** 01/15/09 09:30 **Prep By :** Whuimei

TCLP Prep : PB09011507 **Prep Method :** SW-846 1311 **Prep Date :** 01/14/09 16:00 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
1,1-Dichloroethylene	75-35-4	BRL	mg/L	1	0.13		
1,2-Dichloroethane	107-06-2	BRL	mg/L	1	0.13		
1,4-Dichlorobenzene	106-46-7	BRL	mg/L	1	0.15		
Benzene	71-43-2	BRL	mg/L	1	0.13		
Carbon tetrachloride	56-23-5	BRL	mg/L	1	0.13		
Chlorobenzene	108-90-7	BRL	mg/L	1	0.15		
Chloroform	67-66-3	BRL	mg/L	1	0.13		
MEK	78-93-3	BRL	mg/L	1	0.13		
Tetrachloroethylene	127-18-4	BRL	mg/L	1	0.16		
Trichloroethylene	79-01-6	BRL	mg/L	1	0.13		
Vinyl Chloride	75-01-4	BRL	mg/L	1	0.1		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,1-Dichloroethylene	0.5	0.527	105	0.5	0.538	108	2.1	25	70-130	
Benzene	0.5	0.461	92.2	0.5	0.473	94.6	2.6	25	70-130	
Chlorobenzene	0.5	0.472	94.4	0.5	0.484	96.8	2.5	25	70-130	
Tetrachloroethylene	0.5	0.438	87.6	0.5	0.444	88.8	1.4	25	70-130	
Trichloroethylene	0.5	0.478	95.6	0.5	0.502	100	4.9	25	70-130	

QC Type: MS and MSD
QC Sample ID: 09010198.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
1,1-Dichloroethylene	BRL	0.5	0.556	111						70-130	
Benzene	BRL	0.5	0.472	94.4						70-130	
Chlorobenzene	BRL	0.5	0.471	94.2						70-130	
Trichloroethylene	BRL	0.5	0.501	100						70-130	

Refer to the Definition page for terms.

EPAHO104000437

QUALITY CONTROL CERTIFICATE

Job ID : 09010198 **Date :** 1/20/2009

Analysis : TCLP Semivolatiles **Method :** SW-846 8270D **Reporting Units :** mg/L

QC Batch ID : Qb09011606 **Created Date :** 01/16/09 **Created By :** Mli

Samples in This QC Batch : 09010198.01

Extraction :	PB09011510	**Prep Method :**	SW-846 3510C	**Prep Date :**	01/15/09 08:00	**Prep By :**	Lwang
TCLP Prep :	PB09011507	**Prep Method :**	SW-846 1311	**Prep Date :**	01/14/09 16:00	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
1,4-Dichlorobenzene	106-46-7	BRL	mg/L	1	0.05		
2,4,5-Trichlorophenol	95-95-4	BRL	mg/L	1	0.05		
2,4,6-Trichlorophenol	88-06-2	BRL	mg/L	1	0.05		
2,4-Dinitrotoluene	121-14-2	BRL	mg/L	1	0.05		
2-Methylphenol	95-48-7	BRL	mg/L	1	0.05		
3- & 4-Methylphenols	108-39-4 & 106-44-5	BRL	mg/L	1	0.05		
Aniline	62-53-3	BRL	mg/L	1	0.5		
Hexachlorobenzene	118-74-1	BRL	mg/L	1	0.05		
Hexachlorobutadiene	87-68-3	BRL	mg/L	1	0.05		
Hexachloroethane	67-72-1	BRL	mg/L	1	0.05		
Nitrobenzene	98-95-3	BRL	mg/L	1	0.05		
Pentachlorophenol	87-86-5	BRL	mg/L	1	1.25		
Phenol	108-95-2	BRL	mg/L	1	0.05		
Pyridine	110-861	BRL	mg/L	1	0.05		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,4-Dichlorobenzene	0.25	0.19	76	0.25	0.194	77.6	2.1	35	24-134	
2,4,5-Trichlorophenol	0.25	0.23	92	0.25	0.228	91.2	0.9	35	6-115	
2,4,6-Trichlorophenol	0.25	0.219	87.6	0.25	0.218	87.2	0.5	35	4-138	
2,4-Dinitrotoluene	0.25	0.243	97.2	0.25	0.232	92.8	4.6	35	32-114	
2-Methylphenol	0.25	0.171	68.4	0.25	0.173	69.2	1.2	35	6-132	
3- & 4-Methylphenols	0.5	0.324	64.8	0.5	0.32	64	1.2	35	29-132	
Hexachlorobenzene	0.25	0.23	92	0.25	0.238	95.2	3.4	35	44-142	
Hexachlorobutadiene	0.25	0.189	75.6	0.25	0.192	76.8	1.6	35	20-124	
Hexachloroethane	0.25	0.215	86	0.25	0.224	89.6	4.1	35	14-136	
Nitrobenzene	0.25	0.19	76	0.25	0.196	78.4	3.1	35	38-146	
Pentachlorophenol	0.25	0.196	78.4	0.25	0.207	82.8	5.5	35	25-125	
Pyridine	0.25	0.102	40.8	0.25	0.102	40.8	0	35	6-112	

Refer to the Definition page for terms.

EPAHO104000438

QUALITY CONTROL CERTIFICATE

Job ID : 09010198 **Date :** 1/20/2009

Analysis : TCLP Herbicides **Method : SW-846 8151A** **Reporting Units : ug/L**

QC Batch ID : Qb09011616 **Created Date :** 01/16/09 **Created By :** Mli

Samples in This QC Batch : 09010198.01

Extraction :	PB09011519	**Prep Method :**	SW-846 8151A	**Prep Date :**	01/15/09 10:00	**Prep By :**	Lwang
TCLP Prep :	PB09011507	**Prep Method :**	SW-846 1311	**Prep Date :**	01/14/09 16:00	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
2,4,5-TP		BRL	ug/L	1	25		
2,4-D	94-75-7	BRL	ug/L	1	25		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
2,4,5-TP	50	41.8	83.6	50	41.3	82.6	1.2	35	35-125	
2,4-D	50	41.5	83	50	41.3	82.6	0.5	35	29-124	

QC Type: MS and MSD
QC Sample ID: 09010198.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
2,4,5-TP	BRL	50	15.1	30.2						35-125	M2
2,4-D	BRL	50	20.4	40.8						29-124	

Refer to the Definition page for terms.

EPAHO104000439

QUALITY CONTROL CERTIFICATE

Job ID : 09010198 **Date :** 1/20/2009

Analysis : TCLP Organochlorine Pesticides **Method :** SW-846 8081A **Reporting Units :** ug/L

QC Batch ID : Qb09011617 **Created Date :** 01/16/09 **Created By :** Mli

Samples in This QC Batch : 09010198.01

Extraction :	PB09011518	**Prep Method :**	SW-846 3510C	**Prep Date :**	01/15/09 11:00	**Prep By :**	Lwang
TCLP Prep :	PB09011507	**Prep Method :**	SW-846 1311	**Prep Date :**	01/14/09 16:00	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Chlordane	57-74-9	BRL	ug/L	1	25		
Endrin	72-20-8	BRL	ug/L	1	2.5		
g-BHC	58-89-9	BRL	ug/L	1	2.5		
Heptachlor	76-44-8	BRL	ug/L	1	2.5		
Heptachlor epoxide	1027-57-3	BRL	ug/L	1	2.5		
Methoxychlor	72-43-5	BRL	ug/L	1	2.5		
Toxaphene	8001-35-2	BRL	ug/L	1	25		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Endrin	5	5.6	112	5	5.5	110	1.8	25	50-130	
g-BHC	5	5.4	108	5	5.3	106	1.9	25	50-130	
Heptachlor	5	4.58	91.6	5	4.5	90	1.8	25	50-130	
Heptachlor epoxide	5	5.5	110	5	5.41	108	1.6	25	50-130	
Methoxychlor	5	4.4	88	5	4.34	86.8	1.4	25	50-130	

QC Type: MS and MSD
QC Sample ID: 09010198.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Endrin	BRL	5	4.44	88.8						40-140	
g-BHC	BRL	5	5.21	104						40-140	
Heptachlor	BRL	5	3.13	62.6						40-140	
Heptachlor epoxide	BRL	5	4.38	87.6						40-140	
Methoxychlor	BRL	5	3.53	70.6						40-140	

Refer to the Definition page for terms.

EPAHO104000440

A & B Labs — *Chain of Custody* — The Chain of Custody is a Legal Document — Page ____ of ____

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 09016198

5. Project #

1. REPORT TO:		2. INVOICE TO:		3. PO #
Company:	NALCO COMPANY	Company:	SAME	CREDIT CARD
Address:	7705 HIGHWAY 90-A SUGARLAND TX 77478	Address:		4. Turnaround Time (Business Days)
Contact:	BILL FRITSCHE	Contact:		☐ 1 Day* ☐ Other
Phone:	281-263-7266	Phone:		☐ 2 Days*
Fax: ☐	281-263-7276	Fax: ☐		☐ 3 Days* *Surcharge applies
E-mail: ☐	bfritsche@nalco.com	E-mail: ☐		☒ 7 Days - Standard

6. Project Name/Location: SAN JACINTO COLLEGE DISTRICT – NORTH TES HOUSTON, TX

7. Reporting Requirement:

☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT) — Sampler's Signature & Date: BILL FRITSCHE NALCO COMPANY

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	10. Sampling Time	11. Comp.	11. Grab	12. Matrix Water	Soil	Sludge	Oil	Air	Other	No. of Containers	13. Analyses/Methods RCI / TCLP	18. REMARKS
Page 1 of 1	SJCD-NTES	1-9-09	10:30		X	X		X				4		

14. Containers*
15. Preservatives**
16. PH-Lab Only
17.

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1 Bill Fritsche	1-9-09	11:20			
2					
3			21. RECEIVED BY LABORATORY	1/9/09	9:20

*Containers: VOA - 40 ml vial; A/G - Amber/Glass 1 Liter; 4 oz/8 oz - glass wide mouth; P/O - Plastic/other ____

**Preservatives: C - Cool; H - HCl; N - HNO_3; S - H_2SO_4; OH - NaOH; T - $Na_2S_2O_3$; X - Other ____

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

22. KNOWN HAZARDS/COMMENTS: NO KNOWN HAZARDS

Temperature: 12.8 °C

Intact: Y or N Initials: ____

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days

EPAHO10400441

Sample Condition Checklist

Date : **01/20/09**

A&B JobID : **09010198**	Date Received : **01/09/2009**	Time Received : **11:20AM**
Client Name : **Nalco Company**		
Temperature : **12.8°C**	Sample pH : **n/a**	

	Check Points	Yes	No
1.	**Cooler seal present and signed.**	N/A	
2.	**Sample(s) in a cooler.**	X	
3.	**If yes, ice in cooler.**	X	
4.	**Sample(s) received with chain-of-custody.**	X	
5.	**C-O-C signed and dated.**	X	
6.	**Sample(s) received with signed sample custody seal.**	N/A	
7.	**Sample containers arrived intact. (If no comment).**	X	
8.	**Matrix :** **Water** ☑ **Soil** ☐ **Liquid** ☐ **Sludge** ☑ **Solid** ☐ **Cassette** ☐ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐		
9.	**Sample(s) were received in appropriate container(s).**	X	
10.	**Sample(s) were received with proper preservative**		
11.	**All samples were logged or labeled.**	X	
12.	**Sample ID labels match C-O-C ID's**	X	
13.	**Bottle count on C-O-C matches bottles found.**	X	
14.	**Sample volume is sufficient for analyses requested.**	X	
15.	**Samples were received within the hold time.**		X
16.	**VOA vials completely filled.**	N/A	
17.	**Sample accepted.**	X	

Comments : Include actions taken to resolve discrepancies/problem:

pH was received out of hold time.

Received by : DWarner

Check in by/date : DWarner / 01/09/2009

3275
Rick Friday dba Affodable
Trailers

EPAHO10400443

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/17/2009**

Dear **Ron Kohler**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3275

Expiration Date 4/17/2011

Generator: Rick Friday dba Affordable trailers
Address: 13819 Renault
Houston, TX 77015

Waste Information

Name of Waste: Dirt, soil, and oil
TCEQ Waste Code #: CESQ4891
Container Type:
Detailed Description of Process Generating Waste:
Hydraulic motor oil spill on dirt cleanup
Color: black **Odor:** hydrocarbon **pH:** neutral
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JB/AL

05

SECTION 1: Generator Information

Company: Rick Friday dba Affordable Trailers
Address: 13819 Kenwilt
City: Houston State: TX. Zip: 77015
Contact: Rick Friday Title: Owner
Phone Number: 713-448-3056 Fax Number:
24/hr Phone Number: Same
US EPA ID No: CESQ
State ID No: CESQ SIC Code:

SECTION 2: Billing Information - ☐ Same as Above

Company: Select Environmental
Address: 223 Mealy Dr.
City: Hou. State: Tx. Zip: 77029
Contact: Klein White Title: Sales
Phone Number: 713-675-7376 Fax Number:
281-960-3967

SECTION 3: General Description of the Waste

Name of Waste: Dirt, Soil, Oil
Detailed Description of Process Generating Waste:

Hydraulic, Motor Oil spill on Dirt clean-up

Physical State: ☐ Liquid ☐ Sludge ☐ Powder
☒ Solid ☐ Filter Cake ☐ Combination

Color: Black Odor: Hydrocarbon

Specific Gravity (water=1): Density: lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☑ One-Time
Quantity: 4 drums

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ 4891

Proper US DOT Shipping Name: Non Haz [redacted] Solid
Class: I UN/NA: _____ PG: _____ RQ: _____

See Analytical

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>140	Neutral	0 mg/l	0 mg/l	>50 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
71500 mg/l	Non mg/l	Nil mg/l	mg/l	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	CONCENTRATOIN Ranges are acceptable	UNITS or %
Oil	~~Ref~~	10%
Dirt		50%
Soil		40%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

STANDARD PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analytical Attached

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None Known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles:
TCLP Semi-Volatiles:
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☑ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☑ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Rick Fricley **Date:** 4-13-09

Printed Name/Title: Rick Fricley

[redacted] (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 4-16-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$50 drum

2. Contamination Limit (maximum limit before surchages apply):

No free liquids

3. Surcharge Pricing:

$65 On when liquids are present

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Bulk in Class 1 Solids Box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Harris County
HCPHES
Public Health & Environmental Services
Environmental Public Health Division

SAMPLE DATA

Rick Friday dba Affordable Trailers, Inc.
13819 Renault
Houston, TX 77015
ATTN:
SAMPLE LOCATION: Back yard behind house to the east on grass

ID NO.: 1067
SAMPLE NO.: NA-2354
OUTFALL: NA
SAMPLE DATE: 02/12/09
SAMPLE TIME: 11:30 AM
RUN NO.: 2009B13

SAMPLE AMOUNT 1x250ml-G
APPEARANCE: Soil w/grass & oily substance
SAMPLED BY: Michael R. Wehr
PLANT TYPE: NON PERMITTED SAMPLE TYPE: Grab

VN SENT: _____
COPY TO: _____

LABORATORY ANALYSIS

PARAMETER	ANALYTICAL RESULTS ORIGINAL	DUPLICATE	RECHECK	SPIKE %
Total Petroleum Hydrocarbons	*			
Volatile Organics - Water	**			

SAMPLE COMMENTS

* C6-C12: None detected <2,457 mg/kg)
>C12-C28: 54,298 mg/kg
>C28-C35: 85,826 mg/kg
>C35: 16,896 mg/kg
TOTAL 157,020 mg/kg
TPH profile detected with predominate hydrocarbon species in the C22-C36 range. Pattern similar to that of motor oil.
Concentration: 157,000 mg/kg
** See attachment.

APPROVED DATE 3/17/09
APPROVED BY _____
LABORATORY DIRECTOR

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

RICKY FRIDAY

CUSTOME RICKY FRIDAY PERMIT NA-2354

LAB E P H ID # 1067 MISC RUN # 09 B 13

Matrix: (soil/water) SOIL Lab Sample ID: RICKY FRIDAY, 09

Sample wt/vol: 5.0 (g/ml) G Lab File ID: V030409J.D

Level: (low/med) MED Date Received: 2/13/2009

% Moisture: not dec. 0 Date Analyzed: 3/4/2009

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	1000	U
74-87-3	Chloromethane	1000	U
75-01-4	Vinyl Chloride	1000	U
74-83-9	Bromomethane	1000	U
75-00-3	Chloroethane	1000	U
75-69-4	Trichlorofluoromethane	1000	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha	1000	U
75-35-4	1,1-Dichloroethene	1000	U
67-64-1	Acetone	1000	U
75-15-0	Carbon Disulfide	1000	U
79-20-9	Methyl acetate	1000	U
75-09-2	Methylene chloride	1000	U
1634-04-4	MTBE	1000	U
156-60-5	trans-1,2-Dichloroethene	1000	U
75-34-3	1,1-Dichloroethane	1000	U
156-59-2	cis-1,2-Dichloroethene	1000	U
78-93-3	2-Butanone	1000	U
67-66-3	Chloroform	1000	U
71-55-6	1,1,1-Trichloroethane	1000	U
1110-82-7	Cyclohexane	1000	U
56-23-5	Carbon Tetrachloride	1000	U
107-06-2	1,2-Dichloroethane	1000	U
71-43-2	Benzene	1000	U
79-01-6	Trichloroethene	1000	U
78-87-5	1,2-Dichloropropane	1000	U
108-87-2	Methylcyclohexane	1000	U
75-27-4	Bromodichloromethane	1000	U
10061-01-5	cis-1,3-Dichloropropene	1000	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1000	U
108-88-3	Toluene	1000	U
10061-02-6	trans-1,3-Dichloropropene	1000	U
79-00-5	1,1,2-Trichloroethane	1000	U
591-78-6	2-Hexanone	1000	U
127-18-4	Tetrachloroethene	1000	U
124-48-1	Dibromochloromethane	1000	U
106-93-4	1,2-Dibromoethane	1000	U
108-90-7	Chlorobenzene	1000	U
100-41-4	Ethylbenzene	1000	U
108383	m/p Xylene	2000	U

EPAHO104000452

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

RICKY FRIDAY

CUSTOME RICKY FRIDAY PERMIT NA-2354

LAB E P H ID # 1067 MISC _____ RUN # 09 B 13

Matrix: (soil/water) SOIL Lab Sample ID: RICKY FRIDAY, 09

Sample wt/vol: 5.0 (g/ml) G Lab File ID: V030409J.D

Level: (low/med) MED Date Received: 2/13/2009

% Moisture: not dec. 0 Date Analyzed: 3/4/2009

GC Column: DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 50 (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
95476	o Xylene	1000	U
100-42-5	Styrene	1000	U
75-25-2	Bromoform	1000	U
98-82-8	Isopropylbenzene	1000	U
79-34-5	1,1,2,2-Tetrachloroethane	1000	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U
96-12-8	1,2-Dibromo-3-Chloropropane	1000	U
120-82-1	1,2,4-Trichlorobenzene	1000	U

EPAHO104000453

HARRIS COUNTY ENVIRONMENTAL PUBLIC HEALTH

UNPERMITTED SAMPLE/CUSTODY LOG RECORD

DATE: 2/13/09
TIME: 1:30 (AM)/PM

SAMPLE

NAME: Ricky Friday HD#1067
SITE/ADDRESS: 13819 Renault Houston 77015

SAMPLE LOCATION: Back yard behind house to the East on grass

AMOUNT COLLECTED: 1-250ml glass FLOW:
SAMPLE DESCRIPTION: Soil w/ grass & oilly substance
FIELD TESTS PERFORMED: smells like solvent
SAMPLED BY: Mike Wehr

Briefly summarize the sampling episode including suspected contaminants and attach a copy of the complaint, ROTC, etc.: See complaint

Inform Lab Director of special samples:

ANALYSES REQUESTED

WET LAB

☐ Fecal Coliform/Fecal Streptococcus	☐ TR	☐ TOC/TIC
☐ BOD/CBOD	☐ TDS	☐ Metals (specify)
☐ Ammonia Nitrogen	☐ TSS	☐ Fluoride
☐ pH	☐ Sulfide	☐ Detergent
☐ Chloride	☐ COD	☐ Conductivity

INSTRUMENTATION

☐ FID Screen	☐ GC/MS Screen	☐ BTEX
☐ Profile Comparison	☐ Oil & Grease (soil Only)	☒ TPH
☐ Other Analysis (explain)	☐ Semi-Volatiles	☒ VOAW

FIELD CUSTODY

This sample was placed behind a locked door in the Laboratory after-hours refrigerator: YES NO
BY: DATE: TIME: AM/PM

LABORATORY CUSTODY

ACCEPTED BY: VMaust
DATE: 2/13/09 RUN NO.: 2009B13 TIME: 810 (AM)/PM

vlm 7/07

c/o

32716
Balfour Beatty

EPAHO104000455

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/20/2009**

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3276

Expiration Date 4/20/2011

Generator: Balfour Beatty
Address: 2334 Franz Rd
Katy, TX 77993

Waste Information

Name of Waste: Oily Debris
TCEQ Waste Code #: CESQ4091
Container Type:
Detailed Description of Process Generating Waste:
debris collected from construction site clean-up conatining water, dirt, and oil
Color: dark **Odor:** hydrocarbon **pH:** 4-10
Physical State:
Incompatibilities: oxidizers
Safety Related Data/Special Handling:
standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

TO: Morgan

05

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Balfour Beatty
Address : 2334 Franz Rd
City, State, Zip : Katy TX 77993
Contact : Zac **Title :**
Phone No : (281) 541-4829 **Fax :**
24 / HR Phone :
U.S EPA I.D No : TXCESQG
State I.D : CESQG **SIC Code**

SECTION 2: Billing Information

Company : CKG Services Conroe
Address : 7420 Honea Egypt Road
City, State, Zip : Montgomery TX 77316
Contact : Zac or Dave **Title :**
Phone No : (936) 483-3662 **Fax :** (936) 756-1226

SECTION 3: General Description of the Waste

Name of Waste : Oily Debris

Detailed Description of the Process Generating Waste:

debris collected from construction site clean-up containing water, dirt, and oil

Physical State : ☑ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color : dark **Odor :** hydrocarbon

Specific Gravity (Water=1) : na **Density :** na lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size : 55

Number Of Units : 10

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

EPAHO104000457

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : CESQ4091

Proper U.S. State Waste Code No : Non-RCRA/Non-DOT Regulated Material (oily debris)

Class : na UN/NA : na PG : na RQ : na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	4-10	0 mg/l	0 mg/l	80-90 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
>1500 mg/l	0 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
oil	5-10	%
water	5-10	%
solids(oil, dirt, sand, debris)	80-90	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
none- generator knowledge

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : X
TCLP Volatiles : X
TCLP Semi-Volatiles : X
Reactivity : X

EPAHO104000458

Corrosivity : X

Ignitability : X

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ YES ☑ NO

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Metals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

EPAHO104000459

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego
☑ Oils Subcatego
☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : [signature] **Date :** 4/14/09

Printed Name / Title : Zac McKaughn / Agent for

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer : Prabhakar Thangudu [signature]

Date : 4-16-09 **Status :** (Approved) Rejected

Approval Number :

Process Facility Information :

$40/drum solid
$45/dm sludge
$65/dm liquid

EPAHO104000460

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$140/solid
$45/sludge
$65/liquid

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

None

4. Special Testing Requirements:

None.

5. Treatment and Handling Protocol:

Class I Landfill, if not fit to go to HPP

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3277
Balfour Beatty

EPAHO10400463

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/20/2009**

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3277

Expiration Date 4/20/2011

Generator: Balfour Beatty
Address: 2334 Franz Rd
Katy, TX 77993

Waste Information

Name of Waste: Grease
TCEQ Waste Code #: CESQ4891
Container Type:
Detailed Description of Process Generating Waste:
used and unused grease from greasing equipment
Color: dark **Odor:** none **pH:** 7
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
na

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM
05

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Balfour Beatty
Address : 2334 Franz Rd
City, State, Zip : Katy TX 77993
Contact : Zac Title :
Phone No : (281) 541-4829 Fax :
24 / HR Phone :
U.S EPA I.D No : TXCESQG
State I.D : CESQG SIC Code na

SECTION 2: Billing Information

Company : CKG Services Conroe
Address : 7420 Honea Egypt Road
City, State, Zip : Montgomery TX 77316
Contact : Zac or Dave Title :
Phone No : (936) 483-3662 Fax : (936) 756-1226

SECTION 3: General Description of the Waste

Name of Waste : Grease

Detailed Description of the Process Generating Waste:

Used and unused grease from greasing equipment

Physical State : ☐ Liquid ☐ Sludge ☐ Powder
☑ Solid ☐ Filter Cake ☐ Combination

Color : dark Odor : none

Specific Gravity (Water=1) : 1 Density : 8 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2835 2836 2841 2842 2843 2844 2851
2861 2865 2869 2873 2874 2876 2879 2891 2892 2893 2896 2899 2911 3312 4953 4959 9511

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size : 55

Number Of Units : 5

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

EPAHO104000465

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : CESQ4891

Proper U.S. State Waste Code No : non-RCRA/Non DOT regulated waste grease

Class : na UN/NA : na PG : na RQ : na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	7	0 mg/l	0 mg/l	0 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
>1500 mg/l	0 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Grease	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

na

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

na

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

na

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals :

TCLP Volatiles : x

TCLP Semi-Volatiles : x

Reactivity : x

EPAHO104000466

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ YES ☑ NO

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

EPAHO104000467

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : _____ **Date :** 4/14/09

Printed Name / Title : Zac McKaughn /

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Process Facility Information : $45/dm

Compliance Officer : Prabhakar Thangudu

Date : 4-16-09 **Status :** (Approved) Rejected

Approval Number :

EPAHO104000468

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$45/dm

2. Contamination Limit (maximum limit before surchages apply):

if non conforming to profile

3. Surcharge Pricing:

None

4. Special Testing Requirements:

None

5. Treatment and Handling Protocol:

Class I sludge box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3278
Balfour Beatty

EPAHO10400471

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/20/2009**

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3278

Expiration Date 4/20/2011

Generator: Balfour Beatty
Address: 2334 Franz Rd
Katy, TX 77993

Waste Information

Name of Waste: Diesel
TCEQ Waste Code #: recycle
Container Type:
Detailed Description of Process Generating Waste:
used diesel from equipment
Color: clear **Odor:** hydrocarbon **pH:** na
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

Rec

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Balfour Beatty
Address : 2334 Franz Rd
City, State, Zip : Katy TX 77993
Contact : Zac Title :
Phone No : (281) 541-4829 Fax :
24 / HR Phone :
U.S EPA I.D No : TXCESQG
State I.D : CESQG SIC Code na

SECTION 2: Billing Information

Company : CKG Services Conroe
Address : 7420 Honea Egypt Road
City, State, Zip : Montgomery TX 77316
Contact : Zac or Dave Title :
Phone No : (936) 483-3662 Fax : (936) 756-1226

SECTION 3: General Description of the Waste

Name of Waste : Diesel

Detailed Description of the Process Generating Waste:

Used diesel from equipment

Physical State : ☑ Liquid ☐ Sludge ☐ Powder
☐ Solid ☐ Filter Cake ☐ Combination

Color : clear Odor : hydrocarbon

Specific Gravity (Water=1) : .7-.8 Density : 7-8 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☐ No

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843	2844	2851
2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911	3312	4953	4959	9511

Layers : ☑ Single-Phas ☐ Multi-Phase

Container Type : ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Container Size : 55

Number Of Units : 15

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is It: ☐ D001 ☐ D002 ☐ D003

EPAHO104000473

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : Recycle

Proper U.S. State Waste Code No : UN1993, Waste flammable liquids, n.o.s., 3, PG III

Class : 3 UN/NA : 1993 PG : III RQ : na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>140	na	0 mg/l	0 mg/l	0 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
na mg/l	na mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
diesel	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

std

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.

none

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x

TCLP Volatiles : x

TCLP Semi-Volatiles : x

Reactivity : x

EPAHO104000474

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ YES ☑ NO

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

EPAHO104000475

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : _____ **Date :** 4/14/09

Printed Name / Title : Zac McKaughn /

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer : Prabhakar Thangudu

Date : 4-16-09 **Status :** Approved Rejected

Approval Number : _____

Process Facility Information :

EPAHO104000476

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

Free if DIESEL is good, $45 if diesel is dirty or has water

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

Chlor-d-tect, Flash, %water, % solids

5. Treatment and Handling Protocol:

remove water, add to black oil

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Fuel

3279

Borden Milk Products c/o
Milstead Environmental. LLC

EPAHO104000479

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/22/2009**

Dear **James Wilson**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3279

Expiration Date 4/22/2011

Generator: Borden Milk Products c/o Milstead Environmental, LLC
Address: 900 E Semands
Spring, TX 77386

Waste Information

Name of Waste: Water contaminatedwith milk, tea, and orange juice
TCEQ Waste Code #: SPIL1192
Container Type:
Detailed Description of Process Generating Waste:
waste generated processing of products
Color: varies **Odor:** sour **pH:** na
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

OL DB/MM

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Borden Milk Products C/O Milstead Environmental, LLC
Address: 900 E Semands
City: Conroe **State:** Texas **Zip:** 77301
Contact: Kimberly White **Title:** Agent
Phone Number: 281-367-3535 **Fax Number:** 281-419-4492
24/hr Phone Number: 800-838-9707
US EPA ID No: N/A
State ID No: N/A **SIC Code:** 2020

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Milstead Environmental, LLC
Address: 29707 W Hawthorne
City: Spring **State:** Texas **Zip:** 77386
Contact: Kimberly White **Title:** Administration
Phone Number: 281-367-3515 **Fax Number:** 281-419-4492

SECTION 3: General Description of the Waste

Name of Waste: Water contaminated with milk, tea and orange juice
Detailed Description of Process Generating Waste:

Waste generated from processing of products

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Multi **Odor:** Sour

Specific Gravity (water=1): 1 **Density:** 8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Frequency: ☑ Weekly ☐ Monthly ☐ Yearly ☐ One-Time
Quantity: 6000

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

N/A

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: SPIL1192

Proper US DOT Shipping Name: Non DOT Regulated (Water contaminated with milk, tea and orange juice)

Class: II **UN/NA:** N/A **PG:** N/A **RQ:** N/A

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		N/A		N/A	mg/l	N/A	mg/l	>5	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
Trace	mg/l	N/A	mg/l	N/A	mg/l	N/A	mg/l	N/A	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	75-80%	
Milk, Tea, Orange Juice	10-15%	
Solids	0-5%	

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

N/A

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

***Metals Subcategory*: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

***Oils Subcategory*: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☑ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☑ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Kimberly White **Date:** 4/21/09

Printed Name/Title: Kimberly White, agent

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Barbara Heyden

Date: 4-21-09 ☑ Approved ☐ Rejected

Approval Number: HOU-3279

CES Environmental Services, Inc.

GENERATOR KNOWLEDGE DOCUMENTATION FOR DISPOSAL OF SPECIAL/INDUSTRIAL WASTE

Generator Name: Borden Milk Products, LLC C/O Milstead Environmental, LLC

Waste Identification: Water contaminated with milk, tea and orange juice

Waste code # SPIL1192

Description of process generating this waste:

Waste generated during the processing of the products

Ignitability: N/A

Corrosivity: N/A

Reactivity: N/A

Toxicity: N/A

This information is, to the best of my knowledge, true, accurate and complete.

Kimberly White
Generator Signature

4/21/09
Date

agent
Title

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

.22/gal if treatable at CES
If has to go to System 1 .25/gal plus solid surcharges over 2%

2. **Contamination Limits (maximum limit before surcharges apply):**

Not conforming or not treatable

3. **Surcharge Pricing:**

.25/gal plus solid surcharges

4. **Special Testing Requirements:**

TOC, % solids, PH

5. **Treatment and Handling Protocol:**

Hopefully-treat at CES waste water . If odor is an issue, please do not even try to treat it here at CES.
If treatment not possible, system 1 to Newpark .

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☒ Subcategory C

EPAHO104000486

7. **Tests for Product Recovered/Recycled (if applicable):**

Na

8. **Management for Product Recovered/Recycled (if applicable);**

Na

3280
TAPCO Enpro (Market)

EPAHO10400488

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/22/2009**

Dear **Ron Kohler**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3280

Expiration Date 4/22/2011

Generator: Tapco Enpro (Market)
Address: 16315 Market Street
Channelview, TX 77530

Waste Information

Name of Waste: Carbon Steel dust
TCEQ Waste Code #: CESQ3072
Container Type:
Detailed Description of Process Generating Waste:
captured in drums by vacuum from metal cutting operation
Color: brown **Odor:** hydrocarbon **pH:** 3-11.5
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

15 JB|AL

SECTION 1: Generator Information

Company: Tapco Engrg
Address: 16315 Market St.
City: Channelview State: TX. Zip: 77530
Contact: SKIP Allen Title: Environmental Mgr.
Phone Number: 832-729-5822 Fax Number:
24/hr Phone Number:
US EPA ID No: C25Q
State ID No: C25Q SIC Code:

SECTION 2: Billing Information - ☐ Same as Above

Company: Select Environmtl
Address: 723 mcKay Dr.
City: Hou. State: TX. Zip: 77029
Contact: Kevin White Title: Sales
Phone Number: 281-960-3967 Fax Number: 713-255-1761

SECTION 3: General Description of the Waste

Name of Waste: Carbon Steel Dust
Detailed Description of Process Generating Waste:

Captured in drums by vacuum from metal cutting operation

Physical State: ☐ Liquid ☐ Sludge ☐ Powder
☒ Solid ☐ Filter Cake ☐ Combination

Color: Brown Odor: Hydrocarbon

Specific Gravity (water=1): Density: lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 4

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ3072

Proper US DOT Shipping Name: NON RCRA Non DOT Regulated Material
Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>150 F	3-11.5	0 mg/l	0 mg/l	100 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
0 mg/l	NA mg/l	NA mg/l	NA mg/l	NA mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Dust Particles		100%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

_____

_____

_____

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. _____

_____

_____

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

_____

_____

_____

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: _____
TCLP Volatiles: _____
TCLP Semi-Volatiles: _____
Reactivity: _____
Corrosivity: _____
Ignitability: _____

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☑ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☑ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☑ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Steve Allen **Date:** 4-11-09

Printed Name/Title: Steve Allen

[redacted] (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Barbara Thyer
Date: 4-22-09 ☑ Approved ☐ Rejected
Approval Number: 3280

Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536
Phone: (281)-476-4534 Fax: (281)-476-4406

Select Environmental
223 McCarty Dr.
Houston, TX 77044

Phone: (713) 672-4500
Fax: (713) 255-1761

Attn: **Kevin White**

- CERTIFICATE OF RESULTS -

MES Lab#: 9040131

Client Sample ID: Tapco (Dust)
Extended ID: Prj: Tapco Expo (Dust), Channelview

Sample Collect Date: 4/8/2009 **Sample Type:** Grab
Sample Receipt Date: 4/8/2009 @ 3:00:00 PM

Test Group / Method

BTEX Method: SW-846 8021B	MDL	Result	Units	Analyst: HDG Date / Time
Benzene	0.5	< 0.5	mg/kg	4/12/2009 / 12:30 AM
Toluene	0.5	< 0.5	mg/kg	4/12/2009 / 12:30 AM
Ethyl benzene	0.5	< 0.5	mg/kg	4/12/2009 / 12:30 AM
M+P-Xylene	0.5	< 0.5	mg/kg	4/12/2009 / 12:30 AM
o-Xylene	0.5	< 0.5	mg/kg	4/12/2009 / 12:30 AM

Total Petroleum Hydrocarbons Solid Method: TNRCC 1005	MDL	Result	Units	Analyst: HDG Date / Time
C6 - C12 Hydrocarbons	4	< 4	mg/kg	4/11/2009 / 8:18 PM
>C12 - C28 Hydrocarbons	8	**145**	**mg/kg**	4/11/2009 / 8:18 PM
>C28 - C36 Hydrocarbons	8	< 8	mg/kg	4/11/2009 / 8:18 PM
Total TPH	20	**145**	**mg/kg**	4/11/2009 / 8:18 PM

TCLP Metals (8) Method: SW-846 6010B	MDL	RL	Result	Units	Analyst: JCA Date / Time
Arsenic	0.014	5	< 0.014	mg/L	4/14/2009 / 12:13 PM
Barium	0.0005	100	**0.151**	**mg/L**	4/14/2009 / 12:13 PM
Cadmium	0.002	1	< 0.002	mg/L	4/14/2009 / 12:13 PM
Chromium	0.002	5	**0.603**	**mg/L**	4/14/2009 / 12:13 PM
Lead	0.005	5	< 0.005	mg/L	4/14/2009 / 12:13 PM
Selenium	0.024	1	< 0.024	mg/L	4/14/2009 / 12:13 PM
Silver	0.002	5	< 0.002	mg/L	4/14/2009 / 12:13 PM

TCLP Mercury Method: SW-846 7470A	MDL	RL	Result	Units	Analyst: JCA Date / Time
Mercury	0.0002	0.2	< 0.0002	mg/L	4/14/2009 / 12:00 PM

EPAHO104000494

- CERTIFICATE OF RESULTS -

MES Lab#: 9040131

Client Sample ID: Tapco (Dust)
Extended ID: Prj: Tapco Expo (Dust), Channelview

Sample Collect Date: 4/8/2009 **Sample Type:** Grab
Sample Receipt Date: 4/8/2009 @ 3:00:00 PM

Reactivity, Recoverable Hydrogen Cyanide Method: 7.3.3.2	MDL	Result	Units	Analyst: HDG Date / Time
Hydrogen Cyanide	0.25	< 0.25	mg/kg	4/13/2009 / 9:20 AM

Reactivity, Recoverable Hydrogen Sulfide Method: 7.3.4.2	MDL	Result	Units	Analyst: JL Date / Time
Hydrogen Sulfide	0.25	**1.00**	mg/kg	4/15/2009 / 4:00 PM

Corrosivity: pH Method: SW-846 9045	MDL	Result	Units	Analyst: DB Date / Time
pH		**4.81**		4/9/2009 / 12:25 PM

Ignitability Method: SW-846 1010	MDL	Result	Units	Analyst: DB Date / Time
Flashpoint		**>150**	deg F	4/9/2009 / 1:25 PM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit

John Keller, Ph.D., Lab Director

Thursday, April 16, 2009
Date

EPAHO104000495

SAMPLE: 9040131 DATE: April 16, 2009

MERCURY ENVIRON LABS
QA/QC REPORT

SURROGATE SPIKE RECOVERY FOR BTEX	% REC
Dibromofluoromethane	89
Toluene-d8	97
4-Bromofluorobenzene	104

ANALYTES	MB mg/kg	CCV %REC	MS %REC	MSD %REC	RPD
TPH C6-C12	<4	106	104	109	4
TPH C12-C28	<8	89	87	94	8

ANALYTE	MB mg/L	LCS %REC	LCSD %REC	RPD	CCB mg/L	CCV %REC	MS %REC	MSD %REC	RPD
Arsenic	< 0.002	89	90	1	< 0.002	94	92	95	3
Barium	< 0.002	90	92	2	< 0.002	97	94	95	1
Cadmium	< 0.001	91	92	1	< 0.001	95	94	95	1
Chromium	< 0.001	90	91	1	< 0.001	97	93	94	1
Lead	< 0.002	89	90	1	< 0.002	97	95	93	2
Mercury	< 0.0002	100	100	0	< 0.0002	100	100	100	0
Selenium	< 0.010	90	91	1	<0.010	97	94	99	5
Silver	< 0.002	87	88	1	< 0.002	96	90	91	1

ANALYTE	MB mg/L	CCV %REC	LCS %REC	LCSD %REC	RPD	ORIG %REC	DUP %REC	RPD
CYANIDE	< 0.005	97	95	95	0	<0.005	<0.005	0

ANALYTE	MB mg/L	STD %REC	ORIG mg/kg	DUP mg/kg	RPD
Reactivity as Hydrogen Sulfide	< 0.25	98	0	0	0

ANALYTE	BUFFER 7	ORIG	DUP	RPD
pH	7.01	5.74	5.74	0

ANALYTE	STD	DUP	RPD
Flashpoint (F)	82 F	82	0

Key to QA Abbreviations
MS=Matrix Spike
RPD=Relative Percent Deviation
LCS=Laboratory Control Standard
CCB=Continuing Calibration Blank
MDL=Minimum Detection Limit
MSD=Matrix Spike Duplicate
MB=Method Blank
CCV=Continuing Calibration Verification
%Rec=Percent Recovery
RL=Regulatory Limit

Signature: John Keller
John Keller, Ph.D. / Laboratory Director

CHAIN OF CUSTODY & ANALYSIS REQUEST

Page 1 of 1

RGURY ENVIRON LABORATORIES, LLC.
3 Hwy. 225, Deer Park, TX 77536
1) 476-4534 / (800) 771-4637
c (281) 476-4408 / After Hours: (281) 844-2308
nail: mesenv@aol.com

Results To:	Kevin White
Company:	Select Environmental
Address:	
City	State: Zip:
Phone:	
Fax:	
e-Mail:	

Invoice To:	Fred Blankenship
Company:	
Address:	
City:	State: Zip:
Phone:	
Fax:	
e-Mail:	

TAT - WORKING DAYS: (7) 3 2 1 ASAP

[1] Matrix Key
W:Water WW:Waste Water
S:Solid SO:Soil O:Oil SL:Sludge
SE:Sediment WI:Wipe
O:Oil OR:Organic OT:Other

[2] Container Type Key
P:Plastic G:Glass V:VOA O:Other

[3] Preservation Key
1:Ice(<5oC) 2:HCl 3:H2SO4
4:HNO3 5:NaOH
6:NaOH+Zn Acetate 7:Na2S2O3
8:NONE

NOTES:

ect Name: Tapco Enpro (Dust)

ect Location: Channelview

ect No:

Quote#:

	A	B	C	D	E	F	G	H	I	J	K	L	M
[2] Container Type:	P												
Container ID:	A	B	C	D	E	F	G	H	I	J	K	L	M
[3] Preservation:	1												
Volume:	2002												

PARAMETERS FOR ANALYSIS

IEL USE ONLY (LAB NO.)		YOUR SAMPLE ID.	DATE/TIME SAMPLED	[1] MATRIX	GRAB/COMP.	BTEX	TPH	RCRA 8 Metals	RCI									IF SPECIAL DETECTION LIMITS REQUIRED DETAIL BELOW:
1040131	1)	Tapco (Dust)	4-8-09	So	G	✓	✓	✓	✓									
	2)																	
	3)																	
	4)																	
	5)																	
	6)																	on ice
	7)																	1°
	8)																	
	9)																	
	10)																	

Inquished By (Sign):	Print Name:	Company:	Date:	Time:	Received By (Sign):	Print Name:	Company:	Date:	Time:
mpler) [signature]	Kevin White	Select Environmental	4-8-09	2:30	Ronda Hargrave		MEL	4-8-09	15:00
Inquished By (Sign):	Print Name:	Company:	Date:	Time:	Received By (Sign):	Print Name:	Company:	Date:	Time:
Inquished By (Sign):	Print Name:	Company:	Date:	Time:	Received By (Sign):	Print Name:	Company:	Date:	Time:

te: Delivery of samples constitutes acceptance of terms and conditions in the Price Schedule.

EPAHO104000497

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$45 PER DRUM

2. Contamination Limit (maximum limit before surchages apply):

NO FREE LIQUIDS

3. Surcharge Pricing:

$50 PER DRUM TOTAL IF LIQUIDS ARE PRESENT

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

BULK IN CLASS 2 SOLIDS BOX

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3281
Midway Machine

EPAHO104000500

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/22/2009**

Dear **Ron Kohler**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3281

Expiration Date 4/17/2011

Generator: Midway Machine
Address: 701 Orgeon
South Houston, TX 77587

Waste Information

Name of Waste: Honing Sludge
TCEQ Waste Code #: CESQ6031
Container Type:
Detailed Description of Process Generating Waste:
Honing sludge from metal working operation
Color: Black **Odor:** Hydrocarbon **pH:** 2-11.5
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

OSL JB/AL

SECTION 1: Generator Information

Company: Midway Machine
Address: 701 Oregon
City: South Houston State: Tx Zip: 77587
Contact: John Mai Title: Owner
Phone Number: 713-947-6100 Fax Number:
24/hr Phone Number: SAME
US EPA ID No: 69SQ
State ID No: CESQ SIC Code:

SECTION 2: Billing Information - ☐ Same as Above

Company: Select Environmental
Address: 223 Mcarty Dr.
City: Hou. State: Tx. Zip: 77029
Contact: Kevin White Title: Sales
Phone Number: 713-675-7376 Fax Number: 713-355-1761

SECTION 3: General Description of the Waste

Name of Waste: Honing Sludge
Detailed Description of Process Generating Waste:

Honing Sludge from metal working operation

Physical State: ☐ Liquid ☐ Sludge ☐ Powder
☒ Solid ☐ Filter Cake ☐ Combination

Color: Black Odor: Hydrocarbon

Specific Gravity (water=1): _____ Density: _____ lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☒ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☒ Monthly ☐ Yearly ☐ One-Time
Quantity: 2-drums

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☒ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ 6031

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material
Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>150	2-11.5	0 mg/l	0 mg/l	80 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
>1500 mg/l	70000 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	CONCENTRATOIN Ranges are acceptable	UNITS or %
oil		20%
sludges		80%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Std PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

Analytical

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: _____
TCLP Volatiles: _____
TCLP Semi-Volatiles: _____
Reactivity: _____
Corrosivity: _____
Ignitability: _____

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☑ Spent electroplating baths and/or sludges
- ☑ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☑ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: J. Mc [illegible] **Date:** 4-17-09

Printed Name/Title: J. Mc

[redacted] (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [illegible]
Date: 4-22-09 ☑ Approved ☐ Rejected
Approval Number: 3281

Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536
Phone: (281)-476-4534 Fax: (281)-476-4406

Select Environmental
223 McCarty Dr.
Houston, TX 77044

Phone: (713) 672-4500
Fax: (713) 255-1761

Attn: **Kevin White**

- CERTIFICATE OF RESULTS -

MES Lab#: 9040130
Client Sample ID: Midway Sludge
Extended ID: Prj: Midway Machine (Sludge), South Houston

Sample Collect Date: 4/8/2009 **Sample Type:** Grab
Sample Receipt Date: 4/8/2009 @ 3:00:00 PM

Test Group / Method

BTEX Method: SW-846 8021B	MDL	Result	Units	Analyst: HDG Date / Time
Benzene	0.5	< 0.5	mg/kg	4/12/2009 / 1:05 AM
Toluene	0.5	< 0.5	mg/kg	4/12/2009 / 1:05 AM
Ethyl benzene	0.5	< 0.5	mg/kg	4/12/2009 / 1:05 AM
M+P-Xylene	0.5	< 0.5	mg/kg	4/12/2009 / 1:05 AM
o-Xylene	0.5	< 0.5	mg/kg	4/12/2009 / 1:05 AM

Total Petroleum Hydrocarbons Solid Method: TNRCC 1005	MDL	Result	Units	Analyst: HDG Date / Time
C6 - C12 Hydrocarbons	400	< 400	mg/kg	4/11/2009 / 9:05 PM
>C12 - C28 Hydrocarbons	800	**218000**	mg/kg	4/11/2009 / 9:05 PM
>C28 - C36 Hydrocarbons	800	< 800	mg/kg	4/11/2009 / 9:05 PM
Total TPH	2000	**218000**	mg/kg	4/11/2009 / 9:05 PM

TCLP Metals (8) Method: SW-846 6010B	MDL	RL	Result	Units	Analyst: JCA Date / Time
Arsenic	0.014	5	< 0.014	mg/L	4/14/2009 / 12:18 PM
Barium	0.0005	100	**0.0840**	mg/L	4/14/2009 / 12:18 PM
Cadmium	0.002	1	**0.043**	mg/L	4/14/2009 / 12:18 PM
Chromium	0.002	5	**0.242**	mg/L	4/14/2009 / 12:18 PM
Lead	0.005	5	< 0.005	mg/L	4/14/2009 / 12:18 PM
Selenium	0.024	1	< 0.024	mg/L	4/14/2009 / 12:18 PM
Silver	0.002	5	< 0.002	mg/L	4/14/2009 / 12:18 PM

TCLP Mercury Method: SW-846 7470A	MDL	RL	Result	Units	Analyst: JCA Date / Time
Mercury	0.0002	0.2	< 0.0002	mg/L	4/14/2009 / 12:00 PM

EPAHO104000506

- CERTIFICATE OF RESULTS -

MES Lab#: 9040130

Client Sample ID: Midway Sludge
Extended ID: Prj: Midway Machine (Sludge), South Houston

Sample Collect Date: 4/8/2009 **Sample Type:** Grab
Sample Receipt Date: 4/8/2009 @ 3:00:00 PM

Reactivity, Recoverable Hydrogen Cyanide Method: 7.3.3.2	MDL	Result	Units	Analyst: HDG Date / Time
Hydrogen Cyanide	0.25	< 0.25	mg/kg	4/13/2009 / 9:20 AM

Reactivity, Recoverable Hydrogen Sulfide Method: 7.3.4.2	MDL	Result	Units	Analyst: JL Date / Time
Hydrogen Sulfide	0.25	< 0.25	mg/kg	4/15/2009 / 4:00 PM

Corrosivity: pH Method: SW-846 9045	MDL	Result	Units	Analyst: DB Date / Time
pH		4.74		4/9/2009 / 12:25 PM

Ignitability Method: SW-846 1010	MDL	Result	Units	Analyst: DB Date / Time
Flashpoint		>150	deg F	4/9/2009 / 1:20 PM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit

John Keller, Ph.D., Lab Director

Thursday, April 16, 2009
Date

EPAHO104000507

SAMPLE: 9040130 DATE: April 16, 2009

MERCURY ENVIRON LABS
QA/QC REPORT

SURROGATE SPIKE RECOVERY FOR BTEX	% REC
Dibromofluoromethane	90
Toluene-d8	96
4-Bromofluorobenzene	102

ANALYTES	MB mg/kg	CCV %REC	MS %REC	MSD %REC	RPD
TPH C6-C12	<4	106	104	109	4
TPH C12-C28	<8	89	87	94	8

ANALYTE	MB mg/L	LCS %REC	LCSD %REC	RPD	CCB mg/L	CCV %REC	MS %REC	MSD %REC	RPD
Arsenic	< 0.002	89	90	1	< 0.002	94	92	95	3
Barium	< 0.002	90	92	2	< 0.002	97	94	95	1
Cadmium	< 0.001	91	92	1	< 0.001	95	94	95	1
Chromium	< 0.001	90	91	1	< 0.001	97	93	94	1
Lead	< 0.002	89	90	1	< 0.002	97	95	93	2
Mercury	< 0.0002	100	100	0	< 0.0002	100	100	100	0
Selenium	< 0.010	90	91	1	<0.010	97	94	99	5
Silver	< 0.002	87	88	1	< 0.002	98	90	91	1

ANALYTE	MB mg/L	CCV %REC	LCS %REC	LCSD %REC	RPD	ORIG %REC	DUP %REC	RPD
CYANIDE	< 0.005	97	95	95	0	<0.005	<0.005	0

ANALYTE	MB mg/L	STD %REC	ORIG mg/kg	DUP mg/kg	RPD
Reactivity as Hydrogen Sulfide	< 0.25	98	0	0	0

ANALYTE	BUFFER 7	ORIG	DUP	RPD
pH	7.01	5.74	5.74	0

ANALYTE	STD	DUP	RPD
Flashpoint (F)	82 F	82	0

Key to QA Abbreviations
MS=Matrix Spike
RPD=Relative Percent Deviation
LCS=Laboratory Control Standard
CCB=Continuing Calibration Blank
MDL=Minimum Detection Limit
MSD=Matrix Spike Duplicate
MB=Method Blank
CCV=Continuing Calibration Verification
%Rec=Percent Recovery
RL=Regulatory Limit

Signature: _____
John Keller, Ph.D. / Laboratory Director

CHAIN OF CUSTODY & ANALYSIS REQUEST

Page 1 of 1

ERCURY ENVIRON LABORATORIES, LLC.
13 Hwy. 225, Deer Park, TX 77536
81) 476-4534 / (800) 771-4637
x: (281) 476-4406 / After Hours: (281) 844-2308
mail: mesenv@aol.com

Results To: Kevin White	Invoice To: Fred Blankenship
Company: Select Environmental	Company:
Address: 225 N Cody Dr.	Address:
City: Houston State: Tx. Zip: 77025	City: State: Zip:
Phone: 713-675-7376	Phone:
Fax: 713-255-1761	Fax:
e-Mail:	e-Mail:

TAT - WORKING DAYS: 7 | 3 | 2 | 1 | ASAP

Matrix Key: W:Water WW:Waste Water S:Solid SO:Soil O:Oil SL:Sludge SE:Sediment WI:Wipe O:Oil OR:Organic OT:Other

Container Type Key: P:Plastic G:Glass V:VOA O:Other

Preservation Key: 1:Ice(<6oC) 2:HCl 3:H2SO4 4:HNO3 5:NaOH 6:NaOH+Zn Acetate 7:Na2S2O3 8:NONE

NOTES:

Project Name: Midway Machine (Sludge)

Project Location: South Houston

Project No:

#: Quote#:

	A	B	C	D	E	F	G	H	I	J	K	L	M
Container Type:	P												
Container ID:	A	B	C	D	E	F	G	H	I	J	K	L	M
Preservation:	1												
Volume:	200z												

PARAMETERS FOR ANALYSIS

MEL USE ONLY (LAB NO.)		YOUR SAMPLE ID.	DATE/TIME SAMPLED	MATRIX	GRAB/COMP.	BTEX	TPH	RCRA 8 Metals	RCI										IF SPECIAL DETECTION LIMITS REQUIRED DETAIL BELOW
9040130	1)	Midway Sludge	4-8-09	SL	G	/	/	/	/										
	2)																		
	3)																		
	4)																		
	5)																		on ice
	6)																		1°
	7)																		
	8)																		
	9)																		
	10)																		

Relinquished By (Sign):	Print Name:	Company:	Date:	Time:	Received By (Sign):	Print Name:	Company:	Date:	Time:
(Sampler) [signature]	Kevin White	Select Env.	4-8-09	3:00pm	Ronda Hargrave		MEL	4-8-09	3:00 pm
Relinquished By (Sign):	Print Name:	Company:	Date:	Time:	Received By (Sign):	Print Name:	Company:	Date:	Time:
Relinquished By (Sign):	Print Name:	Company:	Date:	Time:	Received By (Sign):	Print Name:	Company:	Date:	Time:

Note: Delivery of samples constitutes acceptance of terms and conditions in the Price Schedule.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$60 Drum

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Bulk in Class 1 Sludge Box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3282

Port of Houston Authority

EPAHO10400512

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/22/2009**

Dear **Steve Senulis**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3282

Expiration Date 4/22/2011

Generator: Port of Houston Authority
Address: 111 East Loop North
Houston, TX 77029-4327

Waste Information

Name of Waste: Lead Acid Batteries
TCEQ Waste Code #: UNIV309H
Container Type:
Detailed Description of Process Generating Waste:
Spent batteries
Color: varies **Odor:** none **pH:** <2
Physical State:
Incompatibilities: OXIDIZERS, BASIS
Safety Related Data/Special Handling:
LEVEL C

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3282

GB
JR

UNIV

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1460	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Port of Houston - Turning Basin Terminal
Address: 7300 Clinton Drive
City: Houston **State:** TX **Zip:** 77029
Contact: Steve Senulis **Title:** Equipment Shop Lead Man
Phone Number: 713-670-2889 **Fax Number:** 713.670.2923
24/hr Phone Number:
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Port of Houston Authority
Address: P.O. Box 2562
City: Houston **State:** TX **Zip:** 77029-4327
Contact: Roxana Herrera **Title:**
Phone Number: 713-670-2814 **Fax Number:** 713-670-2427

SECTION 3: General Description of the Waste

Name of Waste: Lead Acid batteries
Detailed Description of Process Generating Waste

Spent batteries

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Varies **Odor:** none

Specific Gravity (water=1): 1.5 **Density:** 12 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☑ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 3 pallets

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☑ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: UNIV309H

Proper US DOT Shipping Name: Batteries, wet filled with acid
Class: 8 UN/NA: UN2794 PG: III RQ: N/A

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	<2	BRL mg/l	BRL mg/l	80-100 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
<1500 mg/l	<1500 mg/l	BRL mg/l	BRL mg/l	BRL mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Lead Acid Batteries	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level C

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. None

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Oxidizers, Bases

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Universal D008, D002
TCLP Volatiles:	Not Regulated
TCLP Semi-Volatiles:	Not Regulated
Reactivity:	Non-Reactive
Corrosivity:	<2
Ignitability:	>200 degrees

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

***Metals Subcategory*: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

***Oils Subcategory*: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: R H **Date:** 4-22-09

Printed Name/Title: ROXANA HERRERA, PROGRAM COORDINATOR

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:
Date: 4-22-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$0.50 / LB, $70 / HR

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

RECYCLE

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3283
zach system corp.
(laporte)

EPAHO10400520

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Material / Product Approval Letter

Date **4/22/2009**

Dear **Ronald Smith**

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3283

Expiration Date 4/22/2011

Producer: ZaCh System Corp. (La Porte)
Address: 914 South 16th Street
La Porte, TX 77571

Material / Product Information

Name of Material / Product Solvent Product
Container Type:

Detailed Description of Process Generating or Producing the Material / Product:
Solvent from production of pharmaceutical chemicals (z - valine)

Color: clear to yellow **Odor:** hydrocarbon **pH:** 4.91-10
Physical State:
Incompatibilities: see MSDS
Safety Related Data/Special Handling:
See MSDS

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Product

JB/AC

CES Environmental Services, Inc.

☒ CES Environmental Services – Houston Facility
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☐ CES Environmental Services – Port Arthur Facility
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	Zach Systems Corp. (La Porte)		
Address:	914 South 16th street		
City, State, Zip:	La Porte, TX 77571		
Contact:	Ron Smith	**Title:**	
Phone No:	(713) 725-7499	**Fax No:**	(281) 867-1734
24/hr Phone:			
U.S. EPA I.D. No:	TXR000079062		
State I.D.	88429	**SIC Code:**	na

SECTION 2: Billing Information – ☒ Same as Above

Company:			
Address:			
City, State, Zip:			
Contact:		**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Solvent product
Detailed Description of Process Generating or Producing the Material / Product: Solvent from production of pharmaceutical chemiclas (z-valine)

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: clear to yellow **Odor:** hydrocarbon

Specific Gravity (water=1): <1 **Density:** <8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type:	☐	Drum	☐	Tote	☒	Truck	☐ Other (explain)
Container Size:						5500 gal	

Frequency: ☒ Weekly ☐ Monthly ☐ Quarterly ☐ Yearly
Number of Units (containers): 1 **Other:**

Proper U.S. DOT Shipping Name: Product Flammable Liquids, Toxic, n.o.s.

Class: 3, 6.1 **UN/NA:** UN1992 **PG:** II **RQ:** 1000

EPAHO104000522

Flash Point	pH	N/A	N/A	Solids
<73	3-10			0%

Oil&Grease	TOC	Zinc	Copper	Nickel
namg/l	namg/l	namg/l	namg/l	namg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Ethyl Benzene	0-20	%
Xylene	0-95	%
Toluene	0-95	%
Tetrahydrofuran	0-20	%
C7-C8 (Heptane /Toluene)	0-95	%
See Attached table (Minor components table)		

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
see msds

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
msds

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
see msds

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: [signature] **Date:** 4/20/09

Printed Name/Title: Ronald E. Smith, CSP / EHS Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [signature] Date: 4-22-09 Approved Rejected Approval Number: 3283	

Minor COMPONETS TABLE	Concentration	Units
The material consist of the following materials	Ranges are acceptable	Or %
~~C7 – C8 Aliphatics (Heptane / Toluene)~~	~~0-95~~	%
Ethyl Alcohol	0-5	%
Benzyl Chloride	0-2	%
Acetic Acid	<1	%
Methanol	0-2	%
Isopropanol	0-2	%
NVR (non volatile residue)	<2.5	%
Others (100-Reported components)	<5	%
Water	< .1	%

Signature

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

INSIDE SALES: THIS MATERIAL WILL BE SOLD AS PRODUCT. PLEASE NOTIFY PRODUCT SALES
We pay $0.15 / gal for this material (F.O.B. Zach)

2. **Contamination Limits (maximum limit before surcharges apply):**

This material should be mixed aromatic and aliphatic hydrocarbons; major componets should be xylene toluene, heptanes. if the water is greater than one percent contact inside sales immediately. do not accept load if greater than 1 % water.

* we cannot drain water, filter, etc. as this would constitute processing.

3. **Surcharge Pricing:**

Na

4. **Special Testing Requirements:**

Notify product sales person tha this material is scheduled to arrive for sample visual inspection!! May not be used for fuels. must be used as restricted light ends. PLEASE TEST AND RECORD IN THE PRODUCT LOG BOOK TH E NUMBER OF PHASES. THE COLOR (CLEAR, YELLOW, ETC.) THE SPECIFIC GRAVITY, SOLIDS AND THE pH. THE PH MUST BE GREATER THAN 4.9) RECORD THESE IN THE LOG BOOK. CREATE AN INBOUND. IF THE WATER IS MORE THAN 1 % WATER CONTACT INSIDE SALES because we will not be accepting this load. Note color and suspended solids in the inbound

5. **Treatment and Handling Protocol:**

INSIDE SALES: THIS MATERIAL WILL BE SOLD AS A PRODUCT (Restricted light ends). PLEASE NOTIFY PRODUCT SALES.

Sales Rep and product sales will work together to track production and consequent chemical composition to determine marketability into available markets.

6. **Treated Wastewater Discharge Subcategory:**

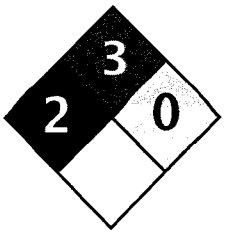
☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104000525

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable);**

ScienceLab.com
Chemicals & Laboratory Equipment



Health	2
Fire	3
Reactivity	0
Personal Protection	H

Material Safety Data Sheet
Ethylbenzene MSDS

Section 1: Chemical Product and Company Identification

Product Name: Ethylbenzene

Catalog Codes: SLE2044

CAS#: 100-41-4

RTECS: DA0700000

TSCA: TSCA 8(b) inventory: Ethylbenzene

CI#: Not available.

Synonym: Ethyl Benzene; Ethylbenzol; Phenylethane

Chemical Name: Ethylbenzene

Chemical Formula: C8H10

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Ethylbenzene	100-41-4	100

Toxicological Data on Ingredients: Ethylbenzene: ORAL (LD50): Acute: 3500 mg/kg [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, permeator).

Potential Chronic Health Effects:
Slightly hazardous in case of skin contact (irritant, sensitizer).
CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC.
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
The substance may be toxic to central nervous system (CNS).
Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

EPAHO104000527

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek medical attention.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 432°C (809.6°F)

Flash Points:
CLOSED CUP: 15°C (59°F). (Tagliabue.) OPEN CUP: 26.667°C (80°F) (Cleveland) (CHRIS, 2001)
CLOSED CUP: 12.8 C (55 F) (Bingham et al, 2001; NIOSH, 2001)
CLOSED CUP: 21 C (70 F) (NFPA)

Flammable Limits: LOWER: 0.8% - 1.6%UPPER: 6.7% - 7%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances: Highly flammable in presence of open flames and sparks, of heat.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.
Slightly explosive in presence of heat.

Fire Fighting Media and Instructions:
Flammable liquid, soluble or dispersed in water.
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use alcohol foam, water spray or fog.

Special Remarks on Fire Hazards:
Vapor may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. When heated to decomposition it emits acrid smoke and irritating fumes.

Special Remarks on Explosion Hazards: Vapors may form explosive mixtures in air.

Section 6: Accidental Release Measures

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Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Large Spill:
Flammable liquid.
Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

Storage:
Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Sensitive to light. Store in light-resistant containers.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 100 STEL: 125 (ppm) from OSHA (PEL) [United States]
TWA: 435 STEL: 545 from OSHA (PEL) [United States]
TWA: 435 STEL: 545 (mg/m3) from NIOSH [United States]
TWA: 100 STEL: 125 (ppm) from NIOSH [United States]
TWA: 100 STEL: 125 (ppm) from ACGIH (TLV) [United States]
TWA: 100 STEL: 125 (ppm) [United Kingdom (UK)]
TWA: 100 STEL: 125 (ppm) [Belgium]
TWA: 100 STEL: 125 (ppm) [Finland]
TWA: 50 (ppm) [Norway]
Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Sweetish. Gasoline-like. Aromatic.

Taste: Not available.

Molecular Weight: 106.16 g/mole

Color: Colorless.

pH (1% soln/water): Not available.

Boiling Point: 136°C (276.8°F)

Melting Point: -94.9 (-138.8°F)

Critical Temperature: 617.15°C (1142.9°F)

Specific Gravity: 0.867 (Water = 1)

Vapor Pressure: 0.9 kPa (@ 20°C)

Vapor Density: 3.66 (Air = 1)

Volatility: 100% (v/v).

Odor Threshold: 140 ppm

Water/Oil Dist. Coeff.: The product is more soluble in oil; log(oil/water) = 3.1

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, diethyl ether.

Solubility:
Easily soluble in diethyl ether.
Very slightly soluble in cold water or practically insoluble in water.
Soluble in all proportions in Ethyl alcohol.
Soluble in Carbon tetrachloride, Benzene.
Insoluble in Ammonia.
Slightly soluble in Chloroform.
Solubility in Water: 169 mg/l @ 25 deg. C.; 0.014 g/100 ml @ 15 deg. C.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, ingnition sources (flames, sparks, static), incompatible materials, light

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Not considered to be corrosive for metals and glass.

Special Remarks on Reactivity:
Can react vigorously with oxidizing materials.
Sensitive to light.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Inhalation.

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Toxicity to Animals: Acute oral toxicity (LD50): 3500 mg/kg [Rat].

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC.
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.
May cause damage to the following organs: central nervous system (CNS).

Other Toxic Effects on Humans:
Hazardous in case of ingestion, of inhalation.
Slightly hazardous in case of skin contact (irritant, permeator).

Special Remarks on Toxicity to Animals:
Lethal Dose/Conc 50% Kill:
LD50 [Rabbit] - Route: Skin; Dose: 17800 ul/kg
Lowest Published Lethal Dose/Conc:
LDL[Rat] - Route: Inhalation (vapor); Dose: 4000 ppm/4 H

Special Remarks on Chronic Effects on Humans:
May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data.
May cause cancer based on animals data. IARC evidence for carcinogenicity in animals is sufficient. IARC evidence of carcinogenicity in humans inadequate.
May affect genetic material (mutagenic).

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects:
Skin: Can cause mild skin irritation. It can be absorbed through intact skin.
Eyes: Contact with vapor or liquid can cause severe eye irritation depending on concentration. It may also cause conjunctivitis. At a vapor exposure level of 85 - 200 ppm , it is mildly and transiently irritating to the eyes; 1000 ppm causes further irritation and tearing; 2000 ppm results in immediate and severe irritation and tearing; 5,000 ppm is intolerable (ACGIH, 1991; Clayton and Clayton, 1994). Standard draize test for eye irritation using 500 mg resulted in severe irritation (RTECS)
Inhalation: Exposure to high concentrations can cause nasal, mucous membrane and respiratory tract irritation and can also result in chest constriction and, trouble breathing, respiratory failure, and even death. It can also affect behavior/Central Nervous System. The effective dose for CNS depression in experimental animals was 10,000 ppm (ACGIH, 1991). Symptoms of CNS depression include headache, nausea, weakness, dizziness, vertigo, irritability, fatigue, lightheadedness, sleepiness, tremor, loss of coordination, judgement and conciousness, coma, and death. It can also cause pulmonary edema. Inhalation of 85 ppm can produce fatigue, insomnia, headache, and mild irritation of the respiratory tract (Haley & Berndt, 1987).
Ingestion: Do not drink, pipet or siphon by mouth. May cause gastroinestinal/digestive tract irritation with Abdominal pain, nausea, vomiting. Ethylbenzene is a pulmonary aspiration hazard. Pulmonary aspiration of even small amounts of the liquid may cause fatal pneumonitis. It may also affect behavior/central nervous system with

Section 12: Ecological Information

Ecotoxicity:
Ecotoxicity in water (LC50): 14 mg/l 96 hours [Fish (Trout)] (static). 12.1 mg/l 96 hours [Fish (Fathead Minnow)] (flow-through)]. 150 mg/l 96 hours [Fish (Blue Gill/Sunfish)] (static). 275 mg/l 96 hours [Fish (Sheepshead Minnow)]. 42.3 mg/l 96 hours [Fish (Fathead Minnow)](soft water). 87.6mg/l 96 hours [Shrimp].

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: CLASS 3: Flammable liquid.

Identification: : Ethylbenzene UNNA: 1175 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
Connecticut hazardous material survey.: Ethylbenzene
Illinois toxic substances disclosure to employee act: Ethylbenzene
Illinois chemical safety act: Ethylbenzene
New York release reporting list: Ethylbenzene
Rhode Island RTK hazardous substances: Ethylbenzene
Pennsylvania RTK: Ethylbenzene
Minnesota: Ethylbenzene
Massachusetts RTK: Ethylbenzene
Massachusetts spill list: Ethylbenzene
New Jersey: Ethylbenzene
New Jersey spill list: Ethylbenzene
Louisiana spill reporting: Ethylbenzene
California Director's List of Hazardous Substances: Ethylbenzene
TSCA 8(b) inventory: Ethylbenzene
TSCA 4(a) proposed test rules: Ethylbenzene
TSCA 8(d) H and S data reporting: Ethylbenzene: Effective Date: 6/19/87; Sunset Date: 6/19/97
SARA 313 toxic chemical notification and release reporting: Ethylbenzene

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada):
CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
CLASSE D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):
R11- Highly flammable.
R20- Harmful by inhalation.
S16- Keep away from sources of ignition - No smoking.
S24/25- Avoid contact with skin and eyes.
S29- Do not empty into drains.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 3

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 3

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves.
Lab coat.
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Splash goggles.

Section 16: Other Information

References:
-Manufacturer's Material Safety Data Sheet.
-Fire Protection Guide to Hazardous Materials, 13th ed., National Fire Protection Association (NFPA)
-Registry of Toxic Effects of Chemical Substances (RTECS)
-Chemical Hazard Response Information System (CHRIS)
-Hazardous Substance Data Bank (HSDB)
-New Jersey Hazardous Substance Fact Sheet
-Ariel Global View
-Reprotext System

Other Special Considerations: Not available.

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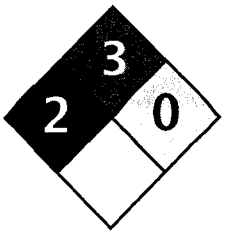

Health	2
Fire	3
Reactivity	0
Personal Protection	H

Material Safety Data Sheet
p-Xylene MSDS

Section 1: Chemical Product and Company Identification

Product Name: p-Xylene

Catalog Codes: SLX1120

CAS#: 106-42-3

RTECS: ZE2625000

TSCA: TSCA 8(b) inventory: p-Xylene

CI#: Not applicable.

Synonym: p-Methyltoluene

Chemical Name: 1,4-Dimethylbenzene

Chemical Formula: C6H4(CH3)2

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
{p-}Xylene	106-42-3	100

Toxicological Data on Ingredients: p-Xylene: ORAL (LD50): Acute: 5000 mg/kg [Rat.]. DERMAL (LD50): Acute: 12400 mg/kg [Rabbit.]. VAPOR (LC50): Acute: 4550 ppm 4 hour(s) [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:
Very hazardous in case of skin contact (irritant), of eye contact (irritant). Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects:
Hazardous in case of skin contact (irritant), of eye contact (irritant).
Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation.
CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
The substance is toxic to blood, kidneys, the nervous system, liver.
Repeated or prolonged exposure to the substance can produce target organs damage.

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Section 4: First Aid Measures

Eye Contact: Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.

Skin Contact:
After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation: Not available.

Ingestion:
Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 527°C (980.6°F)

Flash Points: CLOSED CUP: 25°C (77°F). OPEN CUP: 28.9°C (84°F) (Cleveland).

Flammable Limits: LOWER: 1.1% UPPER: 7%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances: Highly flammable in presence of open flames and sparks, of heat.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
Flammable liquid, insoluble in water.
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

Special Remarks on Fire Hazards:
Explosive in the form of vapor when exposed to heat or flame. Vapor may travel considerable distance to source of ignition and flash back. When heated to decomposition it emits acrid smoke and irritating fumes.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Large Spill:
Toxic flammable liquid, insoluble or very slightly soluble in water.
Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapour/spray. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes Keep away from incompatibles such as oxidizing agents.

Storage:
Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. A refrigerated room would be preferable for materials with a flash point lower than 37.8°C (100°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 100 STEL: 150 (ppm) from ACGIH (TLV)
TWA: 434 STEL: 651 (mg/m3) from ACGIHConsult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid. (Liquid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 106.17 g/mole

Color: Colorless.

pH (1% soln/water): Not applicable.

Boiling Point: 138°C (280.4°F)

Melting Point: 12°C (53.6°F)

Critical Temperature: Not available.

Specific Gravity: 0.86 (Water = 1)

Vapor Pressure: 9 mm of Hg (@ 20°C)

Vapor Density: 3.7 (Air = 1)

Volatility: Not available.

Odor Threshold: 0.62 ppm

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, methanol, diethyl ether.

Solubility:
Easily soluble in methanol, diethyl ether.
Insoluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: No.

Section 11: Toxicological Information

Routes of Entry: Eye contact.

Toxicity to Animals:
WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.
Acute oral toxicity (LD50): 5000 mg/kg [Rat.].
Acute dermal toxicity (LD50): 12400 mg/kg [Rabbit.].
Acute toxicity of the vapor (LC50): 4550 ppm 4 hour(s) [Rat].

Chronic Effects on Humans: The substance is toxic to blood, kidneys, the nervous system, liver.

Other Toxic Effects on Humans:
Very hazardous in case of skin contact (irritant).
Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:

0347 Animal: embryotoxic, foetotoxic, passes through the placental barrier.
0900 Detected in maternal milk in human.
Narcotic effect; may cause nervous system disturbances.

Special Remarks on other Toxic Effects on Humans: Material is irritating to mucous membranes and upper respiratory tract.

Section 12: Ecological Information

Ecotoxicity: *Not available.*

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification: Class 3: Flammable liquid.

Identification: : Xylene : UN1307 PG: III

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
Pennsylvania RTK: p-Xylene
Florida: p-Xylene
Massachusetts RTK: p-Xylene
New Jersey: p-Xylene
TSCA 8(b) inventory: p-Xylene
SARA 313 toxic chemical notification and release reporting: p-Xylene
CERCLA: Hazardous substances.: p-Xylene

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):
CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):
R10- Flammable.
R38- Irritating to skin.
R41- Risk of serious damage to eyes.
R48/20- Harmful: danger of serious

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damage to health by prolonged exposure through inhalation.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 3

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 3

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves.
Lab coat.
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Splash goggles.

Section 16: Other Information

References:
-Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987.
-Material safety data sheet emitted by: la Commission de la SantÃ© et de la SÃ©curitÃ© du Travail du QuÃ©bec.
-SAX, N.I. Dangerous Properties of Indutrial Materials. Toronto, Van Nostrand Reinold, 6e ed. 1984.
-The Sigma-Aldrich Library of Chemical Safety Data, Edition II.
-Guide de la loi et du rÃ¨glement sur le transport des marchandises dangeureuses au canada. Centre de conformitÃ© internatinal LtÃ©e. 1986.

Other Special Considerations: Not available.

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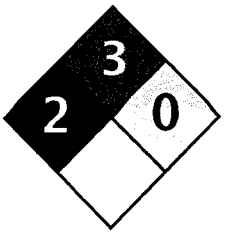

Health	2
Fire	3
Reactivity	0
Personal Protection	H

Material Safety Data Sheet
Toluene MSDS

Section 1: Chemical Product and Company Identification

Product Name: Toluene

Catalog Codes: SLT2857, SLT3277

CAS#: 108-88-3

RTECS: XS5250000

TSCA: TSCA 8(b) inventory: Toluene

CI#: Not available.

Synonym: Toluol, Tolu-Sol; Methylbenzene; Methacide; Phenylmethane; Methylbenzol

Chemical Name: Toluene

Chemical Formula: C6-H5-CH3 or C7-H8

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Toluene	108-88-3	100

Toxicological Data on Ingredients: Toluene: ORAL (LD50): Acute: 636 mg/kg [Rat]. DERMAL (LD50): Acute: 14100 mg/kg [Rabbit]. VAPOR (LC50): Acute: 49000 mg/m 4 hours [Rat]. 440 ppm 24 hours [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
The substance may be toxic to blood, kidneys, the nervous system, liver, brain, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

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Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek medical attention.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 480°C (896°F)

Flash Points: CLOSED CUP: 4.4444°C (40°F). (Setaflash) OPEN CUP: 16°C (60.8°F).

Flammable Limits: LOWER: 1.1% UPPER: 7.1%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:
Flammable in presence of open flames and sparks, of heat.
Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
Flammable liquid, insoluble in water.
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray or fog.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards:
Toluene forms explosive reaction with 1,3-dichloro-5,5-dimethyl-2,4-imidazolididione; dinitrogen tetraoxide;

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concentrated nitric acid, sulfuric acid + nitric acid; N2O4; AgClO4; BrF3; Uranium hexafluoride; sulfur dichloride. Also forms an explosive mixture with tetranitromethane.

Section 6: Accidental Release Measures

Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Large Spill:
Toxic flammable liquid, insoluble or very slightly soluble in water.
Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage:
Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 200 STEL: 500 CEIL: 300 (ppm) from OSHA (PEL) [United States]
TWA: 50 (ppm) from ACGIH (TLV) [United States] SKIN
TWA: 100 STEL: 150 from NIOSH [United States]
TWA: 375 STEL: 560 (mg/m3) from NIOSH [United States]
Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Sweet, pungent, Benzene-like.

Taste: Not available.

EPAHO104000542

Molecular Weight: 92.14 g/mole

Color: Colorless.

pH (1% soln/water): Not applicable.

Boiling Point: 110.6°C (231.1°F)

Melting Point: -95°C (-139°F)

Critical Temperature: 318.6°C (605.5°F)

Specific Gravity: 0.8636 (Water = 1)

Vapor Pressure: 3.8 kPa (@ 25°C)

Vapor Density: 3.1 (Air = 1)

Volatility: Not available.

Odor Threshold: 1.6 ppm

Water/Oil Dist. Coeff.: The product is more soluble in oil; log(oil/water) = 2.7

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, diethyl ether, acetone.

Solubility:
Soluble in diethyl ether, acetone.
Practically insoluble in cold water.
Soluble in ethanol, benzene, chloroform, glacial acetic acid, carbon disulfide.
Solubility in water: 0.561 g/l @ 25 deg. C.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, ignition sources (flames, sparks, static), incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:
Incompatible with strong oxidizers, silver perchlorate, sodium difluoride, Tetranitromethane, Uranium Hexafluoride.
Frozen Bromine Trifluoride reacts violently with Toluene at -80 deg. C.
Reacts chemically with nitrogen oxides, or halogens to form nitrotoluene, nitrobenzene, and nitrophenol and halogenated products, respectively.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

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Toxicity to Animals:
WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.
Acute oral toxicity (LD50): 636 mg/kg [Rat].
Acute dermal toxicity (LD50): 14100 mg/kg [Rabbit].
Acute toxicity of the vapor (LC50): 440 24 hours [Mouse].

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC.
May cause damage to the following organs: blood, kidneys, the nervous system, liver, brain, central nervous system (CNS).

Other Toxic Effects on Humans:
Hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Slightly hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals:
Lowest Published Lethal Dose:
LDL [Human] - Route: Oral; Dose: 50 mg/kg
LCL [Rabbit] - Route: Inhalation; Dose: 55000 ppm/40min

Special Remarks on Chronic Effects on Humans:
Detected in maternal milk in human. Passes through the placental barrier in human. Embryotoxic and/or foetotoxic in animal. May cause adverse reproductive effects and birth defects (teratogenic). May affect genetic material (mutagenic)

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects:
Skin: Causes mild to moderate skin irritation. It can be absorbed to some extent through the skin.
Eyes: Cauess mild to moderate eye irritation with a burning sensation. Splash contact with eyes also causes conjunctivitis, blepharospasm, corneal edema, corneal abraisons. This usually resolves in 2 days.
Inhalation: Inhalation of vapor may cause respiratory tract irritation causing coughing and wheezing, and nasal discharge. Inhalation of high concentrations may affect behavior and cause central nervous system effects characterized by nausea, headache, dizziness, tremors, restlessness, lightheadedness, exhilaration, memory loss, insomnia, impaired reaction time, drowsiness, ataxia, hallucinations, somnolence, muscle contraction or spasticity, unconsciousness and coma. Inhalation of high concentration of vapor may also affect the cardiovascular system (rapid heart beat, heart palpitations, increased or decreased blood pressure, dysrhythmia,), respiration (acute pulmonary edema, respiratory depression, apnea, asphyxia), cause vision disturbances and dilated pupils, and cause loss of appetite.
Ingestion: Aspiration hazard. Aspiration of Toluene into the lungs may cause chemical pneumonitis. May cause irritation of the digestive tract with nausea, vomiting, pain. May have effects similar to that of acute inhalation.
Chronic Potential Health Effects:
Inhalation and Ingestion: Prolonged or repeated exposure via inhalation may cause central nervous system and cardiovascular symptoms similar to that of acute inhalation and ingestion as well liver damage/failure, kidney damage/failure (with hematuria, proteinuria, oliguria, renal tubular acidosis), brain damage, weight loss, blood (pigmented or nucleated red blood cells, changes in white blood cell count), bone marrow changes, electrolyte imbalances (Hypokalemia, Hypophostatemia), severe, muscle weakness and Rhabdomyolysis.
Skin: Repeated or prolonged skin contact may cause defatting dermatitis.

Section 12: Ecological Information

Ecotoxicity:
Ecotoxicity in water (LC50): 313 mg/l 48 hours [Daphnia (daphnia)]. 17 mg/l 24 hours [Fish (Blue Gill)]. 13 mg/l 96 hours [Fish (Blue Gill)]. 56 mg/l 24 hours [Fish (Fathead minnow)]. 34 mg/l 96 hours [Fish (Fathead minnow)]. 56.8 ppm any hours [Fish (Goldfish)].

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may

arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: CLASS 3: Flammable liquid.

Identification: : Toluene UNNA: 1294 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Toluene
California prop. 65 (no significant risk level): Toluene: 7 mg/day (value)
California prop. 65 (acceptable daily intake level): Toluene: 7 mg/day (value)
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Toluene
Connecticut hazardous material survey.: Toluene
Illinois toxic substances disclosure to employee act: Toluene
Illinois chemical safety act: Toluene
New York release reporting list: Toluene
Rhode Island RTK hazardous substances: Toluene
Pennsylvania RTK: Toluene
Florida: Toluene
Minnesota: Toluene
Michigan critical material: Toluene
Massachusetts RTK: Toluene
Massachusetts spill list: Toluene
New Jersey: Toluene
New Jersey spill list: Toluene
Louisiana spill reporting: Toluene
California Director's List of Hazardous Substances.: Toluene
TSCA 8(b) inventory: Toluene
TSCA 8(d) H and S data reporting: Toluene: Effective date: 10/04/82; Sunset Date: 10/0/92
SARA 313 toxic chemical notification and release reporting: Toluene
CERCLA: Hazardous substances.: Toluene: 1000 lbs. (453.6 kg)

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada):
CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):
R11- Highly flammable.
R20- Harmful by inhalation.
S16- Keep away from sources of ignition - No smoking.
S25- Avoid contact with eyes.
S29- Do not empty into drains.
S33- Take precautionary measures against static discharges.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 3

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 3

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves.
Lab coat.
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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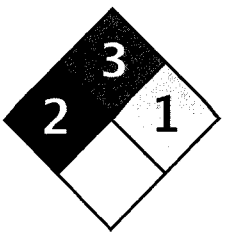

Health	2
Fire	3
Reactivity	0
Personal Protection	H

Material Safety Data Sheet
Tetrahydrofuran MSDS

Section 1: Chemical Product and Company Identification

Product Name: Tetrahydrofuran

Catalog Codes: SLT3136, SLT2254

CAS#: 109-99-9

RTECS: LU5950000

TSCA: TSCA 8(b) inventory: Tetrahydrofuran

CI#: Not available.

Synonym: Tetrahydrofuran stabilized with BHT; THF; Butylene Oxide; Cyclotetramethylene oxide; 1,4-Epoxybutane

Chemical Name: Tetrahydrofuran

Chemical Formula: C4H8O

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Tetrahydrofuran	109-99-9	100

Toxicological Data on Ingredients: Tetrahydrofuran: ORAL (LD50): Acute: 1650 mg/kg [Rat]. VAPOR (LC50): Acute: 21000 mg/m 3 hours [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of skin contact (irritant), of eye contact (irritant). Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
The substance may be toxic to blood, kidneys, lungs, liver, upper respiratory tract, skin, eyes, central nervous system (CNS).

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Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate *medical attention.*

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek medical attention.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 321°C (609.8°F)

Flash Points: CLOSED CUP: -14.5°C (5.9°F). OPEN CUP: -20°C (-4°F).

Flammable Limits: LOWER: 2% UPPER: 11.8%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:
Highly flammable in presence of open flames and sparks, of heat.
Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Explosive in presence of open flames and sparks, of heat.

Fire Fighting Media and Instructions:
Flammable liquid, soluble or dispersed in water.
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use alcohol foam, water spray or fog.

Special Remarks on Fire Hazards: Vapor may travel considerable distance to source of ignition and flash back. May form

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explosive mixtures with air.

Special Remarks on Explosion Hazards:
Reacts explosively with lithium-aluminum alloys, and Sodium Aluminum Hydride, Potassium hydroxide, Calcium Hydride.
It is normally stable, however, prolonged storage, and exposure to air and light may cause formation of unstable explosive peroxides especially when anhydrous and unless it is inhibited against peroxide formation.
Explosive in the form of vapor when exposed to heat or flame.

Section 6: Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill:
Flammable liquid.
Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage:
Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).
Prolonged exposure to air and light may form unstable explosive peroxides unless it is inhibited against peroxide formation

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 590 STEL: 737 (mg/m3) from ACGIH (TLV) [United States] Inhalation
TWA: 200 STEL: 250 (ppm) from ACGIH (TLV) [United States] Inhalation
TWA: 590 STEL: 735 (mg/m3) from NIOSH [United States] Inhalation
TWA: 200 STEL: 250 (ppm) from NIOSH [United States] Inhalation
TWA: 200 STEL: 250 (ppm) from OSHA (PEL) [United States] Inhalation

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TWA: 590 STEL: 735 (mg/m3) from OSHA (PEL) [United States] Inhalation
TWA: 100 STEL: 200 (ppm) [United Kingdom (UK)] Inhalation
TWA: 300 STEL: 599 (mg/m3) [United Kingdom (UK)] Inhalation3
Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Ethereal. Fruity.

Taste: Pungent.

Molecular Weight: 72.11 g/mole

Color: Colorless.

pH (1% soln/water): Not available.

Boiling Point: 65°C (149°F) @ 760 mm Hg

Melting Point: -108.3°C (-162.9°F)

Critical Temperature: 267°C (512.6°F)

Specific Gravity: 0.8892 (Water = 1)

Vapor Pressure: 19.3 kPa (@ 20°C)

Vapor Density: 2.5 (Air = 1)

Volatility: 100% (v/v).

Odor Threshold: 20 ppm - 50 ppm

Water/Oil Dist. Coeff.: The product is more soluble in oil; log(oil/water) = 0.5

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, diethyl ether, acetone.

Solubility:
Easily soluble in diethyl ether, acetone.
Partially soluble in cold water.
Solubility in water is 30%.
Miscible with alcohols, ketones, esters, hydrocarbons, and ethers.
Very soluble in benzene, ethanol, and chloroform.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, ignition sources (sparks, flames), light, air, and incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:
Reacts violently with Bromine.
Addition of anhydrous chlorides (hafnium tetrachloride, titanium tetrachloride, and zirconium tetrachloride) directly to tetrahydrofuran will cause a violent exothermic reaction.
Also incompatible with Calcium Hydride + heat, caustics (e.g. ammonia, ammonium hydroxide, calcium hyroxide, potassium hydroxide, sodium hydroxide), metal halides, moisture, lithium tetrahydroaluminate, borane, 2-aminophenol + potassium dioxide, sodium tetrahydroaluminate, and 2-aminophenol.
Prolonged exposure to air and light may form unstable peroxides especially when anhydrous and unless it is inhibited against peroxide formation.

Special Remarks on Corrosivity: It will attack some forms of plastics, rubber, coatings.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact.

Toxicity to Animals:
WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.
Acute oral toxicity (LD50): 1650 mg/kg [Rat].
Acute toxicity of the vapor (LC50): 24000 mg/m3 2 hours [Mouse].

Chronic Effects on Humans:
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.
May cause damage to the following organs: blood, kidneys, lungs, liver, upper respiratory tract, skin, eyes, central nervous system (CNS).

Other Toxic Effects on Humans:
Hazardous in case of skin contact (irritant).
Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:
It is excreted in mother's milk.
May cause cancer based on animal data. No human data found at this point.
May cause adverse reproductive effects (fetotoxicity) based on animal data. No human data found at this point.
May affect genetic material.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects:
Skin: Causes skin irritation. May be absorbed through skin and cause symptoms similar those of inhalation and ingestion.
Eyes: Contact with eyes may cause severe irritation with possible eye burns. Vapors may cause eye irritation.
Inhalation: May cause upper respiratory tract (nose, throat) irriation. High concentrations may affect behavior/central nervous system (central nervous system depression/effects characterized by headache, general anesthetic, dizziness, somnolence, muscle weakness, loss of conciousness, and coma), respiration (respiratory stimulation, dyspnea), and gastrointestinal tract (nausea, vomiting).
Ingestion: May cause gastrointestinal irritation with nausea, vomiting, and diarrhea, abdominal pain. May also affect the liver and behavior/central nervous system with symptoms similar to inhalation.
Chronic Potential Health Effects:
Skin: Prolonged or repeated skin contact may cause defatting and dermatitis.
Eyes: Prolonged or repeated eye contact may cause conjunctivitis.
Inhalation: Prolonged or repeated exposure to vapors may affect the liver, kidneys, muculosketal system, endrocrine system (spleen and thymus), blood, cardiovascular system, thymus, spleen, and lungs (lung damage).
Ingestion: Prolonged or repeated exposure from ingestion may affect the blood, and metabolism.

Section 12: Ecological Information

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Ecotoxicity: Ecotoxicity in water (LC50): 2160 mg/l 96 hours [Fish (Fathead Minnow)].

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: CLASS 3: Flammable liquid.

Identification: : Tetrahydrofuran UNNA: 2056 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
Connecticut hazardous material survey.: Tetrahydrofuran
Illinois toxic substances disclosure to employee act: Tetrahydrofuran
Illinois chemical safety act: Tetrahydrofuran
New York release reporting list: Tetrahydrofuran
Rhode Island RTK hazardous substances: Tetrahydrofuran
Pennsylvania RTK: Tetrahydrofuran
Minnesota: Tetrahydrofuran
Massachusetts RTK: Tetrahydrofuran
Massachusetts spill list: Tetrahydrofuran
New Jersey: Tetrahydrofuran
New Jersey spill list: Tetrahydrofuran
Louisiana spill reporting: Tetrahydrofuran
California Director's List of Hazardous Substances: Tetrahydrofuran
TSCA 8(b) inventory: Tetrahydrofuran
TSCA 4(a) proposed test rules: Tetrahydrofuran
TSCA 8(a) PAIR: Tetrahydrofuran
TSCA 8(a) IUR: Tetrahydrofuran
TSCA 8(d) H and S data reporting: Tetrahydrofuran: effective data: 3/11/94; sunset date: 6/30/98
CERCLA: Hazardous substances.: Tetrahydrofuran: 1000 lbs. (453.6 kg)

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada):
CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
CLASS D-2B: Material causing other toxic effects (TOXIC).

EPAHO104000552

DSCL (EEC):
R11- Highly flammable.
R19- May form explosive peroxides.
R36/37- Irritating to eyes and respiratory system.
S16- Keep away from sources of ignition - No smoking.
S29- Do not empty into drains.
S33- Take precautionary measures against static discharges.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 3

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 3

Reactivity: 1

Specific hazard:

Protective Equipment:
Gloves.
Lab coat.
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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Last Updated: 11/06/2008 12:00 PM

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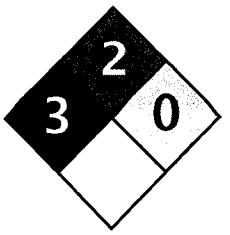

Health	3
Fire	2
Reactivity	0
Personal Protection	H

Material Safety Data Sheet
Acetic acid MSDS

Section 1: Chemical Product and Company Identification

Product Name: Acetic acid

Catalog Codes: SLA3784, SLA1438, SLA2101, SLA3604, SLA1258

CAS#: 64-19-7

RTECS: AF1225000

TSCA: TSCA 8(b) inventory: Acetic acid

CI#: Not applicable.

Synonym: Acetic acid; glacial acetic acid

Chemical Name: Acetic Acid, Glacial

Chemical Formula: C2-H4-O2

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Acetic acid	64-19-7	100

Toxicological Data on Ingredients: Acetic acid: ORAL (LD50): Acute: 3310 mg/kg [Rat]. 4960 mg/kg [Mouse]. 3530 mg/kg [Rat]. DERMAL (LD50): Acute: 1060 mg/kg [Rabbit]. VAPOR (LC50): Acute: 5620 ppm 1 hours [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:
Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects:
Hazardous in case of skin contact (irritant), of ingestion, of inhalation.
CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.
TERATOGENIC EFFECTS: Not available.

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DEVELOPMENTAL TOXICITY: Not available.
The substance may be toxic to kidneys, mucous membranes, skin, teeth.
Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 463°C (865.4°F)

Flash Points: CLOSED CUP: 39°C (102.2°F). OPEN CUP: 43°C (109.4°F).

Flammable Limits: LOWER: 4% UPPER: 19.9%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:
Flammable in presence of open flames and sparks, of heat.
Slightly flammable to flammable in presence of oxidizing materials, of metals.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.
Slightly explosive in presence of oxidizing materials.

Fire Fighting Media and Instructions:

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Flammable liquid, soluble or dispersed in water.
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

Special Remarks on Fire Hazards:
Reacts with metals to produces flammable hydrogen gas.
It will ignite on contact with potassium-tert-butoxide.
A mixture of ammonium nitrate and acetic acid ignites when warmed, especially if warmed.

Special Remarks on Explosion Hazards:
Acetic acid vapors may form explosive mixtures with air.
Reactions between acetic acid and the following materials are potentially explosive: 5-azidotetrazole, bromine pentafluoride, chromium trioxide, hydrogen peroxide, potassium permanganate, sodium peroxide, and phorphorus trichloride.
Dilute acetic acid and dilute hydrogen can undergo an exothermic reaction if heated, forming peracetic acid which is explosive at 110 degrees C.
Reaction between chlorine trifluoride and acetic acid is very violent, sometimes explosive.

Section 6: Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.

Large Spill:
Flammable liquid. Corrosive liquid.
Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. If the product is in its solid form: Use a shovel to put the material into a convenient waste disposal container. If the product is in its liquid form: Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Absorb with an inert material and put the spilled material in an appropriate waste disposal. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
\Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, reducing agents, metals, acids, alkalis.

Storage:
Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Synthetic apron. Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

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Gloves (impervious).

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 10 STEL: 15 (ppm) [Australia]
TWA: 25 STEL: 27 (mg/m3) [Australia]
TWA: 10 STEL: 15 (ppm) from NIOSH
TWA: 25 STEL: 37 (mg/m3) from NIOSH
TWA: 10 STEL: 15 (ppm) [Canada]
TWA: 26 STEL: 39 (mg/m3) [Canada]
TWA: 25 STEL: 37 (mg/m3)
TWA: 10 STEL: 15 (ppm) from ACGIH (TLV) [United States] [1999]
TWA: 10 (ppm) from OSHA (PEL) [United States]
TWA: 25 (mg/m3) from OSHA (PEL) [United States]Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Pungent, vinegar-like, sour (Strong.)

Taste: Vinegar, sour (Strong.)

Molecular Weight: 60.05 g/mole

Color: Colorless. Clear (Light.)

pH (1% soln/water): 2 [Acidic.]

Boiling Point: 118.1°C (244.6°F)

Melting Point: 16.6°C (61.9°F)

Critical Temperature: 321.67°C (611°F)

Specific Gravity: 1.049 (Water = 1)

Vapor Pressure: 1.5 kPa (@ 20°C)

Vapor Density: 2.07 (Air = 1)

Volatility: Not available.

Odor Threshold: 0.48 ppm

Water/Oil Dist. Coeff.: The product is more soluble in water; log(oil/water) = -0.2

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, diethyl ether, acetone.

Solubility:
Easily soluble in cold water, hot water.
Soluble in diethyl ether, acetone.
Miscible with Glycerol, alcohol, Benzene, Carbon Tetrachloride.
Practically insoluble in Carbon Disulfide.

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Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, ignition sources, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, reducing agents, metals, acids, alkalis.

Corrosivity:
Highly corrosive in presence of stainless steel(304).
Slightly corrosive in presence of aluminum, of copper.
Non-corrosive in presence of stainless steel(316).

Special Remarks on Reactivity:
Reacts violently with strong oxidizing agents, acetaldehyde, and acetic anhydride. Material can react with metals, strong bases, amines, carbonates, hydroxides, phosphates, many oxides,cyanides, sulfides, chromic acid, nitric acid, hydrogen peroxide, carbonates. ammonium nitrate, ammonium thiosulfate, chlorine trifluoride, chlorosulfonic acid, perchloric acid, permanganates, xylene, oleum, potassium hydroxide, sodium hydroxide, phosphorus isocyanate, ethylenediamine, ethylene imine.

Special Remarks on Corrosivity: Moderate corrosive effect on bronze. No corrosion data on brass

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:
WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.
Acute oral toxicity (LD50): 3310 mg/kg [Rat].
Acute dermal toxicity (LD50): 1060 mg/kg [Rabbit].
Acute toxicity of the vapor (LC50): 5620 1 hours [Mouse].

Chronic Effects on Humans:
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.
May cause damage to the following organs: kidneys, mucous membranes, skin, teeth.

Other Toxic Effects on Humans:
Extremely hazardous in case of inhalation (lung corrosive).
Very hazardous in case of skin contact (irritant), of ingestion, .
Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May affect genetic material and may cause reproductive effects based on animal data. No human data found.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects:
Skin: Extremely irritating and corrosive. Causes skin irritation (reddening and itching, inflammation). May cause blistering , tissue damage and burns.
Eyes: Extremely irritating and corrosive. Causes eye irritation, lacrimation, redness, and pain. May cause burns, blurred vision, conjunctivitis, conjunctival and corneal destruction and permanent injury.
Inhalation: Causes severe respiratory tract irritation. Affects the sense organs (nose, ear, eye, taste), and blood. May cause chemical pneumonitis, bronchitis, and pulmonary edema. Severe exposure may result in lung tissue damage and corrosion (ulceration) of the mucous membranes. Inhalation may also cause rhinitis, sneezing, coughing, oppressive feeling in the chest or chest pain, dyspnea, wheezing, tachypnea, cyanosis, salivation, nausea, giddiness, muscular weakness.

Ingestion: Moderately toxic. Corrosive. Causes gastrointestinal tract irritation (burning and pain of the mouth, throat, and abdomen, coughing, ulceration, bleeding, nausea, abdomial spasms, vomiting, hematemesis, diarrhea. May Also affect the liver (impaired liver function), behavior (convulsions, giddines, muscular weakness), and the urinary system - kidneys (Hematuria, Albuminuria, Nephrosis, acute renal failure, acute tubular necrosis). May also cause dyspnea or asphyxia. May also lead to shock, coma and death.
Chronic Potential Health Effects:
Chronic exposure via ingestion may cause blackening or erosion of the teeth and jaw necrosis, pharyngitis, and gastritis. It may also behavior (similar to acute ingestion), and metabolism (weight loss).
Chronic exposure via inhalation may cause asthma and/or bronchitis with cough, phlegm, and/or shortness of breath . It may also affect the blood (decreased leukocyte count), and urinary system (kidneys).
Repeated or prolonged skin contact may cause thickening, blackening, and cracking of the skin.

Section 12: Ecological Information

Ecotoxicity:
Ecotoxicity in water (LC50): 423 mg/l 24 hours [Fish (Goldfish)]. 88 ppm 96 hours [Fish (fathead minnow)]. 75 ppm 96 hours [Fish (bluegill sunfish)]. >100 ppm 96 hours [Daphnia].

BOD5 and COD: BOD-5: 0.34-0.88 g oxygen/g

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification:
CLASS 3: Flammable liquid.
Class 8: Corrosive material

Identification: : Acetic Acid, Glacial UNNA: 2789 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
New York release reporting list: Acetic acid
Rhode Island RTK hazardous substances: Acetic acid
Pennsylvania RTK: Acetic acid
Florida: Acetic acid
Minnesota: Acetic acid
Massachusetts RTK: Acetic acid
New Jersey: Acetic acid
California Director's List of Hazardous Subtances (8 CCR 339): Acetic acid
TSCA 8(b) inventory: Acetic acid
CERCLA: Hazardous substances.: Acetic acid: 5000 lbs. (2268 kg)

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Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada):
CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
CLASS E: Corrosive liquid.

DSCL (EEC):
R10- Flammable.
R35- Causes severe burns.
S23- Do not breathe gas/fumes/vapour/spray [***]
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 2

Reactivity: 0

Personal Protection: H

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 2

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves (impervious).
Synthetic apron.
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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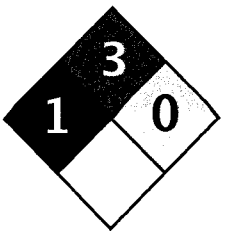

Health	2
Fire	3
Reactivity	0
Personal Protection	H

Material Safety Data Sheet
Isopropyl alcohol MSDS

Section 1: Chemical Product and Company Identification

Product Name: Isopropyl alcohol

Catalog Codes: SLI1153, SLI1579, SLI1906, SLI1246, SLI1432

CAS#: 67-63-0

RTECS: NT8050000

TSCA: TSCA 8(b) inventory: Isopropyl alcohol

CI#: Not available.

Synonym: 2-Propanol

Chemical Name: isopropanol

Chemical Formula: C3-H8-O

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Isopropyl alcohol	67-63-0	100

Toxicological Data on Ingredients: Isopropyl alcohol: ORAL (LD50): Acute: 5045 mg/kg [Rat]. 3600 mg/kg [Mouse]. 6410 mg/kg [Rabbit]. DERMAL (LD50): Acute: 12800 mg/kg [Rabbit].

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, sensitizer, permeator).

Potential Chronic Health Effects:
Slightly hazardous in case of skin contact (sensitizer).
CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE].
The substance may be toxic to kidneys, liver, skin, central nervous system (CNS).
Repeated or prolonged exposure to the substance can produce target organs damage.

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Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:
Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact: Not available.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 399°C (750.2°F)

Flash Points: CLOSED CUP: 11.667°C (53°F) - 12.778 deg. C (55 deg. F) (TAG)

Flammable Limits: LOWER: 2% UPPER: 12.7%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:
Highly flammable in presence of open flames and sparks, of heat.
Flammable in presence of oxidizing materials.
Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Explosive in presence of open flames and sparks, of heat.

Fire Fighting Media and Instructions:
Flammable liquid, soluble or dispersed in water.
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use alcohol foam, water spray or fog.

Special Remarks on Fire Hazards:
Vapor may travel considerable distance to source of ignition and flash back. CAUTION: MAY BURN WITH NEAR INVISIBLE FLAME.
Hydrogen peroxide sharply reduces the autoignition temperature of Isopropyl alcohol.
After a delay, Isopropyl alcohol ignites on contact with dioxgenyl tetrafluorborate, chromium trioxide, and potassium tert-butoxide. When heated to decomposition it emits acrid smoke and fumes.

Special Remarks on Explosion Hazards:
Secondary alcohols are readily autooxidized in contact with oxygen or air, forming ketones and hydrogen peroxide.
It can become potentially explosive.
It reacts with oxygen to form dangerously unstable peroxides which can concentrate and explode during distillation or evaporation. The presence of 2-butanone increases the reaction rate for peroxide formation.
Explosive in the form of vapor when exposed to heat or flame. May form explosive mixtures with air.
Isopropyl alcohol + phosgene forms isopropyl chloroformate and hydrogen chloride.
In the presence of iron salts, thermal decompositon can occur, whicn in some cases can become explosive.
A homogeneous mixture of concentrated peroxides + isopropyl alcohol are capable of detonation by shock or heat.
Barium perchlorate + isopropyl alcohol gives the highly explosive alkyl perchlorates.
It forms explosive mixtures with trinitormethane and hydrogen peroxide.
It produces a violent explosive reaction when heated with aluminum isopropoxide + crotonaldehyde.
Mixtures of isopropyl alcohol + nitroform are explosive.

Section 6: Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill:
Flammable liquid.
Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.

Storage:
Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 983 STEL: 1230 (mg/m3) [Australia]
TWA: 200 STEL: 400 (ppm) from ACGIH (TLV) [United States] [1999]

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TWA: 980 STEL: 1225 (mg/m3) from NIOSH
TWA: 400 STEL: 500 (ppm) from NIOSH
TWA: 400 STEL: 500 (ppm) [United Kingdom (UK)]
TWA: 999 STEL: 1259 (mg/m3) [United Kingdom (UK)]
TWA: 400 STEL: 500 (ppm) from OSHA (PEL) [United States]
TWA: 980 STEL: 1225 (mg/m3) from OSHA (PEL) [United States]Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor:
Pleasant. Odor resembling that of a mixture of
ethanol and acetone.

Taste: Bitter. (Slight.)

Molecular Weight: 60.1 g/mole

Color: Colorless.

pH (1% soln/water): Not available.

Boiling Point: 82.5°C (180.5°F)

Melting Point: -88.5°C (-127.3°F)

Critical Temperature: 235°C (455°F)

Specific Gravity: 0.78505 (Water = 1)

Vapor Pressure: 4.4 kPa (@ 20°C)

Vapor Density: 2.07 (Air = 1)

Volatility: Not available.

Odor Threshold:
22 ppm (Sittig, 1991)
700 ppm for unadapted panelists (Verschuren, 1983).

Water/Oil Dist. Coeff.: The product is equally soluble in oil and water; log(oil/water) = 0.1

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, methanol, diethyl ether, n-octanol, acetone.

Solubility:
Easily soluble in cold water, hot water, methanol, diethyl ether, n-octanol, acetone.
Insoluble in salt solution.
Soluble in benzene.
Miscible with most organic solvents including alcohol, ethyl alcohol, chloroform.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, Ignition sources, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:
Reacts violently with hydrogen + palladium combination, nitroform, oleum, COCl2, aluminum triisopropoxide, oxidants
Incompatible with acetaldehyde, chlorine, ethylene oxide, isocyanates, acids, alkaline earth, alkali metals, caustics, amines, crotonaldehyde, phosgene, ammonia.
Isopropyl alcohol reacts with metallic aluminum at high temperatures.
Isopropyl alcohol attacks some plastics, rubber, and coatings.
Vigorous reaction with sodium dichromate + sulfuric acid.

Special Remarks on Corrosivity: May attack some forms of plastic, rubber and coating

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation.

Toxicity to Animals:
WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.
Acute oral toxicity (LD50): 3600 mg/kg [Mouse].
Acute dermal toxicity (LD50): 12800 mg/kg [Rabbit].
Acute toxicity of the vapor (LC50): 16000 8 hours [Rat].

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC.
DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE].
May cause damage to the following organs: kidneys, liver, skin, central nervous system (CNS).

Other Toxic Effects on Humans:
Hazardous in case of ingestion, of inhalation.
Slightly hazardous in case of skin contact (irritant, sensitizer, permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:
May cause adverse reproductive/teratogenic effects (fertility, fetoxicity, developmental abnormalities(developmental toxin)) based on animal studies.
Detected in maternal milk in human.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects:
Skin: May cause mild skin irritation, and sensitization.
Eyes: Can cause eye irritation.
Inhalation: Breathing in small amounts of this material during normal handling is not likely to cause harmful effects. However, breathing large amounts may be harmful and may affect the respiratory system and mucous membranes (irritation), behavior and brain (Central nervous system depression - headache, dizziness, drowsiness, stupor, incoordination, unconciousness, coma and possible death), peripheral nerve and senstation, blood, urinary system, and liver.
Ingestion: Swallowing small amouts during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. Swallowing large amounts may cause gastrointestinal tract irritation with nausea, vomiting and diarrhea, abdominal pain. It also may affect the urinary system, cardiovascular system, sense organs, behavior or central nervous system (somnolence, generally depressed activity, irritability, headache, dizziness, drowsiness), liver, and respiratory system (breathing difficulty).
Chronic Potential Health Effects:

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May cause defatting of the skin and dermatitis and allergic reaction.
May cause adverse reproductive effects based on animal data (studies).

Section 12: Ecological Information

Ecotoxicity: Ecotoxicity in water (LC50): 100000 mg/l 96 hours [Fathead Minnow]. 64000 mg/l 96 hours [Fathead Minnow].

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: *Not available.*

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: CLASS 3: Flammable liquid.

Identification: : Isopropyl Alcohol UNNA: 1219 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
Connecticut hazardous material survey.: Isopropyl alcohol
Illinois toxic substances disclosure to employee act: Isopropyl alcohol
Rhode Island RTK hazardous substances: Isopropyl alcohol
Pennsylvania RTK: Isopropyl alcohol
Florida: Isopropyl alcohol
Minnesota: Isopropyl alcohol
Massachusetts RTK: Isopropyl alcohol
New Jersey: Isopropyl alcohol
New Jersey spill list: Isopropyl alcohol
Director's list of Hazardous Substances: Isopropyl alcohol
Tennesee: Isopropyl alcohol
TSCA 8(b) inventory: Isopropyl alcohol
TSCA 4(a) final testing order: Isopropyl alcohol
TSCA 8(a) IUR: Isopropyl alcohol
TSCA 8(d) H and S data reporting: Isopropyl alcohol: Effective date: 12/15/86 Sunset Date: 12/15/96
TSCA 12(b) one time export: Isopropyl alcohol
SARA 313 toxic chemical notification and release reporting: Isopropyl alcohol

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

EPAHO104000567

WHMIS (Canada):
CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):
R11- Highly flammable.
R36- Irritating to eyes.
S7- Keep container tightly closed.
S16- Keep away from sources of ignition - No smoking.
S24/25- Avoid contact with skin and eyes.
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 3

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 3

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves.
Lab coat.
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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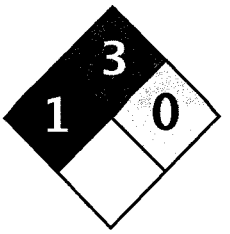

Health	2
Fire	3
Reactivity	0
Personal Protection	H

Material Safety Data Sheet
Methyl alcohol MSDS

Section 1: Chemical Product and Company Identification

Product Name: Methyl alcohol

Catalog Codes: SLM3064, SLM3952

CAS#: 67-56-1

RTECS: PC1400000

TSCA: TSCA 8(b) inventory: Methyl alcohol

CI#: Not applicable.

Synonym: Wood alcohol, Methanol; Methylol; Wood Spirit; Carbinol

Chemical Name: Methanol

Chemical Formula: CH3OH

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Methyl alcohol	67-56-1	100

Toxicological Data on Ingredients: Methyl alcohol: ORAL (LD50): Acute: 5628 mg/kg [Rat]. DERMAL (LD50): Acute: 15800 mg/kg [Rabbit]. VAPOR (LC50): Acute: 64000 ppm 4 hours [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator). Severe over-exposure can result in death.

Potential Chronic Health Effects:
Slightly hazardous in case of skin contact (sensitizer).
CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.
TERATOGENIC EFFECTS: Classified POSSIBLE for human.
DEVELOPMENTAL TOXICITY: Not available.
The substance is toxic to eyes.
The substance may be toxic to blood, kidneys, liver, brain, peripheral nervous system, upper respiratory tract, skin, central nervous system (CNS), optic nerve.

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Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:
If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 464°C (867.2°F)

Flash Points: CLOSED CUP: 12°C (53.6°F). OPEN CUP: 16°C (60.8°F).

Flammable Limits: LOWER: 6% UPPER: 36.5%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:
Highly flammable in presence of open flames and sparks, of heat.
Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Explosive in presence of open flames and sparks, of heat.

Fire Fighting Media and Instructions:
Flammable liquid, soluble or dispersed in water.
SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use alcohol foam, water spray or fog.

Special Remarks on Fire Hazards:
Explosive in the form of vapor when exposed to heat or flame. Vapor may travel considerable distance to source of ignition and flash back. When heated to decomposition, it emits acrid smoke and irritating fumes. CAUTION: MAY BURN WITH NEAR INVISIBLE FLAME

Special Remarks on Explosion Hazards:
Forms an explosive mixture with air due to its low flash point.
Explosive when mixed with Choroform + sodium methoxide and diethyl zinc. It boils violently and explodes.

Section 6: Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill:
Flammable liquid. Poisonous liquid.
Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep locked up.. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, metals, acids.

Storage:
Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 200 from OSHA (PEL) [United States]
TWA: 200 STEL: 250 (ppm) from ACGIH (TLV) [United States] [1999]
STEL: 250 from NIOSH [United States]

TWA: 200 STEL: 250 (ppm) from NIOSH SKIN
TWA: 200 STEL: 250 (ppm) [Canada]
Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Alcohol like. Pungent when crude.

Taste: Not available.

Molecular Weight: 32.04 g/mole

Color: Colorless.

pH (1% soln/water): Not available.

Boiling Point: 64.5°C (148.1°F)

Melting Point: -97.8°C (-144°F)

Critical Temperature: 240°C (464°F)

Specific Gravity: 0.7915 (Water = 1)

Vapor Pressure: 12.3 kPa (@ 20°C)

Vapor Density: 1.11 (Air = 1)

Volatility: Not available.

Odor Threshold: 100 ppm

Water/Oil Dist. Coeff.: The product is more soluble in water; log(oil/water) = -0.8

Ionicity (in Water): Non-ionic.

Dispersion Properties: See solubility in water.

Solubility: Easily soluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, ingnition sources, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, metals, acids.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:
Can react vigorously with oxidizers. Violent reaction with alkyl aluminum salts, acetyl bromide, chloroform + sodium methoxide, chromic anhydride, cyanuirc chlorite, lead perchlorate, phosphorous trioxide, nitric acid. Exothermic reaction with sodium hydroxide + chloroform.
Incompatible with beryllium dihydride, metals (potassium and magnesium), oxidants (barium perchlorate, bromine, sodium hypochlorite, chlorine, hydrogen peroxide), potassium tert-butoxide, carbon tetrachloride, alkali metals,

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metals (aluminum, potassium magnesium, zinc), and dichlormethane.
Rapid autocatalytic dissolution of aluminum, magnesium or zinc in 9:1 methanol + carbon tetrachloride - sufficiently vigorous to be rated as potentially hazardous.
May attack some plastics, rubber, and coatings.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:
WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.
Acute oral toxicity (LD50): 5628 mg/kg [Rat].
Acute dermal toxicity (LD50): 15800 mg/kg [Rabbit].
Acute toxicity of the vapor (LC50): 64000 4 hours [Rat].

Chronic Effects on Humans:
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.
TERATOGENIC EFFECTS: Classified POSSIBLE for human.
Causes damage to the following organs: eyes.
May cause damage to the following organs: blood, kidneys, liver, brain, peripheral nervous system, upper respiratory tract, skin, central nervous system (CNS), optic nerve.

Other Toxic Effects on Humans:
Hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Slightly hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:
Passes through the placental barrier.
May affect genetic material.
May cause birth defects and adverse reproductive effects(paternal and maternal effects and fetotoxicity) based on animal studies.

Special Remarks on other Toxic Effects on Humans:

Section 12: Ecological Information

Ecotoxicity: Ecotoxicity in water (LC50): 29400 mg/l 96 hours [Fathead Minnow].

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation:
Methanol in water is rapidly biodegraded and volatilized. Aquatic hydrolysis, oxidation, photolysis, adsorption to sediment, and bioconcentration are not significant fate processes. The half-life of methanol in surfact water ranges from 24 hrs. to 168 hrs.
Based on its vapor pressure, methanol exists almost entirely in the vapor phase in the ambient atmosphere. It is degraded by reaction with photochemically produced hydroxyl radicals and has an estimated half-life of 17.8 days.
Methanol is physically removed from air by rain due to its solubility. Methanol can react with NO2 in pollulted to

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form methyl nitrate.
The half-life of methanol in air ranges from 71 hrs. (3 days) to 713 hrs. (29.7 days) based on photooxidation half-life in air.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: CLASS 3: Flammable liquid.

Identification: : Methyl alcohol UNNA: 1230 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
Connecticut hazardous material survey.: Methyl alcohol
Illinois toxic substances disclosure to employee act: Methyl alcohol
Illinois chemical safety act: Methyl alcohol
New York release reporting list: Methyl alcohol
Rhode Island RTK hazardous substances: Methyl alcohol
Pennsylvania RTK: Methyl alcohol
Minnesota: Methyl alcohol
Massachusetts RTK: Methyl alcohol
Massachusetts spill list: Methyl alcohol
New Jersey: Methyl alcohol
New Jersey spill list: Methyl alcohol
Louisiana spill reporting: Methyl alcohol
California Directors List of Hazardous Substances (8CCR 339): Methyl alcohol
Tennesse Hazardous Right to Know : Methyl alcohol
TSCA 8(b) inventory: Methyl alcohol
SARA 313 toxic chemical notification and release reporting: Methyl alcohol
CERCLA: Hazardous substances.: Methyl alcohol: 5000 lbs. (2268 kg)

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada):
CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).
CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
Class D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):
R11- Highly flammable.
R23/24/25- Toxic by inhalation, in contact with skin and if swallowed.
R39- Danger of very serious irreversible effects. R39/23/24/25-
Toxic: danger of very serious

irreversible effects through inhalation, in contact with skin and if swallowed.
S7- Keep container tightly closed.
S16- Keep away from sources of ignition - No smoking.
S36/37- Wear suitable protective clothing and gloves.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 3

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 3

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves.
Lab coat.
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Splash goggles.

Section 16: Other Information

References:
-SAX, N.I. Dangerous Properties of Indutrial Materials. Toronto, Van Nostrand Reinold, 6e ed. 1984.
-Material safety data sheet emitted by: la Commission de la SantÃ© et de la SÃ©curitÃ© du Travail du QuÃ©bec.
-Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987.
LOLI, HSDB, RTECS, HAZARDTEXT, REPROTOX databases

Other Special Considerations: Not available.

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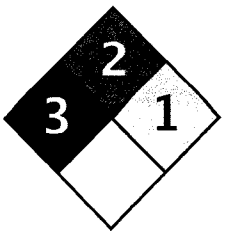

Health	3
Fire	2
Reactivity	0
Personal Protection	

Material Safety Data Sheet
Benzyl chloride MSDS

Section 1: Chemical Product and Company Identification

Product Name: Benzyl chloride

Catalog Codes: SLB2737

CAS#: 100-44-7

RTECS: XS8925000

TSCA: TSCA 8(b) inventory: Benzyl chloride

CI#: Not applicable.

Synonym: Alpha-chlorotoluene

Chemical Name: 1-Chloromethylbenzene

Chemical Formula: (-C(CH2Cl)=CHCH=CHCH=CH-)

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Benzyl chloride	100-44-7	100

Toxicological Data on Ingredients: Benzyl chloride: ORAL (LD50): Acute: 1231 mg/kg [Rat.].

Section 3: Hazards Identification

Potential Acute Health Effects:
Very hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of inhalation. Hazardous in case of ingestion. Corrosive to skin and eyes on contact. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects:
Very hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of inhalation.
Hazardous in case of ingestion.
CARCINOGENIC EFFECTS: Classified A2 (Suspected for human.) by ACGIH.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.

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DEVELOPMENTAL TOXICITY: Not available.
The substance is toxic to kidneys, lungs, the nervous system, liver, mucous membranes.
Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs. Repeated or prolonged inhalation of vapors may lead to chronic respiratory irritation.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact:
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Combustible.

Auto-Ignition Temperature: 525°C (977°F)

Flash Points: CLOSED CUP: 67.2°C (153°F). OPEN CUP: 74°C (165.2°F) (Cleveland).

Flammable Limits: LOWER: 1.1% UPPER: 14%

Products of Combustion: These products are carbon oxides (CO, CO2), halogenated compounds.

Fire Hazards in Presence of Various Substances: Flammable in presence of open flames and sparks, of heat.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

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SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Combustible. When heated to decomposition it emits toxic fumes.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Large Spill:
Combustible material. Corrosive liquid.
Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep locked up.. Keep container dry. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage:
Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 1
Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid. (Liquid.)

Odor: Pungent.

EPAHO104000578

Taste: Not available.

Molecular Weight: 126.59 g/mole

Color: Colorless.

pH (1% soln/water): Not applicable.

Boiling Point: 179°C (354.2°F)

Melting Point: -43°C (-45.4°F)

Critical Temperature: Not available.

Specific Gravity: 1.1 (Water = 1)

Vapor Pressure: 0.1 kPa (@ 20°C)

Vapor Density: 4.36 (Air = 1)

Volatility: 100% (v/v).

Odor Threshold: 0.041 ppm

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, methanol, diethyl ether.

Solubility:
Partially soluble in methanol, diethyl ether.
Insoluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances:
Reactive with oxidizing agents.
Slightly reactive to reactive with metals.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: May decompose on exposure to moist air or water.

Special Remarks on Corrosivity: Not available.

Polymerization: Yes.

Section 11: Toxicological Information

Routes of Entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:

EPAHO104000579

WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.
Acute oral toxicity (LD50): 1231 mg/kg [Rat.].
Acute toxicity of the vapor (LC50): 150 1 hours [Rat].

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: Classified A2 (Suspected for human.) by ACGIH.
Causes damage to the following organs: kidneys, lungs, the nervous system, liver, mucous membranes.

Other Toxic Effects on Humans:
Very hazardous in case of skin contact (irritant, permeator), of inhalation.
Hazardous in case of ingestion.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Tumorigen. 0700 In vitro studies in mammal cells, has shown mutagenic action.

Special Remarks on other Toxic Effects on Humans: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification: Class 8: Corrosive material

Identification: : Benzyl chloride UNNA: UN1738 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Benzyl chloride
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Benzyl chloride
Pennsylvania RTK: Benzyl chloride
Massachusetts RTK: Benzyl chloride
TSCA 8(b) inventory: Benzyl chloride

EPAHO104000580

SARA 302/304/311/312 extremely hazardous substances: Benzyl chloride
SARA 313 toxic chemical notification and release reporting: Benzyl chloride
CERCLA: Hazardous substances.: Benzyl chloride

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):
CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).
CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
CLASS E: Corrosive liquid.

DSCL (EEC):
R22- Harmful if swallowed.
R26- Very toxic by inhalation.
R38- Irritating to skin.
R41- Risk of serious damage to eyes.
R45- May cause cancer.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 2

Reactivity: 0

Personal Protection:

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 2

Reactivity: 1

Specific hazard:

Protective Equipment:
Gloves.
Full suit.
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Face shield.

Section 16: Other Information

References:
-Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987.
-Liste des produits purs tÃ©ratogÃ¨nes, mutagÃ¨nes, cancÃ©rogÃ¨nes. RÃ©pertoire toxicologique de la Commission de la SantÃ©
et de la SÃ©curitÃ© du Travail du QuÃ©bec.
-Material safety data sheet emitted by: la Commission de la SantÃ© et de la SÃ©curitÃ© du Travail du QuÃ©bec.
-SAX, N.I. Dangerous Properties of Indutrial Materials. Toronto, Van Nostrand Reinold, 6e ed. 1984.
-The Sigma-Aldrich Library of Chemical Safety Data, Edition II.

-Guide de la loi et du rÃ¨glement sur le transport des marchandises dangeureuses au canada. Centre de conformitÃ© internatinal LtÃ©e. 1986.

Other Special Considerations: Not available.

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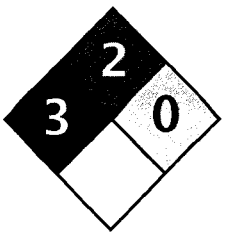

Health	3
Fire	2
Reactivity	0
Personal Protection	

Material Safety Data Sheet
Tributylamine MSDS

Section 1: Chemical Product and Company Identification

Product Name: Tributylamine

Catalog Codes: SLT3097

CAS#: 102-82-9

RTECS: YA0350000

TSCA: TSCA 8(b) inventory: Tributylamine

CI#: Not available.

Synonym:

Chemical Formula: C12H27N

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Tributylamine	102-82-9	100

Toxicological Data on Ingredients: Tributylamine: ORAL (LD50): Acute: 114 mg/kg [Rat]. 114 mg/kg [Mouse]. 615 mg/kg [Rabbit]. DERMAL (LD50): Acute: 194 mg/kg [Rabbit]. VAPOR (LC50): Acute: 75 ppm 4 hour(s) [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:
Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (permeator). Corrosive to skin and eyes on contact. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation.

EPAHO104000583

Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin Contact:
If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical got on the victim's exposed skin, such as the hands : Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:
Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Combustible.

Auto-Ignition Temperature: 210°C (410°F)

Flash Points: CLOSED CUP: 63°C (145.4°F). (Setaflash) OPEN CUP: 85.5°C (185.9°F).

Flammable Limits: LOWER: 1.4% UPPER: 6%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances: Not available.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

EPAHO104000584

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Absorb with an inert material and put the spilled material in an appropriate waste disposal. If necessary: Neutralize the residue with a dilute solution of acetic acid.

Large Spill:
Combustible material. Corrosive liquid.
Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Neutralize the residue with a dilute solution of acetic acid.

Section 7: Handling and Storage

Precautions:
Keep locked up Keep container dry. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapour/spray. Never add water to this product In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes

Storage:
Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. Keep container dry. Keep in a cool place.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Not available.

Taste: Not available.

Molecular Weight: 185.36 g/mole

EPAHO104000585

Color: Colorless to light yellow.

pH (1% soln/water): 12 [Basic.]

Boiling Point: 216.5°C (421.7°F)

Melting Point: -70°C (-94°F)

Critical Temperature: Not available.

Specific Gravity: 0.7782 (Water = 1)

Vapor Pressure: 0.3 mm of Hg (@ 20°C)

Vapor Density: 6.38 (Air = 1)

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: The product is equally soluble in oil and water; log(oil/water) = 0

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Very slightly soluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: No.

Section 11: Toxicological Information

Routes of Entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:
WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.
Acute oral toxicity (LD50): 114 mg/kg [Mouse].
Acute dermal toxicity (LD50): 194 mg/kg [Rabbit].
Acute toxicity of the vapor (LC50): 75 ppm 4 hour(s) [Rat].

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans:

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Very hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification: CLASS 8: Corrosive liquid.

Identification: : Corrosive liquids n.o.s. : UN2542 PG: III

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
Pennsylvania RTK: Tributylamine
Florida: Tributylamine
Massachusetts RTK: Tributylamine
New Jersey: Tributylamine
TSCA 8(b) inventory: Tributylamine

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):
CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).
CLASS E: Corrosive liquid.

DSCL (EEC):
R23- Toxic by inhalation.
R38- Irritating to skin.

R41- Risk of serious damage to eyes.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 2

Reactivity: 0

Personal Protection:

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 2

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves.
Full suit.
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Face shield.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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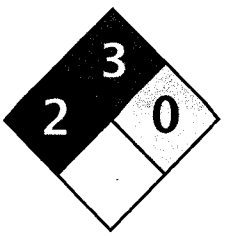

Health	2
Fire	3
Reactivity	0
Personal Protection	H

Material Safety Data Sheet
Ethyl Alcohol 190 Proof MSDS

Section 1: Chemical Product and Company Identification

Product Name: Ethyl Alcohol 190 Proof

Catalog Codes: SLE1036, SLE1609, SLE1288

CAS#: Mixture.

RTECS: Not applicable.

TSCA: TSCA 8(b) inventory: Water; Ethyl alcohol 200 Proof

CI#: Not applicable.

Synonym: Ethyl Alcohol 190 Proof

Chemical Formula: Not applicable.

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

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1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Water	7732-18-5	5
Ethyl alcohol 200 Proof	64-17-5	95

Toxicological Data on Ingredients: Ethyl alcohol 200 Proof: ORAL (LD50): Acute: 7060 mg/kg [Rat]. 3450 mg/kg [Mouse]. VAPOR (LC50): Acute: 20000 ppm 8 hours [Rat]. 39000 mg/m 4 hours [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of skin contact (irritant), of eye contact (irritant), . Slightly hazardous in case of skin contact (permeator), of ingestion. Non-corrosive for skin. Non-corrosive to the eyes. Non-corrosive for lungs.

Potential Chronic Health Effects:
Slightly hazardous in case of skin contact (sensitizer)
CARCINOGENIC EFFECTS: Classified PROVEN by State of California Proposition 65 [Ethyl alcohol 200 Proof]. Classified A4 (Not classifiable for human or animal.) by ACGIH [Ethyl alcohol 200 Proof].
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Ethyl alcohol 200 Proof]. Mutagenic for bacteria and/or yeast. [Ethyl alcohol 200 Proof].
TERATOGENIC EFFECTS: Classified PROVEN for human [Ethyl alcohol 200 Proof].
DEVELOPMENTAL TOXICITY: Classified Development toxin [PROVEN] [Ethyl alcohol 200 Proof]. Classified Reproductive system/toxin/female, Reproductive system/toxin/male [POSSIBLE] [Ethyl alcohol 200 Proof].

EPAHO104000589

The substance is toxic to blood, the reproductive system, liver, upper respiratory tract, skin, central nervous

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: The lowest known value is 363°C (685.4°F) (Ethyl alcohol 200 Proof).

Flash Points: CLOSED CUP: 18.5°C (65.3°F).(estimated)

Flammable Limits: The greatest known range is LOWER: 3.3% UPPER: 19% (Ethyl alcohol 200 Proof)

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:
Highly flammable in presence of open flames and sparks, of heat.
Slightly flammable to flammable in presence of oxidizing materials.
Non-flammable in presence of shocks, of reducing materials, of combustible materials, of organic materials, of metals, of acids, of alkalis.

Explosion Hazards in Presence of Various Substances:
Slightly explosive in presence of open flames and sparks, of heat, of oxidizing materials, of acids.
Non-explosive in presence of shocks.

Fire Fighting Media and Instructions:
Flammable liquid, soluble or dispersed in water.
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use alcohol foam, water spray or fog.

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Special Remarks on Fire Hazards:
Containers should be grounded. CAUTION: MAY BURN WITH NEAR INVISIBLE FLAME Vapor may travel considerable distance to source of ignition and flash back. May form explosive mixtures with air.
Contact with Bromine pentafluoride is likely to cause fire or explosion.
Ethanol ignites on contact with chromyl chloride.
Ethanol ignites on contact with iodine heptafluoride gas.
It ignites than explodes upon contact with nitrosyl perchlorate.
Additon of platinum black catalyst caused ignition.
(Ethyl alcohol 200 Proof)

Special Remarks on Explosion Hazards:
Ethanol has an explosive reaction with the oxidized coating around potassium metal.
Ethanol ignites and then explodes on contact with acetic anhydride + sodium hydrosulfate (ignites and may explode), disulfuric acid + nitric acid, phosphorous(III) oxide platinum, potassium-tert-butoxide+ acids.
Ethanol forms explosive products in reaction with the following
compound : ammonia + silver nitrate (forms silver nitride and silver fulminate), iodine + phosphorus (forms ethane iodide), magnesium perchlorate (forms ethyl perchlorate), mercuric nitrate, nitric acid + silver (forms silver fulminate) silver nitrate (forms ethyl nitrate) silver(I) oxide + ammonia or hydrazine (forms silver nitride and silver fulminate), sodium (evolves hydrogen gas).
Sodium Hydrazide + alcohol can produce an explosion.
Alcohols should not be mixed with mercuric nitrate, as explosive mercuric fulminate may be formed.
May form explosive mixture with manganese perchlorate + 2,2-dimethoxypropane.
Addition of alcohols to highly concentrate hydrogen peroxide forms powerful explosives.
Explodes on contact with calcium hypochlorite
Vapor may explode if ignited in an enclosed area.
Containers may explode when heated or involved in a fire.
(Ethyl alcohol 200 Proof)

Section 6: Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill:
Flammable liquid.
Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep locked up.. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids, alkalis, moisture.

Storage:
Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Do not store above 23°C (73.4°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

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Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
Ethyl alcohol 200 Proof
TWA: 1900 (mg/m3) from OSHA (PEL) [United States]
TWA: 1000 (ppm) from OSHA (PEL) [United States]
TWA: 1900 (mg/m3) from NIOSH [United States]
TWA: 1000 (ppm) from NIOSH [United States]
TWA: 1000 (ppm) [United Kingdom (UK)]
TWA: 1920 (mg/m3) [United Kingdom (UK)]
TWA: 1000 STEL: 1250 (ppm) [Canada]
Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor:
Alcohol like. Mild to strong. Like wine or whiskey; Ethereal, vinous. Pleasant.

Taste: Burning. Pungent.

Molecular Weight: Not applicable.

Color: Clear Colorless.

pH (1% soln/water): Neutral.

Boiling Point: The lowest known value is 78.5°C (173.3°F) (Ethyl alcohol 200 Proof). Weighted average: 79.58°C (175.2°F)

Melting Point: May start to solidify at -114.1°C (-173.4°F) based on data for: Ethyl alcohol 200 Proof.

Critical Temperature: The lowest known value is 243°C (469.4°F) (Ethyl alcohol 200 Proof).

Specific Gravity: Weighted average: 0.8 (Water = 1)

Vapor Pressure: The highest known value is 5.7 kPa (@ 20°C) (Ethyl alcohol 200 Proof). Weighted average: 5.53 kPa (@ 20°C)

Vapor Density: The highest known value is 1.59 (Air = 1) (Ethyl alcohol 200 Proof). Weighted average: 1.54 (Air = 1)

Volatility: Not available.

Odor Threshold: 100 ppm

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, methanol, diethyl ether, acetone.

Solubility:
Easily soluble in cold water, hot water, methanol, diethyl ether.
Soluble in acetone.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials, heat, sources of ignition.

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:
Ethanol rapidly absorbs moisture from the air.
Can react vigorously with oxiders.
The following oxidants have been demonstrated to undergo vigorous/explosive reaction with ethanol: barium perchlorate, bromine pentafluoride, calcium hypochlorite, chloryl perchlorate, chromium trioxide, chromyl chloride, dioxygen difluoride, disulfuryl difluoride, fluorine nitrate, hydrogen peroxide, iodine heptafluoride, nitric acid nitrosyl perchlorate, perchloric acid permanganic acid, peroxodisulfuric acid, potassium dioxide, potassium perchlorate, potassium permanganate, ruthenium(VIII) oxide, silver perchlorate, silver peroxide, uranium hexafluoride, uranyl perchlorate.
Ethanol reacts violently/expodes with the following compounds: acetyl bromide (evolves hydrogen bromide) acetyl chloride, aluminum, sesquibromide ethylate, ammonium hydroxide & silver oxide, chlorate, chromic anhydride, cyanuric acid + water, dichloromethane + sulfuric acid + nitrate (or) nitrite, hydrogen peroxide + sulfuric acid, iodine + methanol + mercuric oxide, manganese perchlorate + 2,2-dimethoxy propane, perchlorates, permanganates + sulfuric acid, potassium superoxide, potassium tert-butoxide, silver & nitric acid, silver perchlorate, sodium hydrazide, sulfuric acid + sodium dichromate, tetrachlorisilane + water.
Ethanol is also incompatible with platinium, and sodium.
No really safe conditions exist under which ethyl alcohol and chlorine oxides can be handled.
Reacts vigorously with acetyl chloride (Ethyl alcohol 200 Proof)

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 3632 mg/kg (Mouse) (Calculated value for the mixture).

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: Classified PROVEN by State of California Proposition 65 [Ethyl alcohol 200 Proof].
Classified A4 (Not classifiable for human or animal.) by ACGIH [Ethyl alcohol 200 Proof].
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Ethyl alcohol 200 Proof]. Mutagenic for bacteria and/or yeast. [Ethyl alcohol 200 Proof].
TERATOGENIC EFFECTS: Classified PROVEN for human [Ethyl alcohol 200 Proof].
DEVELOPMENTAL TOXICITY: Classified Development toxin [PROVEN] [Ethyl alcohol 200 Proof]. Classified Reproductive system/toxin/female, Reproductive system/toxin/male [POSSIBLE] [Ethyl alcohol 200 Proof].

Other Toxic Effects on Humans:
Hazardous in case of skin contact (irritant), of inhalation.
Slightly hazardous in case of skin contact (permeator), of ingestion.

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Special Remarks on Toxicity to Animals:
Lowest Published Dose/Conc:
LDL[Human] - Route: Oral; Dose: 1400 mg/kg
LDL[Human child] - Route: Oral; Dose: 2000 mg/kg
LDL[Rabbit] - Route: Skin; Dose: 20000 mg/kg (Ethyl alcohol 200 Proof)

Special Remarks on Chronic Effects on Humans:
May affect genetic material (mutagenic)
Causes adverse reproductive effects and birth defects (teratogenic) , based on moderate to heavy consumption.
May cause cancer based on animal data.
Human: passes through the placenta, excreted in maternal milk. (Ethyl alcohol 200 Proof)

Special Remarks on other Toxic Effects on Humans:
Acute potential health effects:
Skin: causes skin irritation
Eyes: causes eye irritation
Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea, and alterations in gastric secretions. May affect behavior/central nervous system (central nervous system depression - amnesia, headache, muscular incoordination, excitation, mild euphoria, slurred speech, drowsiness, staggaring gait, fatigue, changes in mood/personality, excessive talking, dizziness, ataxia, somnolence, coma/narcosis, hallucinations, distorted perceptions, general anesthetic), peripherial nervous system (spastic paralysis)vision (diplopia). Moderately toxic and narcotic in high concentrations. May also affect metabolism, blood, liver, respiration (dyspnea), and endocrine system.
May affect respiratory tract, cardiovascular(cardiac arrhythmias, hypotension), and urinary systems.
Inhalation: May cause irritation of the respiratory tract and affect behavior/central nervous system with symptoms similar to ingestion.
Chronic Potential Health Effects:
Skin: Prolonged or repeated skin contact may casue dermatitis, an allergic reaction.
Ingestion: Prolonged or repeated ingestion will have similiar effects as acute ingestion. It may also affect the brain. (Ethyl alcohol 200 Proof)

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: CLASS 3: Flammable liquid.

Identification: : Ethanol (Ethyl alcohol 200 Proof) UNNA: 1170 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Ethyl alcohol 200 Proof (in alcoholic beverage)
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Ethyl alcohol 200 Proof (in alcoholic beverage)
Connecticut hazardous material survey.: Ethyl alcohol 200 Proof
Illinois toxic substances disclosure to employee act: Ethyl alcohol 200 Proof
Rhode Island RTK hazardous substances: Ethyl alcohol 200 Proof
Pennsylvania RTK: Ethyl alcohol 200 Proof
Florida: Ethyl alcohol 200 Proof
Minnesota: Ethyl alcohol 200 Proof
Massachusetts RTK: Ethyl alcohol 200 Proof
Massachusetts spill list: Ethyl alcohol 200 Proof
New Jersey: Ethyl alcohol 200 Proof
TSCA 8(b) inventory: Water; Ethyl alcohol 200 Proof

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):
CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):
R11- Highly flammable.
S7- Keep container tightly closed.
S16- Keep away from sources of ignition - No smoking.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 3

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 3

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves.
Lab coat.
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/09/2005 05:28 PM

Last Updated: 11/06/2008 12:00 PM

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Material Safety Data Sheet
(4-methoxyphenyl)acetonitrile

ACC# 79956

Section 1 - Chemical Product and Company Identification

MSDS Name: (4-methoxyphenyl)acetonitrile
Catalog Numbers: AC173760000, AC173760050, AC173760250
Synonyms: p-Anisyl cyanide; p-Methoxybenzyl cyanide.
Company Identification:

Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01
For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
104-47-2	(4-Methoxyphenyl)acetonitrile	97%	203-206-0

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: light yellow clear liquid.
Warning! Harmful if swallowed, inhaled, or absorbed through the skin. May cause eye, skin, and respiratory tract irritation. The toxicological properties of this material have not been fully investigated.
Target Organs: No data found.

Potential Health Effects
Eye: May cause eye irritation.
Skin: May cause skin irritation. Harmful if absorbed through the skin. May be metabolized to cyanide which in turn acts by inhibiting cytochrome oxidase impairing cellular respiration.
Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.
Inhalation: Harmful if inhaled. May cause respiratory tract irritation. May be metabolized to cyanide which in turns act by inhibiting cytochrome oxidase impairing cellular respiration.
Chronic: Exposure to small amounts of cyanide compounds over long periods of time is reported to cause loss of appetite, headache, weakness, nausea, dizziness, and symptoms of irritation of the upper respiratory tract and eyes.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get

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medical aid.
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.
Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire. Use water spray, dry chemical, carbon dioxide, or chemical foam.
Flash Point: 117 deg C (242.60 deg F)
Autoignition Temperature: 480 deg C (896.00 deg F)
Explosion Limits, Lower:1.2 Vol %
Upper: 9.4 Vol %
NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid breathing dust, mist, or vapor. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.
Storage: Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.
Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
(4-Methoxyphenyl)acetonitrile	none listed	none listed	none listed

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OSHA Vacated PELs: (4-Methoxyphenyl)acetonitrile: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid
Appearance: colorless - light yellow
Odor: Not available.
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: 286 - 287 deg C @760mmHg
Freezing/Melting Point:8 deg C
Decomposition Temperature:> 350 deg C
Solubility: 10 g/l (20°C)
Specific Gravity/Density:1.080
Molecular Formula:C9H9NO
Molecular Weight:147.18

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents, strong reducing agents, strong acids, strong bases.
Hazardous Decomposition Products: Hydrogen cyanide, nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:
CAS# 104-47-2: AM0810000
LD50/LC50:
Not available.

Carcinogenicity:
CAS# 104-47-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

EPAHO104000599

Epidemiology: No information found
Teratogenicity: No information found
Reproductive Effects: No information found
Mutagenicity: No information found
Neurotoxicity: No information found
Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	TOXIC LIQUID, ORGANIC, N.O.S.*	TOXIC LIQUID, ORGANIC, N.O.S.*
Hazard Class:	6.1	6.1
UN Number:	UN2810	UN2810
Packing Group:	III	III

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 104-47-2 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.
Section 313 No chemicals are reportable under Section 313.

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Clean Air Act:

This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 104-47-2 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN

Risk Phrases:

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

Safety Phrases:

S 36/37 Wear suitable protective clothing and gloves.

WGK (Water Danger/Protection)

CAS# 104-47-2: 2

Canada - DSL/NDSL

CAS# 104-47-2 is listed on Canada's NDSL List.

Canada - WHMIS

This product has a WHMIS classification of D1B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997
Revision #4 Date: 8/21/2007

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

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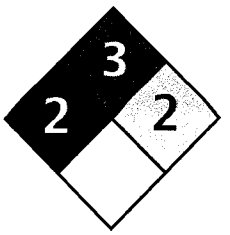
Chemicals & Laboratory Equipment



Health	2
Fire	3
Reactivity	0
Personal Protection	H

Material Safety Data Sheet
Styrene (monomer) MSDS

Section 1: Chemical Product and Company Identification

Product Name: Styrene (monomer)

Catalog Codes: SLS2512, SLU1027

CAS#: 100-42-5

RTECS: WL3675000

TSCA: TSCA 8(b) inventory: Styrene (monomer)

CI#: Not available.

Synonym: Vinylbenzene

Chemical Formula: C8H8

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Styrene (monomer)	100-42-5	100

Toxicological Data on Ingredients: Styrene (monomer): ORAL (LD50): Acute: 2650 mg/kg [Rat]. 316 mg/kg [Mouse]. VAPOR (LC50): Acute: 12000 ppm 4 hour(s) [Rat]. 9500 ppm 4 hour(s) [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:
Very hazardous in case of eye contact (irritant). Hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation. Inflammation of the eye is characterized by redness, watering, and itching.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Classified + (PROVEN) by OSHA. Classified 2B (Possible for human.) by IARC. A4 (Not classifiable for human or animal.) by ACGIH.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
The substance is toxic to the nervous system, upper respiratory tract.
Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

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Eye Contact:
Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin Contact:
After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation: Not available.

Ingestion:
Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 490°C (914°F)

Flash Points: CLOSED CUP: 31.1°C (88°F). (Cleveland) OPEN CUP: 36.7°C (98.1°F) (TAG).

Flammable Limits: LOWER: 1.1% UPPER: 6.1%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:
Flammable in presence of open flames and sparks.
Slightly flammable to flammable in presence of heat.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
Flammable liquid, soluble or dispersed in water.
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Large Spill:
Flammable liquid.
Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep locked up Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapour/spray. In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes

Storage:
Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. A refrigerated room would be preferable for materials with a flash point lower than 37.8°C (100°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 50 STEL: 100 (ppm)
TWA: 213 STEL: 426 (mg/m3)
Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid. (Clear viscous liquid.)

Odor: Sweetish. Aromatic.

Taste: Not available.

Molecular Weight: 104.14 g/mole

Color: Colorless.

pH (1% soln/water): Not available.

Boiling Point: 145.2°C (293.4°F)

Melting Point: -30.6°C (-23.1°F)

Critical Temperature: Not available.

Specific Gravity: 0.906 (Water = 1)

Vapor Pressure: 4.5 mm of Hg (@ 20°C)

Vapor Density: 3.59 (Air = 1)

Volatility: Not available.

Odor Threshold: 0.1 ppm

Water/Oil Dist. Coeff.: The product is equally soluble in oil and water; log(oil/water) = 0

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Very slightly soluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: No.

Section 11: Toxicological Information

Routes of Entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:
WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.
Acute oral toxicity (LD50): 316 mg/kg [Mouse].
Acute toxicity of the vapor (LC50): 9500 ppm 4 hour(s) [Mouse].

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: Classified + (PROVEN) by OSHA. Classified 2B (Possible for human.) by IARC.
A4 (Not classifiable for human or animal.) by ACGIH.
The substance is toxic to the nervous system, upper respiratory tract.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:

Animal embryotoxic. Postnatal development injury in animal. Menstrual disorders in human. Human: passes the placental barrier, detected in maternal milk.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification: Class 3: Flammable liquid.

Identification: : Styrene monomer, inhibited : UN2055 PG: III

Special Provisions for Transport: Marine Pollutant

Section 15: Other Regulatory Information

Federal and State Regulations:
Pennsylvania RTK: Styrene (monomer)
Florida: Styrene (monomer)
Minnesota: Styrene (monomer)
Massachusetts RTK: Styrene (monomer)
New Jersey: Styrene (monomer)
TSCA 8(b) inventory: Styrene (monomer)
SARA 313 toxic chemical notification and release reporting: Styrene (monomer)
CERCLA: Hazardous substances.: Styrene (monomer)

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):
CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):
R10- Flammable.
R38- Irritating to skin.
R41- Risk of serious damage to eyes.
R45- May cause cancer.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 3

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 3

Reactivity: 2

Specific hazard:

Protective Equipment:
Gloves.
Lab coat.
Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/09/2005 06:40 PM

Last Updated: 11/06/2008 12:00 PM

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EPAHO104000607

3284
Southern Scrap Recycling c/o
A-Affordable Vacuum Service

EPAHO10400608

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/22/2009**

Dear **Danyell Childs**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3284

Expiration Date 4/22/2011

Generator: Southern Scrap Recycling c/o A-Affordable Vacuum Service
Address: 4801 Florida St.
New Orleans, TX 70117

Waste Information

Name of Waste: Used oil
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
oil used in ship/vessel
Color: dark **Odor:** hydrocarbon **pH:** 2-12
Physical State:
Incompatibilities: oxidizers
Safety Related Data/Special Handling:
none

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Southern Scrap Recycling c/o A-Affordable Vacuum Service
Address : 4801 Florida St. 4801 Florida St.
City, State, Zip : New Orleans TX 70117
Contact : Danyell Childs **Title :**
Phone No : (281) 802-7661 **Fax :** (713) 842-2011
24 / HR Phone :
U.S EPA I.D No : na
State I.D : na **SIC Code**

SECTION 2: Billing Information

Company : A-Affordable Vacuum Service
Address : 7039 Burkett PO Box 940984
City, State, Zip : Houston TX 77021
Contact : Danyell Childs **Title :**
Phone No : (281) 802-7661 **Fax :** (713) 842-2011

SECTION 3: General Description of the Waste

Name of Waste : Used oil

Detailed Description of the Process Generating Waste:
oil used in ship/vessel

Physical State : ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color : dark **Odor :** hydrocarbon
Specific Gravity (Water=1) : na **Density :** 7.5-9.5 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No
Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No
Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2835 2836 2841 2842 2843 2844 2851
2861 2865 2869 2873 2874 2876 2879 2891 2892 2893 2896 2899 2911 3312 4953 4959 9511

Layers : ☑ Single-Phas ☐ Multi-Phase
Container Type : ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)
Container Size : 5000 gall
Number Of Units : 2

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

EPAHO104000610

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : Product

Proper U.S. State Waste Code No : Used Oil

Class : na **UN/NA :** na **PG :** na **RQ :** na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>150	2-12	0 mg/l	0 mg/l	0-5 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
na mg/l	na mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
oil	90-95	%
water	0-5	%
solids	0-5	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
none

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
CES testing, Chlor-d-tect, ash, water %

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
oxidizers

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x
TCLP Volatilies : x
TCLP Semi-Volatiles : x
Reactivity : x

EPAHO104000611

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ **YES** ☑ **NO**

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

Flash Point	pH	N/A	N/A	Solids
>150	9-12			0-5 %

Oil&Grease	TOC	Zinc	Copper	Nickel
NA mg/l	0 mg/l	0 mg/l	0 mg/l	0 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
oil	90-95	%
water	0-5	%
solids	0-5	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
Oxidizers

SECTION 8: Material Producer's Certification

The information contained herein is based on ☐ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 4/22/09

Printed Name/Title: Trans Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: _____ Date: 4/22/09 (Approved) Rejected Approval Number: 3284	

EPAHO104000613

From: Clinton Hopkins
Sent: Wednesday, April 22, 2009 3:55 PM
To: Morgan McCarley; Dan Bowman
Cc: Julius Prantil; Sam Brown; Miles Root; Joe Camp; Kim Harmon
Subject: RE: AA Affordable Oil loads

All,

So far here are the numbers on the AA Affordable Oil load:

Solids 1%
Water 4.18%
SG 0.949
API 18
Choro-d-tect 300 PPM
flash point > 140

Ash is still running. All this information will be in the inbound for the job.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

Driver must provide weight tickets
CES Pays for load and makes a m in of .15/gal on loads delivered. CES pays .35/gal if paid .50/gal
On loads picked up by CES, CES pays $500/load and keeps the oil unless CES gets paid more than .50/gal

2. **Contamination Limits (maximum limit before surcharges apply):**

Phenol, Fails Chlor d tect, flash <120, water >5%

3. **Surcharge Pricing:**

Call Dan if loads exceed limits in 2

4. **Special Testing Requirements:**

Ash, Flash, Chlor-d-tect, specific gravity

5. **Treatment and Handling Protocol:**

Oil processing facility

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

EPAHO104000615

7. **Tests for Product Recovered/Recycled (if applicable):**

sell in oil market

8. **Management for Product Recovered/Recycled (if applicable);**

sell in oil market

3285
Sunbelt Machine Works
Corporation.

EPAHO104000617

9E

T-35

LAD

8-4-09

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/23/2009**

Dear **Craig Scantlin**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3285

Expiration Date 4/17/2011

Generator: Sunbelt Machine Works Corporation
Address: 13411 Redfish
Stafford, TX 77477

Waste Information

Name of Waste: Recyclable Empty Containers
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
RCRA empty totes or drums
Color: na **Odor:** none **pH:** na
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
std

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM
Recycle

CES Environmental Services, Inc.
4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 748-8664
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Sunbelt Machine Works Corporation
Address : 13411 Redfish 13411 Redfish
City, State, Zip : Stafford TX 77477
Contact : Craig Scantlin / Brent **Title :**
Phone No : (281) 499-0051 **Fax :** (281) 499-6326
24 / HR Phone :
U.S EPA I.D No : TXCESQG
State I.D : CESQG **SIC Code**

SECTION 2: Billing Information

Company : Sunbelt Machine Works Corporation
Address : 13411 Redfish 13411 Redfish
City, State, Zip : Stafford TX 77477
Contact : Craig Scantlin / Brent **Title :**
Phone No : (281) 499-0051 **Fax :** (281) 499-6326

SECTION 3: General Description of the Waste

Name of Waste : RCRA empty containers

Detailed Description of the Process Generating Waste:
RCRA empty containers

Physical State : ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color : varies **Odor :** none
Specific Gravity (Water=1) : na **Density :** na lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No
Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No
Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2835 2836 2841 2842 2843 2844 2851
2861 2865 2869 2873 2874 2876 2879 2891 2892 2893 2896 2899 2911 3312 4953 4959 9511

Layers : ☑ Single-Phas ☐ Multi-Phase
Container Type : ☑ Drum ☑ Tote ☐ Truck ☐ Other (explain)
Container Size : 5/55/250
Number Of Units : 6

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

EPAHO104000620

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : Recycle

Proper U.S. State Waste Code No : Non-RCRA/Non-DOT Regulated Material

Class : na **UN/NA :** na **PG :** na **RQ :** na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
na	na	na mg/l	na mg/l	100 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
na mg/l	na mg/l	na mg/l	na mg/l	na mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
metal drums	0-100	%
plastic drums	0-100	%
totes	0-100	%
pails	0-100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
std

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
none

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
none

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : x
TCLP Volatilies : x
TCLP Semi-Volatiles : x
Reactivity : x

Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ **YES** ☑ **NO**

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego

☐ Oils Subcatego

☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : [signature] **Date :** 4/17/2009

Printed Name / Title : J. B. Scantlin

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer : [signature]

Date : 4-22-09 **Status :** Approved Rejected

Approval Number : HOU-3285

Process Facility Information :

$70/hr
$40/tote washout fee

EPAHO104000623

3266
Smith Int'l

EPAHO10400624

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/9/2009**

Dear **Bill Swain (MC 39A)**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3266

Expiration Date 4/9/2011

Generator: Smith International
Address: 16740 Hardy Street
Houston, TX 77032

Waste Information

Name of Waste: Water & Cutting sludge from cutting concrete, cement & rocks
TCEQ Waste Code #: 00195192
Container Type:
Detailed Description of Process Generating Waste:
Cutting of granite, concrete, cement incased in granit or concrete / cement.
Color: clear liquid w/ grey sol **Odor:** none **pH:** 9.4
Physical State:
Incompatibilities: N/A
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

X 32660

GB
JR

ISL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1460	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Smith Internation Inc.
Address: 16740 Hardy St.
City: Houston **State:** TX **Zip:** 77032
Contact: Tyra Garacci **Title:** Facility HSE Specialist
Phone Number: 281-233-5346 **Fax Number:** 281-233-5982
24/hr Phone Number:
US EPA ID No: TXD00072946
State ID No: 30682 **SIC Code:** 3533

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Smith International Inc.
Address: P.O. Box 60068 BN 39A
City: Houston **State:** TX **Zip:** 77205-0068
Contact: Tyra Garacci **Title:** Facility HSE Specialist
Phone Number: 281-233-5346 **Fax Number:** 281-233-5982

SECTION 3: General Description of the Waste

Name of Waste: Water and cutting sludge from cutting concrete, cement, and/or rocks.
Detailed Description of Process Generating Waste:

Cutting of granite, concrete/cement incased granite, or concrete/cement.

Physical State: ☐ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☑ **Combination**

Color: clear liquid with grey solids **Odor:** None

Specific Gravity (water=1): varies **Density:** _____ lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ **Single-phase** ☑ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☑ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 6 drums

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: 00195192

Proper US DOT Shipping Name: Concrete and Rock cuttings

Class: N/A **UN/NA:** N/A **PG:** N/A **RQ:** ~~N/A~~ N/A

Flash Point		pH		Reactive Sulfides	Reactive Cyanides		Solids	
>100 C		9.4		mg/l		mg/l	10-30	%
Oil & Grease		**TOC**		**Zinc**	**Copper**		**Nickel**	
TPH- 12.8	mg/l		mg/l	mg/l		mg/l		mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Cutting Water	70-90	%
Rock, concrete, cement cuttings	10-30	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

N/A

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analytical Attached.

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

N/A

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Barium 0.316 mg/L . Hg, Sb, As, Be, Cd, Cr, Pb, Ni, Se, Ag - N.D.
TCLP Volatiles:	N/A Only water and rock cuttings no volatiles expected
TCLP Semi-Volatiles:	N/A Only water and rock cuttings no volatiles expected
Reactivity:	Reactive cyanide and suflide - ND
Corrosivity:	Non-corrosive
Ignitability:	>100 C

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

***Metals Subcategory*: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

***Oils Subcategory*: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 03/31/09

Printed Name/Title: Lyra Garacci Facility HSE Specialist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____

Date: 4-8-09 ☑ Approved ☐ Rejected

Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

40 /DM

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

WWTP - seperate solids + bulk to class 2 box send water to WWTP.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

DHL ANALYTICAL

March 06, 2009

Tyra Garacci
SMITH INTERNATIONAL
P.O. Box 60068
Houston, Texas 77205-0068

Order No: 0902168

TEL: (281) 233-5346
FAX: (281) 233-5620

RE: TX-HOU-HDY-Waste

Dear Tyra Garacci:

DHL Analytical received 1 sample(s) on 2/26/2009 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

John DuPont
Lab Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-08B-TX

ACCREDITED IN ACCORDANCE WITH nelac

EPAHO104000632

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EPAHO104000633

DHL ANALYTICAL

2300 Double Creek Drive • Round Rock, TX 78664
Phone (512) 388-8222 • FAX (512) 388-8229

№ 39452

CHAIN-OF-CUSTODY

CLIENT: Smith International Inc.
ADDRESS: 11740 Hardy St Houston, TX
PHONE: 281-233-5396 FAX 281-233-5600
DATA REPORTED TO: Tyra Garacci
ADDITIONAL REPORT COPIES TO:

DATE: 2/25/09 PAGE 01 OF 01
PO #: DHL WORK ORDER #: 0902108
PROJECT LOCATION OR NAME: TX-HOU-HDY-Waste
CLIENT PROJECT #: COLLECTOR: T. Garacci

Authorize 5% surcharge for TRRP report? ☐ Yes ☐ No

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

PRESERVATION: HCl, HNO_3, H_2SO_4 ☐ NaOH ☐, ICE, UNPRESERVED

ANALYSES: BTEX ☐ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ | TPH 1006 ☐ | GASOLINE MOD 8015 ☐ | DIESEL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ | PAH 8270 ☐ | HOLDPAH ☐ | 8081 PESTICIDES ☐ | 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TCLP - METALS (RCRA) ☒ | TCLP VOC ☐ | TCLP - PEST ☐ HERB ☐ | Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ | OTHER LIST ☐ | LEAD - TOTAL ☐ | D.W. 200.8 ☐ | TCLP ☐ | RCI ☒ | TOX ☐ | FLASHPOINT ☐ | TDS ☐ | TSS ☐ | % MOISTURE ☐ | CYANIDE ☐ | pH ☐ | HEXAVALENT CHROMIUM ☐ | EXPLOSIVES ☐ | PERCHLORATE ☐ | CHLORIDE ☐ | ANIONS ☐ | ALKALINITY ☐

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES	FIELD NOTES
HOU-HDY-WaterRock		2/25/09	1300	L	3P,3G							X X X	
TOTAL													

RELINQUISHED BY: (Signature) DATE/TIME 2/25/09 1300 RECEIVED BY: (Signature) FED EX

RELINQUISHED BY: (Signature) DATE/TIME 2/26/09 8:30 RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

☐ DHL DISPOSAL @ $5.00 each ☐ Return

TURN AROUND TIME
RUSH ☐ CALL FIRST
1 DAY ☐ CALL FIRST
2 DAY ☐
NORMAL ☒
OTHER ☐ ____

LABORATORY USE ONLY:
RECEIVING TEMP: 2.5 THERM #: 57
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☒ CARRIER BILL # Fed Ex
☐ APC DELIVERY
☐ HAND DELIVERED

31

200 **FedEx** Express *US Airbill*

FedEx Tracking Number 8684 4310 9892

Form ID No. 0215

SDA12

RECIPIENT: PEEL HERE

fedex.com 1.800.GoFedEx 1.800.463.3339

1 From This portion can be removed for Recipient's records.

Date 2/25/09 FedEx Tracking Number 868443109892

Sender's Name Tyra Garacci Phone 281 293-5316

Company Smith International Inc.

Address 1100 C. Hurn 31 Dept/Floor/Suite/Room

City Houston State TX ZIP 77032

2 Your Internal Billing Reference

3 To

Recipient's Name Phone

Company DHL ANALYTICAL

Recipient's Address 2300 DOUBLE CREEK DR

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City ROUND ROCK State TX ZIP 78664-3801

0396034084

8684 4310 9892

4a Express Package Service *Packages up to 150 lbs.*

- ☐ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☒ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate. * To most locations.

4b Express Freight Service *Packages over 150 lbs.*

- ☐ FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation: ** To most locations.

5 Packaging

☐ FedEx Envelope* ☐ FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak. ☐ FedEx Box ☐ FedEx Tube ☒ Other

* Declared value limit $500.

6 Special Handling Include FedEx address in Section 3.

- ☐ SATURDAY Delivery — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- ☐ HOLD Weekday at FedEx Location — Not available for FedEx First Overnight.
- ☐ HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging. ☐ Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below. Obtain Recip. Acct. No. ☐

☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages Total Weight Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- ☐ No Signature Required — Package may be left without obtaining a signature for delivery.
- ☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*
- ☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. *Fee applies.*

519

Rev. Date 10/05 Part #158279 ©1994–2005 FedEx PRINTED IN U.S.A. SRF

CUSTODY SEAL
DATE 02/25/09
SIGNATURE

QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900

EPAHO10400635

Laboratory Data Package Signature Page

This data package consists of:

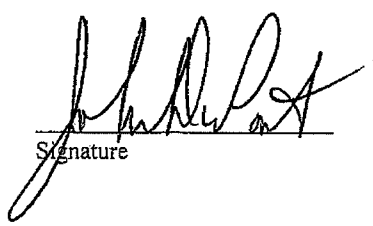
This signature page, the laboratory review checklist, and the following reportable data:

- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC 5.13
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- R10 Other problems or anomalies.

The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Scott Schroeder – Project Manager
John DuPont – General / QA Manager



Signature

03/06/09
Date

EPAHO104000636

DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: TX-HOU-HDY-Waste	Date: 3/5/09
Reviewer Name: Carlos Castro	Laboratory Work Order: 0902168
Prep Batch Number(s): See Prep Dates Report	Run Batch: See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-Custody (C-O-C)					
R1	OI	1) Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				R1-01
		2) Were all departures from standard conditions described in an exception report?			X		
R2	OI	**Sample and Quality Control (QC) Identification**					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test Reports**					
		1) Were all samples prepared and analyzed within holding times?	X				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		3) Were calculations checked by a peer or supervisor?	X				
		4) Were all analyte identifications checked by a peer or supervisor?	X				
		5) Were sample quantitation limits reported for all analytes not detected?	X				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			X		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			X		
		8) If required for the project, TICs reported?			X		
R4	O	**Surrogate Recovery Data**					
		1) Were surrogates added prior to extraction?	X				
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			R4-02
R5	OI	**Test Reports/Summary Forms for Blank Samples**					
		1) Were appropriate type(s) of blanks analyzed?	X				
		2) Were blanks analyzed at the appropriate frequency?	X				
		3) Where method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		4) Were blank concentrations < MQL?	X				
R6	OI	**Laboratory Control Samples (LCS):**					
		1) Were all COCs included in the LCS?	X				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		3) Were LCSs analyzed at the required frequency?	X				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
		6) Was the LCSD RPD within QC limits (if applicable)?	X				
R7	OI	**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data**					
		1) Were the project/method specified analytes included in the MS and MSD?	X				
		2) Were MS/MSD analyzed at the appropriate frequency?	X				
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		4) Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical Duplicate Data**					
		1) Were appropriate analytical duplicates analyzed for each matrix?	X				
		2) Were analytical duplicates analyzed at the appropriate frequency?	X				
		3) Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	**Method Quantitation Limits (MQLs):**					
		1) Are the MQLs for each method analyte included in the laboratory data package?	X				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		3) Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	**Other Problems/Anomalies**					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				R10-01
		2) Were all necessary corrective actions performed for the reported data?	X				
		3) Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000637

DHL Analytical, Inc.

Laboratory Review Checklist (continued): Supporting Data

Project Name: TX-HOU-HDY-Waste	Date: 3/5/09
Reviewer Name: Carlos Castro	Laboratory Work Order: 0902168

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial Calibration (ICAL)**					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	X				
		2) Were percent RSDs or correlation coefficient criteria met?	X				
		3) Was the number of standards recommended in the method used for all analytes?	X				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		5) Are ICAL data available for all instruments used?	X				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB):**					
		1) Was the CCV analyzed at the method-required frequency?	X				
		2) Were percent differences for each analyte within the method-required QC limits?	X				
		3) Was the ICAL curve verified for each analyte?	X				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass Spectral Tuning:**					
		1) Was the appropriate compound for the method used for tuning?	X				
		2) Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal Standards (IS):**					
		1) Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw Data (NELAC section 1 appendix A glossary, and section 5.12)**					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		2) Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual Column Confirmation**					
		1) Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively Identified Compounds (TICs):**					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) Results:**					
		1) Were percent recoveries within method QC limits?	X				
S9	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method Detection Limit (MDL) Studies**					
		1) Was a MDL study performed for each reported analyte?	X				
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency Test Reports:**					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards Documentation**					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/Analyte Identification Procedures**					
		1) Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of Analyst Competency (DOC)**					
		1) Was DOC conducted consistent with NELAC Chapter 5C?	X				
		2) Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/Validation Documentation for Methods** (NELAC Chap 5)					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory Standard Operating Procedures (SOPs):**					
		1) Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000638

DHL Analytical

Sample Receipt Checklist

Client Name SMITH INTERNATIONAL | Date Received: 2/26/2009

Work Order Number 0902168 | Received by JB

Checklist completed by: [signature] Signature 2/26/09 Date | Reviewed by JD Initials 02/26/09 Date

Carrier name: FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	2.5 °C
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Adjusted? _____ Checked by _____

Any No response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

EPAHO104000639

CLIENT: SMITH INTERNATIONAL
Project: TX-HOU-HDY-Waste
Lab Order: 0902168

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

Method TX1005 - Total Petroleum Hydrocarbons
Method SW1010 - Ignitability Analysis
Method M4500-H+ B (18th Edition) - pH of a Water
Method REACTIVITY - Reactivity Analysis (cyanide & sulfide)
Method SW1311/6020 - TCLP Metals Analysis
Method SW1311/7470A - TCLP Mercury Analysis

Exception Report R1-01

The sample was received and log-in performed on 2/26/09. A total of 1 sample was received. The sample arrived in good condition and was properly packaged.

Exception Report R4-02

For TPH analysis performed on 2/26/09 the surrogate recovery for the sample was slightly above control limits for Octacosane. This is flagged accordingly. No further corrective actions were taken.

Exception Report R10-01

The sample had results that were below TCLP or RCRA characterization limits and is therefore, non-hazardous for the parameters that were analyzed.

EPAHO104000640

CLIENT: SMITH INTERNATIONAL
Project: TX-HOU-HDY-Waste
Lab Order: 0902168

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recv'd
0902168-01	HOU-HDY-Water Rocks		02/25/09 01:00 PM	02/26/09

EPAHO104000641

CLIENT: SMITH INTERNATIONAL
Project: TX-HOU-HDY-Waste
Lab Order: 0902168

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
0902168-01A	HOU-HDY-Water Rocks	02/25/09 01:00 PM	Aqueous	TX1005	TX1005 Water Prep	02/26/09 08:37 AM	33684
0902168-01B	HOU-HDY-Water Rocks	02/25/09 01:00 PM	Aqueous	SW1010	Ignitibility Preparation	03/02/09 01:00 PM	33749
	HOU-HDY-Water Rocks	02/25/09 01:00 PM	Aqueous	M4500-H+ B	pH Preparation	02/27/09 10:58 AM	33720
	HOU-HDY-Water Rocks	02/25/09 01:00 PM	Aqueous	Reactivity	Reactivity Prep	03/03/09 09:13 AM	33756
	HOU-HDY-Water Rocks	02/25/09 01:00 PM	Aqueous	Reactivity	Reactivity Prep	03/03/09 09:13 AM	33756
0902168-01C	HOU-HDY-Water Rocks	02/25/09 01:00 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/04/09 09:48 AM	33775
	HOU-HDY-Water Rocks	02/25/09 01:00 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/04/09 09:26 AM	33771

EPAHO10400642

CLIENT: SMITH INTERNATIONAL
Project: TX-HOU-HDY-Waste
Lab Order: 0902168

TCLP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
0902168-01C	HOU-HDY-Water Rocks	02/25/09 01:00 PM	Aqueous	SW1311	TCLP Sample Prep (Metals)	03/03/09 04:25 PM	33769

EPAHO104000643

CLIENT: SMITH INTERNATIONAL
Project: TX-HOU-HDY-Waste
Lab Order: 0902168

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
0902168-01A	HOU-HDY-Water Rocks	Aqueous	TX1005	Tx1005 TPH Water	33684	1	02/26/09 02:17 PM	GC12_090226A
0902168-01B	HOU-HDY-Water Rocks	Aqueous	SW1010	Ignitability	33749	1	03/02/09 01:15 PM	IGN_090302A
	HOU-HDY-Water Rocks	Aqueous	M4500-H+ B	pH	33720	1	02/27/09 11:19 AM	TITRATOR_090227A
	HOU-HDY-Water Rocks	Aqueous	Reactivity	Reactivity (Cyanide & Sulfide)	33756	2	03/03/09 03:06 PM	UV/VIS_2_090303A
	HOU-HDY-Water Rocks	Aqueous	Reactivity	Reactivity (Cyanide & Sulfide)	33756	1	03/03/09 11:15 AM	WC_090303A
0902168-01C	HOU-HDY-Water Rocks	Aqueous	SW1311/7470A	TCLP Mercury	33775	1	03/04/09 03:31 PM	CETAC_HG_090304B
	HOU-HDY-Water Rocks	Aqueous	SW1311/6020	TCLP Metals	33771	1	03/04/09 05:30 PM	ICP-MS2_090304C

EPAHO10400644

CLIENT:	SMITH INTERNATIONAL	**Client Sample ID:**	HOU-HDY-Water Rocks
Project:	TX-HOU-HDY-Waste	**Lab ID:**	0902168-01
Project No:		**Collection Date:**	02/25/09 01:00 PM
Lab Order:	0902168	**Matrix:**	Aqueous

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
Tx1005 TPH Water		**TX1005**					**Analyst: JAW**
T/R Hydrocarbons: C6-C12	ND	0.691	1.97		mg/L	1	02/26/09 02:17 PM
T/R Hydrocarbons: >C12-C28	7.70	0.691	1.97		mg/L	1	02/26/09 02:17 PM
T/R Hydrocarbons: >C28-C35	5.08	0.691	1.97		mg/L	1	02/26/09 02:17 PM
T/R Hydrocarbons: C6-C35	12.8	0.691	1.97		mg/L	1	02/26/09 02:17 PM
Surr: Isopropylbenzene	87.2	0	70 - 130		%REC	1	02/26/09 02:17 PM
Surr: Octacosane	133	0	70 - 130	S	%REC	1	02/26/09 02:17 PM
TCLP Mercury		**SW1311/7470A**					**Analyst: LM**
Mercury	ND	0.000800	0.00200		mg/L	1	03/04/09 03:31 PM
TCLP Metals		**SW1311/6020**					**Analyst: KW**
Antimony	ND	0.00800	0.0250		mg/L	1	03/04/09 05:30 PM
Arsenic	ND	0.0200	0.0600		mg/L	1	03/04/09 05:30 PM
Barium	0.316	0.0300	0.100		mg/L	1	03/04/09 05:30 PM
Beryllium	ND	0.00300	0.0100		mg/L	1	03/04/09 05:30 PM
Cadmium	ND	0.00300	0.0100		mg/L	1	03/04/09 05:30 PM
Chromium	ND	0.0200	0.0600		mg/L	1	03/04/09 05:30 PM
Lead	ND	0.00300	0.0100		mg/L	1	03/04/09 05:30 PM
Nickel	ND	0.0300	0.100		mg/L	1	03/04/09 05:30 PM
Selenium	ND	0.0200	0.0600		mg/L	1	03/04/09 05:30 PM
Silver	ND	0.0100	0.0200		mg/L	1	03/04/09 05:30 PM
Ignitability		**SW1010**					**Analyst: JBC**
Ignitability	>100	0	0		°C	1	03/02/09 01:15 PM
pH		**M4500-H+ B**					**Analyst: JBC**
pH	9.40	0	0		pH Units	1	02/27/09 11:19 AM
Reactivity (Cyanide & Sulfide)		**Reactivity**					**Analyst: AAD**
Reactive Cyanide	ND	0.0992	0.198		mg/Kg	2	03/03/09 03:06 PM
Reactive Sulfide	ND	19.8	19.8		mg/Kg	1	03/03/09 11:15 AM

Qualifiers:

	See Final Page of Report for MQLs and MDLs	J	Analyte detected between SDL and RL
B	Analyte detected in the associated Method Blank	N	Parameter not NELAC certified
C	Sample Result or QC discussed in the Case Narrative	ND	Not Detected at the SDL
DF	Dilution Factor	RL	Reporting Limit (MQL adjusted for moisture and sample size)
E	TPH pattern not Gas or Diesel Range Pattern	S	Spike Recovery outside control limits
		SDL	Sample Detection Limit

EPAHO104000645

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_090226A

Sample ID:	LCS-33684	Batch ID:	33684	TestNo:	TX1005	Units:	mg/L
SampType:	LCS	Run ID:	GC12_090226A	Analysis Date:	02/26/09 11:23 AM	Prep Date:	02/26/09

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
T/R Hydrocarbons: C6-C35	23.3	2.00	25.00	0	93.4	75	125			
Surr: Isopropylbenzene	2.20		2.500		87.9	70	130			
Surr: Octacosane	2.20		2.500		88.0	70	130			

Sample ID:	LCSD-33684	Batch ID:	33684	TestNo:	TX1005	Units:	mg/L
SampType:	LCSD	Run ID:	GC12_090226A	Analysis Date:	02/26/09 11:32 AM	Prep Date:	02/26/09

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
T/R Hydrocarbons: C6-C35	23.8	2.00	25.00	0	95.3	75	125	1.99	20	
Surr: Isopropylbenzene	2.24		2.500		89.6	70	130	0	0	
Surr: Octacosane	2.20		2.500		88.0	70	130	0	0	

Sample ID:	MB-33684	Batch ID:	33684	TestNo:	TX1005	Units:	mg/L
SampType:	MBLK	Run ID:	GC12_090226A	Analysis Date:	02/26/09 11:41 AM	Prep Date:	02/26/09

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
T/R Hydrocarbons: C6-C12	ND	2.00								
T/R Hydrocarbons: >C12-C28	ND	2.00								
T/R Hydrocarbons: >C28-C35	ND	2.00								
T/R Hydrocarbons: C6-C35	ND	2.00								
Surr: Isopropylbenzene	2.10		2.500		84.0	70	130			
Surr: Octacosane	2.11		2.500		84.5	70	130			

Sample ID:	0902145-01BMS	Batch ID:	33684	TestNo:	TX1005	Units:	mg/L
SampType:	MS	Run ID:	GC12_090226A	Analysis Date:	02/26/09 11:58 AM	Prep Date:	02/26/09

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
T/R Hydrocarbons: C6-C35	22.4	1.94	24.31	0	92.2	75	125			
Surr: Isopropylbenzene	2.12		2.431		87.3	70	130			
Surr: Octacosane	2.11		2.431		86.8	70	130			

Sample ID:	0902145-01BMSD	Batch ID:	33684	TestNo:	TX1005	Units:	mg/L
SampType:	MSD	Run ID:	GC12_090226A	Analysis Date:	02/26/09 12:07 PM	Prep Date:	02/26/09

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
T/R Hydrocarbons: C6-C35	23.4	1.97	24.65	0	95.0	75	125	4.41	20	
Surr: Isopropylbenzene	2.26		2.465		91.8	70	130	0	0	
Surr: Octacosane	2.27		2.465		92.0	70	130	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000646

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_090226A

Sample ID:	ICV-090226	**Batch ID:**	R42088	**TestNo:**		TX1005		**Units:**		mg/L
SampType:	ICV	**Run ID:**	GC12_090226A	**Analysis Date:**		02/26/09 11:14 AM		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
T/R Hydrocarbons: C6-C35		1010	2.00	1000	0	101	75	125			
Surr: Isopropylbenzene		48.1		50.00		96.1	70	130			
Surr: Octacosane		50.4		50.00		101	70	130			

Sample ID:	CCV1-090226	**Batch ID:**	R42088	**TestNo:**		TX1005		**Units:**		mg/L
SampType:	CCV	**Run ID:**	GC12_090226A	**Analysis Date:**		02/26/09 12:42 PM		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
T/R Hydrocarbons: C6-C35		517	2.00	500.0	0	103	75	125			
Surr: Isopropylbenzene		24.7		25.00		98.8	70	130			
Surr: Octacosane		24.5		25.00		98.0	70	130			

Sample ID:	CCV2-090226	**Batch ID:**	R42088	**TestNo:**		TX1005		**Units:**		mg/L
SampType:	CCV	**Run ID:**	GC12_090226A	**Analysis Date:**		02/26/09 02:26 PM		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
T/R Hydrocarbons: C6-C35		529	2.00	500.0	0	106	75	125			
Surr: Isopropylbenzene		25.1		25.00		100	70	130			
Surr: Octacosane		24.9		25.00		99.8	70	130			

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000647

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC_HG_090304B

Sample ID:	MB-33775	**Batch ID:**	33775		**TestNo:**	SW1311/7470A		**Units:**		mg/L	
SampType:	MBLK	**Run ID:**	CETAC_HG_090304B		**Analysis Date:**	03/04/09 03:01 PM		**Prep Date:**		03/04/09	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		ND	0.000200								
Sample ID:	MB-33769 TCLP	**Batch ID:**	33775		**TestNo:**	SW1311/7470A		**Units:**		mg/L	
SampType:	MBLK	**Run ID:**	CETAC_HG_090304B		**Analysis Date:**	03/04/09 03:07 PM		**Prep Date:**		03/04/09	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		ND	0.00200								
Sample ID:	LCS-33775	**Batch ID:**	33775		**TestNo:**	SW1311/7470A		**Units:**		mg/L	
SampType:	LCS	**Run ID:**	CETAC_HG_090304B		**Analysis Date:**	03/04/09 03:09 PM		**Prep Date:**		03/04/09	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00194	0.000200	0.002000	0	97.0	85	115			
Sample ID:	LCSD-33775	**Batch ID:**	33775		**TestNo:**	SW1311/7470A		**Units:**		mg/L	
SampType:	LCSD	**Run ID:**	CETAC_HG_090304B		**Analysis Date:**	03/04/09 03:11 PM		**Prep Date:**		03/04/09	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00200	0.000200	0.002000	0	100	85	115	3.05	15	
Sample ID:	0902127-02C SD	**Batch ID:**	33775		**TestNo:**	SW1311/7470A		**Units:**		mg/L	
SampType:	SD	**Run ID:**	CETAC_HG_090304B		**Analysis Date:**	03/04/09 03:15 PM		**Prep Date:**		03/04/09	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0	0.00100	0	0				0	10	
Sample ID:	0902127-02C PDS	**Batch ID:**	33775		**TestNo:**	SW1311/7470A		**Units:**		mg/L	
SampType:	PDS	**Run ID:**	CETAC_HG_090304B		**Analysis Date:**	03/04/09 03:17 PM		**Prep Date:**		03/04/09	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00252	0.000200	0.002500	0	101	85	115			
Sample ID:	0902127-02C MS	**Batch ID:**	33775		**TestNo:**	SW1311/7470A		**Units:**		mg/L	
SampType:	MS	**Run ID:**	CETAC_HG_090304B		**Analysis Date:**	03/04/09 03:19 PM		**Prep Date:**		03/04/09	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00212	0.000200	0.002000	0	106	85	115			
Sample ID:	0902127-02C MSD	**Batch ID:**	33775		**TestNo:**	SW1311/7470A		**Units:**		mg/L	
SampType:	MSD	**Run ID:**	CETAC_HG_090304B		**Analysis Date:**	03/04/09 03:25 PM		**Prep Date:**		03/04/09	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00216	0.000200	0.002000	0	108	85	115	1.87	15	

Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000648

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC_HG_090304B

Sample ID:	ICV-090304	**Batch ID:**	R42186		**TestNo:**		SW1311/7470A		**Units:**		mg/L
SampType:	ICV	**Run ID:**	CETAC_HG_090304B		**Analysis Date:**		03/04/09 02:57 PM		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00400	0.000200	0.00400	0	100	90	110			

Sample ID:	CCV1-090304	**Batch ID:**	R42186		**TestNo:**		SW1311/7470A		**Units:**		mg/L
SampType:	CCV	**Run ID:**	CETAC_HG_090304B		**Analysis Date:**		03/04/09 03:21 PM		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00207	0.000200	0.00200	0	104	90	110			

Sample ID:	CCV2-090304	**Batch ID:**	R42186		**TestNo:**		SW1311/7470A		**Units:**		mg/L
SampType:	CCV	**Run ID:**	CETAC_HG_090304B		**Analysis Date:**		03/04/09 03:42 PM		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Mercury		0.00215	0.000200	0.00200	0	108	90	110			

Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000649

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_090304C

Sample ID:	MB-33771	Batch ID:	33771		TestNo:		SW1311/6020		Units:		mg/L
SampType:	MBLK	Run ID:	ICP-MS2_090304C		Analysis Date:		03/04/09 05:09 PM		Prep Date:		03/04/09
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		ND	0.00250								
Arsenic		ND	0.00600								
Barium		ND	0.0100								
Beryllium		ND	0.00100								
Cadmium		ND	0.00100								
Chromium		ND	0.00600								
Lead		ND	0.00100								
Nickel		ND	0.0100								
Selenium		ND	0.00600								
Silver		ND	0.00200								

Sample ID:	MB-33769 TCLP	Batch ID:	33771		TestNo:		SW1311/6020		Units:		mg/L
SampType:	MBLK	Run ID:	ICP-MS2_090304C		Analysis Date:		03/04/09 05:14 PM		Prep Date:		03/04/09
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		ND	0.0250								
Arsenic		ND	0.0600								
Barium		ND	0.100								
Beryllium		ND	0.0100								
Cadmium		ND	0.0100								
Chromium		ND	0.0600								
Lead		ND	0.0100								
Nickel		ND	0.100								
Selenium		ND	0.0600								
Silver		ND	0.0200								

Sample ID:	LCS-33771	Batch ID:	33771		TestNo:		SW1311/6020		Units:		mg/L
SampType:	LCS	Run ID:	ICP-MS2_090304C		Analysis Date:		03/04/09 05:20 PM		Prep Date:		03/04/09
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.184	0.00250	0.2000	0	91.8	80	120			
Arsenic		0.183	0.00600	0.2000	0	91.4	80	120			
Barium		0.186	0.0100	0.2000	0	93.0	80	120			
Beryllium		0.177	0.00100	0.2000	0	88.3	80	120			
Cadmium		0.183	0.00100	0.2000	0	91.6	80	120			
Chromium		0.187	0.00600	0.2000	0	93.4	80	120			
Lead		0.188	0.00100	0.2000	0	94.1	80	120			
Nickel		0.181	0.0100	0.2000	0	90.4	80	120			
Selenium		0.188	0.00600	0.2000	0	93.9	80	120			
Silver		0.181	0.00200	0.2000	0	90.3	80	120			

Sample ID:	LCSD-33771	Batch ID:	33771		TestNo:		SW1311/6020		Units:		mg/L
SampType:	LCSD	Run ID:	ICP-MS2_090304C		Analysis Date:		03/04/09 05:25 PM		Prep Date:		03/04/09
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.188	0.00250	0.2000	0	93.8	80	120	2.05	15	
Arsenic		0.186	0.00600	0.2000	0	92.9	80	120	1.68	15	

Qualifiers:					
	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000650

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_090304C

Barium		0.188	0.0100	0.2000	0	93.8	80	120	0.964	15
Beryllium		0.187	0.00100	0.2000	0	93.4	80	120	5.67	15
Cadmium		0.186	0.00100	0.2000	0	93.0	80	120	1.57	15
Chromium		0.192	0.00600	0.2000	0	96.2	80	120	2.90	15
Lead		0.192	0.00100	0.2000	0	96.2	80	120	2.21	15
Nickel		0.182	0.0100	0.2000	0	90.8	80	120	0.442	15
Selenium		0.191	0.00600	0.2000	0	95.6	80	120	1.85	15
Silver		0.186	0.00200	0.2000	0	92.8	80	120	2.68	15

Sample ID:	0902168-01C SD	**Batch ID:**	33771		**TestNo:**		SW1311/6020		**Units:**	mg/L
SampType:	SD	**Run ID:**	ICP-MS2_090304C		**Analysis Date:**		03/04/09 05:36 PM		**Prep Date:**	03/04/09
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit** **Qual**
Antimony		0	0.125	0	0				0	10
Arsenic		0	0.300	0	0				0	10
Barium		0.298	0.500	0	0.3161				5.83	10
Beryllium		0	0.0500	0	0				0	10
Cadmium		0	0.0500	0	0				0	10
Chromium		0	0.300	0	0				0	10
Lead		0	0.0500	0	0				0	10
Nickel		0	0.500	0	0				0	10
Selenium		0	0.300	0	0				0	10
Silver		0	0.100	0	0				0	10

Sample ID:	0902168-01C PDS	**Batch ID:**	33771		**TestNo:**		SW1311/6020		**Units:**	mg/L
SampType:	PDS	**Run ID:**	ICP-MS2_090304C		**Analysis Date:**		03/04/09 05:41 PM		**Prep Date:**	03/04/09
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit** **Qual**
Antimony		1.68	0.0250	2.000	0	84.1	75	125		
Arsenic		1.82	0.0600	2.000	0	91.0	75	125		
Barium		2.15	0.100	2.000	0.3161	91.5	75	125		
Beryllium		1.72	0.0100	2.000	0	86.2	75	125		
Cadmium		1.70	0.0100	2.000	0	84.9	75	125		
Chromium		1.76	0.0600	2.000	0	87.8	75	125		
Lead		1.93	0.0100	2.000	0	96.3	75	125		
Nickel		1.70	0.100	2.000	0	84.8	75	125		
Selenium		1.76	0.0600	2.000	0	88.2	75	125		
Silver		1.72	0.0200	2.000	0	85.8	75	125		

Sample ID:	0902168-01C MS	**Batch ID:**	33771		**TestNo:**		SW1311/6020		**Units:**	mg/L
SampType:	MS	**Run ID:**	ICP-MS2_090304C		**Analysis Date:**		03/04/09 05:47 PM		**Prep Date:**	03/04/09
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit** **Qual**
Antimony		1.89	0.0250	2.000	0	94.4	80	120		
Arsenic		1.84	0.0600	2.000	0	92.2	80	120		
Barium		2.15	0.100	2.000	0.3161	91.9	80	120		
Beryllium		1.72	0.0100	2.000	0	86.2	80	120		
Cadmium		1.73	0.0100	2.000	0	86.6	80	120		
Chromium		1.77	0.0600	2.000	0	88.4	80	120		
Lead		1.95	0.0100	2.000	0	97.4	80	120		

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000651

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_090304C

Nickel	1.73	0.100	2.000	0	86.7	80	120	
Selenium	1.86	0.0600	2.000	0	92.8	80	120	
Silver	1.70	0.0200	2.000	0	85.0	80	120	

Sample ID:	0902168-01C MSD	**Batch ID:**	33771	**TestNo:**	SW1311/6020	**Units:**	mg/L
SampType:	MSD	**Run ID:**	ICP-MS2_090304C	**Analysis Date:**	03/04/09 05:52 PM	**Prep Date:**	03/04/09

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony	1.83	0.0250	2.000	0	91.4	80	120	3.17	15	
Arsenic	1.87	0.0600	2.000	0	93.4	80	120	1.35	15	
Barium	2.10	0.100	2.000	0.3161	89.2	80	120	2.49	15	
Beryllium	1.74	0.0100	2.000	0	87.2	80	120	1.15	15	
Cadmium	1.73	0.0100	2.000	0	86.6	80	120	0.115	15	
Chromium	1.77	0.0600	2.000	0	88.6	80	120	0.169	15	
Lead	1.97	0.0100	2.000	0	98.5	80	120	1.12	15	
Nickel	1.75	0.100	2.000	0	87.6	80	120	1.09	15	
Selenium	1.87	0.0600	2.000	0	93.3	80	120	0.537	15	
Silver	1.69	0.0200	2.000	0	84.6	80	120	0.531	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
DF	Dilution Factor	RL	Reporting Limit
J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
MDL	Method Detection Limit	J	Analyte detected between SDL and RL
ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000652

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_090304C

Sample ID:	ICV1-090304	Batch ID:	R42190		TestNo:		SW1311/6020		Units:		mg/L
SampType:	ICV	Run ID:	ICP-MS2_090304C		Analysis Date:		03/04/09 01:47 PM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.0976	0.00250	0.100	0	97.6	90	110			
Arsenic		0.0991	0.00600	0.100	0	99.1	90	110			
Barium		0.0990	0.0100	0.100	0	99.0	90	110			
Beryllium		0.0908	0.00100	0.100	0	90.8	90	110			
Cadmium		0.0961	0.00100	0.100	0	96.1	90	110			
Chromium		0.100	0.00600	0.100	0	100	90	110			
Lead		0.104	0.00100	0.100	0	104	90	110			
Nickel		0.0981	0.0100	0.100	0	98.1	90	110			
Selenium		0.100	0.00600	0.100	0	100	90	110			
Silver		0.0979	0.00200	0.100	0	97.9	90	110			

Sample ID:	CCV3-090304	Batch ID:	R42190		TestNo:		SW1311/6020		Units:		mg/L
SampType:	CCV	Run ID:	ICP-MS2_090304C		Analysis Date:		03/04/09 04:52 PM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.196	0.00250	0.200	0	97.9	90	110			
Arsenic		0.195	0.00600	0.200	0	97.6	90	110			
Barium		0.194	0.0100	0.200	0	97.0	90	110			
Beryllium		0.194	0.00100	0.200	0	97.0	90	110			
Cadmium		0.193	0.00100	0.200	0	96.6	90	110			
Chromium		0.199	0.00600	0.200	0	99.4	90	110			
Lead		0.200	0.00100	0.200	0	100	90	110			
Nickel		0.194	0.0100	0.200	0	97.2	90	110			
Selenium		0.195	0.00600	0.200	0	97.5	90	110			
Silver		0.194	0.00200	0.200	0	97.2	90	110			

Sample ID:	CCV4-090304	Batch ID:	R42190		TestNo:		SW1311/6020		Units:		mg/L
SampType:	CCV	Run ID:	ICP-MS2_090304C		Analysis Date:		03/04/09 06:08 PM		Prep Date:		
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit	Qual
Antimony		0.195	0.00250	0.200	0	97.7	90	110			
Arsenic		0.193	0.00600	0.200	0	96.6	90	110			
Barium		0.198	0.0100	0.200	0	99.0	90	110			
Beryllium		0.183	0.00100	0.200	0	91.3	90	110			
Cadmium		0.194	0.00100	0.200	0	97.0	90	110			
Chromium		0.202	0.00600	0.200	0	101	90	110			
Lead		0.203	0.00100	0.200	0	101	90	110			
Nickel		0.193	0.0100	0.200	0	96.5	90	110			
Selenium		0.201	0.00600	0.200	0	101	90	110			
Silver		0.192	0.00200	0.200	0	95.9	90	110			

Qualifiers:				
	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000653

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: IGN_090302A

Sample ID:	MB-33749	**Batch ID:**	33749	**TestNo:**	SW1010		**Units:**	°C	
SampType:	MBLK	**Run ID:**	IGN_090302A	**Analysis Date:**	03/02/09 01:15 PM		**Prep Date:**	03/02/09	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Ignitability		>100	0								

Qualifiers:				
	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000654

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: IGN_090302A

Sample ID:	ICV-090302	**Batch ID:**	IGN_W-03/02/09		**TestNo:**		SW1010			**Units:**	°C
SampType:	ICV	**Run ID:**	IGN_090302A		**Analysis Date:**		03/02/09 01:15 PM			**Prep Date:**	03/02/09
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Ignitability		64	0	66.00	0	97.0	90	110			

Sample ID:	CCV-090302	**Batch ID:**	IGN_W-03/02/09		**TestNo:**		SW1010			**Units:**	°C
SampType:	CCV	**Run ID:**	IGN_090302A		**Analysis Date:**		03/02/09 01:15 PM			**Prep Date:**	03/02/09
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Ignitability		65	0	66.00	0	98.5	90	110			

Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000655

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_090227A

Sample ID:	0902168-01B DUP	**Batch ID:**	33720		**TestNo:**	M4500-H+ B			**Units:**		pH Units
SampType:	DUP	**Run ID:**	TITRATOR_090227A		**Analysis Date:**	02/27/09 11:20 AM			**Prep Date:**		02/27/09
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
pH		9.40	0	0	9.400				0	5	

Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000656

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_090227A

Sample ID:	ICV-090227	**Batch ID:**	R42100		**TestNo:**		M4500-H+ B		**Units:**		pH Units
SampType:	ICV	**Run ID:**	TITRATOR_090227A		**Analysis Date:**		02/27/09 11:18 AM		**Prep Date:**		02/27/09
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
pH		9.97	0	10.00	0	99.7	99	101			

Sample ID:	CCV-090227	**Batch ID:**	R42100		**TestNo:**		M4500-H+ B		**Units:**		pH Units
SampType:	CCV	**Run ID:**	TITRATOR_090227A		**Analysis Date:**		02/27/09 11:21 AM		**Prep Date:**		02/27/09
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
pH		7.04	0	7.000	0	101	97.1	102.9			

Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000657

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_090303A

Sample ID:	MB-33756	**Batch ID:**	33756	**TestNo:**		**Reactivity**		**Units:**		mg/Kg	
SampType:	MBLK	**Run ID:**	UV/VIS_2_090303A	**Analysis Date:**		03/03/09 03:06 PM		**Prep Date:**		03/03/09	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Reactive Cyanide		ND	0.200								

Sample ID:	LCS-33756CN	**Batch ID:**	33756	**TestNo:**		**Reactivity**		**Units:**		mg/Kg	
SampType:	LCS	**Run ID:**	UV/VIS_2_090303A	**Analysis Date:**		03/03/09 03:06 PM		**Prep Date:**		03/03/09	
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Reactive Cyanide		1.15	0.200	40.00	0	2.89	1	10			

Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000658

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_090303A

Sample ID:	ICV-090303	**Batch ID:**	R42161		**TestNo:**		**Reactivity**		**Units:**		mg/Kg
SampType:	ICV	**Run ID:**	UV/VIS_2_090303A		**Analysis Date:**		03/03/09 03:06 PM		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Reactive Cyanide		0.0996	0.100	0.1000	0	99.6	85	115			

Sample ID:	CCV-090303	**Batch ID:**	R42161		**TestNo:**		**Reactivity**		**Units:**		mg/Kg
SampType:	CCV	**Run ID:**	UV/VIS_2_090303A		**Analysis Date:**		03/03/09 03:06 PM		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Reactive Cyanide		0.204	0.100	0.2000	0	102	85	115			

Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000659

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: WC_090303A

Sample ID:	MB-33756	**Batch ID:**	33756		**TestNo:**		**Reactivity**		**Units:**		mg/Kg
SampType:	MBLK	**Run ID:**	WC_090303A		**Analysis Date:**		03/03/09 10:55 AM		**Prep Date:**		03/03/09
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Reactive Sulfide		ND	20.0								

Sample ID:	LCS-33756S	**Batch ID:**	33756		**TestNo:**		**Reactivity**		**Units:**		mg/Kg
SampType:	LCS	**Run ID:**	WC_090303A		**Analysis Date:**		03/03/09 10:55 AM		**Prep Date:**		03/03/09
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Reactive Sulfide		190	20.0	341.0	0	55.7	25	90			

Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000660

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

ANALYTICAL QC SUMMARY REPORT

RunID: WC_090303A

Sample ID:	ICV-090303	**Batch ID:**	R42160		**TestNo:**		**Reactivity**		**Units:**		mg/Kg
SampType:	ICV	**Run ID:**	WC_090303A		**Analysis Date:**		03/03/09 10:15 AM		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Reactive Sulfide		172	20.0	171.0	0	101	80	120			

Sample ID:	CCV-090303	**Batch ID:**	R42160		**TestNo:**		**Reactivity**		**Units:**		mg/Kg
SampType:	CCV	**Run ID:**	WC_090303A		**Analysis Date:**		03/03/09 12:50 PM		**Prep Date:**		
Analyte		**Result**	**RL**	**SPK value**	**Ref Val**	**%REC**	**LowLimit**	**HighLimit**	**%RPD**	**RPD Limit**	**Qual**
Reactive Sulfide		338	20.0	341.0	0	99.1	80	120			

Qualifiers:	B	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

EPAHO104000661

CLIENT: SMITH INTERNATIONAL
Work Order: 0902168
Project: TX-HOU-HDY-Waste

MQL SUMMARY REPORT

TestNo: TX1005 **Analyte**	**MDL** **mg/L**	**MQL** **mg/L**
T/R Hydrocarbons: >C12-C28	0.700	2.00
T/R Hydrocarbons: >C28-C35	0.700	2.00
T/R Hydrocarbons: C6-C12	0.700	2.00
T/R Hydrocarbons: C6-C35	0.700	2.00

TestNo: SW1010 **Analyte**	**MDL** **°C**	**MQL** **°C**
Ignitability	0	0

TestNo: Reactivity **Analyte**	**MDL** **mg/Kg**	**MQL** **mg/Kg**
Reactive Cyanide	0.100	0.200
Reactive Sulfide	20.0	20.0

TestNo: SW1311/7470A **Analyte**	**MDL** **mg/L**	**MQL** **mg/L**
Mercury	0.0000800	0.000200
Mercury	0.000800	0.00200

TestNo: SW1311/6020 **Analyte**	**MDL** **mg/L**	**MQL** **mg/L**
Antimony	0.000800	0.00250
Antimony	0.00800	0.0250
Arsenic	0.00200	0.00600
Arsenic	0.0200	0.0600
Barium	0.00300	0.0100
Barium	0.0300	0.100
Beryllium	0.000300	0.00100
Beryllium	0.00300	0.0100
Cadmium	0.000300	0.00100
Cadmium	0.00300	0.0100
Chromium	0.00200	0.00600
Chromium	0.0200	0.0600
Lead	0.000300	0.00100
Lead	0.00300	0.0100
Nickel	0.00300	0.0100
Nickel	0.0300	0.100
Selenium	0.00200	0.00600
Selenium	0.0200	0.0600
Silver	0.00100	0.00200
Silver	0.0100	0.0200

Qualifiers:
MQL - Method Quantitation Limit as defined by TRRP
MDL - Method Detection Limit as defined by TRRP

EPAHO104000662

3267
H and H Oil LP

EPAHO10400663

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/9/2009**

Dear **Jennifer Ownes**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3267

Expiration Date 4/9/2011

Generator: H and H Oil L.P. (Baytown)
Address: 7311 Decker Dr
Baytown, TX 77520

Waste Information

Name of Waste: Water and Sludge / tank bottoms from non haz used oil storage
TCEQ Waste Code #: CESQ6032
Container Type: Vacuum Box
Detailed Description of Process Generating Waste:
Clean out four used oil tanks from used oil collection
Color: **Odor:** **pH:**
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JB/AL

~~05~~ 15L

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: H + H Oil L.P. (Baytown)
Address: 2311 Decker Drive
City: Baytown State: TX Zip: 77520
Contact: Jennifer Owens Title: RDC
Phone Number: 281-486-4182 x 138 Fax Number: 281-486-0217
24/hr Phone Number:
US EPA ID No: TXR000021055
State ID No: SIC Code:

SECTION 2: Billing Information - ☐ Same as Above

Company: Vertex Residual Management
Address: 1331 Gemini St. Suite 103
City: Houston State: TX Zip: 77058
Contact: Jennifer Owens Title: RDC
Phone Number: 281.486.4182 ext 138 Fax Number: 281.486.0217

SECTION 3: General Description of the Waste

Name of Waste: Water and sludge / tank bottoms from non haz used oil storage tanks
Detailed Description of Process Generating Waste:

Clean out of four used oil tanks from used oil collection

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☑ Combination

Color: Odor:

Specific Gravity (water=1): Density: lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☑ Other (explain) VACUUM BOXES

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☑ One-Time
Quantity: 2

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☒ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☒ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CES 9 6032

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Material

Class: _____ UN/NA: _____ PG: _____ RQ: _____

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
		mg/l	mg/l	%
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
mg/l	mg/l	mg/l	mg/l	mg/l

SECTION 4: Physical and Chemical Data See attached lab analytical

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Tank Bottoms	90 to 100	
water	0 to 10	

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None Known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity:
Corrosivity:
Ignitability:

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

***Metals Subcategory*: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

***Oils Subcategory*: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Jennifer Owens **Date:** 3-24-09

Printed Name/Title: Jennifer Owens / RDC

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Rebecca Snyder
Date: 4-9-09 ☒ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$50 yard + $300 trip fee + FSC

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Send to class 2 sludge land fill

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

LCS
10201 Bay Area Blvd
Pasadena, Tx 77507
281-474-1334
281-474-7707 FAX

CERTIFICATE of ANALYSIS

LCS Reference: T2009-1580H
CUSTOMER Reference:

FOR: H&H Oil Baytown
PRODUCT: Water and Sludge
SAMPLE DRAWN FROM: VB-0725111
LOCATION: Pasadena, Texas
DATE of ANALYSIS: March 19, 2009

TEST	TEST METHOD	PREP METHOD	DETECTION LIMITS,ppm	RESULTS
Total Metals				
Arsenic	EPA-6010B	EPA-3040/3050	0.020	0.01 ppm
Barium	EPA-6010B	EPA-3040/3050	0.020	0.01 ppm
Cadmium	EPA-6010B	EPA-3040/3050	0.020	0.09 ppm
Chromium	EPA-6010B	EPA-3040/3050	0.020	0.02 ppm
Lead	EPA-6010B	EPA-3040/3050	0.020	0.28 ppm
Mercury	EPA-6010B	EPA-3040/3050	0.020	0.03 ppm
Selenium	EPA-6010B	EPA-3040/3050	0.020	0.02 ppm
Silver	EPA-6010B	EPA-3040/3050	0.020	0.07 ppm

TEST	TEST METHOD	PREP METHOD	DETECTION LIMITS,ppm	RESULTS
BETX		SW 8260B		
Benzene, ppm				0.08
Ethylbenzene, ppm				0.10
Toluene, ppm				0.09
Xylene, ppm				0.05
TPH	EPA SW-846/8440			332 ppm
Texas Metals				
Antimony		EPA 2008	0.020	<0.01 ppm
Nickel		EPA 2008	0.020	0.03 ppm
Beryllium		EPA 2008	0.020	<0.01 ppm

LCS REPRESENTATIVE

MARINE SURVEYORS GUILD EXCELLENCE ETHICS 220 EDUCATION MSG

LCS
10201 Bay Area Blvd
Pasadena, Tx 77507
281-474-1334
281-474-7707 FAX

CERTIFICATE of ANALYSIS

LCS Reference: T2009-1581H
CUSTOMER Reference:

FOR: H&H Oil Baytown
PRODUCT: Water and Sludge
SAMPLE DRAWN FROM: VB-0725 31
LOCATION: Pasadena, Texas
DATE of ANALYSIS: March 9, 2009

TEST	TEST METHOD	PREP METHOD	DETECTION LIMITS,ppm	RESULTS
Total Metals				
Arsenic	EPA-6010B	EPA-3050	0.020	0.01 ppm
Barium	EPA-6010B	EPA-3050	0.020	0.2 ppm
Cadmium	EPA-6010B	EPA-3050	0.020	0.11 ppm
Chromium	EPA-6010B	EPA-3050	0.020	0.02 ppm
Lead	EPA-6010B	EPA-3050	0.020	0.17 ppm
Mercury	EPA-6010B	EPA-3050	0.020	0.02 ppm
Selenium	EPA-6010B	EPA-3050	0.020	0.02 ppm
Silver	EPA-6010B	EPA-3050	0.020	0.05 ppm

TEST	TEST METHOD	DETECTION LIMITS,ppm	RESULTS
BETX	SW 8260		
Benzene, ppm			0.06
Ethylbenzene, ppm			0.07
Toluene, ppm			0.07
Xylene, ppm			0.03
TPH	EPA SW-846/8440		388 ppm
Texas Metals			
Antimony	EPA 200	0.020	<0.01 ppm
Nickel	EPA 200	0.020	0.02 ppm
Beryllium	EPA 200	0.020	<0.01 ppm

LCS REPRESENTATIVE

MARINE SURVEYORS GUILD EXCELLENCE ETHICS 220 EDUCATION MSG

QA/QC Report

Atomic Absorption

DATE 3/19/2009
LCS REFERENCE: T2009-1581H
LCS REFERENCE: T2009-1582H

METAL	DATE ANALYZED	TRUE CONC	INTIAL RUN RESULT	FINAL RUN RESULT
Arsenic	3/19/2009	100 microgram/ml	9.8	9.9
Copper		100 microgram/ml		
Cadmium	3/19/2009	10 microgram/ml	9.7	10
Chromium	3/19/2009	10 microgram/ml	10.1	10.1
Lead	3/19/2009	10 microgram/ml	10.1	10.1
Mercury	3/19/2009	10 microgram/ml	9.6	9.8
Nickel	3/19/2009	10 microgram/ml	9.9	9.9
Selenium	3/19/2009	100 microgram/ml	9.8	9.9
Silver	3/19/2009	100 microgram/ml	9.9	9.9
Zinc		100 microgram/ml		
[illegible]		100 microgram/ml		
Tin		100 microgram/ml		
Antimony	3/19/2009	100 microgram/ml	9.7	9.8
Baryllium	3/19/2009	10 microgram/ml	9.7	9.9

Analytes	Method	MDL mg/L	Reporting Level Minumum Level	Precision RPD	Accuracy %Rec
benzene	SW 846-8260	0.01	0.0100 ppm	<15%	91.5
toluene	SW 846-8260	0.01	0.0100 ppm	<15%	89.1
ethylbenzene	SW 846-8260	0.01	0.0100 ppm	<15%	91.1
xylenes	SW 846-8260	0.01	0.0100 ppm	<15%	89.9

Key to QA Abbreviations:
MS=Matrix Spike, MSD= Matrix Spike Duplicate, RPD= Retative Percent Deviation, MB= Method Blank, LCS= Laboratory Control Standard, CCV= Continuing Calibration Verification, CCB= Continuing Calibration Blank, %Rec= Percent Recovery

Signature _____
QAQC Manager

MARINE SURVEYORS QUALITY EXCELLENCE ETHICS MSQ EDUCATION 220

LCS
10201 Bay Area Blvd
Pasadena, Tx 77507
281-474-1334
281-474-7707 FAX

CERTIFICATE of ANALYSIS

LCS Reference: T2009-1581H
CUSTOMER Reference:

FOR: H&H Oil Baytown
PRODUCT: Water and Sludge
SAMPLE DRAWN FROM: VB-0725131
LOCATION: Pasadena, Texas
DATE of ANALYSIS: March 19, 2009

Association of NORA Responsible Recyclers

TEST	TEST METHOD	PREP METHOD	DETECTION LIMITS,ppm	RESULTS
Total Metals				
Arsenic	EPA-6010B	EPA-3040/3050	0.020	**0.01 ppm**
Barium	EPA-6010B	EPA-3040/3050	0.020	**0.2 ppm**
Cadmium	EPA-6010B	EPA-3040/3050	0.020	**0.11 ppm**
Chromium	EPA-6010B	EPA-3040/3050	0.020	**0.02 ppm**
Lead	EPA-6010B	EPA-3040/3050	0.020	**0.17 ppm**
Mercury	EPA-6010B	EPA-3040/3050	0.020	**0.02 ppm**
Selenium	EPA-6010B	EPA-3040/3050	0.020	**0.02 ppm**
Silver	EPA-6010B	EPA-3040/3050	0.020	**0.05 ppm**

TEST	TEST METHOD	DETECTION LIMITS,ppm	RESULTS
BETX	SW 8260B		
Benzene, ppm			**0.06**
Ethylbenzene, ppm			**0.07**
Toluene, ppm			**0.07**
Xylene, ppm			**0.03**
TPH	EPA SW-846/8440		**388 ppm**
Texas Metals			
Antimony	EPA 200.8	0.020	**<0.01 ppm**
Nickel	EPA 200.8	0.020	**0.02 ppm**
Baryllium	EPA 200.8	0.020	**<0.01 ppm**

LCS REPRESENTATIVE

LCS
10201 Bay Area Blvd
Pasadena, Tx 77507
281-474-1334
281-474-7707 FAX

CERTIFICATE of ANALYSIS

LCS Reference: T2009-1580H
CUSTOMER Reference:

FOR: H&H Oil Baytown
PRODUCT: Water and Sludge
SAMPLE DRAWN FROM: VB-0725111
LOCATION: Pasadena, Texas
DATE of ANALYSIS: March 19, 2009

Association of NORA Responsible Recyclers

TEST	TEST METHOD	PREP METHOD	DETECTION LIMITS,ppm	RESULTS
Total Metals				
Arsenic	EPA-6010B	EPA-3040/3050	0.020	**0.01 ppm**
Barium	EPA-6010B	EPA-3040/3050	0.020	**0.01 ppm**
Cadmium	EPA-6010B	EPA-3040/3050	0.020	**0.09 ppm**
Chromium	EPA-6010B	EPA-3040/3050	0.020	**0.02 ppm**
Lead	EPA-6010B	EPA-3040/3050	0.020	**0.28 ppm**
Mercury	EPA-6010B	EPA-3040/3050	0.020	**0.03 ppm**
Selenium	EPA-6010B	EPA-3040/3050	0.020	**0.02 ppm**
Silver	EPA-6010B	EPA-3040/3050	0.020	**0.07 ppm**

TEST	TEST METHOD	DETECTION LIMITS,ppm	RESULTS
BETX	SW 8260B		
Benzene, ppm			**0.08**
Ethylbenzene, ppm			**0.10**
Toluene, ppm			**0.09**
Xylene, ppm			**0.05**
TPH	EPA SW-846/8440		**332 ppm**
Texas Metals			
Antimony	EPA 200.8	0.020	**<0.01 ppm**
Nickel	EPA 200.8	0.020	**0.03 ppm**
Baryllium	EPA 200.8	0.020	**<0.01 ppm**

LCS REPRESENTATIVE

Al Longoria

From: Joy Baker
Sent: Monday, April 06, 2009 4:01 PM
To: Al Longoria
Subject: RE: Profile and Analytical from review and approval

Follow Up Flag: Follow up
Flag Status: Flagged

Matt says it is okay to receive as class 2.

From: Al Longoria <alongoria@cesenvironmental.com>
Sent: Monday, April 06, 2009 2:00 PM
To: Joy Baker <jbaker@cesenvironmental.com>
Subject: FW: Profile and Analytical from review and approval

This material is class two but we will need the Chain of custody. Can she call it class one and not use any analytical? Let me know.

Thanks,

Al Longoria
CES Environmental Services, Inc
Main: (713) 800-7911

From: Jennifer Owens [mailto:jennifero@vrmus.com]
Sent: Monday, April 06, 2009 1:30 PM
To: Joy Baker; Al Longoria
Subject: FW: Profile and Analytical from review and approval
Importance: High

Good Afternoon,

I originally sent in the attached profile on 03-24-09. I have attached a more legible copy of the analytical and the QA/QC. Al also requested the Chain of Custody, of which I am still working on. Can you review the information attached and advise if you can accept this material without the Chain of Custody? Please let me know if you have any questions.

Thank you,

Jennifer Owens

Residual Disposal Coordinator
Vertex Residual Management
1331 Gemini, Suite 103
Houston, TX 77058
281-486-4182 EXT. 138
281-486-0217 fax
jennifero@vrmus.com

From: Jennifer Owens
Sent: Tuesday, March 24, 2009 10:06 AM
To: 'Joy Baker'; Al Longoria
Subject: Profile and Analytical from review and approval

Please review the attached CES profile and analytical. Please provide a response today as our client would like the material removed ASAP.

Thank you,

Jennifer Owens

Residual Disposal Coordinator
Vertex Residual Management
1331 Gemini, Suite 103
Houston, TX 77058
281-486-4182 EXT. 138
281-486-0217 fax
jennifero@vrmus.com

EPAHO104000677

3268
Vertex Residual

EPAHO10400067S

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/9/2009**

Dear **Jennifer Ownes**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3268

Expiration Date 4/9/2011

Generator: Vertex Residual Management (Westheimer)
Address: 9633 Westheimer
Houston, TX 77063

Waste Information

Name of Waste: Non Haz water
TCEQ Waste Code #: CESQ1191
Container Type:
Detailed Description of Process Generating Waste:
Water from sampling of groundwater monitoring wells
Color: clear tp brown **Odor:** none **pH:** 3-10
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

1V JB/AL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Vertex Residual management
Address: 9633 Westheimer
City: Houston **State:** TX **Zip:** 77063
Contact: Jennifer Owens **Title:** RDC
Phone Number: 281.486.4182 **Fax Number:** 281.486.0217
24/hr Phone Number:
US EPA ID No: na
State ID No: na **SIC Code:** na

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Vertex Residual Management
Address: 1331 Gemini St Suite 103
City: Housotn **State:** TX **Zip:** 77058
Contact: Jennifer Owens **Title:** RDC
Phone Number: 281.486.4182 **Fax Number:** 281.486.0217

SECTION 3: General Description of the Waste

Name of Waste: Non haz Water
Detailed Description of Process Generating Waste:

Water from sampling of groundwater monitoring wells

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: clear to brown **Odor:** none

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Yearly** ☑ **One-Time**
Quantity: 1

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: C659171

Proper US DOT Shipping Name: Non RCRA/Non DOT Regulated Water

Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140 deg F		3-10		NA	mg/l	NA	mg/l	<2	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
NA	mg/l	<10,000	mg/l	<2	mg/l	<2	mg/l	<2	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	99-100	%
tetrachloroethene	<0.7	ppm
Benzene	<0.5	ppm
Trichloroethene	<0.5	ppm
Vinyl Chloride	<0.2	ppm
2-Butanone (MEK)	<200	ppm

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analytical

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	there is no process that involved RCRA metals that could have entered the water
TCLP Volatiles:	third party analytical was completed (see attached)
TCLP Semi-Volatiles:	third party analytical was completed (see attached)
Reactivity:	there is no process that could have caused the groundwater to be reactive
Corrosivity:	there is no process that could have caused the groundwater to be corrosive
Ignitability:	there is no process that could have caused the groundwater to be ignitable

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory *: Subpart C*

- ☐ Landfill leachate
- ☑ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☑ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Jennifer Owens **Date:** 3-20-09

Printed Name/Title: Jennifer Owens / RDC

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert Taylor
Date: 4-9-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$60/Drum + Trans

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Waste water treatment

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☑ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Matt Monroe
Envirotest
3902 Braxton St.

Houston, TX 77063

Report Summary

Tuesday October 07, 2008

Report Number: L367699
Samples Received: 10/01/08
Client Project: HOU 080109

Description: Woodlake Square JCP

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jarred Wells, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 09227, AL - 40660, CA - I-2277, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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4 Samples Reported: 10/07/08 11:43 Revised: 10/07/08 17:54

EPAHO104000686

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REPORT OF ANALYSIS

Matt Monroe
Envirotest
3902 Braxton St.
Houston, TX 77063

October 07, 2008

Date Received : October 01, 2008
Description : Woodlake Square Off-Site Delin.

ESC Sample # : L367699-01

Site ID :

Sample ID : MW-14

Project # : HOU 080109

Collected By : J. Boyle
Collection Date : 09/29/08 14:34

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Volatile Organics								
Acetone	U	0.0089	0.050	mg/l		8260B	10/04/08	1
Acrolein	U	0.014	0.050	mg/l	J4	8260B	10/04/08	1
Acrylonitrile	U	0.0017	0.010	mg/l		8260B	10/04/08	1
Benzene	U	0.00029	0.0010	mg/l		8260B	10/04/08	1
Bromobenzene	U	0.00024	0.0010	mg/l		8260B	10/04/08	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	10/04/08	1
Bromoform	U	0.00051	0.0010	mg/l		8260B	10/04/08	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	10/04/08	1
n-Butylbenzene	U	0.00023	0.0010	mg/l		8260B	10/04/08	1
sec-Butylbenzene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
tert-Butylbenzene	U	0.00020	0.0010	mg/l		8260B	10/04/08	1
Carbon tetrachloride	U	0.00031	0.0010	mg/l		8260B	10/04/08	1
Chlorobenzene	U	0.00026	0.0010	mg/l		8260B	10/04/08	1
Chlorodibromomethane	U	0.00042	0.0010	mg/l		8260B	10/04/08	1
Chloroethane	U	0.00086	0.0050	mg/l		8260B	10/04/08	1
2-Chloroethyl vinyl ether	U	0.0014	0.050	mg/l		8260B	10/04/08	1
Chloroform	U	0.0050	0.0050	mg/l		8260B	10/04/08	1
Chloromethane	U	0.00025	0.0025	mg/l		8260B	10/04/08	1
2-Chlorotoluene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
4-Chlorotoluene	U	0.00016	0.0010	mg/l		8260B	10/04/08	1
1,2-Dibromo-3-Chloropropane	U	0.00048	0.0050	mg/l		8260B	10/04/08	1
1,2-Dibromoethane	U	0.00048	0.0010	mg/l		8260B	10/04/08	1
Dibromomethane	U	0.00028	0.0010	mg/l		8260B	10/04/08	1
1,2-Dichlorobenzene	U	0.00029	0.0010	mg/l		8260B	10/04/08	1
1,3-Dichlorobenzene	U	0.00019	0.0010	mg/l		8260B	10/04/08	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	10/04/08	1
Dichlorodifluoromethane	U	0.00054	0.0050	mg/l		8260B	10/04/08	1
1,1-Dichloroethane	U	0.00031	0.0010	mg/l		8260B	10/04/08	1
1,2-Dichloroethane	U	0.00027	0.0010	mg/l		8260B	10/04/08	1
1,1-Dichloroethene	U	0.00050	0.0010	mg/l		8260B	10/04/08	1
cis-1,2-Dichloroethene	0.013	0.00038	0.0010	mg/l		8260B	10/04/08	1
trans-1,2-Dichloroethene	U	0.00030	0.0010	mg/l		8260B	10/04/08	1
1,2-Dichloropropane	U	0.00052	0.0010	mg/l		8260B	10/04/08	1
1,1-Dichloropropene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
1,3-Dichloropropane	U	0.00023	0.0010	mg/l		8260B	10/04/08	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	10/04/08	1
trans-1,3-Dichloropropene	U	0.00024	0.0010	mg/l		8260B	10/04/08	1
2,2-Dichloropropane	U	0.00025	0.0010	mg/l		8260B	10/04/08	1
Di-isopropyl ether	U	0.00025	0.0010	mg/l		8260B	10/04/08	1
Ethylbenzene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
Hexachloro-1,3-butadiene	U	0.00049	0.0010	mg/l		8260B	10/04/08	1
Isopropylbenzene	U	0.00019	0.0010	mg/l		8260B	10/04/08	1

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REPORT OF ANALYSIS

Matt Monroe
Envirotest
3902 Braxton St.
Houston, TX 77063

October 07, 2008

Date Received : October 01, 2008
Description : Woodlake Square Off-Site Delin.

ESC Sample # : L367699-01

Site ID :

Sample ID : MW-14

Project # : HOU 080109

Collected By :
Collection Date : 09/29/08 14:34

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
p-Isopropyltoluene	U	0.00021	0.0010	mg/l		8260B	10/04/08	1
2-Butanone (MEK)	U	0.0045	0.010	mg/l		8260B	10/04/08	1
Methylene Chloride	U	0.0040	0.0050	mg/l		8260B	10/04/08	1
4-Methyl-2-pentanone (MIBK)	U	0.0014	0.010	mg/l		8260B	10/04/08	1
Methyl tert-butyl ether	0.0073	0.00019	0.0010	mg/l		8260B	10/04/08	1
Naphthalene	U	0.0040	0.0050	mg/l		8260B	10/04/08	1
n-Propylbenzene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
Styrene	U	0.00038	0.0010	mg/l		8260B	10/04/08	1
1,1,1,2-Tetrachloroethane	U	0.00040	0.0010	mg/l		8260B	10/04/08	1
1,1,2,2-Tetrachloroethane	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
Tetrachloroethene	0.39	0.00029	0.0010	mg/l	E	8260B	10/04/08	1
Toluene	U	0.00027	0.0050	mg/l		8260B	10/04/08	1
1,2,3-Trichlorobenzene	U	0.00024	0.0010	mg/l		8260B	10/04/08	1
1,2,4-Trichlorobenzene	U	0.00026	0.0010	mg/l		8260B	10/04/08	1
1,1,1-Trichloroethane	U	0.00027	0.0010	mg/l		8260B	10/04/08	1
1,1,2-Trichloroethane	U	0.00045	0.0010	mg/l		8260B	10/04/08	1
Trichloroethene	0.0052	0.00037	0.0010	mg/l		8260B	10/04/08	1
Trichlorofluoromethane	U	0.00029	0.0050	mg/l		8260B	10/04/08	1
1,2,3-Trichloropropane	U	0.00036	0.0010	mg/l		8260B	10/04/08	1
1,2,4-Trimethylbenzene	U	0.00020	0.0010	mg/l		8260B	10/04/08	1
1,2,3-Trimethylbenzene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
1,3,5-Trimethylbenzene	U	0.00020	0.0010	mg/l		8260B	10/04/08	1
Vinyl chloride	U	0.00027	0.0010	mg/l		8260B	10/04/08	1
Xylenes, Total	U	0.00086	0.0030	mg/l		8260B	10/04/08	1
Surrogate Recovery								
Toluene-d8	99.3			% Rec.		8260B	10/04/08	1
Dibromofluoromethane	105.			% Rec.		8260B	10/04/08	1
4-Bromofluorobenzene	98.5			% Rec.		8260B	10/04/08	1

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REPORT OF ANALYSIS

Matt Monroe
Envirotest
3902 Braxton St.
Houston, TX 77063

October 07, 2008

Date Received : October 01, 2008
Description : Woodlake Square Off-Site Delin.

ESC Sample # : L367699-02

Site ID :

Sample ID : MW-15

Project # : HOU 080109

Collected By : J. Boyle
Collection Date : 09/29/08 16:51

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Volatile Organics								
Acetone	U	0.0089	0.050	mg/l		8260B	10/04/08	1
Acrolein	U	0.014	0.050	mg/l	J4	8260B	10/04/08	1
Acrylonitrile	U	0.0017	0.010	mg/l		8260B	10/04/08	1
Benzene	U	0.00029	0.0010	mg/l		8260B	10/04/08	1
Bromobenzene	U	0.00024	0.0010	mg/l		8260B	10/04/08	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	10/04/08	1
Bromoform	U	0.00051	0.0010	mg/l		8260B	10/04/08	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	10/04/08	1
n-Butylbenzene	U	0.00023	0.0010	mg/l		8260B	10/04/08	1
sec-Butylbenzene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
tert-Butylbenzene	U	0.00020	0.0010	mg/l		8260B	10/04/08	1
Carbon tetrachloride	U	0.00031	0.0010	mg/l		8260B	10/04/08	1
Chlorobenzene	U	0.00026	0.0010	mg/l		8260B	10/04/08	1
Chlorodibromomethane	U	0.00042	0.0010	mg/l		8260B	10/04/08	1
Chloroethane	U	0.00086	0.0050	mg/l		8260B	10/04/08	1
2-Chloroethyl vinyl ether	U	0.0014	0.050	mg/l		8260B	10/04/08	1
Chloroform	U	0.0050	0.0050	mg/l		8260B	10/04/08	1
Chloromethane	U	0.00025	0.0025	mg/l		8260B	10/04/08	1
2-Chlorotoluene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
4-Chlorotoluene	U	0.00016	0.0010	mg/l		8260B	10/04/08	1
1,2-Dibromo-3-Chloropropane	U	0.00048	0.0050	mg/l		8260B	10/04/08	1
1,2-Dibromoethane	U	0.00048	0.0010	mg/l		8260B	10/04/08	1
Dibromomethane	U	0.00028	0.0010	mg/l		8260B	10/04/08	1
1,2-Dichlorobenzene	U	0.00029	0.0010	mg/l		8260B	10/04/08	1
1,3-Dichlorobenzene	U	0.00019	0.0010	mg/l		8260B	10/04/08	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	10/04/08	1
Dichlorodifluoromethane	U	0.00054	0.0050	mg/l		8260B	10/04/08	1
1,1-Dichloroethane	U	0.00031	0.0010	mg/l		8260B	10/04/08	1
1,2-Dichloroethane	U	0.00027	0.0010	mg/l		8260B	10/04/08	1
1,1-Dichloroethene	U	0.00050	0.0010	mg/l		8260B	10/04/08	1
cis-1,2-Dichloroethene	0.018	0.00038	0.0010	mg/l		8260B	10/04/08	1
trans-1,2-Dichloroethene	U	0.00030	0.0010	mg/l		8260B	10/04/08	1
1,2-Dichloropropane	U	0.00052	0.0010	mg/l		8260B	10/04/08	1
1,1-Dichloropropene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
1,3-Dichloropropane	U	0.00023	0.0010	mg/l		8260B	10/04/08	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	10/04/08	1
trans-1,3-Dichloropropene	U	0.00024	0.0010	mg/l		8260B	10/04/08	1
2,2-Dichloropropane	U	0.00025	0.0010	mg/l		8260B	10/04/08	1
Di-isopropyl ether	0.00033	0.00025	0.0010	mg/l	J	8260B	10/04/08	1
Ethylbenzene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
Hexachloro-1,3-butadiene	U	0.00049	0.0010	mg/l		8260B	10/04/08	1
Isopropylbenzene	U	0.00019	0.0010	mg/l		8260B	10/04/08	1

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REPORT OF ANALYSIS

Matt Monroe
Envirotest
3902 Braxton St.
Houston, TX 77063

October 07, 2008

Date Received : October 01, 2008
Description : Woodlake Square Off-Site Delin.

ESC Sample # : L367699-02

Site ID :

Sample ID : MW-15

Project # : HOU 080109

Collected By :
Collection Date : 09/29/08 16:51

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
p-Isopropyltoluene	U	0.00021	0.0010	mg/l		8260B	10/04/08	1
2-Butanone (MEK)	0.0061	0.0045	0.010	mg/l	J	8260B	10/04/08	1
Methylene Chloride	U	0.0040	0.0050	mg/l		8260B	10/04/08	1
4-Methyl-2-pentanone (MIBK)	U	0.0014	0.010	mg/l		8260B	10/04/08	1
Methyl tert-butyl ether	0.021	0.00019	0.0010	mg/l		8260B	10/04/08	1
Naphthalene	U	0.0040	0.0050	mg/l		8260B	10/04/08	1
n-Propylbenzene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
Styrene	U	0.00038	0.0010	mg/l		8260B	10/04/08	1
1,1,1,2-Tetrachloroethane	U	0.00040	0.0010	mg/l		8260B	10/04/08	1
1,1,2,2-Tetrachloroethane	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
Tetrachloroethene	0.078	0.00029	0.0010	mg/l		8260B	10/04/08	1
Toluene	U	0.00027	0.0050	mg/l		8260B	10/04/08	1
1,2,3-Trichlorobenzene	U	0.00024	0.0010	mg/l		8260B	10/04/08	1
1,2,4-Trichlorobenzene	U	0.00026	0.0010	mg/l		8260B	10/04/08	1
1,1,1-Trichloroethane	U	0.00027	0.0010	mg/l		8260B	10/04/08	1
1,1,2-Trichloroethane	U	0.00045	0.0010	mg/l		8260B	10/04/08	1
Trichloroethene	0.0065	0.00037	0.0010	mg/l		8260B	10/04/08	1
Trichlorofluoromethane	U	0.00029	0.0050	mg/l		8260B	10/04/08	1
1,2,3-Trichloropropane	U	0.00036	0.0010	mg/l		8260B	10/04/08	1
1,2,4-Trimethylbenzene	U	0.00020	0.0010	mg/l		8260B	10/04/08	1
1,2,3-Trimethylbenzene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
1,3,5-Trimethylbenzene	U	0.00020	0.0010	mg/l		8260B	10/04/08	1
Vinyl chloride	U	0.00027	0.0010	mg/l		8260B	10/04/08	1
Xylenes, Total	U	0.00086	0.0030	mg/l		8260B	10/04/08	1
Surrogate Recovery								
Toluene-d8	99.9			% Rec.		8260B	10/04/08	1
Dibromofluoromethane	103.			% Rec.		8260B	10/04/08	1
4-Bromofluorobenzene	101.			% Rec.		8260B	10/04/08	1

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Matt Monroe
Envirotest
3902 Braxton St.
Houston, TX 77063

October 07, 2008

ESC Sample # : L367699-03

Site ID :

Project # : HOU 080109

Date Received : October 01, 2008
Description : Woodlake Square Off-Site Delin.

Sample ID : MW-16

Collected By : J. Boyle
Collection Date : 09/29/08 15:51

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Volatile Organics								
Acetone	U	0.0089	0.050	mg/l		8260B	10/06/08	1
Acrolein	U	0.014	0.050	mg/l		8260B	10/06/08	1
Acrylonitrile	U	0.0017	0.010	mg/l		8260B	10/06/08	1
Benzene	0.0048	0.00029	0.0010	mg/l		8260B	10/06/08	1
Bromobenzene	U	0.00024	0.0010	mg/l		8260B	10/06/08	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	10/06/08	1
Bromoform	U	0.00051	0.0010	mg/l		8260B	10/06/08	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	10/06/08	1
n-Butylbenzene	U	0.00023	0.0010	mg/l		8260B	10/06/08	1
sec-Butylbenzene	U	0.00022	0.0010	mg/l		8260B	10/06/08	1
tert-Butylbenzene	U	0.00020	0.0010	mg/l		8260B	10/06/08	1
Carbon tetrachloride	U	0.00031	0.0010	mg/l		8260B	10/06/08	1
Chlorobenzene	U	0.00026	0.0010	mg/l		8260B	10/06/08	1
Chlorodibromomethane	U	0.00042	0.0010	mg/l		8260B	10/06/08	1
Chloroethane	U	0.00086	0.0050	mg/l		8260B	10/06/08	1
2-Chloroethyl vinyl ether	U	0.0014	0.050	mg/l		8260B	10/06/08	1
Chloroform	U	0.0050	0.0050	mg/l		8260B	10/06/08	1
Chloromethane	U	0.00025	0.0025	mg/l		8260B	10/06/08	1
2-Chlorotoluene	U	0.00022	0.0010	mg/l		8260B	10/06/08	1
4-Chlorotoluene	U	0.00016	0.0010	mg/l		8260B	10/06/08	1
1,2-Dibromo-3-Chloropropane	U	0.00048	0.0050	mg/l		8260B	10/06/08	1
1,2-Dibromoethane	U	0.00048	0.0010	mg/l		8260B	10/06/08	1
Dibromomethane	U	0.00028	0.0010	mg/l		8260B	10/06/08	1
1,2-Dichlorobenzene	U	0.00029	0.0010	mg/l		8260B	10/06/08	1
1,3-Dichlorobenzene	U	0.00019	0.0010	mg/l		8260B	10/06/08	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	10/06/08	1
Dichlorodifluoromethane	U	0.00054	0.0050	mg/l		8260B	10/06/08	1
1,1-Dichloroethane	U	0.00031	0.0010	mg/l		8260B	10/06/08	1
1,2-Dichloroethane	U	0.00027	0.0010	mg/l		8260B	10/06/08	1
1,1-Dichloroethene	U	0.00050	0.0010	mg/l		8260B	10/06/08	1
cis-1,2-Dichloroethene	0.020	0.00038	0.0010	mg/l		8260B	10/06/08	1
trans-1,2-Dichloroethene	0.0011	0.00030	0.0010	mg/l		8260B	10/06/08	1
1,2-Dichloropropane	U	0.00052	0.0010	mg/l		8260B	10/06/08	1
1,1-Dichloropropene	U	0.00022	0.0010	mg/l		8260B	10/06/08	1
1,3-Dichloropropane	U	0.00023	0.0010	mg/l		8260B	10/06/08	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	10/06/08	1
trans-1,3-Dichloropropene	U	0.00024	0.0010	mg/l		8260B	10/06/08	1
2,2-Dichloropropane	U	0.00025	0.0010	mg/l		8260B	10/06/08	1
Di-isopropyl ether	0.00099	0.00025	0.0010	mg/l	J	8260B	10/06/08	1
Ethylbenzene	U	0.00022	0.0010	mg/l		8260B	10/06/08	1
Hexachloro-1,3-butadiene	U	0.00049	0.0010	mg/l		8260B	10/06/08	1
Isopropylbenzene	U	0.00019	0.0010	mg/l		8260B	10/06/08	1

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MDL = Minimum Detection Limit = LOD = SQL(TRRP)
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EPAHO104000691

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Matt Monroe
Envirotest
3902 Braxton St.
Houston, TX 77063

October 07, 2008

Date Received : October 01, 2008
Description : Woodlake Square Off-Site Delin.

ESC Sample # : L367699-03

Site ID :

Sample ID : MW-16

Project # : HOU 080109

Collected By :
Collection Date : 09/29/08 15:51

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
p-Isopropyltoluene	U	0.00021	0.0010	mg/l		8260B	10/06/08	1
2-Butanone (MEK)	U	0.0045	0.010	mg/l		8260B	10/06/08	1
Methylene Chloride	U	0.0040	0.0050	mg/l		8260B	10/06/08	1
4-Methyl-2-pentanone (MIBK)	U	0.0014	0.010	mg/l		8260B	10/06/08	1
Methyl tert-butyl ether	0.064	0.00019	0.0010	mg/l		8260B	10/06/08	1
Naphthalene	U	0.0040	0.0050	mg/l		8260B	10/06/08	1
n-Propylbenzene	U	0.00022	0.0010	mg/l		8260B	10/06/08	1
Styrene	U	0.00038	0.0010	mg/l		8260B	10/06/08	1
1,1,1,2-Tetrachloroethane	U	0.00040	0.0010	mg/l		8260B	10/06/08	1
1,1,2,2-Tetrachloroethane	U	0.00022	0.0010	mg/l		8260B	10/06/08	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00022	0.0010	mg/l		8260B	10/06/08	1
Tetrachloroethene	0.10	0.00029	0.0010	mg/l		8260B	10/06/08	1
Toluene	U	0.00027	0.0050	mg/l		8260B	10/06/08	1
1,2,3-Trichlorobenzene	U	0.00024	0.0010	mg/l		8260B	10/06/08	1
1,2,4-Trichlorobenzene	U	0.00026	0.0010	mg/l		8260B	10/06/08	1
1,1,1-Trichloroethane	U	0.00027	0.0010	mg/l		8260B	10/06/08	1
1,1,2-Trichloroethane	U	0.00045	0.0010	mg/l		8260B	10/06/08	1
Trichloroethene	0.029	0.00037	0.0010	mg/l		8260B	10/06/08	1
Trichlorofluoromethane	U	0.00029	0.0050	mg/l		8260B	10/06/08	1
1,2,3-Trichloropropane	U	0.00036	0.0010	mg/l		8260B	10/06/08	1
1,2,4-Trimethylbenzene	U	0.00020	0.0010	mg/l		8260B	10/06/08	1
1,2,3-Trimethylbenzene	U	0.00022	0.0010	mg/l		8260B	10/06/08	1
1,3,5-Trimethylbenzene	U	0.00020	0.0010	mg/l		8260B	10/06/08	1
Vinyl chloride	0.0020	0.00027	0.0010	mg/l		8260B	10/06/08	1
Xylenes, Total	U	0.00086	0.0030	mg/l		8260B	10/06/08	1
Surrogate Recovery								
Toluene-d8	107.			% Rec.		8260B	10/06/08	1
Dibromofluoromethane	110.			% Rec.		8260B	10/06/08	1
4-Bromofluorobenzene	108.			% Rec.		8260B	10/06/08	1

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MDL = Minimum Detection Limit = LOD = SQL(TRRP)
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12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Matt Monroe
Envirotest
3902 Braxton St.
Houston, TX 77063

October 07, 2008

ESC Sample # : L367699-04

Site ID :

Project # : HOU 080109

Date Received : October 01, 2008
Description : Woodlake Square Off-Site Delin.

Sample ID : FIELD BLANK

Collected By : J. Boyle
Collection Date : 09/29/08 13:00

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Volatile Organics								
Acetone	U	0.0089	0.050	mg/l		8260B	10/04/08	1
Acrolein	U	0.014	0.050	mg/l	J4	8260B	10/04/08	1
Acrylonitrile	U	0.0017	0.010	mg/l		8260B	10/04/08	1
Benzene	U	0.00029	0.0010	mg/l		8260B	10/04/08	1
Bromobenzene	U	0.00024	0.0010	mg/l		8260B	10/04/08	1
Bromodichloromethane	U	0.00037	0.0010	mg/l		8260B	10/04/08	1
Bromoform	U	0.00051	0.0010	mg/l		8260B	10/04/08	1
Bromomethane	U	0.00089	0.0050	mg/l		8260B	10/04/08	1
n-Butylbenzene	U	0.00023	0.0010	mg/l		8260B	10/04/08	1
sec-Butylbenzene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
tert-Butylbenzene	U	0.00020	0.0010	mg/l		8260B	10/04/08	1
Carbon tetrachloride	U	0.00031	0.0010	mg/l		8260B	10/04/08	1
Chlorobenzene	U	0.00026	0.0010	mg/l		8260B	10/04/08	1
Chlorodibromomethane	U	0.00042	0.0010	mg/l		8260B	10/04/08	1
Chloroethane	U	0.00086	0.0050	mg/l		8260B	10/04/08	1
2-Chloroethyl vinyl ether	U	0.0014	0.050	mg/l		8260B	10/04/08	1
Chloroform	U	0.0050	0.0050	mg/l		8260B	10/04/08	1
Chloromethane	U	0.00025	0.0025	mg/l		8260B	10/04/08	1
2-Chlorotoluene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
4-Chlorotoluene	U	0.00016	0.0010	mg/l		8260B	10/04/08	1
1,2-Dibromo-3-Chloropropane	U	0.00048	0.0050	mg/l		8260B	10/04/08	1
1,2-Dibromoethane	U	0.00048	0.0010	mg/l		8260B	10/04/08	1
Dibromomethane	U	0.00028	0.0010	mg/l		8260B	10/04/08	1
1,2-Dichlorobenzene	U	0.00029	0.0010	mg/l		8260B	10/04/08	1
1,3-Dichlorobenzene	U	0.00019	0.0010	mg/l		8260B	10/04/08	1
1,4-Dichlorobenzene	U	0.00030	0.0010	mg/l		8260B	10/04/08	1
Dichlorodifluoromethane	U	0.00054	0.0050	mg/l		8260B	10/04/08	1
1,1-Dichloroethane	U	0.00031	0.0010	mg/l		8260B	10/04/08	1
1,2-Dichloroethane	U	0.00027	0.0010	mg/l		8260B	10/04/08	1
1,1-Dichloroethene	U	0.00050	0.0010	mg/l		8260B	10/04/08	1
cis-1,2-Dichloroethene	U	0.00038	0.0010	mg/l		8260B	10/04/08	1
trans-1,2-Dichloroethene	U	0.00030	0.0010	mg/l		8260B	10/04/08	1
1,2-Dichloropropane	U	0.00052	0.0010	mg/l		8260B	10/04/08	1
1,1-Dichloropropene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
1,3-Dichloropropane	U	0.00023	0.0010	mg/l		8260B	10/04/08	1
cis-1,3-Dichloropropene	U	0.00026	0.0010	mg/l		8260B	10/04/08	1
trans-1,3-Dichloropropene	U	0.00024	0.0010	mg/l		8260B	10/04/08	1
2,2-Dichloropropane	U	0.00025	0.0010	mg/l		8260B	10/04/08	1
Di-isopropyl ether	U	0.00025	0.0010	mg/l		8260B	10/04/08	1
Ethylbenzene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
Hexachloro-1,3-butadiene	U	0.00049	0.0010	mg/l		8260B	10/04/08	1
Isopropylbenzene	U	0.00019	0.0010	mg/l		8260B	10/04/08	1

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MDL = Minimum Detection Limit = LOD = SQL(TRRP)
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EPAHO104000693

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Mt. Juliet, TN 37122
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Matt Monroe
Envirotest
3902 Braxton St.
Houston, TX 77063

October 07, 2008

Date Received : October 01, 2008
Description : Woodlake Square Off-Site Delin.

ESC Sample # : L367699-04

Site ID :

Sample ID : FIELD BLANK

Project # : HOU 080109

Collected By :
Collection Date : 09/29/08 13:00

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
p-Isopropyltoluene	U	0.00021	0.0010	mg/l		8260B	10/04/08	1
2-Butanone (MEK)	U	0.0045	0.010	mg/l		8260B	10/04/08	1
Methylene Chloride	U	0.0040	0.0050	mg/l		8260B	10/04/08	1
4-Methyl-2-pentanone (MIBK)	U	0.0014	0.010	mg/l		8260B	10/04/08	1
Methyl tert-butyl ether	U	0.00019	0.0010	mg/l		8260B	10/04/08	1
Naphthalene	U	0.0040	0.0050	mg/l		8260B	10/04/08	1
n-Propylbenzene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
Styrene	U	0.00038	0.0010	mg/l		8260B	10/04/08	1
1,1,1,2-Tetrachloroethane	U	0.00040	0.0010	mg/l		8260B	10/04/08	1
1,1,2,2-Tetrachloroethane	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
Tetrachloroethene	U	0.00029	0.0010	mg/l		8260B	10/04/08	1
Toluene	U	0.00027	0.0050	mg/l		8260B	10/04/08	1
1,2,3-Trichlorobenzene	U	0.00024	0.0010	mg/l		8260B	10/04/08	1
1,2,4-Trichlorobenzene	U	0.00026	0.0010	mg/l		8260B	10/04/08	1
1,1,1-Trichloroethane	U	0.00027	0.0010	mg/l		8260B	10/04/08	1
1,1,2-Trichloroethane	U	0.00045	0.0010	mg/l		8260B	10/04/08	1
Trichloroethene	U	0.00037	0.0010	mg/l		8260B	10/04/08	1
Trichlorofluoromethane	U	0.00029	0.0050	mg/l		8260B	10/04/08	1
1,2,3-Trichloropropane	U	0.00036	0.0010	mg/l		8260B	10/04/08	1
1,2,4-Trimethylbenzene	U	0.00020	0.0010	mg/l		8260B	10/04/08	1
1,2,3-Trimethylbenzene	U	0.00022	0.0010	mg/l		8260B	10/04/08	1
1,3,5-Trimethylbenzene	U	0.00020	0.0010	mg/l		8260B	10/04/08	1
Vinyl chloride	U	0.00027	0.0010	mg/l		8260B	10/04/08	1
Xylenes, Total	U	0.00086	0.0030	mg/l		8260B	10/04/08	1
Surrogate Recovery								
Toluene-d8	99.8			% Rec.		8260B	10/04/08	1
Dibromofluoromethane	105.			% Rec.		8260B	10/04/08	1
4-Bromofluorobenzene	103.			% Rec.		8260B	10/04/08	1

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EPAHO104000694

Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L367699-01	Acrolein	J4
	Tetrachloroethene	E
L367699-02	Acrolein	J4
	Di-isopropyl ether	J
	2-Butanone (MEK)	J
L367699-03	Di-isopropyl ether	J
L367699-04	Acrolein	J4

EPAHO104000695

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
E	GTL (EPA) - Greater than upper calibration limit: Actual value is known to be greater than the upper calibration range.
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J4	The associated batch QC was outside the established quality control range for accuracy.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

EPAHO104000696

Summary of Remarks For Samples Printed
10/07/08 at 17:54:49

TSR Signing Reports: 134
R5 - Desired TAT

Client wants pH reported on all SS requesting metals per JB Arsenic H2O log method 6020

Sample: L367699-01 Account: ENVTESTX Received: 10/01/08 07:45 Due Date: 10/08/08 00:00 RPT Date: 10/07/08 11:43

Sample: L367699-02 Account: ENVTESTX Received: 10/01/08 07:45 Due Date: 10/08/08 00:00 RPT Date: 10/07/08 11:43

Sample: L367699-03 Account: ENVTESTX Received: 10/01/08 07:45 Due Date: 10/08/08 00:00 RPT Date: 10/07/08 11:43

Sample: L367699-04 Account: ENVTESTX Received: 10/01/08 07:45 Due Date: 10/08/08 00:00 RPT Date: 10/07/08 11:43

EPAHO104000697

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L

Project: Woodlake Square Off-Site Delin.

Project No: HOU 080109

Login No: L367699

Sample Number: L367699-01, -02, -04

Sample Date: 9/29/2008

Extraction Date: 10/4/2008

Analysis Date: 10/4/2008 4:20:00 PM

Instrument ID: VOCMS20

Analyst: 126

Analytic Batch: WG387069 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL	MDL
1,1,1,2-Tetrachloroethane	630-20-6	<0.001	<0.0003
1,1,1-Trichloroethane	71-55-6	<0.001	<0.0003
1,1,2,2-Tetrachloroethane	79-34-5	<0.001	<0.0003
1,1,2-Trichloroethane	79-00-5	<0.001	<0.0003
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	<0.001	<0.0003
1,1-Dichloroethane	75-34-3	<0.001	<0.0003
1,1-Dichloroethene	75-35-4	<0.001	<0.0003
1,1-Dichloropropene	563-58-6	<0.001	<0.0003
1,2,3-Trichlorobenzene	87-61-6	<0.001	<0.0003
1,2,3-Trichloropropane	96-18-4	<0.001	<0.0003
1,2,3-Trimethylbenzene	526-73-8	<0.001	<0.0003
1,2,4-Trichlorobenzene	120-82-1	<0.001	<0.0003
1,2,4-Trimethylbenzene	95-63-6	<0.001	<0.0003
1,2-Dibromo-3-Chloropropane	96-12-8	<0.005	<0.0016
1,2-Dibromoethane	106-93-4	<0.001	<0.0003
1,2-Dichlorobenzene	95-50-1	<0.001	<0.0003
1,2-Dichloroethane	107-06-2	<0.001	<0.0003
1,2-Dichloropropane	78-87-5	<0.001	<0.0003
1,3,5-Trimethylbenzene	108-67-8	<0.001	<0.0003
1,3-Dichlorobenzene	541-73-1	<0.001	<0.0003
1,3-Dichloropropane	142-28-9	<0.001	<0.0003
1,4-Dichlorobenzene	106-46-7	<0.001	<0.0003
2,2-Dichloropropane	594-20-7	<0.001	<0.0003
2-Butanone (MEK)	78-93-3	<0.010	<0.0033
2-Chloroethyl vinyl ether	110-75-8	<0.001	<0.0003
2-Chlorotoluene	95-49-8	<0.001	<0.0003
4-Chlorotoluene	106-43-4	<0.001	<0.0003
4-Methyl-2-pentanone (MIBK)	108-10-1	<0.010	<0.0033
Acetone	67-64-1	<0.050	<0.0165
Acrolein	107-02-8	<0.050	<0.0165
Acrylonitrile	107-13-1	<0.010	<0.0033
Benzene	71-43-2	<0.001	<0.0003
Bromobenzene	108-86-1	<0.001	<0.0003
Bromodichloromethane	75-27-4	<0.001	<0.0003

EPAHO104000698

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L
Project: Woodlake Square Off-Site Delin.
Project No: HOU 080109
Login No: L367699
Sample Number: L367699-01, -02, -04
Sample Date: 9/29/2008
Extraction Date: 10/4/2008
Analysis Date: 10/4/2008 4:20:00 PM
Instrument ID: VOCMS20
Analyst: 126
Analytic Batch: WG387069 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL	MDL
Bromoform	75-25-2	<0.001	<0.0003
Bromomethane	74-83-9	<0.005	<0.0016
Carbon tetrachloride	56-23-5	<0.001	<0.0003
Chlorobenzene	108-90-7	<0.001	<0.0003
Chlorodibromomethane	124-48-1	<0.001	<0.0003
Chloroethane	75-00-3	<0.001	<0.0003
Chloroform	67-66-3	<0.005	<0.0016
Chloromethane	74-87-3	<0.001	<0.0003
cis-1,2-Dichloroethene	156-59-2	<0.001	<0.0003
cis-1,3-Dichloropropene	10061-01-5	<0.001	<0.0003
Di-isopropyl ether	108-20-3	<0.001	<0.0003
Dibromomethane	74-95-3	<0.001	<0.0003
Dichlorodifluoromethane	75-71-8	<0.005	<0.0016
Ethylbenzene	100-41-4	<0.001	<0.0003
Hexachloro-1,3-butadiene	87-68-3	<0.001	<0.0003
Isopropylbenzene	98-82-8	<0.001	<0.0003
Methyl tert-butyl ether	1634-04-4	<0.001	<0.0003
Methylene Chloride	75-09-2	<0.005	<0.0016
n-Butylbenzene	104-51-8	<0.001	<0.0003
n-Propylbenzene	103-65-1	<0.001	<0.0003
Naphthalene	91-20-3	<0.005	<0.0016
p-Isopropyltoluene	99-87-6	<0.001	<0.0003
sec-Butylbenzene	135-98-8	<0.001	<0.0003
Styrene	100-42-5	<0.001	<0.0003
tert-Butylbenzene	98-06-6	<0.001	<0.0003
Tetrachloroethene	127-18-4	<0.001	<0.0003
Toluene	108-88-3	<0.005	<0.0016
trans-1,2-Dichloroethene	156-60-5	<0.001	<0.0003
trans-1,3-Dichloropropene	10061-02-6	<0.001	<0.0003
Trichloroethene	79-01-6	<0.001	<0.0003
Trichlorofluoromethane	75-69-4	<0.005	<0.0016
Vinyl chloride	75-01-4	<0.001	<0.0003
Xylenes, Total	1330-20-7	<0.003	<0.0010

EPAHO104000699

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L

Project: Woodlake Square Off-Site Delin.

Project No: HOU 080109

Login No: L367699

Sample Number: L367699-03

Sample Date: 9/29/2008

Extraction Date: 10/6/2008

Analysis Date: 10/6/2008 4:29:00 PM

Instrument ID: VOCMS4

Analyst: 156

Analytic Batch: WG387247 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL	MDL
1,1,1,2-Tetrachloroethane	630-20-6	<0.001	<0.0003
1,1,1-Trichloroethane	71-55-6	<0.001	<0.0003
1,1,2,2-Tetrachloroethane	79-34-5	<0.001	<0.0003
1,1,2-Trichloroethane	79-00-5	<0.001	<0.0003
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	<0.001	<0.0003
1,1-Dichloroethane	75-34-3	<0.001	<0.0003
1,1-Dichloroethene	75-35-4	<0.001	<0.0003
1,1-Dichloropropene	563-58-6	<0.001	<0.0003
1,2,3-Trichlorobenzene	87-61-6	<0.001	<0.0003
1,2,3-Trichloropropane	96-18-4	<0.001	<0.0003
1,2,3-Trimethylbenzene	526-73-8	<0.001	<0.0003
1,2,4-Trichlorobenzene	120-82-1	<0.001	<0.0003
1,2,4-Trimethylbenzene	95-63-6	<0.001	<0.0003
1,2-Dibromo-3-Chloropropane	96-12-8	<0.005	<0.0016
1,2-Dibromoethane	106-93-4	<0.001	<0.0003
1,2-Dichlorobenzene	95-50-1	<0.001	<0.0003
1,2-Dichloroethane	107-06-2	<0.001	<0.0003
1,2-Dichloropropane	78-87-5	<0.001	<0.0003
1,3,5-Trimethylbenzene	108-67-8	<0.001	<0.0003
1,3-Dichlorobenzene	541-73-1	<0.001	<0.0003
1,3-Dichloropropane	142-28-9	<0.001	<0.0003
1,4-Dichlorobenzene	106-46-7	<0.001	<0.0003
2,2-Dichloropropane	594-20-7	<0.001	<0.0003
2-Butanone (MEK)	78-93-3	<0.010	<0.0033
2-Chloroethyl vinyl ether	110-75-8	<0.001	<0.0003
2-Chlorotoluene	95-49-8	<0.001	<0.0003
4-Chlorotoluene	106-43-4	<0.001	<0.0003
4-Methyl-2-pentanone (MIBK)	108-10-1	<0.010	<0.0033
Acetone	67-64-1	<0.050	<0.0165
Acrolein	107-02-8	<0.050	<0.0165
Acrylonitrile	107-13-1	<0.010	<0.0033
Benzene	71-43-2	<0.001	<0.0003
Bromobenzene	108-86-1	<0.001	<0.0003
Bromodichloromethane	75-27-4	<0.001	<0.0003

EPAHO104000700

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L
Project: Woodlake Square Off-Site Delin.
Project No: HOU 080109
Login No: L367699
Sample Number: L367699-03
Sample Date: 9/29/2008
Extraction Date: 10/6/2008
Analysis Date: 10/6/2008 4:29:00 PM
Instrument ID: VOCMS4
Analyst: 156
Analytic Batch: WG387247 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL	MDL
Bromoform	75-25-2	<0.001	<0.0003
Bromomethane	74-83-9	<0.005	<0.0016
Carbon tetrachloride	56-23-5	<0.001	<0.0003
Chlorobenzene	108-90-7	<0.001	<0.0003
Chlorodibromomethane	124-48-1	<0.001	<0.0003
Chloroethane	75-00-3	<0.001	<0.0003
Chloroform	67-66-3	<0.005	<0.0016
Chloromethane	74-87-3	<0.001	<0.0003
cis-1,2-Dichloroethene	156-59-2	<0.001	<0.0003
cis-1,3-Dichloropropene	10061-01-5	<0.001	<0.0003
Di-isopropyl ether	108-20-3	<0.001	<0.0003
Dibromomethane	74-95-3	<0.001	<0.0003
Dichlorodifluoromethane	75-71-8	<0.005	<0.0016
Ethylbenzene	100-41-4	<0.001	<0.0003
Hexachloro-1,3-butadiene	87-68-3	<0.001	<0.0003
Isopropylbenzene	98-82-8	<0.001	<0.0003
Methyl tert-butyl ether	1634-04-4	<0.001	<0.0003
Methylene Chloride	75-09-2	<0.005	<0.0016
n-Butylbenzene	104-51-8	<0.001	<0.0003
n-Propylbenzene	103-65-1	<0.001	<0.0003
Naphthalene	91-20-3	<0.005	<0.0016
p-Isopropyltoluene	99-87-6	<0.001	<0.0003
sec-Butylbenzene	135-98-8	<0.001	<0.0003
Styrene	100-42-5	<0.001	<0.0003
tert-Butylbenzene	98-06-6	<0.001	<0.0003
Tetrachloroethene	127-18-4	<0.001	<0.0003
Toluene	108-88-3	<0.005	<0.0016
trans-1,2-Dichloroethene	156-60-5	<0.001	<0.0003
trans-1,3-Dichloropropene	10061-02-6	<0.001	<0.0003
Trichloroethene	79-01-6	<0.001	<0.0003
Trichlorofluoromethane	75-69-4	<0.005	<0.0016
Vinyl chloride	75-01-4	<0.001	<0.0003
Xylenes, Total	1330-20-7	<0.003	<0.0010

EPAHO104000701

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L
Project: Woodlake Square Off-Site Delin.
Project No: HOU 080109
Login No: L367699
Sample Number: L367699-01, -02, -04
Sample Date: 9/29/2008
Extraction Date: 10/4/2008
Analysis Date: 10/4/2008 4:20:00 PM
Instrument ID: VOCMS20
Analyst: 126
Analytic Batch: WG387069 EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,1,1,2-Tetrachloroethane	0.050	0.055	111	75 - 134	
1,1,1-Trichloroethane	0.050	0.052	104	67 - 137	
1,1,2,2-Tetrachloroethane	0.050	0.051	103	72 - 128	
1,1,2-Trichloroethane	0.050	0.053	106	79 - 123	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.050	0.056	111	51 - 149	
1,1-Dichloroethane	0.050	0.050	99.0	67 - 133	
1,1-Dichloroethene	0.050	0.043	85.6	60 - 130	
1,1-Dichloropropene	0.050	0.050	101	68 - 132	
1,2,3-Trichlorobenzene	0.050	0.052	104	63 - 138	
1,2,3-Trichloropropane	0.050	0.051	101	68 - 130	
1,2,3-Trimethylbenzene	0.050	0.051	103	70 - 127	
1,2,4-Trichlorobenzene	0.050	0.051	103	65 - 137	
1,2,4-Trimethylbenzene	0.050	0.057	113	72 - 135	
1,2-Dibromo-3-Chloropropane	0.050	0.050	99.4	55 - 134	
1,2-Dibromoethane	0.050	0.047	93.3	75 - 126	
1,2-Dichlorobenzene	0.050	0.052	103	75 - 122	
1,2-Dichloroethane	0.050	0.052	104	63 - 137	
1,2-Dichloropropane	0.050	0.053	106	74 - 122	
1,3,5-Trimethylbenzene	0.050	0.056	112	73 - 134	
1,3-Dichlorobenzene	0.050	0.054	107	73 - 131	
1,3-Dichloropropane	0.050	0.052	104	77 - 119	
1,4-Dichlorobenzene	0.050	0.050	99.4	70 - 121	
2,2-Dichloropropane	0.050	0.055	109	46 - 151	
2-Butanone (MEK)	0.250	0.248	99.1	53 - 132	
2-Chloroethyl vinyl ether	0.250	0.245	97.9	0 - 171	
2-Chlorotoluene	0.050	0.053	106	74 - 128	
4-Chlorotoluene	0.050	0.054	107	74 - 130	
4-Methyl-2-pentanone (MIBK)	0.250	0.238	95.2	60 - 142	
Acetone	0.250	0.230	91.8	48 - 134	
Acrolein	0.250	0.457	183	6 - 182	J4
Acrylonitrile	0.250	0.270	108	60 - 140	
Benzene	0.050	0.049	98.7	67 - 126	
Bromobenzene	0.050	0.051	102	76 - 123	
Bromodichloromethane	0.050	0.056	113	68 - 133	

EPAHO104000702

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L

Project: Woodlake Square Off-Site Delin.

Project No: HOU 080109

Login No: L367699

Sample Number: L367699-01, -02, -04

Sample Date: 9/29/2008

Extraction Date: 10/4/2008

Analysis Date: 10/4/2008 4:20:00 PM

Instrument ID: VOCMS20

Analyst: 126

Analytic Batch: WG387069 EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Bromoform	0.050	0.048	96.1	60 - 139	
Bromomethane	0.050	0.061	123	45 - 175	
Carbon tetrachloride	0.050	0.054	108	64 - 141	
Chlorobenzene	0.050	0.054	108	77 - 125	
Chlorodibromomethane	0.050	0.049	97.9	73 - 138	
Chloroethane	0.050	0.058	115	49 - 155	
Chloroform	0.050	0.051	101	66 - 126	
Chloromethane	0.050	0.051	102	45 - 152	
cis-1,2-Dichloroethene	0.050	0.054	108	72 - 128	
cis-1,3-Dichloropropene	0.050	0.053	107	73 - 131	
Di-isopropyl ether	0.050	0.055	111	63 - 139	
Dibromomethane	0.050	0.052	104	73 - 125	
Dichlorodifluoromethane	0.050	0.046	92.8	39 - 189	
Ethylbenzene	0.050	0.054	108	76 - 129	
Hexachloro-1,3-butadiene	0.050	0.053	106	67 - 135	
Isopropylbenzene	0.050	0.056	113	73 - 132	
Methyl tert-butyl ether	0.050	0.057	114	51 - 142	
Methylene Chloride	0.050	0.048	96.5	64 - 125	
n-Butylbenzene	0.050	0.051	102	63 - 142	
n-Propylbenzene	0.050	0.052	104	71 - 132	
Naphthalene	0.050	0.051	102	56 - 145	
p-Isopropyltoluene	0.050	0.056	113	68 - 138	
sec-Butylbenzene	0.050	0.055	109	70 - 135	
Styrene	0.050	0.049	98.2	78 - 130	
tert-Butylbenzene	0.050	0.058	115	72 - 134	
Tetrachloroethene	0.050	0.051	102	67 - 135	
Toluene	0.050	0.049	98.0	72 - 122	
trans-1,2-Dichloroethene	0.050	0.048	96.1	67 - 129	
trans-1,3-Dichloropropene	0.050	0.048	95.1	66 - 137	
Trichloroethene	0.050	0.051	102	74 - 126	
Trichlorofluoromethane	0.050	0.056	111	54 - 156	
Vinyl chloride	0.050	0.056	111	55 - 153	
Xylenes, Total	0.150	0.166	111	75 - 128	

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L

Project: Woodlake Square Off-Site Delin.

Project No: HOU 080109

Login No: L367699

Sample Number: L367699-01, -02, -04

Sample Date: 9/29/2008

Extraction Date: 10/4/2008

Analysis Date: 10/4/2008 4:20:00 PM

Instrument ID: VOCMS20

Analyst: 126

Analytic Batch: WG387069 EPA ID: TN00003

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,1,1,2-Tetrachloroethane	0.050	0.056	112	75 - 134	
1,1,1-Trichloroethane	0.050	0.049	98.3	67 - 137	
1,1,2,2-Tetrachloroethane	0.050	0.053	106	72 - 128	
1,1,2-Trichloroethane	0.050	0.054	108	79 - 123	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.050	0.053	106	51 - 149	
1,1-Dichloroethane	0.050	0.047	95.0	67 - 133	
1,1-Dichloroethene	0.050	0.040	80.2	60 - 130	
1,1-Dichloropropene	0.050	0.048	96.7	68 - 132	
1,2,3-Trichlorobenzene	0.050	0.051	103	63 - 138	
1,2,3-Trichloropropane	0.050	0.052	104	68 - 130	
1,2,3-Trimethylbenzene	0.050	0.052	104	70 - 127	
1,2,4-Trichlorobenzene	0.050	0.051	101	65 - 137	
1,2,4-Trimethylbenzene	0.050	0.056	112	72 - 135	
1,2-Dibromo-3-Chloropropane	0.050	0.052	103	55 - 134	
1,2-Dibromoethane	0.050	0.047	93.6	75 - 126	
1,2-Dichlorobenzene	0.050	0.053	105	75 - 122	
1,2-Dichloroethane	0.050	0.050	100	63 - 137	
1,2-Dichloropropane	0.050	0.052	104	74 - 122	
1,3,5-Trimethylbenzene	0.050	0.055	110	73 - 134	
1,3-Dichlorobenzene	0.050	0.052	104	73 - 131	
1,3-Dichloropropane	0.050	0.052	105	77 - 119	
1,4-Dichlorobenzene	0.050	0.051	101	70 - 121	
2,2-Dichloropropane	0.050	0.052	104	46 - 151	
2-Butanone (MEK)	0.250	0.243	97.1	53 - 132	
2-Chloroethyl vinyl ether	0.250	0.250	100	0 - 171	
2-Chlorotoluene	0.050	0.053	106	74 - 128	
4-Chlorotoluene	0.050	0.053	107	74 - 130	
4-Methyl-2-pentanone (MIBK)	0.250	0.248	99.2	60 - 142	
Acetone	0.250	0.221	88.5	48 - 134	
Acrolein	0.250	0.439	176	6 - 182	
Acrylonitrile	0.250	0.264	106	60 - 140	
Benzene	0.050	0.048	95.6	67 - 126	
Bromobenzene	0.050	0.051	102	76 - 123	
Bromodichloromethane	0.050	0.057	114	68 - 133	

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L

Project: Woodlake Square Off-Site Delin.

Project No: HOU 080109

Login No: L367699

Sample Number: L367699-01, -02, -04

Sample Date: 9/29/2008

Extraction Date: 10/4/2008

Analysis Date: 10/4/2008 4:20:00 PM

Instrument ID: VOCMS20

Analyst: 126

Analytic Batch: WG387069 EPA ID: TN00003

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Bromoform	0.050	0.049	98.3	60 - 139	
Bromomethane	0.050	0.057	114	45 - 175	
Carbon tetrachloride	0.050	0.051	102	64 - 141	
Chlorobenzene	0.050	0.054	108	77 - 125	
Chlorodibromomethane	0.050	0.049	98.5	73 - 138	
Chloroethane	0.050	0.055	110	49 - 155	
Chloroform	0.050	0.049	98.9	66 - 126	
Chloromethane	0.050	0.047	94.9	45 - 152	
cis-1,2-Dichloroethene	0.050	0.052	103	72 - 128	
cis-1,3-Dichloropropene	0.050	0.053	107	73 - 131	
Di-isopropyl ether	0.050	0.055	109	63 - 139	
Dibromomethane	0.050	0.052	103	73 - 125	
Dichlorodifluoromethane	0.050	0.043	86.5	39 - 189	
Ethylbenzene	0.050	0.054	109	76 - 129	
Hexachloro-1,3-butadiene	0.050	0.053	105	67 - 135	
Isopropylbenzene	0.050	0.056	111	73 - 132	
Methyl tert-butyl ether	0.050	0.055	110	51 - 142	
Methylene Chloride	0.050	0.047	93.1	64 - 125	
n-Butylbenzene	0.050	0.051	103	63 - 142	
n-Propylbenzene	0.050	0.052	104	71 - 132	
Naphthalene	0.050	0.051	103	56 - 145	
p-Isopropyltoluene	0.050	0.055	110	68 - 138	
sec-Butylbenzene	0.050	0.054	108	70 - 135	
Styrene	0.050	0.049	98.7	78 - 130	
tert-Butylbenzene	0.050	0.056	113	72 - 134	
Tetrachloroethene	0.050	0.050	101	67 - 135	
Toluene	0.050	0.049	98.0	72 - 122	
trans-1,2-Dichloroethene	0.050	0.046	92.2	67 - 129	
trans-1,3-Dichloropropene	0.050	0.049	97.1	66 - 137	
Trichloroethene	0.050	0.051	102	74 - 126	
Trichlorofluoromethane	0.050	0.053	107	54 - 156	
Vinyl chloride	0.050	0.051	103	55 - 153	
Xylenes, Total	0.150	0.166	111	75 - 128	

EPAHO104000705

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L
Project: Woodlake Square Off-Site Delin.
Project No: HOU 080109
Login No: L367699
Sample Number: L367699-03
Sample Date: 9/29/2008
Extraction Date: 10/6/2008
Analysis Date: 10/6/2008 4:29:00 PM
Instrument ID: VOCMS4
Analyst: 156
Analytic Batch: WG387247 EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,1,1,2-Tetrachloroethane	0.050	0.052	104	75 - 134	
1,1,1-Trichloroethane	0.050	0.052	103	67 - 137	
1,1,2,2-Tetrachloroethane	0.050	0.054	109	72 - 128	
1,1,2-Trichloroethane	0.050	0.050	100	79 - 123	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.050	0.046	92.3	51 - 149	
1,1-Dichloroethane	0.050	0.052	104	67 - 133	
1,1-Dichloroethene	0.050	0.043	85.1	60 - 130	
1,1-Dichloropropene	0.050	0.048	95.3	68 - 132	
1,2,3-Trichlorobenzene	0.050	0.051	102	63 - 138	
1,2,3-Trichloropropane	0.050	0.053	106	68 - 130	
1,2,3-Trimethylbenzene	0.050	0.043	86.7	70 - 127	
1,2,4-Trichlorobenzene	0.050	0.052	103	65 - 137	
1,2,4-Trimethylbenzene	0.050	0.048	95.5	72 - 135	
1,2-Dibromo-3-Chloropropane	0.050	0.050	100	55 - 134	
1,2-Dibromoethane	0.050	0.050	101	75 - 126	
1,2-Dichlorobenzene	0.050	0.046	91.8	75 - 122	
1,2-Dichloroethane	0.050	0.052	103	63 - 137	
1,2-Dichloropropane	0.050	0.051	102	74 - 122	
1,3,5-Trimethylbenzene	0.050	0.048	96.7	73 - 134	
1,3-Dichlorobenzene	0.050	0.048	95.4	73 - 131	
1,3-Dichloropropane	0.050	0.048	95.0	77 - 119	
1,4-Dichlorobenzene	0.050	0.043	85.7	70 - 121	
2,2-Dichloropropane	0.050	0.050	100	46 - 151	
2-Butanone (MEK)	0.250	0.284	114	53 - 132	
2-Chloroethyl vinyl ether	0.250	0.323	129	0 - 171	
2-Chlorotoluene	0.050	0.048	95.5	74 - 128	
4-Chlorotoluene	0.050	0.048	95.5	74 - 130	
4-Methyl-2-pentanone (MIBK)	0.250	0.301	120	60 - 142	
Acetone	0.250	0.253	101	48 - 134	
Acrolein	0.250	0.266	106	6 - 182	
Acrylonitrile	0.250	0.297	119	60 - 140	
Benzene	0.050	0.050	100	67 - 126	
Bromobenzene	0.050	0.048	95.9	76 - 123	
Bromodichloromethane	0.050	0.056	111	68 - 133	

EPAHO104000706

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L

Project: Woodlake Square Off-Site Delin.

Project No: HOU 080109

Login No: L367699

Sample Number: L367699-03

Sample Date: 9/29/2008

Extraction Date: 10/6/2008

Analysis Date: 10/6/2008 4:29:00 PM

Instrument ID: VOCMS4

Analyst: 156

Analytic Batch: WG387247 EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Bromoform	0.050	0.056	112	60 - 139	
Bromomethane	0.050	0.048	95.3	45 - 175	
Carbon tetrachloride	0.050	0.055	111	64 - 141	
Chlorobenzene	0.050	0.048	96.6	77 - 125	
Chlorodibromomethane	0.050	0.054	107	73 - 138	
Chloroethane	0.050	0.044	88.1	49 - 155	
Chloroform	0.050	0.053	106	66 - 126	
Chloromethane	0.050	0.047	93.1	45 - 152	
cis-1,2-Dichloroethene	0.050	0.053	107	72 - 128	
cis-1,3-Dichloropropene	0.050	0.054	107	73 - 131	
Di-isopropyl ether	0.050	0.055	110	63 - 139	
Dibromomethane	0.050	0.049	98.9	73 - 125	
Dichlorodifluoromethane	0.050	0.041	81.8	39 - 189	
Ethylbenzene	0.050	0.048	95.5	76 - 129	
Hexachloro-1,3-butadiene	0.050	0.044	88.9	67 - 135	
Isopropylbenzene	0.050	0.050	99.3	73 - 132	
Methyl tert-butyl ether	0.050	0.046	92.5	51 - 142	
Methylene Chloride	0.050	0.051	102	64 - 125	
n-Butylbenzene	0.050	0.047	93.1	63 - 142	
n-Propylbenzene	0.050	0.048	96.7	71 - 132	
Naphthalene	0.050	0.046	92.4	56 - 145	
p-Isopropyltoluene	0.050	0.051	101	68 - 138	
sec-Butylbenzene	0.050	0.050	99.7	70 - 135	
Styrene	0.050	0.053	106	78 - 130	
tert-Butylbenzene	0.050	0.053	106	72 - 134	
Tetrachloroethene	0.050	0.043	87.0	67 - 135	
Toluene	0.050	0.047	94.6	72 - 122	
trans-1,2-Dichloroethene	0.050	0.047	94.7	67 - 129	
trans-1,3-Dichloropropene	0.050	0.054	109	66 - 137	
Trichloroethene	0.050	0.047	93.3	74 - 126	
Trichlorofluoromethane	0.050	0.049	98.3	54 - 156	
Vinyl chloride	0.050	0.046	91.7	55 - 153	
Xylenes, Total	0.150	0.141	94.1	75 - 128	

EPAHO104000707

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L
Project: Woodlake Square Off-Site Delin.
Project No: HOU 080109
Login No: L367699
Sample Number: L367699-03
Sample Date: 9/29/2008
Extraction Date: 10/6/2008
Analysis Date: 10/6/2008 4:29:00 PM
Instrument ID: VOCMS4
Analyst: 156
Analytic Batch: WG387247 EPA ID: TN00003

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,1,1,2-Tetrachloroethane	0.050	0.051	101	75 - 134	
1,1,1-Trichloroethane	0.050	0.050	101	67 - 137	
1,1,2,2-Tetrachloroethane	0.050	0.052	103	72 - 128	
1,1,2-Trichloroethane	0.050	0.049	98.3	79 - 123	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.050	0.044	88.0	51 - 149	
1,1-Dichloroethane	0.050	0.052	104	67 - 133	
1,1-Dichloroethene	0.050	0.050	99.4	60 - 130	
1,1-Dichloropropene	0.050	0.047	94.0	68 - 132	
1,2,3-Trichlorobenzene	0.050	0.051	101	63 - 138	
1,2,3-Trichloropropane	0.050	0.051	102	68 - 130	
1,2,3-Trimethylbenzene	0.050	0.042	84.2	70 - 127	
1,2,4-Trichlorobenzene	0.050	0.052	103	65 - 137	
1,2,4-Trimethylbenzene	0.050	0.046	92.2	72 - 135	
1,2-Dibromo-3-Chloropropane	0.050	0.049	97.8	55 - 134	
1,2-Dibromoethane	0.050	0.049	98.0	75 - 126	
1,2-Dichlorobenzene	0.050	0.045	89.1	75 - 122	
1,2-Dichloroethane	0.050	0.052	105	63 - 137	
1,2-Dichloropropane	0.050	0.052	104	74 - 122	
1,3,5-Trimethylbenzene	0.050	0.046	92.5	73 - 134	
1,3-Dichlorobenzene	0.050	0.047	93.2	73 - 131	
1,3-Dichloropropane	0.050	0.046	91.9	77 - 119	
1,4-Dichlorobenzene	0.050	0.042	84.2	70 - 121	
2,2-Dichloropropane	0.050	0.049	97.2	46 - 151	
2-Butanone (MEK)	0.250	0.278	111	53 - 132	
2-Chloroethyl vinyl ether	0.250	0.293	117	0 - 171	
2-Chlorotoluene	0.050	0.046	91.8	74 - 128	
4-Chlorotoluene	0.050	0.047	94.2	74 - 130	
4-Methyl-2-pentanone (MIBK)	0.250	0.297	119	60 - 142	
Acetone	0.250	0.270	108	48 - 134	
Acrolein	0.250	0.259	104	6 - 182	
Acrylonitrile	0.250	0.299	120	60 - 140	
Benzene	0.050	0.049	98.7	67 - 126	
Bromobenzene	0.050	0.047	93.2	76 - 123	
Bromodichloromethane	0.050	0.055	109	68 - 133	

EPAHO104000708

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L
Project: Woodlake Square Off-Site Delin.
Project No: HOU 080109
Login No: L367699
Sample Number: L367699-03
Sample Date: 9/29/2008
Extraction Date: 10/6/2008
Analysis Date: 10/6/2008 4:29:00 PM
Instrument ID: VOCMS4
Analyst: 156
Analytic Batch: WG387247 EPA ID: TN00003

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Bromoform	0.050	0.055	110	60 - 139	
Bromomethane	0.050	0.048	95.4	45 - 175	
Carbon tetrachloride	0.050	0.055	109	64 - 141	
Chlorobenzene	0.050	0.046	92.1	77 - 125	
Chlorodibromomethane	0.050	0.052	104	73 - 138	
Chloroethane	0.050	0.041	82.8	49 - 155	
Chloroform	0.050	0.053	105	66 - 126	
Chloromethane	0.050	0.046	91.5	45 - 152	
cis-1,2-Dichloroethene	0.050	0.053	106	72 - 128	
cis-1,3-Dichloropropene	0.050	0.053	105	73 - 131	
Di-isopropyl ether	0.050	0.055	111	63 - 139	
Dibromomethane	0.050	0.048	96.6	73 - 125	
Dichlorodifluoromethane	0.050	0.040	80.1	39 - 189	
Ethylbenzene	0.050	0.046	91.5	76 - 129	
Hexachloro-1,3-butadiene	0.050	0.042	84.7	67 - 135	
Isopropylbenzene	0.050	0.047	94.9	73 - 132	
Methyl tert-butyl ether	0.050	0.042	83.4	51 - 142	
Methylene Chloride	0.050	0.050	101	64 - 125	
n-Butylbenzene	0.050	0.045	89.7	63 - 142	
n-Propylbenzene	0.050	0.046	92.4	71 - 132	
Naphthalene	0.050	0.045	89.7	56 - 145	
p-Isopropyltoluene	0.050	0.049	98.9	68 - 138	
sec-Butylbenzene	0.050	0.048	95.8	70 - 135	
Styrene	0.050	0.051	102	78 - 130	
tert-Butylbenzene	0.050	0.046	92.3	72 - 134	
Tetrachloroethene	0.050	0.041	82.4	67 - 135	
Toluene	0.050	0.046	91.5	72 - 122	
trans-1,2-Dichloroethene	0.050	0.047	93.4	67 - 129	
trans-1,3-Dichloropropene	0.050	0.053	106	66 - 137	
Trichloroethene	0.050	0.046	91.1	74 - 126	
Trichlorofluoromethane	0.050	0.048	95.8	54 - 156	
Vinyl chloride	0.050	0.044	87.6	55 - 153	
Xylenes, Total	0.150	0.137	91.1	75 - 128	

EPAHO104000709

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L
Project: Woodlake Square Off-Site Delin.
Project No: HOU 080109
Login No: L367699
Sample Number: L367699-01, -02, -04
Sample Date: 9/29/2008
Extraction Date: 10/4/2008
Analysis Date: 10/4/2008 4:20:00 PM
Instrument ID: VOCMS20
Analyst: 126
Analytic Batch: WG387069 EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate

L367568-07

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,1,1,2-Tetrachloroethane	0.050	0.000	0.054	109	0.053	105	45-152		3.1	21	
1,1,1-Trichloroethane	0.050	0.000	0.051	102	0.049	98.1	31-161		3.6	23	
1,1,2,2-Tetrachloroethane	0.050	0.000	0.054	108	0.049	98.0	49-149		9.3	22	
1,1,2-Trichloroethane	0.050	0.000	0.052	105	0.051	101	46-145		3.3	20	
1,1,2-Trichloro-1,2,2-	0.050	0.000	0.055	110	0.051	102	14-168		6.9	24	
1,1-Dichloroethane	0.050	0.000	0.049	97.6	0.046	92.9	30-159		5.0	21	
1,1-Dichloroethene	0.050	0.000	0.041	82.3	0.038	76.1	10-162		7.8	23	
1,1-Dichloropropene	0.050	0.000	0.049	97.2	0.046	92.0	14-162		5.5	23	
1,2,3-Trichlorobenzene	0.050	0.000	0.054	108	0.048	96.2	32-143		12	33	
1,2,3-Trichloropropane	0.050	0.000	0.053	107	0.048	95.7	48-148		11	23	
1,2,3-Trimethylbenzene	0.050	0.000	0.051	102	0.050	101	36-141		1.0	25	
1,2,4-Trichlorobenzene	0.050	0.000	0.053	105	0.047	94.6	27-142		11	30	
1,2,4-Trimethylbenzene	0.050	0.000	0.054	108	0.051	102	29-153		5.2	27	
1,2-Dibromo-3-Chloropropane	0.050	0.000	0.054	108	0.048	96.9	37-148		11	27	
1,2-Dibromoethane	0.050	0.000	0.046	92.7	0.044	87.7	41-149		5.5	21	
1,2-Dichlorobenzene	0.050	0.000	0.053	106	0.051	102	40-139		3.3	23	
1,2-Dichloroethane	0.050	0.000	0.050	101	0.048	95.3	29-167		5.6	21	
1,2-Dichloropropane	0.050	0.000	0.052	103	0.050	100	39-148		2.9	20	
1,3,5-Trimethylbenzene	0.050	0.000	0.054	107	0.051	103	33-149		4.4	26	
1,3-Dichlorobenzene	0.050	0.000	0.052	104	0.048	96.1	32-148		7.9	24	
1,3-Dichloropropane	0.050	0.000	0.052	104	0.050	99.1	44-142		4.4	20	
1,4-Dichlorobenzene	0.050	0.000	0.051	101	0.050	99.2	32-136		2.2	23	
2,2-Dichloropropane	0.050	0.000	0.053	107	0.052	105	14-158		1.8	23	
2-Butanone (MEK)	0.250	0.000	0.268	107	0.237	94.8	32-151		12	26	
2-Chloroethyl vinyl ether	0.250	0.000	0.083	33.1	0.022	8.7	0-175		117	75	J3
2-Chlorotoluene	0.050	0.000	0.051	103	0.049	98.1	35-147		4.8	24	
4-Chlorotoluene	0.050	0.000	0.052	105	0.049	98.9	33-147		5.6	25	
4-Methyl-2-pentanone	0.250	0.000	0.265	106	0.246	98.2	40-160		7.4	28	
Acetone	0.250	0.001	0.251	99.7	0.220	87.4	25-157		13	26	
Acrolein	0.250	0.000	0.418	167	0.389	156	0-179		7.1	39	
Acrylonitrile	0.250	0.000	0.291	117	0.264	105	37-162		10.0	24	
Benzene	0.050	0.000	0.048	95.6	0.046	91.7	16-158		4.2	21	
Bromobenzene	0.050	0.000	0.050	99.6	0.047	93.7	37-147		6.1	23	
Bromodichloromethane	0.050	0.000	0.056	112	0.055	110	45-147		1.7	20	

EPAHO104000710

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L

Project: Woodlake Square Off-Site Delin.

Project No: HOU 080109

Login No: L367699

Sample Number: L367699-01, -02, -04

Sample Date: 9/29/2008

Extraction Date: 10/4/2008

Analysis Date: 10/4/2008 4:20:00 PM

Instrument ID: VOCMS20

Analyst: 126

Analytic Batch: WG387069 EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate

L367568-07

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Qualifier RPD	Control Limits Qualifier
Bromoform	0.050	0.000	0.049	98.5	0.046	91.6	38-152	7.3	20
Bromomethane	0.050	0.000	0.054	108	0.051	103	0-191	5.5	35
Carbon tetrachloride	0.050	0.000	0.052	104	0.048	96.4	22-168	7.4	24
Chlorobenzene	0.050	0.000	0.051	103	0.051	102	33-148	0.9	22
Chlorodibromomethane	0.050	0.000	0.049	98.6	0.047	93.0	48-151	5.8	21
Chloroethane	0.050	0.000	0.054	107	0.049	98.6	4-176	8.4	27
Chloroform	0.050	0.000	0.050	101	0.048	95.9	37-147	4.9	21
Chloromethane	0.050	0.000	0.046	91.5	0.043	85.9	10-174	6.3	28
cis-1,2-Dichloroethene	0.050	0.088	0.153	130	0.149	121	29-156	3.0	22
cis-1,3-Dichloropropene	0.050	0.000	0.052	104	0.051	101	35-148	2.9	21
Di-isopropyl ether	0.050	0.000	0.055	110	0.053	106	39-160	3.5	21
Dibromomethane	0.050	0.000	0.052	104	0.049	98.1	36-152	5.6	20
Dichlorodifluoromethane	0.050	0.000	0.048	96.1	0.044	88.1	0-200	8.7	26
Ethylbenzene	0.050	0.000	0.052	103	0.051	102	29-150	1.4	24
Hexachloro-1,3-butadiene	0.050	0.000	0.053	107	0.051	101	28-144	5.5	33
Isopropylbenzene	0.050	0.000	0.055	109	0.053	105	35-147	3.7	25
Methyl tert-butyl ether	0.050	0.000	0.058	117	0.054	108	24-167	8.0	22
Methylene Chloride	0.050	0.000	0.046	91.0	0.042	84.7	23-151	7.2	21
n-Butylbenzene	0.050	0.000	0.052	104	0.051	102	22-151	2.4	29
n-Propylbenzene	0.050	0.000	0.050	100	0.048	96.8	26-150	3.7	25
Naphthalene	0.050	0.000	0.055	109	0.049	97.1	24-160	12	37
p-Isopropyltoluene	0.050	0.000	0.054	109	0.051	102	28-151	6.6	27
sec-Butylbenzene	0.050	0.000	0.053	105	0.051	101	32-149	4.1	26
Styrene	0.050	0.000	0.047	94.8	0.046	91.4	38-149	3.7	23
tert-Butylbenzene	0.050	0.000	0.056	112	0.054	107	36-149	4.0	26
Tetrachloroethene	0.050	0.000	0.046	92.3	0.046	92.6	13-157	0.2	24
Toluene	0.050	0.000	0.047	94.1	0.046	91.8	22-152	2.5	22
trans-1,2-Dichloroethene	0.050	0.010	0.057	94.6	0.055	91.2	11-160	3.1	23
trans-1,3-Dichloropropene	0.050	0.002	0.048	92.7	0.047	90.4	33-153	2.4	22
Trichloroethene	0.050	0.000	0.047	94.7	0.047	93.3	18-163	1.5	21
Trichlorofluoromethane	0.050	0.000	0.052	103	0.049	97.5	10-177	5.9	24
Vinyl chloride	0.050	0.000	0.050	100.0	0.048	95.2	0-179	4.9	26
Xylenes, Total	0.150	0.000	0.158	106	0.156	104	27-151	1.3	23

EPAHO104000711

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L

Project: Woodlake Square Off-Site Delin.

Project No: HOU 080109

Login No: L367699

Sample Number: L367699-01, -02, -04

Sample Date: 9/29/2008

Extraction Date: 10/4/2008

Analysis Date: 10/4/2008 4:20:00 PM

Instrument ID: VOCMS20

Analyst: 126

Analytic Batch: WG387069 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,1,1,2-Tetrachloroethane	0.050	0.055	111	0.056	112	75-134		0.9	20	
1,1,1-Trichloroethane	0.050	0.052	104	0.049	98.3	67-137		5.2	20	
1,1,2,2-Tetrachloroethane	0.050	0.051	103	0.053	106	72-128		2.9	20	
1,1,2-Trichloroethane	0.050	0.053	106	0.054	108	79-123		2.2	20	
1,1,2-Trichloro-1,2,2-	0.050	0.056	111	0.053	106	51-149		5.3	20	
1,1-Dichloroethane	0.050	0.050	99.0	0.047	95.0	67-133		4.2	20	
1,1-Dichloroethene	0.050	0.043	85.6	0.040	80.2	60-130		6.5	20	
1,1-Dichloropropene	0.050	0.050	101	0.048	96.7	68-132		4.2	20	
1,2,3-Trichlorobenzene	0.050	0.052	104	0.051	103	63-138		1.2	20	
1,2,3-Trichloropropane	0.050	0.051	101	0.052	104	68-130		2.6	20	
1,2,3-Trimethylbenzene	0.050	0.051	103	0.052	104	70-127		0.9	20	
1,2,4-Trichlorobenzene	0.050	0.051	103	0.051	101	65-137		1.4	20	
1,2,4-Trimethylbenzene	0.050	0.057	113	0.056	112	72-135		1.6	20	
1,2-Dibromo-3-Chloropropane	0.050	0.050	99.4	0.052	103	55-134		3.5	20	
1,2-Dibromoethane	0.050	0.047	93.3	0.047	93.6	75-126		0.3	20	
1,2-Dichlorobenzene	0.050	0.052	103	0.053	105	75-122		1.9	20	
1,2-Dichloroethane	0.050	0.052	104	0.050	100	63-137		3.6	20	
1,2-Dichloropropane	0.050	0.053	106	0.052	104	74-122		2.0	20	
1,3,5-Trimethylbenzene	0.050	0.056	112	0.055	110	73-134		1.2	20	
1,3-Dichlorobenzene	0.050	0.054	107	0.052	104	73-131		2.8	20	
1,3-Dichloropropane	0.050	0.052	104	0.052	105	77-119		0.9	20	
1,4-Dichlorobenzene	0.050	0.050	99.4	0.051	101	70-121		1.7	20	
2,2-Dichloropropane	0.050	0.055	109	0.052	104	46-151		5.4	20	
2-Butanone (MEK)	0.250	0.248	99.1	0.243	97.1	53-132		2.0	20	
2-Chloroethyl vinyl ether	0.250	0.245	97.9	0.250	100	0-171		2.3	27	
2-Chlorotoluene	0.050	0.053	106	0.053	106	74-128		0.3	20	
4-Chlorotoluene	0.050	0.054	107	0.053	107	74-130		0.6	20	
4-Methyl-2-pentanone	0.250	0.238	95.2	0.248	99.2	60-142		4.1	20	
Acetone	0.250	0.230	91.8	0.221	88.5	48-134		3.7	20	
Acrolein	0.250	0.457	183	0.439	176	6-182	J4	3.9	39	
Acrylonitrile	0.250	0.270	108	0.264	106	60-140		2.3	20	
Benzene	0.050	0.049	98.7	0.048	95.6	67-126		3.2	20	
Bromobenzene	0.050	0.051	102	0.051	102	76-123		0.4	20	
Bromodichloromethane	0.050	0.056	113	0.057	114	68-133		1.3	20	

EPAHO104000712

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L
Project: Woodlake Square Off-Site Delin.
Project No: HOU 080109
Login No: L367699
Sample Number: L367699-01, -02, -04
Sample Date: 9/29/2008
Extraction Date: 10/4/2008
Analysis Date: 10/4/2008 4:20:00 PM
Instrument ID: VOCMS20
Analyst: 126
Analytic Batch: WG387069 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Bromoform	0.050	0.048	96.1	0.049	98.3	60-139		2.3	20	
Bromomethane	0.050	0.061	123	0.057	114	45-175		7.6	20	
Carbon tetrachloride	0.050	0.054	108	0.051	102	64-141		5.7	20	
Chlorobenzene	0.050	0.054	108	0.054	108	77-125		0.1	20	
Chlorodibromomethane	0.050	0.049	97.9	0.049	98.5	73-138		0.7	20	
Chloroethane	0.050	0.058	115	0.055	110	49-155		5.0	20	
Chloroform	0.050	0.051	101	0.049	98.9	66-126		2.5	20	
Chloromethane	0.050	0.051	102	0.047	94.9	45-152		7.1	20	
cis-1,2-Dichloroethene	0.050	0.054	108	0.052	103	72-128		4.3	20	
cis-1,3-Dichloropropene	0.050	0.053	107	0.053	107	73-131		0.2	20	
Di-isopropyl ether	0.050	0.055	111	0.055	109	63-139		1.7	20	
Dibromomethane	0.050	0.052	104	0.052	103	73-125		0.8	20	
Dichlorodifluoromethane	0.050	0.046	92.8	0.043	86.5	39-189		7.0	24	
Ethylbenzene	0.050	0.054	108	0.054	109	76-129		0.3	20	
Hexachloro-1,3-butadiene	0.050	0.053	106	0.053	105	67-135		0.5	20	
Isopropylbenzene	0.050	0.056	113	0.056	111	73-132		1.1	20	
Methyl tert-butyl ether	0.050	0.057	114	0.055	110	51-142		3.1	20	
Methylene Chloride	0.050	0.048	96.5	0.047	93.1	64-125		3.5	20	
n-Butylbenzene	0.050	0.051	102	0.051	103	63-142		0.4	20	
n-Propylbenzene	0.050	0.052	104	0.052	104	71-132		0.0	20	
Naphthalene	0.050	0.051	102	0.051	103	56-145		1.0	20	
p-Isopropyltoluene	0.050	0.056	113	0.055	110	68-138		2.8	20	
sec-Butylbenzene	0.050	0.055	109	0.054	108	70-135		1.3	20	
Styrene	0.050	0.049	98.2	0.049	98.7	78-130		0.5	20	
tert-Butylbenzene	0.050	0.058	115	0.056	113	72-134		2.3	20	
Tetrachloroethene	0.050	0.051	102	0.050	101	67-135		0.8	20	
Toluene	0.050	0.049	98.0	0.049	98.0	72-122		0.1	20	
trans-1,2-Dichloroethene	0.050	0.048	96.1	0.046	92.2	67-129		4.1	20	
trans-1,3-Dichloropropene	0.050	0.048	95.1	0.049	97.1	66-137		2.1	20	
Trichloroethene	0.050	0.051	102	0.051	102	74-126		0.1	20	
Trichlorofluoromethane	0.050	0.056	111	0.053	107	54-156		4.3	20	
Vinyl chloride	0.050	0.056	111	0.051	103	55-153		8.4	20	
Xylenes, Total	0.150	0.166	111	0.166	111	75-128		0.2	20	

EPAHO104000713

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L

Project: Woodlake Square Off-Site Delin.

Project No: HOU 080109

Login No: L367699

Sample Number: L367699-03

Sample Date: 9/29/2008

Extraction Date: 10/6/2008

Analysis Date: 10/6/2008 4:29:00 PM

Instrument ID: VOCMS4

Analyst: 156

Analytic Batch: WG387247 EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate

L367568-03

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,1,1,2-Tetrachloroethane	0.050	0.000	0.053	106	0.029	57.4	45-152		60	21	J3
1,1,1-Trichloroethane	0.050	0.000	0.054	109	0.053	106	31-161		2.8	23	
1,1,2,2-Tetrachloroethane	0.050	0.000	0.052	105	0.032	64.7	49-149		47	22	J3
1,1,2-Trichloroethane	0.050	0.000	0.050	100.0	0.029	57.0	46-145		55	20	J3
1,1,2-Trichloro-1,2,2-	0.050	0.000	0.043	87.0	0.046	91.1	14-168		4.6	24	
1,1-Dichloroethane	0.050	0.000	0.056	113	0.053	105	30-159		6.8	21	
1,1-Dichloroethene	0.050	0.000	0.052	103	0.045	90.6	10-162		13	23	
1,1-Dichloropropene	0.050	0.000	0.053	106	0.048	95.2	14-162		11	23	
1,2,3-Trichlorobenzene	0.050	0.000	0.054	107	0.054	108	32-143		0.7	33	
1,2,3-Trichloropropane	0.050	0.000	0.054	107	0.032	64.5	48-148		50	23	J3
1,2,3-Trimethylbenzene	0.050	0.000	0.045	89.9	0.043	85.4	36-141		5.1	25	
1,2,4-Trichlorobenzene	0.050	0.000	0.054	108	0.053	106	27-142		2.0	30	
1,2,4-Trimethylbenzene	0.050	0.000	0.048	96.5	0.026	51.8	29-153		60	27	J3
1,2-Dibromo-3-Chloropropane	0.050	0.000	0.051	101	0.060	121	37-148		18	27	
1,2-Dibromoethane	0.050	0.000	0.050	101	0.029	57.1	41-149		55	21	J3
1,2-Dichlorobenzene	0.050	0.000	0.047	94.3	0.046	92.4	40-139		2.0	23	
1,2-Dichloroethane	0.050	0.000	0.054	109	0.053	106	29-167		2.6	21	
1,2-Dichloropropane	0.050	0.000	0.054	108	0.050	99.2	39-148		8.2	20	
1,3,5-Trimethylbenzene	0.050	0.000	0.049	98.5	0.031	61.8	33-149		46	26	J3
1,3-Dichlorobenzene	0.050	0.000	0.050	99.2	0.036	72.6	32-148		31	24	J3
1,3-Dichloropropane	0.050	0.000	0.047	93.1	0.027	53.3	44-142		54	20	J3
1,4-Dichlorobenzene	0.050	0.000	0.045	89.7	0.000	0.0	32-136	J6	200	23	J3
2,2-Dichloropropane	0.050	0.000	0.053	106	0.051	101	14-158		4.4	23	
2-Butanone (MEK)	0.250	0.000	0.277	111	0.342	137	32-151		21	26	
2-Chloroethyl vinyl ether	0.250	0.000	0.134	53.8	0.761	304	0-175	J5	140	75	J3
2-Chlorotoluene	0.050	0.000	0.049	98.7	0.033	65.0	35-147		41	24	J3
4-Chlorotoluene	0.050	0.000	0.049	98.8	0.027	53.5	33-147		60	25	J3
4-Methyl-2-pentanone	0.250	0.000	0.300	120	0.339	136	40-160		12	28	
Acetone	0.250	0.029	0.244	86.2	0.294	106	25-157		19	26	
Acrolein	0.250	0.000	0.081	32.3	0.295	118	0-179		114	39	J3
Acrylonitrile	0.250	0.000	0.286	114	0.349	140	37-162		20	24	
Benzene	0.050	0.000	0.054	108	0.050	101	16-158		6.8	21	
Bromobenzene	0.050	0.000	0.048	96.5	0.026	52.8	37-147		58	23	J3
Bromodichloromethane	0.050	0.000	0.058	116	0.056	113	45-147		2.7	20	

EPAHO104000714

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L

Project: Woodlake Square Off-Site Delin.

Project No: HOU 080109

Login No: L367699

Sample Number: L367699-03

Sample Date: 9/29/2008

Extraction Date: 10/6/2008

Analysis Date: 10/6/2008 4:29:00 PM

Instrument ID: VOCMS4

Analyst: 156

Analytic Batch: WG387247 EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate

L367568-03

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Bromoform	0.050	0.000	0.055	110	0.034	67.3	38-152		48	20	J3
Bromomethane	0.050	0.000	0.054	107	0.052	104	0-191		2.9	35	
Carbon tetrachloride	0.050	0.000	0.062	124	0.056	112	22-168		9.7	24	
Chlorobenzene	0.050	0.000	0.049	97.3	0.026	52.2	33-148		60	22	J3
Chlorodibromomethane	0.050	0.000	0.054	109	0.031	62.8	48-151		54	21	J3
Chloroethane	0.050	0.000	0.046	91.9	0.048	95.2	4-176		3.5	27	
Chloroform	0.050	0.000	0.056	111	0.055	109	37-147		1.7	21	
Chloromethane	0.050	0.000	0.048	96.9	0.044	87.8	10-174		9.9	28	
cis-1,2-Dichloroethene	0.050	0.000	0.057	115	0.054	109	29-156		5.3	22	
cis-1,3-Dichloropropene	0.050	0.000	0.056	113	0.054	108	35-148		3.8	21	
Di-isopropyl ether	0.050	0.000	0.055	110	0.057	113	39-160		2.6	21	
Dibromomethane	0.050	0.000	0.052	104	0.050	101	36-152		3.0	20	
Dichlorodifluoromethane	0.050	0.000	0.043	86.5	0.038	76.8	0-200		12	26	
Ethylbenzene	0.050	0.000	0.049	98.2	0.027	53.4	29-150		59	24	J3
Hexachloro-1,3-butadiene	0.050	0.000	0.047	93.5	0.045	89.2	28-144		4.7	33	
Isopropylbenzene	0.050	0.000	0.051	102	0.028	55.3	35-147		60	25	J3
Methyl tert-butyl ether	0.050	0.000	0.042	83.2	0.045	89.2	24-167		6.9	22	
Methylene Chloride	0.050	0.001	0.053	105	0.039	75.8	23-151		32	21	J3
n-Butylbenzene	0.050	0.000	0.049	97.1	0.046	92.2	22-151		5.2	29	
n-Propylbenzene	0.050	0.000	0.050	99.6	0.026	52.6	26-150		62	25	J3
Naphthalene	0.050	0.003	0.045	83.5	0.049	93.1	24-160		10	37	
p-Isopropyltoluene	0.050	0.000	0.052	104	0.029	57.7	28-151		57	27	J3
sec-Butylbenzene	0.050	0.000	0.051	101	0.027	54.5	32-149		60	26	J3
Styrene	0.050	0.000	0.054	109	0.030	59.3	38-149		59	23	J3
tert-Butylbenzene	0.050	0.000	0.054	108	0.032	64.8	36-149		50	26	J3
Tetrachloroethene	0.050	0.000	0.047	93.7	0.024	48.0	13-157		65	24	J3
Toluene	0.050	0.000	0.050	100	0.047	93.6	22-152		7.1	22	
trans-1,2-Dichloroethene	0.050	0.000	0.054	108	0.047	93.8	11-160		14	23	
trans-1,3-Dichloropropene	0.050	0.000	0.056	112	0.056	111	33-153		0.8	22	
Trichloroethene	0.050	0.000	0.050	99.0	0.045	89.5	18-163		10	21	
Trichlorofluoromethane	0.050	0.000	0.052	104	0.052	105	10-177		1.0	24	
Vinyl chloride	0.050	0.000	0.049	97.4	0.046	92.3	0-179		5.4	26	
Xylenes, Total	0.150	0.000	0.147	98.2	0.079	52.4	27-151		61	23	J3

EPAHO104000715

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L

Project: Woodlake Square Off-Site Delin.

Project No: HOU 080109

Login No: L367699

Sample Number: L367699-03

Sample Date: 9/29/2008

Extraction Date: 10/6/2008

Analysis Date: 10/6/2008 4:29:00 PM

Instrument ID: VOCMS4

Analyst: 156

Analytic Batch: WG387247 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,1,1,2-Tetrachloroethane	0.050	0.052	104	0.051	101	75-134		2.7	20	
1,1,1-Trichloroethane	0.050	0.052	103	0.050	101	67-137		2.3	20	
1,1,2,2-Tetrachloroethane	0.050	0.054	109	0.052	103	72-128		5.1	20	
1,1,2-Trichloroethane	0.050	0.050	100	0.049	98.3	79-123		2.2	20	
1,1,2-Trichloro-1,2,2-	0.050	0.046	92.3	0.044	88.0	51-149		4.7	20	
1,1-Dichloroethane	0.050	0.052	104	0.052	104	67-133		0.5	20	
1,1-Dichloroethene	0.050	0.043	85.1	0.050	99.4	60-130		16	20	
1,1-Dichloropropene	0.050	0.048	95.3	0.047	94.0	68-132		1.4	20	
1,2,3-Trichlorobenzene	0.050	0.051	102	0.051	101	63-138		1.0	20	
1,2,3-Trichloropropane	0.050	0.053	106	0.051	102	68-130		4.0	20	
1,2,3-Trimethylbenzene	0.050	0.043	86.7	0.042	84.2	70-127		2.9	20	
1,2,4-Trichlorobenzene	0.050	0.052	103	0.052	103	65-137		0.1	20	
1,2,4-Trimethylbenzene	0.050	0.048	95.5	0.046	92.2	72-135		3.6	20	
1,2-Dibromo-3-Chloropropane	0.050	0.050	100	0.049	97.8	55-134		2.5	20	
1,2-Dibromoethane	0.050	0.050	101	0.049	98.0	75-126		2.7	20	
1,2-Dichlorobenzene	0.050	0.046	91.8	0.045	89.1	75-122		2.9	20	
1,2-Dichloroethane	0.050	0.052	103	0.052	105	63-137		1.4	20	
1,2-Dichloropropane	0.050	0.051	102	0.052	104	74-122		1.9	20	
1,3,5-Trimethylbenzene	0.050	0.048	96.7	0.046	92.5	73-134		4.4	20	
1,3-Dichlorobenzene	0.050	0.048	95.4	0.047	93.2	73-131		2.3	20	
1,3-Dichloropropane	0.050	0.048	95.0	0.046	91.9	77-119		3.3	20	
1,4-Dichlorobenzene	0.050	0.043	85.7	0.042	84.2	70-121		1.8	20	
2,2-Dichloropropane	0.050	0.050	100	0.049	97.2	46-151		3.3	20	
2-Butanone (MEK)	0.250	0.284	114	0.278	111	53-132		2.1	20	
2-Chloroethyl vinyl ether	0.250	0.323	129	0.293	117	0-171		9.8	27	
2-Chlorotoluene	0.050	0.048	95.5	0.046	91.8	74-128		4.0	20	
4-Chlorotoluene	0.050	0.048	95.5	0.047	94.2	74-130		1.4	20	
4-Methyl-2-pentanone	0.250	0.301	120	0.297	119	60-142		1.4	20	
Acetone	0.250	0.253	101	0.270	108	48-134		6.6	20	
Acrolein	0.250	0.266	106	0.259	104	6-182		2.7	39	
Acrylonitrile	0.250	0.297	119	0.299	120	60-140		0.6	20	
Benzene	0.050	0.050	100	0.049	98.7	67-126		1.6	20	
Bromobenzene	0.050	0.048	95.9	0.047	93.2	76-123		2.8	20	
Bromodichloromethane	0.050	0.056	111	0.055	109	68-133		1.6	20	

EPAHO104000716

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L367699

Matrix: Water - mg/L

Project: Woodlake Square Off-Site Delin.

Project No: HOU 080109

Login No: L367699

Sample Number: L367699-03

Sample Date: 9/29/2008

Extraction Date: 10/6/2008

Analysis Date: 10/6/2008 4:29:00 PM

Instrument ID: VOCMS4

Analyst: 156

Analytic Batch: WG387247 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Bromoform	0.050	0.056	112	0.055	110	60-139		1.6	20	
Bromomethane	0.050	0.048	95.3	0.048	95.4	45-175		0.1	20	
Carbon tetrachloride	0.050	0.055	111	0.055	109	64-141		1.4	20	
Chlorobenzene	0.050	0.048	96.6	0.046	92.1	77-125		4.8	20	
Chlorodibromomethane	0.050	0.054	107	0.052	104	73-138		3.4	20	
Chloroethane	0.050	0.044	88.1	0.041	82.8	49-155		6.2	20	
Chloroform	0.050	0.053	106	0.053	105	66-126		0.9	20	
Chloromethane	0.050	0.047	93.1	0.046	91.5	45-152		1.8	20	
cis-1,2-Dichloroethene	0.050	0.053	107	0.053	106	72-128		0.9	20	
cis-1,3-Dichloropropene	0.050	0.054	107	0.053	105	73-131		1.6	20	
Di-isopropyl ether	0.050	0.055	110	0.055	111	63-139		0.3	20	
Dibromomethane	0.050	0.049	98.9	0.048	96.6	73-125		2.4	20	
Dichlorodifluoromethane	0.050	0.041	81.8	0.040	80.1	39-189		2.1	24	
Ethylbenzene	0.050	0.048	95.5	0.046	91.5	76-129		4.2	20	
Hexachloro-1,3-butadiene	0.050	0.044	88.9	0.042	84.7	67-135		4.9	20	
Isopropylbenzene	0.050	0.050	99.3	0.047	94.9	73-132		4.5	20	
Methyl tert-butyl ether	0.050	0.046	92.5	0.042	83.4	51-142		10	20	
Methylene Chloride	0.050	0.051	102	0.050	101	64-125		0.8	20	
n-Butylbenzene	0.050	0.047	93.1	0.045	89.7	63-142		3.7	20	
n-Propylbenzene	0.050	0.048	96.7	0.046	92.4	71-132		4.6	20	
Naphthalene	0.050	0.046	92.4	0.045	89.7	56-145		3.0	20	
p-Isopropyltoluene	0.050	0.051	101	0.049	98.9	68-138		2.3	20	
sec-Butylbenzene	0.050	0.050	99.7	0.048	95.8	70-135		4.0	20	
Styrene	0.050	0.053	106	0.051	102	78-130		3.6	20	
tert-Butylbenzene	0.050	0.053	106	0.046	92.3	72-134		13	20	
Tetrachloroethene	0.050	0.043	87.0	0.041	82.4	67-135		5.4	20	
Toluene	0.050	0.047	94.6	0.046	91.5	72-122		3.4	20	
trans-1,2-Dichloroethene	0.050	0.047	94.7	0.047	93.4	67-129		1.5	20	
trans-1,3-Dichloropropene	0.050	0.054	109	0.053	106	66-137		2.5	20	
Trichloroethene	0.050	0.047	93.3	0.046	91.1	74-126		2.5	20	
Trichlorofluoromethane	0.050	0.049	98.3	0.048	95.8	54-156		2.5	20	
Vinyl chloride	0.050	0.046	91.7	0.044	87.6	55-153		4.7	20	
Xylenes, Total	0.150	0.141	94.1	0.137	91.1	75-128		3.3	20	

EPAHO104000717

Company Name/Address:
Envirotest

3902 Braxton St.
Houston.TX 77063

Alternate billing information:

Analysis/Container/Preservative

Chain of Custody
Page 1 of 1

Prepared by:

ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122

Phone (615) 758-5858
Phone (800) 767-5859
FAX (615) 758-5859

#4

Report to: Matt Monroe

Email to: mmonroe@envirotestltd.com

Project Description: Woodlake Square off-site Delin

City/Sate Collected: Houston TX

Phone: (713) 782-4411
FAX:

Client Project #: Hou 080109

ESC Key:

Collected by: J. Boyle

Site/Facility ID#:

P.O.#:

Collected by (signature):

Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day.....200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed: NTAT
Email? __No X Yes
FAX? __No__Yes

CoCode: ENVTESTX (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	VOCs 8260	Remarks/Contaminant	Sample # (lab only)
MW-14	Grab	GW	—	9-29-08	1434	2	X		L367699-01
MW-15	"	"	—	"	1651	2	X		02
MW-16	"	"	—	"	1551	2	X		03
Field Blank	"	"	—	"	1300	2	X		04

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date: 9/30/08	Time: 245	Received by: (Signature) 9-30-08	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ SWA		Condition: (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.2°C	Bottles Received: 8 v+KB	Ok
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 10/1/08	Time: 0745	pH Checked: NCF: 41 of 41

EPAHO104000718

3269
Vertex Residual Management
(westhelmer)

EPAHO104000719

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/13/2009**

Dear **Jennifer Ownes**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3269

Expiration Date 4/13/2011

Generator: Vertex Residual Management (Westheimer)
Address: 9633 Westheimer
Houston, TX 77063

Waste Information

Name of Waste: Non Haz Soil
TCEQ Waste Code #: CESQ3192
Container Type:
Detailed Description of Process Generating Waste:
Soil cuttings phase II subsurface investigation / well installation
Color: na **Odor:** na **pH:**
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

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CES Environmental Services, Inc. JB/AL

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Vertex Residual management
Address: 9633 Westheimer
City: Houston **State:** TX **Zip:** 77063
Contact: Jennifer Owens **Title:** RDC
Phone Number: 281.486.4182 **Fax Number:** 281.486.0217
24/hr Phone Number:
US EPA ID No: na
State ID No: na **SIC Code:** na

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Vertex Residual Management
Address: 1331 Gemini St Suite 103
City: Housotn **State:** TX **Zip:** 77058
Contact: Jennifer Owens **Title:** RDC
Phone Number: 281.486.4182 **Fax Number:** 281.486.0217

SECTION 3: General Description of the Waste

Name of Waste: Non haz Soil
Detailed Description of Process Generating Waste:

Soil Cuttings phase II subsurface investigation / well installlation

Physical State: ☐ **Liquid** ☐ **Sludge** ☐ **Powder** ☑ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: **Odor:**

Specific Gravity (water=1): **Density:** lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Yearly** ☑ **One-Time**
Quantity: 24

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☐ No

If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: CESQ 3192

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated material

Class: _____ UN/NA: _____ PG: _____ RQ: _____

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
		mg/l	mg/l	%
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
mg/l	mg/l	mg/l	mg/l	mg/l

SECTION 4: Physical and Chemical Data (see attached analytical)

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Soil	100%	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analytical

SECTION 7: Incompatibilities

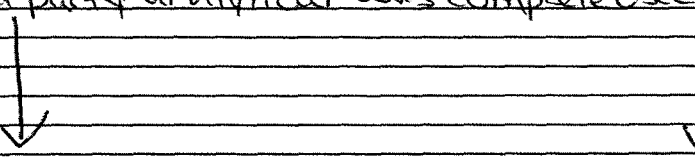
Please list ALL incompatibilities (if any):

None Known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: third party analytical was complete (See attached)
TCLP Volatiles:
TCLP Semi-Volatiles:
Reactivity:
Corrosivity:
Ignitability:



SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☐ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☑ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Jennifer Owens **Date:** 4-6-09

Printed Name/Title: Jennifer Owens / RDC

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:
Date: 4-9-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$45/Drum + TRANS + FSC

2. Contamination Limit (maximum limit before surchages apply):

No free liquids

3. Surcharge Pricing:

$60 DM when liquids are present

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

CLASS 2 Solids Box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Environmental Science Corporation
Mount Juliet, TN

For: Envirotest
Woodlake Square VCP 2009

L394657

Lab SampleID.	Client ID
L394657-01	COMP 1
L394657-02	COMP 1

(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

EST. 1970

EPAHO104000727

Appendix A Laboratory Data Package Cover Page

This data package consists of:

- This signature page, the laboratory review checklist, and the following reportable data:
- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) the amount of analyte measured in the duplicate,
  b) the calculated RPD, and
  c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- R10 Other problems or anomalies.

The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [ ] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

William Mock
Operations Manager
Environmental Science Corp.

EPAHO104000728

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/02/09
Project Name: Woodlake Square VCP 2009	Laboratory Job Number: L394657-02
Reviewer Name: ESC Representative	Prep Batch Number(s): WG413965 TPHTX

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?			✓		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000729

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/02/09
Project Name: Woodlake Square VCP 2009	Laboratory Job Number: L394657-02
Reviewer Name: ESC Representative	Prep Batch Number(s): WG414084 IGN

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?			✓		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			✓		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			✓		
		Were MS/MSD analyzed at the appropriate frequency?			✓		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		
		Were MS/MSD RPDs within laboratory QC limits?			✓		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✓				
		Were analytical duplicates analyzed at the appropriate frequency?	✓				
		Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000730

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/02/09
Project Name: Woodlake Square VCP 2009	Laboratory Job Number: L394657-01
Reviewer Name: ESC Representative	Prep Batch Number(s): WG414176 SV8270TCLP

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000731

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports

Laboratory Name: Environmental Science Corp.	LRC Date: 4/2/2009
Project Name: Woodlake Square VCP 2009	Laboratory Job Number: L394657
Reviewer Name: ESC Representative	Prep Batch Numbers: WG414176 SV8270TCLP

Sample(s) COMP 1 were analyzed for Semi-volatile Organic

ER#:	Description
1	The matrix spike or matrix spike duplicate recoveries were over the laboratory control limits for 3&4-Methyl Phenol and Hexachlorobenzene.

EPAHO104000732

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/02/09
Project Name: Woodlake Square VCP 2009	Laboratory Job Number: L394657-01
Reviewer Name: ESC Representative	Prep Batch Number(s): WG414179 AGICP

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?	✓				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			✓		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?			✓		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		✓			1
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✓				
		Were analytical duplicates analyzed at the appropriate frequency?	✓				
		Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000733

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports

Laboratory Name: Environmental Science Corp.	LRC Date: 4/2/2009
Project Name: Woodlake Square VCP 2009	Laboratory Job Number: L394657
Reviewer Name: ESC Representative	Prep Batch Numbers: WG414179 AGICP

Sample(s) COMP 1 were analyzed for Trace Metals by Method 6010B

ER#:	Description
1	The matrix spike or matrix spike duplicate recoveries were below the laboratory control limits for Silver.

EPAHO104000734

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/02/09
Project Name: Woodlake Square VCP 2009	Laboratory Job Number: L394657-02
Reviewer Name: ESC Representative	Prep Batch Number(s): WG414184 CORR

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?			✓		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			✓		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			✓		
		Were MS/MSD analyzed at the appropriate frequency?			✓		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		
		Were MS/MSD RPDs within laboratory QC limits?			✓		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✓				
		Were analytical duplicates analyzed at the appropriate frequency?	✓				
		Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000735

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/02/09
Project Name: Woodlake Square VCP 2009	Laboratory Job Number: L394657-01
Reviewer Name: ESC Representative	Prep Batch Number(s): WG414219 HG

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?			✓		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			✓		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?			✓		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✓				
		Were analytical duplicates analyzed at the appropriate frequency?	✓				
		Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000736

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/02/09
Project Name: Woodlake Square VCP 2009	Laboratory Job Number: L394657-02
Reviewer Name: ESC Representative	Prep Batch Number(s): WG414478 TS

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?			✓		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			✓		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?			✓		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			✓		
		Were MS/MSD analyzed at the appropriate frequency?			✓		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		
		Were MS/MSD RPDs within laboratory QC limits?			✓		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✓				
		Were analytical duplicates analyzed at the appropriate frequency?	✓				
		Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000737

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/02/09
Project Name: Woodlake Square VCP 2009	Laboratory Job Number: L394657-02
Reviewer Name: ESC Representative	Prep Batch Number(s): WG414563 REACTCN

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?			✓		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			✓		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?			✓		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			✓		
		Were MS/MSD analyzed at the appropriate frequency?			✓		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		
		Were MS/MSD RPDs within laboratory QC limits?			✓		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✓				
		Were analytical duplicates analyzed at the appropriate frequency?	✓				
		Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000738

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/02/09
Project Name: Woodlake Square VCP 2009	Laboratory Job Number: L394657-02
Reviewer Name: ESC Representative	Prep Batch Number(s): WG414565 REACTS

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?			✓		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			✓		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			✓		
		Were MS/MSD analyzed at the appropriate frequency?			✓		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		
		Were MS/MSD RPDs within laboratory QC limits?			✓		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	✓				
		Were analytical duplicates analyzed at the appropriate frequency?	✓				
		Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

EPAHO104000739

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Environmental Science	LRC Date: 04/02/09
Project Name: Woodlake Square VCP 2009	Laboratory Job Number: L394657-01
Reviewer Name: ESC Representative	Prep Batch Number(s): WG414668 V8260TCLP

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
		Were all departures from standard conditions described in an exception report?			✓		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	✓				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	✓				
		Were calculations checked by a peer or supervisor?	✓				
		Were all analyte identifications checked by a peer or supervisor?	✓				
		Were sample quantitation limits reported for all analytes not detected?	✓				
		Were all results for soil and sediment samples reported on a dry weight basis?	✓				
		Were % moisture (or solids) reported for all soil and sediment samples?	✓				
		If required for the project, TICs reported?			✓		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	✓				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	✓				
		Were blanks analyzed at the appropriate frequency?	✓				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
		Were blank concentrations < MQL?	✓				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	✓				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
		Were LCSs analyzed at the required frequency?	✓				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
		Was the LCSD RPD within QC limits?	✓				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	✓				
		Were MS/MSD analyzed at the appropriate frequency?	✓				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				
		Were MS/MSD RPDs within laboratory QC limits?	✓				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			✓		
		Were analytical duplicates analyzed at the appropriate frequency?			✓		
		Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	✓				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
		Are unadjusted MQLs included in the laboratory data package?	✓				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
		Were all necessary corrective actions performed for the reported data?	✓				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

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Mr. Matt Monroe
Envirotest
3902 Braxton St.

Houston, TX 77063

Report Summary

Thursday April 02, 2009

Report Number: L394657
Samples Received: 03/26/09
Client Project: HOU-09-0086

Description: Woodlake Square VCP 2009

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Mark W. Beasley, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

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Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

2 Samples Reported: 04/02/09 12:34 Printed: 04/02/09 16:17

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REPORT OF ANALYSIS

Mr. Matt Monroe
Envirotest
3902 Braxton St.
Houston, TX 77063

April 02,2009

ESC Sample # : L394657-01

Site ID :

Project : HOU-09-0086

Date Received : March 26, 2009
Description : Woodlake Square VCP 2009

Sample ID : COMP 1

Collected By : M. Monroe
Collection Date : 03/24/09 13:00

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	03/28/09 0821	MVE	1
Mercury	BDL	0.0010	mg/l	0.20	7470A	03/30/09 1033	KBW	1
Arsenic	BDL	0.050	mg/l	5.0	6010B	03/30/09 2058	BGL	1
Barium	1.4	0.15	mg/l	100	6010B	03/30/09 2058	BGL	1
Cadmium	BDL	0.050	mg/l	1.0	6010B	03/30/09 2058	BGL	1
Chromium	BDL	0.050	mg/l	5.0	6010B	03/30/09 2058	BGL	1
Lead	BDL	0.050	mg/l	5.0	6010B	03/30/09 2058	BGL	1
Selenium	BDL	0.050	mg/l	1.0	6010B	03/30/09 2058	BGL	1
Silver	BDL	0.050	mg/l	5.0	6010B	03/30/09 2058	BGL	1
TCLP ZHE Extraction	-				1311	04/01/09 0850	LJN	1
TCLP Volatiles								
Benzene	BDL	0.050	mg/l	0.50	8260B	04/01/09 1643	HJE	1
Carbon tetrachloride	BDL	0.050	mg/l	0.50	8260B	04/01/09 1643	HJE	1
Chlorobenzene	BDL	0.050	mg/l	100	8260B	04/01/09 1643	HJE	1
Chloroform	BDL	0.25	mg/l	6.0	8260B	04/01/09 1643	HJE	1
1,2-Dichloroethane	BDL	0.050	mg/l	0.50	8260B	04/01/09 1643	HJE	1
1,1-Dichloroethene	BDL	0.050	mg/l	0.70	8260B	04/01/09 1643	HJE	1
2-Butanone (MEK)	BDL	0.50	mg/l	200	8260B	04/01/09 1643	HJE	1
Tetrachloroethene	BDL	0.050	mg/l	0.70	8260B	04/01/09 1643	HJE	1
Trichloroethene	BDL	0.050	mg/l	0.50	8260B	04/01/09 1643	HJE	1
Vinyl chloride	BDL	0.050	mg/l	0.20	8260B	04/01/09 1643	HJE	1
Surrogate Recovery								
Toluene-d8	99.2		% Rec.	114.	8260B	04/01/09 1643	HJE	1
Dibromofluoromethane	99.8		% Rec.	125.	8260B	04/01/09 1643	HJE	1
a,a,a-Trifluorotoluene	101.		% Rec.	114.	8260B	04/01/09 1643	HJE	1
4-Bromofluorobenzene	101.		% Rec.	128.	8260B	04/01/09 1643	HJE	1
TCLP Semi-Volatiles								
1,4-Dichlorobenzene	BDL	0.10	mg/l	7.5	8270C	03/29/09 1541	BEJ	1
2,4-Dinitrotoluene	BDL	0.10	mg/l	0.13	8270C	03/29/09 1541	BEJ	1
Hexachlorobenzene	BDL	0.10	mg/l	0.13	8270C	03/29/09 1541	BEJ	1
Hexachloro-1,3-butadiene	BDL	0.10	mg/l	0.50	8270C	03/29/09 1541	BEJ	1
Hexachloroethane	BDL	0.10	mg/l	3.0	8270C	03/29/09 1541	BEJ	1
Nitrobenzene	BDL	0.10	mg/l	2.0	8270C	03/29/09 1541	BEJ	1
Pyridine	BDL	0.10	mg/l	5.0	8270C	03/29/09 1541	BEJ	1
3&4-Methyl Phenol	BDL	0.10	mg/l	400	8270C	03/29/09 1541	BEJ	1
2-Methylphenol	BDL	0.10	mg/l	200	8270C	03/29/09 1541	BEJ	1
Pentachlorophenol	BDL	0.10	mg/l	100	8270C	03/29/09 1541	BEJ	1
2,4,5-Trichlorophenol	BDL	0.10	mg/l	400	8270C	03/29/09 1541	BEJ	1

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REPORT OF ANALYSIS

Mr. Matt Monroe
Envirotest
3902 Braxton St.
Houston, TX 77063

April 02,2009

ESC Sample # : L394657-01

Site ID :

Project : HOU-09-0086

Date Received : March 26, 2009
Description : Woodlake Square VCP 2009

Sample ID : COMP 1

Collected By : M. Monroe
Collection Date : 03/24/09 13:00

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
2,4,6-Trichlorophenol	BDL	0.10	mg/l	2.0	8270C	03/29/09 1541	BEJ	1
Surrogate Recovery								
2-Fluorophenol	25.0		% Rec.	87.0	8270C	03/29/09 1541	BEJ	1
Phenol-d5	15.5		% Rec.	67.0	8270C	03/29/09 1541	BEJ	1
Nitrobenzene-d5	44.6		% Rec.	120.	8270C	03/29/09 1541	BEJ	1
2-Fluorobiphenyl	69.2		% Rec.	122.	8270C	03/29/09 1541	BEJ	1
2,4,6-Tribromophenol	79.6		% Rec.	148.	8270C	03/29/09 1541	BEJ	1
p-Terphenyl-d14	113.		% Rec.	149.	8270C	03/29/09 1541	BEJ	1

BDL - Below Detection Limit
Det. Limit - Estimated Quantitation Limit(EQL)
Limit - Maximum Contaminant Level as established by the US EPA
Note:
The reported analytical results relate only to the sample submitted.
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.
Reported: 04/02/09 12:34 Printed: 04/02/09 16:18

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REPORT OF ANALYSIS

Mr. Matt Monroe
Envirotest
3902 Braxton St.
Houston, TX 77063

April 02,2009

ESC Sample # : L394657-02

Site ID :

Project # : HOU-09-0086

Date Received : March 26, 2009
Description : Woodlake Square VCP 2009

Sample ID : COMP 1

Collected By : M. Monroe
Collection Date : 03/24/09 13:00

Parameter	Dry Result	MDL	RDL	Units	Q	Method	Date	Dil.
Corrosivity	U		Non-Corr			9040C	04/01/09	1
Ignitability	U		See Foot	Deg. F		D93/1010	04/01/09	1
Reactive CN (SW846 7.3.3.2)	U	0.0413	0.125	mg/kg		9012B	04/02/09	1
Reactive Sulf.(SW846 7.3.4.1)	U	8.3	25.	mg/kg		9034/903	04/02/09	1
Total Solids	82.2			%		2540G	04/01/09	1
TNRCC Method 1005 - TPH								
TPH C6 - C12	U	25.	61.	mg/kg		TX 1005	03/27/09	1
TPH C12 - C28	U	25.	61.	mg/kg		TX 1005	03/27/09	1
TPH C28 - C35	U	25.	61.	mg/kg		TX 1005	03/27/09	1
TPH C6 - C35	U	25.	61.	mg/kg		TX 1005	03/27/09	1
Surrogate Recovery								
o-Terphenyl	100.			% Rec.		TX 1005	03/27/09	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD
RDL = Reported Detection Limit = LOQ = PQL = EQL
Note:
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L394657-02 (IGNITABILITY) - Did Not Ignite @ 170.0f

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L394657-01	WG414176	SAMP	Hexachlorobenzene	R687866	J5
	WG414176	SAMP	3&4-Methyl Phenol	R687866	J5

EPAHO104000745

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

EPAHO104000746

Summary of Remarks For Samples Printed
04/02/09 at 16:18:04

TSR Signing Reports: 134
R5 - Desired TAT

Client wants pH reported on all SS requesting metals per JB Arsenic H2O log method 6020

Sample: L394657-01 Account: ENVTESTX Received: 03/26/09 09:00 Due Date: 04/02/09 00:00 RPT Date: 04/02/09 12:34

Sample: L394657-02 Account: ENVTESTX Received: 03/26/09 09:00 Due Date: 04/02/09 00:00 RPT Date: 04/02/09 12:34

EPAHO104000747

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Corrosivity by Method 9040C** L394657

Matrix: Soil - mg/kg
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-02
Sample Date: 3/24/2009
Extraction Date: 3/28/2009
Analysis Date: 4/1/2009 12:42:00 PM
Instrument ID: ACCUMET AB
Analyst: 397
Analytic Batch: WG414184 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL	MDL
Corrosivity		**6.70**	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Corrosivity	5.40	5.40	100	97.4 - 102.6	

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Corrosivity	5.40	5.40	100	97.4 - 102.6	

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Corrosivity by Method 9040C** L394657

Matrix: Soil - mg/kg
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-02
Sample Date: 3/24/2009
Extraction Date: 3/28/2009
Analysis Date: 4/1/2009 12:42:00 PM
Instrument ID: ACCUMET AB
Analyst: 397
Analytic Batch: WG414184 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Corrosivity	5.40	5.40	100	5.40	100	97.4-102.6		0.0	20	

Sample Duplicate

L394657-02

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Corrosivity	0.000	0.000			

EPAHO104000749

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Ignitability by Method D93/1010A** L394657

Matrix: Soil - mg/kg
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-02
Sample Date: 3/24/2009
Extraction Date: 3/27/2009
Analysis Date: 4/1/2009 8:08:00 AM
Instrument ID: KOEHLER
Analyst: 471
Analytic Batch: WG414084 EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Ignitability	82.0	82.0	100	96 - 104	

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Ignitability	82.0	82.0	100	96 - 104	

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Ignitability by Method D93/1010A** L394657

Matrix: Soil - mg/kg
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-02
Sample Date: 3/24/2009
Extraction Date: 3/27/2009
Analysis Date: 4/1/2009 8:08:00 AM
Instrument ID: KOEHLER
Analyst: 471
Analytic Batch: WG414084 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Ignitability	82.0	82.0	100	82.0	100	96-104		0.0	20	

Sample Duplicate

L394711-01

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Ignitability	0.000	0.000			

Sample Duplicate

L394893-01

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Ignitability	0.000	0.000			

Sample Duplicate

L395060-03

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Ignitability	0.000	0.000			

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Reactive CN (SW846 7.3.3.2) by Method 9012B** L394657

Matrix: Soil - mg/kg
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-02
Sample Date: 3/24/2009
Extraction Date: 3/31/2009
Analysis Date: 4/2/2009 11:07:00 AM
Instrument ID: LACHAT4
Analyst:
Analytic Batch: WG414563 EPA ID: TN00003

Sample Duplicate
L394942-01

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Reactive CN (SW846	0.000	0.000			

EPAHO104000752

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Reactive Sulf.(SW846 7.3.4.1) by Method 9034/9030B** L394657

Matrix: Soil - mg/kg
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-02
Sample Date: 3/24/2009
Extraction Date: 3/31/2009
Analysis Date: 4/2/2009 10:59:00 AM
Instrument ID: NONE
Analyst: 183
Analytic Batch: WG414565 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL	MDL
Reactive Sulf.(SW846 7.3.4.1)		<25.0	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Reactive Sulf.(SW846 7.3.4.1)	100	70.0	70.0	70 - 130	

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Reactive Sulf.(SW846 7.3.4.1)	100	78.0	78.0	70 - 130	

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Reactive Sulf.(SW846 7.3.4.1) by Method 9034/9030B** L394657

Matrix: Soil - mg/kg
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-02
Sample Date: 3/24/2009
Extraction Date: 3/31/2009
Analysis Date: 4/2/2009 10:59:00 AM
Instrument ID: NONE
Analyst: 183
Analytic Batch: WG414565 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Reactive Sulf.(SW846	100	70.0	70.0	78.0	78.0	70-130		11	20	

Sample Duplicate

L394942-01

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Reactive Sulf.(SW846	0.000	0.000			

EPAHO104000754

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Total Solids by Method 2540G** L394657

Matrix: Soil - mg/kg
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-02
Sample Date: 3/24/2009
Extraction Date: 3/31/2009
Analysis Date: 4/1/2009 9:33:00 AM
Instrument ID: BAL
Analyst: 229
Analytic Batch: WG414478 EPA ID: TN00003

Method Blank

Analyte	CAS	Results
Total Solids		**0.000**

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Total Solids	50.0	50.0	100	85 - 115	

EPAHO104000755

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Total Solids by Method 2540G** L394657

Matrix: Soil - mg/kg

Project: Woodlake Square VCP 2009

Project No: HOU-09-0086

Login No: L394657

Sample Number: L394657-02

Sample Date: 3/24/2009

Extraction Date: 3/31/2009

Analysis Date: 4/1/2009 9:33:00 AM

Instrument ID: BAL

Analyst: 229

Analytic Batch: WG414478 EPA ID: TN00003

Sample Duplicate

L394673-02

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Total Solids	78.3	81.4	3.8	5	

EPAHO104000756

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Mercury by Method 7470A** L394657
Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 3/28/2009
Analysis Date: 3/30/2009 10:33:00 AM
Instrument ID: CVAA3
Analyst: 253
Analytic Batch: WG414219 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL	MDL
Mercury		<0.0002	<0.00007

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Mercury	0.0030	0.0028	92.7	85 - 115	

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Mercury by Method 7470A** L394657
Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 3/28/2009
Analysis Date: 3/30/2009 10:33:00 AM
Instrument ID: CVAA3
Analyst: 253
Analytic Batch: WG414219 EPA ID: TN00003

Sample Duplicate

L394785-01

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Mercury	0.0000	0.0000			

Matrix Spike/Matrix Spike Duplicate

L394785-01

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Qualifier	RPD	Control Limits	Qualifier
Mercury	0.0030	0.0000	0.0030	100	0.0030	101	70-130		1.0	20	

EPAHO104000758

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Trace Metals by Method 6010B** L394657

Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 3/28/2009
Analysis Date: 3/30/2009
Instrument ID: ICP7
Analyst: 281
Analytic Batch: WG414179 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL	MDL
Arsenic	7440-38-2	<0.0500	0.0175
Barium	7440-39-3	<0.150	<0.0495
Cadmium	7440-43-9	<0.0500	<0.0165
Chromium	7440-47-3	<0.0500	<0.0165
Lead	7439-92-1	<0.0500	<0.0165
Selenium	7782-49-2	<0.0500	<0.0165
Silver	7440-22-4	<0.0500	<0.0165

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Arsenic	1.13	1.10	97.3	85 - 115	
Barium	1.13	1.09	96.5	85 - 115	
Cadmium	1.13	1.10	97.3	85 - 115	
Chromium	1.13	1.06	93.8	85 - 115	
Lead	1.13	1.08	95.6	85 - 115	
Selenium	1.13	1.08	95.6	85 - 115	
Silver	1.13	1.08	95.6	85 - 115	

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Trace Metals by Method 6010B** L394657

Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 3/28/2009
Analysis Date: 3/30/2009
Instrument ID: ICP7
Analyst: 281
Analytic Batch: WG414179 EPA ID: TN00003

Sample Duplicate

L394743-06

Name	Sample Results	Results Duplicate	%RPD	Limit	Qualifiers
Arsenic	0.00000	0.00000			
Barium	3.57	3.50	2.0	20	
Cadmium	0.00000	0.00000			
Chromium	0.00000	0.00000			
Lead	0.00000	0.00000			
Selenium	0.00000	0.00000			
Silver	0.00000	0.220			

Matrix Spike/Matrix Spike Duplicate

L394743-06

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Arsenic	1.13	0.00000	1.11	98.2	1.14	101	75-125		2.7	20	
Barium	1.13	3.50	4.60	97.3	4.64	101	75-125		0.9	20	
Cadmium	1.13	0.00000	1.06	93.8	1.08	95.6	75-125		1.9	20	
Chromium	1.13	0.00000	1.06	93.8	1.09	96.5	75-125		2.8	20	
Lead	1.13	0.00000	1.08	95.6	1.10	97.3	75-125		1.8	20	
Selenium	1.13	0.00000	1.08	95.6	1.11	98.2	75-125		2.7	20	
Silver	1.13	0.220	1.06	74.3	1.07	75.2	75-125	J6	0.9	20	

EPAHO104000760

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L394657

Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 4/1/2009
Analysis Date: 4/1/2009 4:43:00 PM
Instrument ID: VOCMS6
Analyst: 167
Analytic Batch: WG414668 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL	MDL
1,1-Dichloroethene	75-35-4	<0.050	<0.0005
1,2-Dichloroethane	107-06-2	<0.050	<0.0003
2-Butanone (MEK)	78-93-3	<0.500	<0.0045
Benzene	71-43-2	<0.050	<0.0003
Carbon tetrachloride	56-23-5	<0.050	<0.0003
Chlorobenzene	108-90-7	<0.050	<0.0003
Chloroform	67-66-3	<0.250	<0.0003
Tetrachloroethene	127-18-4	<0.050	<0.0003
Trichloroethene	79-01-6	<0.050	<0.0004
Vinyl chloride	75-01-4	<0.050	<0.0003

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L394657

Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 4/1/2009
Analysis Date: 4/1/2009 4:43:00 PM
Instrument ID: VOCMS6
Analyst: 167
Analytic Batch: WG414668 EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,1-Dichloroethene	0.050	0.043	86.4	60 - 130	
1,2-Dichloroethane	0.050	0.050	99.7	63 - 137	
2-Butanone (MEK)	0.250	0.240	95.8	53 - 132	
Benzene	0.050	0.043	85.9	67 - 126	
Carbon tetrachloride	0.050	0.048	95.4	64 - 141	
Chlorobenzene	0.050	0.048	96.2	77 - 125	
Chloroform	0.050	0.049	98.4	66 - 126	
Tetrachloroethene	0.050	0.041	82.5	67 - 135	
Trichloroethene	0.050	0.046	92.2	74 - 126	
Vinyl chloride	0.050	0.041	81.9	55 - 153	

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L394657

Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 4/1/2009
Analysis Date: 4/1/2009 4:43:00 PM
Instrument ID: VOCMS6
Analyst: 167
Analytic Batch: WG414668 EPA ID: TN00003

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,1-Dichloroethene	0.050	0.045	89.5	60 - 130	
1,2-Dichloroethane	0.050	0.050	99.1	63 - 137	
2-Butanone (MEK)	0.250	0.250	99.9	53 - 132	
Benzene	0.050	0.045	89.3	67 - 126	
Carbon tetrachloride	0.050	0.050	99.0	64 - 141	
Chlorobenzene	0.050	0.046	92.8	77 - 125	
Chloroform	0.050	0.050	99.6	66 - 126	
Tetrachloroethene	0.050	0.043	86.4	67 - 135	
Trichloroethene	0.050	0.047	94.8	74 - 126	
Vinyl chloride	0.050	0.042	84.9	55 - 153	

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L394657

Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 4/1/2009
Analysis Date: 4/1/2009 4:43:00 PM
Instrument ID: VOCMS6
Analyst: 167
Analytic Batch: WG414668 EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate

L394294-01

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Qualifier	RPD	Control Limits	Qualifier
1,1-Dichloroethene	2.50	0.000	2.15	85.9	2.05	82.2	10-162		4.5	23	
1,2-Dichloroethane	2.50	0.000	2.29	91.5	2.27	91.0	29-167		0.6	21	
2-Butanone (MEK)	12.5	1.80	13.3	91.8	13.0	89.9	32-151		1.8	26	
Benzene	2.50	0.000	2.15	86.2	2.16	86.3	16-158		0.1	21	
Carbon tetrachloride	2.50	0.000	2.32	92.7	2.30	92.0	22-168		0.7	24	
Chlorobenzene	2.50	0.000	2.39	95.4	2.39	95.5	33-148		0.1	22	
Chloroform	2.50	0.000	2.34	93.8	2.35	94.0	37-147		0.3	21	
Tetrachloroethene	2.50	0.000	2.30	92.1	2.21	88.4	13-157		4.1	24	
Trichloroethene	2.50	0.000	2.25	90.0	2.18	87.3	18-163		3.0	21	
Vinyl chloride	2.50	0.000	2.09	83.7	2.03	81.2	0-179		3.1	26	

EPAHO104000764

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Volatile Organic Compounds by Method 8260B** L394657

Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 4/1/2009
Analysis Date: 4/1/2009 4:43:00 PM
Instrument ID: VOCMS6
Analyst: 167
Analytic Batch: WG414668 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,1-Dichloroethene	0.050	0.043	86.4	0.045	89.5	60-130		3.5	20	
1,2-Dichloroethane	0.050	0.050	99.7	0.050	99.1	63-137		0.5	20	
2-Butanone (MEK)	0.250	0.240	95.8	0.250	99.9	53-132		4.2	20	
Benzene	0.050	0.043	85.9	0.045	89.3	67-126		3.8	20	
Carbon tetrachloride	0.050	0.048	95.4	0.050	99.0	64-141		3.7	20	
Chlorobenzene	0.050	0.048	96.2	0.046	92.8	77-125		3.6	20	
Chloroform	0.050	0.049	98.4	0.050	99.6	66-126		1.2	20	
Tetrachloroethene	0.050	0.041	82.5	0.043	86.4	67-135		4.7	20	
Trichloroethene	0.050	0.046	92.2	0.047	94.8	74-126		2.8	20	
Vinyl chloride	0.050	0.041	81.9	0.042	84.9	55-153		3.6	20	

EPAHO104000765

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **TPH C6 - C35 by Method 8015** L394657

Matrix: Soil - mg/kg

Project: Woodlake Square VCP 2009

Project No: HOU-09-0086

Login No: L394657

Sample Number: L394657-02

Sample Date: 3/24/2009

Extraction Date: 3/27/2009

Analysis Date: 3/27/2009 6:24:00 PM

Instrument ID: SVGC21

Analyst: 0

Analytic Batch: WG413965 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL	MDL
TPH C12 - C28		<50.0	<25.0
TPH C28 - C35		<50.0	<25.0
TPH C6 - C12		<50.0	<25.0
TPH C6 - C35		<50.0	<25.0

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
TPH C12 - C28	250	229	91.7	75 - 125	
TPH C6 - C12	250	241	96.4	75 - 125	
TPH C6 - C35	500	472	94.4	75 - 125	

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
TPH C12 - C28	250	226	90.4	75 - 125	
TPH C6 - C12	250	242	96.7	75 - 125	
TPH C6 - C35	500	469	93.9	75 - 125	

EPAHO104000766

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **TPH C6 - C35 by Method 8015** L394657

Matrix: Soil - mg/kg

Project: Woodlake Square VCP 2009

Project No: HOU-09-0086

Login No: L394657

Sample Number: L394657-02

Sample Date: 3/24/2009

Extraction Date: 3/27/2009

Analysis Date: 3/27/2009 6:24:00 PM

Instrument ID: SVGC21

Analyst: 0

Analytic Batch: WG413965 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	% Qualifier RPD	Control Limits	Qualifier
TPH C12 - C28	250	229	91.7	226	90.4	75-125	1.5	20	
TPH C6 - C12	250	241	96.4	242	96.7	75-125	0.3	20	
TPH C6 - C35	500	472	94.4	469	93.9	75-125	0.6	20	

Matrix Spike/Matrix Spike Duplicate

L393978-02

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Qualifier RPD	Control Limits	Qualifier
TPH C12 - C28	250	47.0	258	84.6	269	88.8	75-125	4.0	20	
TPH C6 - C12	250	0.000	268	107	267	107	75-125	0.5	20	
TPH C6 - C35	500	87.0	562	94.9	569	96.4	75-125	1.3	20	

EPAHO104000767

Environmental Science Corporation

Quality Control Summary

Envirotest

*Test:*Semi-Volatiles by Method 8270C L394657

*Matrix:*Water - mg/L

*Project:*Woodlake Square VCP 2009

*Project No:*HOU-09-0086

*Login No:*L394657

*Sample Number:*L394657-01

*Sample Date:*3/24/2009

*Extraction Date:*3/28/2009

*Analysis Date:*3/30/2009

*Instrument ID:*BNAMS10

*Analyst:*279

*Analytic Batch:*WG414176 EPA ID: TN00003

Method Blank

Analyte	CAS	PQL	MDL
Pyridine	110-86-1	<0.100	<0.0330
1,4-Dichlorobenzene	106-46-7	<0.100	<0.0330
2-Methylphenol	95-48-7	<0.100	<0.0330
Hexachloroethane	67-72-1	<0.100	<0.0330
3&4-Methyl Phenol		<0.100	<0.0330
Nitrobenzene	98-95-3	<0.100	<0.0330
Hexachloro-1,3-butadiene	87-68-3	<0.100	<0.0330
2,4,6-Trichlorophenol	88-06-2	<0.100	<0.0330
2,4,5-Trichlorophenol	95-95-4	<0.100	<0.0330
2,4-Dinitrotoluene	121-14-2	<0.100	<0.0330
Hexachlorobenzene	118-74-1	<0.100	<0.0330
Pentachlorophenol	87-86-5	<0.100	<0.0330

EPAHO104000768

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Semi-volatile Organic Compounds by Method 8270C** L394657

Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 3/28/2009
Analysis Date: 3/29/2009 3:41:00 PM
Instrument ID: BNAMS10
Analyst: 279
Analytic Batch: WG414176 EPA ID: TN00003

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,4-Dichlorobenzene	0.0100	0.00705	70.5	19 - 103	
2,4,5-Trichlorophenol	0.0100	0.00848	84.8	48 - 120	
2,4,6-Trichlorophenol	0.0100	0.00825	82.5	49 - 118	
2,4-Dinitrotoluene	0.0100	0.0103	103	56 - 128	
2-Methylphenol	0.0100	0.00694	69.4	42 - 99	
3&4-Methyl Phenol	0.0100	0.00706	70.6	36 - 102	
Hexachloro-1,3-butadiene	0.0100	0.00900	90.0	21 - 116	
Hexachlorobenzene	0.0100	0.0115	115	51 - 121	
Hexachloroethane	0.0100	0.00794	79.4	15 - 109	
Nitrobenzene	0.0100	0.00914	91.4	31 - 105	
Pentachlorophenol	0.0100	0.00578	57.8	20 - 122	
Pyridine	0.0100	0.00237	23.7	7 - 48	

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Semi-volatile Organic Compounds by Method 8270C** L394657

Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 3/28/2009
Analysis Date: 3/29/2009 3:41:00 PM
Instrument ID: BNAMS10
Analyst: 279
Analytic Batch: WG414176 EPA ID: TN00003

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
1,4-Dichlorobenzene	0.0100	0.00653	65.3	19 - 103	
2,4,5-Trichlorophenol	0.0100	0.00835	83.5	48 - 120	
2,4,6-Trichlorophenol	0.0100	0.00806	80.6	49 - 118	
2,4-Dinitrotoluene	0.0100	0.00993	99.3	56 - 128	
2-Methylphenol	0.0100	0.00631	63.1	42 - 99	
3&4-Methyl Phenol	0.0100	0.00609	60.9	36 - 102	
Hexachloro-1,3-butadiene	0.0100	0.00786	78.6	21 - 116	
Hexachlorobenzene	0.0100	0.0104	104	51 - 121	
Hexachloroethane	0.0100	0.00688	68.8	15 - 109	
Nitrobenzene	0.0100	0.00781	78.1	31 - 105	
Pentachlorophenol	0.0100	0.00717	71.7	20 - 122	
Pyridine	0.0100	0.00263	26.3	7 - 48	

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Semi-volatile Organic Compounds by Method 8270C** L394657

Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 3/28/2009
Analysis Date: 3/29/2009 3:41:00 PM
Instrument ID: BNAMS10
Analyst: 279
Analytic Batch: WG414176 EPA ID: TN00003

Matrix Spike/Matrix Spike Duplicate

L394657-01

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,4-Dichlorobenzene	0.100	0.00000	0.0489	48.9	0.0424	42.4	10-108		14	50	
2,4,5-Trichlorophenol	0.100	0.00000	0.0938	93.8	0.0799	79.9	10-136		16	45	
2,4,6-Trichlorophenol	0.100	0.00000	0.0957	95.7	0.0790	79.0	10-137		19	42	
2,4-Dinitrotoluene	0.100	0.00000	0.0910	91.0	0.0829	82.9	32-137		9.2	36	
2-Methylphenol	0.100	0.00000	0.0686	68.6	0.0548	54.8	13-110		22	23	
3&4-Methyl Phenol	0.100	0.00000	0.0644	64.4	0.0531	53.1	10-56	J5	19	36	
Hexachloro-1,3-butadiene	0.100	0.00000	0.0688	68.8	0.0692	69.2	16-118		0.5	50	
Hexachlorobenzene	0.100	0.00000	0.115	115	0.129	129	41-114	J5	11	28	
Hexachloroethane	0.100	0.00000	0.0476	47.6	0.0398	39.8	10-125		18	50	
Nitrobenzene	0.100	0.00000	0.0628	62.8	0.0612	61.2	14-122		2.5	46	
Pentachlorophenol	0.100	0.00000	0.0808	80.8	0.0738	73.8	0-137		9.0	50	
Pyridine	0.100	0.00000	0.0232	23.2	0.0208	20.8	0-70		11	50	

Environmental Science Corporation

Quality Control Summary

Envirotest

Test: **Semi-volatile Organic Compounds by Method 8270C** L394657

Matrix: Water - mg/L
Project: Woodlake Square VCP 2009
Project No: HOU-09-0086
Login No: L394657
Sample Number: L394657-01
Sample Date: 3/24/2009
Extraction Date: 3/28/2009
Analysis Date: 3/29/2009 3:41:00 PM
Instrument ID: BNAMS10
Analyst: 279
Analytic Batch: WG414176 EPA ID: TN00003

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
1,4-Dichlorobenzene	0.0100	0.00705	70.5	0.00653	65.3	19-103		7.7	50	
2,4,5-Trichlorophenol	0.0100	0.00848	84.8	0.00835	83.5	48-120		1.5	29	
2,4,6-Trichlorophenol	0.0100	0.00825	82.5	0.00806	80.6	49-118		2.2	28	
2,4-Dinitrotoluene	0.0100	0.0103	103	0.00993	99.3	56-128		3.5	24	
2-Methylphenol	0.0100	0.00694	69.4	0.00631	63.1	42-99		9.6	26	
3&4-Methyl Phenol	0.0100	0.00706	70.6	0.00609	60.9	36-102		15	31	
Hexachloro-1,3-butadiene	0.0100	0.00900	90.0	0.00786	78.6	21-116		14	50	
Hexachlorobenzene	0.0100	0.0115	115	0.0104	104	51-121		9.7	23	
Hexachloroethane	0.0100	0.00794	79.4	0.00688	68.8	15-109		14	50	
Nitrobenzene	0.0100	0.00914	91.4	0.00781	78.1	31-105		16	43	
Pentachlorophenol	0.0100	0.00578	57.8	0.00717	71.7	20-122		22	50	
Pyridine	0.0100	0.00237	23.7	0.00263	26.3	7-48		10	50	

EPAHO104000772

Company Name/Address:
Envirotest

3902 Braxton St.
Houston.TX 77063

Alternate billing information:

Analysis/Container/Preservative

Chain of Custody Page 1 of 1

Prepared by C072

ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122

Phone (615) 758-5858
Phone (800) 767-5859
FAX (615) 758-5859

Report to: Matt Monroe
Email to: mmonroe@envirotestltd.com

Project Description: Woodlake Square VCP 2009
City/Sate Collected: Houston TX

Phone: (713) 782-4411
FAX:
Client Project #: HOU 09 0086
ESC Key:

Collected by: M. Monroe
Site/Facility ID#:
P.O.#: 09-03-010

Collected by (signature): [signature]
Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day. 200%
___ Next Day. 100%
___ Two Day. 50%
___ Three Day. 25%

Date Results Needed: NTAT
Email? __No X Yes
FAX? __No __Yes

CoCode ENVTESTX (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	TCLP RCRA 8	TPH TX 1005	RCI	TCLP VOCs	TCLP SVOCs			Remarks/Contaminant	Sample # (lab only)
Comp 1	Comb	SS	—	3-24-09	1300	4	X	X	X	X	X				L344657-01/02

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks: 9669 7446 7212

9669 7446 7201 Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐	Condition: (lab use only)
[signature]	3-25-09	10Am	[signature] 3-25-09		OK
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.7 / Bottles Received: 4 - 4oz	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 3/26/09 / Time: 0900	pH Checked: / NCF:

EPAHO104000773

3270
Ergon Trucking, Inc.

EPAHO104000774

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/13/2009**

Dear **Julie Sossaman**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3270

Expiration Date 4/13/2011

Generator: Ergon Trucking, Inc
Address: P.O. 1639
Jackson, MS 39215

Waste Information

Name of Waste: Sodium bisulfate and sodium thiosulfate contaminated waste w
TCEQ Waste Code #: CESQ1191
Container Type:
Detailed Description of Process Generating Waste:
oil contaminated with sodium thiosulfate and sodium bisulfite
Color: Yellow **Odor:** strong **pH:** >2
Physical State:
Incompatibilities: Strong acids
Safety Related Data/Special Handling:
Standard PPE and chemical resistant gloves

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

1L
JB/AL

CES Environmental Services, Inc.

① ~~Need PFT~~ ② ~~Lab report~~ ③ ~~may be recy-clable~~

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Ergon Trucking, Inc
Address: P.O. Box 1639
City: Jackson **State:** MS **Zip:** 39215
Contact: Mary Ellen Snow **Title:** Environmental Scientist
Phone Number: 601.933.3540 **Fax Number:** 601.933.3369
24/hr Phone Number: 1.800.222.7122
US EPA ID No: CESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Vertex Recovery, LP
Address: 2323 Clear Lake blvd. # 180 - 184
City: Houston **State:** TX **Zip:** 77062
Contact: Julie Sossaman **Title:**
Phone Number: (281) 486-4182 ext 124 **Fax Number:** 281.486.0217

SECTION 3: General Description of the Waste

Name of Waste: Sodium bisulfate and sodium thiosulfate contaminated waste water
Detailed Description of Process Generating Waste:

Oil contaminated with sodium thiosulfate and sodium bisulfite

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: yellow **Odor:** strong

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☑ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☑ **Yearly** ☐ **One-Time**
Quantity: 600 gallons

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: CESQ1191

Proper US DOT Shipping Name: Non RCRA/Non DOT Regulated Material

Class: na **UN/NA:** na **PG :** na **RQ:** na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150		>2		0	mg/l	0	mg/l	2	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
~~7150~~ 0	mg/l	<5000	mg/l	0	mg/l	0	mg/l	0	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
water	33	%
sodium thiosulfate	33	%
sodium bisulfate	33	%
oil	<1	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE and chemical resistant gloves

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Strong Acids

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	x
TCLP Volatiles:	x
TCLP Semi-Volatiles:	x
Reactivity:	x
Corrosivity:	x
Ignitability:	x

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☑ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Mary Ellen Snow **Date:** 4/2/09

Printed Name/Title: Mary Ellen Snow Environmental Scientist

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:
Date: 4-9-09 ☑ Approved ☐ Rejected
Approval Number: 3270

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$.40/gal ($500 dollar minimum)

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

pH, % oil.

5. Treatment and Handling Protocol:

Process to System 1

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Kim Harmon
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 3/26/09

From: Miles Root

Lab Memo: 09-061

Subject: **Vertex Recovery Bisulfite/Thiosulfate Stream**

A sample of waste water containing sodium bisulfate and sodium thiosulfates has been evaluated for processing at CES. This sample represents approximately 600 gallons of material containing approximately 30% sodium thiosulfates and 38-44% sodium bisulfate. These values are highly suspect, as they are both above the solubility limits of these components in water. My recommendation is that we do not take this material.

Sodium bisulfate is used as a preservative in a variety of food related products in very small concentrations. It is listed as a hazardous substance. When in an acid medium, the bisulfate releases sulfur dioxide gas, which is toxic. This sample has a pH of 2. This particular sample does release this gas when the sample bottle is opened. It is a very sharp odor. The gas continues to be released as the bottle swells up over time.

Even though this material can be treated with our water, the resulting treated material is solids, and basically the entire volume would need to be filter pressed.

I don't recommend that we take this material for treatment. Even the small pint sized bottle I have gives off enough sulfur dioxide when opened to be hazardous. The potential for toxic gas release and safety concerns over this small volume of material outweigh the benefits.

SOUTHERN IONICS INCORPORATED
MATERIAL SAFETY DATA SHEET

MSDS. NO. 024
Effective Date: September 9, 2002
Revision Date: January 19, 2007

PRODUCT NAME: SODIUM BISULFITE AQUEOUS SOLUTION

Transportation Emergencies, Call (800) 424-9300 (CHEMTREC)
Health Emergencies, contact Your Local Poison Center
Caution: Causes irritation. Avoid contact with skin, eyes or clothing.

Product Name: Sodium Bisulfite Aqueous Solution **Formula:** See Below
Chemical Name: Sodium Bisulfite Aqueous Solution
CAS Number: 7631-90-5

Typical Composition	CAS #'s	%
Sodium Bisulfite ($NaHSO_3$)	7631-90-5	38-44
Sodium Sulfite (Na_2SO_3)	7757-83-7	<1
Sodium Sulfate (Na_2SO_4)	7757-82-6	<4
Water	7732-18-5	60-65

Exposure Standard: ACGIH TWA - 5 mg/m^3 for solid sodium bisulfite.

Hazard Ratings: Health = 3 Flammability = 0 Reactivity = 1
0 = Least; 1 = Slight; 2 = Moderate; 3 = High; 4 = Extreme;

Ventilation: Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evacuation. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Eye: Use chemical splash goggles and face shield (ANSI Z67.1 or approved equivalent). Eye protection worn must be compatible with respiratory protection system employed.

Skin: Chemically resistant gloves should be worn whenever this material is handled. Glove permeation data does not exist for this material. The following glove(s) should be used for splash protection only: - Neoprene Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water.

Respiratory: A respiratory protection program meeting OSHA 1910.134 ANSI Z88.2 requirements must be followed whenever work place conditions warrant a respirator's use.

For exposure exceeding TWA and up to 10 times the TWA, wear a MSHA/NIOSH approved (or equivalent) full-facepiece, air-purifying respirator.

For exposure in excess of 10 times the TWA and up to 100 times the TWA or Unknown, wear a MSHA/NIOSH approved (or equivalent) self-contained breathing apparatus in the positive pressure mode, or MSHA/NIOSH approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

Air-purifying respirators should be equipped with acid gas cartridges.

Other: Where splashing is possible, full chemically resistant protective clothing (e.g. acid suit) and boots are required.

PHYSIOLOGICAL & HEALTH EFFECTS

Routes of Entry:

Eyes: Direct contact with material can cause the following: severe irritation

Repeated contact at high concentrations can cause the following: corneal burning

Skin: Prolonged or repeated skin contact or when confined to skin can cause the following: irritation - dermatitis

Inhalation: Inhalation of vapor or mist can cause the following: irritation of nose, throat, and lungs – coughing – shortness of breath

Ingestion: Material is harmful if swallowed.

Material can cause the following: gastrointestinal irritation – allergic reaction

Material in large doses can cause the following: abdominal pain – control nervous system depression – diarrhea – depression - death

Toxicity: LD50 in rats 2000 mg/kg orally

EMERGENCY & FIRST AID PROCEDURES

Eyes: IMMEDIATELY flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water. Get prompt medical attention. Wash contaminated clothing thoroughly before reuse.

Inhalation: Move subject to fresh air. If breathing is difficult, give oxygen. Give artificial respiration if breathing has stopped. Call a physician.

Ingestion: Induce vomiting by giving 2 glasses of water to drink and touching back of subject's throat with finger. IMMEDIATELY see a physician. Never give anything by mouth to an unconscious person.

[redacted]

Stability: This material is considered stable.

Conditions To Avoid: Avoid exposure to excessive heat.

Incompatibility: Avoid contact with the following: acids – oxidizing agents

Hazardous Decomposition Products: Thermal decomposition may yield the following: sulfur dioxide – toxic fumes

Hazardous Polymerization: Product will not undergo hazardous polymerization.

[redacted]

Appearance and Odor: Clear yellow liquid, pungent odor

Boiling Point: 103°C/217°F Estimated

Melting Point: No Data

Vapor Density (air = 1): > 1.0 Estimate

Vapor Pressure: 32 mm Hg Estimate

Solubility in water: Dilutable

Specific Gravity (H_2O =1): 1.31 to 1.38

pH: 3.5 to 5.0

Other (i.e. wt. per gallon): 10.8 to 11.3 lb/gal

EPAHO104000785

Handling and Storage

Precautions: Avoid temperature extremes during storage; ambient temperature preferred. Do not store this material near food, animal feed or drinking water. Store in well ventilated area. Store away from excessive heat (e.g. steam pipes, radiators), and from reactive materials. Keep container tightly closed when not in use.

The vapor above sodium bisulfite solution contains water vapor and sulfur dioxide. The concentration of sulfur dioxide varies with conditions, temperature and the pH of the SBS being the most important. Caution is recommended in determining how and where such vapors are handled and vented. The ACGIH TWA for sulfur dioxide is 2 ppm.

Do not handle material near food, animal feed or drinking water. This material is corrosive. See the PERSONAL PROTECTION MEASURES Section prior to handling. Vapors can be evolved when material is

heated during processing operations. See FACILITY CONTROL MEASURES Section for types of ventilation required. Slight positive pressure may develop upon long-term storage in air-tight containers. Carefully relieve any pressure build-up when opening container. Wash after handling and shower at end of work period.

CONTAINERS HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue (vapors and/or liquid) follow all MSDS and label warnings even after container is emptied. Empty drums should be rinsed with water before discarding. Dispose empty container in a sanitary landfill or by incineration as allowed by state and local authorities. Avoid inhalation of smoke if incinerated.

Flash Point: Not applicable **Flammable Limits:** Not flammable

Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Special Firefighting Procedures: Move containers promptly out of fire zone. If removal is impossible, cool containers with water spray. Remain upwind. Avoid breathing noxious fumes (sulfur dioxide) from fire-exposed material.

[redacted]

DOT Proper Shipping Name: Bisulfites, inorganic, aqueous solutions, n.o.s. (Sodium Bisulfite)

[redacted]

UN/NA Identification Number: UN2693

Packing Group: III

Other Labels: Corrosive

[redacted]

Precaution if Spilled or Released: Contain spills immediately with inert materials (i.e. sand, earth). Evacuate and ventilate spill area. Avoid all contact. Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Neutralizing Chemicals: Sodium Bisulfite may be neutralized with sodium hydroxide, or soda ash to neutral pH. Avoid acidic conditions (i.e. pH <5.0), since under acidic conditions, sulfur dioxide a poisonous gas can be released.

Waste Disposal Methods: For disposal, incinerate or landfill at a permitted facility in accordance with local, state, and federal regulations (see 40 CFR Part 268).

Reportable Quantities: 5,000 lbs on dry weight basis for sodium bisulfite.

[redacted]

Sodium Bisulfite manufactured at Pasadena, TX and Tuscaloosa, AL are NSF-60 Certified. Maximum use in potable water is 50 mg/l.

SALES OFFICE

For Product Information:
TEL: 662-494-3055
FAX: 662-494-2828

Post Office Drawer 1217
West Point, MS 39773

To Place An Order:
TEL: 800-953-3585
FAX: 800-953-3588

IMPORTANT

The information on this Material Safety Data Sheet is believed to be accurate but is not warranted to be so. Protective equipment, health effects, and other related safety measures are based on intended and anticipated product use. Recipients are advised to confirm in advance of need that the information is applicable and suitable to their circumstances.

EPAHO104000787

SOUTHERN IONICS INCORPORATED
MATERIAL SAFETY DATA SHEET

MSDS. NO. 037
Effective Date: September 10, 2002

PRODUCT NAME: SODIUM THIOSULFATE SOLUTION

Transportation Emergencies, Call (800) 424-9300 (CHEMTREC)
Health Emergencies, contact Your Local Poison Center
Caution: Causes irritation. Avoid contact with skin, eyes or clothing.

I. PRODUCT INFORMATION

Product Name:	Sodium Thiosulfate Solution	**Formula:**	See Below
Chemical Name:			
CAS Number:	7772-98-7		

II. COMPONENT DATA

Typical Composition	CAS #'s	%
$Na_2S_2O_3$	7772-98-7	29-31
Water	7732-18-5	Balance

Exposure Standard: Not Found

Hazard Ratings: Health = 2 Flammability = 0 Reactivity = 2
0 = Least; 1 = Slight; 2 = Moderate; 3 = High; 4 = Extreme;

III. PHYSICAL DATA

Appearance and Odor:	Clear colorless to amber solution. Sulfur like odor.
Boiling Point:	217°F
Melting Point:	N/A
Vapor Density (air = 1):	N/A
Vapor Pressure:	N/A
Solubility in water:	100%
Specific Gravity (H_2O = 1):	1.28
pH:	8 – 10.5
Other (i.e. wt. per gallon):	10.8 lb/gallon typical

IV. FIRE AND EXPLOSION INFORMATION

Flash Point: N/A

Flammable Limits: N/A

Extinguishing Media: N/A

Special Firefighting Procedures: For fires involving this material wear SCBA.

V. REACTIVITY DATA

Stability: Stable

Conditions To Avoid: Sulfur dioxide may be released if allowed to contact strong acids or if dried material is overheated.

Incompatibility: Strong acids.

Hazardous Decomposition Products: If dried material is overheated, sulfur dioxide is given off.

Hazardous Polymerization: Will not occur.

VI. PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS

Ventilation: Use in well ventilated areas.

Eye: Goggles or full face shield.

Skin: Appropriate clothing/rubber or plastic gloves. Avoid contact with skin.

Respiratory: None required under normal conditions.

VII. HEALTH AND FIRST AID

PHYSIOLOGICAL & HEALTH EFFECTS

Routes of Entry:

Eyes: May cause slight irritation.

Skin: Moderate to low irritant.

Inhalation: N/A

Ingestion: Up to 12 grams of sodium thiosulfate can be taken daily by mouth with no ill effects except catharsis.

Toxicity: Large doses internally have a cathartic action.

EMERGENCY & FIRST AID PROCEDURES

Eyes: Flush with water for at least 15 minutes. Contact a physician.

Skin: Wash thoroughly with water. If irritation persists, contact physician.

Inhalation: Not found.

Ingestion: If gross amounts are swallowed, induce vomiting. Contact a physician.

VIII. SPILL AND LEAK PROCEDURES

Precaution if Spilled or Released: Flush small spills with water. For larger spills, recover as much as possible then flush area with water. Comply with all federal, state and local regulations when disposing of waste.

Neutralizing Chemicals: None.

Waste Disposal Methods: Comply with federal, state and local regulations.

Reportable Quantities: N/A

IX. TRANSPORTATION REQUIREMENTS

DOT Proper Shipping Name: Sodium Thiosulfate Solution

DOT Classification: Non hazardous

UN/NA Identification Number: N/A

Packing Group: N/A

Other Labels: N/A

X. SPECIAL PRECAUTIONS

Handling and Storage Precautions: Use general safe work practices when handling this chemical.

SALES OFFICE

For Product Information:
TEL: 662-494-3055
FAX: 662-494-2828

Post Office Drawer 1217
West Point, MS 39773

To Place An Order:
TEL: 800-953-3585
FAX: 800-953-3588

IMPORTANT
The information on this Material Safety Data Sheet is believed to be accurate but is not warranted to be so. Protective equipment, health effects, and other related safety measures are based on intended and anticipated product use. Recipients are advised to confirm in advance of need that the information is applicable and suitable to their circumstances.

3272

Afton Chemical Corporation
Porthur

EPAHO104000792

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Material / Product Approval Letter

Date **4/14/2009**

Dear **Jauming Chen**

Thank you for choosing CES Environmental Services, Inc. for your material / product recycling needs. The following material has been approved at our facility in Houston, TX. If the material received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3272

Expiration Date 4/14/2011

Producer: Afton Chemical Corporation - Port Arthur
Address: 4245 Savannah Ave
Port Arthur, TX 77640

Material / Product Information

Name of Material / Product Hitec 7050
Container Type:

Detailed Description of Process Generating or Producing the Material / Product:
Crankcase additive

Color: Dark Brown **Odor:** mineral oil **pH:** neutral
Physical State:

Incompatibilities: Strong oxidizers and reducers

Safety Related Data/Special Handling:
Standard PPE please see section 8 of MSDS attached fro proper PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

Product
JB/AL

CES Environmental Services, Inc.

☐ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	Afton Chemical Corporation - Port Arthur		
Address:	4245 Savannah Ave		
City, State, Zip:	Port Arthur, TX 77640		
Contact:	Jauming Chen	**Title:**	Site Superintendent
Phone No:	(409) 989-0602	**Fax No:**	(409)989-0603
24/hr Phone:	(409) 989-0602		
U.S. EPA I.D. No:			
State I.D.		**SIC Code:**	

SECTION 2: Billing Information – ☒ Same as Above

Company:			
Address:			
City, State, Zip:			
Contact:		**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Hitec 7050
Detailed Description of Process Generating or Producing the Material / Product: Crankcase additive

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Dark Brown **Odor:** Mineral Oil

Specific Gravity (water=1): .910 **Density:** _____ lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type:	☐	**Drum**	☐	**Tote**	☒	**Truck**	☐ **Other (explain)**
Container Size:		_____		_____		5500 G	_____

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Quarterly** ☒ **Yearly**
Number of Units (containers): 1 **Other:** _____

Proper U.S. DOT Shipping Name: Product Non RCRA Non DOT Regulated Material

Class: na **UN/NA:** na **PG:** na **RQ:** na

EPAHO104000794

Flash Point	pH	N/A	N/A	Solids
>140	neutral			0%

Oil&Grease	TOC	Zinc	Copper	Nickel
>1500mg/l	namg/l	namg/l	namg/l	namg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
Mineral Oil	30-60	%
additives	30-70	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.

Standard PPE Please see the section 8 of MSDS attached for proper PPE.

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

MSDS see attached MSDS

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

Strong oxidizers and reducers

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: J Chen **Date:** 04/14/09

Printed Name/Title: Jauming Chen / Site Superintendent

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: [signature] Date: 4-14-09 Approved Rejected Approval Number: _____	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

Pay $0.15/gal

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

5. **Treatment and Handling Protocol:**

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104000796

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable);**

Belnd with low ash black oil

EPAHO104000797

Material Safety Data Sheet

HiTEC 7050 Performance Additive

MSDS no. H7050

HiTEC is a trademark owned by Afton Chemical Corporation or one of its subsidiaries.

1. Product and company identification

Product use Petrochemical industry: Crankcase Additive

Date of issue/Revisions 11 February 2008

In case of emergency - Chemical

1-800-403-0044 (US & Canada)
1-804-648-7727 (International)
32-2-507-20-64 (Europe)
81-3-5210-4890 (Japan)

Manufacturer / Supplier

Afton Chemical Corporation
500 Spring St.
Richmond, VA 23219
1-804-788-5800

Afton Chemical Limited
Euro-Tech Centre
London Road, Bracknell, Berkshire
RG12 2UW, England
44 1344-304141
msds@aftonchemical.com

In Japan:
Afton Chemical Japan Corporation
Sumitomo Fudousan Sanbancho Bldg. 5F
6-26 Sanbancho, Chiyoda-ku
Tokyo 102-0075 Japan
Emergency phone: 81-3-5210-4890

In Australia:
Afton Chemical Asia Pacific Company
Level 9, 20 Berry Street
North Sydney, NSW 2060
Australia
Telephone number: 02-9923-1588
Business Hours: 9:00am - 5:00pm

2. Hazards identification

Notice to reader

Afton operates a world-wide system for hazard communication. Some hazards shown in Section 2 may apply to non-EU countries and may not result in classification and labeling in the EU. Please see Sections 3 and 15 for country specific classification information, and Section 11 for additional details.

Europe: The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Australia: NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

Primary hazards and critical effects : NOTICE!

Environmental hazards : Not classified as dangerous for the environment according to EC criteria.

Hazardous Material Information System (U.S.A.)

3. Composition and information on ingredients

Note: see section 8 for occupational exposure limits and section 11 for LC50/LD50 information

Substance/Preparation : Preparation

Ingredient name	CAS no.	Conc. (% w/w)	EU Classification	WHMIS Regulated?
Mineral Oil	Mixture.	30 - 60	Not classified.	No.

4. First aid measures

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Ingestion : If affected person is fully conscious, give one glass of water to drink. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

Skin contact : Wash with soap and water. Get medical attention if irritation develops.

Eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

5. Fire-fighting measures

Extinguishing media : In case of fire, use water spray (fog), foam, dry chemical, or CO2.

Fire-fighting procedures : Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Hazardous decomposition products : Decomposition products may include the following materials:
carbon oxides

Flash point : Closed cup: 177°C (350.6°F) [Pensky-Martens. Minimum]
Open cup: 212°C (413.6°F) [Cleveland.]

6. Accidental release measures

Personal precautions : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (section 8). Follow all fire-fighting procedures (section 5).

Environmental precautions and clean-up methods : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Minimize contact of spilled material with soils to prevent runoff to surface waterways.

Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

Handling : Wash thoroughly after handling.

Storage : Keep container tightly closed. Keep container in a cool, well-ventilated area.

8. Exposure controls and personal protection

Engineering controls : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Personal protective equipment

Respiratory system : Use appropriate respiratory protection if there is the potential to exceed the exposure limit(s).

Skin and body : Disposable outer garments when there is the potential for contact with the material.

Hands : Use chemical resistant, impervious gloves.

Eyes : Safety glasses with side shields. Goggles with a face shield may be necessary depending on quantity of material and conditions of use.

Occupational exposure limits

Ingredient name	OEL United States	OEL Canada	OEL Europe	OEL Australia
1) Mineral Oil	**ACGIH (United States).** TWA: 5 mg/m³ STEL: 10 mg/m³ **OSHA (United States).** TWA: 5 mg/m³	TWA: 5 mg/m³ STEL: 10 mg/m³	**EH40 (UK) (Europe, 2002).** TWA: 5 mg/m³ 8 hour(s).	**NOHSC (Australia, 2003).** TWA: 5 mg/m³ 8 hour(s).

9. Physical and chemical properties

Physical state and Appearance : Liquid. [Viscous liquid.]

Color : Brown. [Dark]

Odor : Mineral oil

Density : 0.909 g/cm³

Specific gravity : 0.910 at 15.6°C (target).

Viscosity : 4750 cSt @ 40°C
245 cSt @ 100°C (target).

Auto-ignition temperature

: Not determined.

Flash point : Closed cup: 177°C (350.6°F) [Pensky-Martens. Minimum]
Open cup: 212°C (413.6°F) [Cleveland.]

10. Stability and reactivity

Stability : The product is stable.

Materials to avoid : Strong oxidizing and reducing agents.

Conditions to avoid : High temperatures, sparks, and open flames.

11. Toxicological information

Routes of entry : Skin, Eyes, Ingestion, and Inhalation.

Target organs : None known.

Acute effects

Inhalation : Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

Ingestion : Not determined.

Skin contact :

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

Eye contact : Non-irritating to the eyes.

Adverse effects : Not determined.

Carcinogenic effects :

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA	EU

Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Toxicity data

Product/ingredient name	Result	Species	Dose	Exposure
Mineral Oil	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Other information : Not available.

12. Ecological information

Environmental hazards : Not classified as dangerous for the environment according to EC criteria. Based on calculation.

Environmental fate : This product contains components which may be persistent in the environment.

Germany water class : 1

13. Disposal considerations

Waste handling and disposal : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-

IATA-DGR Class	Not regulated.	-	-	-		-
ADG Class	Not regulated.	-	-	-		-

Not available.

Notice to reader

The above transport information is provided to assist in the proper classification of this product and may not be suitable for all shipping conditions.

15. Regulatory information

EU regulations

Risk phrases : This product is not classified according to EU legislation.

Safety phrases : Not applicable.

Additional warning phrases :

US regulations

SARA 313 toxic chemical notification and release reporting (w/w%) : No SARA 313 chemicals are present above the reporting threshold.

SARA 311/312 Hazardous Categorization : **SARA 311/312 MSDS distribution - chemical inventory - hazard identification:** No products were found.

RQ (Reportable quantity) : CERCLA: Hazardous substances.: No products were found.

State - California Prop. 65 : Does not contain any California Prop 65. chemicals

Canadian regulations

WHMIS (Classification) : Not a WHMIS controlled material.

International Inventory Status

United States inventory (TSCA 8b): All components are listed or exempted.

Canada inventory: All components are listed or exempted.

Europe inventory: All components are listed or exempted.

Japan inventory (ENCS): All components are listed or exempted.

Australia inventory (AICS): All components are listed or exempted.

Korea inventory (KECI): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

16. Other information

PREPARATION INFORMATION

Validated by HS&E Department (Tel: +1 804 788 5800) on 2/11/2008.

Date of printing : **2/11/2008.**

Indicates information that has changed from previously issued version.

Notice to reader

This information and these recommendations are offered in good faith and believed to be correct as of the date hereof. Information and recommendations are supplied upon the condition that the recipients will make their own decision as to safety and suitability for their purposes. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature, are made with respect to the product or the information and recommendations. Afton makes no representation as to completeness or accuracy. In no event will Afton be responsible for damages of any nature whatsoever resulting from the use or reliance upon the information and recommendations.

ADDRESS CONTACT INFORMATION

In the United States and Canada:
Afton Chemical Corporation
500 Spring Street
Richmond, Virginia
USA 23219-2183
Telephone number: 804-788-5800

In Europe:
Afton Chemical Limited
Euro-Tech Centre
London Road, Bracknell, Berkshire
RG12 2UW, England
44-1344-304141

In Singapore:
111 Somerset Road
#09-05
Singapore Power Building
Singapore 238164
Telephone number: 65-6732-0822

In Japan:
Afton Chemical Japan Corporation
Sumitomo Fudousan Sanbancho Bldg. 5F
6-26 Sanbancho, Chiyoda-ku
Tokyo 102-0075 Japan
Emergency phone: 81-3-5210-4890

In Australia:
Afton Chemical Asia Pacific Company
Level 9, 20 Berry Street
North Sydney, NSW 2060
Australia
Telephone number: 02-9923-1588
Business Hours: 9:00am - 5:00pm

***** END OF MSDS *****

3273
Dana Container

EPAHO10400803

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/14/2009**

Dear **Ruben Fernandez**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # PA-3273

Expiration Date 4/14/2011

Generator: Dana Container
Address: 902 Sens Road
La Porte, TX 77572

Waste Information

Name of Waste: Caustic Heels
TCEQ Waste Code #: PRODUCT
Container Type:
Detailed Description of Process Generating Waste:
Removal of heels from corrosive trailer prior to cleaning.
Color: varies **Odor:** mild **pH:** >12.5
Physical State:
Incompatibilities: Metals, Oxidizing Agents
Safety Related Data/Special Handling:
Chemical Suit, Rubber Gloves, Rubber Boots, Safety Goggles, Face Shield, Hard Hat

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#30073

Product JR @JB

CES Environmental Services, Inc.

☐ **CES Environmental Services – Houston Facility**
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ **CES Environmental Services – Port Arthur Facility**
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	Dana Container		
Address:	902 Sens Road		
City, State, Zip:	La Porte, TX 77571		
Contact:	Julio Cuellar	Title:	
Phone No:	(832) 362-8676	Fax No:	(281) 470-2570
24/hr Phone:			
U.S. EPA I.D. No:	TXR000011155		
State I.D.	41563	SIC Code:	NA

SECTION 2: Billing Information – ☒ Same as Above

Company:	Dana Container		
Address:	PO Box 1023		
City, State, Zip:	La Porte, TX 77572		
Contact:	Ruben Fernandez	Title:	
Phone No:	(281) 471-4700	Fax No:	(281) 470-2570

SECTION 3: General Description of the Material / Product

Name of Material / Product: Caustic Heels
Detailed Description of Process Generating or Producing the Material / Product: Removal of heels from corrosive trailer prior to cleaning.

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Varies **Odor:** Mild

Specific Gravity (water=1): .9-1.3 **Density:** _ lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type:	☒	Drum	☐ Tote	☐	Truck	☐	Other (explain)
Container Size:		55 gal	____		____		

Frequency: ☐ Weekly ☒ Monthly ☐ Quarterly ☒ Yearly

Proper U.S. DOT Shipping Name: Product Corrosive Liquids, N.O.S.

Class: 8 **UN/NA:** UN1760 **PG:** PG II **RQ:** 100

EPAHO104000805

Flash Point >140	pH >12.5	N/A	N/A	Solids 0-2%
Oil&Grease NAmg/l	TOC NAmg/l	Zinc NAmg/l	Copper NAmg/l	Nickel NAmg/l

SECTION 4: Physical and Chemical Data

The material / product consists of the following materials	Ranges are acceptable	or %
Sodium Hydoxide	15-50	%
Hydrogen Peroxide	30-80	%
Water	60-80	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
Chemical Suit, Rubber Gloves, Rubber Boots, Safety Goggles, Face Shield, Hard Hat

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
Metals, Oxidizing Agents

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 4-13-09

Printed Name/Title: Julio Cuellar/Cleaning Facility Mgr.

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: _____ Date: 4-14-09 (Approved) Rejected Approval Number: _____	

EPAHO104000806

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$180 / DM

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

Standard sulfidic caustic evaluations for use in the NaSH Production Process: Run full titration, density, percent solids and percent oil via centrifugation, and perform sample acid reaction to ensure normal reaction. Check to ensure oil does not appear post reaction. Check odor, color, and appearance to ensure they are normal. If anything seems abnormal, contact management immediately.

Complete inbound load report if: either solids or oil exceed 1%, arrangements are made for with customer service regarding customer surcharges. If any of these conditions exist, contact customer service immediately.

5. **Treatment and Handling Protocol:**

Feedstock for NaSH into RV2/RV1. Process through reactor vessel for the recovery of sulfur compounds in the production of NaSH

Wastewater may either go to System 1 or other wastewater treatment options

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104000807

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable):**

EPAHO104000808

3274
Sierra chemical Corp.

EPAHO104000809

7E
8-4-09
T-35
LAD

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/15/2009**

Dear **Chris Bickham**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3274

Expiration Date 4/15/2011

Generator: Sierra Chemical Corp
Address: 4524 Southlake Parkway, Suite 34 / P.M.B. 101
Hoover, AL 35244

Waste Information

Name of Waste: Non Haz Electroless Nickel Solution
TCEQ Waste Code #: OUTS1141
Container Type:
Detailed Description of Process Generating Waste:
Solution used in metal treatment
Color: Green **Odor:** none **pH:** 4-5
Physical State:
Incompatibilities: strong bases/caustics
Safety Related Data/Special Handling:
Gloves and goggles and standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

48 | AL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Electroless Nickel Plating of LA, Inc.
Address: 44211 Stein Road
City: Hammond **State:** LA **Zip:** 70403
Contact: L. Pinson / C. Bickham **Title:** Env. Mgr. / Plating Mgr.
Phone Number: 985 345 6352 **Fax Number:** 205 982 0608
24/hr Phone Number: 985 969 7678
US EPA ID No: LAD081414377
State ID No: D0022 **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Sierra Chemical Corp.
Address: 4524 Southlake Parkway, Suite 34, PMP 101
City: Hoover **State:** AL **Zip:** 35244
Contact: M. Pinson **Title:** V.P. AR-AP
Phone Number: 205 982 7799 **Fax Number:** 205 982-0608

SECTION 3: General Description of the Waste

Name of Waste: Non-Haz Electroless Nickel Solution
Detailed Description of Process Generating Waste:

Solution used in metal treatment

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Green **Odor:** None

Specific Gravity (water=1): >1.0 **Density:** 8.5 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: <20,000 gals.

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: NA - OUTS-1141

Proper US DOT Shipping Name: Non RCRA / Non DOT Regulated Material
Class: N/A **UN/NA:** N/A **PG:** N/A **RQ:** None

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140 deg F		4-5		None	mg/l	None	mg/l	<2	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
None	mg/l		mg/l	BDL	mg/l	BDL	mg/l	<1%	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	85-100	%
Electroless nickel chloride/sulfates	0-15	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Gloves and Googles, standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

None

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Strong bases/cautics

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	NA
TCLP Volatiles:	NA
TCLP Semi-Volatiles:	NA
Reactivity:	NA
Corrosivity:	NA
Ignitability:	NA

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☒ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory*: *Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☑ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 4/12/2009

Printed Name/Title: 4/12/09

CES USE ONLY (DO NOT WRITE IN THIS SPACE)		
Compliance Officer:		
Date:	☐ Approved	☐ Rejected
Approval Number:		

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$0.25 /gal + trans + fsc

2. Contamination Limit (maximum limit before surchages apply):

<2% solids

3. Surcharge Pricing:

4. Special Testing Requirements:

1) Test to see if sulfide treatment brings Ni down to acceptable levels. Note on inbound.

5. Treatment and Handling Protocol:

1) If sulfide treatment is feasible, process in sulfide treatment tank. If not,

2) Process to System 1

6. Treated Wastewater Discharge Subcategory:

☒ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3252
Precision Flange

EPAHO10400818

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/30/2009**

Dear **Eddie**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3252

Expiration Date 3/30/2011

Generator: Precision Flange
Address: 13123 West Hardy Road
Houston, TX 77060

Waste Information

Name of Waste: Paint Filters
TCEQ Waste Code #: CESQ3191
Container Type:
Detailed Description of Process Generating Waste:
Paint Filters from paint booth capturing overspray
Color: varies **Odor:** solvent **pH:** N/A
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:
Level D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3252 GB JR IS

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1460	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Precision Flange
Address: 13123 West Hardy Road
City: Houston **State:** TX **Zip:** 77060
Contact: Eddie **Title:**
Phone Number: 281-447-8077 **Fax Number:**
24/hr Phone Number:
US EPA ID No: TXCESQG
State ID No: CESQG **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Pain Filters
Detailed Description of Process Generating Waste:

Paint Filters from paint booth capturing overspray.

Physical State: ☐ **Liquid** ☐ **Sludge** ☐ **Powder**
☑ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Varies **Odor:** Solvent

Specific Gravity (water=1): N/A **Density:** N/A lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☑ **Other (explain)** BAG

Frequency: ☐ **Weekly** ☑ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 10

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☑ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: CESQ3191

Proper US DOT Shipping Name: Non-Hazardous, Non-RCRA material (paint filters)

Class: N/A **UN/NA:** N/A **PG :** N/A **RQ:** N/A

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		N/A		BRL	mg/l	BRL	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>100	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Filters	95-99	%
Paint Residue	1-5	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. ~~None~~ Analysis

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Not Regulated
TCLP Volatiles:	Not Regulated
TCLP Semi-Volatiles:	Not Regulated
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	>140

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: E S _____ **Date:** 3/4/9

Printed Name/Title: _____

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert [illegible]
Date: 3-30-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE O

1. Base Pricing (including freight):

~~<5% Liquid - $95 / DM, <50% Liquid - $155 / DM, >50% processable solids -$185 / DM, >50 non-proc solids - $.65 / lb~~

~~[illegible]~~ $100/BAg

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Bulk to Class 1 box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

ESL

Laboratory Analysis Report

Total Number of Pages: 13

Job ID : 09020226

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
0209-16 PFAM Paint Filters

Report To :	Client Name:	CES Environmental	P.O.#.: 0209-16
	Attn:	Gary Brauckman	Sample Collected By: Gary Brauchman
	Client Address:	4904 Griggs Rd	Date Collected: 02/09/09
	City, State, Zip:	Houston, Texas, 77021	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
Paint Filters	Solid	09020226.01

Released By: Sonia West
Title: Senior Project Manager
Date: 2/26/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/03/2009
Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 02/09/2009 15:30

EPAHO104000825

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09020226

Date: 2/26/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	surr	Surrogate
MS	Matrix Spike	T	Time
MSD	Matrix Spike Duplicate	TNTC	Too numerous to count
MW	Molecular Weight		

Qualifier Definition

D1	Sample required dilution due to matrix effects.
S4	Surrogate not available due to dilution of sample extract for quantification.

EPAHO104000826

LABORATORY TEST RESULTS

Job ID : 09020226

Date 2/26/2009

Client Name: CES Environmental
Attn: Gary Brauckman
Project Name: 0209-16 PFAM Paint Filters

Client Sample ID: Paint Filters
Date Collected: 02/09/09
Time Collected: 15:00
Other Information:

Job Sample ID: 09020226.01
Sample Matrix Solid

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 1010	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				02/17/09 08:05	SG
SW-846 6010C	TCLP Metals								
	Antimony	BRL	mg/L	1	0.1	1		02/12/09 16:18	TK
	Arsenic	BRL	mg/L	1	0.04	1.8		02/12/09 16:18	TK
	Barium	0.722	mg/L	1	0.04	100.0		02/12/09 16:18	TK
	Beryllium	BRL	mg/L	1	0.04	0.08		02/12/09 16:18	TK
	Cadmium	BRL	mg/L	1	0.04	0.5		02/12/09 16:18	TK
	Chromium	BRL	mg/L	1	0.04	5.0		02/12/09 16:18	TK
	Lead	BRL	mg/L	1	0.04	1.5		02/12/09 16:18	TK
	Nickel	BRL	mg/L	1	0.04	70		02/12/09 16:18	TK
	Selenium	BRL	mg/L	1	0.1	1.0		02/12/09 16:18	TK
	Silver	BRL	mg/L	1	0.04	5.0		02/12/09 16:18	TK
SW-846 7.3	Reactive Cyanide								
	Reactive Cyanide	BRL	mg/Kg	1	25			02/12/09 10:00	KS
SW-846 7.3	Reactive Sulfide								
	Reactive Sulfide	BRL	mg/Kg	2	50		D1	02/11/09 13:30	KS
SW-846 7470A	TCLP Metals, Mercury								
	Mercury	BRL	mg/L	1	0.0005	0.2		02/11/09 14:39	TK
SW-846 9045D	Corrosivity, pH								
	pH	6.50	s.u.					02/11/09 14:00	RK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	597	mg/Kg	10	147			02/11/09 10:01	WS
	>C12-C28	5515	mg/Kg	10	184			02/11/09 10:01	WS
	>C28-C35	3450	mg/Kg	10	191			02/11/09 10:01	WS
	Total C6-C35	9562	mg/Kg	10				02/11/09 10:01	WS
	1-Chlorooctane(surr)	N/A	%	10	50-149		S4	02/11/09 10:01	WS
	Chlorooctadecane(surr)	N/A	%	10	50-149		S4	02/11/09 10:01	WS

EPAHO104000827

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : Corrosivity, pH **Method : SW-846 9045D** **Reporting Units : s.u.**

QC Batch ID : Qb09021106 **Created Date :** 02/11/09 **Created By :** Rkurup

Samples in This QC Batch : 09020226.01

QC Type: Duplicate

QC Sample ID: 09020226.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
pH	6.49	6.50	s.u.	0.2	5		

QC Type: LCS and LCSD

Parameter	LCS Assigned	LCS Result		LCSD Assigned	LCSD Result		RPD	RPD CtrlLimit	Tolerance	Qual
pH	4.00	3.98							3.95-4.05	

Refer to the Definition page for terms.

EPAHO104000828

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : TCLP Metals, Mercury **Method :** SW-846 7470A **Reporting Units :** mg/L

QC Batch ID : Qb09021203 **Created Date :** 02/12/09 **Created By :** Tkhuc

Samples in This QC Batch : 09020226.01

Digestion :	PB09021204	**Prep Method :**	SW-846 7470A	**Prep Date :**	02/11/09 12:00	**Prep By :**	Tkhuc
TCLP Prep :	PB09021109	**Prep Method :**	SW-846 1311	**Prep Date :**	02/10/09 16:50	**Prep By :**	Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Mercury	7439-97-6	BRL	mg/L	1	0.0005		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.005	0.0051	102						71-143	

QC Type: MS and MSD
QC Sample ID: 09020258.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.0050	99.4	0.005	0.0050	99.6	0.2	35	61-175	

Refer to the Definition page for terms.

EPAHO104000829

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : **Reactive Sulfide** **Method :** **SW-846 7.3** **Reporting Units :** **mg/Kg**

QC Batch ID : Qb09021215 **Created Date :** 02/11/09 **Created By :** Ksudha

Samples in This QC Batch : 09020226.01

Sample Preparation : PB09021218 **Prep Method :** SW-846 7.3 **Prep Date :** 02/11/09 09:25 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Sulfide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09020199.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Sulfide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Sulfide	680	560	82.4	680	520	76.5	7.4	20	40-120	

Refer to the Definition page for terms.

EPAHO104000830

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : Reactive Cyanide **Method :** SW-846 7.3 **Reporting Units :** mg/Kg

QC Batch ID : Qb09021216 **Created Date :** 02/12/09 **Created By :** Ksudha

Samples in This QC Batch : 09020226.01

Sample Preparation : PB09021219 **Prep Method :** SW-846 7.3 **Prep Date :** 02/11/09 09:25 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Cyanide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09020199.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Cyanide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Cyanide	5.0	2.14	42.8	5.0	2.17	43.4	1.4	20	40-120	

Refer to the Definition page for terms.

EPAHO104000831

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : TCLP Metals **Method :** SW-846 6010C **Reporting Units :** mg/L

QC Batch ID : Qb09021235 **Created Date :** 02/12/09 **Created By :** Tkhuc

Samples in This QC Batch : 09020226.01

Digestion :	PB09021235	**Prep Method :**	SW-846 3010A	**Prep Date :**	02/12/09 12:00	**Prep By :**	Tkhuc
TCLP Prep :	PB09021109	**Prep Method :**	SW-846 1311	**Prep Date :**	02/10/09 16:50	**Prep By :**	Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Antimony	7440-36-0	BRL	mg/L	1	0.1		
Arsenic	7440-38-2	BRL	mg/L	1	0.04		
Barium	7440-39-3	BRL	mg/L	1	0.04		
Beryllium	7440-41-7	BRL	mg/L	1	0.04		
Cadmium	7440-43-9	BRL	mg/L	1	0.04		
Chromium	7440-47-3	BRL	mg/L	1	0.04		
Lead	7439-92-1	BRL	mg/L	1	0.04		
Nickel	7440-02-0	BRL	mg/L	1	0.04		
Selenium	7782-49-2	BRL	mg/L	1	0.1		
Silver	7440-22-4	BRL	mg/L	1	0.04		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Antimony	2	2.03	102	2	2.01	101	1	20	80-120	
Arsenic	2	2.03	102	2	2.00	100	1.5	20	80-120	
Barium	2	1.89	94.5	2	1.87	93.5	1.1	20	80-120	
Beryllium	2	1.98	99	2	1.95	97.5	1.5	20	80-120	
Cadmium	2	1.81	90.5	2	1.79	89.5	1.1	20	80-120	
Chromium	2	1.89	94.5	2	1.87	93.5	1.1	20	80-120	
Lead	2	1.85	92.5	2	1.83	91.5	1.1	20	80-120	
Nickel	2	1.84	92	2	1.82	91	1.1	20	80-120	
Selenium	2	2.01	101	2	1.97	98.5	2	20	80-120	
Silver	2	1.97	98.5	2	1.94	97	1.5	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09020226.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Antimony	BRL	2	2.02	100						70-130	
Arsenic	BRL	2	2.02	101						45-138	
Barium	0.722	2	2.47	87.4						39-135	
Beryllium	BRL	2	1.94	97						70-130	
Cadmium	BRL	2	1.75	87.3						56-125	
Chromium	BRL	2	1.84	91.8						52-125	
Lead	BRL	2	1.74	87						55-125	

Refer to the Definition page for terms.

EPAHO104000832

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : TCLP Metals **Method : SW-846 6010C** **Reporting Units : mg/L**

QC Batch ID : Qb09021235 **Created Date :** 02/12/09 **Created By :** Tkhuc

Samples in This QC Batch : 09020226.01

QC Type: MS and MSD
QC Sample ID: 09020226.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Nickel	BRL	2	1.77	87.3						70-130	
Selenium	BRL	2	2.01	100						70-130	
Silver	BRL	2	1.97	98.5						26-148	

Refer to the Definition page for terms.

EPAHO104000833

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : Total Petroleum Hydrocarbons **Method :** TX 1005 **Reporting Units :** mg/Kg

QC Batch ID : Qb09021236 **Created Date :** 02/12/09 **Created By :** Dshen

Samples in This QC Batch : 09020226.01

Sample Preparation : PB09021234 **Prep Method :** TX 1005 **Prep Date :** 02/10/09 08:00 **Prep By :** Dshen

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
C6-C12		BRL	mg/Kg	1	14.7		
>C12-C28		BRL	mg/Kg	1	18.4		
>C28-C35		BRL	mg/Kg	1	19.1		
Total C6-C35		BRL	mg/Kg	1			

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12	500	454	90.8	500	415	83	9	20	75-125	
>C12-C28	500	498	99.6	500	449	89.8	10.3	20	75-125	
>C28-C35	500	422	84.4	500	388	77.6	8.4	20	75-125	

QC Type: MS and MSD
QC Sample ID: 09020193.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
C6-C12	BRL	500	426	85.2						75-125	
>C12-C28	BRL	500	459	91.6						75-125	
>C28-C35	BRL	500	393	77.3						75-125	

Refer to the Definition page for terms.

EPAHO104000834

QUALITY CONTROL CERTIFICATE

Job ID : 09020226 **Date :** 2/26/2009

Analysis : **Ignitability (Flash Point)** **Method :** **SW-846 1010** **Reporting Units :** **°F**

QC Batch ID : Qb09021733 **Created Date :** 02/17/09 **Created By :** Sgarcia

Samples in This QC Batch : 09020226.01

QC Type: Duplicate

QC Sample ID: 09020226.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Ignitability	>150	>150	°F		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ignitability	83	85	102	83	85	102	0	20	75-125	

Refer to the Definition page for terms.

EPAHO104000835

A & B Labs — *Chain of Custody*

The Chain of Custody is a Legal Document

Page 1 of 1

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 09020226

5. Project # PFAM Paint Filters

1. REPORT TO:
Company: CES Environmental
Address: 4904 Griggs
H, TX 77021
Contact: Gary Brauckman
Phone: cell 713-417-5737
Fax: ☐
E-mail: ☐ gbrauckman@cesenvironmental.com

2. INVOICE TO:
Company:
Address:
Contact:
Phone:
Fax: ☐
E-mail: ☐

3. PO # 0209-16

4. Turnaround Time (Business Days)
☐ 1 Day* ☐ Other
☐ 2 Days*
☐ 3 Days* *Surcharge applies
☑ ~~7 Days~~ - Standard

6. Project Name/Location: PFAM

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT): Gary Brauckman
Sampler's Signature & Date: [signature]

13. No of Containers
14. Containers* 1
15. Preservatives**
16. PH-Lab Only
17. Analyses/Methods: TCLP (11) metals, TPH, RCI

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	10. Sampling Time	11. Comp.	11. Grab	12. Matrix Water	Soil	Sludge	Oil	Air	Other	18. REMARKS
01A	Paint Filters	2-9-09	3:00		✓						✓	

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1 [signature]	2-9-09	3:30			
2					
3			21. RECEIVED BY LABORATORY [signature]	2/9/09	3:30

*Containers: VOA - 40 ml vial; ~~A/G - Amber/Glass~~ 1 Liter; 4 oz/8 oz - glass wide mouth; P/O - Plastic/other

**Preservatives: ~~C - Cool~~; H - HCl; N - HNO_3; S - H_2SO_4; OH - NaOH; T - $Na_2S_2O_3$; X - Other

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

LAB USE ONLY SAMPLING _____ RENTAL _____ P/U _____

22. KNOWN HAZARDS/COMMENTS

Temperature: _____ °C

Intact: Y or N Initials _____

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

EPAHO104000836

Sample Condition Checklist

Date : **02/26/09**

A&B JobID : **09020226**	Date Received : **02/09/2009**	Time Received : **3:30PM**
Client Name : **CES Environmental**		
Temperature : **24.58°C**	Sample pH : **N/A**	

	Check Points	Yes	No
1.	**Cooler seal present and signed.**	N/A	
2.	**Sample(s) in a cooler.**		X
3.	**If yes, ice in cooler.**		X
4.	**Sample(s) received with chain-of-custody.**	X	
5.	**C-O-C signed and dated.**	X	
6.	**Sample(s) received with signed sample custody seal.**	N/A	
7.	**Sample containers arrived intact. (If no comment).**	X	
8.	**Matrix :** **Water** ☐ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☑ **Cassette** ☐ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐		
9.	**Sample(s) were received in appropriate container(s).**	X	
10.	**Sample(s) were received with proper preservative**		
11.	**All samples were logged or labeled.**	X	
12.	**Sample ID labels match C-O-C ID's**	X	
13.	**Bottle count on C-O-C matches bottles found.**	X	
14.	**Sample volume is sufficient for analyses requested.**	X	
15.	**Samples were received within the hold time.**	X	
16.	**VOA vials completely filled.**	N/A	
17.	**Sample accepted.**	X	

Comments : Include actions taken to resolve discrepancies/problem:

Received by : Ruwadia

Check in by/date : Kisom / 02/09/2009

EPAHO104000837

3254
Markwest

EPAHO104000838

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/30/2009**

Dear **Charles Bowen**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3254

Expiration Date 3/30/2011

Generator: Mark West Javelina Company, LLC
Address: 5438 Union Street
Corpus Christi, TX 78407

Waste Information

Name of Waste: Flare Knock-out water - bottom phase
TCEQ Waste Code #: 0060119H
Container Type:
Detailed Description of Process Generating Waste:
from a flare knock out pot.
Color: murky amber **Odor:** medium hydrocarbon / **pH:** 4-10
Physical State:
Incompatibilities: ACID, OXIDIZER
Safety Related Data/Special Handling:
FLAMMABLE PPE, D018 BENZENE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#3254

JR
GB

Hazardous

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1460	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Mark West Javelina Company, LLC
Address: 5438 Union Street
City: Corpus Christi **State:** TX **Zip:** 78407
Contact: Charles Bowen **Title:** EHS Coordinator
Phone Number: 361-289-4928 **Fax Number:** 361-289-4914
24/hr Phone Number: 361-537-5196
US EPA ID No: TXD987985900
State ID No: 39228 **SIC Code:** 4925

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: Nancy Chapa **Title:** Accounts Payable Clerk
Phone Number: 361-289-4993 **Fax Number:** 361-289-4914

SECTION 3: General Description of the Waste

Name of Waste: Flare Knock-Out Water Bottom Phase
Detailed Description of Process Generating Waste:

From a flare knock out pot.

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Murky amber **Odor:** medium hydrocarbon / slight sulfur

Specific Gravity (water=1): .9-1.3 **Density:** 7.5-10 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ **Single-phase** ☑ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☑ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☑ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 2

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☑ Yes ☐ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☑ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

D018

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 0060119H

Proper US DOT Shipping Name: RQ, Flammable Liquids, N.O.S. (benzene)

Class: 3 **UN/NA:** UN1993 **PG:** II **RQ:** 100

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
<140		4-10		BRL	mg/l	BRL	mg/l	0-2	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	50-200	mg/l	.124	mg/l	.076	mg/l	.124	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	82-99	%
Benzene	1-10	%
Trace Organics	0-1	%
Oil	0-5	%
Methane Coke Fines	0-2	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Flammable PPE, D018 Benzene PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Lab Memo #0309-48-49

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

Acid, Oxidizer

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	D018
TCLP Semi-Volatiles:	BRL
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	Flammable

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory **: *Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☑ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☑ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Charles Bowen **Date:** 03/27/09

Printed Name/Title: Charles Bowen/EHS Coordinator

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Robert Thyden
Date: 3-30-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$0.35 / gallon +$0.20 / gallon transportation (min 5,000 gallons)

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Heat to eliminate codes. Recovered organics to light ends. Water to WWTP.

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☑ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

CES Environmental Services, Inc.

LDR Notifications/Certifications

1. Generator Information		2. Receiving Facility Information	
Name:	MarkWest Javelina Company LLC	Name:	CES Environmental Services, Inc.
Address:	5438 Union Street	Address:	4904 Griggs Road
	Corpus Christi TX 78407		Houston, TX 77021
EPA ID No.:	TXD987985900	EPA ID No.:	TXD008950461
Manifest No.:			

3. Waste Description at Point of Generation

Line Item	Waste Description	Hazardous Waste Codes	LDR Subcategory	WW / NWW	Underlying Hazardous Constituents [268.2(i)]
1	Flare Knock-out Bottom Phase	0060119H	E	NWW	None
2					
3					
4					
5					

4. Waste Disposition

Line Item	Subtitle C Exclusion Subsequent to Point of Generation (if applicable)	Current Disposition of Waste	268.45, Table 1 Technology used to treat debris (if applicable)	Date Shipped
1	NA			
2				
3				
4				
5				

5. Was the waste hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste or exempt from Subtitle C regulation (including characterstic wastes managed in wastewater treatment systems discharging under the CWA)?
☐ Yes ☑ No (If yes, this constituents the 268.7(a)(7) one-time notification.)

6. Waste the waste characterstic at the point of generation, treated onsite to remove the characterstic, and treatment residues then shipped to a Subtitle D land disposal facility? ☐ Yes ☑ No (if yes, complete Certification 1 or 2.)

7. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(1) by treating it using an extraction or destruction technology in 268.45, Table 1? ☐ Yes ☑ No (if yes, complete Certification 3.)

8. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(2) by receiving a "no-longer-contains" determinatin from EPA or the authorized state?
☐ Yes ☑ No (if yes, this constituents the 268.7(d)(1) one-time notification.)

9. Is the waste residue from treating K061, K062 and/or F006 wastes in high-temperature metals recovery (HTMR) units that 1) meets the generic exclusion levels in 261.3(c)(2)(ii)(C), 2) does not exhibit any characterstics, and 3) is shipped to a Subtitle D land disposal facility?
☐ Yes ☑ No (if yes, complete Certification 4.)

10. ☐ Waste that has been treated to remove a characterstic and meets underlying hazardous constituents standards. — Applies to items:

NA

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characterstics and that underlying hazardous constituents, as defined in 268.2(i) have been treated on-site to meet the 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Reference: 268.7(b)(4)(v) and 268.9(d)

11. ☐ Waste that has been treated to remove a characterstic but does not meet underlying hazardous constituents standards. — Applies to items:

NA

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characterstic. This decharacterized waste contains underyling hazardous constituents that require further treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Reference: 268.7(b)(4)(v) and 268.9(d)

12. ☐ Debris that has been treated to meet the alternative treatment standards. — Applies to items:

NA

I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Reference: 268.7(b)(4)(v) and 268.9(d)

13. ☐ HTMR residue from treating K061, K062 and/or F006 wastes. — Applies to items:

NA

I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characterstic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Reference: 268.7(b)(4)(v) and 268.9(d)

Authorized Signature: [signature] **Date:** 03/27/19

Printed Name / Title: Charles Bowen / EHS Coordinator

EPAHO104000846

CES Environmental Services, Inc.

UNDERLYING HAZARDOUS CONSTITUENTS (UHC)

Generator	MarkWest Javelina Company LLC	**EPA ID Number**	TXD987985900
Mailing Address	5438 Union Street	**Manifest Number**	
City, State, Zip	Corpus Christi, Texas 78407	**CES Profile Number**	

EPA Waste Codes

D001	D018								

If your waste, at the point of generation, exceeds the limits of the following constituents, then please represent this fact to CES Environmental Services, Inc. by checking the applicable box listed below.

Does this waste contain one or more of the constituents listed on pages 1, 2, 3 or 4? ☐ YES ☑ NO

If "Yes", check applicable constituents and then sign and date the form. If "No", then sign and date the form.

	Description	CAS No. [1]	Wastewater mg/l [2]	Non-Wastewater mg/kg
✓	***I. Organic Constituents***			
☐	2-Acetylaminofluorene	53-96-3	0.059	140
☐	4-Aminobiphenyl	92-67-1	0.13	NA
☐	o-Anisidine (2-methoxyaniline)	90-04-0	0.010	0.66
☐	Acenaphthene	83-32-9	0.059	3.4
☐	Acenaphthylene	208-96-8	0.059	3.4
☐	Acetone	67-64-1	0.28	160
☐	Acetonitrile	75-05-8	5.6	38
☐	Acetophenone	96-86-2	0.01	9.7
☐	Acrolein	107-02-8	0.29	NA
☐	Acrylamide	79-06-1	19	23
☐	Acrylonitrile	107-13-1	0.24	84
☐	Aldicarb sulfone **[6]**	1646-88-4	0.056	0.28
☐	Aldrin	309-00-2	0.021	0.066
☐	alpha-BHC	319-84-6	0.00014	0.066
☐	Aniline	62-53-3	0.81	14
☐	Anthracene	120-12-7	0.059	3.4
☐	Aramite	140-57-8	0.36	NA
☐	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	2.5
☐	4-Bromophenyl phenyl ether	101-55-3	0.055	15
☐	Barban **[6]**	101-27-9	0.056	1.4
☐	Bendiocarb **[6]**	22781-23-3	0.056	1.4
☐	Benomyl **[6]**	17804-35-2	0.056	1.4
☐	Benz(a)anthracene	56-55-3	0.059	3.4
☐	Benzal chloride	98-87-3	0.055	6
☐	Benzene	71-43-2	0.14	10
☐	Benzo(a)pyrene	50-32-8	0.061	3.4
☐	Benzo(b)fluoranthene	205-99-2	0.11	6.8
☐	Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
☐	Benzo(k)fluoranthene	207-08-9	0.11	6.8
☐	beta-BHC	319-85-7	0.00014	0.066
☐	bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2

	Description	CAS No. [1]	Wastewater mg/l [2]	Non-Wastewater mg/kg
✓				
☐	bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
☐	bis-(2-Chloroethoxy)methane	111-91-1	0.036	7.2
☐	bis-(2-Chloroethyl)ether	111-44-4	0.033	6
☐	Bromodichloromethane	75-27-4	0.35	15
☐	Bromoform (Tribromomethane)	75-25-2	0.63	15
☐	Bromomethane/Methyl bromide	74-83-9	0.11	15
☐	Butyl benzyl phthalate	85-68-7	0.017	28
☐	Butylate **[6]**	2008-41-5	0.042	1.4
☐	2-chloro-1,3-butadiene	126-99-8	0.057	0.28
☐	2-Chloroethyl vinyl ether	110-75-8	0.062	NA
☐	2-Chloronaphthalene	91-58-7	0.055	5.6
☐	2-Chlorophenol	95-57-8	0.044	5.7
☐	3-Chloropropylene	107-05-1	0.036	30
☐	Carbaryl **[6]**	63-25-2	0.006	0.14
☐	Carbenzadim **[6]**	10605-21-7	0.056	1.4
☐	Carbofuran **[6]**	1563-66-2	0.006	0.14
☐	Carbofuran phenol **[6]**	1563-38-8	0.056	1.4
☐	Carbon disulfide	75-15-0	3.8	4.8mg/l
☐	Carbon tetrachloride	56-23-5	0.057	6
☐	Carbosulfan **[6]**	55285-14-8	0.028	1.4
☐	Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26
☐	Chlorobenzene	108-90-7	0.057	6
☐	Chlorobenzilate	510-15-6	0.1	NA
☐	Chlorodibromomethane	124-48-1	0.057	15
☐	Chloroethane	75-00-3	0.27	6
☐	Chloroform	67-66-3	0.046	6
☐	Chloromethane (Methyl chloride)	74-87-3	0.19	30
☐	Chrysene	218-01-9	0.059	3.4
☐	m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
☐	m-Cumenyl methylcarbamate **[6]**	64-00-6	0.056	1.4

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✓	*I. Organic Constituents (continued)*			
☐	cis-1,3-Dichloropropylene	10061-01-5	0.036	18
☐	Cyclohexanone	108-94-1	0.36	0.75 mg/l TCLP
☐	1,1-Dichloroethane	75-34-3	0.059	6
☐	1,1-Dichloroethylene	75-35-4	0.025	6
☐	1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
☐	1,2-Dichloroethane	107-06-2	0.21	6
☐	trans-1,2-Dichloroethylene	156-60-5	0.054	30
☐	1,2-Dichloropropane	78-87-5	0.85	18
☐	1,2-Diphenylhydrazine	122-66-7	0.087	NA
☐	trans-1,3-Dichloropropylene	10061-02-6	0.036	18
☐	1,4-Dinitrobenzene	100-25-4	0.32	2.3
☐	1,4-Dioxane	123-91-1	12	170
☐	2,4-Dichlorophenol	120-83-2	0.044	14
☐	2,4-Dichlorophenoxyacetic acid/2,4-D	94-75-7	0.72	10
☐	2,4-Dinitrophenol	51-28-5	0.12	160
☐	2,4-Dinitrotoluene	121-14-2	0.32	140
☐	2,6-Dichlorophenol	87-65-0	0.044	14
☐	2,6-Dinitrotoluene	606-20-2	0.55	28
☐	2-4-D (2,4-Dichlorophenoxyacetic acid)	94-75-7	0.72	10
☐	2-4-Dimethyl phenol	105-67-9	0.036	14
☐	2,4-Dimethylaniline (2,4-xylidine)	95-68-1	0.010	0.66
☐	4,6-Dinitro-o-cresol	534-52-1	0.28	160
☐	delta-BHC	319-86-8	0.023	0.066
☐	di-n-butyl phthalate	84-74-2	0.057	28
☐	Di-n-octyl phthalate	117-84-0	0.017	28
☐	Di-n-propylnitrosamine	621-64-7	0.4	14
☐	Dibenz(a,e)pyrene	192-65-4	0.061	NA
☐	Dibenz(a,h)anthracene	53-70-3	0.055	8.2
☐	Dibromomethane	74-95-3	0.11	15
☐	Dichlorodifluoromethane	75-71-8	0.23	7.2
☐	Dieldrin	60-57-1	0.017	0.13
☐	Diethyl phthalate	84-66-2	0.2	28
☐	Dimethyl phthalate	131-11-3	0.047	28
☐	Diphenylamine	122-39-4	0.92	13
☐	Diphenylnitrosamine	86-30-6	0.92	13
☐	Disulfoton	298-04-4	0.017	6.2
☐	Dithiocarbamates (total) **[6]**	137-30-4	0.028	28
☐	Endosulfan I	959-98-8	0.023	0.066
☐	Endosulfan II	33213-65-9	0.029	0.13
☐	Endosulfan sulfate	1031-07-8	0.029	0.13
☐	Endrin	72-20-8	0.0028	0.13
☐	Endrin aldehyde	7421-93-4	0.025	0.13
☐	EPTC **[6]**	759-94-4	0.042	1.4
☐	Ethyl acetate	141-78-6	0.34	33
☐	Ethyl benzene	100-41-4	0.057	10
☐	Ethyl cyanide/propanenitrile	107-12-0	0.24	360
☐	Ethyl ether	60-29-7	0.12	160
☐	Ethyl methacrylate	97-63-2	0.14	160
☐	Ethyl Oxide	75-21-8	0.12	NA
☐	Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
☐	Famphur	52-85-7	0.017	15
☐	Fluoranthene	206-44-0	0.068	3.4

✓				
☐	Fluorene	86-73-7	0.059	3.4
☐	Formetanate hydrochloride **[6]**	23422-53-9	0.056	1.4
☐	gamma-BHC	58-89-9	0.0017	0.066
☐	Heptachlor	76-44-8	0.0012	0.066
☐	Heptachlor epoxide	1024-57-3	0.016	0.066
☐	Hexachlorobenzene	118-74-1	0.055	10
☐	Hexachlorobutadiene	87-68-3	0.055	5.6
☐	Hexachlorocyclopentadiene	77-47-4	0.057	2.4
☐	Hexachloroethane	67-72-1	0.055	30
☐	Hexachloropropylene	1888-71-7	0.035	30
☐	HxCDDs (All Hexachlorodibenzo-p-dioxins)	N/A	0.000063	0.001
☐	HxCDFs (All Hexachlorodibenzofurans)	N/A	0.000063	0.001
☐	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	0.000035	0.0025
☐	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.000035	0.0025
☐	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.000035	0.0025
☐	Ideno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
☐	Iodomethane	74-88-4	0.19	65
☐	Isobutyl alcohol	78-83-1	5.6	170
☐	Isodrin	465-73-6	0.021	0.066
☐	Isosafrole	120-58-1	0.081	2.6
☐	Kepone	143-50-0	0.0011	0.13
☐	3-Methylcholanthrene	56-49-5	0.0055	15
☐	4,4-Methylene bis (2-chloroaniline)	101-14-4	0.5	30
☐	m-Dichlorobenzene	541-73-1	0.036	6
☐	Methacrylonitrile	126-98-7	0.24	84
☐	Methanol	67-56-1	5.6	0.75 mg/l TCLP
☐	Methiocarb **[6]**	2032-65-7	0.056	1.4
☐	Methomyl **[6]**	16752-77-5	0.028	0.14
☐	Methoxychlor	72-43-5	0.25	0.18
☐	Methapyrilene	91-80-5	0.081	1.5
☐	Methyl ethyl ketone	78-93-3	0.28	36
☐	Methyl isobutyl ketone	108-10-1	0.14	33
☐	Methyl methacrylate	80-62-6	0.14	160
☐	Methyl methansulfonate	66-27-3	0.018	NA
☐	Methyl parathion	298-00-0	0.014	4.6
☐	Methylene chloride	75-09-2	0.089	30
☐	Metolcarb **[6]**	1129-41-5	0.056	1.4
☐	Mexacarbate **[6]**	315-18-4	0.056	1.4
☐	Molinate **[6]**	2212-67-1	0.042	1.4
☐	2-Naphthylamine	91-59-8	0.52	NA
☐	5-Nitro-o-toluidine	99-55-8	0.32	28
☐	n-Butyl alcohol	71-36-3	5.6	2.6
☐	N-Nitroso-di-n-butylamine	924-16-3	0.4	17
☐	N-Nitrosodiethylamine	55-18-5	0.4	28
☐	N-Nitrosodimethylamine	62-75-9	0.4	2.3
☐	N-Nitrosomethylethylamine	10595-95-6	0.4	2.3
☐	N-Nitrosomorpholine	59-89-2	0.4	2.3
☐	N-Nitrosopiperidine	100-75-4	0.013	35
☐	N-Nitrosopyrrolidine	930-55-2	0.013	35
☐	Naphthalene	91-20-3	0.059	5.6
☐	Nitrobenzene	98-95-3	0.068	14
☐	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	0.000063	0.005

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✓	*I. Organic Constituents (continued)*			
☐	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	0.000063	0.005
☐	o,p-DDD	53-19-0	0.023	0.087
☐	o,p-DDE	3424-82-6	0.031	0.087
☐	o,p-DDT	789-02-6	0.0039	0.087
☐	o-Cresol	95-48-7	0.11	5.6
☐	o-Dichlorobenzene	95-50-1	0.088	6
☐	o-Nitroaniline	88-74-4	0.27	14
☐	o-Nitrophenol	88-75-5	0.028	13
☐	Oxamyl **[6]**	23135-22-0	0.056	0.28
☐	1,3-Phenylenediamine	108-45-2	0.010	0.66
☐	p-Cresidine	120-71-8	0.010	0.66
☐	p,p-DDD	72-54-8	0.023	0.087
☐	p,p-DDE	72-55-9	0.031	0.087
☐	p,p-DDT	50-29-3	0.0039	0.087
☐	p-Chloro-m-cresol	59-50-7	0.018	14
☐	p-Chloroaniline	106-47-8	0.46	16
☐	p-Cresol	106-44-5	0.77	5.6
	(difficult to distinguish from m-cresol)			
☐	p-Dichlorobenzene	106-46-7	0.09	6
☐	p-Dimethylaminoazobenzene	60-11-7	0.13	NA
☐	p-Nitroaniline	100-01-6	0.028	28
☐	p-Nitrophenol	100-02-7	0.12	29
☐	Parathion	56-38-2	0.014	4.6
☐	Pebulate **[6]**	1114-71-2	0.042	1.4
☐	PeCDDs (All Pentachlorodibenzo-p-dioxins)	N/A	0.000063	0.001
☐	PeCDFs (All Pentachlorodiebenzofurans)	N/A	0.000035	0.001
☐	Pentachlorobenzene	608-93-5	0.055	10
☐	Pentachloroethane	76-01-7	0.055	6
☐	Pentachloronitrobenzene	82-68-8	0.055	4.8
☐	Pentachlorophenol	87-86-5	0.089	7.4
☐	Phenacetin	62-44-2	0.081	16
☐	Phenanthrene	85-01-8	0.059	5.6
☐	Phenol	108-95-2	0.039	6.2
☐	Phorate	298-02-2	0.021	4.6
☐	Phthalic acid	100-21-0	0.055	28
☐	Phthalic anhydride	85-44-9	0.055	28
☐	Physostigmine **[6]**	57-47-6	0.056	1.4
☐	Physostigmine salicylate **[6]**	57-64-7	0.056	1.4
☐	Promecarb **[6]**	2631-37-0	0.056	1.4
☐	Pronamide	23950-58-5	0.093	1.5
☐	Propham **[6]**	122-42-9	0.056	1.4
☐	Propoxur **[6]**	114-26-1	0.056	1.4
☐	Prosulfocarb **[6]**	52888-80-9	0.042	1.4
☐	Pyrene	129-00-0	0.067	8.2
☐	Pyridine	110-86-1	0.014	16
☐	Safrole	94-59-7	0.081	22
☐	Silvex (2,4,5-TP)	93-72-1	0.72	7.9
☐	1,1,1,2-Tetrachloroethane	630-20-6	0.057	6
☐	1,1,1-Trichloroethane	71-55-6	0.054	6
☐	1,1,2,2-Tetrachloroethane	79-34-5	0.057	6
☐	1,1,2-Trichloro-2,2,2-trifluoroethane	76-13-1	0.057	30
☐	1,1,2-Trichloroethane	79-00-5	0.054	6
☐	1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
☐	1,2,4-Trichlorobenzene	120-82-1	0.055	19
☐	1,2,3-Trichloropropane	96-18-4	0.85	30
☐	2,3,4,6-Tetrachlorophenol	58-90-2	0.03	7.4
☐	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	93-76-5	0.72	7.9
☐	2,4,5-Trichlorophenol	95-95-4	0.18	7.4
☐	2,4,6-Trichlorophenol	88-06-2	0.035	7.4
☐	TCDDs (All Tetrachlorodibenzo-p-dioxins)	N/A	0.000063	0.001
☐	TCDFs (All Tetrachlorodibenzofurans)	N/A	0.000063	0.001
☐	Tetrachloroethylene	127-18-4	0.056	6
☐	Thiodicarb **[6]**	59669-26-0	0.019	1.4
☐	Thiophanate-methyl **[6]**	23564-05-8	0.056	1.4
☐				
☐	Toluene	108-88-3	0.08	10
☐	Total PCBs	1336-36-3	0.1	10
☐	(sum of all PCB isomers, or all Aroclors)			
☐	Toxaphene	8001-35-2	0.0095	2.6
☐	Triallate **[6]**	2303-17-8	0.042	1.4
☐	Trichloroethylene	79-01-6	0.054	6
☐	Trichloromonofluoromethane	75-69-4	0.02	30
☐	Triethylamine **[6]**	101-44-8	0.081	1.5
☐	tris-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.1
☐	Vernolate **[6]**	1929-77-7	0.042	1.4
☐	Vinyl chloride	75-01-4	0.27	6
☐	Xylenes-mixed isomers	1330-20-7	0.32	30
☐	(sum of o-,m-,and p-xylene concentrations)			

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	II. Inorganic Constituents			
☐	Antimony	7440-36-0	1.9 *	1.15 mg/l TCLP
☐	Arsenic	7440-38-2	1.4 *	5.0 mg/l TCLP
☐	Barium	7440-39-3	1.2 *	21.0 mg/l TCLP
☐	Beryllium	7440-41-7	0.82 *	1.22 mg/l TCLP
☐	Cadmium	7440-43-9	0.69 *	0.11 mg/l TCLP
☐	Chromium (Total)	7440-47-3	2.77 *	0.60 mg/l TCLP
☐	Cyanides (Amenable) **[4]**	57-12-5	0.86	30
☐	Cyanides (Total) **[4]**	57-12-5	1.2	590
☐	Fluoride **[5]**	16984-48-8	35	NA
☐	Lead	7439-92-1	0.69 *	0.75 mg/l TCLP
☐	Mercury - All others	7439-97-6	0.15 *	0.025 mg/l TCLP
☐	Mercury - Retort nonwastewater	7439-97-6	NA *	0.20 mg/l TCLP
☐	Nickel	7440-02-0	3.98 *	11.0 mg/l TCLP
☐	Selenium	7782-49-2	0.82 *	5.7 mg/l TCLP
☐	Silver	7440-22-4	0.43 *	0.14 mg/l TCLP
☐	Sulfide	18496-25-8	14	NA
☐	Thallium	7440-28-0	1.4 *	0.2 mg/l TCLP
☐	Vanadium **[4]**	7440-62-2	4.3 *	1.6 mg/l TCLP
☐	Zinc **[5]**	7440-66-6	2.61 *	4.3 mg/l TCLP

I certify that the above is true and correct to the best of my knowledge.

Charles Bowen
Authorized Name (Print)

EHS Coord.
Title

Charles Bowen
Authorized Signature

03/27/09
Date

EPAHO104000850

ANALYSYS INC.

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

nelac T104704268-08-TX

Client: Markwest Javelina Company
Attn: Betty Silvas
Address: 5438 Union Street
Corpus Christi, TX 78407

Phone: 361 289-4765 **FAX:** 361 289-4914

Report#/Lab ID#: 309386 **Report Date:** 07/25/08
Project ID:
Sample Name: Flare KO Drum Liquid
Sample Matrix: waste
Date Received: 07/16/2008 **Time:** 08:32
Date Sampled: 07/15/2008 **Time:** 13:15

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS [4]
Ignitability	74	°F	---	---	07/17/08	1010	---	1.34	-NA-	-NA-	-NA-
Metals Dig.-HNO3	---	---	---	---	07/21/08	3050b	---	---	---	---	---
pH	4.2	pH units	---	---	07/17/08	9045C	---	0	-NA-	-NA-	-NA-
TPH by GC (TNRCC-ext)	---	---	---	---	07/21/08	TX 1005	---	-NA-	-NA-	-NA-	-NA-
Iron/ICP	788	mg/Kg	20	25.6	07/21/08	6010 & 200.7	B	17.71	101.36	93.15	91.3
Alkalinity, total	<10	mg/L	10	<10	07/17/08	310.1	---	0	-NA-	-NA-	-NA-
Ammonia-N	1.64	mg/L	0.01	<0.01	07/22/08	350.1	---	4.21	98.96	99.96	100.94
Reactivity cyanide	<10	mg/Kg	10	<10	07/19/08	9014/SW846-S.7.3	---	0.15	97.7	99.93	101.78
Reactivity sulfide	<20	mg/Kg	10	<10	07/19/08	9034/SW846 S.7.8	---	7.45	80.63	96	-NA-
TPH by GC-TX 1005/C35	---		---		07/22/08	TX 1005	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/25/08	8260b(5030/5035)	---	---	---	---	---
Benzene	3650000	µg/Kg	100000	<100000	07/25/08	8260b	---	3.5	82	90	94.8
Ethylbenzene	5990000	µg/Kg	100000	<100000	07/25/08	8260b	---	6.8	103	113.7	114.5
m,p-Xylenes	24900000	µg/Kg	200000	<200000	07/25/08	8260b	---	7.1	107.4	115.2	116.9
o-Xylene	15300000	µg/Kg	100000	<100000	07/25/08	8260b	---	6.9	112	118.1	120.2
Toluene	11400000	µg/Kg	100000	<100000	07/25/08	8260b	---	3.9	80.9	85.6	92
TPH by GC (>C12-C28)	106000	mg/Kg	25000	<25000	07/22/08	TX 1005	---	2.8	65.9	92.8	89.7
TPH by GC (>C28-C35)	<25000	mg/Kg	25000	<25000	07/22/08	TX 1005	---	-NA-	-NA-	-NA-	-NA-
TPH by GC (C6-C12)	180000	mg/Kg	25000	<25000	07/22/08	TX 1005	---	11.2	61.2	88.7	89.4
TPH by GC (C6-C35)	286000	mg/Kg	25000	<25000	07/22/08	TX 1005	---	7	63.5	90.7	89.5

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Denny E. Wagoner

D.E.Wagoner, Technical Director (or designee)

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

EPAHO104000851

ANALYSYS INC.
3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411
nelac T104704268-08-TX

Client: Markwest Javelina Company	**Project ID:**	**Report#/Lab ID#:** 309386
Attn: Betty Silvas	**Sample Name:** Flare KO Drum Liquid	**Sample Matrix:** waste

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Date Analyzed	Data Qualifiers
1,2-Dichloroethane-d4	8260b	99.9	70-125	07/25/08	---
1,2-Dichloroethane-d4	8260b	109	70-125	07/21/08	---
Toluene-d8	8260b	90.6	75-120	07/25/08	---
Toluene-d8	8260b	92.7	75-120	07/21/08	---
1-Chlorooctane	TX 1005	**none/diluted**	diluted @ 500X	07/22/08	D
p-Terphenyl	TX 1005	**none/diluted**	diluted @ 500X	07/22/08	D

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

EPAHO104000852

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 309386 **Matrix:** waste
Client: Markwest Javelina Company **Attn:** Betty Silvas
Project ID:
Sample Name: Flare KO Drum Liquid

Pursuant to NELAC (LELAP), please note that some parameters and/or test results published in this report may not be covered by the LELAP accreditation# 03011. ASI will be happy to provide a complete list of accredited tests and parameters on request.

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Sample Temperature/Condition: <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif	Comment
Iron/ICP Iron/ICP	B B	One or more method/calib. or Prep. blanks associated with the analysis were found to have analyte above the RQL. However, the sample result is more than five times the conc. of the blank and impact on sample quantitation is negligible.
1-Chlorooctane 1-Chlorooctane	D D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
p-Terphenyl p-Terphenyl	D D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.

EPAHO104000853

CHAIN-OF-CUSTODY www.analysysinc.com

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3512 Montopolis Drive, Austin, TX 78744 Ph: (512) 385-5886 Fax: (512) 385-7411
2209 N. Padre Island Dr., Ste K, Corpus Christi, TX 78408 Ph: (361) 289-6384 Fax: (361) 289-0875

Send Reports To:
Company Name MARK WEST JAVELINA
Address
City State Zip
ATTN: Betty Silvas
Phone 289-4764 Fax
Project Name/PO#: Sampler

Bill To (if different):
Company Name
Address
City State Zip
ATTN:
Phone Fax

Samples/projects intended for TCEQ-TRRP completion require special handling, QC requirements and pricing. To Be successfully completed such projects should be identified and discussed prior to receipt and **MUST BE IDENTIFIED** on this Chain-of Custody under "special instructions".

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Lab I.D. # (Lab Only)	No. of Containers and Preservative (TRRP-13 Mandatory): Ice	HNO3	HCL	ZnAc/NaOH	H2SO4 Glass	None	Other (Specify)	Matrix: Water	Wastewater	Waste	Soil	Other (Specify)	Analyze For: TRRP	TPH (Hydrocarbons)	Ammonia	Amine, wt% ml	TOTAL ALKALINITY	TOTAL IRON	BTEX	RCI				RUSH TAT (Pre-Scheduled)	Standard TAT
Flare KO Drum Liquid	07/15/08	13:15	6	✓		309386									✓					✓	✓	✓	✓	✓	✓	✓					

Special Instructions (such as special QC requirements, lists, methods, etc...)
*Sample contains Amine (corrosive), Sulferox Solution (Iron chelant), oils, and unspecified Hydrocarbons and process water. Classify as "HAZARDOUS" for handling.

4.4°C
Temperature upon receipt (Consistent with NELAC sec. 5.11) (>0-6°C)

(1)Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal reporting limits (MDL/PQL). For GC/MS volatiles and extractables, unless specific analytical parameter lists are specified on this chain-of-custody or attached to this chain-of-custody, ASI will default to Priority Pollutants or ASI's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

Sample Relinquished By: Name	Affiliation	Date	Time	Sample Received By: Name	Affiliation	Date	Time
B. Silvas	MW Javelina	07/16/08	8:32	C. Adams	ASI	7/16/08	8:32

YES X
NO

[Tendering of above described samples to AnalySys, Inc. for analytical testing constitutes agreement by buyer/sampler to AnalySys, Inc.'s standard terms.]

EPAHO104000854

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/30/2009**

Dear **Charles Bowen**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3253

Expiration Date 3/30/2011

Generator: Mark West Javelina Company, LLC
Address: 5438 Union Street
Corpus Christi, TX 78407

Waste Information

Name of Waste: Flare Knock-out water - Top phase
TCEQ Waste Code #: PRODUCT
Container Type:
Detailed Description of Process Generating Waste:
From a flare knock out pot. Sulfides are .66% & sodium carbonate is at 1.56%
Color: murky to black **Odor:** strong hydrocarbon **pH:** 7-10
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:
D001 & D018 Appropriate PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

#32553

CES Environmental Services, Inc.

Product JR GB

☐ CES Environmental Services – Houston Facility
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ CES Environmental Services – Port Arthur Facility
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	Mark West Javelina Company, LLC		
Address:	5438 Union Street		
City, State, Zip:	Corpus Chrsiti, TX 78407		
Contact:	Charles Bowen	**Title:**	EH&S Coordinator
Phone No:	361-289-4928	**Fax No:**	361-289-4914
24/hr Phone:	361-537-5196		
U.S. EPA I.D. No:	TXD987985900		
State I.D.	39228	**SIC Code:**	4925

SECTION 2: Billing Information – ☒ Same as Above

Company:			
Address:			
City, State, Zip:			
Contact:	Nancy Chapa	**Title:**	Accounts Payable Clerk
Phone No:	361-289-4993	**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Flare Knock-Out Water Top Phase
Detailed Description of Process Generating or Producing the Material / Product: From a flare knock out pot. Sulfides are .66% & sodium carbonate is at 1.56%

Physical State: ☒ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: Murky to Black **Odor:** strong hydrocarbon

Specific Gravity (water=1): .9-1.3 **Density:** 7.5-10 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☒ Truck ☐ Other (explain)
Container Size: ____ ____ 5K ga

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly

Proper U.S. DOT Shipping Name: Product RQ, Flammable Liquids, N.O.S. (Benzene)

Class: 3 **UN/NA:** UN1993 **PG:** PG II **RQ:** 100

EPAHO104000856

Flash Point <140	**pH** 7-10	**N/A**	N/A	**Solids** 20-30%
Oil&Grease >1500mg/l	**TOC** NAmg/l	**Zinc** NAmg/l	**Copper** NAmg/l	**Nickel** NAmg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE **The material / product consists of the following materials**	**Concentration** **Ranges are acceptable**	**Units** **or %**
Water	74-95	%
Trace Organics	1-5	%
Oil	1-5	%
Methane	0-1	%
Coke Fines	1-10	%
Benzene	0-2	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
D001 & D018 appropriate PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
Lab Evaluations #0309-48-49

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☒ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Charles Bowen **Date:** 3/27/09

Printed Name/Title: Charles Bowen / EHS Coordinator

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: Robert C Wright Date: 3-30-09 Approved Rejected Approval Number:	

EPAHO104000857

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$0.32 / gallon + $0.15 / gallon transportation (min 5,000 gallons) + FSC

2. **Contamination Limits (maximum limit before surcharges apply):**

3. **Surcharge Pricing:**

4. **Special Testing Requirements:**

Standard evaluations for use in the NaSH Production Process: Run full titration, density, percent solids and percent oil via centrifugation, and perform sample acid reaction to ensure normal reaction. Check to ensure oil does not appear post reaction. Check odor, color, and appearance to ensure they are normal. If anything seems abnormal, contact management immediately.

Complete inbound load report if: either solids or oil exceed 1%, arrangements are made for with customer service regarding customer surcharges. If any of these conditions exist, contact customer service immediately.

5. **Treatment and Handling Protocol:**

Feedstock for NaSH into RV2/RV1. Process through reactor vessel for the recovery of sulfur compounds in the production of NaSH

Wastewater may either go to System 1 or other wastewater treatment options

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104000858

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable);**

EPAHO104000859

ANALYSYS INC.

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

nelac T104704268-08-TX

Client: Markwest Javelina Company
Attn: Charlie Bowen
Address: 5438 Union Street
Corpus Christi TX 78407

Phone: 361-289-4743 **FAX:** 361-289-4914

Report#/Lab ID#: 310328 **Report Date:** 08/18/08
Project ID:
Sample Name: Flare KO Drum
Sample Matrix: waste
Date Received: 08/11/2008 **Time:** 09:15
Date Sampled: 08/11/2008 **Time:** 09:00

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
Ignitability	145	°F	---	---	08/15/08	1010	---	0	-NA-	-NA-	-NA-
Metals Dig.-HNO3	---	---	---	---	08/13/08	3050b	---	---	---	---	---
pH	7.6	pH units	---	---	08/12/08	9045C	---	0	-NA-	-NA-	-NA-
TPH by GC (TNRCC-ext)	---	---	---	---	08/14/08	TX 1005	---	-NA-	-NA-	-NA-	-NA-
Iron/ICP	377	mg/Kg	20	29.6	08/15/08	6010 & 200.7	B	7.39	105.26	104.75	108
Alkalinity, total	54	mg/L	10	<10	08/12/08	310.1	---	3.77	-NA-	-NA-	-NA-
Ammonia-N	12.3	mg/Kg	0.6	<0.6	08/12/08	350.1	---	2.93	92.2	96.28	97.36
Reactivity cyanide	<10	mg/Kg	10	<10	08/14/08	9014/SW846-S.7.3	---	0.33	92.95	99.93	101.13
Reactivity sulfide	<20	mg/Kg	20	<20	08/14/08	9034/SW846 S.7.8	---	3.4	86.4	84	-NA-
TPH by GC-TX 1005/C35	---		---		08/14/08	TX 1005	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		08/15/08	8260b(5030/5035)	---	---	---	---	---
Benzene	492000	µg/Kg	50000	<50000	08/15/08	8260b	---	3.6	93.6	103.1	104.4
Ethylbenzene	1590000	µg/Kg	50000	<50000	08/15/08	8260b	---	4.7	110.3	113.8	117.6
m,p-Xylenes	6560000	µg/Kg	100000	<100000	08/15/08	8260b	---	4.4	109.3	112.1	116.3
o-Xylene	4480000	µg/Kg	50000	<50000	08/15/08	8260b	---	5.3	110.6	113.8	115
Toluene	3220000	µg/Kg	50000	<50000	08/15/08	8260b	---	4.9	96.6	106.2	103.3
TPH by GC (>C12-C28)	91500	mg/Kg	5000	<5000	08/14/08	TX 1005	---	19.4	83.4	91.2	101.8
TPH by GC (>C28-C35)	<5000	mg/Kg	5000	101000	08/14/08	TX 1005	B	-NA-	-NA-	-NA-	-NA-
TPH by GC (C6-C12)	46500	mg/Kg	5000	<5000	08/14/08	TX 1005	---	9.8	87.9	112.1	98
TPH by GC (C6-C35)	138000	mg/Kg	5000	101000	08/14/08	TX 1005	---	14.6	85.7	101.7	99.9

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Denny E. Wagoner

D.E.Wagoner, Technical Director (or designee)

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

EPAHO104000860

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411
nelac
T104704268-08-TX

Client: Markwest Javelina Company	**Project ID:**	**Report#/Lab ID#:** 310328
Attn: Charlie Bowen	**Sample Name:** Flare KO Drum	**Sample Matrix:** waste

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Date Analyzed	Data Qualifiers
1,2-Dichloroethane-d4	8260b	89	70-125	08/15/08	---
Toluene-d8	8260b	85.6	75-120	08/15/08	---
1-Chlorooctane	TX 1005	none/diluted	diluted @ 100X	08/14/08	D
p-Terphenyl	TX 1005	none/diluted	diluted @ 100X	08/14/08	D

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

EPAHO10400861

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 310328 **Matrix:** waste
Client: Markwest Javelina Company **Attn:** Charlie Bowen
Project ID:
Sample Name: Flare KO Drum

Pursuant to NELAC (LELAP), please note that some parameters and/or test results published in this report may not be covered by the LELAP accreditation# 03011. ASI will be happy to provide a complete list of accredited tests and parameters on request.

T104704268-08-TX

Sample Temperature/Condition: <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif	Comment
Iron/ICP	B	One or more method/calib. or Prep. blanks associated with the analysis were found to have analyte above the RQL. However, the sample result is more
Iron/ICP	B	than five times the conc. of the blank and impact on sample quantitation is negligible.
TPH by GC (>C28-C35)	B	One or more method/calib. blanks associated with the analysis were found to have analyte at a level that could impact sample results near the RQL.
1-Chlorooctane	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels).
1-Chlorooctane	D	Surrogate recoveries not accurately quantifiable.
p-Terphenyl	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels).
p-Terphenyl	D	Surrogate recoveries not accurately quantifiable.

EPAHO104000862

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Send Reports To:

Company Name MARK WEST JAVELINA

Address

City State Zip

ATTN: Charles Bowen

Phone 289-4928 Fax

Project Name/PO#: Sampler

Bill To (if different):

Company Name

Address

City State Zip

ATTN:

Phone Fax

Samples/projects intended for TCEQ-TRRP completion require special handling, QC requirements and pricing. To Be successfully completed such projects should be identified and discussed prior to receipt and **MUST BE IDENTIFIED** on this Chain-of-Custody under "special instructions".

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Lab I.D. # (Lab Only)	No. of Containers and Preservative (TRRP-13 Mandatory): Ice	HNO3	HCL	ZnAc/NaOH	H2SO4 Glass	None	Other (Specify)	Matrix: Water	Wastewater	Waste	Soil	Other (Specify)	Analyze For: TRRP	*TPH CHYDROCARBONS	AMMONIA	TOTAL ALKALINITY	Iron	RCI	BTX			RUSH TAT (Pre-Scheduled)	Standard TAT
Hanko Drum	08/11/08	09:00	1	✓		310328										✓														

Special Instructions (such as special QC requirements, lists, methods, etc...)

* NOTE: 2-phase sample - upper layer is Hydrocarbon / BTM is H_2O

4.1°C

Temperature upon receipt (Consistent with NELAC sec. 5.11) (>0-6°C)

(1)Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal reporting limits (MDL/PQL). For GC/MS volatiles and extractables, unless specific analytical parameter lists are specified on this chain-of-custody or attached to this chain-of-custody, ASI will default to Priority Pollutants or ASI's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

Sample Relinquished By				Sample Received By					
Name	Affiliation	Date	Time	Name	Affiliation	Date	Time	YES	X
B Silva	MarkJavelina	08/11/08	09:15	C. ADAMS	ASI	8/11/08	0915	NO	

[Tendering of above described samples to AnalySys, Inc. for analytical testing constitutes agreement by buyer/sampler to AnalySys, Inc.'s standard terms.]

EPAHO104000863

3256
Select Environmental

EPAHO10400864

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/31/2009**

Dear **Darrell Harbuck**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3256

Expiration Date 3/31/2011

Generator: Select Environmental
Address: 223 McCarty Road
Houston, TX 77029

Waste Information

Name of Waste: Metal Dust
TCEQ Waste Code #: CESQ3071
Container Type:
Detailed Description of Process Generating Waste:
Floor sweepings / clean up from around metal fab shop
Color: black **Odor:** hydrocarbon **pH:** 7.28
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JB/AL

SECTION 1: Generator Information

Company: Mac Steel
Address: 7400 Mesa Dr.
City: Houston State: Tx. Zip: 77028
Contact: Darrell Herbuck Title: Maint. Mgr.
Phone Number: 713-633-7400 Fax Number:
24/hr Phone Number:
US EPA ID No: CESQ
State ID No: CESQ SIC Code:

15

SECTION 2: Billing Information - ☐ Same as Above

Company: Select Environmtl
Address: 223 Mercury Dr.
City: Houston State: Tx. Zip: 77029
Contact: Kevin White Title: Sales
Phone Number: 281-960-3967 Fax Number: 713-255-1761

SECTION 3: General Description of the Waste

Name of Waste: Metal Dust
Detailed Description of Process Generating Waste:
Floor Sweepings / clean up from overall metal fab. shop

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☒ Solid ☐ Filter Cake ☐ Combination

Color: Black Odor: Hydrocarbon

Specific Gravity (water=1): n/a Density: n/a lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 10 drums

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is It: ☐ *D001 (Ignitable)* ☐ *D002 (Corrosive)* ☐ *D003 (Reactive)*
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ 3071

Proper US DOT Shipping Name: Non Haz Solid
Class: NA UN/NA: NA PG: NA RQ: NA

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>150	7.28	mg/l	mg/l	100 %
Oil & Grease	TOC	Zinc	Copper	Nickel
>1500 mg/l	NA mg/l	NA mg/l	NA mg/l	NA mg/l

SECTION 4: *Physical and Chemical Data*

COMPONENTS TABLE The waste consists of the following materials	CONCENTRATOIN Ranges are acceptable	UNITS or %
Metal dust / Powder		98 %
oil		2 %

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Std

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. [redacted] Analytical Attached

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: /
TCLP Volatiles: /
TCLP Semi-Volatiles: /
Reactivity: /
Corrosivity: /
Ignitability: /

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☐ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

***Metals Subcategory*: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

***Oils Subcategory*: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☑ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☑ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** _____

Printed Name/Title: _____

[redacted] (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____

Date: 3-31-09 ☑ Approved ☐ Rejected

Approval Number: 3256

Total P.004

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$50/drum

2. Contamination Limit (maximum limit before surchages apply):

No free liquids

3. Surcharge Pricing:

$60/Drum if liquids Are present

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Class 1 Solids

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Mercury Environmental Services, Inc.

6913 HWY 225, Deer Park, TX 77536
Phone: (281)-476-4534 Fax: (281)-476-4406

Select Environmental
223 McCarty Dr.
Houston, TX 77044

Phone: (713) 672-4500
Fax: (713) 255-1761

Attn: **Kevin White**

- CERTIFICATE OF RESULTS -

MES Lab#: 9030071

Client Sample ID: Metal Dust
Extended ID: Prj: Mac Steel #1, Houston

Sample Collect Date: 3/6/2009
Sample Receipt Date: 3/6/2009 @ 3:57:00 PM

Sample Type: Grab

Test Group / Method

BTEX Method: SW-846 8021B	MDL	Result	Units	Analyst: HDG Date / Time
Benzene	0.5	< 0.5	mg/kg	3/8/2009 / 5:50 AM
Toluene	0.5	< 0.5	mg/kg	3/8/2009 / 5:50 AM
Ethyl benzene	0.5	< 0.5	mg/kg	3/8/2009 / 5:50 AM
M+P-Xylene	0.5	< 0.5	mg/kg	3/8/2009 / 5:50 AM
o-Xylene	0.5	< 0.5	mg/kg	3/8/2009 / 5:50 AM

Total Petroleum Hydrocarbons Solid Method: TNRCC 1005	MDL	Result	Units	Analyst: HDG Date / Time
C6 - C12 Hydrocarbons	4	< 4	mg/kg	3/12/2009 / 1:22 AM
>C12 - C28 Hydrocarbons	8	**1130**	mg/kg	3/12/2009 / 1:22 AM
>C28 - C36 Hydrocarbons	8	**576**	mg/kg	3/12/2009 / 1:22 AM
Total TPH	20	**1710**	mg/kg	3/12/2009 / 1:22 AM

TCLP Metals (8) Method: SW-846 6010B	MDL	RL	Result	Units	Analyst: JCA Date / Time
Arsenic	0.014	5	**0.032**	mg/L	3/9/2009 / 1:56 PM
Barium	0.0005	100	**0.139**	mg/L	3/9/2009 / 1:56 PM
Cadmium	0.002	1	< 0.002	mg/L	3/9/2009 / 1:56 PM
Chromium	0.002	5	< 0.002	mg/L	3/9/2009 / 1:56 PM
Lead	0.005	5	< 0.005	mg/L	3/9/2009 / 1:56 PM
Selenium	0.024	1	< 0.024	mg/L	3/9/2009 / 1:56 PM
Silver	0.002	5	< 0.002	mg/L	3/9/2009 / 1:56 PM

TCLP Mercury Method: SW-846 7470A	MDL	RL	Result	Units	Analyst: JCA Date / Time
Mercury	0.0002	0.2	< 0.0002	mg/L	3/9/2009 / 11:00 AM

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EPAHO104000872

- CERTIFICATE OF RESULTS -

MES Lab#: 9030071

Client Sample ID: Metal Dust
Extended ID: Prj: Mac Steel #1, Houston

Sample Collect Date: 3/5/2009 **Sample Type:** Grab
Sample Receipt Date: 3/5/2009 @ 3:57:00 PM

Reactivity, Recoverable Hydrogen Cyanide Method: 7.3.3.2	MDL	Result	Units	Analyst: HDG Date / Time
Hydrogen Cyanide	0.25	< 0.25	mg/kg	3/17/2009 / 3:16 PM

Reactivity, Recoverable Hydrogen Sulfide Method: 7.3.4.2	MDL	Result	Units	Analyst: SA Date / Time
Hydrogen Sulfide	0.25	< 0.25	mg/kg	3/17/2009 / 4:55 PM

Corrosivity: pH Method: SW-846 9045	MDL	Result	Units	Analyst: DB Date / Time
pH		7.28		3/9/2009 / 9:30 AM

Ignitability Method: SW-846 1010	MDL	Result	Units	Analyst: DB Date / Time
Flashpoint		>150	deg F	3/9/2009 / 12:10 PM

Flags: H: Exceeds "High Limit" L: Below "Low Limit" RL=regulatory limit

John Keller

John Keller, Ph.D., Lab Director

Thursday, March 19, 2009
Date

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EPAHO104000873

9030071

MERCURY ENVIRONMENTAL SERVICES
QA/QC REPORT

SURROGATE SPIKE RECOVERY FOR BTEX	% REC
Dibromofluoromethane	86
Toluene-d8	102
4-Bromofluorobenzene	102

ANALYTES	METHOD TPH 1005	MB mg/kg	CCV %REC	MS %REC	MSD %REC	RPD
C8-C12		<4	96	93	97	4
C12-C28		<8	100	96	101	5

ANALYTE	MB mg/L	LCS %REC	LCSD %REC	RPD	CCB mg/L	CCV %REC
Arsenic	< 0.002	87	90	3	< 0.002	101
Barium	< 0.002	88	92	4	< 0.002	103
Cadmium	< 0.001	89	93	4	< 0.001	103
Chromium	< 0.001	88	91	3	< 0.001	105
Lead	< 0.002	88	91	3	< 0.002	106
Mercury	< 0.0002	100	100	0	< 0.0002	100
Selenium	< 0.024	92	97	5	< 0.024	109
Silver	< 0.001	105	92	13	< 0.001	100

ANALYTE	STD	DUP	RPD
Flashpoint	82 F	83	1

ANALYTE	BUFFER 7	ORIG	DUP	RPD
pH	7	9.01	9.04	<1

ANALYTE	ORIG mg/kg	DUP mg/kg	RPD	CCV %REC
Reactivity as Hydrogen Sulfide	< 0.25	< 0.25	0	110

ANALYTE	ORIG mg/kg	DUP mg/kg	RPD	STD %REC
Reactivity as Hydrogen Cyanide	< 0.25	< 0.25	0	99

Key to QA Abbreviations
MS=Matrix Spike
RPD=Relative Percent Deviation
LCS=Laboratory Control Standard
CCB=Continuing Calibration Blank
MDL=Minimum Detection Limit
MSD=Matrix Spike Duplicate
MB=Method Blank
CCV=Continuing Calibration Verification
%Rec=Percent Recovery
RL=Regulatory Limit

Signature: _____
John Keller, Ph.D. / Laboratory Director

March 31, 2009

EPAHO104000874

CHAIN OF CUSTODY & ANALYSIS REQUEST

Page 1 of 1

MERCURY ENVIRON LABORATORIES, LLC.
6913 Hwy. 225, Deer Park, TX 77536
(281) 476-4534 / (800) 771-4637
Fax: (281) 476-4406 / After Hours: (281) 844-2309
e-mail: meserv@aol.com

Results To:	Invoice To:
Kevin White	Fred Blankenship
Company: Select Environ	Company:
Address: 223 McCarty Dr.	Address:
City: Hou State: TX Zip: 77025	City: State: Zip:
Phone: 713-675-7378	Phone:
Fax:	Fax:
e-Mail:	e-Mail:

TAT - WORKING DAYS: 7 | 3 | 2 | 1 | ASAP (7 circled)

Matrix Key: W:Water WW:Waste Water S:Solid SO:Soil O:Oil SL:Sludge SE:Sediment WI:Wipe O:Oil OR:Organic OT:Other

Container Type Key: P:Plastic G:Glass V:VOA O:Other

Preservation Key: 1:Ice(<6oC) 2:HCl 3:H2SO4 4:HNO3 5:NaOH 6:NaOH+Zn Acetate 7:Na2S2O3 8:NONE

NOTES:

Project Name: MACsteel #1

Project Location: Houston

Project No:

PO#: Quote#:

MEL USE ONLY (LAB NO.)	YOUR SAMPLE ID.	DATE/TIME SAMPLED	[1] MATRIX	GRAB/COMP	[2] Container Type:	Container ID:	[3] Preservation:	Volume:	PARAMETERS FOR ANALYSIS: BTEX	TPH	Leachable Metals	PCT
9030071	1) metal Dust	3-5-09	SO	Grab		A			✓	✓	✓	✓
	2)											
	3)											
	4)											
	5)											
	6)											
	7)											
	8)											
	9)											
	10)											

IF SPECIAL DETECTION LIMITS REQUIRED DETAIL BELOW:

on ice 2°

Relinquished By (Sign): (Sampler)	Print Name:	Company:	Date:	Time:	Received By (Sign):	Print Name:	Company:	Date:	Time:
Kevin White	Kevin White	Select Env.	3-5-09	3:57	Ronda Hargrave		MEL	3-5-09	3:57 pm
Relinquished By (Sign):	Print Name:	Company:	Date:	Time:	Received By (Sign):	Print Name:	Company:	Date:	Time:
Relinquished By (Sign):	Print Name:	Company:	Date:	Time:	Received By (Sign):	Print Name:	Company:	Date:	Time:

Note: Delivery of samples constitutes acceptance of terms and conditions in the Price Schedule.

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EPAHO10400875

3255
IDM

EPAHO104000876

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/31/2009**

Dear **Zac or Dave**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3255

Expiration Date 3/31/2011

Generator: IDM
Address: 11616 Galayda
Houston, TX 77086

Waste Information

Name of Waste: Dirt contaminated with oil
TCEQ Waste Code #: CESQ4891
Container Type:
Detailed Description of Process Generating Waste:
punctured, used, or overpacked drums containing oil contaminated dirt from operations
Color: dark **Odor:** hydrocarbon **pH:** 8-9.5
Physical State:
Incompatibilities: oxidizers
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

15

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company:	IDM				
Address:	11616 GALAYDA				
City:	HOUSTON	**State:**	TX	**Zip:**	77086
Contact:	WILLIAM CORDOBA		**Title:**	SAFETY COORDINATOR	
Phone Number:	281-447-9000		**Fax Number:**	281-931-0499	
24/hr Phone Number:	281-702-1145				
US EPA ID No:	TXCESQG				
State ID No:	CESQG		**SIC Code:**		

SECTION 2: Billing Information - ☐ **Same as Above**

Company:	CKG SERVICES, LLC				
Address:	10707 HONEA EGYPT ROAD				
City:	MONTGOMERY	**State:**	TX	**Zip:**	77316
Contact:	ZAC MCKAUGHAN		**Title:**	PRESIDENT	
Phone Number:	281-541-4829		**Fax Number:**	936-756-1226	

SECTION 3: General Description of the Waste

Name of Waste: Floor/dirt drum
Detailed Description of Process Generating Waste: PUNCTURED DRUM/UNUSED/OVERPACK

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Dark **Odor:** n/A

Specific Gravity (water=1): 1.110-1.125 **Density:** 1.8 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☑ One-Time

Quantity: 1

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please fill out the UHC Form

If "Yes", Is It: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: CESQ 4897

Proper US DOT Shipping Name: NON HAZ/NON DOT/NON RCRA
Class: _____ UN/NA: _____ PG: _____ RQ: _____

Flash Point		pH		Reactive Sulfides	Reactive Cyanides		Solids	
		8.0-9.5		mg/l		mg/l		%
Oil & Grease		TOC		Zinc	Copper		Nickel	
	mg/l		mg/l	mg/l		mg/l		mg/l

SECTION 4: *Physical and Chemical Data*

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	
Kitty Litter	40 | 50	c/u
Dirt	40 | 50	c/u
Oil	10	c/u

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

NA

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

MSDA

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None Known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	0
TCLP Volatiles:	0
TCLP Semi-Volatiles:	0
Reactivity:	0
Corrosivity:	0
Ignitability:	0

SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3-30-09

Printed Name/Title: ZAC MCKAUGHAN/PRESIDENT

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____

Date: 3-30-09 ☒ Approved ☐ Rejected

Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$40/drum

2. Contamination Limit (maximum limit before surchages apply):

No Free liquids

3. Surcharge Pricing:

None

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Class 1 solids

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

MATERIAL SAFETY DATA SHEET

Star brite
50/50 Pre-Diluted
150,000 Mile Anti-freeze

(b) (4)

[redacted]

EPAHO104000883

(b) (4)

[redacted]

EPAHO104000884

(b) (4)

[redacted]

EPAHO104000885

(b) (4)

[redacted]

EPAHO104000886

(b) (4)

[redacted]

EPAHO104000887

(b) (4)

[redacted]

LABORATORY ANALYSIS REPORT

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281-367-0065 Fax: 281-367-6772

Report Date: March 27, 2009

KAP Lab Episode No: 3322

Customer Project Information/Analytical Requirements			
Client Project Name:	IDM Galayda Houston, TX	***Client Project Number:***	----

Reported To:

CKG Services, LLC.
10707 Honea Egypt Rd.
Montgomery, TX 77316
936-483-3662

Project Manager: Zac McKaughn
E-Mail Address: zacm@ckg-services.com

KAP TECHNOLOGIES, Inc. has analyzed the following samples as indicated on the attached Chain-of-Custody:

	Client Sample Identification	Matrix	Sampling Date	Sampling Time	KAP Lab ID:	Analysis
1	Floor/Dirt Drum	Soil	3/24/09	13:50	3322-01	BTEX, TCLP Metals, TPH
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Analytical Report Approved by: M. A. Bellows

Meagan A. Bellows
QA Manager

EPAHO104000889

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands, TX 77380
Ph: 281.367.0065 Fax: 281.367.6772

Report Date: 03/27/2009

Laboratory Term and Qualifier Definitions

c/100mL	Colonies per 100mL of sample	ND	Analyte not detected at or above the reporting limit.
Conc.	Concentration	ppm	parts per million
DF	Dilution Factor	QC	Quality Control
LCS	Laboratory Control Sample	Reg Limit	Regulatory Limit
LCSD	Laboratory Control Sample Duplicate	Rpt Limit	Reporting Limit
MDL	Method Detection Limit	RPD	Relative Percent Difference
MQL	Method Quantitation Limit	SQL	Sample Quantitation Limit (Reflects any adjustments made during analysis such as dry weight or dilution.)
MS	Matrix Spike		
MSD	Matrix Spike Duplicate	TNTC	Too numerous to count

QUALIFIERS

C	Sample analysis was sub-contracted to a certified laboratory.
D	Elevated reporting limit due to dilution. Dilution resulted from sample matrix interference or high target analytes or both.
E	Estimated result due to insufficient sample for additional dilution.
H	Sample analyzed outside the EPA recommended holding time for the requested analysis.
I	Estimated result due to % RSD or correlation coefficient outside the QC limits in the initial calibration.
J	Result is between the MDL and the reporting limit.
L	LCS or LCSD recovery is outside the QC limits.
M	MS or MSD recovery is outside the QC limits.
R	Percent RPD is outside the QC limits
S	Surrogate recovery is outside the QC limits. Sample results were confirmed by re-analysis.
U	Analyte not detected above the MDL

EPAHO104000890

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX, 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
BTEX/MtBE - SW846/8260B

BTEX/MtBE by GC/MS-8260B

CLIENT NAME	:CKG Services LLC	CLIENT SAMPLE ID	:Floor/Dirt Drum
PROJECT MANAGER	:Zac McKaughn	LAB SAMPLE ID	:3822.01
PROJECT NAME	:IDM	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	:03/24/2009
METHOD REFERENCE	:SW846-8260B	DATE RECEIVED	:03/24/2009
INSTRUMENT ID	:G5973	DATE ANALYZED	:03/27/2009
INSTRUMENT FILE	:G00405	TIME ANALYZED	:03:29
PURGE AMOUNT	:5 g	ANALYST	:SB
DILUTION FACTOR	:1		

Analyte	Units	Quantitation Limit	Results	Qualifier
Methyl tert-Butyl Ether	ug/Kg	5.0	ND	
Benzene	ug/Kg	5.0	ND	
Toluene	ug/Kg	5.0	ND	
Ethyl Benzene	ug/Kg	5.0	ND	
Xylenes, Total	ug/Kg	15.0	ND	

QUALITY CONTROL DATA

Surrogate Compound	Spike Added	% Recovery	QC Limits	Qualifier
Dibromofluoromethane	50 ug/Kg	111	56 - 153	
1,2-Dichloroethane-d4	50 ug/Kg	119	64 - 130	
Toluene-d8	50 ug/Kg	122	68 - 124	
4-Bromofluorobenzene	50 ug/Kg	80	70 - 137	

EPAHO104000891

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
TCLP Metals 6010B/7470

TCLP Metals by EPA Method 6010B/7470

CLIENT NAME	:CKG Services LLC	CLIENT SAMPLE ID	:Floor/Dirt Drum
PROJECT MANAGER	:Zac McKaughn	LAB SAMPLE ID	:3322.01
PROJECT NAME	:IDM	SAMPLE MATRIX	:TCLP Extract
PROJECT NUMBER	: —	ANALYST	:RA
METHOD REFERENCE	:SW846-6010B, 7470	DATE SAMPLED	:03/24/2009
		DATE RECEIVED	:03/24/2009

Analyte	Date Prepared	Date Analyzed	DF	Quantitation Limit	Results	Units	Qualifier
Antimony	3/27/09	3/27/09	1	0.50	ND	mg/L	
Arsenic	3/27/09	3/27/09	1	0.50	ND	mg/L	
Barium	3/27/09	3/27/09	1	10.0	**10.7**	mg/L	D
Beryllium	3/27/09	3/27/09	1	0.25	ND	mg/L	
Cadmium	3/27/09	3/27/09	1	0.05	ND	mg/L	
Chromium	3/27/09	3/27/09	1	0.25	**0.397**	mg/L	
Lead	3/27/09	3/27/09	1	0.25	ND	mg/L	
Mercury	3/27/09	3/27/09	1	0.05	ND	mg/L	
Nickel	3/27/09	3/27/09	1	0.25	ND	mg/L	
Selenium	3/27/09	3/27/09	1	0.25	ND	mg/L	
Silver	3/27/09	3/27/09	1	0.50	ND	mg/L	

EPAHO104000892

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
TPH (TX1006)

TOTAL PETROLEUM HYDROCARBONS (TX1005)

CLIENT NAME	:CKG Services LLC	CLIENT SAMPLE ID	:Floor/Dirt Drum
PROJECT MANAGER	:Zac McKaughn	LAB SAMPLE ID	:3922.01
PROJECT NAME	:IDM	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	:03/24/2009
METHOD REFERENCE	:TX1005	DATE RECEIVED	:03/24/2009
INSTRUMENT ID	:A5890	DATE ANALYZED	:03/25/2009
INSTRUMENT FILE	:A10184	TIME ANALYZED	:10:01
EXTRACTION AMOUNT	:10 g	ANALYST	:SK
DILUTION FACTOR	:1, 20		

Hydrocarbon Range	Units	Quantitation Limit	Results	Qualifier
C_6 - C_{12}	mg/Kg	20.0	22.1	
>C_{12} - C_{28}	mg/Kg	400	14,100	D
>C_{28} - C_{35}	mg/Kg	1000	46,700	D

QUALITY CONTROL DATA

Surrogate Compounds	Spike Added	% Recovery	QC Limits	Qualifier
1-Chlorooctane	250 mg/Kg	97	70-130	
O-Terphenyl	250 mg/Kg	91	70-130	

EPAHO104000893

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX 77380
Ph: 281.367.0065 Fax: 281.367.5772

Laboratory Analysis Report
Quality Control Data - Soil Blank
BTEX/MtBE - SW846/8260B

BTEX/MtBE by GC/MS-8260B			
CLIENT NAME	: ---	CLIENT SAMPLE ID	: ---
PROJECT MANAGER	: ---	LAB SAMPLE ID	:VBLK46
PROJECT NAME	: ---	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	: ---
METHOD REFERENCE	:SW846-8260B	DATE RECEIVED	: ---
INSTRUMENT ID	:G5973	DATE ANALYZED	:03/27/2009
INSTRUMENT FILE	:G00401	TIME ANALYZED	:01:10
PURGE AMOUNT	:5 g	ANALYST	:SB
DILUTION FACTOR	: 1		

Analyte	Units	Quantitation Limit	Results	Qualifier
Methyl tert-Butyl Ether	ug/Kg	5.0	ND	
Benzene	ug/Kg	5.0	ND	
Toluene	ug/Kg	5.0	ND	
Ethyl Benzene	ug/Kg	5.0	ND	
Xylenes, Total	ug/Kg	15.0	ND	

QUALITY CONTROL DATA				
Surrogate Compound	Spike Added	% Recovery	QC Limits	Qualifier
Dibromofluoromethane	50 ug/Kg	90	56 - 153	
1,2-Dichloroethane-d4	50 ug/Kg	93	64 - 130	
Toluene-d8	50 ug/Kg	102	68 - 124	
4-Bromofluorobenzene	50 ug/Kg	98	70 - 137	

EPAHO104000894

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A2
The Woodlands TX. 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data - Soil LCS
BTEX/MtBE - SW846/8260B

BTEX/MtBE by GC/MS 8260B			
CLIENT NAME	: ---	CLIENT SAMPLE ID	: ---
PROJECT MANAGER	: ---	LAB SAMPLE ID	:VLCS46
PROJECT NAME	: ---	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: ---	DATE SAMPLED	: ---
METHOD REFERENCE	:SW846-8260B	DATE RECEIVED	: ---
INSTRUMENT ID	:G5973	DATE ANALYZED	:03/27/2009
INSTRUMENT FILE	:G00402	TIME ANALYZED	:01:42
PURGE AMOUNT	:5 g	ANALYST	:SB
DILUTION FACTOR	:1		

Analyte	Units	LCS True Value	LCS Found Value	LCS %Recovery	QC Limits LCS/D	Qualifier
Methyl tert-Butyl Ether	ug/Kg	50	48.7	97	63 - 138	
Benzene	ug/Kg	50	46.5	93	69 - 130	
Toluene	ug/Kg	50	46.7	93	69 - 132	
Ethyl Benzene	ug/Kg	50	47.4	95	69 - 130	
Xylenes, Total	ug/Kg	150	139	93	70 - 131	

QUALITY CONTROL DATA				
Surrogate Compound	Spike Added	% Recovery	QC Limits	Qualifier
Dibromofluoromethane	50 ug/Kg	89	58 - 153	
1,2-Dichloroethane-d4	50 ug/Kg	88	64 - 130	
Toluene-d8	50 ug/Kg	89	68 - 124	
4-Bromofluorobenzene	50 ug/Kg	88	70 - 137	

EPAHO104000895

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data - TCLP Blank
TCLP Metals 6010B/7470

TCLP Metals by EPA Method 6010B/7470

CLIENT NAME	: —	CLIENT SAMPLE ID	: —
PROJECT MANAGER	: —	LAB SAMPLE ID	:MBLK032709
PROJECT NAME	: —	SAMPLE MATRIX	:TCLP Extract
PROJECT NUMBER	: —	ANALYST	:RA
METHOD REFERENCE	:SW846-6010B, 7470	DATE SAMPLED	: —
		DATE RECEIVED	: —

Analyte	Date Prepared	Date Analyzed	DF	Quantitation Limit	Results	Units	Qualifier
Antimony	3/27/09	3/27/09	1	0.50	ND	mg/L	
Arsenic	3/27/09	3/27/09	1	0.50	ND	mg/L	
Barium	3/27/09	3/27/09	1	1.00	ND	mg/L	
Beryllium	3/27/09	3/27/09	1	0.25	ND	mg/L	
Cadmium	3/27/09	3/27/09	1	0.05	ND	mg/L	
Chromium	3/27/09	3/27/09	1	0.25	ND	mg/L	
Lead	3/27/09	3/27/09	1	0.25	ND	mg/L	
Mercury	3/27/09	3/27/09	1	0.05	ND	mg/L	
Nickel	3/27/09	3/27/09	1	0.25	ND	mg/L	
Selenium	3/27/09	3/27/09	1	0.25	ND	mg/L	
Silver	3/27/09	3/27/09	1	0.50	ND	mg/L	

EPAHO104000896

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data - TCLP LCS/D
TCLP Metals 6010B/7470

TCLP Metals by EPA Method 6010B/7470

CLIENT NAME	: —	CLIENT SAMPLE ID	: —
PROJECT MANAGER	: —	LAB SAMPLE ID	:MLCS032709/MLCSD032709
PROJECT NAME	: —	SAMPLE MATRIX	:TCLP Extract
PROJECT NUMBER	: —	ANALYST	:RA
METHOD REFERENCE	:SW846-6010B, 7470	DATE SAMPLED	: —
		DATE RECEIVED	: —
		DATE ANALYZED	:03/27/2009

Analyte	Units	LCS True Value	LCS Found Value	LCSD Found Value	LCS %Rec	LCSD %Rec	QC Limits LCS/D	RPD %	RPD QC Limits	Qualifier
Antimony	mg/L	1.00	0.878	0.860	88	86	75 - 125	2.1	25	
Arsenic	mg/L	1.00	0.925	0.897	92	90	75 - 125	3.0	25	
Barium	mg/L	1.00	0.917	0.899	92	90	75 - 125	1.9	25	
Beryllium	mg/L	1.00	0.943	0.923	94	92	75 - 125	2.2	25	
Cadmium	mg/L	1.00	0.943	0.920	94	92	75 - 125	2.4	25	
Chromium	mg/L	1.00	0.957	0.919	96	92	75 - 125	4.1	25	
Lead	mg/L	1.00	0.956	0.922	96	92	75 - 125	3.6	25	
Mercury	mg/L	0.005	0.0054	0.0057	109	114	75 - 125	4.9	25	
Nickel	mg/L	1.00	0.980	0.986	98	99	75 - 125	0.6	25	
Selenium	mg/L	1.00	0.920	0.918	92	92	75 - 125	0.2	25	
Silver	mg/L	0.50	0.522	0.463	104	93	75 - 125	12	25	

EPAHO104000897

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX. 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data - Soil Blank
TPH (TX1005)

TOTAL PETROLEUM HYDROCARBONS (TX1005)			
CLIENT NAME	: —	CLIENT SAMPLE ID	: —
PROJECT MANAGER	: —	LAB SAMPLE ID	:TPHBLK37
PROJECT NAME	: —	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: —	DATE SAMPLED	: —
METHOD REFERENCE	:TX1005	DATE RECEIVED	: —
INSTRUMENT ID	:A5890	DATE ANALYZED	:03/24/2009
INSTRUMENT FILE	:A10164	TIME ANALYZED	:19:02
EXTRACTION AMOUNT	:10 g	ANALYST	:SK
DILUTION FACTOR	:1		

Hydrocarbon Range	Units	Quantitation Limit	Results	Qualifier
C_6 - C_{12}	mg/Kg	20.0	ND	
>C_{12} - C_{28}	mg/Kg	20.0	ND	
>C_{28} - C_{35}	mg/Kg	50.0	ND	

QUALITY CONTROL DATA				
Surrogate Compounds	Spike Added	% Recovery	QC Limits	Qualifier
1-Chlorooctane	250 mg/Kg	97	70-130	
O-Terphenyl	250 mg/Kg	99	70-130	

EPAHO104000898

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A-2
The Woodlands TX 77380
Ph: 281.367.0065 Fax: 281.367.6772

Laboratory Analysis Report
Quality Control Data - Soil LCS/D
TPH(TX1005)

TOTAL PETROLEUM HYDROCARBONS (TX1005)			
CLIENT NAME	: —	CLIENT SAMPLE ID	: —
PROJECT MANAGER	: —	LAB SAMPLE ID	:TPHLCS37
PROJECT NAME	: —	SAMPLE MATRIX	:Soil
PROJECT NUMBER	: —	DATE SAMPLED	: —
METHOD REFERENCE	:TX1005	DATE RECEIVED	: —
INSTRUMENT ID	:A5890	DATE ANALYZED	:03/24/2009
INSTRUMENT FILE	:A10165	TIME ANALYZED	:19:48
EXTRACTION AMOUNT	:10 g	ANALYST	:SK
DILUTION FACTOR	:1		

Hydrocarbon Range	Units	LCS True Value	LCS Found Value	LCSD Found Value	LCS %Recovery	LCSD %Recovery	QC Limits LCS/D	RPD %	Qualifier
C_6 - C_{12}	mg/Kg	250	229	---	92	---	75-125	---	
>C_{12} - C_{28}	mg/Kg	250	237	---	95	---	75-125	---	
>C_{28} - C_{35}	mg/Kg	500	441	---	88	---	75-125	---	

QUALITY CONTROL DATA				
Surrogate Compounds	Spike Added	% Recovery	QC Limits	Qualifier
1-Chlorooctane	250 mg/Kg	98	70-130	
O-Terphenyl	250 mg/Kg	100	70-130	

EPAHO104000899

SAMPLE RECEIPT LOG RECORD

KAP Technologies, Inc.

KAP Lab Episode Number	Date Rec.	Time Rec.	Client/Customer	Project Name	Project N...
3322	3.24.2009	2:30	CKG Services	IDM Gatwyda Houston, TX	—

Samples Delivered By:	KAP Staff (Client) FedEX/UPS LoneStar Other	Total Number of Coolers:	NA
Temperature/On Ice: Cooler (1) NA (2)___ (3)___ (4)___ (5)___		Cooler(s) Received with Custody Seal:	Yes___ NO ✓ See Comments
Sample(s) Received with Chain-of Custody--Dated & Signed:	Yes ✓ NO___ See Comments	Sample Container(s) Received Intact:	Yes ✓ NO___ See Comments

1	Matrix Received: ___Water 1 Soil ___ Sludge ___ Liquid? ___Vapor ___ Other:___	
2	Sample(s) were received in appropriate container(s)	Yes ✓ NO___ See Comments
3	All sample(s) were tagged & labeled	Yes ✓ NO___ See Comments
4	Sample(s) ID labels match C-O-C ID's	Yes ✓ NO___ See Comments
5	Bottle count on C-O-C matches bottles received	Yes ✓ NO___ See Comm
6	Sample volume received meets KAP Technologies Guideline for analyses requested	Yes ✓ NO___ See Comments
7	Sample(s) were received with-in the required holding time(s)	Yes ✓ NO___ See Comments
8	VOA vials completely filled. (list any bubbles in comment section)	Yes ✓ NO___ See Comments
	Sample(s) Accepted by KAP TECHNOLOGIES, Inc.	Yes ✓ NO___ See Comments

Comments:

Checked In By/Date: Nicole Hogue 03-24-09

LIMS Log-In By/Date: _____

Action taken by KAP to Comments: By:_____ Date:_____

EPAHO104000900

KAP TECHNOLOGIES, Inc.
9391 Grogans Mill Rd., Suite A2 The Woodlands, TX 77380

Chain-of-Custody Record
Ph:281.367.0065 FX:281.367.6772

3322

Chain-of Custody (COC Pg.) 1 of 1

CkG Services LLC
7420 Honca Egypt
Montgomery TX 77316

Project Number:
Site Name: IDM Gabayda Houston TX
Project PO#:
Sampled By: Zac McKaugh

TAT Time: ☐ Standard Non-Rush ☐ RUSH
Report Needed By: 3/27/09

Project Manager: Zac McKaugh
PH: 281-541-4826 FAX: 936-756-1229

E-Mail Report To:
1 Zacm@CkG-Services.com
2
3

Remarks: IDM Dirt/Floor Dry with Hydrocarbons

							BTEX and/or MTBE	VOCs - M8260	TPH (TX1005)	Metals RCRA-8	Metals RCRA-8+3	PAHs-8270SIM	SVOCs - M8270					COMMENTS	KAP LAB Sample ID:
1	Floor/Dirt Drum	3/24	1:50		✓	1	✓		✓		✓								8 pm 3322.01
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by:	Date: 3/24	Time: 2:39	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:			

☐ Laboratory Pick-up ☐ OTC-Delivery From Client ☐ FedEX/UPS/LoneStar ☐ OTHER

Nicole Hogue 3-24-09 2:30

PROBLEMS WITH SAMPLE SET; Refer to Sample Receipt Log record for Details: ☐

White Yellow - Laboratory Copies
Pink - Client Copy

EPAHO104000901

3257
GATX

EPAHO104000902

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/1/2009**

Dear **Tom Perez**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3257

Expiration Date 4/1/2011

Generator: GATX Rail , Inc. (La Porte)
Address: 9400 Strang Road
La Porte, TX 77571

Waste Information

Name of Waste: Class C Fly Ash
TCEQ Waste Code #: product
Container Type: supersack
Detailed Description of Process Generating Waste:
removal of heel prior to cleaning RCRA empty containers
Color: grayish white **Odor:** none **pH:** na
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM
Product

CES Environmental Services, Inc.

☒ CES Environmental Services – Houston Facility
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

☒ CES Environmental Services – Port Arthur Facility
2420 S. Gulfway Drive, Port Arthur, TX 77641
Phone: (713) 676-1460 Fax: (713) 676-1676
U.S. EPA ID No: TXR000079307 ISWR No: 88585

SECTION 1: Material Producer Information

Company:	GATX Rail , Inc. (La Porte)		
Address:	9400 Strang Road		
City, State, Zip:	La Porte, TX 77571		
Contact:	Tom Perez	**Title:**	Field Foreman
Phone No:	832-978-1893	**Fax No:**	1-312-499-7458
24/hr Phone:	832-978-1893		
U.S. EPA I.D. No:	TXCESQG		
State I.D.	CESQG	**SIC Code:**	4789

SECTION 2: Billing Information – ☐ Same as Above

Company:	GATX		
Address:	222 w. Monroe		
City, State, Zip:	Chicago Ill. 60606		
Contact:	Tom Perez	**Title:**	Field Foreman
Phone No:	832-978-1893	**Fax No:**	1312-499-7458

SECTION 3: General Description of the Material / Product

Name of Material / Product: Class C Fly Ash
Detailed Description of Process Generating or Producing the Material / Product: removal of heel prior to cleaning RCRA empty rail cars

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☒ Solid ☐ Filter Cake ☐ Combination

Color: grayish white **Odor:** none

Specific Gravity (water=1): 2.3-2.7 **Density:** 19.18-22.5

Does this material contain any total phenolic compounds? ☐ Yes ☒ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☒ No

Layers: ☒ Single-phase ☐ Multi-phase

Container Type:	☐	**Drum**	☒	**Tote**	☐	**Truck**	☐ **Other (explain)**
Container Size:		____		supersack		____	____

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☒ Yearly
Number of Units (containers): 5 **Other:** ____

Proper U.S. DOT Shipping Name: Product Non RCRA Non DOT regulated solids

Class: NA **UN/NA:** NA **PG:** NA **RQ:** NA

EPAHO104000904

Flash Point NA	**pH** NA	**N/A**	N/A	**Solids** 100%
Oil&Grease NAmg/l	**TOC** NAmg/l	**Zinc** NAmg/l	**Copper** NAmg/l	**Nickel** NAmg/l

SECTION 4: Physical and Chemical Data

The material / product consists of the following materials	**Ranges are acceptable**	**or %**
Class C Fly Ash	100	%

SECTION 5: Safety Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None known

SECTION 8: Material Producer's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/31/09

Printed Name/Title: Tom Perez Field Foreman

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Technical Manager: _____ Date: 3-31-09 (Approved) Rejected Approval Number: HOU-3257	

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

Trans: $70.00/hour, Recycling of fly ash - no charge, sale of supersack w/ cut top tote - $45.00

2. **Contamination Limits (maximum limit before surcharges apply):**

NA

3. **Surcharge Pricing:**

NA

4. **Special Testing Requirements:**

NA

5. **Treatment and Handling Protocol:**

For use in warehouse

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104000906

7. **Tests for Product Recovered/Recycled (if applicable):**

NA

8. **Management for Product Recovered/Recycled (if applicable):**

NA

Mineral Resource Technologies, Inc.

A CEMEX COMPANY

Material Safety Data Sheet
[OSHA 29 CFR 1910.1200]

Mineral Resource Technologies, Inc.
2700 Research Forest Drive, Suite 150
The Woodlands, Texas 77381

Emergency Telephone Number
(281) 362-1060

Information telephone Number
(800) 615-1100

Date of Initial Preparation: April, 2001
Last Updated: January, 2008

SECTION I: PRODUCT IDENTIFICATION

MRT™Product Name

CLASS C FLY ASH

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Fly ash composition is variable depending on coal source and power plant characteristics.
Fly ash has a respirable particle size distribution.

Hazardous Components	CAS No.	PEL (OSHA) mg/M³	TLV (ACGIH) mg/M³	Typical% (Varies)
Silica – crystalline, as quartz	14808-60-7	0.2 mg/m³ %SiO2 + 2	0.1 mg/m3 ---	1 - 5
Total Dust Fraction		10 mg/m³ %SiO2 + 2		3 - 9
Silica (Amorphous) Total Dust Fraction	60676-86-0	80 Mg/m³ %SiO2	10 mg/m3	
Alumina (Respirable)		5mg/m³	5mg/m³	10-35
Aluminum Oxide	1344-28-1	None	10 mg/m3	19
Calcium Oxide	1305-78-8	5 mg/m3	2 mg/m3	0.5-32
Iron Oxide	1307-37-1	10 mg/m3	5 mg/m3	3-24
Magnesium Oxide	1309-48-5	15 mg/m3	10 mg/m3	0.5-8

Materials present at less than 12% and greater than 0.5%, and not listed in OSHA of ACGIH include Potassium Oxide, Sodium Oxide, Sulfur Trioxide, and Carbon.

MINERAL RESOURCE TECHNOLOGIES SAFETY DATA SHEET
Product Type: MRT® Fly Ash

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point F: > 1400° C
pH: N/A
Solubility in Water: N/A
Specific Gravity: 2.3 to 2.7
Appearance and Odor: Grayish white or tan powder; indistinctive odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Test Method): N/A
Flammable Limits in Air Percent by Volume: Lower: N/A Upper: N/A
Extinguishing Media: N/A
Special Fire Fighting: N/A
Unusual and Explosion Hazards: None

SECTION V - REACTIVITY DATA

Stability: Stable
Incompatibility (Materials to Avoid): None known.
Hazardous Decomposition or Byproducts: None known.
Hazardous Polymerization: Will Not Occur
Conditions to Avoid: None known.

SECTION VI - HEALTH HAZARD DATA

Effects of Overexposure: Acute - Irritation of eyes, skin and mucous membranes.
Chronic - Fibrotic diseases of the lungs and potential carcinogenicity.

Emergency and First Aid Procedures:
Skin: Wash with mild soap and water.
Ingestion: Keep warm, at rest, and drink large amounts of water. See Physician.
Eyes: Flush with flowing water for 15 minutes. See Physician.
Inhalation: Move to fresh air.

Medical Conditions Aggravated by Exposure: Persons with history of respiratory illness and reduced pulmonary function should avoid work places with high dust levels. Persons with skin disorders may experience aggravation of the condition.

Chronic Exposure: Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. Fly ash contains a small percentage of respirable crystalline silica. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.

Carcinogenicity Listings:

NTP:	Probable carcinogen
OSHA:	Not listed as a carcinogen
IARC Monographs:	Group 1 Carcinogen
California Proposition 65:	Known carcinogen

NTP: The national Toxicology Program, in its sixth Annual Report on Carcinogens concluded that "silica, crystalline (respirable)" may reasonably be anticipated to be a carcinogen, based on sufficient evidence in experimental animals and limited evidence in humans.

IARC: The International Agency for Research on Cancer ("IARC") concluded that there was "*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1)." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, "Silica, Some Silicates..." (1997)

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken if Materials Released or Spilled: Clean up material for use or disposal. Dampen with a water mist to control dust (airborne dust) before removal. Do not use compressed air. If loaded on trucks, wet down ash to prevent dusting during transport.

Waste Disposal Method: The packaging and material may be land filled; however, material should be covered to minimize generation of airborne dust. This product is not classified as a hazardous waste under RCRA or CERCLA.

SECTION VIII - CONTROL MEASURES

DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended. Local exhaust can be used, if necessary, to control airborne dust levels.
Ventilation: Local Exhaust: When feasible, use dust collector.
Protective Gloves: Normal work gloves.
Eye Protection: Safety goggles in dusty operations.
Other Protective Equipment: Recommended coveralls in high concentration conditions.

SECTION IX - SPECIAL PRECAUTIONS

Handling and Storage: Store in dry conditions.
Other Precautions: Avoid creating dust and practice good hygiene; wash hands and face prior to eating and drinking.
WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

Information herein is given in good faith as authoritative and valid; however, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein.

3258
SMI Manufacturing

EPAHO104000911

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/1/2009**

Dear **Patrick Sullivan**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3258

Expiration Date 4/1/2011

Generator: SMI Manufacturing
Address: 13312 East Hardy Road
Houston, TX 77039

Waste Information

Name of Waste: Non Hazardous Class I wastes
TCEQ Waste Code #: CESQ2191
Container Type:
Detailed Description of Process Generating Waste:
used/out-of-date materials
Color: varies **Odor:** hydrocarbon **pH:** 5-9
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/mm

OSL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1460	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: SMI Manufacturing
Address: 13312 East Hardy Road
City: Houston **State:** TX **Zip:** 77039
Contact: John Crespo **Title:** Facilities and EHS manager
Phone Number: 713-393-4231 **Fax Number:**
24/hr Phone Number: 281-732-8387
US EPA ID No: TXCESQG
State ID No: CESGQ **SIC Code:** NA

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Non hazardous Class 1 wastes
Detailed Description of Process Generating Waste:

used/out of date materials

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☑ **Solid** ☐ **Filter Cake** ☑ **Combination**

Color: varies **Odor:** hydrocarbon

Specific Gravity (water=1): 1-1.2 **Density:** 8.4 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ **Single-phase** ☑ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Yearly** ☑ **One-Time**
Quantity: 2 drums

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: CESQ2191

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Materail
Class: NA **UN/NA:** NA **PG :** NA **RQ:** NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		5-9		NA	mg/l	NA	mg/l	50	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	NA	mg/l	NA	mg/l	na	mg/l	na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Case Akcela Hy-tran Ultra SSL	0-100	%
Ease-on pipe joint lubricant	0-100	%
USG Sheetrock Select All Purpose Joint Compund Ready	0-100	%
DAP Wallboard Joint Compound	0-100	%
Various used hydraulic oils	0-100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** *based upon the following generator knowledge:*

TCLP Metals:	X
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory:* Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☑ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ Date: MARCH 31-2009

Printed Name/Title: JEFF SARVER/ PROJECT MANAGER

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-31-09 ☑ Approved ☐ Rejected
Approval Number: HOU-3258

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

Disposal - $85.00/drum plus freight

2. Contamination Limit (maximum limit before surchages apply):

None

3. Surcharge Pricing:

None

4. Special Testing Requirements:

None

5. Treatment and Handling Protocol:

Put in class one box - you may need to crush this drum

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

NH

MATERIAL SAFETY DATA SHEET

FL Viscosity Oil Co.

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

CASE AKCELA HY-TRAN ULTRA SSL
CAS Number: Mixture
SYNONYMS: None

Company Information
FL Viscosity Oil Company
600-H Joliet Road
Willowbrook, IL 60527

Transportation Emergency Response
CHEMTREC (800) 424-9300

Product Information
MSDS Requests: (630) 850-4000 Website: www.viscosityoil.com
Product Information: (630) 850-4000 Website: www.viscosityoil.com

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

Components	Hazardous (Y/N)	CAS Number	Amount
Base lubricating oils	No	Mixture	10-20%%
Synthetic Hydrocarbon base oils	No	Mixture	65-75%
Calcium petroleum sulfonate	Yes	61789-86-4	1-10%
Phosphate ester	No	Mixture	<2%

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

- MAY CAUSE EYE IRRITATION UPON DIRECT CONTACT
- MAY CAUSE SKIN IRRITATION UPON DIRECT CONTACT
- MAY CAUSE AN ALLERGIC SKIN REACTION

IMMEDIATE HEALTH EFFECTS

Eye contact: This product is practically non-irritating to the eyes upon direct contact. Based on testing of similar products and/or components.
Skin contact: Avoid skin contact. This product may cause an allergic skin reaction upon direct contact. Symptoms may include pain, itching, discoloration, swelling, and blistering. If this material is heated, thermal burns may result from skin contact. Prolonged or repeated contact may result in

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contact dermatitis which is characterized by dryness, chapping, and reddening. This condition may make the skin more susceptible to other irritants, sensitizers, and disease. Prolonged or repeated contact may result in oil acne which is characterized by blackheads with possible secondary infection. Injection of pressurized hydrocarbons under the skin can cause inflammation and swelling, as well as severe, permanent tissue damage. The initial wound at the injection site may not appear to be serious at first, but, if left untreated, could result in disfiguration or amputation of the affected part.
Inhalation: This product has a low vapor pressure and is not expected to present an inhalation hazard at ambient conditions. Caution should be taken to prevent the formation of an aerosol or misting of this product. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.
Ingestion: Do not ingest. Because of its low viscosity, this material can directly enter the lungs, if swallowed, or if subsequently vomited. Once in the lungs, it is very difficult to remove and can cause severe injury or death.

DELAYED OR OTHER HEALTH EFFECTS

Cancer: None of the components in this material are listed as carcinogens by IARC, NTP, ACGIH or OSHA.

Other: On rare occasions, prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as chronic lung inflammation. This condition is usually asymptomatic as a result of repeated small aspirations. Shortness of breath and cough are the most common symptoms.

In accordance with Canadian WHMIS Regulations:
Reproduction and Birth Defects: Contains material that may cause adverse reproductive effects if swallowed based on animal data.

See Section 11 for additional information. Risk depends on duration and level of exposure.

SECTION 4 FIRST AID MEASURES

Eye contact: Immediately flush eyes with large amounts of water and continue flushing until irritation subsides. If material is hot, treat for thermal burns and take victim to hospital immediately.
Skin contact: Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention. If material is hot, submerge injured area in cold water. If victim is severely burned, remove to a hospital immediately. If material is injected under the skin, seek medical attention immediately.
Note to physicians: In an accident involving high-pressure equipment, this type of product may be injected under the skin. Immediate treatment at a surgical emergency center is recommended, no matter how small and insignificant the wound may appear.
Inhalation: This material has a low vapor pressure and is not expected to present an inhalation exposure at ambient conditions.
Ingestion: Do not induce vomiting. Seek medical attention.

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SECTION 5 FIRE FIGHTING MEASURES

FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:-Personal Protective Equipment Index recommendation)

FLAMMABLE PROPERTIES:
Flash point: 400°F (ASTM D-92 Cleveland Open Cup)
Autoignition temperature: No Data
Flammable (Explosive) limits (% by volume in air) Lower: No Data Upper: No Data

Extinguishing Media: Use dry chemical, foam, or carbon dioxide.

Special Fire Fighting Procedures: Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Unusual Fire and Explosive Conditions: Dense smoke may be generated while burning. Carbon monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material. Consult Hazards Identification Information in Section 3, Personal Protection information in Section 8, Fire Fighting Measures in Section 5, and Reactivity data in Section 9.
Spill Management: Consult health effect information in section III, Personal Health Protection information in section V, Fire Protection information in section VI, and Reactivity Data in section VII. Notify appropriate authorities of spill. Contain spill immediately. Do not allow spill to enter sewers or watercourses. Remove all sources of ignition. Absorb with appropriate inert material such as sand, clay, etc. Large spills may be picked up using vacuum pumps, shovels, buckets, or other means and placed in drums or other suitable containers.
Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

SECTION 7 HANDLING AND STORAGE

Do not transfer to unmarked containers. Store in closed containers away from heat, sparks, open flame or oxidizing materials. Fire extinguishers should be kept readily available. See NFPA 30 and OSHA 1910.106--flammable and combustible liquids.

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SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

HMIS RATINGS: Health: 0 Flammability: 1 Physical Hazards: 0 PPE: See note 1.
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:-Personal Protective Equipment Index recommendation)

PERSONAL PROTECTIVE EQUIPMENT

Eye protection: Eye protection is not required under conditions of normal use. If material is handled such that it could be splashed into eyes, wear plastic face shield or splash-proof safety goggles.

Skin protection: Skin protection is not required for single, short duration exposures. Prolonged or repeated exposures, use impervious clothing (boots, gloves, aprons, etc.) Over parts of the body subject to exposure. If handling hot material, use insulated protective clothing (boots, gloves, aprons, etc.). Launder soiled clothes. Properly dispose of contaminated leather articles including shoes, which cannot be decontaminated.

Respiratory Protection: Respiratory protection is not required under conditions of normal use. If vapor or mist is generated when the material is heated or handled, use an organic vapor respirator with a dust and mist filter. All respirators must be NIOSH certified. Do not use compressed oxygen in hydrocarbon atmospheres.

Ventilation: If vapor or mist is generated when the material is heated or handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure or flammable limits.

Other: Consumption of food and beverage should be avoided in work areas where hydrocarbons are present. Always wash hands and face with soap and water before eating, drinking, or smoking.

Occupational Exposure Limits (OSHA)

Component	TWA	STEL
Base Lubricating Oil Mixture	5 mg/m^3	No Data Available
Synthetic Hydrocarbon Base Oils	5 mg/m^3	No Data Available
Calcium Petroleum Sulfonate	No Data Available	No Data Available
Phosphate Ester Mixture	3 mg/m^3	No Data Available

Note 1: Employers must determine appropriate PPE for the actual conditions under which this material is used in their workplace.

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

The data below are typical values and do not constitute a specification.

Boiling point:	No Data
Pour point:	- 50 °F
Percent volatile:	No Data
Vapor density (air=1):	No Data
Appearance:	Dark Amber Liquid
Evaporation rate (ethyl ether=1):	No Data
Odor:	Petroleum Odor
Specific gravity:	0.85
Vapor pressure:	<0.01 mm HG @ 68 °F
Molecular weight:	No Data
Solubility:	Negligible in water

SECTION 10 STABILITY AND REACTIVITY

Stability (thermal, light, etc.):	Stable
Conditions to avoid:	None
Hazardous polymerization:	Will Not Occur
Incompatibility materials to avoid:	May react with strong oxidizing agents
Hazardous decomposition products:	None

SECTION 11 TOXICOLOGICAL INFORMATION

IMMEDIATE HEALTH EFFECTS

Eye Irritation: The eye irritation hazard is based on evaluation of data for similar materials or product components.

Skin Irritation: The skin irritation hazard is based on evaluation of data for similar materials or product components.

Skin Sensitization: The skin sensitization hazard is based on evaluation of data for similar materials or product components.

Oral Toxicity: The oral toxicity hazard is based on evaluation of data for similar materials or product components.

Inhalation Toxicity: The inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

Additional Toxicology Information - in accordance with Canadian WHMIS Regulations:
This product contains triarylphosphates that cause reduction in fertility and adverse effects on reproductive organs in an OECD Guideline 422 gavage study in rats.

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SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity: This material is not expected to be toxic beyond to aquatic organisms. The ecotoxicity hazard is based on evaluation of data for similar materials or product components.

Ready Biodegradability: This material is not expected to be readily biodegradable. The biodegradability of this product is based on evaluation of data for similar materials or product components.

SECTION 13 DISPOSAL CONSIDERATIONS

All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded, may be a regulated waste. Refer to state and local regulations. Caution! If regulated solvents are used to clean up spilled material, the resulting waste mixture may be regulated. Department of Transportation (DOT) regulations may apply for transporting this material when spilled. Waste material may be landfilled or incinerated at an approved facility. Materials should be recycled if possible.

SECTION 14 TRANSPORTATION INFORMATION

The description shown may not apply to all shipping situations. Consult 40CFR, or appropriate Dangerous Goods Regulations, for additional requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

Dot Shipping Description: Not regulated as a hazardous material for transportation.

IMO/IMDG Shipping Description: Not regulated as dangerous goods for transportation under the IMDG code.

SECTION 15 REGULATORY INFORMATION

EPCRA 311/312 CATEGORIES:

Immediate (acute) health effects:	Yes
Delayed (chronic) health effects	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactivity hazard	No

LISTED CHEMICALS:
This product is not known to contain any SARA Title III, section 313 reportable chemicals at or greater than 1.0% (0.1% for carcinogens).

CHEMICAL INVENTORIES:
All components comply with the chemical inventory requirements of TSCA (United States).

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WHMIS CLASSIFICATION:
Class D, Division 2, Subdivision B: Toxic Material – Skin Sensitization
Class D, Division 2, Subdivision A: Toxic Material – Reproductive toxin if ingested.

SECTION 16 OTHER INFORMATION

This mixture may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, FL Viscosity Oil Company must rely upon the hazard evaluation of such components submitted to viscosity oil by that product's manufacturer or importer.

DISCLAIMER OF WARRANTY:

The information contained herein is based upon data available to us, and reflects our best professional judgment. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data, the results to be obtained from the use thereof, or that any such use does not infringe any patent. Since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

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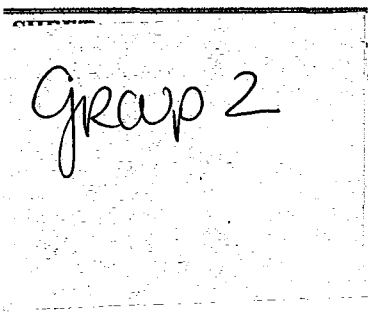
Group 2

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MATERIAL SAFETY DATA SHEET

SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: EASE-ON PIPE JOINT LUBRICANT

SEACORD CORPORATION
1700 FEDERAL STREET
CAMDEN, NJ 08105

Emergency Phone #: 856-966-1526 **Information Phone #:**856-966-1526

SECTION II: HAZARDOUS INGREDIENT INFORMATION

Chemical Name	C.A.S. #	OSHA PEL	ACGIH TLV
Contains no hazardous ingredients			

SECTION III: HAZARDS INDENTIFICATION

Emergency Overview: Non-toxic, basically non-hazardous.
Eye Contact: May cause mild irritation.
Skin Contact: May cause mild irritation to persons sensitive to soap products.
Inhalation: Non-hazardous by inhalation.
Ingestion: Unlikely to occur.

SECTION IV: FIRST AID MEASURES

Note to Physician: Treat as soap irritation
Eyes: Flush with water for 5 minutes, if irritation persists get medical aid.
Skin: Wash with soap and water, if irritation persists get medical aid.
Inhalation: Non-hazardous by inhalation.
Ingestion: Seek immediate medical help.

SECTION V: FIREFIGHTING MEASURES

Flash Point: None
Flammable Limits: N/A
Extinguishing Limits: N/A
Firefighting Procedures: N/A

SECTION VI: ACCIDENTAL RELEASE MEASURES

Directions: Pick up with absorbent material and place in appropriate container for disposal. Material is non-hazardous waste.

SECTION VII: HANDLING AND STORAGE

Storage Temperature: Ambient.
Handling: No special handling or storage procedures required.

SECTION VIII: EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: None required.
Engineering Controls: None required.
Protective Clothing: None required.
Gloves: Recommended to prevent possible dermal irritation.
Safety Glasses: Recommended to prevent possible eye irritation.

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/A
Melting Point: N/A
Flash Point: N/A
Vapor Pressure: N/A
Vapor Density: N/A
Specific Gravity: 1.06
Water Solubility: Appreciable
Physical Form: Paste.

SECTION X: STABILITY AND REACTIVITY

Stability: Stable
Hazardous Polymerization: Will not occur.
Conditions to Avoid: None known.
Materials to Avoid: None.
Hazardous Decomposition or By-Products: None known.

SECTION XI: TOXICOLOGICAL INFORMATION

Product is non-toxic.

SECTION XII: ECOLOGICAL DATA

No data available at this time.

SECTION XIII: DISPOSAL CONSIDERATIONS

In accordance with federal, state, and local regulations.

SECTION XIV: TRANSPORTATION INFORMATION

DOT Regulated: Not regulated.
DOT Shipping Name: N/A

SECTION XV: REGULATORY INFORMATION

OSHA Status: Contains no "hazardous chemicals" as defined by OSHA Hazard Communication Standard, 29CFR, 1910.1200.
TSCA Status: All ingredients listed
CERCLA: Not reportable.
SARA Title III : No reportable ingredients.
Sections 302, 311, 312, 313: No reportable ingredients
RCRA Status: Not regulated

SECTION XVI: OTHER INFORMATION

HMIS		0= Minimal
Health	0	1= Slight
Fire	0	2= Moderate
Reactivity	0	3= Serious
PP	0	4= severe

The above information and recommendations are believed to be accurate and reliable. However, no warranties, either expressed or implied with respect to the product or information herein are made. Users must make their own determination as to the suitability of the product for their purposes prior to use.

02/2006

NA

MATERIAL SAFETY DATA SHEET

SHEETROCK® Select All Purpose Joint Compound Ready Mixed

SECTION 1
CHEMICAL PRODUCT AND IDENTIFICATION

United States Gypsum Company 550 West Adams Street Chicago, Illinois 60661-3637 A Subsidiary of USG Corporation	Product Safety: 1 (800) 507-8899 www.usg.com Version Date: January 1, 2008 Version: 6

PRODUCT(S)	SHEETROCK® Select All Purpose Joint Compound Ready Mixed
CHEMICAL FAMILY / GENERAL CATEGORY	Joint Treatment
SYNONYMS	Joint Compound, Taping Compound, Mud

SECTION 2
HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:
ΔWARNING!
This product is not expected to produce any unusual hazards during normal use. Exposure to high dust levels may irritate the skin, eyes, nose, throat, or upper respiratory tract. Prolonged and repeated breathing of respirable mica dust may cause lung disease (pneumoconiosis).

POTENTIAL HEALTH EFFECTS *(See Section 11 for more information)*

ACUTE :	
Inhalation	Exposure to dust generated during the sanding of the product may irritate eyes, skin, nose, throat, and upper respiratory tract. Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation. Labored breathing may occur after excessive inhalation. If respiratory symptoms persist, consult physician.
Eyes	Dust can cause mechanical irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.
Skin	None known.
Ingestion	None known.
CHRONIC:	
Inhalation	Prolonged and repeated breathing of respirable mica dust may cause lung disease (pneumoconiosis). The extent and severity of lung injury correlates with the length of exposure and dust concentration. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration.
Eyes	None known.
Skin	None known.
Ingestion	None known.

TARGET ORGANS: Eyes, skin and respiratory system.

PRIMARY ROUTES OF ENTRY: Inhalation, eyes and skin contact.

MATERIAL SAFETY DATA SHEET
SHEETROCK® Select All Purpose Joint Compound Ready Mixed

CARCINOGENICITY CLASSIFICATION OF INGREDIENT(S) All substances listed are associated with the nature of the raw materials used in the manufacture of this product and are not independent components of the product formulation. All substances, if present, are at levels well below regulatory limits. See Section 11: Toxicology Information for detailed information.

MATERIAL	IARC	NTP	ACGIH	CAL- 65
Vinyl Acetate Monomer	2B	Not Listed	A3	Not Listed
Acetaldehyde	2B	2	A3	Listed
Formaldehyde	1	2	A2	Listed
Crystalline silica	1	1	A2	Listed

IARC - International Agency for Research on Cancer: 1- Carcinogenic to humans; 2A – Probably carcinogenic to humans; 2B – Possibly carcinogenic to humans; 3 - Not classifiable as a carcinogen; 4 – Probably not a carcinogen

NTP – National Toxicology Program (Health and Human Services Dept., Public Health Service, NIH/NIEHS): 1- Known to be carcinogen; 2- Anticipated to be carcinogens

ACGIH – American Conference of Governmental Industrial Hygienists: A1 – Confirmed human carcinogen; A2 – Suspected human carcinogen; A3 – Animal carcinogen; A4 - Not classifiable as a carcinogen; A5 – Not suspected as a human carcinogen

CAL-65 – California Proposition 65 "Chemicals known to the State of California to Cause Cancer"

Respirable crystalline silica: IARC: Group 1 carcinogen, NTP: Known human carcinogen. The weight percent of crystalline silica given represents total quartz and not the respirable fraction. The weight percent of respirable silica has not been measured in this product.

Food and Drug Administration [CFR Title 21, v.3, sec 184.1409] – Ground limestone is Generally Recognized as Safe (GRAS).

POTENTIAL ENVIRONMENTAL EFFECTS: This product has no known adverse effect on ecology. (See Section 12 for more information)

SECTION 3
COMPOSITION, INFORMATION ON INGREDIENTS

MATERIAL	WT%	CAS #
Limestone	>50	1317-65-3
Water	<40	7732-18-5
Mica	<5	12001-26-2
Vinyl Acetate Polymer	<5	9003-20-7
Or Ethylene Vinyl Acetate Polymer		24937-78-8
Attapulgite	<5	12174-11-7
Crystalline Silica	<2	14808-60-7

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory and the Canadian Domestic Substances List (DSL).

The weight percent for silica represents total quartz and not the respirable fraction.

SECTION 4
FIRST AID MEASURES

FIRST AID PROCEDURES

Inhalation	Remove to fresh air. Leave the area of exposure and remain away until coughing and other symptoms subside. Other measures are usually not necessary, however if conditions warrant, contact physician.

Eyes	In case of contact, do not rub or scratch your eyes. To prevent mechanical irritation, flush thoroughly with water for 15 minutes. If irritation persists, consult physician.
Skin	Wash with mild soap and water. If irritation persists, consult physician.
Ingestion	This product is not intended to be ingested or eaten. If gastric disturbance occurs, call physician.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED: Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

NOTES TO PHYSICIAN: Treatment should be directed at the control of symptoms and the clinical condition.

SECTION 5
FIRE FIGHTING MEASURES

General Fire Hazards	None known
Extinguishing Media	Water or use extinguishing media appropriate for surrounding fire.
Special Fire Fighting Procedures	Wear appropriate personal protective equipment. See section 8.
Unusual Fire/Explosion Hazards	None known
Hazardous Combustion Products	Above 800° C – limestone may decompose to calcium oxide (CaO) and carbon dioxide (CO_2). Above 175° C – polyvinyl acetate may decompose to H_2O, CO_2, CO, and acetic acid, could produce vinyl acetate monomers.

Flash Point	Not Determined	**Auto Ignition**	Not Applicable
Method Used	Not Applicable	**Flammability Classification**	Not Applicable
Upper Flammable Limit (UFL)	Not Determined		
Lower Flammable Limit (LFL)	Not Determined	**Rate of Burning**	Not Applicable

SECTION 6
ACCIDENTAL RELEASE MEASURES

CONTAINMENT: No special precautions. Wear appropriate personal protective equipment. See section 8.

CLEAN-UP: Use normal clean up procedures. No special precautions.

DISPOSAL: Follow all local, state, provincial and federal regulations. Never discharge large releases directly into sewers or surface waters.

SECTION 7
HANDLING AND STORAGE

HANDLING: Avoid dust contact with eyes. Wear the appropriate eye protection against dust (See Section 8). Minimize dust generation and accumulation. Avoid breathing dust. Wear the appropriate respiratory protection against dust in poorly ventilated areas and if TLV is exceeded (see Sections 2 and 8). Use good safety and industrial hygiene practices.

STORAGE: Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities (see Section 10). Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Close container and discard properly. Keep tightly sealed following use.

SECTION 8
EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	WT%	TLV (mg/m^3)	PEL(mg/m^3)
Limestone	>50	10	15(T)/5(R)
Water	<40	(NE)	(NE)
Mica	<5	3(R)	20 mppcf
Vinyl Acetate Polymer	<5	(NE)	(NE)
Or Ethylene Vinyl Acetate Polymer		(NE)	(NE)
Attapulgite	<5	(NE)	(NE)
Crystalline Silica	<2	0.025(R)	0.1(R)

(T)–Total; (R)–Respirable; (NE)-Not Established; (C)-Ceiling; (STEL)-Short-term exposure limit
(F)-Fume; (Du)-Dust; (M)-Mist
ppm-part per million; f/cc-fiber per cubic centimeter; mppcf- million particles per cubic foot

ENGINEERING CONTROLS: Provide ventilation sufficient to control airborne dust levels. If user operations generate airborne dust, use ventilation to keep dust concentrations below permissible exposure limits. Where general ventilation is inadequate, use process enclosures, local exhaust ventilation, or other engineering controls to control dust levels below permissible exposure limits.

RESPIRATORY PROTECTION: Wear a NIOSH/MSHA-approved respirator equipped with particulate cartridges when dusty in poorly ventilated areas, and if TLV is exceeded. A respiratory program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. If engineering controls are not possible, wear a properly fitted NIOSH/MSHA-approved particulate respirator.

OTHER PERSONAL PROTECTIVE EQUIPMENT:

Eye/Face	Wear eye protection, safety glasses or goggles, to avoid possible eye contact.
Skin	Wear gloves and protective clothing to prevent repeated or prolonged skin contact.
General	Selection of Personal Protective Equipment will depend on environmental working conditions and operations.

SECTION 9
PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Off white	**Vapor Density (Air = 1)**	< 1(same as water)
Odor	Low to no odor	**Specific Gravity (H_2O = 1)**	1.3 - 1.7
Odor Threshold	Not Determined	**Solubility in water (g/100g)**	Unlimited dispersibility
Physical State	Paste	**Partition Coefficient**	Not Determined
pH @ 25 ° C	~ 7-8.5	**Auto-ignition Temp**	Not Determined

Melting Point	Not Applicable	**Decomposition Temp**	Not Determined
Freezing Point	32°F/ 0°C	**Viscosity**	Not Determined
Boiling Point	212°F/ 100°C	**Particle Size**	99% Finer than 250 microns
Flash Point	Not Determined	**Bulk Density**	1.3-1.7 kg/L
Evaporation Rate (BuAc = 1)	Not Determined	**Molecular Weight**	Mixture
Upper Flammable Limit (UFL)	Not Determined	**VOC Content**	<2 g/l
Lower Flammable Limit (LFL)	Not Determined	**Percent Volatile**	20-45
Vapor Pressure (mm Hg)	~24 mmHg@ 25°C		

SECTION 10
CHEMICAL STABILITY AND REACTIVITY

STABILITY	Stable.
CONDITIONS TO AVOID	Contact with incompatibles (see below).
INCOMPATIBILITY	None known.
HAZARDOUS POLYMERIZATION	None known.
HAZARDOUS DECOMPOSITION	Above 800° C – limestone may decompose to calcium oxide (CaO) and carbon dioxide (CO_2). Above 175° C – polyvinyl acetate may decompose to H_2O, CO_2, CO, and acetic acid, could produce vinyl acetate monomers.

SECTION 11
TOXICOLOGICAL INFORMATION

ACUTE EFFECTS: None known.

CHRONIC EFFECTS / CARCINOGENICITY:

Vinyl acetate/acetaldehyde/formaldehyde: Ethylene vinyl acetate polymer is a common emulsion polymer most familiar as the component of ordinary white glue which exhibits the "sticky" characteristic. Ethylene vinyl acetate polymer is not classified as a carcinogen by IARC, NTP or ACGIH. Trace amounts of residual vinyl acetate monomers, acetaldehyde and formaldehyde may be associated with the production of ethylene vinyl acetate polymer. Any exposure to vinyl acetate monomer, acetaldehyde, or formaldehyde is expected to remain well below OSHA regulatory and ACGIH recommended limits during normal handling and use of this product.

Mica: Prolonged and repeated breathing of respirable mica dust may cause lung disease (pneumoconiosis). The extent and severity of lung injury correlates with the length of exposure and dust concentration.

Crystalline Silica: Exposures to respirable crystalline silica are not expected during the normal use of this product; however, actual levels must be determined by workplace hygiene testing. The weight percent of respirable crystalline silica may not have been measured in this product. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration.

In June, 1997, IARC classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall

evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.

IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).

SECTION 12
ECOLOGICAL INFORMATION

ENVIRONMENTAL TOXICITY: This product has no known adverse effect on ecology.

Ecotoxicity value	Not determined.

SECTION 13
DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of material in accordance with federal, state, and local regulations. Never *discharge directly into sewers or surface waters. Consult with environmental regulatory agencies for guidance on* acceptable disposal practices.

SECTION 14
TRANSPORT INFORMATION

U.S. DOT INFORMATION: Not a hazardous material per DOT shipping requirements. Not classified or regulated.

Shipping Name	Same as product name.
Hazard Class	Not classified.
UN/NA #	None. Not classified.
Packing Group	None.
Label (s) Required	Not applicable.
GGVSec/MDG-Code	Not classified.
ICAO/IATA-DGR	Not applicable.
RID/ADR	None.
ADNR	None.

SECTION 15
REGULATORY INFORMATION

UNITED STATES REGULATIONS

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory.

MATERIAL	WT%	302	304	313	CERCLA	CAA Sec. 112	RCRA Code
Limestone	>50	NL	NL	NL	NL	NL	NL
Water	<40	NL	NL	NL	NL	NL	NL
Mica	<5	NL	NL	NL	NL	NL	NL
Vinyl Acetate Polymer	<5	NL	NL	NL	NL	NL	NL
Or Ethylene Vinyl Acetate Polymer		NL	NL	NL	NL	NL	NL
Attapulgite	<5	NL	NL	NL	NL	NL	NL
Crystalline Silica	<2	NL	NL	NL	NL	NL	NL

Key : NL = Not Listed

SARA Title III Section 302 (EPCRA) Extremely Hazardous Substances: Threshold Planning Quantity (TPQ)

SARA Title III Section 304 (EPCRA) Extremely Hazardous Substances: Reportable Quantity (RQ)

SARA Title III Section 313 (EPCRA) Toxic Chemicals: X= Subject to reporting under section 313

CERCLA Hazardous Substances: Reportable Quantity (RQ)

CAA Section 112 (r) Regulated Chemicals for Accidental Release Prevention: Threshold Quantities(TQ)

RCRA Hazardous Waste: RCRA hazardous waste code

CANADIAN REGULATIONS

This product has been classified in accordance with the hazard criteria of Controlled Product regulations and the MSDS contains all the information required by the Controlled Products Regulations. All ingredients of this product are included in the Canadian Domestic Substances List (DSL).

MATERIAL	WT%	IDL Item #	WHMIS Classification
Limestone	>50	Not Listed	D2A
Water	<40	Not Listed	Not Listed
Mica	<5	1088	Not Listed
Vinyl Acetate Polymer	<5	Not Listed	Not Listed
Or Ethylene Vinyl Acetate Polymer		Not Listed	Not Listed
Attapulgite	<5	Not Listed	Not Listed
Crystalline Silica	<2	1406	D2A

IDL Item#: Canadian Hazardous Products Act – Ingredient Disclosure List Item #

WHMIS Classification: Workplace Hazardous Material Information System

Risk and Safety Phrases defined by European Union Directive 67/548/EEC (Annex III and IV)

R-Phrase(s): R36/37/38

S-Phrase(s): S51 S38 S39 S2

SECTION 16
OTHER INFORMATION

MATERIAL SAFETY DATA SHEET

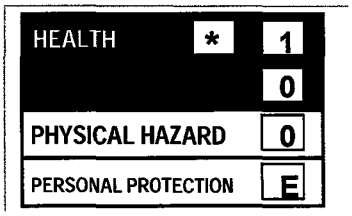
SHEETROCK® Select All Purpose Joint Compound Ready Mixed

Label Information
Δ WARNING! Dust generated from sanding product may cause irritation to eyes, skin, nose, throat and upper respiratory tract. Avoid irritation by reducing exposure to dust. Use wet-sanding to reduce dust created. Use in a well-ventilated area or provide sufficient local ventilation. If dusty, wear a NIOSH/MSHA-approved respirator. Wear eye protection. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call physician. Wash with soap and water after use. Do not ingest. If ingested, call physician. Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Close container and discard properly. Prolonged and repeated breathing of respirable mica dust may cause lung disease (pneumoconiosis). Product safety information: (800) 507-8899 or www.usg.com. KEEP OUT OF REACH OF CHILDREN.

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings:	
Health:	1
Fire:	0
Reactivity:	0

HIMS Ratings:	
Health:	1
Fire:	0
Reactivity:	0



0 = Minimal Hazard
1 = Slight Hazard
2 = Moderate Hazard
3 = Serious Hazard
4 = Severe Hazard

E – Safety glasses, gloves and dust respirator

Key/Legend	
TLV	Threshold Limit Value
PEL	Permissible Exposure Limit
CAS	Chemical Abstracts Service (Registry Number)
NIOSH	National Institute for Occupational Safety and Health
MSHA	Mine Safety and Health Administration
OSHA	Occupational Health and Safety Administration
ACGIH	American Conference of Governmental Industrial Hygienists
IARC	International Agency for Research on Cancer
DOT	United States Department of Transportation
EPA	United States Environmental Protection Agency
NFPA	National Fire Protection Association
HMIS	Hazardous Materials Identification System
PPE	Personal Protection Equipment
TSCA	Toxic Substances Control Act
DSL	Canadian Domestic Substances List
NDSL	Canadian Non-Domestic Substances List
SARA	Superfund Amendments and Reauthorization Act of 1986
CAA	Clean Air Act
EPCRA	Emergency Planning & Community Right-to-know Act
RCRA	Resource Conservation and Recovery Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980

MATERIAL SAFETY DATA SHEET

SHEETROCK® Select All Purpose Joint Compound Ready Mixed

UN/NA#	United Nations/North America number
CFR	Code of Federal Regulations
WHMIS	Workplace Hazardous Material Information System

Prepared by:
Product Safety
USG Corporation
550 West Adams Street
Chicago, IL 60661-3637

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for his/her own particular use.

END

NH

Material Safety Data Sheet

24 Hour Emergency Phone Numbers:
Medical: 1-800-327-3874
1-513-558-5111
Transportation:
1-800-535-5053
1-352-323-3500

•NOTE: National Response Center emergency numbers to be used only •
•in the event of chemical emergencies involving a spill, leak, fire, •
•exposure or accident involving chemicals. •

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this MSDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this MSDS are further described in Section 16.

Section 1 - Chemical Product / Company Information

This Material Safety Data Sheet is available in Canadian French and Hispanic American Spanish upon request.
Esta hoja de datos de la seguridad de los materiales está disponible en francés canadiense y en español a su solicitud.
Los Datos de Serguridad del Producto pueden obtenerse en Espanol si lo riquiere.

Product Name: DAP® Wallboard Joint Compound (RTU)
Product UPC Number: 070798101005 070708101029
Product Use/Class: RTU Spackle/Wallboard Repair
Manufacturer: **DAP Inc.**
2400 Boston Street Suite 200
Baltimore, MD 21224-4723
888-327-8477 (non-emergency matters)

Revision Date: 04/27/2007
Supercedes: 07/28/2003
MSDS Number: 00070288001

Section 2 - Composition / Information On Ingredients

Chemical Name	CASRN	WT%	ACGIH TWA	ACGIH STEL	ACGIH CEIL	OSHA TWA	OSHA STEL	OSHA CEIL	Skin
Calcium carbonate	1317-65-3	40-70	10 MGM3	N.E.	N.E.	5 MGM3 (respirable fraction)	N.E.	N.E.	No
Mica	12001-26-2	1-5	3 MGM3	N.E.	N.E.	5 MGM3	N.E.	N.E.	No
Magnesium aluminum silicate	12174-11-7	1-5	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	No
Silica, crystalline	14808-60-7	0.1-1.0	0.05 MGM3	N.E.	N.E.	10/(%SiO2 + 2) MGM3	N.E.	N.E.	No
Ethylene glycol	107-21-1	0.1-1.0	N.E.	N.E.	100 MGM3	N.E.	N.E.	N.E.	No

Exposure Notes:

14808-60-7 The 2002 ACGIH Threshold Limit Values for Chemical Substances and Physical Agents lists the median Respirable Particulate Mass (RPM) point for crystalline silica at 4.0 microns in terms of the particle's aerodynamic diameter.

The TLVs for crystalline silica represent the respirable fraction.

OSHA PEL TWA for Quartz is calculated using the following formula: 10 mg/m3/(% SiO2 + 2). Both concentration and percent quartz for the application of this limit are to be determined from the fraction passing a size selector with the following characteristics.

..... Aerodynamic diameter (unit density sphere)	Percent passing selector
2	90

2.5	75
3.5	50
5.0	25
10	0

Important: Listed Permissible Exposure Levels (PEL) are from the U.S. Dept. of Labor OSHA Final Rule Limits (CFR 29 1910.1000); these limits may vary between states.

Note: An employee's skin exposure to substances having a "YES" in the "SKIN" column in the table above shall be prevented or reduced to the extent necessary under the circumstances through the use of gloves, coveralls, goggles or other appropriate personal protective equipment, engineering controls or work practices

Section 3 - Hazards Identification

Emergency Overview: A white to off-white paste product with a musty odor. CAUTION! This product contains ethylene glycol.

Refer to other MSDS sections for other detailed information.

Effects Of Overexposure - Eye Contact: Direct eye contact may cause irritation.

Effects Of Overexposure - Skin Contact: May cause skin irritation. May cause dry skin.

Effects Of Overexposure - Inhalation: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Inhalation of dust may cause lung damage or other adverse pulmonary and respiratory effects.

Effects Of Overexposure - Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Effects Of Overexposure - Chronic Hazards:

Ethylene Glycol may cause kidney and liver damage upon prolonged and repeated overexposures. Studies have shown that repeated inhalation of ethylene glycol has produced adverse cardiovascular changes in laboratory animals. Ethylene glycol has been shown to cause birth defects in laboratory animals.

The International Agency for Research on Cancer (IARC) has determined that crystalline silica in the form of quartz or cristobalite that is inhaled from occupational sources is carcinogenic to humans (Group 1- carcinogenic to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (published in June 1997) in conjunction with the use of these materials. The National Toxicology Program (NTP) classifies respirable crystalline silica as "known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (Group A2).

Breathing dust containing respirable crystalline silica may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may have the following serious chronic health effects: Excessive inhalation of respirable dust can cause pneumoconiosis, a respiratory disease, which can result in delayed, progressive, disabling and sometimes fatal lung injury. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function. Smoking exacerbates this disease. Individuals with pneumoconiosis are predisposed to develop tuberculosis. There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as scleroderma (an immune system disorder manifested by fibrosis of the lungs, skin and other internal organs) and kidney disease.

Primary Route(s) Of Entry: Skin Contact, Inhalation

Medical Conditions which May be Aggravated by Exposure: If dry sanded, asthma and asthma-like conditions may worsen from prolonged or repeated exposure to dust.

Section 4 - First Aid Measures

First Aid - Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

First Aid - Skin Contact: Wash off immediately with soap and plenty of water.

First Aid - Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

First Aid - Ingestion: Do not induce vomiting. Call a physician or Poison Control Center immediately.

Note to Physician: None.

COMMENTS: Call Medical Emergency at 1-800-327-3874 if any irritation or complication arises from any of the above routes of entry.

Section 5 - Fire Fighting Measures

Flash Point, F: Greater than 200 degrees
Method: (Seta Closed Cup)

Lower Explosive Limit, %: Not Established
Upper Explosive Limit, %: Not Established

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: None known.

Special Firefighting Procedures: Cool fire-exposed containers using water spray.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Wear proper protective equipment as specified in Section 8. Scrape up dried material and place into containers.

Section 7 - Handling And Storage

Handling: KEEP OUT OF REACH OF CHILDREN! Avoid contact with skin and eyes. Wash thoroughly after handling. Do not breathe dust. While dry sanding, use of a NIOSH-approved dust mask is recommended. Removal of this product after use will result in the generation of Dust. If dry-sanded, exposure to dust may result in the build-up of material in eyes, ears, nose, and mouth which may cause irritation. Avoid excessive heat and handling.

Storage: Store away from caustics and oxidizers. Do not store at temperatures above 120 degrees F. Keep tightly closed. Avoid excessive heat and freezing.

Section 8 - Exposure Controls / Personal Protection

Precautionary Measures: Please refer to other sections and subsections of this MSDS.

Engineering Controls: Local ventilation of emission sources may be necessary to maintain ambient concentrations below recommended exposure limits. Wet sanding is recommended to avoid generation of dust. Prevent build-up of dust and vapors by opening windows and doors or use other means to ensure fresh air entry during application, drying and sanding.

Respiratory Protection: A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. If concentrations exceed the exposure limits specified, use of a NIOSH-approved supplied air respirator is recommended. Where the protection factor is exceeded, use

of a Self Contained Breathing Apparatus (SCBA) may be necessary. Use an approved NIOSH/OSHA respirator if dry sanded.

National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05 mg/m3) as determined by a full shift sample up to 10-hour work shift.

Skin Protection: Wear gloves with repeated or prolonged use.

Eye Protection: Safety glasses with side-shields.

Other protective equipment: Not required under normal use.

Hygienic Practices: Remove and wash contaminated clothing before re-use.

Section 9 - Physical And Chemical Properties

Boiling Range:	210 - 220 F	**Vapor Density:**	Heavier Than Air
Odor:	Musty	**Odor Threshold:**	Not Established
Appearance:	White to Off-White	**Evaporation Rate:**	Slower Than n-Butyl Acetate
Solubility in H2O:	Not Established	**Specific Gravity:**	1.8
Freeze Point:	Not Established	**pH:**	Between 7.0 and 12.0
Vapor Pressure:	17.5 mm Hg @ 68F	**Viscosity:**	Not Established
Physical State:	Paste		

When reported, vapor pressure of this product has been calculated theoretically based on its constituent makeup and has not been determined experimentally.

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Excessive heat and freezing.

Incompatibility: Strong bases. Strong oxidizing agents.

Hazardous Decomposition Products: Normal decomposition products, i.e., COx, NOx.

Hazardous Polymerization: Hazardous polymerization will not occur under normal conditions.

Stability: Stable under normal conditions.

Section 11 - Toxicological Information

Product LD50: Not Established **Product LC50:** Not Established

CASRN	Chemical Name	LD50	LC50	WT%
107-21-1	Ethylene glycol	Rat:4700 mg/kg	Rat:10876 mg/kg	0.1-1.0

Carcinogenicity:

CAS No.	Chemical Name	ACGIH	OSHA	IARC	NTP	WT%
14808-60-7	Silica, crystalline	Suspected human carcinogen.	Not Listed.	Human carcinogen.	Known carcinogen.	0.1-1.0

Significant Data with Possible Relevance to Humans: None.

Section 12 - Ecological Information

Ecological Information: Ecological injuries are not known or expected under normal use.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance with all federal, state and local regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste.

EPA Waste Code if Discarded (40 CFR Section 261): none

Section 14 - Transportation Information

DOT Proper Shipping Name:	Not Regulated	**Packing Group:**	N.A.
DOT Technical Name:	N.A.	**Hazard Subclass:**	N.A.
DOT Hazard Class:	N.A.	**DOT UN/NA Number:**	None

Note: The shipping information provided is applicable for domestic ground transport only. Different categorization may apply if shipped via other modes of transportation and/or to non-domestic destinations.

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard, Chronic Health Hazard

SARA Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

None

Toxic Substances Control Act:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None

U.S. State Regulations

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product:

Chemical Name	CAS Number	WT%
Water	7732-18-5	15-40

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%:

Chemical Name	CAS Number	WT%
Water	7732-18-5	15-40

California Proposition 65:

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Section 16 - Other Information

HMIS Ratings:

Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, GR/LTR: 15.3 LB/GAL: 0.1 WT%: 0.4

REASON FOR REVISION: Periodic Update

Legend:

N.A. – Not Applicable
N.E. – Not Established
N.D. – Not Determined
VOC – Volatile Organic Compound
PEL – Permissible Exposure Limit
TLV – Threshold Limit Value
STEL – Short Term Exposure Limit
LD50 – Lethal Dose 50
F – Degree Fahrenheit
MSDS – Material Safety Data Sheet
ACGIH – American Conference of Governmental Industrial Hygienists
SARA – Superfund Amendments and Reauthorization Act of 1986
NJRTK – New Jersey Right-to-Know Law
OSHA – Occupational Safety and Health Administration
HMIS – Hazardous Materials Identification System
NTP – National Toxicology Program
CEIL – Ceiling Exposure Limit
LC50 – Lethal Concentration 50
C – Degree Celsius
CASRN – The Chemical Abstracts Service Registry Number

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. **NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS.** Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

<End of MSDS>

3259
Kinder Morgan

EPAHO10400094

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/1/2009**

Dear **Jonny Salinas**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3259

Expiration Date 4/1/2011

Generator: Kinder Morgan
Address: 906 Clinton Dr
Galena Park, TX 77547

Waste Information

Name of Waste: Ethanol & Water
TCEQ Waste Code #: 0502219H
Container Type:
Detailed Description of Process Generating Waste:
Rinsing of tank previously containing pure Ethanol product
Color: light brown **Odor:** hydrocarbon **pH:** 5-9
Physical State:
Incompatibilities:
Safety Related Data/Special Handling:
PPE FOR FLAMMABLE MATERIAL

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

GB
JR

Hazardous

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

SECTION 1: Generator Information

Company: Kinder Morgan - Galena Park
Address: 906 Clinton Drive
City: Galena Park **State:** TX **Zip:** 77547
Contact: Johnny Salinas **Title:** EHS Specialist
Phone Number: 713-725-5984 **Fax Number:** 713-450-7485
24/hr Phone Number:
US EPA ID No: TXD026481523
State ID No: 30573 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Ethanol & Water
Detailed Description of Process Generating Waste:

Rinsing of tank previously containing pure Ethanol product.

Physical State: ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color: light brown **Odor:** Hydrocarbon

Specific Gravity (water=1): .73 to .89 **Density:** Vapor >1 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ Single-phase ☑ Multi-phase

Container Type: ☐ Drum ☐ Tote ☑ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☐ Monthly ☑ Yearly ☐ One-Time
Quantity: 10,000 gallons

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☑ Yes ☐ No
If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☑ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 05022194

Proper US DOT Shipping Name: RQ, Flammable Liquids, N.O.S. (Ethanol), 3, UN1993, III
Class: 3 **UN/NA:** UN1993 **PG:** III **RQ:** 100

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
<140		5-9		BRL	mg/l	BRL	mg/l	0-1	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
<1500	mg/l	<1500	mg/l	BRL	mg/l	BRL	mg/l	BRL	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water	50-90	%
Ethanol	10-50	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

PPE For Flammable material

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package.

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	Ignitable

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/27/09

Printed Name/Title: Johnny Salinas

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-31-09 ☑ Approved ☐ Rejected
Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$0.50 / GALLON + TRANS

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Contact Operations and Sales manager prior to scheduling

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☑ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

CES Environmental Services, Inc.

LDR Notifications/Certifications

1. Generator Information		2. Receiving Facility Information	
Name:	Kinder Morgan	Name:	CES Environmental Services, Inc.
Address:	906 Clinto Dr	Address:	4904 Griggs Road
	Galena Park, TX 77547		Houston, TX 77021
EPA ID No.:	TXD026481523	EPA ID No.:	TXD008950461
Manifest No.:			

3. Waste Description at Point of Generation

Line Item	Waste Description	Hazardous Waste Codes	LDR Subcategory	WW / NWW	Underlying Hazardous Constituents [268.2(i)]
1	ETHANOL	D001	E	W/W	
2					
3					
4					
5					

4. Waste Disposition

Line Item	Subtitle C Exclusion Subsequent to Point of Generation (if applicable)	Current Disposition of Waste	268.45, Table 1 Technology used to treat debris (if applicable)	Date Shipped
1				
2				
3				
4				
5				

5. Was the waste hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste or exempt from Subtitle C regulation (including characterstic wastes managed in wastewater treatment systems discharging under the CWA)?
☐ Yes ☑ No (If yes, this constituents the 268.7(a)(7) one-time notification.)

6. Waste the waste characterstic at the point of generation, treated onsite to remove the characterstic, and treatment residues then shipped to a Subtitle D land disposal facility? ☐ Yes ☑ No (if yes, complete Certification 1 or 2.)

7. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(1) by treating it using an extraction or destruction technology in 268.45, Table 1? ☐ Yes ☑ No (if yes, complete Certification 3.)

8. Was the waste "debris" that was hazardous at the point of generation but subsequently became excluded from the definition of hazardous waste under 261.3(f)(2) by receiving a "no-longer-contains" determinatin from EPA or the authorized state?
☐ Yes ☑ No (if yes, this constituents the 268.7(d)(1) one-time notification.)

9. Is the waste residue from treating K061, K062 and/or F006 wastes in high-temperature metals recovery (HTMR) units that 1) meets the generic exclusion levels in 261.3(c)(2)(ii)(C), 2) does not exhibit any characterstics, and 3) is shipped to a Subtitle D land disposal facility?
☐ Yes ☑ No (if yes, complete Certification 4.)

10. ☐ Waste that has been treated to remove a characterstic and meets underlying hazardous constituents standards.

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characterstics and that underlying hazardous constituents, as defined in 268.2(i) have been treated on-site to meet the 268.48 Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Applies to items:

Reference: 268.7(b)(4)(v) and 268.9(d)

11. ☐ Waste that has been treated to remove a characterstic but does not meet underlying hazardous constituents standards.

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characterstic. This decharacterized waste contains underyling hazardous constituents that require further treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Applies to items:

Reference: 268.7(b)(4)(v) and 268.9(d)

12. ☐ Debris that has been treated to meet the alternative treatment standards.

I certify under penalty of law that the debris has been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Applies to items:

Reference: 268.7(b)(4)(v) and 268.9(d)

13. ☐ HTMR residue from treating K061, K062 and/or F006 wastes.

I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characterstic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

Applies to items:

Reference: 268.7(b)(4)(v) and 268.9(d)

Authorized Signature: _____ **Date:** _____

Printed Name / Title: _____

EPAHO104000952

CES Environmental Services, Inc.

UNDERLYING HAZARDOUS CONSTITUENTS (UHC)

Generator	KINDER MORGAN	**EPA ID Number**	TXD026481523
Mailing Address	902 CLINTON DRIVE	**Manifest Number**	
City, State, Zip	GALENA PARK, TX 77547	**CES Profile Number**	

EPA Waste Codes

If your waste, at the point of generation, exceeds the limits of the following constituents, then please represent this fact to CES Environmental Services, Inc. by checking the applicable box listed below.

Does this waste contain one or more of the constituents listed on pages 1, 2, 3 or 4? ☐ YES ☑ NO

If "Yes", check applicable constituents and then sign and date the form. If "No", then sign and date the form.

	Description	CAS No. [1]	Wastewater mg/l [2]	Non-Wastewater mg/kg
✓	***I. Organic Constituents***			
☐	2-Acetylaminofluorene	53-96-3	0.059	140
☐	4-Aminobiphenyl	92-67-1	0.13	NA
☐	o-Anisidine (2-methoxyaniline)	90-04-0	0.010	0.66
☐	Acenaphthene	83-32-9	0.059	3.4
☐	Acenaphthylene	208-96-8	0.059	3.4
☐	Acetone	67-64-1	0.28	160
☐	Acetonitrile	75-05-8	5.6	38
☐	Acetophenone	96-86-2	0.01	9.7
☐	Acrolein	107-02-8	0.29	NA
☐	Acrylamide	79-06-1	19	23
☐	Acrylonitrile	107-13-1	0.24	84
☐	Aldicarb sulfone **[6]**	1646-88-4	0.056	0.28
☐	Aldrin	309-00-2	0.021	0.066
☐	alpha-BHC	319-84-6	0.00014	0.066
☐	Aniline	62-53-3	0.81	14
☐	Anthracene	120-12-7	0.059	3.4
☐	Aramite	140-57-8	0.36	NA
☐	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	2.5
☐	4-Bromophenyl phenyl ether	101-55-3	0.055	15
☐	Barban **[6]**	101-27-9	0.056	1.4
☐	Bendiocarb **[6]**	22781-23-3	0.056	1.4
☐	Benomyl **[6]**	17804-35-2	0.056	1.4
☐	Benz(a)anthracene	56-55-3	0.059	3.4
☐	Benzal chloride	98-87-3	0.055	6
☐	Benzene	71-43-2	0.14	10
☐	Benzo(a)pyrene	50-32-8	0.061	3.4
☐	Benzo(b)fluoranthene	205-99-2	0.11	6.8
☐	Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
☐	Benzo(k)fluoranthene	207-08-9	0.11	6.8
☐	beta-BHC	319-85-7	0.00014	0.066
☐	bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
☐	bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
☐	bis-(2-Chloroethoxy)methane	111-91-1	0.036	7.2
☐	bis-(2-Chloroethyl)ether	111-44-4	0.033	6
☐	Bromodichloromethane	75-27-4	0.35	15
☐	Bromoform (Tribromomethane)	75-25-2	0.63	15
☐	Bromomethane/Methyl bromide	74-83-9	0.11	15
☐	Butyl benzyl phthalate	85-68-7	0.017	28
☐	Butylate **[6]**	2008-41-5	0.042	1.4
☐	2-chloro-1,3-butadiene	126-99-8	0.057	0.28
☐	2-Chloroethyl vinyl ether	110-75-8	0.062	NA
☐	2-Chloronaphthalene	91-58-7	0.055	5.6
☐	2-Chlorophenol	95-57-8	0.044	5.7
☐	3-Chloropropylene	107-05-1	0.036	30
☐	Carbaryl **[6]**	63-25-2	0.006	0.14
☐	Carbenzadim **[6]**	10605-21-7	0.056	1.4
☐	Carbofuran **[6]**	1563-66-2	0.006	0.14
☐	Carbofuran phenol **[6]**	1563-38-8	0.056	1.4
☐	Carbon disulfide	75-15-0	3.8	4.8mg/l
☐	Carbon tetrachloride	56-23-5	0.057	6
☐	Carbosulfan **[6]**	55285-14-8	0.028	1.4
☐	Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26
☐	Chlorobenzene	108-90-7	0.057	6
☐	Chlorobenzilate	510-15-6	0.1	NA
☐	Chlorodibromomethane	124-48-1	0.057	15
☐	Chloroethane	75-00-3	0.27	6
☐	Chloroform	67-66-3	0.046	6
☐	Chloromethane (Methyl chloride)	74-87-3	0.19	30
☐	Chrysene	218-01-9	0.059	3.4
☐	m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
☐	m-Cumenyl methylcarbamate **[6]**	64-00-6	0.056	1.4

EPAHO104000953

✓	I. Organic Constituents (continued)			
☐	cis-1,3-Dichloropropylene	10061-01-5	0.036	18
☐	Cyclohexanone	108-94-1	0.36	0.75 mg/l TCLP
☐	1,1-Dichloroethane	75-34-3	0.059	6
☐	1,1-Dichloroethylene	75-35-4	0.025	6
☐	1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
☐	1,2-Dichloroethane	107-06-2	0.21	6
☐	trans-1,2-Dichloroethylene	156-60-5	0.054	30
☐	1,2-Dichloropropane	78-87-5	0.85	18
☐	1,2-Diphenylhydrazine	122-66-7	0.087	NA
☐	trans-1,3-Dichloropropylene	10061-02-6	0.036	18
☐	1,4-Dinitrobenzene	100-25-4	0.32	2.3
☐	1,4-Dioxane	123-91-1	12	170
☐	2,4-Dichlorophenol	120-83-2	0.044	14
☐	2,4-Dichlorophenoxyacetic acid/2,4-D	94-75-7	0.72	10
☐	2,4-Dinitrophenol	51-28-5	0.12	160
☐	2,4-Dinitrotoluene	121-14-2	0.32	140
☐	2,6-Dichlorophenol	87-65-0	0.044	14
☐	2,6-Dinitrotoluene	606-20-2	0.55	28
☐	2-4-D (2,4-Dichlorophenoxyacetic acid)	94-75-7	0.72	10
☐	2-4-Dimethyl phenol	105-67-9	0.036	14
☐	2,4-Dimethylaniline (2,4-xylidine)	95-68-1	0.010	0.66
☐	4,6-Dinitro-o-cresol	534-52-1	0.28	160
☐	delta-BHC	319-86-8	0.023	0.066
☐	di-n-butyl phthalate	84-74-2	0.057	28
☐	Di-n-octyl phthalate	117-84-0	0.017	28
☐	Di-n-propylnitrosamine	621-64-7	0.4	14
☐	Dibenz(a,e)pyrene	192-65-4	0.061	NA
☐	Dibenz(a,h)anthracene	53-70-3	0.055	8.2
☐	Dibromomethane	74-95-3	0.11	15
☐	Dichlorodifluoromethane	75-71-8	0.23	7.2
☐	Dieldrin	60-57-1	0.017	0.13
☐	Diethyl phthalate	84-66-2	0.2	28
☐	Dimethyl phthalate	131-11-3	0.047	28
☐	Diphenylamine	122-39-4	0.92	13
☐	Diphenylnitrosamine	86-30-6	0.92	13
☐	Disulfoton	298-04-4	0.017	6.2
☐	Dithiocarbamates (total) [6]	137-30-4	0.028	28
☐	Endosulfan I	959-98-8	0.023	0.066
☐	Endosulfan II	33213-65-9	0.029	0.13
☐	Endosulfan sulfate	1031-07-8	0.029	0.13
☐	Endrin	72-20-8	0.0028	0.13
☐	Endrin aldehyde	7421-93-4	0.025	0.13
☐	EPTC [6]	759-94-4	0.042	1.4
☐	Ethyl acetate	141-78-6	0.34	33
☐	Ethyl benzene	100-41-4	0.057	10
☐	Ethyl cyanide/propanenitrile	107-12-0	0.24	360
☐	Ethyl ether	60-29-7	0.12	160
☐	Ethyl methacrylate	97-63-2	0.14	160
☐	Ethyl Oxide	75-21-8	0.12	NA
☐	Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
☐	Famphur	52-85-7	0.017	15
☐	Fluoranthene	206-44-0	0.068	3.4
☐	Fluorene	86-73-7	0.059	3.4
☐	Formetanate hydrochloride [6]	23422-53-9	0.056	1.4
☐	gamma-BHC	58-89-9	0.0017	0.066
☐	Heptachlor	76-44-8	0.0012	0.066
☐	Heptachlor epoxide	1024-57-3	0.016	0.066
☐	Hexachlorobenzene	118-74-1	0.055	10
☐	Hexachlorobutadiene	87-68-3	0.055	5.6
☐	Hexachlorocyclopentadiene	77-47-4	0.057	2.4
☐	Hexachloroethane	67-72-1	0.055	30
☐	Hexachloropropylene	1888-71-7	0.035	30
☐	HxCDDs (All Hexachlorodibenzo-p-dioxins)	N/A	0.000063	0.001
☐	HxCDFs (All Hexachlorodibenzofurans)	N/A	0.000063	0.001
☐	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	0.000035	0.0025
☐	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.000035	0.0025
☐	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.000035	0.0025
☐	Ideno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
☐	Iodomethane	74-88-4	0.19	65
☐	Isobutyl alcohol	78-83-1	5.6	170
☐	Isodrin	465-73-6	0.021	0.066
☐	Isosafrole	120-58-1	0.081	2.6
☐	Kepone	143-50-0	0.0011	0.13
☐	3-Methylcholanthrene	56-49-5	0.0055	15
☐	4,4-Methylene bis (2-chloroaniline)	101-14-4	0.5	30
☐	m-Dichlorobenzene	541-73-1	0.036	6
☐	Methacrylonitrile	126-98-7	0.24	84
☐	Methanol	67-56-1	5.6	0.75 mg/l TCLP
☐	Methiocarb [6]	2032-65-7	0.056	1.4
☐	Methomyl [6]	16752-77-5	0.028	0.14
☐	Methoxychlor	72-43-5	0.25	0.18
☐	Methapyrilene	91-80-5	0.081	1.5
☐	Methyl ethyl ketone	78-93-3	0.28	36
☐	Methyl isobutyl ketone	108-10-1	0.14	33
☐	Methyl methacrylate	80-62-6	0.14	160
☐	Methyl methansulfonate	66-27-3	0.018	NA
☐	Methyl parathion	298-00-0	0.014	4.6
☐	Methylene chloride	75-09-2	0.089	30
☐	Metolcarb [6]	1129-41-5	0.056	1.4
☐	Mexacarbate [6]	315-18-4	0.056	1.4
☐	Molinate [6]	2212-67-1	0.042	1.4
☐	2-Naphthylamine	91-59-8	0.52	NA
☐	5-Nitro-o-toluidine	99-55-8	0.32	28
	n-Butyl alcohol	71-36-3	5.6	2.6
	N-Nitroso-di-n-butylamine	924-16-3	0.4	17
	N-Nitrosodiethylamine	55-18-5	0.4	28
	N-Nitrosodimethylamine	62-75-9	0.4	2.3
	N-Nitrosomethylethylamine	10595-95-6	0.4	2.3
	N-Nitrosomorpholine	59-89-2	0.4	2.3
	N-Nitrosopiperidine	100-75-4	0.013	35
	N-Nitrosopyrrolidine	930-55-2	0.013	35
	Naphthalene	91-20-3	0.059	5.6
	Nitrobenzene	98-95-3	0.068	14
	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	0.000063	0.005

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I. Organic Constituents (continued)			
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	0.000063	0.005
o,p-DDD	53-19-0	0.023	0.087
o,p-DDE	3424-82-6	0.031	0.087
o,p-DDT	789-02-6	0.0039	0.087
o-Cresol	95-48-7	0.11	5.6
o-Dichlorobenzene	95-50-1	0.088	6
o-Nitroaniline	88-74-4	0.27	14
o-Nitrophenol	88-75-5	0.028	13
Oxamyl [6]	23135-22-0	0.056	0.28
1,3-Phenylenediamine	108-45-2	0.010	0.66
p-Cresidine	120-71-8	0.010	0.66
p,p-DDD	72-54-8	0.023	0.087
p,p-DDE	72-55-9	0.031	0.087
p,p-DDT	50-29-3	0.0039	0.087
p-Chloro-m-cresol	59-50-7	0.018	14
p-Chloroaniline	106-47-8	0.46	16
p-Cresol	106-44-5	0.77	5.6
(difficult to distinguish from m-cresol)			
p-Dichlorobenzene	106-46-7	0.09	6
p-Dimethylaminoazobenzene	60-11-7	0.13	NA
p-Nitroaniline	100-01-6	0.028	28
p-Nitrophenol	100-02-7	0.12	29
Parathion	56-38-2	0.014	4.6
Pebulate [6]	1114-71-2	0.042	1.4
PeCDDs (All Pentachlorodibenzo-p-dioxins)	N/A	0.000063	0.001
PeCDFs (All Pentachlorodiebenzofurans)	N/A	0.000035	0.001
Pentachlorobenzene	608-93-5	0.055	10
Pentachloroethane	76-01-7	0.055	6
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Phorate	298-02-2	0.021	4.6
Phthalic acid	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28
Physostigmine [6]	57-47-6	0.056	1.4
Physostigmine salicylate [6]	57-64-7	0.056	1.4
Promecarb [6]	2631-37-0	0.056	1.4
Pronamide	23950-58-5	0.093	1.5
Propham [6]	122-42-9	0.056	1.4
Propoxur [6]	114-26-1	0.056	1.4
Prosulfocarb [6]	52888-80-9	0.042	1.4
Pyrene	129-00-0	0.067	8.2
Pyridine	110-86-1	0.014	16
Safrole	94-59-7	0.081	22
Silvex (2,4,5-TP)	93-72-1	0.72	7.9
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6
1,1,1-Trichloroethane	71-55-6	0.054	6
1,1,2,2-Tetrachloroethane	79-34-5	0.057	6
1,1,2-Trichloro-2,2,2-trifluoroethane	76-13-1	0.057	30
1,1,2-Trichloroethane	79-00-5	0.054	6
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,2,3-Trichloropropane	96-18-4	0.85	30
2,3,4,6-Tetrachlorophenol	58-90-2	0.03	7.4
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	93-76-5	0.72	7.9
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
TCDDs (All Tetrachlorodibenzo-p-dioxins)	N/A	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	N/A	0.000063	0.001
Tetrachloroethylene	127-18-4	0.056	6
Thiodicarb [6]	59669-26-0	0.019	1.4
Thiophanate-methyl [6]	23564-05-8	0.056	1.4
Toluene	108-88-3	0.08	10
Total PCBs	1336-36-3	0.1	10
(sum of all PCB isomers, or all Aroclors)			
Toxaphene	8001-35-2	0.0095	2.6
Triallate [6]	2303-17-8	0.042	1.4
Trichloroethylene	79-01-6	0.054	6
Trichloromonofluoromethane	75-69-4	0.02	30
Triethylamine [6]	101-44-8	0.081	1.5
tris-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.1
Vernolate [6]	1929-77-7	0.042	1.4
Vinyl chloride	75-01-4	0.27	6
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-,m-,and p-xylene concentrations)			

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	II. Inorganic Constituents			
☐	Antimony	7440-36-0	1.9 *	1.15 mg/l TCLP
☐	Arsenic	7440-38-2	1.4 *	5.0 mg/l TCLP
☐	Barium	7440-39-3	1.2 *	21.0 mg/l TCLP
☐	Beryllium	7440-41-7	0.82 *	1.22 mg/l TCLP
☐	Cadmium	7440-43-9	0.69 *	0.11 mg/l TCLP
☐	Chromium (Total)	7440-47-3	2.77 *	0.60 mg/l TCLP
☐	Cyanides (Amenable) **[4]**	57-12-5	0.86	30
☐	Cyanides (Total) **[4]**	57-12-5	1.2	590
☐	Fluoride **[5]**	16984-48-8	35	NA
☐	Lead	7439-92-1	0.69 *	0.75 mg/l TCLP
☐	Mercury - All others	7439-97-6	0.15 *	0.025 mg/l TCLP
☐	Mercury - Retort nonwastewater	7439-97-6	NA *	0.20 mg/l TCLP
☐	Nickel	7440-02-0	3.98 *	11.0 mg/l TCLP
☐	Selenium	7782-49-2	0.82 *	5.7 mg/l TCLP
☐	Silver	7440-22-4	0.43 *	0.14 mg/l TCLP
☐	Sulfide	18496-25-8	14	NA
☐	Thallium	7440-28-0	1.4 *	0.2 mg/l TCLP
☐	Vanadium **[4]**	7440-62-2	4.3 *	1.6 mg/l TCLP
☐	Zinc **[5]**	7440-66-6	2.61 *	4.3 mg/l TCLP

I certify that the above is true and correct to the best of my knowledge.

Authorized Name (Print) **Title**

Authorized Signature **Date**

EPAHO104000956

3260
SM1 Manufacturing

EPAHO104000957

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/1/2009**

Dear **Patrick Sullivan**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3260

Expiration Date 4/1/2011

Generator: SMI Manufacturing
Address: 13312 East Hardy Road
Houston, TX 77039

Waste Information

Name of Waste: Non Hazardous water based paints
TCEQ Waste Code #: CESQ2191
Container Type:
Detailed Description of Process Generating Waste:
used/out-of-date materials
Color: varies **Odor:** hydrocarbon **pH:** 5-9
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
standard

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DC/MM

CES Environmental Services, Inc.

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☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXD008950461 ISWR Number: 30900 TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-1460 U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: SMI Manufacturing
Address: 13312 East Hardy Road
City: Houston **State:** TX **Zip:** 77039
Contact: John Crespo **Title:** Facilities and EHS manager
Phone Number: 713-393-4231 **Fax Number:**
24/hr Phone Number: 281-732-8387
US EPA ID No: TXCESQG
State ID No: CESGQ **SIC Code:** NA

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Non hazardous Water based paints
Detailed Description of Process Generating Waste:

used/out of date materials

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder**
☑ **Solid** ☐ **Filter Cake** ☑ **Combination**

Color: varies **Odor:** hydrocarbon

Specific Gravity (water=1): 1-1.2 **Density:** 8.4 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☐ **Single-phase** ☑ **Multi-phase**

Container Type: ☑ **Drum** ☐ **Tote** ☐ **Truck** ☐ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Yearly** ☑ **One-Time**
Quantity: 2 drums - 1 gallon and 1 pints inside

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: _____

Texas State Waste Code Number: CESQ2191

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated Materail

Class: NA **UN/NA:** NA **PG :** NA **RQ:** NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		5-9		NA	mg/l	NA	mg/l	50	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	NA	mg/l	NA	mg/l	na	mg/l	na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Water based latex paints - Behr, Walmart, Devoe	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Standard PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. MSDS

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	X
TCLP Volatiles:	X
TCLP Semi-Volatiles:	X
Reactivity:	X
Corrosivity:	X
Ignitability:	X

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☑ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** MARCH 30-2009

Printed Name/Title: JEFF SARGER / PROJECT MANAGER

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 3-31-09 ☑ Approved ☐ Rejected
Approval Number: HOU-3260

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$65.00/drum plus freight

2. Contamination Limit (maximum limit before surchages apply):

NA

3. Surcharge Pricing:

NA

4. Special Testing Requirements:

NA

5. Treatment and Handling Protocol:

Class Solids box

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

NA

8. Management for Product Recovered/Recycled (if applicable)

NA

WAL-MART STORES INC. -- COLORPLACE INTERIOR LATEX FLAT WALL PAINT, AC

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MSDS Safety Information

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FSC: 8010
NIIN: 00-004-2251
MSDS Date: 11/18/1999
MSDS Num: CLMWC
Product ID: COLORPLACE INTERIOR LATEX FLAT WALL PAINT, ACCENT BASE
MFN: 01
Responsible Party
Cage: 72222
Name: WAL-MART STORES INC.
Address: 702 SW 8TH STREET
Box: 116
City: BENTONVILLE AR 72716
Info Phone Number: 216-566-2902
Emergency Phone Number: 216-566-2917
Preparer's Name: ERNEST CARTER
Chemtrec IND/Phone: (800)424-9300
Review Ind: Y
Published: Y

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Contractor Summary

==========

Cage: 72222
Name: WAL-MART STORES INC.
Address: 702 SW 8TH STREET
Box: 116
City: BENTONVILLE AR 72716
Phone: 216-566-2902

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Item Description Information

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Ingredients

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Cas: 107-21-1
RTECS #: KW2975000
Name: ETHYLENE GLYCOL
Percent by Wt: 2.
ACGIH TLV: NOT ESTABLISHED
ACGIH STEL: C127 MG/M3;C50 PPM
EPA Rpt Qty: 1 LB
DOT Rpt Qty: 1 LB

Cas: 12001-26-2
RTECS #: VV8760000
Name: MICA
Percent by Wt: 7.
ACGIH TLV: 3 MG/M3
ACGIH STEL: NOT ESTABLISHED

==========

Health Hazards Data

==========

Route Of Entry Inds - Inhalation: YES
Skin: YES
Effects of Exposure: EXPOSURE MAY BE BY INHALATION AND/OR SKIN OR EYE CONTACT, DEPENDING ON CONDITIONS OF USE. TO MINIMIZE EXPOSUE, FOLLOW RECOMMENDATIONS FOR PROPER USE, VENTILATION, AND PERSONAL PROTECTIVE EQUIPMENT.

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Signs And Symptions Of Overexposure: IRRITATION OF EYES, SKIN AND UPPER RESPIRATORY SYSTEM. IN A CONFINED AREA VAPORS IN HIGH CONCENTRATION MAY CAUSE HEADACHE, NAUSEA OR DIZZINESS. REDNESS AND ITCHING OR BURNING SENSATION MAY INDICATE EY E OR EXCESSIVE SKIN EXPOSURE.
First Aid: IF INHALED: REMOVE FROM EXPOSURE. RESTORE BREATHING. KEEP WARM AND QUIET. IF ON SKIN: WASH AFFECTED AREA THOROUGHLY WITH SOAP AND WATER.REMOVE CONTAMINATED CLOTHING AND LAUNDER BEFORE RE-USE.IF IN EYE S: FLUSH EYES WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES. GET MEDICAL ATTENTION. IF SWALLOWED: GET MEDICAL ATTENTION.

Handling and Disposal

Spill Release Procedures: REMOVE ALL SOURCES OF IGNITION. VENTILATE AND REMOVE WITH INERT ABSORBENT.
Waste Disposal Methods: DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
Handling And Storage Precautions: KEEP CONTAINER CLOSED WHEN NOT IN USE, TRANSFER ONLY TO APPROVED CONTAINERS WITH COMPLETE AND APPROPRIATE LABELING. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

Fire and Explosion Hazard Information

Extinguishing Media: CARBON DIOXIDE, DRY CHEMICAL, ALCOHOL FOAM.
Fire Fighting Procedures: FULL PROTECTIVE EQUIPMENT INCLUDING SELF CONTAINED BREATHING APPARATUS SHOULD BE USED. WATER SPRAY MAY BE INEFFECTIVE. IF WATER IS USED,FOG NOZZLES ARE PREFERABLE. WATER MAY BE USED TO COOL CLOSED CON TAINERS TO PREVENT PRESSURE BUILD UP AND POSSIBLE AUTOIGNITION OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT.
Unusual Fire/Explosion Hazard: CLOSED CONTAINERS MAY EXPLODE (DUE TO THE BUILD UP OF PRESSURE) WHEN EXPOSED TO EXTREME HEAT.

Control Measures

Respiratory Protection: IF PERSONAL EXPOSURE CANNOT BE CONTROLLED BELOW APPLICABLE LIMITS BY VENTILATION, WEAR A PROPERLY FITTED ORGNIC VAPOR/PARTICULATE RESPIRATOR APPROVED BY NIOSH/MSHA FOR PROTECTION AGAINST MATERIALS IN SECTION II. WHEN SANDING OR ABRADING THE DRIED FILM, WEAR A DUST/MIST RESPIRATOR APPROVED BY NIOSH/MSHA FOR DUST WHICH MAY BE GENERATED FROM THIS PRODUCT.
Ventilation: LOCAL EXHAUST PREFERABLE.
Protective Gloves: WEAR GLOVES
Eye Protection: WEAR SAFETY SPECTACLES WITH UNPERFORATED SIDESHIELDS.

Physical/Chemical Properties

B.P. Text: 212-477 F
Vapor Density: HEAVIER
Spec Gravity: 1.28
VOC Pounds/Gallon: 1.04
VOC Grams/Liter: 125
Evaporation Rate & Reference: SLOWER THAN ETHER
Percent Volatiles by Volume: 66%

Reactivity Data

Stability Indicator: YES
Hazardous Decomposition Products: CARBON DIOXIDE, CARBON MONOXIDE.
Hazardous Polymerization Indicator: NO
Conditions To Avoid Polymerization: WILL NOT OCCUR.

EPAHO104000966

Regulatory Information
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State Regulatory Information: CALIFORNIA PROPOSITION 65: WARNING: THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.
==========
HAZCOM Label
==========
Product ID: COLORPLACE INTERIOR LATEX FLAT WALL PAINT, ACCENT BASE
Cage: 72222
Company Name: WAL-MART STORES INC.
Street: 702 SW 8TH STREET
PO Box: 116
City: BENTONVILLE AR
Zipcode: 72716
Health Emergency Phone: 216-566-2917
Label Required IND: Y
Date Of Label Review: 10/04/2001
Status Code: A
Origination Code: G
Hazard And Precautions: EXPOSURE MAY BE BY INHALATION AND/OR SKIN OR EYE CONTACT, DEPENDING ON CONDITIONS OF USE. TO MINIMIZE EXPOSUE, FOLLOW RECOMMENDATIONS FOR PROPER USE, VENTILATION, AND PERSONAL PROTECTIVE EQUIPMENT.
==========
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Devoe Paint®

MATERIAL SAFETY DATA SHEET

prepared 06/18/07

ICI Paints North America 15885 Sprague Road Strongsville, Ohio 44136 EMERGENCY TELEPHONE NO. (800) 545-2643

WONDER TONES INTERIOR EGGSHELL

DR34XXN

HAZARDS IDENTIFICATION (ANSI Section 3)

Primary route(s) of exposure : Inhalation, skin contact, eye contact, ingestion.

Effects of overexposure :

Inhalation : Irritation of respiratory tract. Prolonged inhalation may lead to dizziness and/or lightheadedness, headache, nausea, chest pain, coughing, difficulty of breathing, severe lung irritation or damage, pneumoconiosis.

Skin contact : Irritation of skin.

Eye contact : Irritation of eyes. Prolonged or repeated contact can cause tearing of eyes, redness of eyes.

Ingestion : Ingestion may cause mouth and throat irritation, nausea, gastro-intestinal disturbances, abdominal pain.

Medical conditions aggravated by exposure : Eye, skin, respiratory disorders, lung disorders, asthma-like conditions.

FIRST-AID MEASURES (ANSI Section 4)

Inhalation : Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty. Remove to fresh air if inhalation causes eye watering, headaches, dizziness, or other discomfort.

Skin contact : Wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin. Repeated applications may be needed. Remove contaminated clothing. Wash contaminated clothing before re-use.

Eye contact : Flush immediately with large amounts of water, especially under lids for at least 15 minutes. If irritation or other effects persist, obtain medical treatment.

Ingestion : If swallowed, obtain medical treatment immediately.

FIRE-FIGHTING MEASURES (ANSI Section 5)

Fire extinguishing media : Dry chemical or foam water fog. Carbon dioxide. Closed containers may burst if exposed to extreme heat or fire. In closed tanks, water or foam may cause frothing or eruption.

Fire fighting procedures : Water may be used to cool and protect exposed containers. Firefighters should use full protective clothing, eye protection, and self-contained breathing apparatus.

Hazardous decomposition or combustion products : Carbon monoxide, carbon dioxide. Oxides of calcium.

ACCIDENTAL RELEASE MEASURES (ANSI Section 6)

Steps to be taken in case material is released or spilled : Comply with all applicable health and environmental regulations. Eliminate all sources of ignition. Ventilate area. Evacuate all unnecessary personnel. Place collected material in proper container. Small spills - use absorbent to pick up residue and dispose of properly.

HANDLING AND STORAGE (ANSI Section 7)

Handling and storage : Store below 100f (38c). Keep from freezing.

Other precautions : Use only with adequate ventilation. Do not take internally. Keep out of reach of children. Avoid contact with skin and eyes, and breathing of vapors. Wash hands thoroughly after handling, especially before eating or smoking. Keep containers tightly closed and upright when not in use. Avoid conditions which result in formation of inhalable particles such as spraying or abrading (sanding) painted surfaces. If such conditions cannot be avoided, use appropriate respiratory protection as directed under exposure controls/personal protection.

EXPOSURE CONTROLS/PERSONAL PROTECTION (ANSI Section 8)

Respiratory protection : Control environmental concentrations below applicable exposure standards when using this material. When respiratory protection is determined to be necessary, use a NIOSH/MSHA (Canadian z94.4) Approved elastomeric sealing- surface facepiece respirator outfitted with organic vapor cartridges and paint spray (dust/mist) prefilters. Determine the proper level of protection by conducting appropriate air monitoring. Consult 29CFR1910.134 For selection of respirators (Canadian z94.4).

Ventilation : Provide dilution ventilation or local exhaust to prevent build-up of vapors.

Personal protective equipment : Eye wash, safety shower, safety glasses or goggles. Impervious gloves, impervious clothing.

STABILITY AND REACTIVITY (ANSI Section 10)

Under normal conditions : Stable see section 5 fire fighting measures

Materials to avoid : Oxidizers, acids, ammonium salts. Styrene monomer.

Conditions to avoid : Elevated temperatures, contact with oxidizing agent, freezing, sparks, open flame.

Hazardous polymerization : Will not occur

TOXICOLOGICAL INFORMATION (ANSI Section 11)

Supplemental health information : No additional effects are anticipated

Carcinogenicity : In a lifetime inhalation study, exposure to 250 mg/m3 titanium dioxide resulted in the development of lung tumors in rats. These tumors occurred only at dust levels that overwhelmed the animals' lung clearance mechanisms and were different from common human lung tumors in both type and location. The relevance of these findings to humans is unknown but questionable. The international agency for research on cancer (IARC) has classified titanium dioxide as possibly carcinogenic to humans (group 2b) based on inadequate evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

Reproductive effects : No reproductive effects are anticipated

Mutagenicity : No mutagenic effects are anticipated

Teratogenicity : No teratogenic effects are anticipated

ECOLOGICAL INFORMATION (ANSI Section 12)

No ecological testing has been done by ICI paints on this product as a whole.

DISPOSAL CONSIDERATIONS (ANSI Section 13)

Waste disposal : Dispose in accordance with all applicable regulations. Avoid discharge to natural waters.

REGULATORY INFORMATION (ANSI Section 15)

As of the date of this MSDS, all of the components in this product are listed (or are otherwise exempt from listing) on the TSCA inventory. This product has been classified in accordance with the hazard criteria of the CPR (controlled products regulations) and the MSDS contains all the information required by the CPR.

The information contained herein is based on data available at the time of preparation of this data sheet which ICI Paints believes to be reliable. However, no warranty is expressed or implied regarding the accuracy of this data. ICI Paints shall not be responsible for the use of this information, or of any product, method or apparatus mentioned and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and the health and safety of your employees and the users of this material.
Complies with OSHA hazard communication standard 29CFR1910.1200.

EPAHO10400968

Physical Data (ANSI Sections 1, 9, and 14)

Product Code	Description	Wt. / Gal.	VOC gr. / ltr.	% Volatile by Volume	Flash Point	Boiling Range	HMIS	DOT, proper shipping name
DR3401N	wonder-tones eggshell interior latex enamel white	11.53	46.58	63.82	none	212-501	310	paint ** protect from freezing **
DR3449N	wonder-tones eggshell interior latex enamel pure tinting white	11.53	46.55	63.82	none	212-501	310	paint ** protect from freezing **
DR3451N	wonder-tones eggshell interior latex enamel medium tint base	10.27	49.62	67.34	none	212-212	310	paint ** protect from freezing **
DR3453N	wonder-tones eggshell interior latex enamel deep tint base	9.61	49.68	69.37	none	212-212	310	paint ** protect from freezing **
DR3457N	wonder-tones eggshell interior latex enamel accent tint base	9.57	49.28	67.11	none	212-501	310	paint ** protect from freezing **

Ingredients Product Codes with % by Weight (ANSI Section 2)

Chemical Name	Common Name	CAS. No.	DR3401N	DR3449N	DR3451N	DR3453N	DR3457N
limestone	limestone	1317-65-3	5-10	5-10			5-10
kaolin	clay	1332-58-7	1-5	1-5			
titanium oxide	titanium dioxide	13463-67-7	10-20	10-20	10-20	1-5	
2-propenoic acid, butyl ester, polymer with ethenyl acetate	vinyl acrylic latex	25067-01-0	10-20	10-20	10-20	10-20	
propanoic acid, 2-methyl-, monoester with 2,2,4-trimethyl-1,3-pentanediol	texanol	25265-77-4	1-5	1-5			1-5
2-propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate	acrylic polymer	25852-37-3					20-30
nepheline syenite	feldspar-type minerals	37244-96-5			10-20	10-20	10-20
ceramic materials and wares, chemicals	calcined kaolin clay	66402-68-4	1-5	1-5			
water	water	7732-18-5	40-50	40-50	50-60	50-60	50-60

Chemical Hazard Data (ANSI Sections 2, 8, 11, and 15)

		ACGIH-TLV				OSHA-PEL				S.R.								
Common Name	CAS. No.	8-Hour TWA	STEL	C	S	8-Hour TWA	STEL	C	S	Std.	S2	S3	CC	H	M	N	I	O
limestone	1317-65-3	10 mg/m3	not est.	not est.	not est.	5 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
clay	1332-58-7	2 mg/m3	not est.	not est.	not est.	5 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
titanium dioxide	13463-67-7	10 mg/m3	not est.	not est.	not est.	10 mg/m3	not est.	not est.	not est.	not est.	n	n	n	n	n	y	y	n
vinyl acrylic latex	25067-01-0	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
texanol	25265-77-4	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
feldspar-type minerals	37244-96-5	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n
calcined kaolin clay	66402-68-4	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	not est.	n	n	n	n	n	n	n	n

Footnotes:

C=Ceiling - Concentration that should not be exceeded, even instantaneously.

S=Skin - Additional exposure, over and above airborn exposure, may result from skin absorption.

n/a=not applicable
not est=not established
CC=CERCLA Chemical

ppm=parts per million
mg/m3=milligrams per cubic meter
Sup Conf=Supplier Confidential

S2=Sara Section 302 EHS
S3=Sara Section 313 Chemical
S.R.Std.=Supplier Recommended Standard

H=Hazardous Air Pollutant, M=Marine Pollutant
P=Pollutant, S=Severe Pollutant
Carcinogenicity Listed By:
N=NTP, I=IARC, O=OSHA, y=yes, n=no

EPAHO104000969

PRINT GLOSSARY

BEHR
STAINS•VARNISHES•PAINTS

View MSDS : 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**BEHR® Premium Plus Interior Flat Enamel Ultra Pure White No. 1850**
MSDS Manufacturer Number:	1850
Manufacturer Name:	BEHR Process Corporation
Address:	3400 W. Segerstrom Avenue Santa Ana, CA 92704
General Phone Number:	(714) 545-7101
General Fax Number:	(714) 241-1002
Customer Service Phone Number:	(800) 854-0133 ext. 2
CHEMTREC:	For emergencies in the US, call CHEMTREC: 800-424-9300
Canutec:	In Canada, call CANUTEC: (613) 996-6666 (call collect)
MSDS Creation Date:	01/30/2007
MSDS Revision Date:	2/20/2009

NFPA

1
1 0

HMIS

Health Hazard	1
Fire Hazard	1
REACTIVITY	0
Personal Protection	

* Chronic Health Effects:

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Silica, amorphous, precipitated and gel	112926-00-8	1 - 5 by weight
Non hazardous ingredient(s)	No data	30 - 60 by weight
Titanium dioxide	13463-67-7	10 - 30 by weight
Styrene/acrylic copolymer	No data	1 - 5 by weight
Ethylene glycol	107-21-1	1 - 5 by weight
Silica, crystalline - cristobalite	14464-46-1	1 - 5 by weight
Acrylic polymer(s)	No data	10 - 30 by weight
2-ethylhexyl benzoate	5444-75-7	1 - 5 by weight
Nepheline Syenite	37244-96-5	5 - 10 by weight
Aluminum hydroxide	21645-51-2	1 - 5 by weight

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview:	Irritant.
Potential Health Effects:	
Eye:	May cause irritation.
Skin:	May cause irritation.
Inhalation:	Prolonged or excessive inhalation may cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed. May cause vomiting.

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Chronic Health Effects:	Prolonged or repeated contact may cause skin irritation.
Signs/Symptoms:	Overexposure may cause headaches and dizziness.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Aggravation of Pre-Existing Conditions:	None generally recognized.

SECTION 4 - FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for 15 to 20 minutes. Get medical attention, if irritation or symptoms of overexposure persists.
Skin Contact:	Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
Other First Aid:	Due to possible aspiration into the lungs, DO NOT induce vomiting if ingested. Provide a glass of water to dilute the material in the stomach. If vomiting occurs naturally, have the person lean forward to reduce the risk of aspiration.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point:	No Data
Lower Flammable/Explosive Limit:	Not applicable.
Upper Flammable/Explosive Limit:	Not applicable.
Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Ratings:

NFPA Flammability:	1
NFPA Health:	1
NFPA Reactivity:	0

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personnel Precautions:	Use proper personal protective equipment as listed in section 8.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Spill Cleanup Measures:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section.

SECTION 7 - HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, and incompatible substances. Keep container tightly closed when not in use.
Hygiene Practices:	Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below

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	recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing. Wear appropriate protective gloves. Consult glove manufacturer's data for permeability data.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister 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 Protective:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

EXPOSURE GUIDELINES

Silica, amorphous, precipitated and gel :	
Guideline ACGIH:	TLV-TWA: 10 mg/m3
Guideline OSHA:	OSHA-TWA: 20 mg/m3
Titanium dioxide :	
Guideline ACGIH:	TLV-TWA: 10 mg/m3
Guideline OSHA:	OSHA-TWA: 15 mg/m3
Ethylene glycol :	
Guideline ACGIH:	TLV-STEL: C 100 mg/m3 (Aerosol only)
Silica, crystalline - cristobalite :	
Guideline ACGIH:	TLV-TWA: 0.05 mg/m3 (Respirable)
Guideline OSHA:	OSHA-TWA: One half the Quartz PEL [30 mg/m3]/{% Sio2} + 2]

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Liquid.
Color:	White
Boiling Point:	No Data
Melting Point:	No Data
Density:	10 - 12 Lbs./gal.
Vapor Density:	Greater than 1 (Air = 1).
Vapor Pressure:	Greater than 1 (Air = 1).
pH:	8.5 to 9.5
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Flash Point:	No Data
VOC Content:	Material VOC: 40 gm/l (Includes Water) Coating VOC.: 96 gm/l (Excludes Water)

SECTION 10 - STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Not reported.
Conditions to Avoid:	Heat, flames, incompatible materials, and freezing or temperatures below 32 deg. F.
Incompatible Materials:	Oxidizing agents. Strong acids and alkalis.
Special Decomposition Products:	Incomplete combustion may produce carbon monoxide and other toxic gases.

SECTION 11 - TOXICOLOGICAL INFORMATION

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RTECS Number:	VV7315000
Titanium dioxide :	
RTECS Number:	XR2275000
Skin:	Skin - Rabbit; Standard Draize Test. : 300 ug/3D; (Intermittent) mild. (RTECS)
Ingestion:	Ingestion - Rat TDLo: 60 gm/kg; Gastrointestinal - hypermotility, diarrhea Gastrointestinal - other changes. (RTECS)
Ethylene glycol :	
RTECS Number:	KW2975000
Eye:	Eye - Rabbit; Standard Draize Test. : 500 mg/24H; mild. Eye - Rabbit; Standard Draize Test. : 1440 mg/6H; Moderate. (RTECS)
Skin:	Skin - Rabbit; Open irritation : 555 mg; mild. (RTECS)
Inhalation:	Inhalation. - Rat LC: >200 mg/m3/4H; Details of toxic effects not reported other than lethal dose value. Inhalation. - Mouse LC: >200 mg/m3/2H; Details of toxic effects not reported other than lethal dose value. (RTECS)
Ingestion:	Ingestion - Rat LD50: 4700 mg/kg; Details of toxic effects not reported other than lethal dose value.. (RTECS)
RTECS Number:	VV7325000
RTECS Number:	BD0940000

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

SECTION 14 - TRANSPORT INFORMATION

DOT UN Number:	No Data
DOT Hazard Class:	No Data

SECTION 15 - REGULATORY INFORMATION

Silica, amorphous, precipitated and gel :	
TSCA Inventory Status:	Not listed
Canada DSL:	Listed
California PROP 65:	WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.
Titanium dioxide :	
TSCA Inventory Status:	Listed
State Regulations:	Listed in the New Jersey State Right to Know List. Listed in the Pennsylvania State Hazardous Substances List.
Canada DSL:	Listed
Ethylene glycol :	
TSCA Inventory Status:	Listed
State Regulations:	Listed in the New Jersey State Right to Know List. Listed in the Pennsylvania State Hazardous Substances List.
Canada DSL:	Listed
Silica, crystalline - cristobalite :	
TSCA Inventory Status:	Listed

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State Regulations:	Listed in the New Jersey State Right to Know List. Listed in the Pennsylvania State Hazardous Substances List.
Canada DSL:	Listed
2-ethylhexyl benzoate :	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
Nepheline Syenite :	
TSCA Inventory Status:	Not listed
Canada DSL:	Listed
Aluminum hydroxide :	
TSCA Inventory Status:	Listed
Canada DSL:	Listed

SECTION 16 - ADDITIONAL INFORMATION

HMIS Fire Hazard:	1
HMIS Health Hazard:	1
HMIS Reactivity:	0
HMIS Other:	x
MSDS Creation Date:	01/30/2007
MSDS Revision Date:	2/20/2009
MSDS Revision Notes:	Quarterly formula update
MSDS Author:	Actio Corporation
Disclaimer:	This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.
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3261
Vanco Ring Gasket

EPAHO104000975

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/2/2009**

Dear **Joey Beierle**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3261

Expiration Date 4/2/2011

Generator: Vanco Ring Gasket Specialty, Inc.
Address: 10138 Cash Rd.
Stafford, TX

Waste Information

Name of Waste: Waste coolant and oil
TCEQ Waste Code #: CESQ1191
Container Type:
Detailed Description of Process Generating Waste:
used coolant from machining operations
Color: dark **Odor:** glycol **pH:** 7
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

CES Environmental Services, Inc.
4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 748-8664
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

SECTION 1: Generator Information

Company : Vanco Ring Gasket Specialty, Inc.
Address : 10138 Cash Rd.
City, State, Zip : Stafford TX
Contact : Joey Beierle Title :
Phone No : (281) 499-1543 Fax : joey.beierle@vancoring.com
24 / HR Phone :
U.S EPA I.D No : na
State I.D : na SIC Code na

SECTION 2: Billing Information

Company : Vanco Ring Gasket Specialty, Inc.
Address : 10138 Cash Rd.
City, State, Zip : Stafford TX
Contact : Joey Beierle Title :
Phone No : (281) 499-1543 Fax :

SECTION 3: General Description of the Waste

Name of Waste : Waste coolant and oil mixture

Detailed Description of the Process Generating Waste:

Used coolant and oil from machining operations

Physical State : ☑ Liquid ☐ Sludge ☐ Powder ☐ Solid ☐ Filter Cake ☐ Combination

Color : dark Odor : glycol

Specific Gravity (Water=1) : .9-1.1 Density : 8-9 lbs / gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2835 2836 2841 2842 2843 2844 2851
2861 2865 2869 2873 2874 2876 2879 2891 2892 2893 2896 2899 2911 3312 4953 4959 9511

Layers : ☐ Single-Phas ☑ Multi-Phase

Container Type : ☑ Drum ☑ Tote ☐ Truck ☐ Other (explain)

Container Size : 55/300 gal

Number Of Units : 12 / 1

Is this a USEPA "Hazardous Waste" per 40 CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 ☐ D002 ☐ D003

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Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007
☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristics for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes:

Texas State Waste Code No : CESQ1191

Proper U.S. State Waste Code No : Non-RCRA/Non-DOT Regulated Material

Class : na UN/NA : na PG : na RQ : na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>140	7	0 mg/l	0 mg/l	0 %
Oil and Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
<200 mg/l	500 mg/l	.147 mg/l	.459 mg/l	.197 mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The material / product consists of the following materials	Concentration Ranges are acceptable	Units or %
coolant	98-100	%
oil	0-2%	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
in house tests, chlorinated solvents negative

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
none

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generators knowledge

TCLP Metals : ran in house
TCLP Volatiles : x
TCLP Semi-Volatiles : x
Reactivity : x

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Corrosivity : x

Ignitability : x

SECTION 9: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge ? ☐ YES ☑ NO

If 'YES', complete this section

PLEASE CHECK THE APPROPRIATE BOX: IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE

Matals Subcategory: ***Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosph
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: ***Subpart B***

material

- ☑ Used oils
- ☐ Oil-water emulsions or mixtures
- ☑ Lubricants
- ☑ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation wastes
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory ***Subpart C***

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bering wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesive and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations

EPAHO104000979

☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcatego
☐ Oils Subcatego
☐ Organics Subcategory

SECTION 10: Additional Instruction

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby cerity that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature : Joey M. Beierle **Date :** 04/02/09

Printed Name / Title : Joey M. Beierle / Operations Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	**Process Facility Information :**
Compliance Officer :	
Date : _____ **Status :** Approved Rejected	
Approval Number : _____	

EPAHO104000980

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 748-8664

To: Dan Bowman
Cc: Matt Bowman, Prabhakar, Joe Camp

Date: 10/27/08

From: Miles Root

Lab Memo: 08-187

Subject: **Vanco Ring Gasket Evaluation 1008-53**

A sample of coolant and oil from Vanco Ring Gasket has been evaluated for potential processing at CES. This sample is evaluation1008-53 and is a mixture of coolant and oil from a machine shop. Overall, the aqueous phase of this sample looks good, but the very small oil phase does not pass the chlor-d-tect test.

This material has a pH of 7, 5 ppm phenols, TOC of 500 ppm and low metals. This material has an oil layer of less than 2% which tests to be over 4000 mg/L on the chlor-d-tect. At this level there is no rebuttal allowed. The table below summarizes the analytical results.

Vanco Ring Gasket Evaluation 1008-53	
pH	7
Phenols, ppm	5
TOC, mg/L	500
Solids, vol%	0
chlor-d-tect, ppm	>4000
Oil, vol%	<2
Treatability	OK
Metals, ppm	
Ni	0.197
Zn	0.147
Cu	0.459
Cd	0.037
Cr	0.010

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$65/drum $195/tote
Trans - $69/hr (4-hr-minimum)
sale of tote - standard price

2. Contamination Limit (maximum limit before surchages apply):

No solids

3. Surcharge Pricing:

None

4. Special Testing Requirements:

chlorid-tect

5. Treatment and Handling Protocol:

Class 1 liquids/sludge

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3262
SCOT Industries

EPAHO104000984

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/7/2009**

Dear **Robbie Preston**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3262

Expiration Date 4/6/2011

Generator: SCOT Industries
Address: 1501 FM 1489 South
Brookshire, TX 77423

Waste Information

Name of Waste: Oily water/ mill coolant and solids
TCEQ Waste Code #: Recycle
Container Type:
Detailed Description of Process Generating Waste:
Water, oil and mill coolant from a pipe boring sump.
Color: Grey / black **Odor:** none **pH:** 7
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

4904 Griggs Road **Houston, TX 77021**
Phone: (713) 676-1460 **Fax: (713) 676-1676**
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 **ISWR No: 30900**

JB/AL

Sample 0409-03

SECTION 1: Generator Information

Company:	SCOT Industries		
Address:	1501 FM 1489 South		
City, State, Zip:	Brookshire, Texas 77423		
Contact:	Lee Richardson	**Title:**	Ops Mgr
Phone No:	281-391-4340	**Fax No:**	281-934-4931
24/hr Phone:	same		
U.S. EPA I.D. No:	None		
State I.D.	CESQG	**SIC Code:**	

SECTION 2: Billing Information – ☐ Same as Above

Company:	Preston Environmental Consultants, LLC.		
Address:	PO Box 697		
City, State, Zip:	Denham Springs, LA. 70727		
Contact:	Robby Mersiovsky	**Title:**	Managing Partner
Phone No:	713-882-7740	**Fax No:**	832-344-5452

SECTION 3: General Description of the Waste

Name of Waste: Oily water/ mill coolant & solids
Detailed Description of Process Generating Waste: water, oil, and mill coolant from a pipe boring sump

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder**
☒ **Solid** ☐ **Filter Cake** ☒ **Combination**

Color: grey/black **Odor:** none

Specific Gravity (water=1): _____ **Density:** _____ lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ **Yes** ☒ **No**
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834	2835	2836	2841	2842	2843
2844	2851	2861	2865	2869	2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511											

Layers: ☐ **Single-phase** ☒ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** X **Truck** ☐ **Other (explain)**
Container Size: _____ _____ 4000 gal

Frequency: ☐ **Weekly** ☐ **Monthly** **Quarterly** ☐ **Yearly** X **One Time**
Number of Units (containers): _____ **Other:** _____ 7000 gal.

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☒ No

If "Yes", Is it: ☐ D001 Ignitable ☐ D002 Corrosive ☐ D003 Reactive

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply) _____

Texas Waste Code Number:

Proper US DOT Shipping Name: Non Regulated Liquid

Class: 1 **UN/NA:** _____ **PG:** _____ **RQ:** _____

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>200	7	0mg/l	0mg/l	15%

Oil&Grease	TOC	Zinc	Copper	Nickel
0mg/l	_____mg/l	_____mg/l	_____mg/l	_____mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	Concentration Ranges are acceptable	Units or %
Sludge/Shavings	15%	
Oil/Mill Coolant	25%	
Water	60%	

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
none

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
sample

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
None known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: x
TCLP Volatiles: x
TCLP Semi-Volatiles: x
Reactivity: x
Corrosivity: x
Ignitability: x

SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: James L Richardson **Date:** 04/02/09

Printed Name/Title: JAMES L. RICHARDSON
MAINTENANCE MANAGER

CES USE ONLY (DO NOT WRITE IN THIS SPACE)	
Compliance Officer: _____	
Date: _____ Approved Rejected	
Approval Number: 3262	

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

CES Environmental Services, Inc.

4904 Griggs Road
Houston, TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1676

To: Joy Baker
Cc: Matt Bowman, Prabhaker, Joe Camp, Clint Hopkins

Date: 4/03/09

From: Miles Root

Lab Memo: 09-066

Subject: **Preston Environmental Evaluation 0409-03**

A sample of oil mixed with coolant from Preston Environmental, via Scot Technologies, has been tested for potential receipt at CES. This oil/coolant mix was also water washed, with the resulting water checked for treatability. This sample is evaluation 0409-03 and represents material from an oil tank that will be cleaned out with water and detergent. The potential volume of this stream is one load, one time. It should arrive in a vacuum truck. Overall, this oil mix does not pass the chlor-d-tect test. The wash water produced in the lab can be treated. The actual wash water will contain detergents, which will change its ease of treatability, depending upon the type of detergent used. The sludge/solids will need disposal. CES can take on this job, but need pricing that will make it profitable.

The oil/coolant mix has a chlor-d-tect of 1600 ppm, which will require a rebuttal in order to receive it for resale. A chlor-d-tect on the water washed oil was 1800 ppm. The oil's flash point is greater than 140 deg F.

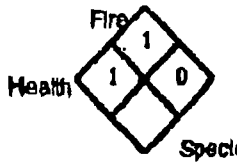
Water added at a 4:1 ratio and thoroughly mixed does appear to pick up some organics. There are an above average amount of solids formed, and the solids do not quickly phase separate. TOC on the water is 749 ppm, a very low value, but an indicator that some of the coolant was extracted into this phase.

The solids in this material appear to be metal shavings mixed with dirt, sand and pebbles. Some of the metal pieces are shavings longer than one inch with widths of 1/8 inch. This type of material will possibly need to be dug out of a vacuum truck. Minimum charge for this would be $300 in itself.

My concerns with this material include the chlor-d-tect on the oil and the ease of treatability of the water once a detergent is added and mixed. Detergents will act to hold the oil into the water, so this source may actually require a heat and/or acid treat to break any emulsions that may form. Pricing on emulsion treating is at least $0.15/gallon. We can take this material, but just need pricing where we will be profitable.

The table below summarizes the analytical testing.

Preston Environmental	
Evaluation 0409-03	
Oil Flash Point, deg F	>140
chlor-d-tect, ppm	1600
Water Treatability	Higher solids, slow separation
Water TOC, ppm	749



Hazard Code

0. Insignificant
1. Slight
2. Moderate
3. High
4. Extreme

Material Safety Data Sheet

This form complies with OSHA's Hazard Communication Standard 29 CFR 1910.1200.

U.S. Department of Labor
Occupation Safety and Health Administration

IDENTITY	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
SPEEDI KUT (all grades)	

Section I

Manufacturer's Name	Emergency Telephone Number
Benz Oil	(414) 442-2900
Address (Number, Street, City, State, and ZIP Code)	**Telephone Number For Information**
2721 W. Hampton Avenue Milwaukee, WI 53209	(414) 442-2900
	Date Prepared July 14, 1995
MSD34	**Signature of Preparer (optional)**

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Mineral Oil	5 mg/M3	5 mg/M3		90
Chlorinated Paraffin				5
Proprietary Additives				

The chlorinated paraffin (CP) used in this product is not Tier III reportable and has not been found to have adverse health effects. Recent National Toxicology Program (NTP) studies have shown that a CP other than the one used in this product caused tumor in laboratory animals that consumed large quantities of it.

SARA Section 313 Toxic Chemical Release Reporting: Not Applicable no toxic chemical is present greater than 1%. OSHA & ACGIH have set the exposure limit for mineral oil at 5 mg/M3 for oil mist in air. ACGIH lists a 10 mg/M3 STEL for mineral oil mist.

WHMIS Classification: Not Applicable this product is non-hazardous by WHMIS standards.

Section III - Physical/Chemical Characteristics

Boiling Point (minimum)		Specific Gravity (H2O = 1)	
315 min	500°F		0.9
Vapor Pressure (mm Hg)		**Melting Point**	
	0.01		NA
Vapor Density (AIR = 1)		**Evaporation Rate**	
	5	(Butyl Acetate = 1)	NIL

Solubility in Water
Very slight at room temperature

Appearance & Odor

Section IV - Fire and Explosion Hazard Data

Flash Point (C.O.C.) °F	Flammable Limits	LEL	UEL
		1	7

Extinguishing Media
Carbon dioxide, water, spray, foam, dry chemical

Special Fire Fighting Procedures
Use self contained breathing apparatus for fighting fires in enclosed areas.

Unusual Fire and Explosion Hazards
Directly spraying extinguishing media onto hot burning products may cause frothing and spreading of fire.

Section V - Reactivity Data

Stability			Conditions to Avoid	NA
	Unstable			
	Stable	X		

Incompatibility (Materials to Avoid)

Avoid contact with strong oxidants such as chlorine gas

Hazardous Decomposition or Byproducts

Fumes, smoke, COx, SOx, NOx, when combusted

Hazardous Polymerization			Conditions to Avoid	NA
	May Occur			
	Will Not Occur	X		

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	X	X	X

Health Hazards (Acute and Chronic)

Product has a low order of acute, oral, and dermal toxicity. Product contacting the eyes may cause irritation. Repeated skin contact may cause skin irritation or dermatitis because these type of products tend to remove natural emollients from the skin.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	NO	NO	NO

Signs and Symptoms of Exposure

Reddening and irritation of eyes or skin

Medical Conditions Generally Aggravated by Exposure

Pre-existing dermatitis or skin diseases

Emergency and First Aid Procedure

Skin contact: Wash with a mild soap containing lanoline or other emolients.

Eye contact: Flush eyes with clear water for 15 minutes and contact a physician if irritation persists.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Recover free product. Add sand, earth, or other absorbent to spill.
Minimize skin contact. Keep product out of sewers and waterways.

Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas.

Waste Disposal Method

Dispose of material in a licensed landfill or incineration facility in accordance with local, state, and federal regulations.

Precautions to be Taken in Handling and Storage

Store away from heat, sparks and other ignititon sources. "Empty" containers retain residual oil. Do not pressurize, cut, weld, solder, drill, grind or expose drums to other ignition sources.

Other Precautions

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Organic vapor mask should be used if mechanical ventilation is insufficient.

Ventilation				
	Local Exhaust	X	Special	NA
	Mechanical(General)	To meet TLV	Other	NA

Protective Gloves

Use oil resistant gloves to avoid prolonged or repeated skin contact.

Other Protective Clothing or Equipment

Use splash goggles or face shield when eye contact may occur.
Use chemical resistant apron to avoid contaminating regular clothing if needed.

Work/Hygienic Practices

In most cases good personal hygeine is all that is needed for safe trouble-free use of this product.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$.10/gal + Trans + FSC

2. **Contamination Limits (maximum limit before surcharges apply):**

Standard per General Pricing Sheet for Disposal

3. **Surcharge Pricing:**

Standard per General pricing sheet for Disposal

$.07/gal for heat or Specialty treatment

4. **Special Testing Requirements:**

oil: flash, chlor d test

Water: Toc, pH, phenols, % Solids

5. **Treatment and Handling Protocol:**

Water will go to Wash water treatment

If oil passes chlore d test then recycle

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☒ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable);**

3263
GATX

EPAHO104000996

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/8/2009**

Dear **Ricardo Salias**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # PA-3263

Expiration Date 4/8/2011

Generator: GATX (Hearne)
Address: 1401 W. Brown St.
Hearne, TX 77859

Waste Information

Name of Waste: Sodium Sulfide Solution
TCEQ Waste Code #: Product
Container Type:
Detailed Description of Process Generating Waste:
heel from railcars prior to cleaning RCRA empty containers
Color: amber, brown **Odor:** pungent, rotten egg **pH:** >11
Physical State:
Incompatibilities: mineral acids, strong oxidizers, chlorine, aluminum, copper, and brass alloys
Safety Related Data/Special Handling:
caustic PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

PACES Profile
DC/MM

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

Product

SECTION 1: Material Producer Information

Company:	GATX Rail		
Address:	1401 W. Brown St.		
City, State, Zip:	Hearne, TX 77859		
Contact:	Ricardo Salias	**Title:**	Maintenance Manager
Phone No:	979-279-3481	**Fax No:**	(979) 279-3020
24/hr Phone:	979-220-2450		
U.S. EPA I.D. No:	TXD000835207		
State I.D.	32643	**SIC Code:**	

SECTION 2: Billing Information – ☒ Same as Above

Company:			
Address:			
City, State, Zip:			
Contact:		**Title:**	
Phone No:		**Fax No:**	

SECTION 3: General Description of the Material / Product

Name of Material / Product: Sodium Sulfide Solution
Detailed Description of Process Generating or Producing the Material / Product: heel from railcars prior to cleaning RCRA empty containers

Physical State: ☒ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: amber, brown **Odor:** pungent, rotten egg

Specific Gravity (water=1): 1 **Density:** 8.34 lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ **Single-phase** ☐ **Multi-phase**

Container Type:	☒	**Drum**	☐ **Tote**	☐	**Truck**	☐	**Other (explain)**
Container Size:							

Frequency:	☐	**Weekly**	☒ **Monthly**	☐	**Quarterly**	☐	**Yearly**

Number of Units (containers): 5-10 **Other:**

Proper U.S. DOT Shipping Name: Product (Sodium Sulfide Solution) Corrosive liquids n.o.s.

Class: 8 **UN/NA:** UN1760 **PG:** II **RQ:** 833 gallons

EPAHO104000998

Flash Point >140	pH >11	N/A	N/A	Solids 0%
Oil&Grease namg/l	TOC namg/l	Zinc namg/l	Copper namg/l	Nickel namg/l

SECTION 4: P ysical and Chemical Data

COMPONENTS TABLE The m terial / product consists of the following materials	Concentration Ranges are acceptable	Units or %
water	88-93	%
sodium sulfide	0-12	%
sodium hydrox ide	0-12	%
mixed alkyl sul des	<1	%
mixed disulfide	<1	%
mixes alkyl me captons	<1	%

SECTION 5: S ifetv Related Data

If the handling of this material / product requires the use of special protective equipment, please explain.
caustic PPE

SECTION 6: A ttached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the material / product profile.
MSDS

SECTION 7: I compatibilities

Please list all i compatibilities (if any):
mineral acids, s ong oxidizers, chlorine, aluminum, copper, and brass alloys

SECTION 8: Material Producer's Certification

The informatio contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached descri tion is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of c nposition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are repre ntative of all materials described by this document.

Authorized Si nature: _____ **Date:** 4/3/9

Printed Name, Title: Ricardo Salas

CES USE ONLY DO NOT WRITE IN THIS SPACE)	
Technical Man ger: Robert Krueger Date: 4-8-09 Approved Rejected Approval Num er: PA-3263	

EPAHO104000999

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$250/drum

2. **Contamination Limits (maximum limit before surcharges apply):**

Solids: ≤5%

3. **Surcharge Pricing:**

Call sales rep

4. **Special Testing Requirements:**

Full titration, percent solids, test for use in NaHS production

5. **Treatment and Handling Protocol:**

Use in NaHS production

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

7. **Tests for Product Recovered/Recycled (if applicable):**

NA

8. **Management for Product Recovered/Recycled (if applicable);**

NA

MERICHEM
CHEMICALS & REFINERY SERVICES LLC

REVISION 4: February 26, 2008 | MATERIAL SAFETY DATA SHEET |

1 IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

1.1	Identification of the Product:	**SODIUM SULFIDE SOLUTION**
1.2	Product Code:	SSREF
1.2	Company:	Merichem Chemicals & Refinery Services LLC 5455 Old Spanish Trail Houston, TX 77023, U.S.A.
1.3	Transportation Emergency:	USA 800-424-9300 (CHEMTREC)
1.4	Product Information:	713-428-5000 713-926-3634 (Fax)

2 COMPOSITION/INFORMATION ON INGREDIENTS

Substance	CAS No.	% Present	Symbol(s)	R-Phrases
Water	7732-18-5	88 - 93	-	-
Sodium Sulfide	1313-82-2	0 - 12	C, N	31, 34, 50
Sodium Hydroxide	1310-73-2	0 - 12	C	34
Mixed Alkyl/Aryl Sulfides	-	<1	-	-
Mixed Disulfides	68334-01-0	<1	-	-
Mixed Alkyl/Aryl Mercaptans	-	<1	-	-

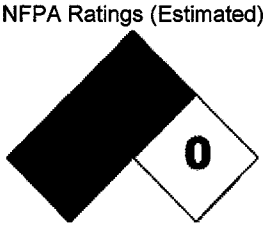
3 HAZARDS IDENTIFICATION

May be corrosive to the skin, eyes and respiratory tract.
May cause burns to the skin and eyes (effects may be delayed).
May be harmful if swallowed, inhaled or absorbed the through the skin.
Aspiration hazard if swallowed (can enter lungs and cause damage).
Noxious odors due to Sulfides, Disulfides and Mercaptans are typically present in the vapour space of closed containers, barges, tanks, etc.
Will react with mineral acids liberating Hydrogen Sulfide in concentrations that may be harmful or fatal.
Will react with mineral acids liberating Hydrogen Sulfide in concentrations that may result in a flammable atmosphere.
Small upper petroleum hydrocarbon layer/film with a flash point of less than 100°F may be present resulting in a potential fire hazard. However, material is not considered flammable or combustible for the purpose of meeting Hazard Communication requirements.

HMIS Ratings (Estimated)

HEALTH	3
FLAMMABILITY	0
	0

NFPA Ratings (Estimated)



4 FIRST-AID MEASURES

In case of swallowing:	Do not induce vomiting. If victim is alert and not convulsing, rinse mouth with water or milk and give three or more glasses of water or milk to drink. If spontaneous vomiting occurs, have affected person lean forward with head down to avoid breathing of vomitus. Rinse mouth again and give more water or milk to drink. Obtain medical attention.
In case of inhalation:	Remove affected person to fresh air. Provide oxygen if breathing is difficult. Give artificial respiration only if breathing has stopped and obtain immediate medical attention. Obtain medical attention if respiratory tract irritation develops.
In case of contact with eyes:	Promptly flush eyes with running water for 15 minutes, including under eyelids. Obtain medical assistance.
In case of contact with skin:	Promptly remove contaminated clothing and thoroughly wash exposed area with soap and water. Continue to flush exposed area with water. Seek medical assistance if irritation or other symptoms develop.

5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media:

Suitable	-	Dry chemical, CO_2 or foam is recommended should fire result from petroleum hydrocarbon layer. Water spray may be used to cool or protect containers exposed to fire or heat.
Not suitable	-	Water spray may be ineffective in extinguishing fire resulting from petroleum hydrocarbon layer.

5.2 Fire exposure hazards: May release Hydrogen Sulfide when heated.

5.3 Personal protective equipment: Wear Self Contained Breathing Apparatus and protective clothing appropriate for fire-fighting. Non-emergency personnel should be removed from the area immediately.

6 ACCIDENTAL RELEASE MEASURES

Remove non-essential personnel from the area. Shut off ignition sources.

Observe any container warning labels (See Sections 14 and 15). Take precautions to avoid exposure (See Section 8).

Promptly contain any spilled material with dry agent (sand, vermiculite, etc.). Shovel agent and absorbed material into labelled container(s) for proper disposal (See Section 13).

7 HANDLING AND STORAGE

7.1 Handling: Handle/weigh this material under conditions of good local exhaust ventilation.

Avoid breathing mist or aerosol, swallowing, and eye and skin contact.

Wear personal protective equipment (See Section 8).

Wash thoroughly after handling.

7.2 Storage: Store in compatible, sealed container.

Store in a clean, dry, well-ventilated area away from heat, direct sunlight, hot metal surfaces, sources of ignition and mineral acids.

Keep containers tightly closed.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Respiratory: Wear respiratory protection to prevent inhalation of uncontained dusts that may be formed during handling and to prevent exposure above regulatory levels (see Section 16). A full-facepiece, SCBA is recommended for nonroutine or emergency conditions.

8.2 Hand: Heavy PVC or butyl rubber gloves or gauntlets

8.3 Eye: Goggles or safety glasses/side shields in combination with face shield.

8.4 Skin: Proper work attire (i.e. Long sleeve shirt, long pants, work shoes). Conditions may also call for an apron, lab coat or coveralls.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance:	Amber, Brown Liquid	9.2 Odour:	Pungent, Rotten Egg
9.3 pH:	>11.0	9.4 Boiling Pt./range:	104°C (220°F), Approximately
9.5 Freezing Pt./Range:	0.5°C (33°F), Approximately		
9.6 Flash point:	Aqueous Solution, Not Flammable. (If present, petroleum hydrocarbon layer has a flash point <37.8°C (100°F))		
9.7 Flammability:	See 9.6	9.8 Autoflammability:	See 9.6
9.9 Explosive properties:	Not Explosive	9.10 Oxidizing properties:	Not an oxidizer
9.11 Vapor pressure:	Not Applicable	9.12 Relative density (H_2O = 1):	1.15 – 1.18 @ 15.6°C (60°F)
9.13 Bulk density:	See 9.12		

9.14 Solubility:

Water	-	Aqueous Solution
Fat (type)	-	Not determined
Other solvents	-	Not determined

9.15 Partition coefficient: Log $P_{o/w}$ (Octanol/water) - Not determined

9.16 Other data: Odor Threshold = <1 ppm

10 STABILITY AND REACTIVITY

10.1 Conditions to avoid: High temperatures and possible sources of ignition.

10.2 Materials to avoid: Mineral acids, strong oxidizing agents, chlorine, aluminium, copper and brass alloys.

10.3 Hazardous decomposition products: Oxides of carbon may be released on burning or heating to decomposition.

11 TOXICOLOGICAL INFORMATION

Acute: Irritant or corrosive in contact with body tissues.

Mist or aerosol is respiratory tract irritant and possibly harmful and systemic poison if inhaled.

Harmful if swallowed possibly causing severe irritation and burns of the mouth, throat and digestive tract followed by delayed effects of abdominal pain and nausea.

If released due to heating, etc., Hydrogen Sulfide vapors may cause headache, dizziness, nausea and vomiting. Prolonged exposure to elevated levels of Hydrogen Sulfide can lead to loss of consciousness, respiratory failure and death.

CAS Number	Dermal LD_{50}	Oral LD_{50}	Inhalation LC_{50}
1313-82-2	-	208 mg/kg, Rat 205 mg/kg, Mouse	-
1310-73-2	-	-	-
Sulfides (as Methyl Sulfide)	>5 gm/kg, Rabbit	3300 mg/kg, Rat 3700 mg/kg, Mouse	31620 ug/m^3, Mouse
Disulfides (as Methyl Disulfide)	-	535 mg/kg, Rat	15850 ug/m^3/2H, Rat 12300 ug/m^3/2H, Mouse
Mercaptans (as Methyl Mercaptan)	-	682 mg/kg, Rat	4420 ppm/4H, Rat 2770 ppm/4H, Mouse

Chronic: Product and components are not listed by NTP, IARA or OSHA as carcinogens.

Product is unlikely to be a skin sensitizer.

12 ECOLOGICAL INFORMATION

The aquatic toxicity of this product has not been determined. One component, Sodium Hydroxide, is considered highly toxic to aquatic life (Bluegill LC_{50} = 250 ug/L, 96 H). Avoid direct or indirect discharge to bodies of water.

13 DISPOSAL CONSIDERATIONS

Generators of waste material are responsible for evaluating materials for compliance with all applicable procedures and regulations. Disposal of unused materials must be in accordance with all local, state and federal regulations. Containers should be cleaned of residual product and rinsed according to all local, state and federal regulations prior to disposal.

14 TRANSPORT INFORMATION

IATA Proper Shipping Name: Corrosive liquid, n.o.s., (Sodium Sulfide Solution)

DOT Proper Shipping Name: Corrosive liquids, n.o.s., (Sodium Sulfide Solution)

UN No.: 1760

Symbol:

Hazard Class: 8

Packing Group: II

Marine Pollutant: No

Hazardous Substance: This product contains Sodium Hydroxide (RQ = 1000 lbs) which is listed in 49 CFR 172.101, Appendix A as a Hazardous Substance. Solution RQ = 8,333 pounds (846 gallons) at 12% concentration.

15 REGULATORY INFORMATION

Components listed as "dangerous" in Annex I to Directive 67/548/EEC[8]

Component or impurity	Annex I Number
Sodium Sulphide	016-009-00-8
Sodium Hydroxide	011-0023-00-6

Classified according to the Directives 67/548/EEC and 88/379/EEC, and their various amendments, and labeled: **Sodium Sulfide Solution (SSREF)**
Contains Sodium Sulphide (EC No. 215.211.5) and Sodium Hydroxide (EC No. 215-185-5)

Warning symbol:

Warning words: Corrosive

Risk phrases:

Sodium Sulphide	R31	Contact with acid liberates toxic gas.
	R34	Causes burns.
	R50	Very toxic to aquatic organisms.
Sodium Hydroxide	R35	Causes severe burns.

Safety phrases:

Sodium Sulphide	S1/2	Keep locked up and out of reach of children.
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
	S61	Avoid release to the environment.
Sodium Hydroxide	S1/2	Keep locked up and out of reach of children.
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S37/39	Wear suitable gloves and eye/face protection.
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

16 OTHER INFORMATION

Occupational Exposure Levels

Sodium Hydroxide	US (OSHA)	2 mg/m^3, 8-hour TWA
	US (ACGIH)	2 mg/m^3, Ceiling
	US (NIOSH)	10 mg/m^3, IDLH
Dimethyl Sulfide (Reference)	US (ACGIH)	10 ppm, 8-hour TWA
Ethyl Mercaptan (Reference)	US (OSHA)	25 mg/m^3 (10 ppm), Ceiling
	US (ACGIH)	0.5 ppm, 8-hour TWA
	US (NIOSH)	500 ppm, IDLH

SARA Title III Information

	Sec 302 CERCLA RQ (pounds)	Sec 302 EHS TPQ (pounds)	Sec 311/312 Category	Sec 313 Toxic Chemical	Sec 313 Category
Product	8333 (Max)		Acute		
Sodium Sulfide			Acute Reactive		
Sodium Hydroxide	1000		Acute Reactive		

WHMIS:

CAS Number	Rating
1313-82-2	E, D1B
1310-73-2	E

Inventories:

CAS Number	TSCA	DSL	EINECS
1313-82-2	Yes	Yes	Yes
1310-73-2	Yes	Yes	Yes
7732-18-5	Yes	Yes	Yes
68334-01-0	Yes	Yes	Yes

Intended Uses: For industrial use only. No other use is intended.

Revisions: Revisions are indicated by 20% shading.

The format of this Safety Data Sheet conforms to the requirements of EC Directive 91/155/EEC.

The information on this form is furnished solely for the purpose of enabling those who transport, handle or use our products to ensure the safety and health of their employees and to comply with various laws and regulations (federal, state and local). This information is offered in good faith and is believed to be accurate. Merichem Chemicals & Refinery Services LLC, however, makes no guarantee or warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use hereof.

3264
Greens Bayou Pipe

EPAHO104001008

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/8/2009**

Dear **Michael Schroeder**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3264

Expiration Date 4/8/2011

Generator: Greens Bayou Pipe Mill, LP
Address: 13935 Industrial Road
Houston, TX 77015

Waste Information

Name of Waste: Non-RCRA Waste Mill Scale
TCEQ Waste Code #: 00063191
Container Type: roll off
Detailed Description of Process Generating Waste:
mill scale from carbon steel press
Color: brown to black **Odor:** none **pH:** na
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

15

CES Environmental Services, Inc.

☐ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Greens Bayou Pipe Mill, LLC
Address: 13935 Industrial Rd.
City: Houston **State:** TX **Zip:** 77015
Contact: Sergio Marquez **Title:** Project Coordinator
Phone Number: 832-671-3916 **Fax Number:**
24/hr Phone Number: 832-671-3916
US EPA ID No: 86876
State ID No: TXR000063917 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Non-RCRA Waste Mill Scale
Detailed Description of Process Generating Waste:

Mill scale from carbon steel press.

Physical State: ☐ **Liquid** ☐ **Sludge** ☐ **Powder** ☑ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Brown to Black **Odor:** None

Specific Gravity (water=1): 1.5-1.75 **Density:** 11 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☐ **Truck** ☑ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 2-20 yds

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Na

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: Na

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: Na

Texas State Waste Code Number: 00063191

Proper US DOT Shipping Name: Non-RCRA Waste Solids

Class: Na **UN/NA:** Na **PG :** Na **RQ:** Na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>200		Na		0	mg/l	0	mg/l	95-100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	Na	mg/l	Na	mg/l	Na	mg/l	Na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Mill Scale	95-100	%
hydrolic oil residue	0-5	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analysis

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	
TCLP Volatiles:	Na-None in Process
TCLP Semi-Volatiles:	Na-None in Process
Reactivity:	Na-None in Process
Corrosivity:	Na-None in Process
Ignitability:	Na-None in Process

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory : Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 4-06-09

Printed Name/Title: SALLY BRIDGES SENIOR ADMINISTRATOR - GBBPW

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____

Date: 4-8-09 ☑ Approved ☐ Rejected

Approval Number: _____

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$55/ton

2. **Contamination Limits (maximum limit before surcharges apply):**

Na-Non conforming to profile

3. **Surcharge Pricing:**

NA

4. **Special Testing Requirements:**

None

5. **Treatment and Handling Protocol:**

~~System 1~~ to solid landfill (See Analysis and call Dan)

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001014

7. **Tests for Product Recovered/Recycled (if applicable):**

Na

8. **Management for Product Recovered/Recycled (if applicable):**

Na

ENVIRON EXPRESS LABORATORIES, INC.

401 N. 11th. St.
La Porte, TX 77571
281.471.0951 FAX:281.471.5821

Express Laboratories

CERTIFICATE OF ANALYSIS NO: 62978.01

Customer: CES Env. Sample ID: 0208-3X Environ ID: 62978.01
Project ID: Greens Bayou Pipe Mill Metal Scale Sampled: 02-25-08
Project Loc: Matrix: Solid Received: 02-26-08 11:15
Charge/P.O.: Type: Grab Reported: 02-27-08

ANALYTE/ PARAMETER	RESULT	UNITS	REG. LIMIT	MQL	TEST METHOD	TEST BY	DATE	TIME
BENZENE - TCLP								
Benzene	< 0.001	mg/l	0.5	0.001	SW846.8021B	DMB	02-27-08	13:40
TPH								
nC6 to nC12 GRO	< 50	mg/kg	--	50	TCEQ 1005.3	DB	02-27-08	14:02
> nC12 to nC28 DRO	62	mg/kg	--	50	TCEQ 1005.3	DB	02-27-08	14:02
> nC28 to nC35 ORO	90	mg/kg	--	50	TCEQ 1005.3	DB	02-27-08	14:02
TPH (Total nC6 to nC35)	152	mg/kg	500		TCEQ 1005.3	DB	02-27-08	14:02
METALS - TCEQ-TCLP					EPA SW846.1311	MN	02-26-08	
Antimony	< 0.1	mg/l	1.0	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Arsenic	< 0.1	mg/l	1.8	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Barium	< 2.0	mg/l	100	2.0	EPA SW846.6010C	JA	02-27-08	15:00
Beryllium	< 0.05	mg/l	0.08	0.05	EPA SW846.6010C	JA	02-27-08	15:00
Cadmium	< 0.1	mg/l	0.5	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Chromium	< 0.1	mg/l	5.0	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Lead	< 0.1	mg/l	1.5	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Nickel	0.3	mg/l	70	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Selenium	< 0.1	mg/l	1.0	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Silver	< 0.2	mg/l	5.0	0.2	EPA SW846.6010C	JA	02-27-08	15:00
Mercury	< 0.02	mg/l	0.2	0.02	EPA SW846.7470A	MN	02-27-08	11:00

Key: TCLP - Toxicity Characteristic Leaching Procedu REG - Regulatory Limit (User Should Verify)
EPA - Environmental Protection Agency MQL - Method Quantitation Limit
TCEQ - Texas Commission on Environmental Qu RCVD - As Received (Wet) Basis
TPH - Total petroleum Hydrocarbons mg/l - Milligrams per Liter (PPM Volume)
GRO - Gasoline Range, DRO - Diesel Range, ORO - Oil Range mg/kg - Milligrams per Kilogram (PPM Weight)

John Keller

John Keller, Ph.D
Laboratory Director

EPAHO104001016

ENVIRON EXPRESS QUALITY CONTROL REPORT

ANALYSIS:	BTEX	METHOD:	EPA SW846/5030/8021B	MATRIX:	LEACHATE

ANALYST:	dmb	UNITS:	mg/l	NO.SAMPLES:	20

SAMPLES:	62978-01	62980-01	62981-01	62982-01	62988-01	62988-02	62988-03	62990-01
	62992-01	62992-02	62992-03	8030040	8030063	8030064	8030065	8030149
	8030151	8030152	8030153	8030154				

MATRIX 8030151	MATRIX RESULTS	SPIKE ADDED	MS RESULTS	MS REC	MSD REC	RPD	CCV REC	MB	QC LIMITS (%)	
									REC-RANGE	RPD
BENZENE	0	100	86	86	84	3	91	0	60 - 120	20
TOLUENE	0	100	86	86	84	3	92	0	60 - 120	20
Et-BENZENE	0	100	88	88	85	4	88	0	60 - 120	20
XYLENES	0	300	274	91	89	2	99	0	60 - 120	20
MTBE	0	100	101	101	101	0	114	0	60 - 120	20

KEY:
BTEX - Benzene (BENZ), Toluene (TOL)
Ethylbenzene (ETBZ), Xylenes (XYLS)
MTBE - Methyl-tert-butyl ether
CCV - Continuing Calibration Verification
MB - Method Blank
MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
REC - Recovery Percent

John Keller 3/11/08
JOHN KELLER, Ph.D DATE
Lab.Dir./QA-QC Mgr.

ENVIRON EXPRESS QUALITY CONTROL REPORT

ANALYSIS:	TPH	METHOD:	TNRCC 1005.3

ANALYST:	dmb	MATRIX:	SOIL	UNITS:	mg/kg	SAMPLES:	5

SAMPLES:	62978-01	62980-01	62981-01	62982-01	62983-01		

QC SAMPLE	MB	CCV	FB	LCS	LCSD	LCS/LCSD	QC LIMITS	
MB	mg/kg	REC	REC	REC	REC	RPD	REC	RPD
GRO RESULT	< 50	99%	93%	93%	89%	5%	75-125	20
DRO RESULT	< 50	96%	86%	86%	86%	0%	75-125	20

John Keller 2/28/08

JOHN KELLER, Ph.D, Lab.Dir./QA-QC Mgr. DATE

KEY:

TPH - Total Petroleum Hydrocarbons
GRO - Gasoline Range Organics
DRO - Diesel Range Organics
CCV - Continuing Calibration Verification
MB - Method Blank
LCS - Laboratory Control Sample
MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative % Difference
REC - Recovery %

ENVIRON EXPRESS QUALITY CONTROL REPORT

ANALYSIS:	METALS	METHOD:	EPA SW846/6010	MATRIX:	LIQUID

ANALYST:	JA	DATE:	02.27.08	UNITS:	PPM (mg/l)	NO.SAMPLES:	6

SAMPLES:	62973.01	62978.01	62980.01	62981.01	92982.01	62983.01		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE ANALYSIS — BATCH ID: 62973.01

SAMPLE Matrix	SAMPLE RESULTS	SPIKE ADDED	SPIKE RESULTS	RECOV. %	RECOV. DUP. %	REL. DIFF. %	CONT. CALIB.	METHOD BLANK	QC LIMITS RECOV.	QC LIMITS DIFF.
Arsenic	0.00	5	4.14	83	91	9	93	0	75 - 125	20
Barium	0.00	5	4.18	84	93	11	97	0	75 - 125	20
Cadmium	0.00	5	4.07	81	91	11	99	0	75 - 125	20
Chromium	0.00	5	4.10	82	91	11	96	0	75 - 125	20
Lead	0.00	5	4.09	82	91	11	96	0	75 - 125	20
Selenium	0.00	5	4.24	85	95	11	96	0	75 - 125	20
Silver	0.00	5	4.07	81	91	11	97	0	75 - 125	20

JOHN KELLER, Ph.D
Laboratory Director

ENVIRON EXPRESS QUALITY CONTROL REPORT

ANALYSIS:	MERCURY	METHOD: EPA SW846/7471A	MATRIX:	LIQUID

ANALYSTS:	MN	DATE:	02.27.08	UNITS:	mg/l	NO.SAMPLES:	6

SAMPLES:	62973.01	62978.01	62980.01	62981.01	62982.01	62983.01		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE ANALYSIS

SAMPLE Matrix	SAMPLE RESULTS	SPIKE ADDED	SPIKE RESULTS	RECOV. %	RECOV. DUP. %	REL. DIFF.	CONT. CALIB.	METH. BLANK	CORR. COEFF.	QC LIMITS RECOV.	QC LIMITS DIFF.
MERCURY	0.00	0.002	0.002	100	100	0	100	0	1	60 - 120	20

JOHN KELLER, Ph.D
Laboratory Director

Page 1 of 1

ENVIRON
Express Laboratories

ENVIRON EXPRESS LABORATORIES, INC.
401 North 11th. St. / La Porte, Texas 77571-3115
(281) 471-0951 / (800) 880-0156
Fax: (281) 471-5821 / After Hours: (281) 844-2308

Results To:	DAN BOWMAN
Company:	CES ENVIRONMENTAL
Address:	4904 GRIGGS ROAD
City	HOUSTON State: TX Zip: 77021
Phone:	713 626 1460
Fax:	
e-Mail:	
Invoice To:	SAME
Company:	
Address:	
City:	State: Zip:
Phone:	
Fax:	
PO#:	Quote#:

TAT (WORKING DAYS) CIRCLE ONE: 1 2 3 5

LAB LOT #	COC Present? Yes No
Shipment Sealed? Yes No	Samples Sealed? Yes No
Received on Ice? Yes No	Samples Intact? Yes No
Cooler Temp. (°C) Amb	Preservative Shown? Yes No NA
Hold Time OK? Yes No	Res. Cl2 Check OK? Yes No NA
pH Check OK? Yes No NA	COC & Labels Agree? Yes No

Project Name: GREENS BAYOU PIPE MILL
Project Location:
Project No:
Sampler (Print):
Sampler (Sign):
Sampler Remarks:

2 Cntr. Type												G						
Number												1						
Volume												3202						
3 Preservative												B						
EEL USE ONLY (LAB NO.)	SAMPLE ID.	DATE/TIME SAMPLED	1 MATRIX	COMP/GRAB	BTEX (8021)	TPH (TX1005)	MTBE	PAH	TOTAL / TCLP / SPLP: VOLATILES	SEMI-VOLS	RCRA METALS	~~RCRA~~ 11 METALS	~~TCLP~~	TPH	TCLP BENZENE			Remarks & Additional Analyses
62978.01	1) 0208-3X	2/25	SO	G							X	X	X	X	X			METAL SCALE
	2)																	
	3)																	
	4)																	
	5)																	
	6)																	
	7)																	
	8)																	
	9)																	
	10)																	

Relinquished By: [signature]	Company: CES	Date/Time: 2/26 11:15	Received By: [signature]	Company: ENVIRON
Relinquished By:	Company:	Date/Time:	Received By:	Company:
Relinquished By:	Company:	Date/Time:	Received By:	Company:

1 Matrix Key
S:Soil W:Water WW:Waste Water SL:Sludge SO:Solid SE:Sediment L: Leachate WI:Wipe OR:Organic OL:Oil DS:Drum Solid DL:Drum Liquid O:Other _____

2 Container Type Key
P:Plastic G:Glass V:VOA Glass O:Other _____

3 Preservative Key
1:Ice(<4°C) 2:HCL 3:H2SO4 4:HNO3 5:NaOH 6:NaOH+Zn Acetate 7:Na2S2O3 8:None

Delivery of samples constitutes acceptance of Environ's terms and conditions in the Price Schedule.

EPAHO104001021

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/8/2009**

Dear **Michael Schroeder**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3264

Expiration Date 4/8/2011

Generator: Greens Bayou Pipe Mill, LP
Address: 13935 Industrial Road
Houston, TX 77015

Waste Information

Name of Waste: Non-RCRA Waste Mill Scale
TCEQ Waste Code #: 00063191
Container Type: roll off
Detailed Description of Process Generating Waste:
mill scale from carbon steel press
Color: brown to black **Odor:** none **pH:** na
Physical State:
Incompatibilities: none
Safety Related Data/Special Handling:
level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

DB/MM

15

CES Environmental Services, Inc.

☐ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Greens Bayou Pipe Mill, LLC
Address: 13935 Industrial Rd.
City: Houston **State:** TX **Zip:** 77015
Contact: Sergio Marquez **Title:** Project Coordinator
Phone Number: 832-671-3916 **Fax Number:**
24/hr Phone Number: 832-671-3916
US EPA ID No: 86876
State ID No: TXR000063917 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Non-RCRA Waste Mill Scale
Detailed Description of Process Generating Waste:

Mill scale from carbon steel press.

Physical State: ☐ **Liquid** ☐ **Sludge** ☐ **Powder** ☑ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Brown to Black **Odor:** None

Specific Gravity (water=1): 1.5-1.75 **Density:** 11 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☐ **Truck** ☑ **Other (explain)**

Frequency: ☐ **Weekly** ☐ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 2-20 yds

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Na

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: Na

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No

If "Yes", then please list ALL applicable codes: Na

Texas State Waste Code Number: 00063191

Proper US DOT Shipping Name: Non-RCRA Waste Solids

Class: Na **UN/NA:** Na **PG :** Na **RQ:** Na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>200		Na		0	mg/l	0	mg/l	95-100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
>1500	mg/l	Na	mg/l	Na	mg/l	Na	mg/l	Na	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Mill Scale	95-100	%
hydrolic oil residue	0-5	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Analysis

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	
TCLP Volatiles:	Na-None in Process
TCLP Semi-Volatiles:	Na-None in Process
Reactivity:	Na-None in Process
Corrosivity:	Na-None in Process
Ignitability:	Na-None in Process

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory*: *Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory*: *Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory : Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☐ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all ~~known or suspected~~ hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Sally Bridges Date: 4-06-09

Printed Name/Title: SALLY BRIDGES SENIOR ADMINISTRATOR. GBBPW

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:
Date: 4-8-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$55/ton

2. **Contamination Limits (maximum limit before surcharges apply):**

Na-Non conforming to profile

3. **Surcharge Pricing:**

NA

4. **Special Testing Requirements:**

None

5. **Treatment and Handling Protocol:**

~~System 4~~ to solid landfill (See Analysis and call Dan)

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A	☐ Subcategory B	☐ Subcategory C

EPAHO104001027

7. **Tests for Product Recovered/Recycled (if applicable):**

Na

8. **Management for Product Recovered/Recycled (if applicable):**

Na

ENVIRON EXPRESS LABORATORIES, INC.

401 N. 11th. St.
La Porte, TX 77571
281.471.0951 FAX:281.471.5821

Express Laboratories

CERTIFICATE OF ANALYSIS NO: 62978.01

Customer: CES Env. Sample ID: 0208-3X Environ ID: 62978.01
Project ID: Greens Bayou Pipe Mill Metal Scale Sampled: 02-25-08
Project Loc: Matrix: Solid Received: 02-26-08 11:15
Charge/P.O.: Type: Grab Reported: 02-27-08

ANALYTE/ PARAMETER	RESULT	UNITS	REG. LIMIT	MQL	TEST METHOD	TEST BY	DATE	TIME
BENZENE - TCLP								
Benzene	< 0.001	mg/l	0.5	0.001	SW846.8021B	DMB	02-27-08	13:40
TPH								
nC6 to nC12 GRO	< 50	mg/kg	--	50	TCEQ 1005.3	DB	02-27-08	14:02
> nC12 to nC28 DRO	62	mg/kg	--	50	TCEQ 1005.3	DB	02-27-08	14:02
> nC28 to nC35 ORO	90	mg/kg	--	50	TCEQ 1005.3	DB	02-27-08	14:02
TPH (Total nC6 to nC35)	152	mg/kg	500		TCEQ 1005.3	DB	02-27-08	14:02
METALS - TCEQ-TCLP					EPA SW846.1311	MN	02-26-08	
Antimony	< 0.1	mg/l	1.0	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Arsenic	< 0.1	mg/l	1.8	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Barium	< 2.0	mg/l	100	2.0	EPA SW846.6010C	JA	02-27-08	15:00
Beryllium	< 0.05	mg/l	0.08	0.05	EPA SW846.6010C	JA	02-27-08	15:00
Cadmium	< 0.1	mg/l	0.5	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Chromium	< 0.1	mg/l	5.0	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Lead	< 0.1	mg/l	1.5	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Nickel	0.3	mg/l	70	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Selenium	< 0.1	mg/l	1.0	0.1	EPA SW846.6010C	JA	02-27-08	15:00
Silver	< 0.2	mg/l	5.0	0.2	EPA SW846.6010C	JA	02-27-08	15:00
Mercury	< 0.02	mg/l	0.2	0.02	EPA SW846.7470A	MN	02-27-08	11:00

Key: TCLP - Toxicity Characteristic Leaching Procedu REG - Regulatory Limit (User Should Verify)
EPA - Environmental Protection Agency MQL - Method Quanitation Limit
TCEQ - Texas Commission on Environmental Qu RCVD - As Received (Wet) Basis
TPH - Total petroleum Hydrocarbons mg/l - Milligrams per Liter (PPM Volume)
GRO - Gasoline Range, DRO - Diesel Range, ORO - Oil Range mg/kg - Milligrams per Kilogram (PPM Weight)

John Keller

John Keller, Ph.D
Laboratory Director

EPAHO104001029

ENVIRON EXPRESS QUALITY CONTROL REPORT

ANALYSIS:	BTEX	METHOD:	EPA SW846/5030/8021B	MATRIX:	LEACHATE

ANALYST:	dmb	UNITS:	mg/l	NO.SAMPLES:	20

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MATRIX 8030151	MATRIX RESULTS	SPIKE ADDED	MS RESULTS	MS REC	MSD REC	RPD	CCV REC	MB	QC LIMITS (%)	
									REC-RANGE	RPD
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TOLUENE	0	100	86	86	84	3	92	0	60 - 120	20
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XYLENES	0	300	274	91	89	2	99	0	60 - 120	20
MTBE	0	100	101	101	101	0	114	0	60 - 120	20

KEY:
BTEX - Benzene (BENZ), Toluene (TOL)
Ethylbenzene (ETBZ), Xylenes (XYLS)
MTBE - Methyl-tert-butyl ether
CCV - Continuing Calibration Verification
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John Keller 3/11/08
JOHN KELLER, Ph.D DATE
Lab.Dir./QA-QC Mgr.

ENVIRON EXPRESS QUALITY CONTROL REPORT

ANALYSIS:	TPH	METHOD:	TNRCC 1005.3

ANALYST:	dmb	MATRIX:	SOIL	UNITS:	mg/kg	SAMPLES:	5

SAMPLES:	62978-01	62980-01	62981-01	62982-01	62983-01		

QC SAMPLE	MB	CCV	FB	LCS	LCSD	LCS/LCSD	QC LIMITS	
MB	mg/kg	REC	REC	REC	REC	RPD	REC	RPD
GRO RESULT	< 50	99%	93%	93%	89%	5%	75-125	20
DRO RESULT	< 50	96%	86%	86%	86%	0%	75-125	20

John Keller 2/28/08

JOHN KELLER, Ph.D, Lab.Dir./QA-QC Mgr. DATE

KEY:

TPH - Total Petroleum Hydrocarbons
GRO - Gasoline Range Organics
DRO - Diesel Range Organics
CCV - Continuing Calibration Verification
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ENVIRON EXPRESS QUALITY CONTROL REPORT

ANALYSIS:	METALS	METHOD:	EPA SW846/6010	MATRIX:	LIQUID

ANALYST:	JA	DATE:	02.27.08	UNITS:	PPM (mg/l)	NO.SAMPLES:	6

SAMPLES:	62973.01	62978.01	62980.01	62981.01	92982.01	62983.01		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE ANALYSIS — BATCH ID: 62973.01

SAMPLE Matrix	SAMPLE RESULTS	SPIKE ADDED	SPIKE RESULTS	RECOV. %	RECOV. DUP. %	REL. DIFF. %	CONT. CALIB.	METHOD BLANK	QC LIMITS RECOV.	QC LIMITS DIFF.
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Barium	0.00	5	4.18	84	93	11	97	0	75 - 125	20
Cadmium	0.00	5	4.07	81	91	11	99	0	75 - 125	20
Chromium	0.00	5	4.10	82	91	11	96	0	75 - 125	20
Lead	0.00	5	4.09	82	91	11	96	0	75 - 125	20
Selenium	0.00	5	4.24	85	95	11	96	0	75 - 125	20
Silver	0.00	5	4.07	81	91	11	97	0	75 - 125	20

John Keller

JOHN KELLER, Ph.D
Laboratory Director

ENVIRON EXPRESS QUALITY CONTROL REPORT

ANALYSIS:	MERCURY	METHOD: EPA SW846/7471A	MATRIX:	LIQUID

ANALYSTS:	MN	DATE:	02.27.08	UNITS:	mg/l	NO.SAMPLES:	6

SAMPLES:	62973.01	62978.01	62980.01	62981.01	62982.01	62983.01		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE ANALYSIS

SAMPLE Matrix	SAMPLE RESULTS	SPIKE ADDED	SPIKE RESULTS	RECOV. %	RECOV. DUP. %	REL. DIFF.	CONT. CALIB.	METH. BLANK	CORR. COEFF.	QC LIMITS RECOV.	QC LIMITS DIFF.
MERCURY	0.00	0.002	0.002	100	100	0	100	0	1	60 - 120	20

John Keller

JOHN KELLER, Ph.D
Laboratory Director

ENVIRON
Express Laboratories

ENVIRON EXPRESS LABORATORIES, INC.
401 North 11th. St. / La Porte, Texas 77571-3115
(281) 471-0951 / (800) 880-0156
Fax: (281) 471-5821 / After Hours: (281) 844-2308

Results To: DAN BOWMAN	Invoice To: SAME
Company: CES ENVIRONMENTAL	Company:
Address: 4904 GRIGGS ROAD	Address:
City: HOUSTON State: TX Zip: 77021	City: State: Zip:
Phone: 713 636 4460	Phone:
Fax:	Fax:
e-Mail:	PO#: Quote#:

TAT (WORKING DAYS) CIRCLE ONE: 1 2 3 5

LAB LOT#	COC Present? Yes No
Shipment Sealed? Yes No	Samples Sealed? Yes No
Received on Ice? Yes No	Samples Intact? Yes No
Cooler Temp. (°C) Amb	Preservative Shown? Yes No NA
Hold Time OK? Yes No	Res. Cl2 Check OK? Yes No NA
pH Check OK? Yes No NA	COC & Labels Agree? Yes No

Remarks & Additional Analyses

Project Name: GREENS BAYOU PIPE MILL
Project Location:
Project No:
Sampler (Print):
Sampler (Sign):
Sampler Remarks:

EEL USE ONLY (LAB NO.)	SAMPLE ID.	DATE/TIME SAMPLED	[1] MATRIX	COMP/GRAB	BTEX (8021)	TPH (TX1005)	MTBE	PAH	VOLATILES	SEMI-VOLS	RCRA METALS	TOTAL / TCLP / SPLP	8 RCRA + Ni + Cu + Zn + Al + Fe + Mn + Co + Sb + Mo + Be + V + Sn + Ag + Tl METALS	TCLP	TPH	TCLP BENZENE			Remarks & Additional Analyses
	[2] Cntr. Type												G						
	Number												1						
	Volume												32oz						
	[3] Preservative												3						
62978.01	1) 0208-3X	2/25	S	G							X		X	X	X	X			METAL SCALE
	2)																		
	3)																		
	4)																		
	5)																		
	6)																		
	7)																		
	8)																		
	9)																		
	10)																		

Relinquished By:	Company: CES	Date/Time: 2/26 11:15	Received By:	Company: ENVIRON
Relinquished By:	Company:	Date/Time:	Received By:	Company:
Relinquished By:	Company:	Date/Time:	Received By:	Company:

[1] Matrix Key
S:Soil W:Water WW:Waste Water SL:Sludge SO:Solid SE:Sediment L: Leachate WI:Wipe OR:Organic OL:Oil DS:Drum Solid DL:Drum Liquid O:Other _____

[2] Container Type Key
P:Plastic G:Glass V:VOA Glass O:Other _____

[3] Preservative Key
1:Ice(<4°C) 2:HCL 3:H2SO4 4:HNO3 5:NaOH 6:NaOH+Zn Acetate 7:Na2S2O3 8:None

Delivery of samples constitutes acceptance of Environ's terms and conditions in the Price Schedule.

EPAHO104001034

3265
Bigler, L.P.

EPAHO104001035

7Q
8-4-09
T-35
LAB

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **4/9/2009**

Dear **Andy Duncan**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3265

Expiration Date 4/8/2011

Generator: Bigler, LP
Address: 3003 Hwy 225 Suite 100
Pasadena, TX 77503

Waste Information

Name of Waste: Non-Hazardous Waste Water
TCEQ Waste Code #: 90181142
Container Type:
Detailed Description of Process Generating Waste:
cooling tower waste water
Color: red to brown **Odor:** none **pH:** 4-10
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Level D PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

D

DB/MM

IL

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Bigler, LP
Address: 3003 Hwy 225 Suite 100
City: Pasadena **State:** TX **Zip:** 77503
Contact: Andy Duncan **Title:** Management
Phone Number: 713-732-4512 **Fax Number:**
24/hr Phone Number: 713-732-4512
US EPA ID No:
State ID No: 84331 **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Bigler, LP
Address: PO Box 5009
City: Pasadena **State:** TX **Zip:** 77508
Contact: Accounts payable **Title:** Accounts Payable
Phone Number: 713-343-7788 **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Non-Hazardous Waste Water
Detailed Description of Process Generating Waste:

Waste cooling tower water.

Physical State: ☑ **Liquid** ☐ **Sludge** ☐ **Powder** ☐ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: Red to brown **Odor:** None

Specific Gravity (water=1): 1 **Density:** 8.33 lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No

Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ **Single-phase** ☐ **Multi-phase**

Container Type: ☐ **Drum** ☐ **Tote** ☑ **Truck** ☐ **Other (explain)**

Frequency: ☑ **Weekly** ☐ **Monthly** ☐ **Yearly** ☐ **One-Time**
Quantity: 5000-1,000,000

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)

Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011

Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Na

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☐ No

If "Yes", then please list ALL applicable codes: Na

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☐ No

If "Yes", then please list ALL applicable codes: Na

Texas State Waste Code Number: 90181142

Proper US DOT Shipping Name: Non-RCRA, Non DOT Regulated Waste Water

Class: Na **UN/NA:** Na **PG:** Na **RQ:** Na

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>200		4-10		0	mg/l	0	mg/l	0-2	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
<1500	mg/l	<5000	mg/l	lab	mg/l	lab	mg/l	lab	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Waste Water	98-100	%
Iron Solids	0-2	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.

Level D PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. Process Knowledge

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

None

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	No RCRA metals in process
TCLP Volatiles:	None in Process
TCLP Semi-Volatiles:	None in Process
Reactivity:	None in Process
Corrosivity:	None in Process
Ignitability:	None in Process

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☑ YES ☐ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

***Metals Subcategory*: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ *Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations*
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

***Oils Subcategory*: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☑ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 4/8/2009

Printed Name/Title: Andy Duncan

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____
Date: 4/16/09 ☒ Approved ☐ Rejected
Approval Number: HOU-3265

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

.07/gal- $150/load

2. **Contamination Limits (maximum limit before surcharges apply):**

>5000 TOC or high metals

3. **Surcharge Pricing:**

Should not be any

4. **Special Testing Requirements:**

Metals, Phenol, TOC

5. **Treatment and Handling Protocol:**

Waste water treatment

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

EPAHO104001042

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable):**

3238
Metropolitan Transit

EPAHO10400104

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/23/2009**

Dear **Trinidad Gonzalez**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3238

Expiration Date 3/23/2011

Generator: Metropolitan Transit Authority
Address: 1900 Main St
Houston, TX 77002

Waste Information

Name of Waste: Fluorescent light bulbs
TCEQ Waste Code #: UNIV
Container Type: Box
Detailed Description of Process Generating Waste:
used fluorescent light bulbs
Color: varies **Odor:** none **pH:** neutral
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JB/AL
Univ

CES Environmental Services, Inc.

☐ CES Environmental Services - Houston Facility	☐ CES Environmental Services - Port Arthur Facility
4904 Griggs Road, Houston, TX 77021	2420 S. Gulfway Dr., Port Arthur, TX 77641
Phone (713) 676-1460 Fax: (713) 676-1676	Phone (713) 676-1460 Fax: (713) 676-1460
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900	U.S. EPA ID Number: TXR000079307 ISWR Number: 88585
TCEQ Industrial Solid Waste Permit Number: 30948	

SECTION 1: Generator Information

Company: Metropolitan Transit Authority
Address: 1900 Main St.(800 Burnett,1103 Naylor St. & 6400 Harrisburg)
City: Houston **State:** Texas **Zip:** 77002
Contact: Darrell Burtner **Title:**
Phone Number: 713-739-6016 **Fax Number:**
24/hr Phone Number: 713-739-6016
US EPA ID No:
State ID No: **SIC Code:**

SECTION 2: Billing Information - ☐ **Same as Above**

Company: Assured Environmental Quality, Inc. (AEQ, Inc)
Address: 3727 Trout St.
City: Houston **State:** Texas **Zip:** 77093
Contact: Trinidad Gonzalez **Title:** Operations Manager
Phone Number: 713-672-8559 **Fax Number:** 713-672-8245

SECTION 3: General Description of the Waste

Name of Waste: Fluorecent light bulbs
Detailed Description of Process Generating Waste:

Used fluorescent light bulbs

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Varies **Odor:** None

Specific Gravity (water=1): NA **Density:** NA lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☐ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☐ Drum ☐ Tote ☐ Truck ☑ Other (explain) Box

Frequency: ☐ Weekly ☐ Monthly ☐ Yearly ☑ One-Time
Quantity: Varies

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: UNIV

Proper US DOT Shipping Name: UN3077, Environmentally Hazardous Substances, solid, N.O.S.
Class: 9 UN/NA: UN3077 PG: III RQ: NA

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>140		Neutral		0	mg/l	0	mg/l	100	%
Oil & Grease		**TOC**		**Zinc**		**Copper**		**Nickel**	
NA	mg/l	Na	mg/l	0	mg/l	0	mg/l	0	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Fluorescent light Bulbs	100	%

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.
Standard ppe

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. NONE

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

NONE KNOWN

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals: Y
TCLP Volatiles: Y
TCLP Semi-Volatiles: Y
Reactivity: Y
Corrosivity: Y
Ignitability: Y

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

***Metals Subcategory*: Subpart A**

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

***Oils Subcategory*: Subpart B**

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ **Date:** 3/20/2009

Printed Name/Title: Trinidad Gonzalez-Operations Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer:
Date: 3-23-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

4' or less $1.25/ea Crushed $2.50/lb
5' or greater $1.50/ea

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Environmental light recyclers

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3239
Zach Systems

EPAHO104001052

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/23/2009**

Dear **Ronald Smith**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3239

Expiration Date 3/23/2011

Generator: ZaCh System Corp. (La Porte)
Address: 914 South 16th Street
La Porte, TX 77571

Waste Information

Name of Waste: Oily rags and debris
TCEQ Waste Code #: 00233101
Container Type:
Detailed Description of Process Generating Waste:
rags from cleaning up oil spills
Color: varies **Odor:** mild **pH:** NEUTRAL
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

JB/AL 05

CES Environmental Services, Inc.

☑ CES Environmental Services - Houston Facility 4904 Griggs Road, Houston, TX 77021 Phone (713) 676-1460 Fax: (713) 676-167E U.S. EPA ID Number: TXD008950461 ISWR Number: 3090C TCEQ Industrial Solid Waste Permit Number: 30948	☐ CES Environmental Services - Port Arthur Facility 2420 S. Gulfway Dr., Port Arthur, TX 77641 Phone (713) 676-1460 Fax: (713) 676-146C U.S. EPA ID Number: TXR000079307 ISWR Number: 88585

SECTION 1: Generator Information

Company: Zach Systems Corp.
Address: 914 South 16th street
City: La Porte **State:** TX **Zip:** 77571
Contact: Ronald Smith **Title:** EHS Manager
Phone Number: 281.842.0201 **Fax Number:** 281.867.1734
24/hr Phone Number: 281.842.0201
US EPA ID No: TXR000079062
State ID No: 88429 **SIC Code:**

SECTION 2: Billing Information - ☑ **Same as Above**

Company:
Address:
City: **State:** **Zip:**
Contact: **Title:**
Phone Number: **Fax Number:**

SECTION 3: General Description of the Waste

Name of Waste: Oily rags and debris
Detailed Description of Process Generating Waste:

rags from cleaning up oil spills

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Varies **Odor:** mild

Specific Gravity (water=1): na **Density:** na lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene **AND** if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2896	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 1-5 drums

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", Is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 00233101

Proper US DOT Shipping Name: Non RCRA Non DOT Regulated material (oily rags and debris)
Class: na UN/NA: na PG: na RQ: na

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
>150	neutral	0 mg/l	0 mg/l	98-100 %
Oil & Grease	**TOC**	**Zinc**	**Copper**	**Nickel**
>1500 mg/l	na mg/l	na mg/l	na mg/l	na mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Oily rags, sorbents, and other oil soaked debris.	100	%

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.

Standard

SECTION 6: Attached Supporting Documents

List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. none

SECTION 7: Incompatibilities

Please list ALL incompatibilities (if any):

none known

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	Not regulated
TCLP Volatiles:	Not regulated
TCLP Semi-Volatiles:	Not regulated
Reactivity:	Not regulated
Corrosivity:	Not regulated
Ignitability:	Not regulated

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Prtaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory **: *Subpart A***

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory **: *Subpart B***

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory *: Subpart C*

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data.
I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of compostion properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Ronald E Smith **Date:** 3/16/2009

Printed Name/Title: Ronald Smith, CSP / EHS Manager

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: Rodney R Thayer
Date: 3-19-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

$50 drum $95 Bay/tote

2. Contamination Limit (maximum limit before surchages apply):

No free liquids

3. Surcharge Pricing:

Free liquid surcharge ~~total~~ price
$60 drum $125 tote

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Class 1 solids

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

3240
JC Express Corp

EPAHO104001060

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/23/2009**

Dear **Steve Sams**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3240

Expiration Date 3/23/2011

Generator: JC Express Corporation
Address: Pasadena BLVD & Thomas
Pasadena, TX

Waste Information

Name of Waste: Gravel Absorbent PPE
TCEQ Waste Code #: CESQ3101
Container Type:
Detailed Description of Process Generating Waste:
Gravel absorbent and ppe from a lime truck spill
Color: na **Odor:** na **pH:** na
Physical State:
Incompatibilities: none known
Safety Related Data/Special Handling:
Standard PPE

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

CES Environmental Services, Inc.

4904 Griggs Road Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit No: 30948
U.S. EPA ID No: TXD008950461 ISWR No: 30900

JBIAL

IS

SECTION 1: Generator Information

Company:	J C EXPRESS CORPORATION		
Address:	CORNER OF PASADENA BLVD. & THOMAS		
City, State, Zip:	PASADENA, TEXAS		
Contact:	STEVE SAMS	**Title:**	AUTH. BROKER FOR GENERATOR
Phone No:	281-838-3400	**Fax No:**	281-424-7748
24/hr Phone:	281-838-3400		
U.S. EPA I.D. No:	N/A		
State I.D.	N/A	**SIC Code:**	N/A

SECTION 2: Billing Information – ☐ Same as Above

Company:	PHOENIX POLLUTION CONTROL & ENVIRONMENTAL SERVICES, INC.		
Address:	4808 FAIRMONT PARKWAY #274		
City, State, Zip:	PASADENA, TEXAS 77505		
Contact:	STEVE SAMS	**Title:**	AUTH. BROKER FOR GENERATOR
Phone No:	281-838-3400	**Fax No:**	281-424-7748

SECTION 3: General Description of the Waste

Name of Waste: GRAVEL, ABSORBENT , PPE
Detailed Description of Process Generating Waste: GRAVEL, ABSORBENT & PPE FROM A LIME TRUCK SPILL.

Physical State: ☐ Liquid ☐ Sludge ☐ Powder
☒ **Solid** ☐ **Filter Cake** ☐ **Combination**

Color: N/A Odor: N/A

Specific Gravity (water=1): N/A Density: N/A lbs/gal

Does this material contain any total phenolic compounds? ☐ **Yes** ☒ **No**

Does this material contain any para substituted phenolic compounds? ☐ **Yes** ☒ **No**

Layers: ☒ Single-phase ☐ Multi-phase

Container Type: ☒ Drum ☐ Tote ☐ Truck ☐ Other (explain)
Container Size: 55 GAL

Frequency: ☐ Weekly ☐ Monthly ☐ Quarterly ☐ Yearly
Number of Units (containers): 1 **Other:**
Texas State Waste Code No: CES93101
Proper U.S. DOT Shipping Name: Non Regulation DOT Regulated material
Class: N/A **UN/NA:** N/A **PG:** N/A **RQ:** N/A

EPAHO104001062

Flash Point	pH	Reactive Sulfides	Reactive Cyanides	Solids
N/A	N/A	N/Amg/l	N/Amg/l	100%
Oil&Grease	**TOC**	Zinc	Copper	Nickel
N/Amg/l	N/Amg/l	N/Amg/l	N/Amg/l	N/Amg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE The waste consists of the following materials	Concentration Ranges are acceptable	Units or %
SOLIDS	100	%

SECTION 5: Safety Related Data

If the handling of this waste requires the use of special protective equipment, please explain.
PPE

SECTION 6: Attached Supporting Documents

List all documents, notes, data, and/or analysis attached to this form as part of the waste approval package.
N/A

SECTION 7: Incompatibilities

Please list all incompatibilities (if any):
N/A

SECTION 8: Generator's Knowledge Documentation

Laboratory analysis of the hazardous waste characteristics, listed below, WAS NOT PERFORMED based upon the following generator knowledge:

TCLP Metals: X
TCLP Volatiles: X
TCLP Semi-Volatiles: X
Reactivity: X
Corrosivity: X
Ignitability: X

SECTION 9: Generator's Certification

The information contained herein is based on ☒ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: _____ Date: 03/23/09

Printed Name/Title: Steve Sams / Auth. Broker for Gen.

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: _____

Date: 3-23-09 (Approved) Rejected

Approval Number: _____

EPAHO104001063

SECTION 10: Waste Receipt Classification Under 40 CFR 437

Is this material a wastewater or wastewater sludge? ☐ YES ☒ NO

If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A

- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B

- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources
- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

Organics Subcategory: Subpart C

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

EPAHO104001064

(1) If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2) If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.5 mg/L

(3) If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

☐ Metals Subcategory

☐ Oils Subcategory

☐ Organics Subcategory

SECTION 11: Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

1. **Base Pricing (including freight):**

$50/drum

2. **Contamination Limits (maximum limit before surcharges apply):**

No free liquids

3. **Surcharge Pricing:**

$65/DM if it has free liquids

4. **Special Testing Requirements:**

5. **Treatment and Handling Protocol:**

Class 1 Solids Only

6. **Treated Wastewater Discharge Subcategory:**

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY!!)

7. **Tests for Product Recovered/Recycled (if applicable):**

8. **Management for Product Recovered/Recycled (if applicable):**

3241
Frgd Vessel

EPAHO104001068

CES Environmental Services, Inc.

4904 Griggs Road
Houston TX 77021
Tel. (713) 676-1460
Fax. (713) 676-1460

Waste Pre-Acceptance/Approval Letter

Date **3/24/2009**

Dear **Robert Holcolm**

Thank you for choosing CES Environmental Services, Inc. for you waste disposal and/or recycling needs. The following waste stream has been approved at our facility in Houston, TX. If the waste received does not conform to the profile, then rejection or additional charges may apply.

CES Profile # HOU-3241

Expiration Date 3/24/2011

Generator: Forged Vessel Connections, Inc.
Address: 2525 De Soto Ave.
Houston, TX 77091

Waste Information

Name of Waste: TPH Contaminated Debris
TCEQ Waste Code #: 05584891
Container Type:
Detailed Description of Process Generating Waste:
From manufacturing process
Color: Brown to Black **Odor:** Hydrocarbon **pH:** 7
Physical State:
Incompatibilities: N/A
Safety Related Data/Special Handling:
LEVEL D

If you have any questions concerning this approval and/or the conditions, then please feel free to contact our office at (713) 676-1460.

Thank you,

Matt Bowman, President
CES Environmental Services, Inc.

0558-489-1

CES Environmental Services, Inc.
4904 Griggs Road, Houston, TX 77021
Phone: (713) 676-1460 Fax: (713) 676-1676
http://www.cesenvironmental.com
TCEQ Industrial Solid Waste Permit Number: 30948
U.S. EPA ID Number: TXD008950461 ISWR Number: 30900

JR GD OS

SECTION 1: Generator Information

Company:	Forged Vessel Connections, Inc.				
Address:	2525 De Soto Ave.				
City:	Houston	**State:**	TX	**Zip:**	77091
Contact:	[redacted] Cary Pieczonka	**Title:**	HS&E Coordinator		
Phone Number:	(713) 337-2328	**Fax Number:**	(713) 429-8328		
24/hr Phone Number:	(832) 338-7173				
US EPA ID No:	TXD070861560				
State ID No:	90266	**SIC Code:**	3462		

SECTION 2: Billing Information - ☐ **Same as Above**

Company:	Forged Vessel Connections				
Address:	P.O. Box 38421				
City:	Houston	**State:**	TX	**Zip:**	77091
Contact:	Cary Pieczonka	**Title:**	HSE Coordinator		
Phone Number:	713-337-2328	**Fax Number:**	713-429-8328		

SECTION 3: General Description of the Waste

Name of Waste: Soil / Graphite Waste / TPH Contaminated Debris
Detailed Description of Process Generating Waste: -per Cary 3/24

From manufacturing process

Physical State: ☐ Liquid ☐ Sludge ☐ Powder ☑ Solid ☐ Filter Cake ☐ Combination

Color: Brown to Black **Odor:** Hydrocarbon

Specific Gravity (water=1): N/A **Density:** N/A lbs/gal

Does this material contain any total phenolic compounds? ☐ Yes ☑ No

Does this material contain any para substituted phenolic compounds? ☐ Yes ☑ No

Is the Waste subject to the benzene waste operation NESHAP? (40 CFR Part 61, Subpart FF) ☐ Yes ☑ No
Answer "Yes" if your waste contains benzene AND if the SIC code from your facility is one of the following:

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	2865	2869
2873	2874	2876	2879	2891	2892	2893	2898	2899	2911
3312	4953	4959	9511						

Layers: ☑ Single-phase ☐ Multi-phase

Container Type: ☑ Drum ☐ Tote ☐ Truck ☐ Other (explain)

Frequency: ☐ Weekly ☑ Monthly ☐ Yearly ☐ One-Time
Quantity: 5

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? ☐ Yes ☑ No

If "Yes", then please complete, sign and date the Underlying Hazardous Constituents Form attached hereto

If "Yes", is it: ☐ D001 (Ignitable) ☐ D002 (Corrosive) ☐ D003 (Reactive)
Characteristic for Toxic Metals: ☐ D004 ☐ D005 ☐ D006 ☐ D007 ☐ D008 ☐ D009 ☐ D010 ☐ D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)

Is this an "F" or "K" Listed waste or mixed with one? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Is this a commercial product or spill cleanup that would carry a "U" or "P" waste code under 40 CFR 261.33(e) or (f)? ☐ Yes ☑ No
If "Yes", then please list ALL applicable codes:

Texas State Waste Code Number: 0558-489-2

Proper US DOT Shipping Name: Non-Hazardous, Non-Regulated Material (soil)
Class: N/A UN/NA: N/A PG: N/A RQ: N/A

Flash Point		pH		Reactive Sulfides		Reactive Cyanides		Solids	
>150		7		BRL	mg/l	BRL	mg/l	100	%
Oil & Grease		TOC		Zinc		Copper		Nickel	
190,229	mg/l	N/A	mg/l	BRL	mg/l	BRL	mg/l	.988	mg/l

SECTION 4: Physical and Chemical Data

COMPONENTS TABLE	CONCENTRATOIN	UNITS
The waste consists of the following materials	Ranges are acceptable	or %
Graphite Waste	0-100	%
Soil	0-100	90
Rags, PPE	0-100	90
per Carey 3/24		

SECTION 5: Safety Related Data
If the handling of this waste requires the use of special protective equipment, please explain.
Standard PPE

SECTION 6: Attached Supporting Documents
List all documents, notes, data and/or analysis attached to this form as part of the waste approval package. A&B analytical report# 09030212

SECTION 7: Incompatibilities
Please list ALL incompatibilities (if any):
N/A

SECTION 8: Generator's Knowledge Documentation
Laboratory analysis of the hazardous waste characteristics, listed below, **WAS NOT PERFORMED** based upon the following generator knowledge:

TCLP Metals:	BRL
TCLP Volatiles:	BRL
TCLP Semi-Volatiles:	BRL
Reactivity:	Non-Reactive
Corrosivity:	Non-Corrosive
Ignitability:	Non-Ignitable

SECTION 9: Waste Receipt Classification Under 40 CFR 437 (Pertaining to Pre-Treatment Requirements for Centralized Waste Treatment Facilities)

Is this material a wastewater or wastewater sludge? ☐ YES ☑ NO
If 'Yes', complete this section.

PLEASE CHECK THE APPROPRIATE BOX. IF NO APPROPRIATE CATEGORY, GO TO THE NEXT PAGE.

Metals Subcategory: Subpart A
- ☐ Spent electroplating baths and/or sludges
- ☐ Metal finishing rinse water and sludges
- ☐ Chromate wastes
- ☐ Air pollution control blow down water and sludges
- ☐ Spent anodizing solutions
- ☐ Incineration wastewaters
- ☐ Waste liquid mercury
- ☐ Cyanide-containing wastes greater than 136 mg/l
- ☐ Waste acids and bases with or without metals
- ☐ Cleaning, rinsing, and surface preparation solutions from electroplating or phosphating operations
- ☐ Vibratory deburring wastewater
- ☐ Alkaline and acid solutions used to clean metal parts or equipment

Oils Subcategory: Subpart B
- ☐ Used oils
- ☐ Oil-water emulsions or mixtures
- ☐ Lubricants
- ☐ Coolants
- ☐ Contaminated groundwater clean-up from petroleum sources
- ☐ Used petroleum products
- ☐ Oil spill clean-up
- ☐ Bilge water
- ☐ Rinse/wash waters from petroleum sources

- ☐ Interceptor wastes
- ☐ Off-specification fuels
- ☐ Underground storage remediation waste
- ☐ Tank clean-out from petroleum or oily sources
- ☐ Non-contact used glycols
- ☐ Aqueous and oil mixtures from parts cleaning operations
- ☐ Wastewater from oil bearing paint washes

***Organics Subcategory*: Subpart C**

- ☐ Landfill leachate
- ☐ Contaminated groundwater clean-up from non-petroleum sources
- ☐ Solvent-bearing wastes
- ☐ Off-specification organic product
- ☐ Still bottoms
- ☐ Byproduct waste glycol
- ☐ Wastewater from paint washes
- ☐ Wastewater from adhesives and/or epoxies formulation
- ☐ Wastewater from organic chemical product operations
- ☐ Tank clean-out from organic, non-petroleum sources

(1)

If the waste contains oil and grease at or in excess of 100 mg/L, the waste should be classified in the oils subcategory.

(2)

If the waste contains oil and grease less than 100 mg/L, and has any of the pollutants listed below in concentrations in excess of the values listed below, the waste should be classified in the metals subcategory.

Cadmium: 0.2 mg/L
Chromium: 8.9 mg/L
Copper: 4.9 mg/L
Nickel: 37.6 mg/L

(3)

If the waste contains oil and grease less than 100 mg/L, and does not have concentrations of cadmium, chromium, copper, or nickel above any of the values listed above, the waste should be classified in the organics subcategory.

- ☐ Metals Subcategory
- ☐ Oils Subcategory
- ☐ Organics Subcategory

SECTION 10 Additional Instructions

If you cannot determine the correct subcategory in Section 9 and you did not furnish data for the concentration of Cadmium, Chromium, Copper, Nickel, and Oil and Grease, CES will send offsite to a commercial laboratory a sample to determine these concentrations. This will be prior to acceptance. The generator will be responsible for the cost of the analysis.

SECTION 11: Generator's Certification

The information contained herein is based on ☑ generator knowledge and/or ☐ analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all materials described by this document.

Authorized Signature: Cory O'Brien **Date:** 3-24-09

Printed Name/Title: Cory Piecznik HSE Coordinator

CES USE ONLY (DO NOT WRITE IN THIS SPACE)

Compliance Officer: [signature]
Date: 3-24-09 ☑ Approved ☐ Rejected
Approval Number:

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

1. Base Pricing (including freight):

2. Contamination Limit (maximum limit before surchages apply):

3. Surcharge Pricing:

4. Special Testing Requirements:

5. Treatment and Handling Protocol:

Wil be redirected to HPP under CES profile

6. Treated Wastewater Discharge Subcategory:

☐ Subcategory A ☐ Subcategory B ☐ Subcategory C

CES Environmental Services, Inc.

PROCESS FACILITY INFORMATION (CES USE ONLY)!!!

7. Tests for Product Recovered/Recycled (if applicable):

8. Management for Product Recovered/Recycled (if applicable)

Laboratory Analysis Report

Total Number of Pages: 13

Job ID : 09030212

4DM

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
0309-23 / Forged Vessel - Graphite Waste

Report To :	Client Name:	CES Environmental	P.O.#.: 0309-23
	Attn:	Gary Brauckman	Sample Collected By: Gary Brauchman
	Client Address:	4904 Griggs Rd	Date Collected: 03/11/09
	City, State, Zip:	Houston, Texas, 77021	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
Graphite	Solid	09030212.01

Shantall Carpenter

Released By: Shantall Carpenter
Title: Project Manager
Date: 3/20/2009

This Laboratory is NELAP (T104704213-08B-TX) accredited. Effective: 07/01/2008; Expires: 06/03/2009
Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 03/11/2009 14:00

EPAHO104001076

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 09030212

Date: 3/20/2009

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	surr	Surrogate
MS	Matrix Spike	T	Time
MSD	Matrix Spike Duplicate	TNTC	Too numerous to count
MW	Molecular Weight		

Qualifier Definition

S4	Surrogate not available due to dilution of sample extract for quantification.

EPAHO104001077

LABORATORY TEST RESULTS

Job ID : 09030212

Date 3/20/2009

Client Name: CES Environmental

Attn: Gary Brauckman

Project Name: 0309-23 / Forged Vessel - Graphite Waste

Client Sample ID: Graphite
Date Collected: 03/11/09
Time Collected: 10:00
Other Information:

Job Sample ID: 09030212.01
Sample Matrix Solid

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 1010	Ignitability (Flash Point)								
	Ignitability	>150	°F	1				03/17/09 08:05	SG
SW-846 6010C	TCLP Metals								
	Antimony	BRL	mg/L	1	0.1	1		03/12/09 16:21	TK
	Arsenic	BRL	mg/L	1	0.04	1.8		03/12/09 16:21	TK
	Barium	0.44	mg/L	1	0.04	100.0		03/12/09 16:21	TK
	Beryllium	BRL	mg/L	1	0.04	0.08		03/12/09 16:21	TK
	Cadmium	BRL	mg/L	1	0.04	0.5		03/12/09 16:21	TK
	Chromium	BRL	mg/L	1	0.04	5.0		03/12/09 16:21	TK
	Lead	BRL	mg/L	1	0.04	1.5		03/12/09 16:21	TK
	Nickel	0.988	mg/L	1	0.04	70		03/12/09 16:21	TK
	Selenium	BRL	mg/L	1	0.1	1.0		03/12/09 16:21	TK
	Silver	BRL	mg/L	1	0.04	5.0		03/12/09 16:21	TK
SW-846 7.3	Reactive Cyanide								
	Reactive Cyanide	BRL	mg/Kg	1	25			03/13/09 10:15	KS
SW-846 7.3	Reactive Sulfide								
	Reactive Sulfide	BRL	mg/Kg	1	25			03/12/09 10:05	KS
SW-846 7470A	TCLP Metals, Mercury								
	Mercury	BRL	mg/L	1	0.0005	0.2		03/12/09 13:37	SM
SW-846 9045D	Corrosivity, pH								
	pH	8.08	s.u.					03/13/09 14:00	RK
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	BRL	mg/Kg	100	1470			03/11/09 20:58	WS
	>C12-C28	92754	mg/Kg	100	1840			03/11/09 20:58	WS
	>C28-C35	97475	mg/Kg	100	1910			03/11/09 20:58	WS
	Total C6-C35	190229	mg/Kg	100				03/11/09 20:58	WS
	1-Chlorooctane(surr)	N/A	%	100	50-149		S4	03/11/09 20:58	WS
	Chlorooctadecane(surr)	131	%	100	50-149			03/11/09 20:58	WS

EPAHO104001078

QUALITY CONTROL CERTIFICATE

Job ID : 09030212 **Date :** 3/20/2009

Analysis : TCLP Metals **Method :** SW-846 6010C **Reporting Units :** mg/L

QC Batch ID : Qb09031217 **Created Date :** 03/12/09 **Created By :** Tkhuc

Samples in This QC Batch : 09030212.01

Digestion :	PB09031241	**Prep Method :**	SW-846 3010A	**Prep Date :**	03/12/09 10:00	**Prep By :**	Tkhuc
TCLP Prep :	PB09031234	**Prep Method :**	SW-846 1311	**Prep Date :**	03/11/09 16:40	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Antimony	7440-36-0	BRL	mg/L	1	0.1		
Arsenic	7440-38-2	BRL	mg/L	1	0.04		
Barium	7440-39-3	BRL	mg/L	1	0.04		
Beryllium	7440-41-7	BRL	mg/L	1	0.04		
Cadmium	7440-43-9	BRL	mg/L	1	0.04		
Chromium	7440-47-3	BRL	mg/L	1	0.04		
Lead	7439-92-1	BRL	mg/L	1	0.04		
Nickel	7440-02-0	BRL	mg/L	1	0.04		
Selenium	7782-49-2	BRL	mg/L	1	0.1		
Silver	7440-22-4	BRL	mg/L	1	0.04		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Antimony	2	2.08	104	2	2.05	103	1.4	20	80-120	
Arsenic	2	2.04	102	2	2.01	101	1.5	20	80-120	
Barium	2	1.85	92.5	2	1.83	91.5	1.1	20	80-120	
Beryllium	2	1.98	99	2	1.95	97.5	1.5	20	80-120	
Cadmium	2	1.9	95	2	1.88	94	1.1	20	80-120	
Chromium	2	1.92	96	2	1.9	95	1	20	80-120	
Lead	2	1.97	98.5	2	1.94	97	1.5	20	80-120	
Nickel	2	1.91	95.5	2	1.89	94.5	1	20	80-120	
Selenium	2	2.03	102	2	2.02	101	0.5	20	80-120	
Silver	2	2.03	102	2	2.01	101	1	20	80-120	

QC Type: MS and MSD
QC Sample ID: 09030167.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Antimony	BRL	2	2.1	105						70-130	
Arsenic	BRL	2	2.08	104						45-138	
Barium	0.161	2	1.97	90.5						39-135	
Beryllium	BRL	2	1.99	99.5						70-130	
Cadmium	BRL	2	1.89	94.2						56-125	
Chromium	BRL	2	1.93	95.9						52-125	
Lead	BRL	2	1.97	98.4						55-125	

Refer to the Definition page for terms.

EPAHO104001079

QUALITY CONTROL CERTIFICATE

Job ID : 09030212 **Date :** 3/20/2009

Analysis : TCLP Metals **Method : SW-846 6010C** **Reporting Units : mg/L**

QC Batch ID : Qb09031217 **Created Date :** 03/12/09 **Created By :** Tkhuc

Samples in This QC Batch : 09030212.01

QC Type: MS and MSD
QC Sample ID: 09030167.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Nickel	BRL	2	1.93	96.5						70-130	
Selenium	BRL	2	2.07	103						70-130	
Silver	BRL	2	2.05	102						26-148	

Refer to the Definition page for terms.

EPAHO104001080

QUALITY CONTROL CERTIFICATE

Job ID : 09030212 **Date :** 3/20/2009

Analysis : TCLP Metals, Mercury **Method :** SW-846 7470A **Reporting Units :** mg/L

QC Batch ID : Qb09031227 **Created Date :** 03/05/09 **Created By :** Sathish

Samples in This QC Batch : 09030212.01

Digestion :	PB09031259	**Prep Method :** SW-846 7470A	**Prep Date :**	03/12/09 11:00	**Prep By :**	Sathish
TCLP Prep :	PB09031234	**Prep Method :** SW-846 1311	**Prep Date :**	03/11/09 16:40	**Prep By :**	Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Mercury	7439-97-6	BRL	mg/L	1	0.0005		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury	0.005	0.0050	99.8	0.005	0.0046	92.8	7.3	35	71-143	

QC Type: MS and MSD
QC Sample ID: 09030202.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.0051	102	0.005	0.0047	94.2	7.6	35	61-175	

Refer to the Definition page for terms.

EPAHO104001081

QUALITY CONTROL CERTIFICATE

Job ID : 09030212 **Date :** 3/20/2009

Analysis : Reactive Sulfide **Method : SW-846 7.3** **Reporting Units : mg/Kg**

QC Batch ID : Qb09031233 **Created Date :** 03/12/09 **Created By :** Ksudha

Samples in This QC Batch : 09030212.01

Sample Preparation : PB09031263 **Prep Method :** SW-846 7.3 **Prep Date :** 03/12/09 10:00 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Sulfide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09030167.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Sulfide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Sulfide	900	680	75.6	900	720	80	5.7	20	40-120	

Refer to the Definition page for terms.

EPAHO104001082

QUALITY CONTROL CERTIFICATE

Job ID : 09030212 **Date :** 3/20/2009

Analysis : Corrosivity, pH **Method : SW-846 9045D** **Reporting Units : s.u.**

QC Batch ID : Qb09031319 **Created Date :** 03/13/09 **Created By :** Rkurup

Samples in This QC Batch : 09030212.01

QC Type: Duplicate

QC Sample ID: 09030212.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
pH	8.12	8.08	s.u.	0.5	5		

QC Type: LCS and LCSD

Parameter	LCS Assigned	LCS Result		LCSD Assigned	LCSD Result		RPD	RPD CtrlLimit	Tolerance	Qual
pH	4.00	3.98							3.95-4.05	

Refer to the Definition page for terms.

EPAHO104001083

QUALITY CONTROL CERTIFICATE

Job ID : 09030212 **Date :** 3/20/2009

Analysis : Reactive Cyanide **Method :** SW-846 7.3 **Reporting Units :** mg/Kg

QC Batch ID : Qb09031322 **Created Date :** 03/13/09 **Created By :** Ksudha

Samples in This QC Batch : 09030212.01

Sample Preparation : PB09031313 **Prep Method :** SW-846 7.3 **Prep Date :** 03/12/09 10:00 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
Reactive Cyanide		BRL	mg/Kg	1	25		

QC Type: Duplicate

QC Sample ID: 09030167.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Reactive Cyanide	BRL	BRL	mg/Kg		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Reactive Cyanide	5.0	2.32	46.4	5.0	2.26	45.2	2.6	20	40-120	

Refer to the Definition page for terms.

EPAHO104001084

QUALITY CONTROL CERTIFICATE

Job ID : 09030212 **Date :** 3/20/2009

Analysis : Total Petroleum Hydrocarbons **Method :** TX 1005 **Reporting Units :** mg/Kg

QC Batch ID : Qb09031501 **Created Date :** 03/15/09 **Created By :** Dshen

Samples in This QC Batch : 09030212.01

Sample Preparation : PB09031501 **Prep Method :** TX 1005 **Prep Date :** 03/11/09 15:00 **Prep By :** Dshen

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit		Qual
C6-C12		BRL	mg/Kg	1	14.7		
>C12-C28		BRL	mg/Kg	1	18.4		
>C28-C35		BRL	mg/Kg	1	19.1		
Total C6-C35		BRL	mg/Kg	1			

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12	500	573	115	500	573	115	0	20	75-125	
>C12-C28	500	508	102	500	517	103	1.8	20	75-125	
>C28-C35	500	401	80.2	500	425	85	5.8	20	75-125	

QC Type: MS and MSD
QC Sample ID: 09030214.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
C6-C12	BRL	500	567	111						75-125	
>C12-C28	107	500	599	98.4						75-125	
>C28-C35	75	500	495	84						75-125	

Refer to the Definition page for terms.

EPAHO104001085

QUALITY CONTROL CERTIFICATE

Job ID : 09030212 **Date :** 3/20/2009

Analysis : **Ignitability (Flash Point)** **Method :** **SW-846 1010** **Reporting Units :** **°F**

QC Batch ID : Qb09031713 **Created Date :** 03/17/09 **Created By :** Sgarcia

Samples in This QC Batch : 09030212.01

QC Type: Duplicate

QC Sample ID: 09030212.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Ignitability	>150	>150	°F		20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ignitability	83	86	104	83	85	102	1.2	20	75-125	

Refer to the Definition page for terms.

EPAHO104001086

A & B Labs — *Chain of Custody* — The Chain of Custody is a Legal Document — Page 1 of 1

10100 East Fwy (I-10) Ste. 100
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
ablabs.com

A&B JOB ID # 0903012

5. Project # 0309-23

1. REPORT TO:		2. INVOICE TO:	
Company:	CES Environmental	Company:	CI
Address:	4904 Griggs RD Houston, TX 77021	Address:	
Contact:	Gary Brackman	Contact:	
Phone:	713-417-5737	Phone:	
Fax: ☐	713-676-1676	Fax: ☐	
E-mail: ☐		E-mail: ☐	

3. PO # 0309-23

4. Turnaround Time (Business Days)
- ☐ 1 Day*
- ☐ Other
- ☐ 2 Days*
- ☐ 3 Days*
- *Surcharge applies
- ☒ 7 Days - Standard

6. Project Name/Location: Forged Vessel - Graphite waste

7. Reporting Requirement:
☐ TRRP Limits only ☐ TRRP Rpt. Package ☐ See Attached ☐ Standard Level II

8. Sampler's Name & Company (PLEASE PRINT): Gary Brackman
Sampler's Signature & Date:

13. No. of Containers
14. Containers* 1
15. Preservatives**
16. PH-Lab Only
17. Analyses/Methods: TCLP (11) metals; TPH; RCI

LAB USE ONLY	9. Sample ID and Description	10. Sampling Date	10. Sampling Time	11. Comp.	11. Grab	12. Matrix: Water	Soil	Sludge	Oil	Air	Other	18. REMARKS
01A	Graphite	3-1-09	10:00		✓	✓					✓	

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1	3-1-09	2:00			
2					
3			21. RECEIVED BY LABORATORY	3/1/09	1400

22. KNOWN HAZARDS/COMMENTS: none known

Temperature: 23.1 °C

Intact: Y or N Initials: MB

*Containers: VOA - 40 ml vial; A/G - Amber/Glass 1 Liter; 4 oz/8 oz - glass wide mouth; P/O - Plastic/other

**Preservatives: C - Cool; H - HCl; N - HNO_3; S - H_2SO_4; O - NaOH; T - $Na_2S_2O_3$; X - Other

METHOD OF SHIPMENT

BILL OF LADING/TRACKING #

A&B cannot accept verbal changes
Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
A&B reserves the right to return samples

LAB USE ONLY SAMPLING _____ RENTAL _____ P/U _____

EPAHO104001087

Sample Condition Checklist

Date : **03/20/09**

A&B JobID : **09030212**	Date Received : **03/11/2009**	Time Received : **2:00PM**
Client Name : **CES Environmental**		
Temperature : **23.1°C**	Sample pH : **N/A**	

	Check Points	Yes	No
1.	**Cooler seal present and signed.**	N/A	
2.	**Sample(s) in a cooler.**		X
3.	**If yes, ice in cooler.**		X
4.	**Sample(s) received with chain-of-custody.**	X	
5.	**C-O-C signed and dated.**	X	
6.	**Sample(s) received with signed sample custody seal.**	N/A	
7.	**Sample containers arrived intact. (If no comment).**	X	
8.	**Matrix :** **Water** ☐ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☑ **Cassette** ☐ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐		
9.	**Sample(s) were received in appropriate container(s).**	X	
10.	**Sample(s) were received with proper preservative**	N/A	
11.	**All samples were logged or labeled.**	X	
12.	**Sample ID labels match C-O-C ID's**	X	
13.	**Bottle count on C-O-C matches bottles found.**	X	
14.	**Sample volume is sufficient for analyses requested.**	X	
15.	**Samples were received within the hold time.**	X	
16.	**VOA vials completely filled.**	N/A	
17.	**Sample accepted.**	X	

Comments : Include actions taken to resolve discrepancies/problem:

Received by : Mgonzalez

Check in by/date : Mgonzalez / 03/11/2009