



Area Environmental & Facility Programs  
General Electric Company  
100 West Main Avenue Pittsfield, MA 01201

October 17, 1994

Superfund Records Center  
SITE: GE HOUSATONIC  
PEAK: 2.6  
OTHER: 448608

Mr. David Slowick  
Department of Environmental Protection  
436 Dwight Street  
Springfield, MA 01103

Dear Mr. Slowick:

Enclosed please find BWSC-006 for TOR 1-10380.

Yours truly,

G. Grant Bowman  
Manager, Environmental Engineering

Enclosure

cc: J.L. Cutler (2)  
R.W. Gates, Martin Marietta  
R.K. Goldman  
A. Kurpaska  
J.G. Ruebesam



IMMEDIATE RESPONSE ACTION (IRA)
COMPLETION STATEMENT (pursuant to 310 CMR 40.0427)

1 - 10380

A. RELEASE OR THREAT OF RELEASE (TOR) LOCATION:

Release Name (optional): Buried Drums
Street: 100 Woodlawn Avenue
City/Town: Pittsfield, MA
Location Adj: West of MM Bldg. OP3
Zip Code: 01201

B. PERSON WHO ASSUMED RESPONSIBILITY FOR IRA:

Name of Organization: Martin Marietta
Name of Contact: Richard W. Gates
Title: Mgr.-Environmental Protection
Street: 100 Plastics Avenue
City/Town: Pittsfield State: MA Zip Code: 01201
Telephone: 413 - 494 - 6202 Ext.

C. RELATIONSHIP TO RELEASE OR TOR OF PERSON WHO ASSUMED RESPONSIBILITY FOR IRA:

- (check one/specify)
[ ] RP Specify (circle one): Owner Operator Generator Transporter Other RP:
[ ] PRP Specify (circle one): Owner Operator Generator Transporter Other PRP:
[ ] Fiduciary/Secured Lender
[ ] Agency/Public Utility on a Right of Way
[X] Other Person: Environmental Project Manager

D. IRA PLAN INFORMATION:

Communication of IRA Plan to DEP (check all that apply/specify):
DATE APPROVED: 06/10/94
DEP CONTACT: D. Slowick
[ ] Oral
[X] Written 08/24/94
D. Slowick

E. SITE CONDITIONS THAT WARRANTED IRA:

Media/Receptors Affected (circle all that apply): Air Groundwater Surface Water Sediments (Soil) Storm Drain Private Well
Public Water Supply Zone 2 Residence School Unknown Other:

IRA Trigger (from CMR 40.0412) (check all that apply):

- 2 HOUR CONDITION
[ ] Sudden Release
[ ] Oil Sheen
[ ] Release Detected in Private Well
[ ] Imminent Hazard
[X] Threat of Sudden Release
[ ] Release to Storm Drain
[ ] Sanitary Sewer Release (Imminent Hazard)
72 HOUR CONDITION
[ ] Subsurface NAPL
[ ] UST Release
[ ] Release to Groundwater near Water Supply
[ ] Release to Groundwater near School or Residence
[ ] Threat of UST Release
SUBSTANTIAL RELEASE MIGRATION
[ ] Discharge of separate phase OHM to surface waters, subsurface structures, or underground utilities/conduits
[ ] Release to soil/vadose zone jeopardizing groundwater
[ ] Release to groundwater which migrates more than 200 feet per year
OHM release that has impacted or been detected in, or within 1 year may impact or be detected in, one or more of the following:
[ ] Public/Private Drinking Water Supply Well
[ ] Public Reservoir/Surface Water Supply
[ ] Downgradient Receptors (specify):
[ ] Vapor Discharge into School Buildings/Residences

OTHER CONDITIONS:

**ATTACHMENT 1  
IRA COMPLETION REPORT**

**G. Findings and Conclusions:**

**(a) a description of the release or threat of release, site conditions, and surrounding receptors;**

Prior sampling of a planned excavation site had identified U220 and U239 waste at a layer from 6-8 ft. deep. While excavating this area, buried drums were encountered. The area is approximately 50' off a well-traveled road (Merrill) 100' from an industrial facility, and bordering a wetland. (An order of conditions has been obtained.)

**(b) a description of the work completed, including work undertaken in response to any conditions of approval imposed by the Department, and any work undertaken at the site that was not included in the scope of the Immediate Response Action Plan, where submitted;**

As soon as drums were observed, the job was stopped, DEP contacted, and IRA approval received to continue the excavation with 40-hour hazardous trained personnel. A total of 19 drums were recovered.

**(c) all investigatory and monitoring data obtained during the implementation of the Immediate Response Action;**

Waste characterization was submitted to WERO DEP Emergency Response Section accompanying BWSC-003 RNF for tracking number 1-10380 on 08-08-94.

**(d) a succinct statement on the findings and conclusions of the Immediate Response Action;**

Nineteen drums were excavated, overpacked, sampled, and characterized without incident. Soil from around the drums was placed on and covered with plastic, sampled, and properly disposed without incident. The IRA was totally successful in the specified area under construction. Additional searching from drums will be performed with appropriate geotechnic procedures as part of the ongoing BWSC and RCRA C/A Phase II/CAS process.

**(e) details and documentation on the management of any Remediation Waste handled at or transported from the site as part of the Immediate Response Action.**

Soil from around drums was profiled for disposal as RCRA waste and shipped on manifest NYB 4295727 dated 08/08/94. Although not technically a part of the IRA, the manifests for the pre-sampled contaminated layer were provided DEP in the 08-08-94 BWSC-003. Nineteen drums were characterized by CHI and reported on 6/24/94, and this was reported in BWSC-003 on 08-08-94. The drums were shipped on manifest MAG084929 on 10-07-94.

(f) a description of any ongoing activities related to the Immediate Response Action that will be conducted at the site, including monitoring activities, security measures and the maintenance of fences, caps and other passive systems.

See (d)

DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF HAZARDOUS SUBSTANCES REGULATION  
**HAZARDOUS WASTE MANIFEST**  
P.O. Box 12620, Albany, New York 12212

Form Approved, OMB No. 2050-0039, Expires 8-30-94

Please print or type. Do not Staple.

In case of emergency or spill immediately call the National Response Center at 1-800-424-6802 and the N.Y. Dept. of Environmental Conservation at 518-457-7362.

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA No. <b>44990323426</b>		Manifest Document No. <b>27572</b>		2. Page 1 of 1		Information in the shaded areas is not required by Federal Law.	
3. Generator's Name and Mailing Address <b>Martin McClinton Corp. 700 Planting Ave. Rm 1310c Pittsfield, NY 01201</b>				A. State Manifest Document No. <b>NY B 429572 7</b>		B. Generator's ID <b>542 McClinton M. Pittsfield, NY 01201</b>			
4. Generator's Phone ( 518 ) <b>434-2282</b> <b>Attn: Mike Walter</b>				C. State Transporter's ID <b>NY 2250</b>		D. Transporter's Phone ( 517 ) <b>849-1808</b>			
5. Transporter 1 (Company Name) <b>Clean Surface Rev. Services, Inc.</b>		6. US EPA ID Number <b>NY D 839322250</b>		E. State Transporter's ID		F. Transporter's Phone ( )			
7. Transporter 2 (Company Name)		8. US EPA ID Number		G. State Facility's ID		H. Facility's Phone ( 716 ) <b>254-8273</b>			
9. Designated Facility Name and Site Address <b>Oil Chemical Services, Inc. 1200 Duane St. Rochester, NY 14607</b>				10. US EPA ID Number <b>NY D 849836679</b>					
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)						12. Containers	13. Total	14. Unit	15. Waste No.
a. <b>20, Insoluble Resin, Solid, H.O.S. (Toluene, Xylene), 9, UN3072, POIS</b>						No. Type	Quantity	Wt/Vol	EPA STATE
									EPA STATE
									EPA STATE
									EPA STATE
J. Additional Descriptions for Materials listed Above						K. Handling Codes for Wastes Listed Above			
a. <b>Oil profile 754679</b>						b. <input checked="" type="checkbox"/> c. <input type="checkbox"/> d. <input type="checkbox"/>			
15. Special Handling Instructions and Additional Information <b>In case of emergency, call CHE at 1-800-437-8668</b> <b>CHE Confirmation # 1214015</b>						<b>CHE 0827964 81351081</b>			
10. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name <b>A. Michael Walter</b>				Signature <i>A. Michael Walter</i>		Mo. Day Year <b>080894</b>			
17. Transporter 1 (Acknowledgement of Receipt of Materials)				Printed/Typed Name <i>[Signature]</i>		Signature <i>[Signature]</i>		Mo. Day Year <b>080894</b>	
18. Transporter 2 (Acknowledgement of Receipt of Materials)				Printed/Typed Name		Signature		Mo. Day Year	
19. Discrepancy Indication Space <b>actual rec'd 25700P</b>									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name <b>Eileen Carter</b>				Signature <i>Eileen Carter</i>		Mo. Day Year <b>080894</b>			

NY B 429572 1

Generator Name: MARTIN MARIETTA

Manifest Doc. No.: 219572

CWM Profile Number: 8 1 4 6 1 9 MDC

State Manifest No.: NY B 429572 7

1. Is this waste a non-wastewater or a wastewater? (See 40 CFR 268.2) Check ONE:  Non-Wastewater  Wastewater
2. If this waste is subject to any California List restrictions enter the letter from below (either A, B1, or B2) next to each restriction that is applicable:  
HOCs, PCBs, Acid, Metals, Cyanides.
3. Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subdivision, or check NONE if the waste code has no subdivision. Also check which treatment standards apply. Specific solvent and California List treatment standards are listed on the back of this form. If P039, multi-source leachate applies, those standards must be attached by the generator.

ROW #	4. USEPA HAZARDOUS WASTE CODE(S)	3. SUBDIVISION		6. APPLICABLE TREATMENT STANDARDS			7. HOW MUST THE WASTE BE MANAGED? ENTER THE LETTER FROM BELOW
		ENTER THE SUBDIVISION DESCRIPTION IF NOT APPLICABLE SIMPLY CHECK NONE		6.a. PERFORMANCE-BASED. CHECK AS APPLICABLE		6.b. SPECIFIED TECHNOLOGY. IF APPLICABLE ENTER THE 40 CFR 268.42-1 TREATMENT CODE(S)	
		DESCRIPTION	NONE	268.41(a)	268.43(a)	268.42(a)	
1	<u>U220</u>	<u>TOLUENE</u>	<u>X</u>		<u>X</u>	<u>N/A</u>	<u>D</u>
2	<u>U239</u>	<u>XYLENE</u>	<u>X</u>		<u>X</u>	<u>N/A</u>	<u>D</u>
3							
4							
5							
6							
7							
8							
9							
10							

To list additional USEPA waste code(s) and subcategory(s), use the supplemental sheet provided (CWM-2001-B) and check here:

HOW MUST THE WASTE BE MANAGED? In column 7 above, enter the letter (A, B1, B2, B3, C, or D) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B2, B3, or D, you are making the appropriate certification as provided below.

**A. RESTRICTED WASTE REQUIRES TREATMENT**

This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268 Subpart D, 268.32, or RCRA Section 3004(d).

**B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS**

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d), without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment."

**B.2 RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS EXPRESSED AS A SPECIFIED TECHNOLOGY (AND THE WASTE HAS BEEN TREATED BY THAT TECHNOLOGY)**

"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

**B.3 GOOD FAITH ANALYTICAL CERTIFICATION - FOR INCINERATED ORGANICS**

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 40 CFR Part 268 Subpart U or Part 268 Subpart Q, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

**C. RESTRICTED WASTE SUBJECT TO A VARIANCE**

This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 7 above.

**D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT**

"I have determined that this waste meets all applicable treatment standards set forth in 40 CFR Part 268 Subpart D, and all applicable prohibition levels set forth in Section 268.32 or RCRA Section 3004(d), and therefore, can be land disposed without further treatment. A copy of all applicable treatment standards and specified treatment methods is maintained at the treatment, storage and disposal facility named above. I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment."

**E. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS**

This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature: [Handwritten Signature] Title: Environmental Specialist Date: 8/08/94



**CWM Chemical Services, Inc.**

Medel City Facility  
P.O. Box 200  
1330 Balmer Road  
Medel City, New York 14107  
716/754-8231

**MARTIN MARIETTA CORP  
ATTN: MANIFEST SECTION  
MAD985294263  
540 MERRILL RD  
PITTSFIELD MA 01201-3714**

**CERTIFICATE OF DISPOSAL**

Chemical Waste Management, Inc. has received waste material from MARTIN MARIETTA CORP on 08/09/94 as described on [State Manifest or Uniform] Hazardous Waste Manifest number NYB4295727 Sequence number 01.

Profile Number: BL4619  
CWM Tracking ID: 8135108101  
Disposal Date: 08/09/94  
CWM Unit #: 1\*0

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

*Kathleen D. Morrison*

**KATHLEEN D. MORRISON  
RECORDS DEPT SUPERVISOR  
Certificate # 27347  
08/11/94**



COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF HAZARDOUS WASTE  
One Winter Street  
Boston, Massachusetts 02108

854 729

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator US EPA ID No.	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address GENERAL ELECTRIC CO. ATTN: P. ARMSTRONG 100 WOODLAWN AVE. BOSTON, MA 02114-250					
4. Generator's Phone ( ) 617 552-1111					
5. Transporter 1 Company Name CLEAN HARBOR ENVIR. SERVICES INC.	6. US EPA ID Number 441411111111				
7. Transporter 2 Company Name	8. US EPA ID Number				
9. Designated Facility Name and Site Address CLEAN HARBOR OF BRAINTREE INC. 385 CUNICY AVE. BRAINTREE, MA 02184		10. US EPA ID Number			
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. <del>HAZARDOUS LIQUID, N.O.S.</del>					
b. POLYCHLORINATED BIPHENYL MIXTURE Q, UN2315, III				0010	K
c. POLYCHLORINATED BIPHENYLS MIXTURE Q, UN2315, III				00470	K
d. HAZARDOUS WASTE, LIQUID, N.O.S. (XYLENE)					
15. Special Handling Instructions and Additional Information					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.					
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name ANTHONY V. SARRIS		Signature		Date Month Day Year 11 16 94	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name KUSU		Signature		Date Month Day Year 11 16 94	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Date Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name		Signature		Date Month Day Year	



<b>UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)</b>		21 Generator's US EPA ID No MA 0002084093	Manifest Document No. 00314	22 Page information in the shaded areas is not required by Federal law 2 of 2	
23 Generator Name GENERAL ELECTRIC CO. ATTN: T. ARMSTRONG 100 WOODLAWN AVE. PITTSFIELD, MA 01201			25 US EPA ID NUMBER MA 000322250		E. State Manifest Document Number MA 000727 M. State Generator's ID Number and Facility ID N. State Transporter's ID Number O. Transporter's Phone P. State Transporter's ID Number Q. Transporter's Phone
24 Transporter Company Name CLEAN HARBOR ENVIR. SERVICE INC		27 US EPA ID NUMBER		N. State Transporter's ID Number O. Transporter's Phone P. State Transporter's ID Number Q. Transporter's Phone	
26 Transporter Company Name		27 US EPA ID NUMBER			
28 US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		29 Containers No	30 Total Quantity	31 Unit Wt/Vol	
HAZARDOUS WASTE, SOLID, N.O.S. (TOLUENE, Xylene) 9, MA3077, III		4 DM	2645	P	
COAL TAR CONTAMINATED SOIL-NONE DOT REGULATED MA, MA, MA		1 DM	160	P	
ANTIMONY COMPOUNDS, INORGANIC, SOLID, N.O.S. 6.1, UN1549, III		9 DM	6770	P	
HAZARDOUS WASTE, SOLID, N.O.S. (TOLUENE, Xylene) 9, MA3077, III		1 DM	310	P	
HAZARDOUS WASTE, LIQUID, N.O.S. (TOLUENE) 9, MA3082, III		1 DM	55	G	
POLYCHLORINATED BIPHENYLS MIXTURE 9, UN2815, III		1 DM	450	P	
HAZARDOUS WASTE, SOLID, MIXTURE N.O.S. (LEAD) 9, MA3077, III		1 DM	255	P	
h			30	G	
1. SOLVENT/SOIL-061314 2. ZINC OXIDE 065724 3. TOLUENE MIX-063083 4. SOLVENT/SOIL-063081 5. SOLVENT/SOIL-063083 6. SOLVENT-061308		Handling Codes for Wastes:			
32. Special Handling Instructions and Additional Information					
TRANSPORTER	33. Transporter Acknowledgement of Receipt of Materials			Date	
	Printed/Typed Name	Signature		Month	Day Year
FACILITY	34. Transporter Acknowledgement of Receipt of Materials			Date	
	Printed/Typed Name	Signature		Month	Day Year
35. Discrepancy Identification Space					

CONTINUED ON REVERSE SIDE OF MANIFEST

GENERAL ELECTRIC CO.  
MAD002084093MAG084929  
SHIP DATE 10/7/94

DRUM #	OUT OF SERVICE	CONTENTS	PROFILE	WEIGHT	
				LBS	KGM
279	6/10/94	EMPTY PCB DMS	R31353	60	27
280	9/7/94	EMPTY PCB DMS	R31353	60	27
281	9/7/94	EMPTY PCB DMS	R31353	60	27
282	9/7/94	EMPTY PCB DMS	R31353	60	27
283	9/1/94	EMPTY PCB DMS	R31353	60	27
287	8/30/94	EMPTY PCB DMS	R31353	60	27
288	8/30/94	EMPTY PCB DMS	R31353	60	27
0		PAGE 1. LINE 11b. =====>		0	191
0				0	0
123	3/24/94	PCB CARBON	T07674	498	226
124	3/24/94	PCB CARBON	T07674	535	243
0		PAGE 1. LINE 11c. =====>		0	470
0				0	0
291	7/1/94	PCB SOIL	U63083	460	209
0		PAGE 2. LINE 28f. =====>		0	209

Generator Land Disposal Restriction Notification for  
Hazardous Wastes Subject to an Effective Prohibition Date

Generator Name: GENERAL ELECTRIC

EPA ID No. MA6084929

Address: 100 WOODLAND AVE

Contact (Print) TW ARMSTRONG

Signature: TW Armstrong

Date: 10/4/94

The hazardous wastes identified on the accompanying manifest number MA6084929 and bearing the Hazardous Waste Codes listed below are restricted wastes which are prohibited from land disposal under the Land Disposal Restrictions, 40 CFR Part 268. In accordance with 40 CFR 268.7(a)(1), the EPA waste code, waste subcategory, treatability groups, treatment standards, technology codes, and appropriate references, as applicable, are provided below:

I. Characteristic Wastes D001 through D017

Waste Code/Subcategory	Numerical Treatment Standard, Technology Code and/or Reference	
	<u>Wastewater</u>	<u>Nonwastewater</u>
<input type="checkbox"/> D001 - All descriptions based on 40 CFR 261.21, except for the §261.21(a)(1) High TOC subcategory, managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems. IF "DEACT, AND MEET F039" IS CHECKED, THE GENERATOR MUST IDENTIFY ALL UNDERLYING HAZARDOUS CONSTITUENTS THAT ARE REASONABLY EXPECTED TO BE PRESENT IN THE WASTE. SEE SECTION I.A BELOW.	<input type="checkbox"/> DEACT, and meet F039; OR <input type="checkbox"/> FSUBS, RORGS, or INCIN	<input type="checkbox"/> DEACT, and meet F039; OR <input type="checkbox"/> FSUBS, RORGS, or INCIN
<input type="checkbox"/> D001 - All descriptions based on 40 CFR 261.21, except for the §261.21(a)(1) High TOC subcategory, managed in CWA, CWA-equivalent or Class I SDWA systems.	<input type="checkbox"/> DEACT	<input type="checkbox"/> DEACT
<input type="checkbox"/> D001 - All descriptions based on 40 CFR 261.21(a)(1) High TOC Ignitable Liquids Subcategory (Greater than or equal to 10% TOC)	Not applicable	<input type="checkbox"/> FSUBS, RORGS, or INCIN
<input type="checkbox"/> D002 - All wastes (acids, alkalines, others) that are managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems. THE GENERATOR MUST IDENTIFY ALL UNDERLYING HAZARDOUS CONSTITUENTS THAT ARE REASONABLY EXPECTED TO BE PRESENT IN THE WASTE. SEE SECTION I.A BELOW.	<input type="checkbox"/> DEACT, and meet F039	<input type="checkbox"/> DEACT, and meet F039
<input type="checkbox"/> D002 - All wastes (acids, alkalines, others) that are managed in CWA, CWA-equivalent or Class I SDWA systems.	<input type="checkbox"/> DEACT	<input type="checkbox"/> DEACT
<input type="checkbox"/> D003		
<input type="checkbox"/> Reactive Sulfides	<input type="checkbox"/> Ref 2 -- DEACT	<input type="checkbox"/> Ref 2 -- DEACT
<input type="checkbox"/> Reactive Cyanides	<input type="checkbox"/> Ref 3	<input type="checkbox"/> Ref 3
<input type="checkbox"/> Explosives	<input type="checkbox"/> Ref 2 -- DEACT	<input type="checkbox"/> Ref 2 -- DEACT
<input type="checkbox"/> Water Reactives	Not applicable	<input type="checkbox"/> Ref 2 -- DEACT
<input type="checkbox"/> Other (per §261.23(a)(1))	<input type="checkbox"/> Ref 2 -- DEACT	<input type="checkbox"/> Ref 2 -- DEACT
<input type="checkbox"/> D004 - Arsenic	<input type="checkbox"/> Ref 3	<input type="checkbox"/> Ref 1
<input type="checkbox"/> D005 - Barium	<input type="checkbox"/> Ref 3	<input type="checkbox"/> Ref 1
<input type="checkbox"/> D006		
<input type="checkbox"/> Cadmium	<input type="checkbox"/> Ref 3	<input type="checkbox"/> Ref 1
<input type="checkbox"/> Cadmium Containing Batteries	Not applicable	<input type="checkbox"/> Ref 2 -- RTHRM
<input checked="" type="checkbox"/> D007 - Chromium	<input type="checkbox"/> Ref 3	<input type="checkbox"/> Ref 1
<input checked="" type="checkbox"/> D008		
<input checked="" type="checkbox"/> Lead	<input type="checkbox"/> Ref 3	<input checked="" type="checkbox"/> Ref 1
<input type="checkbox"/> Lead Acid Batteries	Not applicable	<input type="checkbox"/> Ref 2 -- RLEAD
<input type="checkbox"/> D009 - Mercury		
<input type="checkbox"/> Low Hg, < 260 mg/kg Hg	<input type="checkbox"/> Ref 3	<input type="checkbox"/> Ref 1
<input type="checkbox"/> High Hg, > or = 260 mg/kg Hg, mercury and organics and are not incinerator residues	Not applicable	<input type="checkbox"/> Ref 2 -- IMERC; or RMERC
<input type="checkbox"/> High Hg, > or = 260 mg/kg Hg, inorganics including incinerator & RMERC residues	Not applicable	<input type="checkbox"/> Ref 2 -- RMERC
<input type="checkbox"/> D010 - Selenium	<input type="checkbox"/> Ref 3	<input type="checkbox"/> Ref 1
<input type="checkbox"/> D011 - Silver	<input type="checkbox"/> Ref 3	<input type="checkbox"/> Ref 1
<input type="checkbox"/> D012 - Endrin	<input type="checkbox"/> Ref 2 -- BIODG; or INCIN	<input type="checkbox"/> Ref 3
<input type="checkbox"/> D013 - Lindane	<input type="checkbox"/> Ref 2 -- CARBN; or INCIN	<input type="checkbox"/> Ref 3
<input type="checkbox"/> D014 - Methoxychlor	<input type="checkbox"/> Ref 2 -- WETOX; or INCIN	<input type="checkbox"/> Ref 3
<input type="checkbox"/> D015 - Toxaphene	<input type="checkbox"/> Ref 2 -- BIODG; or INCIN	<input type="checkbox"/> Ref 3
<input type="checkbox"/> D016 - 2,4-D	<input type="checkbox"/> Ref 2 -- CHOXD; BIODG; or INCIN	<input type="checkbox"/> Ref 3
<input type="checkbox"/> D017 - 2,4,5-TP (Silvex)	<input type="checkbox"/> Ref 2 -- CHOXD; or INCIN	<input type="checkbox"/> Ref 3

I.A D001/D002 Hazardous Wastes Requiring "DEACT, and meet F039" Treatment Standard (Check one)

- See attached LDR1 Addendum for identification of F039 underlying hazardous constituents.
- This waste is intended for export to a treatment and disposal facility located outside the United States. Per U.S. EPA guidance, the identification of F039 underlying hazardous constituents is not required unless the waste is returned to the United States for treatment or disposal.

1.1: Spent Solvent Wastes F001 through F005

Spent Solvent Waste Code(s) -- Check all which apply:  F001  F002  F003  F004  F005

Constituent	Wastewater (mg/l)	Nonwastewater (mg/kg) (by TCLP method (mg/l) where indicated by asterisk **)
<input type="checkbox"/> Acetone	<input type="checkbox"/> 0.28	<input type="checkbox"/> 160
<input type="checkbox"/> Benzene	<input type="checkbox"/> 0.070	<input type="checkbox"/> 3.7
<input type="checkbox"/> n-Butyl alcohol	<input type="checkbox"/> 5.6	<input type="checkbox"/> 2.6
<input type="checkbox"/> Carbon disulfide	<input type="checkbox"/> 0.014	<input type="checkbox"/> 4.8**
<input type="checkbox"/> Carbon tetrachloride	<input type="checkbox"/> 0.057	<input type="checkbox"/> 5.6
<input type="checkbox"/> Chlorobenzene	<input type="checkbox"/> 0.057	<input type="checkbox"/> 5.7
<input type="checkbox"/> Cresol (m- and p- isomers)	<input type="checkbox"/> 0.77	<input type="checkbox"/> 3.2
<input type="checkbox"/> o-Cresol	<input type="checkbox"/> 0.11	<input type="checkbox"/> 5.6
<input type="checkbox"/> Cyclohexanone	<input type="checkbox"/> 0.36	<input type="checkbox"/> 0.75**
<input type="checkbox"/> 1,2-Dichlorobenzene	<input type="checkbox"/> 0.088	<input type="checkbox"/> 6.2
<input type="checkbox"/> 2-Ethoxyethanol (F005)	<input type="checkbox"/> Ref 2 -- BIODG; or INCIN	<input type="checkbox"/> Ref 2 -- INCIN
<input type="checkbox"/> Ethyl acetate	<input type="checkbox"/> 0.34	<input type="checkbox"/> 33
<input type="checkbox"/> Ethyl benzene	<input type="checkbox"/> 0.057	<input type="checkbox"/> 6.0
<input type="checkbox"/> Ethyl ether	<input type="checkbox"/> 0.12	<input type="checkbox"/> 160
<input type="checkbox"/> Isobutyl alcohol	<input type="checkbox"/> 5.6	<input type="checkbox"/> 170
<input type="checkbox"/> Methanol	<input type="checkbox"/> 5.6	<input type="checkbox"/> 0.75**
<input type="checkbox"/> Methylene chloride	<input type="checkbox"/> 0.089	<input type="checkbox"/> 33
<input type="checkbox"/> Methylene chloride -- Pharmaceutical Industry Wastewater Only	<input type="checkbox"/> 0.44	NA
<input checked="" type="checkbox"/> Methyl ethyl ketone	<input type="checkbox"/> 0.28	<input checked="" type="checkbox"/> 36
<input checked="" type="checkbox"/> Methyl isobutyl ketone	<input type="checkbox"/> 0.14	<input checked="" type="checkbox"/> 33
<input type="checkbox"/> Nitrobenzene	<input type="checkbox"/> 0.068	<input type="checkbox"/> 14
<input type="checkbox"/> 2-Nitropropane (F005)	<input type="checkbox"/> Ref 2 -- (METOX or CHOXD) fb CARBN; or INCIN	<input type="checkbox"/> Ref 2 -- INCIN
<input type="checkbox"/> Pyridine	<input type="checkbox"/> 0.014	<input type="checkbox"/> 16
<input type="checkbox"/> Tetrachloroethylene	<input type="checkbox"/> 0.056	<input type="checkbox"/> 5.6
<input checked="" type="checkbox"/> Toluene	<input type="checkbox"/> 0.08	<input checked="" type="checkbox"/> 28
<input type="checkbox"/> 1,1,1-Trichloroethane	<input type="checkbox"/> 0.054	<input type="checkbox"/> 5.6
<input type="checkbox"/> 1,1,2-Trichloroethane	<input type="checkbox"/> 0.030	<input type="checkbox"/> 7.6
<input checked="" type="checkbox"/> Trichloroethylene	<input type="checkbox"/> 0.054	<input checked="" type="checkbox"/> 5.6
<input type="checkbox"/> 1,1,2-Trichloro- 1,2,2-trifluoroethane	<input type="checkbox"/> 0.057	<input type="checkbox"/> 28
<input type="checkbox"/> Trichlorofluoromethane	<input type="checkbox"/> 0.02	<input type="checkbox"/> 33
<input checked="" type="checkbox"/> Xylenes (total)	<input type="checkbox"/> 0.32	<input checked="" type="checkbox"/> 28

III. California List Wastes -- Hazardous waste containing one or more of the following constituents:

- Nickel > or = 134 mg/l  
 Liquids with PCB's > or = 50 ppm  
 Thallium > or = 130 mg/l  
 Waste containing HOC's > or = 1,000 mg/kg *ITGM 28h*

IV. Other Listed Hazardous Wastes (F006-F012, F019-F028, F037, F038, K-, U-, and P-codes)

EPA Hazardous Waste Code	Wastewater or Nonwastewater	5-letter Technology Code (if applicable -- see Ref 2)	Reference(s) (Ref 1, Ref 2, and/or Ref 3)
<u>U220</u>	<u>N-wastewater</u>		<u>Ref 3, CCW</u>
<u>U239</u>	<u>N-wastewater</u>		

CHECK HERE IF ADDITIONAL LISTED WASTE CODES ARE PRESENT. IF CHECKED, USE LDR1 CONTINUATION SHEET.

References  
 Ref 1: See numerical treatment standard(s) in 40 CFR 268.41, Table CCME - Constituent Concentrations in Waste Extract  
 Ref 2: See technology-based standard(s) in 40 CFR 268.42, Table 2 - Technology-Based Standard By RCRA Waste Codes  
 Ref 3: See numerical treatment standard(s), 40 CFR 268.43, Table CCW - Constituent Concentrations in Wastes



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 004, DRUMS #8, #9, #10, #11  
 Sample Type: Solid

CHES Lab #: 9406211-04  
 Data Received: 06/14/94

Volatile Organics - System E  
 Toxicity Characteristic Leaching Procedure (TCLP)  
 by EPA Method 8260 (ref. d)

Zero Headspace Extraction Date: 06/20/94  
 Analysis Date: 06/21/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Benzene	0.025	ND	1,1-Dichloroethylene	0.025	ND
Carbon tetrachloride	0.025	ND	Methyl ethyl ketone	0.10	ND
Chlorobenzene	0.025	ND	Tetrachloroethylene	0.025	ND
Chloroform	0.025	ND	Trichloroethylene	0.025	ND
1,2-Dichloroethane	0.025	ND	Vinyl chloride	0.050	ND

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311, as described in the Federal Register, Volume 55, No. 126.

Additional compounds observed in sample.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 92 %  
 Toluene-d8: 102 %  
 p-BFB: 95 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 004, DRUMS #8, #9, #10, #11  
Sample Type: Solid

CHES Lab #: 9406211-04  
Date Received: 06/14/94

Semi-Volatile Base/Neutral and Acid Extractable Organics - System B  
Toxicity Characteristic Leaching Procedure (TCLP)  
by EPA Method 3510/8270 (ref. c)

TCLP Extraction Date: 06/15/94  
Organic Extraction Date: 06/17/94  
Analysis Date: 06/21/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.
Total cresols	0.10	1.2	Nitrobenzene	0.10	ND
1,4-Dichlorobenzene	0.10	ND	Pentachlorophenol	0.50	ND
2,4-Dinitrotoluene	0.10	ND	Pyridine	0.10	ND
Hexachlorobenzene	0.10	ND	2,4,5-Trichlorophenol	0.50	ND
Hexachlorobutadiene	0.10	ND	2,4,6-Trichlorophenol	0.50	ND
Hexachlorocyclohexane	0.10	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP = Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.

Additional compounds observed in sample.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: 54 %  
Phenol-d5: 48 %  
Nitrobenzene-d5: 30 %  
2-Fluorobiphenyl: 6 %  
2,4,6-Tribromophenol: 89 %  
Terphenyl-d14: 74 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
21-100%	25-121%
10-94%	24-113%
35-114%	23-120%
43-116%	30-115%
10-123%	19-122%
33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 004, DRUMS #8, #9, #10, #11  
Sample Type: Solid

CHES Lab #: 9406211-04  
Date Received: 06/14/94

Polychlorinated Biphenyls (PCBs)  
by EPA Method 3540/8080 (raf. c)

Extraction Date: 06/20/94  
Analysis Date: 06/23/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	0.9	ND	mg/kg
PCB - Aroclor 1221	0.9	ND	mg/kg
PCB - Aroclor 1232	0.9	ND	mg/kg
PCB - Aroclor 1242	0.9	ND	mg/kg
PCB - Aroclor 1248	0.9	ND	mg/kg
PCB - Aroclor 1254	0.9	ND	mg/kg
PCB - Aroclor 1260	0.9	ND	mg/kg

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid sample results based on sample dry weight.  
NA - Due to dilutions required to analyze the sample,  
the surrogate recovery was unable to be calculated.

QA/QC

Surrogate Recovery

Acceptance Criteria

Hexabromobenzene: NA

78-148%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 004, DRUMS #8, #9, #10, #11  
Sample Type: Solid

OHES Lab #: 9406211-04H  
Date Received: 06/14/94

Parameter	FQL*	Result*	Digestion Date	Analysis Date	Method Number and Reference
Arsenic - TCLP	0.2	ND	06/16/94	06/21/94	3010/6010(c)
Barium - TCLP	1.0	ND	06/16/94	06/21/94	3010/6010(c)
Cadmium - TCLP	0.05	ND	06/16/94	06/21/94	3010/6010(c)
Chromium - TCLP	0.05	ND	06/16/94	06/21/94	3010/6010(c)
Lead - TCLP	0.1	ND	06/16/94	06/21/94	3010/6010(c)
Mercury - TCLP	0.0020	ND	06/16/94	06/17/94	Mod. 7470(c)
Selenium - TCLP	0.2	ND	06/16/94	06/21/94	3010/6010(c)
Silver - TCLP	0.05	ND	06/16/94	06/20/94	3003/6010(c)

Sample extracted on 06/15/94.

Notes: ND - Below practical quantitation limit (FQL)  
\* - mg/l  
Soil/solid samples based on sample dry weight.  
Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.





Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 004, DRUMS #8, #9, #10, #11  
Sample Type: Solid

CHEB Lab #: 9406211-04  
Date Received: 06/14/94

Parameter	PQL	Result	Units	Analysis Date	Method Number and Reference
Total Solids	--	86.8	%	06/15/94	209F(b)

Notes: ND - Below practical quantitation limit (POL)  
Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 005, DRUM #12  
 Sample Type: Liquid

CHES Lab #: 9406211-05AB  
 Date Received: 06/14/94

Volatile Organics - System E  
 by EPA Method 824 (ref. 2)

Analysis Date: 06/17/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Acetone	0.40	ND	1,2-Dichloropropane	0.10	ND
Benzene	0.10	ND	cis-1,3-Dichloropropene	0.10	ND
Bromodichloromethane	0.10	ND	trans-1,3-Dichloropropene	0.10	ND
Bromoform	0.10	ND	Ethylbenzene	0.10	ND
Bromomethane	0.20	ND	2-Hexanone	0.10	ND
2-Butanone	0.40	ND	Methylene chloride	0.40	ND
Carbon disulfide	0.20	ND	4-Methyl-2-pentanone	0.10	ND
Carbon tetrachloride	0.10	ND	Methyl-t-butylether (MTBE)	0.20	ND
Chlorobenzene	0.10	ND	Styrene	0.10	ND
Chloroethane	0.20	ND	1,1,2,2-Tetrachloroethane	0.10	ND
2-Chloroethyl vinyl ether	0.20	ND	Tetrachloroethene	0.10	ND
Chloroform	0.10	ND	Toluene	0.10	ND
Chloromethane	0.20	ND	1,1,1-Trichloroethane	0.10	ND
Dibromochloromethane	0.10	ND	1,1,2-Trichloroethane	0.10	ND
Dibromoethane (EDB)	0.10	ND	Trichloroethene	0.10	ND
1,1-Dichloroethane	0.10	ND	Trichlorofluoromethane	0.10	ND
1,2-Dichloroethane	0.10	ND	Vinyl acetate	0.20	ND
1,1-Dichloroethene	0.10	ND	Vinyl chloride	0.20	ND
trans-1,2-Dichloroethene	0.10	ND	Total xylenes	0.10	0.11

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Additional compounds observed in sample.

Hydrocarbon background present in sample.

QA/QC

Success Rate Recoveries:

1,2-Dichloroethane-d4: 100 %  
 Toluene-d8: 98 %  
 p-NFB: 90 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 005, DRUM #12  
 Sample Type: Liquid

CHES Lab #: 9406211-05  
 Date Received: 06/14/94

Polychlorinated Biphenyls (PCBs)  
 by EPA Method 608 (ref. F)

Extraction Date: 06/17/94  
 Analysis Date: 06/21/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	1.0	ND	ug/l
PCB - Aroclor 1221	1.0	ND	ug/l
PCB - Aroclor 1232	1.0	ND	ug/l
PCB - Aroclor 1242	1.0	ND	ug/l
PCB - Aroclor 1248	1.0	ND	ug/l
PCB - Aroclor 1254	1.0	ND	ug/l
PCB - Aroclor 1260	1.0	4.3	ug/l

Notes: ND - Below practical quantitation limit (PQL)  
 Soil/solid sample results based on sample dry weight.

QA/QC

Surrogate Recovery

Acceptance Criteria

Hexabromobenzene: 69.8%

34-104%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 005, DRUM #12  
Sample Type: Liquid

OHHS Lab #: 9406211-0  
Date Received: 06/14/94

Parameter	PQL	Result	Units	Analysis Date	Method Num and Referen
Flashpoint	--	>200	deg F	06/17/94	1010(

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 006, DRUM #13  
Sample Type: Liquid

CHES Lab #: 9406211-06A5  
Date Received: 06/14/94

Volatile Organics - System E  
by EPA Method 624 (ref. f)

Analysis Date: 06/17/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Acetone	5.0	9.1 ←	1,2-Dichloropropane	1.3	ND
Benzene	1.3	ND	cis-1,3-Dichloropropene	1.3	ND
Bromodichloromethane	1.3	ND	trans-1,3-Dichloropropene	1.3	ND
Bromoform	1.3	ND	Ethylbenzene	1.3	ND
Bromomethane	2.5	ND	2-Hexanone	1.3	ND
2-Butanone	5.0	ND	Methylene chloride	5.0	ND
Carbon disulfide	2.5	ND	4-Methyl-2-pentanone	1.3	31 ←
Carbon tetrachloride	1.3	ND	Methyl-t-butylether (MTBE)	2.5	ND
Chlorobenzene	1.3	ND	Styrene	1.3	ND
Chloroethane	2.5	ND	1,1,2,2-Tetrachloroethane	1.3	ND
2-Chloroethyl vinyl ether	2.5	ND	Tetrachloroethene	1.3	ND
Chloroform	1.3	ND	Toluene	1.3	ND
Chloromethane	2.5	ND	1,1,1-Trichloroethane	1.3	ND
Dibromochloromethane	1.3	ND	1,1,2-Trichloroethane	1.3	ND
Dibromoethane (EDB)	1.3	ND	Trichloroethene	1.3	ND
1,1-Dichloroethane	1.3	ND	Trichlorofluoromethane	1.3	ND
1,2-Dichloroethane	1.3	ND	Vinyl acetate	2.5	ND
1,1-Dichloroethene	1.3	ND	Vinyl chloride	2.5	ND
trans-1,2-Dichloroethene	1.3	ND	Total xylenes	1.3	2.8 ←

Notes

ND = Below practical quantitation limit (PQL)

\* = mg/l

Additional compounds observed in sample.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 96 %  
Toluene-d8: 100 %  
p-BFB: 90 %

Acceptance Criteria:

Water	Soil
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 006, DRUM #13  
 Sample Type: Liquid

CHEM Lab #: 9406211-06  
 Date Received: 06/14/94

Polychlorinated Biphenyls (PCBs)  
 by EPA Method 608 (ref. 2)

Extraction Date: 06/17/94  
 Analysis Date: 06/21/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	5.7	ND	ug/l
PCB - Aroclor 1221	5.7	ND	ug/l
PCB - Aroclor 1232	5.7	ND	ug/l
PCB - Aroclor 1242	5.7	ND	ug/l
PCB - Aroclor 1248	5.7	ND	ug/l
PCB - Aroclor 1254	5.7	ND	ug/l
PCB - Aroclor 1260	5.7	8.0	ug/l

Notes: ND - Below practical quantitation limit (PQL)  
 Soil/solid sample results based on sample dry weight.  
 NA - Due to dilutions required to analyze the sample,  
 the surrogate recovery was unable to be calculated.

---

QA/QC

Surrogate Recovery

Acceptance Criteria

Hexabromobenzene: NA

34-104a



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 006, DRUM #13  
Sample Type: Liquid

CHES Lab #: 9406211-061  
Date Received: 06/14/94

Parameter	PQL	Result	Units	Analysis Date	Method Number and Reference
Flashpoint	--	>200	deg F	06/17/94	1010(c)

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 001, DRUM #1  
 Sample Type: Solid

CHES Lab #: 9406211-01M  
 Data Received: 06/14/94

Parameter	PQL*	Result*	Digestion Date	Analysis Date	Method Number and Reference
Arsenic - TCLP	0.2	ND	06/16/94	06/21/94	3010/6010(c)
Barium - TCLP	1.0	ND	06/16/94	06/21/94	3010/6010(c)
Cadmium - TCLP	0.05	ND	06/16/94	06/21/94	3010/6010(c)
Chromium - TCLP	0.05	0.16	06/16/94	06/21/94	3010/6010(c)
Lead - TCLP	0.1	ND	06/16/94	06/21/94	3010/6010(c)
Mercury - TCLP	0.0020	ND	06/16/94	06/17/94	Mod. 7470(c)
Selenium - TCLP	0.2	ND	06/16/94	06/21/94	3010/6010(c)
Silver - TCLP	0.05	ND	06/16/94	06/20/94	3005/6010(c)

Sample extracted on 06/15/94.

Notes: ND - below practical quantitation limit (PQL)

\* - mg/l

Soil/solid samples based on sample dry weight.

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.





Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 001, DRUM #1  
 Sample Type: Solid

OHES Lab #: 9406211-01A  
 Date Received: 06/14/94

Volatile Organics - System 2  
 Toxicity Characteristic Leaching Procedure (TCLP)  
 by EPA Method 8260 (ref. c)

Zero Headspace Extraction Date: 06/20/94  
 Analysis Date: 06/21/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Benzene	0.025	ND	1,1-Dichloroethylene	0.025	ND
Carbon tetrachloride	0.025	ND	Methyl ethyl ketone	0.10	ND
Chlorobenzene	0.025	ND	Tetrachloroethylene	0.025	ND
Chloroform	0.025	ND	Trichloroethylene	0.025	ND
1,2-Dichloroethane	0.025	ND	Vinyl chloride	0.050	ND

Notes

ND - Below practical quantitation limit (PQL)

\* = mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311, as described  
 in the Federal Register, Volume 55, No. 126.

Additional compounds observed in sample.

QA/QC

Spiked Recoveries:

1,2-Dichloroethane-d4: 94 %  
 Toluene-d8: 99 %  
 p-BFB: 95 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 001, DRUM #1  
 Sample Type: Solid

CHES Lab #: 9406211-010  
 Date Received: 06/14/94

Semi-Volatile Base/Neutral and Acid Extractable Organics - System B  
 Toxicity Characteristic Leaching Procedure (TCLP)  
 by EPA Method 3510/8270 (ref. c)

TCLP Extraction Date: 06/15/94  
 Organic Extraction Date: 06/17/94  
 Analysis Date: 06/21/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.
Total cresols	0.10	ND	Nitrobenzene	0.10	ND
1,4-Dichlorobenzene	0.10	ND	Pentachlorophenol	0.50	ND
2,4-Dinitrotoluene	0.10	ND	Pyridine	0.10	ND
Hexachlorobenzene	0.10	ND	2,4,5-Trichlorophenol	0.50	ND
Hexachlorobutadiene	0.10	ND	2,4,6-Trichlorophenol	0.50	ND
Hexachloroethane	0.10	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described  
 in the Federal Register, Volume 35, No. 126.

Hydrocarbon background present in sample.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: 72 %  
 Phenol-d5: 72 %  
 Nitrobenzene-d5: 2 %  
 2-Fluorobiphenyl: 65 %  
 2,4,6-Tribromophenol: 93 %  
 Terphenyl-d14: 83 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
21-100%	25-121%
10-94%	24-113%
35-114%	23-120%
43-116%	30-115%
10-123%	19-122%
33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 001, DRUM #1  
 Sample Type: Solid

CHES Lab #: 9406211-010  
 Date Received: 06/14/94

Polychlorinated Biphenyls (PCBs)  
 by EPA Method 3540/8080 (ref. c)

Extraction Date: 06/20/94  
 Analysis Date: 06/22/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	1.1	ND	mg/kg
PCB - Aroclor 1221	1.1	ND	mg/kg
PCB - Aroclor 1232	1.1	ND	mg/kg
PCB - Aroclor 1242	1.1	ND	mg/kg
PCB - Aroclor 1248	1.1	ND	mg/kg
PCB - Aroclor 1254	1.1	ND	mg/kg
PCB - Aroclor 1260	1.1	ND	mg/kg

Notes: ND - Below practical quantitation limit (PQL)  
 Soil/solid sample results based on sample dry weight.  
 NA - Due to dilutions required to analyze the sample,  
 the surrogate recovery was unable to be calculated.

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QA/QC

Surrogate Recovery

Acceptance Criteria

Hexabromobenzene: NA

78-1480



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 001, DRUM #1  
Sample Type: Solid

CHES Lab #: 9406211-01M  
Date Received: 06/14/94

Parameter	PQL	Result	Units	Analysis Date	Method Number and Reference
Total Solids	--	73.0	%	06/13/94	209F(b)

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 002, DRUMS #2 AND #4  
 Sample Type: Solid

CHES Lab #: 0406211-02  
 Date Received: 06/14/94

Parameter	PQL*	Result*	Digestion Date	Analysis Date	Method Number and Reference
Arsenic - TCLP	0.2	ND	06/16/94	06/21/94	3010/6010(c)
Barium - TCLP	1.0	ND	06/16/94	06/21/94	3010/6010(c)
Cadmium - TCLP	0.05	ND	06/16/94	06/21/94	3010/6010(c)
Chromium - TCLP	0.05	ND	06/16/94	06/21/94	3010/6010(c)
Lead - TCLP	0.1	ND	06/16/94	06/21/94	3010/6010(c)
Mercury - TCLP	0.0020	ND	06/16/94	06/17/94	Mod. 7470(c)
Selenium - TCLP	0.2	ND	06/16/94	06/21/94	3010/6010(c)
Silver - TCLP	0.05	ND	06/16/94	06/20/94	3005/6010(c)

Sample extracted on 06/15/94.

Notes: ND - Below practical quantitation limit (PQL)

\* - mg/l

Soil/solid samples based on sample dry weight.

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 002, DRUMS #2 AND #4  
Sample Type: Solid

CHES Lab #: 9406211-020  
Date Received: 06/14/94

Semi-Volatile Base/Neutral and Acid Extractable Organics - System B  
Toxicity Characteristic Leaching Procedure (TCLP)  
by EPA Method 3510/8270 (ref. c)

TCLP Extraction Date: 06/13/94  
Organic Extraction Date: 06/17/94  
Analysis Date: 06/21/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.
Total cresols	0.10	ND	Nitrobenzene	0.10	ND
1,4-Dichlorobenzene	0.10	ND	Pentachlorophenol	0.50	ND
2,4-Dinitrotoluene	0.10	ND	Pyridine	0.10	ND
Hexachlorobenzene	0.10	ND	2,4,5-Trichlorophenol	0.50	ND
Hexachlorobutadiene	0.10	ND	2,4,6-Trichlorophenol	0.50	ND
Hexachloroethane	0.10	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: 38 %  
Phenol-d5: 45 %  
Nitrobenzene-d5: 62 %  
2-Fluorobiphenyl: 65 %  
2,4,6-Tribromophenol: 67 %  
Terphenyl-d14: 84 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
21-100%	25-121%
10-94%	24-113%
35-114%	23-120%
43-116%	30-115%
10-123%	19-122%
33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 002, DRUMS #2 AND #4  
 Sample Type: Solid

CHES Lab #: 9406211-0  
 Date Received: 06/14/94

Polychlorinated Biphenyls (PCBs)  
 by EPA Method 3540/8080 (ref. c)

Extraction Date: 06/20/94  
 Analysis Date: 06/23/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	1.0	ND	mg/kg
PCB - Aroclor 1221	1.0	ND	mg/kg
PCB - Aroclor 1232	1.0	ND	mg/kg
PCB - Aroclor 1242	1.0	ND	mg/kg
PCB - Aroclor 1248	1.0	ND	mg/kg
PCB - Aroclor 1254	1.0	ND	mg/kg
PCB - Aroclor 1260	1.0	ND	mg/kg

Notes: ND = Below practical quantitation limit (PQL)  
 Soil/solid sample results based on sample dry weight.  
 NA - Due to dilutions required to analyze the sample,  
 the surrogate recovery was unable to be calculated.

QA/QC

Surrogate Recovery

Acceptance Criteria

Hexabromobenzene: NA

75-148a



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 002, DRUMS #2 AND #4  
Sample Type: Solid

CHES Lab #: 9406211-  
Date Received: 06/14/94

Parameter	PQL	Result	Units	Analysis Date	Method Num and Reference
Total Solids	--	81.8	%	06/15/94	209F

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.





Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 003, DRUMS #5, #6, AND #7  
 Sample Type: Solid

CHES Lab #: 9406211-03M  
 Date Received: 06/14/94

Parameter	PQL*	Result*	Digestion Data	Analysis Data	Method Number and Reference
Arsenic - TCLP	0.2	ND	06/16/94	06/21/94	3010/6010(c)
Barium - TCLP	1.0	ND	06/16/94	06/21/94	3010/6010(c)
Cadmium - TCLP	0.05	ND	06/16/94	06/21/94	3010/6010(c)
Chromium - TCLP	0.05	ND	06/16/94	06/21/94	3010/6010(c)
Lead - TCLP	0.1	0.3	06/16/94	06/21/94	3010/6010(c)
Mercury - TCLP	0.0020	ND	06/16/94	06/17/94	Mod. 7470(c)
Selenium - TCLP	0.2	ND	06/16/94	06/21/94	3010/6010(c)
Silver - TCLP	0.05	ND	06/16/94	06/24/94	3005/6010(c)

Sample extracted on 06/15/94.

Notes: ND - Below practical quantitation limit (PQL)

\* - mg/l

Soil/solid samples based on sample dry weight.

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 003, DRUMS #5, #6, AND #7  
Sample Type: Solid

CHES Lab #: 9406211-C  
Date Received: 06/14

Volatile Organics - System E  
Toxicity Characteristic Leaching Procedure (TCLP)  
by EPA Method 8260 (ref. c)

Zero Headspace Extraction Date: 06/20/94  
Analysis Date: 06/21/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.
Benzene	0.025	ND	1,1-Dichloroethylene	0.025	ND
Carbon tetrachloride	0.025	ND	Methyl ethyl ketone	0.10	ND
Chlorobenzene	0.025	0.025	Tetrachloroethylene	0.025	ND
Chloroform	0.025	ND	Trichloroethylene	0.025	ND
1,2-Dichloroethane	0.025	ND	Vinyl chloride	0.050	ND

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311, as described in the Federal Register, Volume 55, No. 126.

Additional compounds observed in sample.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 94 %  
Toluene-d8: 101 %  
p-BFB: 95 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
76-114e	70-121e
88-110e	84-138e
86-115e	59-113e



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 003, DRUMS #5, #6, AND #7  
 Sample Type: Solid

CHES Lab #: 9406211-030  
 Date Received: 06/14/94

Semi-Volatile Base/Neutral and Acid Extractable Organics - System B  
 Toxicity Characteristic Leaching Procedure (TCLP)  
 by EPA Method 3510/8270 (ref. c)

TCLP Extraction Date: 06/15/94  
 Organic Extraction Date: 06/17/94  
 Analysis Date: 06/21/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Total creosols	0.10	ND	Nitrobenzene	0.10	ND
1,4-Dichlorobenzene	0.10	ND	Pentachlorophenol	0.50	ND
2,4-Dinitrotoluene	0.10	ND	Pyridine	0.10	ND
Hexachlorobenzene	0.10	ND	2,4,5-Trichlorophenol	0.50	ND
Hexachlorobutadiene	0.10	ND	2,4,6-Trichlorophenol	0.50	ND
Hexachloroethane	0.10	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: 39 %  
 Phenol-d5: 46 %  
 Nitrobenzene-d5: 70 %  
 2-Fluorobiphenyl: 62 %  
 2,4,6-Tribromophenol: 52 %  
 Terphenyl-d14: 83 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
21-100%	25-121%
10-94%	24-113%
35-114%	23-120%
43-116%	30-115%
10-123%	19-122%
33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 003, DRUMS #5, #6, AND #7  
Sample Type: Solid

CHES Lab #: 9406211-031  
Date Received: 06/14/94

Polychlorinated Biphenyls (PCBs)  
by EPA Method 3540/8080 (ref. n)

Extraction Date: 06/20/94  
Analysis Date: 06/23/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	9.3	ND	mg/kg
PCB - Aroclor 1221	9.3	ND	mg/kg
PCB - Aroclor 1232	9.3	ND	mg/kg
PCB - Aroclor 1242	9.3	ND	mg/kg
PCB - Aroclor 1248	9.3	ND	mg/kg
PCB - Aroclor 1254	9.3	29	mg/kg
PCB - Aroclor 1260	9.3	ND	mg/kg

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid sample results based on sample dry weight.  
NA - Due to dilutions required to analyze the sample,  
the surrogate recovery was unable to be calculated.

QA/QC

Surrogate Recovery	Acceptance Criteria
Hexabromobenzene: NA	78-148%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 003, DRUMS #5, #6, AND #7  
Sample Type: Solid

CHES Lab #: 9406211-0  
Date Received: 06/14/94

Parameter	PQL	Result	Units	Analysis Date	Method Number and Reference
Total Solids	--	81.0	%	06/15/94	209F(1)

Notes: ND = Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 009, DRUM #16  
 Sample Type: Oil

CHES Lab #: 9406243-03A1  
 Date Received: 06/15/94

Volatile Organics - System E  
 by EPA Method 8260 (ref. c)

Analysis Date: 06/22/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Acetone	650	ND	1,2-Dichloropropane	160	ND
Benzene	160	ND	cis-1,3-Dichloropropane	160	ND
Bromodichloromethane	160	ND	trans-1,3-Dichloropropane	160	ND
Bromoform	160	ND	Ethylbenzene	160	ND
Bromomethane	330	ND	2-Hexanone	160	ND
2-Butanone	650	ND	Methylene chloride	650	ND
Carbon disulfide	330	ND	4-Methyl-2-pentanone	160	ND
Carbon tetrachloride	160	ND	Methyl-t-butyl ether (MTBE)	330	ND
Chlorobenzene	160	ND	Styrene	160	ND
Chloroethane	330	ND	1,1,2,2-Tetrachloroethane	160	ND
2-Chloroethyl vinyl ether	330	ND	Tetrachloroethene	160	ND
Chloroform	160	ND	Toluene	160	2,400
Chloromethane	330	ND	1,1,1-Trichloroethane	160	ND
Dibromochloromethane	160	ND	1,1,2-Trichloroethane	160	ND
Dibromoethane (EDB)	160	ND	Trichloroethene	160	ND
1,1-Dichloroethane	160	ND	Trichlorofluoromethane	160	ND
1,2-Dichloroethane	160	ND	Vinyl acetate	330	ND
1,1-Dichloroethene	160	ND	Vinyl chloride	330	ND
trans-1,2-Dichloroethene	160	ND	Total xylenes	160	ND

Notes

ND = Below practical quantitation limit (PQL)

\* - mg/kg

Additional compounds observed in sample.

Hydrocarbon background present in sample.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 101 %  
 Toluene-d8: 98 %  
 p-BFB: 92 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 009, DRUM #16  
Sample Type: Oil

CHES Lab #: 9406243-  
Date Received: 06/15

Parameter	PQL	Result	Units	Analysis Date	Method Num and Refere
Flashpoint	--	>200	deg F	06/17/94	1010

Notes: ND = Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 010, DRUM #17  
 Sample Type: Soil

CHES Lab #: 9406243-0  
 Date Received: 06/15/94

Parameter	PQL*	Result*	Digestion Date	Analysis Date	Method Number and Reference
Arsenic - TCLP	0.2	ND	06/17/94	06/21/94	3010/6010(c)
Barium - TCLP	1.0	ND	06/17/94	06/21/94	3010/6010(c)
Cadmium - TCLP	0.05	ND	06/17/94	06/21/94	3010/6010(c)
Chromium - TCLP	0.05	ND	06/17/94	06/21/94	3010/6010(c)
Lead - TCLP	0.1	0.6	06/17/94	06/21/94	3010/6010(c)
Mercury - TCLP	0.0020	ND	06/17/94	06/20/94	Mod. 7470(c)
Selenium - TCLP	0.2	ND	06/17/94	06/21/94	3010/6010(c)
Silver - TCLP	0.05	ND	06/17/94	06/20/94	3005/6010(c)

Sample extracted on 06/16/94.

Notes: ND - Below practical quantitation limit (PQL)  
 \* - mg/l  
 Soil/solid samples based on sample dry weight.  
 Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.





Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 010, DRUM #1/  
Sample Type: Soil

CMES Lab #: 9406243  
Date Received: 06/11/94

Polychlorinated Biphenyls (PCBs)  
by EPA Method 3540/8080 (ref. c)

Extraction Date: 06/24/94  
Analysis Date: 06/27/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	3,700	ND	µg/kg
PCB - Aroclor 1221	3,700	ND	mg/kg
PCB - Aroclor 1232	3,700	ND	mg/kg
PCB - Aroclor 1242	3,700	ND	mg/kg
PCB - Aroclor 1248	3,700	ND	mg/kg
PCB - Aroclor 1254	3,700	ND	mg/kg
PCB - Aroclor 1260	3,700	17,000	mg/kg

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid sample results based on sample dry weight.  
NA - Due to dilutions required to analyze the sample,  
the surrogate recovery was unable to be calculated.

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QA/QC

Surrogate Recovery

Acceptance Criteria

Hexabromobenzene: NA

78-1481



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 010, DRUM #17  
Sample Type: Soil

CHES Lab #: 9406243-0  
Date Received: 06/15,

Volatile Organics - System E  
Toxicity Characteristic Leaching Procedure (TCLP)  
by EPA Method 8260 (ref. c)

Zero Headspace Extraction Date: 06/22/94  
Analysis Date: 06/27/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Benzene	2.5	ND	1,1-Dichloroethylene	2.5	ND
Carbon tetrachloride	2.5	ND	Methyl ethyl ketone	10	130
Chlorobenzene	2.5	ND	Tetrachloroethylene	2.5	ND
Chloroform	2.5	ND	Trichloroethylene	2.5	ND
1,2-Dichloroethane	2.5	ND	Vinyl chloride	5.0	ND

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311, as described in the Federal Register, Volume 59, No. 126.

Additional compounds observed in sample.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 100 %  
Toluene-d8: 94 %  
p-BFB: 93 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 010, DRUM #17  
 Sample Type: Soil

OHHS Lab #: 9406243-0  
 Date Received: 06/15/94

Semi-Volatile Base/Neutral and Acid Extractable Organics - System A  
 Toxicity Characteristic Leaching Procedure (TCLP)  
 by EPA Method 3510/8270 (ref. c)

TCLP Extraction Date: 06/16/94  
 Organic Extraction Date: 06/20/94  
 Analysis Date: 06/22/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.
Total cresols	0.10	0.15	Nitrobenzene	0.10	ND
1,4-Dichlorobenzene	0.10	ND	Pentachlorophenol	0.50	ND
2,4-Dinitrotoluene	0.10	ND	Pyridine	0.10	ND
Hexachlorobenzene	0.10	ND	2,4,5-Trichlorophenol	0.50	ND
Hexachlorobutadiene	0.10	ND	2,4,6-Trichlorophenol	0.50	ND
Hexachloroethane	0.10	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.

Additional compounds observed in sample.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: 68 %  
 Phenol-d5: 86 %  
 Nitrobenzene-d5: 57 %  
 2-Fluorobiphenyl: 59 %  
 2,4,6-Tribromophenol: 98 %  
 Terphenyl-d14: 86 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
21-100%	25-121%
10-94%	24-113%
35-114%	23-120%
43-116%	30-115%
10-123%	19-122%
33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 010, DRUM #17  
Sample Type: Soil

CHES Lab #: 9406243-C  
Date Received: 06/15/94

Parameter	PQL	Result	Units	Analysis Date	Method Num and Referen
Total Solids	--	39.7	%	06/16/94	209F(

Notes: ND = Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 011, DRUM #18  
 Sample Type: Soil

CMES Lab #: 9406243-05M  
 Date Received: 06/15/94

Parameter	PQL*	Result*	Digestion Date	Analysis Date	Method Number and Reference
Arsenic - TCLP	0.2	ND	06/17/94	06/21/94	3010/6010(c)
Barium - TCLP	1.0	ND	06/17/94	06/21/94	3010/6010(c)
Cadmium - TCLP	0.05	ND	06/17/94	06/21/94	3010/6010(c)
Chromium - TCLP	0.05	ND	06/17/94	06/21/94	3010/6010(c)
Lead - TCLP	0.1	6	06/17/94	06/21/94	3010/6010(c)
Mercury - TCLP	0.0020	ND	06/17/94	06/20/94	Mod. 7470(c)
Selenium - TCLP	0.2	ND	06/17/94	06/21/94	3010/6010(c)
Silver - TCLP	0.05	ND	06/17/94	06/20/94	3005/6010(c)

Sample extracted on 06/16/94.

Notes: ND - Below practical quantitation limit (PQL)

\* - mg/l

Soil/solid samples based on sample dry weight.

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 011, DRUM #18  
 Sample Type: Soil

CHES Lab #: 9406243-05A  
 Date Received: 06/15/94

Volatile Organics - System E  
 Toxicity Characteristic Leaching Procedure (TCLP)  
 by EPA Method 8260 (ref. a)

Zero Headspace Extraction Date: 06/22/94  
 Analysis Date: 06/27/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Benzene	0.025	ND	1,1-Dichloroethylene	0.025	ND
Carbon tetrachloride	0.025	ND	Methyl ethyl ketone	0.10	ND
Chlorobenzene	0.025	ND	Tetrachloroethylene	0.025	ND
Chloroform	0.025	ND	Trichloroethylene	0.025	ND
1,2-Dichloroethane	0.025	ND	Vinyl chloride	0.050	ND

Notes

ND - Below practical quantitation limit (PQL)

\* = mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311, as described  
 in the Federal Register, Volume 55, No. 126.

Additional compounds observed in sample.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 106 %  
 Toluene-d8: 98 %  
 p-BFB: 93 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 011, DRUM #18  
 Sample Type: Soil

CHES Lab #: 9406243-030  
 Date Received: 06/15/94

Semi-Volatile Base/Neutral and Acid Extractable Organics - System A  
 Toxicity Characteristic Leaching Procedure (TCLP)  
 by EPA Method 3510/8270 (ref. c)

TCLP Extraction Date: 06/16/94  
 Organic Extraction Date: 06/20/94  
 Analysis Date: 06/22/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Total cresols	0.10	ND	Nitrobenzene	0.10	ND
1,4-Dichlorobenzene	0.10	ND	Pentachlorophenol	0.50	ND
2,4-Dinitrotoluene	0.10	ND	Pyridine	0.10	ND
Hexachlorobenzene	0.10	ND	2,4,5-Trichlorophenol	0.50	ND
Hexachlorobutadiene	0.10	ND	2,4,6-Trichlorophenol	0.50	ND
Hexachloroethane	0.10	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described  
 in the Federal Register, Volume 55, No. 126.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: 28 %  
 Phenol-d5: 38 %  
 Nitrobenzene-d5: 10 %  
 2-Fluorobiphenyl: 56 %  
 2,4,6-Tribromophenol: 69 %  
 Terphenyl-d14: 77 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
21-100%	25-121%
10-94%	24-113%
35-114%	23-120%
43-116%	30-115%
10-123%	19-122%
33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 011, DRUM #18  
 Sample Type: Soil

CHES Lab #: 9406243-050  
 Date Received: 06/15/94

Polychlorinated Biphenyls (PCBs)  
 by EPA Method 3540/8080 (ref. c)

Extraction Date: 06/23/94  
 Analysis Date: 06/24/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	0.9	ND	mg/kg
PCB - Aroclor 1221	0.9	ND	mg/kg
PCB - Aroclor 1232	0.9	ND	mg/kg
PCB - Aroclor 1242	0.9	ND	mg/kg
PCB - Aroclor 1248	0.9	ND	mg/kg
PCB - Aroclor 1254	0.9	3.1	mg/kg
PCB - Aroclor 1260	0.9	ND	mg/kg

Notes: ND = Below practical quantitation limit (PQL)  
 Soil/solid sample results based on sample dry weight.  
 NA = Due to dilutions required to analyze the sample,  
 the surrogate recovery was unable to be calculated.

QA/QC

Surrogate Recovery

Acceptance Criteria

Hexabromobenzene: NA

78-148%





Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 011, DRUM #18  
Sample Type: Soil

CHES Lab #: 9406243-05M  
Date Received: 06/15/94

Parameter	PQL	Result	Units	Analysis Date	Method Number and Reference
Total Solids	--	87.8	%	06/16/94	209F(b)

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 007, DRUM #14  
 Sample Type: Oil

CHES Lab #: 9406243-01AB  
 Date Received: 06/15/94

Volatiles Organics - System 2  
 by EPA Method 8260 (ref. c)

Analysis Date: 06/20/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Acetone	2000	ND	1,2-Dichloropropane	500	ND
Benzene	500	ND	cis-1,3-Dichloropropene	500	ND
Bromodichloromethane	500	ND	trans-1,3-Dichloropropene	500	ND
Bromoform	500	ND	Ethylbenzene	500	ND
Bromomethane	1000	ND	2-Hexanone	500	ND
2-Butanone	2000	ND	Methylene chloride	2000	ND
Carbon disulfide	1000	ND	4-Methyl-2-pentanone	500	ND
Carbon tetrachloride	500	ND	Methyl-t-butylether (MTBE)	1000	ND
Chlorobenzene	500	ND	Styrene	500	ND
Chloroethane	1000	ND	1,1,2,2-Tetrachloroethane	500	ND
2-Chloroethyl vinyl ether	1000	ND	Tetrachloroethene	500	ND
Chloroform	500	ND	Toluene	500	ND
Chloromethane	1000	ND	1,1,1-Trichloroethane	500	ND
Dibromochloromethane	500	ND	1,1,2-Trichloroethane	500	ND
Dibromoethane (EDB)	500	ND	Trichloroethene	500	17,000
1,1-Dichloroethane	500	ND	Trichlorofluoromethane	500	ND
1,2-Dichloroethane	500	ND	Vinyl acetate	1000	ND
1,1-Dichloroethene	500	ND	Vinyl chloride	1000	ND
trans-1,2-Dichloroethene	500	ND	Total xylenes	500	ND

Notes

ND = Below practical quantitation limit (PQL)

\* = mg/kg

Additional compounds observed in sample.

Hydrocarbon background present in sample.

QA/QC

Spike Recoveries:

1,2-Dichloroethane-d4: 99 %  
 Toluene-d8: 99 %  
 p-BFB: 97 %

Appearance Criteria:

<u>Water</u>	<u>Soil</u>
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 007, DRUM #14  
 Sample Type: Oil

CHES Lab #: 9406243-01  
 Date Received: 06/15/94

Polychlorinated Biphenyls (PCBs)  
 by EPA Method 600/4-81-045 (ref. d)

Extraction Date: 06/21/94  
 Analysis Date: 06/22/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	2.0	ND	mg/kg
PCB - Aroclor 1221	2.0	ND	mg/kg
PCB - Aroclor 1232	2.0	ND	mg/kg
PCB - Aroclor 1242	2.0	ND	mg/kg
PCB - Aroclor 1248	2.0	ND	mg/kg
PCB - Aroclor 1254	2.0	ND	mg/kg
PCB - Aroclor 1260	2.0	ND	mg/kg

Notes: ND - Below practical quantitation limit (PQL)  
 Soil/solid sample results based on sample dry weight.



CHES Lab #: 9406243-C  
Date Received: 06/15/94

Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 007, DRUM #14  
Sample Type: Oil

Parameter	PQL	Result	Units
Flashpoint	..	117	deg F

Analysis Date  
06/17/94

Method Num  
and Refere  
10106

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc  
 Sample I.D.: 012, DRUM #19  
 Sample Type: Soil

CHES Lab #: 9406324-01A  
 Date Received: 06/21/94

Volatile Organics - System E  
 Toxicity Characteristic Leaching Procedure (TCLP)  
 by EPA Method 8260 (ref. c)

Zero Headspace Extraction Date: 06/22/94  
 Analysis Date: 06/24/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Benzene	0.025	ND	1,1-Dichloroethylene	0.025	ND
Carbon tetrachloride	0.025	ND	Methyl ethyl ketone	0.10	ND
Chlorobenzene	0.025	ND	Tetrachloroethylene	0.025	ND
Chloroform	0.025	ND	Trichloroethylene	0.025	ND
1,2-Dichloroethane	0.025	ND	Vinyl chloride	0.050	ND

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311, as described in the Federal Register, Volume 55, No. 126.

Additional compounds observed in sample.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 90 %  
 Toluene-d8: 97 %  
 p-BFB: 99 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
76-114%	70-121%
88-110%	84-138%
86-113%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 012, DRUM #19  
 Sample Type: Soil

CHES Lab #: 9406324-010  
 Date Received: 06/21/94

Semi-Volatile Base/Neutral and Acid Extractable Organics - System B  
 Toxicity Characteristic Leaching Procedure (TCLP)  
 by EPA Method 3510/8270 (ref. c)

TCLP Extraction Date: 06/22/94  
 Organic Extraction Date: 06/24/94  
 Analysis Date: 06/28/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Total cresols	0.10	ND	Nitrobenzene	0.10	ND
1,4-Dichlorobenzene	0.10	ND	Pentachlorophenol	0.50	ND
2,4-Dinitrotoluene	0.10	ND	Pyridine	0.10	ND
Hexachlorobenzene	0.10	ND	2,4,5-Trichlorophenol	0.50	ND
Hexachlorobutadiene	0.10	ND	2,4,6-Trichlorophenol	0.50	ND
Hexachloroethane	0.10	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.

Additional compounds observed in sample.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: 25 %  
 Phenol-d5: 31 %  
 Nitrobenzene-d5: 23 %  
 2-Fluorobiphenyl: 26 %  
 2,4,6-Tribromophenol: 35 %  
 Terphenyl-d14: 53 %

Acceptance Criteria:

	<u>Water</u>	<u>Soil</u>
	21-100%	23-121%
	10-94%	24-113%
	35-114%	23-120%
	43-116%	30-115%
	10-123%	19-122%
	33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc  
 Sample I.D.: 012, DRUM #19  
 Sample Type: Soil

CHES Lab #: 9406324-01M  
 Date Received: 06/21/94

Parameter	FQL*	Result*	Digestion Date	Analysis Date	Method Number and Reference
Arsenic - TCLP	0.2	ND	06/23/94	06/30/94	3010/6010(c)
Barium - TCLP	1.0	ND	06/23/94	06/30/94	3010/6010(c)
Cadmium - TCLP	0.05	ND	06/23/94	06/30/94	3010/6010(c)
Chromium - TCLP	0.05	ND	06/23/94	06/30/94	3010/6010(c)
Lead - TCLP	0.1	ND	06/23/94	06/30/94	3010/6010(c)
Mercury - TCLP	0.0020	ND	06/23/94	06/24/94	Mod. 7470(c)
Selenium - TCLP	0.2	ND	06/23/94	06/30/94	3010/6010(c)
Silver - TCLP	0.05	ND	06/23/94	06/27/94	3005/6010(c)

Sample extracted on 06/22/94.

Notes: ND - Below practical quantitation limit (PQL)

\* - mg/l

Soil/solid samples based on sample dry weight.

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 012, DRUM #19  
 Sample Type: Soil

CHES Lab #: 9406324-010  
 Date Received: 06/21/94

Polychlorinated Biphenyls (PCBs)  
 by EPA Method 3540/8080 (ref. c)

Extraction Date: 06/23/94

Analysis Date: 06/30/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	1.0	ND	mg/kg
PCB - Aroclor 1221	1.0	ND	mg/kg
PCB - Aroclor 1232	1.0	ND	mg/kg
PCB - Aroclor 1242	1.0	ND	mg/kg
PCB - Aroclor 1248	1.0	ND	mg/kg
PCB - Aroclor 1254	1.0	ND	mg/kg
PCB - Aroclor 1260	1.0	1.5	mg/kg

Notes: ND - Below practical quantitation limit (PQL)  
 Soil/solid sample results based on sample dry weight.  
 NA - Due to dilutions required to analyze the sample,  
 the surrogate recovery was unable to be calculated.

QA/QC

Surrogate Recovery

Acceptance Criteria

Hexabromobenzene: NA

78-148%





Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 012, DRUM #19  
Sample Type: Soil

CHES Lab #: 9406324-01M  
Date Received: 06/21/94

Parameter	PQL	Result	Units	Analysis Date	Method Number and Reference
Total Solids	--	82.5	%	06/22/94	209F(b)

Notes: ND - Below practical quantification limit (PQL)  
Soil/solid samples based on sample dry weight.



REPORT OF ANALYSIS

Clean Harbors Environmental Services, Inc.  
Albany Service Center  
32 Bask Road  
Glenmont, NY 12077

Project: WM.J.KELLER  
P.O. #: NY8025

Date Received: 06/24/94  
CHES Lab #: 9406417

Attn: Mr. Bob Shorman

Enclosed are the results for the sample(s) delivered to our laboratory (DEP Laboratory ID# MA032) on the date indicated above.

The methods listed represent those methodologies which were used to develop the best analytical techniques. Analytical results and quality assurance protocols are based on those guidelines. These meet the requirements for the reporting of results under the RCRA, NPDES and Safe Drinking Water Act regulations.

Clean Harbors Environmental Services has an active program of quality assurance and quality control. The program closely follows the guidance provided in the EPA Contract Laboratory Program Statement of Work (organic and inorganic), the guidance provided in SW-846, and many other pertinent documents.

Should you have any questions concerning this work, please do not hesitate to contact me.

The information contained in this report is, to the best of my knowledge, accurate and complete.

Per/Date: Michael Murray 7/8/94  
Michael J. Murray  
Laboratory Manager



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 013, SOIL AROUND DRUMS  
 Sample Type: Soil

CHES Lab #: 9406417-01A  
 Date Received: 06/24/94

Volatile Organics - System C  
 Toxicity Characteristic Leaching Procedure (TCLP)  
 by EPA Method 8260 (ref. c)

Zero Headspace Extraction Date: 06/28/94  
 Analysis Date: 07/05/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Benzene	0.025	ND	1,1-Dichloroethylene	0.025	ND
Carbon tetrachloride	0.025	ND	Methyl ethyl ketone	0.10	ND
Chlorobenzene	0.025	ND	Tetrachloroethylene	0.025	ND
Chloroform	0.025	ND	Trichloroethylene	0.025	ND
1,2-Dichloroethane	0.025	ND	Vinyl chloride	0.050	ND

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311, as described in the Federal Register, Volume 55, No. 126.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 113 %  
 Toluene-d8: 122 %  
 p-BFB: 95 %

Acceptance Criteria:

Water	Soil
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 013, SOIL AROUND DRUMS /  
 Sample Type: Soil

CHES Lab #: 9406417-010  
 Date Received: 06/24/94

Semi-Volatile Base/Neutral and Acid Extractable Organics - System B  
 Toxicity Characteristic Leaching Procedure (TCLP)  
 by EPA Method 3510/8270 (ref. c)

TCLP Extraction Date: 06/27/94  
 Organic Extraction Date: 06/29/94  
 Analysis Date: 07/06/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Total cresols	0.10	ND	Nitrobenzene	0.10	ND
1,4-Dichlorobenzene	0.10	ND	Pentachlorophenol	0.50	ND
2,4-Dinitrotoluene	0.10	ND	Pyridine	0.10	ND
Hexachlorobenzene	0.10	ND	2,4,5-Trichlorophenol	0.50	ND
Hexachlorobutadiene	0.10	ND	2,4,6-Trichlorophenol	0.50	ND
Hexachloroethane	0.10	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: 26 %  
 Phenol-d5: 32 %  
 Nitrobenzene-d5: 62 %  
 2-Fluorobiphenyl: 58 %  
 2,4,6-Tribromophenol: 38 %  
 Terphenyl-d14: 78 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
21-100%	25-121%
10-94%	24-113%
35-114%	23-120%
43-116%	30-115%
10-123%	19-122%
33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 013, SOIL AROUND DRUMS /  
 Sample Type: Soil

CHES Lab #: 9406417-010  
 Date Received: 06/24/94

Polychlorinated Biphenyls (PCBs)  
 by EPA Method 3540/8080 (ref. c)

Extraction Date: 06/27/94  
 Analysis Date: 07/06/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	10	ND	mg/kg
PCB - Aroclor 1221	10	ND	mg/kg
PCB - Aroclor 1232	10	ND	mg/kg
PCB - Aroclor 1242	10	ND	mg/kg
PCB - Aroclor 1248	10	ND	mg/kg
PCB - Aroclor 1254	10	ND	mg/kg
PCB - Aroclor 1260	10	26	mg/kg

Notes: ND = Below practical quantitation limit (PQL)  
 Soil/solid sample results based on sample dry weight.  
 NA = Due to dilutions required to analyze the sample,  
 the surrogate recovery was unable to be calculated.

QA/QC

Surrogate Recovery	Acceptance Criteria
Hexabromobenzene: NA	78-148%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 013, SOIL AROUND DRUMS ✓  
Sample Type: Soil

CHES Lab #: 9406417-01M  
Date Received: 06/24/94

Parameter	PQL*	Result*	Digestion Date	Analysis Date	Method Number and Reference
Arsenic - TCLP ✓	0.2	ND	06/28/94	06/30/94	3010/6010(c)
Barium - TCLP	1.0	ND	06/28/94	06/30/94	3010/6010(c)
Cadmium - TCLP	0.05	ND	06/28/94	06/30/94	3010/6010(c)
Chromium - TCLP	0.05	ND	06/28/94	06/30/94	3010/6010(c)
Lead - TCLP	0.1	ND	06/28/94	06/30/94	3010/6010(c)
Mercury - TCLP	0.0020	ND	06/28/94	06/29/94	Mod.7470(c)
Selenium - TCLP	0.2	ND	06/28/94	06/30/94	3010/6010(c)
Silver - TCLP	0.05	ND	06/28/94	06/29/94	3005/6010(c)

Sample extracted on 06/27/94.

Notes: ND - Below practical quantitation limit (PQL)  
\* - mg/l  
Soil/solid samples based on sample dry weight.  
Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 013, SOIL AROUND DRUMS /  
 Sample Type: Soil

CHES Lab #: 9406417-01  
 Date Received: 06/24/94

Parameter	PQL	Result	Units	Analysis Date	Method Number and Reference
Total Solids	--	89.6	%	06/27/94	209F(b)

Notes: ND - Below practical quantitation limit (PQL)  
 Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 014, SIDE OF EXCAVATION /  
 Sample Type: Soil

CHES Lab #: 9406417-02A  
 Date Received: 06/24/94

Volatile Organics - System C  
 Toxicity Characteristic Leaching Procedure (TCLP) ✓  
 by EPA Method 8260 (ref. c)

Zero Headspace Extraction Date: 06/28/94  
 Analysis Date: 07/05/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Benzene	0.025	ND	1,1-Dichloroethylene	0.025	ND
Carbon tetrachloride	0.025	ND	Methyl ethyl ketone	0.10	ND
Chlorobenzene	0.025	ND	Tetrachloroethylene	0.025	ND
Chloroform	0.025	ND	Trichloroethylene	0.025	ND
1,2-Dichloroethane	0.025	ND	Vinyl chloride	0.050	ND

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311, as described  
 in the Federal Register, Volume 55, No. 126.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 117 %  
 Toluene-d8: 108 %  
 p-BFB: 82 %

Acceptance Criteria:

Water	Soil
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%





Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 014, SIDE OF EXCAVATION /  
 Sample Type: Soil

CHES Lab #: 9406417-020  
 Date Received: 06/24/94

Semi-Volatile Base/Neutral and Acid Extractable Organics - System B  
 Toxicity Characteristic Leaching Procedure (TCLP) /  
 by EPA Method 3510/8270 (ref. c)

TCLP Extraction Date: 06/27/94  
 Organic Extraction Date: 06/29/94  
 Analysis Date: 07/06/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Total cresols	0.10	ND	Nitrobenzene	0.10	ND
1,4-Dichlorobenzene	0.10	ND	Pentachlorophenol	0.50	ND
2,4-Dinitrotoluene	0.10	ND	Pyridine	0.10	ND
Hexachlorobenzene	0.10	ND	2,4,5-Trichlorophenol	0.50	ND
Hexachlorobutadiene	0.10	ND	2,4,6-Trichlorophenol	0.50	ND
Hexachloroethane	0.10	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: 65 %  
 Phenol-d5: 68 %  
 Nitrobenzene-d5: 59 %  
 2-Fluorobiphenyl: 68 %  
 2,4,6-Tribromophenol: 70 %  
 Terphenyl-d14: 85 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
21-100%	25-121%
10-94%	24-113%
35-114%	23-120%
43-116%	30-115%
10-123%	19-122%
33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 014, SIDE OF EXCAVATION /  
 Sample Type: Soil

CHES Lab #: 9406417-020  
 Date Received: 06/24/94

Polychlorinated Biphenyls (PCBs)  
 by EPA Method 3540/8080 (ref. c)

Extraction Date: 06/27/94  
 Analysis Date: 07/06/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	0.1	ND	mg/kg
PCB - Aroclor 1221	0.1	ND	mg/kg
PCB - Aroclor 1232	0.1	ND	mg/kg
PCB - Aroclor 1242	0.1	ND	mg/kg
PCB - Aroclor 1248	0.1	ND	mg/kg
PCB - Aroclor 1254	0.1	0.8 /	mg/kg
PCB - Aroclor 1260	0.1	ND	mg/kg

Notes: ND = Below practical quantitation limit (PQL)  
 Soil/solid sample results based on sample dry weight.

QA/QC

Surrogate Recovery	Acceptance Criteria
Hexabromobenzene: 87.3%	78-148%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 014, SIDE OF EXCAVATION /  
Sample Type: Soil

CHES Lab #: 9406417-02M  
Date Received: 06/24/94

Parameter	PQL*	Result*	Digestion Date	Analysis Date	Method Number and Reference
Arsenic - TCLP /	0.2	ND	06/28/94	06/30/94	3010/6010(c)
Barium - TCLP	1.0	ND	06/28/94	06/30/94	3010/6010(c)
Cadmium - TCLP	0.05	ND	06/28/94	06/30/94	3010/6010(c)
Chromium - TCLP	0.05	ND	06/28/94	06/30/94	3010/6010(c)
Lead - TCLP	0.1	ND	06/28/94	06/30/94	3010/6010(c)
Mercury - TCLP	0.0020	ND	06/28/94	06/29/94	Mod. 7470(c)
Selenium - TCLP	0.2	ND	06/28/94	06/30/94	3010/6010(c)
Silver - TCLP	0.05	ND	06/28/94	06/29/94	3005/6010(c)

Sample extracted on 06/27/94.

Notes: ND = Below practical quantitation limit (PQL)  
\* = mg/l  
Soil/solid samples based on sample dry weight.  
Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 014, SIDE OF EXCAVATION  
Sample Type: Soil

CHES Lab #: 9406417-02M  
Date Received: 06/24/94

Parameter	PQL	Result	Units	Analysis Date	Method Number and Reference
Total Solids	--	88.9	%	06/27/94	209F(b)

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 015, BOTTOM OF EXCAVATION /  
 Sample Type: Soil

CHES Lab #: 9406417-03A  
 Date Received: 06/24/94

Volatile Organics - System C  
 Toxicity Characteristic Leaching Procedure (TCLP) /  
 by EPA Method 8260 (ref. c)

Zero Headspace Extraction Date: 06/28/94  
 Analysis Date: 07/05/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Benzene	0.025	ND	1,1-Dichloroethylene	0.025	ND
Carbon tetrachloride	0.025	ND	Methyl ethyl ketone	0.10	ND
Chlorobenzene	0.025	ND	Tetrachloroethylene	0.025	ND
Chloroform	0.025	ND	Trichloroethylene	0.025	ND
1,2-Dichloroethane	0.025	ND	Vinyl chloride	0.050	ND

Notes

ND - Below practical quantitation limit (PQL)  
 \* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311, as described in the Federal Register, Volume 55, No. 126.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 121 %  
 Toluene-d8: 101 %  
 p-BFB: 81 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 015, BOTTOM OF EXCAVATION /  
 Sample Type: Soil

CHES Lab #: 9406417-030  
 Date Received: 06/24/94

Semi-Volatile Base/Neutral and Acid Extractable Organics - System B  
 Toxicity Characteristic Leaching Procedure (TCLP) /  
 by EPA Method 3510/8270 (ref. c)

TCLP Extraction Date: 06/27/94  
 Organic Extraction Date: 06/29/94  
 Analysis Date: 07/06/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Total cresols	0.10	ND	Nitrobenzene	0.10	ND
1,4-Dichlorobenzene	0.10	ND	Pentachlorophenol	0.50	ND
2,4-Dinitrotoluene	0.10	ND	Pyridine	0.10	ND
Hexachlorobenzene	0.10	ND	2,4,5-Trichlorophenol	0.50	ND
Hexachlorobutadiene	0.10	ND	2,4,6-Trichlorophenol	0.50	ND
Hexachloroethane	0.10	ND			

Notes:

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: 68 %  
 Phenol-d5: 66 %  
 Nitrobenzene-d5: 54 %  
 2-Fluorobiphenyl: 60 %  
 2,4,6-Tribromophenol: 74 %  
 Terphenyl-d14: 75 %

Acceptance Criteria:

Water	Soil
21-100%	25-121%
10-94%	24-113%
35-114%	23-120%
43-116%	30-115%
10-123%	19-122%
33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 015, BOTTOM OF EXCAVATION /  
 Sample Type: Soil

CHES Lab #: 9406417-030  
 Date Received: 06/24/94

Polychlorinated Biphenyls (PCBs)  
 by EPA Method 3540/8080 (ref. c)

Extraction Date: 06/27/94  
 Analysis Date: 07/06/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	0.2	ND	mg/kg
PCB - Aroclor 1221	0.2	ND	mg/kg
PCB - Aroclor 1232	0.2	ND	mg/kg
PCB - Aroclor 1242	0.2	ND	mg/kg
PCB - Aroclor 1248	0.2	ND	mg/kg
PCB - Aroclor 1254	0.2	ND	mg/kg
PCB - Aroclor 1260	0.2	ND	mg/kg

Notes: ND - Below practical quantitation limit (PQL)  
 Soil/solid sample results based on sample dry weight.

QA/QC

Surrogate Recovery	Acceptance Criteria
Hexabromobenzene: 87.1%	78-148%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 015, BOTTOM OF EXCAVATION /  
Sample Type: Soil

CHES Lab #: 9406417-03M  
Date Received: 06/24/94

Parameter	PQL*	Result*	Digestion Date	Analysis Date	Method Number and Reference
Arsenic - TCLP /	0.2	ND	06/28/94	06/30/94	3010/6010(c)
Barium - TCLP	1.0	ND	06/28/94	06/30/94	3010/6010(c)
Cadmium - TCLP	0.05	ND	06/28/94	06/30/94	3010/6010(c)
Chromium - TCLP	0.05	ND	06/28/94	06/30/94	3010/6010(c)
Lead - TCLP	0.1	ND	06/28/94	06/30/94	3010/6010(c)
Mercury - TCLP	0.0020	ND	06/28/94	06/29/94	Mod. 7470(c)
Selenium - TCLP	0.2	ND	06/28/94	06/30/94	3010/6010(c)
Silver - TCLP	0.05	ND	06/28/94	06/29/94	3005/6010(c)

Sample extracted on 06/27/94.

Notes: ND - Below practical quantitation limit (PQL)  
\* - mg/l  
Soil/solid samples based on sample dry weight.  
Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.





Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 015, BOTTOM OF EXCAVATION  
Sample Type: Soil

CHES Lab #: 9406417-03M  
Date Received: 06/24/94

Parameter	PQL	Result	Units	Analysis Date	Method Number and Reference
Total Solids	--	35.6	%	06/27/94	209F(b)

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.



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Clean Harbors Analytical Services, Inc., 325 Wood Rd., Braintree, MA 02184 CHAIN OF CUSTODY RECORD Sample Custodian -- (617) 849-1800 Page 1 of 1

Client: CHE Albany Project Name: WM J. Keller Work Order/P.O. #: NY8025 Date: 6/23/94

Report To: Bob Sherman Address: 32 Bask Road, Glarment, NY Phone #: (800) 633-0660

Date Samples Collected: 6/23/94 by: Joe Mastrodimenco Date Samples Received: 6/24/94

Air/Water of Lading: (Y)N NOTE: Samples received unpreserved will be preserved upon arrival at CHAS. Samples were: Preserved Unpreserved

Sample I.D.	Sampling Information				Analysis				# of con.	CHAS Sample #
	Date	Time	Station Location	Sample Matrix	TECP methy	TECP UIC	TECP Sem-vol	PCBU		
013	6/23	14:30	Soil Ground	Soil	X	X	X	X	3	01A, R.V.O., X
014	6/23	1	side of excavation	Soil	X	X	X	X	3	02A, R.V.O., X
015	6/23	14	bottom of excavation	Soil	X	X	X	X	3	03A, R.V.O., X

9400417 6/24  
CHAS Sample # 06

Relinquished by: [Signature] Date: 6/23 Time: 2:00 PM  
 Received by: Eastern Con Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: Eastern Con Date: 6/24/94 Time: 11:30  
 Received by: [Signature] Date: 6/24/94 Time: 11:50

VOA Vial  
Glass Bottle  
Plastic Bottle  
Pres.  
Volume

Preservation Key: A - Acidified with \_\_\_\_\_  
 B - Filtered, C - Sample chilled, D - NaOH,  
 E - NaThiosulfate, W - Sample Ambient, F - Other

REMARKS/COMMENTS: (Sample storage, nonstandard bottles, cautions, special instructions)

Standard laboratory turnaround time is 2 weeks from date of receipt. Accelerated turnaround may be assessed a surcharge.  
 Accelerated turnaround requested: \_\_\_\_\_  
 Confirmed by: \_\_\_\_\_ Surcharge: \_\_\_\_\_  
 Location of samples: R4 R101-3  
 Turnaround: 24 Hrs. 48 Hrs. 1 Week 2 Weeks Other: \_\_\_\_\_

JUL 26 '94 15:58

518 434 9118

PAGE 018

CELLIN MKRDKURS HLBHNT, N LU:518-434-9118 JUL 26 '94 15:45 NO.017 P.18



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 008, DRUM #15  
 Sample Type: Solid

CHES Lab #: 9407219-03A  
 Date Received: 07/14/94

Volatile Organics - System D  
 by EPA Method 8260 (ref. c)

Analysis Date: 07/15/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Acetone	6.4	ND	1,2-Dichloropropane	1.6	ND
Benzene	1.6	ND	cis-1,3-Dichloropropene	1.6	ND
Bromodichloromethane	1.6	ND	trans-1,3-Dichloropropene	1.6	ND
Bromoform	1.6	ND	Ethylbenzene	1.6	ND
Bromomethane	3.2	ND	2-Hexanone	1.6	ND
2-Butanone	6.4	ND	Methylene chloride	6.4	ND
Carbon disulfide	3.2	ND	4-Methyl-2-pentanone	1.6	ND
Carbon tetrachloride	1.6	ND	Methyl-t-butylether (MTBE)	3.2	ND
Chlorobenzene	1.6	ND	Styrene	1.6	ND
Chloroethane	3.2	ND	1,1,2,2-Tetrachloroethane	1.6	ND
2-Chloroethyl vinyl ether	3.2	ND	Tetrachloroethene	1.6	ND
Chloroform	1.6	ND	Toluene	1.6	120
Chloromethane	3.2	ND	1,1,1-Trichloroethane	1.6	ND
Dibromochloromethane	1.6	ND	1,1,2-Trichloroethane	1.6	ND
Dibromoethane (EDB)	1.6	ND	Trichloroethene	1.6	ND
1,1-Dichloroethane	1.6	ND	Trichlorofluoromethane	1.6	ND
1,2-Dichloroethane	1.6	ND	Vinyl acetate	3.2	ND
1,1-Dichloroethene	1.6	ND	Vinyl chloride	3.2	ND
trans-1,2-Dichloroethene	1.6	ND	Total xylenes	1.6	43

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/kg

Additional compounds observed in sample.

Hydrocarbon background present in sample.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 92 %  
 Toluene-d8: 102 %  
 p-BFB: 90 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
76-114%	70-121%
88-110%	84-138%
86-119%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 008, DRUM #15  
 Sample Type: Solid

CHES Lab #: 9407219-03G  
 Date Received: 07/14/94

Semi-Volatile Base/Neutral Extractable Organics - System B  
 by EPA Method 3550/8270 (ref. c)

Extraction Date: 07/19/94  
 Analysis Date: 07/25/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Acenaphthene	170	ND	Dimethylphthalate	170	ND
Acenaphthylene	170	ND	Di-n-butylphthalate	170	ND
Anthracene	170	ND	2,4-Dinitrotoluene	170	ND
Benzo(a)anthracene	170	ND	2,6-Dinitrotoluene	170	ND
Benzo(a)pyrene	170	ND	Di-n-octylphthalate	170	ND
Benzo(b)fluoranthene	170	ND	Fluoranthene	170	ND
Benzo(g,h,i)perylene	170	ND	Fluorene	170	ND
Benzo(k)fluoranthene	170	ND	Hexachlorobenzene	170	ND
Bis(2-chloroethoxy)methane	170	ND	Hexachlorobutadiene	170	ND
Bis(2-chloroethyl)ether	170	ND	Hexachlorocyclopentadiene	170	ND
Bis(2-chloroisopropyl)ether	170	ND	Hexachloroethane	170	ND
Bis(2-ethylhexyl)phthalate	340	ND	Indeno(1,2,3-cd)pyrene	170	ND
4-Bromophenyl phenyl ether	170	ND	Isophorone	170	ND
Butylbenzylphthalate	170	ND	2-Methylnaphthalene	170	460
4-Chloroaniline	170	ND	Naphthalene	170	310
2-Chloronaphthalene	170	ND	2-Nitroaniline	860	ND
4-Chlorophenyl phenyl ether	170	ND	3-Nitroaniline	860	ND
Chrysene	170	ND	4-Nitroaniline	860	ND
Dibenzo(a,h)anthracene	170	ND	Nitrobenzene	170	ND
Dibenzofuran	170	ND	N-Nitroso-di-n-propylamine	170	ND
1,2-Dichlorobenzene	170	ND	N-Nitrosodiphenylamine	170	ND
1,3-Dichlorobenzene	170	ND	Phenanthrene	170	ND
1,4-Dichlorobenzene	170	ND	Pyrene	170	ND
3,3'-Dichlorobenzidine	340	ND	1,2,4-Trichlorobenzene	170	ND
Diethylphthalate	170	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/kg

NA - Due to dilution necessary to analyze the sample, the surrogate recoveries were unable to be calculated.

Hydrocarbon background present in sample.

QA/QC

Surrogate Recoveries:

Nitrobenzene-d5: NA  
 2-Fluorobiphenyl: NA  
 Terphenyl-d14: NA

Acceptance Criteria:

Water	Soil
35-114%	23-120%
43-116%	30-115%
33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 008, DRUM #15  
Sample Type: Solid

CHES Lab #: 9407219-03G  
Date Received: 07/14/94

Semi-Volatile Acid Extractable Organics - System B  
by EPA Method 3550/8270 (ref. c)

Extraction Date: 07/19/94  
Analysis Date: 07/25/94

Parameter	PQL*	Conc.*
4-Chloro-3-methylphenol	170	ND
2-Chlorophenol	170	ND
2,4-Dichlorophenol	170	ND
2,4-Dimethylphenol	170	ND
4,6-Dinitro-2-methylphenol	860	ND
2,4-Dinitrophenol	860	ND
2-Methylphenol	170	ND
4 Methylphenol	170	ND
2-Nitrophenol	170	ND
4-Nitrophenol	860	ND
Pentachlorophenol	860	ND
Phenol	170	ND
2,4,5-Trichlorophenol	860	ND
2,4,6-Trichlorophenol	860	ND

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/kg

NA - Due to dilution necessary to analyze the sample, the surrogate recoveries were unable to be calculated.

Hydrocarbon background present in sample.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: NA  
Phenol-d5: NA  
2,4,6-Tribromophenol: NA

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
21-100%	25-121%
10-94%	24-113%
10-123%	19-122%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 008, DRUM #15  
 Sample Type: Soil

CHES Lab #: 9406243-028  
 Date Received: 06/15/94

Parameter	PQL*	Result*	Digestion Date	Analysis Date	Method Number and Reference
Arsenic - TCLP	0.2	ND	06/17/94	06/21/94	3010/6010(c)
Barium - TCLP	1.0	ND	06/17/94	06/21/94	3010/6010(c)
Cadmium - TCLP	0.05	ND	06/17/94	06/21/94	3010/6010(c)
Chromium - TCLP	0.05	0.18	06/17/94	06/21/94	3010/6010(c)
Lead - TOLP	0.1	ND	06/17/94	06/21/94	3010/6010(c)
Mercury - TCLP	0.0020	ND	06/17/94	06/20/94	Mod. 7470(c)
Selenium - TOLP	0.2	ND	06/17/94	06/21/94	3010/6010(c)
Silver - TCLP	0.05	ND	06/17/94	06/20/94	3005/6010(c)

Sample extracted on 06/16/94.

Notes: ND - Below practical quantitation limit (PQL)

\* - mg/l

Soil/solid samples based on sample dry weight.

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 008, DRUM #15  
Sample Type: Soil

CHES Lab #: 9406243-02  
Date Received: 06/15/94

Volatile Organics - System E  
Toxicity Characteristic Leaching Procedure (TCLP)  
by EPA Method 8260 (ref. c)

Zero Headspace Extraction Date: 06/20/94  
Analysis Date: 06/21/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Benzene	0.025	ND	1,1-Dichloroethylene	0.025	ND
Carbon tetrachloride	0.025	ND	Methyl ethyl ketone	0.10	0.13
Chlorobenzene	0.025	ND	Tetrachloroethylene	0.025	ND
Chloroform	0.025	ND	Trichloroethylene	0.025	ND
1,2-Dichloroethane	0.025	ND	Vinyl chloride	0.050	ND

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311, as described in the Federal Register, Volume 55, No. 126.

Additional compounds observed in sample.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 93 %  
Toluene-d8: 97 %  
p-BFB: 94 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 008, DRUM #15  
Sample Type: Soil

CHES Lab #: 9406243-020  
Date Received: 06/15/94

Semi Volatile Base/Neutral and Acid Extractable Organics - System A  
Toxicity Characteristic Leaching Procedure (TCLP)  
by EPA Method 3510/8270 (ref. c)

TCLP Extraction Date: 06/16/94  
Organic Extraction Date: 06/20/94  
Analysis Date: 06/22/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.
Total cresols	0.10	0.62	Nitrobenzene	0.10	ND
1,4-Dichlorobenzene	0.10	ND	Pentachlorophenol	0.50	ND
2,4-Dinitrotoluene	0.10	ND	Pyridine	0.10	ND
Hexachlorobenzene	0.10	ND	2,4,5-Trichlorophenol	0.50	ND
Hexachlorobutadiene	0.10	ND	2,4,6-Trichlorophenol	0.50	ND
Hexachloroethane	0.10	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/l

Reported results are not bias corrected for matrix spike recoveries.

TCLP - Toxicity Characteristic Leaching Procedure, EPA Method 1311 as described in the Federal Register, Volume 55, No. 126.

Hydrocarbon background present in sample.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: 72 %  
Phenol-d5: 70 %  
Nitrobenzene-d5: 2 %  
2-Fluorobiphenyl: 58 %  
2,4,6-Tribromophenol: 92 %  
Terphenyl-d14: 79 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
21-100%	25-121%
10-94%	24-113%
35-114%	23-120%
43-116%	30-115%
10-123%	19-122%
33-141%	18-137%





Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 008, DRUM #15  
Sample Type: Soil

CHES Lab #: 9406243-02  
Date Received: 06/15/94

Polychlorinated Biphenyls (PCBs)  
by EPA Method 3540/8080 (ref. c)

Extraction Date: 06/21/94  
Analysis Date: 06/25/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	2.2	ND	mg/kg
PCB - Aroclor 1221	2.2	ND	mg/kg
PCB - Aroclor 1232	2.2	ND	mg/kg
PCB - Aroclor 1242	2.2	ND	mg/kg
PCB - Aroclor 1248	2.2	ND	mg/kg
PCB - Aroclor 1254	2.2	9.3	mg/kg
PCB - Aroclor 1260	2.2	ND	mg/kg

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid sample results based on sample dry weight.  
NA - Due to dilutions required to analyze the sample,  
the surrogate recovery was unable to be calculated.

QA/QC

Surrogate Recovery

Acceptance Criteria

Hexabromobenzene: NA

78-1486



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 008, DRUM #15  
Sample Type: Soil

CHES Lab #: 9406243-01  
Data Received: 06/15/94

Parameter	PQL	Result	Units	Analysis Date	Method Number and Reference
Total Solids	--	68.0	%	06/16/94	209F(b)

Notes: ND - Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 009, DRUM #16  
Sample Type: Solid

CHES Lab #: 9407219-04N  
Date Received: 07/14/94

Polychlorinated Biphenyls (PCBs)  
by EPA Method 3540/8080 (ref. c)

Extraction Date: 07/21/94  
Analysis Date: 07/26/94

Parameter	PQL	Concentration	Units
PCB - Aroclor 1016	9.7	ND	mg/kg
PCB - Aroclor 1221	9.7	ND	mg/kg
PCB - Aroclor 1232	9.7	ND	mg/kg
PCB - Aroclor 1242	9.7	ND	mg/kg
PCB - Aroclor 1240	9.7	ND	mg/kg
PCB - Aroclor 1254	9.7	36	mg/kg
PCB - Aroclor 1260	9.7	ND	mg/kg

Notes: ND - Below practical quantitation limit (PQL)  
Soil/Solid sample results based on sample dry weight.  
NA - Due to dilutions required to analyze the sample,  
the surrogate recovery was unable to be calculated.

QA/QC

Surrogate Recovery

Acceptance Criteria

Hexabromobenzene: NA

78-148%

*Checked w/ CHZ  
Number is 30.*



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 009, DRUM #16  
Sample Type: Solid

OHS Lab #: 9407219-04N  
Date Received: 07/14/94

Parameter	PQL	Result	Units	Analysis Date	Method Number and Reference
Total Solids	--	85.5	%	07/15/94	209F(b)

Notes: ND = Below practical quantitation limit (PQL)  
Soil/solid samples based on sample dry weight.



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 004, DRUMS #8,9,10,11  
 Sample Type: Solid

CHES Lab #: 9407219-02A  
 Date Received: 07/14/94

Volatile Organics - System D  
 by EPA Method 624 (ref. F)

Analysis Date: 07/15/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Acetone	8.2	ND	1,2-Dichloropropane	2.0	ND
Benzene	2.0	ND	cis-1,3-Dichloropropene	2.0	ND
Bromodichloromethane	2.0	ND	trans-1,3-Dichloropropene	2.0	ND
Bromoform	2.0	ND	Ethylbenzene	2.0	11
Bromomethane	4.1	ND	2-Hexanone	2.0	ND
2-Butanone	8.2	ND	Methylene chloride	8.2	ND
Carbon disulfide	4.1	ND	4-Methyl-2-pentanone	2.0	ND
Carbon tetrachloride	2.0	ND	Methyl-t-butylether (MTBE)	4.1	ND
Chlorobenzene	2.0	ND	Styrene	2.0	ND
Chloroethane	4.1	ND	1,1,2,2-Tetrachloroethane	2.0	ND
2-Chloroethyl vinyl ether	4.1	ND	Tetrachloroethene	2.0	ND
Chloroform	2.0	ND	Toluene	2.0	15
Chloromethane	4.1	ND	1,1,1-Trichloroethane	2.0	ND
Dibromochloromethane	2.0	ND	1,1,2 Trichloroethane	2.0	ND
Dibromoethane (EDB)	2.0	ND	Trichloroethene	2.0	ND
1,1-Dichloroethane	2.0	ND	Trichlorofluoromethane	2.0	ND
1,2-Dichloroethane	2.0	ND	Vinyl acetate	4.1	ND
1,1-Dichloroethene	2.0	ND	Vinyl chloride	4.1	ND
trans-1,2-Dichloroethene	2.0	ND	Total xylenes	2.0	65

Notes

ND = Below practical quantitation limit (PQL)

\* - mg/kg

Additional compounds observed in sample.

Hydrocarbon background present in sample.

QA/QC

Surrogate Recoveries:

1,2-Dichloroethane-d4: 86 %  
 Toluene-d8: 100 %  
 p-BFB: 111 %

Acceptance Criteria:

<u>Water:</u>	<u>Soil:</u>
76-114%	70-121%
88-110%	84-138%
86-115%	59-113%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 004, DRUMS #8,9,10,11  
 Sample Type: Solid

CHEG Lab #: 9407219-02G  
 Date Received: 07/14/94

Semi-Volatile Base/Neutral Extractable Organics - System A  
 by EPA Method 3550/8270 (ref. c)

Extraction Date: 07/19/94

Analysis Date: 07/26/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.
Acenaphthene	180	ND	Dimethylphthalate	180	ND
Acenaphthylene	180	ND	Di-n-butylphthalate	180	ND
Anthracene	180	ND	2,4-Dinitrotoluene	180	ND
Benzo(a)anthracene	180	ND	2,6-Dinitrotoluene	180	ND
Benzo(a)pyrene	180	ND	Di-n-octylphthalate	180	ND
Benzo(b)fluoranthene	180	ND	Fluoranthene	180	ND
Benzo(g,h,i)perylene	180	ND	Fluorene	180	ND
Benzo(k)fluoranthene	180	ND	Hexachlorobenzene	180	ND
Bis(2-chloroethoxy)methane	180	ND	Hexachlorobutadiene	180	ND
Bis(2-chloroethyl)ether	180	ND	Hexachlorocyclopentadiene	180	ND
Bis(2-chloroisopropyl)ether	180	ND	Hexachloroethane	180	ND
Bis(2-ethylhexyl)phthalate	360	ND	Indeno(1,2,3-cd)pyrene	180	ND
4-Bromophenyl phenyl ether	180	ND	Isophorone	180	ND
Butylbenzylphthalate	180	ND	2-Methylnaphthalene	180	ND
4-Chloroaniline	180	ND	Naphthalene	180	ND
2-Chloronaphthalene	180	ND	2-Nitroaniline	910	ND
4-Chlorophenyl phenyl ether	180	ND	3-Nitroaniline	910	ND
Chrysene	180	ND	4-Nitroaniline	910	ND
Dibenzo(a,h)anthracene	180	ND	Nitrobenzene	180	ND
Dibenzofuran	180	ND	N-Nitroso-di-n-propylamine	180	ND
1,2-Dichlorobenzene	180	ND	N-Nitrosodiphenylamine	180	ND
1,3-Dichlorobenzene	180	ND	Phenanthrene	180	ND
1,4-Dichlorobenzene	180	ND	Pyrene	180	ND
3,3'-Dichlorobenzidine	360	ND	1,2,4-Trichlorobenzene	180	ND
Diethylphthalate	180	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/kg

NA - Due to dilution necessary to analyze the sample, the surrogate recoveries were unable to be calculated. Additional compounds observed in sample.

QA/QC

Surrogate Recoveries:

Nitrobenzene-d5: NA  
 2-Fluorobiphenyl: NA  
 Terphenyl-d14: NA

Acceptance Criteria:

Water	Soil
35-114%	23-120%
43-116%	30-115%
33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 004, DRUMS #8,9,10,11  
Sample Type: Solid

CHES Lab #: 9407219-02G  
Data Received: 07/14/94

Semi-Volatile Acid Extractable Organics - System A  
by EPA Method 3550/8270 (ref. c)

Extraction Date: 07/19/94  
Analysis Date: 07/26/94

Parameter	PQL*	Conc.*
4-Chloro-3-methylphenol	180	ND
2-Chlorophenol	180	ND
2,4-Dichlorophenol	180	ND
2,4-Dimethylphenol	180	ND
4,6-Dinitro-2-methylphenol	910	ND
2,4-Dinitrophenol	910	ND
2-Methylphenol	180	ND
4-Methylphenol	180	ND
2-Nitrophenol	180	ND
4-Nitrophenol	910	ND
Pentachlorophenol	910	ND
Phenol	180	ND
2,4,5-Trichlorophenol	910	ND
2,4,6-Trichlorophenol	910	ND

Notes

ND = Below practical quantitation limit (PQL)

\* = mg/kg

NA = Due to dilution necessary to analyze the sample, the surrogate recoveries were unable to be calculated.

Additional compounds observed in sample.

QA/QC

Surrogate Recoveries:

2-Fluorophenol: NA  
Phenol-d5: NA  
2,4,6-Tribromophenol: NA

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
21-100%	25-121%
10-94%	24-113%
10-123%	19-122%

2-Fluorobiphenyl: NA  
Terphenyl-d14: NA

33-1148  
43-1168  
33-1418

25-1708  
30-1158  
18-1378



Client: Clean Harbors Environmental Services, Inc.  
Sample I.D.: 001, DRUM #1  
Sample Type: Solid

CHES Lab #: 9407219-01G  
Date Received: 07/14/94

Semi-Volatile Acid Extractable Organics - System B  
by EPA Method 3550/8270 (ref. c)

Extraction Date: 07/19/94  
Analysis Date: 07/25/94

Parameter	PQL*	Conc.*
4-Chloro-3-methylphenol	66	ND
2-Chlorophenol	66	ND
2,4-Dichlorophenol	66	ND
2,4-Dimethylphenol	66	ND
4,6-Dinitro-2-methylphenol	330	ND
2,4-Dinitrophenol	330	ND
2-Methylphenol	66	ND
4-Methylphenol	66	ND
2-Nitrophenol	66	ND
4-Nitrophenol	330	ND
Pentachlorophenol	330	ND
Phenol	66	ND
2,4,5-Trichlorophenol	330	ND
2,4,6-Trichlorophenol	330	ND

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/kg

NA - Due to dilution necessary to analyze the sample, the surrogate recoveries were unable to be calculated.

Hydrocarbon background present in sample.



AUXILIARY APPROVALS

AGREEMENTS WITH

2-Fluorophenol: NA  
 Phenol-d5: NA  
 2,4,6-Tribromophenol: NA

<u>Water</u>	<u>Soil</u>
21-100%	25-121%
10-94%	24-113%
10-123%	19-122%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 001, DRUM #1  
 Sample Type: Solid

CHES Lab #: 9407219-01G  
 Date Received: 07/14/94

Semi-Volatile Base/Neutral Extractable Organics - System B  
 by EPA Method 3550/8270 (ref. c)

Extraction Date: 07/19/94

Analysis Date: 07/25/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Acanaphthene	66	100	Dimethylphthalate	66	ND
Acanaphthylene	66	ND	Di-n-butylphthalate	66	ND
Anthracene	66	89	2,4-Dinitrotoluene	66	ND
Benzo(a)anthracene	66	95	2,6-Dinitrotoluene	66	ND
Benzo(a)pyrene	66	ND	Di-n-octylphthalate	66	ND
Benzo(b)fluoranthene	66	130	Fluoranthene	66	250
Benzo(g,h,i)perylene	66	ND	Fluorone	66	130
Benzo(k)fluoranthene	66	ND	Hexachlorobenzene	66	ND
Bis(2-chloroethoxy)methane	66	ND	Hexachlorobutadiene	66	ND
Bis(2-chloroethyl)ether	66	ND	Hexachlorocyclopentadiene	66	ND
Bis(2-chloroisopropyl)ether	66	ND	Hexachloroethane	66	ND
Bis(2-ethylhexyl)phthalate	130	ND	Indeno(1,2,3-cd)pyrene	66	ND
4-Bromophenyl phenyl ether	66	ND	Isophorone	66	ND
Butylbenzylphthalate	66	ND	2-Methylnaphthalene	66	220
4-Chloroaniline	66	ND	Naphthalene	66	270
2-Chloronaphthalene	66	ND	2-Nitroaniline	330	ND
4-Chlorophenyl phenyl ether	66	ND	3-Nitroaniline	330	ND
Chrysene	66	110	4-Nitroaniline	330	ND
Dibenzo(a,h)anthracene	66	ND	Nitrobenzene	66	ND
Dibenzofuran	66	100	N-Nitroso-di-n-propylamine	66	ND
1,2-Dichlorobenzene	66	ND	N-Nitrosodiphenylamine	66	ND
1,3-Dichlorobenzene	66	ND	Phenanthrene	66	400
1,4-Dichlorobenzene	66	ND	Pyrene	66	160
3,3'-Dichlorobenzidine	130	ND	1,2,4-Trichlorobenzene	66	ND
Diethylphthalate	66	ND			

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/kg

NA - Due to dilution necessary to analyze the sample, the surrogate recoveries were unable to be calculated.

Hydrocarbon background present in sample.

QA/QC

Surrogate Recoveries:

Nitrobenzene-d5: NA  
 2-Fluorobiphenyl: NA  
 Terphenyl-d14: NA

Acceptance Criteria:

Water	Soil
35-114%	23-120%
43-116%	30-115%
33-141%	18-137%



Client: Clean Harbors Environmental Services, Inc.  
 Sample I.D.: 001, DRUM #1  
 Sample Type: Solid

CHES Lab #: 9407219-01A  
 Date Received: 07/14/94

Volatile Organics - System D  
 by EPA Method 8260 (ref. c)

Analysis Date: 07/19/94

Parameter	PQL*	Conc.*	Parameter	PQL*	Conc.*
Acetone	99	ND	1,2-Dichloropropane	25	ND
Benzene	25	ND	cis-1,3-Dichloropropene	25	ND
Bromodichloromethane	25	ND	trans-1,3-Dichloropropene	25	ND
Bromoform	25	ND	Ethylbenzene	25	ND
Bromomethane	49	ND	2-Hexanone	25	ND
2-Butanone	99	ND	Methylene chloride	99	ND
Carbon disulfide	49	ND	4-Methyl-2-pentanone	25	ND
Carbon tetrachloride	25	ND	Methyl-t-butylether (MTBE)	49	ND
Chlorobenzene	25	ND	Styrene	25	ND
Chloroethane	49	ND	1,1,2,2-Tetrachloroethane	25	ND
2-Chloroethyl vinyl ether	49	ND	Tetrachloroethene	25	ND
Chloroform	25	ND	Toluene	25	ND
Chloromethane	49	ND	1,1,1-Trichloroethane	25	ND
Dibromochloromethane	25	ND	1,1,2 Trichloroethane	25	ND
Dibromoethane (EDB)	25	ND	Trichloroethene	25	ND
1,1-Dichloroethane	25	ND	Trichlorofluoromethane	25	ND
1,2-Dichloroethane	25	ND	Vinyl acetate	49	ND
1,1-Dichloroethene	25	ND	Vinyl chloride	49	ND
trans-1,2-Dichloroethene	25	ND	Total xylenes	25	ND

Notes

ND - Below practical quantitation limit (PQL)

\* - mg/kg

Hydrocarbon background present in sample.

QA/QC

Spike Recoveries:

1,2-Dichloroethane-d4: 102 %  
 Toluene-d8: 99 %  
 p-BFB: 102 %

Acceptance Criteria:

<u>Water</u>	<u>Soil</u>
76-110%	70-121%
88-110%	84-138%
86-115%	59-113%