Environmental
Restoration
University of California
Environmental Science and Waste Technology (E)
Environmental Restoration, MS M992
Los Alamos, New Mexico 87545
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U.S. Department of Energy
Los Alamos Area Office, MS A316
Environmental Restoration Program
Los Alamos, New Mexico 87544
505-667-7203/FAX 505-665-4504

HSWA LANL 4/1049 | Los Alamos Canyon "Acid Canyon" 1-002"

Date: August 22, 2001
Refer to: ER2001-0701

AUG 2001
RECEIVED

Mr. John Young
Permits Management Program
NMED – Hazardous Waste Bureau
2905 Rodeo Park Drive East
Building 1
Santa Fe, NM 87505-6303

SUBJECT: REQUEST FOR "NO LONGER CONTAINED IN" DETERMINATION FOR ACID CANYON SEDIMENT

Dear Mr. Young:

The purpose of this letter is to request that the New Mexico Environment Department Hazardous Waste Bureau use their discretionary authority to determine that environmental media generated during excavation of sediments as part of the Laboratory's Interim Action (IA) for the South Fork of Acid Canyon, do not warrant management as F-listed hazardous waste.

The excavation activities in Acid Canyon involve excavating the environmental media that has accumulated in the stream channel in an effort to reduce potential dose from radionuclides present in Acid Canyon sediment. Some of this excavated material may contain low levels of toluene and 4-methyl-2-pentanone (methyl isobutyl ketone), that may have originated from processes for which listed wastes are identified.

The Los Alamos National Laboratory (LANL) proposes to use the Environmental Protection Agency (EPA) Region 6 Human Health Medium-Specific Screening Levels (MSSLs) and New Mexico Environment Department Soil Screening Levels (SSLs) for comparison to as-found concentrations to determine whether any of the organic constituents detected in excavated environmental media from Acid Canyon warrant management as F-listed hazardous waste. The proposed MSSLs and SSLs are based on the industrial receptor using direct exposure routes (inhalation, ingestion, and dermal contact) and are derived using conservative exposure parameters for reasonable maximum exposure. These MSSLs and SSLs, based on an industrial receptor, are appropriate because the environmental media excavated during these removal activities will be properly disposed in an onsite engineered low-level radioactive waste disposal facility. All of the as–found concentrations of the toluene and 4-methyl-2-pentanone in the environmental media to date are below MSSLs and SSLs.

According to EPA documents and associated guidance, the authorized state may also make a determination on a case-specific basis as to how the Land Disposal Restrictions (LDRs) apply to the waste when a "no longer contained in" determination has been made. Because all of the as-found concentrations of toluene and 4-methyl-2-pentanone in the environmental media in Acid Canyon are below the LDR of 10 mg/kg and 33 mg/kg respectively, it is LANLs expectation that LDRs will not apply to this environmental media.

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TV

The organic constituents, maximum concentration detected to date, and the proposed MSSLs and SSLs are shown in the table below:

Organic Constituent	Maximum Concentration (mg/kg)	MSSL (mg/kg)	SSL (mg/kg)
Toluene	0.00077	520	180
Methyl-isobutyl ketone	0.005	3600	NA[1]

NA[1]= no SSL available for this constituent

The concentrations listed above were detected in discrete samples collected from the sediment in Acid Canyon prior to planned excavation activities.

If the as-found concentrations of the organic constituents listed above in the excavated environmental media are equal to or exceed the MSSLs or SSLs, the material will be managed as F-listed hazardous waste. If the as-found concentrations in the excavated environmental media are below the MSSLs or SSLs, the material will be managed as low-level radioactive waste unless and until it meets another listing criteria or exhibits a hazardous characteristic.

Enclosed are the validated analytical results for volatile organics from the Acid Canyon sediment samples. Please note that the sample ID# CAPU-01-0195 is a trip blank. Acetone and I,2-dichlorobeneze were present in both the trip blank and the 12 hour method blank. All reported results for these analytes are qualified as not detected (U) because they are within 5x the amount present in both the trip blank and the method blank. All other results are estimated because the values are less than the Practical Quantification Limit but above the Method Detection Limit.

LANL believes that a "no longer contained in" determination for the organic constituents listed above would allow for cost-effective removal of the environmental media at Acid Canyon. If you have any questions, please contact Dave McInroy at (505) 667-0819 or Mat Johansen at (505) 667-5046.

Sincerely,

Julie A. Canepa, Program Manager
Environmental Restoration Project
Los Alamos National Laboratory

Sincerely,

Mat Johansen, Project Manager
Department of Energy
Los Alamos Area Office

JC/MJ/RB/ev

Enclosure: Analytical Results for Volatile Organics from Acid Canyon Sediment Samples

Cy (w/enc.):
R. Bohn, E/ER, MS M992
M. Kirsch, E/ER, MS M992
D. Neleigh, US EPA (2 copies)
M. Johansen, LAAO, MS A316
G. Turner, LAAO, MS A316
H. Wheeler-Benson, ESH-19, MS M992
J. Davis, NMED-SWQB
M. Leavitt, NMED-GWQB
J. Parker, NMED-DOE OB
S. Yanicak, NMED-DOE OB, MS J993
E/ER File, MS M992
RPF, MS M707

Cy (w/o enc.):
J. Canepa, E/ER, MS M992
D. McInroy, E/ER, MS M992
J. Bearzi, NMED-HWB
J. Kieling, NMED-HWB

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Lab Sample ID: L0108059-01
Client Sample ID: CAPU-01-0189
Site/Work ID: 9498R/MTAA0220ENAO

Matrix: Soil
Collected: 08/01/01 00:00

% Solid: 98
COC Info: 9498r/

Analyte	Units	Result	Qualifiers	RL	Dil	Type	Analyst	Analysis Date	Time	Method
Percent Solids.....	weight %	98		1.0	1	N/A	TMM	08/03/01	12:30	D2216-90

8/15/01

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-01
Client Sample ID: CAPU-01-0189
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

Dil. Type: N/A
COC Info: 9498r/
Date Collected: 08/01/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 98

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 16:22

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16569

Method: 8260B
Run ID: R173590
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
75-71-8	Dichlorodifluoromethane.....	ug/kg		U	15	1.45
74-87-3	Chloromethane.....	ug/kg		U	15	1.45
75-01-4	Vinyl chloride.....	ug/kg		U	15	1.45
74-83-9	Bromomethane.....	ug/kg		U	15	1.45
75-00-3	Chloroethane.....	ug/kg		U	15	1.45
75-69-4	Trichlorofluoromethane.....	ug/kg		U	7.4	1.45
75-35-4	1,1-Dichloroethene.....	ug/kg		U	7.4	1.45
74-88-4	Iodomethane.....	ug/kg		U	7.4	1.45
75-15-0	Carbon disulfide.....	ug/kg		U	7.4	1.45
67-64-1	Acetone.....	ug/kg	9.8	J,B U, U4	30	1.45
75-09-2	Methylene chloride.....	ug/kg		U	7.4	1.45
156-60-5	trans-1,2-Dichloroethene.....	ug/kg		U	15	1.45
75-34-3	1,1-Dichloroethane.....	ug/kg		U	7.4	1.45
594-20-7	2,2-Dichloropropane.....	ug/kg		U	7.4	1.45
156-59-2	cis-1,2-Dichloroethene.....	ug/kg		U	15	1.45
78-93-3	2-Butanone.....	ug/kg		U	30	1.45
74-97-5	Bromochloromethane.....	ug/kg		U	7.4	1.45
67-66-3	Chloroform.....	ug/kg		U	7.4	1.45
71-55-6	1,1,1-Trichloroethane.....	ug/kg		U	7.4	1.45
56-23-5	Carbon tetrachloride.....	ug/kg		U	7.4	1.45
563-58-6	1,1-Dichloropropene.....	ug/kg		U	7.4	1.45
71-43-2	Benzene.....	ug/kg		U	7.4	1.45
107-06-2	1,2-Dichloroethane.....	ug/kg		U	7.4	1.45
79-01-6	Trichloroethene.....	ug/kg		U	7.4	1.45

RL = Reporting Limit

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-01
Client Sample ID: CAPU-01-0189
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

Dil. Type: N/A
COC Info: 9498r/
Date Collected: 08/01/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 98

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 16:22

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16569

Method: 8260B
Run ID: R173590
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
78-87-5	1,2-Dichloropropane	ug/kg		U	7.4	1.45
74-95-3	Dibromomethane	ug/kg		U	7.4	1.45
75-27-4	Bromodichloromethane	ug/kg		U	7.4	1.45
10061-02-6	trans-1,3-Dichloropropene	ug/kg		U	7.4	1.45
108-10-1	4-Methyl-2-pentanone	ug/kg		U	30	1.45
108-88-3	Toluene	ug/kg		U	7.4	1.45
10061-01-5	cis-1,3-Dichloropropene	ug/kg		U	7.4	1.45
79-00-5	1,1,2-Trichloroethane	ug/kg		U	7.4	1.45
127-18-4	Tetrachloroethene	ug/kg		U	7.4	1.45
142-28-9	1,3-Dichloropropane	ug/kg		U	7.4	1.45
124-48-1	Dibromochloromethane	ug/kg		U	7.4	1.45
591-78-6	2-Hexanone	ug/kg		U	30	1.45
106-93-4	1,2-Dibromoethane	ug/kg		U	7.4	1.45
108-90-7	Chlorobenzene	ug/kg		U	7.4	1.45
630-20-6	1,1,1,2-Tetrachloroethane	ug/kg		U	7.4	1.45
100-41-4	Ethyl benzene	ug/kg		U	7.4	1.45
95-47-6	Xylenes (total)	ug/kg		U	7.4	1.45
100-42-5	Styrene	ug/kg		U	7.4	1.45
75-25-2	Bromoform	ug/kg		U	7.4	1.45
98-82-8	Isopropylbenzene	ug/kg		U	7.4	1.45
108-86-1	Bromobenzene	ug/kg		U	7.4	1.45
96-18-4	1,2,3-Trichloropropane	ug/kg		U	7.4	1.45
79-34-5	1,1,2,2-Tetrachloroethane	ug/kg		U	7.4	1.45
103-65-1	n-Propylbenzene	ug/kg		U	7.4	1.45
95-49-8	2-Chlorotoluene	ug/kg		U	7.4	1.45
106-43-4	4-Chlorotoluene	ug/kg		U	7.4	1.45
108-67-8	1,3,5-Trimethylbenzene	ug/kg		U	7.4	1.45
98-06-6	tert-Butylbenzene	ug/kg		U	7.4	1.45
95-63-6	1,2,4-Trimethylbenzene	ug/kg		U	7.4	1.45
135-98-8	sec-Butylbenzene	ug/kg		U	7.4	1.45
541-73-1	1,3-Dichlorobenzene	ug/kg		U	7.4	1.45
106-46-7	1,4-Dichlorobenzene	ug/kg		U	7.4	1.45
99-87-6	p-Isopropyltoluene	ug/kg		U	7.4	1.45
95-50-1	1,2-Dichlorobenzene	ug/kg	0.77	J,B G, V4	7.4	1.45
104-51-8	n-Butylbenzene	ug/kg		U	7.4	1.45
96-12-8	1,2-Dibromo-3-chloropropane	ug/kg		U	15	1.45
76-13-1	Trichlorotrifluoroethane	ug/kg		U	7.4	1.45

RL = Reporting Limit

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-01
Client Sample ID: CAPU-01-0189
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 16:22

Dil. Type: N/A
COC Info: 9498r/
Date Collected: 08/01/01

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16569

Sample Weight: N/A
Extract Volume: N/A
% Solid: 98

Method: 8260B
Run ID: R173590
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
	SURROGATES- In Percent Recovery:					
	Toluene-d8		98.5	(81 - 117%)		
	p-Bromofluorobenzene		101	(74 - 121%)		
	Dibromofluoromethane		104	(80 - 120%)		
	1,2-Dichloroethane-d4		112	(80 - 120%)		

Product: 827-TC - TCLP Semivolatiles

Lab Sample ID: L0108059-01
Client Sample ID: CAPU-01-0189
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

TCLP Extract Date: 08/06/01
Extract Date: 08/07/01
Analysis Date: 08/08/01 Time: 17:42

Dil. Type: N/A
COC Info: 9498r/
Date Collected: 08/01/01

Instrument: HPMS4
Analyst: MDC
Lab File ID: 4M9782

Sample Weight: N/A
Extract Volume: N/A
% Solid: 98

Method:8270C\3510C\1311
Units:ug/L

EPA HW#	CAS #	Compound	Result	Qualifiers	RL	Dilution	Regulatory Limit
D023	95-48-7	o-Cresol		U ~~[illegible]~~ OK	5.0	1	200000
		m-,p-Cresol		U	5.0	1	
D027	106-46-7	1,4-Dichlorobenzene		U	5.0	1	7500
D030	121-14-2	2,4-Dinitrotoluene		U	5.0	1	130
D032	118-74-1	Hexachlorobenzene		U	5.0	1	130
D033	87-68-3	Hexachlorobutadiene		U	5.0	1	500
D034	67-72-1	Hexachloroethane		U	5.0	1	3000
D036	98-95-3	Nitrobenzene		U	5.0	1	2000
D037	87-86-5	Pentachlorophenol		U	25	1	100000
D038	110-86-1	Pyridine		U	5.0	1	5000
D041	95-95-4	2,4,5-Trichlorophenol		U	25	1	400000
D042	88-06-2	2,4,6-Trichlorophenol		U	5.0	1	2000

RL = Reporting Limit

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 827-TC - TCLP Semivolatiles

Lab Sample ID: L0108059-01
Client Sample ID: CAPU-01-0189
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

TCLP Extract Date: 08/06/01
Extract Date: 08/07/01
Analysis Date: 08/08/01 Time: 17:42

Dil. Type: N/A
COC Info: 9498r/

Date Collected: 08/01/01

Instrument: HPMS4
Analyst: MDC
Lab File ID: 4M9782

Sample Weight: N/A
Extract Volume: N/A

% Solid: 98

Method:8270C\3510C\1311
Units:ug/L

EPA HW#	CAS #	Compound	Result	Qualifiers	RL	Dilution	Regulator Limit
		SURROGATES- In Percent Recovery:					
		2-Fluorophenol	19.3 *	(21 - 100%)			
		Phenol-d5	16.0	(10 - 94%)			
		Nitrobenzene-d5	47.7	(35 - 114%)			
		2-Fluorobiphenyl	48.9	(43 - 116%)			
		2,4,6-Tribromophenol	61.0	(10 - 123%)			
		p-Terphenyl-d14	80.7	(33 - 141%)			

Lab Sample ID: L0108059-02
Client Sample ID: CAPU-01-0190
Site/Work ID: 9498R/MTAA0220ENAO

Matrix: Soil
Collected: 08/01/01 00:00

% Solid: 99
COC Info: 9498r/

Analyte	Units	Result	Qualifiers	RL	Dil	Type	Analyst	Analysis Date	Time	Method
Percent Solids	weight %	99		1.0	1	N/A	TMM	08/03/01	12:30	D2216-9

RL - Reporting Limit

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-02
Client Sample ID: CAPU-01-0190
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

Dil. Type: N/A
COC Info: 9498r/
Date Collected: 08/01/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 99

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 16:56

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16570

Method: 8260B
Run ID: R173490
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
75-71-8	Dichlorodifluoromethane	ug/kg		U	18	1.78
74-87-3	Chloromethane	ug/kg		U	18	1.78
75-01-4	Vinyl chloride	ug/kg		U	18	1.78
74-83-9	Bromomethane	ug/kg		U	18	1.78
75-00-3	Chloroethane	ug/kg		U	18	1.78
75-69-4	Trichlorofluoromethane	ug/kg		U	9.0	1.78
75-35-4	1,1-Dichloroethene	ug/kg		U	9.0	1.78
74-88-4	Iodomethane	ug/kg		U	9.0	1.78
75-15-0	Carbon disulfide	ug/kg		U	9.0	1.78
67-64-1	Acetone	ug/kg	20	J,B 0.04	36	1.78
75-09-2	Methylene chloride	ug/kg		U	9.0	1.78
156-60-5	trans-1,2-Dichloroethene	ug/kg		U	18	1.78
75-34-3	1,1-Dichloroethane	ug/kg		U	9.0	1.78
594-20-7	2,2-Dichloropropane	ug/kg		U	9.0	1.78
156-59-2	cis-1,2-Dichloroethene	ug/kg		U	18	1.78
78-93-3	2-Butanone	ug/kg		U	36	1.78
74-97-5	Bromochloromethane	ug/kg		U	9.0	1.78
67-66-3	Chloroform	ug/kg		U	9.0	1.78
71-55-6	1,1,1-Trichloroethane	ug/kg		U	9.0	1.78
56-23-5	Carbon tetrachloride	ug/kg		U	9.0	1.78
563-58-6	1,1-Dichloropropene	ug/kg		U	9.0	1.78
71-43-2	Benzene	ug/kg		U	9.0	1.78
107-06-2	1,2-Dichloroethane	ug/kg		U	9.0	1.78
79-01-6	Trichloroethene	ug/kg		U	9.0	1.78
78-87-5	1,2-Dichloropropane	ug/kg		U	9.0	1.78
74-95-3	Dibromomethane	ug/kg		U	9.0	1.78
75-27-4	Bromodichloromethane	ug/kg		U	9.0	1.78
10061-02-6	trans-1,3-Dichloropropene	ug/kg		U	9.0	1.78
108-10-1	4-Methyl-2-pentanone	ug/kg		U	36	1.78
108-88-3	Toluene	ug/kg		U	9.0	1.78
10061-01-5	cis-1,3-Dichloropropene	ug/kg		U	9.0	1.78
79-00-5	1,1,2-Trichloroethane	ug/kg		U	9.0	1.78
127-18-4	Tetrachloroethene	ug/kg		U	9.0	1.78
142-28-9	1,3-Dichloropropane	ug/kg		U	9.0	1.78
124-48-1	Dibromochloromethane	ug/kg		U	9.0	1.78
591-78-6	2-Hexanone	ug/kg		U	36	1.78
106-93-4	1,2-Dibromoethane	ug/kg		U	9.0	1.78
108-90-7	Chlorobenzene	ug/kg		U	9.0	1.78
630-20-6	1,1,1,2-Tetrachloroethane	ug/kg		U	9.0	1.78

RL = Reporting Limit

8/15/01

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-02
Client Sample ID: CAPU-01-0190
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

Dil. Type: N/A
COC Info: 9498r/
Date Collected: 08/01/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 99

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 16:56

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16570

Method: 8260B
Run ID: R173490
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
100-41-4	Ethyl benzene	ug/kg		U	9.0	1.78
95-47-6	Xylenes (total)	ug/kg		U	9.0	1.78
100-42-5	Styrene	ug/kg		U	9.0	1.78
75-25-2	Bromoform	ug/kg		U	9.0	1.78
98-82-8	Isopropylbenzene	ug/kg		U	9.0	1.78
108-86-1	Bromobenzene	ug/kg		U	9.0	1.78
96-18-4	1,2,3-Trichloropropane	ug/kg		U	9.0	1.78
79-34-5	1,1,2,2-Tetrachloroethane	ug/kg		U	9.0	1.78
103-65-1	n-Propylbenzene	ug/kg		U	9.0	1.78
95-49-8	2-Chlorotoluene	ug/kg		U	9.0	1.78
106-43-4	4-Chlorotoluene	ug/kg		U	9.0	1.78
108-67-8	1,3,5-Trimethylbenzene	ug/kg		U	9.0	1.78
98-06-6	tert-Butylbenzene	ug/kg		U	9.0	1.78
95-63-6	1,2,4-Trimethylbenzene	ug/kg		U	9.0	1.78
135-98-8	sec-Butylbenzene	ug/kg		U	9.0	1.78
541-73-1	1,3-Dichlorobenzene	ug/kg		U	9.0	1.78
106-46-7	1,4-Dichlorobenzene	ug/kg		U	9.0	1.78
99-87-6	p-Isopropyltoluene	ug/kg		U	9.0	1.78
95-50-1	1,2-Dichlorobenzene	ug/kg		U	9.0	1.78
104-51-8	n-Butylbenzene	ug/kg		U	9.0	1.78
96-12-8	1,2-Dibromo-3-chloropropane	ug/kg		U	18	1.78
76-13-1	Trichlorotrifluoroethane	ug/kg		U	9.0	1.78

SURROGATES- In Percent Recovery:

Toluene-d8	97.3	(81 - 117%)
p-Bromofluorobenzene	97.6	(74 - 121%)
Dibromofluoromethane	102	(80 - 120%)
1,2-Dichloroethane-d4	111	(80 - 120%)

RL = Reporting Limit

12

KEMRON ENVIRONMENTAL SERVICES

Product: 827-TC - TCLP Semivolatiles

Lab Sample ID: L0108059-02
Client Sample ID: CAPU-01-0190
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

TCLP Extract Date: 08/06/01
Extract Date: 08/07/01
Analysis Date: 08/08/01 Time: 18:15

Dil. Type: N/A
COC Info: 9498r/

Date Collected: 08/01/01

Instrument: HPMS4
Analyst: MDC
Lab File ID: 4M9783

Sample Weight: N/A
Extract Volume: N/A

% Solid: 99

Method:8270C\3510C\1311
Units:ug/L

EPA HW#	CAS #	Compound	Result	Qualifiers	RL	Dilution	Regulatory Limit
D023	95-48-7	o-Cresol		U	5.0	1	200000
		m-,p-Cresol		U	5.0	1	
D027	106-46-7	1,4-Dichlorobenzene		U	5.0	1	7500
D030	121-14-2	2,4-Dinitrotoluene		U	5.0	1	130
D032	118-74-1	Hexachlorobenzene		U	5.0	1	130
D033	87-68-3	Hexachlorobutadiene		U	5.0	1	500
D034	67-72-1	Hexachloroethane		U	5.0	1	3000
D036	98-95-3	Nitrobenzene		U	5.0	1	2000
D037	87-86-5	Pentachlorophenol		U	25	1	100000
D038	110-86-1	Pyridine		U	5.0	1	5000
D041	95-95-4	2,4,5-Trichlorophenol		U	25	1	400000
D042	88-06-2	2,4,6-Trichlorophenol		U	5.0	1	2000

SURROGATES- In Percent Recovery:

2-Fluorophenol	39.5	(21 - 100%)
Phenol-d5	27.8	(10 - 94%)
Nitrobenzene-d5	65.6	(35 - 114%)
2-Fluorobiphenyl	66.0	(43 - 116%)
2,4,6-Tribromophenol	103	(10 - 123%)
p-Terphenyl-d14	103	(33 - 141%)

Lab Sample ID: L0108059-03
Client Sample ID: CAPU-01-0191
Site/Work ID: 9498R/MTAA0220ENAO

Matrix: Soil
Collected: 08/01/01 00:00

% Solid: 89
COC Info: 9498r/

Analyte	Units	Result	Qualifiers	RL	Dil	Type	Analyst	Analysis Date	Time	Method
Percent Solids	weight %	89		1.0	1	N/A	TMM	08/03/01	12:30	D2216-90

RL = Reporting Limit

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-03
Client Sample ID: CAPU-01-0191
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

Dil. Type: N/A
COC Info: 9498r/
Date Collected: 08/01/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 89

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 17:30

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16571

Method: 8260B
Run ID: R173516
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
75-71-8	Dichlorodifluoromethane	ug/kg		U	13	1.12
74-87-3	Chloromethane	ug/kg		U	13	1.12
75-01-4	Vinyl chloride	ug/kg		U	13	1.12
74-83-9	Bromomethane	ug/kg		U	13	1.12
75-00-3	Chloroethane	ug/kg		U	13	1.12
75-69-4	Trichlorofluoromethane	ug/kg		U	6.3	1.12
75-35-4	1,1-Dichloroethene	ug/kg		U	6.3	1.12
74-88-4	Iodomethane	ug/kg		U	6.3	1.12
75-15-0	Carbon disulfide	ug/kg		U	6.3	1.12
67-64-1	Acetone	ug/kg		U	25	1.12
75-09-2	Methylene chloride	ug/kg		U	6.3	1.12
156-60-5	trans-1,2-Dichloroethene	ug/kg		U	13	1.12
75-34-3	1,1-Dichloroethane	ug/kg		U	6.3	1.12
594-20-7	2,2-Dichloropropane	ug/kg		U	6.3	1.12
156-59-2	cis-1,2-Dichloroethene	ug/kg		U	13	1.12
78-93-3	2-Butanone	ug/kg		U	25	1.12
74-97-5	Bromochloromethane	ug/kg		U	6.3	1.12
67-66-3	Chloroform	ug/kg		U	6.3	1.12
71-55-6	1,1,1-Trichloroethane	ug/kg		U	6.3	1.12
56-23-5	Carbon tetrachloride	ug/kg		U	6.3	1.12
563-58-6	1,1-Dichloropropene	ug/kg		U	6.3	1.12
71-43-2	Benzene	ug/kg		U	6.3	1.12
107-06-2	1,2-Dichloroethane	ug/kg		U	6.3	1.12
79-01-6	Trichloroethene	ug/kg		U	6.3	1.12
78-87-5	1,2-Dichloropropane	ug/kg		U	6.3	1.12
74-95-3	Dibromomethane	ug/kg		U	6.3	1.12
75-27-4	Bromodichloromethane	ug/kg		U	6.3	1.12
10061-02-6	trans-1,3-Dichloropropene	ug/kg		U	6.3	1.12
108-10-1	4-Methyl-2-pentanone	ug/kg		U	25	1.12
108-88-3	Toluene	ug/kg		U	6.3	1.12
10061-01-5	cis-1,3-Dichloropropene	ug/kg		U	6.3	1.12
79-00-5	1,1,2-Trichloroethane	ug/kg		U	6.3	1.12
127-18-4	Tetrachloroethene	ug/kg		U	6.3	1.12
142-28-9	1,3-Dichloropropane	ug/kg		U	6.3	1.12
124-48-1	Dibromochloromethane	ug/kg		U	6.3	1.12
591-78-6	2-Hexanone	ug/kg		U	25	1.12
106-93-4	1,2-Dibromoethane	ug/kg		U	6.3	1.12
108-90-7	Chlorobenzene	ug/kg		U	6.3	1.12
630-20-6	1,1,1,2-Tetrachloroethane	ug/kg		U	6.3	1.12

RL = Reporting Limit

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-03
Client Sample ID: CAPU-01-0191
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 17:30

Dil. Type: N/A
COC Info: 9498r/

Date Collected: 08/01/01

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16571

Sample Weight: N/A
Extract Volume: N/A

% Solid: 89

Method: 8260B
Run ID: R173516
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
100-41-4	Ethyl benzene	ug/kg		U	6.3	1.12
95-47-6	Xylenes (total)	ug/kg		U	6.3	1.12
100-42-5	Styrene	ug/kg		U	6.3	1.12
75-25-2	Bromoform	ug/kg		U	6.3	1.12
98-82-8	Isopropylbenzene	ug/kg		U	6.3	1.12
108-86-1	Bromobenzene	ug/kg		U	6.3	1.12
96-18-4	1,2,3-Trichloropropane	ug/kg		U	6.3	1.12
79-34-5	1,1,2,2-Tetrachloroethane	ug/kg		U	6.3	1.12
103-65-1	n-Propylbenzene	ug/kg		U	6.3	1.12
95-49-8	2-Chlorotoluene	ug/kg		U	6.3	1.12
106-43-4	4-Chlorotoluene	ug/kg		U	6.3	1.12
108-67-8	1,3,5-Trimethylbenzene	ug/kg		U	6.3	1.12
98-06-6	tert-Butylbenzene	ug/kg		U	6.3	1.12
95-63-6	1,2,4-Trimethylbenzene	ug/kg		U	6.3	1.12
135-98-8	sec-Butylbenzene	ug/kg		U	6.3	1.12
541-73-1	1,3-Dichlorobenzene	ug/kg		U	6.3	1.12
106-46-7	1,4-Dichlorobenzene	ug/kg		U	6.3	1.12
99-87-6	p-Isopropyltoluene	ug/kg		U	6.3	1.12
95-50-1	1,2-Dichlorobenzene	ug/kg	0.53	J,B U,U4	6.3	1.12
104-51-8	n-Butylbenzene	ug/kg		U	6.3	1.12
96-12-8	1,2-Dibromo-3-chloropropane	ug/kg		U	13	1.12
76-13-1	Trichlorotrifluoroethane	ug/kg		U	6.3	1.12

SURROGATES- In Percent Recovery:

Toluene-d8	94.9	(81 - 117%)
p-Bromofluorobenzene	95.1	(74 - 121%)
Dibromofluoromethane	105	(80 - 120%)
1,2-Dichloroethane-d4	112	(80 - 120%)

RL = Reporting Limit

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 827-TC - TCLP Semivolatiles

Lab Sample ID: L0108059-03
Client Sample ID: CAPU-01-0191
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

Dil. Type: N/A
COC Info: 9498r/
Date Collected: 08/01/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 89

TCLP Extract Date: 08/06/01
Extract Date: 08/07/01
Analysis Date: 08/08/01 Time: 18:47

Instrument: HPMS4
Analyst: MDC
Lab File ID: 4M9784

Method:8270C\3510C\1311
Units:ug/L

EPA HW#	CAS #	Compound	Result	Qualifiers	RL	Dilution	Regulatory Limit
D023	95-48-7	o-Cresol		U	5.0	1	200000
		m-,p-Cresol		U	5.0	1	
D027	106-46-7	1,4-Dichlorobenzene		U	5.0	1	7500
D030	121-14-2	2,4-Dinitrotoluene		U	5.0	1	130
D032	118-74-1	Hexachlorobenzene		U	5.0	1	130
D033	87-68-3	Hexachlorobutadiene		U	5.0	1	500
D034	67-72-1	Hexachloroethane		U	5.0	1	3000
D036	98-95-3	Nitrobenzene		U	5.0	1	2000
D037	87-86-5	Pentachlorophenol		U	25	1	100000
D038	110-86-1	Pyridine		U	5.0	1	5000
D041	95-95-4	2,4,5-Trichlorophenol		U	25	1	400000
D042	88-06-2	2,4,6-Trichlorophenol		U	5.0	1	2000

SURROGATES- In Percent Recovery:

2-Fluorophenol	20.7	*	(21 - 100%)
Phenol-d5	16.6		(10 - 94%)
Nitrobenzene-d5	45.7		(35 - 114%)
2-Fluorobiphenyl	45.4		(43 - 116%)
2,4,6-Tribromophenol	71.2		(10 - 123%)
p-Terphenyl-d14	64.8		(33 - 141%)

Lab Sample ID: L0108059-04
Client Sample ID: CAPU-01-0192
Site/Work ID: 9498R/MTAA0220ENAO

Matrix: Soil
Collected: 08/01/01 00:00

% Solid: 86
COC Info: 9498r/

Analyte	Units	Result	Qualifiers	RL	Dil	Type	Analyst	Analysis Date	Time	Method
Percent Solids	weight %	86		1.0	1	N/A	TMM	08/03/01	12:30	D2216-90

RL = Reporting Limit

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-04
Client Sample ID: CAPU-01-0192
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

Dil. Type: N/A
COC Info: 9498r/
Date Collected: 08/01/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 86

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 18:04

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16572

Method: 8260B
Run ID: R173526
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
75-71-8	Dichlorodifluoromethane	ug/kg		U	16	1.4
74-87-3	Chloromethane	ug/kg		U	16	1.4
75-01-4	Vinyl chloride	ug/kg		U	16	1.4
74-83-9	Bromomethane	ug/kg		U	16	1.4
75-00-3	Chloroethane	ug/kg		U	16	1.4
75-69-4	Trichlorofluoromethane	ug/kg		U	8.1	1.4
75-35-4	1,1-Dichloroethene	ug/kg		U	8.1	1.4
74-88-4	Iodomethane	ug/kg		U	8.1	1.4
75-15-0	Carbon disulfide	ug/kg		U	8.1	1.4
67-64-1	Acetone	ug/kg		U	33	1.4
75-09-2	Methylene chloride	ug/kg		U	8.1	1.4
156-60-5	trans-1,2-Dichloroethene	ug/kg		U	16	1.4
75-34-3	1,1-Dichloroethane	ug/kg		U	8.1	1.4
594-20-7	2,2-Dichloropropane	ug/kg		U	8.1	1.4
156-59-2	cis-1,2-Dichloroethene	ug/kg		U	16	1.4
78-93-3	2-Butanone	ug/kg		U	33	1.4
74-97-5	Bromochloromethane	ug/kg		U	8.1	1.4
67-66-3	Chloroform	ug/kg		U	8.1	1.4
71-55-6	1,1,1-Trichloroethane	ug/kg		U	8.1	1.4
56-23-5	Carbon tetrachloride	ug/kg		U	8.1	1.4
563-58-6	1,1-Dichloropropene	ug/kg		U	8.1	1.4
71-43-2	Benzene	ug/kg		U	8.1	1.4
107-06-2	1,2-Dichloroethane	ug/kg		U	8.1	1.4
79-01-6	Trichloroethene	ug/kg		U	8.1	1.4
78-87-5	1,2-Dichloropropane	ug/kg		U	8.1	1.4
74-95-3	Dibromomethane	ug/kg		U	8.1	1.4
75-27-4	Bromodichloromethane	ug/kg		U	8.1	1.4
10061-02-6	trans-1,3-Dichloropropene	ug/kg		U	8.1	1.4
108-10-1	4-Methyl-2-pentanone	ug/kg		U	33	1.4
108-88-3	Toluene	ug/kg		U	8.1	1.4
10061-01-5	cis-1,3-Dichloropropene	ug/kg		U	8.1	1.4
79-00-5	1,1,2-Trichloroethane	ug/kg		U	8.1	1.4
127-18-4	Tetrachloroethene	ug/kg		U	8.1	1.4
142-28-9	1,3-Dichloropropane	ug/kg		U	8.1	1.4
124-48-1	Dibromochloromethane	ug/kg		U	8.1	1.4
591-78-6	2-Hexanone	ug/kg		U	33	1.4
106-93-4	1,2-Dibromoethane	ug/kg		U	8.1	1.4
108-90-7	Chlorobenzene	ug/kg		U	8.1	1.4
630-20-6	1,1,1,2-Tetrachloroethane	ug/kg		U	8.1	1.4

KL 8/15/01

RL = Reporting Limit

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-04
Client Sample ID: CAPU-01-0192
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 18:04

Dil. Type: N/A
COC Info: 9498r/

Date Collected: 08/01/01

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16572

Sample Weight: N/A
Extract Volume: N/A

% Solid: 86

Method: 8260B
Run ID: R173526
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
100-41-4	Ethyl benzene	ug/kg		U	8.1	1.4
1330-20-7	Xylenes (total)	ug/kg		U		1
100-42-5	Styrene	ug/kg		U	8.1	1.4
75-25-2	Bromoform	ug/kg		U	8.1	1.4
98-82-8	Isopropylbenzene	ug/kg		U	8.1	1.4
108-86-1	Bromobenzene	ug/kg		U	8.1	1.4
96-18-4	1,2,3-Trichloropropane	ug/kg		U	8.1	1.4
79-34-5	1,1,2,2-Tetrachloroethane	ug/kg		U	8.1	1.4
103-65-1	n-Propylbenzene	ug/kg		U	8.1	1.4
95-49-8	2-Chlorotoluene	ug/kg		U	8.1	1.4
106-43-4	4-Chlorotoluene	ug/kg		U	8.1	1.4
108-67-8	1,3,5-Trimethylbenzene	ug/kg		U	8.1	1.4
98-06-6	tert-Butylbenzene	ug/kg		U	8.1	1.4
95-63-6	1,2,4-Trimethylbenzene	ug/kg		U	8.1	1.4
135-98-8	sec-Butylbenzene	ug/kg		U	8.1	1.4
541-73-1	1,3-Dichlorobenzene	ug/kg		U	8.1	1.4
106-46-7	1,4-Dichlorobenzene	ug/kg		U	8.1	1.4
99-87-6	p-Isopropyltoluene	ug/kg		U	8.1	1.4
95-50-1	1,2-Dichlorobenzene	ug/kg		U	8.1	1.4
104-51-8	n-Butylbenzene	ug/kg		U	8.1	1.4
96-12-8	1,2-Dibromo-3-chloropropane	ug/kg		U	16	1.4
76-13-1	Trichlorotrifluoroethane	ug/kg		U	8.1	1.4

SURROGATES- In Percent Recovery:

Toluene-d8	102		(81 - 117%)
p-Bromofluorobenzene	106		(74 - 121%)
Dibromofluoromethane	110		(80 - 120%)
1,2-Dichloroethane-d4	123	*	(80 - 120%)

RL = Reporting Limit

18

KEMRON ENVIRONMENTAL SERVICES

Product: 827-TC - TCLP Semivolatiles

Lab Sample ID: L0108059-04
Client Sample ID: CAPU-01-0192
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

TCLP Extract Date: 08/06/01
Extract Date: 08/07/01
Analysis Date: 08/08/01 Time: 19:19

Dil. Type: N/A
COC Info: 9498r/

Date Collected: 08/01/01

Instrument: HPMS4
Analyst: MDC
Lab File ID: 4M9785

Sample Weight: N/A
Extract Volume: N/A

% Solid: 86

Method:8270C\3510C\1311
Units:ug/L

EPA HW#	CAS #	Compound	Result	Qualifiers	RL	Dilution	Regulatory Limit
D023	95-48-7	o-Cresol		U	5.0	1	200000
		m-,p-Cresol		U	5.0	1	
D027	106-46-7	1,4-Dichlorobenzene		U	5.0	1	7500
D030	121-14-2	2,4-Dinitrotoluene		U	5.0	1	130
D032	118-74-1	Hexachlorobenzene		U	5.0	1	130
D033	87-68-3	Hexachlorobutadiene		U	5.0	1	500
D034	67-72-1	Hexachloroethane		U	5.0	1	3000
D036	98-95-3	Nitrobenzene		U	5.0	1	2000
D037	87-86-5	Pentachlorophenol		U	25	1	100000
D038	110-86-1	Pyridine		U	5.0	1	5000
D041	95-95-4	2,4,5-Trichlorophenol		U	25	1	400000
D042	88-06-2	2,4,6-Trichlorophenol		U	5.0	1	2000

SURROGATES- In Percent Recovery:

2-Fluorophenol	28.0	(21 - 100%)
Phenol-d5	21.2	(10 - 94%)
Nitrobenzene-d5	55.2	(35 - 114%)
2-Fluorobiphenyl	50.2	(43 - 116%)
2,4,6-Tribromophenol	73.9	(10 - 123%)
p-Terphenyl-d14	73.0	(33 - 141%)

Lab Sample ID: L0108059-05
Client Sample ID: CAPU-01-0193
Site/Work ID: 9498R/MTAA0220ENAO

Matrix: Soil
Collected: 08/01/01 00:00

% Solid: 96
COC Info: 9498r/

Analyte	Units	Result	Qualifiers	RL	Dil	Type	Analyst	Analysis Date	Time	Method
Percent Solids	weight %	96		1.0	1	N/A	TMM	08/03/01	12:30	D2216-90

RD Reporting Limit

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-05
Client Sample ID: CAPU-01-0193
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 18:37

Dil. Type: N/A
COC Info: 9498r/

Date Collected: 08/01/01

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16573

Sample Weight: N/A
Extract Volume: N/A

% Solid: 96

Method: 8260B
Run ID: R173676
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
75-71-8	Dichlorodifluoromethane	ug/kg		U	14	1.39
74-87-3	Chloromethane	ug/kg		U	14	1.39
75-01-4	Vinyl chloride	ug/kg		U	14	1.39
74-83-9	Bromomethane	ug/kg		U	14	1.39
75-00-3	Chloroethane	ug/kg		U	14	1.39
75-69-4	Trichlorofluoromethane	ug/kg		U	7.2	1.39
75-35-4	1,1-Dichloroethene	ug/kg		U	7.2	1.39
74-88-4	Iodomethane	ug/kg		U	7.2	1.39
75-15-0	Carbon disulfide	ug/kg		U	7.2	1.39
67-64-1	Acetone	ug/kg	86	B U, Trip Blank	29	1.39
75-09-2	Methylene chloride	ug/kg		U	7.2	1.39
156-60-5	trans-1,2-Dichloroethene	ug/kg		U	14	1.39
75-34-3	1,1-Dichloroethane	ug/kg		U	7.2	1.39
594-20-7	2,2-Dichloropropane	ug/kg		U	7.2	1.39
156-59-2	cis-1,2-Dichloroethene	ug/kg		U	14	1.39
78-93-3	2-Butanone	ug/kg		U	29	1.39
74-97-5	Bromochloromethane	ug/kg		U	7.2	1.39
67-66-3	Chloroform	ug/kg		U	7.2	1.39
71-55-6	1,1,1-Trichloroethane	ug/kg		U	7.2	1.39
56-23-5	Carbon tetrachloride	ug/kg		U	7.2	1.39
563-58-6	1,1-Dichloropropene	ug/kg		U	7.2	1.39
71-43-2	Benzene	ug/kg		U	7.2	1.39
107-06-2	1,2-Dichloroethane	ug/kg		U	7.2	1.39
79-01-6	Trichloroethene	ug/kg		U	7.2	1.39
78-87-5	1,2-Dichloropropane	ug/kg		U	7.2	1.39
74-95-3	Dibromomethane	ug/kg		U	7.2	1.39
75-27-4	Bromodichloromethane	ug/kg		U	7.2	1.39
10061-02-6	trans-1,3-Dichloropropene	ug/kg		U	7.2	1.39
108-10-1	4-Methyl-2-pentanone	ug/kg	5.0	J	29	1.39
108-88-3	Toluene	ug/kg	0.77	J	7.2	1.39
10061-01-5	cis-1,3-Dichloropropene	ug/kg		U	7.2	1.39
79-00-5	1,1,2-Trichloroethane	ug/kg		U	7.2	1.39
127-18-4	Tetrachloroethene	ug/kg		U	7.2	1.39
142-28-9	1,3-Dichloropropane	ug/kg		U	7.2	1.39
124-48-1	Dibromochloromethane	ug/kg		U	7.2	1.39
591-78-6	2-Hexanone	ug/kg		U	29	1.39
106-93-4	1,2-Dibromoethane	ug/kg		U	7.2	1.39
108-90-7	Chlorobenzene	ug/kg		U	7.2	1.39
630-20-6	1,1,1,2-Tetrachloroethane	ug/kg		U	7.2	1.39

RL = Reporting Limit

8/15/01

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-05
Client Sample ID: CAPU-01-0193
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 18:37

Dil. Type: N/A
COC Info: 9498r/

Date Collected: 08/01/01

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16573

Sample Weight: N/A
Extract Volume: N/A

% Solid: 96

Method: 8260B
Run ID: R173676
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
100-41-4	Ethyl benzene	ug/kg		U	7.2	1.39
95-47-6	Xylenes (total)	ug/kg		U	7.2	1.39
100-42-5	Styrene	ug/kg		U	7.2	1.39
75-25-2	Bromoform	ug/kg		U	7.2	1.39
98-82-8	Isopropylbenzene	ug/kg	5.0	J	7.2	1.39
108-86-1	Bromobenzene	ug/kg		U	7.2	1.39
96-18-4	1,2,3-Trichloropropane	ug/kg		U	7.2	1.39
79-34-5	1,1,2,2-Tetrachloroethane	ug/kg		U	7.2	1.39
103-65-1	n-Propylbenzene	ug/kg		U	7.2	1.39
95-49-8	2-Chlorotoluene	ug/kg		U	7.2	1.39
106-43-4	4-Chlorotoluene	ug/kg		U	7.2	1.39
108-67-8	1,3,5-Trimethylbenzene	ug/kg		U	7.2	1.39
98-06-6	tert-Butylbenzene	ug/kg		U	7.2	1.39
95-63-6	1,2,4-Trimethylbenzene	ug/kg		U	7.2	1.39
135-98-8	sec-Butylbenzene	ug/kg		U	7.2	1.39
541-73-1	1,3-Dichlorobenzene	ug/kg		U	7.2	1.39
106-46-7	1,4-Dichlorobenzene	ug/kg		U	7.2	1.39
99-87-6	p-Isopropyltoluene	ug/kg		U	7.2	1.39
95-50-1	1,2-Dichlorobenzene	ug/kg		U	7.2	1.39
104-51-8	n-Butylbenzene	ug/kg		U	7.2	1.39
96-12-8	1,2-Dibromo-3-chloropropane	ug/kg		U	14	1.39
76-13-1	Trichlorotrifluoroethane	ug/kg		U	7.2	1.39

SURROGATES- In Percent Recovery:

Toluene-d8	98.4	(81 - 117%)
p-Bromofluorobenzene	100	(74 - 121%)
Dibromofluoromethane	105	(80 - 120%)
1,2-Dichloroethane-d4	117	(80 - 120%)

RL = Reporting Limit

21

KEMRON ENVIRONMENTAL SERVICES

Product: 827-TC - TCLP Semivolatiles

Lab Sample ID: L0108059-05
Client Sample ID: CAPU-01-0193
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

TCLP Extract Date: 08/06/01
Extract Date: 08/07/01
Analysis Date: 08/08/01 Time: 19:51

Dil. Type: N/A
COC Info: 9498r/

Date Collected: 08/01/01

Instrument: HPMS4
Analyst: MDC
Lab File ID: 4M9786

Sample Weight: N/A
Extract Volume: N/A

% Solid: 96

Method: 8270C\3510C\1311
Units: ug/L

EPA HW#	CAS #	Compound	Result	Qualifiers	RL	Dilution	Regulatory Limit
D023	95-48-7	o-Cresol		U	5.0	1	200000
		m-,p-Cresol		U	5.0	1	
D027	106-46-7	1,4-Dichlorobenzene		U	5.0	1	7500
D030	121-14-2	2,4-Dinitrotoluene		U	5.0	1	130
D032	118-74-1	Hexachlorobenzene		U	5.0	1	130
D033	87-68-3	Hexachlorobutadiene		U	5.0	1	500
D034	67-72-1	Hexachloroethane		U	5.0	1	3000
D036	98-95-3	Nitrobenzene		U	5.0	1	2000
D037	87-86-5	Pentachlorophenol		U	25	1	100000
D038	110-86-1	Pyridine		U	5.0	1	5000
D041	95-95-4	2,4,5-Trichlorophenol		U	25	1	400000
D042	88-06-2	2,4,6-Trichlorophenol		U	5.0	1	2000

SURROGATES- In Percent Recovery:

2-Fluorophenol	25.8	(21 - 100%)
Phenol-d5	19.3	(10 - 94%)
Nitrobenzene-d5	48.5	(35 - 114%)
2-Fluorobiphenyl	47.8	(43 - 116%)
2,4,6-Tribromophenol	83.4	(10 - 123%)
p-Terphenyl-d14	77.5	(33 - 141%)

Lab Sample ID: L0108059-06
Client Sample ID: CAPU-01-0194
Site/Work ID: 9498R/MTAA0220ENAO

Matrix: Soil
Collected: 08/01/01 00:00

% Solid: 94
COC Info: 9498r/

Analyte	Units	Result	Qualifiers	RL	Dil	Type	Analyst	Analysis Date	Time	Method
Percent Solids	weight %	94		1.0	1	N/A	TMM	08/03/01	12:30	D2216-90

RL = Reporting Limit

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-06
Client Sample ID: CAPU-01-0194
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 19:11

Dil. Type: N/A
COC Info: 9498r/

Date Collected: 08/01/01

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16574

Sample Weight: N/A
Extract Volume: N/A

% Solid: 94

Method: 8260B
Run ID: R173653
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
75-71-8	Dichlorodifluoromethane	ug/kg		U	13	1.18
74-87-3	Chloromethane	ug/kg		U	13	1.18
75-01-4	Vinyl chloride	ug/kg		U	13	1.18
74-83-9	Bromomethane	ug/kg		U	13	1.18
75-00-3	Chloroethane	ug/kg		U	13	1.18
75-69-4	Trichlorofluoromethane	ug/kg		U	6.3	1.18
75-35-4	1,1-Dichloroethene	ug/kg		U	6.3	1.18
74-88-4	Iodomethane	ug/kg		U	6.3	1.18
75-15-0	Carbon disulfide	ug/kg		U	6.3	1.18
67-64-1	Acetone	ug/kg	28	B U,U4	25	1.18
75-09-2	Methylene chloride	ug/kg		U	6.3	1.18
156-60-5	trans-1,2-Dichloroethene	ug/kg		U	13	1.18
75-34-3	1,1-Dichloroethane	ug/kg		U	6.3	1.18
594-20-7	2,2-Dichloropropane	ug/kg		U	6.3	1.18
156-59-2	cis-1,2-Dichloroethene	ug/kg		U	13	1.18
78-93-3	2-Butanone	ug/kg		U	25	1.18
74-97-5	Bromochloromethane	ug/kg		U	6.3	1.18
67-66-3	Chloroform	ug/kg		U	6.3	1.18
71-55-6	1,1,1-Trichloroethane	ug/kg		U	6.3	1.18
56-23-5	Carbon tetrachloride	ug/kg		U	6.3	1.18
563-58-6	1,1-Dichloropropene	ug/kg		U	6.3	1.18
71-43-2	Benzene	ug/kg		U	6.3	1.18
107-06-2	1,2-Dichloroethane	ug/kg		U	6.3	1.18
79-01-6	Trichloroethene	ug/kg		U	6.3	1.18
78-87-5	1,2-Dichloropropane	ug/kg		U	6.3	1.18
74-95-3	Dibromomethane	ug/kg		U	6.3	1.18
75-27-4	Bromodichloromethane	ug/kg		U	6.3	1.18
10061-02-6	trans-1,3-Dichloropropene	ug/kg		U	6.3	1.18
108-10-1	4-Methyl-2-pentanone	ug/kg		U	25	1.18
108-88-3	Toluene	ug/kg		U	6.3	1.18
10061-01-5	cis-1,3-Dichloropropene	ug/kg		U	6.3	1.18
79-00-5	1,1,2-Trichloroethane	ug/kg		U	6.3	1.18
127-18-4	Tetrachloroethene	ug/kg		U	6.3	1.18
142-28-9	1,3-Dichloropropane	ug/kg		U	6.3	1.18
124-48-1	Dibromochloromethane	ug/kg		U	6.3	1.18
591-78-6	2-Hexanone	ug/kg		U	25	1.18
106-93-4	1,2-Dibromoethane	ug/kg		U	6.3	1.18
108-90-7	Chlorobenzene	ug/kg		U	6.3	1.18
630-20-6	1,1,1,2-Tetrachloroethane	ug/kg		U	6.3	1.18

8/15/01

RL = Reporting Limit

23

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108059-06
Client Sample ID: CAPU-01-0194
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

Dil. Type: N/A
COC Info: 9498r/
Date Collected: 08/01/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 94

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 19:11

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16574

Method: 8260B
Run ID: R173653
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
100-41-4	Ethyl benzene	ug/kg		U	6.3	1.18
95-47-6	Xylenes (total)	ug/kg		U	6.3	1.18
100-42-5	Styrene	ug/kg		U	6.3	1.18
75-25-2	Bromoform	ug/kg		U	6.3	1.18
98-82-8	Isopropylbenzene	ug/kg	0.39	J	6.3	1.18
108-86-1	Bromobenzene	ug/kg		U	6.3	1.18
96-18-4	1,2,3-Trichloropropane	ug/kg		U	6.3	1.18
79-34-5	1,1,2,2-Tetrachloroethane	ug/kg		U	6.3	1.18
103-65-1	n-Propylbenzene	ug/kg		U	6.3	1.18
95-49-8	2-Chlorotoluene	ug/kg		U	6.3	1.18
106-43-4	4-Chlorotoluene	ug/kg		U	6.3	1.18
108-67-8	1,3,5-Trimethylbenzene	ug/kg		U	6.3	1.18
98-06-6	tert-Butylbenzene	ug/kg		U	6.3	1.18
95-63-6	1,2,4-Trimethylbenzene	ug/kg		U	6.3	1.18
135-98-8	sec-Butylbenzene	ug/kg		U	6.3	1.18
541-73-1	1,3-Dichlorobenzene	ug/kg		U	6.3	1.18
106-46-7	1,4-Dichlorobenzene	ug/kg		U	6.3	1.18
99-87-6	p-Isopropyltoluene	ug/kg		U	6.3	1.18
95-50-1	1,2-Dichlorobenzene	ug/kg	0.46	J,B 0.04	6.3	1.18
104-51-8	n-Butylbenzene	ug/kg		U	6.3	1.18
96-12-8	1,2-Dibromo-3-chloropropane	ug/kg		U	13	1.18
76-13-1	Trichlorotrifluoroethane	ug/kg		U	6.3	1.18

SURROGATES- In Percent Recovery:

Toluene-d8	98.7	(81 - 117%)
p-Bromofluorobenzene	99.2	(74 - 121%)
Dibromofluoromethane	108	(80 - 120%)
1,2-Dichloroethane-d4	120	(80 - 120%)

RL = Reporting Limit

Login #L0108059
August 9, 2001 04:42 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 827-TC - TCLP Semivolatiles

Lab Sample ID: L0108059-06
Client Sample ID: CAPU-01-0194
Site/Work ID: 9498R/MTAA0220ENAO
Matrix: Soil

Dil. Type: N/A
COC Info: 9498r/
Date Collected: 08/01/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 94

TCLP Extract Date: 08/06/01
Extract Date: 08/07/01
Analysis Date: 08/08/01 Time: 20:23

Instrument: HPMS4
Analyst: MDC
Lab File ID: 4M9787

Method:8270C\3510C\1311
Units:ug/L

EPA HW#	CAS #	Compound	Result	Qualifiers	RL	Dilution	Regulatory Limit
D023	95-48-7	o-Cresol		U	5.0	1	200000
		m-,p-Cresol		U	5.0	1	
D027	106-46-7	1,4-Dichlorobenzene		U	5.0	1	7500
D030	121-14-2	2,4-Dinitrotoluene		U	5.0	1	130
D032	118-74-1	Hexachlorobenzene		U	5.0	1	130
D033	87-68-3	Hexachlorobutadiene		U	5.0	1	500
D034	67-72-1	Hexachloroethane		U	5.0	1	3000
D036	98-95-3	Nitrobenzene		U	5.0	1	2000
D037	87-86-5	Pentachlorophenol		U	25	1	100000
D038	110-86-1	Pyridine		U	5.0	1	5000
D041	95-95-4	2,4,5-Trichlorophenol		U	25	1	400000
D042	88-06-2	2,4,6-Trichlorophenol		U	5.0	1	2000

SURROGATES- In Percent Recovery:

2-Fluorophenol	27.1	(21 - 100%)
Phenol-d5	19.5	(10 - 94%)
Nitrobenzene-d5	44.6	(35 - 114%)
2-Fluorobiphenyl	46.0	(43 - 116%)
2,4,6-Tribromophenol	102	(10 - 123%)
p-Terphenyl-d14	107	(33 - 141%)

RL = Reporting Limit

Login #L0108062
August 9, 2001 09:02 am

KEMRON ENVIRONMENTAL SERVICES

Lab Sample ID: L0108062-01
Client Sample ID: CAPU-01-0195
Site/Work ID: 9499R/MTAA0220ENAO

Matrix: Soil
Collected: 08/01/01 00:00

% Solid: 100
COC Info: 9499r/

Analyte	Units	Result	Qualifiers	RL	Dil	Type	Analyst	Analysis Date	Time	Method
Percent Solids.....	weight %	100		1.0	1	N/A	TMM	08/02/01	16:30	D2216-90

Product: 826LA - Volatile Organics

Lab Sample ID: L0108062-01
Client Sample ID: CAPU-01-0195
Site/Work ID: 9499R/MTAA0220ENAO
Matrix: Soil

Dil. Type: N/A
COC Info: 9499r/
Date Collected: 08/01/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 100

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 19:45

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16575

Method: 8260B
Run ID: R173647
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
75-71-8	Dichlorodifluoromethane.....	ug/kg		U	12	1.22
74-87-3	Chloromethane.....	ug/kg		U	12	1.22
75-01-4	Vinyl chloride.....	ug/kg		U	12	1.22
74-83-9	Bromomethane.....	ug/kg		U	12	1.22
75-00-3	Chloroethane.....	ug/kg		U	12	1.22
75-69-4	Trichlorofluoromethane.....	ug/kg		U	6.1	1.22
75-35-4	1,1-Dichloroethene.....	ug/kg		U	6.1	1.22
74-88-4	Iodomethane.....	ug/kg		U	6.1	1.22
75-15-0	Carbon disulfide.....	ug/kg		U	6.1	1.22
67-64-1	Acetone.....	ug/kg	28	B	24	1.22
75-09-2	Methylene chloride.....	ug/kg		U	6.1	1.22
156-60-5	trans-1,2-Dichloroethene.....	ug/kg		U	12	1.22
75-34-3	1,1-Dichloroethane.....	ug/kg		U	6.1	1.22
594-20-7	2,2-Dichloropropane.....	ug/kg		U	6.1	1.22
156-59-2	cis-1,2-Dichloroethene.....	ug/kg		U	12	1.22
78-93-3	2-Butanone.....	ug/kg		U	24	1.22
74-97-5	Bromochloromethane.....	ug/kg		U	6.1	1.22
67-66-3	Chloroform.....	ug/kg		U	6.1	1.22
71-55-6	1,1,1-Trichloroethane.....	ug/kg		U	6.1	1.22
56-23-5	Carbon tetrachloride.....	ug/kg		U	6.1	1.22
563-58-6	1,1-Dichloropropene.....	ug/kg		U	6.1	1.22
71-43-2	Benzene.....	ug/kg		U	6.1	1.22
107-06-2	1,2-Dichloroethane.....	ug/kg		U	6.1	1.22
79-01-6	Trichloroethene.....	ug/kg		U	6.1	1.22

RL = Reporting Limit

Login #L0108062
August 9, 2001 09:02 am

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108062-01
Client Sample ID: CAPU-01-0195
Site/Work ID: 9499R/MTAA0220ENAO
Matrix: Soil

Dil. Type: N/A
COC Info: 9499r/
Date Collected: 08/01/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 100

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 19:45

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16575

Method: 8260B
Run ID: R173647
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
78-87-5	1,2-Dichloropropane	ug/kg		U	6.1	1.22
74-95-3	Dibromomethane	ug/kg		U	6.1	1.22
75-27-4	Bromodichloromethane	ug/kg		U	6.1	1.22
10061-02-6	trans-1,3-Dichloropropene	ug/kg		U	6.1	1.22
108-10-1	4-Methyl-2-pentanone	ug/kg		U	24	1.22
108-88-3	Toluene	ug/kg		U	6.1	1.22
10061-01-5	cis-1,3-Dichloropropene	ug/kg		U	6.1	1.22
79-00-5	1,1,2-Trichloroethane	ug/kg		U	6.1	1.22
127-18-4	Tetrachloroethene	ug/kg		U	6.1	1.22
142-28-9	1,3-Dichloropropane	ug/kg		U	6.1	1.22
124-48-1	Dibromochloromethane	ug/kg		U	6.1	1.22
591-78-6	2-Hexanone	ug/kg		U	24	1.22
106-93-4	1,2-Dibromoethane	ug/kg		U	6.1	1.22
108-90-7	Chlorobenzene	ug/kg		U	6.1	1.22
630-20-6	1,1,1,2-Tetrachloroethane	ug/kg		U	6.1	1.22
100-41-4	Ethyl benzene	ug/kg		U	6.1	1.22
1330-20-7	Xylenes (total)	ug/kg		U		1
100-42-5	Styrene	ug/kg		U	6.1	1.22
75-25-2	Bromoform	ug/kg		U	6.1	1.22
98-82-8	Isopropylbenzene	ug/kg		U	6.1	1.22
108-86-1	Bromobenzene	ug/kg		U	6.1	1.22
96-18-4	1,2,3-Trichloropropane	ug/kg		U	6.1	1.22
79-34-5	1,1,2,2-Tetrachloroethane	ug/kg		U	6.1	1.22
103-65-1	n-Propylbenzene	ug/kg		U	6.1	1.22
95-49-8	2-Chlorotoluene	ug/kg		U	6.1	1.22
106-43-4	4-Chlorotoluene	ug/kg		U	6.1	1.22
108-67-8	1,3,5-Trimethylbenzene	ug/kg		U	6.1	1.22
98-06-6	tert-Butylbenzene	ug/kg		U	6.1	1.22
95-63-6	1,2,4-Trimethylbenzene	ug/kg		U	6.1	1.22
135-98-8	sec-Butylbenzene	ug/kg		U	6.1	1.22
541-73-1	1,3-Dichlorobenzene	ug/kg		U	6.1	1.22
106-46-7	1,4-Dichlorobenzene	ug/kg		U	6.1	1.22
99-87-6	p-Isopropyltoluene	ug/kg		U	6.1	1.22
95-50-1	1,2-Dichlorobenzene	ug/kg	0.47	J,B	6.1	1.22
104-51-8	n-Butylbenzene	ug/kg		U	6.1	1.22
96-12-8	1,2-Dibromo-3-chloropropane	ug/kg		U	12	1.22
76-13-1	Trichlorotrifluoroethane	ug/kg		U	6.1	1.22

RL = Reporting Limit

Login #L0108062
August 9, 2001 09:02 am

KEMRON ENVIRONMENTAL SERVICES

Product: 826LA - Volatile Organics

Lab Sample ID: L0108062-01
Client Sample ID: CAPU-01-0195
Site/Work ID: 9499R/MTAA0220ENAO
Matrix: Soil

Dil. Type: N/A
COC Info: 9499r/
Date Collected: 08/01/01

Sample Weight: N/A
Extract Volume: N/A
% Solid: 100

TCLP Extract Date: N/A
Extract Date: N/A
Analysis Date: 08/02/01 Time: 19:45

Instrument: HPMS9
Analyst: MES
Lab File ID: 9M16575

Method: 8260B
Run ID: R173647
Batch : WG102130

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
	SURROGATES- In Percent Recovery:					
	Toluene-d8		98.3	(81 - 117%)		
	p-Bromofluorobenzene		95.1	(74 - 121%)		
	Dibromofluoromethane		102	(80 - 120%)		
	1,2-Dichloroethane-d4		114	(80 - 120%)		

RL = Reporting Limit