



1. Project Code 005030	Account Code	2. Region No. 5	Sampling Co. JACOBS	4. Date Shipped 10/20/93	Carrier FED EX	6. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	7. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved
Regional Identification		3. Sampler (Name) Susan Lorenz		Airbill Number 6346883664			
Non-Superfund Program		3. Sampler Signature <i>Susan Lorenz</i>		5. Ship To PACIFIC ANALYTICAL 6349 PASAD DEL LAJO CARLSBAD, CA 92009			
Site Name CITY OF STONINGTON LOND 711		3. Type of Activity Remedial Removal SF <input type="checkbox"/> CLEM <input type="checkbox"/> PRP <input type="checkbox"/> PA <input type="checkbox"/> RA <input checked="" type="checkbox"/> REMA <input type="checkbox"/> ST <input type="checkbox"/> SSI <input type="checkbox"/> O&M <input type="checkbox"/> REM <input type="checkbox"/> FED <input type="checkbox"/> LSI <input type="checkbox"/> NPLD <input type="checkbox"/> OIL <input type="checkbox"/> UST <input type="checkbox"/>		619/931-1766			
City, State Stonington, RI		Site Spill ID					

Sample Numbers	A Matrix Enter from Box 6	B Conc Low Med High	C Preservative Used from Box 7	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Designated Field QC
193JM04507	2	L	1	TH7 METH SO2.2,524.2	-	5-008534	SL-MW6D-1093	10/19/93 1645	SKL	-
293JM04507	2	L	1	TH7 METH SO2.2,524.2	D	5-008540	SL-MW6D-1093	10/19/93 1645	SKL	-
393JM04510	2	L	1	TH7 METH SO2.2,524.2	-	5-008548	SL-EB01-1093	10/20/93 1000	SKL	EB
493JM04511	2	L	1	TH7 METH SO2.2,524.2	-	5-008549	SL-MW2D-1093	10/20/93 1115	SKL	-
593JM04515	2	L	N	TH7 METH SO2.2,524.2	-	5-008566	SL-MW7003-1093	10/20/93 1400 1600	SKL	TB
7										
8										
9										
10										

Shipment for SAS complete? (Y/N) **(Y)**

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Susan Lorenz</i>	Date / Time 10/20/93 1930	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>Juan Lopez</i>	Date / Time 10/21/93 1015	Remarks App #s 147407, 147408 & CS#s 147416, 147417	Is custody seal intact? <input checked="" type="checkbox"/> Y/N/none cooler 3
Split Samples <input type="checkbox"/> Accepted (Signature)			<input type="checkbox"/> Declined		



USEPA Contract Laboratory Program
1401 Rte 287, Ashland, VA 23005
Huntington, WV 25701
Tel: 703-557-2490 Fax: 703-557-2490
E-mail: epa@epa.gov

Special Analytes

Project Code	Account Code	S. Health No.	State/Project Code
0302030		2	

Sample Collection Requirements

Confirmatory analysis and Special Analytes SAS parameters may require extra volume.

Cooler and Sample Documentation

Complete all sections of the SAS Packing List/Chain of Custody Form. Press firmly with a ballpoint pen to ensure the carbon copies are legible. Check the information and correct any errors.

- Please remember to complete the Chain of Custody information on the form.
- Seal the two sets of laboratory SAS Packing List/Chain of Custody form copies in a plastic bag. Include a return address for the cooler. Tape bag under cooler lid.
- Overlap the lid and bottle and bottle of each sample container with custody seals.
- Seal each container in a plastic bag.
- Pack medium and high concentration samples in metal cans.
- Cool low waters to 4°C. Cooling of low soils is optional. Do not cool medium or high concentration waters and soils.
- Separate and surround cooler contents with vermiculite or equivalent packaging.
- Seal the cooler overlapping the lid and body with custody seals.
- Send SMO the yellow copy of the SAS Packing List/Chain of Custody Form within 3 days.

3. Sample Shipment Reporting

- PHONE IN ALL SHIPMENTS IMMEDIATELY TO SMO (or to RSCC, if instructed)**

Required information:

- SAS (and/or Case) number
- Date shipped
- Number of samples by concentration, matrix, and analysis
- Carrier and airbill number
- Next planned shipment
- Leave your name and a number where you can be reached.
- Information for **SATURDAY DELIVERIES** must be phoned in by 3:00 p.m. (Eastern) the preceding FRIDAY.
- Report any delays or changes of scope (i.e. changes in number of samples to be collected, matrix changes, etc.)
- CALL IF YOU HAVE ANY QUESTIONS**

USEPA Contract Laboratory Program
Sample Management Office
P.O. Box 818
Alexandria, VA 22313
Phone: (703) 557-2490
(703) 684-5678
FAX: (703) 683-0378

Resubmitted by: (Signature)	Date / Time	Received by: (Signature)	Received by: (Signature)
John Smith	11/24/93	John Smith	10/23/93

CHAIN OF CUSTODY REPORT



1. Project Code 205030		Account Code .		2. Region No. 5		Sampling Co. JACOBS		4. Date Shipped 10/20/93		Carrier FED EX		6. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)		7. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	
Regional Information 05				3. Type of Activity Lead: <input type="checkbox"/> Pre Remedial <input type="checkbox"/> Remedial <input type="checkbox"/> Removal SF <input type="checkbox"/> PA <input type="checkbox"/> ST <input type="checkbox"/> FED <input type="checkbox"/> RIFS <input type="checkbox"/> RD <input type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD <input type="checkbox"/> CLEM <input type="checkbox"/> REMA <input checked="" type="checkbox"/> REM <input type="checkbox"/> OIL <input type="checkbox"/> UST <input type="checkbox"/>				Airbill Number 6346883653				5. Ship To POETIC ANALYTICAL 6349 PASEO DEL LAHO CARLSBAD, CA 92009			
Non-Superfund Program				Sampler (Name) SUSAN LORENZ				Sampler Signature <i>[Signature]</i>				619/931-1766			
Site Name CITY OF STATION LANDFILL				City State STATION, NJ				Site Spill ID				Sample Numbers Matrix Enter from Box 6 Conc Low Med High 2 L			
C		D		E		F		G		H		I		J	
Preservative Used from Box 7		Analysis		Sample used for spike and/or duplicate		Regional Specific Tracking Number or Tag Number		Station Location Identifier		Mo/Day/Year/Time Sample Collection		Sampler Initials		Designated Field QC	
1		THE METHODS 502.2 524.2		-		5008556		SL-MW25-1093		10/20/93 1225		SKL		-	
N		THE METHODS 502.2 524.2		-		5008567		SL-TB04-1093		10/20/93 1600		SKL		TB	
9															
10															
Shipment for SAS complete? (Y/N) (Y)															

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>[Signature]</i>		Date / Time 10/20/93 1930		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)	
Received by: (Signature)		Date / Time		Received for Laboratory by (Signature) <i>[Signature]</i>		Date / Time 10-21-93 1015		Remarks COOL # (S#s 147412, 147413)		Is custody seal intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> None COOL # 4	
Split Samples <input type="checkbox"/> Accepted (Signature)						<input type="checkbox"/> Declined					

EPA Form

DISTRIBUTION:

White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

S 035765

Received by: (Signature) <i>[Signature]</i>	Date / Time	Received for: (Signature) <i>[Signature]</i>	Date / Time
Received by: (Signature) <i>[Signature]</i>	Date / Time <i>10/20/83 18:30</i>	Received for: (Signature) <i>[Signature]</i>	Date / Time <i>10/20/83 18:30</i>
Received by: (Signature)	Date / Time	Received for: (Signature)	Date / Time

Completed (Y/N)
 Signature for SAS
[Signature]

Sample Collection Requirements:

Confirmatory Analysis and Special Analytical Services (SAS) parameters may require extra volume.

Cooler and Sample Documentation:

- Complete all sections of the SAS Packing List/Chain of Custody Form. Press firmly with a ball-point pen to ensure that carbon copies are legible. Check the information and correct any errors.
- Please remember to complete the Chain of Custody Information on the form.
- Seal the two sets of laboratory SAS Packing List/Chain of Custody form copies in a plastic bag. Include a return address for the cooler. Tape bag under cooler lid.
- Overlap the lid and bottle and bottle of each sample container with custody seals.
- Seal each container in a plastic bag.
- Pack medium and high concentration samples in metal cans.
- Cool low waters to 4°C. Cooling of low soils is optional. Do not cool medium or high concentration waters and soils.
- Separate and surround cooler contents with vermiculite or equivalent packing.
- Seal the cooler, overlapping the lid and body with custody seals.
- Send SMO the yellow copy of the SAS Packing List/Chain of Custody Form within 3 days.

Sample Shipment Reporting:

- PHONE IN ALL SHIPMENTS IMMEDIATELY TO SMO (or to RSCC, if instructed)
- Required information:
 SAS (and/or Case) number
 Date shipped
 Number of samples by concentration, matrix, and analysis
 Carrier and airbill number
 Next planned shipment
 Leave your name and a number where you can be reached.
- Information for SATURDAY DELIVERIES must be phoned in by 3:00 p.m. (Eastern) the preceding FRIDAY.
- Report any delays or changes of scope (i.e., changes in number of samples to be collected, matrix changes, etc.)
- CALL IF YOU HAVE ANY QUESTIONS

**USEPA Contract Laboratory Program
 Sample Management Office**
 P.O. Box 818
 Alexandria, VA 22313
 Phone: (703) 557-2490
 (703) 684-5678
 FAX: (703) 683-0378



USEPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 818
 Alexandria, VA 22313
 Phone: (703) 557-2490
 (703) 684-5678
 FAX: (703) 683-0378

Special Analytical Services
 Reporting Instructions



1. Project Code 105030	Account Code	2. Region No. 5	Sampling Co. JACOBS	4. Date Shipped 10/21/93	Carrier FED EX	6. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	7. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NAOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved
Regional Information		3. Type of Activity		5. Ship To			
Non-Superfund Program		Remedial <input type="checkbox"/> Removal <input type="checkbox"/>		Pacific Analytical			
Site Name MILL OF STOUGHTON LANDFILL		Lead <input type="checkbox"/> Pre-Remedial <input type="checkbox"/> RIFS <input type="checkbox"/> CLEM <input type="checkbox"/>		6349 PASO DEL ARCO			
City State STOUGHTON, VA		PRP <input type="checkbox"/> PA <input type="checkbox"/> RA <input type="checkbox"/> REM <input checked="" type="checkbox"/>		CARLSBAD, CA 92009			
Site Spill ID		ST <input type="checkbox"/> SSI <input type="checkbox"/> O&M <input type="checkbox"/> OIL <input type="checkbox"/>		619/931-1766			
FED <input type="checkbox"/> LSI <input type="checkbox"/> NPLD <input type="checkbox"/> UST <input type="checkbox"/>							

Sample Numbers	A Matrix Enter from Box 6	B Conc Low Med High	C Preservative Used from Box 7	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Designated Field QC
193JM04512	2	L	1	THE METHS 502.2	-	5008581	SL-MW7S-1093	10/20/93 1820	SKL	-
293JM04513	2	L	1	THE METHS 502.2	-	5008586	SL-MW7B-1093	10/20/93 1600	SKL	-
393JM04514	2	L	1	THE METHS 502.2	-	5008587	SL-MW7C-1093	10/20/93 1650	SKL	-
493JM04522	2	L	N	THE METHS 502.2	-	5008589	SL-TB08-1093	10/21/93 0920	SKL	TB
593JM04520	2	L	1	THE METHS 502.2	-	5008594	SL-MW4D-1093	10/21/93 1025	SKL	-

Shipment for SAS complete? (Y/N) Y

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Susan Lorenz</i>	Date / Time 10/21/93 1930	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature) <i>[Signature]</i>	Date / Time	Received for Laboratory by: (Signature) <i>[Signature]</i>	Date / Time 10-22-93 950	Remarks CS#s 147418, 147409 cooler 5	Is custody seal intact? <input checked="" type="checkbox"/> Y/N/none
EPA Form			Split Samples <input type="checkbox"/> Accepted (Signature) <input type="checkbox"/> Declined		

DISTRIBUTION:
 White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO



Sample Collection Requirements

- 1. Confirmatory Analyses and Special Analytical Services (SAS) parameters may require extra volume.
- 2. Cooler and Sample Documentation
 - Complete all sections of the SAS Packing List/Chain of Custody Form.
 - Press firmly with a ballpoint pen to ensure that carbon copies are legible. Check the information and correct any errors.
 - Please remember to complete the Chain of Custody Information on the form.
 - Seal the two sets of laboratory SAS Packing List/Chain of Custody form copies in a plastic bag. Include a return address for the cooler. Tape bag under cooler lid.
 - Overlap the lid and bottle and bottle of each sample container with custody seals.
 - Seal each container in a plastic bag.
 - Pack medium and high concentration samples in metal cans.
 - Cool low waters to 4°C. Cooling of low soils is optional. Do not cool medium or high concentration waters and soils.
 - Separate and surround cooler contents with vermiculite or equivalent packaging.
 - Seal the cooler, overlapping the lid and body with custody seals.
 - Send SMO the yellow copy of the SAS Packing List/Chain of Custody Form within 3 days.

- 3. Sample Shipment Reporting
 - PHONE IN ALL SHIPMENTS IMMEDIATELY TO SMO (or to RSCC, if instructed)
- Required information:
- SAS (and/or Case) number
 - Date shipped
 - Number of samples by concentration, matrix, and analysis

Carrier and airbill number
 Next planned shipment date and time
 Leave your name and a number where you can be reached.
 Information for SATURDAY DELIVERIES must be phoned in by 3:00 p.m. (Eastern) the preceding FRIDAY.
 Report any delays or changes of scope (i.e., changes in number of samples to be collected, matrix changes, etc.)

CALL IF YOU HAVE ANY QUESTIONS
 USEPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 818
 Alexandria, VA 22313
 Phone: (703) 557-2490
 (703) 684-5678
 FAX: (703) 683-0378

Project Code	Account Code	Region No.	Date	Shipper Name	Carrier	Ship Date	Ship Time	Shipper	Carrier	Ship Date	Ship Time	Shipper	Carrier	Ship Date	Ship Time	Shipper	Carrier
2030		5	1/23/85		...												
			1/23/85														

CHAIN OF CUSTODY RECORD

Date Time	Received by: (Signature)	Date Time	Received by: (Signature)	Date Time	Received by: (Signature)	Date Time	Received by: (Signature)
1/23/85	[Signature]						

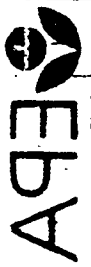


1. Project Code 25020	Account Code	2. Region No. 5	Sampling Co. JACOBS	4. Date Shipped 10/21/93	Carrier FED EX	6. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	7. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved			
Regional Information	3. Sampler (Name) Suzanne Lorenz		Airbill Number 7880166593							
Non-Superfund Project	Sampler Signature <i>Suzanne Lorenz</i>		5. Ship To PACIFIC ANALYTICAL 6349 PASEO DEL LAHO CARLSBAD, CA 92009							
Site Name 7707 STATION LANDFILL	Site ID	3. Type of Activity <input type="checkbox"/> ST <input type="checkbox"/> PRP <input type="checkbox"/> ST <input type="checkbox"/> FED <input type="checkbox"/> PA <input type="checkbox"/> SS <input type="checkbox"/> LS <input type="checkbox"/> RIFS <input type="checkbox"/> RD <input type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD <input checked="" type="checkbox"/> CLEM <input checked="" type="checkbox"/> REMA <input type="checkbox"/> REM <input type="checkbox"/> OIL <input type="checkbox"/> UST		5. Ship To 619/931-1766						
City, State WASHINGTON, VA	Site ID			E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Designated Field OC	
Sample Numbers 93JM04526	A Matrix Enter from Box 6 2	B Conc Low Med High L	C Preservative Used from Box 7 N	D Analysis THE METHODS 502.2	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number 5008588	G Station Location Identifier SL-TB07-1093	H Mo/Day/Year/Time Sample Collection 10/21/93 0920	I Sampler Initials SL	J Designated Field OC TB
93JM04525	2	L	N	THE METHODS 502.2		5008626	SL-MW8B-1093	10/21/93 1255	SL	-
93JM04524	2	L	1	THE METHODS 502.2		5008627	SL-MW4S-1093	10/21/93 1255	SL	-
93JM04526	2	L	1	THE METHODS 502.2		5008628	SL-MW3B-1093	10/21/93 1130	SL	-
93JM04527	2	L	1	THE METHODS 502.2		5008629	SL-MW3S-1093	10/21/93 1550	SL	-

Shipment for SAS Complete? (Y/N)

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Suzanne Lorenz</i>	Date / Time 10/21/93 1930	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature) <i>[Signature]</i>	Date / Time	Received for Laboratory by: (Signature) <i>[Signature]</i>	Date / Time 10/22/93	Remarks 15 # 147425, 147426	Is custody seal intact? <input checked="" type="checkbox"/> Y/N/none
Split Samples <input type="checkbox"/> Accepted <input type="checkbox"/> Declined			(Signature)		



EPA
 Contract Laboratory Program
 Office of Water
 303-223-5600
 412-221-5800
 800-424-6343
 800-424-6343
 800-424-6343

Special Analysis

Sample Collection Requirements:
 • Confirmatory Analysis and Special Analytical Services (SAS) parameters may require extra volume.
Cooler and Sample Documentation
 Complete all sections of the SAS Packing List/Chain of Custody Form. Press firmly with a ballpoint pen to ensure that carbon copies are legible. Check the information and correct any errors.
 • Please remember to complete the Chain of Custody information on the form.
 • Seal the two sets of laboratory SAS Packing List/Chain of Custody form copies in a plastic bag. Include a return address for the cooler. Tape bag under cooler lid.
 • Overlap the lid and bottle and bottle of each sample container with custody seals.
 • Seal each container in a plastic bag.
 • Pack medium and high concentration samples in metal cans.
 • Cool low waters to 5°C. Cooling of low soils is optional. Do not cool medium or high concentration waters and soils.
 • Separate and surround cooler contents with vermiculite or equivalent packaging.
 • Seal the cooler, overlapping the lid and body with custody seals.
 • Send SMO the yellow copy of the SAS Packing List/Chain of Custody Form within 3 days.

3. Sample Shipment Reporting
 • **PHONE IN ALL SHIPMENTS IMMEDIATELY TO SMO (or to RSCC, if instructed)**
 Required information:
 SAS (and/or Case) number
 Date shipped
 Number of samples by concentration, matrix, and analysis
 Carrier and airbill number
 Next planned shipment
 Leave your name and a number where you can be reached.
 • Information for SATURDAY DELIVERIES must be phoned in by 3:00 p.m. (Eastern) the preceding FRIDAY.
 • Report any delays or changes of scope (i.e., changes in number of samples to be collected, matrix changes, etc.)
 • **CALL IF YOU HAVE ANY QUESTIONS**
 USEPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 818
 Alexandria, VA 22313
 Phone: (703) 557-2490
 (703) 684-5678
 FAX: (703) 683-0378

Received by (Signature)	Date / Time	Received by (Signature)	Date / Time	Received by (Signature)	Date / Time
<i>[Signature]</i>	08/23/90	<i>[Signature]</i>	08/23/90	<i>[Signature]</i>	08/23/90
<i>[Signature]</i>		<i>[Signature]</i>		<i>[Signature]</i>	
<i>[Signature]</i>		<i>[Signature]</i>		<i>[Signature]</i>	
<i>[Signature]</i>		<i>[Signature]</i>		<i>[Signature]</i>	

CHAIN OF CUSTODY RECORD

Approved: *[Signature]*
 Date: 08/23/90
 Title: *[Signature]*
 Date: 08/23/90
 Title: *[Signature]*
 Date: 08/23/90
 Title: *[Signature]*

Narrative SAS 08143-E-01

EPA Sample No: 93JM04501, 502, 503, 504, 505, 506, 507,
D07, 509, 510, 511, 512, 513, 514,
515, 516, 519, 520, 521, 522, 525,
526, 527, 528, 530, 531, 532, D32,
533, 534, 535, 539, 540

93JM04516MS, 516MSD, 525MS, 525MSD

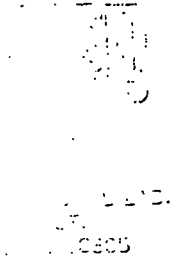
1. All samples were analyzed for the requested targets following EPA method 524.2
2. THF was spiked at a level ten times the other analytes into all standards, sample spikes and LBFs.
3. As per a prior communication with Stephen Rodiger the surrogate compounds were accidentally left out of a daily blank. The samples all had surrogate recoveries within QC limits. The affected samples were then reanalyzed but out of holding time. As requested both sets of data are included

The following samples were affected:

93JM04521,22, 25, 26, 27, 28, 28DL, 33, 39DL



Dante Bencivengo
Mass Spec Lab Manager



PACIFIC ANALYTICAL, INC.
6349 PASEO DEL LAGO
CARLSBAD, CALIFORNIA 92009

06 October 1993

Facsimile Communication
page 1 of 1

To: Stephan Rodiger, SMO Region 5 Coordinator
FAX: (703)683-0378

Fm: Steve Parsons
FAX: (619)931-9479

Subject: SAS 08143-E-01

The following information is supplied in response to your FAX dated 05 October 1993 and phone call on 06 October 93.

1. The request is for the analysis of 30+2 water samples for tetrahydrofuran, dichlorofluoromethane, and trichlorofluoromethane by EPA Method 524.2. The CRQL for the analytes is 10 uG/L for water. The three analytes will be used to fortify a matrix spike and duplicate matrix spike sample at 50 uG/L. Holding times, and QC criteria are those specified in EPA Method 524.2. Data turnaround time is specified in the SAS request as 30 days from the receipt of the last sample in the SDG.

2. Pacific Analytical is a CLP contract lab and is able to meet all the requirements required under EPA Method 524.2. This has been verified both by EPA audit and performance over the past year. In addition PA has analytical standards in house for tetrahydrofuran, dichlorofluoromethane, and trichlorofluoromethane. Capacity assigned to perform the work on this SAS will not be affected by other work in house or other unscheduled work.

3. Personnel assigned to perform this work are those designated in Pacific Analytical's Capabilities Statement. The following individual's resumes may be found in the above stated document and are assigned to perform under this SAS:

Sample Receipt: Laura Soeten

GC/MS analysis: Mark Greg

Data review: Elana Colby

Document Control: Paula Zukoff-Romanoski

Project Manager: Lee Helms

4. The analysis will be performed on either a VG 12/250 or a VG MD800. Both of these instruments are equipped with O.I. Model 4460A purge and traps with MPM-16 autosamplers. Both of these instruments are available to perform these analyses.

5. References: EPA CLP Program Metcaff & Eddy
DycCorp/Viar Michael Dennis
(703)557-2490 (614)890-5501

000002

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04501

	EPA SAMPLE NO.	S1 (DCB)#	S2 (BFB)#	OTHER	TOT OUT
01	VBLK37	103	94		
02	LFB 1 ppb	101	96		
03	93JM04501	101	97		
04	93JM04502	100	98		
05	93JM04503	99	96		
06	93JM04504	101	94		
07	93JM04505	102	101		
08	93JM04506	101	93		
09	93JM04508	99	97		
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

QC LIMITS

S1 (DCB) = 1,2-Dichlorobenzene-d4 (80-120)

S2 (BFB) = Bromofluorobenzene (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04501

	EPA SAMPLE NO.	S1 (DCB)#	S2 (BFB)#	OTHER	TOT OUT
01	VBLK38	100	94		
02	LFB 1 ppb	96	100		
03	93JM04507	99	97		
04	93JM04D07	99	97		
05	93JM04510	99	98		
06	93JM04511	99	99		
07	93JM04515	100	100		
08	93JM04509	102	101		
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

S1 (DCB) = 1,2-Dichlorobenzene-d4 (80-120) QC LIMITS
 S2 (BFB) = Bromofluorobenzene (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04501

	EPA SAMPLE NO.	S1 (DCB)#	S2 (BFB)#	OTHER	TOT OUT
01	VBLK41	103	88		
02	LFB 1 ppb	105	96		
03	93JM04512	104	93		
04	93JM04513	102	90		
05	93JM04514	105	90		
06	93JM04519	102	94		
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

QC LIMITS

S1 (DCB) = 1,2-Dichlorobenzene-d4 (80-120)

S2 (BFB) = Bromofluorobenzene (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04501

	EPA SAMPLE NO.	S1 (DCB)#	S2 (BFB)#	OTHER	TOT OUT
01	VBLK42	99	83		
02	LFB 1 ppb	98	86		
03	93JM04516	99	83		
04	93JM04516MS	99	89		
05	93JM04516MSD	98	92		
06	93JM04520	99	87		
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

QC LIMITS

S1 (DCB) = 1,2-Dichlorobenzene-d4 (80-120)
 S2 (BFB) = Bromofluorobenzene (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04522

	EPA SAMPLE NO.	S1 (DCB)#	S2 (BFB)#	OTHER	TOT OUT
01	VBLK43	7*	3*		2
02	LFB 1 ppb	104	96		
03	93JM04521	103	92		
04	93JM04522	104	93		
05	93JM04525	104	93		
06	93JM04526	104	92		
07	93JM04527	105	93		
08	93JM04528	105	94		
09	93JM04530	108	94		
10	93JM04531	103	93		
11	93JM04532	107	97		
12	93JM04D32	111	91		
13	93JM04533	104	93		
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

QC LIMITS

S1 (DCB) = 1,2-Dichlorobenzene-d4 (80-120)
S2 (BFB) = Bromofluorobenzene (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

000024

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04522

	EPA SAMPLE NO.	S1 (DCB)#	S2 (BFB)#	OTHER	TOT OUT
01	VBLK44	108	84		
02	LFB 1 ppb	101	86		
03	93JM04528DL	104	86		
04	93JM04533DL	101	90		
05	93JM04534	100	91		
06	93JM04535	101	89		
07	93JM04539	102	90		
08	93JM04540	101	87		
09	93JM04530RE	101	89		
10	93JM04531RE	100	88		
11	93JM04532RE	102	91		
12	93JM04D32RE	103	89		
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

S1 (DCB) = 1,2-Dichlorobenzene-d4 QC LIMITS (80-120)
 S2 (BFB) = Bromofluorobenzene (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04522

	EPA SAMPLE NO.	S1 (DCB)#	S2 (BFB)#	OTHER	TOT OUT
01	VBLK45	103	88		
02	LFB 1 ppb	105	90		
03	93JM04521RE	105	84		
04	93JM04522RE	108	86		
05	93JM04525RE	106	81		
06	93JM04525MS	103	95		
07	93JM04525MSD	103	96		
08	93JM04526RE	100	86		
09	93JM04527RE	104	88		
10	93JM04528RE	103	86		
11	93JM04539DL	103	88		
12	93JM04533RE	103	88		
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

QC LIMITS

S1 (DCB) = 1,2-Dichlorobenzene-d4 (80-120)

S2 (BFB) = Bromofluorobenzene (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3A

VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix Spike Sample: 93JM04516

COMPOUND	SPIKE ADDED (ng)	SPIKE REC	DUPL REC	RPD
Dichlorodifluoromethane	5	2.3	2.2	4.4
Trichlorofluoromethane	5	3.4	2.9	15.9
Tetrahydrofuran	50	41.8	43.1	3.1

000027

3A

VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix Spike Sample: 93JM04525

COMPOUND	SPIKE ADDED (ng)	SPIKE REC	DUPL REC	RPD
Dichlorodifluoromethane	5	5.4	5.6	3.6
Trichlorofluoromethane	5	5.5	5.4	1.8
Tetrahydrofuran	50	50.5	55.7	9.8

000028

VBLK 37

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04501

Lab File ID: 10J2201

Lab Sample ID: 00000

Date Analyzed: 10/22/93

Time Analyzed: 1142

Matrix: (soil/water) WATER

Level: (low/med) LOW

Instrument ID: VG10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LFB 1 ppb	00001	10J2202	10/22/93
02	93JM04501	68601	10J2203	10/22/93
03	93JM04502	68602	10J2204	10/22/93
04	93JM04503	68603	10J2205	10/22/93
05	93JM04504	68604	10J2206	10/22/93
06	93JM04505	68605	10J2207	10/22/93
07	93JM04506	68606	10J2208	10/22/93
08	93JM04508	68607	10J2209	10/22/93
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

LFB 38

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04501

Lab File ID: 10J2502

Lab Sample ID: 00000

Date Analyzed: 10/25/93

Time Analyzed: 1633

Matrix: (soil/water) WATER

Level: (low/med) LOW

Instrument ID: VG10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LFB 1 ppb	00001	10J2503	10/25/93
02	93JM04507	68608	10J2504	10/25/93
03	93JM04D07	68609	10J2505	10/25/93
04	93JM04510	68610	10J2506	10/25/93
05	93JM04511	68611	10J2507	10/25/93
06	93JM04515	68612	10J2508	10/25/93
07	93JM04509	68613	10J2509	10/25/93
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

COMMENTS:

VBLK41

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04501

Lab File ID: 10K0101

Lab Sample ID: 00000

Date Analyzed: 11/01/93

Time Analyzed: 1545

Matrix: (soil/water) WATER

Level: (low/med) LOW

Instrument ID: VG10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID.	LAB FILE ID	DATE ANALYZED
01	LFB 1 ppb	00001	10K0102	11/01/93
02	93JM04512	68615	10K0103	11/01/93
03	93JM04513	68616	10K0104	11/01/93
04	93JM04514	68617	10K0105	11/01/93
05	93JM04519	68618	10K0106	11/01/93
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

VBLK42

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04501

Lab File ID: 10K0202

Lab Sample ID: 00000

Date Analyzed: 11/02/93

Time Analyzed: 1225

Matrix: (soil/water) WATER

Level: (low/med) LOW

Instrument ID: VG10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LFB 1 ppb	00001	10K0203	11/02/93
02	93JM04516	68614	10K02	11/02/93
03	93JM04516MS	68614	10K02MS	11/02/93
04	93JM04516MS	68614	10K02MSD	11/02/93
05	93JM04520	68619	10K0204	11/02/93
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

COMMENTS:

VBLK43

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04522

Lab File ID: 10K0401

Lab Sample ID: 00000

Date Analyzed: 11/04/93

Time Analyzed: 1658

Matrix: (soil/water) WATER

Level: (low/med) LOW

Instrument ID: VG10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LFB 1 ppb	00001	10K0402	11/04/93
02	93JM04521	68620	10K0403	11/04/93
03	93JM04522	68621	10K0404	11/04/93
04	93JM04525	68622	10K0405	11/04/93
05	93JM04526	68623	10K0406	11/04/93
06	93JM04527	68624	10K0407	11/04/93
07	93JM04528	68625	10K0408	11/04/93
08	93JM04530	68626	10K0409	11/04/93
09	93JM04531	68627	10K0410	11/04/93
10	93JM04532	68628	10K0411	11/04/93
11	93JM04D32	68629	10K0412	11/04/93
12	93JM04533	68630	10K0413	11/04/93
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

COMMENTS:

VBLIC44

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: PACIFIC ANALYTICAL, INC.

Contract:

Lab Code: PACIF Case No.:

SAS No.: 8143E-01 SDG No.: 93JM04522

Lab File ID: 10K0602

Lab Sample ID: 00000

Date Analyzed: 11/05/93

Time Analyzed: 2033

Matrix: (soil/water) WATER

Level:(low/med) LOW

Instrument ID: VG10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LFB 1 ppb	00001	10K0603	11/05/93
02	93JM04521RE	68620	10K0604	11/05/93
03	93JM04522RE	68621	10K0605	11/05/93
04	93JM04525RE	68622	10K06	11/05/93
05	93JM04525MS	68622	10K06MS	11/05/93
06	93JM04525MS	68622	10K06MSD	11/05/93
07	93JM04526RE	68623	10K0606	11/06/93
08	93JM04527RE	68624	10K0607	11/06/93
09	93JM04528RE	68625	10K0608	11/06/93
10	93JM04539DL	68633	10K0609	11/06/93
11	93JM04533RE	68630	10K0610	11/06/93
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

COMMENTS:

1/BLK 45

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: PACIFIC ANALYTICAL, INC. Contract:
Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522
Lab File ID: 10K0502 Lab Sample ID: 00000
Date Analyzed: 11/05/93 Time Analyzed: 1208
Matrix: (soil/water) WATER Level:(low/med) LOW
Instrument ID: VG10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LFB 1 ppb	00001	10K0503	11/05/93
02	93JM04528DL	68625	10K0504	11/05/93
03	93JM04533DL	68630	10K0505	11/05/93
04	93JM04534	68631	10K0506	11/05/93
05	93JM04535	68632	10K0507	11/05/93
06	93JM04539	68633	10K0508	11/05/93
07	93JM04540	68634	10K0509	11/05/93
08	93JM04530RE	68626	10K0510	11/05/93
09	93JM04531RE	68627	10K0511	11/05/93
10	93JM04532RE	68628	10K0512	11/05/93
11	93JM04D32RE	68629	10K0513	11/05/93
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK37

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 00000

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2201

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/22/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000354

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK38

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 00000

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2502

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000358

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK41

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 00000

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0101

Level: (low/med) LOW Date Received:

Moisture: not dec. Date Analyzed: 11/01/93

Column: (pack/cap) CAP Dilution Factor: 0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000362

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK42

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 00000

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0202

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/02/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000366

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK43

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 00000

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0401

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/04/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000370

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK44

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 00000

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0502

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000374

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK45

Lab Name: PACIFIC ANALYTICAL, INC. Contract:
 Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501
 Matrix: (soil/water) WATER Lab Sample ID: 00000
 Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0602
 Level: (low/med) LOW Date Received:
 Moisture: not dec. _____ Date Analyzed: 11/05/93
 Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000378

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04501

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68601

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2203

Level: (low/med) LOW Date Received: 10/19/93

Moisture: not dec. _____ Date Analyzed: 10/22/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000054

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04502

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68602

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2204

Level: (low/med) LOW Date Received: 10/19/93

Moisture: not dec. _____ Date Analyzed: 10/22/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000058

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04503

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68603

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2205

Level: (low/med) LOW Date Received: 10/19/93

Moisture: not dec. _____ Date Analyzed: 10/22/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
---------	----------	--	---

75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000062

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04504

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68604

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2206

Level: (low/med) LOW Date Received: 10/20/93

Moisture: not dec. _____ Date Analyzed: 10/22/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000066

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04505

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68605

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2207

Level: (low/med) LOW Date Received: 10/20/93

Moisture: not dec. _____ Date Analyzed: 10/22/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000070

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04506

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68606

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2208

Level: (low/med) LOW Date Received: 10/20/93

Moisture: not dec. _____ Date Analyzed: 10/22/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
---------	----------	--	---

75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000074

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04507

Lab Name: PACIFIC ANALYTICAL, INC. Contract:
Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501
Matrix: (soil/water) WATER Lab Sample ID: 68608
Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2504
Level: (low/med) LOW Date Received: 10/21/93
Moisture: not dec. _____ Date Analyzed: 10/25/93
Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000078

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04508

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68607

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2209

Level: (low/med) LOW Date Received: 10/20/93

Moisture: not dec. _____ Date Analyzed: 10/22/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000086

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04509

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68613

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2509

Level: (low/med) LOW Date Received: 10/21/93

Moisture: not dec. _____ Date Analyzed: 10/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000090

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04510

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68610

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2506

Level: (low/med) LOW Date Received: 10/21/93

Moisture: not dec. _____ Date Analyzed: 10/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000094

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04511

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68611

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2507

Level: (low/med) LOW Date Received: 10/21/93

Moisture: not dec. _____ Date Analyzed: 10/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000098

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04512

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68615

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0103

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/01/93

Column: (pack/cap) CAP Dilution Factor: 0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000102

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04513

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68616

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0104

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/01/93

Column: (pack/cap) CAP Dilution Factor: 0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
---------	----------	--	---

75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000106

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04514

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68617

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0105

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/01/93

Column: (pack/cap) CAP Dilution Factor: 0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000110

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04515

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68612

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10J2508

Level: (low/med) LOW Date Received: 10/21/93

Moisture: not dec. _____ Date Analyzed: 10/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000114

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04516

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68614

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K02

Level: (low/med) LOW Date Received: 10/21/93

Moisture: not dec. _____ Date Analyzed: 11/02/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000118

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04519

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68618

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0106

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/01/93

Column: (pack/cap) CAP Dilution Factor: 0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000122

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04520

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68619

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0204

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/02/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04521

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68620

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0403

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/04/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000130

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04521RE

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 68620

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0604

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000134

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04522

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68621

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0404

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/04/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L		Q
75-71-8-----	Dichlorodifluoromethane_____	10	U	
75-69-4-----	Trichlorofluoromethane_____	10	U	
109-99-9-----	Tetrahydrofuran_____	10	U	

FORM I

1/87 Rev.

000138

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04522RE

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68621

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0605

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000142

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04525

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68622

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0405

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/04/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000146

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04525RE

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68622

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K06

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000150

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04526

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68623

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0406

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/04/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000154

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04526RE

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68623

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0606

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/06/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000158

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04527

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68624

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0407

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/04/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000162

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04527RE

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68624

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0607

Level: (low/med) LOW Date Received: 10/22/93

Moisture: not dec. _____ Date Analyzed: 11/06/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000166

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04528

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68625

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0408

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/04/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	381	E

FORM I

1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04528RE

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68625

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0608

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/06/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	388	E

FORM I

1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04528DL

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68625

Sample wt/vol: 2.500 (g/mL) ml Lab File ID: 10K0504

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	20	UD
75-69-4-----	Trichlorofluoromethane_____	20	UD
109-99-9-----	Tetrahydrofuran_____	417	D

FORM I

1/87 Rev.

000180

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04530

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68626

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0409

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/04/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000185

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04530RE

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68626

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0510

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04531

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68627

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0410

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/04/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	18	
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000193

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04531RE

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68627

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0511

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	18	
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000198

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04532

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68628

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0411

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/04/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000203

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04532RE

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68628

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0512

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000207

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04D32

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68629

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0412

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/04/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000211

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04D32RE

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68629

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0513

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000215

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04533

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68630

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0413

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/04/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	285	E
75-69-4-----	Trichlorofluoromethane_____	16	
109-99-9-----	Tetrahydrofuran_____	94	

FORM I

1/87 Rev.

000219

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04533RE

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68630

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0610

Level: (low/med) LOW Date Received: 10/23/90

Moisture: not dec. _____ Date Analyzed: 11/06/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	185	E
75-69-4-----	Trichlorofluoromethane_____	13	
109-99-9-----	Tetrahydrofuran_____	95	

FORM I

1/87 Rev.

000226

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04533DL

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68830

Sample wt/vol: 0.200 (g/mL) ml Lab File ID: 10K0505

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 25

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	315	
75-69-4-----	Trichlorofluoromethane_____	250	U
109-99-9-----	Tetrahydrofuran_____	250	U

FORM I

1/87 Rev.

000233

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04534

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68631

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0506

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.



000238

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04535

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68632

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0507

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000242

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04539

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68633

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0508

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	288	E
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	42	

FORM I

1/87 Rev.

000246

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04539DL

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68633

Sample wt/vol: 0.200 (g/mL) ml Lab File ID: 10K0609

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/06/93

Column: (pack/cap) CAP Dilution Factor: 25

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	357	
75-69-4-----	Trichlorofluoromethane_____	250	U
109-99-9-----	Tetrahydrofuran_____	250	U

FORM I

1/87 Rev.

000252

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04540

Lab Name: PACIFIC ANALYTICAL, INC. Contract:

Lab Code: PACIF Case No.: SAS No.: 8143E-01 SDG No.: 93JM04522

Matrix: (soil/water) WATER Lab Sample ID: 68634

Sample wt/vol: 5.000 (g/mL) ml Lab File ID: 10K0509

Level: (low/med) LOW Date Received: 10/23/93

Moisture: not dec. _____ Date Analyzed: 11/05/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8-----	Dichlorodifluoromethane_____	10	U
75-69-4-----	Trichlorofluoromethane_____	10	U
109-99-9-----	Tetrahydrofuran_____	10	U

FORM I

1/87 Rev.

000257

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No. _____ CERCLIS No. WI
Case No. SAS8143EX1 Site Name Location: Stoughton City, LF
Contractor or EPA Lab: Pacific Data User: Superfund
No. of Samples: 34 Date Samples or Data Received: 11-24-93

Have Chain-of-Custody records been received? YES NO
Have traffic reports or packing lists been received? YES NO
If no, are traffic report or packing list numbers written on the chain-of-custody record? YES NO
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? YES NO
No. of samples claimed: 34 No. of samples received: 34
Received by: Lynette Burnett Date: 11-24-93
Received by LSSS: Dorothy M. May Date: 12/01/93
Review started: 12-23-93 Reviewer Signature: Edna Wilson
Total time spent on review: 30.5 Date review completed: 1-7-94
Copied by: Freddie Hopkins Date: 11/24/94
Mailed to user by: AD Harris Date: 1-26-94

DATA USERS:

Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ESCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete () Suitable for Intended Purpose () if OK
Organic Data Complete () Suitable for Intended Purpose ()
Dioxin Data Complete () Suitable for Intended Purpose ()
SAS Data Complete () Suitable for Intended Purpose ()
prblms below.

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files Date: _____

VOAS
SVOAS
Pest/PCBs
①

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 1/3/94

SUBJECT: Review of Region V CLP Data
Received for Review on NOV 24, 1993

FROM: Charles T. Elly, Director (SL-10C)
Central Regional Laboratory *MSP for CTE*

TO: Data User: Superfund

We have reviewed the data for the following case.

SITE NAME: Stoughton City LF (WI)

CASE and/or SAS NUMBER: SAS 8143E-02⁽¹⁾ SDG NUMBER: 93JM04501

Number and Type of Samples: 20 (water)

CLP Sample Numbers: 93JM04501, 314, 317-318, 324, 326, 328

CLP Laboratory: Enviro-system Hrs. for Review 14

Following are our findings: 18 w/w

The data are acceptable for use with qualification.

Mumtaz Pasha
1/3/94

- () Data are acceptable for use.
- (X) Data are acceptable for use with qualification.
- () Data are preliminary, pending verification by laboratory.
- () Data are unacceptable.

cc: Edward Kantor, EMSL-Las Vegas
Julie Frankel, VIAR & Co. (SMO)

NARRATIVE

Contractor: ENVSYS
Case: SAS8143E-02
SDG: 93JM04S01

Page 1 of 7

The samples were collected on 10/18 through 10/22/93. The laboratory received twenty (20) water samples on 10/19 through 10/23/93 in good condition for VOA and SVOA drinking water analysis following the SOW for SAS 08143-E-02.

Samples 93JM04S03, 93JM04S08, 93JM04S17, 93JM04S18, 93JM04S24 were trip blanks and only analyzed for VOAs

Sample 93JM04S28 was used for the matrix spike/spike duplicate for VOA and SVOA analysis.

The VOA samples were analyzed within the holding time of fourteen (14) days. The SVOA samples were extracted within the holding time of fourteen (14) days. The extracts were than promptly analyzed.

No PE sample was shipped to the laboratory with this group of samples.

Reviewed by: Thomas E. Sedlacek Lockheed/ESAT
Date: December 10, 1993

NARRATIVE

Page 2 of 7

Contractor: ENVSYS
Case: SAS8143E-02
SDG: 93JM04S01

Below is a summary of the out of control audits and the possible effects on the data for this case.

I. HOLDING TIMES.

The samples were collected on 10/18 to 10/22/93. The laboratory received twenty (20) water samples on 10/19 to 10/23/93 in good condition for organic drinking water analysis. The VOA samples were analyzed within the holding time of fourteen (14) days. The SVOA samples were extracted within the holding time of fourteen (14) days. The extracts were analyzed within forty (40) days after extraction; therefore the results are acceptable.

II. MS TUNE/GC PERFORMANCE

GC/MS tuning complied with the mass list and ion abundance criteria for BFB and DFTPP.

II. CALIBRATIONS.

Initial and continuing calibration standards of VOA and SVOA were evaluated for Target Compounds Lists (TCLs) and outliers were recorded on the outlier forms included as part of this narrative.

IV. BLANKS.

VBLKC6, VBLKC7 and VBLK1 are the VOA method blanks for this data group. 1021STGBLK was the storage blank associated with this data group. No TCLs or TICs were reported in any of the blanks associated with this data set.

SBLKA1, SBLKA2 and SBLKA3 were the extraction method blanks for this data set. There were no TCLs or TICs reported in the blanks

V. SURROGATES

The surrogate for the volatile fraction, 4-Bromoflouro-benzene was out of range low for samples 93JM04S01, 93JM04S04, 93JM04S11 and 93JM04S26. Samples 93JM04S01RE and 93JM04S04 had the surrogate within limits, the results from these analysis should be used. The lab choose not to re-run 93JM04S11 and 93JM04S26, therefore all results for those samples are flagged estimated detects (J) and non-detects (UJ).

Reviewed by: Thomas E. Sedlacek Lockheed/ESAT
Date: December 10, 1993

NARRATIVE

Contractor: ENVSYS
Case: SAS8143E-02
SDG: 93JM04S01

Page 3 of 7

In the SVOA fraction SB1(NBZ) = Nitrobenzene-d5 was out of limits high in samples 93JM04S10, 93JM04S28, and 93JM0428MSD, since only one surrogate is out of range no action need be taken.

VI. MATRIX SPIKE/DUPLICATES

VOA All MS and MSD recoveries and RPD were within QC limits.

SVOA Recovery for N-Nitroso-di-n-propylamine was out low in the matrix spike. The recoveries for 4-Chloro-3-methylphenol, Pentachlorophenol and 4-Nitrophenol were out high in the matrix spike duplicate. The RPD for 4-Chloro-3-methylphenol, 1,2,4-Trichlorobenzene, Acenapthene, 2,4-Dinitrotoluene and Pyrene exceeded the QC limits. The above listed compounds are flagged estimated (J) for detects in sample 93JM04S28.

VII. OTHER QC CHECKS

A. FIELD DUPLICATE AND FIELD BLANKS

There were no identified field blank in this sample data group. Sample 93JM04S07 and 93JM04D07 are field duplicates.

B. LABORATORY CONTROL SAMPLES

The LCS for the VOA analysis had all recoveries with the QC control limits, therefore the results are acceptable.

The LCS for the SVOA analysis had recoveries for the following analytes below the QC limits; Bis(2-Chloroethyl)ether (54%), Naphthalene (55%), 2,4-Dinitrotoluene (37%), Diethylphthalate (37%) and Benzo(a)pyrene (51%). In accordance with the national guidelines, all results for these compounds are flagged estimated (J) and non-detects are flagged unusable (R).

VIII. INTERNAL STANDARDS.

In the VOA fraction, sample 93JM04S06 reported area counts for IS3 (CBZ) = Chlorobenzene-d5, low outside the required QC limits. Sample 93JM04S06RE had all internal standards within the QC limits and the results of this analysis should be used.

In the SVOA fraction all internal standards were within the windows for area and retention time.

Reviewed by: Thomas E. Sedlacek Lockheed/ESAT
Date: December 10, 1993

NARRATIVE

Contractor: ENVSYS
Case: SAS8143E-02
SDG: 93JM04S01

Page 4 of 7

IX. COMPOUND IDENTIFICATION

Target compounds (TCLs) and Tentatively Identified Compounds (TICs) were identified by "best fit" library search method.

X. COMPOUND QUANTITATION & REPORTED DETECTION LIMITS

VOA and SVOA Target compounds (TCLs) and Tentatively Identified Compounds (TICs) were properly quantitated; therefore the results are acceptable.

XI. SYSTEM PERFORMANCE.

All aspects of the system performance appear to be satisfactory.

XII. OVERALL ASSESSMENT.

With the qualifiers noted above the VOA and SVOA data is acceptable for use.

Reviewed by: Thomas E. Sedlacek Lockheed/ESAT
Date: December 10, 1993

CALIBRATION OUTLIERS
LOW CONCENTRATION WATER VOLATILE TCL COMPOUNDS

CASE/SAS#: 46143E2\8143E02
COLUMN: _____

CONTRACTOR: F-NUSYS
SITE NAME: STOUGHTON CITY LI

(Page 1 of 1)

Instrument#	MSC	Initial Cal.				Contin. Cal.				Contin. Cal.				Contin. Cal.			
		#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Date/Time:																	
Chloromethane	0.01	0.321	6.0					0.279	14.6					0.271	31.2	J	
Bromomethane	0.10																
Vinyl chloride	0.10																
Chloroethane	0.01																
Methylene chloride	0.01																
Acetone	0.01																
Carbon disulfide	0.01																
1,1-Dichloroethene	0.10																
1,1-Dichloroethane	0.20																
cis-1,2-Dichloroethene	0.10																
trans-1,2-Dichloroethene	0.10																
Chloroform	0.20																
1,2-Dichloroethane	0.10																
2-Butanone	0.01	2.069	43.1	J				0.024	65.2	J				0.020	71.0	J	
Bromochloromethane	0.10																
1,1,1-Trichloroethane	0.10																
Carbon tetrachloride	0.10																
Bromodichloromethane	0.20																
1,2-Dichloropropane	0.01																
cis-1,3-Dichloropropene	0.20																
Trichloroethene	0.30																
Dibromochloromethane	0.10																
1,1,2-Trichloroethane	0.10																
Benzene	0.50																
tran-1,3-Dichloropropene	0.10																
Bromoform	0.10																
4-Methyl-2-pentanone	0.01	0.119	27.5					0.063	30.2	J				0.074	37.5	J	
2-Hexanone	0.01	0.075	24.4	J				0.055	26.7					0.048	36.0	J	
Tetrachloroethene	0.20																
1,1,2,2-Tetrachloroethane	0.50																
1,2-Dibromoethane	0.10																
Toluene	0.40																
Chlorobenzene	0.50																
Ethylbenzene	0.10																
Styrene	0.30																
Xylene (total)	0.30																
1,2-Dibromo-3-chloropropane	0.10																
1,3-Dichlorobenzene	0.60																
1,4-Dichlorobenzene	0.50																
1,2-Dichlorobenzene	0.40																
Bromofluorobenzene	0.40																
Samples affected:		43JM04501	43JM04504	43JM04501RI	43JM04512	43JM04524		43JM04502RI	43JM04513	43JM04525MS				43JM04503	43JM04514	43JM04525MS	
		43JM04502	43JM04504	43JM04507RI	43JM04524	43JM04510DL		43JM04503	43JM04514	43JM04525MS				43JM04504	43JM04514	43JM04525MS	
		43JM04503	43JM04504	43JM04507RI	43JM04524	43JM04510DL		43JM04504	43JM04514	43JM04525MS				43JM04504	43JM04514	43JM04525MS	
		43JM04504	43JM04504	43JM04507RI	43JM04524	43JM04510DL		43JM04504	43JM04514	43JM04525MS				43JM04504	43JM04514	43JM04525MS	
		43JM04505	43JM04504	43JM04507RI	43JM04524	43JM04510DL		43JM04505	43JM04514	43JM04525MS				43JM04505	43JM04514	43JM04525MS	
		43JM04506	43JM04504	43JM04507RI	43JM04524	43JM04510DL		43JM04506	43JM04514	43JM04525MS				43JM04506	43JM04514	43JM04525MS	
		43JM04507	43JM04504	43JM04507RI	43JM04524	43JM04510DL		43JM04507	43JM04514	43JM04525MS				43JM04507	43JM04514	43JM04525MS	
		43JM04508	43JM04504	43JM04507RI	43JM04524	43JM04510DL		43JM04508	43JM04514	43JM04525MS				43JM04508	43JM04514	43JM04525MS	

Reviewer's Init/Date: JAS 12/9/93

* These flags should be applied to the analytes on the sample data sheets.
Minimum Relative Response Factor

CALIBRATION OUTLIER
LOW CONCENTRATION WATER SEMIVOLATILE TCL COMPOUNDS

(Page 1 of 2)

CASE/SAS#: 4143E2 / 4143E02
 COLUMN: _____

CONTRACTOR: E NUSYS
 SITE NAME: Stoughton City L.F.

Instrument#	MSA	Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
		#	rf	%rsd	#	rf	%d	#	rf	%d	#	rf	%d	#	rf	%d
Date/Time:																
Phenol		0.80														
bis(2-chloroethyl) Ether		0.70														
2-Chlorophenol		0.70														
2-Methylphenol		0.70														
2,2'-Oxybis(1-chl-propane)		0.01	6.542	9.5	6.133	9.7				2.5999	17.4		3.576	36.1	J	
4-Methylphenol		0.60														
N-nitroso-di-n-propylamine		0.50														
Hexachloroethane		0.30														
Nitrobenzene		0.20														
Isophorone		0.40														
2-Nitrophenol		0.10														
2,4-Dimethylphenol		0.20														
bis-(2-chloroethoxy)methane		0.30														
2,4-Dichlorophenol		0.20														
1,2,4-Trichlorobenzene		0.20														
Naphthalene		0.70														
4-Chloroaniline		0.01														
Hexachlorobutadiene		0.01														
4-Chloro-3-methylphenol		0.20														
2-Methylnaphthalene		0.40														
Hexachlorocyclopentadiene		0.01														
2,4,6-Trichlorophenol		0.20														
2,4,5-Trichlorophenol		0.20														
2-Chloronaphthalene		0.80														
2-Nitroaniline		0.01														
Dimethyl phthlate		0.01														
Acenaphthylene		1.30														
2,6-Dinitrotoluene		0.20														
3-Nitroaniline		0.01														
Acenaphthene		0.30														
2,4-Dinitrophenol		0.01														
4-Nitrophenol		0.01														
Dibenzofuran		0.80														
2,4-Dinitrotoluene		0.20														

Affected samples:	5BLK A1	93JM04502	93JM04513	LE501	93JM04007
	5BLK A2	93JM04504	93JM04514		
	5BLK A3	93JM04505	93JM04526		
	93JM04501	93JM04506	93JM04525		
		93JM04507	93JM0454MS		
		93JM04509	93JM0454MS0		
		93JM04510			
		93JM04511			
		93JM04512			

Reviewer's Init/Date: JAS 12/9/93

* These flags should be applied to the analytes on the sample data sheets.
 # Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 2 of 2)

CASE/SAS#: 5143E2/5143E02
COLUMN: _____

CONTRACTOR: ENVUSYS
SITE NAME: Stoughton City L.F.

Instrument#	M SA	Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
		#	rf	%rd	#	rf	%d	#	rf	%d	#	rf	%d	#	rf	%d
Date/Time:		11/05/93	10346		11/06/93	04812		11/15/93	0441		11/19/93	0929				
Dichlphthalate		0.01														
4-Chlorophenyl-phenylether		0.40														
Fluorene		0.90														
4-Nitroaniline		0.01														
4,6-Dinitro-2-methylphenol		0.01	0.155	15.7	0.169	4.0		0.171	10.3		0.202	30.3	J			
N-nitrosodiphenylamine		0.01														
4-Bromophenyl-phenylether		0.10														
Hexachlorobenzene		0.10														
Pentachlorophenol		0.05														
Phenanthrene		0.70														
Anthracene		0.70														
Carbazole																
Di-n-butylphthalate		0.01														
Fluoranthene		0.60														
Pyrene		0.60														
Butylbenzylphthalate		0.01														
3,3'-Dichlorobenzidine		0.01	0.235	24.5	0.172	26.4	J									
Benzo(a)anthracene		0.80														
Chrysene		0.70														
bis(2-Ethylhexyl)phthalate		0.01														
Di-n-octyl phthalate		0.01														
Benzo(b)fluoranthene		0.70														
Benzo(k)fluoranthene		0.70														
Benzo(a)pyrene		0.70														
Indeno(1,2,3-cd)pyrene		0.50														
Dibenz(a,h)anthracene		0.40														
Benzo(g,h,i)perylene		0.50														
Nitrobenzene-d5		0.01														
2-Fluorobiphenyl		0.70														
Terphenyl-d14		0.50														
Phenol-d5		0.80														
2-Fluorophenol		0.60														
2,4,6-Tribromophenol		0.01														
2-Chlorophenol-d4																
1,2-Dichlorobenzene-d4																

Reviewer's Init/Date: 5/15 12/9/93

* These flags should be applied to the analytes on the sample data sheets.
Minimum Relative Response Factor

DATA REPORTING QUALIFIERS
(page 1)

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE-if the results is a value greater than or equal to the Contract Required Quantitation Limit (CRQL), report the value.

U - Indicates compound was analyzed for but not detected. The sample Quantitation Limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the Sample Quantitation Limit for phenol (330 U) would be corrected to:

$$\frac{(330 \text{ U}) \times \text{df}}{D}$$

$$\text{where } D = \frac{100 - \% \text{ moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100 - 24}{100} = 0.76$$

$$\frac{(330 \text{ U}) \times 10}{.76} = 4300 \text{ U rounded to the appropriate number of significant figures}$$

For soil samples subjected to GPC clean-up procedures, the extract must be concentrated to 0.5 ml, and the sensitivity of the analysis is not compromised by the cleanup procedures. Therefore, the CRQL values will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specified volume, this fact be accounted for in reporting the Sample Quantitation Limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration of 3 ug/L is calculated, report it as 3J. The Sample Quantitation Limit must be adjusted for dilution as discussed for the U flag. The J flag is also applied to pesticide/Aroclor results where the pesticide/Aroclor is confirmed to be present but the concentration is less than the CRQL.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds. Where the identification is based on a mass spectral library search. It is applied to all TIC results.

DATA REPORTING QUALIFIERS
(page 2)

- P** - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two columns (see Form X). The lower of the two values is reported on Form I and flagged with a "P".
- C** - This flag applies to pesticide results where identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but unsuccessful, do not apply this flag, instead use a laboratory-defined, discussed below.
- B** - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.
- E** - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for the specific analysis. This flag will not apply to pesticide/PCBs analyzed by GC/MS methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.
- D** - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.
- A** - This flag indicates that a TIC is a suspected aldol-condensation product.
- X** - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the SDG Narrative. If more than one flag is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B" and "D" flags for some sample. The laboratory-defined are limited to letters "X", "Y" and "Z".



1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NAOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5 3. Sampling Co. JACOBS	4. Date Shipped 10/18/93 Carrier FED EX	7. Date Received 10/19/93 Received by <i>[Signature]</i>												
		Sampler (Name) Louis Ehrhard		Airbill Number 634688308#2	Laboratory											
		Sampler Signature <i>[Signature]</i>		5. Ship To ENVIROSYSTEMS INC. 9200 RUMSEY ROAD SUITE 3102 COLUMBIA, MD 21045 410/964-0330		8. Transfer to _____ Date Received _____										
3. Type of Activity <table border="0"> <tr> <td>Remedial</td> <td>Removal</td> </tr> <tr> <td>Lead</td> <td>CLEM</td> </tr> <tr> <td>Pre-Remedial</td> <td>REMA</td> </tr> <tr> <td>RA</td> <td>REM</td> </tr> <tr> <td>O&M</td> <td>OIL</td> </tr> <tr> <td>NPLD</td> <td>UST</td> </tr> </table>		Remedial	Removal	Lead	CLEM	Pre-Remedial	REMA	RA	REM	O&M	OIL	NPLD	UST	Received by _____ Laboratory _____		
Remedial	Removal															
Lead	CLEM															
Pre-Remedial	REMA															
RA	REM															
O&M	OIL															
NPLD	UST															

0005

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
193TMO4501	2	L	N	ABN LOW CONC.	-	S-008503	SL-CSW6-1093	10/18/93 0935	<i>[Signature]</i>	
293TMO4501	2X	L	I	VDAS LOW CONC.	-	S-008502	SL-CSW6-1093	10/18/93 0935	<i>[Signature]</i>	
393TMO4502	2	L	N	ABN LOW CONC.	-	S-008507	SL-PSW3-1093	10/18/93 1030	<i>[Signature]</i>	
493TMO4502	2	L	I	VDAS LOW CONC.	-	S-008508	SL-PSW3-1093	10/18/93 1030	<i>[Signature]</i>	
593TMO4503	2	L	N	ABN LOW CONC.	-	S-008515	SL-TB01-1093	1415 10/18/93		
693TMO4503	2	L	N	VDAS LOW CONC.	-	S-008514	SL-TB01-1093	1415 10/18/93	<i>[Signature]</i>	
7.										
8.										
9.										
10.										

Shipment for SAS complete? (Y/N) *[Marked Y]*

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>[Signature]</i>	Date / Time 10/18/93 1830	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>[Signature]</i>	Date / Time 10/19/93 1000	Remarks CS#s 12049, 12050	Is custody seal intact? Y/N/none
Split Samples <input type="checkbox"/> Accepted (Signature) <input type="checkbox"/> Declined					

EPA Form
 DISTRIBUTION:
 White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

S 035755



1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinseate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No.	3. Sampling Co.	4. Date Shipped	Carrier	7. Date Received -- Received by	
		Sampler (Name)		Airbill Number		Laboratory	
		Sampler Signature		5. Ship To		8. Transfer to	
3. Type of Activity		Remedial		Removal		Received by	
SF <input type="checkbox"/> Lead <input type="checkbox"/> Pre-Remedial <input type="checkbox"/> PA <input type="checkbox"/> SSI <input type="checkbox"/> LSI <input type="checkbox"/> PRP <input type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD <input type="checkbox"/> ST <input type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD <input type="checkbox"/> FED <input type="checkbox"/> LSI <input type="checkbox"/> NPLD <input type="checkbox"/> UST <input type="checkbox"/>		RIFS <input type="checkbox"/> RD <input type="checkbox"/> CLEM <input type="checkbox"/> REMA <input checked="" type="checkbox"/> REM <input type="checkbox"/> OIL <input type="checkbox"/> UST <input type="checkbox"/>		ENVIROSYSTEMS INC. 9200 RUMSEY RD SUITE B102 COLUMBIA, MD 21045 410/964-0330		Laboratory	

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
193JM04504	2	L	1	LOW CONC UVA	-	5-008516	SL-MW-ID-1093	10/19/93 1120	SKL	
293JM04504	2	L	N	LOW CONC ABN	-	5-008517	SL-MW-ID-1093	10/19/93 1130	SKL	
393JM04505	2	L	1	LOW CONC UVA	-	5-008523	SL-MWIS-1093	10/19/93 1210	SKL	
493JM04505	2	L	N	LOW CONC ABN	-	5-008524	SL-MWIS-1093	10/19/93 1210	SKL	
593JM04506	2	L	N	LOW CONC ABN	-	5-008530	SL-MWES-1093	10/19/93 1510	SKL	
693JM04506	2	L	1	LOW CONC UVA	-	5-008529	SL-MWES-1093	10/19/93 1510	SKL	
793JM04508	2	L	N	LOW CONC UVA	-	5-008546	SL-HW-02-1093	10/19/93 1700	SKL	
8.							TB			
9.										
10.										

Shipment for SAS complete? (Y/N) Y

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Susan Lorenz</i>	Date / Time 10/19/93 7:00 AM	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature) <i>WMB</i>	Date / Time	Received for Laboratory by: (Signature)	Date / Time 10/24/93 1000	Remarks PS# 512042, 12041	Is custody seal intact? Y/N/none

EPA Form

DISTRIBUTION:

White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

Split Samples Accepted (Signature)
 Declined

S 035759



1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	3. Sampling Co. JACOBS	4. Date Shipped 10/20/93	Carrier FEDEX	7. Date Received -- Received by 10/21/93 <i>[Signature]</i>		
		3. Sampler (Name) Susan Lorenz		Airbill Number 6346883631		Laboratory		
		3. Sampler Signature <i>[Signature]</i>		5. Ship To ENVIROSYSTEMS 9200 RUMSEY RD. SUITE B102 COLUMBIA, MD 21045 410/964-0330		8. Transfer to		Date Received
3. Type of Activity Remedial Removal Lead <input type="checkbox"/> Pre-Remedial <input type="checkbox"/> RIFS <input type="checkbox"/> CLEM <input type="checkbox"/> SF <input type="checkbox"/> PA <input type="checkbox"/> RD <input checked="" type="checkbox"/> REMA <input type="checkbox"/> PRP <input type="checkbox"/> SSI <input type="checkbox"/> RA <input type="checkbox"/> REM <input type="checkbox"/> ST <input type="checkbox"/> O&M <input type="checkbox"/> OIL <input type="checkbox"/> FED <input type="checkbox"/> LSI <input type="checkbox"/> NPLO <input type="checkbox"/> UST <input type="checkbox"/>		Received by Laboratory		Laboratory				

1000

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
193JM04507	2	L	N	100% CONC. UOAA	-	5008536	SL-MW6D-1093	10/19/93 1645	SLE	
293JM04D07	2	L	N	100% CONC. UOAA	D	5008542	SL-MW6D-1093	10/19/93 1645	SLE	
393JM04507	2	L	I	100% CONC. UOAA	-	50085351	SL-MW6D-1093	10/19/93 1645	SLE	
493JM04D07	2	L	I	100% CONC. UOAA	D	5008541	SL-MW6D-1093	10/19/93 1645	SLE	
593JM04S11	2	L	I	100% CONC. UOAA	-	5008550	SL-MW6D-1093	10/20/93 1115	SLE	
693JM04S18	2	L	N	100% CONC. UOAA	-	5008569	SL-MW6D-1093	10/20/93 1645	SLE	
7.										
8.										
9.										
10.										

Shipment for SAS complete? (Y/N) *Y*

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>[Signature]</i>	Date / Time 10/20/93 1930	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature) <i>[Signature]</i>	Date / Time	Received for Laboratory by: (Signature)	Date / Time 10/21/93 1000	Remarks AOC #s 12040, 12039	Is custody seal intact? Y/N/none CS

EPA Form
 DISTRIBUTION:
 White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

Split Samples Accepted (Signature)
 Declined

S 035762



1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinseate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	3. Sampling Co. JACOBS	4. Date Shipped 10/20/93	Carrier FEDEX	7. Date Received 10/21/93	Received by 	8000
		Sampler (Name) SUSAN LORENZ		Airbill Number 7880166571		Laboratory		
		Sampler Signature 		5. Ship To ENVIROSYSTEMS INC. 9200 Ramsey Rd Ste B102 COLUMBIA, MD 21045 410/964-0330		8. Transfer to		
3. Type of Activity Remedial Removal SF <input type="checkbox"/> Lead <input type="checkbox"/> Pre-Remedial <input type="checkbox"/> RIFS <input type="checkbox"/> CLEM <input type="checkbox"/> PRP <input type="checkbox"/> PA <input type="checkbox"/> RD <input checked="" type="checkbox"/> REMA <input type="checkbox"/> ST <input type="checkbox"/> SSI <input type="checkbox"/> RA <input type="checkbox"/> REM <input type="checkbox"/> FED <input type="checkbox"/> LSI <input type="checkbox"/> O&M <input type="checkbox"/> OIL <input type="checkbox"/> <input type="checkbox"/> NPLD <input type="checkbox"/> UST <input type="checkbox"/>				Received by		Laboratory		

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
193JM04510	2	L	1	low conc VOA	-	5008552	SL-EB01-1093	10/20/93 1000	SKL	
293JM04509	2	L	1	low conc VOA	-	5008553	SL-MW25-1093	10/20/93 1225	SKL	
393JM04510	2	L	N	low conc ABN	-	5008554	SL-EB01-1093	10/20/93 1000	SKL	
493JM04509	2	L	N	low conc ABN	-	5008555	SL-MW25-1093	10/20/93 1225	SKL	
593JM04517	2	L	N	low conc VOA	-	5008568	SI-TB05-1093	10/20/93 1225 1600	SKL	
6.										
7.										
8.										
9.										
10.										

Shipment for SAS complete? (Y/N)

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) 	Date / Time 10/20/93 1930	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) 	Date / Time 10/21/93 1000	Remarks 147411, 147410 CS	Is custody seal intact? Y/N/none
EPA Form			Split Samples <input type="checkbox"/> Accepted (Signature)		
DISTRIBUTION: White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO			<input type="checkbox"/> Declined		



1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO ₃ 3. NAHSO ₄ 4. H ₂ SO ₄ 5. NAOH 6. Other (SAS) 7. Ice only N. Not preserved	2. Region No. S	Sampling Co. JACOBS	4. Date Shipped 10/21/93	Carrier FED EX	7. Date Received -- Received by 10/22/93 <i>[Signature]</i>															
		Sampler (Name) SUSAN LORENZ		Airbill Number 6346883583		Laboratory															
		Sampler Signature <i>[Signature]</i>		5. Ship To ENVUROSYS 9200 RUMSEY RD Ste. B102 Columbia, MD 21045 410/964-0330		8. Transfer to		Date Received													
3. Type of Activity <table border="0"> <tr> <td>Remedial</td> <td>Removal</td> </tr> <tr> <td>Lead</td> <td>CLEM</td> </tr> <tr> <td>Pre-Remedial</td> <td>REMA</td> </tr> <tr> <td>RIFS</td> <td>REM</td> </tr> <tr> <td>RD</td> <td>OIL</td> </tr> <tr> <td>RA</td> <td>UST</td> </tr> <tr> <td>O&M</td> <td></td> </tr> <tr> <td>NPLD</td> <td></td> </tr> </table>		Remedial	Removal	Lead	CLEM	Pre-Remedial	REMA	RIFS	REM	RD	OIL	RA	UST	O&M		NPLD		Received by		Laboratory	
Remedial	Removal																				
Lead	CLEM																				
Pre-Remedial	REMA																				
RIFS	REM																				
RD	OIL																				
RA	UST																				
O&M																					
NPLD																					

0009

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
193JM04512	2	L	1	LOW CONC UOA	-	5008580	SI-MW75-1093	10/20/93 1420	SKC	
293JM04512	2	L	N	LOW CONC OBA	-	5008579	SI-MW75-1093	10/20/93 1420	SKC	
393JM04513	2	L	N	LOW CONC OBA	-	5008582	SI-MW75-1093	10/20/93 1600	SKC	
493JM04514	2	L	N	LOW CONC OBA	-	5008583	SI-MW71-1093	10/20/93 1650	SKC	
593JM04513	2	L	1	LOW CONC UOA	-	5008584	SI-MW76-1093	10/20/93 1600	SKC	
693JM04514	2	L	1	LOW CONC UOA	-	5008585	SI-MW71-1093	10/20/93 1650	SKC	
793JM04524	2	L	N	LOW CONC UOA	-	5008591	SI-TB10-1093	10/21/93 0920	SKC	
8.										
9.										
10.										

Shipment for SAS complete? (Y/N) (Y)

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>[Signature]</i>	Date / Time 10/21/93 1930	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>[Signature]</i>	Date / Time 10/22/93 1000	Remarks: Is custody seal intact? Y/N/none CS#s 147421, 147422	

Split Samples Accepted (Signature)
 Declined

EPA Form
 DISTRIBUTION:
 White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

S 035769



1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	3. Sampling Co. JACOBS	4. Date Shipped 10/21/93	Carrier FED EX	7. Date Received -- Received by 10/21/93 [Signature]					
		Sampler (Name) Susan Lorenz		Airbill Number 6346883605		Laboratory					
		Sampler Signature [Signature]		5. Ship To ENVIRO SYSTEMS INC. 9200 RUMSEY RD SUITE B102 COLUMBIA, MD 21045		8. Transfer to		Date Received			
3. Type of Activity		<input type="checkbox"/> SF <input type="checkbox"/> PRP <input type="checkbox"/> ST <input type="checkbox"/> FED		<input type="checkbox"/> Lead <input type="checkbox"/> Pre-Remedial <input type="checkbox"/> PA <input type="checkbox"/> SS <input type="checkbox"/> LSI		<input type="checkbox"/> RIF <input type="checkbox"/> RD <input type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD		<input type="checkbox"/> Removal <input type="checkbox"/> CLEM <input checked="" type="checkbox"/> REMA <input type="checkbox"/> REM <input type="checkbox"/> OIL <input type="checkbox"/> UST		Received by Laboratory	
				410/964-0330							

0010

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
193JMO4527	2	L	N	LOW CONC ARIN	-	5008630	SL-MW35-1093	10/21/93 1550	SKL	
273JMO4526	2	L	N	LOW CONC ARIN	-	5008631	SL-MW35B-1093	10/21/93 1510	SKL	
393JMO4527	2	L	1	LOW CONC UO4	-	5008632	SL-MW35-1093	10/21/93 1550	SKL	
493JMO4526	2	L	1	LOW CONC UO4	-	5008633	SL-MW35B-1093	10/21/93 1510	SKL	
593JMO4528	2	L	1	LOW CONC UO4	-	5008634	SL-MW35D-1093	10/21/93 1700	SKL	
673JMO4528	2	L	1	LOW CONC UO4	S	5008635	SL-MW35D-1093	10/21/93 1700	SKL	
793JMO4528	2	L	1	LOW CONC UO4	S	5008636	SL-MW35D-1093	10/21/93 1700	SKL	
873JMO4524	2	L	N	LOW CONC UO4	-	5008637	SL-MW35-1093	10/21/93 1700	SKL	
9.							SL			
10.										

Shipment for SAS complete? (Y/N) **(Y)**

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) [Signature]	Date / Time 10/21/93 1950	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature) [Signature]	Date / Time	Received for Laboratory by: (Signature) [Signature]	Date / Time 10/21/93 1000	Remarks Is custody seal intact? Y/N/none QS 147428, 147427	
EPA Form DISTRIBUTION White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO			Split Samples <input type="checkbox"/> Accepted (Signature) <input type="checkbox"/> Declined		

S 035773



8113E-02

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	Sampling Co. JOBS	4. Date Shipped 10/22/93	Carrier FedEX	7. Date Received -- Received by 10/23/93 <i>WMB</i>		
		3. Sampler (Name) <i>Susan Lorenz</i>		Airbill Number 10346883616		Laboratory		
		3. Sampler Signature <i>Susan Lorenz</i>		5. Ship To EnviroSystems Inc 9700 Rimsey Rd Suite B102 Columbia, MD 21045 410-964-0330		8. Transfer to		Date Received
		3. Type of Activity				Received by		
		3. Type of Activity				Laboratory		
		3. Type of Activity				Laboratory		

Sample Numbers	A Matrix Enter from Box 1	B Corro Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
1. 93JMO4S28	2	L	F	Low Conc ARN	—	5009639	SL-MWSD-1093	10/22/93 1700		
2. 93JMO4S29	2	L	F	Low Conc ARN	S	5002640	SL-MWSD-1093	10/22/93 1700		
3. 93JMO4S30	2	L	F	Low Conc ARN	—	5002611	SL-MWSD-1093	10/22/93 1700		
4. 93JMO4S30	2	L	F	Low Conc VOA	—	5008612	SL-MWSD-1093	10/22/93 0925		
5. 93JMO4S31										
6. 93JMO4S31										
7. 93JMO4S36	2	L	F	Low Conc VOA	—	5008620	SL-TRB-1093	10/22/93 1130		
8.										
9.										
10.										

Shipment for SAS complete? (Y/N)

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Susan Lorenz</i>	Date / Time 10/22/93 1900	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>WMB</i>	Date / Time 10/23/93 1000	Remarks Is custody seal intact? Y/N/none Cust Seal Nos: 147431, 147432	

EPA Form
 DISTRIBUTION:
 White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

Split Samples Accepted (Signature) Declined

S 035775

Copy - original in 8145 K-02 STC 937 M77

0011

NARRATIVE

LABORATORY NAME: ENVIROSYSTEMS, INC.

SAS #: 8143E-02

SDG #: 93JM04S01

DATES SAMPLES RECEIVED AT LABORATORY: 19 - 22 OCT. 1993

SAMPLE ANALYSES INCLUDED IN THIS REPORT:

EPA SAMPLE #	LAB ID #	ANALYSIS
93JM04S01	93102132	VOA, BNA
93JM04S02	93102133	VOA, BNA
93JM04S03	93102134	VOA
93JM04S04	93102144	VOA, BNA
93JM04S05	93102145	VOA, BNA
93JM04S06	93102146	VOA, BNA
93JM04S08	93102147	VOA
93JM04D07	93102180	VOA, BNA
93JM04S07	93102181	VOA, BNA
93JM04S09	93102182	VOA, BNA
93JM04S10	93102183	VOA, BNA
93JM04S11	93102184	VOA, BNA
93JM04S17	93102185	VOA
93JM04S18	93102186	VOA
93JM04S12	93102194	VOA, BNA
93JM04S13	93102195	VOA, BNA
93JM04S14	93102196	VOA, BNA
93JM04S24	93102197	VOA
93JM04S26	93102198	VOA, BNA
93JM04S28	93102199	VOA, BNA

MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSES WERE PERFORMED ON SAMPLE 93JM04S28.

VOLATILES SECTION:

Many of the samples had surrogate recoveries that did not meet the SAS requirements. Some of the samples were reanalyzed; however the laboratory realized that each analysis met the GC requirements for surrogate recovery specified by SAMLCO 10/92 (80-120% for BFB). No further reanalysis was performed for surrogate failures.

One of the eleven LCS recoveries was below the GC limits.

One internal standard area (IS3) was outside the GC limits in sample 93JM04S06. The samples was reanalyzed with compliant IS areas but noncompliant surrogate recovery. Both sets of data are included in this report.

Sample 93JM04S10 required a dilution because of a high concentration of chloroform.

SEMIVOLATILES SECTION:

02

2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01:1021STGBLK	97	100	125 *	0	1
02:93JM04S01	111 *	81 *	97	0	2
03:93JM04S01RE	104	104	138 *	0	1
04:93JM04S02	103	86	100	0	0
05:93JM04S03	109	88	108	0	0
06:93JM04S04	102	83 *	103	0	1
07:93JM04S04RE	106	105	130 *	0	1
08:93JM04S05	110	97	113	0	0
09:93JM04S06	100	88	112	0	0
10:93JM04S06RE	100	96	120 *	0	1
11:93JM04S07	112 *	89	110	0	1
12:93JM04S07RE	104	104	126 *	0	1
13:93JM04S08	103	90	105	0	0
14:93JM04S09	103	92	110	0	0
15:93JM04S10	101	100	124 *	0	1
16:93JM04S10DL	112 *	108	124 *	0	2
17:93JM04S11	102	85 *	119 *	0	2
18:93JM04S12	94	102	128 *	0	1
19:93JM04S13	101	98	138 *	0	1
20:93JM04S14	92	98	129 *	0	1
21:93JM04S17	100	92	126 *	0	1
22:93JM04S18	102	89	117 *	0	1
23:93JM04S24	101	95	126 *	0	1
24:93JM04S26	99	85 *	129 *	0	2
25:93JM04S28	116 *	101	127 *	0	2
26:93JM04D07	101	95	125 *	0	1
27:LCS01	105	91	98	0	0
28:93JM04S28MS	103	101	117 *	0	1
29:93JM04S28MSD	98	105	139 *	0	1
30:VBLKC6	104	96	107	0	0

QC LIMITS

SMC1 (TOL) = Toluene-d8 (88-110)
 SMC2 (BFB) = Bromofluorobenzene (86-115)
 SMC3 (DCE) = 1,2-Dichloroethane-d4 (76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

6014

Surrogate recovery was high for nitrobenzene-d5 in samples 93JM04S10, 93JM04S28 and 93JM04S28MSD. The unspiked samples were reanalyzed with similar results. The data for the reanalyses is not included in this report.

Five of the fifteen LCS recoveries were below the QC limits required by the method. In the past the laboratory has used wider recovery windows which would have bracketed more compounds.

The MS/MSD samples were spiked at the RAS levels.

I CERTIFY THAT THIS DATA PACKAGE IS IN COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT, BOTH TECHNICALLY AND FOR COMPLETENESS, FOR OTHER THAN THE CONDITIONS DETAILED ABOVE. RELEASE OF THE DATA CONTAINED IN THIS HARDCOPY DATA PACKAGE HAS BEEN AUTHORIZED BY THE LABORATORY MANAGER OR HIS DESIGNEE, AS VERIFIED BY THE FOLLOWING SIGNATURE:



William Brewington

DATE: 11/19/93
19 November 1993

03

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
	=====	=====	=====	=====	=====	=====
01	VBLKC7	104	92	114	0	0
02	VBLKC1	113 *	103	110	0	1

QC LIMITS

SMC1 (TOL) = Toluene-d8 (88-110)

SMC2 (BFB) = Bromofluorobenzene (86-115)

SMC3 (DCE) = 1,2-Dichloroethane-d4 (76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3LCA
 LOW CONC. WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS01

Lab Name: ENVIROSYSTEMS

Contract: 68D90135

Lab Code: ENVSYS

Case No.: 8143E-02

SAS No.: 8143E-02

SDG No.: 93JM04S01

Lab Sample ID: 1023LCS

Date Analyzed: 10/23/93

Lab File ID: 1023LCS

Dilution Factor: 1.0

Purge Volume: 25 (mL)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	%REC #	QC LIMITS
Vinyl chloride_____	125	74	59 *	60-140
1,2-Dichloroethane_____	125	126	101	60-140
Carbon tetrachloride_____	125	127	102	60-140
1,2-Dichloropropane_____	125	127	102	60-140
Trichloroethene_____	125	127	102	60-140
1,1,2-Trichloroethane_____	125	130	104	60-140
Benzene_____	125	130	104	60-140
cis-1,3-Dichloropropene_____	125	123	98	60-140
Bromoform_____	125	126	101	60-140
Tetrachloroethene_____	125	147	118	60-140
1,4-Dichlorobenzene_____	125	129	103	60-140

Column to be used to flag LCS recovery with an asterisk.

* Values outside of QC limits.

LCS Recovery: 1 outside limits out of 11 total

COMMENTS:

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix Spike - EPA Sample No.: 93JM04S28

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	5.000	0	3.271	65	61-145
Trichloroethene	5.000	0	4.068	81	71-120
Benzene	5.000	0	4.357	87	76-127
Toluene	5.000	0	4.328	87	76-125
Chlorobenzene	5.000	0	4.736	95	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,1-Dichloroethene	5.000	3.572	71	9	14 61-145
Trichloroethene	5.000	3.965	79	2	14 71-120
Benzene	5.000	4.302	86	1	11 76-127
Toluene	5.000	4.282	86	1	13 76-125
Chlorobenzene	5.000	4.761	95	0	13 75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

MSC 35(5)/260/10

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKC6

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab File ID: 1023VWBC2 Lab Sample ID: 1023VWBC2

Date Analyzed: 10/23/93 Time Analyzed: 1916

GC Column: RTX-502.2 ID: 0.530(mm) Heated Purge: (Y/N) N

Instrument ID: MSC

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01:93JM04S01	93102132	102132	2053
02:93JM04S02	93102133	102133	2127
03:93JM04S03	93102134	102134	2201
04:93JM04S04	93102144	102144	2234
05:93JM04S05	93102145	102145	2307
06:93JM04S06	93102146	102146	2340
07:93JM04S07	93102181	102181	0154
08:93JM04S08	93102147	102147	0013
09:93JM04S09	93102182	102182	0227
10:LCS01	1023LCS	1023LCS	2018

COMMENTS: VBLKC6 LAB BLANK 10/23/93 25ML
MSC 35(5)/260/10

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKC7

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab File ID: 1024VWBC1 Lab Sample ID: 1024VWBC1

Date Analyzed: 10/24/93 Time Analyzed: 1410

GC Column: RTX-502.2 ID: 0.530(mm) Heated Purge: (Y/N) N

Instrument ID: MSC

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01:93JM04S01RE	93102132	102132R	1454
02:93JM04S04RE	93102144	102144R	1528
03:93JM04S06RE	93102146	102146R	1601
04:93JM04S07RE	93102181	102181R	1709
05:93JM04S10	93102183	102183	1744
06:93JM04S11	93102184	102184	1818
07:93JM04S12	93102194	102194	1959
08:93JM04S13	93102195	102195	2033
09:93JM04S14	93102196	102196	2107
10:93JM04S17	93102185	102185	1852
11:93JM04S18	93102186	102186	1926
12:93JM04S24	93102197	102197	2141
13:93JM04S26	93102198	102198	2215
14:93JM04D07	93102180	102180R	1635

COMMENTS: VBLKC7 LAB BLANK 10/24/93 25ML
MSC 35(5)/260/10

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKC1

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab File ID: 1025VWBC1 Lab Sample ID: 1025VWBC1

Date Analyzed: 10/25/93 Time Analyzed: 1033

GC Column: RTX-502.2 ID: 0.530(mm) Heated Purge: (Y/N) N

Instrument ID: MSC

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	1021STGBLK	1021STGBLK	1021STGBLK	2034
02	93JM04S10DL	93102183	102183D	1818
03	93JM04S28	93102199	102199	1141
04	93JM04S28MS	93102199	102199MS	1215
05	93JM04S28MSD	93102199	102199MSD	1250

COMMENTS: VBLKC1 LAB BLANK 10/25/93 25ML
MSC 35(5)/260/10

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC6

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 1023VWBC2

Date Received:

Lab File ID: 1023VWBC2

Date Analyzed: 10/23/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-98-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKC6

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 1023VWBC2

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 1023VWBC2

Level: (low/med) LDW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/23/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC7

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 1024VWBC1

Date Received:

Lab File ID: 1024VWBC1

Date Analyzed: 10/24/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	1	U
74-83-9	-----Bromomethane	1	U
75-01-4	-----Vinyl Chloride	1	U
75-00-3	-----Chloroethane	1	U
75-09-2	-----Methylene Chloride	2	U
67-64-1	-----Acetone	5	U
75-15-0	-----Carbon Disulfide	1	U
75-35-4	-----1,1-Dichloroethene	1	U
75-34-3	-----1,1-Dichloroethane	1	U
156-60-5	-----Trans-1,2-Dichloroethene	1	U
156-59-4	-----cis-1,2-Dichloroethene	1	U
67-66-3	-----Chloroform	1	U
107-06-2	-----1,2-Dichloroethane	1	U
78-93-3	-----2-Butanone	5	U
71-55-6	-----1,1,1-Trichloroethane	1	U
56-23-5	-----Carbon Tetrachloride	1	U
108-05-4	-----Vinyl Acetate	1	U
75-27-4	-----Bromodichloromethane	1	U
78-87-5	-----1,2-Dichloropropane	1	U
10061-01-5	-----cis-1,3-Dichloropropene	1	U
79-01-6	-----Trichloroethene	1	U
124-48-1	-----Dibromochloromethane	1	U
79-00-5	-----1,1,2-Trichloroethane	1	U
71-43-2	-----Benzene	1	U
10061-02-6	-----trans-1,3-Dichloropropene	1	U
75-25-2	-----Bromoform	1	U
108-10-1	-----4-Methyl-2-Pentanone	5	U
591-78-6	-----2-Hexanone	5	U
127-18-4	-----Tetrachloroethene	1	U
79-34-5	-----1,1,2,2-Tetrachloroethane	1	U
108-88-3	-----Toluene	1	U
108-90-7	-----Chlorobenzene	1	U
100-41-4	-----Ethylbenzene	1	U
100-42-5	-----Styrene	1	U
1330-20-7	-----Xylene (total)	1	U
75-69-4	-----Trichlorofluoromethane	1	U
95-50-1	-----1,2-Dichlorobenzene	1	U
106-46-7	-----1,4-Dichlorobenzene	1	U
541-73-1	-----1,3-Dichlorobenzene	1	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKC7

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 1024VWBC1

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 1024VWBC1

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC1

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 1025VWBC1

Date Received:

Lab File ID: 1025VWBC1

Date Analyzed: 10/25/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKC1

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 1025VWBC1

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 1025VWBC1

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S01RE

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102132 Date Received: 10/19/93

Lab File ID: 102132R Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S01

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102132 Date Received: 10/19/93

Lab File ID: 102132 Date Analyzed: 10/23/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S01

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102132

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102132

Level: (low/med) LOW

Date Received: 10/19/93

% Moisture: not dec.

Date Analyzed: 10/23/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S01RE

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102132

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102132R

Level: (low/med) LOW

Date Received: 10/19/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S02

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102133 Date Received: 10/19/93

Lab File ID: 102133 Date Analyzed: 10/23/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S02

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102133

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102133

Level: (low/med) LOW

Date Received: 10/19/93

% Moisture: not dec.

Date Analyzed: 10/23/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S03

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102134

Date Received: 10/19/93

Lab File ID: 102134

Date Analyzed: 10/23/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	3	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

8045

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S03

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102134

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102134

Level: (low/med) LOW

Date Received: 10/19/93

% Moisture: not dec.

Date Analyzed: 10/23/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S04

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102144 Date Received: 10/20/93

Lab File ID: 102144 Date Analyzed: 10/23/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S04

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102144

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102144

Level: (low/med) LOW

Date Received: 10/20/93

% Moisture: not dec.

Date Analyzed: 10/23/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S04RE

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102144

Date Received: 10/20/93

Lab File ID: 102144R

Date Analyzed: 10/24/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	1	U
74-83-9	-----Bromomethane	1	U
75-01-4	-----Vinyl Chloride	1	U
75-00-3	-----Chloroethane	1	U
75-09-2	-----Methylene Chloride	2	U
67-64-1	-----Acetone	5	U
75-15-0	-----Carbon Disulfide	1	U
75-35-4	-----1,1-Dichloroethene	1	U
75-34-3	-----1,1-Dichloroethane	1	U
156-60-5	-----Trans-1,2-Dichloroethene	1	U
156-59-4	-----cis-1,2-Dichloroethene	1	U
67-66-3	-----Chloroform	1	U
107-06-2	-----1,2-Dichloroethane	1	U
78-93-3	-----2-Butanone	5	U
71-55-6	-----1,1,1-Trichloroethane	1	U
56-23-5	-----Carbon Tetrachloride	1	U
108-05-4	-----Vinyl Acetate	1	U
75-27-4	-----Bromodichloromethane	1	U
78-87-5	-----1,2-Dichloropropane	1	U
10061-01-5	-----cis-1,3-Dichloropropene	1	U
79-01-6	-----Trichloroethene	1	U
124-48-1	-----Dibromochloromethane	1	U
79-00-5	-----1,1,2-Trichloroethane	1	U
71-43-2	-----Benzene	1	U
10061-02-6	-----trans-1,3-Dichloropropene	1	U
75-25-2	-----Bromoform	1	U
108-10-1	-----4-Methyl-2-Pentanone	5	U
591-78-6	-----2-Hexanone	5	U
127-18-4	-----Tetrachloroethene	1	U
79-34-5	-----1,1,2,2-Tetrachloroethane	1	U
108-88-3	-----Toluene	1	U
108-90-7	-----Chlorobenzene	1	U
100-41-4	-----Ethylbenzene	1	U
100-42-5	-----Styrene	1	U
1330-20-7	-----Xylene (total)	1	U
75-69-4	-----Trichlorofluoromethane	1	U
95-50-1	-----1,2-Dichlorobenzene	1	U
106-46-7	-----1,4-Dichlorobenzene	1	U
541-73-1	-----1,3-Dichlorobenzene	1	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S04RE

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102144

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102144R

Level: (low/med) LOW

Date Received: 10/20/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S05

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102145 Date Received: 10/20/93

Lab File ID: 102145 Date Analyzed: 10/23/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	7	
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	2	
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	2	
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S05

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102145

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102145

Level: (low/med) LOW

Date Received: 10/20/93

% Moisture: not dec.

Date Analyzed: 10/23/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 6876-23-9	CYCLOHEXANE, 1,2-DIMETHYL-	14.98	4	J
2.	UNKNOWN ALKYL BENZENE	18.20	7	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S06

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102146

Date Received: 10/20/93

Lab File ID: 102146

Date Analyzed: 10/23/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0084

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S06

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102146

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102146

Level: (low/med) LOW

Date Received: 10/20/93

% Moisture: not dec.

Date Analyzed: 10/23/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	G
=====	=====	=====	=====	=====

0085

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S06RE

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102146 Date Received: 10/20/93

Lab File ID: 102146R Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

009C'

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S06RE

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102146

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102146R

Level: (low/med) LOW

Date Received: 10/20/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0091

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S07

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102181 Date Received: 10/21/93

Lab File ID: 102181 Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	1	U
74-83-9	-----Bromomethane	1	U
75-01-4	-----Vinyl Chloride	1	U
75-00-3	-----Chloroethane	1	U
75-09-2	-----Methylene Chloride	2	U
67-64-1	-----Acetone	5	U
75-15-0	-----Carbon Disulfide	1	U
75-35-4	-----1,1-Dichloroethene	1	U
75-34-3	-----1,1-Dichloroethane	1	U
156-60-5	-----Trans-1,2-Dichloroethene	1	U
156-59-4	-----cis-1,2-Dichloroethene	1	U
67-66-3	-----Chloroform	1	U
107-06-2	-----1,2-Dichloroethane	1	U
78-93-3	-----2-Butanone	5	U
71-55-6	-----1,1,1-Trichloroethane	1	U
56-23-5	-----Carbon Tetrachloride	1	U
108-05-4	-----Vinyl Acetate	1	U
75-27-4	-----Bromodichloromethane	1	U
78-87-5	-----1,2-Dichloropropane	1	U
10061-01-5	-----cis-1,3-Dichloropropene	1	U
79-01-6	-----Trichloroethene	1	U
124-48-1	-----Dibromochloromethane	1	U
79-00-5	-----1,1,2-Trichloroethane	1	U
71-43-2	-----Benzene	1	U
10061-02-6	-----trans-1,3-Dichloropropene	1	U
75-25-2	-----Bromoform	1	U
108-10-1	-----4-Methyl-2-Pentanone	5	U
591-78-6	-----2-Hexanone	5	U
127-18-4	-----Tetrachloroethene	1	U
79-34-5	-----1,1,2,2-Tetrachloroethane	1	U
108-88-3	-----Toluene	1	U
108-90-7	-----Chlorobenzene	1	U
100-41-4	-----Ethylbenzene	1	U
100-42-5	-----Styrene	1	U
1330-20-7	-----Xylene (total)	1	U
75-69-4	-----Trichlorofluoromethane	1	U
95-50-1	-----1,2-Dichlorobenzene	1	U
106-46-7	-----1,4-Dichlorobenzene	1	U
541-73-1	-----1,3-Dichlorobenzene	1	U

0096

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S07

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102181

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 102181

Level: (low/med) LOW Date Received: 10/21/93

% Moisture: not dec. Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0097

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S07RE

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102181 Date Received: 10/21/93

Lab File ID: 102181R Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0102

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S07RE

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102181

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102181R

Level: (low/med) LDW

Date Received: 10/21/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	G
-----	-----	-----	-----	-----

0103

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04D07

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102180

Date Received: 10/21/93

Lab File ID: 102180R

Date Analyzed: 10/24/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0208

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04D07

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102180

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102180R

Level: (low/med) LOW

Date Received: 10/21/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0209

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S08

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102147 Date Received: 10/20/93

Lab File ID: 102147 Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	3	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0108

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S08

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102147

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102147

Level: (low/med) LOW

Date Received: 10/20/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	G

0109

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S09

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102182 Date Received: 10/21/93

Lab File ID: 102182 Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0117

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S09

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102182

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102182

Level: (low/med) LOW

Date Received: 10/21/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0118

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S10

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102183 Date Received: 10/21/93

Lab File ID: 102183 Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	37	E
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0123

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S10

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102183

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102183

Level: (low/med) LOW

Date Received: 10/21/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

0124

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S10DL

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102183 Date Received: 10/21/93

Lab File ID: 102183D Date Analyzed: 10/25/93

Purge Volume: 25 mL Dilution Factor: 20.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	G
74-87-3	-----Chloromethane	20	U
74-83-9	-----Bromomethane	20	U
75-01-4	-----Vinyl Chloride	20	U
75-00-3	-----Chloroethane	20	U
75-09-2	-----Methylene Chloride	40	U
67-64-1	-----Acetone	100	U
75-15-0	-----Carbon Disulfide	20	U
75-35-4	-----1,1-Dichloroethene	20	U
75-34-3	-----1,1-Dichloroethane	20	U
156-60-5	-----Trans-1,2-Dichloroethene	20	U
156-59-4	-----cis-1,2-Dichloroethene	20	U
67-66-3	-----Chloroform	43	D
107-06-2	-----1,2-Dichloroethane	20	U
78-93-3	-----2-Butanone	100	U
71-55-6	-----1,1,1-Trichloroethane	20	U
56-23-5	-----Carbon Tetrachloride	20	U
108-05-4	-----Vinyl Acetate	20	U
75-27-4	-----Bromodichloromethane	20	U
78-87-5	-----1,2-Dichloropropane	20	U
10061-01-5	-----cis-1,3-Dichloropropene	20	U
79-01-6	-----Trichloroethene	20	U
124-48-1	-----Dibromochloromethane	20	U
79-00-5	-----1,1,2-Trichloroethane	20	U
71-43-2	-----Benzene	20	U
10061-02-6	-----trans-1,3-Dichloropropene	20	U
75-25-2	-----Bromoform	20	U
108-10-1	-----4-Methyl-2-Pentanone	100	U
591-78-6	-----2-Hexanone	100	U
127-18-4	-----Tetrachloroethene	20	U
79-34-5	-----1,1,2,2-Tetrachloroethane	20	U
108-88-3	-----Toluene	20	U
108-90-7	-----Chlorobenzene	20	U
100-41-4	-----Ethylbenzene	20	U
100-42-5	-----Styrene	20	U
1330-20-7	-----Xylene (total)	20	U
75-69-4	-----Trichlorofluoromethane	20	U
95-50-1	-----1,2-Dichlorobenzene	20	U
106-46-7	-----1,4-Dichlorobenzene	20	U
541-73-1	-----1,3-Dichlorobenzene	20	U

0135

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S10DL

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102183

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102183D

Level: (low/med) LOW

Date Received: 10/21/93

% Moisture: not dec.

Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 20.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0136

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S11

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102184 Date Received: 10/21/93

Lab File ID: 102184 Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0194

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S11

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102184

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 102184

Level: (low/med) LOW Date Received: 10/21/93

% Moisture: not dec. Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0145

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S12

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102194 Date Received: 10/22/93

Lab File ID: 102194 Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0150

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S12

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102194

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102194

Level: (low/med) LOW

Date Received: 10/22/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0151

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S13

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102195 Date Received: 10/22/93

Lab File ID: 102195 Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0156

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S13

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102195

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102195

Level: (low/med) LOW

Date Received: 10/22/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

6157

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S14

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102196 Date Received: 10/22/93

Lab File ID: 102196 Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0162

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S14

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102196

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102196

Level: (low/med) LOW

Date Received: 10/22/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	G
=====	=====	=====	=====	=====

0163

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S17

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102185 Date Received: 10/21/93

Lab File ID: 102185 Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	3	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0168

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S17

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102185

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102185

Level: (low/med) LDW

Date Received: 10/21/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	G
=====	=====	=====	=====	=====

0169

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S18

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: B143E-02 SAS No.: B143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102186 Date Received: 10/21/93

Lab File ID: 102186 Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	3	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0177

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S18

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102186

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102186

Level: (low/med) LOW

Date Received: 10/21/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

0178

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S24

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102197 Date Received: 10/22/93

Lab File ID: 102197 Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	3	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0186

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S24

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102197

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102197

Level: (low/med) LOW

Date Received: 10/22/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

0187

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S26

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102198 Date Received: 10/22/93

Lab File ID: 102198 Date Analyzed: 10/24/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg) UG/L	g
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0195

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S26

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102198

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102198

Level: (low/med) LDW

Date Received: 10/22/93

% Moisture: not dec.

Date Analyzed: 10/24/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0196

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S28

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 93102199

Date Received: 10/22/93

Lab File ID: 102199

Date Analyzed: 10/25/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0201

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S28

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER

Lab Sample ID: 93102199

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102199

Level: (low/med) LOW

Date Received: 10/22/93

% Moisture: not dec.

Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 109-99-9	FURAN, TETRAHYDRO-	11.15	9	J

0202

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ENVIROSYSTEMS

Contract: 68D90135

Lab Code: ENVSYS

Case No.: 8143E2

SAS No.: 8143E02

SDG No.: 93JM04s01

EPA	S1	S2	S3	S4	S5	S6	TOT
SAMPLE NO.	(NBZ)#	(FBP)#	(TPH)#	(PHL)#	(2FP)#	(TBP)#	OUT
01:93JM04D07	114	111	130	60	78	67	0
02:93JM04S01	86	89	82	67	81	27	0
03:93JM04S02	71	63	77	52	59	31	0
04:93JM04S04	93	77	92	68	78	35	0
05:93JM04S05	102	82	95	78	88	38	0
06:93JM04S06	70	57	72	50	56	30	0
07:93JM04S07	105	85	123	76	86	33	0
08:93JM04S09	111	91	120	70	78	54	0
09:93JM04S10	118 *	99	109	84	94	48	1
10:93JM04S11	75	56	67	50	58	25	0
11:93JM04S12	104	82	91	70	80	39	0
12:93JM04S13	78	71	74	56	66	29	0
13:93JM04S14	113	95	108	78	95	45	0
14:93JM04S26	92	77	101	69	80	33	0
15:93JM04S28	131 *	98	117	70	72	47	1
16:LCS01	92	85	78	61	69	27	0
17:93JM04S28MS	89	70	84	64	72	37	0
18:93JM04S28MSD	123 *	105	116	83	87	49	1
19:SBLKA1	68	69	63	50	59	27	0
20:SBLKA2	53	52	55	42	51	21	0
21:SBLKA3	87	80	80	73	87	31	0

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5 (35-114)
 S2 (FBP) = 2-Fluorobiphenyl (43-116)
 S3 (TPH) = Terphenyl-d14 (33-141)
 S4 (PHL) = Phenol-d5 (10-110)
 S5 (2FP) = 2-Fluorophenol (21-110)
 S6 (TBP) = 2,4,6-Tribromophenol (10-123)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

3LCB
 LOW CONC. WATER SEMIVOLATILE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS01

Lab Name: ENVIROSYSTEMS

Contract: 68D90135

Lab Code: ENVSYS Case No.:

SAS No.: 8143E-02 SDG No.: 93JM04S01

Lab Sample ID: 1027LCS1

Date Received:

Lab File ID: 1027LCS1

Date Extracted: 10/27/93

Sample wt/vol: 1000 (g/mL) ML

Date Analyzed: 11/08/93

Concentrated Extract Volume: 1000 (uL)

Dilution Factor: 1.0

Injection Volume: 1.0(uL)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	%REC #	QC LIMITS
Phenol	40	29.8	75	44-120
bis(2-Chloroethyl)Ether	20	10.8	54 *	64-110
2-Chlorophenol	40	23.4	59	58-110
N-Nitroso-Di-n-Propylamine	20	7.3	37	34-102
Hexachloroethane	20	8.1	41	32-77
Isophorone	20	16.1	81	49-110
1,2,4-Trichlorobenzene	20	9.6	48	44-96
Naphthalene	20	11.1	55 *	56-160
4-Chloroaniline	40	22.3	56	35-98
2,4,6-Trichlorophenol	40	27.2	68	65-110
2,4-Dinitrotoluene	20	7.5	37 *	61-140
Diethylphthalate	20	8.6	43 *	76-104
N-Nitrosodiphenylamine	20	7.3	37	35-120
Hexachlorobenzene	20	14.9	74	30-95
Benzo(a)Pyrene	20	10.2	51 *	55-92

Column to be used to flag LCS recovery with an asterisk.

* Values outside of QC limits.

LCS Recovery: 5 outside limits out of 15 total

COMMENTS:

0305

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENVIROSYSTEMS Contract: 68D90135Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01Matrix Spike - EPA Sample No.: 93JM04S28

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	75.00	0	54.45	73	12-110
2-Chlorophenol	75.00	0	51.09	68	27-123
1,4-Dichlorobenzene	50.00	0	28.40	57	36-97
N-Nitroso-di-n-prop. (1)	50.00	0	19.64	39 *	41-116
1,2,4-Trichlorobenzene	50.00	0	24.25	49	39-98
4-Chloro-3-methylphenol	75.00	0	46.78	62	23-97
Acenaphthene	50.00	0	28.62	57	46-118
4-Nitrophenol	75.00	0	55.88	75	10-80
2,4-Dinitrotoluene	50.00	0	25.88	52	24-96
Pentachlorophenol	75.00	0	51.38	69	9-103
Pyrene	50.00	0	32.58	65	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Phenol	75.00	72.57	97	28	42 12-110
2-Chlorophenol	75.00	70.15	94	32	40 27-123
1,4-Dichlorobenzene	50.00	37.61	75	27	28 36-97
N-Nitroso-di-n-prop. (1)	50.00	27.11	54	32	38 41-116
1,2,4-Trichlorobenzene	50.00	37.56	75	42 *	28 39-98
4-Chloro-3-methylphenol	75.00	75.91	101 *	48 *	42 23-97
Acenaphthene	50.00	45.51	91	46 *	31 46-118
4-Nitrophenol	75.00	89.31	119 *	45	50 10-80
2,4-Dinitrotoluene	50.00	43.35	87	50 *	38 24-96
Pentachlorophenol	75.00	80.17	107 *	43	50 9-103
Pyrene	50.00	50.94	102	44 *	31 26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limitsRPD: 5 out of 11 outside limitsSpike Recovery: 4 out of 22 outside limits

COMMENTS: 93102199 93JM04S28

MSA 40(2)/300/11 SAS 8143E-02 SDG 93JM04S01 10/22 10/27

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKA1

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Lab File ID: 1025SWBA1 Lab Sample ID: 1025SWBA1

Instrument ID: MSA Date Extracted: 10/25/93

Matrix: (soil/water) WATER Date Analyzed: 11/05/93

Level: (low/med) LOW Time Analyzed: 1426

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	93JM04S01	93102132	S102132	11/05/93
02	93JM04S02	93102133	S102133	11/06/93

COMMENTS: SBLKA1 BNA H2O BLANK 10/25/93
MSA 40(2)/300/11

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKA2

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 Sol

Lab File ID: 1026SWBA1 Lab Sample ID: 1026SWBA1

Instrument ID: MSA Date Extracted: 10/26/93

Matrix: (soil/water) WATER Date Analyzed: 11/05/93

Level: (low/med) LOW Time Analyzed: 1506

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	
01	93JM04D07	93102180	S102180R	11/09/93
02	93JM04S04	93102144	S102144	11/06/93
03	93JM04S05	93102145	S102145	11/06/93
04	93JM04S06	93102146	S102146	11/06/93
05	93JM04S07	93102181	S102181	11/06/93
06	93JM04S09	93102182	S102182	11/06/93
07	93JM04S10	93102183	S102183	11/06/93
08	93JM04S11	93102184	S102184	11/06/93

COMMENTS: SBLKA2 BNA H2O BLANK 10/26/93
MSA 40(2)/300/11

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKA3

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04501

Lab File ID: 1027SWBA1 Lab Sample ID: 1027SWBA1

Instrument ID: MSA Date Extracted: 10/27/93

Matrix: (soil/water) WATER Date Analyzed: 11/05/93

Level: (low/med) LOW Time Analyzed: 1544

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01:93JM04S12	93102194	S102194	11/06/93
02:93JM04S13	93102195	S102195	11/06/93
03:93JM04S14	93102196	S102196	11/06/93
04:93JM04S26	93102198	S102198	11/06/93
05:93JM04S28	93102199	S102199	11/06/93
06:LCS01	1028LCS1	1027LCS1	11/08/93
07:93JM04S28MS	93102199	S102199MS	11/06/93
08:93JM04S28MSD	93102199	S102199MSD	11/06/93

COMMENTS: SBLKA3 BNA H2O BLANK 10/27/93
MSA 40(2)/300/11

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKA1

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: _____ SDG No.: 93JM04 Sol

Matrix: (soil/water) WATER Lab Sample ID: 1025SWBA1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1025SWBA1

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/25/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	<u>g</u>
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKA1

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: B143E2 SAS No.: _____ SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 1025SWBA1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1025SWBA1

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/25/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	<u>g</u>
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKA1

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: _____ SDG No.: 93JM04501
Matrix: (soil/water) WATER Lab Sample ID: 1025SWBA1
Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1025SWBA1
Level: (low/med) LOW Date Received: _____
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/25/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKA2

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: _____ SDG No.: 93JM04 S01

Matrix: (soil/water) WATER Lab Sample ID: 1026SWBA1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1026SWBA1

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	<u>g</u>
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2, 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKA2

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: _____ SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 1026SWBA1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1026SWBA1

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKA2

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: _____ SDG No.: 93JM04 501
Matrix: (soil/water) WATER Lab Sample ID: 1026SWBA1
Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1026SWBA1
Level: (low/med) LOW Date Received: _____
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKA3

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: _____ SDG No.: 93JM04561

Matrix: (soil/water) WATER Lab Sample ID: 1027SWBA1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1027SWBA1

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>		g
108-95-2	Phenol	5	U	
111-44-4	bis(2-Chloroethyl)Ether	5	U	
95-57-8	2-Chlorophenol	5	U	
100-51-6	Benzyl Alcohol	20	U	
95-48-7	2-Methylphenol	5	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U	
106-44-5	4-Methylphenol	5	U	
621-64-7	N-Nitroso-Di-n-Propylamine	5	U	
67-72-1	Hexachloroethane	5	U	
98-95-3	Nitrobenzene	5	U	
78-59-1	Isophorone	5	U	
88-75-5	2-Nitrophenol	5	U	
105-67-9	2,4-Dimethylphenol	5	U	
65-85-0	Benzoic Acid	20	U	
111-91-1	bis(2-Chloroethoxy)Methane	5	U	
120-83-2	2,4-Dichlorophenol	5	U	
120-82-1	1,2,4-Trichlorobenzene	5	U	
91-20-3	Naphthalene	5	U	
106-47-8	4-Chloroaniline	5	U	
87-68-3	Hexachlorobutadiene	5	U	
59-50-7	4-Chloro-3-Methylphenol	5	U	
91-57-6	2-Methylnaphthalene	5	U	
77-47-4	Hexachlorocyclopentadiene	5	U	
88-06-2	2,4,6-Trichlorophenol	5	U	
95-95-4	2,4,5-Trichlorophenol	20	U	
91-58-7	2-Chloronaphthalene	5	U	
88-74-4	2-Nitroaniline	20	U	
131-11-3	Dimethylphthalate	5	U	
208-96-8	Acenaphthylene	5	U	
606-20-2	2,6-Dinitrotoluene	5	U	
99-09-2	3-Nitroaniline	20	U	
83-32-9	Acenaphthene	5	U	
51-28-5	2,4-Dinitrophenol	20	U	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKA3

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: _____ SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 1027SWBA1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1027SWBA1

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKA3

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: _____ SDG No.: 93JM04S01
Matrix: (soil/water) WATER Lab Sample ID: 1027SWBA1
Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1027SWBA1
Level: (low/med) LOW Date Received: _____
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S01

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04Sol

Matrix: (soil/water) WATER Lab Sample ID: 93102132

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102132

Level: (low/med) LDW Date Received: 10/19/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/25/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S01

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102132

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102132

Level: (low/med) LOW Date Received: 10/19/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/25/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>		Q
100-02-7	4-Nitrophenol	20	U	
132-64-9	Dibenzofuran	5	U	
121-14-2	2,4-Dinitrotoluene	5	U	
84-66-2	Diethylphthalate	5	U	
7005-72-3	4-Chlorophenyl-phenylether	5	U	
86-73-7	Fluorene	5	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine (1)	5	U	
101-55-3	4-Bromophenyl-phenylether	5	U	
118-74-1	Hexachlorobenzene	5	U	
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	5	U	
120-12-7	Anthracene	5	U	
84-74-2	Di-n-Butylphthalate	5	U	
206-44-0	Fluoranthene	5	U	
129-00-0	Pyrene	5	U	
85-68-7	Butylbenzylphthalate	5	U	
91-94-1	3,3'-Dichlorobenzidine	5	U	
56-55-3	Benzo(a)Anthracene	5	U	
218-01-9	Chrysene	5	U	
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U	
117-84-0	Di-n-Octyl Phthalate	5	U	
205-99-2	Benzo(b)Fluoranthene	5	U	
207-08-9	Benzo(k)Fluoranthene	5	U	
50-32-8	Benzo(a)Pyrene	5	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U	
53-70-3	Dibenz(a,h)Anthracene	5	U	
191-24-2	Benzo(g,h,i)Perylene	5	U	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S01

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S01
Matrix: (soil/water) WATER Lab Sample ID: 93102132
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102132
Level: (low/med) LOW Date Received: 10/19/93
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/25/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S02

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102133

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102133

Level: (low/med) LOW Date Received: 10/19/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/25/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2, 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S02

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: B143E2 SAS No.: B143E02 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 93102133

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102133

Level: (low/med) LOW Date Received: 10/19/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/25/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S02

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01
Matrix: (soil/water) WATER Lab Sample ID: 93102133
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102133
Level: (low/med) LOW Date Received: 10/19/93
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/25/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S04

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102144

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102144

Level: (low/med) LOW Date Received: 10/20/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	<u>g</u>
108-95-2	Phenol	18	
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S04

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102144

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102144

Level: (low/med) LOW Date Received: 10/20/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>		Q
100-02-7	4-Nitrophenol	20	U	
132-64-9	Dibenzofuran	5	U	
121-14-2	2,4-Dinitrotoluene	5	U	
84-66-2	Diethylphthalate	5	U	
7005-72-3	4-Chlorophenyl-phenylether	5	U	
86-73-7	Fluorene	5	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine (1)	5	U	
101-55-3	4-Bromophenyl-phenylether	5	U	
118-74-1	Hexachlorobenzene	5	U	
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	5	U	
120-12-7	Anthracene	5	U	
84-74-2	Di-n-Butylphthalate	5	U	
206-44-0	Fluoranthene	5	U	
129-00-0	Pyrene	5	U	
85-68-7	Butylbenzylphthalate	5	U	
91-94-1	3,3'-Dichlorobenzidine	5	U	
56-55-3	Benzo(a)Anthracene	5	U	
218-01-9	Chrysene	5	U	
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U	
117-84-0	Di-n-Octyl Phthalate	5	U	
205-99-2	Benzo(b)Fluoranthene	5	U	
207-08-9	Benzo(k)Fluoranthene	5	U	
50-32-8	Benzo(a)Pyrene	5	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U	
53-70-3	Dibenz(a,h)Anthracene	5	U	
191-24-2	Benzo(g,h,i)Perylene	5	U	

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S04

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102144

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102144

Level: (low/med) LOW Date Received: 10/20/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0

CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04505

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 93102145

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102145

Level: (low/med) LOW Date Received: 10/20/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	<u>g</u>
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2, 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04505

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 93102145

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102145

Level: (low/med) LOW Date Received: 10/20/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	g
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-2	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S05

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01
Matrix: (soil/water) WATER Lab Sample ID: 93102145
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102145
Level: (low/med) LOW Date Received: 10/20/93
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S06

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102146

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102146

Level: (low/med) LOW Date Received: 10/20/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	<u>Q</u>
108-95-2	Phenol	3	J
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S06

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S01

Matrix: (soil/water) WATER Lab Sample ID: 93102146

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102146

Level: (low/med) LOW Date Received: 10/20/93

% Moisture: decanted: (Y/N) Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	G
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S06

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102146

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102146

Level: (low/med) LDW Date Received: 10/20/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0

CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S07

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102181

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102181

Level: (low/med) LOW Date Received: 10/21/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2, 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S07

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102181

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102181

Level: (low/med) LOW Date Received: 10/21/93

% Moisture: decanted: (Y/N) Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>		Q
100-02-7	4-Nitrophenol	20	U	
132-64-9	Dibenzofuran	5	U	
121-14-2	2,4-Dinitrotoluene	5	U	
84-66-2	Diethylphthalate	5	U	
7005-72-3	4-Chlorophenyl-phenylether	5	U	
86-73-7	Fluorene	5	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine (1)	5	U	
101-55-3	4-Bromophenyl-phenylether	5	U	
118-74-1	Hexachlorobenzene	5	U	
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	5	U	
120-12-7	Anthracene	5	U	
84-74-2	Di-n-Butylphthalate	5	U	
206-44-0	Fluoranthene	5	U	
129-00-0	Pyrene	5	U	
85-68-7	Butylbenzylphthalate	5	U	
91-94-1	3,3'-Dichlorobenzidine	5	U	
56-55-3	Benzo(a)Anthracene	5	U	
218-01-9	Chrysene	5	U	
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U	
117-84-0	Di-n-Octyl Phthalate	5	U	
205-99-2	Benzo(b)Fluoranthene	5	U	
207-08-9	Benzo(k)Fluoranthene	5	U	
50-32-8	Benzo(a)Pyrene	5	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U	
53-70-3	Dibenz(a,h)Anthracene	5	U	
191-24-2	Benzo(g,h,i)Perylene	5	U	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S07

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01
Matrix: (soil/water) WATER Lab Sample ID: 93102181
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102181
Level: (low/med) LOW Date Received: 10/21/93
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04D07

Lab Name: ENVIROSYSTEMS Contract: 68D90135
 Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04Sol
 Matrix: (soil/water) WATER Lab Sample ID: 93102180
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102180R
 Level: (low/med) LOW Date Received: 10/21/93
 % Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93
 Injection Volume: 1.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
38-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-7	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04D07

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04Sol

Matrix: (soil/water) WATER Lab Sample ID: 93102180

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102180R

Level: (low/med) LOW Date Received: 10/21/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	<u>g</u>
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04D07

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S01

Matrix: (soil/water) WATER Lab Sample ID: 93102180

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102180R

Level: (low/med) LOW Date Received: 10/21/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S09

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102182

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102182

Level: (low/med) LOW Date Received: 10/21/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	g
108-95-2	Phenol		7	
111-44-4	bis(2-Chloroethyl)Ether		5	U
95-57-8	2-Chlorophenol		5	U
100-51-6	Benzyl Alcohol		20	U
95-48-7	2-Methylphenol		5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)		5	U
106-44-5	4-Methylphenol		5	U
621-64-7	N-Nitroso-Di-n-Propylamine		5	U
67-72-1	Hexachloroethane		5	U
98-95-3	Nitrobenzene		5	U
78-59-1	Isophorone		5	U
88-75-5	2-Nitrophenol		5	U
105-67-9	2, 4-Dimethylphenol		5	U
65-85-0	Benzoic Acid		20	U
111-91-1	bis(2-Chloroethoxy)Methane		5	U
120-83-2	2, 4-Dichlorophenol		5	U
120-82-1	1, 2, 4-Trichlorobenzene		5	U
91-20-3	Naphthalene		5	U
106-47-8	4-Chloroaniline		5	U
87-68-3	Hexachlorobutadiene		5	U
59-50-7	4-Chloro-3-Methylphenol		5	U
91-57-6	2-Methylnaphthalene		5	U
77-47-4	Hexachlorocyclopentadiene		5	U
88-06-2	2, 4, 6-Trichlorophenol		5	U
95-95-4	2, 4, 5-Trichlorophenol		20	U
91-58-7	2-Chloronaphthalene		5	U
88-74-4	2-Nitroaniline		20	U
131-11-3	Dimethylphthalate		5	U
208-96-8	Acenaphthylene		5	U
606-20-2	2, 6-Dinitrotoluene		5	U
99-09-2	3-Nitroaniline		20	U
83-32-9	Acenaphthene		5	U
51-28-5	2, 4-Dinitrophenol		20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S09

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102182

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102182

Level: (low/med) LOW Date Received: 10/21/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>		Q
100-02-7	4-Nitrophenol	20	U	
132-64-9	Dibenzofuran	5	U	
121-14-2	2,4-Dinitrotoluene	5	U	
84-66-2	Diethylphthalate	5	U	
7005-72-3	4-Chlorophenyl-phenylether	5	U	
86-73-7	Fluorene	5	U	
100-01-6	4-Nitroaniline	20	U	
534-52-1	4,6-Dinitro-2-methylphenol	20	U	
86-30-6	N-Nitrosodiphenylamine (1)	5	U	
101-55-3	4-Bromophenyl-phenylether	5	U	
118-74-1	Hexachlorobenzene	5	U	
87-86-5	Pentachlorophenol	20	U	
85-01-8	Phenanthrene	5	U	
120-12-7	Anthracene	5	U	
84-74-2	Di-n-Butylphthalate	5	U	
206-44-0	Fluoranthene	5	U	
129-00-0	Pyrene	5	U	
85-68-7	Butylbenzylphthalate	5	U	
91-94-1	3,3'-Dichlorobenzidine	5	U	
56-55-3	Benz(a)Anthracene	5	U	
218-01-9	Chrysene	5	U	
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U	
117-84-0	Di-n-Octyl Phthalate	5	U	
205-99-2	Benzo(b)Fluoranthene	5	U	
207-08-9	Benzo(k)Fluoranthene	5	U	
50-32-8	Benzo(a)Pyrene	5	U	
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U	
53-70-3	Dibenz(a,h)Anthracene	5	U	
191-24-2	Benzo(g,h,i)Perylene	5	U	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S09

Lab Name: ENVIROSYSTEMS Contract: 68D90135
 Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01
 Matrix: (soil/water) WATER Lab Sample ID: 93102182
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102182
 Level: (low/med) LOW Date Received: 10/21/93
 % Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93
 Injection Volume: 1.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S10

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102183

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102183

Level: (low/med) LOW Date Received: 10/21/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
108-95-2	Phenol	4		J
111-44-4	bis(2-Chloroethyl)Ether	5		U
95-57-8	2-Chlorophenol	5		U
100-51-6	Benzyl Alcohol	20		U
95-48-7	2-Methylphenol	5		U
108-60-1	2,2'-oxybis(1-Chloropropane)	5		U
106-44-5	4-Methylphenol	5		U
621-64-7	N-Nitroso-Di-n-Propylamine	5		U
67-72-1	Hexachloroethane	5		U
98-95-3	Nitrobenzene	5		U
78-59-1	Isophorone	5		U
88-75-5	2-Nitrophenol	5		U
105-67-9	2,4-Dimethylphenol	5		U
65-85-0	Benzoic Acid	20		U
111-91-1	bis(2-Chloroethoxy)Methane	5		U
120-83-2	2,4-Dichlorophenol	5		U
120-82-1	1,2,4-Trichlorobenzene	5		U
91-20-3	Naphthalene	5		U
106-47-8	4-Chloroaniline	5		U
87-68-3	Hexachlorobutadiene	5		U
59-50-7	4-Chloro-3-Methylphenol	5		U
91-57-6	2-Methylnaphthalene	5		U
77-47-4	Hexachlorocyclopentadiene	5		U
88-06-2	2,4,6-Trichlorophenol	5		U
95-95-4	2,4,5-Trichlorophenol	20		U
91-58-7	2-Chloronaphthalene	5		U
88-74-4	2-Nitroaniline	20		U
131-11-3	Dimethylphthalate	5		U
208-96-8	Acenaphthylene	5		U
606-20-2	2,6-Dinitrotoluene	5		U
99-09-2	3-Nitroaniline	20		U
83-32-7	Acenaphthene	5		U
51-28-5	2,4-Dinitrophenol	20		U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S10

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04501

Matrix: (soil/water) WATER Lab Sample ID: 93102183

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102183

Level: (low/med) LOW Date Received: 10/21/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-3	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S10

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S01
Matrix: (soil/water) WATER Lab Sample ID: 93102183
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102183
Level: (low/med) LOW Date Received: 10/21/93
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

93JM04S11

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102184

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102184

Level: (low/med) LOW Date Received: 10/21/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 9.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	g
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S11

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102184

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102184

Level: (low/med) LOW Date Received: 10/21/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 9.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
97-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S11

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01
Matrix: (soil/water) WATER Lab Sample ID: 93102184
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102184
Level: (low/med) LOW Date Received: 10/21/93
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/26/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 9.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S12

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 Sol

Matrix: (soil/water) WATER Lab Sample ID: 93102194

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102194

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	<u>g</u>
108-95-2	Phenol	2	J
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2, 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S12

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 501

Matrix: (soil/water) WATER Lab Sample ID: 93102194

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102194

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S12

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S01
Matrix: (soil/water) WATER Lab Sample ID: 93102194
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102194
Level: (low/med) LOW Date Received: 10/22/93
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 1 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 134-62-3	BENZAMIDE, N,N-DIETHYL-3-MET	15.50	8	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S13

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S01

Matrix: (soil/water) WATER Lab Sample ID: 93102195

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102195

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	(ug/L or ug/Kg) <u>UG/L</u>	<u>g</u>
108-95-2	Phenol	2	J
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S13

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S01

Matrix: (soil/water) WATER Lab Sample ID: 93102195

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102195

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	<u>g</u>
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S13

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S01

Matrix: (soil/water) WATER Lab Sample ID: 93102195

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102195

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: decanted: (Y/N) Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S14

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102196

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102196

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>		g
108-95-2	Phenol	5	U	
111-44-4	bis(2-Chloroethyl)Ether	5	U	
95-57-8	2-Chlorophenol	5	U	
100-51-6	Benzyl Alcohol	20	U	
95-48-7	2-Methylphenol	5	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U	
106-44-5	4-Methylphenol	5	U	
621-64-7	N-Nitroso-Di-n-Propylamine	5	U	
67-72-1	Hexachloroethane	5	U	
98-95-3	Nitrobenzene	5	U	
78-59-1	Isophorone	5	U	
88-75-5	2-Nitrophenol	5	U	
105-67-9	2,4-Dimethylphenol	5	U	
65-85-0	Benzoic Acid	20	U	
111-91-1	bis(2-Chloroethoxy)Methane	5	U	
120-83-2	2,4-Dichlorophenol	5	U	
120-82-1	1,2,4-Trichlorobenzene	5	U	
91-20-3	Naphthalene	5	U	
106-47-8	4-Chloroaniline	5	U	
87-68-3	Hexachlorobutadiene	5	U	
59-50-7	4-Chloro-3-Methylphenol	5	U	
91-57-6	2-Methylnaphthalene	5	U	
77-47-4	Hexachlorocyclopentadiene	5	U	
88-06-2	2,4,6-Trichlorophenol	5	U	
95-95-4	2,4,5-Trichlorophenol	20	U	
91-58-7	2-Chloronaphthalene	5	U	
88-74-4	2-Nitroaniline	20	U	
131-11-3	Dimethylphthalate	5	U	
208-96-8	Acenaphthylene	5	U	
606-20-2	2,6-Dinitrotoluene	5	U	
99-09-2	3-Nitroaniline	20	U	
83-32-9	Acenaphthene	5	U	
51-28-5	2,4-Dinitrophenol	20	U	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S14

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102196

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102196

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	g
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S14

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S01
Matrix: (soil/water) WATER Lab Sample ID: 93102196
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102196
Level: (low/med) LOW Date Received: 10/22/93
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S26

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102198

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102198

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S26

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S01

Matrix: (soil/water) WATER Lab Sample ID: 93102198

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102198

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04526

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04561
Matrix: (soil/water) WATER Lab Sample ID: 93102198
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102198
Level: (low/med) LOW Date Received: 10/22/93
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S28

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S01

Matrix: (soil/water) WATER Lab Sample ID: 93102199

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102199

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2, 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S28

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S01

Matrix: (soil/water) WATER Lab Sample ID: 93102199

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102199

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) <u>UG/L</u>	<u>Q</u>
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No. _____ (1) CERCLIS No. WI

Case No. SAS 8143E02 Site Name Location: Stoughton City, VT

Contractor or EPA Lab: Enviro-systems Data User: Superfund

No. of Samples: 20 ^{NMM} Date Samples or Data Received: 11-24-93

Have Chain-of-Custody records been received? YES NO
Have traffic reports or packing lists been received? YES NO
If no, are traffic report or packing list numbers written on the chain-of-custody record? YES NO
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? YES NO
No. of samples claimed: 20 ^{NMM} No. of samples received: 20 ^{NMM}

Received by: Lynette Burnett Date: 11-24-93

Received by ISSS: Dorothy M. May Date: 11/26/93

Review started: 12/4/93 Reviewer Signature: Thomas E. Seawell

Total time spent on review: 14 Date review completed: 12/10/93

Copied by: Treddie Hopkins Date: 1-3-94

Mailed to user by: OD News Date: 1-2-94

DATA USERS:
Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ESCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete [] Suitable for Intended Purpose [] if OK
Organic Data Complete [] Suitable for Intended Purpose [] list
Dioxin Data Complete [] Suitable for Intended Purpose [] prblms
SAS Data Complete [] Suitable for Intended Purpose [] below.

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files Date: _____

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S28

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 Sol
Matrix: (soil/water) WATER Lab Sample ID: 93102199
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102199
Level: (low/med) LOW Date Received: 10/22/93
% Moisture: decanted: (Y/N) Date Extracted: 10/27/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/06/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

VOAs (2)
SVOAs

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 12/29/93

SUBJECT: Review of Region V CLP Data
Received for Review on Nov 24, 1993

FROM: Charles T. Elly, Director (SL-10C) MSP for CTE
Central Regional Laboratory

TO: Data User: Superfund

We have reviewed the data for the following case.

SITE NAME: Stoughton City LF (WI)

CASE and/or SAS NUMBER: SAS 8143E-02(2) SDG NUMBER: 93JM04S19

Number and Type of Samples: 16 (water)

CLP Sample Numbers: 93JM04S19, S20, S23, S25, S27, S29, S33, S36-340, D32

CLP Laboratory: EnviroSystems Hrs. for Review 18+3=21

Following are our findings:

The data are acceptable for use with qualification.

Mumtaz Pasha
12/29/93

- Data are acceptable for use.
- Data are acceptable for use with qualification.
- Data are preliminary, pending verification by laboratory.
- Data are unacceptable.

cc: Edward Kantor, EMSL-Las Vegas
Julie Frankel, VIAR & Co. (SMO)

NARRATIVE

CONTRACTOR: ENVIROSYSTEMS
CASE: SAS8143E-02
SITE: STOUGHTON CITY LANDFILL (WI)

Page 2 of 12
SDG: 93JM04S19

SAS8143E-02 consisted of sixteen (16) groundwater samples, labeled 93JM04S19 - S20, S23, S25, S27, S29 - S33, D32, and S36 - S40. EnviroSystems, Inc. of Columbia, Maryland received the samples between October 22 and 23, 1993 in good condition following the Special Analytical Services (SAS) #8143E-02 contract. All samples were scheduled for Low Concentration Volatile (VOA) and Semi-volatile (SV) analyses only.

LCS %recoveries for the VOA fraction met the QC criteria; therefore the results are acceptable. LCS %recoveries for the SV fraction were outside QC criteria for bis(2-Chloroethyl)Ether, 1,2,4-Trichlorobenzene, 2,3-Dinitrotoluene, Diethylphthalate, and Isophorone. The presence of Isophorone in the samples is qualified as estimated, "J". The presence of the other compounds is qualified as estimated, "J" and non-detects as unusable, "R".

Sample 93JM04S39 was used as the low level spike for both fractions. The MS/MSD %recoveries were outside QC limits for the volatile compounds Trichloroethene and Benzene, therefore the presence of these compounds in the unspiked sample is qualified as estimated, "J". The MS/MSD %recoveries were outside QC limits for the semi-volatile compounds 4-Chloro-3-methylphenol and 4-Nitrophenol, therefore the presence of these compounds in the unspiked sample is qualified as estimated, "J".

Sample 93JM04D32 was identified as the field duplicate of sample 93JM04S32 with a "D" on the SAS packing list. However, the Station Location Identifier appears to identify samples 93JM04S20 as a duplicate of 93JM04S19, 93JM04S31 as a duplicate of 93JM04S30, and 93JM04S28 as a duplicate of 93JM04S27, however there is a time differential between the sample collections. The results for sample 93JM04S28 were not included in this SDG grouping. Samples 93JM04S23, 93JM04S29, 93JM04S36, 93JM04S37, and 93JM04S38 were identified as trip blanks. No samples appeared to be identified as field blanks.

All VOA samples were preserved with acid and analyzed within 7 days, therefore the results are acceptable. All SV samples were unpreserved, extracted within 7 days and then promptly analyzed. Therefore, the results are acceptable.

The reviewer's narrative and data qualifiers are noted in the following pages.

Reviewed by: Allison C. Harvey *acth* Lockheed/ESAT
Date: December 21, 1993

NARRATIVE

CONTRACTOR: ENVIROSYSTEMS
CASE: SAS8143E-02
SITE: STOUGHTON CITY LANDFILL (WI)

Page 3 of 12
SDG: 93JM04S19

Below is a summary of the out-of-control audits and the possible effect on the data for this case.

1. HOLDING TIME.

Envirosystems, Inc. of Columbia, Maryland received sixteen (16) water samples (labeled 93JM04S19, S20, S23, S25, S27, S29 - S33, D32, and S36 - S40) for low organic volatile and semi-volatile analyses on October 22 and 23, 1993. The samples were received in good condition following the Special Analytical Services (SAS) #8143E-02 contract. All samples of sample delivery group (SDG) 93JM04S19 were analyzed for VOAs and SVs only.

Samples were collected October 21 and 22, 1993. All VOA samples were analyzed on October 25 and 26, 1993 well within the holding time of seven (7) days for preserved water samples, therefore the results are acceptable. All SV samples were extracted on October 27, 1993 well within the seven (7) day holding time and promptly analyzed on November 8 and 9, 1993. Therefore, the results are acceptable.

2. GC/MS TUNING AND GC PERFORMANCE.

VOA BFB (Bromofluorobenzene) tune checks met the required mass list (normalized to m/z 95) and ion abundance criteria. All samples were analyzed within the twelve (12) hour periods for instrument performance; therefore the results are acceptable.

All SV DFTPP (Decafluorotriphenylphosphine) tune checks met the required mass list (normalized to m/z 198) and ion abundance criteria. All samples were analyzed within the twelve (12) hour periods for instrument performance; therefore the results are acceptable.

3. CALIBRATION.

Initial and continuing calibrations of the Volatile and Semi-volatile standards were evaluated for the Target Compounds List (TCLs) and outliers were recorded on the outlier forms included as a part of this narrative.

All volatile and semi-volatile target compounds are qualified by using the following criteria: If the %RSD is

Reviewed by: Allison C. Harvey *acth* Lockheed/ESAT
Date: December 21, 1993

NARRATIVE

CONTRACTOR: ENVIROSYSTEMS
CASE: SAS8143E-02
SITE: STOUGHTON CITY LANDFILL (WI)

Page 4 of 12
SDG: 93JM04S19

greater than (>) 30.0% and all initial calibration RRFs are greater than or equal to (\leq) 0.05, positive results are qualified as estimated, "J". If the %D of the volatile compound is outside the \pm 30.0% criteria and the continuing calibration RRFs are \geq 0.05, positive results are qualified as estimated, "J" and non-detects as "UJ". If the %D of the semi-volatile compound is outside the \pm 25.0% criteria and the continuing calibration RRFs are \geq 0.05, positive results are qualified as estimated, "J" and non-detects as "UJ". If any initial or continuing RRF is less than (<) 0.05, positive results are qualified as estimated, "J" and non-detected analytes are qualified as unusable, "R".

4. METHOD BLANK.

VOA: VBLKC1 and VBLKC2 are the two (2) low concentration volatile method blanks and STGBLK1022 is the storage blank. No TCLs or TICs were detected in any of the blanks, therefore the results are acceptable.

SV: SBLKA3 is the low concentration semi-volatile method blank. No TCLs or TICs were detected in the blank, therefore the results are acceptable.

Please refer to Form-IVs for a list of the samples associated with each method blank.

5. SURROGATE (SYSTEM MONITORING COMPOUND) RECOVERY.

VOA: SMC1 (TOL) = Toluene-d8 reported %recoveries high outside QC limits (88-110%) for the samples listed below:

93JM04D32 (116)	93JM04S19 (119)	93JM04S25 (111)
93JM04S27 (112)	93JM04S33 (122)	93JM04S37 (120)
93JM04S37RE (111)	93JM04S39MS (122)	LCS01 (127)
STGBLK1022 (120)	VBLKC1 (113)	VBLKC2 (114)

SMC2 (BFB) = Bromofluorobenzene reported %recoveries low outside QC limits (86-115%) for samples:

93JM04S32 (77)	93JM04S32RE (79)	93JM04S37RE (81)
93JM04S38 (80)	93JM04S39 (85)	VBLKC2 (81)

Reviewed by: Allison C. Harvey *act* Lockheed/ESAT
Date: December 21, 1993

NARRATIVE

CONTRACTOR: ENVIROSYSTEMS
CASE: SAS8143E-02
SITE: STOUGHTON CITY LANDFILL (WI)

Page 5 of 12
SDG: 93JM04S19

SMC3 (DCE) = 1,2-Dichloroethane-d4 reported %recoveries high outside QC limits (76-114%) for the samples mentioned below:

93JM04D32 (134)	93JM04S19 (128)	93JM04S20 (116)
93JM04S23 (116)	93JM04S25 (127)	93JM04S27 (127)
93JM04S30 (134)	93JM04S31 (146)	93JM04S36 (115)
93JM04S37RE (116)	93JM04S38 (116)	93JM04S40 (122)
93JM04S40DL (128)	93JM04S39MS (120)	STGBLK1022 (142)

Where the surrogate recoveries are greater than the upper acceptance limits, detected volatile compounds are qualified as estimated, "J" for samples 93JM04D32, 93JM04S19, 93JM04S20, 93JM04S23, 93JM04S25, 93JM04S27, 93JM04S30, 93JM04S33, 93JM04S36, 93JM04S37, 93JM04S40, 93JM04S40DL, 93JM04S39MS, LCS01, STGBLK1022 and method blank VBLKC1. Where the surrogate recoveries are between 10% and the lower acceptance limits, detected target compounds are qualified as estimated, "J" and non-detects as "UJ" for samples 93JM04S32, 93JM04S32RE, 93JM04S37RE, 93JM04S38, 93JM04S39 and method blank VBLKC2.

SV: S1 (NBZ) = Nitrobenzene-d5 of the base/neutral fraction reported %recoveries high outside QC limits (35-114%) for samples 93JM04S39MS (134), 93JM04S39MSD (137) and LCS02 (130). No qualification is necessary because less than two (2) compounds within the same fraction were out of QC specifications.

6. LABORATORY CONTROL SAMPLE (LCS).

VOA: The LCS %recoveries for the volatile LCS sample, LCS01 met the required QC criteria; therefore the results are acceptable.

SV: The LCS %recoveries for the semi-volatile LCS sample, LCS02, reported low outside QC limits for the compounds bis(2-Chloroethyl)Ether (62), 1,2,4-Trichlorobenzene (42), 2,4-Dinitrotoluene (53) and Diethylphthalate (50). The LCS %recovery reported high outside QC limits (49-110%) for the compound Isophorone (113). When the LCS recoveries are not met, the Laboratory performance and method accuracy are considered questionable. Therefore, the presence of Isophorone in the samples is qualified as estimated, "J". The presence of the other above mentioned compounds is qualified as estimated, "J" and non-detects as unusable, "R".

Reviewed by: Allison C. Harvey *act* Lockheed/ESAT
Date: December 21, 1993

NARRATIVE

CONTRACTOR: ENVIROSYSTEMS
CASE: SAS8143E-02
SITE: STOUGHTON CITY LANDFILL (WI)

Page 6 of 12
SDG: 93JM04S19

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE.

Water sample 93JM04S39 was used as the low level spike for both the VOA and SV fractions.

VOA: The MS/MSD %recoveries reported high outside QC limits for the compounds Trichloroethene (121%) and Benzene (130%). The %RPD value was reported high outside QC limits (0-14%) for the compound Trichloroethene (52). The presence of these compounds in the unspiked sample should be qualified as estimated, "J".

SV: The MS/MSD %recoveries reported high outside QC limits for the compounds 4-Chloro-3-methylphenol (109,108) and 4-Nitrophenol (100,105). The presence of these compounds in the unspiked sample should be qualified as estimated, "J".

8. FIELD BLANK AND FIELD DUPLICATE.

Sample 93JM04D32 was identified as the field duplicate of sample 93JM04S32 with a "D" on the Traffic reports. Sample 93JM04S32 reported two (2) TCLs - Methylene Chloride and Trichlorofluoromethane; and no TICs for the VOA fraction and no TCLs or TICs for the SV fraction. Sample 93JM04S32 was reanalyzed for the VOA fraction and reported three (3) TCLs - Methylene Chloride, Acetone, and Trichlorofluoromethane; and no TICs. Sample 93JM04D32 reported three (3) TCLs - Methylene Chloride, Acetone, and Trichlorofluoromethane; and no TICs for the VOA fraction and no TCLs or TICs for the SV fraction.

On the SAS packing list/Chain-of-Custody reports the Station Location Identifier appears to identify samples 93JM04S20 as a duplicate of 93JM04S19, 93JM04S31 as a duplicate of 93JM04S30, and 93JM04S28 as a duplicate of 93JM04S27, however there is a time differential between the sample collections. The results for sample 93JM04S28 were not included in this SDG grouping. Both samples 93JM04S19 and 93JM04S20 reported no TCLs or TICs for the VOA fraction and no TCLs or TICs for the SV fraction. Sample 93JM04S30 reported four (4) TCLs - Methylene Chloride, Acetone, cis-1,2-Dichloroethene and Trichlorofluoromethane; and one (1) TIC for the VOA fraction and no TCLs or TICs for the SV fraction. Sample 93JM04S31 reported two (2) TCLs - Methylene Chloride and Acetone, and one (1) TIC for the VOA fraction and no TCLs or TICs for the SV fraction. Sample 93JM04S27 reported no TCLs or TICs for the VOA fraction and no TCLs or TICs for the SV fraction.

Reviewed by: Allison C. Harvey *act* Lockheed/ESAT
Date: December 21, 1993

NARRATIVE

CONTRACTOR: ENVIROSYSTEMS
CASE: SAS8143E-02
SITE: STOUGHTON CITY LANDFILL (WI)

Page 7 of 12
SDG: 93JM04S19

Samples 93JM04S23, 93JM04S29, 93JM04S36, 93JM04S37, and 93JM04S38 were identified as trip blanks. Trip blanks 93JM04S23 and 93JM04S29 each reported one (1) TCL - Chloroform; and no TICs for the VOA fraction. Trip blanks 93JM04S36 and 93JM04S37 each reported two (2) TCLs - Methylene Chloride and Chloroform; and no TICs for the VOA fraction. Trip blank 93JM04S38 reported three (3) TCLs - Methylene Chloride, Acetone and Chloroform; and no TICs. No samples appeared to be identified as field blanks.

9. INTERNAL STANDARDS.

The internal standards' retention times and area counts for the SV fraction were all within the required QC limits; therefore the results are acceptable.

VOA: IS3 (DCB) = 1,4-Dichlorobenzene-d4 reported area counts low outside QC limits for samples 93JM04S25 (10412), 93JM04S37 (10488) and 93JM04S37RE (9883). Positive results for compounds quantitated using this internal standard should be qualified as estimated, "J" and non-detects as "UJ".

Please refer to Table 4 for a list of affected compounds.

10. COMPOUND IDENTIFICATION.

Target compounds and TICs were identified by "best fit" library search method.

11. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS.

VOA and SV Target Compounds (TCLs) and Tentatively Identified Compounds (TICs) were properly quantitated; therefore, the results are acceptable.

12. SYSTEM PERFORMANCE.

GC/MS baseline indicated acceptable performance.

GC baseline counts indicated acceptable performance.

13. OVERALL CASE ASSESSMENT.

The table below summarizes the number of target compounds (TCLs) outside the Contract Required Quantitation Limit (CRQL)

Reviewed by: Allison C. Harvey *acth* Lockheed/ESAT
Date: December 21, 1993

NARRATIVE

CONTRACTOR: ENVIROSYSTEMS
CASE: SAS8143E-02
SITE: STOUGHTON CITY LANDFILL (WI)

Page 8 of 12
SDG: 93JM04S19

and the number of tentatively identified compounds (TICs) associated with these samples.

VOA: The compound Chloroform exceeded the instrument calibration range in sample 93JM04S40. The sample 93JM04S40DL was analyzed at a 5:1 dilution. The results from the re-analysis were used to validate the data.

The Laboratory chose to re-analyze only sample 93JM04S32 because it failed to meet the surrogate BFB recovery QC limits (80-120%) as specified in the SuperFund Analytical Methods for Low Concentration Water for Organics Analysis (SAMLCO) (6/91). The results from the re-analyzed sample, 93JM04S32RE, were used to validate the data.

Samples 93JM04S25 and 93JM04S37 failed to meet the internal standards criteria, however according to the laboratory's narrative "The IS failure in sample 93JM04S25 was not realized until the time of report preparation and no re-analysis was performed". The results from samples 93JM04S25 and 93JM04S37RE were used to validate the data.

According to the SAS contract the detection limits for all volatile compounds should have been 1 ug/L. According to the Form Is, the detection limits of Methylene Chloride, Acetone, 2-Butanone, 4-Methyl-2-Pentanone, and 2-Hexanone were not lowered to comply with the request. Therefore sample 93JM04S32 actually reported three (3) TCLs, 93JM04S33 reported five (5) TCLs and 93JM04S37 reported four (4).

Reviewed by: Allison C. Harvey *act* Lockheed/ESAT
Date: December 21, 1993

NARRATIVE

CONTRACTOR: ENVIROSYSTEMS
CASE: SAS8143E-02
SITE: STOUGHTON CITY LANDFILL (WI)

Page 9 of 12
SDG: 93JM04S19

Sample ID # # of Hits

	<u>VOA</u>		<u>SV</u>		<u>Pest/PCB</u>
	<u>TCL</u>	<u>TIC</u>	<u>TCL</u>	<u>TIC</u>	<u>TCL</u>
93JM04S19	0	0	0	0	-
93JM04S20	0	0	0	0	-
93JM04S23	1	0	-	-	-
93JM04S25	0	0	0	0	-
93JM04S27	0	0	0	0	-
93JM04S29	1	0	-	-	-
93JM04S30	4	1	0	0	-
93JM04S31	2	1	0	0	-
93JM04S32	2 (3)	0	0	0	-
93JM04S32RE	3	0	-	-	-
93JM04D32	3	0	0	0	-
93JM04S33	4 (5)	1	0	0	-
93JM04S36	2	0	-	-	-
93JM04S37	2 (4)	0	-	-	-
93JM04S37RE	2	0	-	-	-
93JM04S38	3	0	-	-	-
93JM04S39	6	2	0	0	-
93JM04S40	3	0	1	0	-
93JM04S40DL	3	0	-	-	-

(-) No analysis was performed.
(RE) Results from re-analysis.
(DL) Sample analyzed at a secondary dilution.

Reviewed by: Allison C. Harvey *acth* Lockheed/ESAT
Date: December 21, 1993

CALIBRATION OUTLIERS
LOW CONCENTRATION WATER VOLATILE TCL COMPOUNDS

(Page 1 of 1)

CASE/SAS#: SAS8143E-02
 COLUMN: RTX-502.2

CONTRACTOR: ENVIROSYSTEMS
 SITENAME: STOUGHTON CITY LF

Instrument#	MSC	Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			
		#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Date/Time:		10/23/93			10/25/93	0936		10/26/93	0842								
Chloromethane	0.01	0.321			0.221	31.2	J	0.195	39.2	J							
Bromomethane	0.10																
Vinyl chloride	0.10																
Chloroethane	0.01																
Methylene chloride	0.01																
Acetone	0.01	0.022		J	0.017		J	0.018		J							
Carbon disulfide	0.01																
1,1-Dichloroethene	0.10																
1,1-Dichloroethane	0.20																
cis-1,2-Dichloroethene	0.10																
trans-1,2-Dichloroethene	0.10																
Chloroform	0.20																
1,2-Dichloroethane	0.10																
2-Butanone	0.01	0.069	43.1	J	0.020	71.0	J	0.021	69.6	J							
Bromochloromethane	0.10																
1,1,1-Trichloroethane	0.10																
Carbon tetrachloride	0.10																
Bromodichloromethane	0.20																
1,2-Dichloropropane	0.01																
cis-1,3-Dichloropropene	0.20																
Trichloroethene	0.30																
Dibromochloromethane	0.10																
1,1,2-Trichloroethane	0.10																
Benzene	0.50																
tran-1,3-Dichloropropene	0.10																
Bromoform	0.10																
4-Methyl-2-pentanone	0.01	0.119			0.074	37.8	J	0.070	41.2	J							
2-Hexanone	0.01	0.075	34.8	J	0.048	36.0	J	0.044	41.3	J							
Tetrachloroethene	0.20																
1,1,2,2-Tetrachloroethane	0.50																
1,2-Dibromoethane	0.10																
Toluene	0.40																
Chlorobenzene	0.50																
Ethylbenzene	0.10																
Styrene	0.30																
Xylene (total)	0.30																
1,2-Dibromo-3-chloropropane	0.10																
1,3-Dichlorobenzene	0.60																
1,4-Dichlorobenzene	0.50																
1,2-Dichlorobenzene	0.40																
Bromofluorobenzene	0.40																
Vinyl Acetate	0.344				0.102	70.4	J	0.105	69.5	J							
Samples affected:					VBLK1			VBLK2									
					93JM04S19-S20			93JM04S32-S33									
					93JM04S23,S25			LCS01									
					93JM04S27,D32			93JM04S30-S40									
					93JM04S29-S31			93JM04S32 RE									
								93JM04S37 RE									
								93JM04S39MS/MSD									
								93JM04S40 DL									

STGBLK1022

Reviewer's Init/Date: ACT / 12-15-93

* These flags should be applied to the analytes on the sample data sheets.
 # Minimum Relative Response Factor

**CALIBRATION OUTLIER
LOW CONC. WATER SEMVOLATILE TCL COMPOUNDS**

(Page 1)

CASE/SAS#: SAS8143E-02

CONTRACTOR: ENVIROSYSTEMS
STOUGHTON CITY LANDFILL CW

Instrument#	MSA	Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
		#	rf	%rsd	#	rf	%d	#	rf	%d	#	rf	%d	#	rf	%d
Date/Time:		11/05/93	1052		11/05/93	1305		11/08/93	0841		11/09/93	0929				
Phenol		0.80														
bis(chloroethyl) Ether		0.70														
2-Chlorophenol		0.70														
2-Methylphenol		0.70														
2,2'-Oxybis(1-chl-propane)		0.01	5.592		5.407		4.599		3.576		36.1					
4-Methylphenol		0.60														
N-nitroso-di-n-propylamine		0.50														
Hexachloroethane		0.30														
Nitrobenzene		0.20														
Isophorone		0.40														
2-Nitrophenol		0.10														
2,4-Dimethylphenol		0.20														
bis-(2-chloroethoxy)methane		0.30														
2,4-Dichlorophenol		0.20														
1,2,4-Trichlorobenzene		0.20														
Naphthalene		0.70														
4-Chloroaniline		0.01														
Hexachlorobutadiene		0.01														
4-Chloro-3-methylphenol		0.20														
2-Methylnaphthalene		0.40														
Hexachlorocyclopentadiene		0.01														
2,4,6-Trichlorophenol		0.20														
2,4,5-Trichlorophenol		0.20														
2-Chloronaphthalene		0.80														
2-Nitroaniline		0.01														
Dimethyl phthlate		0.01														
Acenaphthylene		1.30														
2,6-Dinitrotoluene		0.20														
3-Nitroaniline		0.01														
Acenaphthene		0.30														
2,4-Dinitrophenol		0.01														
4-Nitrophenol		0.01														
Dibenzofuran		0.80														
2,4-Dinitrotoluene		0.20														
Affected samples:					SBLK A3		93JM04519-520		93JM04532-533							
							93JM04527, 530		93JM04525							
							93JM04539-540		93JM04531, D32							
							93JM04539MS/MSD									
							LCS02									

Reviewer's Init/Date: acth / 12-15-93

* These flags should be applied to the analytes on the sample data sheets.
Minimum Relative Response Factor

CALIBRATION OUTLIER
LOW CONC. WATER SEMVOLATILE TCL COMPOUNDS
 (Page 2)

CASE/SAS#: SAS8143E-02
 CONTRACTOR: ENVIROSYSTEMS
STOUGHTON CITY LANDFILL

Instrument#	MSA	Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			
		#	rf	%rsd	#	rf	%d	#	rf	%d	#	rf	%d	#	rf	%d	
Date/Time:					11/05/93	1052		11/05/93	1305		11/08/93	0841		11/04/93	0929		
Diethylphthalate		0.01															
4-Chlorophenyl-phenylether		0.40															
Fluorene		0.90															
4-Nitroaniline		0.01															
4,6-Dinitro-2-methylphenol		0.01	0.155			0.172			0.171			0.202	303	J			
N-nitrosodiphenylamine		0.01															
4-Bromophenyl-phenylether		0.10															
Hexachlorobenzene		0.10															
Pentachlorophenol		0.05															
Phenanthrene		0.70															
Anthracene		0.70															
Di-n-butylphthalate		0.01															
Fluoranthene		0.60															
Pyrene		0.60															
Butylbenzylphthalate		0.01															
3,3'-Dichlorobenzidine		0.01															
Benzo(a)anthracene		0.80															
Chrysene		0.70															
bis(2-Ethylhexyl)phthalate		0.01															
Di-n-octyl phthalate		0.01															
Benzo(b)fluoranthene		0.70															
Benzo(k)fluoranthene		0.70															
Benzo(a)pyrene		0.70															
Indeno(1,2,3-cd)pyrene		0.50															
Dibenz(a,h)anthracene		0.40															
Benzo(g,h,i)perylene		0.50															
Nitrobenzene-d5		0.01															
2-Fluorobiphenyl		0.70															
Terphenyl-d14		0.50															
Phenol-d5		0.80															
2-Fluorophenol		0.60															
2,4,6-Tribromophenol		0.01															

Reviewer's Init/Date: aca / 12-15-93

* These flags should be applied to the analytes on the sample data sheets.
 # Minimum Relative Response Factor

DATA REPORTING QUALIFIERS

(page 1)

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE-if the results is a value greater than or equal to the Contract Required Quantitation Limit (CRQL), report the value.

U - Indicates compound was analyzed for but not detected. The sample Quantitation Limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the Sample Quantitation Limit for phenol (330 U) would be corrected to:

$$\frac{(330 \text{ U}) \times \text{df}}{D}$$

$$\text{where } D = \frac{100 - \% \text{ moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100 - 24}{100} = 0.76$$

$$\frac{(330 \text{ U}) \times 10}{.76} = 4300 \text{ U rounded to the appropriate number of significant figures}$$

For soil samples subjected to GPC clean-up procedures, the extract must be concentrated to 0.5 ml, and the sensitivity of the analysis is not compromised by the cleanup procedures. Therefore, the CRQL values will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specified volume, this fact be accounted for in reporting the Sample Quantitation Limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration of 3 ug/L is calculated, report it as 3J. The Sample Quantitation Limit must be adjusted for dilution as discussed for the U flag. The J flag is also applied to pesticide/Aroclor results where the pesticide/Aroclor is confirmed to be present but the concentration is less than the CRQL.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds. Where the identification is based on a mass spectral library search. It is applied to all TIC results.

DATA REPORTING QUALIFIERS
(page 2)

- P** - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two columns (see Form X). The lower of the two values is reported on Form I and flagged with a "P".
- C** - This flag applies to pesticide results where identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but unsuccessful, do not apply this flag, instead use a laboratory-defined, discussed below.
- B** - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.
- E** - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for the specific analysis. This flag will not apply to pesticide/PCBs analyzed by GC/MS methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.
- D** - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.
- A** - This flag indicates that a TIC is a suspected aldol-condensation product.
- X** - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the SDG Narrative. If more than one flag is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B" and "D" flags for some sample. The laboratory-defined are limited to letters "X", "Y" and "Z".

TABLE 4

(For Low Concentration water)

VOLATILE INTERNAL STANDARDS WITH CORRESPONDING TCL ANALYTES ASSIGNED FOR QUANTITATION

<u>1,4-Difluorobenzene</u>	<u>Chlorobenzene-d₁</u>	<u>1,4-Dichlorobenzene-d₂</u>
Chloromethane	4-Methyl-2-pentanone	Bromoform
Bromomethane	1,1,1-Trichloroethane	1,2-Dibromo-3-chloropropane
Vinyl chloride	Carbon tetrachloride	1,2-Dichlorobenzene
Chloroethane	Bromodichloromethane	1,3-Dichlorobenzene
Methylene chloride	1,2-Dichloropropane	1,4-Dichlorobenzene
Acetone	trans-1,3-Dichloropropane	
Carbon disulfide	Trichloroethene	
1,1-Dichloroethene	Dibromochloromethane	
1,1-Dichloroethane	1,1,2-Trichloroethane	
4-Bromofluorobenzene	Benzene	
Chloroform	cis-1,3-Dichloropropene	
1,2-Dichloroethane	Chlorobenzene	
1,2-Dichloroethane-d ₂ (surr, smc)	1,2-Dibromomethane	
2-Butanone	Ethylbenzene	
Bromochloromethane	2-Hexanone	
cis-1,2-Dichloroethene	Styrene	
trans-1,2-Dichloroethene	Xylene(total)	
	Toluene	
	Tetrachloroethene	
	1,1,2,2-Tetrachloroethane	

SEMI-VOLATILE INTERNAL STANDARDS WITH CORRESPONDING TCL ANALYTES ASSIGNED FOR QUANTITATION

<u>1,4-Dichlorobenzene-d₂</u>	<u>Naphthalene-d₈</u>	<u>Acenaphthene-d₁₀</u>	<u>Phenanthrene-d₁₀</u>	<u>Chrysene-d₁₂</u>	<u>Perylene-d₁₂</u>
Phenol	Nitrobenzene	Hexachlorocyclopentadiene	4,6-Dinitro-2-methylphenol	Pyrene	Di-n-octyl phthalate
bis(2-chloroethyl)ether	Isophorone	2,4,6-Trichlorophenol	N-nitroso-di-phenylamine	butylbenzyl phthalate	Benzo(b)fluoranthene
2-Chlorophenol	2-Nitrophenol	2,4,6-Trichlorophenol	1,2-Diphenylhydrazine	3,3'-Dichlorobenzidine	Benzo(k)fluoranthene
2-Methylphenol	2,4-Dimethylphenol	2-Chloronaphthalene	4-Bromophenyl phenyl ether	Benzo(e)anthracene	Benzo(e)pyrene
bis(2-chloroisopropyl)ether	2-Methylnaphthalene	2-Nitroaniline	Hexachlorobenzene	bis(2-Ethylhexyl)phthalate	Indeno(1,2,3-cd)pyrene
4-Methylphenol	bis(2-Chloroethoxy)methane	Dimethylphthalate	Pentachlorophenol	Chrysene	Dibenzo(e,h)anthracene
N-nitroso-di-n-propylamine	2,4-Dichlorophenol	Acenaphthylene	Phenanthrene	Terphenyl-d ₁₄ (surr)	Benzo(g,h,i)perylene
2-Fluorophenol(surr)	Nitrobenzene-d ₅ (surr)	3-Nitroaniline	Anthracene		
Phenol-d ₆ (surr)	4-Chloroaniline	Acenaphthene	Di-n-butyl phthalate		
	Hexachlorobutadiene	2,4-Dinitrophenol	Fluoranthene		
	4-Chloro-3-methylphenol	4-Nitrophenol			
		Dibenzofuran			
		2,4-Dinitrotoluene			
		2,6-Dinitrotoluene			
		Diethyl phthalate			
		4-Chlorophenyl phenyl ether			
		Fluorene			
		4-Nitroaniline			
		2-Fluorobiphenyl(surr)			
		2,4,6-Tribromophenol(surr)			

(surr) - surrogate

OLC01 0 (4/90)



United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

44-30-03

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	Sampling Co. Jacobs	4. Date Shipped 10/22/93	Carrier Fed EX	7. Date Received -- Received by 10/23/93 [Signature]			
		Sampler (Name) Susan Lorenz		Airbill Number 6346883620		Laboratory			
		Sampler Signature Susan Lorenz		5. Ship To Enviro Systems Inc. 1700 Runway Rd Suite 302 Columbia, MD 21045		8. Transfer to		Date Received	
		3. Type of Activity Remedial <input type="checkbox"/> Pre Remedial <input type="checkbox"/> Remedial <input type="checkbox"/> PA <input type="checkbox"/> SS <input type="checkbox"/> FED/LSI		<input type="checkbox"/> RIFS <input type="checkbox"/> RD <input checked="" type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD		<input type="checkbox"/> CLEM <input type="checkbox"/> REMA <input type="checkbox"/> REM <input type="checkbox"/> OIL <input type="checkbox"/> UST		Received by Laboratory	

0006

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
1 33W04531	2	L	1	Low Conc UGA	-	5008616	SL-MW55-453	10/22/93 1120	[Signature]	
2 93JH04531	2	L	7	Low Conc ARN	-	5008617	SL-MW55-K92	10/22/93 1120	[Signature]	
3 93JH04532	2	L	7	Low Conc UGA	-	5008621	SL-TB15-K93	10/22/93 1130	[Signature]	
4 93JH04532	2	L	7	Low Conc OBN	D	5008654	SL-MW9B-1093	10/22/93 1120	[Signature]	
5 93JH04532	2	L	7	Low Conc ARN	-	5008624	SL-MW9A-1093	10/22/93 1120	[Signature]	
6 93JH04533	2	L	1	Low Conc UGA	-	5008625	SL-MW9I-1093	10/22/93 1120	[Signature]	
7 93JH04532	2	L	1	Low Conc UGA	D	5008658	SL-MW9A-1093	10/22/93 1120	[Signature]	
8 93JH04532	2	L	1	Low Conc UGA	-	5008659	SL-MW9A-1093	10/22/93 1120	[Signature]	
9.										
10.										

Shipment for SAS complete? (Y/N)

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) Susan Lorenz	Date / Time 10/22/93 1900	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [Signature]	Date / Time 10/23/93 1000	Remarks Is custody seal intact? Y/N/none (encl. Seal Nos: 1172435, 117436)	

EPA Form
 DISTRIBUTION:
 White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

Split Samples Accepted (Signature) Declined

S 025770



United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2400 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

SAS No.

8143E-02

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinse 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO ₃ 3. NaHSO ₄ 4. H ₂ SO ₄ 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	3. Sampling Co. JACOBS	4. Date Shipped 10/21/93	Carrier FEDEX	7. Date Received -- Received by 10/22/93 WUH	
		Sampler (Name) SISON Lorenz		Airbill Number 6346883594		Laboratory	
		Sampler Signature [Signature]		5. Ship To ENVIRC SYSTEMS 9200 RUMSEY RD SUITE B102 COLUMBIA, MD 21045		8. Transfer to Date Received	
		RIFS <input type="checkbox"/> CLEM <input type="checkbox"/> RD <input type="checkbox"/> REMA <input type="checkbox"/> RA <input checked="" type="checkbox"/> REM <input type="checkbox"/> OSM <input type="checkbox"/> OIL <input type="checkbox"/> NPLD <input type="checkbox"/> UST <input type="checkbox"/>		9200 RUMSEY RD SUITE B102 COLUMBIA, MD 21045		Received by Laboratory	
				410/964-0330			

5005

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
1 93JM04S20	2	L	N	LOW CONC ABA	-	5008592	SL-M1040-1093	10/21/93 10:25	WUH	OK
2 93JM04S23	2	L	N	LOW CONC ABA	-	5008590	SL-T609-1093	10/21/93 10:25	WUH	OK
3 93JM04S20	2	L	1	LOW CONC VOA	-	5008593	SL-M1040-1093	10/21/93 10:25	WUH	OK
4 93JM04S19	2	L	N	LOW CONC ABA	-	5008598	SL-M1045-1093	10/21/93 11:30	WUH	OK
5 93JM04S19	2	L	1	LOW CONC VOA	-	5008599	SL-M1045-1093	10/21/93 11:30	WUH	OK
6 93JM04S25	2	L	N	LOW CONC ABA	-	5008600	SL-M1081E-1093	10/21/93 12:05	WUH	OK
7 93JM04S25	2	L	1	LOW CONC VOA	-	5008601	SL-M1081B-1093	10/21/93 12:05	WUH	OK
8.										
9.										
10.										

Shipment for SAS complete? (Y/N) **(Y)**

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) Sison Lorenz	Date / Time 10/21/93 10:30	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature) WUH	Date / Time	Received for Laboratory by: (Signature)	Date / Time 10/22/93 10:00	Remarks OS 147423, 147424	Is custody seal intact? Y/N/none

EPA Form
 DISTRIBUTION:
 White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

Split Samples Accepted (Signature)
 Declined



United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

DATE NO.

7113.e 52

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinse 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO ₃ 3. NAHSO ₄ 4. H ₂ SO ₄ 5. NaOH 6. Other (Specify) 7. Ice only N. Not preserved	2. Region No. 5	3. Sampling Co. Jacobs	4. Date Shipped 10/27/93	Carrier FedEx	7. Date Received -- Received by 10/23/93 <i>WLL</i>
		Sampler (Name) Susan Lorenz	Airbill Number 634688642	Laboratory 2000	5. Ship To EnviroSystems Inc. 9700 Runway Rd. Suite B102 Columbia, MD 21046 410-924-0330	8. Transfer to Date Received

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
1. 93 MAY 339	2	L	7	low conc VOA	-	5008673	SI-7B16-093	10/27/93 1150		
2. 93 MAY 343	2	L	7	low conc VOA	-	5009476	SI-7B16-093	10/27/93 1220		
3. 93 MAY 359	2	L	1	low conc VOA	-	5008666	SI-MW9S-093	10/27/93 1435	SLR	
4. 93 MAY 339	2	L	7	low conc ABN	-	5008667	SI-MW9S-093	10/27/93 1435	SLR	
5. 93 MAY 340	2	L	1	low conc VOA	-	5008670	SI-AB02-093	10/27/93 1505		
6. 93 MAY 340	2	L	7	low conc ABN	-	5008671	SI-AB02-093	10/27/93 1505		
7.										
8.										
9.										
10.										

Shipment for SAS complete? (Y/N)
 Y

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Susan Lorenz</i>	Date / Time 10/27/93 1900	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature) <i>WLL</i>	Date / Time	Received for Laboratory by: (Signature)	Date / Time 10/27/93 1000	Remarks Cust Seal Nos: 147439, 117440	Is custody seal intact? Y/N/none

EPA Form
 DISTRIBUTION:
 White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

Split Samples Accepted (Signature)
 Declined

S 025779



United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

SAS No.

8143E-02

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinse 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column A) 1. HCl 2. HNO ₃ 3. NAHSO ₄ 4. H ₂ SO ₄ 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	3. Sampling Cp. JOLOB'S	4. Date Shipped 10/22/93	Carrier Fed Ex	7. Date Received -- Received by 10/23/93 <i>[Signature]</i>	
		Sampler (Name) <i>[Signature]</i>	Airbill Number 10346883616	Laboratory	8. Transfer to Date Received		Received by Laboratory
		4. Type of Activity Remedial Removal <input type="checkbox"/> RIFS <input type="checkbox"/> CLEM <input type="checkbox"/> RD <input type="checkbox"/> REMA <input type="checkbox"/> RA <input type="checkbox"/> REM <input type="checkbox"/> O&M <input type="checkbox"/> OIL <input type="checkbox"/> NPLD <input type="checkbox"/> UST		5. Ship To EnviroSystems Inc. 5700 Rimsay Rd Suite B102 Columbia, MD 21045 410-964-0330			

8000

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
1 93JM04S28	2	L	F	Low Conc ARN	—	5008639	SL-MWSD-1093	10/21/93 1700	JK	
2 93JM04S28	2	L	F	Low Conc ARN	S	5008640	SL-MWSD-1093	10/21/93 1700	JK	
3 93JM04S30	2	L	F	Low Conc ARN	—	5008611	SL-MWSD-1093	10/22/93 1700	JK	
4 93JM04S30	2	L	F	Low Conc VA	—	5008612	SL-MWSD-1093	10/22/93 1700	JK	
5 93JM04S30										
6 93JM04S30										
7 93JM04S36	2	L	F	Low Conc VOA	—	5008620	SL-TB-1093	10/22/93 1130	JK	
8										
9										
10										

Shipment for SAS complete? (Y/N)

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>[Signature]</i>	Date / Time 10/22/93 1900	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>[Signature]</i>	Date / Time 10/23/93 1000	Remarks Is custody seal intact? Y/N/none Cust Seal Nos. 147431, 147432	

Split Samples Accepted (Signature)
 Declined



United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 618 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

303110

8145E-12

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinse 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO ₃ 3. H ₂ SO ₄ 4. H ₂ O 5. NaOH 6. Other (Specify) 7. Ice only N. Not preserved	2. Region No. 5	3. Sampling Co. JACOBS	4. Date Shipped 10/21/93	Carrier FEDEX	7. Date Received 10/21/93	Received by 	
		Sampler (Name) [Redacted]		Airbill Number 6346883605	5. Ship To ENVIROSYSTEMS INC 9200 RUMSEY RD SUITE B102 COLUMBIA, MD 21045		Laboratory [Redacted]	8. Transfer to [Redacted]
		Removal <input type="checkbox"/> RIFS <input type="checkbox"/> RD <input type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD		<input type="checkbox"/> CLEM <input checked="" type="checkbox"/> REMA <input type="checkbox"/> REM <input type="checkbox"/> OIL <input type="checkbox"/> UST		Received by [Redacted]		Laboratory [Redacted]

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
193TMD4527	2	L	N	LOW CONC ARN	-	5008630	SL-MW35-1093	10/21/93 1550	SKL	
293TMD4526	2	L	N	LOW CONC ARN	-	5008631	SL-MW36-1093	10/21/93 1510	SKL	
393TMD4527	2	L	L	LOW CONC UOA	-	5008632	SL-MW35-1093	10/21/93 1550	SKL	
493TMD4526	2	L	L	LOW CONC UOA	-	5008633	SL-MW36-1093	10/21/93 1510	SKL	
593TMD4528	2	L	L	LOW CONC UOA	-	5008634	SL-MW3D-1093	10/21/93 1700	SKL	
693TMD4528	2	L	L	LOW CONC UOA	S	5008635	SL-MW3D-1093	10/21/93 1700	SKL	
793TMD4528	2	L	L	LOW CONC UOA	S	5008636	SL-MW3D-1093	10/21/93 1700	SKL	
893TMD4529	2	L	N	LOW CONC UOA	-	5008637	SL-MW31-1093	10/21/93 1700	SKL	
9										
10										

Shipment for SAS complete? (Y/N) Y

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) 	Date / Time 10/21/93 1950	Received by: (Signature) 	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature) 	Date / Time	Received for Laboratory by: (Signature) 	Date / Time 10/21/93 1000	Remarks CS 147428, 147427	Is custody seal intact? Y/N/none

EPA Form 3031-109
 DISTRIBUTION
 White - Region Copy, Yellow - SMO Copy, Gold - Lab Copy, Pink - Lab Copy for Return to SMO

Split Samples Accepted (Signature) Declined

Copy - Original in 8145E-02 S72 JM 04501

6000

NARRATIVE

LABORATORY NAME: ENVIROSYSTEMS, INC.

SAS #: 8143E-02

SDG #: 93JM04S19

DATES SAMPLES RECEIVED AT LABORATORY: 22 - 23 OCT. 1993

SAMPLE ANALYSES INCLUDED IN THIS REPORT:

EPA SAMPLE #	LAB ID #	ANALYSIS
93JM04S19	93102200	VOA, BNA
93JM04S20	93102201	VOA, BNA
93JM04S23	93102202	VOA
93JM04S25	93102203	VOA, BNA
93JM04S27	93102204	VOA, BNA
93JM04S29	93102205	VOA
93JM04S30	93102206	VOA, BNA
93JM04S31	93102207	VOA, BNA
93JM04D32	93102208	VOA, BNA
93JM04S32	93102209	VOA, BNA
93JM04S33	93102210	VOA, BNA
93JM04S36	93102211	VOA
93JM04S37	93102212	VOA
93JM04S38	93102213	VOA
93JM04S39	93102214	VOA, BNA
93JM04S40	93102215	VOA, BNA

MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSES WERE PERFORMED ON SAMPLE 93JM04S39.

VOLATILES SECTION:

Many of the samples had surrogate recoveries that did not meet the SAS requirements. Only those samples that did not meet the surrogate recovery requirements specified by SAMLCO 10/92 (80-120% for BFB) were reanalyzed.

One internal standard area was outside the GC limits in samples 93JM04S37 and 93JM04S25. Sample 93JM04S37 was reanalyzed with similar results and both sets of data are included. The IS failure in sample 93JM04S05 was not realized until the time of report preparation and no reanalysis was performed.

SEMIVOLATILES SECTION:

Surrogate recovery was high for nitrobenzene-d5 in samples LCS02, 93JM04S39MS and 93JM04S39MSD.

Five of the fifteen LCS recoveries were below the GC limits required by the method. In the past the laboratory has used wider recovery windows which would have bracketed more compounds.

0003



United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703 557-2480 FTS 557-2490

Special Analytical Service
 Packing List/Chain of Custody

SAS No.
 8143E-02

1. Project Code C05030	Account Code	2. Region No. S	Sampling Co. JACOBS	4. Date Shipped 10/21/93	Carrier FED EX	6. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinseate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	7. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NAOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved
Regional Information		Sampler (Name) SUSAN LORENZ		Airbill Number 6346883583			
Non-Superfund Program		Sampler Signature <i>Susan Lorenz</i>		5. Ship To ENVROSYS SYSTEMS 9200 RIMSEY RD Rte. B102 Columbia, MD 21045 410/964-0330			
Site Name CITY OF SIMONTON LANDFILL		3. Type of Activity					
City, State SIMONTON, WI		Site Spill ID					
		<input type="checkbox"/> SF <input type="checkbox"/> PRP <input type="checkbox"/> ST <input type="checkbox"/> FED		<input type="checkbox"/> Lead <input type="checkbox"/> PA <input type="checkbox"/> SS <input type="checkbox"/> LSI		<input type="checkbox"/> RIFS <input type="checkbox"/> RD <input type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD	
		<input type="checkbox"/> CLEM <input checked="" type="checkbox"/> REMA <input type="checkbox"/> REM <input type="checkbox"/> OIL <input type="checkbox"/> UST					

Sample Numbers	A Matrix Enter from Box 6	B Conc Low Med High	C Preservative Used from Box 7	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Designated Field QC
193TM04512	2	L	1	LOW CONC UOA	-	5008580	SL-MW75-1093	10/20/93 1520	SLR	-
293TM04512	2	L	N	LOW CONC DBN	-	5008579	SL-MW75-1093	10/20/93 1520	SLR	-
393TM04513	2	L	N	LOW CONC DBN	-	5008582	SL-MW75-1093	10/20/93 1600	SLR	-
493TM04514	2	L	N	LOW CONC DBN	-	5008583	SL-MW75-1093	10/20/93 1650	SLR	-
593TM04513	2	L	1	LOW CONC UOA	-	5008584	SL-MW75-1093	10/20/93 1600	SLR	-
693TM04514	2	L	1	LOW CONC UOA	-	5008585	SL-MW75-1093	10/20/93 1650	SLR	-
793TM04524	2	L	N	LOW CONC UOA	-	5008591	SL-TB10-1093	10/20/93 0920	SLR	TB
8										
9										
10										

Shipment for SAS complete? (Y/N) **(Y)**

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Susan Lorenz</i>	Date / Time 10/21/93	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks IS custody seal intact? Y/N/None (SAS 147421, 147422)	

Split Samples Accepted (Signature)
 Declined

8 025760

The MS/MSD samples were spiked at the RAS levels.

I CERTIFY THAT THIS DATA PACKAGE IS IN COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT, BOTH TECHNICALLY AND FOR COMPLETENESS, FOR OTHER THAN THE CONDITIONS DETAILED ABOVE. RELEASE OF THE DATA CONTAINED IN THIS HARDCOPY DATA PACKAGE HAS BEEN AUTHORIZED BY THE LABORATORY MANAGER OR HIS DESIGNEE, AS VERIFIED BY THE FOLLOWING SIGNATURE:



William Brewington

DATE: 11/19/93
19 November 1993

2A
 WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01:93JM04D32	116 *	110	134 *	0	2
02:93JM04S19	119 *	111	128 *	0	2
03:93JM04S20	105	102	116 *	0	1
04:93JM04S23	102	91	116 *	0	1
05:93JM04S25	111 *	104	127 *	0	2
06:93JM04S27	112 *	113	127 *	0	2
07:93JM04S29	98	88	111	0	0
08:93JM04S30	94	101	134 *	0	1
09:93JM04S31	110	114	146 *	0	1
10:93JM04S32	99	77 *	103	0	1
11:93JM04S32RE	104	79 *	102	0	1
12:93JM04S33	122 *	93	114	0	1
13:93JM04S36	98	88	115 *	0	1
14:93JM04S37	120 *	100	114	0	1
15:93JM04S37RE	111 *	81 *	116 *	0	3
16:93JM04S38	99	80 *	116 *	0	2
17:93JM04S39	103	85 *	110	0	1
18:93JM04S40	107	91	122 *	0	1
19:93JM04S40DL	109	87	128 *	0	1
20:LCS01	127 *	93	112	0	1
21:STGBLK1022	120 *	108	142 *	0	2
22:93JM04S39MS	122 *	99	120 *	0	2
23:93JM04S39MSD	103	86	114	0	0
24:VBLKC1	113 *	103	110	0	1
25:VBLKC2	114 *	81 *	98	0	1

QC LIMITS

SMC1 (TOL) = Toluene-d8 (88-110)
 SMC2 (BFB) = Bromofluorobenzene (86-115)
 SMC3 (DCE) = 1,2-Dichloroethane-d4(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

0012

3LCA
 LOW CONC. WATER VOLATILE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS01

Lab Name: ENVIROSYSTEMS

Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 1026LCS

Date Analyzed: 10/26/93

Lab File ID: 1026LCS

Dilution Factor: 1.0

Purge Volume: 25 (mL)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	%REC #	QC LIMITS
Vinyl chloride	125	90	72	60-140
1,2-Dichloroethane	125	131	105	60-140
Carbon tetrachloride	125	135	108	60-140
1,2-Dichloropropane	125	152	122	60-140
Trichloroethene	125	142	114	60-140
1,1,2-Trichloroethane	125	152	122	60-140
Benzene	125	150	120	60-140
cis-1,3-Dichloropropene	125	131	105	60-140
Bromoform	125	149	119	60-140
Tetrachloroethene	125	159	127	60-140
1,4-Dichlorobenzene	125	151	121	60-140

Column to be used to flag LCS recovery with an asterisk.
 * Values outside of QC limits.

LCS Recovery: 0 outside limits out of 11 total

COMMENTS:

0013

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix Spike - EPA Sample No.: 93JM04S39

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	GC LIMITS REC.
1,1-Dichloroethene	5.000	0	3.949	79	61-145
Trichloroethene	5.000	9.313	15.37	121 *	71-120
Benzene	5.000	0	6.344	127	76-127
Toluene	5.000	0	5.359	107	76-125
Chlorobenzene	5.000	0	5.510	110	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	GC LIMITS RPD	REC.
1,1-Dichloroethene	5.000	3.674	73	8	14	61-145
Trichloroethene	5.000	12.84	71	52 *	14	71-120
Benzene	5.000	6.521	130 *	2	11	76-127
Toluene	5.000	5.546	111	4	13	76-125
Chlorobenzene	5.000	5.781	116	5	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of GC limits

RPD: 1 out of 5 outside limits

Spike Recovery: 2 out of 10 outside limits

COMMENTS:

MSC 35(5)/260/10

0014

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKC1

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab File ID: 1025VWBC1

Lab Sample ID: 1025VWBC1

Date Analyzed: 10/25/93

Time Analyzed: 1033

GC Column: RTX-502.2 ID: 0.530(mm)

Heated Purge: (Y/N) N

Instrument ID: MSC

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01:93JM04D32	93102208	102208	2000
02:93JM04S19	93102200	102200	1451
03:93JM04S20	93102201	102201	1529
04:93JM04S23	93102202	102202	1603
05:93JM04S25	93102203	102203	1637
06:93JM04S27	93102204	102204	1711
07:93JM04S29	93102205	102205	1744
08:93JM04S30	93102206	102206	1852
09:93JM04S31	93102207	102207	1926

COMMENTS: VBLKC1 LAB BLANK 10/25/93 25ML
MSC 35(5)/260/10

0015

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKC2

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab File ID: 1026VWBC2

Lab Sample ID: 1026VWBC2

Date Analyzed: 10/26/93

Time Analyzed: 1019

GC Column: RTX-502.2 ID: 0.530(mm)

Heated Purge: (Y/N) N

Instrument ID: MSC

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	93JM04S32	93102209	102209
02	93JM04S32RE	93102209	102209R
03	93JM04S33	93102210	102210
04	93JM04S36	93102211	102211
05	93JM04S37	93102212	102212
06	93JM04S37RE	93102212	102212R
07	93JM04S38	93102213	102213
08	93JM04S39	93102214	102214
09	93JM04S40	93102215	102215
10	93JM04S40DL	93102215	102215D
11	LCS01	1026LCS	1026LCS
12	STGBLK1022	1022STGBLK	1022STGBLK
13	93JM04S39MS	93102214	102214MS
14	93JM04S39MSD	93102214	102214MSD

COMMENTS: VBLKC2 LAB BLANK 10/26/93 25ML
MSC 35(5)/260/10

0016

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC1

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 1025VWBC1

Date Received:

Lab File ID: 1025VWBC1

Date Analyzed: 10/25/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		g
74-87-3	Chloromethane	1		U
74-83-9	Bromomethane	1		U
75-01-4	Vinyl Chloride	1		U
75-00-3	Chloroethane	1		U
75-09-2	Methylene Chloride	2		U
67-64-1	Acetone	5		U
75-15-0	Carbon Disulfide	1		U
75-35-4	1,1-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	1		U
156-60-5	Trans-1,2-Dichloroethene	1		U
156-59-4	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
107-06-2	1,2-Dichloroethane	1		U
78-93-3	2-Butanone	5		U
71-55-6	1,1,1-Trichloroethane	1		U
56-23-5	Carbon Tetrachloride	1		U
108-05-4	Vinyl Acetate	1		U
75-27-4	Bromodichloromethane	1		U
78-87-5	1,2-Dichloropropane	1		U
10061-01-5	cis-1,3-Dichloropropene	1		U
79-01-6	Trichloroethene	1		U
124-48-1	Dibromochloromethane	1		U
79-00-5	1,1,2-Trichloroethane	1		U
71-43-2	Benzene	1		U
10061-02-6	trans-1,3-Dichloropropene	1		U
75-25-2	Bromoform	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
591-78-6	2-Hexanone	5		U
127-18-4	Tetrachloroethene	1		U
79-34-5	1,1,2,2-Tetrachloroethane	1		U
108-88-3	Toluene	1		U
108-90-7	Chlorobenzene	1		U
100-41-4	Ethylbenzene	1		U
100-42-5	Styrene	1		U
1330-20-7	Xylene (total)	1		U
75-69-4	Trichlorofluoromethane	1		U
95-50-1	1,2-Dichlorobenzene	1		U
106-46-7	1,4-Dichlorobenzene	1		U
541-73-1	1,3-Dichlorobenzene	1		U

0311

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKC1

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 1025VWBC1

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 1025VWBC1

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

0312

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC2

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 1026VWBC2

Date Received:

Lab File ID: 1026VWBC2

Date Analyzed: 10/26/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0317

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKC2

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02

SAS No.: 8143E-02

SDG No.: 93JM04519

Matrix: (soil/water) WATER

Lab Sample ID: 1026VWBC2

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 1026VWBC2

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/26/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0319

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STGBLK1022

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 1022STGBLK Date Received: 10/22/93

Lab File ID: 1022STGBLK Date Analyzed: 10/26/93

Purge Volume: 25 mL Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0343

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

STGBLK1022

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 1022STGBLK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 1022STGBLK

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: not dec. Date Analyzed: 10/26/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0344

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S19

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102200

Date Received: 10/22/93

Lab File ID: 102200

Date Analyzed: 10/25/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0038

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S19

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102200

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: 102200

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: not dec. Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	g

0039

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

93JM04S20

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: B143E-02 SAS No.: B143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102201 Date Received: 10/22/93

Lab File ID: 102201 Date Analyzed: 10/25/93

Purge Volume: 25 mL Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0044

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S20

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102201

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102201

Level: (low/med) LOW

Date Received: 10/22/93

% Moisture: not dec.

Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----

0045

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S23

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: B143E-02 SAS No.: B143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102202

Date Received: 10/22/93

Lab File ID: 102202

Date Analyzed: 10/25/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	3	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-98-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0050

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S23

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102202

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102202

Level: (low/med) LOW

Date Received: 10/22/93

% Moisture: not dec.

Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0051

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S25

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102203 Date Received: 10/22/93

Lab File ID: 102203 Date Analyzed: 10/25/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	1		U
74-83-9	Bromomethane	1		U
75-01-4	Vinyl Chloride	1		U
75-00-3	Chloroethane	1		U
75-09-2	Methylene Chloride	2		U
67-64-1	Acetone	5		U
75-15-0	Carbon Disulfide	1		U
75-35-4	1, 1-Dichloroethene	1		U
75-34-3	1, 1-Dichloroethane	1		U
156-60-5	Trans-1, 2-Dichloroethene	1		U
156-59-4	cis-1, 2-Dichloroethene	1		U
67-66-3	Chloroform	1		U
107-06-2	1, 2-Dichloroethane	1		U
78-93-3	2-Butanone	5		U
71-55-6	1, 1, 1-Trichloroethane	1		U
56-23-5	Carbon Tetrachloride	1		U
108-05-4	Vinyl Acetate	1		U
75-27-4	Bromodichloromethane	1		U
78-87-5	1, 2-Dichloropropane	1		U
10061-01-5	cis-1, 3-Dichloropropene	1		U
79-01-6	Trichloroethene	1		U
124-48-1	Dibromochloromethane	1		U
79-00-5	1, 1, 2-Trichloroethane	1		U
71-43-2	Benzene	1		U
10061-02-6	trans-1, 3-Dichloropropene	1		U
75-25-2	Bromoform	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
591-78-6	2-Hexanone	5		U
127-18-4	Tetrachloroethene	1		U
79-34-5	1, 1, 2, 2-Tetrachloroethane	1		U
108-88-3	Toluene	1		U
108-90-7	Chlorobenzene	1		U
100-41-4	Ethylbenzene	1		U
100-42-5	Styrene	1		U
1330-20-7	Xylene (total)	1		U
75-69-4	Trichlorofluoromethane	1		U
95-50-1	1, 2-Dichlorobenzene	1		U
106-46-7	1, 4-Dichlorobenzene	1		U
541-73-1	1, 3-Dichlorobenzene	1		U

0059

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S25

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02

SAS No.: 8143E-02

SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102203

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102203

Level: (low/med) LOW

Date Received: 10/22/93

% Moisture: not dec.

Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

0060

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S27

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102204

Date Received: 10/22/93

Lab File ID: 102204

Date Analyzed: 10/25/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0065

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S27

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102204

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102204

Level: (low/med) LOW

Date Received: 10/22/93

% Moisture: not dec.

Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

0066

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S29

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102205

Date Received: 10/22/93

Lab File ID: 102205

Date Analyzed: 10/25/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	3	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0071

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S29

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102205

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102205

Level: (low/med) LOW

Date Received: 10/22/93

% Moisture: not dec.

Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----

0072

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

93JM04S30

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102206

Date Received: 10/23/93

Lab File ID: 102206

Date Analyzed: 10/25/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg) UG/L	g
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	12	
67-64-1	Acetone	21	
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	2	
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-98-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	3	
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0080

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S30

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102206

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102206

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-43-4	METHANE, DICHLOROFLUORO-	5.85	3	J

0081

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

93JM04S31

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102207

Date Received: 10/23/93

Lab File ID: 102207

Date Analyzed: 10/25/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	G
74-87-3	-----Chloromethane	1	U
74-83-9	-----Bromomethane	1	U
75-01-4	-----Vinyl Chloride	1	U
75-00-3	-----Chloroethane	1	U
75-09-2	-----Methylene Chloride	12	
67-64-1	-----Acetone	36	
75-15-0	-----Carbon Disulfide	1	U
75-35-4	-----1,1-Dichloroethene	1	U
75-34-3	-----1,1-Dichloroethane	1	U
156-60-5	-----Trans-1,2-Dichloroethene	1	U
156-59-4	-----cis-1,2-Dichloroethene	1	U
67-66-3	-----Chloroform	1	U
107-06-2	-----1,2-Dichloroethane	1	U
78-93-3	-----2-Butanone	5	U
71-55-6	-----1,1,1-Trichloroethane	1	U
56-23-5	-----Carbon Tetrachloride	1	U
108-05-4	-----Vinyl Acetate	1	U
75-27-4	-----Bromodichloromethane	1	U
78-87-5	-----1,2-Dichloropropane	1	U
10061-01-5	-----cis-1,3-Dichloropropene	1	U
79-01-6	-----Trichloroethene	1	U
124-48-1	-----Dibromochloromethane	1	U
79-00-5	-----1,1,2-Trichloroethane	1	U
71-43-2	-----Benzene	1	U
10061-02-6	-----trans-1,3-Dichloropropene	1	U
75-25-2	-----Bromoform	1	U
108-10-1	-----4-Methyl-2-Pentanone	5	U
591-78-6	-----2-Hexanone	5	U
127-18-4	-----Tetrachloroethene	1	U
79-34-5	-----1,1,2,2-Tetrachloroethane	1	U
108-88-3	-----Toluene	1	U
108-90-7	-----Chlorobenzene	1	U
100-41-4	-----Ethylbenzene	1	U
100-42-5	-----Styrene	1	U
1330-20-7	-----Xylene (total)	1	U
75-69-4	-----Trichlorofluoromethane	1	U
95-50-1	-----1,2-Dichlorobenzene	1	U
106-46-7	-----1,4-Dichlorobenzene	1	U
541-73-1	-----1,3-Dichlorobenzene	1	U

0099

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S31

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102207

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102207

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-43-4	METHANE, DICHLOROFLUORO-	5.82	3	J

0100

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S32

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102209

Date Received: 10/23/93

Lab File ID: 102209

Date Analyzed: 10/26/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	9	
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	7	
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0112

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04532

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04519

Matrix: (soil/water) WATER

Lab Sample ID: 93102209

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102209

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/26/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	g
-----	-----	-----	-----	-----

0113

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S32RE

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102209

Date Received: 10/23/93

Lab File ID: 102209R

Date Analyzed: 10/26/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	1	U
74-83-9	-----Bromomethane	1	U
75-01-4	-----Vinyl Chloride	1	U
75-00-3	-----Chloroethane	1	U
75-09-2	-----Methylene Chloride	7	
67-64-1	-----Acetone	13	
75-15-0	-----Carbon Disulfide	1	U
75-35-4	-----1,1-Dichloroethene	1	U
75-34-3	-----1,1-Dichloroethane	1	U
156-60-5	-----Trans-1,2-Dichloroethene	1	U
156-59-4	-----cis-1,2-Dichloroethene	1	U
67-66-3	-----Chloroform	1	U
107-06-2	-----1,2-Dichloroethane	1	U
78-93-3	-----2-Butanone	5	U
71-55-6	-----1,1,1-Trichloroethane	1	U
56-23-5	-----Carbon Tetrachloride	1	U
108-05-4	-----Vinyl Acetate	1	U
75-27-4	-----Bromodichloromethane	1	U
78-87-5	-----1,2-Dichloropropane	1	U
10061-01-5	-----cis-1,3-Dichloropropene	1	U
79-01-6	-----Trichloroethene	1	U
124-48-1	-----Dibromochloromethane	1	U
79-00-5	-----1,1,2-Trichloroethane	1	U
71-43-2	-----Benzene	1	U
10061-02-6	-----trans-1,3-Dichloropropene	1	U
75-25-2	-----Bromoform	1	U
108-10-1	-----4-Methyl-2-Pentanone	5	U
591-78-6	-----2-Hexanone	5	U
127-18-4	-----Tetrachloroethene	1	U
79-34-5	-----1,1,2,2-Tetrachloroethane	1	U
108-88-3	-----Toluene	1	U
108-90-7	-----Chlorobenzene	1	U
100-41-4	-----Ethylbenzene	1	U
100-42-5	-----Styrene	1	U
1330-20-7	-----Xylene (total)	1	U
75-69-4	-----Trichlorofluoromethane	6	
95-50-1	-----1,2-Dichlorobenzene	1	U
106-46-7	-----1,4-Dichlorobenzene	1	U
541-73-1	-----1,3-Dichlorobenzene	1	U

0124

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S32RE

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102209

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102209R

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/26/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

0125

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04D32

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102208

Date Received: 10/23/93

Lab File ID: 102208

Date Analyzed: 10/25/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	11	
67-64-1	Acetone	60	
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	5	
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0023

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04D32

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab. Sample ID: 93102208

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102208

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/25/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

0024

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S33

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102210

Date Received: 10/23/93

Lab File ID: 102210

Date Analyzed: 10/26/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	4	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	7	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	24	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0139

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

93JM04S33

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102210

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102210

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/26/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-43-4	METHANE, DICHLOROFLUORO-	5.87	64	J

0140

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S36

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102211

Date Received: 10/23/93

Lab File ID: 102211

Date Analyzed: 10/26/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	Q
74-87-3	Chloromethane	1 U
74-83-9	Bromomethane	1 U
75-01-4	Vinyl Chloride	1 U
75-00-3	Chloroethane	1 U
75-09-2	Methylene Chloride	4
67-64-1	Acetone	5 U
75-15-0	Carbon Disulfide	1 U
75-35-4	1,1-Dichloroethene	1 U
75-34-3	1,1-Dichloroethane	1 U
156-60-5	Trans-1,2-Dichloroethene	1 U
156-59-4	cis-1,2-Dichloroethene	1 U
67-66-3	Chloroform	3
107-06-2	1,2-Dichloroethane	1 U
78-93-3	2-Butanone	5 U
71-55-6	1,1,1-Trichloroethane	1 U
56-23-5	Carbon Tetrachloride	1 U
108-05-4	Vinyl Acetate	1 U
75-27-4	Bromodichloromethane	1 U
78-87-5	1,2-Dichloropropane	1 U
10061-01-5	cis-1,3-Dichloropropene	1 U
79-01-6	Trichloroethene	1 U
124-48-1	Dibromochloromethane	1 U
79-00-5	1,1,2-Trichloroethane	1 U
71-43-2	Benzene	1 U
10061-02-6	trans-1,3-Dichloropropene	1 U
75-25-2	Bromoform	1 U
108-10-1	4-Methyl-2-Pentanone	5 U
591-78-6	2-Hexanone	5 U
127-18-4	Tetrachloroethene	1 U
79-34-5	1,1,2,2-Tetrachloroethane	1 U
108-88-3	Toluene	1 U
108-90-7	Chlorobenzene	1 U
100-41-4	Ethylbenzene	1 U
100-42-5	Styrene	1 U
1330-20-7	Xylene (total)	1 U
75-69-4	Trichlorofluoromethane	1 U
95-50-1	1,2-Dichlorobenzene	1 U
106-46-7	1,4-Dichlorobenzene	1 U
541-73-1	1,3-Dichlorobenzene	1 U

0158

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S36

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102211

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102211

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/26/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

0159

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S37

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102212

Date Received: 10/23/93

Lab File ID: 102212

Date Analyzed: 10/26/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	4	U
67-64-1	Acetone	5	U *
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	3	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U *
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0170

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S37

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102212

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102212

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/26/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

0171

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S37RE

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102212

Date Received: 10/23/93

Lab File ID: 102212R

Date Analyzed: 10/26/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	G
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	7	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	3	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0182

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S37RE

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102212

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102212R

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/26/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

0183

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S38

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102213

Date Received: 10/23/93

Lab File ID: 102213

Date Analyzed: 10/26/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		g
74-87-3	Chloromethane	1		U
74-83-9	Bromomethane	1		U
75-01-4	Vinyl Chloride	1		U
75-00-3	Chloroethane	1		U
75-09-2	Methylene Chloride	4		
67-64-1	Acetone	27		
75-15-0	Carbon Disulfide	1		U
75-35-4	1,1-Dichloroethene	1		U
75-34-3	1,1-Dichloroethane	1		U
156-60-5	Trans-1,2-Dichloroethene	1		U
156-59-4	cis-1,2-Dichloroethene	1		U
67-66-3	Chloroform	2		
107-06-2	1,2-Dichloroethane	1		U
78-93-3	2-Butanone	5		U
71-55-6	1,1,1-Trichloroethane	1		U
56-23-5	Carbon Tetrachloride	1		U
108-05-4	Vinyl Acetate	1		U
75-27-4	Bromodichloromethane	1		U
78-87-5	1,2-Dichloropropane	1		U
10061-01-5	cis-1,3-Dichloropropene	1		U
79-01-6	Trichloroethene	1		U
124-48-1	Dibromochloromethane	1		U
79-00-5	1,1,2-Trichloroethane	1		U
71-43-2	Benzene	1		U
10061-02-6	trans-1,3-Dichloropropene	1		U
75-25-2	Bromoform	1		U
108-10-1	4-Methyl-2-Pentanone	5		U
591-78-6	2-Hexanone	5		U
127-18-4	Tetrachloroethene	1		U
79-34-5	1,1,2,2-Tetrachloroethane	1		U
108-88-3	Toluene	1		U
108-90-7	Chlorobenzene	1		U
100-41-4	Ethylbenzene	1		U
100-42-5	Styrene	1		U
1330-20-7	Xylene (total)	1		U
75-69-4	Trichlorofluoromethane	1		U
95-50-1	1,2-Dichlorobenzene	1		U
106-46-7	1,4-Dichlorobenzene	1		U
541-73-1	1,3-Dichlorobenzene	1		U

0194

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S38

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102213

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102213

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/26/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

0195

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S39

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS

Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102214

Date Received: 10/23/93

Lab File ID: 102214

Date Analyzed: 10/26/93

Purge Volume: 25 mL

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		g
74-87-3	Chloromethane	1	U	
74-83-9	Bromomethane	1	U	
75-01-4	Vinyl Chloride	1	U	
75-00-3	Chloroethane	1	U	
75-09-2	Methylene Chloride	4		
67-64-1	Acetone	9		
75-15-0	Carbon Disulfide	1	U	
75-35-4	1,1-Dichloroethene	1	U	
75-34-3	1,1-Dichloroethane	1	U	
156-60-5	Trans-1,2-Dichloroethene	1	U	
156-59-4	cis-1,2-Dichloroethene	2		
67-66-3	Chloroform	1	U	
107-06-2	1,2-Dichloroethane	1	U	
78-93-3	2-Butanone	5	U	
71-55-6	1,1,1-Trichloroethane	1	U	
56-23-5	Carbon Tetrachloride	1	U	
108-05-4	Vinyl Acetate	1	U	
75-27-4	Bromodichloromethane	1	U	
78-87-5	1,2-Dichloropropane	1	U	
10061-01-5	cis-1,3-Dichloropropene	1	U	
79-01-6	Trichloroethene	9		
124-48-1	Dibromochloromethane	1	U	
79-00-5	1,1,2-Trichloroethane	1	U	
71-43-2	Benzene	1	U	
10061-02-6	trans-1,3-Dichloropropene	1	U	
75-25-2	Bromoform	1	U	
108-10-1	4-Methyl-2-Pentanone	5	U	
591-78-6	2-Hexanone	5	U	
127-18-4	Tetrachloroethene	2		
79-34-5	1,1,2,2-Tetrachloroethane	1	U	
108-88-3	Toluene	1	U	
108-90-7	Chlorobenzene	1	U	
100-41-4	Ethylbenzene	1	U	
100-42-5	Styrene	1	U	
1330-20-7	Xylene (total)	1	U	
75-69-4	Trichlorofluoromethane	2		
95-50-1	1,2-Dichlorobenzene	1	U	
106-46-7	1,4-Dichlorobenzene	1	U	
541-73-1	1,3-Dichlorobenzene	1	U	

0209

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S39

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102214

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102214

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/26/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-43-4	METHANE, DICHLOROFLUORO-	5.83	63	J
2.	UNKNOWN	6.88	3	J

0210

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

93JM04S40

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102215 Date Received: 10/23/93

Lab File ID: 102215 Date Analyzed: 10/26/93

Purge Volume: 25 mL Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	4	
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-60-5	Trans-1,2-Dichloroethene	1	U
156-59-4	cis-1,2-Dichloroethene	1	U
67-66-3	Chloroform	44	E
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	7	
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U
75-69-4	Trichlorofluoromethane	1	U
95-50-1	1,2-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
541-73-1	1,3-Dichlorobenzene	1	U

0235

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S40

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102215

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102215

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/26/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

0236

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S40DL

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 93102215

Date Received: 10/23/93

Lab File ID: 102215D

Date Analyzed: 10/26/93

Purge Volume: 25 mL

Dilution Factor: 5.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	13	D
67-64-1	Acetone	25	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
156-59-4	cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	44	D
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	5	U
75-27-4	Bromodichloromethane	6	D
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	25	U
591-78-6	2-Hexanone	25	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U
75-69-4	Trichlorofluoromethane	5	U
95-50-1	1,2-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U

0250

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S40DL

Lab Name: ENVIROSYSTEMS

Contract: 68-D9-0135

Lab Code: ENVSYS Case No.: 8143E-02 SAS No.: 8143E-02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER

Lab Sample ID: 93102215

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: 102215D

Level: (low/med) LOW

Date Received: 10/23/93

% Moisture: not dec.

Date Analyzed: 10/26/93

GC Column: RTX-502.2 ID: 0.530 (mm)

Dilution Factor: 5.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	G
-----	-----	-----	-----	-----

0251

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ENVIROSYSTEMS

Contract: 68D90135

Lab Code: ENVSYS

Case No.: 8143E2

SAS No.: 8143E02

SDG No.: 93JM04S19

EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	TOT OUT
01:93JM04D32	97	96	117	50	63	56	0
02:93JM04S19	89	75	74	56	72	22	0
03:93JM04S20	105	84	57	64	74	31	0
04:93JM04S25	109	95	115	55	71	62	0
05:93JM04S27	110	89	85	64	83	30	0
06:93JM04S30	105	82	79	65	81	29	0
07:93JM04S31	94	90	88	49	59	53	0
08:93JM04S32	86	99	121	51	64	50	0
09:93JM04S33	93	86	90	51	69	65	0
10:93JM04S39	95	67	64	52	63	24	0
11:93JM04S40	89	53	86	51	64	26	0
12:LCS02	130 *	90	80	66	79	29	1
13:93JM04S39MS	134 *	86	91	72	90	35	1
14:93JM04S39MSD	137 *	76	77	69	76	34	1
15:SBLKA3	87	80	80	73	87	31	0

QC LIMITS

- S1 (NBZ) = Nitrobenzene-d5 (35-114)
- S2 (FBP) = 2-Fluorobiphenyl (43-116)
- S3 (TPH) = Terphenyl-d14 (33-141)
- S4 (PHL) = Phenol-d5 (10-110)
- S5 (2FP) = 2-Fluorophenol (21-110)
- S6 (TBP) = 2,4,6-Tribromophenol (10-123)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 0 Surrogate diluted out

3LCB
 LOW CONC. WATER SEMIVOLATILE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS02

Lab Name: ENVIROSYSTEMS

Contract: 68D90135

Lab Code: ENVSYS Case No.:

SAS No.: 8143E-02 SDG No.: 93JM04S19

Lab Sample ID: 1027LCS2

Date Received:

Lab File ID: 1027LCS2

Date Extracted: 10/27/93

Sample wt/vol: 1000 (g/mL) ML

Date Analyzed: 11/08/93

Concentrated Extract Volume: 1000 (uL)

Dilution Factor: 1.0

Injection Volume: 1.0(uL)

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	%REC #	QC LIMITS
Phenol	40	31.8	80	44-120
bis(2-Chloroethyl)Ether	20	12.4	62 *	64-110
2-Chlorophenol	40	24.4	61	58-110
N-Nitroso-Di-n-Propylamine	20	10.4	52	34-102
Hexachloroethane	20	8.8	44	32-77
Isophorone	20	22.6	113 *	49-110
1,2,4-Trichlorobenzene	20	8.5	42 *	44-96
Naphthalene	20	11.3	56	56-160
4-Chloroaniline	40	20.8	52	35-98
2,4,6-Trichlorophenol	40	29.6	74	65-110
2,4-Dinitrotoluene	20	10.5	53 *	61-140
Diethylphthalate	20	10.1	50 *	76-104
N-Nitrosodiphenylamine	20	7.0	35	35-120
Hexachlorobenzene	20	12.2	61	30-95
Benzo(a)Pyrene	20	11.4	57	55-92

Column to be used to flag LCS recovery with an asterisk.
 * Values outside of QC limits.

LCS Recovery: 5 outside limits out of 15 total

COMMENTS:

0352

3C
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S39

Matrix Spike - EPA Sample No.: 93JM04S39

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	75.00	0	80.92	108	12-110
2-Chlorophenol	75.00	0	64.60	86	27-123
1,4-Dichlorobenzene	50.00	0	35.85	72	36-97
N-Nitroso-di-n-prop. (1)	50.00	0	28.85	58	41-116
1,2,4-Trichlorobenzene	50.00	0	30.93	62	39-98
4-Chloro-3-methylphenol	75.00	0	81.65	109 *	23-97
Acenaphthene	50.00	0	45.44	91	46-118
4-Nitrophenol	75.00	0	74.86	100 *	10-80
2,4-Dinitrotoluene	50.00	0	43.81	88	24-96
Pentachlorophenol	75.00	0	57.51	77	9-103
Pyrene	50.00	0	45.56	91	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Phenol	75.00	77.45	103	5	42 12-110
2-Chlorophenol	75.00	57.91	77	11	40 27-123
1,4-Dichlorobenzene	50.00	29.62	59	20	28 36-97
N-Nitroso-di-n-prop. (1)	50.00	24.30	49	17	38 41-116
1,2,4-Trichlorobenzene	50.00	25.95	52	18	28 39-98
4-Chloro-3-methylphenol	75.00	80.91	108 *	1	42 23-97
Acenaphthene	50.00	40.81	52	10	31 46-118
4-Nitrophenol	75.00	79.00	105 *	5	50 10-80
2,4-Dinitrotoluene	50.00	44.15	58	0	38 24-96
Pentachlorophenol	75.00	54.71	73	5	50 9-103
Pyrene	50.00	45.08	60	1	31 26-127

(1) N-Nitroso-~~di-n-propylamine~~

Column to be used to flag recovery and RPD values with an asterisk
+ Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 4 out of 22 outside limits

COMMENTS: 93102214 93JM04S39 SAS 8143E-02 SDG 93JM04S19 10/23 10/27
MSA 40(2)/300/11

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKA3

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04\$19

Lab File ID: 1027SWBA1 Lab Sample ID: 1027SWBA1

Instrument ID: MSA Date Extracted: 10/27/93

Matrix: (soil/water) WATER Date Analyzed: 11/05/93

Level: (low/med) LOW Time Analyzed: 1544

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	
01	93JM04D32	93102208	S102208R	11/09/93
02	93JM04S19	93102200	S102200	11/08/93
03	93JM04S20	93102201	S102201	11/08/93
04	93JM04S25	93102203	S102203R	11/09/93
05	93JM04S27	93102204	S102204	11/08/93
06	93JM04S30	93102206	S102206	11/08/93
07	93JM04S31	93102207	S102207R	11/09/93
08	93JM04S32	93102209	S102209R	11/09/93
09	93JM04S33	93102210	S102210R	11/09/93
10	93JM04S39	93102214	S102214	11/08/93
11	93JM04S40	9310SS15	S102215	11/08/93
12	LCS02	1027LCS2	1027LCS2	11/08/93
13	93JM04S39MS	93102214	S102214MS	11/08/93
14	93JM04S39MSD	93102214	S102214MSD	11/08/93

COMMENTS: SBLKA3 SNA H2O BLANK 10/27/93
MSA 40(2)/300/11

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKA3

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: _____ SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 1027SWBA1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1027SWBA1

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	UG/L	g
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-3	Acenaphthylene	5	U
606-20-2	2, 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKA3

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 9143E2 SAS No.: _____ SDG No.: 93JM04519

Matrix: (soil/water) WATER Lab Sample ID: 1027SWBA1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1027SWBA1

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
95-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-1	Chrysene	5	U
117-81-1	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKA3

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 9143E2 SAS No.: _____ SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 1027SWBA1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1027SWBA1

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0 CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04D32

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102208

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102208R

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	g
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-3	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04D32

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 9143E2 SAS No.: 8143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102208

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102208R

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	g
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04D32

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19
Matrix: (soil/water) WATER Lab Sample ID: 93102208
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102208R
Level: (low/med) LOW Date Received: 10/23/93
% Moisture: decanted: (Y/N) Date Extracted: 10/27/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S19

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102200

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102200

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-9	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
506-20-2	2, 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S19

Lab Name: ENVIROSYSTEMS Contract: 68D90135
 Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19
 Matrix: (soil/water) WATER Lab Sample ID: 93102200
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102200
 Level: (low/med) LOW Date Received: 10/22/93
 % Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93
 Injection Volume: 1.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L g

100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-1	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04519

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: B143E2 GAS No.: B143E02 SDG No.: 93JM04519

Matrix: (soil/water) WATER Lab Sample ID: 93102200

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102200

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ Decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

SFO Cleanup: (Y/N) N pH: 8.0

Number TICs Found: 3 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

18
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S20

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102201

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102201

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2, 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

10
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S20

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: S143E2 SAS No.: S143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102201

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102201

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 3.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	UG/L	g
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-2	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
95-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
24-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-88-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-2	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-91-7	cis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-6	Benzo(a)Pyrene	5	U
193-39-8	Indeno(1,2,3-cd)Pyrene	5	U
53-70-2	Dibenz(a,h)Anthracene	5	U
191-24-1	Benzo(g,h,i)Perylene	5	U

1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S20

Lab Name: ENVIROSYSTEMS Contract: 68D90135
 Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19
 Matrix: (soil/water) WATER Lab Sample ID: 93102201
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102201
 Level: (low/med) LOW Date Received: 10/22/93
 % Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93
 Injection Volume: 1.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	U G

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S25

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 9143E2 SAS No.: 9143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102203

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102203R

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:

CAS NO	COMPOUND	(ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-2	2,4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-58-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-5	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,6-Trichlorophenol	20	U
91-59-7	2-Chloronaphthalene	5	U
88-74-2	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-94-8	Acenaphthylene	5	U
506-20-2	2,6-Dinitrotoluene	5	U
99-09-3	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-7	2,4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S25

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102203

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102203R

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: decanted: (Y/N) Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-7	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-6	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04525

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04519

Matrix: (soil/water) WATER Lab Sample ID: 93102203

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102203R

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs Found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S27

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102204

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102204

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	<u>Q</u>
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
98-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acanaphthylene	5	U
606-20-2	2, 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acanaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

10
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S27

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: B143E2 SAS No.: B143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102204

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102204

Level: (low/med) LOW Date Received: 10/22/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

SFC Cleanup: (Y/N) N pH: 3.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-8	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-71-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylsebacate	5	U
208-42-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-58-7	Butylbenzylphthalate	5	U
91-91-1	3,3'-Dichlorobenzidine	5	U
86-55-0	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	Di(2-Ethylhexyl)Phthalate	5	U
117-81-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
80-32-8	Benzo(e)Pyrene	5	U
193-29-8	Indeno(1,2,3-cd)Pyrene	5	U
83-70-3	Dibenzo(a,h)Anthracene	5	U
191-24-1	Benzo(g,h,i)Perylene	5	U

1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S27

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19
Matrix: (soil/water) WATER Lab Sample ID: 93102204
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102204
Level: (low/med) LOW Date Received: 10/22/93
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: ENVIROSYSTEMS Contract: 98D90135
 Lab Code: ENVSYS Case No.: 9143E2 SAS No.: 8143E02 SDG No.: 93JM04519
 Matrix: (soil/water) WATER Lab Sample ID: 93102206
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: 9102206
 Level: (low/med) LOW Date Received: 10/23/93
 % Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93
 Injection Volume: 1.0 (uL) Dilution Factor: 1.0
 SPC Cleanup: (Y/N) N pH 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
108-95-2	Phenol	5	10
111-44-4	bis(2-Chloroethyl)Ether	5	10
95-57-8	2-Chlorophenol	5	10
100-51-6	Benzyl Alcohol	20	10
95-48-7	2-Methylphenol	5	10
108-60-1	2,2'-oxybis(1-Chloropropane)	5	10
106-44-6	4-Methylphenol	5	10
621-64-7	N-Nitroso-Di-n-Propylamine	5	10
67-72-1	Hexachloroethane	5	10
98-95-3	Nitrosentene	5	10
78-39-1	Isophorone	5	10
89-75-8	2-Nitrophenol	5	10
103-27-4	2,4-Dimethylphenol	5	10
65-85-0	Benzoin Acid	20	10
111-91-1	2-(2-Chloroethoxy)Ethane	5	10
120-63-8	2,4-Dichlorophenol	5	10
120-82-1	1,2,4-Trichlorobenzene	5	10
91-20-2	Naphthalene	5	10
105-47-8	4-Chloroaniline	5	10
87-18-3	Hexachlorobutadiene	5	10
69-50-7	4-Chloro-3-Methylphenol	5	10
91-57-6	2-Methylnaphthalene	5	10
77-47-8	Hexachlorocyclopentadiene	5	10
68-06-2	2,4,6-Trichlorophenol	5	10
93-95-8	2,4,5-Trichlorophenol	20	10
91-58-2	2-Chloronaphthalene	5	10
68-74-4	3-nitroaniline	20	10
101-11-3	Dimethylphthalate	5	10
203-99-3	Acenaphthylene	5	10
206-202-4	3,4-Dichlorobenzene	5	10
88-09-2	2-Nitroaniline	10	10
83-32-9	Acenaphthene	5	10
81-29-8	2,4-Dimethylphenol	20	10

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S30

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102206

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102206

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	g
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-9	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S30

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 9143E2 SAS No.: 9143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102206

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102206

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S31

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S19

Matrix: (soil/water) WATER Lab Sample ID: 93102207

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102207R

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	g
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
79-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	3	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
97-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2, 6-Dinitrotoluene	5	U
99-09-3	3-Nitroaniline	20	U
93-32-9	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S31

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: B143E2 SAS No.: B143E02 SDG No.: 93JM04 s19

Matrix: (soil/water) WATER Lab Sample ID: 93102207

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102207R

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	UG/L	g
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-56-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-5	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
96-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-3	Pentachlorophenol	20	U
85-01-2	Phenanthrene	5	U
120-12-7	Antarscene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
93-58-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzofluoranthene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Butyl Phthalate	5	U
205-99-2	Benzofluoranthene	5	U
207-06-9	Benzofluoranthene	5	U
80-32-2	Benzofluoranthene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-2	Dibenzofluoranthene	5	U
191-24-5	Benzofluoranthene	5	U

1 - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S31

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102207

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102207R

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S32

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: B143E2 SAS No.: B143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102209

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102209R

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO	COMPOUND	UG/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
98-75-5	2-Nitrophenol	5	U
105-57-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Napthalene	5	U
106-47-2	4-Chloroaniline	5	U
87-58-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnapthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
98-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronapthalene	5	U
98-74-4	2-Nitroaniline	20	U
131-11-2	Dimethylphthalate	5	U
208-95-4	Acenaphthylene	5	U
506-20-2	2, 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-6	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S32

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04s19

Matrix: (soil/water) WATER Lab Sample ID: 93102209

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102209R

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	g
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
97-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-3	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S32

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19
Matrix: (soil/water) WATER Lab Sample ID: 93102209
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102209R
Level: (low/med) LOW Date Received: 10/23/93
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.0

Number TICs Found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S33

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102210

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102210R

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS	g
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
98-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
98-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
98-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-2	Acenaphthylene	5	U
506-20-2	2, 6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S33

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04519

Matrix: (soil/water) WATER Lab Sample ID: 93102210

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102210R

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____, decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	g
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
37-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
34-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-66-7	Butylbenzylphthalate	5	U
71-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-1	Chrysene	5	U
117-81-1	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-09-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
83-70-5	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S33

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19
Matrix: (soil/water) WATER Lab Sample ID: 93102210
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102210R
Level: (low/med) LOW Date Received: 10/23/93
% Moisture: decanted: (Y/N) Date Extracted: 10/27/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S39

Lab Name: ENVIROSYSTEMS Contract: 68D90135
 Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19
 Matrix: (soil/water) WATER Lab Sample ID: 93102214
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102214
 Level: (low/med) LOW Date Received: 10/23/93
 % Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93
 Injection Volume: 1.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND		
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2, 2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2, 4-Dimethylphenol	5	U
65-65-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2, 4-Dichlorophenol	5	U
120-82-1	1, 2, 4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-3	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2, 4, 6-Trichlorophenol	5	U
95-95-4	2, 4, 5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
98-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
806-20-2	2, 5-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-22-9	Acenaphthene	5	U
51-28-5	2, 4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S39

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102214

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102214

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: decanted: (Y/N) Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L g

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	g
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)Anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	U
117-84-0	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-9	Benzo(k)Fluoranthene	5	U
50-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-3	Dibenz(a,h)Anthracene	5	U
191-24-2	Benzo(g,h,i)Perylene	5	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S39

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 93102214

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102214

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
-----	-----	-----	-----	-----

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S40

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04S19

Matrix: (soil/water) WATER Lab Sample ID: 9310SS15

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102215

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	g
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)Ether	5	U
95-57-8	2-Chlorophenol	5	U
100-51-6	Benzyl Alcohol	20	U
95-48-7	2-Methylphenol	5	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-Di-n-Propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-Methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

93JM04S40

Lab Name: ENVIROSYSTEMS Contract: 68D90135

Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04519

Matrix: (soil/water) WATER Lab Sample ID: 9310SS15

Sample wt/vol. 1000 (g/mL) ML Lab File ID: S102215

Level: (low/med) LOW Date Received: 10/23/93

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-86-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
36-30-2	N-Nitrosodiphenylamine (1)	5	U
101-55-2	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
95-01-5	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-Butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
95-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3-Dichlorobenzidine	5	U
85-55-2	Benzo(a)Anthracene	5	U
218-01-1	Thrysene	5	U
117-81-7	bis(2-Ethylhexyl)Phthalate	12	U
117-84-6	Di-n-Octyl Phthalate	5	U
205-99-2	Benzo(b)Fluoranthene	5	U
207-08-3	Benzo(k)Fluoranthene	5	U
20-32-8	Benzo(a)Pyrene	5	U
193-39-5	Indeno(1,2,3-cd)Pyrene	5	U
53-70-5	Dibenz(a,h)Anthracene	5	U
191-24-1	Benzo(g,h,i)Perylene	5	U

11 - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

93JM04S40

Lab Name: ENVIROSYSTEMS Contract: 68D90135
Lab Code: ENVSYS Case No.: 8143E2 SAS No.: 8143E02 SDG No.: 93JM04 S19
Matrix: (soil/water) WATER Lab Sample ID: 9310SS15
Sample wt/vol: 1000 (g/mL) ML Lab File ID: S102215
Level: (low/med) LOW Date Received: 10/23/93
% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 10/27/93
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/08/93
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No. _____ (2) CERCLIS No. WI

Case No. SAS8143802 Site Name Location: Stoughton City LE

Contractor or EPA Lab: Enviro-system Data User: Superfund

No. of Samples: 16 Date Samples or Data Received: 11-24-93

Have Chain-of-Custody records been received? YES NO
Have traffic reports or packing lists been received? YES NO
If no, are traffic report or packing list numbers written on the chain-of-custody record? YES NO
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? YES NO
No. of samples claimed: 16 No. of samples received: 16

Received by: Lynette Burnett Date: 11-24-93

Received by LSS: Dorothy M. May Date: 11/26/93

Review started: 12-08-93 Reviewer Signature: Alison C. Harve

Total time spent on review: 180 hrs Date review completed: 12-21-93

Copied by: Jeanette Fitchell Date: Dec 28, 1993

Mailed to user by: Lynette Burnett Date: 1-3-94

DATA USES:

Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, SSCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete () Suitable for Intended Purpose () If OK
Organic Data Complete () Suitable for Intended Purpose () List
Dioxin Data Complete () Suitable for Intended Purpose () prblms
SAS Data Complete () Suitable for Intended Purpose () below.

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files Date: _____

In Reference to Case No(s):

8143503(2)

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Telephone Record Log

Date of Call: 12/27/93

Laboratory Name: Vegus

Lab Contact: Ramesh Joshi

02 365 1207

Region: 5

Regional Contact: M. Fletcher

Call Initiated By: Laboratory Region

In reference to data for the following sample number(s):

SD 01 D3Z

Summary of Questions/Issues Discussed:

- 1) TDL for K verify" see attached SD0501 phone log"
- 2) PP samples where are they " "
- 3) LAB doesn't account for GFAA correction factor " "
- 4) I CV & CCV what are true values for GFAA
are listed values correct on form 2
- 5) the goal is Pz, T, CI, no just match
lab noted values

Summary of Resolution:

- 1-3 Lab resubmitted corrected data 12/28
no PP samples mailed to lab by agency
- 4) incorrect computer error true values are
C1-2 Sp 4 pb T1-20 will resubmit
form 2's will day also
- 5) SMO submitted an amendment to
SAs (PDI) will fax lab has right (PDI
values)

M. Fletcher
Signature

12/28/93
Date

Distribution: (1) Lab Copy, (2) Region Copy, (3) SMO Copy

In Reference to Case No(s):

SAS 8143 E03 (1)

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Telephone Record Log

Date of Call: 12-22-93

Laboratory Name: Vegas

Lab Contact: Bhanu Joshi 702-365-1201

Region: 5

Regional Contact: Bai Yuen

Call Initiated By: Laboratory Region

In reference to data for the following sample number(s):

SDG. 501

Summary of Questions/Issues Discussed:

1. Did the lab receive PE samples from the Agency?
2. Pages 2 to ~~8~~ 8 (Forms 1) were misreported. ~~20~~ SO2 data ^{on} the Form 1 are from 501
3. What's the IDL for K? 37 ^{µg/l} or 319 ^{µg/l}?
4. What are the dilution factors for As, ^{Se, Pb, Cr, Sb and Cd} for ICV and LCSW?
5. Were used correction factor (1.1) for all GFAA result analyses?
6. How the dilution factors for all GFAA were reported?
7. The H3 raw data page for CCV4 and CCB4 was missing. (page after p206B)

Summary of Resolution:

1. No. The lab did not contact the ~~Agency~~ Agency for PE information.
2. The lab will correct the mistakes and send the ~~forms~~ ^{p206B} resubmission to the Region.
3. 319 ^{µg/l} the lab will resubmit Form 10.
4. Forms 14 will be resubmitted.
5. 6. Forms 1 will be resubmitted for using d.f. (1.1) for GFAA.
7. Will look and send.

Bai Yuen
Signature

12-22-93
Date

Distribution: (1) Lab Copy, (2) Region Copy, (3) SMO Copy



6143E-03

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	Sampling Co. Jacobs	4. Date Shipped 10/22/93	Carrier FedEx	7. Date Received -- Received by 10/23/93 [Signature]																	
		Sampler (Name) Susan Lorenz		Airbill Number 7880166556		Laboratory VETRAD																	
		Sampler Signature [Signature]		5. Ship To Vegas Analytical 3877 Cliff Drive Las Vegas, NV 891		8. Transfer to		Date Received															
		3. Type of Activity		Received by		Laboratory																	
		<table border="0"> <tr> <td>Remedial</td> <td>Removal</td> </tr> <tr> <td>Lead</td> <td>CLEM</td> </tr> <tr> <td>Pre-Remedial</td> <td>REMA</td> </tr> <tr> <td>RIFS</td> <td>REM</td> </tr> <tr> <td>RD</td> <td>OIL</td> </tr> <tr> <td>RA</td> <td>UST</td> </tr> <tr> <td>O&M</td> <td></td> </tr> <tr> <td>NPLD</td> <td></td> </tr> </table>		Remedial	Removal	Lead	CLEM	Pre-Remedial	REMA	RIFS	REM	RD	OIL	RA	UST	O&M		NPLD		707-365-1701			
Remedial	Removal																						
Lead	CLEM																						
Pre-Remedial	REMA																						
RIFS	REM																						
RD	OIL																						
RA	UST																						
O&M																							
NPLD																							

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
1	93TMC1S16	2	L	5	Low Conc. Cyanide	-	5008677	SL-1 B02-1093	10/27/93 1400	Del. good
2	93TMC1S10	2	L	2/1/93	Low Conc. Mercury	-	5008678	SL-1 B02-1093	11/22/93 1505	Del. good
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										

Shipment for SAS complete? (Y/N) Y

Cooler good

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) [Signature]	Date / Time 10/22/93 1400	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time 10/23/93 1420	Received for Laboratory by: (Signature) [Signature]	Date / Time	Remarks	Is custody seal intact? Y/N/none Cust. Seal Abs: 11/7/11, 11/7/12

EPA Form
 DISTRIBUTION:
 White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

Split Samples Accepted (Signature)
 Declined

S 035782



Special Analytical Service
 Packing List/Chain of Custody

SAS No.

8143E-03

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	3. Sampling Co. Jacobs	4. Date Shipped 10/27/93	Carrier FedEx	7. Date Received -- Received by 10/25/93 <i>[Signature]</i>	
		Sampler (Name) Susan Lorenz		Airbill Number 7880166556		Laboratory VEVAS	
		Sampler Signature <i>[Signature]</i>		5. Ship To Jacobs Analytical 3271 Cliff Drive Las Vegas, NV 89103 702-365-1201		8. Transfer to Date Received	
3. Type of Activity		Remedial		Removal		Received by	
SF <input type="checkbox"/> Lead PRP <input type="checkbox"/> PA ST <input type="checkbox"/> SS FED <input type="checkbox"/> LSI		Pre-Remedial RIFS <input type="checkbox"/> RD <input type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD <input type="checkbox"/>		CLEM <input type="checkbox"/> REMA <input checked="" type="checkbox"/> REM <input type="checkbox"/> OIL <input type="checkbox"/> UST <input type="checkbox"/>		Laboratory	

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
1. 93JMC4D32	7	L	2	Low Conc. Metals	D	5008655	SI-MU98-493	10/27/93 1200	SLL	Good
2. 93JMC4D32	7	L	5	Low Conc. Cyanide	D	5008656	SI-MU98-493	10/27/93 1200	SLL	↓
3. 93JMC4D32	7	L	2/Ky/Sy/Co	Low Conc. Mercury	D	5008657	SI-MU98-493	10/27/93 1200	SLL	
4. 93JMC4S33	2	L	2	Low Conc. Metals	-	5008660	SI-MU98-493	10/27/93 1200	SLL	
5. 93JMC4S33	2	L	5	Low Conc. Cyanide	-	5008661	SI-MU98-493	10/27/93 1200	SLL	
6. 93JMC4S33	2	L	2/Ky/Sy/Co	Low Conc. Mercury	-	5008662	SI-MU98-493	10/27/93 1200	SLL	
7. 93JMC4S39	2	L	2	Low Conc. Metals	-	5008672	SI-MU98-493	10/27/93 1200	SLL	
8. 93JMC4S39	2	L	5	Low Conc. Cyanide	-	5008673	SI-MU98-493	10/27/93 1200	SLL	
9. 93JMC4S39	2	L	2/Ky/Sy/Co	Low Conc. Mercury	-	5008674	SI-MU98-493	10/27/93 1200	SLL	
10. 93JMC4S46	2	L	2	Low Conc. Metals	-	5008675	SI-FPC7-493	10/27/93 1200	SLL	

Shipment for SAS complete? (Y/N) **(Y)**

coolers good

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>[Signature]</i>	Date / Time 10/27/93 1900	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time 10/29/93 1400	Received for Laboratory by: (Signature) <i>[Signature]</i>	Date / Time	Remarks Is custody seal intact? Y/N/none Seal Nos: 147441, 147442	

EPA Form
 DISTRIBUTION:
 White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

Split Samples Accepted (Signature)
 Declined



1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	3. Sampling Cp. Jacobs	4. Date Shipped 10/27/93	Carrier FedEx	7. Date Received -- Received by 10/25/93 [Signature]																		
		Sampler (Name) Susan Lorenz		Airbill Number 789 0166 ST-0		Laboratory VCS																		
		Sampler Signature [Signature]		5. Ship To Vegas Analytical Lab 3891 Cliff Drive Las Vegas, NV 89103 702-365-1711		8. Transfer to	Date Received																	
		3. Type of Activity <table border="0"> <tr> <td>Lead</td> <td>Pre-Remedial</td> <td>RIFS</td> <td>CLEM</td> </tr> <tr> <td>SF</td> <td>PA</td> <td>RD</td> <td>REMA</td> </tr> <tr> <td>PRP</td> <td>SS</td> <td>RA</td> <td>REM</td> </tr> <tr> <td>ST</td> <td>LSI</td> <td>O&M</td> <td>OIL</td> </tr> <tr> <td>FED</td> <td></td> <td>NPLD</td> <td>UST</td> </tr> </table>		Lead	Pre-Remedial	RIFS	CLEM	SF	PA	RD	REMA	PRP	SS	RA	REM	ST	LSI	O&M	OIL	FED		NPLD	UST	
Lead	Pre-Remedial	RIFS	CLEM																					
SF	PA	RD	REMA																					
PRP	SS	RA	REM																					
ST	LSI	O&M	OIL																					
FED		NPLD	UST																					

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
1 93 JMCV S30	2	L	5	Low Conc. Arsenic	-	5008609	SL-MWSD-1093	10/27/93 1125	[Signature]	good
2 93 JMCV S30	2	L	2/4/93	Low Conc. Arsenic	-	5008610	SL-MWSD-1093	10/27/93 1125	[Signature]	↓
3 93 JMCV S31	2	L	2	Low Conc. Arsenic	-	5008613	SL-MWSS-1093	10/27/93 1125	[Signature]	
4 93 JMCV S31	2	L	5	Low Conc. Arsenic	-	5008614	SL-MWSS-1093	10/27/93 1125	[Signature]	
5 93 JMCV S31	2	L	2/4/93	Low Conc. Arsenic	-	5008615	SL-MWSD-1093	10/27/93 1125	[Signature]	
6 93 JMCV S32	2	L	2	Low Conc. Arsenic	-	5008651	SL-MWSD-1093	10/27/93 1125	[Signature]	
7 93 JMCV S32	2	L	5	Low Conc. Arsenic	-	5008652	SL-MWSD-1093	10/27/93 1125	[Signature]	
8 93 JMCV S32	2	L	2/4/93	Low Conc. Arsenic	-	5008653	SL-MWSD-1093	10/27/93 1125	[Signature]	
9										
10										

Shipment for SAS complete? (Y/N) Y

Cooler good

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) [Signature]	Date / Time 10/27/93 1400	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time 10/23/93 14:25	Received for Laboratory by: (Signature) [Signature]	Date / Time	Remarks Anal. Seal OK: 112 1123, 112 1124	Is custody seal intact? Y/N/none

EPA Form
 DISTRIBUTION:
 White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

Split Samples Accepted (Signature)
 Declined



1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinseate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	Sampling Co. Jacobs	4. Date Shipped 10/27/93	Carrier FedEx	7. Date Received -- Received by 10/23/93 [Signature]														
		Sampler (Name) Susan Lorenz		Airbill Number 7880166 SL0		Laboratory UERAB														
		Sampler Signature Susan Lorenz		5. Ship To Vegas Analytical Laboratory 3894 Cliff Drive Las Vegas, NV 89103 702-365-1701		8. Transfer to	Date Received													
		3. Type of Activity <table border="0"> <tr> <td>Lead</td> <td>Pre-Remedial</td> <td>RIFS</td> <td>CLEM</td> </tr> <tr> <td>PA</td> <td>RD</td> <td>REMA</td> <td>REMA</td> </tr> <tr> <td>RA</td> <td>O&M</td> <td>OIL</td> <td>OIL</td> </tr> <tr> <td>NPLD</td> <td>UST</td> <td>UST</td> <td>UST</td> </tr> </table>		Lead	Pre-Remedial	RIFS	CLEM	PA	RD	REMA	REMA	RA	O&M	OIL	OIL	NPLD	UST	UST	UST	
Lead	Pre-Remedial	RIFS	CLEM																	
PA	RD	REMA	REMA																	
RA	O&M	OIL	OIL																	
NPLD	UST	UST	UST																	

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
1. 93JM04SZ6	2	L	2	Low conc. Metals	-	5008641	SL-MW3S-1093	10/21/93 1500	SJL	good
2. 93JM04SZ6	2	L	5	Low conc. Cyanide	-	5008642	SL-MW3S-1093	10/21/93 1500	SJL	
3. 93JM04SZ6	2	L	2/k, Ceph	Low conc. Mercury	-	5008643	SL-MW3S-1093	10/21/93 1500	SJL	
4. 93JM04SZ7	2	L	2	Low conc. Metals	-	5008644	SL-MW3S-1093	10/21/93 1550	SJL	
5. 93JM04SZ7	2	L	5	Low conc. Cyanide	-	5008645	SL-MW3S-1093	10/21/93 1550	SJL	
6. 93JM04SZ7	2	L	2/k, Ceph	Low conc. Mercury	-	5008646	SL-MW3S-1093	10/21/93 1550	SJL	
7. 93JM04SZ8	2	L	2	Low conc. Metals	-	5008647	SL-MW3D-1093	10/21/93 1700	SJL	
8. 93JM04SZ8	2	L	5	Low conc. Cyanide	-	5008648	SL-MW3D-1093	10/21/93 1700	SJL	
9. 93JM04SZ8	2	L	2/k, Ceph	Low conc. Mercury	-	5008649	SL-MW3D-1093	10/21/93 1700	SJL	
10. 93JM04SZ8	2	L	2	Low conc. Metals	-	5008650	SL-MW3D-1093	10/22/93 0700	SJL	

Shipment for SAS complete? (Y/N) Y

cooler good

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) Susan Lorenz	Date / Time 10/22/93 1900	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time 10/23/93 14:20	Received for Laboratory by: (Signature) Umesh Joli	Date / Time	Remarks Is custody seal intact? Y/N/nine Cust. Seal Nos: 117433, 117434	

Split Samples Accepted (Signature)
 Declined

ATTACHMENT I
MODIFIED

MODIFIED

*
*
*
*
*
*
*
*
*
*
*
*
*
*
*
*
*
*
*
*
*

ANALYTE	SAS REQUIRED DETECTION LIMITS			MATRIX SPIKE CONCENTRATION (ug/l)		
	GFAA	ICP	Other	GFAA	ICP	Other
aluminum		50			2000	
antimony		5			100	
arsenic	5			40		
barium		20			2000	
beryllium		1			50	
cadmium (2)		4		2	50	
calcium (3)		1000			5000	
chromium		5			200	
cobalt		10			500	
copper		10			250	
iron		100			1000	
lead (2)	2			20	500	
magnesium (3)		1000			5000	
manganese		10			500	
mercury			0.2			1.0
nickel		20			500	
potassium (3)		2000			5000	
polonium	1			10		
silver		7			50	
sodium (3)		1000			5,000	
thallium	2			50		
vanadium		10			500	
zinc		1			500	
cyanide			10			100

- (1) IDLs must be met before any sample are analyzed. The laboratory may submit its quarterly Form 10 with each case if all IDLs meet the detection limits. If detection limits for ICP analytes cannot be met using ICP, GFAA must be used.
- (2) ICP analytical results may be reported for Pb and Cd only if the values are greater than 10 times the ICP IDLs. If any result is reported, all ICP analytes must be reported for that element, including the matrix spike.
- (3) Report the Ca, Mg, Na, and K matrix spike results on a separate Form 5A.

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

D32

SOW NO.: ILM01.0

EPA Sample No.

Lab Sample ID.

D32
D32D
D32S
S26
S27
S28
S30
S31
S32
S33
S39
S40

D32
D32D
D32S
S26
S27
S28
S30
S31
S32
S33
S39
S40

Were ICP interelement correction applied?

Yes/No

YES

Were ICP Background corrections applied?

Yes/No

YES

If yes-were raw data generated before
Application of background corrections?

Yes/No

NO

Comments:

Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature

Lab Manager. *Umah Jol.*

Date. 11/20/93 _____

INORGANIC ANALYSES DATA SHEET

D32

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

D32

Matrix (Soil/Water): WATER

Lab Sample ID: D32

Level (Low/Med): LOW

Date Received: 10/23/93

2

% Solids:

0.0

Date Collected: 10/22/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13.60	B		P
7440-36-0	Antimony	1.80	B		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	24.20			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	81700.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	4.00	U		P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	42200.00			P
7439-96-5	Manganese	10.50			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	1090.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	5820.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	2.90			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S26

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135
 Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: D32
 Matrix (Soil/Water): WATER Lab Sample ID: S26
 Level (Low/Med): LOW Date Received: 10/23/93
 % Solids: 0.0 Date Collected: 10/21/93

3

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18.90	B		P
7440-36-0	Antimony	1.20	B		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	31.10			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	84300.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	17.40	B		P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	43600.00			P
7439-96-5	Manganese	14.50			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	2010.00			P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	3.10	B		P
7440-23-5	Sodium	7540.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	40.30			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:
 Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S27

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

D32

Matrix (Soil/Water): WATER

Lab Sample ID: S27

Level (Low/Med): LOW

Date Received: 10/23/93

% Solids:

0.0

Date Collected: 10/21/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1470.00			P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	103.00			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	96200.00			P
7440-47-3	Chromium	2.40	B		P
7440-48-4	Cobalt	2.20	B		P
7440-50-8	Copper	3.70	B		P
7439-89-6	Iron	3000.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	47400.00			P
7439-96-5	Manganese	229.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	1330.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	26300.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	4.70	B		P
7440-66-6	Zinc	8.20			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLOUDY

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S28

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.: D32

Matrix (Soil/Water): WATER

Lab Sample ID: S28

Level (Low/Med): LOW

Date Received: 10/23/93

% Solids:

0.0

Date Collected: 10/21/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	152.00			P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	80.30			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	91500.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	645.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	64200.00			P
7439-96-5	Manganese	93.70			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	1700.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	12700.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	3.90			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

INORGANIC ANALYSES DATA SHEET

S30

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS Case No.:

SAS No.: 8143E03

SDG No.: D32

Matrix (Soil/Water): WATER

Lab Sample ID: S30

Level (Low/Med): LOW

Date Received: 10/23/93

% Solids: 0.0

Date Collected: 10/22/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	17.70	B		P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	36.80			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	90500.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	144.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	51800.00			P
7439-96-5	Manganese	22.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	1350.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	12500.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	3.10			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S31

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

D32

Matrix (Soil/Water): WATER

Lab Sample ID: S31

Level (Low/Med): LOW

Date Received: 10/23/93

% Solids: 0.0

Date Collected: 10/22/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	80.10			P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	72.30			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	70700.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	130.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	32600.00			P
7439-96-5	Manganese	17.60			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	454.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	16900.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	5.20			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S32

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135
 Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: D32
 Matrix (Soil/Water): WATER Lab Sample ID: S32
 Level (Low/Med): LOW Date Received: 10/23/93
 % Solids: 0.0 Date Collected: 10/22/93

8

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19.20	B		P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	24.70			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	82500.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	7.50	B		P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	42600.00			P
7439-96-5	Manganese	10.70			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	1110.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	5910.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	1.00	U		P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:
 Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S33

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

D32

Matrix (Soil/Water): WATER

Lab Sample ID: S33

Level (Low/Med): LOW

Date Received: 10/23/93

% Solids:

0.0

Date Collected: 10/22/93

9

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20.60	B		P
7440-36-0	Antimony	1.80	B		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	25.90			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	70200.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	41.70	B		P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	41100.00			P
7439-96-5	Manganese	334.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	12.70	B		P
7440-09-7	Potassium	1120.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	10600.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	3.80			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

INORGANIC ANALYSES DATA SHEET

S39

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.: D32

Matrix (Soil/Water): WATER

Lab Sample ID: S39

Level (Low/Med): LOW

Date Received: 10/23/93

% Solids:

0.0

Date Collected: 10/22/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	134.00			P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	25.70			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	61400.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	4.00	B		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	192.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	35500.00			P
7439-96-5	Manganese	477.00			P
7439-97-6	Mercury	0.30			CV
7440-02-0	Nickel	18.00	B		P
7440-09-7	Potassium	903.00	B		P
7482-49-2	Selenium	1.10			F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	25700.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	1.00			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S40

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

D32

Matrix (Soil/Water): WATER

Lab Sample ID: S40

Level (Low/Med): LOW

Date Received: 10/23/93

11

% Solids:

0.0

Date Collected: 10/22/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20.40	B		P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	7.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	572.00	B		P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	6.50	B		P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	284.00	B		P
7439-96-5	Manganese	2.70	B		P
7439-97-6	Mercury	0.40			CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	319.00	U		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	83.90	B		P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	1.30			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

Lab Name : VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: D32

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	12.0	B	15.0	B	10.0	U	10.0	U	14.800	B	P
Antimony	1.0	U	1.0	U	1.0	U	1.0	U	1.200	B	F
Arsenic	1.8	U	1.8	U	1.8	U	1.8	U	2.200	U	F
Barium	7.0	U	7.0	U	7.0	U	7.0	U	7.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cadmium	0.2	U	0.2	U	0.2	U	0.2	U	0.220	U	F
Calcium	15.0	U	15.0	U	15.0	U	15.0	U	80.300	B	P
Chromium	2.2	B	2.0	U	2.0	U	2.0	U	2.000	U	P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Copper	2.0	U	2.0	U	2.0	U	-2.4	B	2.000	U	P
Iron	4.0	U	4.0	U	4.0	U	4.0	U	8.600	B	P
Lead	0.9	U	0.9	U	0.9	U	0.9	U	1.100	U	F
Magnesium	19.0	U	19.0	U	19.0	U	19.0	U	19.000	U	P
Manganese	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	8.0	U	8.0	U	8.0	U	8.0	U	8.000	U	P
Potassium	319.0	U	319.0	U	-392.4	B	319.0	U	-489.800	B	P
Selenium	0.9	U	0.9	U	0.9	U	0.9	U	1.100	U	F
Silver	2.4	B	2.0	U	2.0	U	2.0	U	-2.300	B	P
Sodium	37.0	U	-162.6	B	37.0	U	-48.2	B	37.000	U	P
Thallium	1.8	U	1.8	U	1.8	U	1.8	U	2.200	U	F
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	C

Lab Name : VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: D32

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L) C	Continuing Calibration Blank (ug/L)						Prepa- ration Blank C	M
		4 C	5 C	6 C					
Aluminum		15.5 B	19.9 B	12.1 B				P	
Antimony		1.0 U						F	
Arsenic		1.8 U						F	
Barium		7.0 U	7.0 U	7.0 U				P	
Beryllium		1.0 U	1.0 U	1.0 U				P	
Cadmium		0.2 U						F	
Calcium		15.0 U	15.0 U	15.0 U				P	
Chromium		2.0 U	2.0 U	2.0 U				P	
Cobalt		2.0 U	2.0 U	2.0 U				P	
Copper		-2.7 B	2.0 U	2.0 U				P	
Iron		4.0 U	4.0 U	4.0 U				P	
Lead		0.9 U						F	
Magnesium		19.0 U	19.0 U	19.0 U				P	
Manganese		1.0 U	1.0 U	1.0 U				P	
Mercury								NR	
Nickel		8.0 U	8.0 U	8.0 U				P	
Potassium		319.0 U	319.0 U	319.0 U				P	
Selenium		0.9 U						F	
Silver		4.0 B	3.8 B	2.9 B				P	
Sodium		-58.4 B	-64.7 B	-64.4 B				P	
Thallium		1.8 U						F	
Vanadium		2.0 U	2.0 U	2.0 U				P	
Zinc		1.0 U	1.0 U	1.0 U				P	
Cyanide								NR	

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

D32S

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: D32

Matrix (Soil/Water): WATER Level (low/med): LOW

Concentration Units (ug/L or mg/kg dry weight): UG/L

19

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	85-115	2072.5000	13.6000 B	2000.0 0	102.9	9	P
Antimony	85-115	97.0000	1.8000 B	100.0 0	95.2	2	F
Arsenic	85-115	43.8000	2.2000 U	40.0 0	109.5	5	F
Barium	85-115	2168.3000	24.2000	2000.0 0	107.2	2	P
Beryllium	85-115	56.0000	1.0000 U	50.0 0	112.0	0	P
Cadmium	85-115	2.2000 B	0.2200 U	2.0 0	110.0	0	F
Calcium	85-115	86200.0000	81674.3000	5000.0 0	90.5	5	P
Chromium	85-115	211.1000	2.0000 U	200.0 0	105.5	5	P
Cobalt	85-115	497.6000	2.0000 U	500.0 0	99.5	5	P
Copper	85-115	249.1000	2.0000 U	250.0 0	99.6	6	P
Iron	85-115	1058.6000	4.0000 U	1000.0 0	105.9	9	P
Lead	85-115	17.7000	1.1000 U	20.0 0	88.5	5	F
Magnesium	85-115	47360.0000	42201.1000	5000.0 0	103.2	2	P
Manganese	85-115	524.4000	10.5000	500.0 0	102.8	8	P
Mercury	80-120	1.2000	0.2000 U	1.0 0	120.0	0	C
Nickel	85-115	545.8000	8.0000 U	500.0 0	109.2	2	P
Potassium	85-115	6110.4000	1085.8000 B	5000.0 0	100.5	5	P
Selenium	85-115	9.8000	1.1000 U	10.0 0	98.0	0	F
Silver	85-115	46.5000	4.0000 B	50.0 0	85.0	0	P
Sodium	85-115	10999.1000	5823.6000	5000.0 0	103.5	5	P
Thallium	85-115	49.8000	2.2000 U	50.0 0	99.6	6	F
Vanadium	85-115	498.5000	2.0000 U	500.0 0	99.7	7	P
Zinc	85-115	518.5000	29.3000	500.0 0	97.8	8	P
Cyanide	80-120	98.3000	10.0000 U	100.0 0	98.3	3	C

Comments :

6
DUPLICATES

EPA SAMPLE NO.

D32D

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: D32

Matrix (Soil/Water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

20

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	M
Aluminum		13.6000 B	23.1000 B	51.8		P
Antimony		1.8000 B	1.1000 U	200.0		F
Arsenic		2.2000 U	2.2000 U			F
Barium	20.0	24.2000	24.7000	2.0		P
Beryllium		1.0000 U	1.0000 U			P
Cadmium		0.2200 U	0.2200 U			E
Calcium		81674.3000	83340.0000	2.0		P
Chromium		2.0000 U	2.0000 U			P
Cobalt		2.0000 U	2.0000 U			P
Copper		2.0000 U	2.0000 U			P
Iron		4.0000 U	7.1000 B	200.0		P
Lead		1.1000 U	1.1000 U			F
Magnesium		42201.1000	43050.0000	2.0		P
Manganese	10.0	10.5000	10.9000	3.7		P
Mercury		0.2000 U	0.2000 U			CV
Nickel		8.0000 U	8.0000 U			P
Potassium		1085.8000 B	1003.0000 B	7.9		P
Selenium		1.1000 U	1.1000 U			F
Silver		4.0000 B	2.0000 U	200.0		P
Sodium		5823.6000	5943.0000	2.0		P
Thallium		2.2000 U	2.2000 U			F
Vanadium		2.0000 U	2.0000 U			P
Zinc	1.0	2.9000	3.1000	6.7		P
Cyanide	10.0	10.0000 U	10.0000 U			C

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: D32

ICP ID Number: VALI P1 Date: 10/15/93

Flame AA ID Number: VALI F2

Furnace AA ID Number: VALI F1

23

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.21		50	10.0	P
Antimony	206.83	BS	5	1.0	F
Arsenic	193.70	BS	5	2.0	F
Barium	493.40		20	7.0	P
Beryllium	313.04		1	1.0	P
Cadmium	228.80	BS	4	0.2	F
Calcium	317.93		1000	15.0	P
Chromium	267.72		5	2.0	P
Cobalt	228.62		10	2.0	P
Copper	324.75		10	2.0	P
Iron	259.94		100	4.0	P
Lead	220.36	BS	2	1.0	F
Magnesium	279.08		1000	19.0	P
Manganese	257.61		10	1.0	P
Mercury	253.70		.2	0.2	CV
Nickel	231.60		20	8.0	P
Potassium	766.49		2000	319.0	P
Selenium	196.03	BS	1	1.0	F
Silver	328.07		7	2.0	P
Sodium	588.99		1000	37.0	P
Thallium	190.86	BS	2	2.0	F
Vanadium	292.40		10	2.0	P
Zinc	213.86		1	1.0	P
Cyanide			10	10.0	C

Comments :

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No. _____ (2) CERCLIS No. _____

Case No. SAS8143E-03 ⁽²⁾ Site Name Location: STOUGHTON LANDFILL

Contractor or EPA Lab: VEGAS Data User: SF

No. of Samples: 10 Date Samples or Data Received: 11-24-93

Have Chain-of-Custody records been received? YES NO

Have traffic reports or packing lists been received? YES NO

If no, are traffic report or packing list numbers written on the chain-of-custody record? YES NO

If no, which traffic report or packing list numbers are missing?

Are basic data forms in? YES NO

No. of samples claimed: 10 No. of samples received: 10

Received by: A. C. Harvey Date: 11-24-93

Received by LSSS: Dorothy M. May Date: 12/02/93

Review started: 12/21/93 Reviewer Signature: M. Fletcher

Total time spent on review: 14 Date review completed: 12/28/93

Copied by: Freddie Hopkins ^{+0.5 by 12-28-93} Date: 1/28/94

Mailed to user by: AD WAMS Date: 1-31-94

DATA USERS:

Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ESCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete () Suitable for Intended Purpose () ^{if OK}
Organic Data Complete [] Suitable for Intended Purpose () list
Dioxin Data Complete [] Suitable for Intended Purpose () prblms
SAS Data Complete [] Suitable for Intended Purpose () below.

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files Date: _____

Metals
①

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 1/13/94

SUBJECT: Review of Region V CLP Data Received for Review on 11-24-93

FROM: Charles T. Elly, Director (SL-10C) Central Regional Laboratory
Patrick J. Chavilla for C. T. Elly

TO: Data User: S F

We have reviewed the data for the following case.

SITE NAME: STOUGHTON LANDFILL (WI)
CASE and/or SAS NUMBER: SAS8143E-03 (1) SDG NUMBER: (93JMO4501) S01

Number and Type of Samples: 16 - WATERS

CLP Sample Numbers: S01, S02, S04-S07, ^{D07} S09-S14, S19, S20, S25
1/13/94

CLP Laboratory: VEGAS Hrs. for Review 13 + 2.5 + 0.5

Following are our findings:

THE DATA ARE ACCEPTABLE WITH THE QUALIFICATIONS DESCRIBED IN THE ATTACHED REVIEW.
Patrick J. Chavilla 1/13/94

- () Data are acceptable for use.
- (X) Data are acceptable for use with qualification.
- () Data are preliminary, pending verification by laboratory.
- () Data are unacceptable.

cc: Edward Kantor, EMSL-Las Vegas
Julie Frankel, VIAR & Co. (SMO)

NARRATIVE

SITE : STOUGHTON LANDFILL (WI) CASE: 8143E-03(1)
 CONTRACTOR: VEGAS SDG : S01

The laboratory's portion of this case contains 16 low level water samples analyzed for total metals and cyanide with the lower detection limits. Below is a summary of the out of control audits and their possible effects on the data for this case.

EVIDENTIAL AUDIT: The reviewer filled in the page number 21A for the blank reporting sheet (Form 3) on the DC-2 form (inventory sheet). All forms, raw data and documents are originals and are present in the order indicated on the DC-2 form. All original sample tags are included in the case and their numbers match the numbers on the DC-1 form (log-in sheet). The lab resubmitted Forms 1, 5, 6, 10 and part of Form 14 (see phonelog). The reviewer replaced the respective original pages and inserted page 206C (Hg raw data) in the case.

The lab did not received PE samples from the Agency. Therefore, no PE samples were performed in this case (see phonelog).

ICP ANALYSES: The matrix spike recoveries for Ca (71.0%) and Mg (81.8%) were not flagged by the lab because the sample concentrations were greater than four times the spike added. All Ca and Mg results are acceptable.

The preparation blanks were found to contain Al (30.7 ug/l and 10.2 ug/l) and Fe (19.3 ug/l). The CCBs were found to contain Al (15.0 ug/l and 15.5 ug/l). The Al results except for S05, S06 and S10 are estimated (J) due to contamination. The Fe results for S13, S14, S19 and S25 are affected by contamination but will be qualified below.

GFAA ANALYSES: After checking the Cd raw data, the reviewer removed the (U) flag and added (B) flag to S06 for Cd on Form 1. All Cd results are acceptable.

OTHER QUALIFIERS: All Hg and CN results are acceptable.

Samples S07/D07 are field duplicates. The %RPD for Fe (32.2%) is out of control. All Fe results are estimated (J) due to poor field precision.

Reviewed by: 

Date: 12-28-93

Lockheed/ESAT

ESAT-5-041.1

GLOSSARY A

Data Qualifier Definitions

For the purposes of this document the following code letters and associated definitions are provided.

- U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
- J - The associated value is an estimated quantity.
- R - The data are unusable. (Note: Analyte may or may not be present.)
- UJ - The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

VEGAS ANALYTICAL LABORATORIES INC

CASE NARRATIVE: SAS#8143E03. SDG#S01. SMO CONTACT: Stephen Rodiger

Sixteen samples in SAS were received from 10/19/93 to 10/22/93. This is a SAS program requiring special low detection limits. All sample were received in good condition. The sample names were too long to fit on Form 14. SMO was contacted and we were to shorten the sample name from 93JM04S01 to S01, and so on. Sample D07 was marked with QA/QC requirement and lab performed duplicate and matrix spike analysis on/ this sample.

ICP: Al, Ba, Be, Ca, Cr, Co, Cu, Fe, Mg, Mn, Ni, K, Ag, Na, V and Zn were analyzed on ICP-AES. All the CRDL were met. Two preparation blanks were analyzed for this SDG. Two matrix spikes were made. One for Ca, Mg, Na and K and other for the remaining elements. Since two SDGs are analyzed in a single ICP run, all original raw data for common QA/QC for SDG#S01 are given with the SDG#S01. The copy are enclosed with the SDG#D32.

FURNACE AA: As, Sb, Cd, Pb, Se and Tl were analyzed on GFAA using Smith-Hieftje background correction. Each element was analyzed separately. All the detection limits were met. There was a problem with Cd. Since the SAS order asked to use 0,1,2, and 4 UG/L solutions as calibration standards and the CRDL was set at 4. That is the CRDL standard is also a high standard. This created confusion in calibration. Our IDL for Cd is 0.2 UG/L. Hence we used 1UG/L as a CRDL standard for calibration and analysis of a CRA standard. At all other places, 4 UG/L was used as CRDL for putting flags and modifiers.

Hg COLD VAPOR AA: As required by the SAS two Preparation Blanks were analyzed. EPA EMSL/CI provided WP-30 solution was used as LCSW. Normally no LCSW is required for Hg.

CN, MANUAL COLORIMETRC: After distillation, samples were mixed with the reagents and filled in the sample cuvette and read on SQ colorimeter. Since it takes only 10 seconds to insert a cuvette, take the reading and replace with the second one, six reading could be taken in a minute. Hence the timing on Form XIV are for reading time.

The lab had asked previous permission from Mr. Rodiger to report analysis results of more than one method on the same Form I. This is a standard SOP for ILM01.0. However, we have modified this form to include the date of sample collection as asked in the SAS. Other information such as sample digestion dates and volumes digested is given on preparation log and Form XIII. The lab asked SMO for permission to provide the information in this way rather than putting all information on Form I.

Original sample tags, COC-packing list and air bills are enclosed in a separate cover..

In Reference to Case No(s):

SAS 8143 E03 (1)

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Telephone Record Log

Date of Call: 12-22-93
Laboratory Name: Vegas
Lab Contact: Bhanu Joshi 702-365-1201
Region: 5
Regional Contact: Bai Luen
Call Initiated By: Laboratory Region

In reference to data for the following sample number(s):

SDG: 501

Summary of Questions/Issues Discussed:

1. Did the lab receive PE samples from the Agency?
2. Pages 2 to ~~8~~ 8 (Forms 1) were misreported
eg. SO₂ data ^{on} the Form 1 are from 501
3. What's the IDL for K? 37 ^{µg/l} or 319 ^{µg/l}?
4. What are the dilution factors for AS₁ ^{se. Pb, Cr, Sb and Cd.} for ICV and LCSW?
5. Why used correction factor (1.1) in all GFAA result analyses?
6. How the dilution factors for all GFAA were reported?
7. The H₂ raw data page for CCB4 and CCB4 was missing. (page after p206B).

Summary of Resolution:

1. No. The lab did not contact the ~~lab~~ Agency for PE information.
2. The lab will correct the mistakes and send the ~~forms~~ ^{p2 to 8} resubmission to the Region.
3. 319 ^{µg/l} the lab will resubmit Form 10.
4. Forms 14 will be resubmitted.
5. 6 Forms 1 will be resubmitted for using d.f. (1.1) for GFAA.
7. Will look and send.

Bai Luen
Signature

12-22-93
Date

Distribution: (1) Lab Copy, (2) Region Copy, (3) SMO Copy



United States Environmental Protection Agency
 Contract Laboratory Program - Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

SAS No.

8143E-03

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinstate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO ₃ 3. NAHSO ₄ 4. H ₂ SO ₄ 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	Sampling Co. JACOBS	4. Date Shipped 10/18/93	Carrier FEDEX	7. Date Received -- Received by 10/19/93 Umesh Joshi			
		Sampler (Name) LOUIS EINHARD		Airbill Number 6346883885		Laboratory VEGAS LABS			
		Sampler Signature [Signature]		5. Ship To VEGAS ANALYTICAL 3894 SCHIFF DRIVE LAS VEGAS, NV 89103		8. Transfer to		Date Received	
		3. Type of Activity Remedial Removal Lead Pre-Remedial RIFS <input type="checkbox"/> CLEM <input type="checkbox"/> SF <input type="checkbox"/> RD <input checked="" type="checkbox"/> REMA <input type="checkbox"/> PRP <input type="checkbox"/> PA <input type="checkbox"/> RA <input type="checkbox"/> REM <input type="checkbox"/> ST <input type="checkbox"/> SSI <input type="checkbox"/> O&M <input type="checkbox"/> OIL <input type="checkbox"/> FED <input type="checkbox"/> LSI <input type="checkbox"/> NPLD <input type="checkbox"/> UST <input type="checkbox"/>		702/345-1201		Received by Laboratory			

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
193JMD4501	2	L	H ₂ O ₂ , O ₃ , HNO ₃	MERCURY LOW CONC	-	5-008506	SL-CSW6-1093	10/18/93 0935	(E)	GOOD
293JMD4501	2	L	NaOH	CYANIDE LOW CONC	-	5-008505	SL-CSW6-1093	10/18/93 0935	(E)	GOOD
393JMD4501	2	L	HNO ₃	METALS LOW CONC	-	5-008504	SL-CSW6-1093	10/18/93 0935	(E)	GOOD
493JMD4502	2	L	K ₂ Cr ₂ O ₇ , HNO ₃	MERCURY LOW CONC	-	5-008510	SL-CSW3-1093	10/18/93 1030	(E)	GOOD
593JMD4502	2	L	NaOH	CYANIDE LOW CONC	-	5-008512	SL-CSW3-1093	10/18/93 1030	(E)	GOOD
693JMD4502	2	L	HNO ₃	METALS LOW CONC	-	5-008511	SL-CSW3-1093	10/18/93 1030	(E)	GOOD
7.										
8.										
9.										
10.										

Shipment for SAS complete? (Y/N) Y

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) [Signature]	Date / Time 10/19/93 1030	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) Umesh Joshi	Date / Time 10/19/93 9:44	Remarks CS#s 12051, 12052	Is custody seal intact? (Y/N) none

Split Samples Accepted (Signature)
 Declined

EPA Form

DISTRIBUTION:

White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

217



United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

SAS No.

8143E-03

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	3. Sampling Co. JACOBS	4. Date Shipped 10/20/93	Carrier FED EX	7. Date Received -- Received by 10/21/93 Umesh Jashi		
		Sampler (Name) SUSAN LORENZ		Airbill Number 634688 3701		Laboratory VEGAS		
		Sampler Signature <i>Susan Lorenz</i>		5. Ship To Vegas Analytical LABS 3894 SCHI77 DRIVE LAS VEGAS, NV 89103		8. Transfer to		Date Received
3. Type of Activity		Remedial		Removal		Received by		
Lead		Pre-Remedial		RIFS		CLEM		
SF		PA		RD		REMA		
PRP		SS		RA		REM		
ST		LSI		O&M		OIL		
FED		NPLD		UST		UST		
						702/365-1201		

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
193JM04S04	2	L	2	LOW CONC METALS	-	S-008521	SL-MW10-1093	10/19/93 11:30	SAL	GOOD
293JM04S04	2	L	5	LOW CONC CYANIDE	-	S-008520	SL-MW10-1093	10/19/93 11:30	SAL	GOOD
393JM04S04	2	L	H ₂ CrO ₄ HNO ₃	LOW CONC MERCURY	-	S-008519	SL-MW10-1093	10/19/93 11:30	SAL	GOOD
493JM04S05	2	L	2	LOW CONC METALS	-	S-008525	SL-MW15-1093	10/19/93 12:10	SAL	GOOD
593JM04S05	2	L	5	LOW CONC CYANIDE	-	S-008526	SL-MW15-1093	10/19/93 12:10	SAL	GOOD
693JM04S05	2	L	H ₂ CrO ₄ HNO ₃	LOW CONC MERCURY	-	S-008527	SL-MW15-1093	10/19/93 12:10	SAL	GOOD
793JM04S06	2	L	2	LOW CONC METALS	-	S-008531	SL-MW65-1093	10/20/93 15:10	SAL	GOOD
893JM04S06	2	L	5	LOW CONC CYANIDE	-	S-008532	SL-MW65-1093	10/20/93 15:10	SAL	GOOD
993JM04S06	2	L	H ₂ CrO ₄ HNO ₃	LOW CONC MERCURY	-	S-008533	SL-MW65-1093	10/20/93 15:10	SAL	GOOD
10.										

Shipment for SAS complete? (Y/N) **(Y)**

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Susan Lorenz</i>	Date / Time 10/20/93 19:50	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature) <i>Umesh Jashi</i>	Date / Time	Received for Laboratory by: (Signature)	Date / Time 10/21/93 9:40	Remarks (S #s 12041, 12043)	Is custody seal intact? (Y/N) none

Split Samples Accepted (Signature)
 Declined

506

218



United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

SAS No.

8143E-03

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	3. Sampling Co. JACOBS	4. Date Shipped 10/20/93	Carrier FED EX	7. Date Received -- Received by 10/21/93 Umesh Jochi	
		Sampler (Name) Susan Lorenz		Airbill Number 7880166534		Laboratory VEGAS	
		Sampler Signature <i>Susan Lorenz</i>		5. Ship To VEGAS ANALYTICAL 3894 SHIFF DRIVE LAS VEGAS, NV 89103 702/365-1201		8. Transfer to	Date Received
		3. Type of Activity Remedial Removal Lead Pre-Remedial RIFS CLEM SF PA RD REMA PRP RA REM ST SSI O&M OIL FED LSI NPLD UST				Received by	Laboratory

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
193Jm04D07	2	L	5	low conc cyanide	D	5008544	SL-MW6D-1093	10/20/93 1645	SJL	GOOD
293Jm04D07	2	L	2	low conc METALS	D	5008543	SL-MW6D-1093	10/20/93 1645	SJL	GOOD
393Jm04D07	2	L	K ₂ Cr ₂ O ₇ HNO ₃	low conc mercury	D	5008545	SL-MW6D-1093	10/20/93 1645	SJL	GOOD
493Jm04507	2	L	5	low conc cyanide	-	5008538	SL-MW6D-1093	10/20/93 1645	SJL	GOOD
593Jm04507	2	L	K ₂ Cr ₂ O ₇ HNO ₃	low conc mercury	-	5008539	SL-MW6D-1093	10/20/93 1645	SJL	GOOD
693Jm04507	2	L	2	low conc metals	-	5008537	SL-MW6D-1093	10/20/93 1645	SJL	GOOD
793Jm04509	2	L	K ₂ Cr ₂ O ₇ HNO ₃	low conc mercury	-	5008563	SL-MW25-1093	10/20/93 1225	SJL	GOOD
893Jm04509	2	L	5	low conc cyanide	-	5008565	SL-MW25-1093	10/20/93 1225	SJL	GOOD
993Jm04509	2	L	2	low conc metals	-	5008562	SL-MW25-1093	10/20/93 1225	SJL	GOOD
1093Jm04510	2	L	2	low conc metals	-	5008558	SL-MW01-1093	10/20/93 1000	SJL	GOOD

Shipment for SAS complete? (Y/N) Y

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Susan Lorenz</i>	Date / Time 10/20/93 1930	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>Umesh Jochi</i>	Date / Time 10/21/93 9:40	Remarks Is custody seal intact? <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N 15 147414, 147415	

Split Samples Accepted (Signature) Declined



United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

SAS No.

8143E-03

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	Sampling Co. JACOBS	4. Date Shipped 10/20/93	Carrier FEDEX	7. Date Received -- Received by 10/21/93 Umesh Joshi																												
		Sampler (Name) SUSAN LOPEZ		Airbill Number 7880166534		Laboratory VEGAS																												
		Sampler Signature <i>Susan Lopez</i>		5. Ship To VEGAS ANALYTICAL 3894 SHIFF DRIVE LAS VEGAS, NV 89103		8. Transfer to	Date Received																											
		3. Type of Activity <table border="0"> <tr> <td>Lead</td> <td>Pre-Remedial</td> <td>RIFS</td> <td><input type="checkbox"/></td> <td>CLEM</td> <td><input type="checkbox"/></td> </tr> <tr> <td>SF</td> <td>Remedial</td> <td>RD</td> <td><input type="checkbox"/></td> <td>REMA</td> <td><input type="checkbox"/></td> </tr> <tr> <td>PRP</td> <td>PA</td> <td>RA</td> <td><input type="checkbox"/></td> <td>REM</td> <td><input type="checkbox"/></td> </tr> <tr> <td>ST</td> <td>SSI</td> <td>O&M</td> <td><input type="checkbox"/></td> <td>OIL</td> <td><input type="checkbox"/></td> </tr> <tr> <td>FED</td> <td>LSI</td> <td>NPLD</td> <td><input type="checkbox"/></td> <td>UST</td> <td><input type="checkbox"/></td> </tr> </table>		Lead	Pre-Remedial	RIFS	<input type="checkbox"/>	CLEM	<input type="checkbox"/>	SF	Remedial	RD	<input type="checkbox"/>	REMA	<input type="checkbox"/>	PRP	PA	RA	<input type="checkbox"/>	REM	<input type="checkbox"/>	ST	SSI	O&M	<input type="checkbox"/>	OIL	<input type="checkbox"/>	FED	LSI	NPLD	<input type="checkbox"/>	UST	<input type="checkbox"/>	Received by
Lead	Pre-Remedial	RIFS	<input type="checkbox"/>	CLEM	<input type="checkbox"/>																													
SF	Remedial	RD	<input type="checkbox"/>	REMA	<input type="checkbox"/>																													
PRP	PA	RA	<input type="checkbox"/>	REM	<input type="checkbox"/>																													
ST	SSI	O&M	<input type="checkbox"/>	OIL	<input type="checkbox"/>																													
FED	LSI	NPLD	<input type="checkbox"/>	UST	<input type="checkbox"/>																													

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
1937M04S10	2	L	5	low conc cyanide	-	5008560	SL-EB01-1093	10/20/93 1000	SL	GOOD
2937M04S10	2	L	HNO3 K2Cr2O7	low conc mercury	-	5008557	SL-EB01-1093	10/20/93 1000	SL	GOOD
3937M04S11	2	L	2	low conc metals	-	5008559	SL-MW2D-1093	10/20/93 1115	SL	GOOD
4937M04S11	2	L	HNO3 K2Cr2O7	low conc mercury	-	5008564	SL-MW2D-1093	10/20/93 1115	SL	GOOD
5937M04S11	2	L	5	low conc cyanide	-	5008561	SL-MW2D-1093	10/20/93 1115	SL	GOOD
6.										
7.										
8.										
9.										
10.										

Shipment for SAS complete? (Y/N) Y

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Susan Lopez</i>	Date / Time 10/20/93 1930	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>Umesh Joshi</i>	Date / Time 10/21/93 9:40	Remarks PS# 147414, 147415	Is custody seal intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> None
Split Samples <input type="checkbox"/> Accepted (Signature)			<input type="checkbox"/> Declined		

EPA Form

DISTRIBUTION:

White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO



United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

SAS No.

8143E-03

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C)	2. Region No. 5	Sampling Co. JACOBS	4. Date Shipped 10/21/93	Carrier FEDEX	7. Date Received 10/22/93	Received by Umesh Joshi
		Sampler (Name) SUSAN LORENZ		Airbill Number 7880166545		Laboratory VEGAS	
		Sampler Signature <i>Susan Lorenz</i>		5. Ship To VEGAS ANALYTICAL 3894 SHIFF DRIVE 115 VEGAS, ALEXANDRIA 99103		8. Transfer to	
3. Type of Activity		<input type="checkbox"/> Remedial <input type="checkbox"/> Removal		Received by		Laboratory	
<input type="checkbox"/> SF <input type="checkbox"/> PA <input type="checkbox"/> ST <input type="checkbox"/> FED		<input type="checkbox"/> Lead <input type="checkbox"/> Pre-Remedial <input type="checkbox"/> RIFS <input type="checkbox"/> RD <input type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD		<input type="checkbox"/> CLEM <input checked="" type="checkbox"/> REMA <input type="checkbox"/> REM <input type="checkbox"/> OIL <input type="checkbox"/> UST		702/365-1201	

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
193JM04512	2	L	Z	LOW CONC. METALS	-	5008570	SL-MW75-1093	10/20/93 1820	SKL	GOOD
293JM04512	2	L	5	LOW CONC. CYANIDE	-	5008571	SL-MW75-1093	10/20/93 1820	SKL	
393JM04512	2	L	H ₂ O ₁₂ 07 HNO ₃	LOW CONC. MERCURY	-	5008572	SL-MW75-1093	10/20/93 1820	SKL	
493JM04513	2	L	Z	LOW CONC. METALS	-	5008573	SL-MW7B-1093	10/20/93 1600	SKL	
593JM04513	2	L	Z 5	LOW CONC. CYANIDE	-	5008574	SL-MW7B-1093	10/20/93 1600	SKL	
693JM04513	2	L	H ₂ O ₁₂ 07 HNO ₃	LOW CONC. MERCURY	-	5008575	SL-MW7B-1093	10/20/93 1600	SKL	
793JM04514	2	L	Z	LOW CONC. METALS	-	5008576	SL-MW7I-1093	10/20/93 1650	SKL	
893JM04514	2	L	5	LOW CONC. CYANIDE	-	5008577	SL-MW7I-1093	10/20/93 1650	SKL	
993JM04514	2	L	H ₂ O ₁₂ 07 HNO ₃	LOW CONC. MERCURY	-	5008578	SL-MW7I-1093	10/20/93 1650	SKL	
1093JM04520	2	L	H ₂ O ₁₂ 07 HNO ₃	LOW CONC. MERCURY	-	5008595	SL-MW4D-1093	10/21/93 1025	SKL	

Shipment for SAS complete? (Y/N) **(Y)**

COOLER good

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Susan Lorenz</i>	Date / Time 10/21/93 1930	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>Umesh Joshi</i>	Date / Time 10/21/93 9:55	Remarks IS#s 147419, 147420	Is custody seal intact? (Y/N) (Y)
Split Samples <input type="checkbox"/> Accepted <input type="checkbox"/> Declined			(Signature)		

221



United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

SAS No.

8143E-03

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinseate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	Sampling Co. JACOBS	4. Date Shipped 10/20/93	Carrier FEDEX	7. Date Received 10/22/93	Received by Umesh Jashi	
		3. Type of Activity		Sampler (Name) Susan Lorenz	Airbill Number 788 016 6545	Laboratory VEGAS		
		Remedial Removal SF <input type="checkbox"/> PA <input type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD <input type="checkbox"/> PRP <input type="checkbox"/> SS <input type="checkbox"/> O&M <input type="checkbox"/> OIL <input type="checkbox"/> ST <input type="checkbox"/> LSI <input type="checkbox"/> NPLD <input type="checkbox"/> UST <input type="checkbox"/>		Sampler Signature <i>Susan Lorenz</i>	5. Ship To VEGAS ANALYTICAL 3895 SHIFF DRIVE LAS VEGAS, NV 89103	8. Transfer to		Date Received

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time - Sample Collection	I Sampler Initials	J Sample Condition On Receipt
193JM04520	2	L	2	low conc metals	-	5008596	SL-MW4D-1093	10/21/93 1025	SJL	good
293JM04520	2	L	5	low conc. Cyanide	-	5008547	SL-MW4D-1093	10/21/93 1025	SJL	↓
393JM04S19	2	L	5	low conc. Cyanide	-	5008602	SL-MW4S-1093	10/21/93 1130	SJL	
493JM04S19	2	L	2	low conc. metals	-	5008603	SL-MW4S-1093	10/21/93 1130	SJL	
593JM04S19	2	L	2 1/2 Cl ₂	low conc. Mercury	-	5008604	SL-MW4S-1093	10/21/93 1130	SJL	
693JM04S25	2	L	2	low conc. metals	-	5008605	SL-MW8R-1093	10/21/93 1255	SJL	
793JM04S25	2	L	5	low conc. Cyanide	-	5008606	SL-MW8R-1093	10/21/93 1255	SJL	
893JM04S25	2	L	2 1/2 Cl ₂	low conc. Mercury	-	5008607	SL-MW8R-1093	10/21/93 1255	SJL	
9										

Shipment for SAS complete? (Y/N) Y

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Susan Lorenz</i>	Date / Time 10/21/93 1930	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature) <i>Umesh Jashi</i>	Date / Time	Received for Laboratory by: (Signature)	Date / Time 10/22/93 9:55	Remarks Is custody seal intact? <u>Y</u> /N/none CS# 147419, 147420	

Split Samples Accepted (Signature)
 Declined

222

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.: S01

SOW NO.: ILM1.0

EPA Sample No.

Lab Sample ID.

S01	S01
S02	S02
S04	S04
S05	S05
S06	S06
S07	S07
D07	D07
D07D	D07D
D07S	D07S
S09	S09
S10	S10
S11	S11
S12	S12
S13	S13
S14	S14
S19	S19
S20	S20
S25	S25

VEGAS ANALYTICAL LABS
 1501 SOUTH STATE ST.
 CHICAGO, ILLINOIS 60605

Were ICP interelement correction applied? Yes/No YES

Were ICP Background corrections applied? Yes/No YES

If yes-were raw data generated before Application of background corrections? Yes/No NO

Comments:

Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature

Lab Manager. *Tom Sed*

Date. 11/19/73

1
INORGANIC ANALYSES DATA SHEET

S01

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: S01

Matrix (Soil/Water): WATER Lab Sample ID: S01

Level (Low/Med): LOW Date Received: 10/19/93

% Solids: 0.0 Date Sample Collected: 10/18/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	36.10	B		P
7440-36-0	Antimony	1.70	B		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	32.10			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.70	B		F
7440-70-2	Calcium	72500.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	5.80	B		P
7439-89-6	Iron	320.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	45600.00			P
7439-96-5	Manganese	16.50			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	1480.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.70	B		P
7440-23-5	Sodium	3050.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	1.90			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S02

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

S01

Matrix (Soil/Water): WATER

Lab Sample ID: S02

Level (Low/Med): LOW

Date Received: 10/19/93

3

% Solids: 0.0

Date Sample Collected: 10/18/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22.10	B		P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	27.80			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	74000.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	350.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	45000.00			P
7439-96-5	Manganese	16.50			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	1500.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	2630.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	1.00	U		P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

INORGANIC ANALYSES DATA SHEET

S04

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

S01

Matrix (Soil/Water): WATER

Lab Sample ID: S04

Level (Low/Med): LOW

Date Received: 10/21/93

% Solids:

0.0

Date Sample Collected: 10/19/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	29.70	B		P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	91.70			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	107000.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	425.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	56300.00			P
7439-96-5	Manganese	24.20			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	2310.00			P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	236000.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	3.70	B		P
7440-66-6	Zinc	4.20			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S05

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

S01

Matrix (Soil/Water): WATER

Lab Sample ID: S05

Level (Low/Med): LOW

Date Received: 10/21/93

5

% Solids:

0.0

Date Sample Collected: 10/19/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	659.00			P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	3.40	B		F
7440-39-3	Barium	212.00			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.50	B		F
7440-70-2	Calcium	163000.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	5.40	B		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	2140.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	71600.00			P
7439-96-5	Manganese	1070.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	9.20	B		P
7440-09-7	Potassium	5090.00			P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	16900.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	6.80	B		P
7440-66-6	Zinc	1.80			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLOUDY

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

INORGANIC ANALYSES DATA SHEET

S06

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

S01

Matrix (Soil/Water): WATER

Lab Sample ID: S06

Level (Low/Med): LOW

Date Received: 10/21/93

% Solids:

0.0

Date Sample Collected: 10/20/93

6

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1340.00			P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	51.40			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U B		F
7440-70-2	Calcium	128000.00			P
7440-47-3	Chromium	5.20			P
7440-48-4	Cobalt	3.00	B		P
7440-50-8	Copper	4.80	B		P
7439-89-6	Iron	2500.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	61600.00			P
7439-96-5	Manganese	188.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	1610.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	4770.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	7.40	B		P
7440-66-6	Zinc	10.80			P
-----	Cyanide	10.00	U		C

By 12-28-93

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S07

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.: S01

Matrix (Soil/Water): WATER

Lab Sample ID: S07

Level (Low/Med): LOW

Date Received: 10/21/93

% Solids: 0.0

Date Sample Collected: 10/19/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19.70	B		P
7440-36-0	Antimony	1.70	B		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	27.10			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	72700.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	710.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	46000.00			P
7439-96-5	Manganese	7.10	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	894.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	4240.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	1.00	U		P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

INORGANIC ANALYSES DATA SHEET

D07

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.: S01

Matrix (Soil/Water): WATER

Lab Sample ID: D07

Level (Low/Med): LOW

Date Received: 10/21/93

8

% Solids: 0.0

Date Sample Collected: 10/19/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20.40	B		P
7440-36-0	Antimony	2.10	B		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	27.00			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	72200.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	983.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	44500.00			P
7439-96-5	Manganese	7.10	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	962.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	4200.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	1.00	U		P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S09

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.: S01

Matrix (Soil/Water): WATER

Lab Sample ID: S09

Level (Low/Med): LOW

Date Received: 10/21/93

% Solids: 0.0

Date Sample Collected: 10/20/93

9

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	42.30	B		P
7440-36-0	Antimony	6.10			F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	173.00			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	165000.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	19400.00			P
7439-92-1	Lead	1.60	B		F
7439-95-4	Magnesium	56500.00			P
7439-96-5	Manganese	2360.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	14900.00			P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	13600.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	6.20			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S10

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

S01

Matrix (Soil/Water): WATER

Lab Sample ID: S10

Level (Low/Med): LOW

Date Received: 10/21/93

10

% Solids:

0.0

Date Sample Collected: 10/20/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10.00	U		P
7440-36-0	Antimony	1.20	B		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	7.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	1460.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	149.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	587.00	B		P
7439-96-5	Manganese	14.90			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	319.00	U		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	199.00	B		P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	1.00	U		P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S11

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

S01

Matrix (Soil/Water): WATER

Lab Sample ID: S11

Level (Low/Med): LOW

Date Received: 10/21/93

% Solids:

0.0

Date Sample Collected: 10/20/93

11

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19.70	B		P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	4.30	B		F
7440-39-3	Barium	93.90			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	84000.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	1550.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	49400.00			P
7439-96-5	Manganese	77.70			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	1360.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	11000.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	1.00	U		P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S12

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135
 Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: S01
 Matrix (Soil/Water): WATER Lab Sample ID: S12
 Level (Low/Med): LOW Date Received: 10/22/93
 % Solids: 0.0 Date Sample Collected: 10/20/93

12

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	140.00			P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	3.10	B		F
7440-39-3	Barium	54.80			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.70	B		F
7440-70-2	Calcium	94200.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	17.70			P
7439-89-6	Iron	333.00			P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	50300.00			P
7439-96-5	Manganese	745.00			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	14.60	B		P
7440-09-7	Potassium	1380.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	9970.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.10	B		P
7440-66-6	Zinc	11.20			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:
 Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S13

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

S01

Matrix (Soil/Water): WATER

Lab Sample ID: S13

Level (Low/Med): LOW

Date Received: 10/22/93

% Solids:

0.0

Date Sample Collected: 10/20/93

13

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15.10	B		P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	32.70			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	81800.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	57.90	B		P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	41800.00			P
7439-96-5	Manganese	5.70	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	838.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	9730.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	1.00	U		P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S14

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135
 Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: S01
 Matrix (Soil/Water): WATER Lab Sample ID: S14 **14**
 Level (Low/Med): LOW Date Received: 10/22/93
 % Solids: 0.0 Date Sample Collected: 10/20/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19.70	B		P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	22.10			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	75600.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	32.10	B		P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	39800.00			P
7439-96-5	Manganese	22.70			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	853.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	3080.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	1.00	U		P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:
 Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S19

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: S01

Matrix (Soil/Water): WATER Lab Sample ID: S19

Level (Low/Med): LOW Date Received: 10/22/93

% Solids: 0.0 Date Sample Collected: 10/21/93

15

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	27.70	B		P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	58.50			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	62000.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	4.00	B		P
7439-89-6	Iron	32.90	B		P
7439-92-1	Lead	4.40			F
7439-95-4	Magnesium	28200.00			P
7439-96-5	Manganese	3.10	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	897.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	8780.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	2.60			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S20

Lab Name: VEGAS ANALYTICAL LABS INC

Contract: VEGAS-0135

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.: S01

Matrix (Soil/Water): WATER

Lab Sample ID: S20

16

Level (Low/Med): LOW

Date Received: 10/22/93

% Solids: 0.0

Date Sample Collected: 10/21/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19.70	B		P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	11.70			F
7440-39-3	Barium	65.40			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	129000.00			P
7440-47-3	Chromium	2.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	3950.00			P
7439-92-1	Lead	1.60	B		F
7439-95-4	Magnesium	82200.00			P
7439-96-5	Manganese	56.20			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	1470.00	B		P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	27600.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	1.00	U		P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments :

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S25

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: S01

Matrix (Soil/Water): WATER Lab Sample ID: S25 **17**

Level (Low/Med): LOW Date Received: 10/22/93

% Solids: 0.0 Date Sample Collected: 10/21/93

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	31.60	B		P
7440-36-0	Antimony	1.10	U		F
7440-38-2	Arsenic	2.20	U		F
7440-39-3	Barium	37.20			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	0.22	U		F
7440-70-2	Calcium	85900.00			P
7440-47-3	Chromium	5.70			P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	35.00	B		P
7439-92-1	Lead	1.10	U		F
7439-95-4	Magnesium	39500.00			P
7439-96-5	Manganese	1.90	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	28700.00			P
7482-49-2	Selenium	1.10	U		F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	18400.00			P
7440-28-0	Thallium	2.20	U		F
7440-62-2	Vanadium	2.00	U		P
7440-66-6	Zinc	2.50			P
-----	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments :

3
BLANKS

21A

Lab Name : VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: S01

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	12.0	B	15.0	B	10.0	U	10.0	U	30.700	B	P
Antimony	1.0	U	1.0	U	1.0	U	1.0	U	1.100	U	F
Arsenic	2.0	U	2.0	U	2.0	U	2.0	U	2.200	U	F
Barium	7.0	U	7.0	U	7.0	U	7.0	U	7.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cadmium	0.2	U	0.2	U	0.2	U	0.2	U	0.220	U	F
Calcium	15.0	U	15.0	U	15.0	U	15.0	U	120.100	B	P
Chromium	2.2	B	2.0	U	2.0	U	2.0	U	2.000	U	P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Copper	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Iron	4.0	U	4.0	U	4.0	U	4.0	U	19.300	B	P
Lead	1.0	U	1.0	U	1.0	U	1.0	U	1.100	U	F
Magnesium	19.0	U	19.0	U	19.0	U	19.0	U	50.600	B	P
Manganese	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	8.0	U	8.0	U	8.0	U	8.0	U	8.000	U	P
Potassium	319.0	U	319.0	U	319.0	U	319.0	U	319.000	U	P
Selenium	1.0	U	1.0	U	1.0	U	1.0	U	1.100	U	F
Silver	2.4	B	2.0	U	2.0	U	2.0	U	2.000	U	P
Sodium	37.0	U	37.0	U	37.0	U	37.0	U	37.000	U	P
Thallium	2.0	U	2.0	U	2.0	U	2.0	U	2.200	U	F
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	C

3
BLANKS

Lab Name : VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

21B

Lab Code: VEGAS

Case No.:

SAS No.: 8143E03

SDG No.:

S01

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg):

Analyte	Initial Calib. Blank (ug/L) C	Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
		4	C	5	C	6	C	C	M	
Aluminum		15.5	B	19.9	B	12.1	B	10.200	B	P
Antimony		1.0	U	1.0	U	1.0	U	1.000	U	F
Arsenic		2.0	U	2.0	U	2.0	U	2.200	U	F
Barium		7.0	U	7.0	U	7.0	U	7.000	U	P
Beryllium		1.0	U	1.0	U	1.0	U	1.000	U	P
Cadmium		0.2	U	0.2	U	0.2	U	0.220	U	F
Calcium		15.0	U	15.0	U	15.0	U	31.300	B	P
Chromium		2.0	U	2.0	U	2.0	U	2.000	U	P
Cobalt		2.0	U	2.0	U	2.0	U	2.000	U	P
Copper		2.0	U	2.0	U	2.0	U	2.000	U	P
Iron		4.0	U	4.0	U	4.0	U	5.000	B	P
Lead		1.0	U	1.0	U	1.0	U	1.100	U	F
Magnesium		19.0	U	19.0	U	19.0	U	19.000	U	P
Manganese		1.0	U	1.0	U	1.0	U	1.000	U	P
Mercury		0.2	U					0.200	U	CV
Nickel		8.0	U	8.0	U	8.0	U	8.000	U	P
Potassium		319.0	U	319.0	U	319.0	U	319.000	U	P
Selenium		1.0	U	1.0	U	1.0	U	1.100	U	F
Silver		4.0	B	3.8	B	2.9	B	2.000	U	P
Sodium		37.0	U	37.0	U	37.0	U	37.000	U	P
Thallium		2.0	U	2.0	U	2.0	U	2.200	U	F
Vanadium		2.0	U	2.0	U	2.0	U	2.000	U	P
Zinc		1.0	U	1.0	U	1.0	U	1.000	U	P
Cyanide		10.0	U					10.000	U	C

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

D07S

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: S01

Matrix (Soil/Water): WATER Level (low/med): LOW

Concentration Units (ug/L or mg/kg dry weight): UG/L

23

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (S)	%R	Q	M
Aluminum	85-115	2131.0000	20.4000 B	2000.00	105.5		P
Antimony	85-115	99.5000	2.1000 B	100.00	97.4		F
Arsenic	85-115	41.4000	2.2000 U	40.00	103.5		F
Barium	85-115	2207.3000	27.0000	2000.00	109.0		P
Beryllium	85-115	56.5000	1.0000 U	50.00	113.0		P
Cadmium	85-115	2.2000 B	0.2200 U	2.00	110.0		F
Calcium	85-115	75736.9000	72189.2000	5000.00	71.0		P
Chromium	85-115	212.1000	2.0000 U	200.00	106.0		P
Cobalt	85-115	536.7000	2.0000 U	500.00	107.3		P
Copper	85-115	252.8000	2.0000 U	250.00	101.1		P
Iron	85-115	1887.6000	983.2000	1000.00	90.4		P
Lead	85-115	19.0000	1.1000 U	20.00	95.0		F
Magnesium	85-115	48588.8000	44496.3000	5000.00	81.8		P
Manganese	85-115	522.2000	7.1000 B	500.00	103.0		P
Mercury	80-120	1.1000	0.2000 U	1.00	110.0		CV
Nickel	85-115	537.8000	8.0000 U	500.00	107.6		P
Potassium	85-115	6033.7000	961.9000 B	5000.00	101.4		P
Selenium	85-115	9.2000	1.1000 U	10.00	92.0		F
Silver	85-115	47.7000	2.0000 U	50.00	95.4		P
Sodium	85-115	8987.1000	4195.4000	5000.00	95.8		P
Thallium	85-115	50.5000	2.2000 U	50.00	101.0		F
Vanadium	85-115	502.6000	2.0000 U	500.00	100.5		P
Zinc	85-115	504.2000	1.0000 U	500.00	100.8		P
Cyanide	80-120	106.3000	10.0000 U	100.00	106.3		C

Comments :

6
DUPLICATES

EPA SAMPLE NO.

D07D

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.: S01

Matrix (Soil/Water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

24

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	M
Aluminum		20.4000 B	16.9000 B	18.8		P
Antimony		2.1000 B	2.1000 B			F
Arsenic		2.2000 U	2.2000 U			F
Barium		27.0000	26.2000	3.0		P
Beryllium		1.0000 U	1.0000 U			P
Cadmium		0.2200 U	0.2200 U			F
Calcium		72189.2000	71275.9000	1.3		P
Chromium		2.0000 U	2.0000 U			P
Cobalt		2.0000 U	2.0000 U			P
Copper		2.0000 U	2.0000 U			P
Iron		983.2000	945.1000	4.0		P
Lead		1.1000 U	1.1000 U			F
Magnesium		44496.3000	43629.6000	2.0		P
Manganese		7.1000 B	7.0000 B	1.4		P
Mercury		0.2000 U	0.2000 U			CV
Nickel		8.0000 U	8.0000 U			P
Potassium		961.9000 B	982.5000 B	2.1		P
Selenium		1.1000 U	1.1000 U			F
Silver		2.0000 U	2.0000 U			P
Sodium		4195.4000	4070.0000	3.0		P
Thallium		2.2000 U	2.2000 U			F
Vanadium		2.0000 U	2.0000 U			P
Zinc		1.0000 U	1.0000 U			P
Cyanide		10.0000 U	10.0000 U			C

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: VEGAS ANALYTICAL LABS INC Contract: VEGAS-0135

Lab Code: VEGAS Case No.: SAS No.: 8143E03 SDG No.:S01

ICP ID Number: VALI P1 Date: 10/15/93

Flame AA ID Number: VALI F2

Furnace AA ID Number: VALI F1

27

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.21		50	10.0	P
Antimony	206.83	BS	5	1.0	F
Arsenic	193.70	BS	5	2.0	F
Barium	493.40		20	7.0	P
Beryllium	313.04		1	1.0	P
Cadmium	228.80	BS	4	0.2	F
Calcium	317.93		1000	15.0	P
Chromium	267.72		5	2.0	P
Cobalt	228.62		10	2.0	P
Copper	324.75		10	2.0	P
Iron	259.94		100	4.0	P
Lead	220.36	BS	2	1.0	F
Magnesium	279.08		1000	19.0	P
Manganese	257.61		10	1.0	P
Mercury	253.70		.2	0.2	CV
Nickel	231.60		20	8.0	P
Potassium	766.49		2000	319.0	P
Selenium	196.03	BS	1	1.0	F
Silver	328.07		7	2.0	P
Sodium	588.99		1000	37.0	P
Thallium	190.86	BS	2	2.0	F
Vanadium	292.40		10	2.0	P
Zinc	213.86		1	1.0	P
Cyanide			10	10.0	C

Comments :

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No. _____ (1) CERCLIS No. _____

Case No. SAS8143E-03 ⁽¹⁾ Site Name Location: STOUGHTON LANDFILL

Contractor or EPA Lab: VEGAS Data User: S F

No. of Samples: 16 Date Samples or Data Received: 11-24-93

Have Chain-of-Custody records been received? YES NO

Have traffic reports or packing lists been received? YES NO

If no, are traffic report or packing list numbers written on the chain-of-custody record? YES NO

If no, which traffic report or packing list numbers are missing?

Are basic data forms in? YES NO

No. of samples claimed: 16 No. of samples received: 16

Received by: A. C. Harvey Date: 11-24-93

Received by LSSS: _____ Date: _____

Review started: 12-22-93 Reviewer Signature: B. Green

Total time spent on review: 13+25 Date review completed: 12-28-93

Copied by: Reddie Hopkins Date: 1/13/94

Mailed to user by: Lynette Burnett Date: 1-18-94

DATA USERS:

Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ESCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete Suitable for Intended Purpose if OK
Organic Data Complete Suitable for Intended Purpose List
Dioxin Data Complete Suitable for Intended Purpose prblms
SAS Data Complete Suitable for Intended Purpose below.

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files Date: _____

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 1/24/94

SUBJECT: Review of Region V CLP Data
Received for Review on Nov 24, 1993

FROM: Charles T. Elly, Director (SL-10C) MSP for CTC
Central Regional Laboratory

TO: Data User: Superfund

We have reviewed the data for the following case.

SITE NAME: Stoughton City LF (WI)

CASE and/or SAS NUMBER: SAS8143E-01 SDG NUMBER: 93)M04^S01

Number and Type of Samples: 34 (Water)

CLP Sample Numbers: 93)M04^S01 - ^{S16, S19-S22, S} ~~S21~~ DOT, ^{S28, S30-S35} ~~S25, ^{AMM} S25~~

CLP Laboratory: Pacific Hrs. for Review 30.5

Following are our findings:

The data are acceptable for use with qualification described in the attached narrative.

Murton Pashe
1/24/94

- () Data are acceptable for use.
- (X) Data are acceptable for use with qualification.
- () Data are preliminary, pending verification by laboratory.
- () Data are unacceptable.

cc: Edward Kantor, EMSL-Las Vegas
Julie Frankel, VIAR & Co. (SMO)

NARRATIVE

**CONTRACTOR: PACIFIC
CASE: SAS 8143E-01
SDG: 93JM04501**

Page 2 of 12

SITE: STOUGHTON CITY L.F.

The samples were received at the Laboratory from 10/19/93 to 10/23/93. The laboratory received thirty-four (34) water samples to be analyzed for the requested targets compounds; Dichlorodifluoromethane (CCL2F2), Trichlorofluoromethane (CCL3F) and Tetrahydrofuran (THF), following the EPA method 524.2.

Samples 93JM04516 and 93JM04525 were used for the matrix spike/spike duplicate for the VOA analysis.

Samples 93JM04503, 4508, 4515, 4516, 4521, and 93JM04522 in this case were identified as the Trip blanks. Sample 93JM04510 is identified as a Field Blank.

The VOA samples were analyzed within the thirty (30) day turnaround analysis holding time.

The reviewer's narrative and data qualifiers are noted in the following pages.

Reviewed by: W. Ira Wilson _Lockheed/ESAT

Date: Jan. 7 , 1994

NARRATIVE

CONTRACTOR: PACIFIC
CASE: SAS 8143E-01
SDG: 93JM04501

Page 3 of 12

SITE: STOUGHTON CITY L.F.

Below is a summary of the out-of-control audits and the possible effect on the data for this case.

1. HOLDING TIME

The VOA samples were analyzed within the thirty (30) day turnaround analysis holding time.

2. GC/MS TUNING AND GC PERFORMANCE

GC/MS performance instrument check was satisfactory. The BFB VOA tuning criteria met the required QC criteria.

3. CALIBRATION

Initial and continuing calibration standards of the VOA were evaluated for the Target Compounds List (TCLs) and outliers were recorded on the outlier forms included as a part of this narrative.

4. METHOD BLANK

Volatile blanks VBLK37, VBLK38, VBLK41, VBLK42, VBLK43, VBLK44, and VBLK45 are the low level method blanks. The blanks were free of any TCL compounds.

5. SURROGATE RECOVERY

The VOA Method Blank, VBLK43 had surrogate S1 (DCB)= 1,2-Dichlorobenzene-d4 and S2 (BFB)= Bromofluorobenzene low (less than 10 %) out side of the QC limits. Therefore, results for compounds associated with this Blank are qualified as estimated "J" for positive "Hits" and non-detected results are unusable "R". The surrogate recoveries in all of the other samples and blanks were well within the QC limits.

6. MATRIX SPIKE/MSD SAMPLES

Sample 93JM04516 and sample 93JM04525 were used for the spike samples for the VOA, SVOA and Pest/PCB fraction.

Reviewed by: W. Ira Wilson__Lockheed/ESAT

Date: Jan. 7 , 1994

NARRATIVE

CONTRACTOR: PACIFIC
CASE: SAS 8143E-01
SDG: 93JM04501

Page 4 of 12

SITE: STOUGHTON CITY L.F.

The MS% REC., MSD % REC. and the RPD values for all compounds in the volatile fractions were well ~~thin~~ within the QC limits. The percent recovery ranged from 46% to 101%. *within*

7.FIELD BLANK AND FIELD DUPLICATE

Samples 93JM04503, 4508, 4515, 4516, 4521, and 93JM04522 are identified as Trips Blanks. There were no TCL compounds detected in any of the samples. Sample 93JM04510 is identified as a Field Blank. This Blank was also clean.

9.INTERNAL STANDARDS

The IS areas and the retention times were well within the QC limits for the VOA analysis.

10.COMPOUND IDENTIFICATION

Target compounds and TICs were identified by "best fit" library search method.

11.COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The VOA Target Compounds (TCLs) and Tentative Identified Compounds (TICs) were properly quantitated; therefore, the data is acceptable.

The CRQLs were adjusted to reflect all sample dilutions.

12.SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

GC baseline indicated acceptable performance.

13.OVERALL CASE ASSESSMENT

Reviewed by: W. Ira Wilson__Lockheed/ESAT

Date: Jan. 7 , 1994

NARRATIVE

**CONTRACTOR: PACIFIC
CASE: SAS 8143E-01
SDG: 93JM04501**

Page 5 of 12

SITE: STOUGHTON CITY L.F.

Tetrahydrofuran exceeded the calibration range in samples 4528 and 4528RE. The sample was diluted and reanalyzed to bring the compound back within range; Dichlorodifluoromethane exceeded the calibration range in samples 4533, 4533RE and 4539; the samples were also diluted and reanalyzed to bring the compound back within range. Therefore, the results from the diluted samples (4528DL, 4533DL and 4539DL) are used to validate the results in this data package for the above noted compounds. Dichlorodifluoromethane was detected in samples 4531 and 4531RE.

There no additional problems observed.

Reviewed by: W. Ira Wilson _Lockheed/ESAT

Date: Jan. 7 , 1994

CALIBRATION OUTLIERS
 ADDITIONAL _____ TCL COMPOUNDS

CASE (SAS#) 8143E-01
 COLUMN: CAP

CONTRACTOR: PACIFIC
 SITE NAME: Stoughton City Lt

TIME: 1503

Instrument#:	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
	RF	%SD	*	RF	%SD	*	RF	%SD	*	RF	%SD	*	RF	%SD	*
Date/Time	10/25/93														
C Chlorobenzene-d3															
1,4-Dichlorobenzene-d4															
4-Bromofluorobenzene															
1,2-Dichlorobenzene-d4															
D, Chloro difluoromethane															
Trichlorofluoromethane															
Tetrahydrofuran															

Affected Samples:

W. J.
 VBLK 38
 93JMA04507
 93JMO4507
 - 4007
 - 4510
 - 4511
 - 4515
 - 4509

W. J. Wilson 1-7-94

CALIBRATION OUTLIERS
ADDITIONAL _____ TCL COMPOUNDS

CASE (SAS#): 8143E-01
 COLUMN: CAP

CONTRACTOR: PACIFIC
 SITE NAME: Stoughton City LT

Instrument#:	Init. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.										
Date/Time	11/17/93-15/2														
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloro benzene-d5															
1,4-Dichloro benzene-d4															
4-Bromofluoro benzene															
1,2-Dichloro benzene-d4															
Dichloro difluoro methane															
Trichlorofluoro methane															
Tetrahydrofuran															

Affected Samples:

- VBLK 41
- 93JM04512
- 4513
- 4514
- 4519

W. Keaton 1-7-94

CALIBRATION OUTLIERS
ADDITIONAL _____ TCL COMPOUNDS

CASE (SAS#) 8143E-01
COLUMN: CAP

CONTRACTOR: PACIFIC
SITE NAME: Stoughton City LF

TIME 1139

Instrument#	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
	RP	%RSD	*	RP	%RSD	*	RP	%RSD	*	RP	%RSD	*
Date/Time	11/2/93											
<u>Chloro benzene-d3</u>												
<u>1,4-Dichloro benzene-d4</u>												
<u>4-Bromofluoro benzene</u>												
<u>1,2-Dichloro benzene-d4</u>												
<u>Dichloro difluoro methane</u>												
<u>Trichlorofluoro methane</u>												
<u>Tetrahydrofuran</u>												

Affected Samples:

VBLK42
93JM04516
-4516MS
-4516MSD
-4520

W. Sullivan 1-7-94

CALIBRATION OUTLIERS
ADDITIONAL _____ TCL COMPOUNDS

CASE (SAS#) 8143E-01
COLUMN: CAP

CONTRACTOR: PACIFIC
SITE NAME: Stoughton City

TIME 1625

Instrument#: <u>VG 10</u>	Init. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.										
Date/Time: <u>11/4/93</u>															
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
<u>Chloro benzene-d5</u>															
<u>1,4-Dichloro benzene-d4</u>															
<u>4-Bromofluoro benzene</u>															
<u>1,2-Dichloro benzene-d4</u>															
<u>D, Chloro difluoro methane</u>															
<u>Trichlorofluoro methane</u>															
<u>Tetrahydrofuran</u>															

Affected Samples:
VELK 43
93JM04521
-4522
-4525
-4526
-4527
-4528
-4530
-4531
-4532
-4032
-4533

P. W. Wilson 1-7-94

CALIBRATION OUTLIERS
ADDITIONAL _____ TCL COMPOUNDS

CASE (SAS#) 8143E-01
COLUMN: CAP

CONTRACTOR: PACIFIC
SITE NAME: SToughton City

TIME 1100

Instrument#: <u>VG10</u>	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
	RF	%RSD	*	RF	%RSD	*	RF	%RSD	*	RF	%RSD	*
Date/Time	<u>11/8/93</u>											
<u>Chloro benzene-d5</u>												
<u>1,4-Dichloro benzene-d4</u>												
<u>4-Bromofluorobenzene</u>												
<u>1,2-Dichloro benzene-d4</u>												
<u>Dichlorodifluoromethane</u>												
<u>Trichlorofluoromethane</u>												
<u>Tetrahydrofuran</u>												

Affected Samples:

- U BLK 44
- 93JM04528DL
- 4533 DL
- 4534
- 4535
- 4539
- 4540
- 4530RE
- 4531RE
- 4532RE
- 4032RE

Alisa Nelson 1-7-94

CALIBRATION OUTLIERS
ADDITIONAL _____ TCL COMPOUNDS

CASE (SAS#): 8143E-01
COLUMN: CAF

CONTRACTOR: PACIFIC
SITE NAME: Toughnuton City Lt

TIME 2001

Instrument: VGL0	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
	RF	MSD	*	RF	MSD	*	RF	MSD	*	RF	MSD	*	RF	MSD	*
Date/Time	11/8/93														
Chloro benzene - d 5															
1,4-Dichloro benzene - d 4															
4-Bromofluoro benzene															
1,2-Dichloro benzene - d 4															
Di Chloro difluoro methane															
Tri Chloro difluoro methane															
Tetrahydrofuran															

Affected Samples:

- VBLK 45
- 435M04521RE
- 4522RE
- 4525RE
- 4525MS
- 4525MSD
- 4526RE
- 4527RE
- 4528RE
- 4539DL
- 4533RE

11/17/94

DATA REPORTING QUALIFIERS
(page 1)

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE-if the results is a value greater than or equal to the Contract Required Quantitation Limit (CRQL), report the value.

U - Indicates compound was analyzed for but not detected. The sample Quantitation Limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the Sample Quantitation Limit for phenol (330 U) would be corrected to:

$$\frac{(330 \text{ U}) \times \text{df}}{\text{D}}$$

$$\text{where D} = \frac{100 - \% \text{ moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, D} = \frac{100 - 24}{100} = 0.76$$

$$\frac{(330 \text{ U}) \times 10}{.76} = 4300 \text{ U rounded to the appropriate number of significant figures}$$

For soil samples subjected to GPC clean-up procedures, the extract must be concentrated to 0.5 ml, and the sensitivity of the analysis is not compromised by the cleanup procedures. Therefore, the CRQL values will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specified volume, this fact be accounted for in reporting the Sample Quantitation Limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration of 3 ug/L is calculated, report it as 3J. The Sample Quantitation Limit must be adjusted for dilution as discussed for the U flag. The J flag is also applied to pesticide/Aroclor results where the pesticide/Aroclor is confirmed to be present but the concentration is less than the CRQL.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds. Where the identification is based on a mass spectral library search. It is applied to all TIC results.

DATA REPORTING QUALIFIERS
(page 2)

- P** - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two columns (see Form X). The lower of the two values is reported on Form I and flagged with a "P".
- C** - This flag applies to pesticide results where identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but unsuccessful, do not apply this flag, instead use a laboratory-defined, discussed below.
- B** - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.
- E** - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for the specific analysis. This flag will not apply to pesticide/PCBs analyzed by GC/MS methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.
- D** - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.
- A** - This flag indicates that a TIC is a suspected aldol-condensation product.
- X** - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the SDG Narrative. If more than one flag is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B" and "D" flags for some sample. The laboratory-defined are limited to letters "X", "Y" and "Z".



United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

SAS No.

8143E-01

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO ₃ 3. NaHSO ₄ 4. H ₂ SO ₄ 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	3. Sampling Co. MWAS	4. Date Shipped 10/22/93	Carrier Fed Ex	7. Date Received -- Received by 10-23-93 Laura Soeten														
		Sampler (Name) Susan Lorenz		Airbill Number 7880166696		Laboratory Pacific Analytical Inc														
		Sampler Signature <i>Susan Lorenz</i>		5. Ship To Pacific Analytical 6349 Paseo Del Lago Carlsbad, CA 92009 619-931-1366 Alvin Stevens		8. Transfer to Date Received														
		3. Type of Activity <table border="0"> <tr> <td>Remedial</td> <td>Removal</td> </tr> <tr> <td>Lead</td> <td>CLEM</td> </tr> <tr> <td>Pre Remedial</td> <td>REMA</td> </tr> <tr> <td>RIFS</td> <td>REM</td> </tr> <tr> <td>RD</td> <td>OIL</td> </tr> <tr> <td>RA</td> <td>UST</td> </tr> <tr> <td>O&M</td> <td></td> </tr> <tr> <td>NPLD</td> <td></td> </tr> </table>		Remedial	Removal	Lead	CLEM	Pre Remedial	REMA	RIFS	REM	RD	OIL	RA	UST	O&M		NPLD		
Remedial	Removal																			
Lead	CLEM																			
Pre Remedial	REMA																			
RIFS	REM																			
RD	OIL																			
RA	UST																			
O&M																				
NPLD																				

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
1. 93SM04S28	2	L	1	THE HILL 5027/5247	-	5008658	SL-MW3D-1093	10/21/93 1700	SL	
2. 93SM04S30	2	L	1	THE HILL 5027/5247	-	5008608	SL-MW05D-1093	10/22/93 5428	SL	
3. 93SM04S31	2	L	1	THE HILL 5027/5247	-	5008618	SL-MW5S-1093	10/22/93 1005	SL	
4. 93SM04S34	2	L	7	THE HILL 5027/5247	-	5008619	SL-TR12-1093	10/22/93 1130	SL	
5. 93SM04S32	2	L	1	THE HILL 5027/5247	-	5008664	SL-MW9R-1093	10/22/93 1120	SL	
6. 93SM04D32	2	L	1	THE HILL 5027/5247	D	5008665	SL-MW9B-1093	10/22/93 1120	SL	
7.										
8.										
9.										
10.										

Shipment for SAS complete? (Y/N) Y

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
<i>[Signature]</i>	10/21/93 1700				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Is custody seal intact? (Y/N) none
		<i>[Signature]</i>	10-23-93 1000	Cust seal Nos: 1471130, 147429 cooler 7 gold & pink copies	
Split Samples <input type="checkbox"/> Accepted (Signature)			<input type="checkbox"/> Declined		



United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

Special Analytical Service

Packing List/Chain of Custody

SAS No.

8113E-01

1. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	2. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved	2. Region No. 5	Sampling Co. Javelas	4. Date Shipped 10/22/93	Carrier FedEx	7. Date Received -- Received by 10.23.93 Laura Soeter
		Sampler (Name) Susan Lorenz		Airbill Number 7880166604		Laboratory Pacifi7 Analytical Inc
		Sampler Signature <i>[Signature]</i>		5. Ship To Pacific Analytical 6349 Paseo Del Lago Corte Madera, CA 94009 619-931-1766		8. Transfer to Date Received
3. Type of Activity		Remedial		Removal		Received by
SF <input type="checkbox"/> Lead <input type="checkbox"/> Pre-Remedial <input type="checkbox"/> PA <input type="checkbox"/> RIFS <input type="checkbox"/> RD <input type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD <input type="checkbox"/> LSI <input type="checkbox"/>		CLEM <input type="checkbox"/> REMA <input type="checkbox"/> REM <input type="checkbox"/> OIL <input type="checkbox"/> UST <input type="checkbox"/>		Laboratory		

Sample Numbers	A Matrix Enter from Box 1	B Conc Low Med High	C Preservative Used from Box 2	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Sample Condition On Receipt
1 93TMC4S35	2	L	2	TUE 11-15-92 7/24/93	-	5008622	SL-TB13-00	10/22/93 1130	SL	
2 93TMC4S33	2	L	1	TUE 11-15-92 7/24/93	-	5008663	SL-MW95-09	10/22/93 1130	SL	
3 93TMC4S37	2	L	1	TUE 11-15-92 7/24/93	-	5008668	SL-MW95-09	10/22/93 1130	SL	
4 93TMC4S41	2	L	1	TUE 11-15-92 7/24/93	-	5008669	SL-MW95-09	10/22/93 1130	SL	
5.										
6.										
7.										
8.										
9.										
10.										

Shipment for SAS complete? (Y/N)

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>[Signature]</i>	Date / Time 10/22/93 1900	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>[Signature]</i>	Date / Time 10.23.93 1000	Remarks Cust. Seal Nos: 1172137 117458 rooter @ Pacifi7 Analytical Inc copy book only	Is custody seal intact? <input checked="" type="checkbox"/> (Y/N) none

Split Samples Accepted Declined

1. Project Code 1C65030	Account Code	2. Region No. 5	Sampling Co. Jacobs	4. Date Shipped 18 Oct 93	Carrier Fed. Ex.	6. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	7. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NaOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved
Regional Information		3. Sampler (Name) Louis Ehrhard		Airbill Number 6346883896			
Non-Superfund Program		3. Sampler Signature <i>[Signature]</i>		5. Ship To Pacific Analytical Inc 6349 Paseo Del Lago Carlsbad, CA 92009			
Site Name City of Stoughton Landfill II		3. Type of Activity Remedial Removal Lead: Pre- RIFS <input type="checkbox"/> CLEM <input type="checkbox"/> Remedial RD <input checked="" type="checkbox"/> REMA <input type="checkbox"/> SF <input type="checkbox"/> PA <input type="checkbox"/> RA <input type="checkbox"/> REM <input type="checkbox"/> PRP <input type="checkbox"/> SS <input type="checkbox"/> O&M <input type="checkbox"/> OIL <input type="checkbox"/> ST <input type="checkbox"/> LSI <input type="checkbox"/> NPLD <input type="checkbox"/> UST <input type="checkbox"/>					
City, State Stoughton, WI		Site Spill ID					

Sample Numbers	A Matrix Enter from Box 6	B Conc Low Med High	C Preservative Used from Box 7	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Designated Field QC
1 93JM04S01	2	L	1	THE, METH S02.2/524.2	-	5-008501	SL-CSNB-1093	10/18/93	(E)	-
2 93JM04S02	2	L	1	THE, METH S02.2/524.2	-	5-008509	SL-CSW3-1093	10/18/93 1030	(E)	-
3 93JM04S03	2	L	N	THE, METH S02.2/524.2	-	5-008513	SL-TB01-1093	10/18/93 1415	(E)	TB
4										
5										
6										
7										
8										
9										
10										

Shipment for SAS complete? (Y/N) **(Y)**

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>[Signature]</i>	Date / Time 10/18/93 1830	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>[Signature]</i>	Date / Time 10.19.93 1015	Remarks CS # 12048, 12047 COOPER 1	Is custody seal intact? (Y) /N/none
			Split Samples <input type="checkbox"/> Accepted (Signature)		
			<input type="checkbox"/> Declined		

EPA Form
DISTRIBUTION:
White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

S 035754



Sample Collection Requirements

1. Confirmatory Analysis and Special Analytical Services (SAS)
 Note: Confirmatory analysis and Special Analytical Services (SAS) parameters that require extra volume.

2. Cooler and Sample Documentation

- Complete all sections of the SAS Packing List/Chain of Custody Form
- Press firmly with a ball point pen to ensure that carbon copies are legible. Check the information and correct any errors.
- Please remember to complete the Chain of Custody information on the form.
- Seal the two sets of laboratory SAS Packing List/Chain of Custody form copies in a plastic bag. Include a return address for the cooler. Tape bag under cooler lid.
- Overlap the lid and bottle and bottle of each sample container with custody seals.
- Seal each container in a plastic bag.
- Pack medium and high concentration samples in metal cans.
- Cool low waters to 4°C. Cooling of low soils is optional. Do not cool medium or high concentration waters and soils.
- Separate and surround cooler contents with vermiculite or equivalent packaging.
- Seal the cooler, overlapping the lid and body with custody seals.
- Send SMO the yellow copy of the SAS Packing List/Chain of Custody Form within 3 days.

3. Sample Shipment Reporting

- PHONE IN ALL SHIPMENTS IMMEDIATELY TO SMO (or to RSCC, if instructed)
- Required information:
 SAS (and/or Case) number
 Date shipped
 Number of samples by concentration, matrix, and analysis

- Carrier and airbill number
- Next planned shipment
- Leave your name and a number where you can be reached.
- Information for SATURDAY DELIVERIES must be phoned in by 3:00 p.m. (Eastern) the preceding FRIDAY.
- Report any delays or changes of scope (i.e., changes in number of samples to be collected, matrix changes, etc.)

CALL IF YOU HAVE ANY QUESTIONS
 USEPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 818
 Alexandria, VA 22313
 Phone: (703) 557-2490
 (703) 684-5678
 FAX: (703) 683-0378

Analytical Lab (Signature) Date / Time Received by (Signature) Date / Time	Analytical Lab (Signature) Date / Time Received by (Signature) Date / Time	Analytical Lab (Signature) Date / Time Received by (Signature) Date / Time
---	---	---

Project Code: W-0230
 VCCOM: C-001
 S: H-001
 Date: 10/23/85

10/23/85
 10/23/85
 10/23/85



1. Project Code MS030	Account Code	2. Region No. 5	Sampling Co. JACOBS	4. Date Shipped 10/19/93	Carrier FED EX	6. Sample Description (Enter in Column A) 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil 7. Waste 8. Other (Specify)	7. Preservative (Enter in Column C) 1. HCl 2. HNO3 3. NAHSO4 4. H2SO4 5. NAOH 6. Other (SAS) (Specify) 7. Ice only N. Not preserved
Regional Information City of Stoughton Landfill		3. Type of Activity Remedial <input type="checkbox"/> Removal <input type="checkbox"/> Lead: <input type="checkbox"/> Pre-Remedial <input type="checkbox"/> RIFS <input type="checkbox"/> CLEM <input type="checkbox"/> PA <input type="checkbox"/> RA <input type="checkbox"/> REM <input checked="" type="checkbox"/> ST <input type="checkbox"/> SSI <input type="checkbox"/> O&M <input type="checkbox"/> OIL <input type="checkbox"/> FED <input type="checkbox"/> LSI <input type="checkbox"/> NPLD <input type="checkbox"/> UST <input type="checkbox"/>		5. Ship To PACIFIC ANALYTICAL 6349 POSEO DEL LAGO CORLSBOD, CA 92009			
City, State STOUGHTON, MA		Site Spill ID		619/931-1766			

Sample Numbers	A Matrix Enter from Box 6	B Conc Low Med High	C Preservative Used from Box 7	D Analysis	E Sample used for spike and/or duplicate	F Regional Specific Tracking Number or Tag Number	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Designated Field QC
1. 93TMO4504	2	L	1	THE METHODS 502.2, 224.2	-	5-008518	SL-MW10-1093	10/19/93 1130	JLL	-
2. 93TMO4505	2	L	1	THE 502.2, 224.2	-	5-008522	SL-MW15-1093	10/19/93 1210	JLL	-
3. 93TMO4506	2	L	1	THE 502.2, 224.2	-	5-008528	SL-MW65-1093	10/19/93 1510	JLL	-
4. 93TMO4508	2	L	N	THE 502.2, 224.2	-	5-008547	SL-TB02-1093	10/19/93 1700	JLL	TB
5.										
6.										
7.										
8.										
9.										
10.										

Shipment for SAS complete? (Y/N) **(Y)**

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) <i>Susan Lorenz</i>	Date / Time 10/19/93 7:30 PM	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>James S...</i>	Date / Time 10/20/93 9:55	Remarks CS # 5 12045, 12046	Is custody seal intact? (Y/N) none Coater 2
Split Samples <input type="checkbox"/> Accepted (Signature)			<input type="checkbox"/> Declined		

EPA Form
 DISTRIBUTION:
 White - Region Copy Yellow - SMO Copy Gold - Lab Copy Pink - Lab Copy for Return to SMO

S 035758



USEPA
Contract Laboratory Program
Sample Management Office
P.O. Box 818
Alexandria, VA 22313

USEPA
Contract Laboratory Program
Sample Management Office
P.O. Box 818
Alexandria, VA 22313

Sample Collection Requirements

1. **Confirmation Analysis and Special Analytical Services (SAS)**
Parameters that require extra volume

2. **Cooler and Sample Documentation**
Complete all sections of the SAS Packing List/Chain of Custody Form Press firmly with a ball point pen to ensure that carbon copies are legible. Check the information and correct any errors.

3. **Sample Shipment Reporting**
PHONE IN ALL SHIPMENTS IMMEDIATELY TO SMO (or to RSCC, if instructed)

Required Information:
SAS (and/or Case) number
Date shipped
Number of samples by concentration, matrix, and analysis
Carrier and airbill number
Next planned shipment
Leave your name and a number where you can be reached.
Information for SATURDAY DELIVERIES must be phoned in by 3:00 p.m. (Eastern) the preceding FRIDAY.

• Report any delays or changes of scope (i.e., changes in number of samples to be collected, matrix changes, etc.)
• CALL IF YOU HAVE ANY QUESTIONS

USEPA Contract Laboratory Program
Sample Management Office
P.O. Box 818
Alexandria, VA 22313
Phone: (703) 557-2490
(703) 684-5678
FAX: (703) 683-0378

RECEIVED BY (Signature)
RECEIVED FOR (Signature)
DATE / TIME
RECEIVED BY (Signature)
RECEIVED FOR (Signature)
DATE / TIME
RECEIVED BY (Signature)
RECEIVED FOR (Signature)
DATE / TIME

CHAIN OF CUSTODY

White - Region Code Yellow - SMO Code Green - RSCC Code

2005

Metals-2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 1/28/94

SUBJECT: Review of Region V CLP Data
Received for Review on 11-24-93

FROM: Charles T. Elly, Director (SL-10C) *Patrick C. Churilla*
Central Regional Laboratory *for C.T. Elly*

TO: Data User: S F

We have reviewed the data for the following case.

SITE NAME: STOUGHTON LANDFILL (W1)
CASE and/or SAS NUMBER: SAS8143E-03(2) SDG NUMBER: D32 (93JMO4D32)
Number and Type of Samples: 10 - WATERS
CLP Sample Numbers: D32, S26 - S28, S30 - S33, S39, S40
CLP Laboratory: VEGAS Hrs. for Review 14
+0.5

Following are our findings:

THE DATA ARE USEABLE WITH THE QUALIFICATIONS
DESCRIBED IN THE ATTACHED REVIEW. - *Patrick C. Churilla*
1/28/94

- () Data are acceptable for use.
- (~~X~~) Data are acceptable for use with qualification.
- () Data are preliminary, pending verification by laboratory.
- () Data are unacceptable.

cc: Edward Kantor, EMSL-Las Vegas
Julie Frankel, VIAR & Co. (SMO)

NARRATIVE

SITE : STOUGHTON LANDFILL (WI) CASE: SAS8143E-03(2)
LABORATORY: VEGAS SDG : D32

The laboratory's portion of this case contains 10 low level water samples assayed for total metals and total cyanide using lower detection limits. The following narrative lists the out of control audits and their possible effects on the results.

EVIDENTIAL AUDIT: All forms, sample tags, DC-1 Form, DC-2 Forms(s), and chain of custody forms are originals. The original ICP raw data (pages 49-66, 69-71, 78-80, and 83-86) are with case SAS8143E-03 SDG:S01. The remaining raw data are originals. The lab incorrectly reported all GFAA data (the sample, ICV, CCV, and blank data) on all forms. The lab listed two K IDL's on different forms. The lab resubmitted all corrected forms for GFAA data and IDL data for K on 12/28/93. (See phone log attached). The SAS CRDL's required for Cd, Tl, Ag, and CN do not match the CRDL's listed in the case by the lab. (See phone log attached) The lab faxed an amendment made by SMO for the CRDL values for the above mentioned analytes on 12/28/93. The lab faxed corrected Form 2's which were added to the data package on 12/28/93. The lab stated they will resubmit corrected original Form 2's at a later date. All forms are present and in the order indicated on the Form DC-2 [inventory sheet].

The lab did not receive PE samples from the USEPA. Therefore, no PE samples were assayed in this case as required by the SAS.

ICP ANALYSES:

The duplicate audits of Al(51.8%), Fe(200%), and Ag(200%) were not flagged(*) by the lab because the duplicate differences did not exceed the technical criterion(+/- CRDL) for water samples. The Al, Fe, and Ag results are qualified below.

The preparation blank was found to contain Al(14.8 ug/L) and Fe(8.6 ug/L). The CCB's were found to contain Al(15.5 ug/L, 19.9 ug/L, and 12.1 ug/L) and Ag(4 ug/L). The following data are estimated(J) due to contamination: Al(S26, S30-33, S40, and D32), Fe(S26, S32, S33, and S40), and Ag(S26).

GFAA ANALYSES:

The duplicate audit of Sb(200%) was not flagged(*) by the lab because the duplicate difference did not exceed the technical criterion(+/- CRDL) for water samples. The Sb results are qualified below. The preparation blank was found to contain Sb(1.2 ug/L).

Reviewed by: M. Fletcher *M. Fletcher*
Date: 12-28-93

Lockheed/ESAT

GFAA ANALYSES:

The Sb results for S26, S33, and D32 are estimated(J) due to contamination.

OTHER ANALYSES:

All Hg and CN results are acceptable.

Samples S32/D32 are field duplicates with an RPD for Zn(200%). All Zn data are estimated(J) due to poor field precision.

Reviewed by: M. Fletcher *M. Fletcher*
Date: 12-28-93

Lockheed/ESAT

ESAT-5-041.1

GLOSSARY A

Data Qualifier Definitions

For the purposes of this document the following code letters and associated definitions are provided:

- U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
- J - The associated value is an estimated quantity.
- R - The data are unusable. (Note: Analyte may or may not be present.)
- UJ - The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.