3705-SCU-149
0044241

SDG Memo/Sample Summary

Client Name:	WESTINGHOUSE HANFORD CO.	Date:	19 Jul 1993
Project Name:	93-172	Update No.:	
SDG No.:	3705	Work Order No.:	32468-20-01
Project Manager:	J. DEWALD		
Mail Date:			

Client Samp No.	S-Cubed Samp No.	Date Rcvd	Date Samp	Matrix	8010VOA	VOAOLM-L							
B08MM0	3705-01	6-24-1993	6-22-1993	WATER	X	X							
B08MM0MS	3705-01MS	6-24-1993	6-22-1993	WATER	X	X							
B08MM0MSD	3705-01MSD	6-24-1993	6-22-1993	WATER	X	X							
B08MM2	3705-02	6-24-1993	6-18-1993	WATER	X	X							
B08MM2DL	3705-02DL	6-24-1993	6-18-1993	WATER		(X)							
B08MM3	3705-03	6-24-1993	6-18-1993	WATER	X	X							
B08MM4	3705-04	6-24-1993	6-21-1993	WATER	X	X							
B08MM6	3705-05	6-24-1993	6-21-1993	WATER	X	X							

(X) = Non-Billable Sample

JUN 1996 RECEIVED LDMC

SC-10, Rev 8/92

2

MAXWELL
S-CUBED Division

NARRATIVE

July 19, 1993

Narrative Project:	93-172
Reference No.:	32468-20-01
Client:	WHC
SDG No.:	3705

VOLATILES

Initial analysis by 8010 encountered instument problems due to high analyte concentrations in the samples and were run by 8240 with 25 ml purge in order to meet holding times. Only data from 8240 analysis are reported.

Water samples were analyzed on a Quadrex 70 meter megabore capillary column connected to a jet separator. Water samples were analyzed using a DynaTech PTA-30 autosampler which, due to automated surrogate and internal standard spiking, does not allow for variation of surrogate concentrations in the ICAL. Consequently all standards were spiked with surrogates at 50 ppb.

Non target compounds were reported as Tentatively Identified Compounds (TICs) with an estimated quantitation based on an assumed relative response factor of 1.0 using the closest internal standard as a reference. Peaks less than 10% of the area of the nearest internal standard were not reported.

All samples were analyzed within holding time constraints using low level techniques (25-ml purge). Sample B08MM2 had to be diluted 1:20 and re-analyzed due to the presence of Carbon Tetrachloride above the GC/MS calibration range. Sample B08MM0 contained 5-ppb of Chloroform, 38-ppb of Carbon Tetrachloride and 5-ppb of Trichloroethene. Sample B08MM2 contained 26-ppb of Chloroform and 490-ppb of Carbon Tetrachloride. Siloxane column bleed was found in blanks and samples in like amounts and reported as TIC's.

The quality control results were acceptable. LCS recoveries were excellent, as were the recoveries and RPD's for B08MM0 MS/MSD. All surrogate recoveries pass QC requirements and the initial and continuing calibration data are method compliant.

John DeWald
Project Manager

enclosures
r:\narr\n3705

LOI # 5'105

Westinghouse Hanford Company	CHAIN OF CUSTODY pg. 1 of 4

Custody Form Initiator PH BUTCHER
Company Contact PH BUTCHER
Project Designation/Sampling Locations CCL4
Ice Chest No. SML-149
Bill of Lading/Airbill No. 2536955674
Method of Shipment EMERY
Shipped to S-CUBED
Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
Collection Date 6/26/93
Field Logbook No. EFL 1057
Offsite Property No. W93-0-0585-07

Sample Identification	~~METHOD~~
B08MM0 3, 40ml, Gs, WATER; VOA(.008% Na2S2O3)	8010
~~B08MM1~~ ~~3, 40ml, Gs, WATER; CLP-VOA~~ pce 6/23/93	

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: 6/22/93 1255 GG HAMILTON	Received by: PCCole PCCole	Date/Time: 6/23/93 0800
Relinquished by: 6/23/93 PCCole PCCole 0800	Received by: Amy Smith A. Smith	Date/Time: 6/24/93 10:00
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:
Freq 3 A

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

LOT #3705

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST pg 1a of 4

PART I: FIELD SECTION

Collecto K. Lee, G. Hamilton Date Sampled 6/23/93 Time 0913 hours

Company P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample	Type of Sample*	Analysis Requested
01 B08MM0	3, 40ml, Gs	WATER	VOA(.008% Na2S2O3) METHOD: 8010
~~B08MM1~~	~~3, 40ml, Gs~~	~~WATER~~	~~CLP-VOA~~ pcc 6/23/93
			OPC: # W93-0-0585-07
			BOL: # 2531695 5674
			TASK: 93-172

Field

Special Handling and/or

Possible Sample

PART II: LABORATORY SECTION

Received Titl Date

Analysis

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

LOT #3705

Westinghouse Hanford Company	CHAIN OF CUSTODY pg. 2 of 4

Custody Form Initiator PH BUTCHER
Company Contact PH BUTCHER
Project Designation/Sampling Locations CCL4
Ice Chest No. SML-149
Bill of Lading/Airbill No. 2536955674
Method of Shipment EMERY
Shipped to S-CUBED
Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
Collection Date 6-18-93
Field Logbook No. EFL 0057
Offsite Property No. W93-0-0585-07

Sample Identification	~~METHOD~~
B08MM2 3, 40ml, Gs, WATER; VOA(.008% Na2S203)	8010
B08MM3 PCC 6/23/93 1 ~~3~~, 40ml, Gs, WATER; CLP-VOA	

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: 6-18-93 1320 [illegible] CG Hamilton	Received by: PC Cole PC Cole	Date/Time: 6/23/93 0800
Relinquished by: 6-23-93 PC Cole PC Cole 0800	Received by: Amy Smith A. Smith	Date/Time: 6/24/93 10:00
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:
Fridge 3B

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

LOT # 3705

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST pg. 2a of 4

PART I: FIELD SECTION

Collecto K. Lee, L. Walker Date Sampled 6/18/93 Time 1050 hours

Company P. H. Butcher Telephone (509) 376-5045

	Sample Number	Number and Type of Sample	Type of Sample*	Analysis Requested
02	B08MM2	3, 40ml, Gs	WATER	VOA(.008% Na2S2O3) METHOD: 8010
03	B08MM3	~~3~~ 1 PCC 6/23/93, 40ml, Gs	WATER	CLP-VOA
				OPC: # W93-0-0585-07
				BOL: # 2536955674
				TASK: 93-172

Field

Special Handling and/or

Possible Sample

PART II: LABORATORY SECTION

Received Titl Date

Analysis

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

LOT #3703

Westinghouse Hanford Company	CHAIN OF CUSTODY pg. 3 of 4

Custody Form Initiator PH BUTCHER
Company Contact PH BUTCHER
Project Designation/Sampling Locations CCL4
Ice Chest No. SMC-149
Bill of Lading/Airbill No. 2536955674
Method of Shipment EMERY
Shipped to S-CUBED
Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
Collection Date 6-21-93
Field Logbook No. EFL 1057
Offsite Property No. W93-0-0585-07

Sample Identification	~~METHOD~~
B08MM4 3, 40ml, Gs, WATER; VOA(.008% Na2S2O3)	8010
~~B08MM5~~ pce 6/22/93 ~~3, 40ml, Gs, WATER; CLP-VOA~~	

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: 6/21/93 1455 [illegible] G E Hamilton	Received by: PCCole PCCole	Date/Time: 6/23/93 0800
Relinquished by: 6/22/93 PCCole PCCole 0800	Received by: Amy Smith A. Smith	Date/Time: 6/24/93 10:00
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:
Freq 7A

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

LOT #3705

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST pg. 3a of

PART I: FIELD SECTION

Collecto K. Lee, L. Walker Date Sampled 6/21/93 Time 1248 hours

Company P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample	Type of Sample*	Analysis Requested
04 B08MM4	3, 40ml, Gs	WATER	VOA(.008% Na2S2O3) METHOD: 8010
~~B08MM5~~	~~3, 40ml, Gs~~	~~WATER~~	~~CLP VOA~~ PCC 6/22/93
			OPC: # W93-D-0585-07
			BOL: # 7531455674
			TASK: 93-172

Field

Special Handling and/or

Possible Sample

PART II: LABORATORY SECTION

Received Titl Date

Analysis

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

LOT # 3705

Westinghouse Hanford Company	CHAIN OF CUSTODY pg 4 of 4

Custody Form Initiator PH BUTCHER
Company Contact PH BUTCHER
Project Designation/Sampling Locations CCL4
Ice Chest No. SMC-149
Bill of Lading/Airbill No. 2536955674
Method of Shipment EMERY
Shipped to S-CUBED
Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
Collection Date 6-21-93
Field Logbook No EFL- 1057
Offsite Property No. W93-0-0585-07

Sample Identification	METHOD
B08MM6 3, 40ml, Gs, WATER; VOA(.008% Na2S2O3)	8010
B08MM7 ~~3, 40ml, Gs, WATER; CLP-VOA~~ PCC 6/22/93	

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: 6/22/93 1455 GG Hamilton	Received by: PCCole PCCole	Date/Time: 6/23/93 0800
Relinquished by: 6/23/93 0800 PCCole PCCole	Received by: Amy Smith A. Smith	Date/Time: 6/24/93 10:00
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:
Fig 3A

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

LOT # 3705

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST pg. 4a of

PART I: FIELD SECTION

Collecto K. Lee, L. Walker Date Sampled 6-21-93 Time 1046 hours

Company P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample	Type of Sample*	Analysis Requested
95 B08MM6	3, 40ml, Gs	WATER	VOA(.008% Na2S2O3) METHOD: 8010
~~B08MM7~~	~~3, 40ml, Gs~~	~~WATER~~	~~CLP-VOA~~ PCC 6/23/93
			OPC: # W93-0-0585-07
			BOL: # 7536955674
			TASK: 93-172

Field

Special Handling and/or

Possible Sample

PART II: LABORATORY SECTION

Received Titl Date

Analysis

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

WIDE

A CF Company

...TURE AND TALLY RECORD

...) Litho USA

DATE: 06-23-93 SHIPMENT NO.: 253695567 4

SHIPPER: WESTINGHOUSE SHIPPING DEPT. (509) 376-6665

REFERENCE NO.: W93-0-058587

...ER NAME AND ADDRESS	CONSIGNEE NAME AND ADDRESS
WESTINGHOUSE SHIPPING DEPT. (509) 376-6665 62-06 U.S. DEPARTMENT OF ENERGY C/O WESTINGHOUSE HANFORD COMPANY 2355 STEVENS DRIVE 1163 BUILDING PO BOX 1970 RICHLAND WA 99352	S-CUBED 3398 CARMEL MT. ROAD SAN DIEGO CA 92121

Pieces	Weight	Description/Marks	Emery Authorization No.
1	36 LBS	COOLER ID: SAL 149 WATER SAMPLES	

EACH PERSON HANDLING OR TAKING CUSTODY OF THIS SHIPMENT MUST SIGN AND COMPLETE THE INFORMATION BELOW

Name of Person/Company	Transship Point/Destination	Signature of Person Accepting Custody	Time/Date
1. CG MILLER WESTINGHOUSE HANFORD CO SHIPPING DEPT	RICHLAND WA	[illegible]	[illegible]
2.			
3. [illegible]	[illegible]	[illegible]	[illegible]
4.			[illegible]
5. J McGuire	SAN	J McGuire	0935 6/24/93
6. [illegible]	[illegible]	[illegible]	[illegible]
7. [illegible]	S-CUBED	[illegible]	1115 6/24
8.			

SPECIAL HANDLING INSTRUCTIONS

CONSIGNEE COPY

FORM OF PAYMENT

Check ☐ GBL ☐ FCCOD ☐

Bill to Shipper [X] Bill to Consignee ☐ Third Party Billing ☐

60

EMERY WORLDWIDE

A CF Company

SERVICES **

UNITED STATES / CANADA: Same Day (Extra Charges) ☐ AM ☐ PM ☐ [X] Second Day ☐ Saturday Delivery

INTERNATIONAL: Express ☐ Standard Plus ☐ Preferred ☐ Standard ☐ Business Documents ☐ Customs Clearance ☐ Delivery ☐

E Shipper's Account Number: 850281585

Date: 06-23-93 | Origin: PSC | Shipment Number: 253695567 4

From:
WESTINGHOUSE SHIPPING DEPT. (509) 376-6665
U.S. DEPARTMENT OF ENERGY C/O
WESTINGHOUSE HANFORD
BLDG 1163
2355 STEVENS DRIVE
RICHLAND WA
Canada ☐

To:
S-CUBED
S-CUBED
3398 CARMEL MT. ROAD
SAN DIEGO CA 92121
Hold for Pick Up ☐ Canada ☐

Tariff Dest. | Gateway

Check to Shipper $

EMERY WORLDWIDE will accept Consignee's check with all risks being assumed by Shipper, including but not limited to non-payment, fraud and misrepresentation.

Customer's Reference Numbers: W81232 P12BR W93-0-058547 | 99352

E Consignee's Account Number

Description	Pcs	L	W	H	Total Pieces	Total Weight (in lb.)
PH BUTCHER 1 COOLER ID: SMU 149 WATER SAMPLES	1	27	16	17	1	36

FOR INFORMATION OR RATES CALL 1-800 44 EMERY (1-800-443-6379)

Declared Value $

253695567 4

Remarks: OVERNIGHT DELIVERY SIGNATURE SECURITY SERVICE

Zip Ship ☐ For shipments within the 50 United States Shipper has the option to check this box and, by checking, agrees that the Zip Ship conditions, described in the area to the right, apply.

Mark if Emery Packaging is used: Urgent Letter 9X12 [X] Urgent Pack 12X15 [X]

Shipper's Signature

International Shipping: Free Domicile ☐ Commodity Code

Third-Party Account Number mandatory for Third Party Billing. E Third Party Account Number

International Customs Value | International Insurance

Base Charge

Total Transportation Charges | Other Charges/Advance at Origin ☐ COD/AO $

SAN-A

Terms and Conditions on Back

17

MAXWELL
S-CUBED Division

Lot No. 3705

Sample Log-In Sheet
Revision No.: 0

Date Received: 6-24-1993 Date Sampled: 6-22-1993 Client Code: WHC DC No._____-__-___

Time Received: 10:00 Data Due Date: 7-14-1993 Report Mail Date: 7-23-1993

Received by (Sig): Amy Smith Custody Seals Present/Intact (Y) N Reporting Level: FULL CLP

Airbill No. 2536955674 Chain of Custody Present/Intact (Y) N Turnaround Required: 30 DAY

Charge No. 32468-20-01 Client Forms Present (Y) N Quality Control Reqd'd: Level 3 (RCRA)

Case No./Project Code: 93-172 SDG No.: 3705

S-Cubed Sample No.	Sample Identification	Samp. Type	No. Cont.	Samp Stor.	Samp Cond	8010VOA									All Info Agree	Notes
3705-01	B08MM0	WATER	3	GC		X										
3705-01MS	B08MM0MS	WATER	3	GC		X										
3705-01MSD	B08MM0MSD	WATER	3	GC		X										
3705-02	B08MM2	WATER	3	GC		X										
3705-03	B08MM3	WATER	1	GC		X										
3705-04	B08MM4	WATER	3	GC		X										
3705-05	B08MM6	WATER	3	GC		X										

Container Types

Water _____

Soil _____

Soil = Soil/Sediment/Sludge
Water = Aqueous
NAL = Non-Aqueous Liquid
NSS = Non-Soil Solid

Water MS,MSD_____
Soil MS,MSD_____
SDG Complete (Y) N

Review JW 6/25/93

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08MM0

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-01
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: WH751
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/01/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	1	U
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (total)	1	U
67-66-3	Chloroform	5	
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	2	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	38	
108-05-4	Vinyl Acetate	2	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	5	
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	2	U
591-78-6	2-Hexanone	2	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	Ethyl Benzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U

1E

EPA SAMPLE NO.

B08MM0

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-01
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: WH751
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/01/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number of TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.00541-05-9	Cyclotrisiloxane,hexamethyl	15.58	3	JBN
2.00556-67-2	Cyclotetrasiloxane,octameth	21.02	2	JBN
3.Z000-00-3	Unknown siloxane	25.44	1	J

FORM I VOA-TIC 3/90

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08MM2

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-02
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: WH752
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/01/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	1	U
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (total)	1	U
67-66-3	Chloroform	26	
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	2	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	260	E
108-05-4	Vinyl Acetate	2	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	2	U
591-78-6	2-Hexanone	2	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	Ethyl Benzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U

1E

EPA SAMPLE NO.

B08MM2

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-02
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: WH752
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/01/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number of TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.00541-05-9	Cyclotrisiloxane,hexamethyl	15.59	3	JBN

FORM I VOA-TIC 3/90

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08MM2DL

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-02DL
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: RDL52
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/03/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 20.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	40	U
74-83-9	Bromomethane	40	U
75-01-4	Vinyl Chloride	40	U
75-00-3	Chloroethane	40	U
75-09-2	Methylene Chloride	20	U
67-64-1	Acetone	40	U
75-15-0	Carbon Disulfide	20	U
75-35-4	1,1-Dichloroethene	20	U
75-34-3	1,1-Dichloroethane	20	U
540-59-0	1,2-Dichloroethene (total)	20	U
67-66-3	Chloroform	28	D
107-06-2	1,2-Dichloroethane	20	U
78-93-3	2-Butanone	40	U
71-55-6	1,1,1-Trichloroethane	20	U
56-23-5	Carbon Tetrachloride	490	D
108-05-4	Vinyl Acetate	40	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	40	U
591-78-6	2-Hexanone	40	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	Ethyl Benzene	20	U
100-42-5	Styrene	20	U
1330-20-7	Xylene (total)	20	U

1E

EPA SAMPLE NO.

B08MM2DL

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-02DL
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: RDL52
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/03/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 20.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number of TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.00541-05-9	Cyclotrisiloxane,hexamethyl	15.62	73	JBN
2.Z000-00-2	Unknown	15.92	22	J
3.Z000-00-3	Cyclotetrasiloxane,octameth	21.08	55	JBN
4.Z000-00-4	Unknown siloxane	25.50	29	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08MM3

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-03
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: WH753
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/01/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	2	
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (total)	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	2	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	2	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	2	U
591-78-6	2-Hexanone	2	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	Ethyl Benzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U

1E

EPA SAMPLE NO.

B08MM3

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-03
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: WH753
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/01/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number of TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.00541-05-9	Cyclotrisiloxane,hexamethyl	15.60	3	JBN
2.00556-67-2	Cyclotetrasiloxane,octameth	21.06	2	JBN
3.Z000-00-3	Unknown siloxane	25.48	1	J

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08MM4

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-04
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: WH754
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/01/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	1	U
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (total)	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	2	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	2	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	2	U
591-78-6	2-Hexanone	2	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	Ethyl Benzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U

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EPA SAMPLE NO.

B08MM4

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-04
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: WH754
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/01/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number of TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.00541-05-9	Cyclotrisiloxane,hexamethyl	15.59	3	JBN
2.00556-67-2	Cyclotetrasiloxane,octameth	21.05	2	JBN

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08MM6

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-05
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: RH755
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/03/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	1	U
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (total)	1	U
67-66-3	Chloroform	0.7	J
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	2	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	2	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	2	U
591-78-6	2-Hexanone	2	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	Ethyl Benzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylene (total)	1	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08MM6

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-05
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: RH755
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/03/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
Number of TICs found: 3 (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.00541-05-9	Cyclotrisiloxane,hexamethyl	15.56	5	JBN
2.00556-67-2	Cyclotetrasiloxane,octameth	21.00	4	JBN
3.Z000-00-4	Unknown siloxane	25.42	1	J

FORM I VOA-TIC 3/90

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08MM0

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-01
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: WH751
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/01/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number of TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.00541-05-9	Cyclotrisiloxane,hexamethyl	15.58	3	JBN
2.00556-67-2	Cyclotetrasiloxane,octameth	21.02	2	JBN
3.	Unknown siloxane	25.44	1	J

Dm 7/15/93

FORM I VOA-TIC 3/90

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08MM2DL

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-02DL
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: RDL52
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/03/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 20.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number of TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.00541-05-9	Cyclotrisiloxane,hexamethyl	15.62	73	JBN
2.	Unknown	15.92	22	J
3.00556-67-2	Cyclotetrasiloxane,octameth	21.08	55	JBN
4.	Unknown siloxane	25.50	29	J

AM 7/15/93

FORM I VOA-TIC 3/90

1E

EPA SAMPLE NO.

B08MM3

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-03
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: WH753
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/01/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number of TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.00541-05-9	Cyclotrisiloxane,hexamethyl	15.60	3	JBN
2.00556-67-2	Cyclotetrasiloxane,octameth	21.06	2	JBN
3.	Unknown siloxane	25.48	1	J

DM 7/15/93

FORM I VOA-TIC 3/90

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08MM6

Lab Name: S-CUBED Contract: 32468-20-01
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3705
Matrix: (soil/water) WATER Lab Sample ID: 3705-05
Sample wt/vol: 25.00 (g/ml)ML Lab File ID: RH755
Level: (low/med) LOW Date Received: 06/24/93
%Moisture: not dec. 100.00 Date Analyzed: 07/03/93
GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.00
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number of TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.00541-05-9	Cyclotrisiloxane,hexamethyl	15.56	5	JBN
2.00556-67-2	Cyclotetrasiloxane,octameth	21.00	4	JBN
3.	Unknown siloxane	25.42	1	J

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