START 9613444.1819

3722-SCU-158 11/2
0044235

MAXWELL
S-CUBED Division

NARRATIVE

July 27, 1993

Narrative Project:	93-172
Reference No.:	32468-20-02
Client:	WHC
SDG No.:	3722

VOLATILES

Samples were analyzed by SW-846 Method 8010 GC/HECD purge and trap analysis. All hits were confirmed by Method 8240 GC/MS.

Sample B08ML2 required a 1 to 10 and 1 to 100 dilutions due to high target analyte concentrations. Sample B08ML3 only had Methylene Chloride at 2.9 ppb.

All calibration and sample QC were acceptable.

John DeWald
Project Manager

enclosures

r:\narr\n3722

JUN 1996
RECEIVED
EDMC

SDG Memo/Sample Summary

Client Name:	WESTINGHOUSE HANFORD CO.	**Date:**	27 Jul 1993
Project Name:	93-172	**Update No.:**	
SDG No.:	3722	**Work Order No.:**	32468-20-02
Project Manager:	J. DEWALD		
Mail Date:			

Client Samp No.	S-Cubed Samp No.	Date Rcvd	Date Samp	Matrix	8010VOA								
B08ML2	3722-01	7-1-1993	6-24-1993	WATER	X								
B08ML2DL	3722-01DL	7-1-1993	6-24-1993	WATER	(X)								
B08ML2DL2	3722-01DL2	7-1-1993	6-24-1993	WATER	(X)								
B08ML2DL2MS	3722-01DL2MS	7-1-1993	6-24-1993	WATER	X								
B08ML2DL2MSD	3722-01DL2MSD	7-1-1993	6-24-1993	WATER	X								
B08ML2MS	3722-01MS	7-1-1993	6-24-1993	WATER	X								
B08ML2MSD	3722-01MSD	7-1-1993	6-24-1993	WATER	X								
B08ML3	3722-02	7-1-1993	6-24-1993	WATER	X								

(X) = Non-Billable Sample

RUI - JILL

Westinghouse Hanford Company	CHAIN OF CUSTODY	pg. 1 of 3

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations CCL4

Collection Date 6/24/93

Ice Chest No. SML-4

Field Logbook No. EFL-1057

Bill of Lading/Airbill No. 253695 5751

Offsite Property No. W93-0-0585-11

Method of Shipment EMERY

Shipped to S-CUBED

Possible Sample Hazards/Remarks N/A

Sample Identification	METHOD
01 B08ML2 3, 40ml, Gs, WATER; VOA(.008% Na2S203)	8010
02 B08ML3 3, 40ml, Gs, WATER; CLP-VOA	

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: 6/24/93 1245 PCCole PCCole	Received by: L.W.Day D.M. DAY	Date/Time: 6-30-93 0920
Relinquished by: 6-30-93 0920 L.W. Day DM. DAY	Received by: Amy Smith	Date/Time: 7-01-93 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. # 1

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

TA
DEA
10/1/93

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST pg. 2 of 3

PART I: FIELD SECTION

Collecto K. Lee, L. Walker Date Sampled 6/24/93 Time 9053 hours

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

Sample Number	Number and Type of Sample	Type of Sample*	Analysis Requested
B08ML2	3, 40ml, Gs	WATER	VOA(.008% Na2S2O3) METHOD: 8010
B08ML3	3, 40ml, Gs	WATER	CLP-VOA
			OPC: # W93-0-0585-11
			BOL: # 253695 5751
			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.

TB Dea

A-6000-406(05/90)

10-1-93

Contractor	OFF-SITE PROPERTY CONTROL	CONTROL NUMBER (To be obtained from PROPERTY MANAGEMENT)
WHC		LJO-USAS-11

PART I – TO BE COMPLETED BY ORIGINATOR

Department	Section	Unit

The following items are to be shipped from ☑ Contractor ☐ Vendor

Routing ☒ Contractor ☐ Vendor

Shipped to	Off-site Custodian
[illegible] WEED % JOHN DEWALD [illegible] MIRAMAR MESA RD SAN DIEGO, CA 92121	Full Title

Quantity	Description (Include Serial and any Government Tag Numbers)	Original Cost
1 10 lbs.	SAMPLE #: EQ4MLC, [illegible]3 BLOCK #: SAM-4 [illegible] WITH [illegible] ANTICS MIXED IN WET MIX W/ VERMICULITE.	N/A

☐ Classified ☒ Unclassified ☐ Shipped Under DOE Contract ☐ Shipped Under Contractor's Use Permit Contract

Necessity for the Off-Site Use of this Property

SAMPLING [illegible] WAS IN THE [illegible]

BEST AVAILABLE COPY

BILL OF LADING # [illegible]

CERTIFICATION OF THE RADIATION MONITORING RELEASE MUST BE SECURED THE SAME DAY THAT MATERIAL IS DELIVERED TO SHIPPING.

RM Clearance for Public Release	RM Survey No.	Date
[illegible]	14727	9-30-93

Location of Property (Area & Bldg.)	Contact	Phone
[illegible]	[illegible]	[illegible]

Date Ready for Shipment	Cost Code to be Charged	Approximate Date This Property will be Returned
9-30-93	[illegible]	

Originated By	Date	Authorized By	Date
[illegible]	9-30-93	[illegible]	9-30-93
Signature and Name of Property Control	Custodian Date	Property Management Approval	Date
		[illegible]	9/30/93

PART II – TO BE COMPLETED BY SHIPPING

Signature of Recipient	Return Order No.	Date Issued	Purchase Order No.	Date Issued
[illegible]				
Date 1-24-93				

DISTRIBUTION

By Originator	Shipping Operation – Sign all Copies and Forward to:
White, Green, Yellow, Pink – Property Management Goldenrod – Retain	White – Property Management Green – Property Control Custodian (Issuing Office) Yellow – Retain Pink – Originator

10-1-93 DFA

EMERY WORLDWIDE — A CF Company

SIGNATURE AND TALLY RECORD

60029-48 (8/89) Litho USA

DATE: 05-30-93 SHIPMENT NO.: 253696575 1
SHIPPER: WESTINGHOUSE SHIPPING DEPT. (509) 376-6665
REFERENCE NO.: 693-0-0585011

SHIPPER NAME AND ADDRESS	CONSIGNEE NAME AND ADDRESS
WESTINGHOUSE SHIPPING DEPT. (509) 376-6665 G2-06 U.S. DEPARTMENT OF ENERGY C/O WESTINGHOUSE HANFORD COMPANY 2355 STEVENS DRIVE 1163 BUILDING PO BOX 1970 RICHLAND WA 99352	JOHN DEWALD S-CUBED 3390 CARMEL MT. ROAD SAN DIEGO CA 92121-1095

Pieces	Weight	Description/Marks	Emery Authorization No.
1	10 LBS	COOLER ID: SML 4 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.	CR NELSON WESTINGHOUSE HANFORD CO SHIPPING DEPT	RICHLAND WA		
2.				
3.				
4.				
5.	J McGuire		J McGuire	05 31 93
6.				
7.				
8.				

SPECIAL HANDLING INSTRUCTIONS

8

Check ☐ cash ☐ COD ☐

Bill to Shipper ☐ Bill to Consignee ☐ Third Party Billing ☐

Express ☐ Same Day (Extra Charges) ☐ Standard Plus ☐ Business Documents ☐

AM ☐ PM ☐ Preferred ☐ Customs Clearance ☐

Second Day ☐ Standard ☐ Delivery ☐

E 850281585

EMERY WORLDWIDE

A CF Company

Date 06-30-93 | Origin PSC | 253695575 1

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 C/O JOHN DEWALD
S-CUBED
3390 CARMEL MT. ROAD
SAN DIEGO CA USA
Hold for Pick Up ☐
Canada ☐

Tariff Dest. | Gateway

$

Customer's Reference Numbers

HB1232 P1280 W03-0-0585#11

99352

E Consignee's Account Number 92121

Pcs	Dimensions L	W	H	Total Pieces	Total Weight
1				1	10

1 COOLER SML 4
WATER SAMPLES

FOR INFORMATION OR RATES CALL 1-800-HEMERY

Declared Value $

2536955751

Remarks

OVERNIGHT DELIVERY
SIGNATURE SECURITY SERVICE

Shipper's Signature X

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 ☐ Urgent Pack 12X15 ☐

SAN-A

Terms and Conditions on Back

International Shipments

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 ☐ OC/AO- $

9281 4494 1826

6

MAXWELL
S-CUBED Division

Lot No. 3722

Sample Log-In Sheet
Revision No.: 0

Date Received: 7-1-1993 Date Sampled: 6-24-1993 Client Code: WHC DC No._____-___-___

Time Received: 10:00 **Data Due Date: 7-21-1993** **Report Mail Date: 7-30-1993**

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

Airbill No. 15369557 5 1 Chain of Custody Present/Intact (Y) N Turnaround Required: 30 DAY

Charge No. 32468-20-02 Client Forms Present (Y) N Quality Control Reqd'd: Level 3 (RCRA)

Case No./Project Code: 93-172 SDG No.: 3722

S-Cubed Sample No.	Sample Identification	Samp. Type	No. Cont.	Samp Stor.	Samp Cond	8010VOA								All Info Agree	Notes
3722-01	B08ML2	WATER	3	ac		X									
3722-01MS	B08ML2MS	WATER	3	ac		X									
3722-01MSD	B08ML2MSD	WATER	3	ac		X									
3722-02	B08ML3	WATER	3	ac		X									

Container Types

Water _____

Soil 10 _____

_____

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 _____

SC-03, Rev 8/92

9613444.1826

1D

8010 VOLATILES ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08ML2DL

Lab Name: S-CUBED Contract: 32468-20-02
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3722
Matrix: (soil/water) WATER Lab Sample ID: 3722-01DL
Sample wt/vol: 5 (g/ml) ML Lab File ID: K0707-7QUAD009
%Moisture: 100.00 decanted: (Y/N) N Date Received: 07/01/93
Extraction: (SepF/Cont/Sonc) Date Extracted:
Concentrated Extract Volume: 5000 (uL) Date Analyzed: 07/08/93
Injection Volume: 1.00 (uL) Dilution Factor: 10.00
GPC Cleanup: (Y/N) pH: 0.00 Sulfur Cleanup: (Y/N)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	5.00	U
75-01-4	Vinyl Chloride	5.00	U
74-83-9	Bromomethane	5.00	U
75-00-3	Chloroethane	5.00	U
75-69-4	Trichlorofluoromethane	5.00	U
75-35-4	1,1-Dichloroethylene	5.00	U
75-09-2	Methylene Chloride	5.99	C
156-60-5	Trans-1,2-Dichloroethylene	5.00	U
75-34-3	1,1-Dichloroethane	5.00	U
156-59-2	cis-1,2-Dichloroethylene	5.00	U
67-66-3	Chloroform	14.4	C
71-55-6	1,1,1-Trichloroethane	5.00	U
56-23-5	Carbon Tetrachloride	1590	C
107-06-2	1,2-Dichloroethane	5.00	U
79-01-6	Trichloroethylene	7.79	
78-87-5	1,2-Dichloropropane	5.00	U
110-75-8	2-Chloro-Ethyl-Vinyl-Ether	250	U
75-27-4	Dichlorobromomethane	5.00	U
10061-01-5	cis-1,3-Dichloropropene	5.00	U
10061-02-6	trans-1,3-Dichloropropene	5.00	U
79-00-5	1,1,2-Trichloroethane	5.00	U
127-18-4	Tetrachloroethylene	5.00	U
124-48-1	Dibromochloromethane	5.00	U
108-90-7	Chlorobenzene	5.00	U
75-25-2	Bromoform	5.00	U
79-34-5	1,1,2,2-Tetrachloroethane	5.00	U

1D

8010 VOLATILES ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08ML2DL2

Lab Name: S-CUBED Contract: 32468-20-02
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3722
Matrix: (soil/water) WATER Lab Sample ID: 3722-01DL2
Sample wt/vol: 5 (g/ml) ML Lab File ID: K0707-7QUAD010
%Moisture: 100.00 decanted: (Y/N) N Date Received: 07/01/93
Extraction: (SepF/Cont/Sonc) Date Extracted:
Concentrated Extract Volume: 5000 (uL) Date Analyzed: 07/08/93
Injection Volume: 1.00 (uL) Dilution Factor: 100.00
GPC Cleanup: (Y/N) pH: 0.00 Sulfur Cleanup: (Y/N)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	50.0	U
75-01-4	Vinyl Chloride	50.0	U
74-83-9	Bromomethane	50.0	U
75-00-3	Chloroethane	50.0	U
75-69-4	Trichlorofluoromethane	50.0	U
75-35-4	1,1-Dichloroethylene	50.0	U
75-09-2	Methylene Chloride	51.3	C
156-60-5	Trans-1,2-Dichloroethylene	50.0	U
75-34-3	1,1-Dichloroethane	50.0	U
156-59-2	cis-1,2-Dichloroethylene	50.0	U
67-66-3	Chloroform	50.0	U
71-55-6	1,1,1-Trichloroethane	50.0	U
56-23-5	Carbon Tetrachloride	1780	C
107-06-2	1,2-Dichloroethane	50.0	U
79-01-6	Trichloroethylene	50.0	U
78-87-5	1,2-Dichloropropane	50.0	U
110-75-8	2-Chloro-Ethyl-Vinyl-Ether	2500	U
75-27-4	Dichlorobromomethane	50.0	U
10061-01-5	cis-1,3-Dichloropropene	50.0	U
10061-02-6	trans-1,3-Dichloropropene	50.0	U
79-00-5	1,1,2-Trichloroethane	50.0	U
127-18-4	Tetrachloroethylene	50.0	U
124-48-1	Dibromochloromethane	50.0	U
108-90-7	Chlorobenzene	50.0	U
75-25-2	Bromoform	50.0	U
79-34-5	1,1,2,2-Tetrachloroethane	50.0	U

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1D

EPA SAMPLE NO.

B08ML3

8010 VOLATILES ORGANICS ANALYSIS DATA SHEET

Lab Name: S-CUBED Contract: 32468-20-02
Lab Code: S3 Case No.: 93-172 SAS No.: SDG No.: 3722
Matrix: (soil/water) WATER Lab Sample ID: 3722-02
Sample wt/vol: 5 (g/ml) ML Lab File ID: K0707-7QUAD015
%Moisture: 100.00 decanted: (Y/N) N Date Received: 07/01/93
Extraction: (SepF/Cont/Sonc) Date Extracted:
Concentrated Extract Volume: 5000 (uL) Date Analyzed: 07/08/93
Injection Volume: 1.00 (uL) Dilution Factor: 1.00
GPC Cleanup: (Y/N) pH: 0.00 Sulfur Cleanup: (Y/N)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	0.500	U
75-01-4	Vinyl Chloride	0.500	U
74-83-9	Bromomethane	0.500	U
75-00-3	Chloroethane	0.500	U
75-69-4	Trichlorofluoromethane	0.500	U
75-35-4	1,1-Dichloroethylene	0.500	U
75-09-2	Methylene Chloride	2.91	C
156-60-5	Trans-1,2-Dichloroethylene	0.500	U
75-34-3	1,1-Dichloroethane	0.500	U
156-59-2	cis-1,2-Dichloroethylene	0.500	U
67-66-3	Chloroform	0.500	U
71-55-6	1,1,1-Trichloroethane	0.500	U
56-23-5	Carbon Tetrachloride	0.500	U
107-06-2	1,2-Dichloroethane	0.500	U
79-01-6	Trichloroethylene	0.500	U
78-87-5	1,2-Dichloropropane	0.500	U
110-75-8	2-Chloro-Ethyl-Vinyl-Ether	25.0	U
75-27-4	Dichlorobromomethane	0.500	U
10061-01-5	cis-1,3-Dichloropropene	0.500	U
10061-02-6	trans-1,3-Dichloropropene	0.500	U
79-00-5	1,1,2-Trichloroethane	0.500	U
127-18-4	Tetrachloroethylene	0.500	U
124-48-1	Dibromochloromethane	0.500	U
108-90-7	Chlorobenzene	0.500	U
75-25-2	Bromoform	0.500	U
79-34-5	1,1,2,2-Tetrachloroethane	0.500	U