

**START**

9613444-1810

3605-SCU-127  
0044234

82



# NARRATIVE

May 6, 1993

**Narrative Project:** 93-092  
**Reference No.** 32468-03  
**Client:** WHC  
**SDG No.:** 3605

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## METALS

The samples were analyzed according to SW-846 Method 6010 for the CLP list. No dilutions were required for analysis. Cr and Fe were detected in the sample. Mn, Ni, and Zn were detected in the sample, but below the CRDL.

The quality control results were acceptable. Calibration data was acceptable. MS recovery for Ba and Pb were low. %RPD recovery was acceptable. Prep blanks was acceptable. All soil LCS recoveries were within the advisory ranges.

## TOTAL ORGANIC CARBON

The samples were analyzed according to EPA Method 9060 by combustion and then IR analysis. Prior to analysis, a sample aliquot was measured and phosphoric acid was added to the soil. The mixture was placed in an oven at 70 C for one hour, then removed, cooled, and ground to a fine powder texture. The sample then went through the combustion and IR analysis process. The quality control results were acceptable. MS and %RPD recoveries were acceptable.

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John DeWald  
 Project Manager

enclosures

r:\narr\n3605



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### SDG Memo/Sample Summary

Client Name: WESTINGHOUSE HANFORD CO. Date: 6 May 1993  
Project Name: 93-092 Update No.:  
SDG No.: 3605 Work Order No.: 32468-03  
Project Manager: J. DEWALD  
Mail Date:

Client Samp No.	S-Cubed Samp No.	Date Rcvd	Date Samp	Matrix	ICP6010	MTOC							
B08CM8	3605-01	4-9-1993	4-7-1993	NAL	X	X							
B08CM8MS	3605-01MS	4-9-1993	4-7-1993	NAL	X	X							
B08CM8MSD	3605-01MSD	4-9-1993	4-7-1993	NAL		X							
B08CM8REP	3605-01REP	4-9-1993	4-7-1993	NAL	X								

(X) = Non-Billable Sample

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LOT # 3605

Westinghouse  
Hanford Company

CHAIN OF CUSTODY

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Custody Form Initiator MARY ANN GREEN

Telephone 373-1463/ 372-3075

Company Contact MARY ANN GREEN/ LARRY ZUCK

Collection Date 4-7-93

Project Designation/Sampling Locations SAF # 93-092/SAMPLE  
LOCATION 163N DAY TANK

Field Logbook No. WHC-N-587- #3

Ice Chest No. \_\_\_\_\_

Bill of Lading/Airbill No. \_\_\_\_\_ Offsite Property No. \_\_\_\_\_

Method of Shipment Glass sample bottle wrapped in a vermiculite blanket & pillow. placed  
inside a metal can which is placed in a plastic bag. Then it's placed into a fiberboard  
box with shoring.

Shipped to S-CUBED LABORATORIES, SAN DIEGO, CA

Possible Sample Hazards/Remarks CORROSIVE LIQUID

See Sample Analysis Request for individual containers and analysis.

Sample Identification

B08CM8 (1 GLASS BOTTLE)

Field Transfer of Custody Chain of Possession (Sign and Print Names)

Relinquished by: <u>Mary Ann Green</u>	Received by: <u>Amy Smith</u>	Date/Time: <u>4-9-93 11:30AM</u>
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:
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Comments:



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HAZARDOUS MATERIAL SHIPMENT RECORD (HMSR)

TO: S-CUBED LABORATORIES  
Company  
3398 CARMEL MT. RD.  
Address  
SAN DIEGO, CA 92121-1095  
City, State, Zip  
RECEIVING DOCK  
Attention:

Originating Facility Building 1E3H Area 100N  
Originator Signature Mary Ann Green  
Date 4-8-93  
FROM:  WHC  KEH  PNL  OTHER  
OFFSITE ONLY SHIP:  PREPAID  COLLECT  
VIA:  Parcel Post  Air Parcel Post  Freight (Rail/Truck)  
 Air (Passenger)  Air (Cargo) Cost Code: ORG. 11150/E11457

SHIPMENT DESCRIPTION

CONTAINERS/PACKAGING						CONTENT DESCRIPTION
Number of Containers	Type	DOT Spec	Package Dimensions	Quantity Pkg	Gross Wt Each Pkg	See 49 CFR 172.101(c) Hazardous Material Table
1	CF	UN 5-25-95 <del>12A-10</del> 4G	11-3/16 X 11-3/16 X 14-3/4	16 oz (500ml)	6 lbs	Proper Ship Name: SULFURIC ACID HB Hazard Class: CORROSIVE MATERIAL UN 5-25-95 UN/NA No.: UN 1830 PACKAGING GROUP 2 List Secondary Hazards: NONE List Labels Req'd/Applied: CORROSIVE
Mae 4-8-93						Proper Ship Name: Hazard Class: UN/NA No.: List Secondary Hazards: List Labels Req'd/Applied:
Mae 4-8-93						Proper Ship Name: Hazard Class: UN/NA No.: List Secondary Hazards: List Labels Req'd/Applied:
Total No. Containers	Gross Wt of Shipment		Identify Placards Required:		Identify Property Control or Return Order No. (if applicable)	
1	6 lbs.		1. NA 3. _____ 2. _____ 4. _____			

Material in manufacturers original container:  Yes  No  
Container free of deterioration or damage:  Yes  
Container acceptability documented:  Yes  
Material is packaged, sealed, marked and labelled to meet DOT requirements:  Yes

Describe Internal Packaging:  
Glass sample bottle wrapped in vermiculite, in a metal can inside a plastic bag. The can is placed inside a ~~12A-10~~ box.  
4G UN 5-25-95

RADIATION RELEASE  
Survey No. 151504  
Date 4-8-93  
RM Signature [Signature]  
Print Name RICH A. COOK

CERTIFICATION

CONTRACTORS CERTIFICATION  
This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transport according to the applicable regulations of the Department of Transportation:  
This shipment is within the Limitations prescribed for:  Passenger Aircraft  Cargo Aircraft  NA Aircraft  
Authorizing Signature: Mary Ann Green  
Print Name Mary Ann Green  
Date: 4-8-93

FOR OFFSITE SHIPMENTS - ADDITIONAL APPROVAL REQUIRED

WHC	TRAFFIC	B.L. No.	Date Shipped	ETA	Routing	Special Considerations
			4/8/93	4/9/93	FED X	
WHC Traffic:		Greg [Signature]				WHC Shipping:

Lot No. 3605

Date Received: 4-9-1993

Date Sampled: 4-7-1993

Client Code: WHC

DC No. \_\_\_\_\_

Time Received: 11:30

Data Due Date: 4-29-1993

Report Mail Date: 5-7-1993

Received by (Sig): Amy Smith

Custody Seals Present/Intact (Y) N Reporting Level: FULL CLP

Airbill No. \_\_\_\_\_

Chain of Custody Present/Intact (Y) N Turnaround Required: 30 DAY

Charge No. 32359-96

Client Forms Present (Y) N Quality Control Req'd: Level 3 (RCRA)

Case No./Project Code: 93-092		SDG No.: 3605				ICP6010	TOC										All Info Agree	Notes
S-Cubed Sample No.	Sample Identification	Samp. Type	No. Cont.	Samp Stor.	Samp Cond													
3605-01	B08CM8	NAL	1A/1	WA/16		X	X											
3605-01MS	B08CM8MS	NAL	1A/1	WA/16		X	X											
3605-01MSD	B08CM8MSD	NAL	1A/1	WA/16			X											
3605-01REP	B08CM8REP	NAL	1A/1	WA/16		X												

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**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 SDY/10

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

3605-01

Lab Name: S\_CUBED \_\_\_\_\_ Contract: 32359-96 \_\_\_\_\_  
 Lab Code: S3 \_\_\_\_\_ Case No.: 93-09 SAS No.: \_\_\_\_\_ SDG No.: 3605 \_\_\_\_\_  
 Matrix (soil/water): SOIL \_\_\_\_\_ Lab Sample ID: 3605-01 \_\_\_\_\_  
 Level (low/med): LOW \_\_\_\_\_ Date Received: 04/09/93  
 % Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	32.2	U		P
7440-36-0	Antimony	11.2	U		P
7440-38-2	Arsenic				NR
7440-39-3	Barium	1.0	U		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	121	U		P
7440-47-3	Chromium	7.2			P
7440-48-4	Cobalt	2.6	U		P
7440-50-8	Copper	0.60	U		P
7439-89-6	Iron	444			P
7439-92-1	Lead	7.4	U		P
7439-95-4	Magnesium	81.8	U		P
7439-96-5	Manganese	3.8	B		P
7439-97-6	Mercury				NR
7440-02-0	Nickel	5.2	B		P
7440-09-7	Potassium	144	U		P
7782-49-2	Selenium				NR
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	97.0	U		P
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.4	U		P
7440-66-6	Zinc	2.8	B		P

Color Before: BROWN \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: FINE \_\_\_\_\_  
 Color After: COLORLESS Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:  
 B08CM8 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

MAXWELL  
S-CUBED

ANALYTE:	TOC	CALIBRATION	
METHOD REF.	9060	STD 2000ppm	1992
DATE:	4/20/93	STD 400ppm	402
ANALYST:	MM	STD 10ppm	10.1
		CAL BLANK	0.069
		TOC CONC. = (TOC READING*DIL. FACTOR)	
MATRIX:	WATER	DETECTION LIMIT=0.30mg/l	

SAMPLE ID. (S3)	TOC READING (mg/l)	DIL. FACTOR	TOC CONC. (mg/l)	CLIENT SAMP. ID
EBW0420	0.808	1	0.81	EBW0420
LCSW0420	395.98	1	396.0	LCSW0420
3605-01	33.72	1	33.7	BO8CM8

961344.017