0032287

MAR 25 1993

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: WA789000896 7 — Manifest Document No.: 21755

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
DEPARTMENT OF ENERGY, FIELD OFFICE, RICHLAND 163/100N AREA
P.O. BOX 550, 2355 STEVENS DR., RICHLAND, WA 99352

4. Generator's Phone (509) 373-5702 Attn: SUZANNE HOMAN X0-35

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: WESTINGHOUSE TRANSPORTATION

6. US EPA ID Number: WA789000896 7

C. State Transporter's ID

D. Transporter's Phone (509) 376-0971

7. Transporter 2 Company Name: NONE

8. US EPA ID Number: N/A

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
616 NONRADIOACTIVE DANGEROUS WASTE
STORAGE FACILITY/616 BUILDING/600 AREA
Attn: J. PRATT

10. US EPA ID Number: WA789000896 7

G. State Facility's ID

H. Facility's Phone (509) 373-5013

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ, Hazardous Waste Liquid,n.o.s. ORM-E NA9189 (D008)	2	DM	190.97	K	WT02,D008
b.							
c.							
d.							

no clearance

NOV 1993 RECEIVED EPIC

LIFETIME VALIDATED By MAR 31 1993 Initial

J. Additional Descriptions for Materials Listed Above
a. [100N-91-0008,0009] 55 gal. drums.

K. Handling Codes for Wastes Listed Above
a- Store in ANY CELL
Inspected @ Merrie C. Mill 3-10-93

15. Special Handling Instructions and Additional Information

HPT RACOOM 3-15-93

RETURN TO GENERATOR IF NOT DELIVERED
* EMERGENCY CONTACT CALL (509) 373-3800 OR 811 *

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Noel O. Hinojosa — Signature: Noel O. Hinojosa — Month Day Year: 03 10 93

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: G.R. HiLL — Signature: G.R. Hill — Month Day Year: 03 15 93

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: NONE — Signature: — Month Day Year:

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Tim Callaway — Signature: Tim Callaway — Month Day Year: 03 15 93

GENERATOR / TRANSPORTER / FACILITY

Style F15 REV-6 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800)621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

ORIGINAL - RETURN TO GENERATOR

87232-SWES-91-141
ATTACHMENT 1

I certify that, to the best of my knowledge, the waste addressed on uniform hazardous waste manifest 21755 was not generated in an area where there is a potential for contamination due to the presence of unencapsulated or unconfined radioactive material, or, an area that is exposed to beams or particles capable of causing activation (neutrons, protons, etc.).

NOEL O. HINOJOSA	[signature]	3-8-93
Name (print)	Signature	Date

ase print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-92

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: WA7890008957 — Manifest Document No.: 21755

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
DEPARTMENT OF ENERGY, FIELD OFFICE, RICHLAND 163/100N AREA
P.O. BOX 550, 2355 STEVENS DR., RICHLAND, WA 99352

4. Generator's Phone (509) 373-5702 Attn: SUZANNE HOHAN MD-35

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: WESTINGHOUSE TRANSPORTATION

6. US EPA ID Number: WA7890008957

C. State Transporter's ID

D. Transporter's Phone (509) 376-0971

7. Transporter 2 Company Name: NONE

8. US EPA ID Number: N/A

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
616 NONRADIOACTIVE DANGEROUS WASTE
STORAGE FACILITY/616 BUILDING/600 AREA
Attn: J. PRATT

10. US EPA ID Number: WA7890008957

G. State Facility's ID

H. Facility's Phone (509) 373-5013

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	WT02,D008
b.							
c.							
d.							

LIFETIME VALIDATED
By H & RWC MAR 15 1993
Initial

J. Additional Descriptions for Materials Listed Above
a. [100N-91-0008,0009] 55 gal. drums.

K. Handling Codes for Wastes Listed Above
a- Store in ANY CELL
Inspected @ Merrie C. Miller
3-10-93

15. Special Handling Instructions and Additional Information
RETURN TO GENERATOR IF NOT DELIVERED
* EMERGENCY CONTACT CALL (509) 373-3800 OR 811 *

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Abel O. Hinojosa — Signature: [illegible] — Month Day Year: [illegible]

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: G.R. Hill — Signature: G.R. Hill — Month Day Year: 03 15 93

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: NONE — Signature: — Month Day Year:

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: — Signature: — Month Day Year:

Style F15 REV-6 Printed by Labelmaster, An American Labelmark Co., Chicago, IL 60646 (800)621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

GENERATOR COPY

Westinghouse Hanford Company

RADIATION SURVEY REPORT

Date	Time	Survey Number		Page
3-15-93	From C900 To 1010	№ 146873	G	1 of 4

Bldg	Area	Room
163 N	100	N/A

Description of Job: Hazard waste shipment to waste storage facility 616/600 area

RWP No: 6093

Location: Waste Pad

Check if appropriate. When checked, do not place unrelated information on this record.

- ☐ Personnel Contamination
- ☐ CAM Radiation Alarm
- ☐ Establish Dose Rates
- ☐ Radiation/Contamination Incident
- ☐ High Radiation Level Work
- ☐ "Special Survey"
- ☒ Property Release
- ☐ RAM Shipment

Item No.	PER (1)	Description of Work Performed, Radiation Controls, and Measurements	Meter Deflection W/O	Meter Deflection W/C	Dist	CF	DOSE RATE beta (non pen) mrad/hr	DOSE RATE gamma (pen) mR/hr	DOSE RATE neutron mrem/hr	CONTAMINATION LEVELS Direct (dpm) beta	Direct (dpm) alpha	Smear 100 cm² beta (d/m)	Smear 100 cm² alpha (d/m)	Smear 100 cm² mrad/hr
1	N/A	Drum 100N 91 0008	N/A	N/A	N/A	N/A	N/A	N/A	N/A	LD	LD	LD	LD	N/A
2		Drum 100N 91 0009								LD	LD	LD	LD	
N/A		N/A								N/A	N/A	N/A	N/A	

LIFETIME VALIDATED By R&RWC MAR 15 1993 Initial

1. Check for personnel dose rate N/A ☐ Continued on supplemental report form

Instrument(s) Used	☐ CP	☒ G-M Pancake	☒ PAM	☐ N/A	☐ N/A	☐ N/A
Serial No.(s)		1841 / 1926	2154			

Respiratory Protection Worn

- ☐ Supplied Air
- ☐ Filter
- ☐ Other
- ☒ None

ESTIMATED PERSONNEL DOSE RATES

Phase of Work	Based on Measurement(s)	Average Dose Rate	Limit Applying
N/A	N/A	N/A	WBP N/A E
/	/	/	WBP / S E
			WBP / S E

RFT Exposure	Work Location Code	Signed / PR No
0	56	RACook 81334

Did you increase or reduce RWP requirements for this work? ☒ No ☐ Yes Explain on reverse side

Did you attend a pre-job meeting for this work? ☒ N/A ☐ No ☐ Yes

Reviewed By: Date:

BD-6000-010 (10-90)

U.S. GOVERNMENT PRINTING OFFICE 1991-502-441

RADIATION SURVEY REPORT (cont.)	Survey Number № 146873	FC 6	Page 3 of 4

Further Descriptions, Data, and Comment

Hazard waste Shipment - 2 Drums Shipped to 616 Building 600 area. attached is a copy of the manifest and a copy of lab Results.

DIAGRAMS OR SKETCHES

N/A

LIFETIME VALIDATED
By H&RWC MAR 15 1993
Initial

ADDITIONAL REPORTS COMPLETED

	Log No.		Log No.
Radiological Problem Report	N/A	Onsite Radioactive Shipment	N/A
Skin Contamination Survey	↓	Offsite Radioactive Shipment	↓
Personnel Effects Contamination Report	↓	Routine Radioactive Shipment	↓
Radiation Survey Report	↓	Sample Counter Log	↓

BD-6000-010P (10-90)

105N COUNTING LAB RADIATION RELEASE LOG

LAB #	SAMPLE DESCRIPTION	LAB #	SAMPLE DESCRIPTION
692 1340	1143-100N-92	692 1352	100K-91-0082
692 1341	100K-92-015400	692 1353	100N-92-022001
692 1345	105N Sanitary H_2O	~~692 1356~~	~~100N-92-0272~~ 1-28-93
692 1348	100N-91-0008	692 1357	100K-91-015100
692 1352	100N-91-0009	692 1358	Hydraulic Oil
692 1351	100N-91-0197		

INSTRUMENT: Tennelec ① S/N 10870 CAL. DUE 2/5/93
Tennelec ② S/N 1677 CAL. DUE 6/22/93
LSA ③ S/N 104117 CAL. DUE NA
* GM ~~1098~~ 1-7-93 S/N 1678 CAL. DUE 3-29-93
* PAM S/N 2883 CAL. DUE 3-15-93
S/N CAL. DUE

SUPERVISOR: _____ DATE _____

SAMPLE DATA			GAMMA COUNTING DATA				ALPHA/BETA COUNTING ACTIVITY					TOTAL ACTIVITY	PERFORMED BY:	
LAB #	DATE	TIME	DATE	TIME	SAMPLE VOLUME	ACTIVITY pCi/gm	DATE	TIME	SAMPLE VOLUME	α ACTIVITY pCi/gm	β ACTIVITY pCi/gm	pCi/gm	HPT SIGN	DATE
692-1340	12/14/92	1330	12/15/92	0925	420g	<MDA	12/15/92	0957	5gr	<MDA	<MDA	<MDA	SR Loeb	12/15/92
692-1341	12/14/92	1430	12/15/92	0919	452g	18.5	12/15/92	0942	1gr	1.7	8.3	28.5	SR Loeb	12/15/92
692-1345	12/17/92	0900	12/17/92	1030	100ml	<MDA	12/17/92	1000	1gr	<MDA	<MDA	<MDA	SR Loeb	12/17/92
692-1348	12/21/92	1300	12/21/92	1319	418g	<MDA	12/21/92	1301	1g	<MDA	<MDA	<MDA	SR Loeb	12/23/92
692-1352	12/21/92	1300	12/21/92	1431	410g	<MDA	12/21/92	1317	1g	<MDA	<MDA	<MDA	SR Loeb	12/23/92
692-1351	12/21/92	1355	12/22/92	0946	400g	<MDA	12/22/92	1035	0.5g	1.78	77.5	77.5	SR Loeb	12/23/92
692-1356	12/21/92	1200	12/22/92	1051	[illegible]	<MDA	12/23/92	1059	1gr	<MDA	<MDA	<MDA	SR Loeb	1-4-93
692-1357	12/21/92	1330	12/22/92	0951	475g	<MDA	12/22/92	1055	0.25g	5.1	<MDA	5.1	SR Loeb	12/23/92
~~692-1355~~	VOID													
692-1357	12/21/92	1300	1-4-93	1311	91g	<MDA	1-4-93	1312	91g	<D	<D	<MDA	SR Loeb	1-4-93
692-1358	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

LIFETIME ALLOWED
HEWC MAY 15 1995
SA
Initial

DRUMS FOR SHIPMENT

SCHEDULED SHIPMENT DATE: 3-15 93 21755
SHIP TO: 616

CONTAINER NUMBER	MANIFEST NUMBER	D.D. DATE	WASTE TYPE	CONT. TYPE	LBS.	ACC. DATE	ROW	SURVEY'S
100N91-0008	21755	90DA9 +	ORM-E	55-17H	403	1/18/91		G42-1349
100N91-0009	21755	90DA9 +	ORM-E	55-17H	368	1/23/91		G42-1350

LIFETIME VALIDATED
MAR 15 1993
BY H & RWC
SA
Initial

Hazardous Waste Disposal Analysis Record (HWDAR)

ISSUE DATE MAR 08 1993

DISPOSAL ANALYSIS No. 21755 Gen. Log No. WHC-005-93

GENERATOR N. O. Hinojosa MSIN XO-35 PHONE 373-5592 COMPANY WHC

ACCUMULATION DATE January 18, 1991 **SHIPPING DEADLINE DATE** greater than 90 days

Analysis: B. Warn Phone 376-7350

Review: Approval: Debi Tuesman

****

GENERAL INSTRUCTIONS

Package, Label, and Mark according to the Shipping Summary Table (attached)

All shipping containers must be in good condition and tightly closed.

Container gross weight must be 450 pounds or less whenever possible.

Complete a Uniform Hazardous Waste Manifest for shipments of regulated waste.

All regulated waste must be inspected by Hazardous Materials Operations (376-7627)

Obtain radiological release or exemption within 24 hours before transport.

Arrange for transport at least one week ahead of time.

LIFETIME VALIDATED By RWC MAR 10 1993 SA initial

SEE WHC-CM-5-16 AND WHC-CM-2-14 FOR DETAILS OF PACKAGING AND SHIPPING

The designations included in this HWDAR have been performed based upon information provided by the generator. Should there be a difference in the waste listed on the WSDR and actual waste content the generator will be responsible to notify Acceptance Services.

****

Waste Destination	Transportation Rep.	Phone Number
X 616 Nonradioactive Waste Storage	R. Pedraza	373-1881
___Non-regulated Drum Storage	P. C. Hendrix	376-0971
X Solid Waste Landfill Trash Trench	P. C. Hendrix	376-0971
___Other:		

****

cc: Acceptance Services, others as needed:

M. J. Wagner	G2-02	M. R. Romsos	N3-11
J. W. Pratt	T4-01	Solid Waste Landill Operator	G4-07
R. Pedraza	T4-06		

WASTE SHIPPING SUMMARY

MANIFEST #: 21755
SHIPPING NAME: RQ, Hazardous Waste Liquid, n.o.s. (D008)
DOT ID NO: NA9189
HAZ CLASS: ORM-E
DOT LABEL: Hazardous Waste
PACKAGING: Package according to 49 CFR 173.12
SHIP TO: 616 Building CELL: Any

ITEM NUMBER: 100N-91-0008
WASTE CONTENT: 40% Sulfuric Acid, 66% Water, 148ppm Lead
QUANTITY: (1) 30 gallon 35-30 drum inside a DOT 17H 55 gallon drum weighing 105.69K (Land Ban: D008)
WASTE NUMBERS: WT02, D008 (DW)

ITEM NUMBER: 100N-91-0009
WASTE CONTENT: 40% Sulfuric Acid, 66% Water, 577ppm Lead
QUANTITY: (1) 30 gallon 35-30 drum inside a DOT 17H 55 gallon drum weighing 85.28K (Land Ban: D008)
WASTE NUMBERS: WT02, D008 (EHW)

NON-REGULATED WASTE

The following waste is not regulated according to WAC 173-303 and 40 CFR 261. The designations included in this Disposal Analysis have been performed based upon information provided by the generator. Should there be a difference in the waste listed on the WSDR and actual waste content the generator will be responsible to notify Aceptance Services.

LIFETIME VALIDATED
By HA RWC MAY 10 1993
Initial

100N-92-033100 (1) DOT 17E 30 gallon drum containing 45.81K of used Conoco 32 oil
100D-90-0064 (1) DOT 12B65 9x12x12 Fiberboard Box containing 1.36K of various inks and fluorescent liquid concentrate
100N-93-000600 (1) DOT 17H 55 gallon drum containing 126.33K of Conoco Dextron II Fluid absorbed in Diatomaceous Earth
100K-91-0151 (1) DOT 17H 30 gallon drum containing 66K of Rigid Cutting Oil, Iron Metal Filings, Conwed Pads, Rags, and Kitty Litter

Package for disposal to the Solid Waste Landfill Trash Trench according to the following instructions:

- It shall be the responsibility of the generator to meet the radiological release criteria specified in WHC-EP-0063-3.
- It shall be the generators responsibility to meet DOT requirements and to transport the waste accordingly.
- It shall be the generators responsibility to list the number, size and type of containers that actually go to the landfill.
- All free liquids must be absorbed in accordance with OSHA requirements in a safe manner.

- Labpacked drums must bear a specific contents list, encased in plastic, and affixed to the drum. LABPACKS CONTAINING LIQUIDS ARE NOT ALLOWED.

- All container weights must be restricted to 450 pounds or less when possible. If this is not possible, contact P. Hendrix on 376-0971 one week prior to the shipping date.

NO MANIFEST REQUIRED FOR THIS WASTE

LIFETIME
VALIDATED
By H & RWC MAR 10 1993
SA
Initial

Request Information Report
Request Number From: 21724
Request Number Thru: 21756

Request Number: 21755
Date Number Requested: _____ Routine: N Ref. #: _____
Letter #: _____ and Date: 01/25/93 Company ID/Group: WHC 100A
Gener Id/Name: 54406 NO HINOJOSA X0-35 Gener Log #: WHC-005-93
Request Type/Sub-Type: WA H NON RTN Primary/Secondary Waste Type: H
Accum Date: _____ Due Date: _____ Date Needed By: _____
Accept Date: 01/28/93 Number of Items: __ or SDARs: _____
Keywords/Description: OIL/BATTERY ELECTROLITE/INKS
Analyst ID/Name: _____ Assign Date: _____ Start Date: _____
Response Issue Date: _____ Closed Date: _____ File Date: _____
Request on Hold: N Info in Inactive File: N Request Cancelled: N
Process Time: _____ Response Time: _____

Status
Date Request Level Status Description
--- ---

- HWDAR Change Log -

Number	Date	Change Description
100n-92-0331		
100n-91-0008		
100n-91-0009		
1000-90-0064		
100n-93-000600		
100K-91-005100		

LIFETIME
VALIDATED
By H & RWC FEB 0 2 1993
SA
Initial

NOTE: In converting over to SWITS a separate "Receipt" program was not provided. This form is an improvisation to an existing SWITS report program.

Information for your analysis is below the solid line. Request Number, Gener Log #, and Due Date is what you need for your information.

This only acknowledges receipt of your Waste Storage/Disposal Request (WSDR). You will be receiving a letter with instructions regarding the disposition of the waste as soon as possible. If you have any questions please contact Acceptance Services.

WASTE STORAGE/DISPOSAL REQUEST (REV 0, 9/1/91)

COMPLETE AND SUBMIT TO: SOLID WASTE ENGINEERING (SWE); N3-11/WHC; P.O. BOX 1970; RICHLAND, WA 99352. FOR DETAILS REFER TO WHC-EP-0063

WHC Tracking #

Company: WHC	Qualified Generator/MSIN: Noel O. Hinojosa XO-35	Accumulation Date (If Applicable): TO BE SET IF HAZ.
Approved Generating Facility (Per Cert. Plan): 100N	Signature/Date: Noel O. Hinojosa 1-25-93	Phone: 373-5592
Generator Log Number/Tracking Number: WHC-005-93	Request Includes: ___ Attachment A (For Low-Level, RMW, TRU, and High-Level) / X Attachment B (For Onsite Non-Radioactive Waste ONLY)	

Waste Type

(Mark all that apply)

- ___ Low-Level
- ___ Transuranic
- ___ > Class C
- ___ Classified
- X Non-Radioactive
- ___ Remote Handled
- ___ RMW
- ___ High-Level
- ___ Heat Generating Potential
- ___ Compactible
- ___ Contact Handled
- ___ Gas Generating Potential

Additional Information For Low-Level, RMW, TRU, and High-Level Waste ONLY

General Waste Description: _____

Physical Properties

- ___ Solid
- ___ Solidified
- ___ Absorbed Liquids
- ___ Labpacked Free Liquids

pH ____ Flashpoint _____ °F

Hazards _____

Transport Category

(Mark all that apply)

- ___ < 2 nCi/g
- ___ Limited Quantity
- ___ Low Specific Activity
- ___ Type A ___ Type B
- ___ Highway Route Control
- ___ SARP #_____

Special Package Form

- ___ Lab Pack
- ___ Disposable Overpack COC #_____
- ___ Returnable Overpack COC #_____
- ___ Liner (_____) mils

PIN (Specific Shipment): _____

Container Information

External Dimensions: _____

Maximum Gross Weight: _____

Drawing/Specification Number: _____

General Description: _____

LIFETIME VALIDATED JAN 20 1993 BY H&RWO

Closure Mechanism: _____

Special Rigging Requirements: _____

ATTACHMENT B (REV 0, 9/1/91)
Non-Radioactive Waste Items List

WHC Tracking #

A Item No.	B Number of Containers	C Container Description	D Kg Waste	E Waste/Process Description	F Chemical Components	G Weight %	H Physical Condition	I Hazard		
100N-92-033100	1	30 Gal. DOT 17E	45.81	Conoco 32 oil (Used)	Conoco 32 oil-MSDS-12544 (See Lab Data) For process knowledge we're using 100N92-006800	100%	Liquid	N/A	U	PF
100N-91-0008	1	30 Gal.35-30 inside a 55 Gal. 17H	105.69	Battery Electrolite (Used)	Electrolite-MSDS-15618 (See Lab Data)	100%	Liquid (PH 6)	T	U	PF
100N-91-0009	1	30 Gal.35-30 inside a 55 Gal. 17H	85.28	Battery Electrolite (Used)	Electrolite-MSDS-15618 (See Lab Data)	100%	Liquid (PH 6)	T	U	PF
100D-90-0064	1	9x12x12 Fiber-Board Box DOT 12B65	1.36	Various Inks and Flurosecent Liquid Concentrate (Old Stock)	Various Inks (See Lab Data)	100%	Liquid	N/A	O	PF
100N-93-000600	1	55 Gal. DOT 17H	126.33	Conoco Dextron II Fluid absorbed in Diatomaceous Earth (Spill Cleanup)	Dextron Fluid-MSDS-18963 Diatomaceous Earth	15% 85%	Solid	N/A	S	PF
100K-91-0151	1	30 Gal. DOT 17H	66.00	Rigid Cutting Oil, Blk. Iron Metal Filings, Conweb Pads and Rags, Kitty Litter (Spill Cleanup)	Rigid Cutting Oil-MSDS-12116 Blk. Iron Metal Filings Conweb Pads and Rags	2% 3% 10%	Solid	T	S	PF
					Kitty Litter	85%				

LIFETIME EXPIRED
MAY 26 1993

Initial

RS WHC

Hazardous/Mixed Waste Debris Determination Checklist

WSDR # WHC-005-93

Completion of this checklist makes a preliminary determination of whether the waste generated is land disposal prohibited hazardous or mixed debris waste or not. The preliminary determination will be verified during the preparation of a SDAR or HWDAR. In evaluating the waste consider the bulk of the waste stream (and not the container it is packaged in) rather than minor components, however if minor components exist like those in section 2.0 please note these in the comments section. When completing this checklist use the best information available, physical measurements or inspections are not necessarily required.

WASTE CHARACTERISTICS	Yes (Y) No (N) Unknown (UN)
1.0 Determine if the waste is dangerous or mixed waste.	
1.1 Is the waste a EPA hazardous or Washington state dangerous waste? If it is known to possess hazardous or dangerous constituents then answer yes. If it is known to not possess hazardous or dangerous constituents then answer no. Otherwise answer unknown.	N
If the answer is no to question 1.1 then the waste is not hazardous or mixed waste and the preparer is finished with this checklist, go to box 4.0. If yes or unknown then continue.	
2.0 Determine if the waste is a material that is not debris.	
2.1 Is the waste a liquid or gas? If the material requires a container to maintain its shape at room temperature it considered a gas or liquid.	
2.2 Is the waste a process waste? Process wastes are incinerator ash, water treatment sludges, slag, vitrified material, air emission residues, and residues from the treatment of waste.	
2.3 Is the waste soil or fine grained material? Soil, clay, absorbents, or any other fined grained material that may be agglomerated or compacted to hold its shape.	
2.4 Is the waste cement that has been used to stabilize waste?	
2.5 Is the waste intact containers? Intact containers are defined as unruptured and able to contain at least 75% of original volume capacity.	
2.6 Does the waste possess a specific treatment standard? The EPA has promulgated treatment standards found in 40 CFR parts 268.41, 268.42, or 268.43. At present the only known waste specific treatment standards that are also debris are batteries or radioactively contaminated lead metal(not salts of lead!).	
2.7 Is the waste primarily smaller than 2.5 inches? At least 50% of the material must be smaller than 2.5 inches in all dimensions.	
If any one of the answers provided in section 2.0 is yes then the waste is not a debris and the preparer is finished with this checklist, go to box 4.0. If all the answers are no or unknown then continue.	

LIFETIME VALIDATED
JAN 26 1995
H&RWC
SA
Initial

WASTE CHARACTERISTICS	Yes (Y) No (N) Unknown (UN)
3.0 Determine if the waste is a debris material.	
3.1 Is the waste a manufactured object? Manufactured objects are equipment, tools, pipe, cloth, glass, plastic, rubber, concrete, etc.	
3.2 Is the waste plant or animal material? Plant or animal material are tumble weeds, animals, wood, etc.	
3.3 Is the waste natural geologic material? Natural geologic material are rocks, course gravel, etc.	
THE WASTE IS HAZARDOUS DEBRIS If the answer to any one question in section 3.0 is yes then the waste is a hazardous or mixed debris waste, please so indicate by placing yes in this row. If the all the answers in section 3.0 are no or unknown then further evaluation is reqùired, please so indicate by placing unknown in this row.	
4.0 THE WASTE IS NOT HAZARDOUS DEBRIS Since conditions in section 1.0 or 2.0 were failed the waste is not hazardous debris, please so indicate by placing a yes in this row	Y

Comments: This info. pertains to containers 100N-93-000600.
Conoco Dextron II absorbed in Diatomaceous earth.

LIFETIME VALIDATED
By H&RWC JAN 26 1995
Initial

Preparer: Noel O. Hinojosa

Name: Noel O. Hinojosa Date: 01/22/93 Tel. #: 373-5592

ref. file: debcklst

Hazardous/Mixed Waste Debris Determination Checklist

WSDR # WHC-005-93

Completion of this checklist makes a preliminary determination of whether the waste generated is land disposal prohibited hazardous or mixed debris waste or not. The preliminary determination will be verified during the preparation of a SDAR or HWDAR. In evaluating the waste consider the bulk of the waste stream (and not the container it is packaged in) rather than minor components, however if minor components exist like those in section 2.0 please note these in the comments section. When completing this checklist use the best information available, physical measurements or inspections are not necessarily required.

WASTE CHARACTERISTICS	Yes (Y) No (N) Unknown (UN)
1.0 Determine if the waste is dangerous or mixed waste.	
1.1. Is the waste a EPA hazardous or Washington state dangerous waste? If it is known to possess hazardous or dangerous constituents then answer yes. If it is known to not possess hazardous or dangerous constituents then answer no. Otherwise answer unknown.	Y
If the answer is no to question 1.1 then the waste is not hazardous or mixed waste and the preparer is finished with this checklist, go to box 4.0. If yes or unknown then continue.	
2.0 Determine if the waste is a material that is not debris.	
2.1 Is the waste a liquid or gas? If the material requires a container to maintain its shape at room temperature it considered a gas or liquid.	Y
2.2 Is the waste a process waste? Process wastes are incinerator ash, water treatment sludges, slag, vitrified material, air emission residues, and residues from the treatment of waste.	N
2.3 Is the waste soil or fine grained material? Soil, clay, absorbents, or any other fined grained material that may be agglomerated or compacted to hold its shape.	N
2.4 Is the waste cement that has been used to stabilize waste?	N
2.5 Is the waste intact containers? Intact containers are defined as unruptured and able to contain at least 75% of original volume capacity.	N
2.6 Does the waste possess a specific treatment standard? The EPA has promulgated treatment standards found in 40 CFR parts 268.41, 268.42, or 268.43. At present the only known waste specific treatment standards that are also debris are batteries or radioactively contaminated lead metal(not salts of lead!).	N H & RWC
2.7 Is the waste primarily smaller than 2.5 inches? At least 50% of the material must be smaller than 2.5 inches in all dimensions.	N
If any one of the answers provided in section 2.0 is yes then the waste is not a debris and the preparer is finished with this checklist, go to box 4.0. If all the answers are no or unknown then continue.	

LIFETIME VALIDATE
JAN 26 1993
Initial

WASTE CHARACTERISTICS	Yes (Y) No (N) Unknown (UN)
3.0 Determine if the waste is a debris material.	
3.1 Is the waste a manufactured object? Manufactured objects are equipment, tools, pipe, cloth, glass, plastic, rubber, concrete, etc.	
3.2 Is the waste plant or animal material? Plant or animal material are tumble weeds, animals, wood, etc.	
3.3 Is the waste natural geologic material? Natural geologic material are rocks, course gravel, etc.	
THE WASTE IS HAZARDOUS DEBRIS If the answer to any one question in section 3.0 is yes then the waste is a hazardous or mixed debris waste, please so indicate by placing yes in this row. If the all the answers in section 3.0 are no or unknown then further evaluation is required, please so indicate by placing unknown in this row.	
4.0 THE WASTE IS NOT HAZARDOUS DEBRIS Since conditions in section 1.0 or 2.0 were failed the waste is not hazardous debris, please so indicate by placing a yes in this row	Y

Comments: This info. pertains to containers 100N-91-0008 and 100N-91-0009.

Preparer: Noel O. Hinojosa

Name: Noel O. Hinojosa Date: 01/22/93 Tel. #: 373-5592

LIFETIME VALIDATED JAN 26 199

Initial

ref. file: debcklst

CONTAINER REQUEST FORM

WA, EMS, PM No. 158418	Generator ID
Requestor's Signature: Richard A. Eckroth	
Requestor's Printed Name: RICHARD A. ECKROTH	Requestor's Phone No. 373-5443 / Date Requested

Waste Description Section

☐ Solid ☑ Liquid ☐ Absorbed in _____

Waste description (Include everything to go into this container. Be complete and concise. Materials other than what is described will not be approved for addition to this container.)	List all MSDS numbers that pertain to this container.
BATTERY ELECTROLITE	15618
	HAZARDOUS [illegible] CAL [illegible] KB

Waste will be generated from: Location (Room No. and Bldg.) Room 8 105N	
Equipment Source (Be specific as to where waste will come from.) BATTERIES FROM RM 9	Process Involved BATTERY LAY-UP
Total Waste Quantity (estimate vol. or wt.)	Unit (lb., gal., oz.)

Waste Status:
Indicate whether waste is: ☐ New ☑ Used ☐ Expired ☐ Spill Materials

Hazardous and Radiological Waste Control

Container Size 30	Container Type 34-30 Poly
Container No. 100N910008	Date Container Delivered to Generator 1-16-91

Distribution: White–Administrative Control Yellow–Field File Pink–Generator Goldenrod–Administrative Control

BC-6000-379 (01/90)

GENERATOR CERTIFICATION

RECEIVED

JAN 23 1991 YB

HAZARDOUS & RADIOLOGICAL

1. The following waste was generated from

Building 105 N Room No. 9

System 19 Process BATTERY LAY-UP

Generator ID

2. Accumulation Date 1-18-91

3. The total waste quantity, (estimate) 27 GAL

4. Product or chemical name BATTERY ELECTROLITE

5. List everything in drum by percentage, whether hazardous or not:

	%		MSDS No.
a.	100	BATTERY ELECTROLITE	15618
b.			
c.			

5A. See attached log sheet ____ See attached MSDS listing ✓

6. Is the waste a liquid, solid or has it been absorbed? Liquid

7. Is the waste new, expired, used or a spill cleanup? USED

8. Is the container full or partially full? FULL

9. Has the waste been in a radiation zone or been contaminated in any way? NO

To the best of my knowledge I certify the information provided above accurately describes the contents of this container. I am aware of the 100 Area Waste Minimization Plan.

Waste Generators Signature	Date
Richard A. Eckroth	1-18-91
Printed Name	**Organization Code**
RICHARD A. ECKROTH	W52912

Hazardous and Radiological Waste Control Section

Assigned Hazardous Class	Container No.
N	100N910008

Accumulation Date Approval	Name of Reviewer
1-18-91	Brad Schilperoort

Signature of Reviewer	Date
Brad Schilperoort	1-18-91

Distribution: White–Administrative Control Yellow–Field File Pink–Generator Goldenrod–Administrative Control

BC-6000-380 (01/90)

RECEIVING ROW CHECK LIST 163 PAD/1310 PAD/K-AREA PAD
(Circle One)

100M-91-0008 Blue Poly

CONTAINER NUMBER _____ SIZE 114 Liters DOT SPEC. 34.30

SAMPLE DATE - / - / CHAIN OF CUSTODY ____ P-11 yes

BRASS TAG yes WEIGHT 250 lb CONTAINER CONDITION Good
(Dents, Rust, Bulges, Etc.)

MATERIAL HISTORY RELEASE ✓ DRUM COUNTER RESULTS NA

WASTE TYPE* N OPEN/ACCUMULATION DATE - / - / -

*(H=Hazardous, M=Mixed, R=Radioactive, P=PCB's, N=Non Regulated)

HAZARD CLASS Row - 13.A

RECEIVED JAN 23 1991 HAZARDOUS & RADIOLOGICAL

COMBUSTIBLES (RED)

FLAMMABLE LIQUID ____ FLAMMABLE SOLID ____ FLAMMABLE LABEL ____
COMBUSTIBLE LIQUID ____ COMBUSTIBLE SOLID ____ COMBUSTIBLE LABEL ____

ROW # ____ or STORAGE CELL # ____

REACTIVE (YELLOW)

LIQUID ____ SOLID ____ LABEL ____ STORAGE CELL # ____

HEALTH (BLUE)

ACID LIQUID <2 pH** ____ ACID SOLID <2 pH** ____
CAUSTIC LIQUID >10 pH** ____ CAUSTIC SOLID >10 pH** ____
PERSISTENT LIQUID ____ PERSISTENT SOLID ____
TOXIC LIQUID ____ TOXIC SOLID ____
CARCINOGEN LIQUID ____ CARCINOGEN SOLID ____

**LABEL CONTAINER WITH pH IF <2 OR >12.5

CORROSIVE LABEL ____ **pH LABEL ____ BLUE ROW # ____

OTHER (WHITE)

DANGEROUS WHEN WET ____ OXIDIZER LIQUID ____ OXIDIZER SOLID ____

DANGEROUS WHEN WET LABEL ____ OXIDIZER LABEL ____ STORAGE CELL # ____

PCB's (BLACK)

PCB LIQUID ____ PCB SOLID ____
PCB LABEL'S ____ BLACK ROW # ____

PCB SIGN AT ROW ____ PCB SIGN AT ENTRANCE ____

ALL LABELING COMPLETE Hutch 1-18-91
OPERATOR NAME / DATE

SUPERVISOR VERIFICATION Schil 1-18-91
NAME / DATE

FORM #: HRWC-2000
EFFECTIVE DATE: 01/02/91
REVISION: 1

MATERIAL RELEASE HISTORY RECORD

Radiation Survey Report Number	Facility Code	Building/Facility	Date

To the best of my knowledge the item(s) being released from radiological control:

- ☒ Has never been subject to decontamination efforts and in my judgement the inaccessible surfaces could not have been contaminated without having contaminated the accessible surfaces, or
- ☐ Has been subjected to decontamination; in my judgement the inaccessible surfaces could not have been contaminated during decontamination or during use.

(I.A.W., WHC-CM-4-10, Radiation Protection Manual, Section 9, paragraph 5.2)

Item Identification	Serial No.
100 N-91-0008	
LIFETIME VALIDATED By H & RWC MAR 19 1993 SLA Initial	

I&E Maint. — Organization

R A Eckert 56129 — Signature/Pay Number

11-21-91 — Date

File original
cc: OHP Unit Manager
Responsible Organization

A-6000-343 (12-88

32359-63 LOT # 3

Westinghouse Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator MARY ANN GREEN

Company Contact MARY ANN GREEN

Telephone 509-373-1463

Project Designation/Sampling Locations 163N Waste Pad

Collection Date 12-22-92

Ice Chest No.

Field Logbook No. #3

Bill of Lading/Airbill No.

Offsite Property No.

Method of Shipment Glass bottles wrapped in plastic, placed inside a metal can wi absorbent and placed inside a 12B65 box. For air shipment

Shipped to S-Cubed Laboratories, San Diego, CA

Possible Sample Hazards/Remarks Battery electrolyte fluid, field tested with a pH of

Sample Identification

100N910008-M	1- 250 ml amber glass bottle	100N910009-M	1- 250 ml amb ss
100N910008-A	1- 250 ml amber glass bottle	100N910009-A	1- 250 ml amb ss

[] Field Transfer of Custody

Chain of Possession (Sign a Names)

Relinquished by:	Received by:	Date/Time:
M.A. Green	Amy Smith	12-24-92 pm
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:

Comments:
** PRIORITY TURNAROUND **

LIFETIME
VALIDATED
By H & RWC JAN 22 1993
mae
Initial

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

004

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPL

3488

Lab Name: S_CUBED Contract: 32359-63

Lab Code: S3 Case No.: SAS No.: SDG No.:

Matrix (soil/water): SOIL Lab Sample ID: 348

Level (low/med): LOW Date Received: 12/

% 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	4.6			P
7440-36-0	Antimony	1.1			P
7440-38-2	Arsenic	0.16	U		P
7440-39-3	Barium	1.3			P
7440-41-7	Beryllium	0.002	U		P
7440-43-9	Cadmium	0.02			P
7440-70-2	Calcium	9.7	B		P
7440-47-3	Chromium	0.12			P
7440-48-4	Cobalt	0.03	U		P
7440-50-8	Copper	0.61			P
7439-89-6	Iron	1.7			P
7439-92-1	Lead	148			P
7439-95-4	Magnesium	11.9	B		P
7439-96-5	Manganese	0.03	B		P
7439-97-6	Mercury				NR
7440-02-0	Nickel	0.11			P
7440-09-7	Potassium	6.3	U		P
7782-49-2	Selenium	0.09	U		P
7440-22-4	Silver	0.14			P
7440-23-5	Sodium	844			P
7440-28-0	Thallium	0.31	U		P
7440-62-2	Vanadium	0.04	U		P
7440-66-6	Zinc	1.3			P

LIFETIME VALIDATED By JJ & RWC JAN 22 1995 Initial

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts

Comments:
100N910008
PB_RESULT_FROM_SERIAL_DILUTION

FORM I - IN

DATA REPORT

3

010

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMP. NO.

3488

Lab Name: S_CUBED Contract: 32359-63

Lab Code: S3 Case No.: SAS No.: SDG No.:

Matrix (soil/water): SOIL Lab Sample ID: 348

Level (low/med): LOW Date Received: 12/

% 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	8.0			P
7440-36-0	Antimony	2.4			P
7440-38-2	Arsenic	0.16	U		P
7440-39-3	Barium	3.6			P
7440-41-7	Beryllium	0.002	U		P
7440-43-9	Cadmium	0.02			P
7440-70-2	Calcium	24.0			P
7440-47-3	Chromium	0.11			P
7440-48-4	Cobalt	0.03	U		P
7440-50-8	Copper	0.83			P
7439-89-6	Iron	6.0			P
7439-92-1	Lead	577			P
7439-95-4	Magnesium	12.4	B		P
7439-96-5	Manganese	0.12			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	0.12			P
7440-09-7	Potassium	6.2	U		P
7782-49-2	Selenium	0.09	U		P
7440-22-4	Silver	0.27			P
7440-23-5	Sodium	744			P
7440-28-0	Thallium	0.30	U		P
7440-62-2	Vanadium	0.04	U		P
7440-66-6	Zinc	1.2			P

LIFETIME VALIDATED

By RWC JAN 22 1993

mae Initial

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts

Comments:

100N910009

PB_RESULT_FROM_DILUTED_ANALYSIS

FORM I - IN

DATA REPORT

3

011

ANIONS ANALYSIS BENCHSHEET

LABORATORY: S-CUBED
ANALYST: EA
CHARGE #: 12359-63

UNIT: MG/L

LOT #: 3488
FILE #: ANI3488
DISK #: ANI1123

SAMPLE TYPE: WATER

SULFATE RESULTS

METHOD DET. LIMIT: 0.1

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	200	4.07	814	01/07/93	01/07/93	20		
3488-02	100	10.38	1038	01/07/93	01/07/93	10		
3488-01R	100	8.43	843	01/07/93	01/07/93	10		3.5
3488-01S	200	9.19	1838	01/07/93	01/07/93	20	102	

FLUORIDE RESULTS

METHOD DET. LIMIT: 0.02

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	0.39	1.95	01/07/93	01/07/93	0.10		
3488-02	10	0.24	2.40	01/07/93	01/07/93	0.20		
3488-01R	5	0.39	1.95	01/07/93	01/07/93	0.10		NC
3488-01S	10	0.78	7.8	01/07/93	01/07/93	0.20	59	

LIFETIME
VALIDATED
By
H & RWC JAN 22 1993
mpe
Initial

ANIONS ANALYSIS BENCHSHEET

LABORATORY: S-CUBED
ANALYST: EA
CHARGE #: 32359-63

LOT #: 3488
FILE #: AMI3488
DISK #: AMI1123

UNIT: MG/L

SAMPLE TYPE: WATER

CHLORIDE RESULTS

METHOD DET. LIMIT: 0.02

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	1.78	8.90	01/07/93	01/07/93	0.10		
3488-02	10	1.48	14.80	01/07/93	01/07/93	0.20		
3488-01	5	1.84	9.20	01/07/93	01/07/93	0.10		2.9
3488-01	10	1.9	19.00	01/07/93	01/07/93	0.20	101	

NITRITE RESULTS

METHOD DET. LIMIT: 0.04

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	< 0.04	< 0.2	01/07/93	01/07/93	0.20		
3488-02	10	< 0.04	< 0.4	01/07/93	01/07/93	0.40		
3488-01R	5	< 0.04	< 0.2	01/07/93	01/07/93	0.20		NC
3488-01S	10	0.96	9.60	01/07/93	01/07/93	0.40	96	

LIFETIME
VALIDATED

By H & RWC JAN 22 1993

mee
Initial

ANIONS ANALYSIS BENCHSHEET

LABORATORY: S-CHARED
ANALYST: EA
CHARGE #: 32359-63

UNIT: MG/L

LOT #: 3488
FILE #: Ami 3488
DISK #: Ami 1123

SAMPLE TYPE: Water

BROMIDE RESULTS — METHOD DET. LIMIT: 0.1

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		
3488-02	10	< 0.1	< 1	01/07/93	01/07/93	1.00		
3488-01R	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		NC
3488-01S	10	4.66	46.60	01/07/93	01/07/93	1.00	93	

NITRATE RESULTS — METHOD DET. LIMIT: 0.1

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		
3488-02	10	< 0.1	< 1	01/07/93	01/07/93	1.00		
3488-01R	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		NC
3488-01S	10	4.99	49.90	01/07/93	01/07/93	1.00	100	

LIFETIME
VALIDATED

By H & RWC JAN 22 1995

Initial

30

ANIONS ANALYSIS BENCHSHEET

LABORATORY: S-CORED
ANALYST: EA
CHARGE #: 12359-63

UNIT: MG/L

LOT #: 3488
FILE #: Ani 3488
DISK #: Ani 1123

SAMPLE TYPE: water

PHOSPHATE RESULTS

METHOD DET. LIMIT: 0.1

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		
3488-02	10	< 0.1	< 1	01/07/93	01/07/93	1.00		
3488-01R	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		NC
3488-01S	10	4.79	47.90	01/07/93	01/07/93	1.00	96	

LIFETIME
VALIDATED
By H & RWC JAN 22 1993
Initial

L31

pH ANALYSIS

LABORATORY:	S-CUBED	DATA REVIEWER:	1/5/93
CLIENT:	WHC	PROJECT REVIEWER:	
LOT #:	3488	DATE SAMPLED:	12-22-92
CHARGE #:	32359-63	DATE RECEIVED:	12-24-92
DISK #:	PH0619	ANALYSIS DATE:	01-04-93

ANALYSIS: pH
TECHNIQUE: pH ELECTRODE
METHOD: E150.1
SAMPLE ALIQUOT: 50 mL
SAMPLE TYPE: NAL

SAMPLE ID	pH
3488-01	7.93
3488-02	7.10

All QC checks were acceptable.

LIFETIME
VALIDATED
By H & RWC JAN 22 1995
Initial

HRWC

CHAIN-OF-CUSTODY/RECORD SHEET II

Record No.

WHC Contact: Green

Phone No.: 3-1463

MSIN:

Sampler (print): Garcia

Signature: Robert Garcia

Date: 12-18-92

Analytical Lab: ☐ 183KE ☐ Off Site Lab ☐ PNL ☒ Other 105 N

Proper Shipping Name:

Secondary Hazards:

Sample No.	Location	Date	Time	Remarks
100N-91-0008	163-Pad	12-18-92	1300 hrs	Liquid

	Color	Clarity	Percent	pH	Flash Point (when available)
Top Phase	Grey	Translucent	95%	N/A	N/A
Middle Phase	↓	↓	↓	↓	↓
Bottom Phase	↓	↓	↓	↓	↓
Sediment	↓	Opaque	5%	✓	✓

Label/Generator Description of Materials:

Liquid

pH = 7

LIFETIME VALIDATED By H & RWC DEC 22 1992 SH Initial

Radioactive: ☐ Yes ☐ No.

183KE Lab Radioactive: ☐ Yes ☐ No.

(If Radioactive, the results) _____ dpm _____ Contact mR/hr _____ One meter mR/hr

CUSTODIANSHIP

Relinquished by	Received by	Date/Time	
M. A. Green	R Hoel	122192 1005	☐ Transport ☐ Storage ☒ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal

Sample Returned to Drum by | Drum No. | Date/Time

Verified by | Date/Time

Chain-of-Custody Returned by | Date/Time

DISTRIBUTION: White - Administrative Control Blue - Administrative Control Green - Custodian Yellow - Custodian Pink - Custodian Goldenrod - Sample Coordinator

BC-6000-691 (04/91)

HRWC

CHAIN-OF-CUSTODY/RECORD SHEET II

Record No.

WHC Contact: Green

Phone No.: 3-1463

MSIN:

Sampler (print): Garcia

Signature: Robert Garcia Jr

Date: 12-18-92

Analytical Lab: ☐ 183KE ☐ Off Site Lab ☐ PNL ☒ Other 105 N

Proper Shipping Name:

Secondary Hazards:

Sample No.	Location	Date	Time	Remarks
100N-91-0008	163-Pad	12-18-92	1300 hrs	Liquid

	Color	Clarity	Percent	pH	Flash Point (when available)
Top Phase	Grey	Translucent	95%	N/A	N/A
Middle Phase	↓	↓	↓	↓	↓
Bottom Phase	↓	↓	↓	↓	↓
Sediment	↓	Opaque	5%	↓	↓

Label/Generator Description of Materials: Liquid

pH = 7

VALIDATED LIFETIME BY H&RWC DEC 23 1992 SA Initial

Radioactive: ☐ Yes ☐ No.

183KE Lab Radioactive: ☐ Yes ☐ No.

(If Radioactive, the results) _____ dpm _____ Contact mR/hr _____ One meter mR/hr

CUSTODIANSHIP

Relinquished by	Received by	Date/Time	
M. A. Green	R. Hoel	122192 1005	☐ Transport ☐ Storage ☒ Anal. ☐ Disposal
R. Hoel	M. A. Green	Date/Time 0910 12-22-92	☐ Transport ☒ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal

Sample Returned to Drum by: K. Shupe — Drum No.: 100N910008 — Date/Time: 12-22-92

Verified by: M. A. Green — Date/Time: 0930 12-22-92

Chain-of-Custody Returned by: M. A. Green — Date/Time: 1100 12-22-92

DISTRIBUTION: White - Administrative Control; Blue - Administrative Control; Green - Custodian; Yellow - Custodian; Pink - Custodian; Goldenrod - Sample Coordinator

BC-6000-691 (04/91)

SAMPLE ANALYSIS REQUEST

100 AREAS FACILITIES HEALTH & SAFETY

373-1436

FAX: 373-4030

STER: GREEN

122292

SAMPLE NUMBER	SAMPLE DATE/TIME	SAMPLE DESCRIPTION	**HEALTH PHYSICS USE ONLY** ANALYSIS DATE/TIME	LAB NUMBER	BETA/GAMMA/ALPHA RESULTS (pCi/gm)	ALPHA RESULTS (pCi/gm)
N-91-0008	12/18/92 1300	Battery Electrolyte	12/21/92	692-1349	<MDA	<MDA
N-91-0009	12/18/92 1300	" "	12/21/92	692-1350	<MDA	<MDA

LIFETIME VALIDATED By H & RWC DEC 23 1992 Initial

ANALYSIS BY: [illegible]

DATE 122292

Westinghouse Hanford Company

CHAIN OF CUSTODY

14

Custody Form Initiator MARY ANN GREEN

Telephone 509-373-1463

Company Contact MARY ANN GREEN

Collection Date 12-22-92

Project Designation/Sampling Locations 163N Waste Pad

Field Logbook No. #3

Ice Chest No.

Offsite Property No.

Bill of Lading/Airbill No.

Method of Shipment Glass bottles wrapped in plastic, placed inside a metal can with absorbent and placed inside a 12B65 box. For air shipment

Shipped to S-Cubed Laboratories, San Diego, CA

Possible Sample Hazards/Remarks Battery electrolyte fluid, field tested with a pH of 7

Sample Identification

100N910008-M	1- 250 ml amber glass bottle	100N910009-M	1- 250 ml amber glass
100N910008-A	1- 250 ml amber glass bottle	100N910009-A	1- 250 ml amber glass

(Sign and Print Names)

[] Field Transfer of Custody

Chain of Possession

Relinquished by:	Received by:	Date/Time:
M.A. Green		
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:

Comments:
** PRIORITY TURNAROUND **

LIFETIME VALIDATED
By H&RWC DEC 23 1992
SA
Initial

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

HAZARDOUS MATERIAL SHIPMENT RECORD (HMSR)

SHIPPING INST.

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

Originating Facility: Building 163, Area 100-N
Originator Signature: Mary Ann Green
Date: 12-23-92
FROM: [X] WHC [ ] KEH [ ] PNL [ ] OTHER

OFFSITE ONLY: SHIP: [X] PREPAID [ ] COLLECT
VIA: [ ] Parcel Post [ ] Air Parcel Post [ ] Freight (Rail/Truck) [X] 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.
2	CF	12B65	9x13x13	#1-30oz. #2=32oz		Proper Ship Name: INK, LTD.QTY (Lab Samples) Hazard Class: FLAMMABLE LIQUID UN/NA No.: UN 1210 List Secondary Hazards: NONE List Labels Req'd/Applied FLAMMABLE LIQUID
1	CF	12B65	9x13x13	24 oz.		Proper Ship Name: ADHESIVE, LTD.QTY (Lab Samples) Hazard Class: FLAMMABLE LIQUID UN/NA No.: UN1133 List Secondary Hazards: NONE List Labels Req'd/Applied FLAMMABLE LIQUID
1	CF	12B65	9x13x13	4-250 ml ~~32 oz.~~ Bottles		Proper Ship Name: BATTERY FLUID, ACID, LTD.QTY. Hazard Class: CORROSIVE MATERIAL (lab samples) UN/NA No.: UN 2796 List Secondary Hazards: NONE List Labels Req'd/Applied CORROSIVE

VALIDATED LIFETIME By H&RWC DEC 15 1992 SA Initial

Total No. Containers	Gross Wt of Shipment	Identify Placards Required:	Identify Property Control or Return Order No. (if applicable)
4		1. N/A 2. 3. 4.	

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

Describe Internal Packaging: Glass sample bottles are wrapped in plastic and placed inside a metal can with absorbent. The can is placed inside a 12B65 box.

RADIATION RELEASE	Survey No.	Date	RM Signature	Print Name
	#146520	12-23-92	Ross Stearns	ROSS STEARNS

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: [X] Passenger Aircraft [ ] Cargo Aircraft [ ] NA

Authorizing Signature: Mary Ann Green Print Name Mary Ann Green Date: 12-23-92

FOR OFFSITE SHIPMENTS – ADDITIONAL APPROVAL REQUIRED

WHC	TRAFFIC	B.L. No.	Date Shipped	ETA	Routing	Special Considerations

WHC Traffic: _____ WHC Shipping: _____

EMERGENCY PHONE NO. 509-373-3800 DOT ERG GUIDE ~~27~~ 26 12-23-92 MRG ATTACHED ERG ~~54~~ 39 12-23-92 MRG ATTACHED

54-3000-596 (10-87)

SHIPPING INST.

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

HAZARDOUS MATERIAL SHIPMENT RECORD (HMSR)

Originating Facility: Building 163, Area 100-N
Originator Signature: Mary Ann Green
Date: 12-23-92
FROM: [X] WHC [ ] KEH [ ] PNL [ ] OTHER ____

OFFSITE ONLY: SHIP: [X] PREPAID [ ] COLLECT
VIA: [ ] Parcel Post [ ] Air Parcel Post [ ] Freight (Rail/Truck) [XX] 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
2	CF	12B65	9x13x13	#1=30oz. #2=32oz	13 lbs 12 lbs	Proper Ship Name: INK, LTD.QTY (Lab Samples) Hazard Class: FLAMMABLE LIQUID UN/NA No.: UN 1210 List Secondary Hazards: NONE List Labels Req'd/Applied FLAMMABLE LIQUID
1	CF	12B65	9x13x13	24 oz.	13 lbs	Proper Ship Name: ADHESIVE, LTD.QTY (Lab Samples) Hazard Class: FLAMMABLE LIQUID UN/NA No.: UN1133 List Secondary Hazards: NONE List Labels Req'd/Applied FLAMMABLE LIQUID
1	CF	12B65	9x13x13	4 @ 8oz ea (32 oz TOTAL)	13 lbs	Proper Ship Name: BATTERY FLUID, ACID, LTD.QTY. Hazard Class: CORROSIVE MATERIAL (lab samples) UN/NA No.: UN 2796 List Secondary Hazards: NONE List Labels Req'd/Applied CORROSIVE

VALIDATED By H & RWC DEC 30 1992 MDC Initial

Total No. Containers	Gross Wt of Shipment	Identify Placards Required:	Identify Property Control or Return Order No.: (if applicable)
4	51 lbs	1. N/A 2. ____ 3. ____ 4. ____	

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

Describe Internal Packaging: Glass sample bottles are wrapped in plastic and placed inside a metal can with absorbent. The can is placed inside a 12B65 box.

RADIATION RELEASE	Survey No.	Date	RM Signature	Print Name
	#146520	12-23-92	Ross Stearns (MAC)	ROSS STEARNS

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: [XX] Passenger Aircraft [ ] Cargo Aircraft [ ] NA

Authorizing Signature: Mary Ann Green Print Name Mary Ann Green Date: 12-23-92

FOR OFFSITE SHIPMENTS – ADDITIONAL APPROVAL REQUIRED

WHC	TRAFFIC	B.L. No.	Date Shipped	ETA	Routing	Special (
			12/23/92	12/24/92	FEDX	

WHC Traffic: Larry L. Cole [signature] WHC Shipping: ____

D-0-0052
~~N-91-0008~~
N-91-0009
1000-90-0064

EMERGENCY PHONE NO. 509-373-3800 DOT ERG GUIDE ~~27~~ 26 12-23-92 MAC ATTACHED, ERG ~~50~~ 39 12-23-92 MAC ATTACHED

CONTAINER STATUS CHANGE FORM

To Data Base

Container No. 100N-91-0008

The following changes have been made to this container:

1. Class**: From _____ To _____
2. Accumulation Date: From _____ To _____
3. Location: From _____ To _____
4. Drum Type/Size: From 30gal Dot 34-30 inside a To 55 17H
5. Contents 9WT 403 LBS
6. CWDR No. _____

Radiation Monitoring Section

Change in Radioactive Release: P-11 _____ Lab Results _____

Survey No. _____

Analytical No. _____

Change in Outer Container Labels: LIFETIME VALIDATED BY H&RWC JAN 19 1993 SA Initial

Initial

Radiation Sticker: Removed _____

Applied _____

Change in Inner Container Labels:

Initial

Radiation Sticker: Removed _____

Applied _____

HPT Signature _____ Date _____

Reasons for Status Change 30 gal poly Damaged (inner container gwt 250 LBS gross)

Date 1/15/93

*Name Patti Huff

*This person is responsible for a copy of this form to be sent to Administrative Control or any affected personnel ASAP.

**If any container changes RADIOLOGICAL status then the HPT will fill out the RADIATION MONITORING SECTION.

Distribution: White–Administrative Control Yellow–Distribution Pink–Originator Goldenrod–Administrative Control BC-6000-378 (08/90)

32359-63 LOT # 3

Westinghouse Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator MARY ANN GREEN

Company Contact MARY ANN GREEN

Telephone 509-373-1463

Project Designation/Sampling Locations 163N Waste Pad

Collection Date 12-22-92

Ice Chest No.

Field Logbook No. #3

Bill of Lading/Airbill No.

Offsite Property No.

Method of Shipment Glass bottles wrapped in plastic, placed inside a metal can wi absorbent and placed inside a 12B65 box. For air shipment

Shipped to S-Cubed Laboratories, San Diego, CA

Possible Sample Hazards/Remarks Battery electrolyte fluid, field tested with a pH of

Sample Identification

100N910008-M	1- 250 ml amber glass bottle	100N910009-M	1- 250 ml ambe ss
100N910008-A	1- 250 ml amber glass bottle	100N910009-A	1- 250 ml ambe ss

[] Field Transfer of Custody

Chain of Possession (Sign a Names)

Relinquished by:	Received by:	Date/Time:
M. A. Green	Amy Smith	12-24-92 pm
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

LIFETIME VALIDATED By H & RWC JAN 25 1993 SA Initial

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:
** PRIORITY TURNAROUND **

LIFETIME VALIDATED By H & RWC JAN 22 1993 mee Initial

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

004

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPL

3488

Lab Name: S_CUBED Contract: 32359-63

Lab Code: S3 Case No.: SAS No.: SDG No.:

Matrix (soil/water): SOIL Lab Sample ID: 348

Level (low/med): LOW Date Received: 12/

% 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	4.6			P
7440-36-0	Antimony	1.1			P
7440-38-2	Arsenic	0.16	U		P
7440-39-3	Barium	1.3			P
7440-41-7	Beryllium	0.002	U		P
7440-43-9	Cadmium	0.02			P
7440-70-2	Calcium	9.7	B		P
7440-47-3	Chromium	0.12			P
7440-48-4	Cobalt	0.03	U		P
7440-50-8	Copper	0.61			P
7439-89-6	Iron	1.7			P
7439-92-1	Lead	148			P
7439-95-4	Magnesium	11.9	B		P
7439-96-5	Manganese	0.03	B		P
7439-97-6	Mercury				NR
7440-02-0	Nickel	0.11			P
7440-09-7	Potassium	6.3	U		P
7782-49-2	Selenium	0.09	U		P
7440-22-4	Silver	0.14			P
7440-23-5	Sodium	844			P
7440-28-0	Thallium	0.31	U		P
7440-62-2	Vanadium	0.04	U		P
7440-66-6	Zinc	1.3			P

LIFETIME VALIDATED

By RWC JAN 22 1993

Initial

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts

Comments:

100N910008

PB_RESULT_FROM_SERIAL_DILUTION

SUPPORTING DATA REPORT

FORM I - IN

3

010

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMP... D.

3488

Lab Name: S_CUBED Contract: 32359-63

Lab Code: S3 Case No.: SAS No.: SDG No.:

Matrix (soil/water): SOIL Lab Sample ID: 348

Level (low/med): LOW Date Received: 12/

% 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	8.0			P
7440-36-0	Antimony	2.4			P
7440-38-2	Arsenic	0.16	U		P
7440-39-3	Barium	3.6			P
7440-41-7	Beryllium	0.002	U		P
7440-43-9	Cadmium	0.02			P
7440-70-2	Calcium	24.0			P
7440-47-3	Chromium	0.11			P
7440-48-4	Cobalt	0.03	U		P
7440-50-8	Copper	0.83			P
7439-89-6	Iron	6.0			P
7439-92-1	Lead	577			P
7439-95-4	Magnesium	12.4	B		P
7439-96-5	Manganese	0.12			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	0.12			P
7440-09-7	Potassium	6.2	U		P
7782-49-2	Selenium	0.09	U		P
7440-22-4	Silver	0.27			P
7440-23-5	Sodium	744			P
7440-28-0	Thallium	0.30	U		P
7440-62-2	Vanadium	0.04	U		P
7440-66-6	Zinc	1.2			P

LIFETIME VALIDATED

By H & RWC JAN 22 1993

mae

Initial

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts

Comments:

100N910009

PB_RESULT_FROM_DILUTED_ANALYSIS

DATA REPORT

FORM I - IN

011

ANIONS ANALYSIS BENCHSHEET

LABORATORY: S-CUBED
ANALYST: EA
CHARGE #: 32359-63

UNIT: MG/L

LOT #: 3488
FILE #: ANI3488
DISK #: ANI1123

SAMPLE TYPE: WATER

SULFATE RESULTS METHOD DET. LIMIT: 0.1

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	200	4.07	814	01/07/93	01/07/93	20		
3488-02	100	10.38	1038	01/07/93	01/07/93	10		
3488-01R	100	8.43	843	01/07/93	01/07/93	10		3.5
3488-01S	200	9.19	1838	01/07/93	01/07/93	20	102	

FLUORIDE RESULTS METHOD DET. LIMIT: 0.02

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	0.39	1.95	01/07/93	01/07/93	0.10		
3488-02	10	0.24	2.40	01/07/93	01/07/93	0.20		
3488-01R	5	0.39	1.95	01/07/93	01/07/93	0.10		NC
3488-01S	10	0.78	7.8	01/07/93	01/07/93	0.20	59	

LIFETIME
VALIDATED
By H & RWC JAN 22 1993
mpe
Initial

SUMMARY DATA REPORT

ANIONS ANALYSIS BENCHSHEET

LABORATORY: S-CUBED
ANALYST: EA
CHARGE #: 32359-63

LOT #: 3488
FILE #: ANI3488
DISK #: ANI1123

UNIT: MG/L

SAMPLE TYPE: WATER

CHLORIDE RESULTS

METHOD DET. LIMIT: 0.02

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	1.78	8.90	01/07/93	01/07/93	0.10		
3488-02	10	1.48	14.80	01/07/93	01/07/93	0.20		
3488-01	5	1.84	9.20	01/07/93	01/07/93	0.10		2.9
3488-01	10	1.9	19.00	01/07/93	01/07/93	0.20	101	

NITRITE RESULTS

METHOD DET. LIMIT: 0.04

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	< 0.04	< 0.2	01/07/93	01/07/93	0.20		
3488-02	10	< 0.04	< 0.4	01/07/93	01/07/93	0.40		
3488-01R	5	< 0.04	< 0.2	01/07/93	01/07/93	0.20		NC
3488-01S	10	0.96	9.60	01/07/93	01/07/93	0.40	96	

LIFETIME
VALIDATED
By H & RWC JAN 22 1993
mee
Initial

SUPPORTING DATA
REPORT

23

ANIONS ANALYSIS BENCHSHEET

LABORATORY: S-CHRED
ANALYST: EA
CHARGE #: 32359-63

UNIT: MG/L

LOT #: 3488
FILE #: Ani 3488
DISK #: Ani 1123

SAMPLE TYPE: Water

BROMIDE RESULTS — METHOD DET. LIMIT: 0.1

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		
3488-02	10	< 0.1	< 1	01/07/93	01/07/93	1.00		
3488-01R	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		NC
3488-01S	10	4.66	46.60	01/07/93	01/07/93	1.00	93	

NITRATE RESULTS — METHOD DET. LIMIT: 0.1

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		
3488-02	10	< 0.1	< 1	01/07/93	01/07/93	1.00		
3488-01R	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		NC
3488-01S	10	4.99	49.90	01/07/93	01/07/93	1.00	100	

LIFETIME
VALIDATED
By H & RWC JAN 22 1993
Initial

SUMMARY DATA REPORT

ANIONS ANALYSIS BENCHSHEET

LABORATORY: S-CUMED
ANALYST: BA
CHARGE #: 32359-63

UNIT: MG/L

LOT #: 3488
FILE #: Ani 3488
DISK #: Ani 1123

SAMPLE TYPE: water

PHOSPHATE RESULTS

METHOD DET. LIMIT: 0.1

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		
3488-02	10	< 0.1	< 1	01/07/93	01/07/93	1.00		
3488-01R	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		NC
3488-01S	10	4.79	47.90	01/07/93	01/07/93	1.00	96	

LIFETIME
VALIDATED
By H & RWC JAN 22 1993
Initial

SUPPORTING DATA

pH ANALYSIS

LABORATORY:	S-CUBED	DATA REVIEWER:	1/5/93
CLIENT:	WHC	PROJECT REVIEWER:	
LOT #:	3488	DATE SAMPLED:	12-22-92
CHARGE #:	32359-63	DATE RECEIVED:	12-24-92
DISK #:	PH0619	ANALYSIS DATE:	01-04-93

ANALYSIS:	pH
TECHNIQUE:	pH ELECTRODE
METHOD:	E150.1
SAMPLE ALIQUOT:	50 mL
SAMPLE TYPE:	NAL

SAMPLE ID	pH
3488-01	7.93
3488-02	7.10

All QC checks were acceptable.

LIFETIME
VALIDATED

By H & RWC JAN 22 1993

MAC
Initial

SUPPORTING DATA

- All residual containers returned shall have WHC sample numbers on them. If a container is returned that was used as a sample mount (e.g., 500 ml Marinelli), the WHC identification number shall be on that container.

- Sample containers with legible markings or labels identifying the contents as radioactive contaminated shall be transported as radioactive material.

- Any sample material to be returned that is contaminated with radioactive materials in excess of the following limits shall be labeled as "radioactive":

  $\geq$ 60 pCi/gm (or ml) Alpha or

  $\geq$ 200 pCi/gm (or ml) Alpha + Beta + Gamma.

4. The commercial laboratories must meet all U.S. Department of Transportation packaging and shipping requirements for return of sample materials to WHC.

If you have any questions or need additional information, please contact Ms. F. H. Steen at 2-2495.

J. H. Kessner, Manager
Analytical Laboratory Coordination

nlj

LIFETIME
VALIDATED
By H & RWC FEB 16 1993
Initial

CONTAINER STATUS CHANGE FORM

To: Data Base

Container No. (100N-91-0008) 100N-91-000800

The following changes have been made to this container:

1. Class**: From N To Haz
2. Accumulation Date: From _____ To 1/18/91
3. Location: From _____ To _____
4. Drum Type/Size: From _____ To _____
5. Contents _____
6. CWDR No. WHC-005-93

Radiation Monitoring Section

Change in Radioactive Release: P-11 _____ Lab Results _____

Survey No. _____

Analytical No. _____

Change in Outer Container Labels: LIFETIME VALIDATED BY RWC MAR 03 1993 Initial

Radiation Sticker: Initial Removed _____ Applied _____

Change in Inner Container Labels:

Radiation Sticker: Initial Removed _____ Applied _____

HPT Signature _____ Date _____

Reasons for Status Change Per SWD Phone Call 3/3/93

Date 3/3/93 *Name Patti Huff

*This person is responsible for a copy of this form to be sent to Administrative Control or any affected personnel ASAP.

**If any container changes RADIOLOGICAL status then the HPT will fill out the RADIATION MONITORING SECTION.

Distribution: White–Administrative Control Yellow–Distribution Pink–Originator Goldenrod–Administrative Control BC-6000-378 (08/90)

RECEIVED
JAN 2 9 1991 KLB
HAZARDOUS & RADIOLOGICAL WASTE CONTROL

GENERATOR CERTIFICATION

1. The following waste was generated from

Building 105 Room No. 9

System 19 Process BATTERY LAY-UP

Generator ID

2. Accumulation Date 1-23-91

3. The total waste quantity, (estimate)

4. Product or chemical name BATTERY ELECTROLYTE

5. List everything in drum by percentage, whether hazardous or not:

	%		MSDS No.
a.	100		15618
b.			
c.			

5A. See attached log sheet See attached MSDS listing 15618

6. Is the waste a liquid, solid or has it been absorbed? Liquid

7. Is the waste new, expired, used or a spill cleanup? used

8. Is the container full or partially full? full

9. Has the waste been in a radiation zone or been contaminated in any way? no

To the best of my knowledge I certify the information provided above accurately describes the contents of this container. I am aware of the 100 Area Waste Minimization Plan.

Waste Generators Signature	Date
Richard A. Eckroth	1-23-91
Printed Name	**Organization Code**
RICHARD A. ECKROTH	W5291 2

Hazardous and Radiological Waste Control Section

Assigned Hazardous Class	Container No.
N	100N91 0009

Accumulation Date Approval	Name of Reviewer
1-23-91	Brad Schilperoort

Signature of Reviewer	Date
Brad Schilperoort	1-24-91

Distribution: White–Administrative Control Yellow–Field File Pink–Generator Goldenrod–Administrative Control

BC-6000-380 (01/90)

RECEIVED

CONTAINER REQUEST FORM

JAN 23 1991 HB

HAZARDOUS & RADIOLOGICAL

WA, EMS, PM No.	Generator ID: SS-E

Requestor's Signature: Richard A. Eckroth

Requestor's Printed Name: RICHARD A. ECKROTH	Requestor's Phone No. 373-5443	Date Requested 1-18-91

Waste Description Section

☐ Solid ☑ Liquid ☐ Absorbed in _____

Waste description (Include everything to go into this container. Be complete and concise. Materials other than what is described will not be approved for addition to this container.)	List all MSDS numbers that pertain to this container.
BATTERY ELECTROLYTE	15618

Waste will be generated from: Location (Room No. and Bldg.)
Room 9 105-N

Equipment Source (Be specific as to where waste will come from.) BATTERIES.	Process Involved BATTERY LAY UP
Total Waste Quantity (estimate vol. or wt.)	Unit (lb., gal., oz.)

Waste Status:
Indicate whether waste is: ☐ New ☑ Used ☐ Expired ☐ Spill Materials

Hazardous and Radiological Waste Control

Container Size 30	Container Type 34-30 Poly
Container No. 100N910009	Date Container Delivered to Generator 1-18-91

Distribution: White–Administrative Control Yellow–Field File Pink–Generator Goldenrod–Administrative Control

BC-6000-379 (01/90)

GENERATOR CERTIFICATION

1. The following waste was generated from

   Building 105 Room No. 9

   System 19 Process BATTERY LAY-UP

   Generator ID

2. Accumulation Date 1-23-91

3. The total waste quantity, (estimate)

4. Product or chemical name BATTERY ELECTROLYTE

5. List everything in drum by percentage, whether hazardous or not:

	%		MSDS No.
a.	100		15618
b.			
c.			

LIFETIME VALIDATED MAR 19 1993 By H & RWC SA Initial

5A. See attached log sheet ____ See attached MSDS listing 15618

6. Is the waste a liquid, solid or has it been absorbed? Liquid

7. Is the waste new, expired, used or a spill cleanup? used

8. Is the container full or partially full? full

9. Has the waste been in a radiation zone or been contaminated in any way? no

To the best of my knowledge I certify the information provided above accurately describes the contents of this container. I am aware of the 100 Area Waste Minimization Plan.

Waste Generators Signature	Date
Richard A. Eckroth	1-23-91
Printed Name	**Organization Code**
RICHARD A. ECKROTH	W5291 2

Hazardous and Radiological Waste Control Section

Assigned Hazardous Class	Container No.
N	100N91 0009

Accumulation Date Approval	Name of Reviewer
1-23-91	Brad Schilperoort

Signature of Reviewer	Date
Brad Schilperoort	1-24-91

Distribution: White–Administrative Control Yellow–Field File Pink–Generator Goldenrod–Administrative Control

BC-6000-380 (01/90)

MATERIAL RELEASE HISTORY RECORD

Radiation Survey Report Number	Facility Code	Building/Facility	Date

To the best of my knowledge the item(s) being released from radiological control:

- [x] Has never been subject to decontamination efforts and in my judgement the inaccessible surfaces could not have been contaminated without having contaminated the accessible surfaces, or
- [ ] Has been subjected to decontamination; in my judgement the inaccessible surfaces could not have been contaminated during decontamination or during use.

(I.A.W., WHC-CM-4-10, Radiation Protection Manual, Section 9, paragraph 5.2)

Item Identification	Serial No.
100-N-91-0009	

LIFETIME VALIDATED
By H&RWC MAR 19 1995
Initial

1 & E MAINT.	R. A. Eckroth 56129	11-21-95
Organization	Signature/Pay Number	Date

File original
cc: OHP Unit Manager
Responsible Organization

A-6000-343 (12-88)

RECEIVED
JAN 2 9 1991
HAZARDOUS & RADIOLOGICAL

RECEIVING ROW CHECK LIST — 163 PAD/1310 PAD/K-AREA PAD
(Circle One)

CONTAINER NUMBER 100 V-91-0009 SIZE 114 Liters DOT SPEC. 34-30

SAMPLE DATE 1/23/ CHAIN OF CUSTODY yes P-11 yes

BRASS TAG yes WEIGHT 200 LB CONTAINER CONDITION new
(Dents, Rust, Bulges, Etc.)

MATERIAL HISTORY RELEASE yes DRUM COUNTER RESULTS yA

WASTE TYPE* H OPEN/ACCUMULATION DATE 1/23/91
*(H=Hazardous, M=Mixed, R=Radioactive, P=PCB's, N=Non Regulated)

HAZARD CLASS

COMBUSTIBLES (RED)

FLAMMABLE LIQUID____ FLAMMABLE SOLID____ FLAMMABLE LABEL____
COMBUSTIBLE LIQUID____ COMBUSTIBLE SOLID____ COMBUSTIBLE LABEL____

ROW #____ or STORAGE CELL #____

REACTIVE (YELLOW)

LIQUID____ SOLID____ LABEL____ STORAGE CELL #____

HEALTH (BLUE)

ACID LIQUID <2 pH**____ ACID SOLID <2 pH**____
CAUSTIC LIQUID >10 pH**____ CAUSTIC SOLID >10 pH**____
PERSISTENT LIQUID____ PERSISTENT SOLID____
TOXIC LIQUID____ TOXIC SOLID____
CARCINOGEN LIQUID____ CARCINOGEN SOLID____

**LABEL CONTAINER WITH pH IF <2 OR >12.5

CORROSIVE LABEL ✓ **pH LABEL 8.2 BLUE ROW # ✓

Row 5.1

OTHER (WHITE)

DANGEROUS WHEN WET____ OXIDIZER LIQUID____ OXIDIZER SOLID____

DANGEROUS WHEN WET LABEL____ OXIDIZER LABEL____ STORAGE CELL #____

PCB's (BLACK)

PCB LIQUID____ PCB SOLID____
PCB LABEL'S____ BLACK ROW #____

PCB SIGN AT ROW____ PCB SIGN AT ENTRANCE____

ALL LABELING COMPLETE Hatch / 1-23-91
OPERATOR NAME / DATE

SUPERVISOR VERIFICATION Schul / 1-23-91
NAME / DATE

FORM #: HRWC-2000
EFFECTIVE DATE: 01/02/91
REVISION: 1

HRWC

CHAIN-OF-CUSTODY/RECORD SHEET II

Record No.

WHC Contact: Green

Phone No.: 3-1463

MSIN:

Sampler (print): Garcia

Signature: Robert Garcia Jr

Date: 12-18-92

Analytical Lab: ☐ 183KE ☐ Off Site Lab ☐ PNL ☒ Other 105N

Proper Shipping Name:

Secondary Hazards:

Sample No.	Location	Date	Time	Remarks
100N-91-0009	163 Pad	12-18-92	1300 hrs	Liquid

	Color	Clarity	Percent	pH	Flash Point (when available)
Top Phase	Grey	Translucent	70%	N/A	N/A
Middle Phase	↓	↓	↓	↓	
Bottom Phase	Lt. Grey	Opaque	30%	↓	
Sediment	↓	↓	↓	↓	

Label/Generator Description of Materials: Liquid / Solids

pH = 7

LIFETIME VALIDATED By H&RWC DEC 22 1992 SA Initial SA

Radioactive: ☐ Yes ☐ No.

183KE Lab Radioactive: ☐ Yes ☐ No.

(If Radioactive, the results) _____ dpm _____ Contact mR/hr _____ One meter mR/hr

CUSTODIANSHIP

Relinquished by	Received by	Date/Time	
M.A. Green	[illegible]	12/21/92 1005	☐ Transport ☐ Storage ☒ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal

Sample Returned to Drum by | Drum No. | Date/Time

Verified by | Date/Time

Chain-of-Custody Returned by | Date/Time

DISTRIBUTION: White - Administrative Control Blue - Administrative Control Green - Custodian Yellow - Custodian Pink - Custodian Goldenrod - Sample Coordinator

BC-6000-681 (04/91)

HRWC

CHAIN-OF-CUSTODY/RECORD SHEET II

Record No.

WHC Contact	Phone No.	MSIN
Green	3-1463	

Sampler (print)	Signature	Date
Garcia	Robert Garcia Jr	12-18-92

Analytical Lab: ☐ 183KE ☐ Off Site Lab ☐ PNL ☒ Other 105N

Proper Shipping Name:	Secondary Hazards:

Sample No.	Location	Date	Time	Remarks
100N-91-0009	163 Pad	12-18-92	1300 hrs	Liquid

	Color	Clarity	Percent	pH	Flash Point (when available)
Top Phase	Grey	Translucent	70%	N/A	N/A
Middle Phase	↓	↓	↓	↓	
Bottom Phase	Lt. Grey	Opaque	30%	↓	
Sediment	↓	↓	↓	↓	

Label/Generator Description of Materials:

Liquid / Solids

pH = 7

VALIDATED LIFETIME
By HRWC DEC 23 1992
SA
Initial

Radioactive: ☐ Yes ☐ No. 183KE Lab Radioactive: ☐ Yes ☐ No.

(If Radioactive, the results) _____ dpm _____ Contact mR/hr _____ One meter mR/hr

CUSTODIANSHIP

Relinquished by	Received by	Date/Time	
M.A. Dreen	J.R. Hoek	12/21/92 1005	☐ Transport ☐ Storage ☒ Anal. ☐ Disposal
J.R. Hoek	M.A. Dreen	12-22-92 0910	☐ Transport ☒ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal
			☐ Transport ☐ Storage ☐ Anal. ☐ Disposal

Sample Returned to Drum by	Drum No.	Date/Time
K. Sharp	100N91 0009	12-22-92

Verified by	Date/Time
M.A. Dreen	0935 12-27-92

Chain-of-Custody Returned by	Date/Time
M.A. Dreen	1100 12-22-92

DISTRIBUTION: White - Administrative Control Blue - Administrative Control Green - Custodian
Yellow - Custodian Pink - Custodian Goldenrod - Sample Coordinator

BC-6000-691 (04/91)

SAMPLE ANALYSIS REQUEST

100 AREAS FACILITIES HEALTH & SAFETY

373-1436

FAX: 373-4030

REQUESTER: Green

PHONE:

DATE: 122292

HEALTH PHYSICS USE ONLY

SAMPLE NUMBER	SAMPLE DATE/TIME	SAMPLE DESCRIPTION	ANALYSIS DATE/TIME	LAB NUMBER	BETA/GAMMA/ALPHA RESULTS (pCi/gm)	ALPHA RESULTS (pCi/gm)
[illegible]-91-0008	12/18/92 1300	Battery electrolyte	12/21/92	692-1349	<MDA	<MDA
[redacted]	12/18/92 1300	" "	12/21/92	692-1350	<MDA	<MDA

VALIDATED
LIFETIME
By H&S Inc
DEC 23 1992
Initial

ANALYSIS BY: [signature]

DATE: 122292

Westinghouse Hanford Company

CHAIN OF CUSTODY

14

Custody Form Initiator MARY ANN GREEN

Telephone 509-373-1463

Company Contact MARY ANN GREEN

Collection Date 12-22-92

Project Designation/Sampling Locations 163N Waste Pad

Field Logbook No. #3

Ice Chest No.

Offsite Property No.

Bill of Lading/Airbill No.

Method of Shipment Glass bottles wrapped in plastic, placed inside a metal can with absorbent and placed inside a 12B65 box. For air shipment

Shipped to S-Cubed Laboratories, San Diego, CA

Possible Sample Hazards/Remarks Battery electrolyte fluid, field tested with a pH of 7

Sample Identification

100N910008-M	1- 250 ml amber glass bottle	100N910009-M	1- 250 ml amber glass
100N910008-A	1- 250 ml amber glass bottle	100N910009-A	1- 250 ml amber glass

[] Field Transfer of Custody

Chain of Possession (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
M. A. Green		
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:

Comments:
** PRIORITY TURNAROUND **

LIFETIME VALIDATED
By H&AWC DEC 23 1992
Initial SM

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

HAZARDOUS MATERIAL SHIPMENT RECORD (HMSR)

SHIPPING INST.

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

Originating Facility: Building 163, Area 100-N
Originator Signature: Mary Ann Dean
Date: 12-23-92
FROM: [X] WHC [ ] KEH [ ] PNL [ ] OTHER
OFFSITE ONLY: SHIP: [X] PREPAID [ ] COLLECT
VIA: [ ] Parcel Post [ ] Air Parcel Post [ ] Freight (Rail/Truck) [X] 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
2	CF	12B65	9x13x13	#1-30oz. #2-32oz	13 lbs 12 lbs	Proper Ship Name: INK, LTD.QTY (Lab Samples) Hazard Class: FLAMMABLE LIQUID UN/NA No.: UN 1210 List Secondary Hazards: NONE List Labels Req'd/Applied FLAMMABLE LIQUID
1	CF	12B65	9x13x13	24 oz.	13 lbs	Proper Ship Name: ADHESIVE, LTD.QTY (Lab Samples) Hazard Class: FLAMMABLE LIQUID UN/NA No.: UN1133 List Secondary Hazards: NONE List Labels Req'd/Applied FLAMMABLE LIQUID
1	CF	12B65	9x13x13	4 @ 8oz ea (32 oz TOTAL)	13 lbs	Proper Ship Name: BATTERY FLUID, ACID, LTD.QTY. Hazard Class: CORROSIVE MATERIAL (lab samples) UN/NA No.: UN 2796 List Secondary Hazards: NONE List Labels Req'd/Applied CORROSIVE

VALIDATED By ~~N.A.~~ RWC DEC 30 1992 Initial

Total No. Containers	Gross Wt of Shipment	Identify Placards Required:	Identify Property Control or Return Order No.: (if applicable)
4	51 lbs	1. N/A 2. 3. 4.	

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

Describe Internal Packaging: Glass sample bottles are wrapped in plastic and placed inside a metal can with absorbent. The can is placed inside a 12B65 box.

RADIATION RELEASE	Survey No.	Date	RM Signature	Print Name
	#146520	12-23-92	Ross Stearns (MKC)	ROSS STEARNS

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: [X] Passenger Aircraft [ ] Cargo Aircraft [ ] NA

Authorizing Signature: Mary Ann Dean Print Name: Mary Ann Green Date: 12-23-92

FOR OFFSITE SHIPMENTS – ADDITIONAL APPROVAL REQUIRED

WHC	TRAFFIC	B.L. No.	Date Shipped	ETA	Routing	Special C
			12/23/92	12/24/92	FEDEX	

WHC Traffic: Larry L. Cole WHC Shipping:

D-0-0052
N-91-0008
~~A-91-0009~~
1000-910-0064

EMERGENCY PHONE NO. 509-373-3800 DOT ERG GUIDE ~~27~~ 26 12-23-92 MAC ATTACHED, ERG ~~60~~ 39 12-23-92 MAC ATTACHED

HAZARDOUS MATERIAL SHIPMENT RECORD (HMSR)

SHIPPING INST.

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

Originating Facility: Building 163, Area 100-N
Originator Signature: Mary Ann Green
Date: 12-23-92
FROM: [X] WHC [ ] KEH [ ] PNL [ ] OTHER
OFFSITE ONLY: SHIP: [X] PREPAID [ ] COLLECT
VIA: [ ] Parcel Post [ ] Air Parcel Post [ ] Freight (Rail/Truck) [X] Air (Passenger) [ ] Air (Cargo)
Cost Code: ORG:11150/ E11457

SHIPMENT DESCRIPTION

Number of Containers	Type	DOT Spec	Package Dimensions	Quantity Pkg	Gross Wt Each Pkg	CONTENT DESCRIPTION (See 49 CFR 172.101(c) Hazardous Material Table.)
2	CF	12B65	9x13x13	#1-30oz. #2-32oz		Proper Ship Name: INK, LTD.QTY (Lab Samples) Hazard Class: FLAMMABLE LIQUID UN/NA No.: UN 1210 List Secondary Hazards: NONE List Labels Req'd/Applied: FLAMMABLE LIQUID
1	CF	12B65	9x13x13	24 oz.		Proper Ship Name: ADHESIVE, LTD.QTY (Lab Samples) Hazard Class: FLAMMABLE LIQUID UN/NA No.: UN1133 List Secondary Hazards: NONE List Labels Req'd/Applied: FLAMMABLE LIQUID
1	CF	12B65	9x13x13	4-250ml ~~32oz.~~ Bottles		Proper Ship Name: BATTERY FLUID, ACID, LTD.QTY. Hazard Class: CORROSIVE MATERIAL (lab samples) UN/NA No.: UN 2796 List Secondary Hazards: NONE List Labels Req'd/Applied: CORROSIVE

LIFETIME VALIDATED BY H&S WHC DEC 23 1992

Total No. Containers	Gross Wt of Shipment	Identify Placards Required:	Identify Property Control or Return Order No. (if applicable)
4		1. N/A 2. 3. 4.	~~N/A~~ initial

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

Describe Internal Packaging: Glass sample bottles are wrapped in plastic and placed inside a metal can with absorbent. The can is placed inside a 12B65 box.

RADIATION RELEASE	Survey No.	Date	RM Signature	Print Name
	#146520	12-23-92	Ross Stearns	Ross Stearns

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: [X] Passenger Aircraft [ ] Cargo Aircraft [ ] NA

Authorizing Signature: Mary Ann Green Print Name: Mary Ann Green Date: 12-23-92

FOR OFFSITE SHIPMENTS – ADDITIONAL APPROVAL REQUIRED

WHC	TRAFFIC	B.L. No.	Date Shipped	ETA	Routing	Special Considerations

WHC Traffic: _____ WHC Shipping: _____

EMERGENCY PHONE NO. 509-373-3800 DOT ERG GUIDE ~~27~~ 26 12-23-92 MAG ATTACHED ERG ~~54~~ 39 12-23-92 MAG ATTACHED

54-3000-596 (10-87)

CONTAINER STATUS CHANGE FORM

To	Container No.
Data Base	100N-91-0009

The following changes have been made to this container:

1. Class**: From _____ To _____
2. Accumulation Date: From _____ To _____
3. Location: From _____ To _____
4. Drum Type/Size: From 30 gal Dot 34-30 inside a To 55 gal 17H
5. Contents _____ GWT 368 LBS
6. CWDR No. _____

Radiation Monitoring Section

Change in Radioactive Release: P-11 _____ Lab Results _____

Survey No. _____

Analytical No. _____

Change in Outer Container Labels:

LIFETIME VALIDATED By M & RWC JAN 19 1993 SH Initial

Initial

Radiation Sticker: Removed _____

Applied _____

Change in Inner Container Labels:

Initial

Radiation Sticker: Removed _____

Applied _____

HPT Signature _____ Date _____

Reasons for Status Change 30 gal poly damaged (inner container gwt 205 LBS)

Date	*Name
1/15/93	Patti Huff

*This person is responsible for a copy of this form to be sent to Administrative Control or any affected personnel ASAP.

**If any container changes RADIOLOGICAL status then the HPT will fill out the RADIATION MONITORING SECTION.

Distribution: White–Administrative Control Yellow–Distribution Pink–Originator Goldenrod–Administrative Control BC-6000-378 (08/90)

32359-63 LOT # 3

Westinghouse Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator MARY ANN GREEN

Company Contact MARY ANN GREEN

Telephone 509-373-1463

Project Designation/Sampling Locations 163N Waste Pad

Collection Date 12-22-92

Ice Chest No.

Field Logbook No. #3

Bill of Lading/Airbill No.

Offsite Property No.

Method of Shipment Glass bottles wrapped in plastic, placed inside a metal can wi absorbent and placed inside a 12B65 box. For air shipment

Shipped to S-Cubed Laboratories, San Diego, CA

Possible Sample Hazards/Remarks Battery electrolyte fluid, field tested with a pH of

Sample Identification

100N910008-M	1- 250 ml amber glass bottle	100N910009-M	1- 250 ml amb ss
100N910008-A	1- 250 ml amber glass bottle	100N910009-A	1- 250 ml amb ss

[] Field Transfer of Custody

Chain of Possession (Sign a Names)

Relinquished by:	Received by:	Date/Time:
M. A. Green	Amy Smith	12-24-92 pm
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

LIFETIME VALIDATED By H&RWC JAN 25 1993 SA Initial

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:
** PRIORITY TURNAROUND **

LIFETIME VALIDATED By H&RWC JAN 22 1993 Initial

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

004

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPL

3488

Lab Name: S_CUBED Contract: 32359-63

Lab Code: S3 Case No.: SAS No.: SDG No.:

Matrix (soil/water): SOIL Lab Sample ID: 348

Level (low/med): LOW Date Received: 12/

% 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	4.6			P
7440-36-0	Antimony	1.1			P
7440-38-2	Arsenic	0.16	U		P
7440-39-3	Barium	1.3			P
7440-41-7	Beryllium	0.002	U		P
7440-43-9	Cadmium	0.02			P
7440-70-2	Calcium	9.7	B		P
7440-47-3	Chromium	0.12			P
7440-48-4	Cobalt	0.03	U		P
7440-50-8	Copper	0.61			P
7439-89-6	Iron	1.7			P
7439-92-1	Lead	148			P
7439-95-4	Magnesium	11.9	B		P
7439-96-5	Manganese	0.03	B		P
7439-97-6	Mercury				NR
7440-02-0	Nickel	0.11			P
7440-09-7	Potassium	6.3	U		P
7782-49-2	Selenium	0.09	U		P
7440-22-4	Silver	0.14			P
7440-23-5	Sodium	844			P
7440-28-0	Thallium	0.31	U		P
7440-62-2	Vanadium	0.04	U		P
7440-66-6	Zinc	1.3			P

LIFETIME VALIDATED

By hwc JAN 22 1995

mee Initial

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts

Comments:

100N910008

PB_RESULT_FROM_SERIAL_DILUTION

DATA

FORM I - IN

3

010

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMP. 3488

Lab Name: S_CUBED Contract: 32359-63

Lab Code: S3 Case No.: SAS No.: SDG No.:

Matrix (soil/water): SOIL Lab Sample ID: 348

Level (low/med): LOW Date Received: 12/

% 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	8.0			P
7440-36-0	Antimony	2.4			P
7440-38-2	Arsenic	0.16	U		P
7440-39-3	Barium	3.6			P
7440-41-7	Beryllium	0.002	U		P
7440-43-9	Cadmium	0.02			P
7440-70-2	Calcium	24.0			P
7440-47-3	Chromium	0.11			P
7440-48-4	Cobalt	0.03	U		P
7440-50-8	Copper	0.83			P
7439-89-6	Iron	6.0			P
7439-92-1	Lead	577			P
7439-95-4	Magnesium	12.4	B		P
7439-96-5	Manganese	0.12			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	0.12			P
7440-09-7	Potassium	6.2	U		P
7782-49-2	Selenium	0.09	U		P
7440-22-4	Silver	0.27			P
7440-23-5	Sodium	744			P
7440-28-0	Thallium	0.30	U		P
7440-62-2	Vanadium	0.04	U		P
7440-66-6	Zinc	1.2			P

LIFETIME VALIDATED By H & RWC JAN 22 1993 mee Initial

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts

Comments:
100N910009
PB_RESULT_FROM_DILUTED_ANALYSIS

DATA

FORM I - IN

ANIONS ANALYSIS BENCHSHEET

LABORATORY: S-CHRED
ANALYST: EA
CHARGE #: 12359-63

LOT #: 3488
FILE #: ANI3488
DISK #: ANI1123

UNIT: MG/L

SAMPLE TYPE: WATER

SULFATE RESULTS

METHOD DET. LIMIT: 0.1

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	200	4.07	814	01/07/93	01/07/93	20		
3488-02	100	10.38	1038	01/07/93	01/07/93	10		
3488-01R	100	8.43	843	01/07/93	01/07/93	10		3.5
3488-01S	200	9.19	1838	01/07/93	01/07/93	20	102	

FLUORIDE RESULTS

METHOD DET. LIMIT: 0.02

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	0.39	1.95	01/07/93	01/07/93	0.10		
3488-02	10	0.24	2.40	01/07/93	01/07/93	0.20		
3488-01R	5	0.39	1.95	01/07/93	01/07/93	0.10		NC
3488-01S	10	0.78	7.8	01/07/93	01/07/93	0.20	59	

LIFETIME
VALIDATED
By H & RWC JAN 22 1993
Initial

DATA

ANIONS ANALYSIS BENCHSHEET

LABORATORY: S-CUBED
ANALYST: EA
CHARGE #: 32359-63

LOT #: 3488
FILE #: AMI3488
DISK #: AMI1123

UNIT: MG/L

SAMPLE TYPE: WATER

CHLORIDE RESULTS

METHOD DET. LIMIT: 0.02

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	1.78	8.90	01/07/93	01/07/93	0.10		
3488-02	10	1.48	14.80	01/07/93	01/07/93	0.20		
3488-01	5	1.84	9.20	01/07/93	01/07/93	0.10		2.9
3488-01	10	1.9	19.00	01/07/93	01/07/93	0.20	101	

NITRITE RESULTS

METHOD DET. LIMIT: 0.04

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	< 0.04	< 0.2	01/07/93	01/07/93	0.20		
3488-02	10	< 0.04	< 0.4	01/07/93	01/07/93	0.40		
3488-01R	5	< 0.04	< 0.2	01/07/93	01/07/93	0.20		NC
3488-01S	10	0.96	9.60	01/07/93	01/07/93	0.40	96	

LIFETIME
VALIDATED

By H & RWC JAN 22 1993

mee
Initial

23

ANIONS ANALYSIS BENCHSHEET

LABORATORY: S-CURED
ANALYST: EA
CHARGE #: 32359-63

UNIT: MG/L

LOT #: 3488
FILE #: Ani 3488
DISK #: Ani 1123

SAMPLE TYPE: Water

BROMIDE RESULTS — METHOD DET. LIMIT: 0.1

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		
3488-02	10	< 0.1	< 1	01/07/93	01/07/93	1.00		
3488-01R	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		NC
3488-01S	10	4.66	46.60	01/07/93	01/07/93	1.00	93	

NITRATE RESULTS — METHOD DET. LIMIT: 0.1

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		
3488-02	10	< 0.1	< 1	01/07/93	01/07/93	1.00		
3488-01R	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		NC
3488-01S	10	4.99	49.90	01/07/93	01/07/93	1.00	100	

LIFETIME
VALIDATED
By H & RWC JAN 22 1993
Initial

[illegible] DATA
[illegible]

39

ANIONS ANALYSIS BENCHSHEET

LABORATORY: S-CURED
ANALYST: EA
CHARGE #: 32359-63

LOT #: 3488
FILE #: Ani 3483
DISK #: Ani 1123

UNIT: MG/L

SAMPLE TYPE: Water

PHOSPHATE RESULTS

METHOD DET. LIMIT: 0.1

LAB ID	DILUTION FACTOR	CONC. FOUND (MG/L)	FINAL CONC.	ANALYSIS DATE	PREP DATE	DETECTION LIMIT (MG/L)	%RECOVERY	RPD
3488-01	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		
3488-02	10	< 0.1	< 1	01/07/93	01/07/93	1.00		
3488-01R	5	< 0.1	< 0.5	01/07/93	01/07/93	0.50		NC
3488-01S	10	4.79	47.90	01/07/93	01/07/93	1.00	96	

LIFETIME
VALIDATED
By H & RWC JAN 22 1993
Initial

131

pH ANALYSIS

LABORATORY:	S-CUBED	DATA REVIEWER:	1/5/93
CLIENT:	WHC	PROJECT REVIEWER:	
LOT #:	3488	DATE SAMPLED:	12-22-92
CHARGE #:	32359-63	DATE RECEIVED:	12-24-92
DISK #:	PH0619	ANALYSIS DATE:	01-04-93

ANALYSIS: pH
TECHNIQUE: pH ELECTRODE
METHOD: E150.1
SAMPLE ALIQUOT: 50 mL
SAMPLE TYPE: NAL

SAMPLE ID	pH
3488-01	7.93
3488-02	7.10

All QC checks were acceptable

LIFETIME
VALIDATED
By H & RWC JAN 22 1995
MAE
Initial

Westinghouse
Hanford Company

Internal
Memo

From: Analytical Laboratory Coordination 12550-93-004
Phone: 2-2596 H4-23
Date: February 10, 1993
Subject: RETURN AND DISPOSAL OF SAMPLES SUBMITTED TO COMMERCIAL LABORATORIES

LIFETIME VALIDATED
By H&RWC FEB 16 1993
Initial

To: M. A. Green XO-35

cc: R. M. Jochen XO-35
J. A. Lerch H4-23
C. D. Lucas XO-35
G. C. Mooers H4-23
K. N. Pool H4-23
K. L. Silvers H4-23
F. H. Steen H4-23
L. D. Zuck H4-23
JAL File/LB

The Westinghouse Hanford Company (WHC) currently has four commercial laboratory contracts managed by the Hanford Analytical Services Management (HASM) function. All samples submitted to the subject commercial laboratories are to be returned to WHC for disposal by the 222-S laboratory (222-S). Requirements governing the return of samples to WHC are specified in the Statements of Work under which the contracts were awarded and include the following criteria:

1. The commercial laboratories must notify HASM in writing of their intent to return samples. This notification includes a list of all samples to be returned.

2. Approval to return samples to WHC must be received from HASM prior to shipment of the samples.

3. For WHC to properly receive and process returned sample residuals the following criteria must be met for each shipment:

   - All sample residuals shall have a Chain-of-Custody (COC) with seal tamper tape appropriately placed on each container. If the original COC has been returned with the data package, the Seller shall generate a COC for the residuals to be returned.

   - A complete inventory of all sample containers within the shipping container shall be provided with the shipment. The inventory shall include the number of containers that are identified with a single WHC identification number (e.g., HEIS number).

- All residual containers returned shall have WHC sample numbers on them. If a container is returned that was used as a sample mount (e.g., 500 ml Marinelli), the WHC identification number shall be on that container.

- Sample containers with legible markings or labels identifying the contents as radioactive contaminated shall be transported as radioactive material.

- Any sample material to be returned that is contaminated with radioactive materials in excess of the following limits shall be labeled as "radioactive":

  ≥ 60 pCi/gm (or ml) Alpha or

  ≥ 200 pCi/gm (or ml) Alpha + Beta + Gamma.

4. The commercial laboratories must meet all U.S. Department of Transportation packaging and shipping requirements for return of sample materials to WHC.

If you have any questions or need additional information, please contact Ms. F. H. Steen at 2-2495.

J. H. Kessner, Manager
Analytical Laboratory Coordination

nlj

LIFETIME
VALIDATED
By H&RWC FEB 16 1993
Initial

CONTAINER STATUS CHANGE FORM

(100N-91-0009)

To: Data Base

Container No.: 100N-91-000900

The following changes have been made to this container:

1. Class**: From N To H
2. Accumulation Date: From _____ To 1/23/91
3. Location: From _____ To _____
4. Drum Type/Size: From _____ To _____
5. Contents _____
6. CWDR No. WHC-005-93

Radiation Monitoring Section

Change in Radioactive Release: P-11 _____ Lab Results _____

Survey No. _____

Analytical No. _____

Change in Outer Container Labels: Initial

Radiation Sticker: Removed _____

Applied _____

LIFETIME VALIDATED MAR 03 1993 By H & RWC Initial

Change in Inner Container Labels: Initial

Radiation Sticker: Removed _____

Applied _____

HPT Signature _____ Date _____

Reasons for Status Change per SWO Phone Call 3/3/93

Date 3/3/93 *Name Patti Huff

*This person is responsible for a copy of this form to be sent to Administrative Control or any affected personnel ASAP.

**If any container changes RADIOLOGICAL status then the HPT will fill out the RADIATION MONITORING SECTION.

Distribution: White–Administrative Control Yellow–Distribution Pink–Originator Goldenrod–Administrative Control BC-6000-378 (08/90)