

START

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B07KK8-DAT-195



ENVIRONMENTAL WATER REPORT

Form EPRW-A
Page 1 of 3
Part 1 of 2

Date NOV 25 1992

Agency Identification Number S92-0840

Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan



Telephone (509) 373-3225

Sampling Collection and Shipment

Sampling Site 100-BC-5 Date of Collection October 27, 1992

Date Samples Received at Laboratory October 29, 1992

Analytical Results

Parameter Name	Field Number	Lab Number								
Analysis Date Units										
Method Prep Method										
Hydrazine		B07KK8		B07K53	B07KC3	B07KK3	B07KC8	B07K98	B07KB3	B07KL8
11/06/1992	µg/L	EL 4822	ND*	EL 4823	EL 4824	EL 4825	EL 4826	EL 4827	EL 4828	EL 4829
ASTMD1385										



† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
‡ Analyses completed on or before this date.

** Parameter not analyzed (See comment page).
() Parameter between LOD and LOQ.
[] Method Reference (See comments page.)

RECORD COPY

Mark Hix
Analyst: Mark A. Hixon

Wendy L. Odell
Reviewer: Wendy L. Odell

Norman K. Christensen
Laboratory Supervisor: Norman K. Christensen

9613420.1067



ENVIRONMENTAL WATER REPORT

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Part 2 of 2

Date NOV 25 1992
Agency Identification Number S92-0840
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

Telephone (509) 373-3225

Sampling Collection and Shipment

Sampling Site 100-BC-5 Date of Collection October 27, 1992

Date Samples Received at Laboratory October 29, 1992

Analytical Results

Parameter Name	Field Number	Lab Number							Limit of Detection	
Analysis Date Units										
Method Prep Method										
Hydrazine		B07KJ8		B07K88		B07KB8		B07KH8		
11/06/1992	µg/L	EL 4830	ND*	EL 4831	ND*	EL 4832	ND*	EL 4833	ND*	3.
ASTMD1385										

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
1 Analyses completed on or before this date.

** Parameter not analyzed (See comment page).
() Parameter between LOD and LOQ.
[] Method Reference (See comments page.)

9613420.1068



ENVIRONMENTAL WATER REPORT

Form EPRW-C

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Date NOV 25 1992
Agency Identification Number S92-0840

General Set Comments

Quality control sample target value = 80 µg/L.
Matrix spike added = 90 µg/L.

9613420.1069

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER
 Company Contact PH BUTCHER
 Project Designation/Sampling Locations 100-BC-5
 Ice Chest No. BE-2
 Bill of Lading/Airbill No. 250986 5475
 Method of Shipment EMERY
 Shipped to DATA CHEM
 Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
 Collection Date 10-23-92
 Field Logbook No. EFL-1037
 Offsite Property No. W93-0-0059-9

Sample Identification

BO 7KK8
 1, 40ml, G, WATER, HYDRAZINE (HC1)

<input type="checkbox"/> Field Transfer of Custody		Chain of Possession	(Sign and Print Names)
Relinquished by: <i>L. D. Walker</i> <i>L. D. Walker</i>	Received by: <i>Bill White B. WHITEN</i>	Date/Time: 10-28-92 0800	
Relinquished by: <i>Bill White B. WHITEN</i>	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 / 10-29-92 1200	
Relinquished by:	Received by:	Date/Time:	
Relinquished by:	Received by:	Date/Time:	
Final Sample Disposition			
Disposal Method:	Disposed by:	Date/Time:	
Comments:			

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Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER
 Company Contact PH BUTCHER
 Project Designation/Sampling Locations 100-BC-5
 Ice Chest No. BE-2
 Bill of Lading/Airbill No. ~~250966~~ 2509665875
 Method of Shipment EMERY
 Shipped to DATA CHEM
 Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
 Collection Date 10-23-92
 Field Logbook No. EFL-1037
 Offsite Property No. W93-0-0059-9

Sample Identification

B07K53
 1, 40ml, G, WATER, HYDRAZINE (HCl)

[] Field Transfer of Custody		Chain of Possession	(Sign and Print Names)
Relinquished by: L.P. Walker <i>L.P. Walker</i>	Received by: <i>[Signature]</i> B. WHITEN	Date/Time: 10-28-92 0800	
Relinquished by: <i>[Signature]</i> B. WHITEN	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 / 1000	
Relinquished by:	Received by:	Date/Time:	
Relinquished by:	Received by:	Date/Time:	
Final Sample Disposition			
Disposal Method:	Disposed by:	Date/Time:	
Comments:			

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Westinghouse Hanford Company	CHAIN OF CUSTODY
Custody Form Initiator PH BUTCHER	Telephone (509)376-5045
Company Contact PH BUTCHER	Collection Date 10-23-92
Project Designation/Sampling Locations 100-BC-5	Field Logbook No. EFL-1037
Ice Chest No. BE-2	Offsite Property No. W93-0-0059-9
Bill of Lading/Airbill No. 250986547J	
Method of Shipment EMERY	
Shipped to DATA CHEM	
Possible Sample Hazards/Remarks N/A	

Sample Identification

BO TKC3
1, 40ml, G, WATER, HYDRAZINE (HC1)

<input type="checkbox"/> Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L. D. Walker <i>L. D. Walker</i>	Received by: <i>[Signature]</i> B. WHITTEN	Date/Time: 10-28-92 0800
Relinquished by: <i>[Signature]</i> B. WHITTEN	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 1200
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition		
Disposal Method:	Disposed by:	Date/Time:
Comments:		

9813420.1072

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER
 Company Contact PH BUTCHER
 Project Designation/Sampling Locations 100-BC-5
 Ice Chest No. BE-7
 Bill of Lading/Airbill No. 2509865675
 Method of Shipment EMERY
 Shipped to DATA CHEM
 Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
 Collection Date 10-23-92
 Field Logbook No. EFL-1037
 Offsite Property No. W93-0-0059-9

Sample Identification

BO 7KK3
 1, 40ml, G, WATER, HYDRAZINE (HCl)

[] Field Transfer of Custody		Chain of Possession	(Sign and Print Names)
Relinquished by: <i>L.D. Walker</i> <i>L.D. Walker</i>	Received by: <i>[Signature]</i> <i>B. WHITTEN</i>	Date/Time: <i>10-28-92 0800</i>	
Relinquished by: <i>[Signature]</i> <i>B. WHITTEN</i>	Received by: <i>[Signature]</i>	Date/Time: <i>10-29-92 1200</i>	
Relinquished by:	Received by:	Date/Time:	
Relinquished by:	Received by:	Date/Time:	
Final Sample Disposition			
Disposal Method:	Disposed by:	Date/Time:	
Comments:			

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Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Project Designation/Sampling Locations 100-BC-5

Ice Chest No. DE-7

Bill of Lading/Airbill No. 2509865875

Method of Shipment EMERY

Shipped to DATA CHEM

Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045

Collection Date 10/23/92

Field Logbook No. EFL 1036

Offsite Property No. W93-O-0059-9

Sample Identification

BO 7KCB

1, 40ml, G, WATER, HYDRAZINE (HC1)

[] Field Transfer of Custody		Chain of Possession	(Sign and Print Names)
Relinquished by: <i>Robert G. Hamilton</i>	Received by: <i>Phil Whitten</i>	B. WHITTEN	Date/Time: 10-28-92 0800
Relinquished by: <i>Phil Whitten</i>	Received by: <i>[Signature]</i>		Date/Time: 10-29-92 /1200
Relinquished by:	Received by:		Date/Time:
Relinquished by:	Received by:		Date/Time:
Final Sample Disposition			
Disposal Method:	Disposed by:		Date/Time:
Comments:			

9813420.1074 B9-2

Westinghouse Hanford Company	CHAIN OF CUSTODY
---------------------------------	-------------------------

Custody Form Initiator PH BUTCHER	Telephone (509)376-5045
Company Contact PH BUTCHER	Collection Date 10-27-92
Project Designation/Sampling Locations 100-BC-5	Field Logbook No. EFL-1037
Ice Chest No. DE-2	Offsite Property No. W93-0-0059-9
Bill of Lading/Airbill No. 2509865875	
Method of Shipment EMERY	
Shipped to DATA CHEM	
Possible Sample Hazards/Remarks N/A	

Sample Identification

BO 7K98
1, 40ml, G, WATER, HYDRAZINE (HC1)

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker <i>L.D. Walker</i>	Received by: <i>Bill A. Whitton</i> B. WHITTON	Date/Time: 10-28-92 0800
Relinquished by: <i>Bill A. Whitton</i> B. WHITTON	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 /1200
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition		
Disposal Method:	Disposed by:	Date/Time:
Comments:		

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69-3

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER
 Company Contact PH BUTCHER
 Project Designation/Sampling Locations 100-BC-5
 Ice Chest No. BE-2
 Bill of Lading/Airbill No. 2509865875
 Method of Shipment EMERY
 Shipped to DATA CHEM
 Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
 Collection Date 10-27-92
 Field Logbook No. EFL-1037
 Offsite Property No. W93-0-0059-9

Sample Identification

BO7K B3
 1, 40ml, G, WATER, HYDRAZINE (HCl)

[] Field Transfer of Custody		Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker <i>L.D. Walker</i>	Received by: <i>Phil Walker</i> B. WALKER	Date/Time: 10-28-92 0800	
Relinquished by: <i>Phil Walker</i> B. WALKER	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 /1200	
Relinquished by:	Received by:	Date/Time:	
Relinquished by:	Received by:	Date/Time:	

Final Sample Disposition		
Disposal Method:	Disposed by:	Date/Time:
Comments:		

9813420.1076 SP-2 B4-5

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER
Company Contact PH BUTCHER
Project Designation/Sampling Locations 100-BC-5
Ice Chest No. BE-2
Bill of Lading/Airbill No. 2509865875
Method of Shipment EMERY
Shipped to DATA CHEM
Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
Collection Date 10-26-92
Field Logbook No. EFL-1037
Offsite Property No. W93-O-0059-9

Sample Identification

BO7KL8
1, 40ml, G, WATER, HYDRAZINE (HCl)

[] Field Transfer of Custody		Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker <i>L.D. Walker</i>	Received by: <i>[Signature]</i> B. WHITTEN	Date/Time: 10-28-92 0800	
Relinquished by: <i>[Signature]</i> B. WHITTEN	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 / 1200	
Relinquished by:	Received by:	Date/Time:	
Relinquished by:	Received by:	Date/Time:	

Final Sample Disposition		
Disposal Method:	Disposed by:	Date/Time:
Comments:		

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B-45

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER
Company Contact PH BUTCHER
Project Designation/Sampling Locations 100-BC-5
Ice Chest No. BE-2
Bill of Lading/Airbill No. 2509865875
Method of Shipment EMERY
Shipped to DATA CHEM
Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
Collection Date 10-26-82
Field Logbook No. EFL-1037
Offsite Property No. W93-0-0059-9

Sample Identification

BO 7KJ9
1, 40ml, G, WATER, HYDRAZINE (HCl)

Field Transfer of Custody		Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker <i>L.D. Walker</i>	Received by: <i>Bill Whitten</i> B. WHITTEN	Date/Time: 10-28-82 0800	
Relinquished by: <i>Bill Whitten</i> B. WHITTEN	Received by: <i>[Signature]</i>	Date/Time: 10-29-82 1200	
Relinquished by:	Received by:	Date/Time:	
Relinquished by:	Received by:	Date/Time:	
Final Sample Disposition			
Disposal Method:	Disposed by:	Date/Time:	
Comments:			

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B4-5

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 10-26-92

Ice Chest No. DE-2

Field Logbook No. EFL-1037

Bill of Lading/Airbill No. 2509865675

Offsite Property No. W93-0-0059-9

Method of Shipment EMERY

Shipped to DATA CHEM

Possible Sample Hazards/Remarks N/A

Sample Identification

BO 7K88

1, 40ml, G, WATER, HYDRAZINE (HC1)

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

Relinquished by: L. D. Walker <i>L. D. Walker</i>	Received by: <i>[Signature]</i> B. WHITE	Date/Time: 10-28-92 0800
Relinquished by: <i>[Signature]</i> B. WHITE	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 / 1200
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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Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER
Company Contact PH BUTCHER
Project Designation/Sampling Locations 100-BC-5
Ice Chest No. BE-7
Bill of Lading/Airbill No. 2509865875
Method of Shipment EMERY
Shipped to DATA CHEM
Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
Collection Date 10-26-92
Field Logbook No. EFL-1037
Offsite Property No. W93-0-0059-9

Sample Identification

BO 7K88
1, 40ml, G, WATER, HYDRAZINE (HCl)

<input type="checkbox"/> Field Transfer of Custody		Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker <i>L.D. Walker</i>	Received by: <i>[Signature]</i> B. WHITTEN	Date/Time: 10-28-92 0800	
Relinquished by: <i>[Signature]</i> B. WHITTEN	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 1200	
Relinquished by:	Received by:	Date/Time:	
Relinquished by:	Received by:	Date/Time:	
Final Sample Disposition			
Disposal Method:	Disposed by:	Date/Time:	
Comments:			

9613420.1080 84-7

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 10-26-92

Ice Chest No. BE-2

Field Logbook No. EFL-1037

Bill of Lading/Airbill No. 2509865875

Offsite Property No. W93-0-0059-9

Method of Shipment EMERY

Shipped to DATA CHEM

Possible Sample Hazards/Remarks N/A

Sample Identification

BO 7KJ8
1, 40ml, G, WATER, HYDRAZINE (HCl)

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

Relinquished by: L. D. Walker <i>L. D. Walker</i>	Received by: <i>PH BUTCHER</i> PH BUTCHER	Date/Time: 10-28-92 0800
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Relinquished by: <i>PH BUTCHER</i> PH BUTCHER	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 / 1200
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Relinquished by:	Received by:	Date/Time:
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Relinquished by:	Received by:	Date/Time:
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Final Sample Disposition

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



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ANALYTICAL REQUEST FORM

1. **REGULAR Status**

RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____ DATE _____

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES.

2. Date 10-28-92 Purchase Order No. _____

3. Company Name WESTING HOUSE

Address _____

Person to Contact P.H BUTCHER

Telephone (509) 276-5045

Fax Telephone () _____

Billing Address (if different from above) _____

4. **Sample Collection**

Sampling Site 100-BC-5

Industrial Process _____

Date of Collection 10-27-92

Time Collected _____

Date of Shipment 10-28-92

Chain of Custody No. _____

5. **REQUEST FOR ANALYSES**

Laboratory Use Only	Client Sample Number	Media Type*	Sample Volume (Liters)	ANALYSES REQUESTED - Use Method Number if Known
EL 4822	B07KK8	W	40 ML	HYDRAZINE (HCL)
4823	B07K53			
4824	B07KC3			
4825	B07KK3			
4826	B07KC8			
4827	B07K98			
4828	B07KB3			
4829	B07KL8			
4830	B07KJ8			
4831	B07K88			
4832	B07KB8			
4833	B07KH8	✓	✓	✓

*Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk Sample; Blood; Urine; Tissue; Soil; Water; Other

6. **QC REQUIREMENTS**

MUST BE COMPLETED - See General Services Terms and Conditions: QC samples billed at regular sample rate

METHOD QC SAMPLES

(Lab QC according to published methods)

PROJECT PLAN QC SAMPLES

(Lab QC according to provided QA/QC Plan)

NO QC SAMPLES REQUESTED

(May not conform to Agency requirements)

OTHER (as specified below)

Comments _____

Possible Contamination and/or Chemical Hazards _____

7. Requested by _____

960 West LeVoy Drive / Salt Lake City, UT 84123
4388 Glendale-Milford Road / Cincinnati, OH 45242

800-356-9135 or 801-266-7700 / FAX: 801-268-9992
800-458-1493 or 513-733-5336 / FAX: 513-733-5347

DATACHEM LABORATORIES - A SORENSON COMPANY

DISTRIBUTION:

WHITE - LABORATORY COPY

CANARY - CUSTOMER COPY

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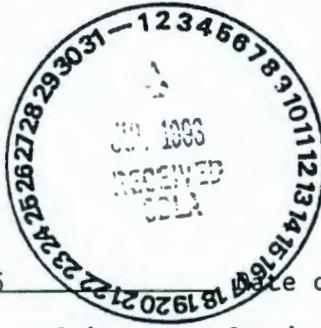


ENVIRONMENTAL WATER REPORT

Form EPRW-A
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Part 1 of 2

Date _____
Agency Identification Number S92-0840
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan



Telephone (509) 373-3225

Sampling Collection and Shipment

Sampling Site 100-BC-5 Date of Collection October 27, 1992
Date Samples Received at Laboratory October 29, 1992

Analytical Results

Parameter Name	Field Number	Lab Number															
Analysis Date Units																	
Method Prep Method																	
Hydrazine		B07KK8	EL 4822	B07K53	EL 4823	B07KC3	EL 4824	B07KK3	EL 4825	B07KC8	EL 4826	B07K98	EL 4827	B07KB3	EL 4828	B07KL8	EL 4829
11/06/1992																	
ASTMD1385	µg/L	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
! Analyses completed on or before this date.

** Parameter not analyzed (See comment page).
() Parameter between LOD and LOQ.
[] Method Reference (See comments page.)

Mark Hix
Analyst: Mark A. Hix
Wendy L. Odell
Reviewer: Wendy L. Odell

Laboratory Supervisor: Norman K. Christensen



ENVIRONMENTAL WATER REPORT

Form EPRW-A
 Page 2 of 3
 Part 2 of 2

Date _____
 Agency Identification Number S92-0840 _____
 Account No. 3534C _____

Westinghouse Hanford Company
 2355 Stevens Drive
 MSIN T6-08
 Richland, WA 99352
 Attention: Jeanette Duncan

Telephone (509) 373-3225

Sampling Collection and Shipment

Sampling Site 100-BC-5 _____ Date of Collection October 27, 1992 _____

Date Samples Received at Laboratory October 29, 1992 _____

Analytical Results

Parameter Name	Analysis Date	Units	Method	Prep Method	Field Number	Lab Number	Limit of Detection
Hydrazine	11/06/1992	µg/L	ASTMD1385		B07KJ8	EL 4830	1
					B07K88	EL 4831	
					B07KB8	EL 4832	
					B07KH8	EL 4833	

† See comment on last page.
 ND Parameter not detected.
 NR Parameter not requested.
 † Analyses completed on or before this date.

** Parameter not analyzed (See comment page).
 () Parameter between LOD and LOQ.
 [] Method Reference (See comments page.)

9613420.1084



ENVIRONMENTAL WATER REPORT

Form EPRW-C

Page 3 of 3

Date _____

Agency Identification Number S92-0840 _____

General Set Comments

Quality control sample target value = 80 µg/L.
Matrix spike added = 90 µg/L.

DATA QUALIFICATION SUMMARY

UNIT: 100-BC-5

DOCUMENT CONTROL NUMBER: WHC-SD-EN-TI-139

ANALYSES: Wet Chemistry

RFW NO.: B07KK8-DAT-195

SDG NO.: B07K53

QUALIFICATION SUMMARY:WET CHEMISTRY

SAMPLE NUMBERS: B07K53, B07K88, B07K98, B07KB3, B07KB8,
B07KC3, B07KC8, B07KH8, B07KJ8, B07KK3,
B07KK8, B07KL8

DATA PACKAGE COMPLETENESS

Hydrazine results in SDG No. B07K53 were rejected and flagged "R" due to the lack of sufficient analytical data.

WET CHEMISTRY DATA VALIDATION CHECKLIST - FORM A-7

PROJECT: Westinghouse	REVIEWER: SC	DATE: 12-23-92
LABORATORY: Data Chem	CASE:	SDG: B07KB8 53
SAMPLES/MATRIX: water, B07KK8, B07K53, B07KC3		
B07KK3, B07KC8, B07K98, B07KB3, B07KL8		
B07KJ8, B07KB8, B07KT8		

1. DATA PACKAGE COMPLETENESS No Raw Data Submitted

Review the data package for completeness and check off the items below. If any data review elements are missing contact the laboratory for submittal of the omitted data.

Data Package Item	Present?:	Yes	No	N/A
Case Narrative	—	—	✓	—
Cover Page	—	—	✓	—
Traffic Reports/Chain-of-Custody	—	✓	✓	—
Sample Analysis Data Report Forms	—	✓	✓	—
Standards Data	—	—	✓	—
QC Summary				
Blanks Summary Report Forms	—	—	✓	—
Spike Sample Recovery Report Forms	—	—	✓	—
Duplicate Sample Analysis Report Forms	—	—	✓	—
Laboratory Control Sample Report Forms	—	—	✓	—
Raw Data				
Ion Chromatograph Chromatograms	—	—	✓	—
TOC and TOX Instrument Printouts	—	—	✓	—
Laboratory Bench Sheets	—	—	✓	—
Additional Data				
Laboratory Sample Preparation Logs	—	—	✓	—
Instrument Run Logs	—	—	✓	—
Internal Laboratory Chain-of-Custody	—	✓	✓	—
Percent Solids Analysis Records	—	—	✓	—
Reduction Formulae	—	—	✓	—
Chemist Notebook Pages	—	—	✓	—

2. HOLDING TIMES

Were all samples analyzed within holding times? Yes No N/A

Action: If any holding times were exceeded qualify all affected results as estimated (J for detects and UJ for non-detects).

3. INITIAL CALIBRATIONS

Were all instruments calibrated daily, each set-up time and were the proper number of standards used?

Yes No N/A

Are the correlation coefficients ≥ 0.995 ?

Yes No N/A

Was a balance check conducted prior to the TDS analysis?

Yes No N/A

Was the titrant normality checked?

Yes No N/A

ACTION: Qualify all data as unusable (R) if reported from an analysis in which the above criteria were not met.

4. INITIAL AND CONTINUING CALIBRATION VERIFICATION

Have ICV and CCV been analyzed at the proper frequency?

Yes No N/A

Are ICV and CCV percent recoveries within control?

Yes No N/A

Are there calculation errors?

Yes No N/A

ACTION: Qualify all affected data in accordance with the validation requirements.

5. LABORATORY BLANKS

Are target analytes present in the laboratory blanks?

Yes No N/A

ACTION: Qualify all associated sample results for any analyte $< 5X$ the amount in any laboratory blank as non-detected (U) and list the affected samples and analytes below.

6. FIELD BLANKS

Are target analytes present in the field blanks?

Yes No N/A

ACTION: Qualify all sample results for any analyte $< 5X$ the amount in any valid field blank as non-detected (U).

7. MATRIX SPIKE SAMPLE ANALYSIS

Are spike recoveries within the acceptance limits?

Yes No N/A

ACTION: If the sample concentration exceeds the spike concentration by a factor of 4 or more, and spike recoveries are outside the acceptance limits, no qualification is necessary. If spike recovery is outside the control limits and the sample results are greater than the CRQL, qualify the data as estimated (J). If the spike recovery is less than 30% and the sample results are less than the IDL qualify the data as unusable (R).

13. ANALYTE QUANTITATION AND DETECTION LIMITS

Have results been reported and calculated correctly?

Yes No **N/A**

Are instrument detection limits below the CRDL?

Yes No **N/A**

Action: If analyte quantitation is in error, contact the laboratory for explanation. If errors or deficiencies can not be resolved with the laboratory, qualify associated data as unusable (R).

14. OVERALL ASSESSMENT AND SUMMARY

Has the laboratory conducted the analysis in accordance with the analytical SOW?

Yes No **N/A**

Were project specific data quality objectives met for this analysis?

Yes No **N/A**

ACTION: Summarize all the data qualifications and complete the data validation narrative as specified in Section 10 of the data validation requirements.

COMMENTS (attach additional sheets as necessary): _____

no raw data submitted w/ the package

9613420.1091



ENVIRONMENTAL WATER REPORT

Form EPRW-A
Page 1 of 3
Part 1 of 2

NOV 25 1992

Date _____
Agency Identification Number S92-0840
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan



Telephone (509) 373-3225

Sampling Collection and Shipment

Sampling Site 100-BC-5 Date of Collection October 27, 1992

Date Samples Received at Laboratory October 29, 1992

216193 SC

Analytical Results

Parameter Name	Field Number	Lab Number	B07KK8	B07K53	B07KC3	B07KK3	B07KC8	B07K98	B07KB3	B07KL8
Hydrazine			EL 4822	EL 4823	EL 4824	EL 4825	EL 4826	EL 4827	EL 4828	EL 4829
11/06/1992										
Method	Prep Method									
ASTMD1385	µg/L		ND*							
			3U	3U						

† See comment on last page. ** Parameter not analyzed (See comment page).
ND Parameter not detected. () Parameter between LOD and LOQ.
NR Parameter not requested. [] Method Reference (See comments page.)
‡ Analyses completed on or before this date.

RECORD COPY

Analyst: Mark A. Hixon
Reviewer: Wendy L. Odell
Laboratory Supervisor: Norman K. Christensen

9613420.1092



ENVIRONMENTAL WATER REPORT

Form EPRW-A
Page 2 of 3
Part 2 of 2

Date Nov 25 1992
Agency Identification Number S92-0840
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

Telephone (509) 373-3225

Sampling Collection and Shipment

Sampling Site 100-BC-5 Date of Collection October 27, 1992

Date Samples Received at Laboratory October 29, 1992

216193 SC

Analytical Results

Parameter Name	Analysis Date	Units	Method	Prep Method	Field Number Lab Number	B07KJ8 EL 4830	B07K88 EL 4831	B07K88 EL 4832	B07KH8 EL 4833	Limit of Detection
Hydrazine	11/06/1992	µg/L	ASTMD1385			ND* 3M	ND*	ND*	ND*	3.

† See comment on last page.
 ND Parameter not detected.
 NR Parameter not requested.
 † Analyses completed on or before this date.
 ** Parameter not analyzed (See comment page).
 () Parameter between LOD and LOQ.
 [] Method Reference (See comments page.)

9613420.1093

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 10-23-92

Ice Chest No. BE-2

Field Logbook No. EFL-1037

Bill of Lading/Airbill No. 250986 5475

Offsite Property No. W93-0-0059-9

Method of Shipment EMERY

Shipped to DATA CHEM

Possible Sample Hazards/Remarks N/A

Sample Identification

BO 7KK8

1, 40ml, G, WATER, HYDRAZINE (HC1)

<input type="checkbox"/> Field Transfer of Custody		Chain of Possession	(Sign and Print Names)
Relinquished by: <i>L. D. Walker</i> <i>L. D. Walker</i>	Received by: <i>B. Whitten</i> <i>B. WHITTEN</i>	Date/Time: 10-28-92 0800	
Relinquished by: <i>B. Whitten</i> <i>B. WHITTEN</i>	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 / 1200	
Relinquished by:	Received by:	Date/Time:	
Relinquished by:	Received by:	Date/Time:	
Final Sample Disposition			
Disposal Method:	Disposed by:	Date/Time:	
Comments:			

9613420.1094

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 10-23-92

Ice Chest No. BE-2

Field Logbook No. EFL-1037

Bill of Lading/Airbill No. ~~25846~~ 2509665875

Offsite Property No. W93-0-0059-9

Method of Shipment EMERY

Shipped to DATA CHEM

Possible Sample Hazards/Remarks N/A

Sample Identification

B07K53

1, 40ml, G, WATER, HYDRAZINE (HC1)

 Field Transfer of Custody

Chain of Possession

(Sign and Print Names)

Relinquished by: L.P. Walker

Received by:

Date/Time:

*L.P. Walker**Bill Whitte B. WHITTE*

10-28-92 0800

Relinquished by:

Received by:

Date/Time:

*Bill Whitte B. WHITTE**[Signature]*

10-29-92 / 1000

Relinquished by:

Received by:

Date/Time:

Relinquished by:

Received by:

Date/Time:

Final Sample Disposition

Disposal Method:

Disposed by:

Date/Time:

Comments:

9813420.1095

Westinghouse Hanford Company	CHAIN OF CUSTODY
Custody Form Initiator PH BUTCHER	
Company Contact PH BUTCHER	Telephone (509)376-5045
Project Designation/Sampling Locations 100-BC-5	Collection Date 10-23-92
Ice Chest No. DE-2	Field Logbook No. EFL-1037
Bill of Lading/Airbill No. 2509865675	Offsite Property No. W93-0-0059-9
Method of Shipment EMERY	
Shipped to DATA CHEM	
Possible Sample Hazards/Remarks N/A	

Sample Identification

BO 7KC3
1, 40ml, G, WATER, HYDRAZINE (HC1)

<input type="checkbox"/> Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L. D. Walker <i>L. D. Walker</i>	Received by: <i>[Signature]</i> B. WHITTEN	Date/Time: 10-28-92 0805
Relinquished by: <i>[Signature]</i> B. WHITTEN	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 /1200
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:
Final Sample Disposition		
Disposal Method:	Disposed by:	Date/Time:
Comments:		

9613420.1096

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Project Designation/Sampling Locations 100-BC-5

Ice Chest No. BE-2

Bill of Lading/Airbill No. 2509865875

Method of Shipment EMERY

Shipped to DATA CHEM

Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045

Collection Date 10-23-92

Field Logbook No. EFL-1037

Offsite Property No. W93-0-0059-9

Sample Identification

BO 7KK3

1, 40ml, G, WATER, HYDRAZINE (HC1)

[] Field Transfer of Custody		Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker <i>L.D. Walker</i>	Received by: <i>Phillip Walker</i> B. WHITTEN	Date/Time: 10-28-92 0800	
Relinquished by: <i>Phillip Walker</i> B. WHITTEN	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 1200	
Relinquished by:	Received by:	Date/Time:	
Relinquished by:	Received by:	Date/Time:	
Final Sample Disposition			
Disposal Method:	Disposed by:	Date/Time:	
Comments:			

9613420.1097

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER
 Company Contact PH BUTCHER
 Project Designation/Sampling Locations 100-BC-5
 Ice Chest No. DE-7
 Bill of Lading/Airbill No. 2509865875
 Method of Shipment EMERY
 Shipped to DATA CHEM
 Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
 Collection Date 10/23/92
 Field Logbook No. EFL 1036
 Offsite Property No. W93-O-0059-9

Sample Identification

BO 7KCB
 1, 40ml, G, WATER, HYDRAZINE (HC1)

<input type="checkbox"/> Field Transfer of Custody		Chain of Possession	(Sign and Print Names)
Relinquished by: <i>GG Hamilton</i>	Received by: <i>B. WHITTEN</i>		Date/Time: 10-28-92 0800
Relinquished by: <i>B. WHITTEN</i>	Received by: <i>[Signature]</i>		Date/Time: 10-29-92 / 1200
Relinquished by:	Received by:		Date/Time:
Relinquished by:	Received by:		Date/Time:
Final Sample Disposition			
Disposal Method:	Disposed by:		Date/Time:
Comments:			

9613420.1098 B9-2

Westinghouse Hanford Company	CHAIN OF CUSTODY
---	-------------------------

Custody Form Initiator PH BUTCHER	Telephone (509)376-5045
Company Contact PH BUTCHER	Collection Date 10-27-92
Project Designation/Sampling Locations 100-BC-5	Field Logbook No. EFL-1037
Ice Chest No. DE-2	Offsite Property No. W93-D-0059-7
Bill of Lading/Airbill No. 2509865875	
Method of Shipment EMERY	
Shipped to DATA CHEM	
Possible Sample Hazards/Remarks N/A	

Sample Identification

BO 7K98
1, 40ml, G, WATER, HYDRAZINE (HC1)

<input type="checkbox"/> Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
--	---------------------	------------------------

Relinquished by: L.D. Walker <i>L.D. Walker</i>	Received by: <i>[Signature]</i> B. WATSON	Date/Time: 10-28-92 0800
Relinquished by: <i>[Signature]</i> B. WATSON	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 /1200
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

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

9613420.1099
B9-3

Westinghouse Hanford Company **CHAIN OF CUSTODY**

Custody Form Initiator PH BUTCHER	Telephone (509)376-5045
Company Contact PH BUTCHER	Collection Date 10-27-92
Project Designation/Sampling Locations 100-BC-5	Field Logbook No. EFL-1037
Ice Chest No. BE-2	Offsite Property No. W93-0-0059-9
Bill of Lading/Airbill No. 2509865475	
Method of Shipment EMERY	
Shipped to DATA CHEM	
Possible Sample Hazards/Remarks N/A	

Sample Identification

BO7K83
1, 40ml, G, WATER, HYDRAZINE (HC1)

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

Relinquished by: <i>L.D. Walker</i> <i>L.D. Walker</i>	Received by: <i>Phil Walker</i> B. WALKER	Date/Time: 10-28-92 0800
Relinquished by: <i>Phil Walker</i> B. WALKER	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 /1200
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

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

9613420.1100

SP-2 B4-5

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 10-26-92

Ice Chest No. BE-2

Field Logbook No. EFL-1037

Bill of Lading/Airbill No. 2509865875

Offsite Property No. W93-O-0059-9

Method of Shipment EMERY

Shipped to DATA CHEM

Possible Sample Hazards/Remarks N/A

Sample Identification

BO7KL8

1, 40ml, G, WATER, HYDRAZINE (HC1)

 Field Transfer of Custody

Chain of Possession

(Sign and Print Names)

Relinquished by: L. D. Walker

Received by:

Date/Time:

LD Walker

[Signature] B. C. WITTEN

10-28-92 0800

Relinquished by:

Received by:

Date/Time:

[Signature] B. C. WITTEN

[Signature]

10-29-92 / 1200

Relinquished by:

Received by:

Date/Time:

Relinquished by:

Received by:

Date/Time:

Final Sample Disposition

Disposal Method:

Disposed by:

Date/Time:

Comments:

9813420 1101
B-5

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 10-26-92

Ice Chest No. BE-2

Field Logbook No. EFL-1037

Bill of Lading/Airbill No. 2509865875

Offsite Property No. W93-0-0059-9

Method of Shipment EMERY

Shipped to DATA CHEM

Possible Sample Hazards/Remarks N/A

Sample Identification

BO 7KJ9

1, 40ml, G, WATER, HYDRAZINE (HCl)

[] Field Transfer of Custody		Chain of Possession	(Sign and Print Names)
Relinquished by: <i>L.D. Walker</i> <i>L.D. Walker</i>	Received by: <i>Bill Whitton</i> <i>B. WHITTON</i>	Date/Time: 10-28-92 0800	
Relinquished by: <i>Bill Whitton</i> <i>B. WHITTON</i>	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 1200	
Relinquished by:	Received by:	Date/Time:	
Relinquished by:	Received by:	Date/Time:	

Final Sample Disposition		
Disposal Method:	Disposed by:	Date/Time:
Comments:		

9613420 1102
B9-5

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 10-26-92

Ice Chest No. DE-2

Field Logbook No. EFL-1037

Bill of Lading/Airbill No. 2509865675

Offsite Property No. W93-0-0059-9

Method of Shipment EMERY

Shipped to DATA CHEM

Possible Sample Hazards/Remarks N/A

Sample Identification

BO 7K88

1, 40ml, G, WATER, HYDRAZINE (HC1)

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

Relinquished by: L. D. Walker <i>L. D. Walker</i>	Received by: <i>[Signature]</i> B. WHITE	Date/Time: 10-28-92 0800
Relinquished by: <i>[Signature]</i> B. WHITE	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 / 1200
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

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

9813420-38036

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 10-26-92

Ice Chest No. BE-7

Field Logbook No. EFL-1037

Bill of Lading/Airbill No. 2509865875

Offsite Property No. W93-D-0059-9

Method of Shipment EMERY

Shipped to DATA CHEM

Possible Sample Hazards/Remarks N/A

Sample Identification

BO 71C88

1, 40ml, G, WATER, HYDRAZINE (HC1)

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

Relinquished by: L.D. Walker <i>L.D. Walker</i>	Received by: <i>PH Butcher</i> B. WHITTON	Date/Time: 10-28-92 0800
Relinquished by: <i>PH Butcher</i> B. WHITTON	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 / 1200
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

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

9813420.1104 B4-1

Westinghouse
Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 10-26-92

Ice Chest No. BE-2

Field Logbook No. EFL-1037

Bill of Lading/Airbill No. 2509865875

Offsite Property No. W93-0-0059-9

Method of Shipment EMERY

Shipped to DATA CHEM

Possible Sample Hazards/Remarks N/A

Sample Identification

BO 7K H8
1, 40ml, G, WATER, HYDRAZINE (HCl)

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

Relinquished by: L. D. Walker <i>L. D. Walker</i>	Received by: <i>Neil D. Whitten</i> D. WHITTEN	Date/Time: 10-28-92 0800
Relinquished by: <i>Neil D. Whitten</i> D. WHITTEN	Received by: <i>[Signature]</i>	Date/Time: 10-29-92 / 1200
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

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

9613420.1105

ANALYTICAL REQUEST FORM



1. REGULAR Status

RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____ DATE _____

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES.

2. Date 10-28-92 Purchase Order No. _____

3. Company Name WESTING HOUSE

Address _____

Person to Contact P.H. BUTCHER

Telephone (504) 276-5045

Fax Telephone () _____

Billing Address (if different from above) _____

4. Sample Collection

Sampling Site 100-BC-5

Industrial Process _____

Date of Collection 10-27-92

Time Collected _____

Date of Shipment 10-28-92

Chain of Custody No. _____

5. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Media Type*	Sample Volume (Liters)	ANALYSES REQUESTED - Use Method Number if Known
EL 4822	B07KK8	W	40 ML	HYDRAZINE (HCL)
4823	B07K53			
4824	B07KC3			
4825	B07KK3			
4826	B07KC8			
4827	B07K98			
4828	B07KB3			
4829	B07KL8			
4830	B07KJ8			
4831	B07K88			
4832	B07KB8			
4833	B07KH8			

*Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk Sample; Blood; Urine; Tissue; Soil; Water; Other

6. Q C REQUIREMENTS
MUST BE COMPLETED - See General Services Terms and Conditions: QC samples billed at regular sample rate

- METHOD QC SAMPLES (Lab QC according to published methods)
- PROJECT PLAN QC SAMPLES (Lab QC according to provided QA/QC Plan)
- NO QC SAMPLES REQUESTED (May not conform to Agency requirements)
- OTHER (as specified below) _____

Comments _____

Possible Contamination and/or Chemical Hazards _____

7. Requested by _____

960 West LeVoy Drive / Salt Lake City, UT 84123 800-356-9135 or 801- 266-7700 / FAX: 801-268-9992
4388 Glendale-Milford Road / Cincinnati, OH 45242 800-458-1493 or 513-733-5336 / FAX: 513-733-5347

DATACHEM LABORATORIES - A SORENSON COMPANY

DISTRIBUTION: WHITE - LABORATORY COPY CANARY - CUSTOMER COPY