DATA CHEM LABORATORIES

START 9613404.0657

ENVIRONMENTAL SOIL REPORT

0043179

Date 7/21/92

Agency Identification Number S92-0428-EE

General Set Comments

Sample preparation consisted of 10 grams sample being extracted in 100 mL DDI water. Sample was filtered using a 0.45 micron syringe filter. (Alkalinity)

Sample preparation consisted of weighing 1.0 g of sample and adding 10 mL of anion eluent. The sample was then vortexed, sonicated for 10 min, and then vortexed again. The sample was filtered using a 0.45 micron syringe filter. (Sulfate, phospate, chloride, nitrite, and nitrate)

Sample preparation consisted of weighing 0.5 g of sample and adding 2.5 mL of 2M KCl solution. The sample was shaken for one hour, and then 47.5 mL of DDI water were added. The sample was filtered using a 0.45 micron syringe filter. (Nitrates)

Method Index -- **Method Reference** --

[1] EPA-600/4-79-020 "Methods for Chemical Analysis of Water and Wastes", March 1983 (Modified for use with soils.)

FEB 1996
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LDMC

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A Sorenson Company

9613404.0658

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

JUL 1992 RECEIVED OSM DMO

Date 7/8/92
Agency Identification Number S92-0428-AE
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 Yakima Barricade-429 Date of Collection June 16, 1992

Date Samples Received at Laboratory June 18, 1992

Analytical Results

Parameter Name / Analysis Date / Method / Prep Method	Units	Field Number / Lab Number	B06JC0 / EL 2418							* Limit of Detection
Aluminum (Al) 07/06/1992 6010 [1] 3050 [1]	µg/g		4200							5.
Antimony (Sb) 07/06/1992 6010 [1] 3050 [1]	µg/g		ND*							5.
Arsenic (As) 07/06/1992 6010 [1] 3050 [1]	µg/g		ND*							5.
Barium (Ba) 07/06/1992 6010 [1] 3050 [1]	µg/g		49.							1.
Beryllium (Be) 07/06/1992 6010 [1] 3050 [1]	µg/g		ND*							1.
Cadmium (Cd) 07/06/1992 6010 [1] 3050 [1]	µg/g		ND*							1.
Calcium (Ca) 07/06/1992 6010 [1] 3050 [1]	µg/g		2600							5.
Chromium (Cr) 07/06/1992 6010 [1] 3050 [1]	µg/g		10.							1.

* 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.)

Analyst: Laran J. Jensen

Reviewer: Robert R. Bowe

Laboratory Supervisor: Michael D. Beesley

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547 / (801) 266-7700
A Sorenson Company

9613404.0659

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date 7/8/92
Agency Identification Number S92-0428-AE
Account No. 3534C

Analytical Results

Parameter Name / Analysis Date / Method	Units / Prep Method	Field Number / Lab Number	B06JC0 EL 2418							* Limit of Detection
Cobalt (Co) 07/06/1992 6010 [1]	µg/g 3050 [1]		4.							1.
Copper (Cu) 07/06/1992 6010 [1]	µg/g 3050 [1]		9.							1.
Iron (Fe) 07/06/1992 6010 [1]	µg/g 3050 [1]		17000							1.
Lead (Pb) 07/06/1992 6010 [1]	µg/g 3050 [1]		ND*							5.
Lithium (Li) 07/06/1992 6010 [1]	µg/g 3050 [1]		ND*							5.
Magnesium (Mg) 07/06/1992 6010 [1]	µg/g 3050 [1]		2100							2.
Manganese (Mn) 07/06/1992 6010 [1]	µg/g 3050 [1]		250							1.
Molybdenum (Mo) 07/06/1992 6010 [1]	µg/g 3050 [1]		1.							1.
Nickel (Ni) 07/06/1992 6010 [1]	µg/g 3050 [1]		8.							1.
Phosphorus (P) 07/06/1992 6010 [1]	µg/g 3050 [1]		440							10
Potassium 07/06/1992 6010 [1]	µg/g 3050 [1]		430							20
Selenium (Se) 07/06/1992 6010 [1]	µg/g 3050 [1]		ND*							5.
Silver (Ag) 07/06/1992 6010 [1]	µg/g 3050 [1]		ND*							1.
Sodium (Na) 07/06/1992 6010 [1]	µg/g 3050 [1]		190							10
Strontium (Sr) 07/06/1992 6010 [1]	µg/g 3050 [1]		12.							1.

[1] 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 comments page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page).

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A Sorenson Company

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9613404.0660

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Form EPRS-B
Page 3 of 4
Part 1 of 1

Date 7/8/92
Agency Identification Number S92-0428-AE
Account No. 3534C

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	B06JC0 / EL 2418							* Limit of Detection
Thallium (Tl) 07/06/1992 µg/g 6010 [1] 3050 [1]		ND*							10
Vanadium (V) 07/06/1992 µg/g 6010 [1] 3050 [1]		35.							1.
Zinc (Zn) 07/06/1992 µg/g 6010 [1] 3050 [1]		25.							1.

* 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 comments page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page).

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DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date 7/3/92
Agency Identification Number S92-0428-AE

Method Index **-- Method Reference --**

[1] SW-846 "Test Methods for Evaluating Solid Waste", 3rd Edition, November 1986.

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9613404.0662

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Form EPRS-A
Page 1 of 2
Part 1 of 1

Date 7/15/92
Agency Identification Number S92-0428-BE
Account No. 3534C

JUL 1992 RECEIVED OSM DMO

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 Yakima Barricade-429 Date of Collection June 16, 1992

Date Samples Received at Laboratory June 18, 1992

Analytical Results

Parameter Name / Analysis Date / Method	Units / Prep Method	Field Number / Lab Number	B06JC0 / EL 2418							< Limit of Detection
Arsenic (As) 07/07/1992 7060 [1]	3050 [1]	µg/g	1.7							0.5
Lead (Pb) 07/08/1992 7421 [1]	3050 [1]	µg/g	1.5							0.4
Selenium (Se) 07/07/1992 7740 [1]	3050 [1]	µg/g	ND*							0.5
Thallium (Tl) 07/10/1992 7841 [1]	3050 [1]	µg/g	ND*							0.5

* 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.)

Tanya Cheklin
Analyst: Tanya Cheklin

Robert B. Copenhafer
Reviewer: Robert B. Copenhafer

Brent E. Stephens
Laboratory Supervisor: Brent E. Stephens

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A Sorenson Company

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DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date 7/15/92
Agency Identification Number S92-0428-BE

Method Index -- **Method Reference** --

[1] SW-846 "Test Methods for Evaluating Solid Waste", 3rd Edition, November 1986.

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9613404.0664

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Form EPRS-A
Page 1 of 2
Part 1 of 1

Date 7/10/92

Identification Number S92-0428-CE

Account No. 3534C

JUL 1992 RECEIVED OSM DMO

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 Yakima Barricade-429 Date of Collection June 16, 1992

Date Samples Received at Laboratory June 18, 1992

Analytical Results

Parameter Name / Analysis Date / Method / Prep Method	Units	Field Number / Lab Number	B06JC0 / EL 2418							* Limit of Detection
Mercury (Hg) 07/07/1992 7471 [1]	µg/g		ND*							0.05

* 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.)

Kristie Bitner
Analyst: Kristie F. Bitner

Reviewer: Jeffery S. Ward

Laboratory Supervisor: Brent E. Stephens

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9613404.0665

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date 7/10/92
Agency Identification Number S92-0428-CE

General Set Comments

Sample was spiked with 0.5 µg/g of mercury with 106% recovery.

Method Index -- **Method Reference** --

[1] SW-846 "Test Methods for Evaluating Solid Waste", 3rd Edition, November 1986.

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A Sorenson Company

2C

9613404.0666

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Form EPRS-A
Page 1 of 2
Part 1 of 1

Date 7/15/92
Agency Identification Number S92-0428-DE
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 Yakima Barricade-429 Date of Collection June 16, 1992

Date Samples Received at Laboratory June 18, 1992

Analytical Results

Parameter Name / Analysis Date / Method / Units / Prep Method	Field Number / Lab Number	B06JC0 EL 2418							* Limit of Detection
Sulfide (S) 07/01/1992 9030 [1]	mg/kg	ND*							5.

* 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.)

Shelly K Myers
Analyst: Shelly Myers

Rosemary H. Hanks
Reviewer: Rosemary H. Hanks

Norman K. Christensen
Laboratory Supervisor: Norman K. Christensen

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A Sorenson Company

26

9613404.0667

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date 7/15/92
Agency Identification Number S92-0428-DE

Method Index -- **Method Reference** --

[1] SW-846 "Test Methods for Evaluating Solid Waste", 3rd Edition, November 1986.

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A Sorenson Company

9613404.0668

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Form EPRS-A
Page 1 of 2
Part 1 of 1

Date 7/21/92
Agency Identification Number S92-0428-EE
Account No. 3534C

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

JUL 1992 RECEIVED GSM DMB

Telephone (509) 373-3225

Sampling Collection and Shipment

Sampling Site Yakima Barricade-429 Date of Collection June 16, 1992

Date Samples Received at Laboratory June 18, 1992

Analytical Results

Parameter Name / Analysis Date / Method / Prep Method	Units	Field Number / Lab Number	B06JC0 / EL 2418							Limit of Detection
Alkalinity ($CaCO_3$) 07/10/1992 310.2 [1]	µg/g		60							50
Sulfate (SO_4) 07/02/1992 300.0 [1]	µg/g		9.							2.
Phosphate (PO_4-P) 07/02/1992 300.0 [1]	µg/g		ND*							2.
Chloride (Cl) 07/02/1992 300.0 [1]	µg/g		3.							2.
Nitrite (NO_2-N) 07/02/1992 300.0 [1]	µg/g		0.8							0.7
Nitrate (NO_3-N) 07/02/1992 300.0 [1]	µg/g		ND*							0.5
Nitrates (NO_3-N + NO_2-N) 07/14/1992 353.2 [1]	µg/g		ND*							1.

† 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.)

Cynthia Adams
Analyst: Cynthia Adams

Dorene A. Riley
Reviewer: Dorene A. Riley

Norman L. Christensen for MPB
Laboratory Supervisor: Michael P. Beesley

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A Sorenson Company

9613404.0669

Document # _____

DATACHEM LABORATORIES NONCONFORMANCE REPORT

Directions: Fill in all information in the top box and briefly explain the nonconformance. Sign your name and make two copies. Distribute the green original to the DCIAC Section, one copy to your Section Manager, and one copy to the appropriate Project Manager.

THIS REPORT MUST BE SUBMITTED TO QA WITHIN ONE WORKING DAY AFTER NONCONFORMANCE IS DOCUMENTED

LOT/SET ID No.(s): 592 0428

SAMPLES AFFECTED: EL 2418
806JC0

SUBMITTED BY: Tom Jackson
(please print name)

ANALYSIS/AREA: Metals, Ions, Alk, Toc, Sulf.

SIGNATURE: [signature]

ACCOUNT #: 3534

DATE DOCUMENTED: 6-18-92

CLIENT: Westinghouse - Hanford

DATE OF OCCURRENCE: 6-18-92

Briefly describe nonconformance: Cooler was received with an unacceptable temp of 16°C. This temp. is from between sample and ice pack. Ambient cooler temp was 18.7°C. Kevin Griffiths has been notified and will fax a copy of this NCR to Westinghouse.

WILL THIS AFFECT THE INTEGRITY OF THE DATA? ☐ YES ☐ NO

QUALITY ASSURANCE use only

QA Comments: _____

SIGNATURE: _____ DATE: _____

CAR REQUIRED _____ YES _____ NO

If yes, CAR # _____

DATE NCR RECEIVED _____

9613404.0670

Document # _____

DATACHEM LABORATORIES NONCONFORMANCE REPORT

Directions: Fill in all information in the top box and briefly explain the nonconformance. Sign your name and make two copies. Distribute the green original to the DCIAC Section, one copy to your Section Manager, and one copy to the appropriate Project Manager.

THIS REPORT MUST BE SUBMITTED TO QA WITHIN ONE WORKING DAY AFTER NONCONFORMANCE IS DOCUMENTED

LOT/SET ID No.(s): 592 0428

SAMPLES AFFECTED: EL 2418

806JC0

SUBMITTED BY: Tom Jackson
(please print name)

ANALYSIS/AREA: Metals, Ions, Alk, TOC, Sulf.

SIGNATURE: [signature]

ACCOUNT #: 3534

DATE DOCUMENTED: 6-18-92

CLIENT: Westinghouse - Hanford

DATE OF OCCURRENCE: 6-18-92

Briefly describe nonconformance: Cooler was received with an unacceptable temp of 16°C. This temp. is from between sample and ice pack. Ambient cooler temp was 18.7°C. Kevin Griffiths has been notified and will fax a copy of this NCR to Westinghouse.

WILL THIS AFFECT THE INTEGRITY OF THE DATA? ☐ YES ☐ NO

QUALITY ASSURANCE use only

QA Comments: _____

SIGNATURE: _____ DATE: _____

CAR REQUIRED _____ YES _____ NO

If yes, CAR # _____

DATE NCR RECEIVED _____

9613404.0671

Document # _____

DATACHEM LABORATORIES NONCONFORMANCE REPORT

Directions: Fill in all information in the top box and briefly explain the nonconformance. Sign your name and make two copies. Distribute the green original to the DCIAC Section, one copy to your Section Manager, and one copy to the appropriate Project Manager.

THIS REPORT MUST BE SUBMITTED TO QA WITHIN ONE WORKING DAY AFTER NONCONFORMANCE IS DOCUMENTED

LOT/SET ID No.(s): 592 0428

SAMPLES AFFECTED: EL 2418

B06JC0

SUBMITTED BY: Tom Jackson
(please print name)

ANALYSIS/AREA: Metals, Ions, Alk, TOC, Sulf.

SIGNATURE: [signature]

ACCOUNT #: 3534

DATE DOCUMENTED: 6-18-92

CLIENT: Westinghouse - Hanford

DATE OF OCCURRENCE: 6-18-92

Briefly describe nonconformance: Cooler was received with an unacceptable temp of 16°C. This temp. is from between sample and ice pack. Ambient cooler temp was 18.7°C. Kevin Griffiths has been notified and will fax a copy of this NCR to Westinghouse.

WILL THIS AFFECT THE INTEGRITY OF THE DATA? ☐ YES ☐ NO

QUALITY ASSURANCE use only

QA Comments: _____

SIGNATURE: _____ DATE: _____

CAR REQUIRED _____ YES _____ NO

If yes, CAR # _____

DATE NCR RECEIVED _____

2

9613404.0672

Document # _____

DATACHEM LABORATORIES NONCONFORMANCE REPORT

Directions: Fill in all information in the top box and briefly explain the nonconformance. Sign your name and make two copies. Distribute the green original to the DCIAC Section, one copy to your Section Manager, and one copy to the appropriate Project Manager.

THIS REPORT MUST BE SUBMITTED TO QA WITHIN ONE WORKING DAY AFTER NONCONFORMANCE IS DOCUMENTED

LOT/SET ID No.(s): 592 0428

SAMPLES AFFECTED: EL 2418

806JCO

SUBMITTED BY: Tom Jackson
(please print name)

ANALYSIS/AREA: Metals, Ions, Alk, TOC, Sulf.

SIGNATURE: [signature]

ACCOUNT #: 3534

DATE DOCUMENTED: 6-18-92

CLIENT: Westinghouse - Hanford

DATE OF OCCURRENCE: 6-18-92

Briefly describe nonconformance: Cooler was received with an unacceptable temp of 16°C. This temp. is from between sample and ice pack. Ambient cooler temp was 18.7°C. Kevin Griffiths has been notified and will fax a copy of this NCR to Westinghouse.

WILL THIS AFFECT THE INTEGRITY OF THE DATA? ☐ YES ☐ NO

QUALITY ASSURANCE use only

QA Comments: _____

SIGNATURE: _____ DATE: _____

CAR REQUIRED _____ YES _____ NO

If yes, CAR # _____

DATE NCR RECEIVED _____

9613404.0673

Document # _____

DATACHEM LABORATORIES NONCONFORMANCE REPORT

Directions: Fill in all information in the top box and briefly explain the nonconformance. Sign your name and make two copies. Distribute the green original to the DCIAC Section, one copy to your Section Manager, and one copy to the appropriate Project Manager.

THIS REPORT MUST BE SUBMITTED TO QA WITHIN ONE WORKING DAY AFTER NONCONFORMANCE IS DOCUMENTED

LOT/SET ID No.(s): 592 0428

SAMPLES AFFECTED: EL 2418

806JC0

SUBMITTED BY: Tom Jackson (please print name)

ANALYSIS/AREA: Metals, Ions, Alk, Toc, Sulf.

SIGNATURE: [signature]

ACCOUNT #: 3534

DATE DOCUMENTED: 6-18-92

CLIENT: Westinghouse - Hanford

DATE OF OCCURRENCE: 6-18-92

Briefly describe nonconformance: Cooler was received with an unacceptable temp of 16°C. This temp. is from between sample and ice pack. Ambient cooler temp was 18.7°C. Kevin Griffiths has been notified and will fax a copy of this NCR to Westinghouse.

WILL THIS AFFECT THE INTEGRITY OF THE DATA? ☐ YES ☐ NO

QUALITY ASSURANCE use only

QA Comments: _____

SIGNATURE: _____ DATE: _____

CAR REQUIRED _____ YES _____ NO

If yes, CAR # _____

DATE NCR RECEIVED _____

Westinghouse Hanford Company 9613404.0674

CHAIN OF CUSTODY

Custody Form Initiator: Chris Kramer

Company Contact: Jon Lucas — Telephone: 376-2789

Project Designation/Sampling Locations: Yakima Barricade Borehole # 699-48-96 -429 Ft level- Site wide Background Project — Collection Date: 6-16-92

Ice Chest No.: RM#8 — Field Logbook No.: EFL-1023

Bill of Lading/Airbill No.: 250986841 6 — Offsite Property No.: W92-0-0436 #8

Method of Shipment: Emery

Shipped to: Data-Chem Salt Lake City, UT

Possible Sample Hazards/Remarks: None

Sample Identification

B06JC0 - Soil (1) 250 ml aG

☐ Field Transfer of Custody

CHAIN OF POSSESSION (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
Chris Kramer	Jonathan G. Lucas / Jonathan G. Lucas	6-16-92 1335 HRS
Relinquished by: Jonathan G. Lucas / Jonathan G. Lucas	Received by: T. Jackson	Date/Time: 6-18-92 / 1300
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90)

Westinghouse Hanford Company 9613404.0675

CHAIN OF CUSTODY

Custody Form Initiator: Chris Kramer

Company Contact: Jon Lucas — Telephone: 376-2789

Project Designation/Sampling Locations: Yakima Barricade Borehole # 699-48-96 -429 Ft level- Site wide Background Project — Collection Date: 6-16-92

Ice Chest No.: RM#8 — Field Logbook No.: EFL-1023

Bill of Lading/Airbill No.: 250986841 6 — Offsite Property No.: W92-0-0436 #8

Method of Shipment: Emery

Shipped to: Data-Chem Salt Lake City, UT

Possible Sample Hazards/Remarks: None

Sample Identification

B06JC0 - Soil (1) 250 ml aG

] Field Transfer of Custody	CHAIN OF POSSESSION	(Sign and Print Names)
elinquished by: Chris Kramer	Received by: Jonathan G. Lucas Jonathan G. Lucas	Date/Time: 6-16-92 1335 HRS
elinquished by: Jonathan G. Lucas Jonathan G. Lucas	Received by: T. Jackson	Date/Time: 6-18-92 / 1300
elinquished by:	Received by:	Date/Time:
elinquished by:	Received by:	Date/Time:

Final Sample Disposition

isposal Method:	Disposed by:	Date/Time:

omments:

A-6000-407 (12/90)

Westinghouse Hanford Company 9613404.0676

CHAIN OF CUSTODY

Custody Form Initiator: Chris Kramer

Company Contact: Jon Lucas — Telephone: 376-2789

Project Designation/Sampling Locations: Yakima Barricade Borehole # 699-48-96 -429 Ft level- Site wide Background Project — Collection Date: 6-16-92

Ice Chest No.: RM#8 — Field Logbook No.: EFL-1023

Bill of Lading/Airbill No.: 250986841 6 — Offsite Property No.: W92-0-0436 #8

Method of Shipment: Emery

Shipped to: Data-Chem Salt Lake City, UT

Possible Sample Hazards/Remarks: None

Sample Identification

B06JC0 - Soil (1) 250 ml aG

] Field Transfer of Custody	CHAIN OF POSSESSION	(Sign and Print Names)
elinquished by: Chris Kramer	Received by: Jonathan G. Lucas Jonathan G. Lucas	Date/Time: 6-16-92 1335 HRS
elinquished by: Jonathan G. Lucas Jonathan G. Lucas	Received by: T. Jackson	Date/Time: 6-18-92 / 1300
elinquished by:	Received by:	Date/Time:
elinquished by:	Received by:	Date/Time:

Final Sample Disposition

isposal Method:	Disposed by:	Date/Time:

omments:

A-6000-407 (12/90)

22

Westinghouse Hanford Company 9613404.0677

CHAIN OF CUSTODY

Custody Form Initiator: Chris Kramer

Company Contact: Jon Lucas — Telephone: 376-2789

Project Designation/Sampling Locations: Yakima Barricade Borehole # 699-48-96 -429 Ft level- Site wide Background Project — Collection Date: 6-16-92

Ice Chest No.: RM#8 — Field Logbook No.: EFL-1023

Bill of Lading/Airbill No.: 250986841 6 — Offsite Property No.: W92-0-0436 #8

Method of Shipment: Emery

Shipped to: Data-Chem Salt Lake City, UT

Possible Sample Hazards/Remarks: None

Sample Identification

B06JC0 - Soil (1) 250 ml aG

] Field Transfer of Custody	CHAIN OF POSSESSION	(Sign and Print Names)
elinquished by: Chris Kramer	Received by: Jonathan G. Lucas Jonathan G. Lucas	Date/Time: 6-16-92 1335 HRS
elinquished by: Jonathan G. Lucas Jonathan G. Lucas	Received by: T. Jackson	Date/Time: 6-18-92 / 1300
elinquished by:	Received by:	Date/Time:
elinquished by:	Received by:	Date/Time:

Final Sample Disposition

isposal Method:	Disposed by:	Date/Time:

omments:

A-6000-407 (12/90)

30

Westinghouse Hanford Company

9613404.0678

CHAIN OF CUSTODY

Custody Form Initiator: Chris Kramer

Company Contact: Jon Lucas — Telephone: 376-2789

Project Designation/Sampling Locations: Yakima Barricade Borehole # 699-48-96 -429 Ft level- Site wide Background Project — Collection Date: 6-16-92

Ice Chest No.: RM#8 — Field Logbook No.: EFL-1023

Bill of Lading/Airbill No.: 250986841 6 — Offsite Property No.: W92-0-0436 #8

Method of Shipment: Emery

Shipped to: Data-Chem Salt Lake City, UT

Possible Sample Hazards/Remarks: None

Sample Identification

B06JC0 - Soil (1) 250 ml aG

] Field Transfer of Custody	CHAIN OF POSSESSION	(Sign and Print Names)
elinquished by: Chris Kramer	Received by: Jonathan G. Lucas Jonathan G. Lucas	Date/Time: 6-16-92 1335 HRS
elinquished by: Jonathan G. Lucas Jonathan G. Lucas	Received by: T. Jackson	Date/Time: 6-18-92 / 1300
elinquished by:	Received by:	Date/Time:
elinquished by:	Received by:	Date/Time:

Final Sample Disposition

isposal Method:	Disposed by:	Date/Time:

omments:

A-6000-407 (12/90)

4C

ANALYTICAL REQUEST FORM

DATA CHEM LABORATORIES

613404.0679

1. ☑ REGULAR Status

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____ DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES.

2. Date 6-17-92 Purchase Order No. _____

3. Company Name Westinghouse Hanford Co.

Address P.O. Box 1970

Richland, WA 99352

Person to Contact J. G. Lucas

Telephone (509) 376-2789

Fax Telephone (509) 376-6476

Billing Address (if different from above)

—

4. Sample Collection

Sampling Site Yakima Barricade Borehole # 699-48 -429 FT leve

Industrial Process —

Date of Collection 6-16-92

Time Collected 1205 HRS

Date of Shipment 6-17-92

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 2418	B06JC0	Soil	(1) 250 ml	ICP/AA metals (including Hg) —
				6010, 7000 series, 7471
				↳ As, Pb, Se, Tl
				Anions (SO_4, PO_4, Cl, NO_2, NO_3) —
				EPA 300.0 ~~& 353.2~~
				Alkalinity - EPA 310.1
				Sulfide - 9030
				~~TOC - 9060~~ Cancelled
				per K. Griffiths 6-25-92

*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 4°C

Possible Contamination and/or Chemical Hazards None

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

ANALYTICAL REQUEST FORM

DATA CHEM LABORATORIES

9613404.0680

1. ☑ REGULAR Status

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____ DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES.

2. Date 6-17-92 Purchase Order No. _____

3. Company Name Westinghouse Hanford Co.

Address P.O. Box 1970

Richland, WA 99352

Person to Contact J. G. Lucas

Telephone (509) 376-2789

Fax Telephone (509) 376-6476

Billing Address (if different from above)

—

4. Sample Collection

Sampling Site Yakima Barricade Borehole # 699-48-9 -429 FT level

Industrial Process —

Date of Collection 6-16-92

Time Collected 1205 HRS

Date of Shipment 6-17-92

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 2418	B06JC0	Soil	(1) 250 ml	ICP/AA metals (including Hg) —
				6010, 7000 series, 7471
				↳ As, Pb, Se, Tl
				Anions (SO_4, PO_4, Cl, NO_2, NO_3) —
				EPA 300.0 ~~& 353.2~~
				Alkalinity - EPA 310.1
				Sulfide - 9030
				~~TOC - 9060~~ Cancelled
				per K. Griffith 5-25-92

*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 4°C

Possible Contamination and/or Chemical Hazards None

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

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ANALYTICAL REQUEST FORM

DATA CHEM LABORATORIES

9613404.0681

1. ☑ REGULAR Status

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____ DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES.

2. Date 6-17-92 Purchase Order No. _____

3. Company Name Westinghouse Hanford Co.

Address P.O. Box 1970

Richland, WA 99352

Person to Contact J. G. Lucas

Telephone (509) 376-2789

Fax Telephone (509) 376-6476

Billing Address (if different from above)

—

4. Sample Collection

Sampling Site Yakima Barricade Borehole # 699-48-9 :-429 FT level

Industrial Process —

Date of Collection 6-16-92

Time Collected 1205 HRS

Date of Shipment 6-17-92

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 2418	B06JC0	Soil	(1) 250 ml	ICP/AA metals (including Hg) —
				6010, 7000 series, 7471
				↳ As, Pb, Se, Tl
				Anions (SO_4, PO_4, Cl, NO_2, NO_3) —
				EPA 300.0 ~~& 353.2~~
				Alkalinity - EPA 310.1
				Sulfide - 9030
				~~TOC - 9060~~ Cancelled
				per K. Griffiths 5-25-92

*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 4°C

Possible Contamination and/or Chemical Hazards None

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

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ANALYTICAL REQUEST FORM

DATA CHEM LABORATORIES

9613404.0682

1. ☑ REGULAR Status

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____ DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES.

2. Date 6-17-92 Purchase Order No. _____

3. Company Name Westinghouse Hanford Co.

Address P.O. Box 1970

Richland, WA 99352

Person to Contact J. G. Lucas

Telephone (509) 376-2789

Fax Telephone (509) 376-6476

Billing Address (if different from above)

—

4. Sample Collection

Sampling Site Yakima Barricade Borehole # 699-48-429 FT level

Industrial Process —

Date of Collection 6-16-92

Time Collected 1205 HRS

Date of Shipment 6-17-92

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 2418	B06JC0	Soil	(1) 250 ml	ICP/AA metals (including Hg) —
				6010, 7000 series, 7471
				↳ As, Pb, Se, Tl
				Anions (SO_4, PO_4, Cl, NO_2, NO_3) —
				EPA 300.0 ~~& 353.2~~
				Alkalinity - EPA 310.1
				Sulfide - 9030
				~~TOC - 9060~~ Cancelled
				per K. Griffiths 5-25-92

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

6. Q C REQUIREMENTS

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☐ METHOD QC SAMPLES (Lab QC according to published methods)

☐ PROJECT PLAN QC SAMPLES (Lab QC according to provided QA/QC Plan)

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DATACHEM LABORATORIES - A SORENSON COMPANY

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ANALYTICAL REQUEST FORM

DATA CHEM LABORATORIES

9613404.0683

1. ☑ REGULAR Status

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____ DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES.

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3. Company Name Westinghouse Hanford Co.

Address P.O. Box 1970

Richland, WA 99352

Person to Contact J. G. Lucas

Telephone (509) 376-2789

Fax Telephone (509) 376-6476

Billing Address (if different from above)

—

4. Sample Collection

Sampling Site Yakima Barricade Borehole # 699-48-; -429 FT level

Industrial Process —

Date of Collection 6-16-92

Time Collected 1205 HRS

Date of Shipment 6-17-92

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
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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

"Next Day Delivery" "Signature Security"

Contractor: Westinghouse Hanford Co.	OFF-SITE PROPERTY CONTROL	CONTROL NUMBER (To be obtained from PROPERTY MANAGEMENT) W92-0-0436 #8

PART I – TO BE COMPLETED BY ORIGINATOR

Department: Environ. Rest. Eng.	Section: Environ. Remedial Act.	Unit
The following items are to be shipped from	☒ Contractor	☐ Vendor
Routing: Emery	☒ Contractor	☐ Vendor

Shipped to	Off-site Custodian
Data Chem 960 West Levoy Drive Salt Lake City, UT 84123	Jim Johnston 592-0428
	Full Title: —

Quantity	Description (Include Serial and any Government Tag Numbers)	Original Cost
1 18 lbs	Poly ice chest (RM # 8) containing glass sample container of soil packed in blue ice and vermiculite. Sample # – B06JC0	

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

Necessity for the Off-Site Use of this Property

Program not available on site.
Bill of Lading # 250986841 6

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

RM Clearance for Public Release: Felipe Baza	RM Survey No. 910680	Date 6-17-92
Location of Property (Area & Bldg.) – 429 FT Yakima Barricade, borehole #699-48-96	Contact J.G. Lucas	Phone 376-2789
Date Ready for Shipment 6-17-92	Cost Code to be Charged PK1BB 81225	Approximate Date This Property will be Returned —
Originated By J.G. Lucas	Date 6-17-92	Authorized By [signature] Date 6/17/92
Signature and Name of Property Control	Custodian Date	Property Management Approval [signature] Date 6/17/92

PART II – TO BE COMPLETED BY SHIPPING

Signature of Recipient	Return Order No.	Date Issued	Purchase Order No.	Date Issued
J. Demarest Date 6/17-92 11:35				

DISTRIBUTION

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

54-3000-479 (09/89)

PLEASE TYPE OR USE BALL POINT PEN. BEAR DOWN FIRMLY!
KEEP MARKS WITHIN BOXES TO ASSURE ACCURACY

1A ☐ 1B ☐ 1C ☐

FORM NO. 60001-46

9613404.0685

FORM OF PAYMENT

Check ☐ GBL ☐ FCCOD ☐

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

E Shipper's Account Number 850281585

EMERY WORLDWIDE

A CF Company

SERVICES

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

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

Date	Origin	Shipment Number
06-17-92	PSC	250986841 6

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

To:
JIM JOHNSTON
DATA CHEM
960 WEST LEVOY DRIVE
SALT LAKE CITY UT Canada ☐ Hold for Pick Up ☐

Tariff Dest. | Gateway

Check to Shipper $

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

Customer's Reference Numbers: W81225 PK1BB W92-0-0436#8 Zip 99352

E Consignee's Account Number 84123

Description	Pcs.	L	W	H	Total Pieces	Total Weight (In Lbs.)
1 ICE CHEST RM#8 SOIL SAMPLES B06JC0	1		14		1	18

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

Declared Value $

250986841 6

Remarks: OVERNIGHT DELIVERY SIGNATURE SECURITY SERVICE

Shipper's Signature X

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

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

International Shipments: Free Domicile ☐ Commodity Code

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

Base Charge

International Customs Value

International Insurance

Total Transportation Charges

Other Charges/Advance at Origin OC/AO- $

SLC-A

Terms and Conditions on back

CONSIGNEE —PACKAGE COPY — 4

PULL HERE SHIPMENT NO. TAB

FORM OF PAYMENT

Check ☐ GBL ☐ FCCOD ☐

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

EMERY WORLDWIDE

A CF Company

UNITED STATES / CANADA: ☐ Same Day ☐ XX AM ☐ PM ☐ Second Day ☐ Saturday Delivery

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

PULL FOR SHIPT. NO. TAB

E Shipper's Account Number: 850281585

Date: 06-17-92 Origin: PSC Shipment Number: 250986841 6

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

To:
JIM JOHNSTON
DATA CHEM
960 WEST LEVOY DRIVE
SALT LAKE CITY UT Canada ☐

Tariff Dest. Gateway

Check to Shipper $

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

Customer's Reference Numbers: W81225 PK1BB W92-0-0436#8 Zip: 99352

E Consignee's Account Number: Zip: 84123

Description	Pcs.	L	W	H	Total Pieces	Total Weight (In Lbs.)
1 ICE CHEST RM#8 SOIL SAMPLES B06JC0	1	27	16	17	1	18

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

Declared Value $

250986841 6

Remarks: OVERNIGHT DELIVERY SIGNATURE SECURITY SERVICE

Shipper's Signature X [signature] 6/17/92

Zip Ship ☐

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

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International Shipments: Free Domicile ☐ Commodity Code

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

International Customs Value

International Insurance

Base Charge

Total Transportation Charges

Other Charges/Advance at Origin ☐ OC/AO $

SLC-A

Terms and Conditions on Back

CONSIGNEE — PACKAGE COPY — 4

PLEASE TYPE OR USE BALL POINT PEN. BEAR DOWN FIRMLY! KEEP MARKS WITHIN BOXES TO ASSURE ACCURACY

FORM NO. 80001-46

9613404.0686