START 9613451.1575

9104L328-WES-050

0044567

DON'T SAY IT --- *Write It!*

DATE: December 7, 1993

TO: File 9104L328-WES-050

FROM: Doris Ayres SDLA

Telephone: 372-2507

SUBJECT: Changing Client Sample Numbers to HEIS sample numbers

The following sample numbers were changed within the referenced package:

Old Client Sample Number	New HEIS Sample Number
D3-4161-13	B09N73
D3-4161-14	B09N74

RECEIVED JUN 1996 EDMC

Custody Transfer Record/Lab Work Request

WESTON

WESTON Analytics Use Only
9104L328

WS-HANFORD

Client: WESTINGHOUSE HANFORD- V. ROHAY
Work Order: 6168-02-01
Date Rec'd.: 4/18/91 Date Due: 5/23/91
RFW Contact: J. King
Client Contact/Phone: V. Rohay (509) 376-5507

Refrigerator#				1								
#/Type Container				glass								
Volume				125ml								
Preservative				N/A								
ANALYSES REQUESTED				VOA								
WA Use Only Lab ID	Client ID/Description	Matrix	Date Collected	0624H								
001	D3-4161-13	S	4-16-91	X								
002	D3-4161-14	S	4-16-91	X								

J.G.A.

QC/Del = CLP
TAT - 35 day

Matrix:
S - Soil
SE - Sediment
SO - Solid
W - Water
O - Oil
A - Air
WI - Wipe
DS - Drum Solids
DL - Drum Liquids
F - Fish
L - EP/TCLP Leachate
X - Other

Special Instructions:

Item/Reason	Relinquished by	Received by	Date	Time	Item/Reason	Relinquished by	Received by	Date	Time
	D Hogan								
	Emory	[illegible]	4/18/91	1:30 PM					
RADSCAN	[illegible]	[illegible]	4-18-91	2:00PM					
STORAGE	Charles [illegible]	[illegible]	4-18-91	4:00PM					

WESTON Analytics Use Only

Samples Were:
1 Shipped or Hand-Delivered
NOTES:

2 Ambient or Chilled
NOTES:

3 Received Broken/Leaking (Improperly Sealed) Y N
NOTES:

4 Properly Preserved Y N
NOTES:

5 Received Within Holding Times Y N
NOTES:

COC Tape Was:
1 Present on Outer Package Y N
2 Unbroken on Outer Package Y N
3 Present on Sample Y N
4 Unbroken on Sample Y N
NOTES:

COC Record Was:
1 Present Upon Receipt of Samples Y N

Discrepancies Between Sample Labels and COC Record? Y N
NOTES:

RFW 21-21-001/A-12/88

7-115

0000002

9613451 1576

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 04-18-91
RFW #: 9104L328, GC/MS VOLATILE
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of two (2) soil samples collected on 04-16-91.

The samples were analyzed according to criteria set forth in CLP SOW 02/88 (Rev. 05/89) for TCL Volatile target compounds on 04-19,22,23-91.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analysis:

1. Non-target compounds were detected in these samples.

2. Four (4) of twenty-four (24) surrogate recoveries were outside EPA QC limits. EPA QC surrogate recovery criteria were not met for samples D3-4161-13 and D3-4161-14. The associated matrix spike analysis of sample D3-4161-13 fulfilled its re-analysis requirements. The sample D3-4161-14 was re-analyzed on 04-22-91 and reported.

3. Three (3) of ten (10) matrix spike recoveries were outside EPA QC limits.

4. The laboratory blanks contained the common contaminants acetone and methylene chloride at levels less than 3x the CRQL.

5. Internal standard area and retention time criteria were met for samples and blanks.

Jack R. Tuschall, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

6.3.91
Date

Roy F. Weston, Inc. - Lionville Laboratory
Volatiles by GC/MS, HSL List

RFW Batch Number: 9104L328 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 05/30/91 16:11 Page: 1a

Cust ID:	D3-4161-13	D3-4161-13	D3-4161-13	D3-4161-14	D3-4161-14	VBLK
Sample Information RFW#:	001	001 MS	001 MSD	002	002	91LVB283-MB1
Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
D.F.:	1.00	1.00	1.00	1.02	0.980	1.00
Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg REPREP	ug/Kg
Surrogate Recovery: Toluene-d8	117 %	112 %	107 %	115 %	117 %	98 %
Bromofluorobenzene	106 %	107 %	102 %	107 %	109 %	92 %
1,2-Dichloroethane-d4	123 * %	120 %	125 * %	129 * %	132 * %	107 %
Chloromethane	10 U	10 U	10 U	11 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	11 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	11 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	11 U	10 U	10 U
Methylene Chloride	50 B	95 B	75 B	37 B	48 B	10
Acetone	27 B	25 B	19 B	54 B	27 B	16
Carbon Disulfide	5 U	5 U	5 U	6 U	5 U	5 U
1,1-Dichloroethene	5 U	112 %	106 %	6 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	6 U	5 U	5 U
1,2-Dichloroethene (total)	5 U	5 U	5 U	6 U	5 U	5 U
Chloroform	5 U	5 U	5 U	6 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	6 U	5 U	5 U
2-Butanone	10 U	10 U	10 U	11 U	10 U	10 U
1,1,1-Trichloroethane	5 U	5 U	5 U	6 U	5 U	5 U
Carbon Tetrachloride	5 U	5 U	5 U	6 U	5 U	5 U
Vinyl Acetate	10 U	10 U	10 U	11 U	10 U	10 U
Bromodichloromethane	5 U	5 U	5 U	6 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	6 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	6 U	5 U	5 U
Trichloroethene	5 U	136 %	139 * %	6 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	6 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	6 U	5 U	5 U
Benzene	5 U	128 %	135 %	6 U	5 U	5 U
Trans-1,3-Dichloropropene	5 U	5 U	5 U	6 U	5 U	5 U
Bromoform	5 U	5 U	5 U	6 U	5 U	5 U
4-Methyl-2-pentanone	10 U	10 U	10 U	11 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	11 U	10 U	10 U
Tetrachloroethene	5 U	5 U	5 U	6 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	6 U	5 U	5 U

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9104L328 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Page: 1b

Cust ID:	D3-4161-13	D3-4161-13	D3-4161-13	D3-4161-14	D3-4161-14	VBLK
RFW#:	001	001 MS	001 MSD	002	002 REPREP	91LVB283-MB1
Toluene	5 U	139 %	138 %	6 U	5 U	5 U
Chlorobenzene	5 U	134 * %	139 * %	6 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	6 U	5 U	5 U
Styrene	5 U	5 U	5 U	6 U	5 U	5 U
Xylene (total)	5 U	5 U	5 U	6 U	5 U	5 U

*= Outside of EPA CLP QC limits.

0000005

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1A

VOLATILE ORGANICS ANALYSIS SHEET

0000022

CLIENT SAMPLE NO.

D3-4161-13

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9104L328-001

Sample wt/vol: 5.00 (g/mL) G

Lab File ID: B042206

Level: (low/med) LOW

Date Received: 04/18/91

% Moisture: not dec. 4

Date Analyzed: 04/22/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	50	B
67-64-1	Acetone	27	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

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1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0000023

CLIENT SAMPLE NO.

D3-4161-13

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9104L328-001

Sample wt/vol: 5.00 (g/mL) G

Lab File ID: B042206

Level: (low/med) LOW

Date Received: 04/18/91

% Moisture: not dec. 4

Date Analyzed: 04/22/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

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1A

VOLATILE ORGANICS ANALYSIS SHEET

0000031

CLIENT SAMPLE NO.

D3-4161-14

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9104L328-002

Sample wt/vol: 4.90 (g/mL) G

Lab File ID: B041912

Level: (low/med) LOW

Date Received: 04/18/91

% Moisture: not dec. 4

Date Analyzed: 04/19/91

Column: (pack/cap) CAP

Dilution Factor: 1.02

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NO.	COMPOUND		
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	37	B
67-64-1	Acetone	54	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U

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VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0000032

CLIENT SAMPLE NO.

D3-4161-14

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9104L328-002

Sample wt/vol: 4.90 (g/mL) G

Lab File ID: B041912

Level: (low/med) LOW

Date Received: 04/18/91

% Moisture: not dec. 4

Date Analyzed: 04/19/91

Column: (pack/cap) CAP

Dilution Factor: 1.02

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	*PROBABLE LAB CONTAMINANT			
2.	ACETONITRILE*	8.43	10	JB
3.	1,4-DIOXANE*	16.27	30	J

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1A

VOLATILE ORGANICS ANALYSIS SHEET

0000043

CLIENT SAMPLE NO.

D3-4161-14RE

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9104L328-002

Sample wt/vol: 5.10 (g/mL) G

Lab File ID: B042207

Level: (low/med) LOW

Date Received: 04/18/91

% Moisture: not dec. 4

Date Analyzed: 04/22/91

Column: (pack/cap) CAP

Dilution Factor: 0.980

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	48	B
67-64-1	Acetone	27	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

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ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 04-18-91
RFW #: 9104L328
W.O. #: 6168-02-01

INORGANIC NARRATIVE

The following is a summary of the quality control results and a description of any problems encountered during the analysis of this batch of samples:

1. The analytical methods applied by the laboratory, unless otherwise requested, for all inorganic analyses are derived from the USEPA Method for Chemical Analysis of Water and Wastes (USEPA 600/4-79-020), and Standard Methods for the Examination of Water and Wastewater 16 ed. Methods for the analysis of solid samples are derived from Test Methods for Evaluating Solid Waste (USEPA SW846).

JUN 1991
RECEIVED
DATA RECEIPT

Jack R. Tuschall, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

5.14.91
Date

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
WESTINGHOUSE HANFORD

DATE RECEIVED: 04/18/91 RFW LOT # :9104L328

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
D3-4161-13						
% SOLIDS	001	S	91L%S072	04/16/91	05/03/91	05/04/91
D3-4161-14						
% SOLIDS	002	S	91L%S072	04/16/91	05/03/91	05/04/91

JUN 1991
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DATA RECEIPT